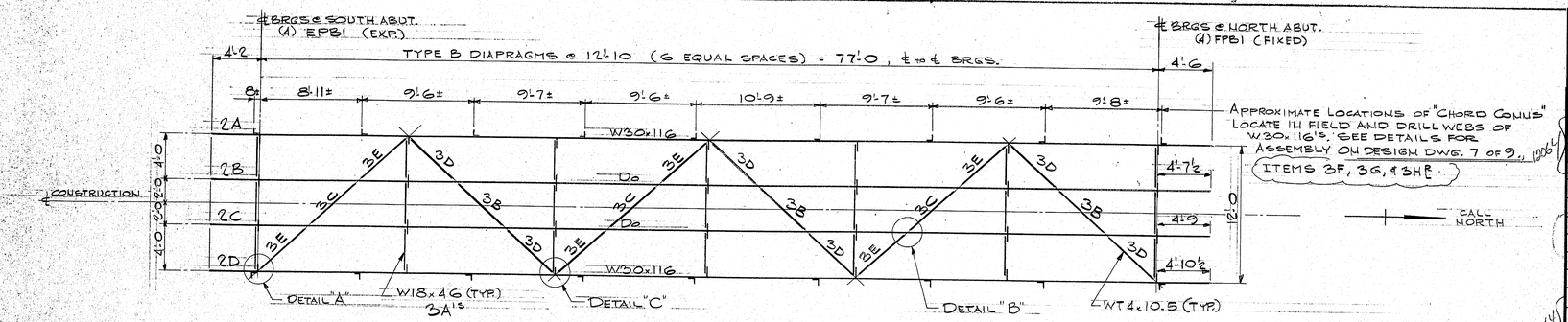
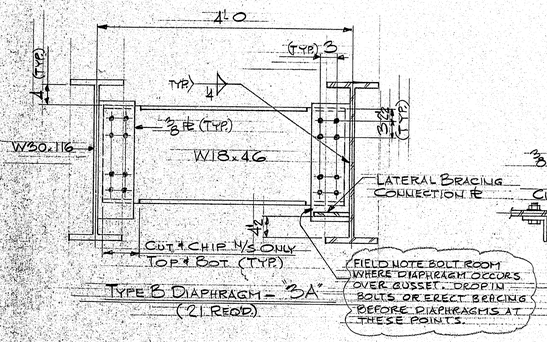
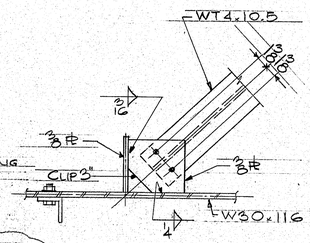


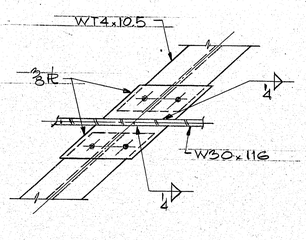
FRAMING PLAN
(6" STRINGER CAMBER UP)



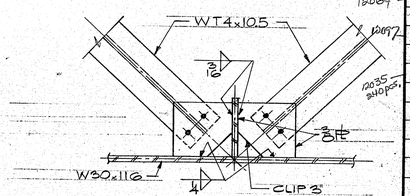
TYPE B DIAPHRAGM - "3A"
(21 REQD.)



DETAIL "A"



DETAIL "B"



DETAIL "C"

FIELD NOTE:

1) SEE SHOP DWG. 2 FOR BEAM STRINGERS.
2) SEE " " 3 FOR DIAPHRAGMS & BRACING.
3) SEE " " 3 FOR ITEMS "3J" & "3K", INSTALL PER DESIGN DWG. 6 OF 9.
4) SEE SHOP DWG. 3 FOR ITEMS "3M" THRU "3W", INSTALL PER DESIGN DWG. 3 OF 9.
5) SEE SHOP DWG. 4 FOR COMPLETE BRIDGE PARTS AND NOTES TO INSTALL.

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.
		(DASH NO.)									
1A	460	-4	⅞" HS Bolt	0	2¼	* 19063				A325, TYPE I, GALV.	
1B	40	-3	⅞" HS Bolt	0	2½					ALL CONN'S, U.N.O.	
1C	40	-3	⅞" HS Bolt	0	3¼					3F's TO STRINGERS	
1D	1080	-4	⅞" HARD WASHERS	-	-					3H℄ TO 3G	
										4 PER BOLT ALL PLACES	
				-	-						
1G	9	-1	¾" M. Bolts	1	2					@ CLEAR FRAMES	
1H	400	-5	½" CARRIAGE BOLTS BRIDGE	0	10					A307, GALV. WASHER	
1J	400	-5	BC-655 TIE ANCH	-	-	* 19063				@ BRIDGE DECK	
1K	20	-3	TECO SHEAR RS	-	-	* 19063				SEE PLAN SPECS.	
1L	20	-3	¾" M. BOLTS	2	0	* 19063				A307, GALV. WASH. @ BOT. CHORD REPAIR	
1M	80	-3	½" Lag Screws	0	5					3H℄ TO WOOD	
1N	65	-5	⅞" HEX 10 HEAD BOLTS	0	14	* 19063				A307, GALV. SPLICE	
1P	320	-5	⅝" CARRIAGE BOLTS	0	4	* 19063				A.S. TO W6 & 3R TO 3P	
										GALV. 2 6000 RAILS WITH WASHERS	

TOTAL WEIGHT

PRINT DISTRIBUTION	
FA	9/13/82
FA	10/4/82
NDOT	10/7/82
SHOP	10/6/82
SHOP	10/19/82 Δ

Δ Elim Chord Splice Bolts (1E, 1P)

REV Δ	TT	10/20/82
CHK'D	SDO	
DRWN	SDO	

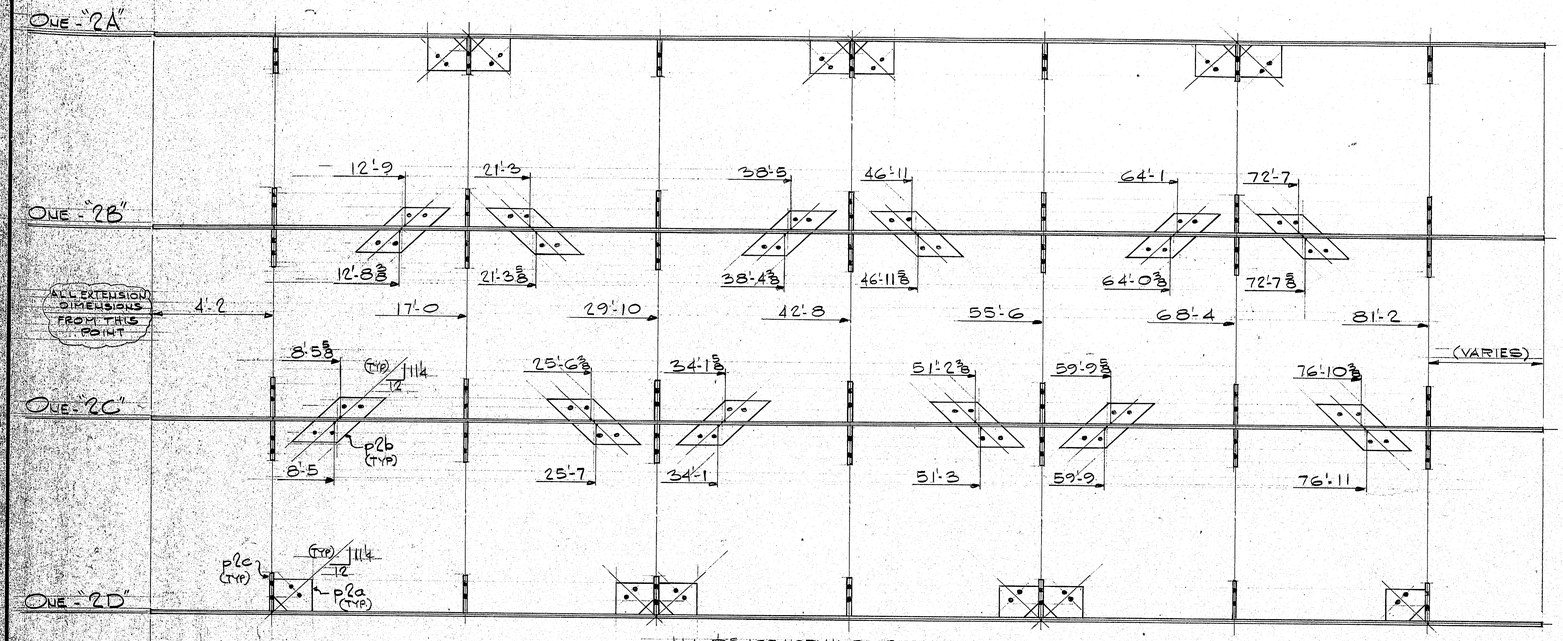
MATERIAL	A36 U.N.O.
BOLTS	⅞ A325, TYPE I, GALV. U.N.O.
SURFACE PREP	SSPC-SP10 (NEAR WHITE)
PRIMER	INORGANIC ZINC (TNEMEC N-90-92E) 3 MILS DRY U.N.O.
FINISH	—
ERECTION PLAN & DETAILS / FIELD BOLT LIST	
HOLES	1⅛ ϕ U.N.O.
ELECTRODE	PER WELDING PROCEDURES
REF. DWG.	MDOT SHTS. 1-9

MAINE-CASCADE IRON WORKS
BAKER STREET, CLINTON, MAINE 04927 OCT 4 1982
PHONE 207-426-2671

DESCRIPTION	ROBYVILLE BRIDGE OVER KENDUSKEAG STREAM
PROJECT	505-K(151)
LOCATION	CORINTH, PENOBSCOT COUNTY, MAINE
DESIGNER	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
CUSTOMER	STETSON COMPANY
JOB NO.	82-497-1393 DWG. NO. 1 REV.

175-116

WEB VIEWS BELOW TAKEN LOOKING DOWN ON WEBS



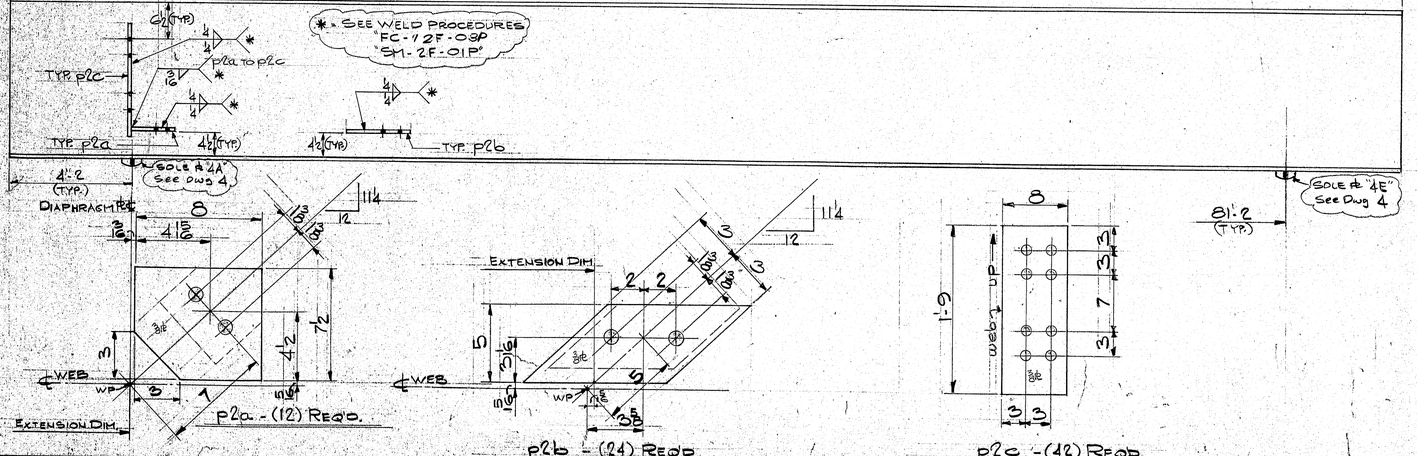
ALL #'s ARE NORMAL TO STRINGERS

"LENGTH" BELOW, W30x116

5" CAMBER UP, (TOL. +½, -0)

PIECE MARK	"2A"	"2B"	"2C"	"2D"
LENGTH	85'-8	85'-9½	85'-11	86'-0½

MARK: "TOP ← SOUTH"



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.
2A	1		W30x116	85	8		1	85	8	(10,183)	9927
2B	1			85	9½		1	85	9⅜	A572; Gr. 50 (10,200)	9954
2C	1			85	11		1	85	11	Charpy V-Notch (10,201)	9966
2D	1		W30x116	86	0½		1	86	0½	TEST Required (10,220)	9981
	12	P2a	BAR 8x⅜	0	7½					Diag from Web Shape	77
	24	P2b	BAR 5x⅜	1	2⅛		3	20	0	"DD" NEST CUT, SEE DETAIL	180
	12	P2c	BAR 8x⅜	1	9		4	20	8	Diag to P2a	750
										TOTAL'S	40,843#

TOTAL WEIGHT

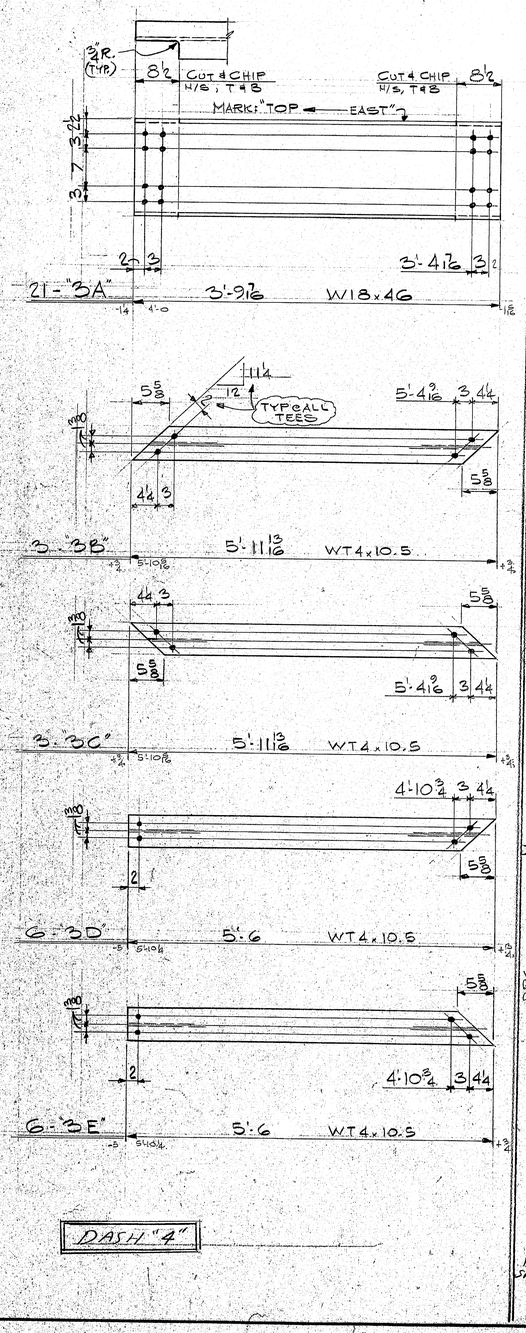
PRINT DISTRIBUTION	
FA	9/13/82
FA	10/4/82
APPD	10/6/82
SHOP	10/6/82
REV △	
CHK'D	SDD
DRWN	SDD

MATERIAL A36 U.N.O. — HOLES 1 1/16ϕ U.N.O.
BOLTS ⅞ϕ A325, TYPE I, GALV. U.N.O. — ELECTRODE PER WELDING PROCEDURES
SURFACE PREP SSPC-SP10 (NEAR WHITE) — REF. DWG. MDOT SHT. 1 of 2
PRIMER INORGANIC ZINC (TNEMEC N-90-92E) 3 MILS DRY U.N.O.
FINISH —

BEAM STRINGERS (4)

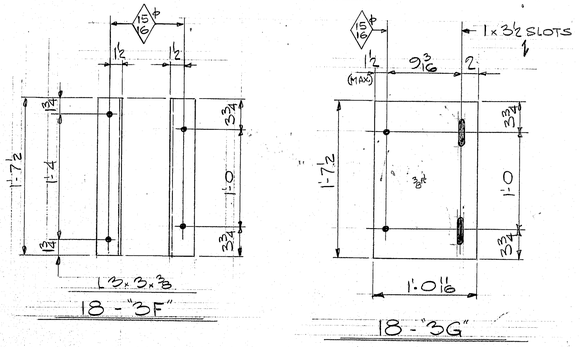
MAINE-CASCADE IRON WORKS
BAKER STREET, CLINTON, MAINE 04927
PHONE 207-426-2871
OCT. 1982

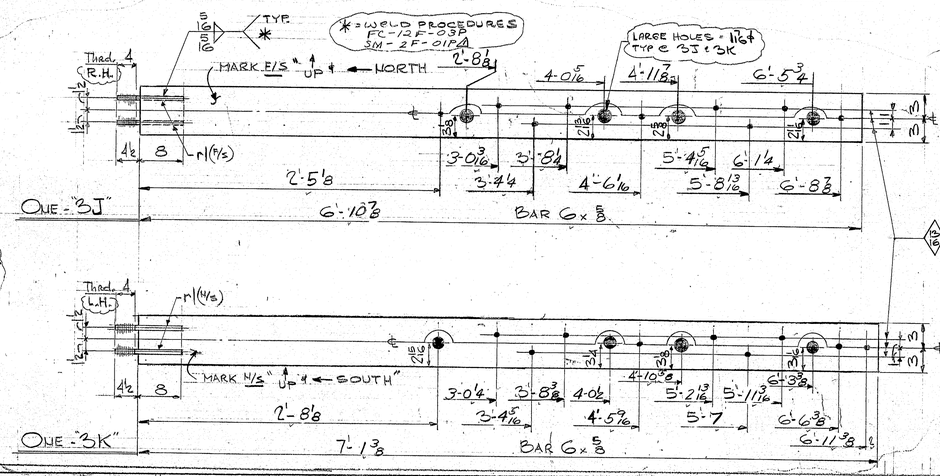
DESCRIPTION ROBYVILLE BRIDGE OVER KENDUSKEAG STREAM
PROJECT 505-K(151)I
LOCATION CORINTH, PENOBSCOT COUNTY, MAINE
DESIGNER STATE OF MAINE DEPARTMENT OF TRANSPORTATION
CUSTOMER STETSON COMPANY
JOB NO. 82-497-4 — DWG. NO. 2



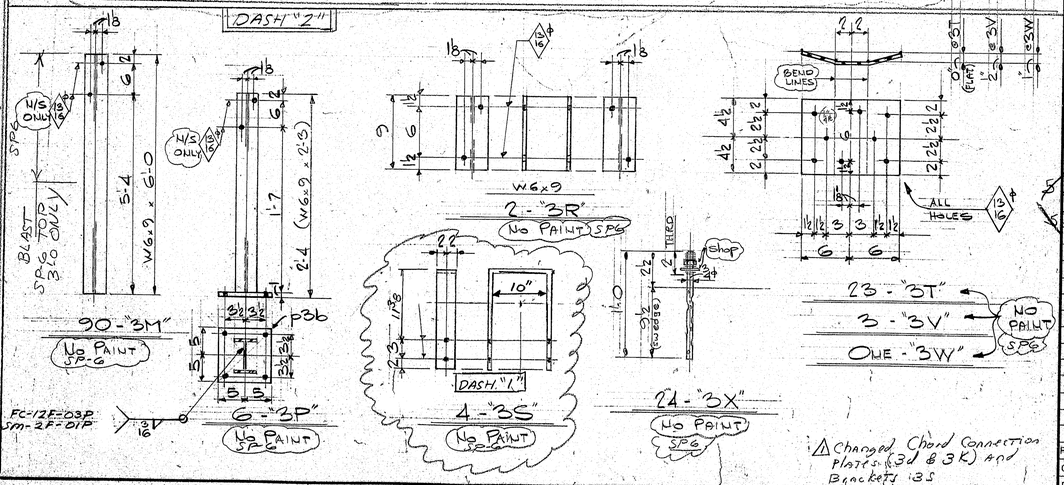
DASH "4"

DASH "3"





DASH "2"



△ Changed Chord Connection Plates (3J & 3K) and Brackets 13S

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.
			DASH "4"									
3A	21		W18 x 46	3	9 7/16	#19540	1	39 4/3	6 5/8		(174)	3648
										SPLICE W18x91		
3B	3		WT4 x 10.5	5	11 3/16		2	42	10	BCEE	(63)	189
3C	3		↓	5	11 3/16					BCEE	(63)	189
3D	6			5	6					BCIE	(33)	207
3E	6		WT4 x 10.5	5	6	⊥				BCIE	(58)	347
3F	18		L3 x 3 x ⅜	1	7½	DASH "3" STR					(12)	211
3G	18		PL ⅜ x 12 11/16	1	7½	STR					(26)	473
3H^R	18		L5 x 3 x ⅜	2	2½	#19721	2	40	0		(22)	390
3H^L	18		L5 x 3 x ⅜	2	2½	⊥					(22)	390
3J	1		PL ⅝ x 6	6	10⅜	#19661	1	16x10½		A572	(32)	88
3K	1		PL ⅝ x 6	7	1⅜	⊥				A572 △1	(32)	91
	4	r1	1¼ ϕ ROD	1	0½	#19668				A572 LEFT/RIGHT THREAD		11
			DASH "2"									
3M	90		W6 x 9	6	0	#19540	11	48	0		(54)	4860
3P	6		↓	2	3	↓	1	27	9		(18)	126
3R	2		W6 x 9	0	9	⊥		↓			(7)	14
	6	P36	PL 1 x 10	0	10	#19661	1	30x2'-7				170
			DASH "4"									
3S	4		BAR 4 x ⅜	3	6	#19661	1	22	0	A588 (NO PAINT)		74
3T	23		PL ¼ x 9	1	0	#19661	1	36x9'6			(6)	176
3V	3		↓	1	0	↓		↓			(1)	23
3W	1		PL ¼ x 9	1	0	⊥		⊥				8
3X	24		¾ ϕ ROD	1	0	#19663					(2)	36
	24	Shop	¾ ϕ NUT	-	-	STK				A325, TYPE 3 OR EQUIVALENT		-
	24	Shop	¾ ϕ WASHER	-	-	⊥						-
FIELD	2		1¼ Hex Sleeve Nuts	-	-	19833				A563 GRADE B (GALV.)		-
FIELD	2		1¼ Hex NUTS	-	-	#19818				A325 FOR 3J & 3K		-

△1

TOTAL WEIGHT: 11,967#

PRINT DISTRIBUTION	
SHOP	10-6-82
APP	10-6-82
SHOP △	10-18-82

MATERIAL	A36 U.N.O.
BOLTS	¾ A325, TYPE I, GALV., U.N.O.
SURFACE PREP.	SSPC: SP10 (NEAR WHITE)
PRIMER	INORGANIC ZINC (TNEMEC N-90-92E); 3 MILS DRY U.N.O.
FINISH	—
HOLES	11/16 ϕ U.N.O.
ELECTRODE	PER WELDING PROCEDURES
REF. DWG.	MDOT SHTS 1-9

OCT 16 1982

DIAPHRAGMS (21), LAT. BRCS. (18), MISC. ITEMS (231)

MAINE-CASCADE IRON WORKS

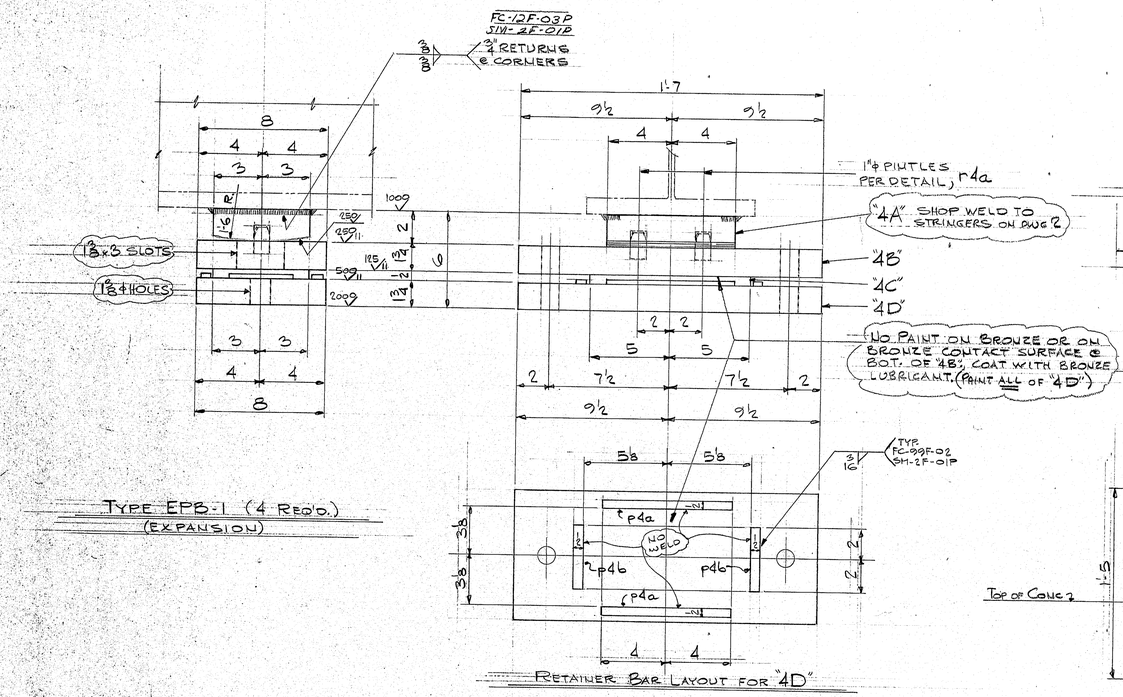
BAKER STREET, CLINTON, MAINE 04927 OCT 4 1982

PHONE 207-426-2671

DESCRIPTION	ROBYVILLE BRIDGE OVER KENDUSKEAG STREAM
PROJECT	505-K(151)
LOCATION	CORINTH, PENOBSCOT COUNTY, MAINE
DESIGNER	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
CUSTOMER	STETSON COMPANY
JOB NO.	82-497-1234 DWG. NO. 3 REV.

