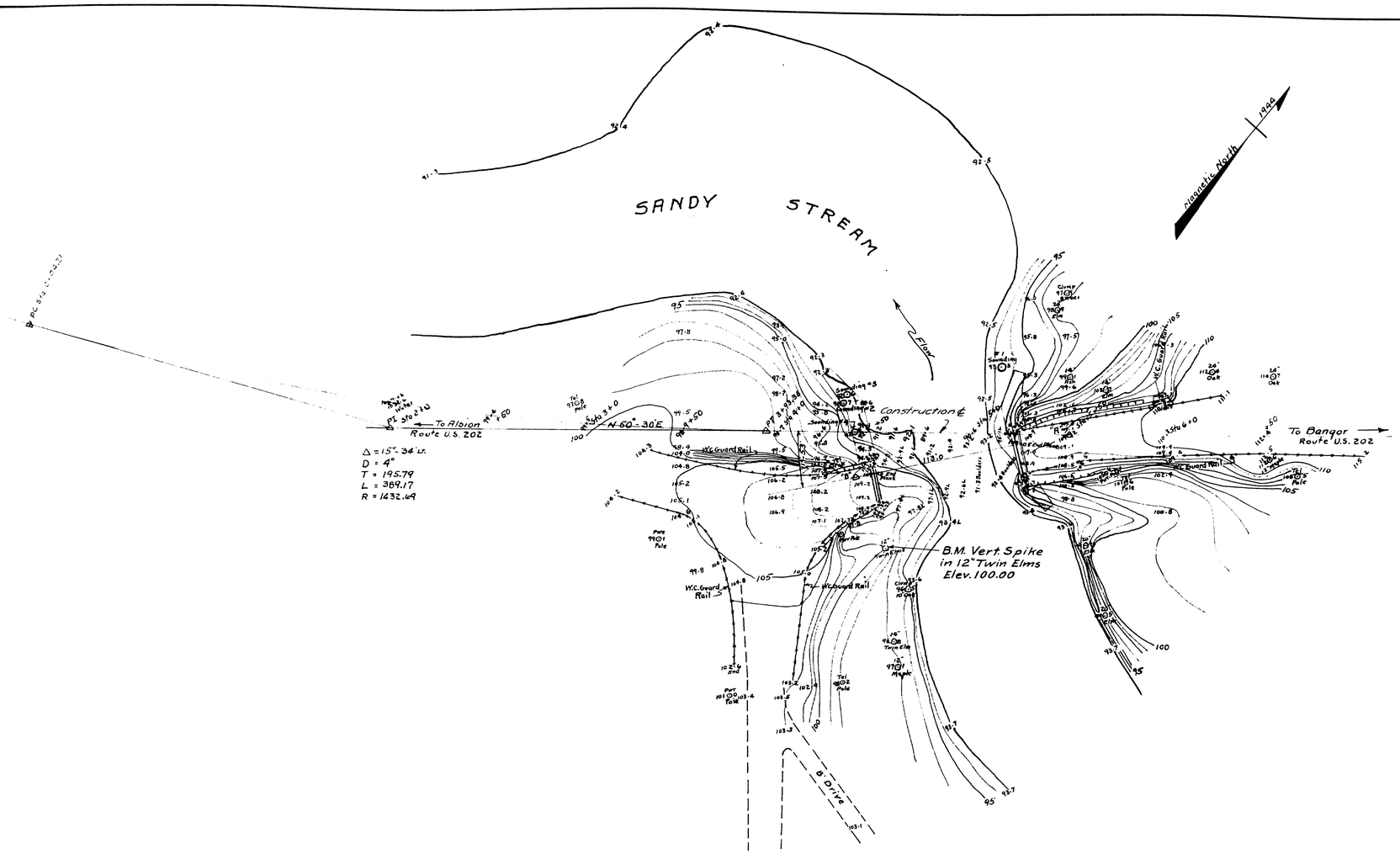
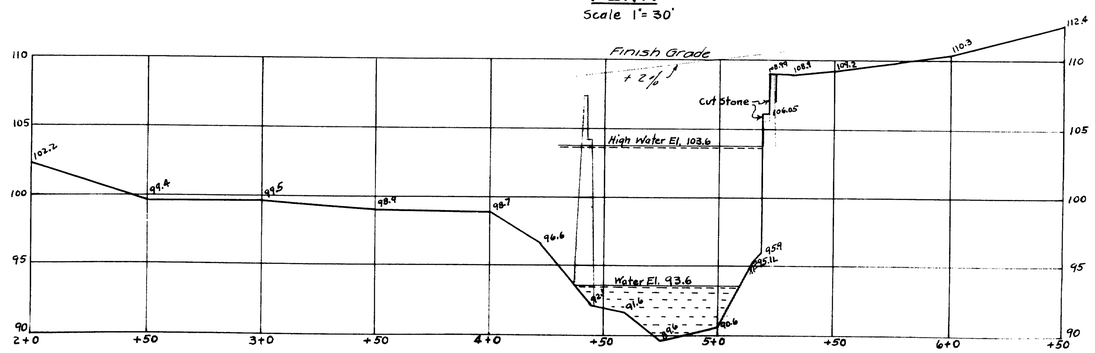


PLAN
Scale 1" = 30'



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

Rod Sounding #1
34' left Sta. 5+14
Ground Elev. 93.3
0.0' to 3.5' by hand
3.5' to 7.0' ½ in. per blow
7.0' Refusal, bounce, probable ledge.

Rod Sounding #2
15' left Sta 4+33
Ground Elev. 92.7
0.0' to 1.5' by hand
1.5' to 3.5' ½ in. per blow
3.5' Refusal, bounce.

Rod Sounding #3
19' left Sta. 4+35
Ground Elev. 92.6
0.0' to 4.0' ½ in. per blow
4.0' Refusal, bounce.

Rod Sounding #4
℄ Sta. 4+39
Ground Elev. 92.8
0.0' to 2.5' 1 in. per blow
2.5' Refusal, bounce.

Notes-
Superstructure - Steel pony truss with wood deck.
Substructure - Coursed split granite abutments.
Stream - Moderate current at all stages. High Water Elev. 103.6
Low water slightly lower than present stage.
Foundation - Ledge, see soundings and profile.
Approaches - Surface treated gravel.

Drainage Area 651 Sq. Miles.

NOTE:
Some data on this plan was taken from Highway notes Nov. 8, 1944 by Poor, Leavitt + Worthylake.

Survey - Towne Traced by GGW	Town 14-24 Bridge 3

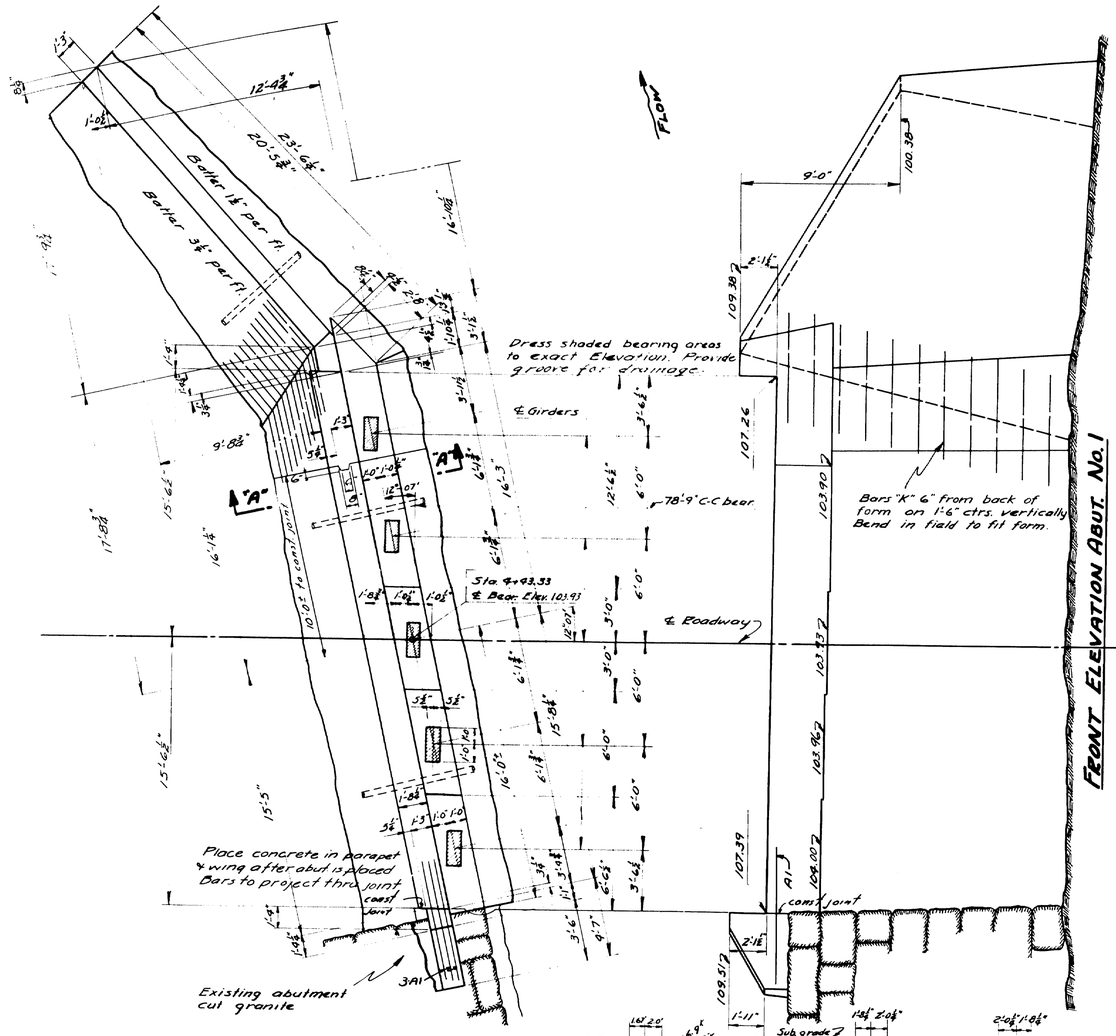
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
UNITY BRIDGE
OVER
SANDY STREAM
IN THE TOWN OF
UNITY - WALDO COUNTY
SURVEY PLAN

SHEET 6 OF 9 AUGUSTA, MAINE. Dec. 1944

96-157

0 1 2 3 4 5 INCHES

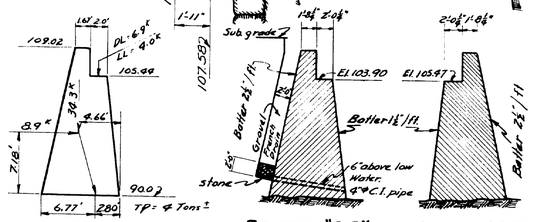
P.R.A. DIV. NO.	STATE	FED AID PROJ. NO	SHEET NO	TOTAL SHEETS
1	MAINE	S-58 (1)	7	9



PLAN ABUTMENT No. 1

Fixed Bearings

Note:- Cover construction joints on the back side with 2 layers of heavy roofing. Coat concrete and back of each layer as applied with hot tar or asphalt. Roofing to be 10" wide. Area covered by roofing to be recessed ¼" by nailing thin strips to the form before concrete is placed. Break bond at construction joints by painting with hot tar or asphalt. Provide 1" v-groove at exposed faces.

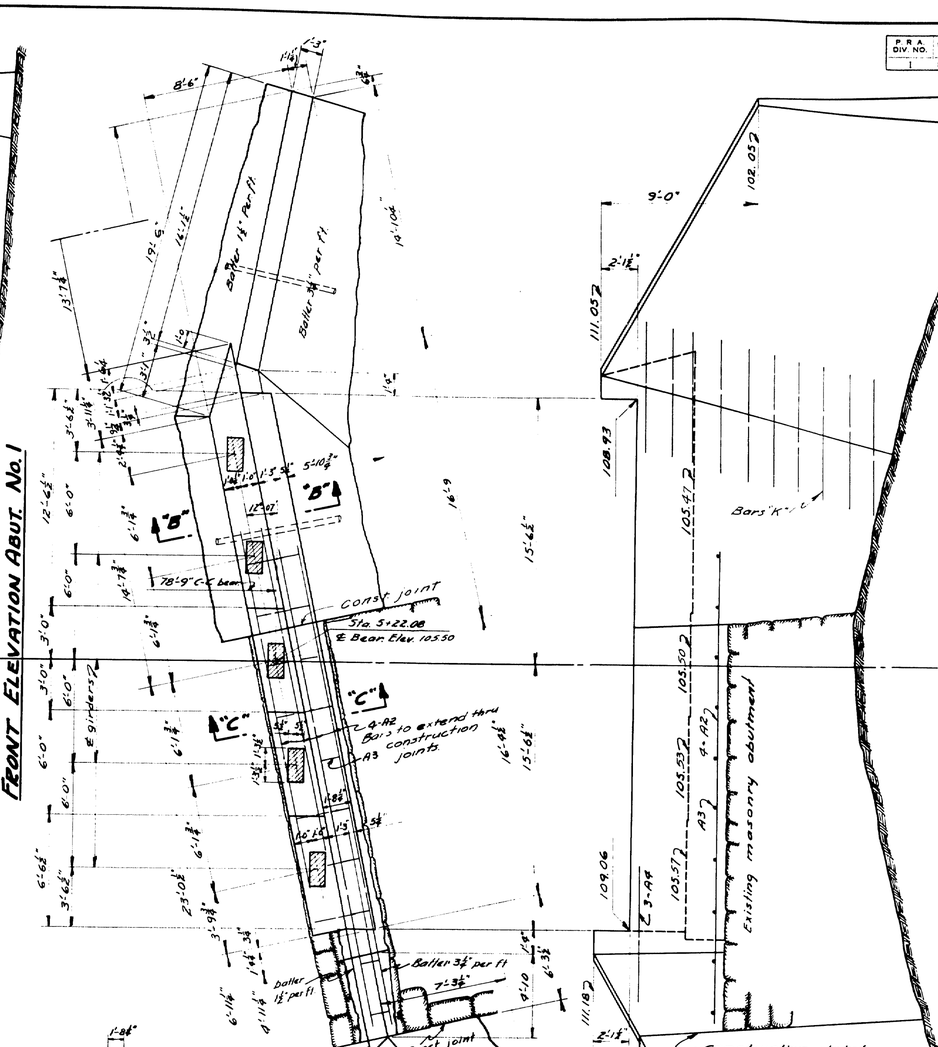


FRONT ELEVATION ABUT. No. 1

SECTION "C-C"

ABUT. ANALYSIS

Note:- French drains in rear of abuts. & Wings. Location of drains to be determined by Engineer in field. Payment for abutment concrete to include 4"ø C.I. pipe.



