NOTES.

EXISTING SUPERST. Steel Pony Truss for Road. steel thru. truss for Sidewalk. Steel badly rusted. Wood floor on roadway very poor condition

EXISTING SUBST. Granite Abuts. fairly laid in mortar. Good condition. Sidewalk bridge has concrete abuts. Fair condition.

STREAM. Bridge in flowage of Central Maine Power Co. Dam about 800' below bridge. Water well controlled. Extreme high water at El. 98.0 Ordinary water at present stage 93.9

FOUNDATION. All ledge, Stream in ledge gorge.

12" water pipe supported by 2-24" I Beams on their own Fdns.

4" Gas pipe on downstream side of bridge.

B.M. downstream corner of bridge seat Abut. #2 El. 102.84 (From Kennebec Water District. U.S.G.S. Elevation.

PLAN
SCALE 30'=1"

PROFILE on ℄ WESTERN AVENUE
HOR. SCALE 1"=30' VERT. SCALE 1"=5'

SURVEY BLAKE
PLOT B.T.W.

TOWN 06-25
BRIDGE 3836

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

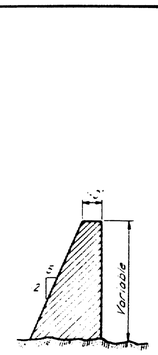
WESTERN AVENUE BRIDGE OVER MESSALONSKEE STREAM IN THE CITY OF WATERVILLE-KENNEBEC CO.

SURVEY PLAN

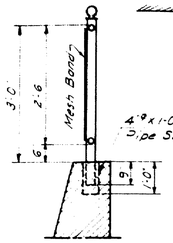
SHEET 1 OF 4. AUGUSTA ME DEC. 1941

44-187

0 1 2 3 4 5 INCHES

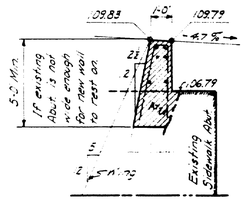


SECTION A-A

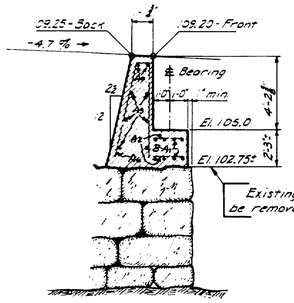


RAIL SECTION

NOTE: Steel Mesh Link Fence, 2" openings #9 Galvanized after wearing (2'-6" width). 2½"ø Posts with ornamental top. ½"ø top and bottom bars. Posts, Bars and fittings to be Galvanized. After rail posts have been set, Grout with cement mortar in 4"ø Pipe Sleeve. Exact length and grade of this rail to be determined by the Engineer in the field. Offset fittings may be used if desired. Fasten steel mesh to top and bottom rails with #12 gage wire loops at 1'-4" centers.