REV.	SPD/MK	10/18/82
CHK'D	SDS	
DRWN	SDS	

178 - 188



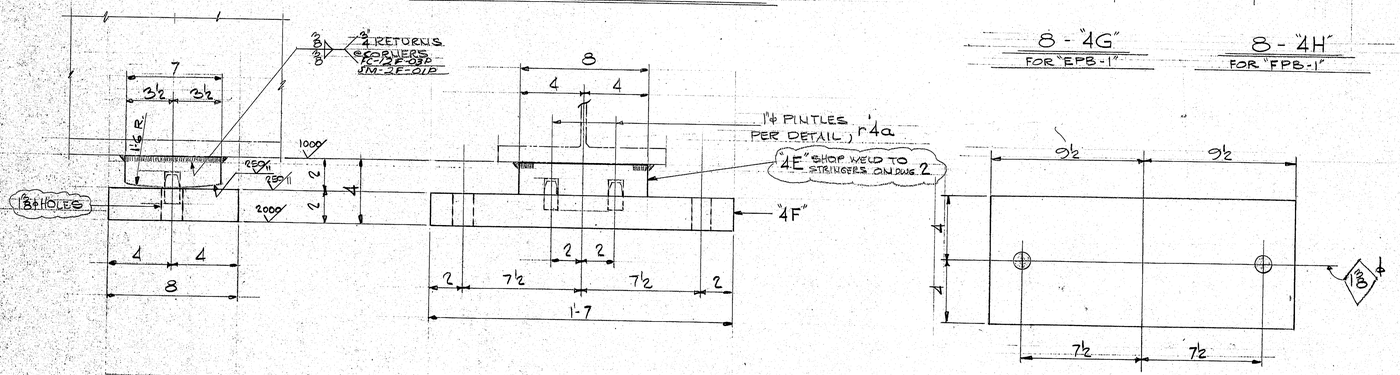
TYPE EPB-1 (4 REQ'D.)
(EXPANSION)

TYPICAL PINTLE DETAIL
r4a

RETAINER BAR LAYOUT FOR "4D"

8 - "4G"
FOR "EPB-1"

8 - "4H"
FOR "FPB-1"



TYPE FPB-1 (4 REQ'D.)
(FIXED)

8 - "4K"
B PREFORMED PAD
(FOR ALL SHOES)

PAINT & COATINGS NOTE:
2 COATS OF PAINT @ BOT. OF 4A & 4E
@ TOP & BOT. OF 4B (U.N.O.)
@ ALL OF 4D & 4F.
FURNISH SPECIAL COATINGS AT FINISHED SURFACES PER MDOT SPEC'S.

MATERIAL SCHEDULE

SHIPPING MARK	NO. PCS.	SUB-ASSEM.	SHAPE	LENGTH FT.	LENGTH IN.	D OR S	CUT FROM NO.	CUT FROM FT.	CUT FROM IN.	REMARKS		WT.
	4	"4A"	PL 2 x 6	0	8	STK	Bought Cut				(27)	10.9
12065 11982	4B		PL 1¾ x 8	1	7	STK	1	48	7'-0	(Pay 16)	(76)	30.1
	8	r4a	1" ϕ ROD	0	1½	#M270	2	20	0			3
12065	4C		PL ½ x 6	0	10	#M270				SELF LUBE BRONZE PER SPECS. 173.04 ASTM B22	(97)	3.4
12065 11982	4D		PL 1¾ x 8	1	7	STK	as above				(76)	30.1
	8	p4a	BAR ½ x ¼	0	8	CUT FR						3
	8	p4b	BAR ½ x ¼	0	4							1
	4	"4E"	PL 2 x 7	0	8	STK	Bought Cut			A588	(32)	12.7
12065 11982	4F		PL 2 x 8	1	7	STK	1	36	3.0		(87)	31.5
	8	r4a	1" ϕ ROD	0	1½	#M270	as above			A307		3
1997	4G	8	1" ϕ ROD	1	5	#M270	as above			A307	(5)	2.0
	8	p4c	BAR ¾ x ¼	0	5	CUT FR				1 1/16 ϕ HOLE O.C.		9
	16	Shop	1" ϕ STD NUTS	–	–	#M563				See Spec's. 713.02 & ANSI		–
	4H	8	1" ϕ ROD	1	3	#M270	as above			A307	(3)	2.7
	8	Shop	1" ϕ STD. WASH	–	–	#M563				} See Spec's. ANSI		–
	16	Shop	1" ϕ STD NUTS	–	–							–
12065	4J	8	8 x 8 PREFORMED PAD	1	7	#M270				85-95 SHORE A DUROMETER Ultimate Compressive loading of 10,000 psi SPEC: 713.03		–

TOTAL WEIGHT 1,175#

PRINT DISTRIBUTION	
ADD	10/6/82
SHOP	10/6/82
REV△	
CHK'D	SDD
DRWN	SDD

MATERIAL A36 U.N.O. — HOLES 1 1/16 ϕ U.N.O.
BOLTS ¾ ϕ A325, TYPE I, GALV. U.N.O. — ELECTRODE PER WELDING PROCEDURES
SURFACE PREP SSPC-SP10 (NEAR WHITE) — REF. DWG. MDOT SHTS. 1 & 9
PRIMER INORGANIC ZINC (TNEMEC N-90-92E) 3 MILS DRY U.N.O.
FINISH —
BRIDGE SHOES (48 ITEMS)

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

DESCRIPTION ROBYVILLE BRIDGE OVER KENDUSKEAG STREAM
PROJECT 505-K(151)1
LOCATION CORINTH, PENOBSCOT COUNTY, MAINE
DESIGNER STATE OF MAINE DEPARTMENT OF TRANSPORTATION
CUSTOMER STETSON COMPANY
JOB NO. 82-497-6 — DWG. NO. 4

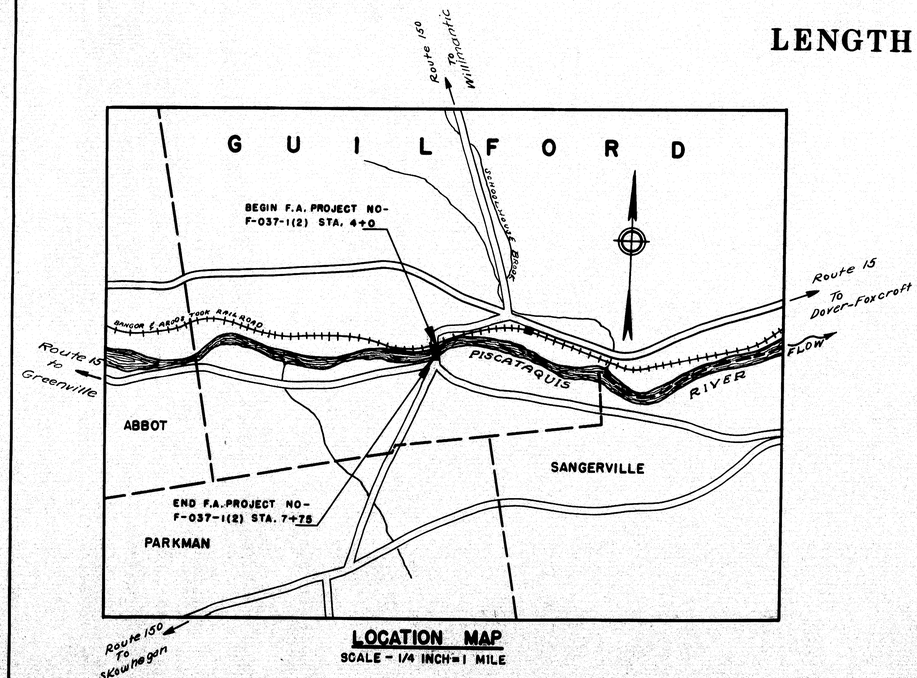
B. P. R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-037-1(2)		11

STATE OF MAINE
STATE HIGHWAY COMMISSION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

FEDERAL AID PROJECT NO. F-037-1(2)

LENGTH OF PROJECT_____.071 MILE



LOCATION MAP
SCALE - 1/4 INCH = 1 MILE

NOTE: All work contemplated on this project to be governed by and in conformity with State of Maine, State Highway Commission, Standard Specifications, Revision of May, 1953; except as modified on these plans or in the Supplemental Specifications.

CONCRETE CLASSIFICATIONS

SUPERSTRUCTURE SLAB_____CLASS "A"
ABUTMENTS & PIERS_____CLASS "B"
PIER SEAL_____CLASS "S"
RAIL_____CLASS "Y"

DESIGN- AASHO Standard Specifications for Highway Bridges 1949.

LOADING H20-44

fs = 18,000
fc = 1200
n = 10

INDEX OF SHEETS

1	TITLE SHEET
1A	STANDARDS
2-3	SURVEY PLANS
4	GENERAL PLAN & ELEV.
5	CROSS SECTIONS
6	ABUTMENT NO. 1
7	ABUTMENT NO. 2
8	PIER
9	SUPERSTRUCTURE
10	RAIL, LIGHTS & REINF.
11	STRUCTURAL STEEL

APPROVED:
MAINE STATE HIGHWAY COMMISSION
Lloyd B. Minte CHAIRMAN
Harlan D. Welch
Hazen B. Emery
Lucius O. Barrows CHIEF ENGINEER

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS
RECOMMENDED FOR APPROVAL:
_____ DISTRICT ENGINEER _____ DATE
APPROVED:
_____ DIVISION ENGINEER _____ DATE

64 - 1

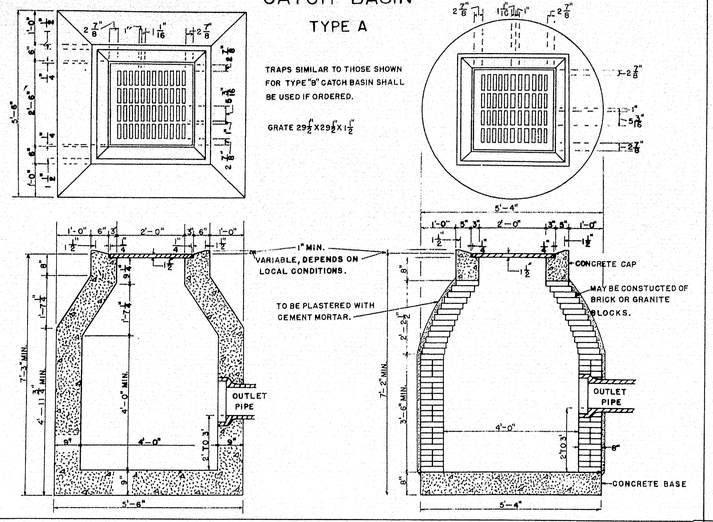
B. P. R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-037-1(2)	1	11

CATCH BASIN

TYPE A

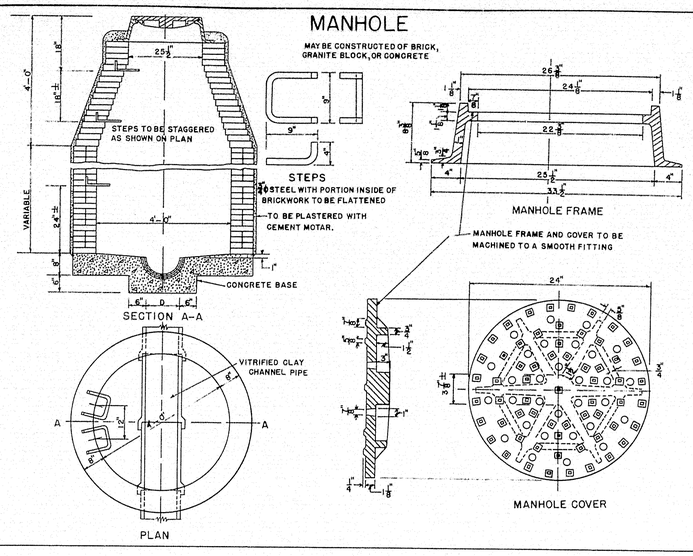
TRAPS SIMILAR TO THOSE SHOWN FOR TYPE "B" CATCH BASIN SHALL BE USED IF ORDERED.

GRATE 29½"X29½"X1½"

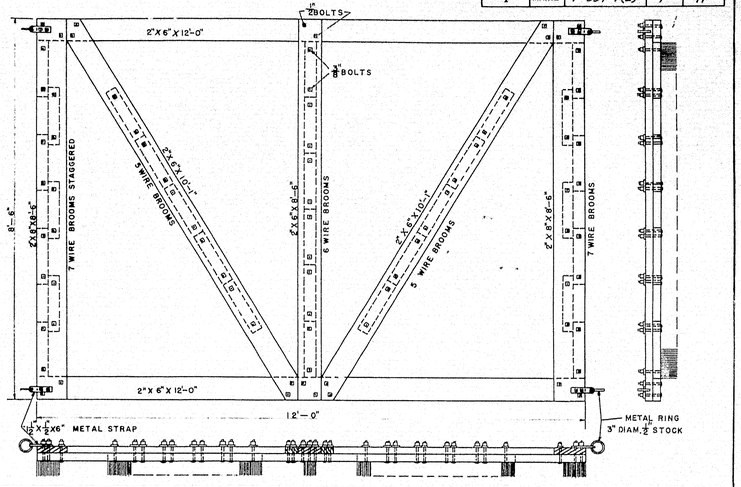


MANHOLE

MAY BE CONSTRUCTED OF BRICK, GRANITE BLOCK, OR CONCRETE



BROOM DRAG

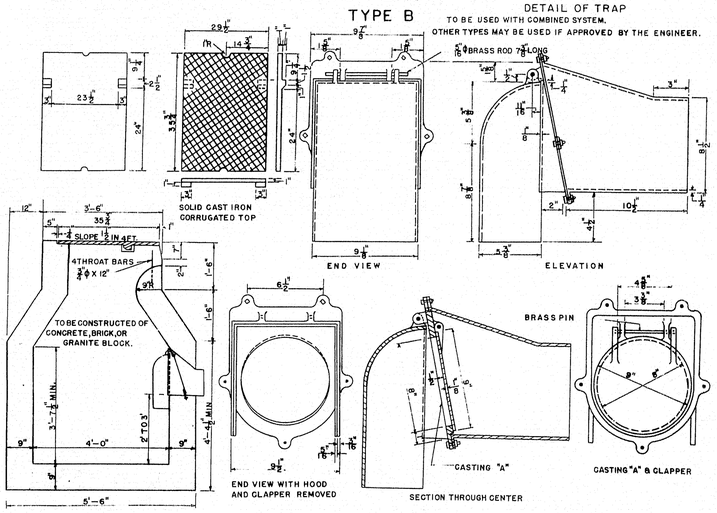


CATCH BASIN

TYPE B

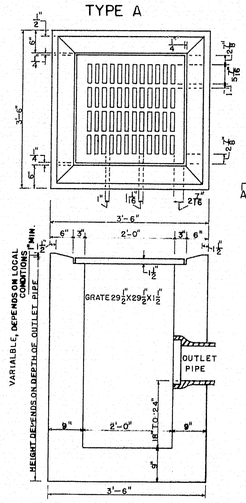
DETAIL OF TRAP

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



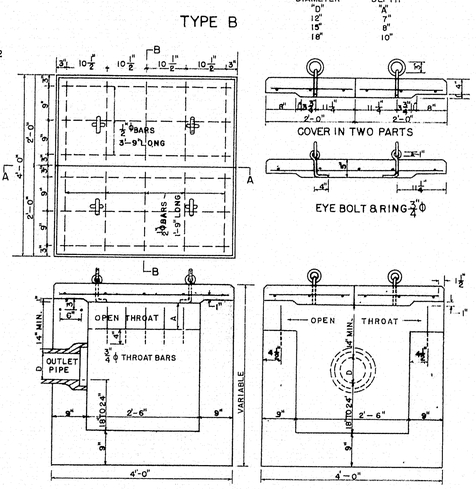
DROP INLET

TYPE A

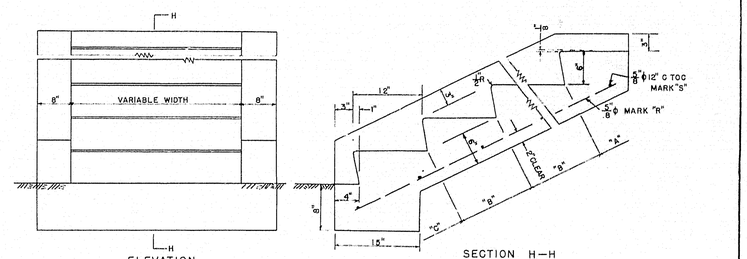


TYPE B

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



CONCRETE STEPS

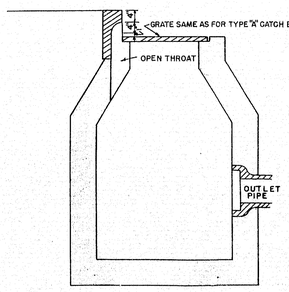


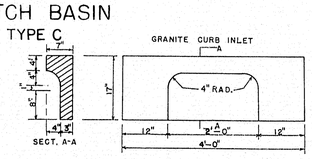
CONCRETE CLASS "A"		
SECTION	STEPS PER FT. OF WIDTH	PARAPET EACH WALL
"A" HEADER	.026 CU. YDS.	.022 CU. YDS.
"B" EA. INTER. ST.	.030 CU. YDS.	.034 CU. YDS.
"C" FOOTER	.050 CU. YDS.	.051 CU. YDS.

REINFORCING STEEL			
MARK	SIZE	NUMBER	LENGTH (EACH)
R	⅝"Ø 1.043 LBS. PER FT.	1 EACH PARAPET 1 EACH FT. OF WIDTH	8" FOR "A" +1'-8" FOR EACH "B" +1'-6" FOR "C"
S	⅝"Ø 1.043 LBS. PER FT.	1 FOR "A" 1 FOR EACH "B" 2 FOR "C"	6" EACH PARAPET +12" PER FT. OF WIDTH

CATCH BASIN

TYPE C

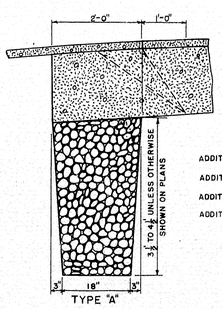




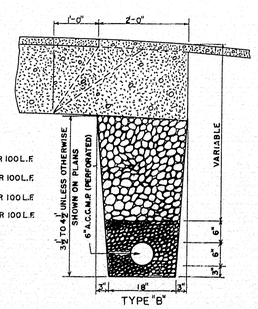
CATCH BASIN MAY BE CONSTRUCTED OF CONCRETE, BRICK, OR GRANITE BLOCKS AND SHALL CONFORM TO THE DIMENSIONS OF TYPE "A" CATCH BASIN.

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

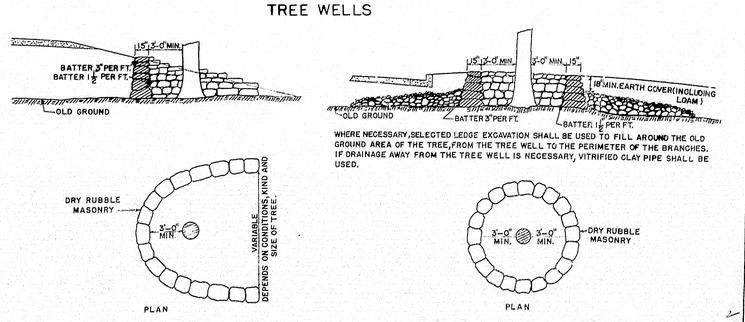
UNDERDRAIN



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



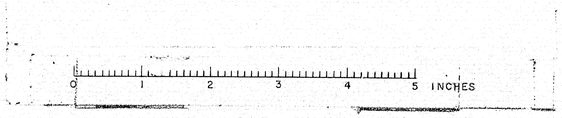
TREE WELLS



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

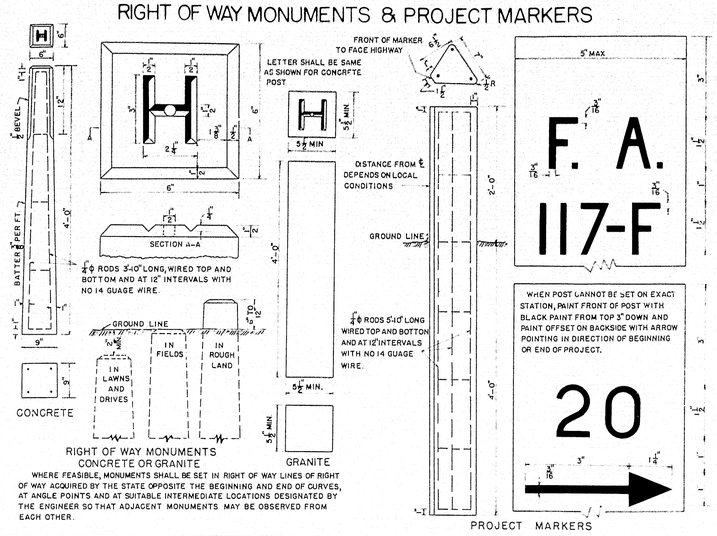
1945

64-2



B.P.R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1.	MAINE	F-037-1(2)	1A	11

RIGHT OF WAY MONUMENTS & PROJECT MARKERS

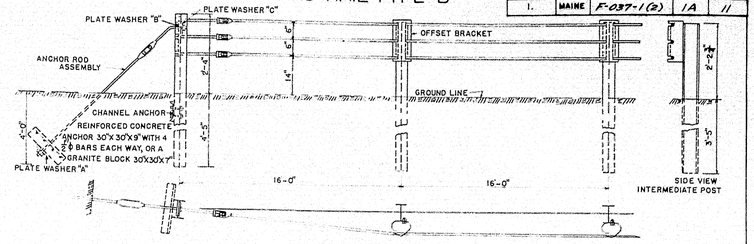


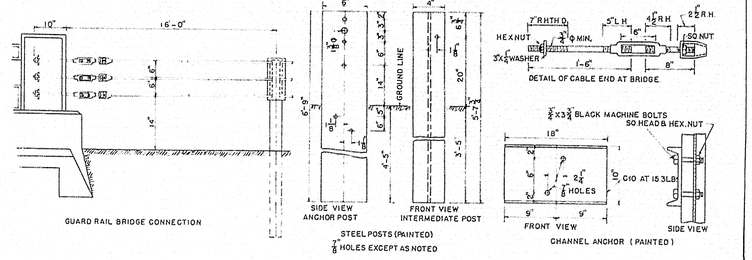
RIGHT OF WAY MONUMENTS
CONCRETE OR GRANITE

WHERE FEASIBLE, MONUMENTS SHALL BE SET IN RIGHT OF WAY LINES OF RIGHT OF WAY ACQUIRED BY THE STATE OPPOSITE THE BEGINNING AND END OF CURVES, AT ANGLE POINTS AND AT SUITABLE INTERMEDIATE LOCATIONS DESIGNATED BY THE ENGINEER SO THAT ADJACENT MONUMENTS MAY BE OBSERVED FROM EACH OTHER.

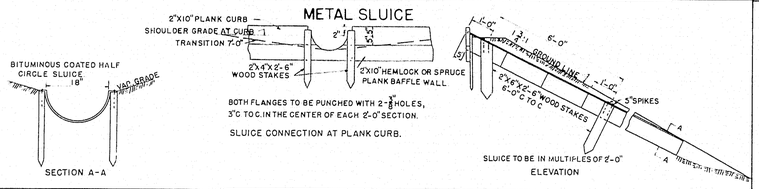
PROJECT MARKERS

GUARD RAIL TYPE "B"

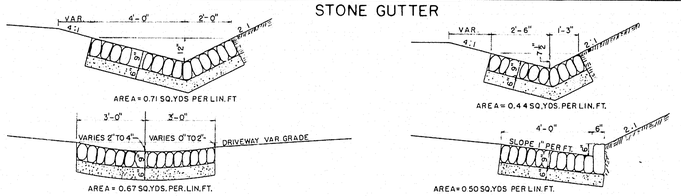




METAL SLUICE

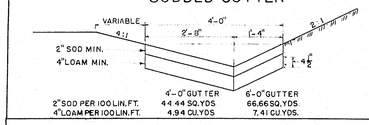


STONE GUTTER

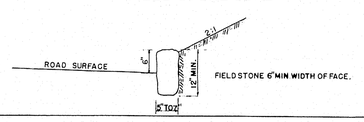


GRAVEL BED FOR GROUTED STONE GUTTER ONLY.

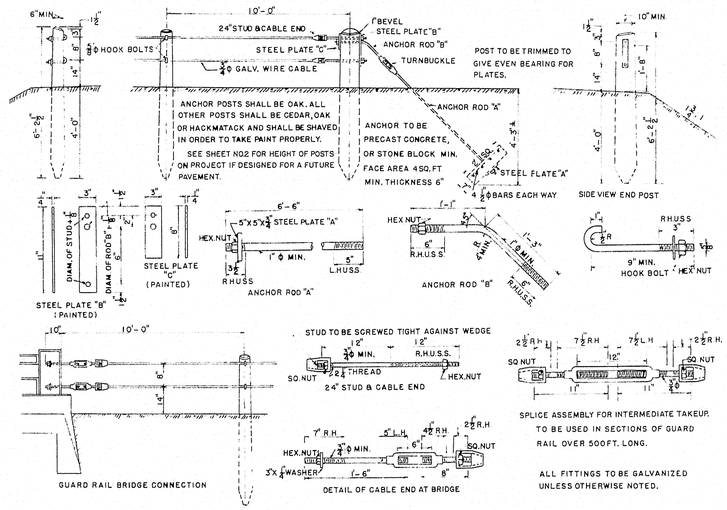
SODDED GUTTER



FIELD STONE CURB

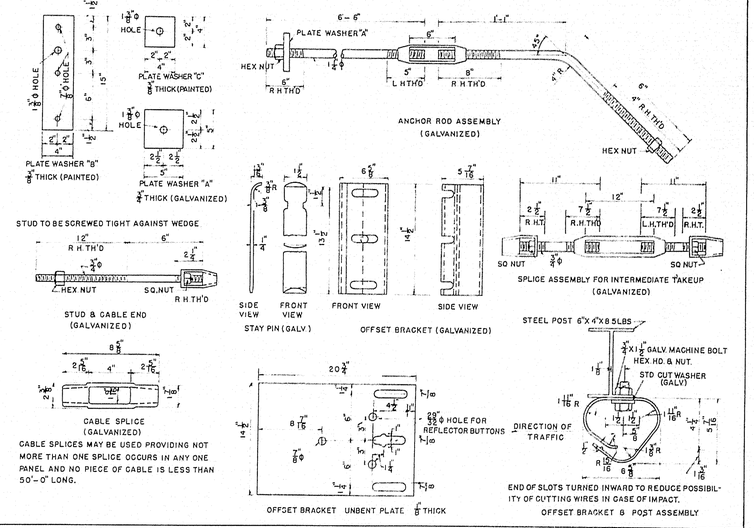


GUARD RAIL TYPE "A"



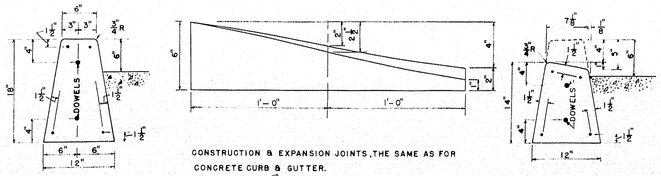
SPLICE ASSEMBLY FOR INTERMEDIATE TAKEUP. TO BE USED IN SECTIONS OF GUARD RAIL OVER 500 FT. LONG.