PLAN ABUTMENT No. 2

Expansion Bearings

Place concrete in D.S. end of abutment before capping masonry.

Existing field stone retaining wall at this corner to be removed to rock foundation before construction of new wing.

REAR ELEVATION ABUT. No. 2

DESIGN – EVERETT
TRACED – CLARK
CHECKED – N.W.T.

TOWN – 14-24
BRIDGE –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

UNITY BRIDGE

OVER

SANDY STREAM

IN THE TOWN OF

UNITY – WALDO COUNTY

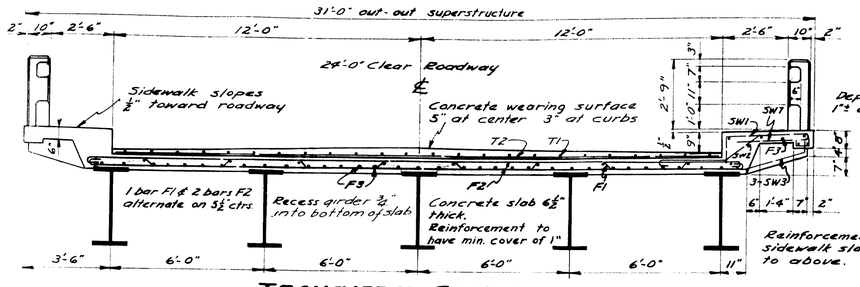
"SUBSTRUCTURE"

SHEET 7 OF 9 AUGUSTA, MAINE NOVEMBER, 1945

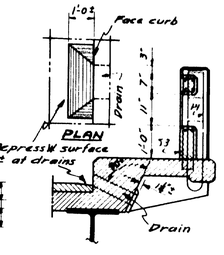
46-158

0 1 2 3 4 5 INCHES

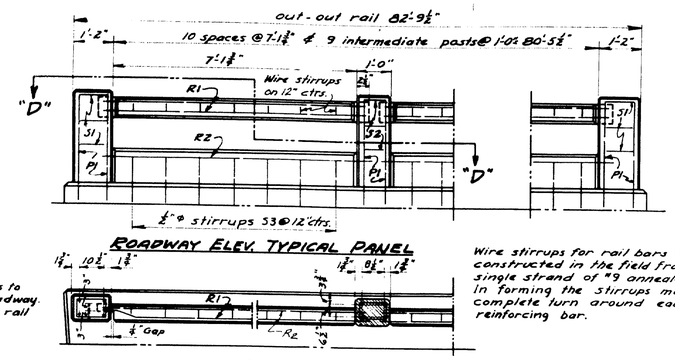
P.R.A. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
		S-58(1)	8	9



TRANSVERSE SECTION



Interior rail post brackets to be built normal to ℄ roadway. Bracket at each interior rail post.

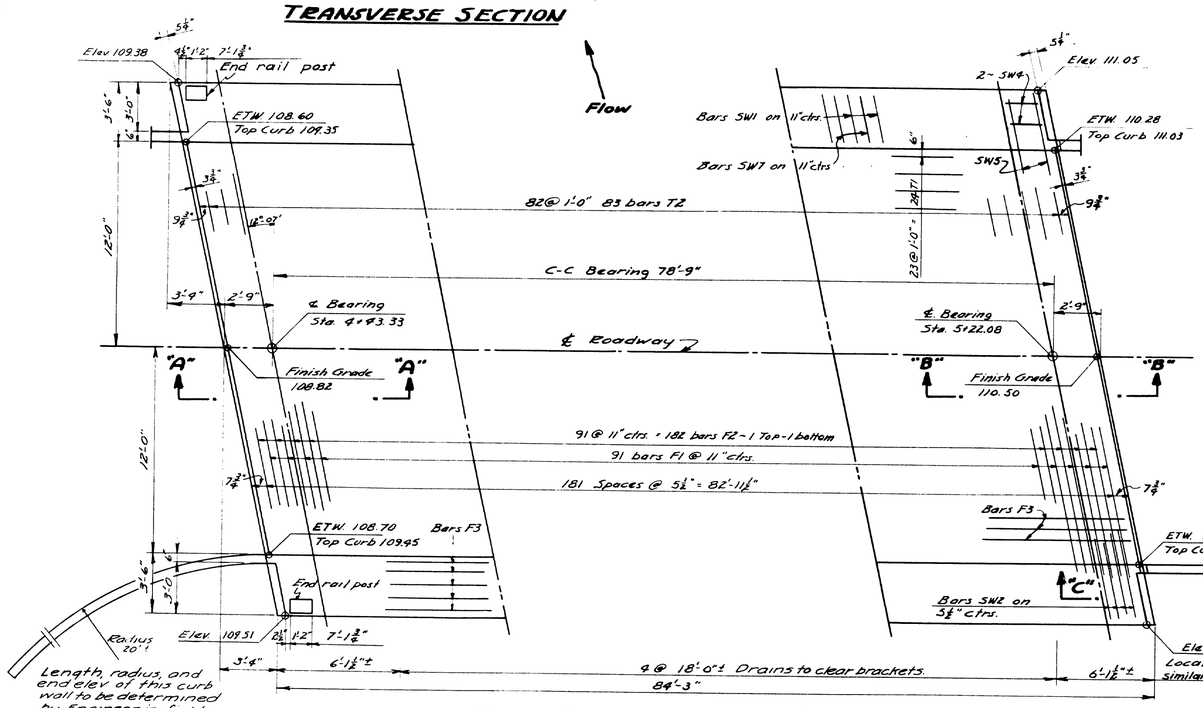


VIEW "D-D"

Wire stirrups for rail bars to be constructed in the field from a single strand of #9 annealed wire. In forming the stirrups make a complete turn around each reinforcing bar.

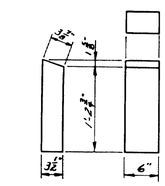
RAIL DETAILS

NOTE:- Steel for posts and lower bar to be in position before sidewalk slab is placed. Cast lower bar in place. Longitudinal steel in lower bar to project 3" ±. Precast top bar and set in position so that ends project into post forms 2½". Wrap tongue ends with two (2) layers of heavy roofing. Build post forms and cast posts. All exposed edges of concrete to be chamfered ½" unless otherwise noted.



PART SUPERSTRUCTURE PLAN

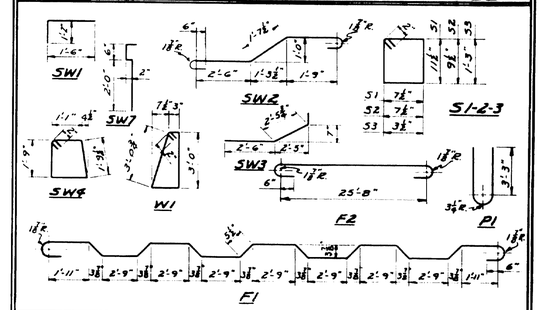
Reinforcement for opposite sidewalk slab similar to above.



METAL DRAIN FORM

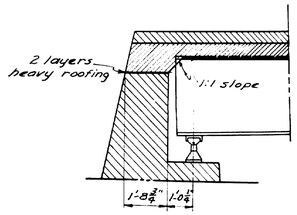
#24 Gage galv. iron
10 Req'd.

~ REINFORCING STEEL SCHEDULE ~



Mark	Size	No.	Length	Remarks	Mark	Size	No.	Length	Remarks
SW1	½"φ	182	2'-8"	Sidewalk	P1	¾"φ	8	1'-6"	Abut-Curb wall
SW2	½"φ	364	7'-10"	Sidewalk	W2	⅜"φ	29	9'-6"	Curb wall
SW3	½"φ	54	5'-6"	S.walk Brackets	T1	⅜"φ	48	42'-4"	Surface (splice)
SW4	½"φ	8	6'-5"	S.walk end diaph.	T2	⅜"	83	24'-3"	Surface
W1	½"φ	28	7'-6"	Curb walls	F3	½"φ	110	42'-6"	Slab (splice)
S1	¼"φ	12	3'-6"	End posts	SW5	½"φ	8	5'-0"	S.walk end diaph.
S2	¼"φ	54	3'-2"	Int. posts					
S3	½"φ	140	3'-5"	Lower rail bars	R1	½"φ	80	7'-6"	Rail bars
P1	¾"φ	44	7'-4"	Posts	R2	½"φ	40	7'-8"	Rail bars
F1	⅝"φ	91	28'-9"	Slab	A1	¾"φ	3	7'-6"	Abut. #1
F2	⅝"φ	182	27'-8"	Slab	A2	¾"φ	4	28'-0"	Abut #2
SW7	½"φ	182	3'-0"	Sidewalk	A3	¾"φ	10	3'-3"	Abut #2
					A4	¾"φ	3	7'-6"	Abut. #2
					K	¾"φ	21	8'-0"	Abutments

Dimensions to ℄ of bars

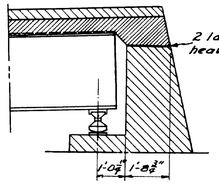


SECTION "A-A"

At Abutment No. 1

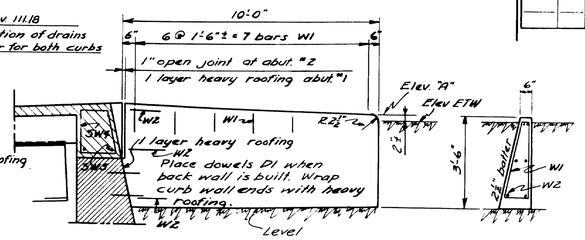
NOTE:

Cover the ½" openings between superstructure and wing walls also the 1" open joint between super. and curb wall on the back side with two (2) layers of heavy roofing 10" wide. Coat concrete and back of each layer as applied with hot tar or asphalt. Area to be covered is to be recessed ⅛" by nailing thin strips to the forms before concrete is placed.



SECTION "B-B"

At Abutment No. 2



SECTION "C-C"

Showing approach curb wall. Curb wall at corners of structure. To be built after superstructure is placed. All four walls alike except as noted. Concrete to be paid for under Item #63.

ELEV. "A"

Abut. #1 - U.S. - Determine in field
do - D.S. - 108.57
Abut. #2 - U.S. - 110.75
do - D.S. - 110.65

DESIGN - EVERETT
TRACED - CLARK
CHECKED - N.W.T.

TOWN - 14-24
BRIDGE -

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

UNITY BRIDGE

OVER

SANDY STREAM

IN THE TOWN OF

UNITY - WALDO COUNTY

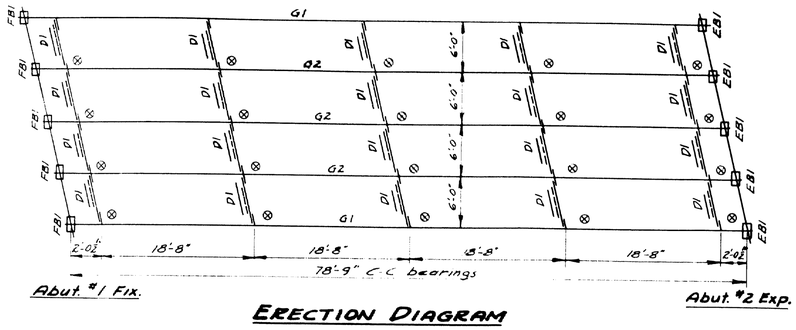
"SUPERSTRUCTURE"

SHEET 8 OF 9 AUGUSTA, MAINE NOVEMBER, 1945

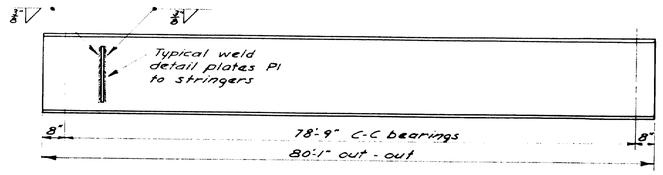
46-159

0 1 2 3 4 5 INCHES

F.H.W.A. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	S-58 (1)	9	9

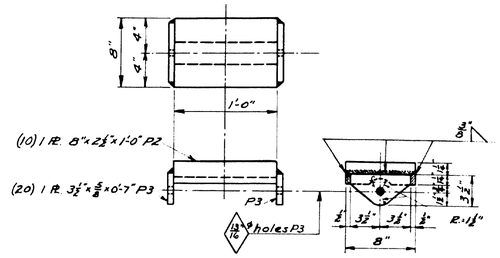


ERECTION DIAGRAM



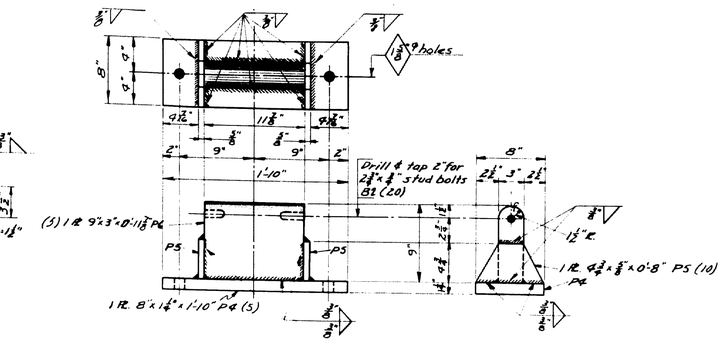
GIRDERS G1-G2

36" WF @ 280# x 80'-1" Roll Camber 2" for G2 (3 Req'd)
36" WF @ 260# x 80'-1" Rol. Camber 2¼" for G1 (2 Req'd)



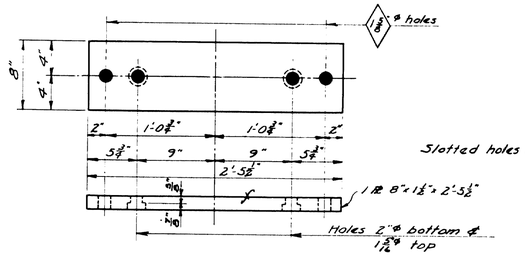
SOLE PLATE SP1

10 Req'd.



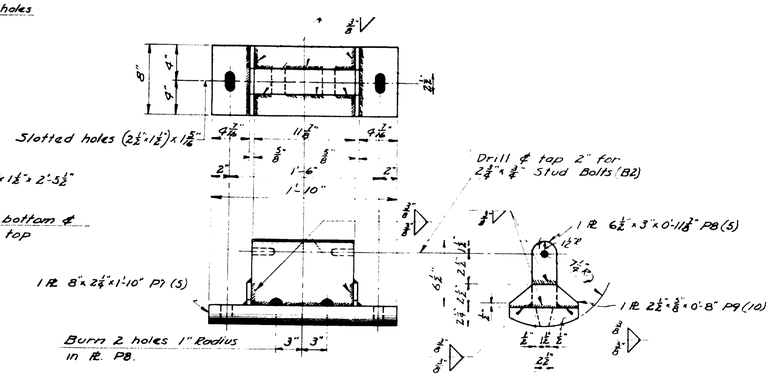
FIXED PEDESTAL FP1

5 Req'd.



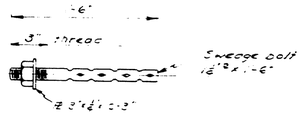
MASONRY PLATE M1

5 Req'd.



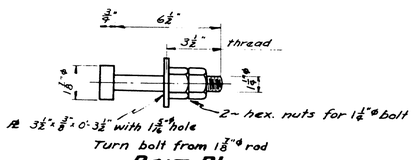
EXPANSION PEDESTAL EP1

5 Req'd.



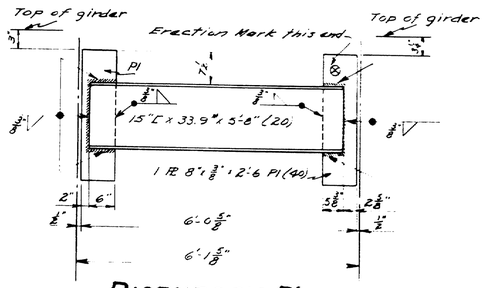
ANCHOR BOLT AB1

20 Req'd.

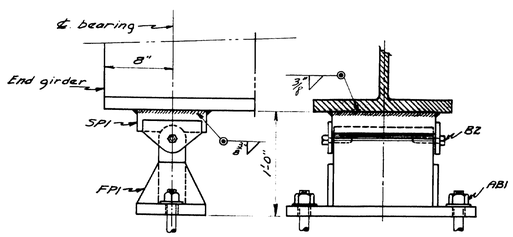


BOLT B1

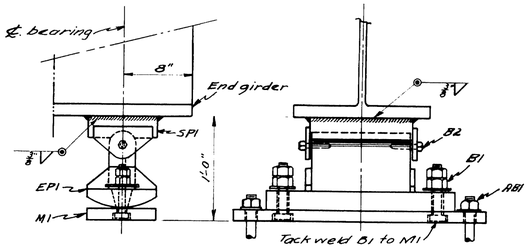
10 Req'd.