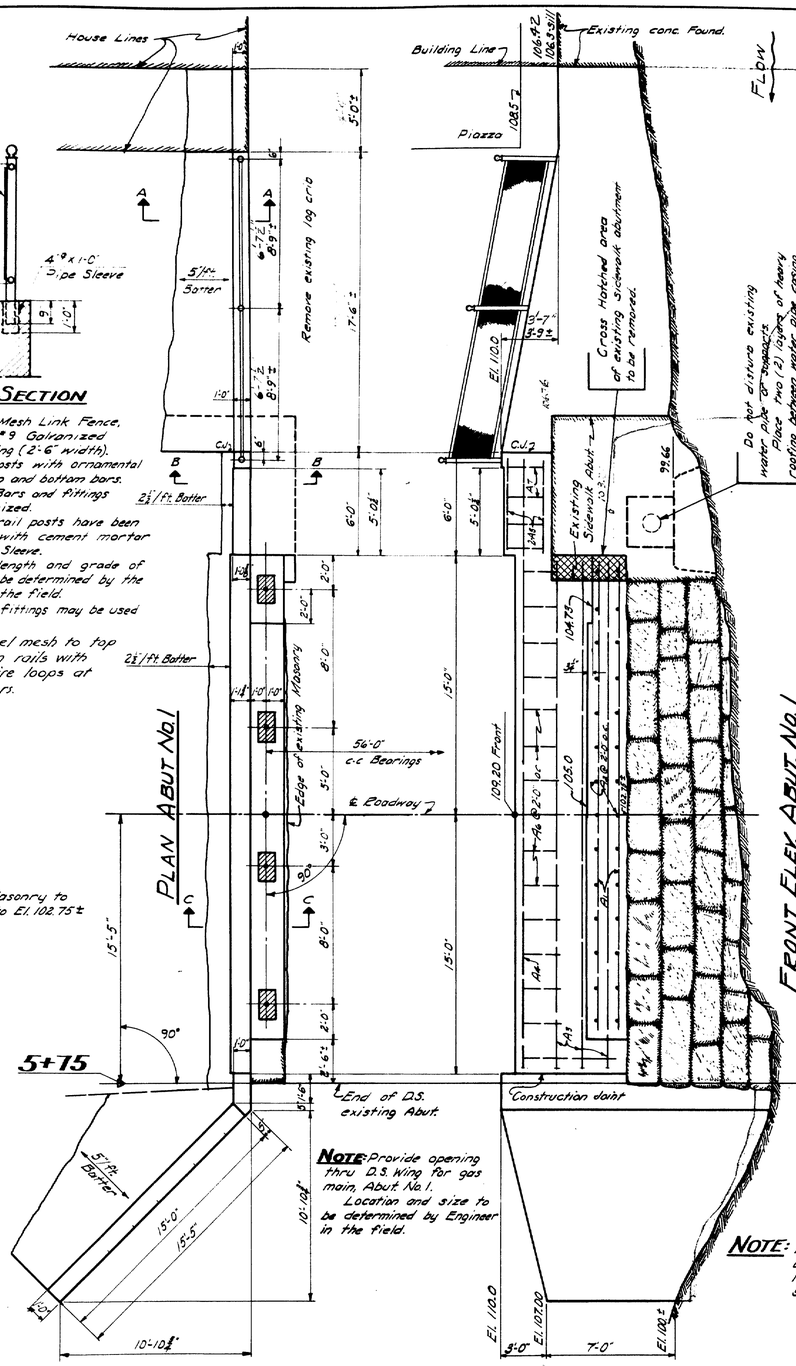


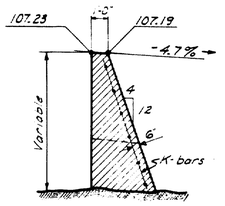
SECTION B-B



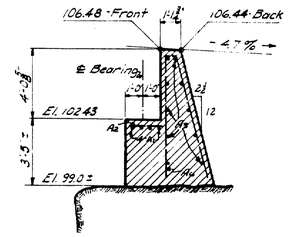
SECTION C-C

NOTE: Center Line of Bearing for No. 1 Abutment to be a minimum of 1'-1" from face of existing masonry abutment. Center Line of Bearing for No. 2 Abutment to be set 56'-0" from, and parallel to Center Line of Bearing Abutment No. 1.

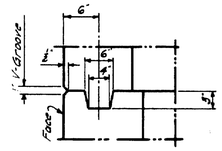




SECTION D-D



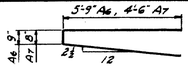
SECTION E-E



KEY DETAIL FOR CONSTRUCTION JOINTS

Note: Changes in Green. F.A.P.

REINFORCING STEEL



MARK	SIZE	NO.	LENGTH	REMARKS
A1	1"ø	12	27'-0"	Abuts. Bridge Seats
A2	1"ø	42	2'-0"	" " "
A3	"	16	29'-6"	" Back Walls
A4	"	2	35'-6"	Abut "1" - Back Wall
A5	"	4	5'-6"	" "1" S.W. Back Wall
A6	⅝"ø	31	12'-3"	Abuts. Back Walls
A7	"	4	9'-8"	Abut "1" - S.W. Back Wall
K	½"ø	6	8'-0"	Abut. "2" Wing

DESIGN - HAMILTON
TRACE - CLARK
CHECK - [illegible]

BRIDGE - 3836

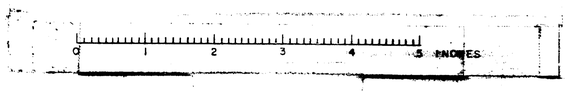
STATE HIGHWAY COMMISSION
BRIDGE DIVISION