ALL FITTINGS TO BE GALVANIZED UNLESS OTHERWISE NOTED.



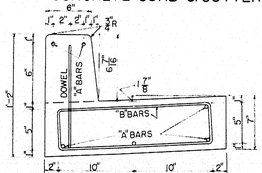
CONCRETE CURB

TRANSITION FOR DRIVEWAY APPROACH FOR 6"CURB



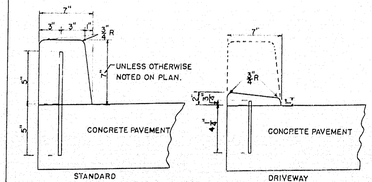
CONSTRUCTION & EXPANSION JOINTS, THE SAME AS FOR CONCRETE CURB & GUTTER.
DOWELS ⅝ϕ X 2'-0" LONG.
REINFORCEING STEEL ½ϕ X 19'-8" LONG.

CONCRETE CURB & GUTTER



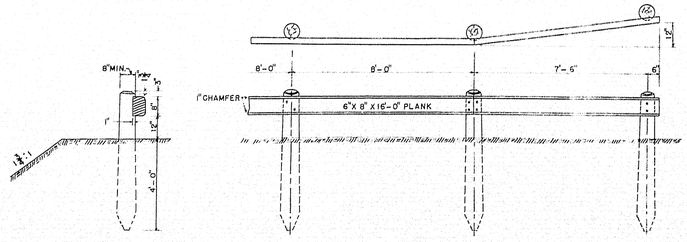
TO BE CONSTRUCTED IN 20' SECTIONS. CONSTRUCTION JOINTS TO BE PAINTED WITH BITUMINOUS MATERIAL. EXPANSION JOINTS EVERY 40. ½ THICK PREMOLDED MATERIAL SHALL BE PLACED IN EACH EXPANSION JOINT.
"A" BARS ⅝ϕ X 19'-8" LONG. "B" BARS ⅝ϕ X 4'-6" LONG. PLACE A "B" BAR 1'-3" FROM EACH END OF THE SECTION AND THEN SPACE THEM 3'-6" C.TO C. THE REST OF THE SECTION.
DOWELS ⅝ϕ X 1'-0" LONG, SPACED 1'-0" C.TO C.
CLASS "A" CONCRETE 5.49 CU.YDS. PER 100 LIN.FT.
STEEL 339.33 LBS. PER 100 LIN.FT.

INTEGRAL CONCRETE CURB



EXPANSION & DUMMY JOINTS IN CURB SHALL BE CONSTRUCTED AT SAME LOCATION AS EXPANSION & DUMMY JOINTS IN CONCRETE PAVEMENT.
DOWELS ⅝ϕ SPACED 1'-0" C.TO C. FIRST DOWEL TO BE PLACED 6" FROM END OF JOINT.
CONCRETE (STANDARD) 1.17 CU.YDS. PER 100 LIN.FT.
STEEL (STANDARD) 55.5 LBS. PER 100 LIN.FT.

WOOD GUARD RAIL

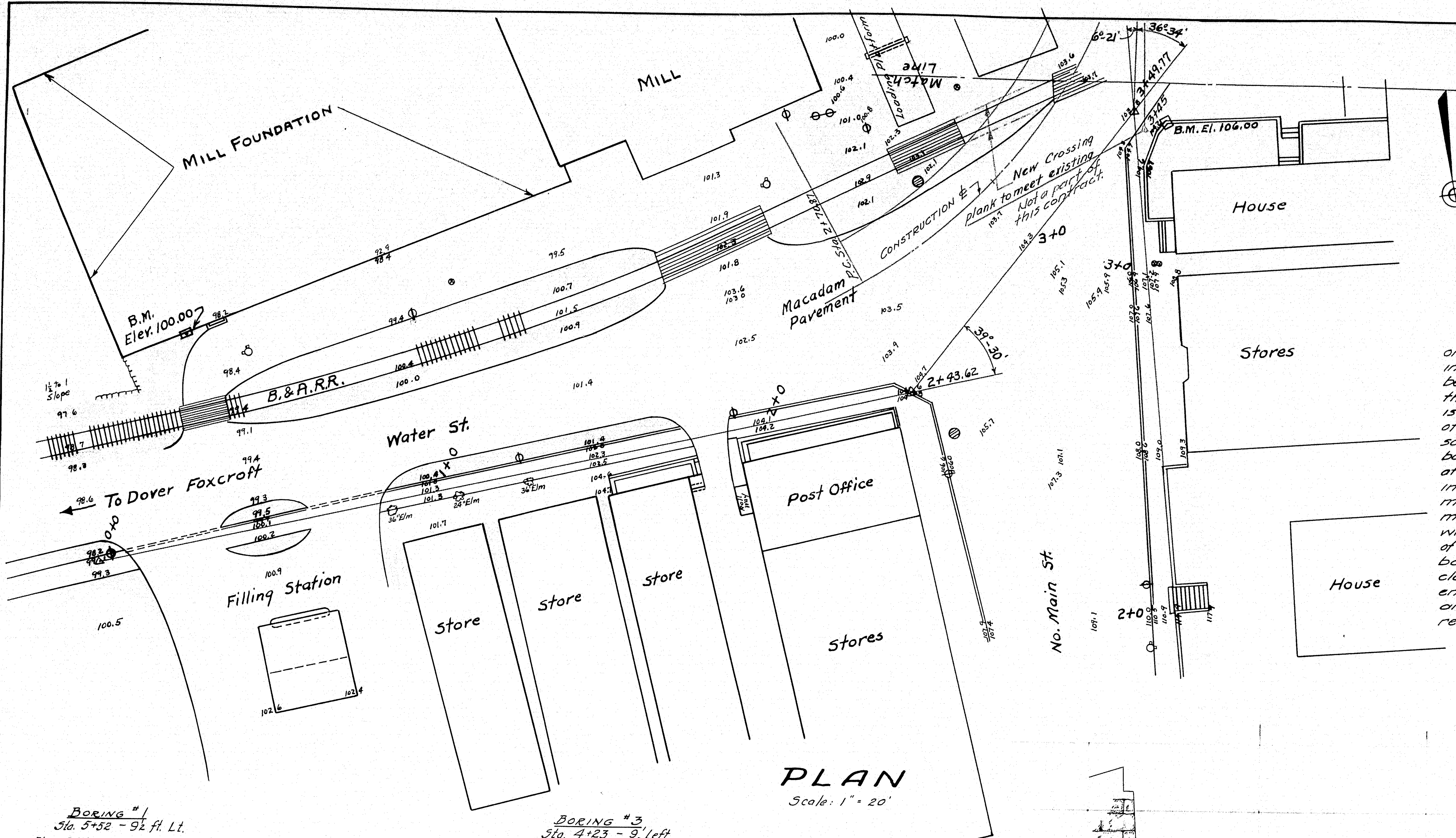


PRINTED BY SPAULDING-MOSS CO., BOSTON, MASS., RE-ORDER NO 5-1949

1945

64-3

F-037-1(2) | Sheet No. 2 | Total Sheets 11

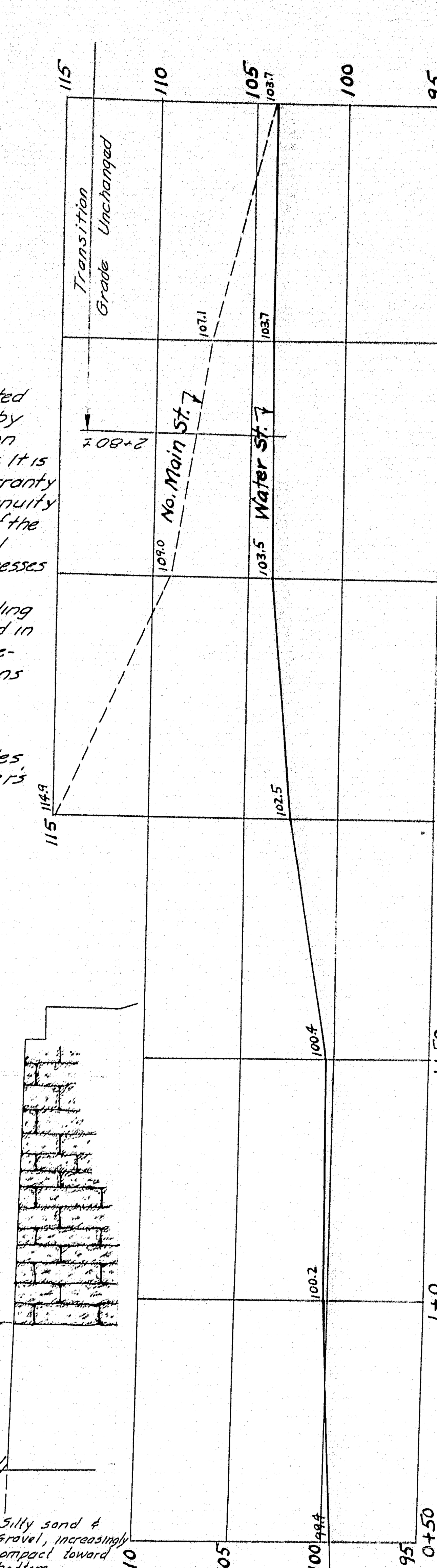


PLAN

Scale: 1" = 20'

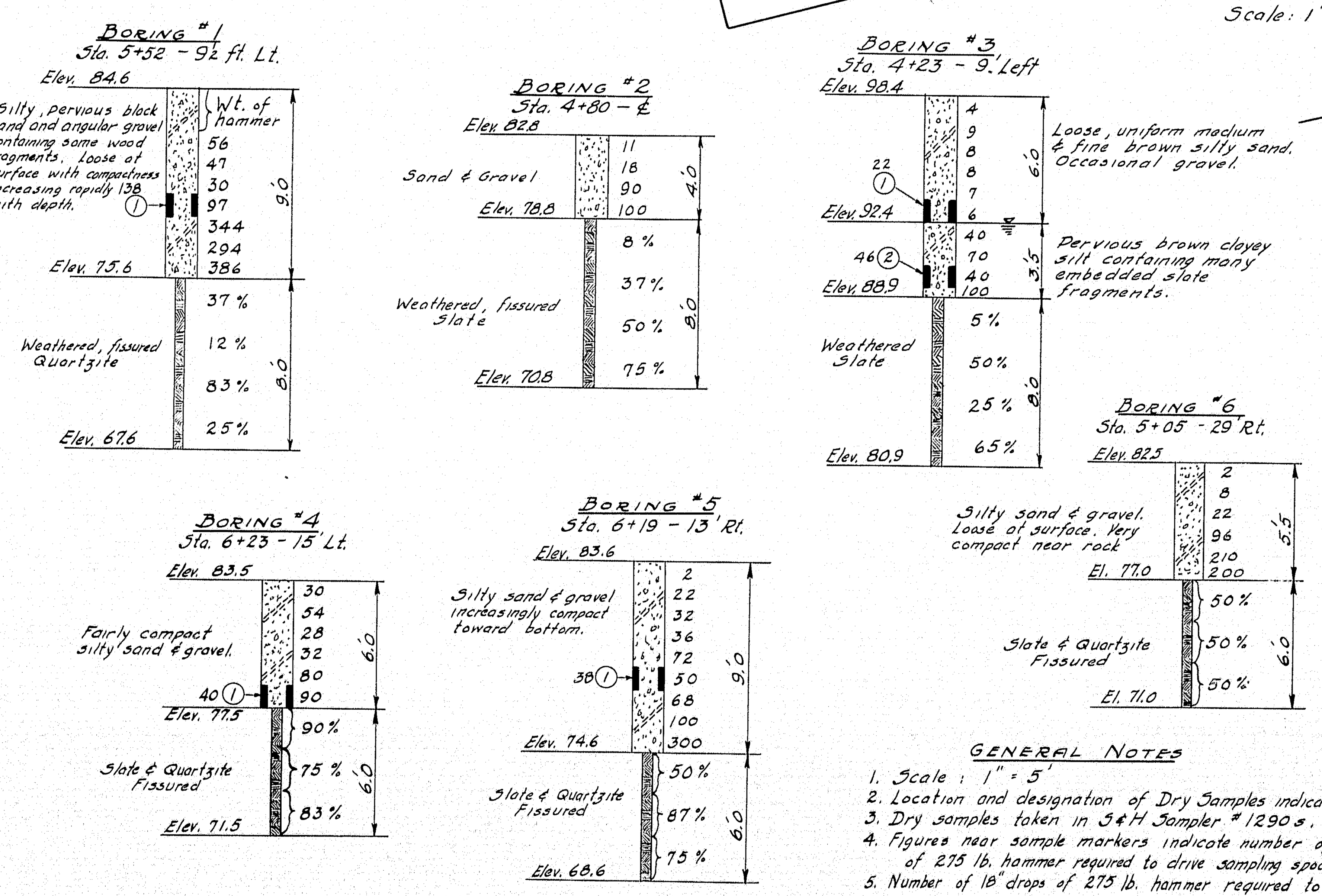
Boring Note.

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



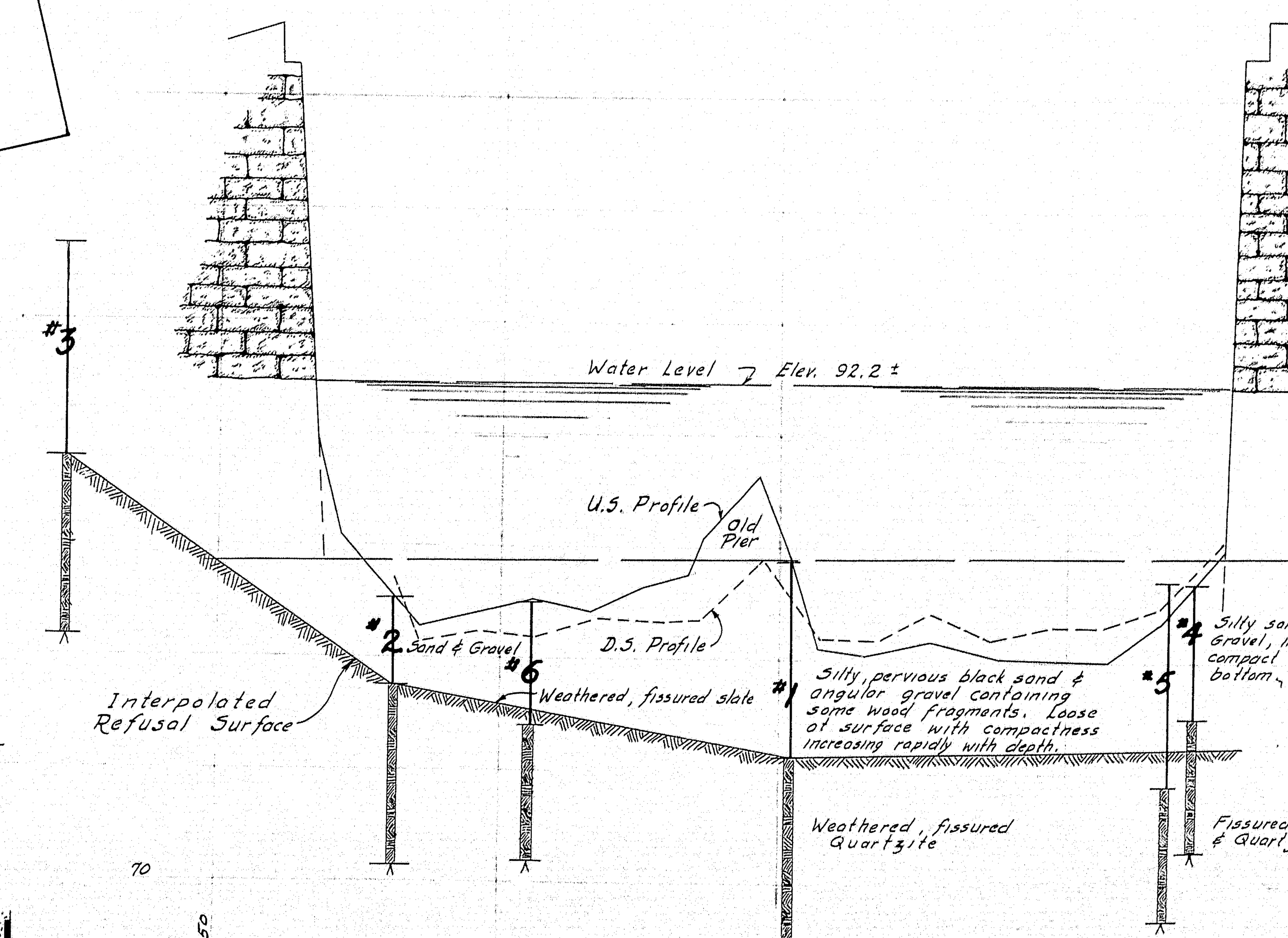
PROFILE ON ℄ RDWY.

Hor. Scale 1" = 20 Ft.
Vert. " 1" = 5 Ft.



General Notes

1. Scale : 1" = 5'
2. Location and designation of Dry Samples indicated thus :
3. Dry samples taken in S&H Sampler #1290 s.
4. Figures near sample markers indicate number of 6" drops of 275 lb. hammer required to drive sampling spoon one foot.
5. Number of 18" drops of 275 lb. hammer required to drive 2½" extra heavy casing one foot indicated thus :
6. Recovery of rock cores by Size E Diamond Drill indicated thus :
7. Ground water table indicated thus :



STRATOGRAPHIC PROFILE

Scale : Horiz. - 1" = 20' ; Vert. - 1" = 5'

F-037-1(2)

SURVEY - TOWN - BLAKE PLOT & TRACE - WELCH	BRIDGE - 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY
SURVEY PLAN

SHEET 2 OF 11 AUGUSTA, MAINE JAN. 1950 4

64-4

F-037-1(2) 3 11

P.C. Sta. 2+70.87

Match Line

Office

Drive

Ref. Point

Concrete Retaining Wall

Old Stone Wall

Mill

Pr. Sta. 4+20.31

Old Stone Wall

Store

Shop

Shed

B.&M. R.R.

Power Pole

Hydrant

Sta. 4+57 is common to both survey and construction ℄s. The Stations of the P.I., P.C. & P.T. of the curve are given back from that station.

I: 61°00'
D: 36°
T: 95.31
L: 169.44
R: 161.8

20 Ft. to Crest of Dam Elev. 92.0±

Skew 4°45'

FLOWS

RIVER

PISCATAQUIS

Removal of and alteration of any buildings not a part of this contract.

Pr. Sta. 5+41.25

Old Stone Wall

Construction ℄

345'

Store

Store

Stores

Stone Pavement

Drive

Tie

Landing 1st Story

Old Stone Wall

Oak Street

Guilford Trust

B.M. 5
Elev. 128.51

Hudson Ave.
To Sangerville

Odd Fellows Hall

Macadam Pavement

Private Sewer 6" Tile

South Main St.
To Parkman
Route 150

2-Gas Pumps

SOCONY Station

2-Gas Pumps

Greenville
Route 15 & 16

So. Main St.

Greenville

End Project

PLAN
SCALE 1"=20FT.

Begin Project

Sta. 1+22.62 P.C. 10700

Sta. 5+46.13 P.C. 108.13

Sta. 5+46.25 P.C. 108.16

Sta. 6+32.5 P.C. 109.30

109.35

109.65

32' V.C. Ex. = .16

84'-3" c-c Bg.

84'-3" c-c Bg.

70' V.C. Ex. = 0.79

Transition 125'± Grade unchanged

+5.36%

+1.35%

+10.14%

Water level Elev. 92.2±

Soft Mud

Old Pier

U.S.

DS

Firm bottom

PROFILE ON ℄ RDWY.
HOR. SCALE 1" = 20 FT.
VERT. " 1" = 5 FT.

F-037-1(2)

SURVEY - TOWN - BLAKE
PLOT & TRACE - WELCH

BRIDGE - 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

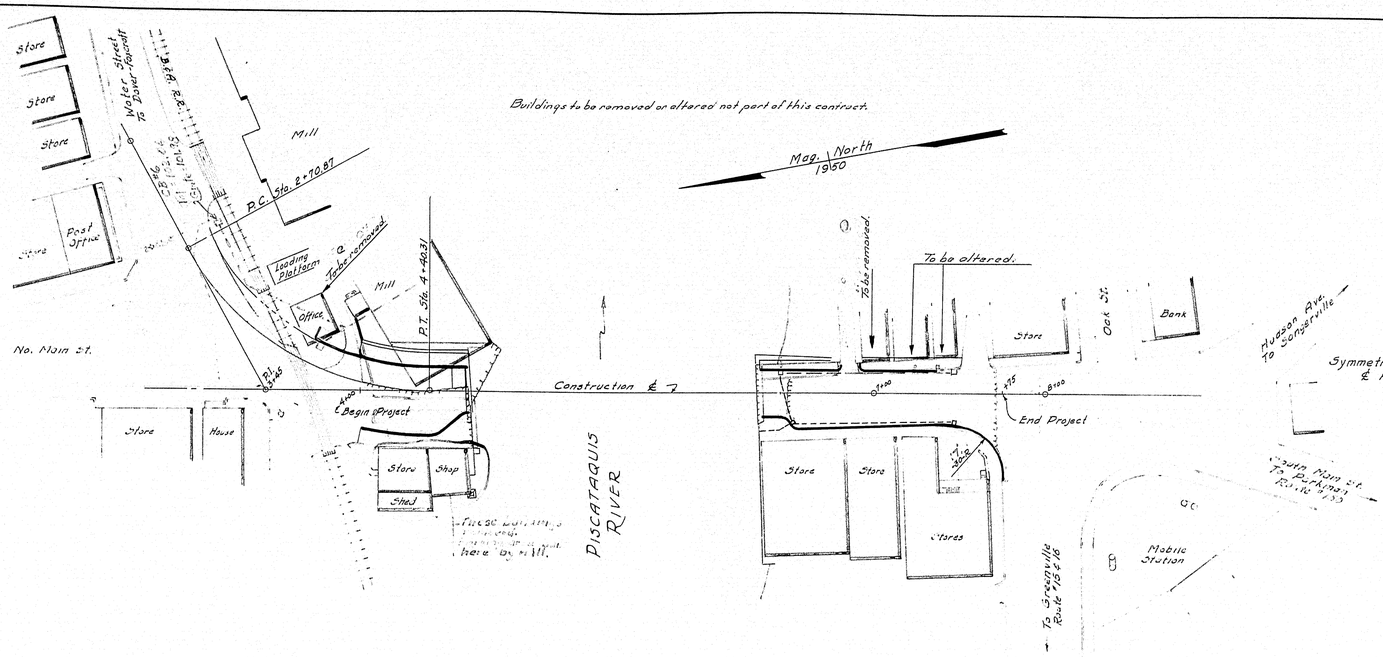
GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY
SURVEY PLAN

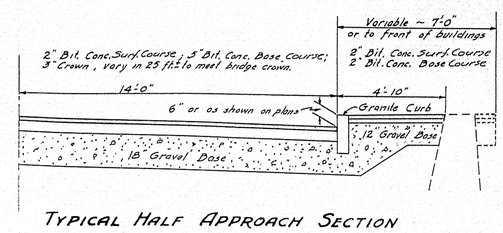
SHEET 3 OF 11 AUGUSTA, MAINE JAN. 1950

64-5

0 1 2 3 4 5 INCHES

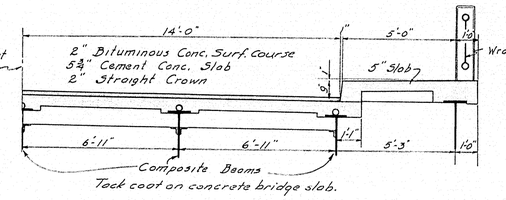
F-037-1(2) 4 11





TYPICAL HALF APPROACH SECTION

Note — The 2" Bit. Conc. Surf. course to be Type A, consisting of 1" surface course and 1" primary course.



TRANSVERSE SECTION

DESIGN: A.S.H.O. Bridge Specification 1949.

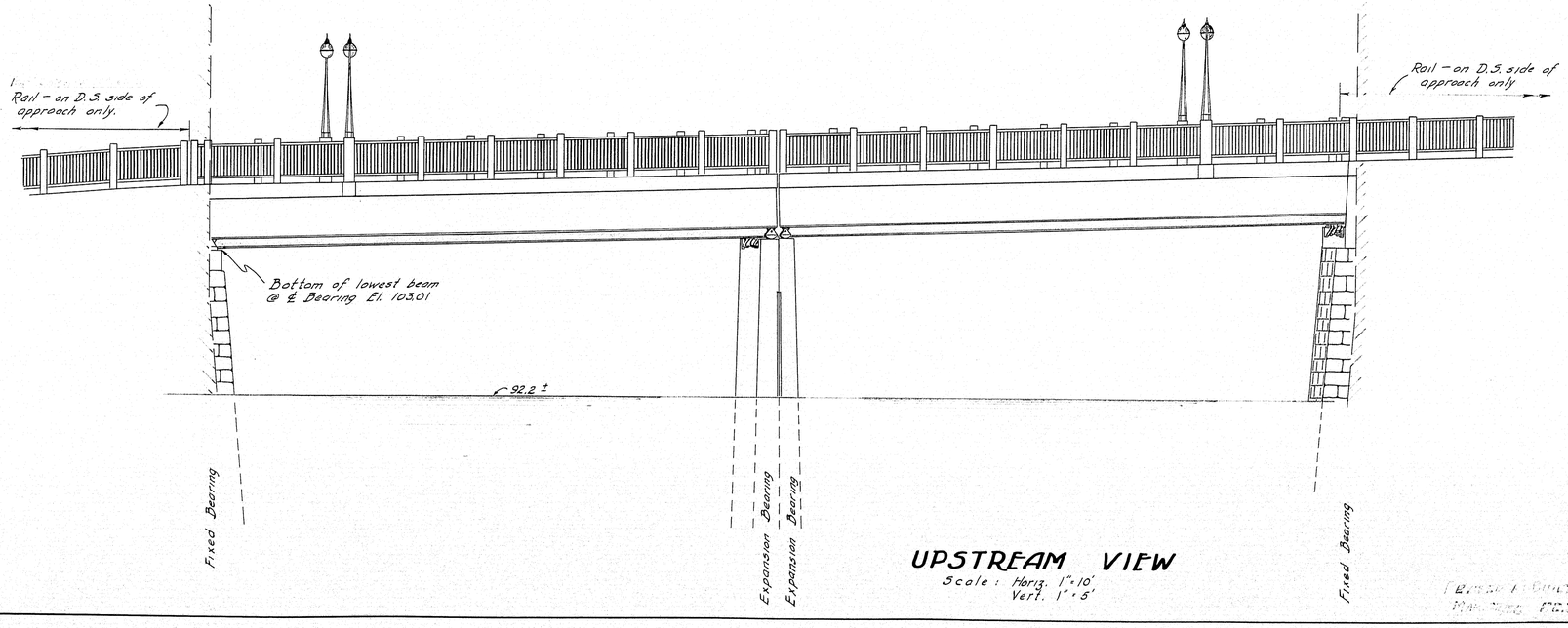
Loading: H 20-44
f_s = 18,000, f_c = 1200; n = 10

Concrete Classification
Superstructure — A
Abuts. & Piers — B
Seal — S
Rail Posts — Y

Water Elevation is controlled by a dam located 100 ft. ± D.S. from ℄ of Bridge. Elev. Crest of Dam 92.0 ±
Drainage Area = 253 sq. miles

The store at the Southwest corner of the bridge has a story below street grade. Ice has reached Elev. 100.0 ±

Existing Superstructure — one span, thru steel truss.