DIAPHRAGM D1



FIXED BEARING ASSEMBLY FB1



EXPANSION BEARING ASSEMBLY EB1

Paint:-
One shop coat red lead and oil.

~Specifications~
Maine State Highway Commission Specifications for Steel Highway Bridges 1945.

Loading H20-44
fs = 18,000 #/□"
fc = 1000 #/□"
n = 10

DESIGN – EVERETT TRACED – CLARK CHECKED – N.H.T.	TOWN – 14-24 BRIDGE –

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

UNITY BRIDGE

OVER

SANDY STREAM

IN THE TOWN OF

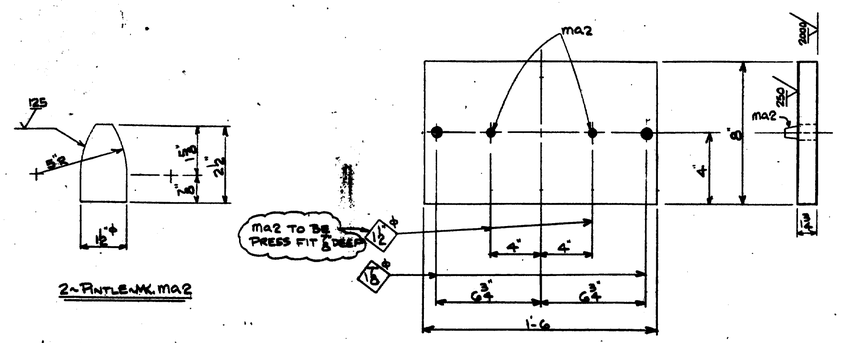
UNITY – WALDO COUNTY

"STEEL DETAILS"

SHEET 9 OF 9 AUGUSTA, MAINE NOVEMBER, 1945

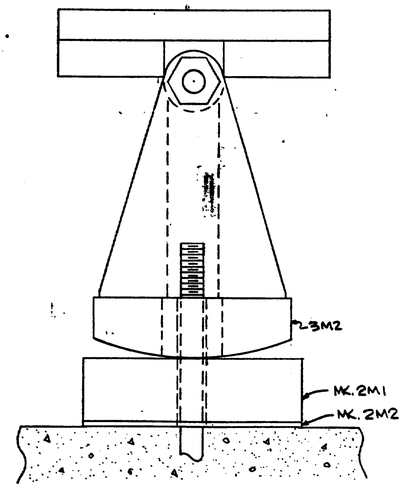
46-160

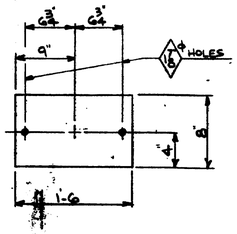
0 1 2 3 4 5 INCHES



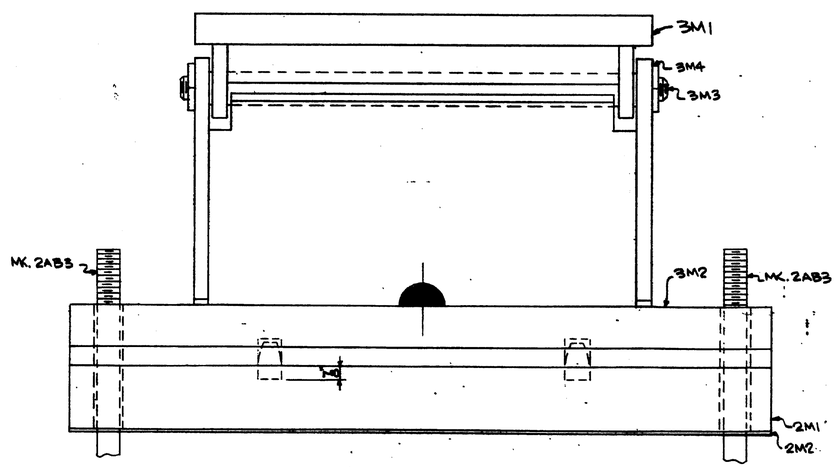
2~PINTLE~MK. ma2

ONE~MASONRY PL~MK. 2M1
"TWO SHOP COATS PAINT"

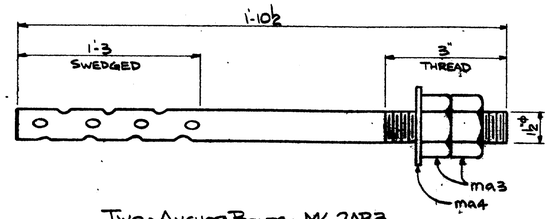




ONE~FABRIC PAD~MK. 2M2
"NO PAINT" (AS PER ME. STD. SPEC. 718.03)



ASSEMBLY VIEW



TWO~ANCHOR BOLTS~MK. 2AB3
"NO PAINT"

SHOP NOTE
SURFACES WITH ⊕ FINISH TO BE COATED WITH TEXACO MULTI-FAK EP-2 LUBRICANT

MATERIAL SCHEDULE

SHIPPING MARK	NO PCS	SUB-ASSEM.	SHAPE	LENGTH FT.	LENGTH IN.	O OR S	CUT FROM NO.	CUT FROM FT.	CUT FROM IN.	REMARKS	WT
2M1	1		PL 1¾" x 8"	1	6					MIS	
	2	ma2	1½"φ ROD	0	2½					MACHINE	
2M2	1		PAD ⅛" x 8"	1	6					PREFORMED FABRIC PAD/NO. SPEC. 718.03	
2AB3	2		ROD 1½"φ	1	10½					SWEDGED THD. ONE END	
	4		1½"φ HVY. HEX NUT							A563 GRADE A ANSI B21.2	
	2		1½"φ WASHER							TYPE A-W	

MAG PARTICLE TESTING REQUIRED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
AUG 24 1989
☐ Approved as noted ☐ Rejected
K. Jacobs
WELDING ENGR.

FOR EFFECTION

OFFICE COPY
RECEIVED AUG 23 1989
CHECKED BY
REVIEWED BY

WEIGHED BY | CHK'D BY | TOTAL WEIGHT

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PRINT DISTRIBUTION	
FA	8-2-89
APP'D	8-18-89
FIELD	8-18-89
SHOP	

MATERIAL A572 GR. 50 U.N.
BOLTS ——
SURFACE PREP SP6
PRIMER ONE COAT BASIC LEAD SILICO CHROMATE ORANGE
~~FINISH~~ PER ME. D.O.T. SPEC. 708.02 4 MILS W.F.T. U.N.O.
PROJECT Nº 00277200 BID ITEM 504.70 ← SEE PAINT NOTE
HOLES AS NOTED
ELECTRODE SEE WELD PROC.
REF. DWG. ME. STD. 1986

MAINE-CASCADE IRON WORKS

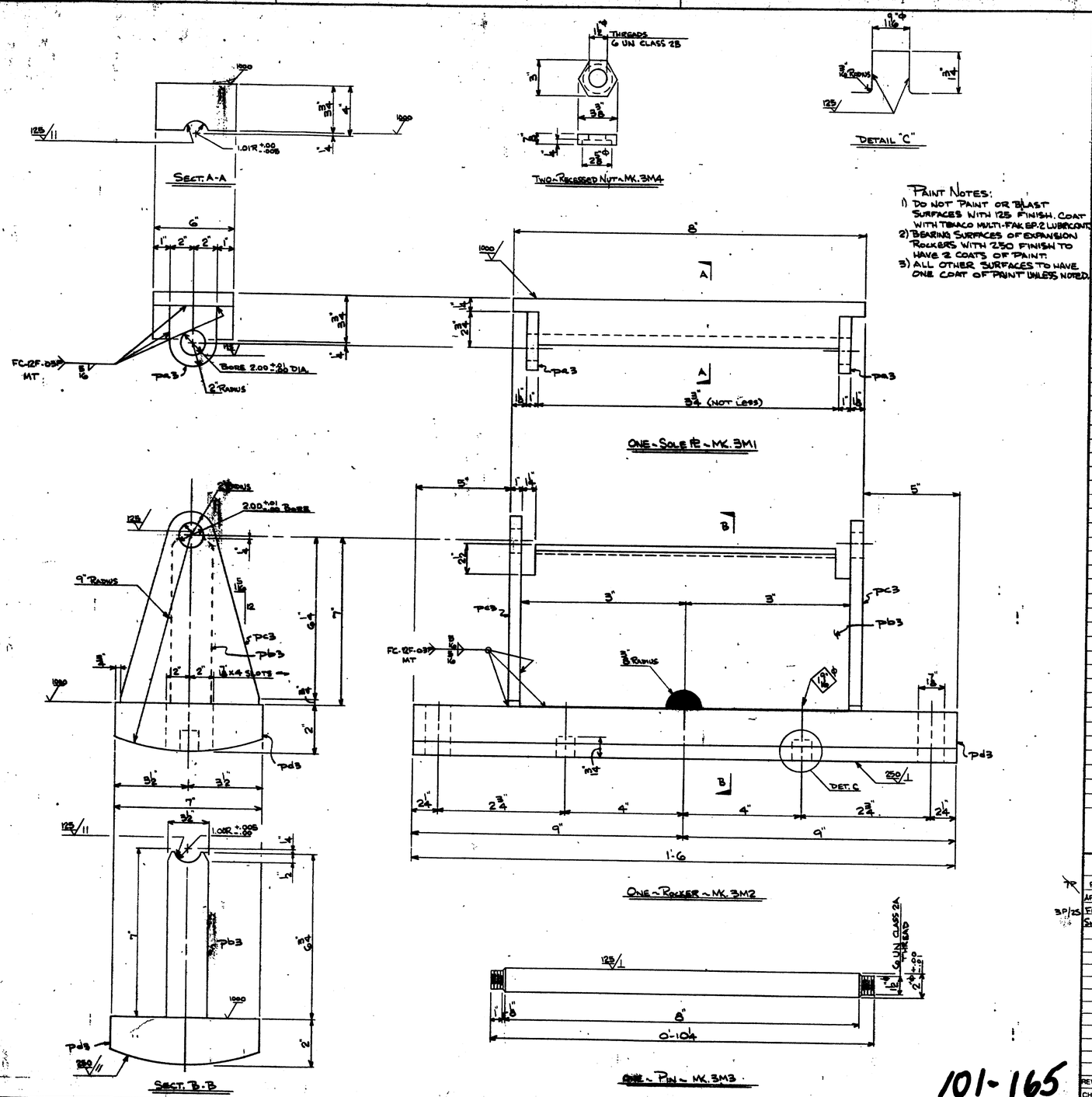
BAKER STREET, CLINTON, MAINE 04927
PHONE 207-426-2671

DESCRIPTION BEARING PEDESTAL
PROJECT UNITY, ME.
LOCATION U.S. RTE. 202
DESIGNER ME. D.O.T.
CUSTOMER COLWELL CONST.

REV △
CHK'D RB 7-28-89
DRWN MSS 7-26-89
JOB NO. 89-684-3 | DWG. NO. 2 | REV. △

101-164

BRIDGE PEDESTAL SIMILAR TO EPE & EPD



PAINT NOTES:
1) DO NOT PAINT OR BLAST SURFACES WITH 125 FINISH. COAT WITH TEXACO MULTI-FAK EP.2 LUBRICANT.
2) BEARING SURFACES OF EXPANSION ROCKERS WITH 250 FINISH TO HAVE 2 COATS OF PAINT.
3) ALL OTHER SURFACES TO HAVE ONE COAT OF PAINT UNLESS NOTED.