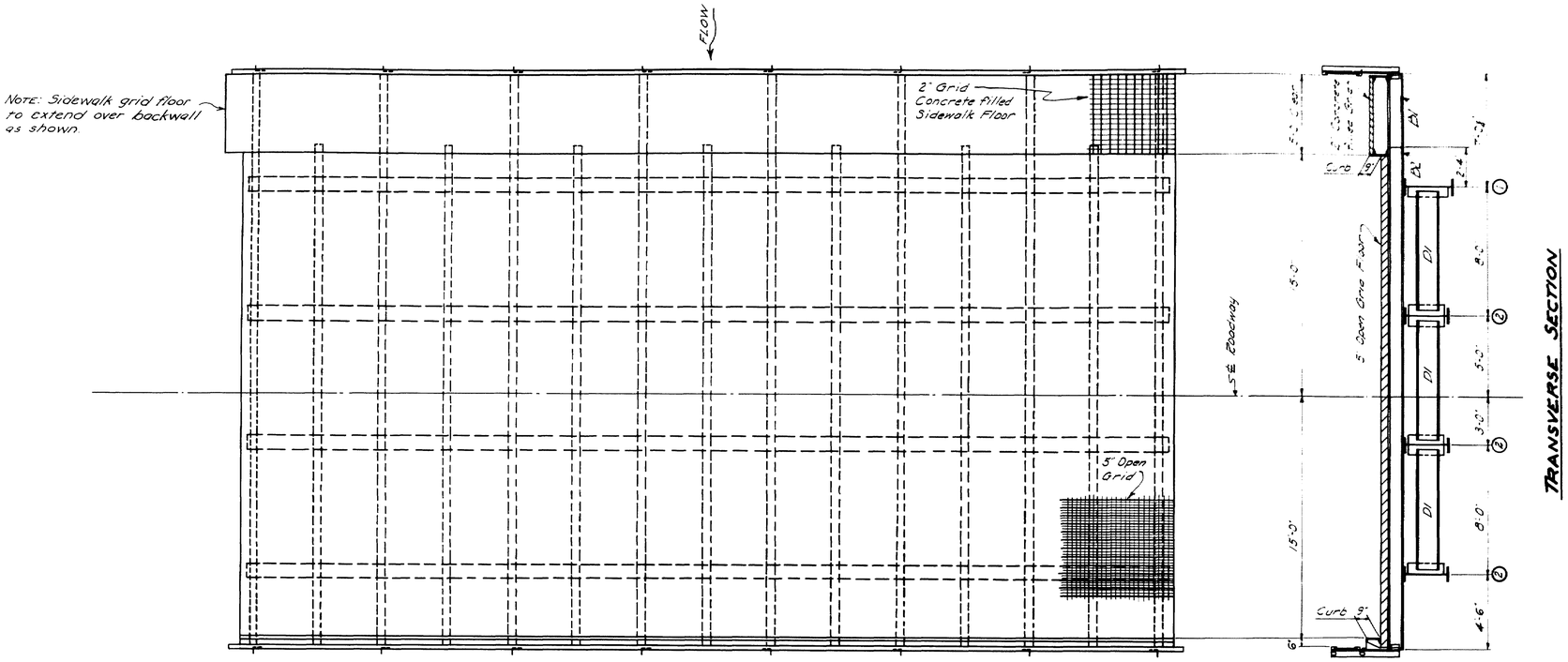
WESTERN AVENUE BRIDGE
OVER
MESSALONSKEE STREAM
IN THE CITY OF
WATERVILLE - KENNEBEC CO.