UPSTREAM VIEW
Scale: Horiz. 1"=10'
Vert. 1"=5'

F-037-1(2)

DESIGN & TRACE - FORTIER	BRIDGE - 2337
CHECK - A.B.P.	

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

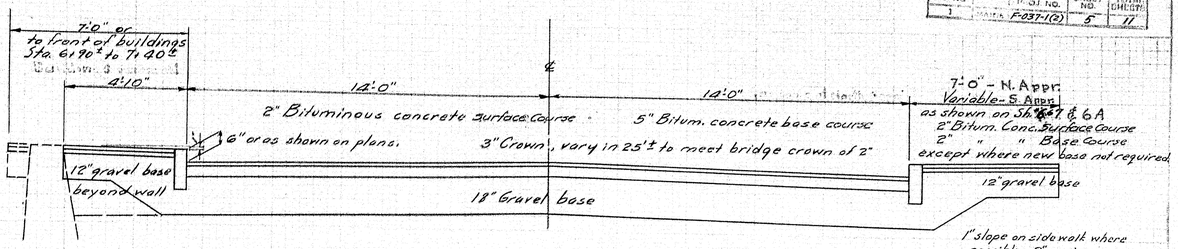
GENERAL PLAN & ELEVATION

SHEET 4 OF 11 AUGUSTA, MAINE JAN. 1953

64-6

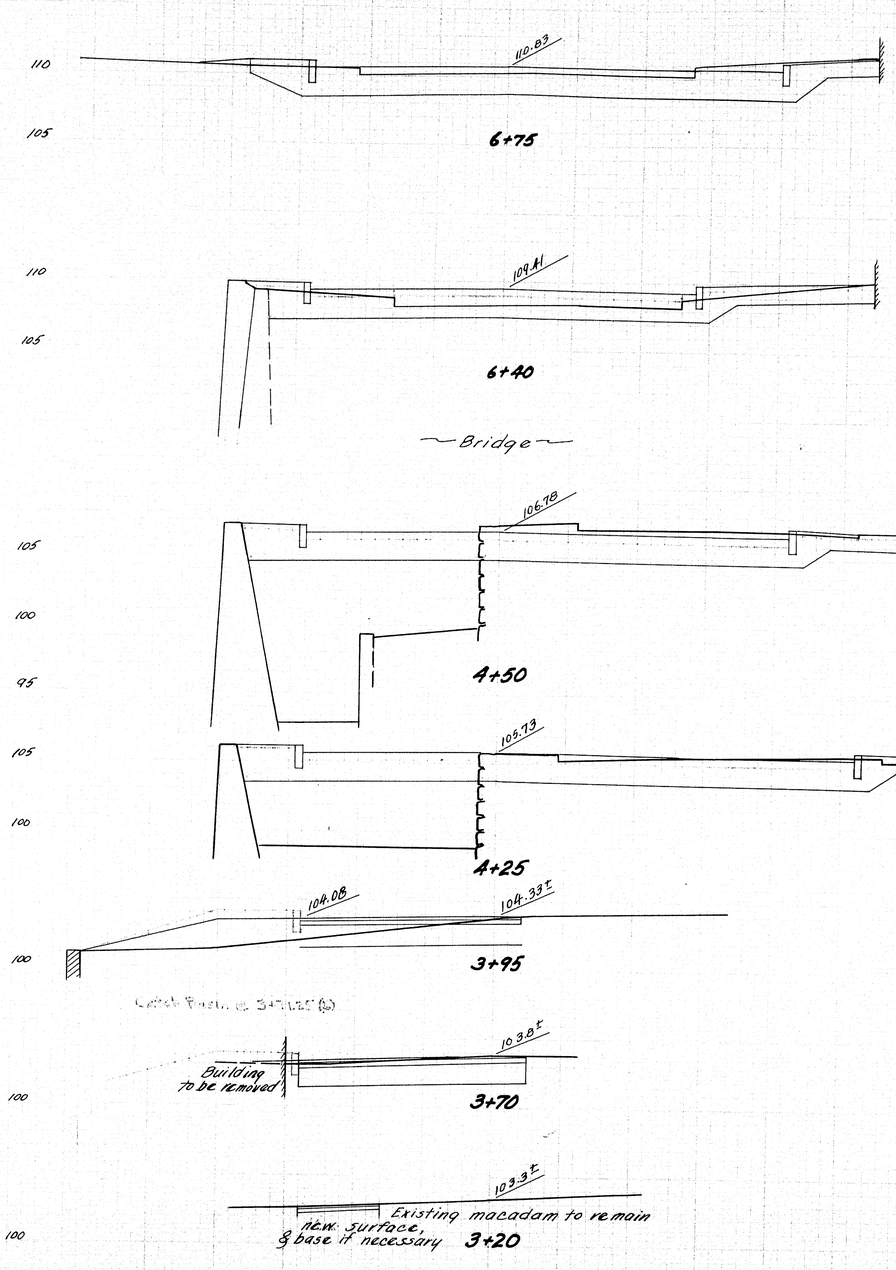
0 1 2 3 4 5 INCHES

B. P. R. DIV. NO.	STATE	FED. AID P. J. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-037-1(2)	5	11

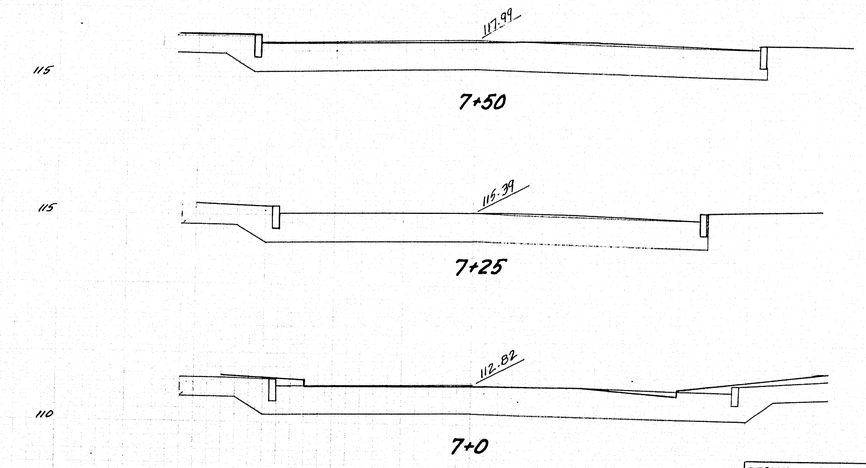


TYPICAL APPROACH SECTION

See plan for variations



Meet Existing macadam pavement at 7+75, End of Project.



DESIGN - ALLEN	
TRACE - "	BRIDGE - 2337
CHECK - A.B.P.	

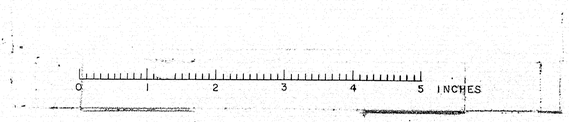
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

CROSS - SECTIONS

SHEET 5 OF 11 AUGUSTA, MAINE NOV. 1952

64-7



B.P.R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-037-1(2)	6	11

ELEVATION OF RETAINING WALL

Panels A1 @ 6% ; A2 @ -5.52% ; A3 @ +5.05% ; A4 @ +3.90%

Note:- The two joints of the intersection of the old and new walls are to be made in a manner satisfactory to the mill owners.

Remove enough of the mill foundation wall so that drainage back of the retaining wall may get into the 4" pipe.

Notes:-

Dress the shaded areas on the bridge seats 1/in. larger all around than the bearing plates and to exact elevations shown.

Place K bars at the junction of the Abut. and retaining wall 6 in. from the back forms at 1'-6" centers vertically.

Cover the construction joints on the back side with two layers of roofing 10 in. wide. Coat the contact surfaces with a suitable grade of roofing cement. Recess the area of concrete to be covered 1/4 in.

Where the new abutment and retaining wall cross the mill foundation walls, those walls may be left in place provided the masonry is in good condition and is found to be resting on ledge. ☆ See note elsewhere.

Break the bond in construction joints by pointing the joint surface with a coat of asphalt paint.

All Granite curb to be new.

Cover the 1/2" slot between the retaining wall and the end wall, below ground level, in the manner described for the construction joint.

Granite Curb built to catch basin at Sta 3+71.13

Granite curb corner

Superstructure of Mill Building will be removed by others.
☆ If found necessary, the foundation walls are to be removed under Item 204-12, Structural earth excavation, abuts. & ret. w'ls.

Remove courses of stone of the "masonry wall" and the top portion of the "concrete wall" so that the final elevations will not be above the subgrade.
To be removed under Item 204-12

In the first length of granite curb next to the Abutment, dress the side and end of the granite to match the 1" slope and the back batter respectively.

SECT. C-C

SECT. A-A ANALYSIS

SECT. B-B

SECT. D-D

PLAN ABUT

SECT. E-E. FRONT ELEV.

Payment for W.I. pipe rail including rail posts shall be made at the contract unit price for Item 805 M Wrought iron rail.

Bend C2 & C3 in field.

Bend reinforcement to clear opening

Exact location of post to be determined in the field; to be set so that the existing wood rail on building may be attached to the new post. Length and grade of rail Panel "E" to be set in field.

Curb & sidewalk revised See sheet 6A

Edge of sidewalk to be determined in the field from wall and building conditions.

Buildings removed

This rail not built See revision on Sheet 6A

Excavate 6" below depth of new concrete and backfill with 1 ft. of stone fill.

REVISED AS BUILT SHOWN IN GREEN MAR. 28/56 P.E.W.

See Revision Sh. 6A.

DESIGN	ALLEN
TRACE	LANGFORD
CHECK	A.B.P.

BRIDGE 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

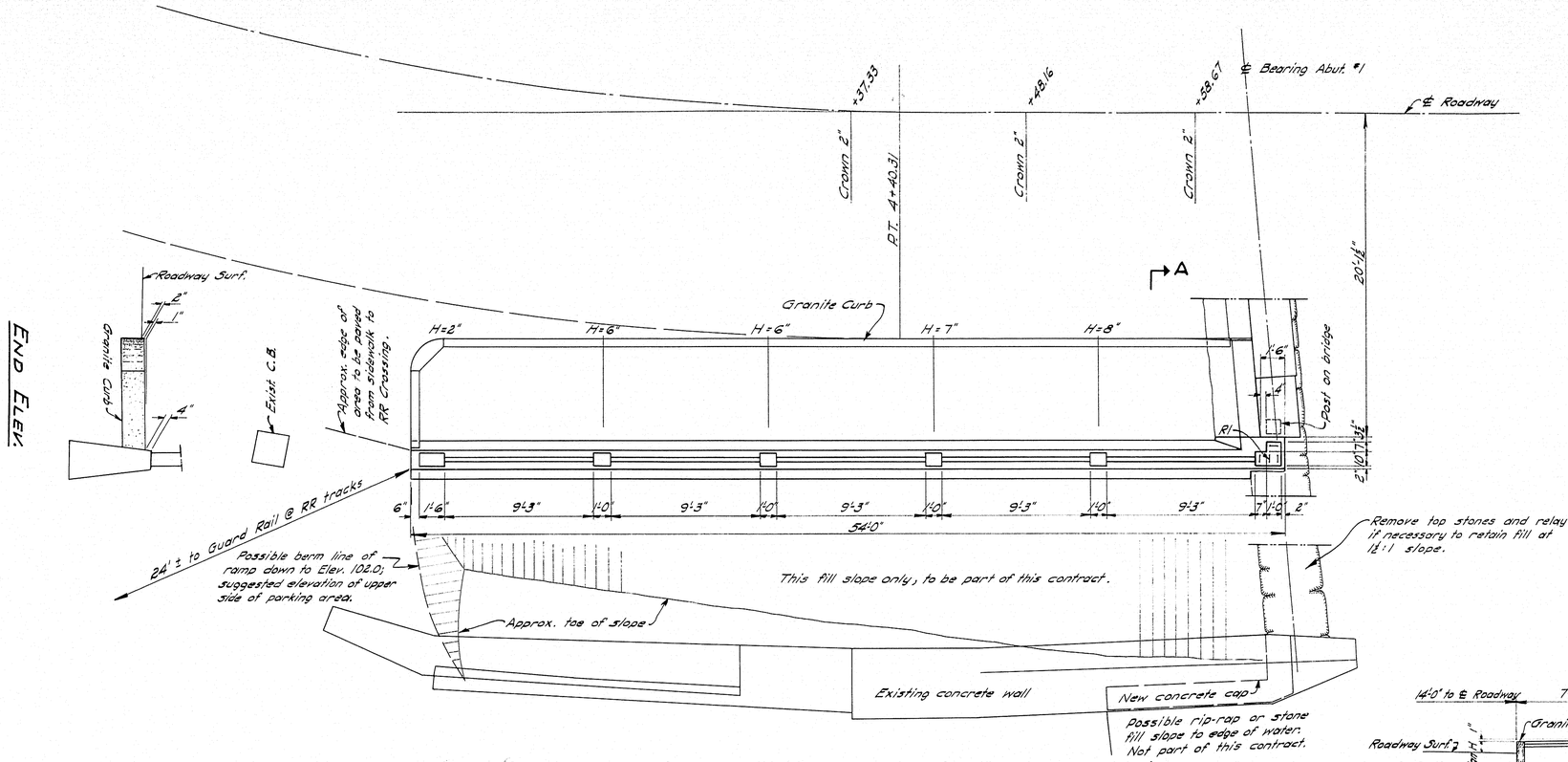
GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

ABUTMENT #1

SHEET 6 OF 11 AUGUSTA, MAINE NOV. 1952

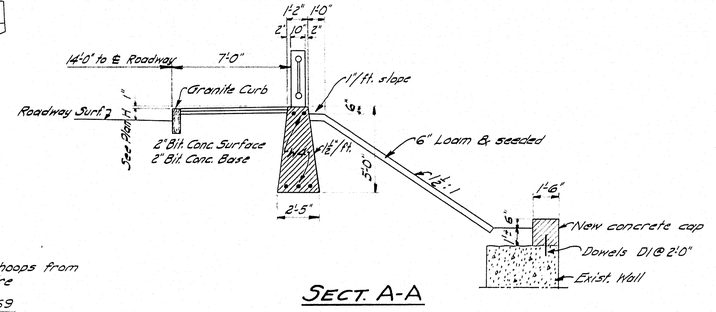
64-8

0 1 2 3 4 5 INCHES

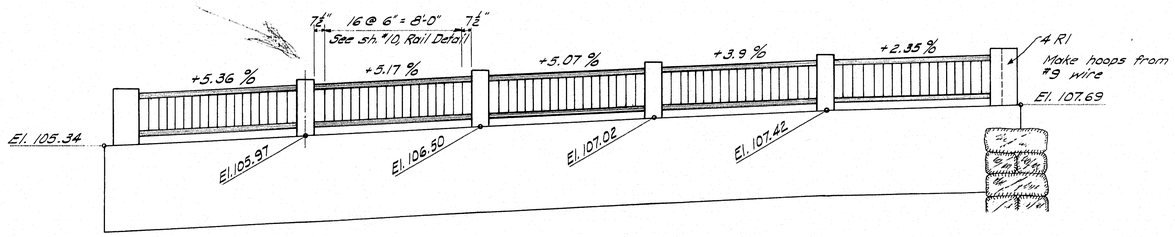


PLAN RETAINING WALL - NORTH APPROACH

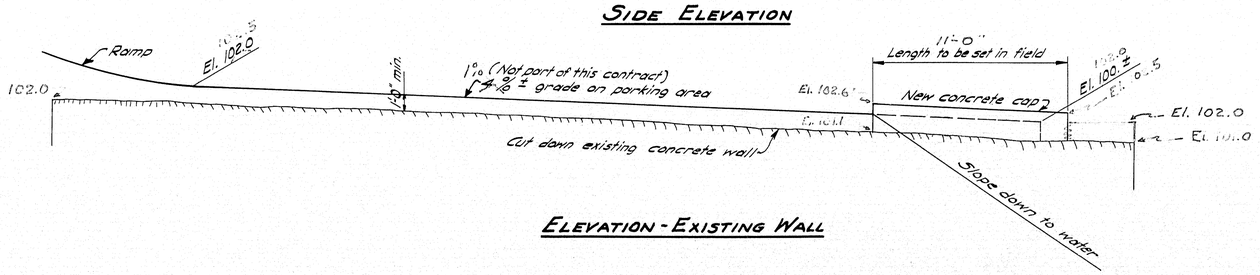
ADDITIONAL REINF. STEEL				
MARK	SIZE	No.	LENGTH	REMARKS
H1		16	See sh. #10	Int. Rail Posts
H2		4	" "	End " Post
R1		14	" "	All " Posts
D1	#6	8	1'-0"	Wall Cap
W4	#5	15	20'-0"	Rail Wall



SECT. A-A



SIDE ELEVATION



ELEVATION - EXISTING WALL

REVISED AS BUILT SHOWN IN GREEN MAR. 28/56 P.E.W.

DESIGN - ALLEN
TRACE - CLARK
CHECK - A.B.P.

BRIDGE - 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

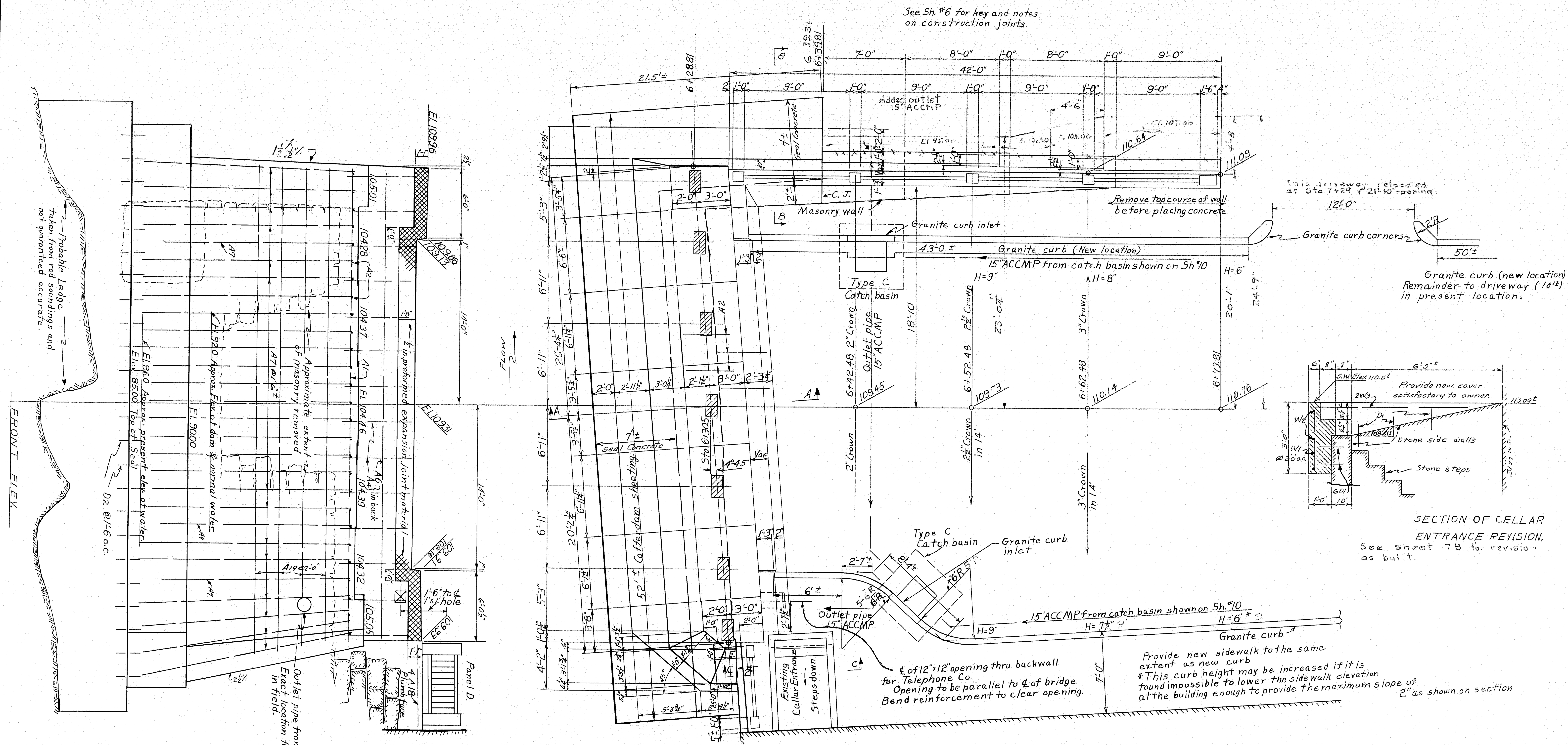
GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

NORTH APPROACH REVISION

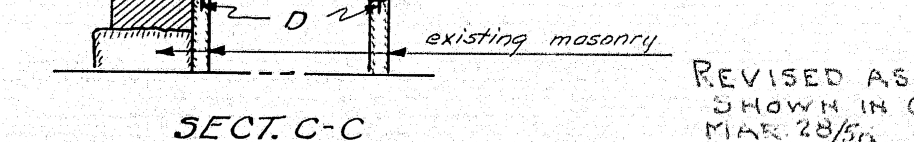
SHEET 6A OF 11 AUGUSTA, MAINE SEPT. 1954

64-9

0 1 2 3 4 5 INCHES



PLAN ABUTMENT #2



SECT. C-C

REVISED AS BUILT SHOWN IN GREEN MAR. 28/56 R.E.W

Revised, 7/54 (U.S. corner & step)
Abutment revised 6/54 (new sheet)

DESIGN - ALLEN
TRACE - H.P. GRAY
CHECK - Harris

BRIDGE - 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY
ABUTMENT NO. 2

SHEET 7 OF 11 AUGUSTA, MAINE JUNE 1954

10

64-10

0 1 2 3 4 5 INCHES

B.P.R. DIV. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1	MAINE	F-037-1(2)	7	11

FRONT ELEV.

PLAN ABUT. #2.

ELEV. D.S.RET. WALL.

Granite curb (new location). Remainder to driveway (10'±), in present location.

SECTION OF CELLAR ENTRANCE REVISION

SECT. A-A

SECT. B-B

SECT. C-C

DESIGN ALLEN	
TRACE LANGFORD	
CHECK A.B.E.	BRIDGE 2337

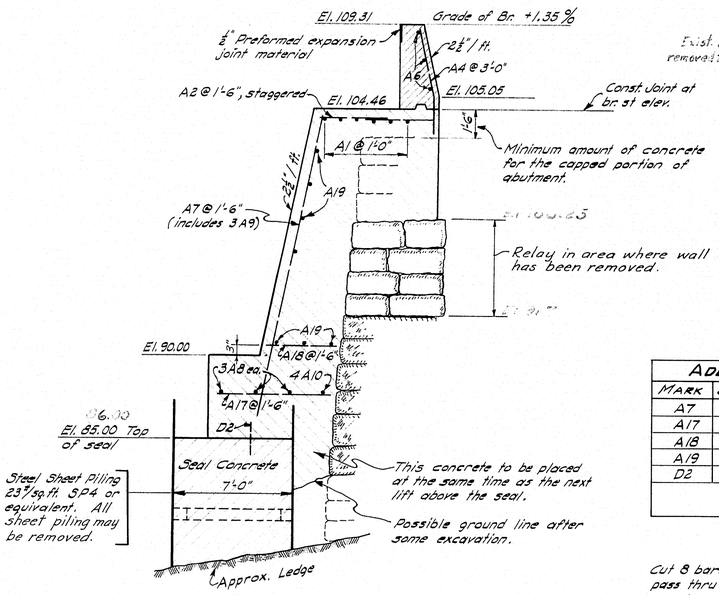
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

ABUT. NO. 2

SHEET 7 OF 11 AUGUSTA, MAINE NOV. 1932

64-11

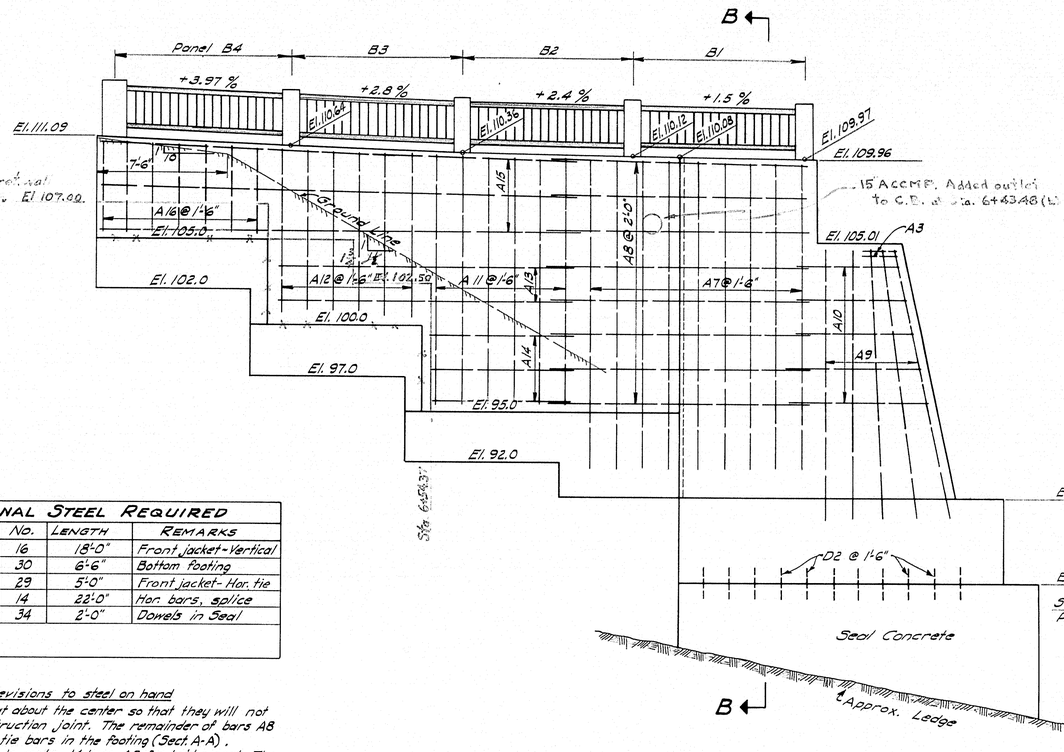


SECTION A-A

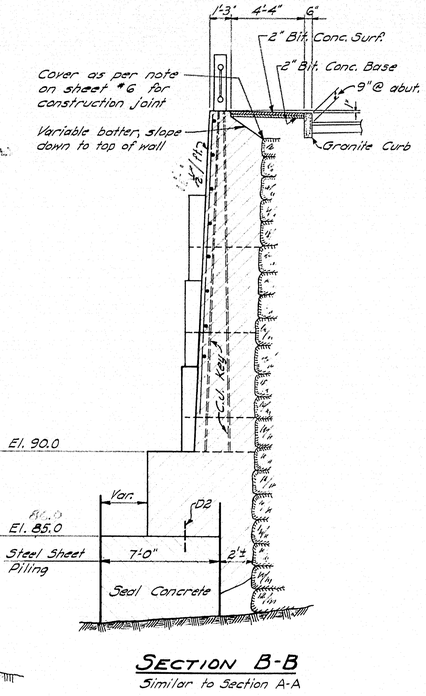
ADDITIONAL STEEL REQUIRED				
MARK	SIZE	NO.	LENGTH	REMARKS
A7	#6	16	18'-0"	Front jacket - Vertical
A17	#6	30	6'-6"	Bottom footing
A18	#6	29	5'-0"	Front jacket - Hor. tie
A19	#4	14	22'-0"	Hor. bars, splice
D2	#6	34	2'-0"	Dowels in Seal

Revisions to steel on hand

Cut 8 bars A8 at about the center so that they will not pass thru construction joint. The remainder of bars A8 may be used as tie bars in the footing (Sect. A-A). Cut 7 bars A10 to make 14 bars A2 for bridge seat. The remainder may be used as footing tie bars, as A8.