MATERIAL SCHEDULE

SHIPPING MARK	NO PCS	SUB-ASSEM	SHAPE	LENGTH FT	LENGTH IN	O OR S	CUT FROM NO	CUT FROM FT	CUT FROM IN	REMARKS	WT
3M1	1		PL 3¾" x 6"	0	8					MIS	
	2	PA3	PL 1" x 4"	0	4¼					MIS SHAPE	
3M2	1		ROCKER	1	6						
	1	PB3	PL 3½" x 6"	0	6¾					MIS SHAPE	
	2	PC3	PL 1" x 5½"	0	9					SHAPE	
	1	PD3	PL 2" x 7"	1	6					MIS	
3M3	1		2" ϕ PIN	0	10¼					MACHINE	
3M4	2		1¼" ϕ RECESSED PIN NUT								

MAG PARTICLE TESTING REQUIRED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
AUG 21 1989
☐ Approved as noted ☐ Disapproved
K. Jacobs
WELDING ENGR

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REVIEWED BY

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PRINT DISTRIBUTION	
FA	8-2-89
APP'D	8-18-89
FIELD	8-18-89
SHOP	

MATERIAL A572 GR.50 — HOLES AS NOTED
BOLTS —— — ELECTRODE SEE WELD PROC.
SURFACE PREP SP6 — REF DWG
PRIMER ONE COAT BASIC LEAD SILICO CHROMATE ORANGE PER ME SPEC PRINT
FINISH D.O.T. SPEC 708.02 4 MILS W.F.T. U.N.O. NOTES
PROJECT NE 00217200 BID ITEM 504.70

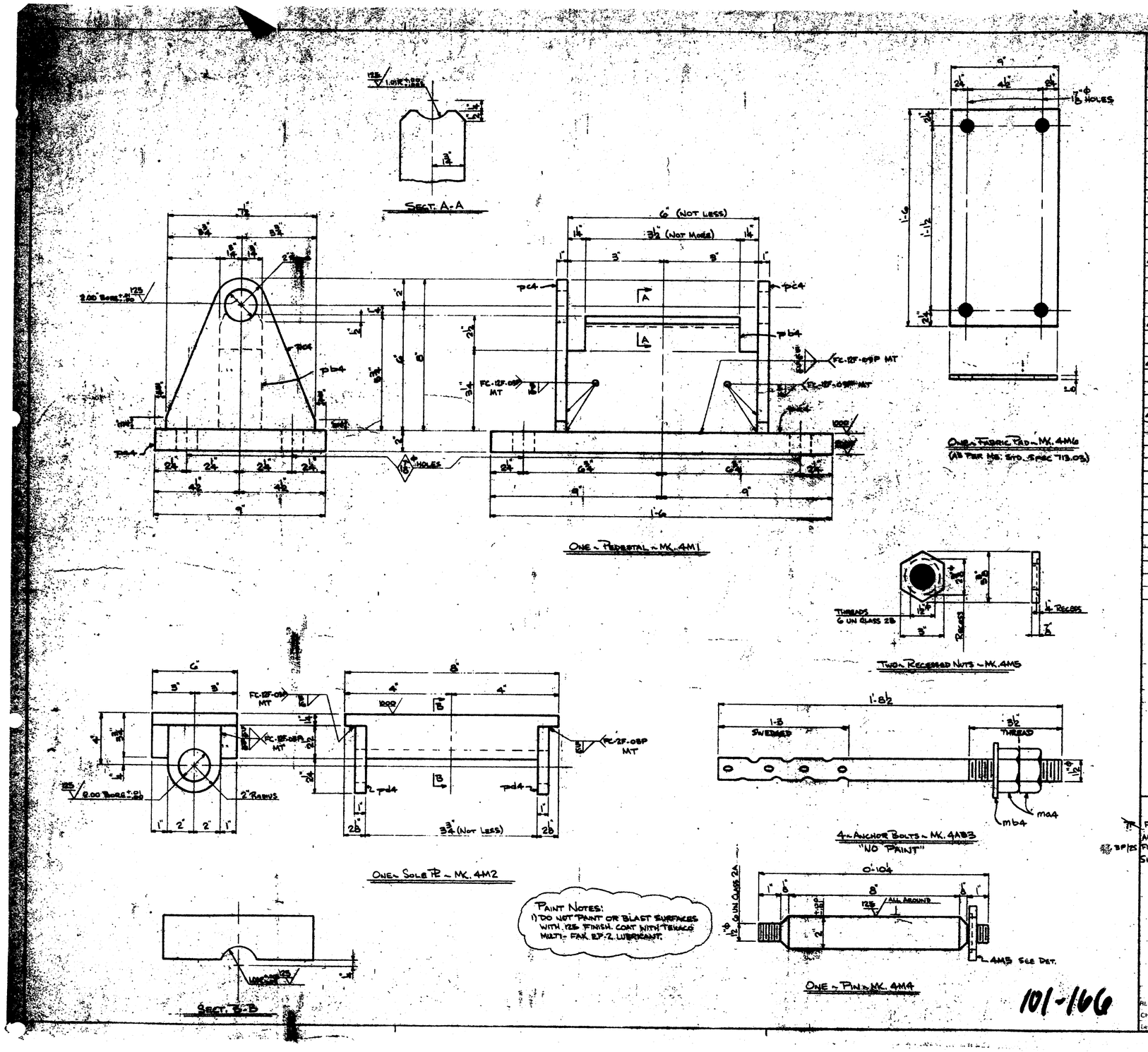
MAINE-CASCADE IRON WORKS
BAKER STREET, CLINTON, MAINE 04927
PHONE 207-426-2871

DESCRIPTION BEARING PEDESTAL
PROJECT UNITY, ME.
LOCATION U.S. RTE. 202
DESIGNER ME. D.O.T.
CUSTOMER COLWELL CONST.

REV △	
CHK'D	JB 7-26-89
DRWN	MJG 7-28-89

JOB NO. 89-684-3 — DWG. NO. 3 — REV.

101-165



MATERIAL SCHEDULE

DRAWING REF.	No.	DIM. ASSEM.		LENGTH FT	LENGTH IN.				REMARKS
4M1	1		FIXED PEDESTAL						
	1	pa4	PL 2" x 9"	1	6				
	1	pb4	PL 9½ x 5¾	0	6				M15 SHAPE
	2	pc4	PL 1" x 7½	0	8				SHAPE
4M2	1		PL 3¾ x 6"	0	8				M15
	2	pd4	PL 1" x 4"	0	4¾				SHAPE
4AB3	4		1½" ϕ ROD	1	8½				SUCCEED THE OWNER AND
	8	ma4	1½" HVY. HEX NUT						ASTM GRADE A
	4	mb4	1½" WASHER						
4M4	1		2" ϕ PIN	0	10¼				MACHINE
4M5	2		1½" RECESSED NUT						
4M6	1		PAD ½" x 9"	1	6				PREFORMED FABRIC PAD

MAG PARTICLE TESTING REQUIRED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
☒ Approved ☐ Returned for Corrections
AUG 14 1989
☐ Approved as noted
K. Jacobs
WELDING ENGR.

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TOTAL WEIGHT

WARNING

DISTRIBUTION
FA 8-2-89
APPD 8-18-89
FIELD 8-18-89
SHOP

MATERIAL A572 GR. 50
DIM —
SHOP PREP SP6
PAINT ONE COAT BASIC LEAD SILICO CHROMATE ORANGE PER M.E. D.O.T. SPEC. 708.02 4 MILS W.F.T. U.N.O. "SEE PAINT NOTE"
PROJECT № 00277200 BID ITEM: 504.70

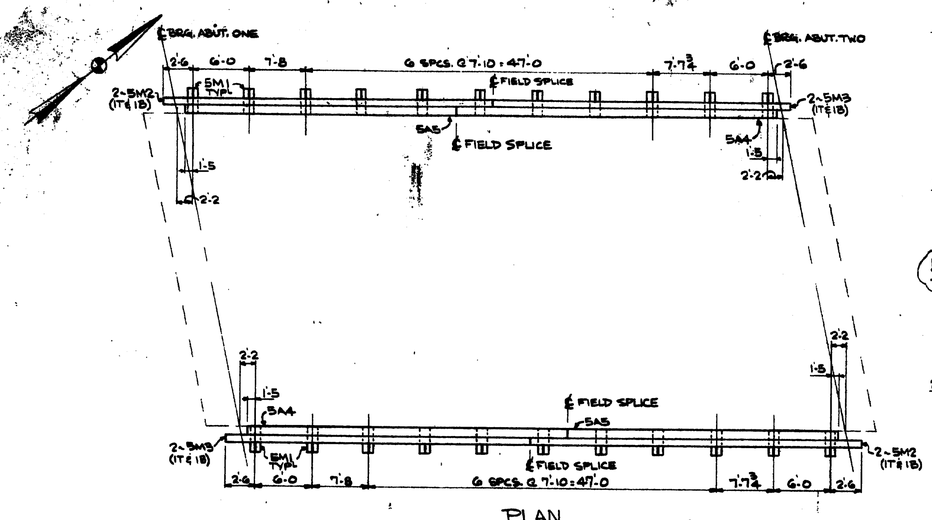
UNLESS AS NOTED
ELECTRODE SEE WELD PROC.
REF DWG

MAINE-CASCADE IRON WORKS
BAKER STREET, CLINTON MAINE 04927

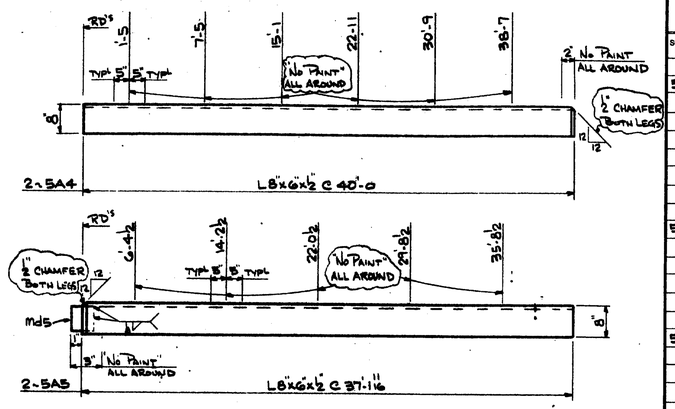
DESCRIPTION BEARING PEDESTAL
PROJECT UNITY, ME.
LOCATION U.S. RTE. 202
DESIGNER ME. D.O.T.
CUSTOMER COLWELL CONST.
JOB № 89-684-3 SHEET № 4

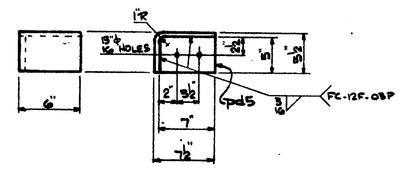
REV. △
CHKD BS 7-28-89
DRAWN MJS 7-28-89

101-166

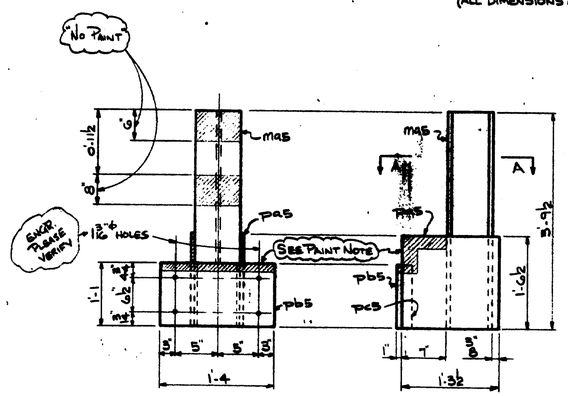


PLAN
(ALL DIMENSIONS ABOVE ARE HORIZONTAL)

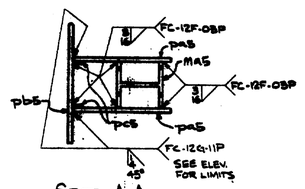




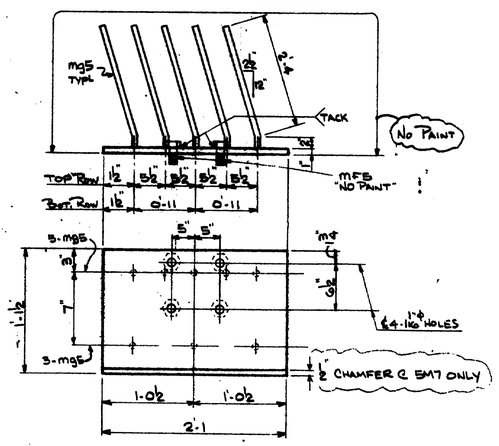
4 ~ BRACKETS ~ MK. 5M6



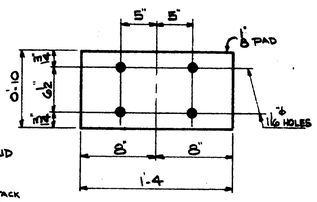
22 ~ RAIL POSTS ~ MK. 5M1



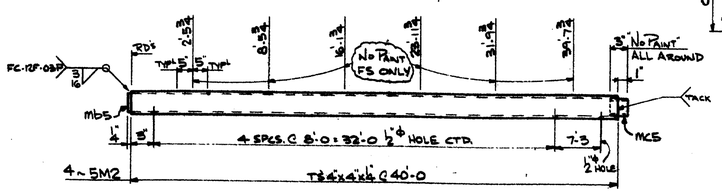
SECT. A-A

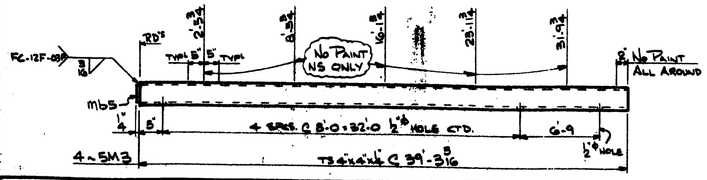


11 ~ MOUNT TS ~ MK. 5M7 @ DOWNSTREAM SIDE
11 ~ MOUNT TS ~ MK. 5M8 @ UPSTREAM SIDE



22 ~ FABRIC PAD ~ MK. 5M9
"NO PAINT" (AS PER ME. STD. SPEC. 713.03)





PAINT NOTE:
SHADED AREAS ARE 2" WIDE STRIPS OF NO PAINT EITHER SIDE, U.N.O.

FIELD NOTE:
SEE STD. BRIDGE RAIL DWG. BD-451-89 ON SHT. 11 OF 13 FOR FIELD WELDING AND FURTHER INSTALLATION INSTRUCTIONS.