SUBSTRUCTURE

SHEET 2 OF 4 AUGUSTA, MAINE MAY 1957

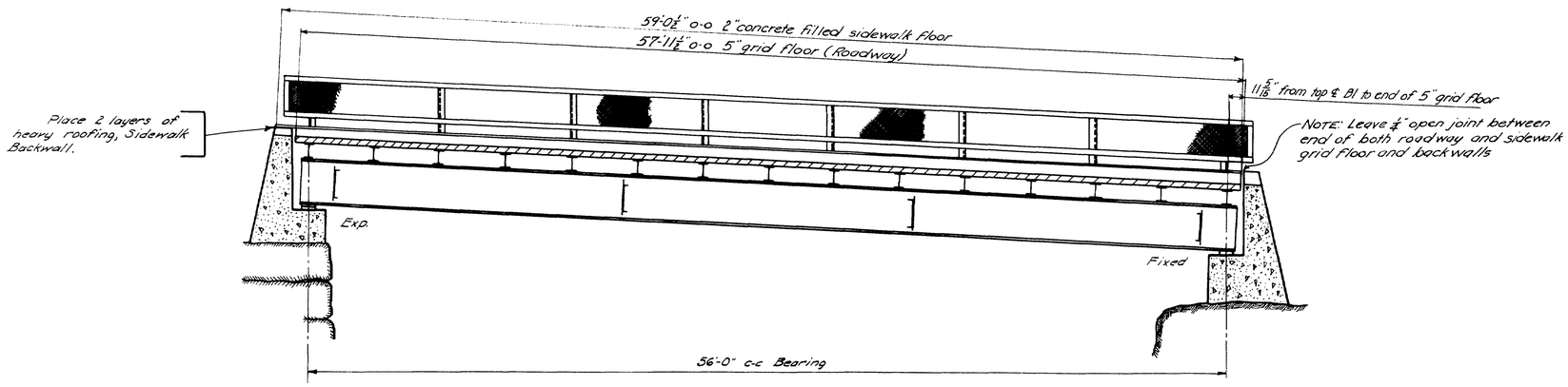
44-186





PLAN

TRANSVERSE SECTION



ABUT. No. 1

ABUT. No. 2

LONGITUDINAL SECTION

ROADWAY FLOOR 5" open grid
30'-6" Width
57'-11½" Length

SIDEWALK FLOOR 2" Concrete filled grid
5'-0" Width
59'-0½" Length

Loading - H 20-44

DESIGN - HAMILTON
TRACE - CLARK
CHECK - Gdc

BRIDGE - 3836

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

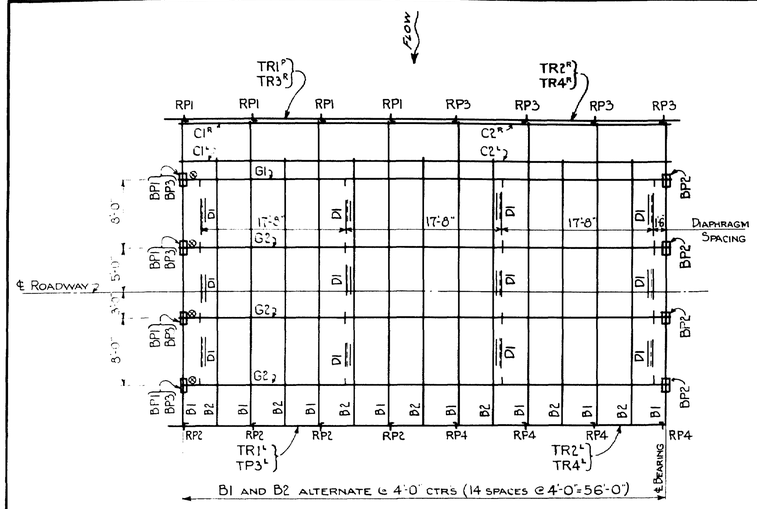
WESTERN AVENUE BRIDGE
OVER
MESSALONSKEE STREAM
IN THE CITY OF
WATERVILLE - KENNEBEC CO.