ELEVATION D.S. RETAINING WALL



SECTION B-B

Similar to Section A-A

REVISED AS BUILT SHOWN IN GREEN MAR. 28/56 P.E.W.

Revised, 7/54 (Relay granite & step)
Abutment revised 6/54 (additional sheet)

DESIGN – ALLEN
TRACE – CLARK
CHECK – Harris

BRIDGE – 2337

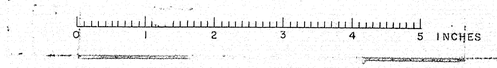
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

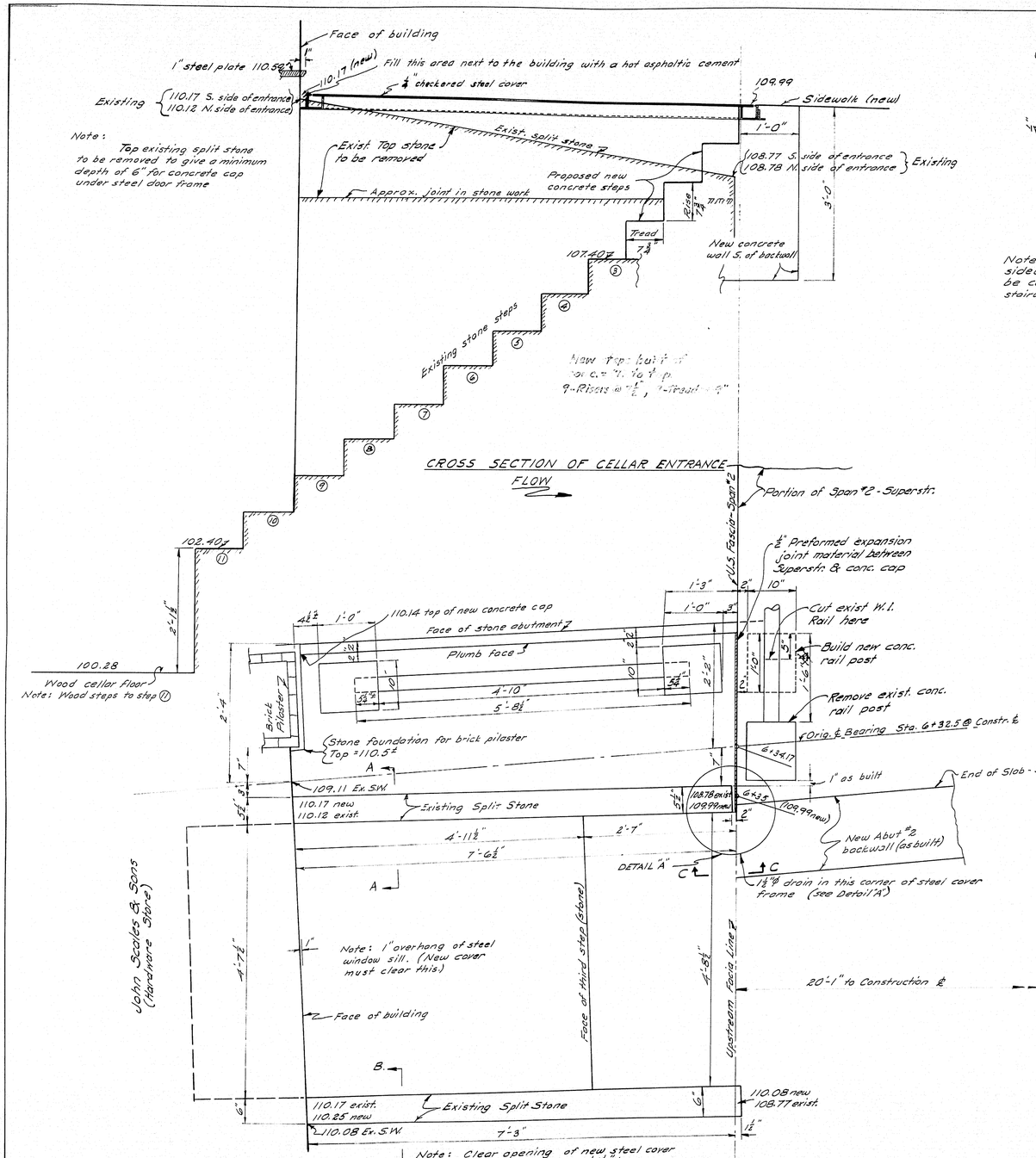
GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

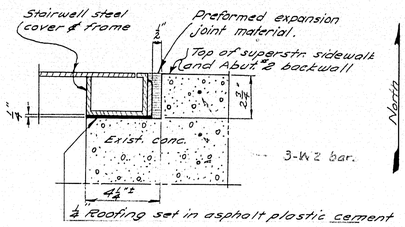
ABUTMENT NO. 2

SHEET 7A OF 11 AUGUSTA, MAINE JUNE 1954

64-12

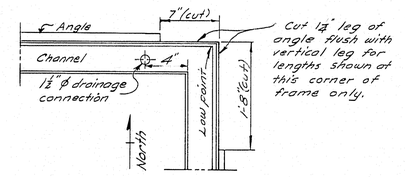






Note: Existing concrete of the superstructure sidewalk and Abutment No. 2 backwall to be cut away to permit installation of stairwell steel cover and frame. 2 3/4" deep x 44" wide x 1'-7 1/2" ± long.

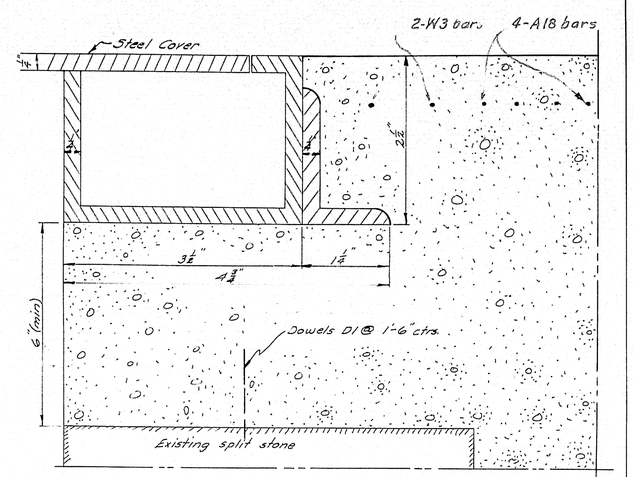
SECTION C-C



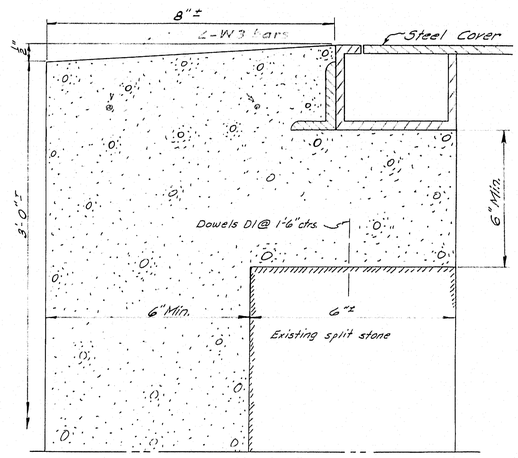
DETAIL "A"

Frame for steel cover

Note: Place sufficient asphalt roofing cement in channel of cover frame at this corner, after installation, to eliminate any standing water due to outlet not being located at the low point.



SECTION A-A



SECTION B-B

Note: The cover for the stairwell entrance to Scales Hardware Store shall be of steel, double leaf, watertight, equipped with a torsion spring to assist in opening, of sufficient strength to support a load of 150 lbs. per square foot, and equipped with a steel frame and a drainage outlet connection located as shown on the plan. The double leaf cover shall have a non-skid surface and the joint between the leaves shall be the long way of the opening, with hinges on the long sides. The clear opening to be 4'-9" wide and 7'-1 1/2" long. The cover and frame shall be as follows or equivalent to it.

Bilco, Type A, double leaf, water tight, sidewalk door as manufactured by the Bilco Co., 164 Hallock Ave., New Haven 5, Conn. and as shown in the catalog, "Bilco doors for special services."

REVISED AS BUILT SHOWN IN GREEN APR. 19, 1956 P.E.W.

DETAIL – WOODS	
TRACE – N. GRAY	BRIDGE – 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

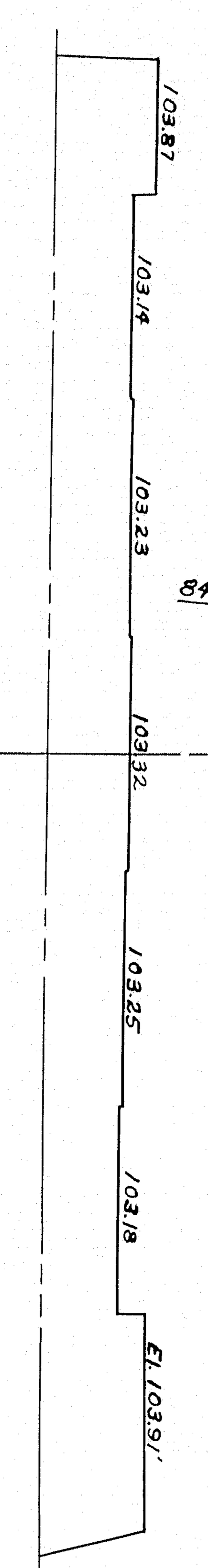
REVISED STAIRWELL COVER & W.I. RAIL U.S. ABUT. 2

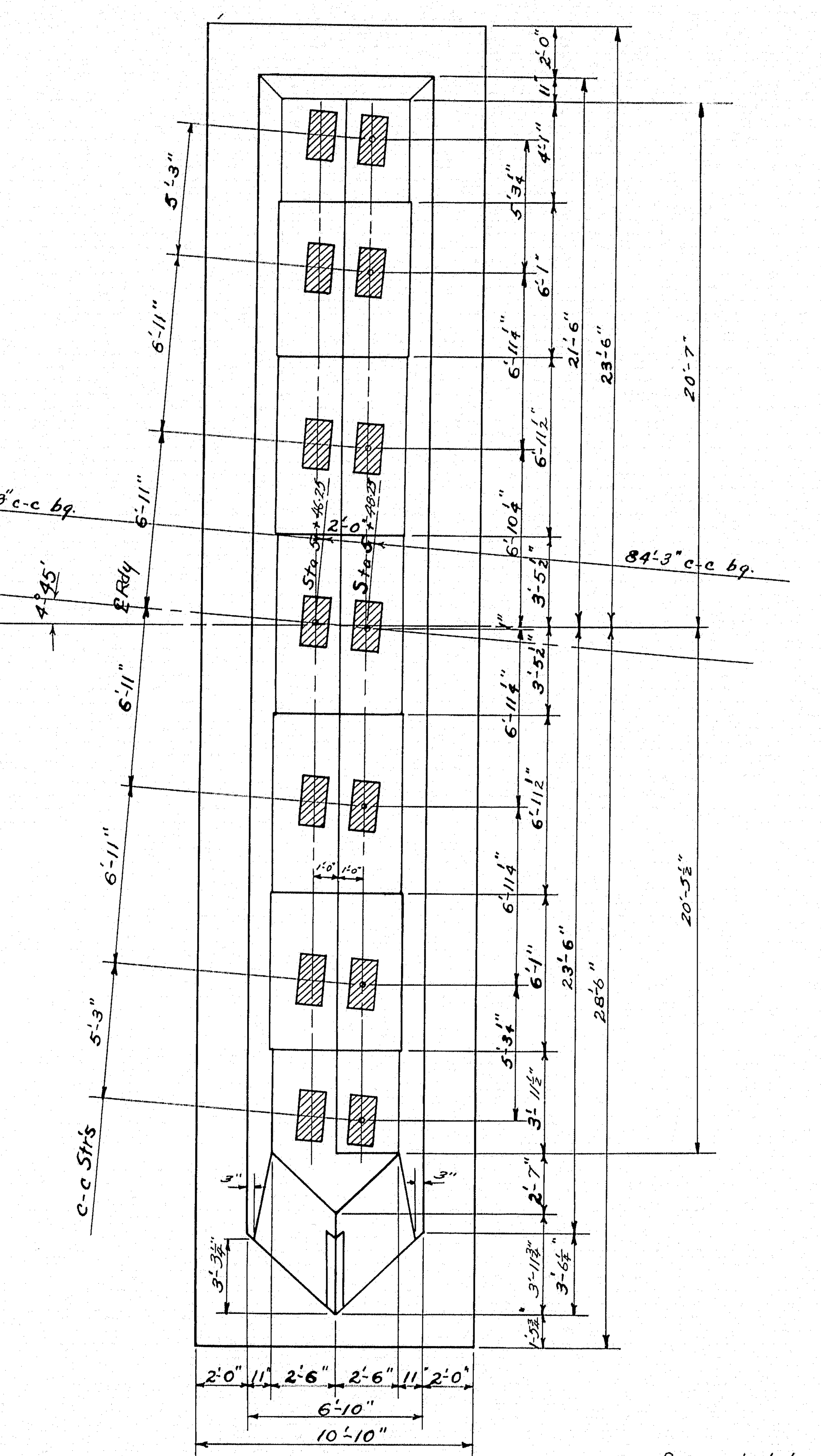
SHEET 7B OF 11 AUGUSTA, MAINE MAR. 1955

64-13

0 1 2 3 4 5 INCHES

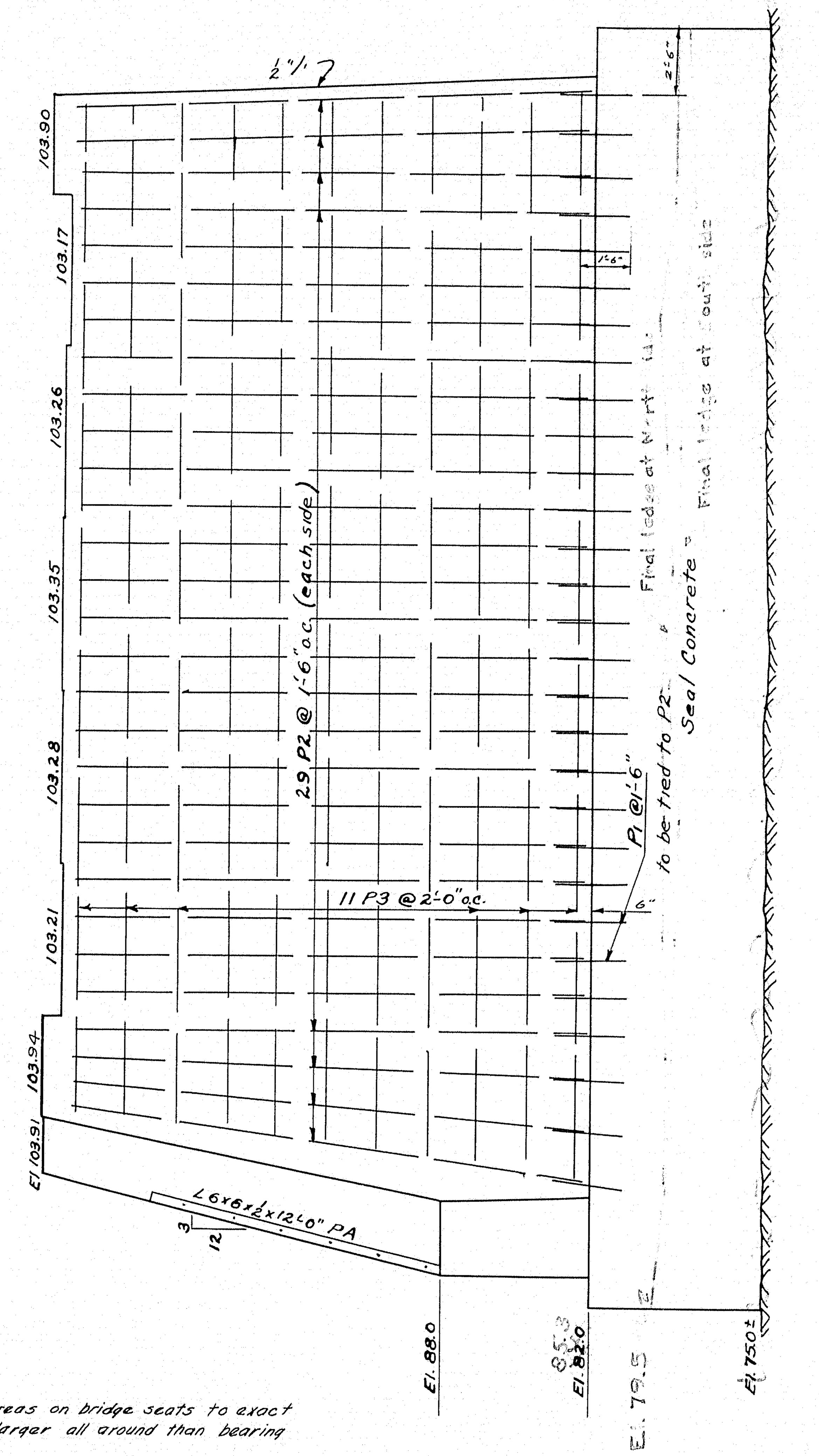
Fed. Road Div. No.	State	Fed. Aid Proj. No.	Sheet No.	Total Sheets
1	MAINE	F-037-1(2)	8	11



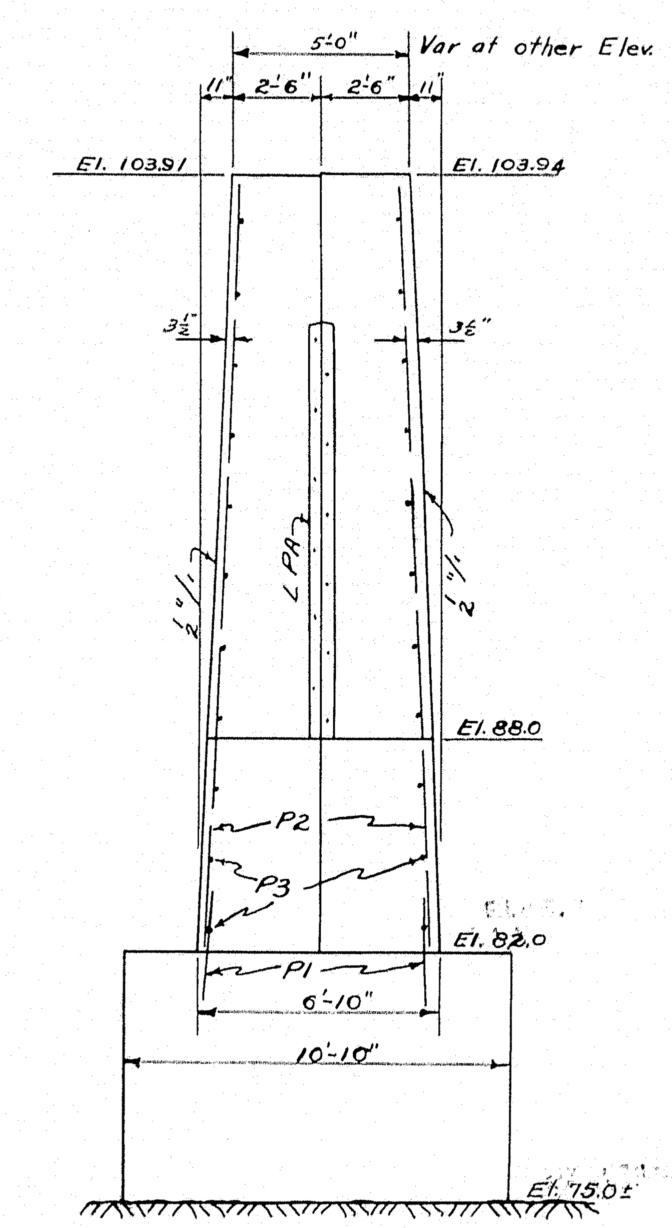


PIER PLAN.

Dress shaded areas on bridge seats to exact elevations and 1" larger all around than bearing plates.

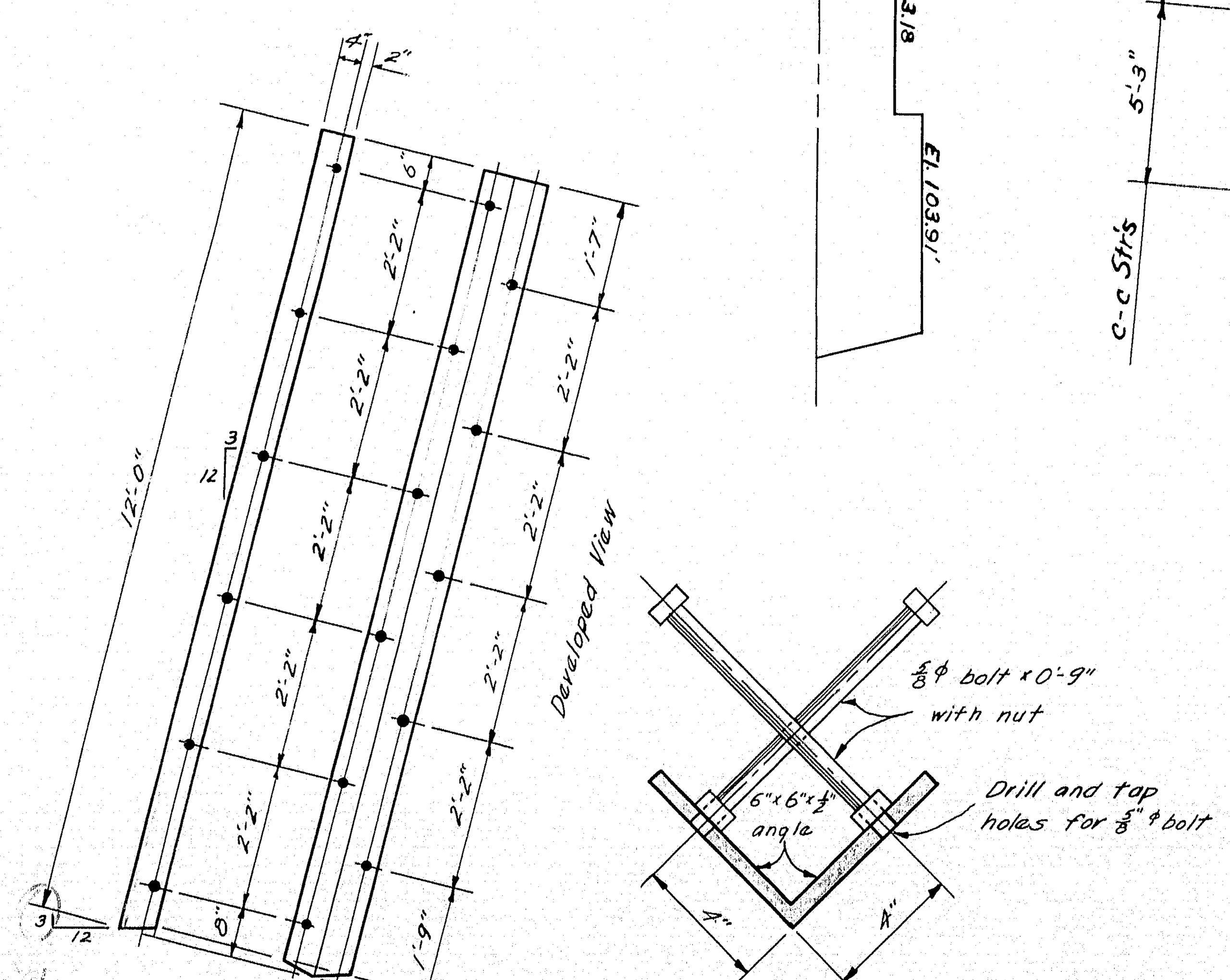


SIDE ELEVATION



END ELEV.

Depth of seal to be determined by the engineer considering the ledge elev. and water elev. at the time of construction.



DETAIL OF PIER NOSE L PA one req'd.

Erection to be paid for under Item 702-98 Structural Steel, Erection.

REVISED AS BUILT
SHOWN IN GREEN
APR. 16, 1956 R.E.W.