101-167

MATERIAL SCHEDULE

SHIPPING MARK	NO. PCS	SUB-ASSEM	SHAPE	LENGTH FT.	LENGTH IN.	O OR S	CUT FROM NO.	CUT FROM FT.	CUT FROM IN.	REMARKS	WT.
5M1	22		RAIL POSTS	3	9½						
	22	ma5	W8x18	3	9½						
	44	pa5	PL ½"x 15½"	1	6½						
	22	pb5	PL 1"x 13"	1	4						
	44	pc5	FB 1"x4"	1	1						
5M2	4		TS 4"x4"x¼"	40	0					A500 GR. B	
	4	mb5	PL ¼"x 3 5/8"	0	3 5/8						
	4	mc5	TS 3½"x3½"x 3/16"	0	2					A500 GR. B	
5M3	4		TS 4"x4"x¼"	39	3 5/16					A500 GR. B	
	4	mb5	PL								
5A4	2		L8"x6"x½"	40	0						
5A5	2		L8"x6"x½"	37	11 1/16						
	2	md5	PL ¼"x 2"	0	11½					6" @ 42° BEND	
5M6	4		PL ½"x 6"	1	0					BEND	
	4	pd5	PL ½"x 5"	0	7					FIT	
5M7	11		PL 1"x 13½"	2	1						
	44	mf5	1"ø H.S. BOLT	0	3½					A325 I W/N&W	
	88	mg5	½"ø DEFORMED ANC.	2	6						
5M8	11		PL 1"x 3½"	2	1						
	44	mf5	1"ø H.S. BOLT								
	88	mg5	ANCHOR								
5M9	22		PAD ⅛"x 10"	1	4					PREFORMED FABRIC PAD / ME. SPEC. 713.03	
5FB12	10		5/8"ø H.S. BOLT	0	6					A325I W/N&W	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
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☐ Approved Subject to Corrections ☐ Rejected
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WEIGHED BY: K. Jacobs 2ND CHK BY

TOTAL WEIGHT

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APPD	8-18-89	
FIELD	8-18-89	
SHOP		
REV. △		
CHK'D	BB	8-2-89
DRWN	MSS	8-1-89

MATERIAL A36 U.N.O. — HOLES AS NOTED
BOLTS A325 I — ELECTRODE SEE WELD PROC. SHT. 6 OF 13 & STD. DWG.
SURFACE PREP SP6 — REF. DWG. SHT. 11 OF 13
PRIMER ONE COAT BASIC LEAD SILICO CHROMATE ORANGE PER
FINISH ME. D.O.T. SPEC. 708.02 4 MILS W.F.T. AS NOTED
PROJECT Nº 00271200 BID ITEM: 507.08

MAINE-CASCADE IRON WORKS
BAKER STREET, CLINTON, MAINE 04927
PHONE 207-426-2671

DESCRIPTION Bridge Railing
PROJECT Unity, Me.
LOCATION U.S. Rte. 202
DESIGNER ME. D.O.T.
CUSTOMER Colwell Const.
JOB NO. 89-684-4 — DWG. NO. 5 — REV. △

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	002772.00	1	86

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLANS

UNITY

WALDO COUNTY
MAINE STATE
PROJECT NO. 002772.00
PROJECT LENGTH = 5.464 MILES

PLAN 50 0 50 100
SCALES: PROFILE HOR. 50 0 50 100 FEET
VERT. 5 0 5 10
CROSS SECTION 5 0 5 10

RECYCLING & RESURFACING

REEL 297

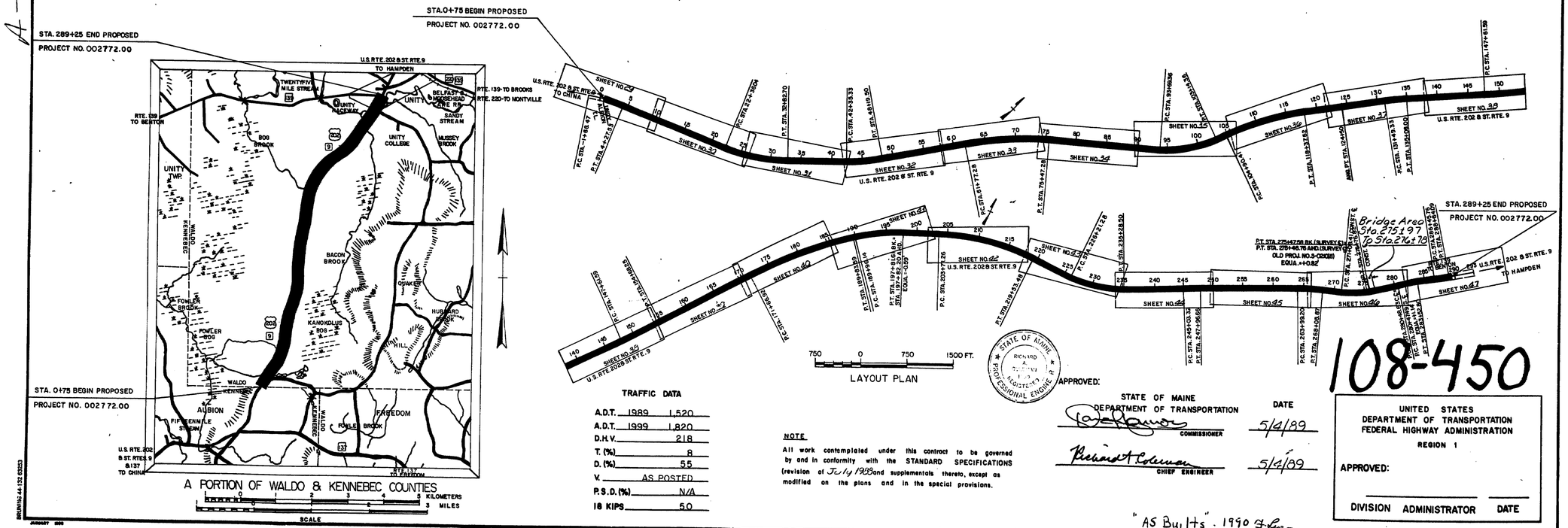
CONVENTIONAL SIGNS

COUNTY LINES	TRAVELLED WAY - PROPOSED
TOWN LINES	UNDERGROUND UTILITIES - EXISTING
PROPERTY LINES	UNDERGROUND UTILITIES - PROPOSED
R/W LINES - EXISTING	RAILROAD - SINGLE TRACK
R/W LINES - NEW - ACCESS CONTROL	RAILROAD - DOUBLE TRACK
R/W LINES - NEW - NO ACCESS CONTROL	UTILITY POLE - EXISTING
CULVERT - EXISTING	UTILITY POLE - JOINT OCCUPANCY
CULVERT - PROPOSED	PROPOSED UTILITY POLE - TEMPORARY
CURBING - EXISTING	PROPOSED UTILITY POLE - PERMANENT
CURBING - PROPOSED	TREES hardwood softwood
TRAVELLED WAY - EXISTING	WOODS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	Title Sheet
2-3	Typical Sections
4	Estimated Quantities & Summary Of Excavation & Borrow
5	Drainage Sheet & Pipe Trench Detail
6	General Notes
7-15	Standard Details
16-28	Bridge Plans
29-47	Plan Sheets
48-86	Cross Sections

A-34



A PORTION OF WALDO & KENNEBEC COUNTIES

SCALE 1 0 1 2 3 4 5 KILOMETERS
1 0 1 2 3 MILES

TRAFFIC DATA

A.D.T.	1989	1,520
A.D.T.	1999	1,820
D.H.V.		218
T. (%)		8
D. (%)		55
V.		AS POSTED
P.S.D. (%)		N/A
18 KIPS		50

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

COMMISSIONER — DATE 5/4/89

Richard A. Coleman
CHIEF ENGINEER — 5/4/89

"AS Builts". 1990 [illegible]

108-450

UNITED STATES
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION 1

APPROVED:

DIVISION ADMINISTRATOR — DATE

BRUNING 44-132 63253

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	002772.00	4	86

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.23	Removing Single Tree Top Only	17	Each
201.24	Removing Stump	20	Each
202.12	Removal Of Existing Structural Concrete	20	Cu.Yd.
202.123	Scarifying Concrete Deck-Top 1 Inch (355 S.Y.)	1	L.S.
202.127	Removing Existing Bituminous Pave. (2355 S.Y.)	1	L.S.
202.128	Removing Of Existing Concrete-Curbs & Sws.	1	L.S.
203.20	Common Excavation	5,050	Cu.Yd.
203.21	Rock Excavation	800	Cu.Yd.
203.24	Common Borrow	2,775	Cu.Yd.
203.25	Granular Borrow	27	Cu.Yd.
204.41	Rehab. Existing Shoulder, Plan Quantity	38,000	Sq.Yd. **
** 206.061	Str. Earth Excav.-Drain & Minor Strs., Below Gr.	50	Cu.Yd.
206.07	Str. Rock Excav.-Drain & Minor Strs.	400	Cu.Yd.
206.082	Str. Earth Excav.-Major Strs.	40	Cu.Yd.
304.10	Aggregate Subbase Course-Gravel	1,700	Cu.Yd.
307.30	Cold In-Place Recycled Material	61,300	Sq.Yd.
307.37	Bituminous Material For Cold In-Place Recycling	61,300	Gal.
403.07	Hot Bituminous Pavement, Grading "B"	5,700	Ton
403.10	Hot Bituminous Pavement, Grading "D"	7,250	Ton
403.101	Hot Bit. Pave, Grad. "D" (Sws, Shims, Drs., Incid.)	300	Ton
403.121	Hot Bit. Pave, Grad. "E" (Shimming)	125	Ton
409.15	Bituminous Tack Coat, Applied	100	Gal.
411.10	Untreat. Agg. Sft. Crse., Truck Measure	3,300	Cu.Yd.
502.21	Str. Concrete, Abutments & Retaining Walls	30	Cu.Yd.
502.26	Str. Conc. Roadway & Sw. Slabs On Steel Bridge (300 S.Y.)	1	L.S.
502.44	Str. Concrete Wearing Surface On Bridges	55	Cu.Yd.
502.47N	Silica Fume Additive	1	L.S.
503.12	Reinforcing Steel, Fabricated & Delivered	15,200	Lb.
503.13	Reinforcing Steel, Placing	15,200	Lb.
504.70	Str. Steel Fabricated & Delivered (20,300 Lbs.)	1	L.S.
504.71	Str. Steel Erection (20,300 Lbs.)	1	L.S.
505.08	Shear Connectors (522 Each)	1	L.S.
506.141	Field Painting New Str. Steel (20,300 Lbs.)	1	L.S.
506.142	Field Painting Existing Str. Steel (114,300 Lbs.)	1	L.S.
507.08	Steel Bridge Railing-2 Bar	159	L.F.
514.06	Curing Box For Concrete Cylinders	1	Each
515.21	Protective Coating For Conc. Srfs. (370 Sq.Yds.)	1	L.S.
518.30	Rehab. Of Str. Conc. Slab To Reinforcing Steel	100	Sq.Ft.
518.31	Rehab. Of Str. Conc. Slab To Below Reinforcing Std	50	Sq.Ft.
526.301	Temporary Concrete Barrier Type 1 (360 L.F.)	1	L.S.
527.32	Portable Crash Barrels	16	Each
601.22	Gabions, PVC Coated	10	Cu.Yd.
603.159	12 Inch Culvert Pipe Option III	68	L.F.
* 603.16	15 Inch Culvert Pipe Option I	178	L.F.
603.169	15 Inch Culvert Pipe Option III	108	L.F.
603.17	18 Inch Culvert Pipe Option I	30	L.F.
603.171	18 Inch Corrugated Metal Pipe	32	L.F.
603.199	24 Inch Culvert Pipe Option III	256	L.F.
603.201	30 Inch Corrugated Metal Pipe	18	L.F.
603.209	30 Inch Culvert Pipe Option III	120	L.F.
603.219	36 Inch Culvert Pipe Option III	124	L.F.

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
603.271	12 Inch Corrugated Metal Pipe	8	L.F.
603.3312	Remove & Relay 12 Inch Metal Pipe	36	L.F.
603.1316	Remove & Relay 15 Inch Metal Pipe	24	L.F.
604.092	Catch Basin Type B1-C	6	Each
604.161	Altering Catch Basin	1	Each
604.164	Rebuilding Catch Basin	5	Each
605.09	6 Inch Underdrain Type "B"	3,475	L.F.
605.10	6 Inch Underdrain Outlet	500	L.F.
605.11	12 Inch Underdrain Type "C"	585	L.F.
606.35	Guard Rail Delineator Post	24	Each
606.47	Single Wood Posts	50	Each
606.55	Guard Rail Type 3-Single Rail	1,575	L.F.
606.60	Guard Rail Type 3-Over 15 Foot Radius	50	L.F.
606.15	Widen Shoulder for Breakaway Cable Terminal	16	Each
606.17	Breakaway Cable Terminal	16	Each
609.31	Curb Type 3	1,475	L.F.
610.09	Plain Riprap	100	C.Y.
610.18	Stone Ditch Protection	90	Cu.Yd.
612.06	Bituminous Sealing-Black	180	Sq.Yd.
613.319	Temporary Erosion Control Blanket	1,000	Sq.Yd.
615.07	Loam	75	Cu.Yd.
616.08	Sodding	1,550	Sq.Yd.
618.13	Seeding Method No. 1	20	Unit
618.14	Seeding Method No. 2	430	Unit
619.12	Mulch	460	Unit
621.273	Large Deciduous (2"-2½" Caliper) Grp. A	11	Each
627.61	4 Inch Solid White Pave. Marking Line	57,700	L.F.
627.63	4 Inch Solid Yellow Pave. Marking Line	31,400	L.F.
627.65	White Or Yellow Pave. And Curb Marking	880	Sq.Ft.
627.68	Temp. 4" Paint Pave. Mark. Line, Yellow Or White	104,700	L.F.
629.05	Hand Labor, Straight Time	50	M.H.
631.12	All Purpose Excavator (Inc. Op.)	20	Hr.
631.171	Truck-Small (Inc. Op.)	20	Hr.
631.172	Truck-Large (Inc. Op.)	20	Hr.
631.18	Chain Saw Rental (Inc. Op.)	5	Hr.
631.32	Culvert Cleaner (Inc. Op.)	25	Hr.
639.19	Field Office-Type "B"	1	L.S.
639.21	Testing Facilities Soils	1	L.S.
639.22	Testing Facilities Bituminous Mixes	1	L.S.
643.72	Temporary Traffic Signal	1	L.S.
652.31	Type I Barricades	60	Each
652.311	Type III Barricades	20	Each
652.33	Drum	30	Each
652.34	Cone	60	Each
652.35	Construction Signs	1000	S.F.
652.36	Maintenance Of Traffic Control Devices	150	L.D.
652.37	Warning Lights	2	G.P.
652.70	Flagger	2000	M.H.
** 656.50	Baled Hay, In Place	50	Each
** 656.51	Sandbag, In Place	50	Each
** 656.65	Temporary Silt Fence	1,000	L.F.
657.24	Seeding Pits	10	Unit
658.20	Acrylic Latex Color Finish Green	35	Sq.Yd.
659.10	Mobilization	1	L.S.

Note:
* = 400 L.F. To Be Undetermined Location.
** = Undetermined Location Item.

SUMMARY OF EXCAVATION AND BORROW

Common Excavation For Estimate

Common Excavation (From Cross Sections)	4,678 Cu.Yd.	
Earth From Drives, Old Road, Etc.	355 Cu.Yd.	
Total Common Excavation		5,033 Cu.Yd.

Fill For Borrow Calculations

Common Fill (From Sections)	4,740 Cu.Yd.	
Fill For Drives	103 Cu.Yd.	
Total Fill		4,843 Cu.Yd.

Rock Excavation For Estimate

Rock Excavation (From Cross Sections)	780 Cu.Yd.	
Total Rock Excavation		780 Cu.Yd.

Available Common Excavation For Borrow Calculations

(1) Total Common Excavation	5,033 Cu.Yd.
(2) Total Deductions	0 Cu.Yd.
Total Available Common Excavation (1) Minus (2)	5,033 Cu.Yd.
Total Available Struct. Excavation (Usually U.D. Only)	1,099 Cu.Yd.
Total Available Non-Rock Excavation	6,132 Cu.Yd.

Computation Of Common Borrow For Estimate

Total Fill		4,843 Cu.Yd.
Total Available Non-Rock Excav.	6,132 × 0.85 = 5,212 Cu.Yd.	
Total Available Rock Excav.	780 × 1.33 = 1,037 Cu.Yd.	
Total Available Str. Rock Excav.	660 × 1.33 = 877 Cu.Yd.	
Total Available Excavation		6,736 Cu.Yd.
Total Fill Minus Total Available Excavation		- 1,893 Cu.Yd. (Waste) To Be Disposed Of Off Project

Computation Of Granular Borrow For Estimate

Granular Borrow Behind Abutments	21 Cu.Yd.	
Granular Borrow = 21 × 1.15 =		24 Cu.Yd.

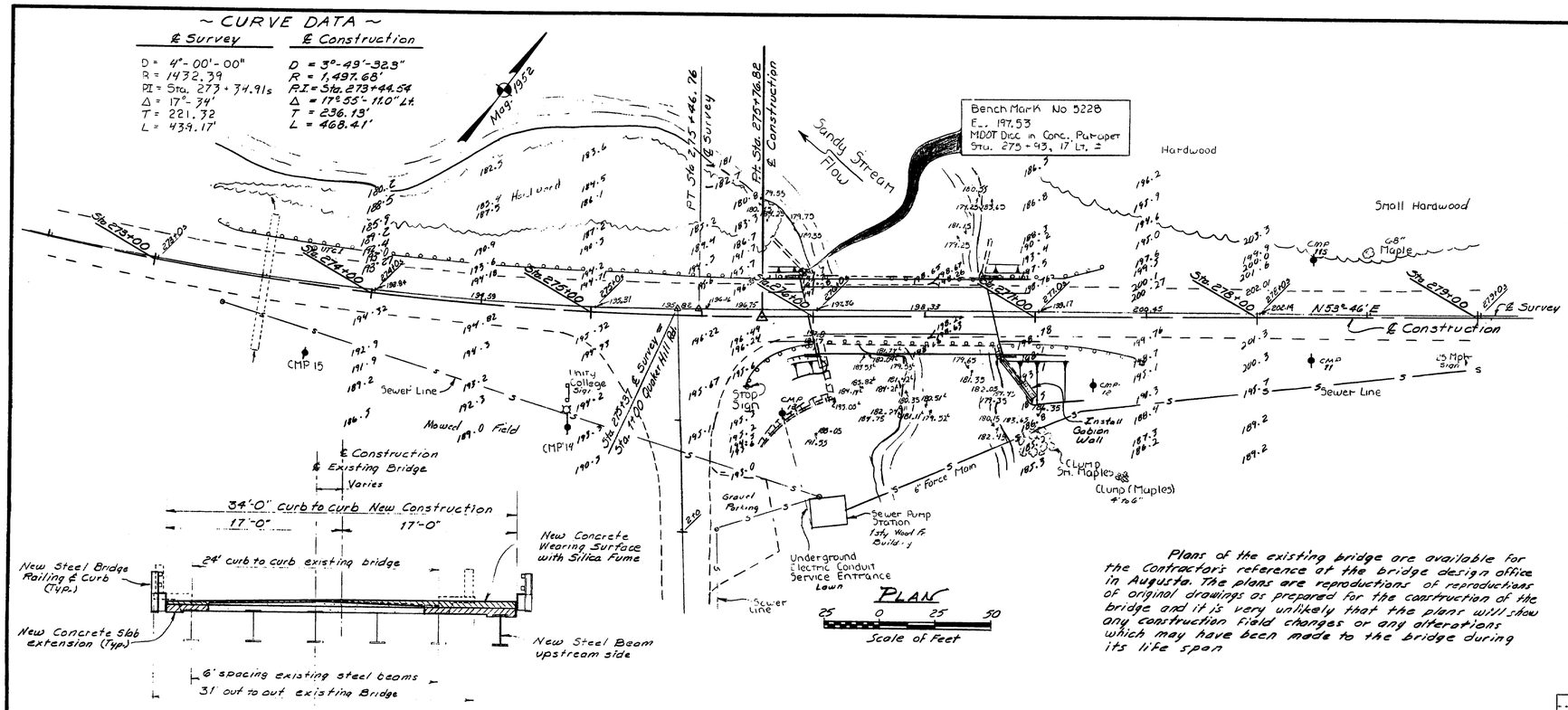
108-451

BRUNING 44-132 45710-1

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	002772.00	16	86

~ CURVE DATA ~

℄ Survey	℄ Construction
D = 4°-00'-00"	D = 3°-49'-32.3"
R = 1432.39	R = 1,497.68'
PI = Sta. 273+34.91s	P.I = Sta. 273+44.54
Δ = 17°-34'	Δ = 17°55'-12.0" Lt.
T = 221.32	T = 236.13'
L = 439.17'	L = 468.41'



TYPICAL BRIDGE SECTION

Plans of the existing bridge are available for the contractor's reference at the bridge design office in Augusta. The plans are reproductions of 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

SPECIFICATIONS

DESIGN

Load Factor Design per AASHTO Standard Specifications for Highway Bridges 1983 and Interim Specifications 1984 thru 1988.

CONTRACT

State of Maine, Department of Transportation, Standard Specifications, Highways and Bridges, Revision of July 1988.

DESIGN LOADING

LIVE LOAD: Existing
H 20
New
HS25 Stress Cycles 500,000

MATERIALS

CONCRETE: Structural Wearing Surface - Class AAA
All other - - - - - - - - - Class A
REINFORCING STEEL: ASTM A615 Grade 60
STRUCTURAL STEEL:
All new material - - - - ASTM A36
High Strength Bolts - ASTM A325, Type I

BASIC DESIGN STRESSES

CONCRETE: - - - - - - - - - - f'_c = 3,000 psi.
REINFORCING STEEL: - - - - f_y = 60,000 psi.
STRUCTURAL STEEL:
ASTM A36 - - - F_y = 36,000 psi.
ASTM A325 - - - F_y = 85,000 psi.

TRAFFIC DATA

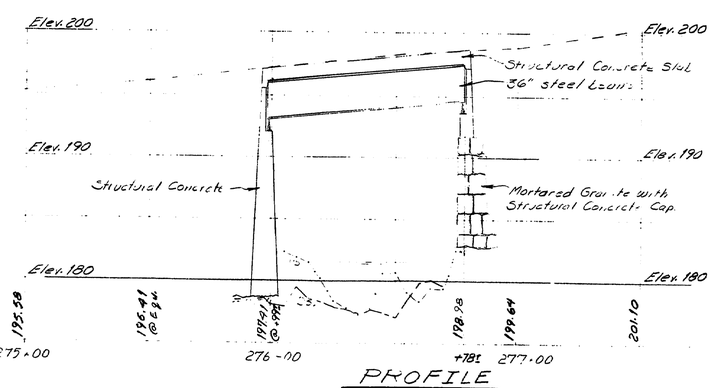
AADT 1989 1520
AADT 1999 1820
DHV-(% AADT) 12
DHV 218
% Heavy Truck (AADT) - 8
% Heavy Truck (DHV) - 8
Dir. Distribution (DHV) - 55
18 Kip Eq. P20 50
18 Kip Eq. P25 49

SCOPE OF WORK

Remove existing bituminous overlay. Scarify 1" minimum of the concrete wearing surface and rehabilitate as needed. Widen superstructure on the upstream side with one new beam. Replace existing curb and rail system with fascia-mounted steel rails. Place concrete wearing surface with silica fume additive. Clean and paint existing steel.

MAINTENANCE OF TRAFFIC

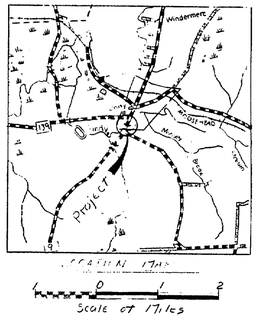
Maintain one 12' minimum lane of traffic during construction.



PROFILE

INDEX OF BRIDGE PLANS

1. General Plan
2. Construction Sequence
Estimated Bridge Quantities
Construction Notes
3. Substructure Layout
4. Substructure Details
5. Structural Steel
6. Superstructure
7. Reinforcing Steel Schedule
~BRIDGE STANDARDS~
8. BD 101-89 Bearing Pedestals
9. BD 112-89 Diaphragms
10. BD 201-89 Concrete End Posts
11. BD451-89 Steel Bridge Railing, 2 bar
12. BD 501-89 Substructure Details
13. BD 521-89 Superstructure Details



Bridge No. 5228 Book No. 10631

108-452

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
IN THE TOWN OF
UNITY
WALDO COUNTY

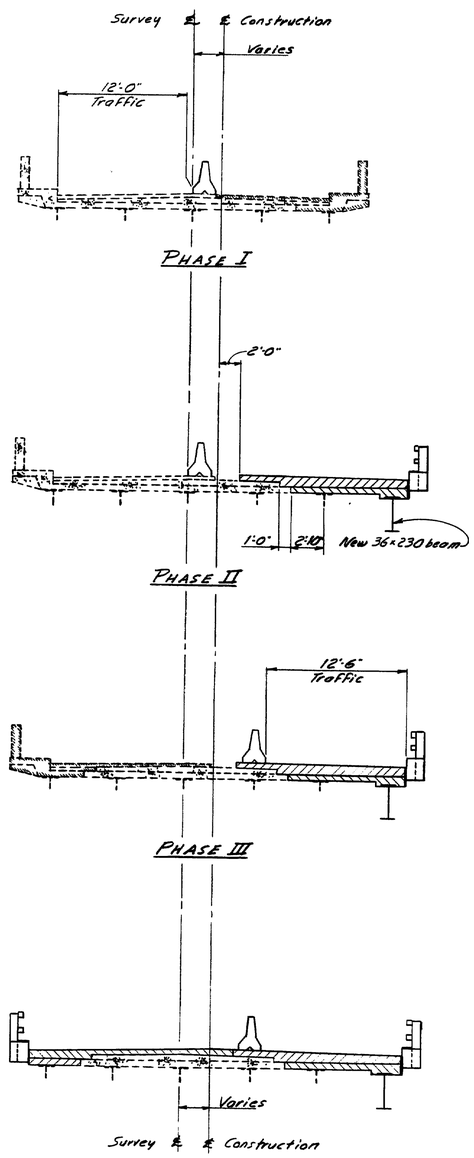
GENERAL PLAN

SHEET 1 OF 13 AUGUSTA, MAINE

PROJECT	DESIGN ENGINEER	BY	DATE
PLANS	DESIGN - DETAILED	LJCT	7/92
	CHECKED	LJ Wilson	7/92
	REVISED	BAS	5-89
	FIELD CHANGES		

Plotted by Tracy MacIsaac 5-.-88

BRUNING 44-132 45710-1



CONSTRUCTION SEQUENCE

ESTIMATED BRIDGE QUANTITIES

Item No.	Description	Quantity	Unit
202.12	Removal of Existing Concrete	20	Cu. Yd.
202.123	Scarifying Concrete Deck - Top 1 inch (1155 S.Y.)	1	L.S.
202.127	Removing Existing Bituminous Pavement (225 S.Y.)	1	L.S.
202.128	Removing Existing Concrete Curb and Sidewalk (35 C.Y.)	1	L.S.
203.25	Granular Borrow	21	Cu. Yd.
206.082	Structural Earth Excavation - Major Structures	40	Cu. Yd.
502.21	Structural Concrete Abutments and Retaining Walls	30	Cu. Yd.
502.26	Structural Concrete Roadway and Sidewalk Slabs on Steel Bridges (30 C.Y.)	1	L.S.
502.44	Structural Concrete Wearing Surface on Bridges	55	Cu. Yd.
502.4711	Silica Fume Additive (3,575 lbs.)	1	L.S.
503.12	Reinforcing Steel, Fabricated & Delivered	15,200	Lbs.
503.13	Reinforcing Steel, Placing	15,200	Lbs.
504.70	Structural Steel Fabricated and Delivered (20,300 lbs.)	1	L.S.
504.71	Structural Steel Erection (20,300 lbs.)	1	L.S.
505.08	Shear Connectors (522 ea.)	1	L.S.
506.141	Field Painting New Structural Steel (20,300 lbs.)	1	L.S.
506.142	Field Painting Existing Structural Steel (114,300 lbs.)	1	L.S.
507.081	Steel Bridge Railing, 2 bar	159	Lin. Ft.
514.06	Curing Box for Concrete Cylinders	1	Ea.
515.21	Protective Coating for Concrete Surfaces (370 S.Y.)	1	L.S.
518.30	Rehabilation of Structural Concrete Slab to Reinforcing Steel	100	Sq. Ft.
518.31	Rehabilation of Structural Concrete Slab to below Reinforcing Steel	50	Sq. Ft.
526.301	Temporary Concrete Barrier Type 1 (360 L.F.)	1	L.S.
601.22	Gabions, PVC Coated	12	Cu. Yd.
639.19	Field Office Type B		
643.72	Temporary Traffic Signal	1	L.S.
659.10	Mobilization	1	L.S.

CONSTRUCTION NOTES

1. All utility facilities shall be adjusted by the respective utilities unless noted.

2. Reinforcing steel shall have 2 inches cover unless otherwise indicated.

3. Cover the joints (vertical & horizontal) between the end of the slab and the back of the backwall with two layers of heavy roofing. See BD 501 for detail

4. Protective coating for concrete surfaces shall be applied to the following areas:
   - Face and top of concrete curbs.
   - All exposed surfaces of concrete end posts.
   - Top of slab, Fascia down to drip notch

5. Stage construction maintain one 12 foot lane of traffic.

6. Payment for drilling and grouting reinforcing steel will be made under Item 503.13 Reinforcing Steel, Placing.

7. Mortar for grout shall contain a non shrink additive.

8. Reinforcing steel may be adjusted to fit as directed.

9. The superstructure slab concrete shall be placed continuously and shall be kept plastic until the entire span has been placed.

10. Form a 1 inch V-groove on the fascias at the horizontal joint between the slab and concrete wearing surface.

11. Steel bridge railings shall be painted.

12. All concrete wearing surface shall contain a Silica Fume Additive.

13. Place Confilm or equivalent on the concrete wearing surface in accordance with manufacturer's recommendations. Payment will be considered incidental to Item 502.44 Structural Concrete Wearing Surface on Bridges

14. Cross-Frame or diaphragm connection plates may be either plumb or normal to the top flange

15. The Bearing Setting Chart indicates the required Final position of the bearings. It is anticipated that the bearings at abutment #2 will move 1/4 inch away from the fixed bearings due to the placement of the superstructure concrete. No separate payment will be made for resetting bearings to the Final position if an adjustment is required.