DESIGN - ALLEN
TRACE - LANGFORD
CHECK A.B.P.

BRIDGE 2337

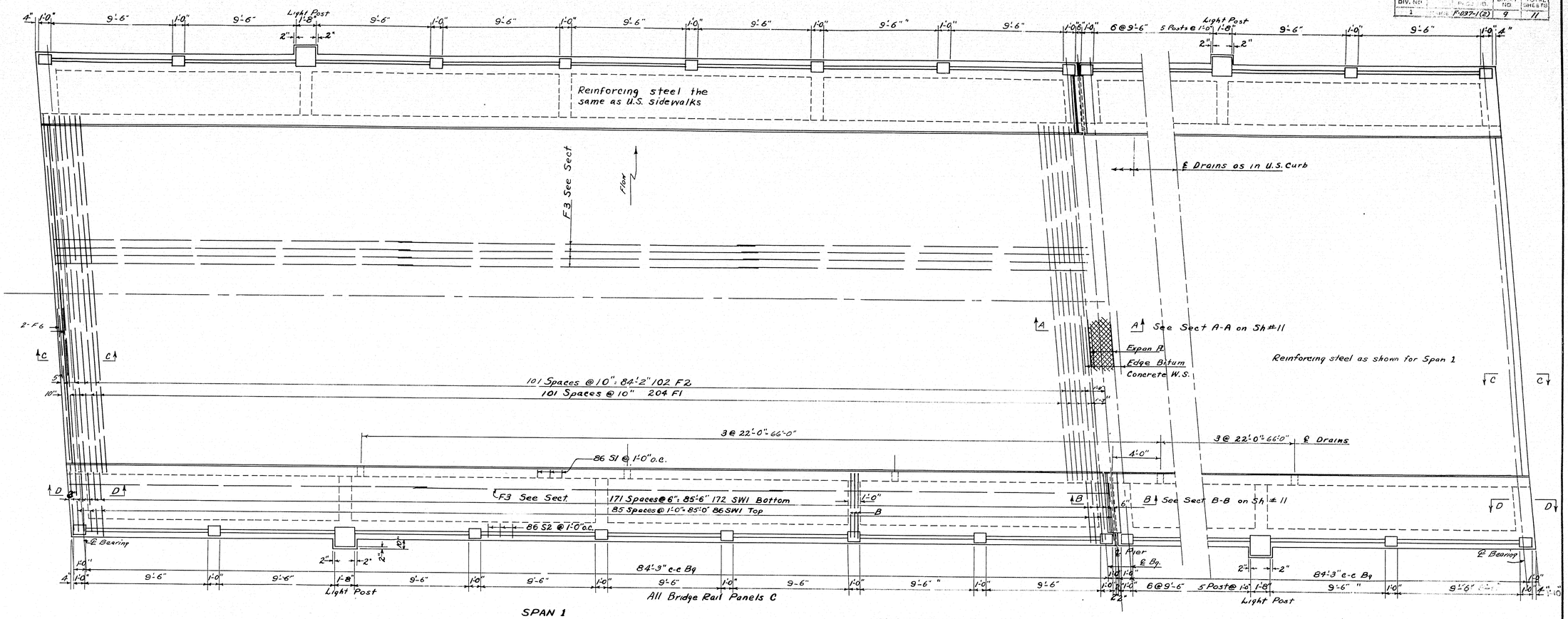
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY 14
PIER

SHEET 8 OF 11 AUGUSTA, MAINE NOV. 1952

64-14

B.P.R. DIV. NO.	STATE	FED. AID NO.	SHEET NO	TOTAL SHEETS
1	MAINE	F-037-1(2)	9	11

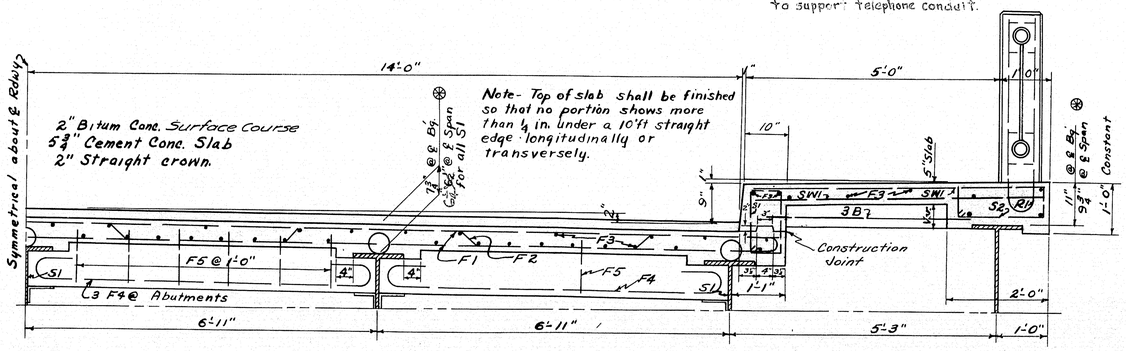


SPAN 1

SUPERSTRUCTURE PLAN

SPAN 2

NOTE:-
Hanger bolts placed in sidewalk slab, at upstream sidewalk, to support telephone conduit.



TRANSVERSE SECTION

⊛ These dimensions assume 3¾" camber in beams with 2½" out under dead load deflection. Should the actual camber obtained be different, these dimensions are to be varied accordingly at ℄ of span.

½" Preformed Expan. Joint Filler
1'-0"
Abut. backwall
F2 F1
F5
F4
45° Bevel
L Alon S1

SECT. C-C

½" Preformed Expan. Joint Filler
SW2
SW1
F3
3B7
1'-6"

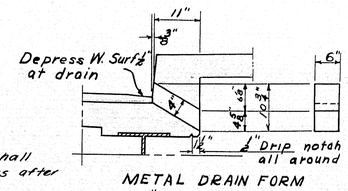
SECT. D-D

LOADING H20-44
f_c = 18000 f_s = 1200 n = 10

Concrete Classification

Superstructure	Class A
Abuts. and Pier	" B
Pier Seal	" S
Rail Post	" Y

-NOTE-
Concrete in curb and sidewalk shall not be placed until at least 7 days after roadway slab is placed.



METAL DRAIN FORM
#24 Ga. galvanized iron
14 Reqd.

REVISED AS BUILT SHOWN IN GREEN APR. 16, 1956 P.E.W.

DESIGN - ALLEN
TRACE - LANGFORD
CHECK A.B.P.

BRIDGE 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

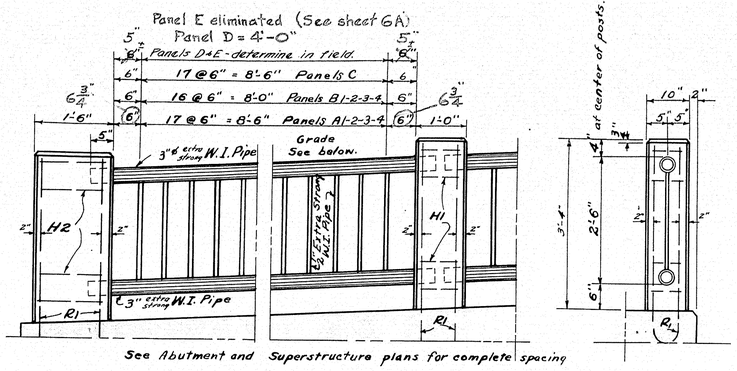
SUPERSTRUCTURE

SHEET 9 OF 11 AUGUSTA, MAINE NOV. 1952

64-15

0 1 2 3 4 5 INCHES

B.P.R. CTY. TWP.		FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1		F037-1(2)	10	11



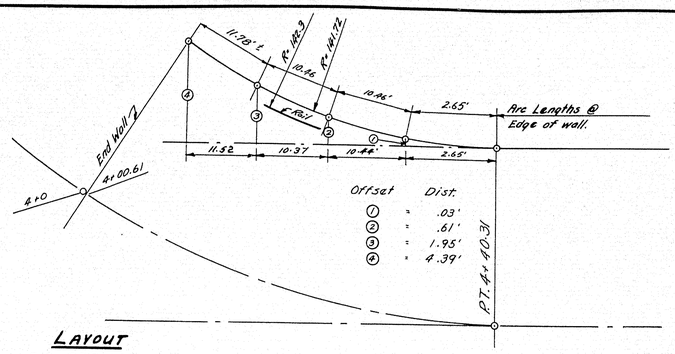
See Abutment and Superstructure plans for complete spacing

Panel		Grade
A1	-	6 %
A2	-	5.52 %
A3	-	5.05 %
A4	-	3.9 %
B1	-	1.5 %
B2	-	2.4 %
B3	-	2.8 %
B4	-	3.97 %
C	-	1.35 %
D		determine in field
E		" " "

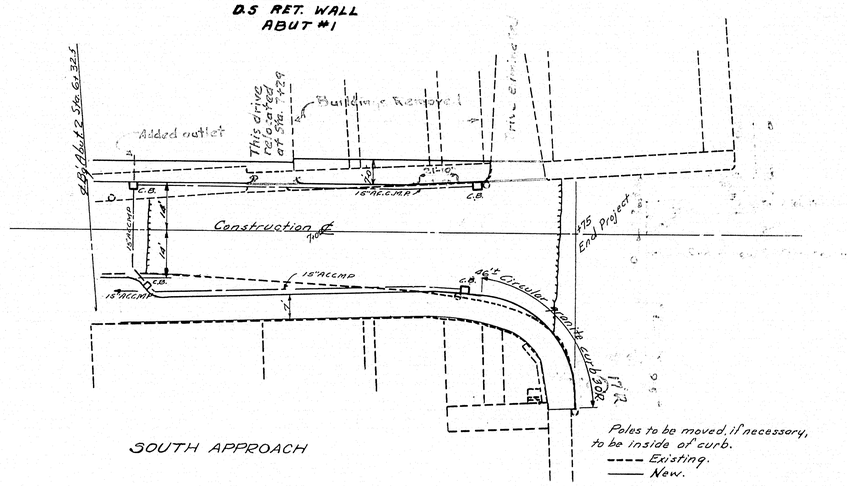
Holes for the pales are to be drilled in the 3" pipes so that the pales will extend thru the wall of the pipe. The pales are to be fillet welded to the 3" pipestop and bottom. All such joints are to be finished neatly by grinding or filling.

Pales and concrete posts are to be vertical and the top of the posts level.

Where the 3" pipes extend into the posts they are to be wrapped with two layers of heavy roofing.



LAYOUT
D.S RET. WALL
ABUT #1



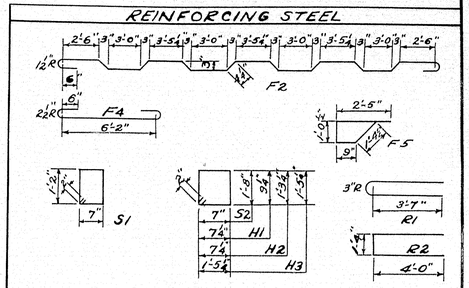
SOUTH APPROACH

Poles to be moved, if necessary, to be inside of curb.
---- Existing.
—— New.

·NOTE·

Any work on, or extensions to, the existing private sewer, made necessary by work on this contract, shall be done on a force account basis.

REINFORCING STEEL

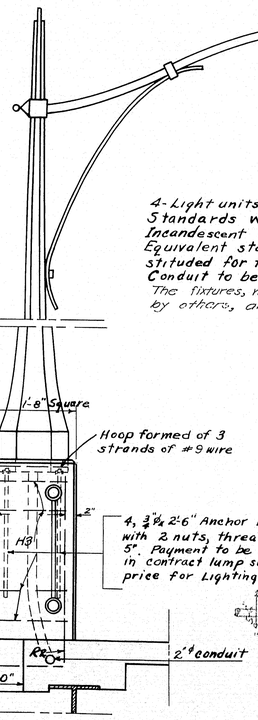


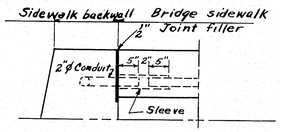
MARK	SIZE	NO.	LENGTH	REMARKS
F2	#5	204	31'-11"	Roadway slab
F4	#7	24	8'-6"	" " at Abuts
F5	#4	48	5'-7"	" " " "
H1	#3	180	3'-1"	Int. Rail posts
H2	#3	8	4'-1"	End " "
H3	#3	16	6'-1"	Light Posts
S1	#4	344	3'-10"	Roadway curb
S2	#4	344	4'-10"	Sidewalk facia
R1	#6	94	7'-11"	Rail Posts
R2	#6	8	9'-9"	Light Posts

STRAIGHT BARS				
F6	#7	4	29'-6"	Slab at Abuts.
A17	#4	2	12'-0"	Abut #1 rail wall
A18	#4	4	7'-0"	" #2 " "
A1	#6	24	21'-0"	Abut. #1 & 2 splice
A2	#4	27	4'-0"	" "
A3	#4	4	6'-0"	" " bend in field
A4	#5	28	6'-0"	" "
A5	#4	6	21'-0"	" 1 splice
A6	#4	6	20'-6"	" 2 "
A7	#6	18	18'-0"	splice " 2 Ret. wall
A8	#4	18	13'-0"	" 2 " "
A9	#6	8	16'-0"	splice " 2 " "
A10	#4	15	8'-0"	" 2 " " bends in field
A11	#6	6	14'-6"	" 2 " "
A12	#6	6	9'-6"	" 2 " "
A13	#4	2	17'-0"	" 2 " "
A14	#4	3	8'-0"	" 2 " "
B	#6	60	4'-6"	Sidewalk diaphragms
A15	#4	3	27'-3"	Abut. 2 Ret. Wall
A16	#6	7	5'-6"	" " " "
C1	#4	5	15'-0"	End Ret. Wall cap
C2	#4	6	3'-6"	" " " "
C3	#4	4	2'-6"	" " " "
C4	#4	6	18'-0"	Side " " " Abut #1
D1	#6	20	1'-0"	Mill Ret. Wall & Cellar Entrance
F1	#5	408	29'-6"	Roadway slab, transverse
F3	#4	442	29'-2"	Rdy. #5 W. slabs, longitudinal
K	#6	16	8'-0"	Abut. #1 & Ret. Wall
P1	#6	58	3'-0"	Pier
P2	#6	68	20'-8"	"
P3	#4	44	22'-3"	"
SW1	#4	1032	5'-0"	Sidewalk Slab
W1	14	3	2'-6"	Cellar entrance wall
W2	14	3	5'-0"	" " "
W3	14	4	6'-6"	" " "

BW1	#4	6	15'-0"	Mill wall	✓
BW2	#5	10	17'-0"	" "	✓

Dimensions are to ℄ of bars.



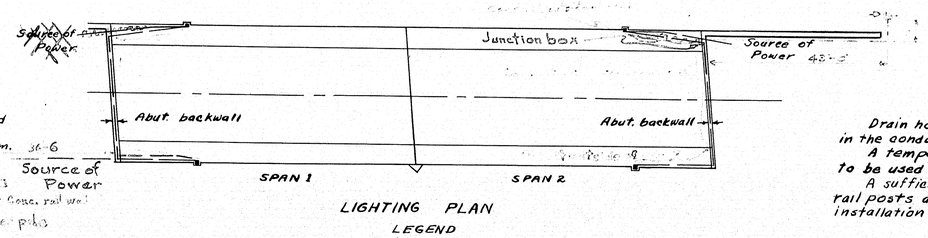


JOINT DETAIL AT ABUT'S

LIGHTING SYSTEM

4-Light units required. General Electric material listed. Standards with brackets. Hy-Lite design No. 610-A434 Incandescent Fixture - Form 79-R. C-Symetric AAG142. Equivalent standards, brackets and fixtures may be substituted for those listed, if approved by the Engineer. Conduit to be 2" ø.

The fixtures, which will be furnished and installed by others, are not part of this contract.



LIGHTING PLAN

LEGEND
Lights ■
Conduit — — —

Note - Source of power is assumed and should be verified before placing conduit.

The above system is suggestive only and does not prohibit the use of junction boxes or any other system if approved by the Engineer.

Drain holes with suitable outlet pipes shall be provided at low points, in the conduit to provide for the drainage of any moisture in the conduit.

A temporary wire shall be furnished and installed in the conduit to be used in the installation of the permanent wiring cable.

A sufficient time shall elapse between the placing of concrete rail posts and the erection of the light standards to permit the installation of the permanent wiring by others, if so desired

Revised as to ½ dwn. in 3 Cases P.E.W. Sept. 56

DESIGN - ALLEN
TRACE - LANGFORD
CHECK A.B.F.

BRIDGE 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

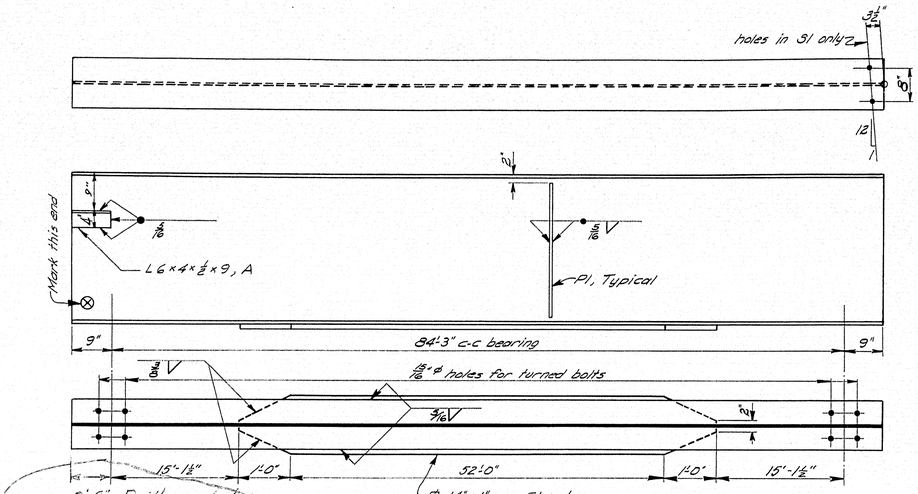
RAILS, LIGHTS & REINF.

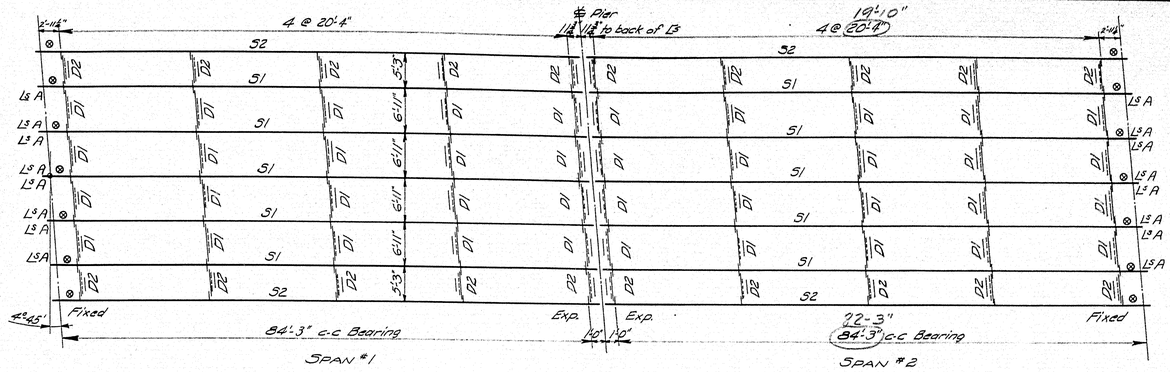
SHEET 10 OF 11 AUGUSTA, MAINE NOV. 1952

64-16

0 1 2 3 4 5 INCHES

D.P.W. DIV. No.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
		F-037-1(2)	11	11

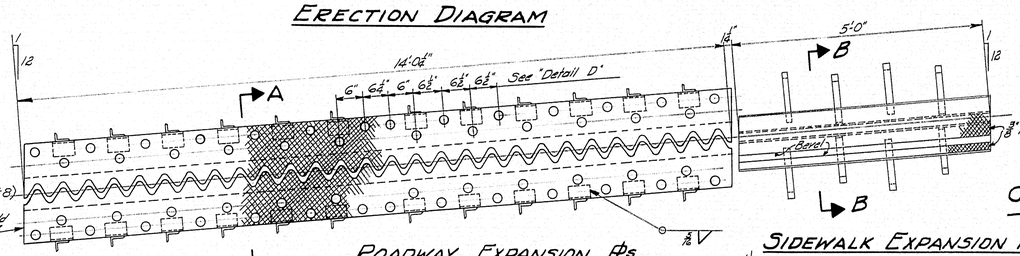




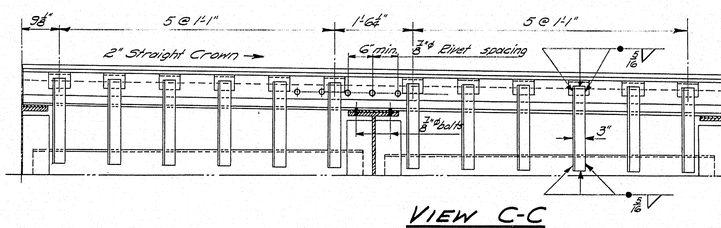
ERECTION DIAGRAM

Summay of Structual Steel

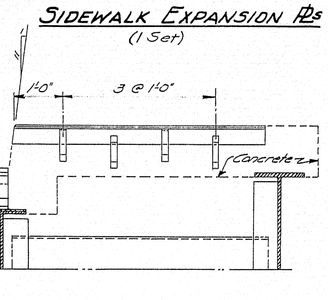
No.	Member	Mark
10	Stringers	S1
4	Stringers	S2
16	Angles	A
40	Diaphragms ℄	D1
20	Diaphragms ℄	D2
120	Plates	P1
14	Ex. Pedestals	EP
14	Fx. Pedestals	FP
2 Sets	Roadway Ex. Pls	
2 Sets	Sidewalk Ex. Pls	
1	Pier Nose Angle	PA (Sheet 8)



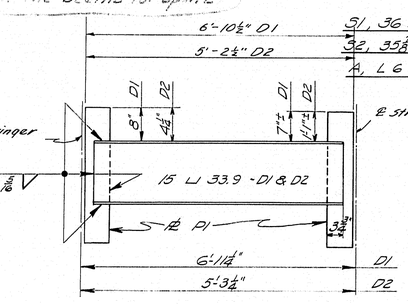
ROADWAY EXPANSION ℙs
(1 Set)



VIEW C-C

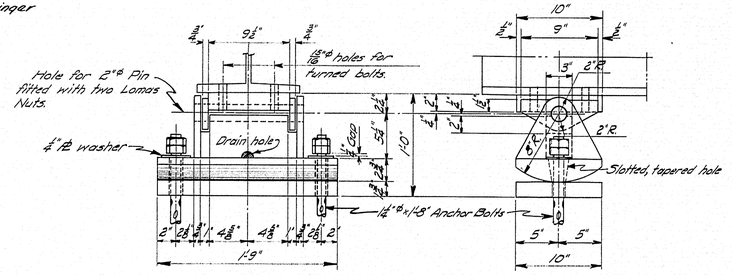


SIDEWALK EXPANSION ℙs
(1 Set)

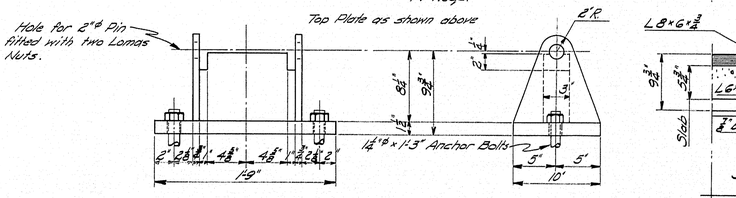


Typical diaphragm connection. Except for ones next to pier in both spans, D1 & D2 may be erected right or left hand.

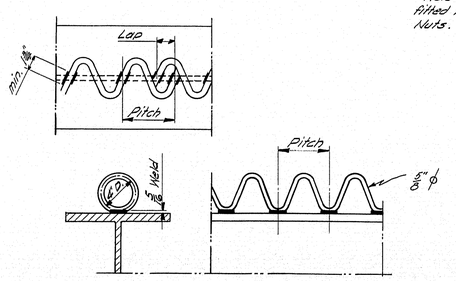
P1, PL 6 x ⅜ x 2'-8" - 120 Required
D1, 15 L 33.9 x 6'-6" - 40 Regd.
D2, 15 L 33.9 x 4'-10" - 20 Regd.



EXPANSION PEDESTAL, EP
14 Regd.

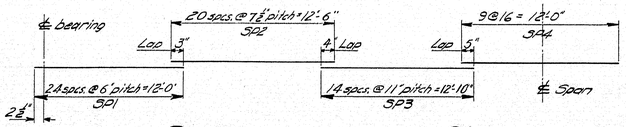


FIXED PEDESTAL, FP
14 Regd.

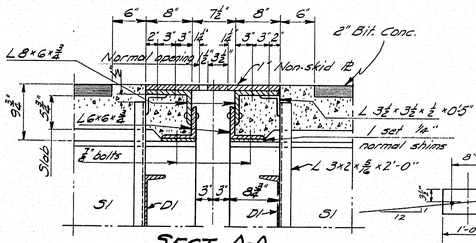


SPIRAL WELDS TO BEAM S1

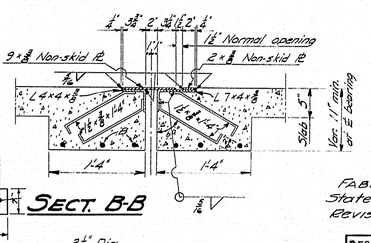
Spirals used to create composite action between stringers S1 and floor slab will be furnished and paid for in accordance with the item "Spiral Reinforcement."



SPIRAL LOCATION ON S1
Reg'd. - 20 SP1, 20 SP2, 20 SP3, 10 SP4

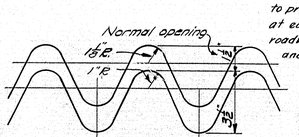


SECT. A-A



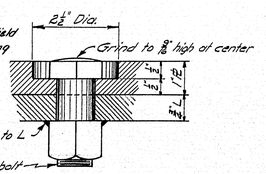
SECT. B-B

Steel Nose Angle for Pier detailed on sheet #8



FINGER DETAIL
For Roadway Expansion ℙ

Shims maybe cut in field to provide a firm bearing at each bearing of roadway expan. dam and stringers.



"DETAIL D"

Revised 10-14 for 12½" Holes, Span 2.

SPECIFICATIONS

FABRICATION & ERECTION - State of Maine, State Highway Commission Revision of May, 1953.

DESIGN - ALLEN
TRACE - CLARK
CHECK - A.B.P.