16. Basic Design Stresses:
    Structural Steel ASTM A36 $f_y = 36{,}000$ psi.

    Materials:
    Structural Steel ASTM A36
    High Strength bolts ASTM A325-Type 3

17. Payment for removing existing superstructure concrete will be made under Item No. 202.128 Removing of Existing Concrete Curbs & Sidewalks.

18. Payment for removing existing substructure concrete, substructure granite, and approach curbs will be made under Item No. 202.12 Removal of Existing Structural Concrete.

19. The existing bridge dimensions shown on the plans were obtained from existing plans. The contractor is responsible for verifying existing dimensions prior to construction and steel fabrication.

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SYMBOLS

- Existing Abut Concrete (to be removed)
- New Concrete (plan & elevation)
- New Concrete (section)
- Existing Concrete (to be removed)
- Existing Concrete (to remain)
- Bituminous Pavement (to be removed)

TEMPORARY SIGNAL TIMING

	1	2	3	4	5	6	7	8	9	1
Route 201 EB	G	Y	R	R	R	R	R	R	R	G
Route 201 WB	R	R	R	G	Y	R	R	R	R	R
Quaker Hill Rd.	R	R	R	R	R	R	G	Y	R	R
Time-Sec. (90 s cycle)	15	3	18	15	3	5	5	3	13	-

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	002772.00	17	86

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN - DETAILED	LRT	APR 5-89
CHECKED	KPTA	
REVISIONS	BAS	5-89
FIELD CHANGES		

BRUNING 4571D-1

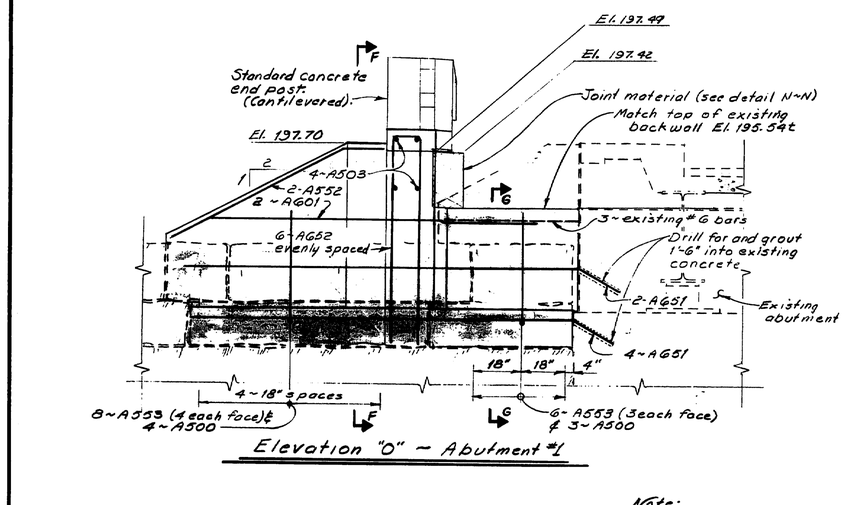
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
UNITY

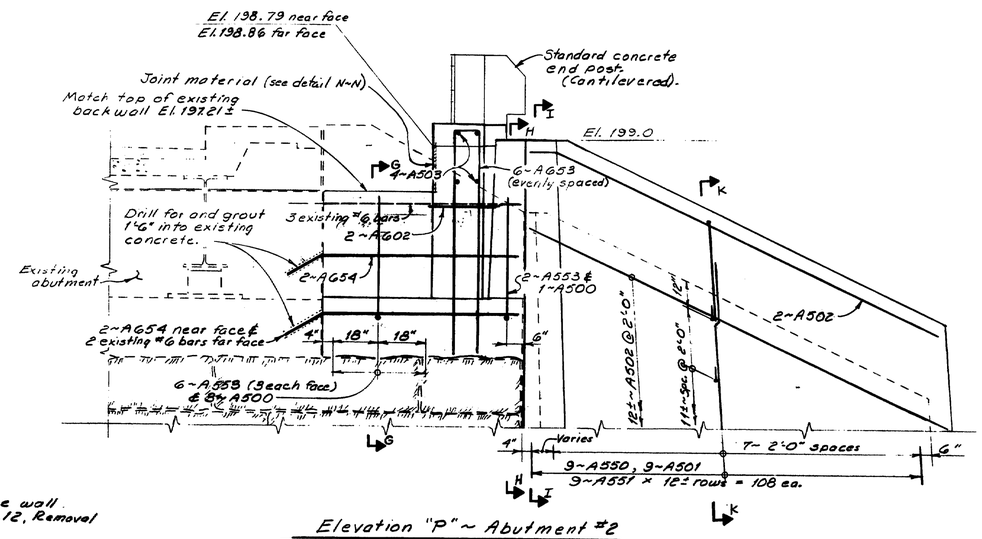
CONSTRUCTION SEQUENCE
ESTIMATED BRIDGE QUANTITIES
CONSTRUCTION NOTES

SHEET 2 OF 13 AUGUSTA, MAINE

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	002772.00	18	86

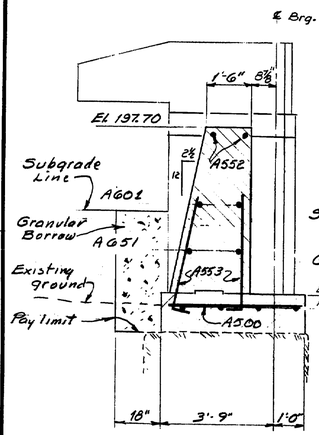


Elevation "O" ~ Abutment #1

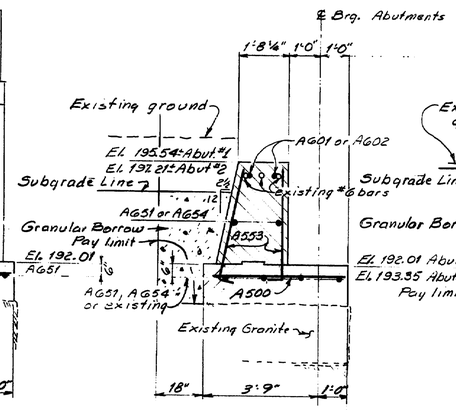


Elevation "P" ~ Abutment #2

Note:
Removing of existing granite stone wall to be paid for under Item 202.12, Removal of Existing Structural Concrete.



Section "F"



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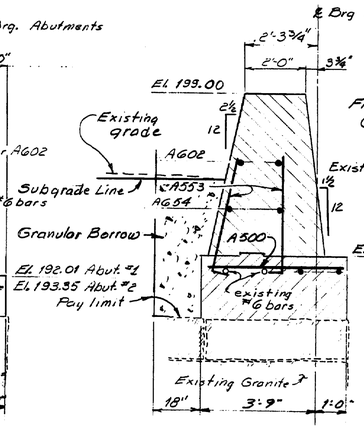

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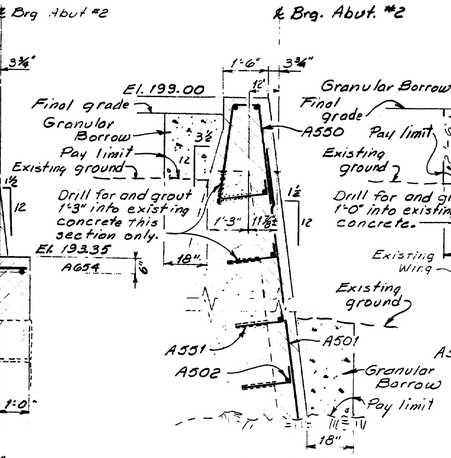
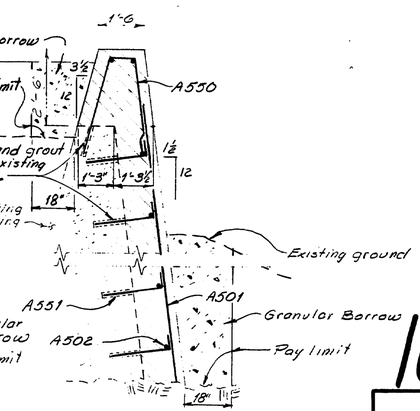


Section "I"



Section "k"

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN - DETAILED	LRT	4/88
CHECKED	BAS	5-89
REVISIONS		
FIELD CHANGES		

108-454

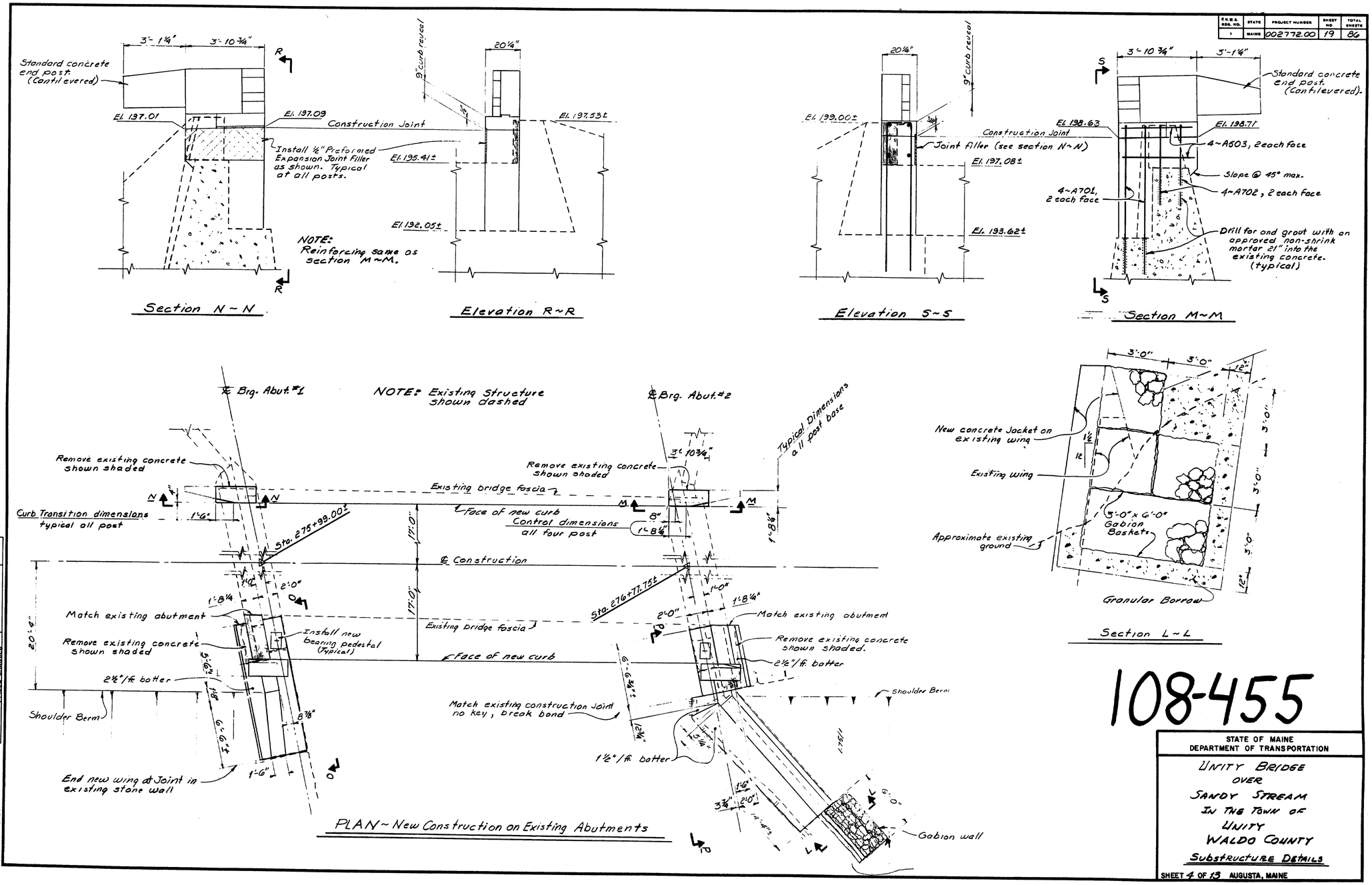
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
IN THE TOWN OF
UNITY
WALDO COUNTY
Substructure Layout

SHEET 3 OF 13 AUGUSTA, MAINE

BRUNING 45710-1

F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO	TOTAL SHEETS
1	MAINE	002772.00	19	86



108-455

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
IN THE TOWN OF
UNITY
WALDO COUNTY

SUBSTRUCTURE DETAILS

SHEET 4 OF 13 AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY	DATE
PLANS DESIGN-DETAILED	LRT	4/8/89
CHECKED	LAW	4/8/89
REVISIONS	BAS	5-89
FIELD CHANGES		

BRUNING 45710-1

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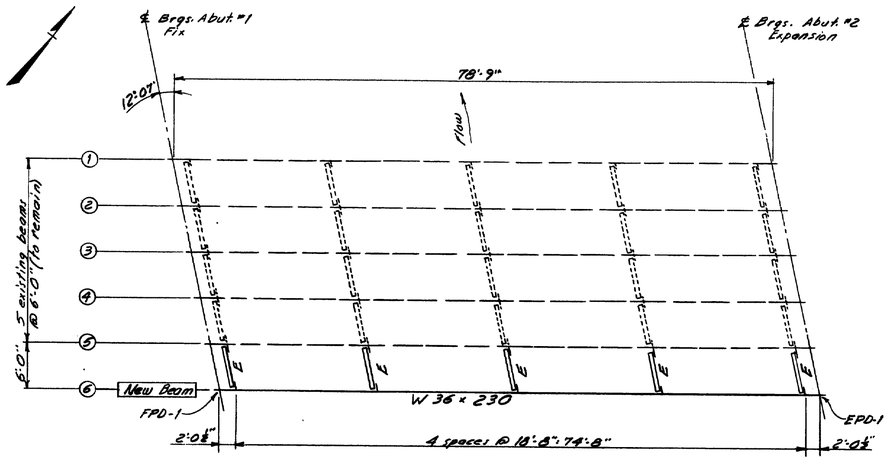
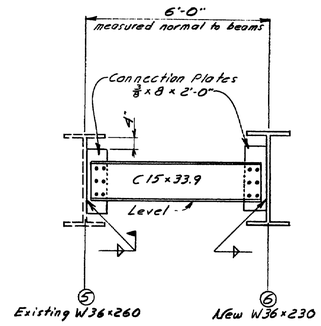
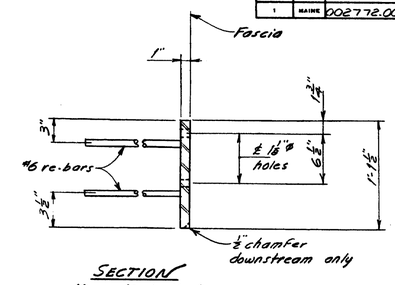