BRIDGE - 2337

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

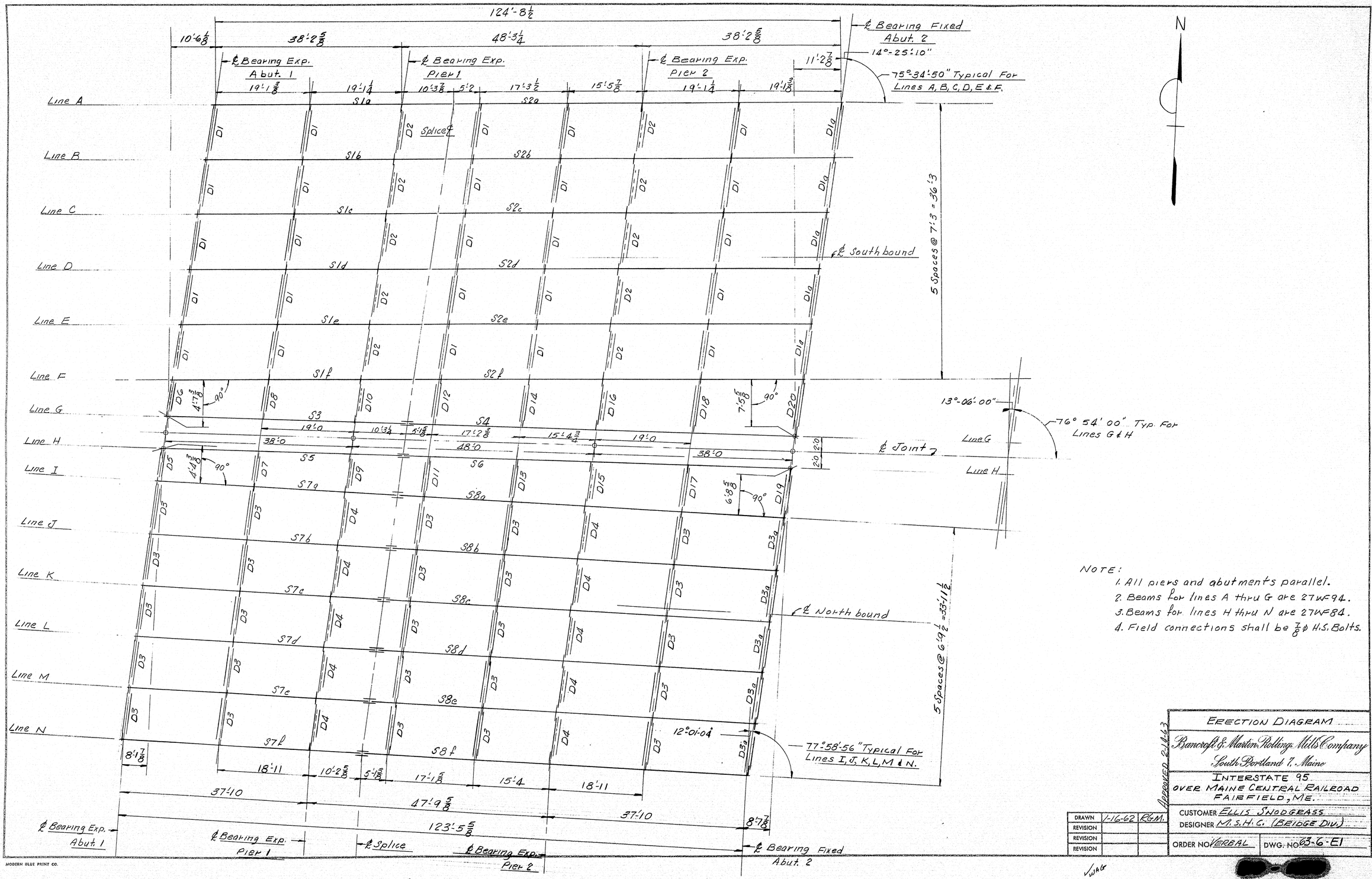
GUILFORD BRIDGE
OVER
PISCATAQUIS RIVER
IN THE TOWN OF
GUILFORD
PISCATAQUIS COUNTY

STRUCTURAL STEEL

SHEET 11 OF 11 AUGUSTA, MAINE NOV. 1952

64-17

0 1 2 3 4 5 INCHES



NOTE:

1. All piers and abutments parallel.
2. Beams for lines A thru G are 27WF94.
3. Beams for lines H thru N are 27WF84.
4. Field connections shall be ⅞ ϕ H.S. Bolts.

ERECTION DIAGRAM

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, ME.

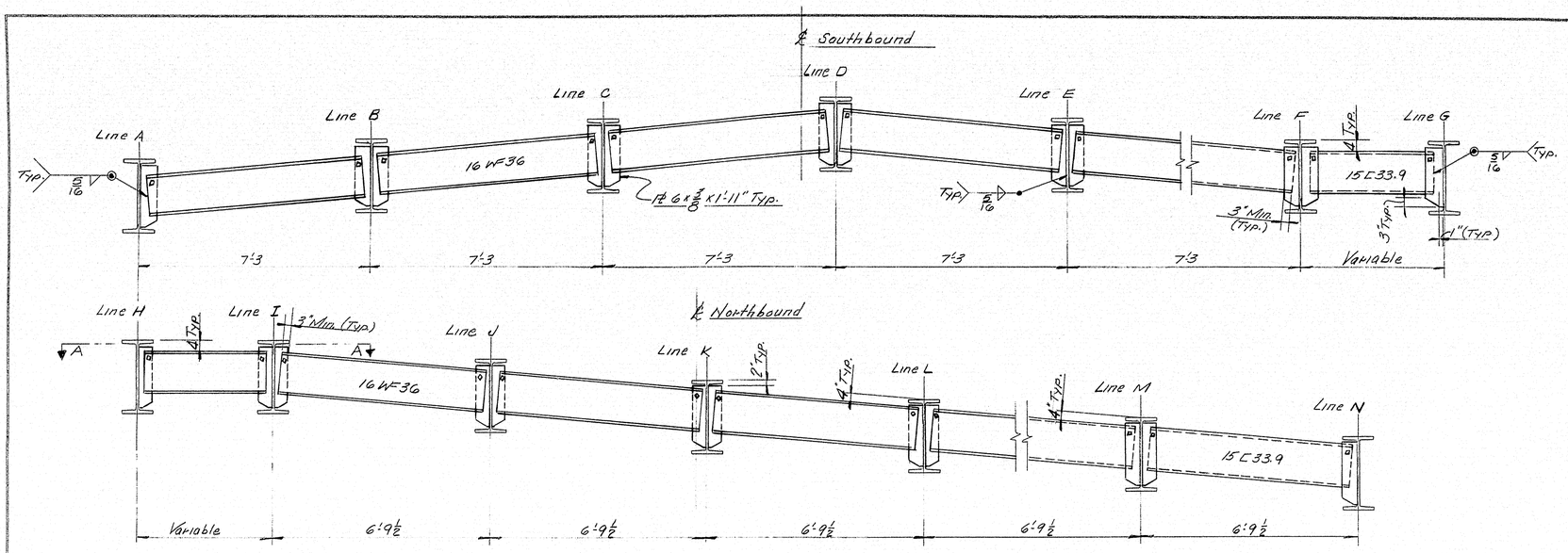
DRAWN	1-16-62	R.G.M.
REVISION		
REVISION		
REVISION		

CUSTOMER ELLIS SNODGRASS
DESIGNER M.S.H.C. (BRIDGE DIV.)
ORDER NO VERBAL
DWG. NO 63-6-E1

Approved 2-14-63

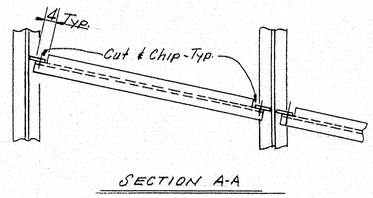
MODERN BLUE PRINT CO.

0 1 2 3 4 5 INCHES

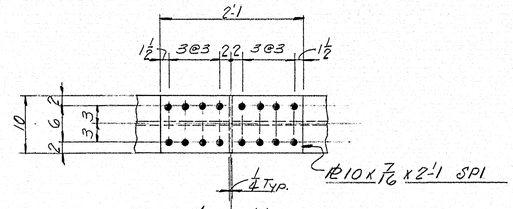


DIAPHRAGMS

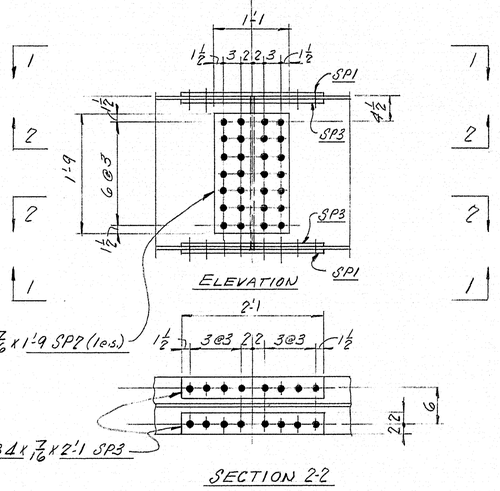
13/16 ø Holes in Diaphragms & Conn. Pl's for ⅞ ø x 0'-1½ H.T. Bolts.



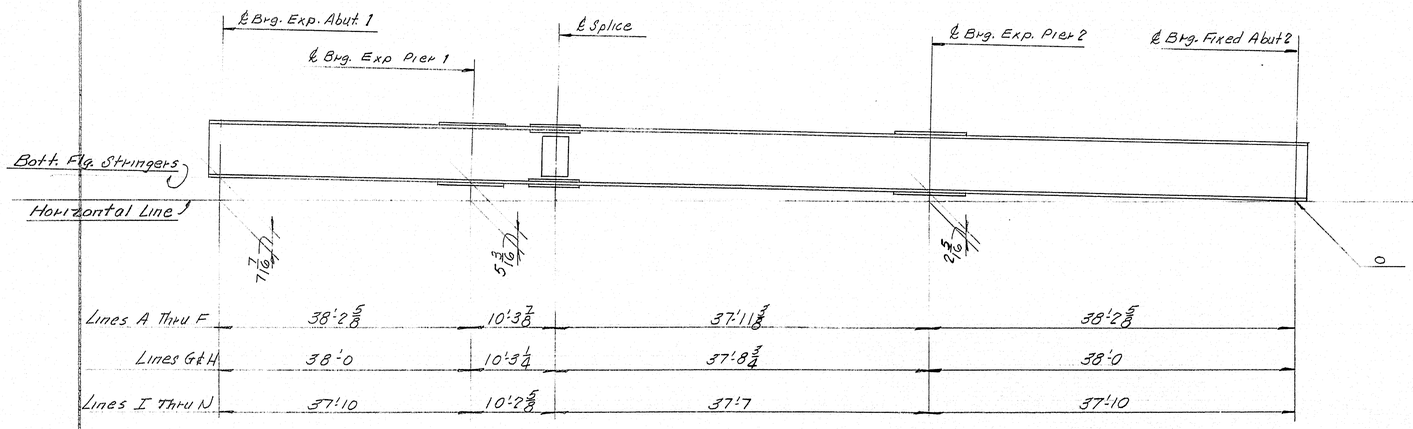
SECTION A-A



VIEW 1-1



SECTION 2-2



Lines A Thru F	38'-2 5/8	10'-3 7/8	37'-11 3/8	38'-2 5/8
Lines G & H	38'-0	10'-3 1/4	37'-8 3/4	38'-0
Lines I Thru N	37'-10	10'-2 5/8	37'-7	37'-10

ERECTION DETAIL FOR STRINGER & SPLICE

No Camber Req'd. in Stringers (Place natural camber up.)

SPLICE DETAILS

FIELD CONNECTIONS H. S. Bolts: ⅞ ø x 0'-3 @ Top & Bott. Flg. of 27 WF 84 & @ Web of all Stringers.
⅞ ø x 0'-3¼ @ Top & Bott. Flg. of 27 WF 94

APPROVED 2-14-63

ERECTION & SPLICE DETAIL

Bancroft & Martin Rolling Mills Company
South Portland 7, Maine

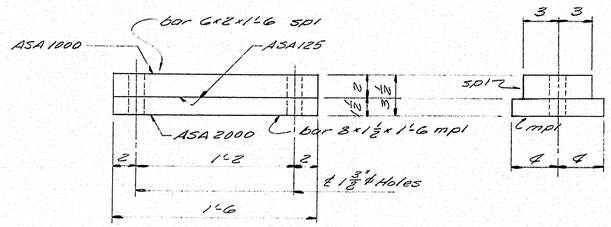
INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, ME.

DRAWN	1-17-63	EGM.
REVISION		
REVISION		
REVISION		

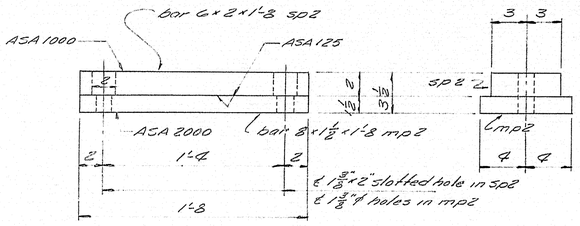
CUSTOMER ELLIS SNODGRASS
DESIGNER M.S.H.C. (BRIDGE DIV.)
ORDER NO. VERBAL
DWG. NO 63-6-E2

VWAG

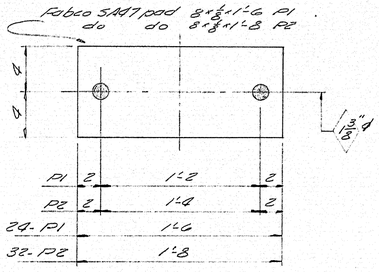
MODERN BLUE PRINT CO.

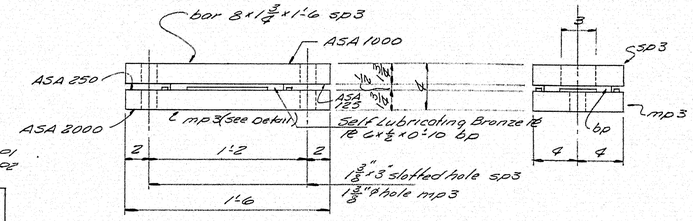


FIXED BEARING
FB1 6 REQ'D.

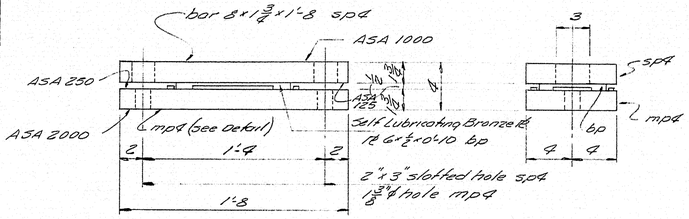


FIXED BEARING
FB2 8 REQ'D





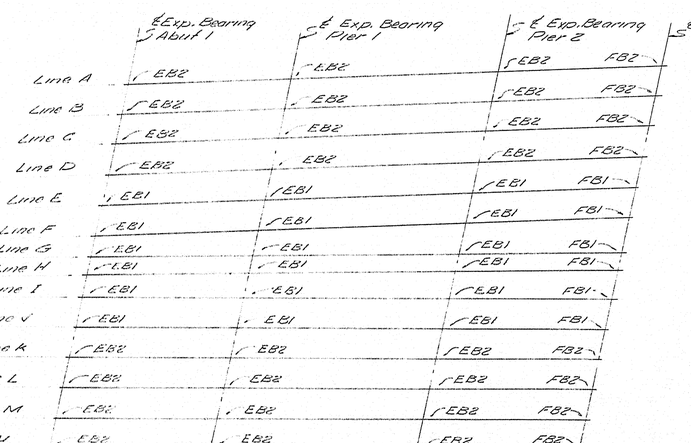
EXPANSION BEARING
EB1 18 REQ'D



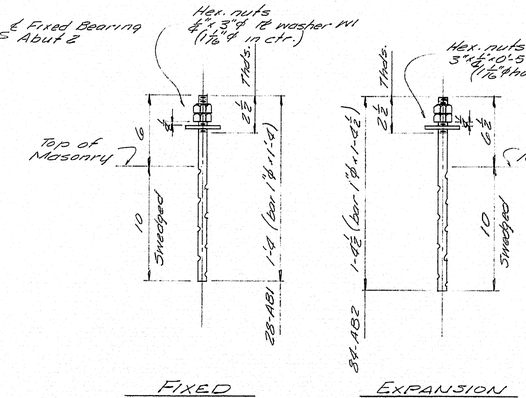
EXPANSION BEARING
EB2 24 REQ'D.

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
FB1	6		FIXED BEARING –			
	6	sp1	bar 6x2	1 6		field weld to stringer
	6	mp1	bar 8x1½	1 6		
FB2	8		FIXED BEARING –			
	8	sp2	bar 6x2	1 8		field weld to stringer
	8	mp2	bar 8x1½	1 8		
EB1	18		EXPANSION BEARING			
	18	sp3	bar 8x1¾	1 6		field weld to stringer
	18	mp3	bar 8x1¾	1 6		
EB2	24		EXPANSION BEARING			
	24	sp4	bar 8x1¾	1 8		field weld to stringer
	24	mp4	bar 8x1¾	1 8		
	84	fb1	bar ⅜x½	0 7		
	84	fb2	do	0 3½		
	42	bp	12 Gx½	0 10		self lubricating Bronze Plate Req.# 9262
AB1	28		bar 1"ϕ	1 4		swedged
AB2	84		do	1 4½		do
	224	shop	1"ϕ Hex nut			
W1	28		bar 3"ϕ	0 0½		12 washer
W2	84		bar 3x¼	0 5		do
P1	24		Fabco 3A97 pad 8x8	1 6		Use @ Bearings FB1 & EB1
P2	32		do	1 8		Use @ Bearings FB2 & EB2 Req.# 9272
		NOTE:				
			Allowance to be made for machining			
			when cutting above plates.			
			ITEM 702-103A			

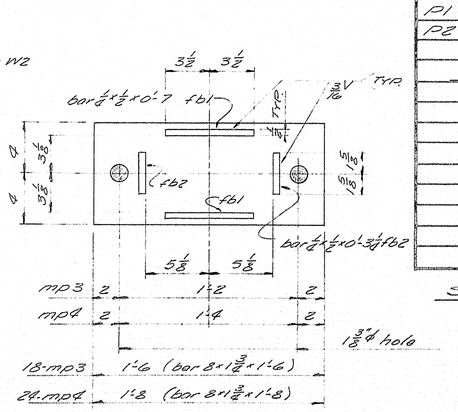
SCALE WEIGH



PLAN ~ BEARINGS



FIXED EXPANSION
ANCHOR BOLTS



MASONRY PLATE mp3 & mp4

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded, Bolted
HOLES: As noted
PAINT: Red lead per M.S.H.C. spec. except as noted.

PAINT NOTE:

No paint on surfaces finished ASA 125 or ASA 250. Coat with hot mixture of white lead and tallow.
No paint on top surface sp1, sp2, sp3 and sp4.
No paint on self lubricating Bronze Plate and areas in contact with bronze plate
No paint on anchor bolts.

Approved 2-14-63

BEARINGS ~ ANCHOR BOLTS

Bancroft & Martin Inc.
South Portland 7, Maine

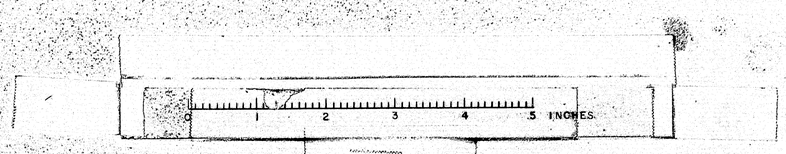
INTERSTATE 95
OVER M.C.R.R.
FAIRFIELD, MAINE.

CUSTOMER Ellis Snodgrass
DESIGNER M.S.H.C. Bridge Div.

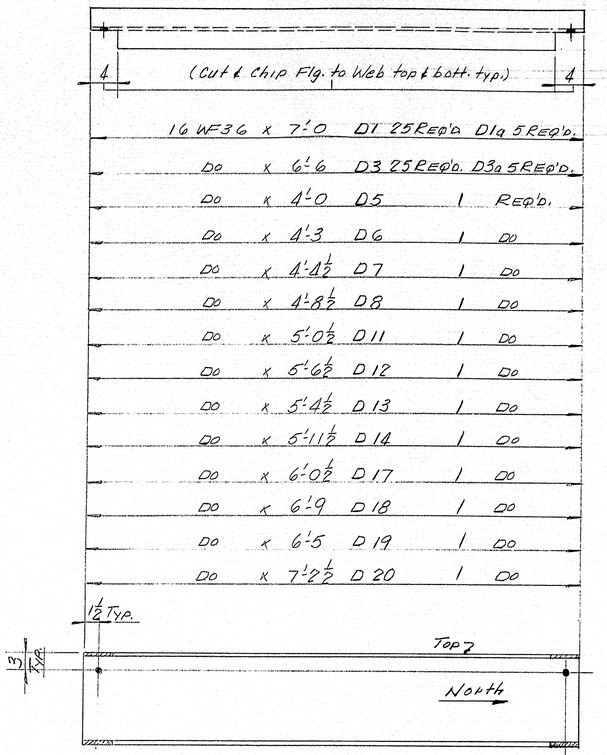
ORDER NO. Verbal
DWG. NO. 63-6-51

DRAWN	1-10-63	H.L.
REVISION		
REVISION		
REVISION		

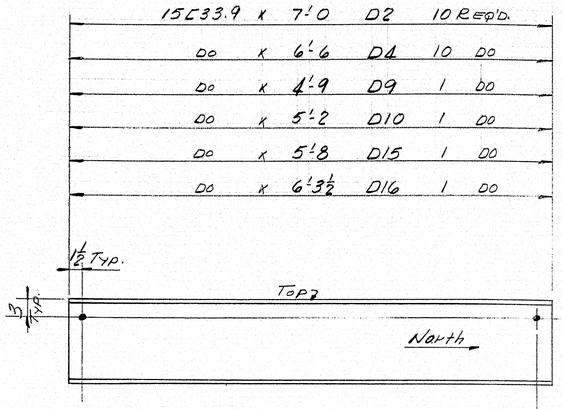
PRINTED BY SPAULDING-MOSS CO. BOSTON, MASS.

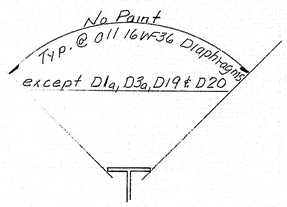


89-159



D1 & D1a	6'-10 9/16
D3 & D3a	6'-4½
D5	3'-10½
D6	4'-1½
D7	4'-2 15/16
D8	4'-7 1/16
D11	4'-11
D12	5'-5
D13	5'-2 15/16
D14	5'-10
D17	5'-11
D18	6'-7½
D19	6'-3½
D20	7'-1





D2	6'-10½
D4	6'-4 7/16
D9	4'-7 7/16
D10	5'-0 7/16
D15	5'-6 9/16
D16	6'-1 15/16

NOTE:
No Paint 5" each end of all diaphragms.

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
D1	25		16 WF36	7 0		
D1a	5			7 0		
D3	25			6 6		
D3a	5			6 6		
D5	1			4 0		
D6	1			4 3		
D7	1			4 4½		
D8	1		Do	4 8½		
D11	1			5 0½		
D12	1			5 6½		
D13	1			5 4½		
D14	1			5 11½		
D17	1			6 0½		
D18	1			6 9		
D19	1			6 5		
D20	1		16 WF36	7 2½		
D2	10		15 C 33.9	7 0		
D4	10			6 6		
D9	1			4 9		
D10	1		Do	5 2		
D15	1			5 8		
D16	1		15 C 33.9	6 3½		

BILL OF MATERIAL DWG. NO 63-6-52

SHOP CONNECTIONS: —
FIELD CONNECTIONS: Bolted & Welded
HOLES: 13/16 ϕ
PAINT: Red Lead per Maine Spec's. except as noted.

APPROVED 2-14-63

DIAPHRAGM DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, MAINE

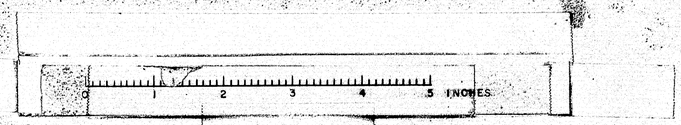
CUSTOMER Ellis Snodgrass
DESIGNER M.S.H.C. (Bridge Div.)