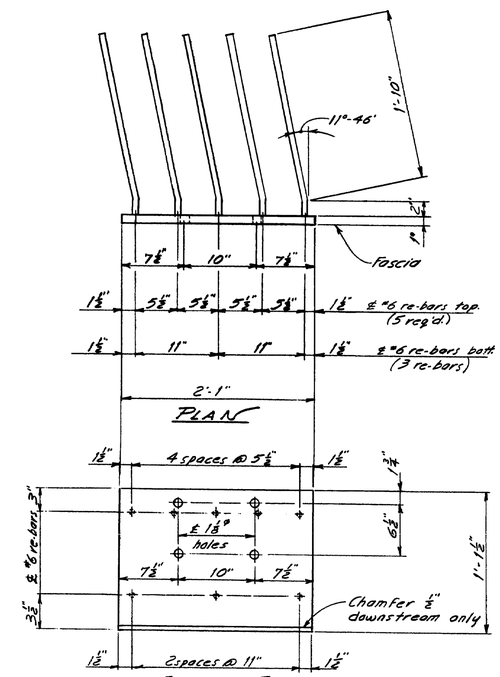
FRAMING PLAN



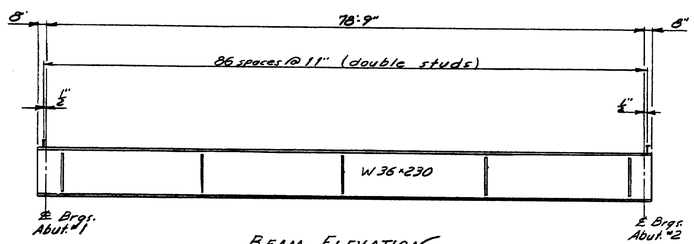
TYPE E DIAPHRAGM DETAIL
(5 required)
Work this sheet with BD 112-89



SECTION
11 required Upstream
11 required Downstream



RAIL POST MOUNTING PLATE DETAILS
(MODIFIED)

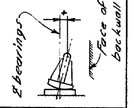


BEAM ELEVATION
(New)

NOTE:

Beam #1 & 5 : 36" WF × 260 —— 348 studs (174 each beam) – Field weld
Beam #2, #3 & #4 : 36" WF × 280
Beam #6 (New) : W 36 × 230 —— 174 studs — Camber beam up 3"
522 studs req'd.

EXPANSION BEARING CHART



Temp. F	Abut. No. 1	Abut. No. 2
5°	0"	-½"
25°	↓	-⅛"
45°		0"
65°		+⅛"
85°		+¼"
105°	0"	+⅜"

BOTTOM OF SLAB ELEVATIONS

	℄ brg's. Abut. #1	Points measured horizontaly along ℄ of beam							℄ brg's. Abut. #2
	0'	10'	20'	30'	40'	50'	60'	70'	78.75'
Beam #1	196.01	196.26	196.51	196.73	196.94	197.13	197.30	197.45	197.58
Beam #5	196.11	196.36	196.61	196.84	197.05	197.23	197.40	197.55	197.68
Beam #6	196.14	196.39	196.63	196.86	197.07	197.26	197.43	197.58	197.71

108-456

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

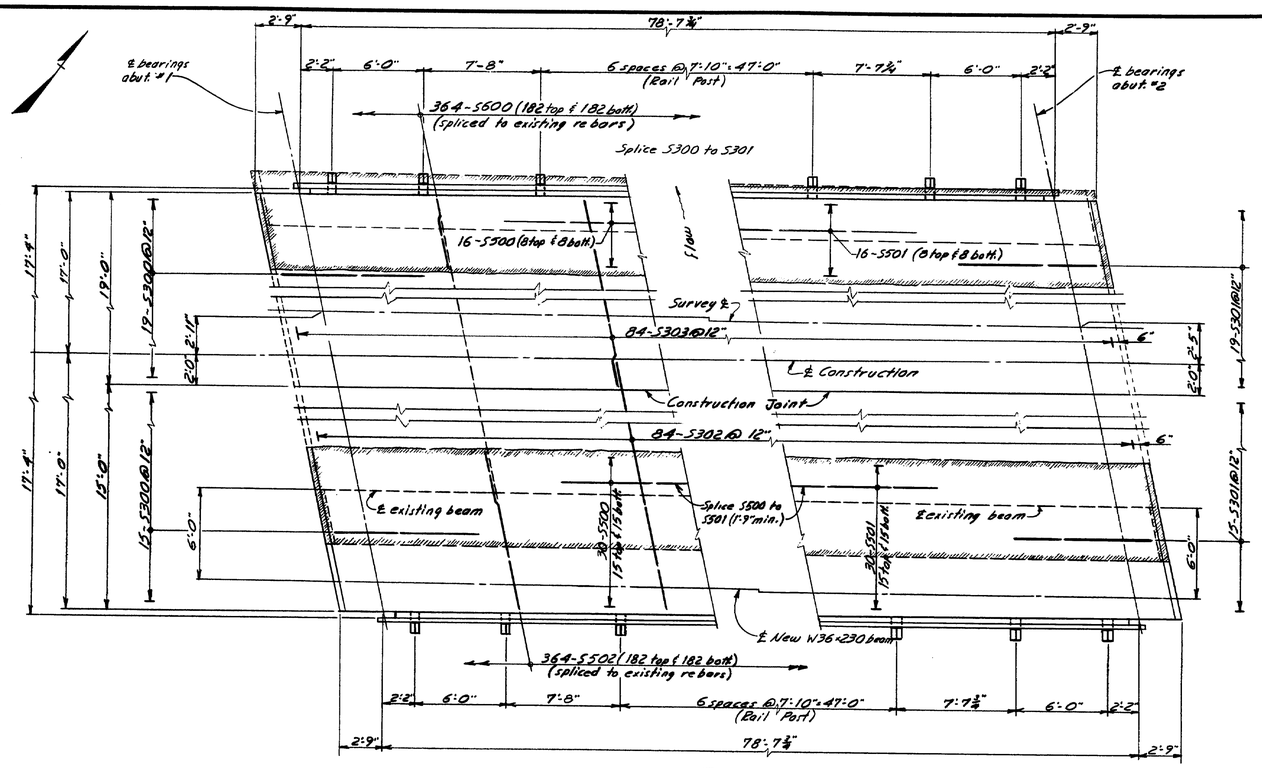
UNITY BRIDGE
OVER
SANDY STREAM
UNITY
STRUCTURAL STEEL

SHEET 5 OF 13 AUGUSTA, MAINE

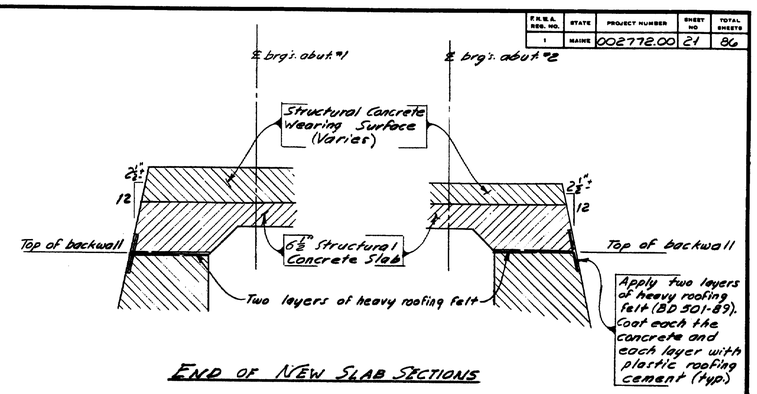
PROJECT	DESIGN ENGINEER	BY	DATE
PLANS	DESIGN – DETAILED	LRT	2-89
	CHECKED		4-89
	REVISIONS	BAS	5-89
	FIELD CHANGES		

BRUNING 4571D-1

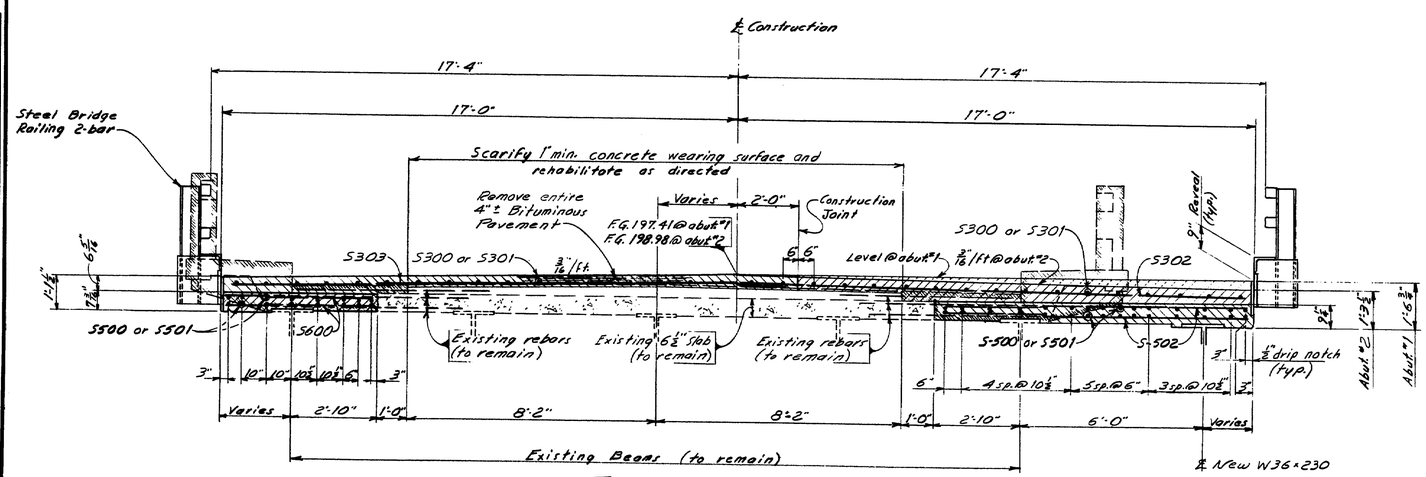
F.H.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	002772.00	21	86



PLAN



END OF NEW SLAB SECTIONS



TRANSVERSE SECTION

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN & DETAILED	LRT	6-89
CHECKED	RFTA	6-89
REVISIONS	BAS	5-89
FIELD CHANGES		

PLANS

BRUNING 45710-1

108-457

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
UNITY

SUPERSTRUCTURE

SHEET 6 OF 13 AUGUSTA, MAINE

REINFORCING STEEL SCHEDULE

FHWA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	002772.00	22	86

STRAIGHT BARS

MARK	NO.	LENGTH	LOCATION
ABUTMENTS			
A500	11	4'-4"	Bridge Seals
A501	9	25'-0"	Rt. Wing Abut. #2
A502	14	15'-0"	Rt. Wing Abut. #2
A503	16	3'-6"	4 each E.P. base
A601	2	11'-0"	Rt. Wing Abut. #1
A602	2	3'-0"	Rt. Wing Abut. #2

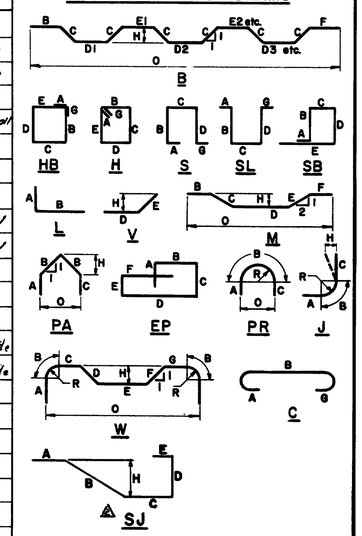
MARK	NO.	LENGTH	LOCATION
SUPERSTRUCTURE			
S300	34	45'-0"	Longitudinal
S301	34	40'-0"	Longitudinal
S302	84	17'-6"	Transverse
S303	84	17'-0"	Transverse
S500	46	40'-0"	Longitudinal
S501	46	45'-0"	Longitudinal
S502	364	10'-0"	Transverse
S600	364	4'-10"	Transverse
END POST			
EP400	24	2'-0"	Vertical

BENT BARS

MARK	NO.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION
ABUTMENTS														
A550	9	7'-3"	S	0	3'-3"	9"	3'-3"	—	—	0	—	—	—	Rt. Wing Abut. #2
A551	100	2'-6"	L	6"	2'-0"	—	—	—	—	—	—	—	—	Rt. Wing Abut. #2
A552	2	7'-6"	V	—	—	—	6'	1'-6"	—	—	8"	—	—	Rt. Wing Abut. #1
A553	22	4'-2"	L	6"	3'-8"	—	—	—	—	—	—	—	—	Br. Seat to Backwall
A651	6	14'-6"	V	—	—	—	13'-0"	1'-6"	—	—	9"	—	—	Rt. Abut. #1
A652	6	15'-0"	S	0	7'-0"	1'-0"	7'-0"	—	—	0	—	—	—	Rt. E.P. base Abut. #1
A653	6	15'-6"	S	0	7'-3"	1'-0"	7'-3"	—	—	0	—	—	—	Rt. E.P. base Abut. #1
A654	4	7'-9"	V	—	—	—	6'-3"	1'-6"	—	—	9"	—	—	Rt. Abut. #2
A701	8	8'-0"	L	8"	7'-4"	—	—	—	—	—	—	—	—	E.P. base Left side
A702	8	4'-8"	L	8"	4'-0"	—	—	—	—	—	—	—	—	E.P. base Left side
END POST														
EP401	16	4'-11"	S	0	2'-0"	11"	2'-0"	—	—	0	—	—	—	Vertical
EP402	8	4'-6"	S	0	2'-0"	6"	2'-0"	—	—	0	—	—	—	Vertical
EP700	16	7'-10"	S	0	5'-6"	7"	1'-9"	—	—	0	—	—	—	Horizontal
EP701	16	6'-8"	SJ	0	3'-1"	2'-7"	1'-0"	—	—	—	8"	—	—	Horizontal
EP702	16	4'-7"	S	0	1'-10"	11"	1'-10"	—	—	0	—	—	—	Vertical
EP703	8	4'-2"	S	0	1'-10"	6"	1'-10"	—	—	0	—	—	—	Vertical

108-458

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. △1
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
△2 New Bent Bar Type SJ	9-[illegible]
△1 Revised ACI Standard	5-12-83

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

UNITY BRIDGE
OVER
SANDY STREAM
UNITY

REINFORCING STEEL SCHEDULE

SHEET 7 OF 13 AUGUSTA, MAINE

PLANS	BY	DATE
DESIGN - DETAIL	LKT RTA	4-89
CHECKED	BAS	5-89
REVISIONS		
FIELD CHANGES		