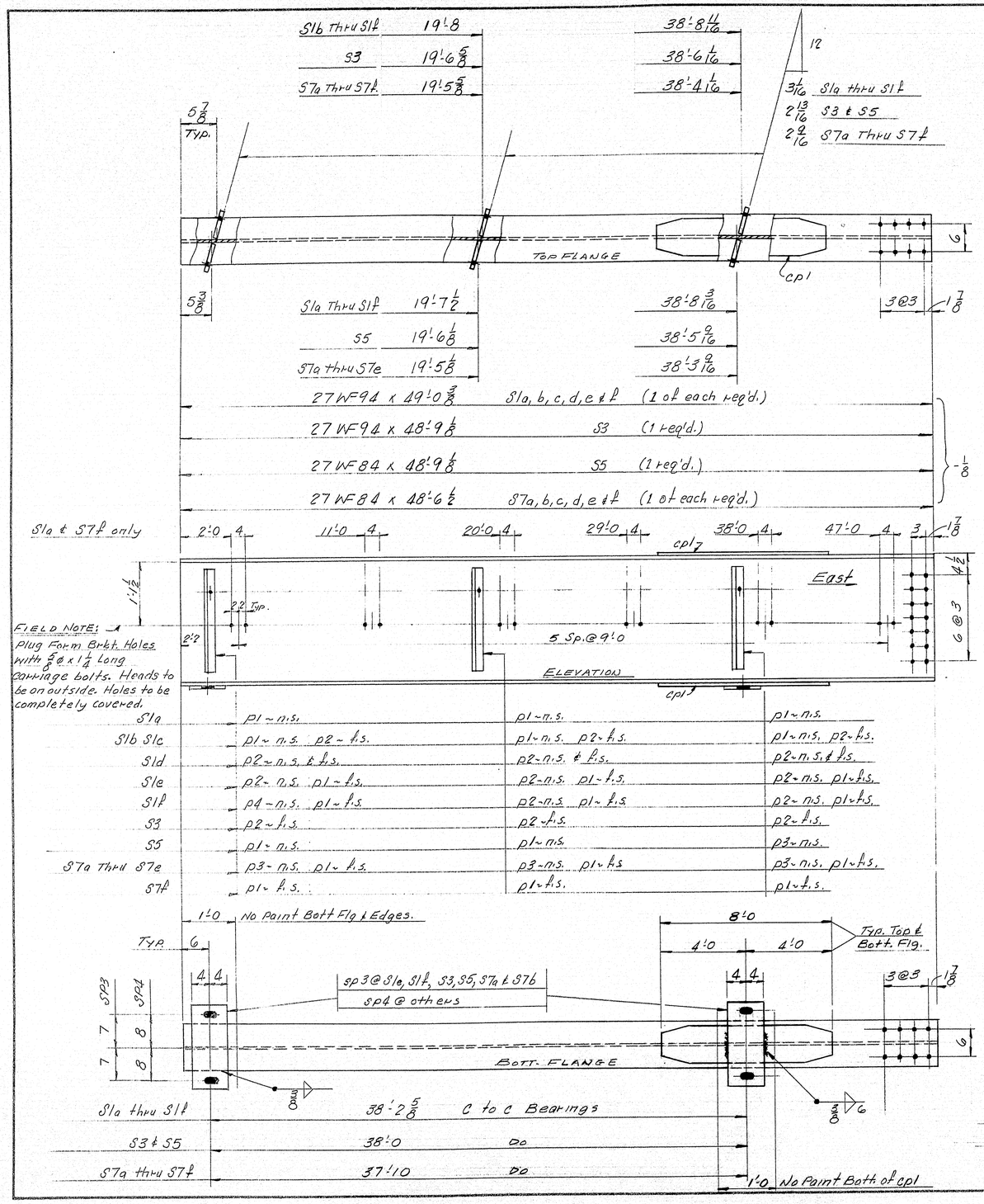
ORDER NO. Verbal DWG. NO. 63-6-52

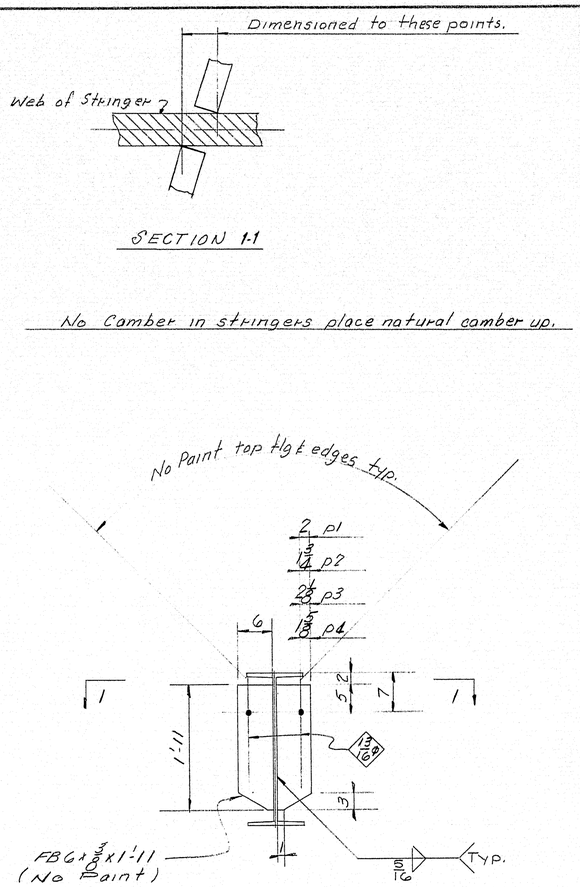
DRAWN	1-21-63	EGM
REVISION		
REVISION		
REVISION		

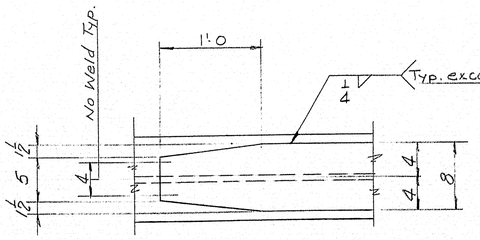
PRINTED BY SPAULDING-MOSS CO., BOSTON, MASS.

89-160









COVER PLATE DETAIL
FB 8 x 5/16 x 8'-0 cpl

HOLES ARE FOR HIGH TENSILE BOLTS They are to be free from burrs and shall not be painted on any surface within 5" of such open holes.

NOTE: Holes in field splices of continuous beams are to be sub-punched (or sub-drilled) and reamed while assembled in the shop and connecting parts to be match marked and bolted for shipment.

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
S1a	1		27WF94	49 0 3/8		A-36
S1b	1			49 0 3/8		
S1c	1			49 0 3/8		
S1d	1		Do	49 0 3/8		
S1e	1			49 0 3/8		
S1f	1			49 0 3/8		
S3	1		27WF94	48 9 1/8		
S5	1		27WF84	48 9 1/8		
S7a	1			48 6 1/2		
S7b	1			48 6 1/2		
S7c	1		Do	48 6 1/2		
S7d	1			48 6 1/2		
S7e	1			48 6 1/2		
S7f	1		27WF84	48 6 1/2		
S2a	1		27WF94	76 7 3/8		Do
S2b	1			76 7 3/8		
S2c	1			76 7 3/8		
S2d	1		Do	76 7 3/8		
S2e	1			76 7 3/8		
S2f	1			76 7 3/8		
S4	1		27WF94	76 2 5/8		
S6	1		27WF84	76 2 5/8		
S8a	1			75 10 3/8		
S8b	1			75 10 3/8		
S8c	1		Do	75 10 3/8		
S8d	1			75 10 3/8		
S8e	1			75 10 3/8		
S8f	1		27WF84	75 10 3/8		
	56	cpl	FB 8 x 5/16	8 0		
	96	p1	FB 6 x 3/8	1 11		
	52	p2		1 11		
	42	p3		1 11		
	2	p4	FB 6 1/2	1 11		
SP1	28		PL 10 x 7/16	2 1		A-36
SP2	28		PL 13 x 7/16	1 9		A-36
SP3	56		FB 4 x 7/16	2 1		A-36
FIELD	192		3/4φ M.Bolts	0 1 1/2		@ Diaphragms
Do	616		3/4φ H.S. Bolts	0 3		@ Splice
Do	224		3/4φ H.S. Bolts	0 3 1/4		@ Splice
Do	1680		3/4 Hard Washers			@ Splice
Do	56		3/4φ Carriage Bolts	0 1 1/4		@ Brkt. Holes

Above Bill of Material covers Dwgs. E2 & S4 also.

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded & Bolted
HOLES: 15/16 except as noted
PAINT: Red Lead per State of Maine Spec's. except as Noted.

STRINGER DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, ME.

CUSTOMER Ellis Snodgrass
DESIGNER M.S.H.C. (Beidge Div.)

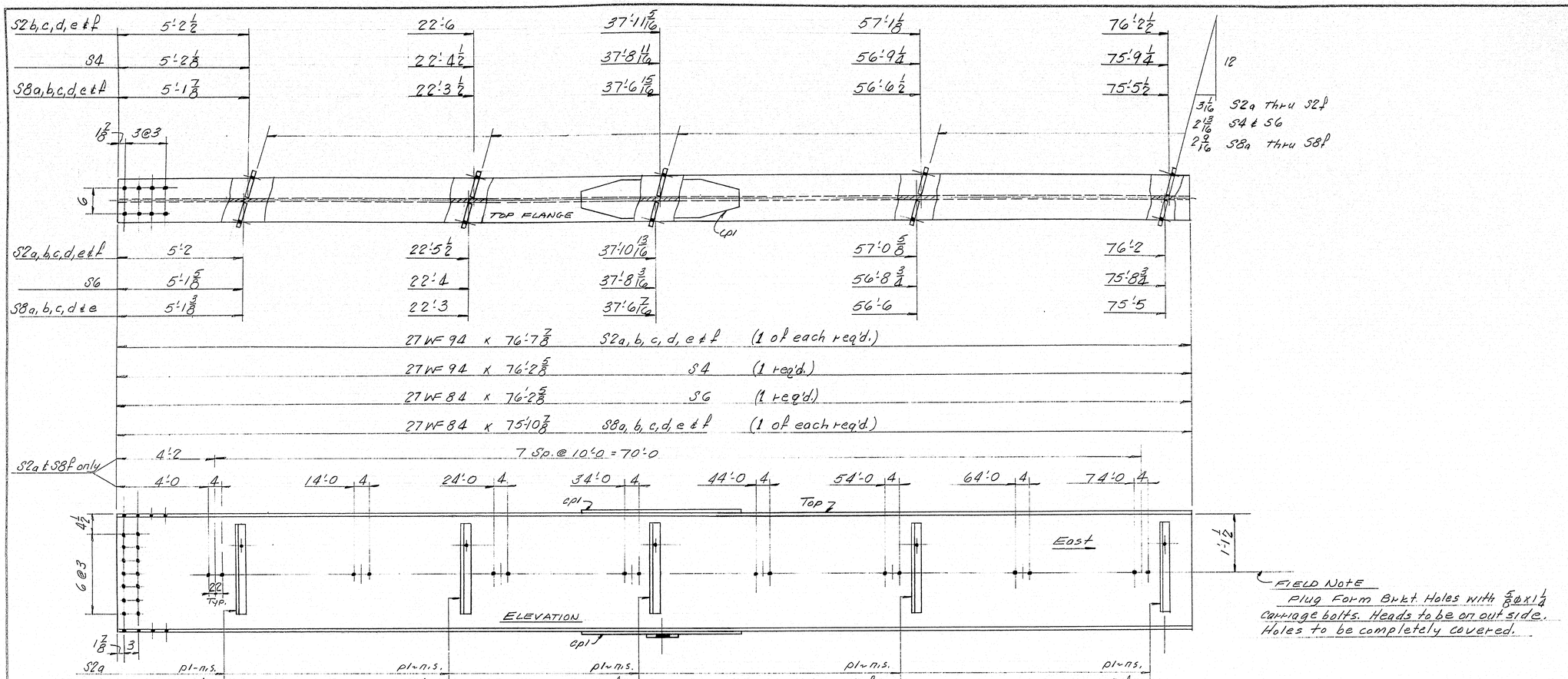
DRAWN	1-15-63	E.G.M.
REVISION		
REVISION		
REVISION		

ORDER NO Verbal
DWG. NO 63-6-33

APPROVED 2-21-63

89-161

S2b,c,d,e&f	5'-2 1/2	22'-6	37'-11 5/16	57'-1 1/8	76'-2 1/2
S4	5'-2 1/8	22'-4 1/2	37'-8 11/16	56'-9 1/4	75'-9 1/4
S8a,b,c,d,e&f	5'-1 7/8	22'-3 1/2	37'-6 15/16	56'-6 1/2	75'-5 1/2



S2a,b,c,d,e&f	5'-2	22'-5 1/2	37'-10 13/16	57'-0 5/8	76'-2
S6	5'-1 5/8	22'-4	37'-8 3/16	56'-8 3/4	75'-8 3/4
S8a,b,c,d&e	5'-1 3/8	22'-3	37'-6 7/16	56'-6	75'-5

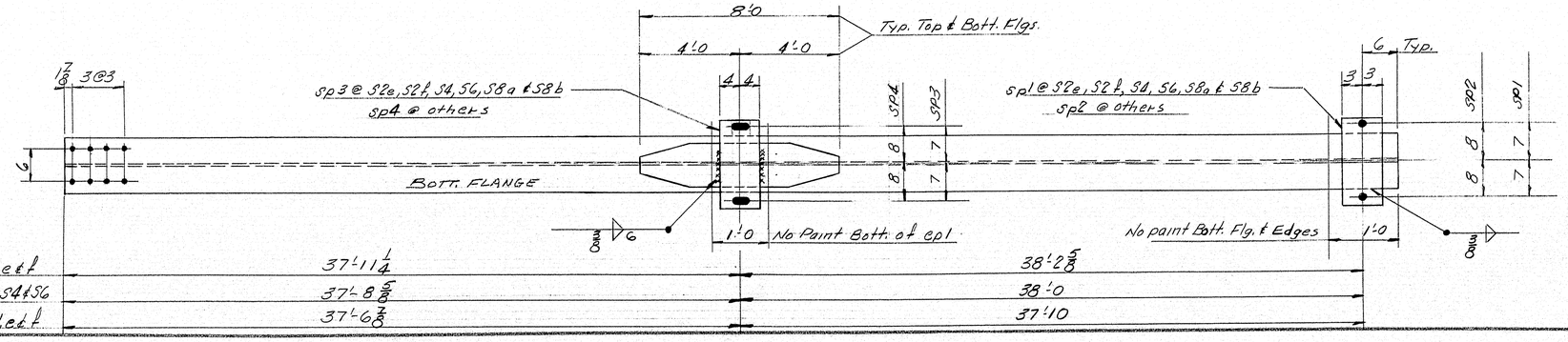
27WF94 x 76'-7 7/8 S2a,b,c,d,e&f (1 of each req'd.)
27WF94 x 76'-2 5/8 S4 (1 req'd.)
27WF84 x 76'-2 5/8 S6 (1 req'd)
27WF84 x 75'-10 7/8 S8a,b,c,d,e&f (1 of each req'd.)

FIELD NOTE
Plug Form Bolt Holes with 5/8 x 1 1/4 carriage bolts. Heads to be on outside. Holes to be completely covered.

S2a	pl-n.s.	pl-n.s.	pl-n.s.	pl-n.s.	pl-n.s.
S2b&S2c	pl-n.s. p2-f.s.	pl-n.s. p2-f.s.	pl-n.s. p2-f.s.	pl-n.s. p2-f.s.	pl-n.s. p2-f.s.
S2d	p2-n.s. & f.s.	p2-n.s. & f.s.	p2-n.s. & f.s.	p2-n.s. & f.s.	p2-n.s. & f.s.
S2e	p2-n.s. pl-f.s.	p2-n.s. pl-f.s.	p2-n.s. pl-f.s.	p2-n.s. pl-f.s.	p2-n.s. pl-f.s.
S2f	p2-n.s. pl-f.s.	pl-n.s. & f.s.	p4-n.s. pl-f.s.	p2-n.s pl-f.s.	p2-n.s. pl-f.s.
S4	pl-f.s.	p2-f.s.	p2-f.s.	p2-f.s.	p2-f.s.
S6	pl-n.s.	pl-n.s.	pl-n.s.	pl-n.s.	p3-n.s.
S8a,b,c,d&e	p3-n.s. pl-f.s.	p3-n.s. pl-f.s.	p3-n.s. pl-f.s.	p3-n.s. pl-f.s.	p3-n.s. pl-f.s.
S8f	pl-f.s.	pl-f.s.	pl-f.s.	pl-f.s.	pl-f.s.

See Typ. Section, cover plate detail, general notes & Bill of material on Dwg. S3.

No Camber in stringers place natural camber up.



S2a,b,c,d,e&f	37'-11 1/4	38'-2 5/8
S4&S6	37'-8 5/8	38'-0
S8a,b,c,d,e&f	37'-6 7/8	37'-10

APPROVED 2/14/63

STRINGER DETAILS

Bancroft & Martin Rollings Mills Company
South Portland 7, Maine

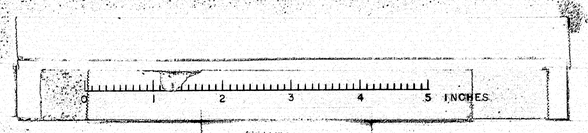
INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, MAINE

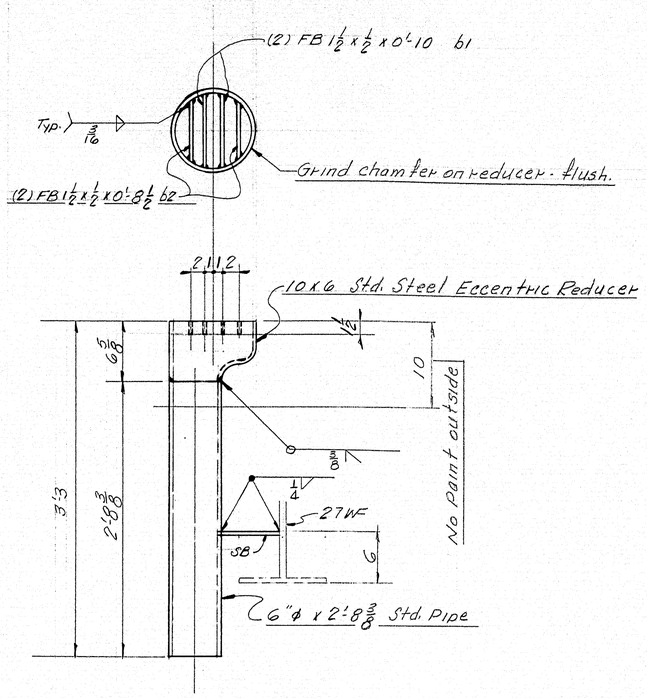
CUSTOMER Ellis Snodgrass
DESIGNER M.S.H.C. (Bridge Div.)

DRAWN	1-23-63	R.G.M.
REVISION		
REVISION		
REVISION		

ORDER NO. VERBAL DWG. NO. 63-6-S4

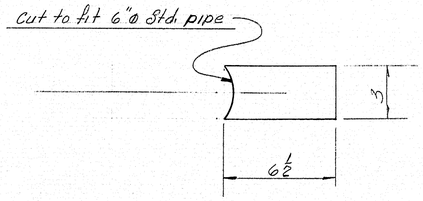
MODERN BLUE PRINT CO.





DRAIN DETAIL DR1

3 REQ'D.



STAY BAR SB

FB 3 x 5/8 x 0'-6½ (3 REQ'D.)

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
DR1	3		6"ø Std. Pipe	2 8 3/8		
SB	3		FB 3 x 5/8	0 6½		
	6	b1	FB 1½ x ½	0 10		
	6	b2	∞	0 8½		
	3	Shop	10 x 6 Std. Steel Eccentric Reducer			Rep. #9269 2-5-63

BILL OF MATERIAL DWG. NO 63-6-S5

SHOP CONNECTIONS: Welded
FIELD CONNECTIONS: Welded
HOLES: —
PAINT: Red Lead per State of Maine Spec's. & as noted.

APPROVED 2/14/63

DRAIN DETAIL

Bancroft & Martin Inc.
South Portland 7, Maine

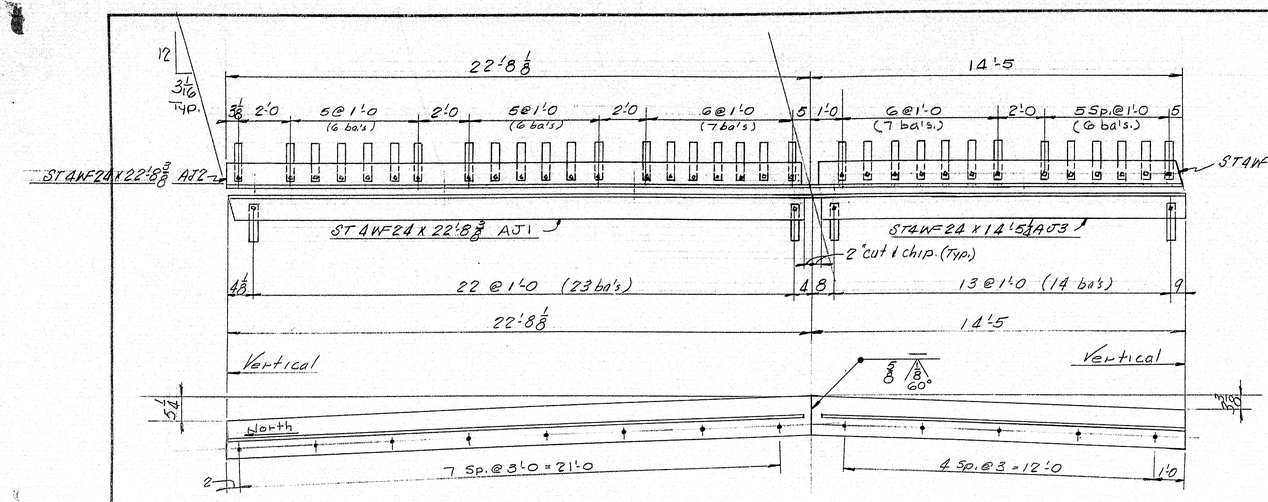
INTERSTATE 95
OVER MAINE CENTRAL RAILROAD
FAIRFIELD, MAINE

DRAWN	1-24-63	R&M
REVISION		
REVISION		
REVISION		

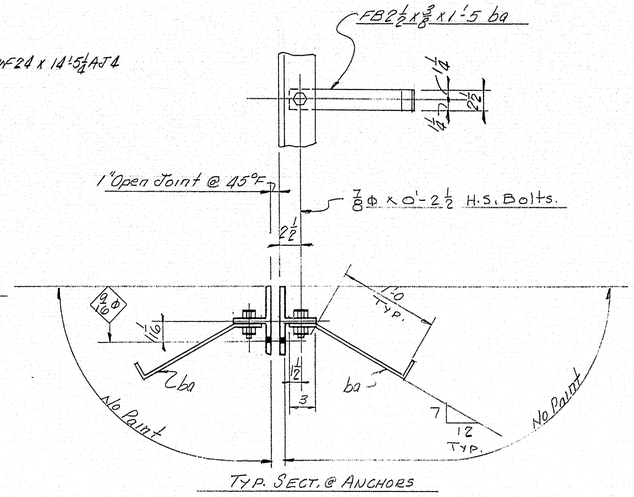
CUSTOMER ELLIS SNODGRASS
DESIGNER M.S.H.C. (BRIDGE DIV.)
ORDER NO VERBAL DWG. NO 63-6-S5

89-163

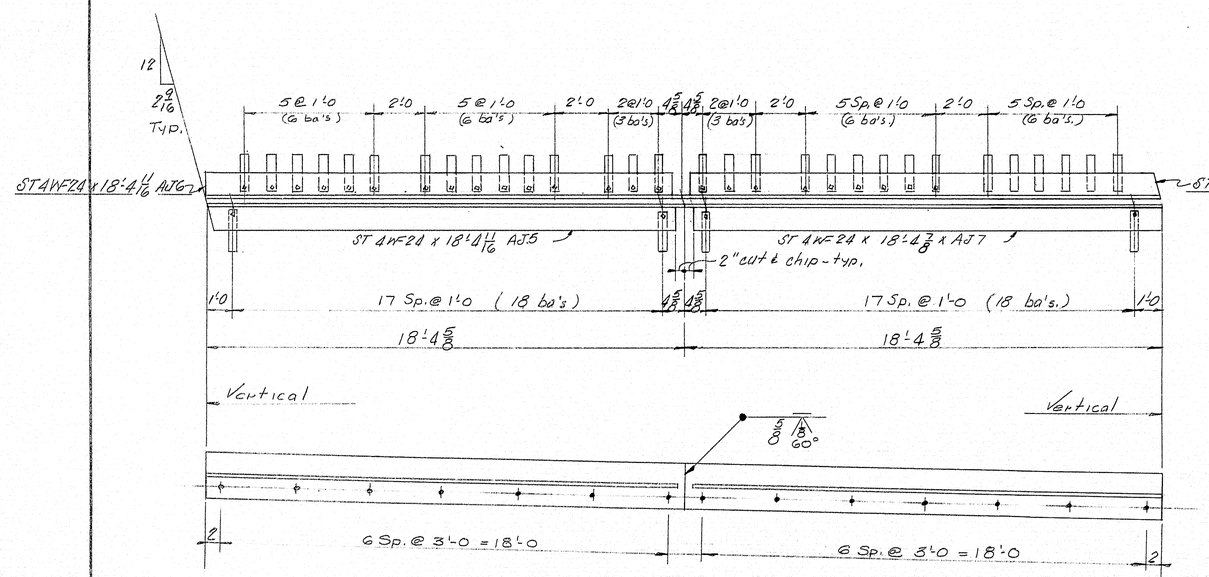
PRINTED BY SHUMWAY-HOSE CO., BOSTON, MASS.



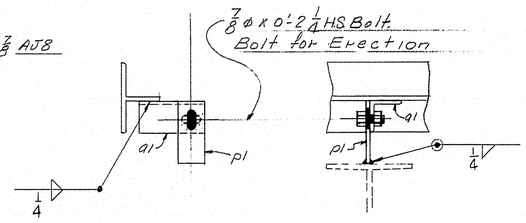
ARMORED JOINT (1 REQ'D.)
@ SOUTHBOUND ABUT. 1



TYP. SECT. @ ANCHORS

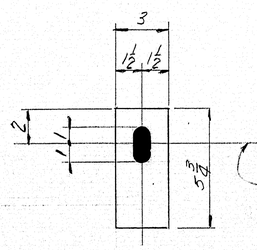


ARMORED JOINT (1 REQ'D.)
@ NORTHBOUND ABUT. 1

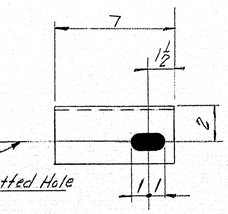


ADJUSTMENT DEVICE AD

NOTE: After armored joint is in its final position, weld the plate to the angle with a 1/4 fillet weld. Locate adjustment devices @ each stringer.



ADJUSTMENT PL p1
FB 3 1/2 x 3/8 x 0'-5 3/4



ADJUSTMENT ANGLE a1
4 3 1/2 x 3 1/2 x 3/8 x 0'-7

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	REMARKS
AJ1	1		ST 4WF24	22 8 3/8		
AJ2	1		Do	22 8 3/8		
AJ3	1		Do	14 5 1/4		
AJ4	1		Do	14 5 1/4		
AJ5	1		Do	18 4 11/16		
AJ6	1		Do	18 4 11/16		
AJ7	1		Do	18 4 7/8		
AJ8	1		ST 4WF24	18 4 7/8		
AD	11		Shop Assy			
	11	a1	4 3 1/2 x 3 1/2 x 3/8	0 7		
	11	p1	FB 3 x 3/8	0 5 3/4		
	136	bq	FB 2 1/2 x 3/8	1 5		
	136	Shop	7/8 Φ H.S. Bolts	0 2 1/2		
	272	Do	7/8 Hard Washers			
FIELD	11		7/8 Φ H.S. Bolt	0 2 1/4		
Do	22		7/8 Hard Washers			

SHOP CONNECTIONS: Bolted
FIELD CONNECTIONS: Welded
HOLES: 15/16 Φ ℄ as noted.
PAINT: Red Lead per State of Maine
Specs. ℄ as noted.

APPROVED 2/14/63

ARMORED JOINT DETAILS

Bancroft & Martin Inc.
South Portland 7, Maine

INTERSTATE 95
over MAINE CENTRAL RAILROAD
FAIRFIELD, MAINE

CUSTOMER ELLIS SNODGRASS
DESIGNER M.S.H.C. BRIDGE DIV.

DRAWN	1-25-63	RGM
REVISION		
REVISION		
REVISION		

ORDER NO VERBAL DWG. NO 63-6-56

89-164

PRINTED BY SHUMWAY-MOSE CO., BOSTON, MASS.

0 1 2 3 4 5 INCHES