SUPERSTRUCTURE

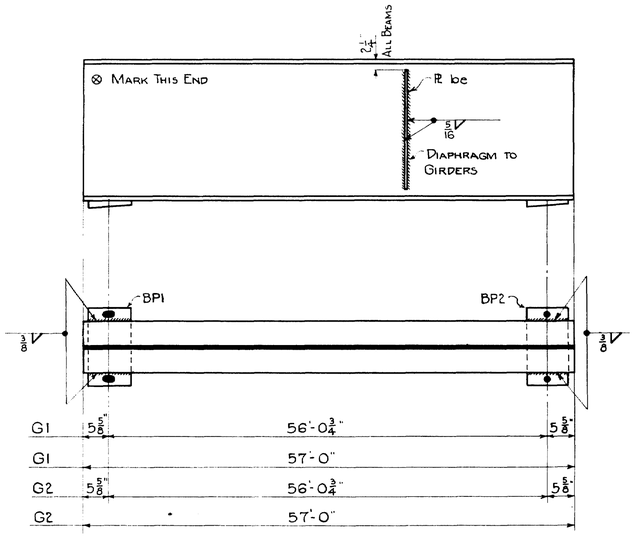
SHEET 3 OF 4 AUGUSTA, MAINE MAY 1947

44-189

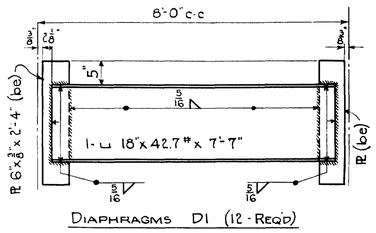
0 1 2 3 4 5 INCHES



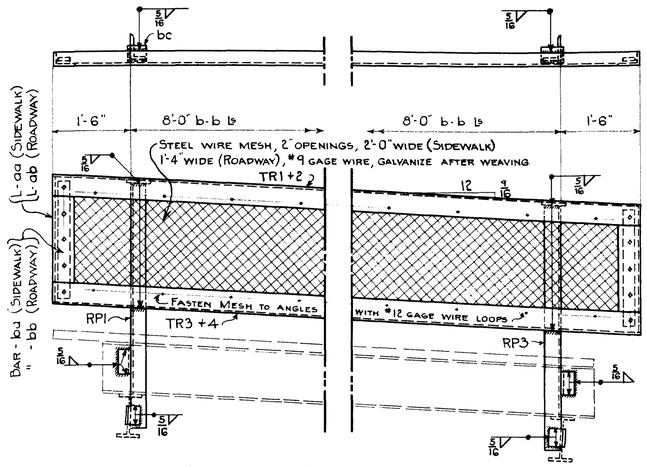
ERECTION DIAGRAM



36"WF x 194# x 57'-0" G1 1-REQD
33"WF x 141# x 57'-0" G2 3-REQD

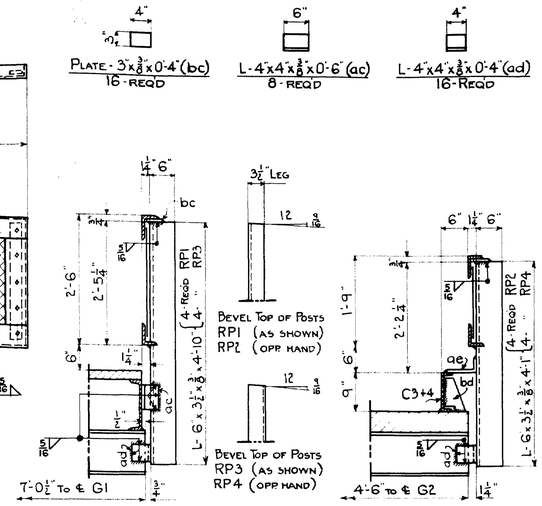


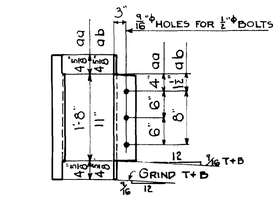
DIAPHRAGMS D1 (12-REQ'D)



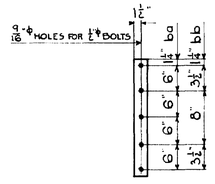
SIDEWALK RAIL ASSEMBLY

ROADWAY IS SIMILAR

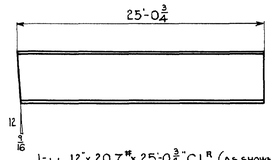




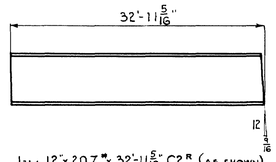
L-5"x3"x⅜"x 2'-5¼" (2-REQD) aa
L-5"x3"x⅜"x 1'-8¼" (2-REQD) ab



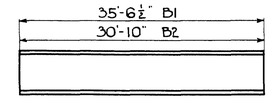
BAR-3"x⅜"x 2'-2½" (2-REQD) ba
" -3"x⅜"x 1'-5½" (2-REQD) bb



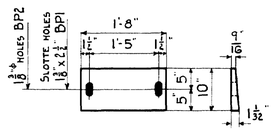
1-⊔ 12"x 20.7#x 25'-0¾" C1R (AS SHOWN)
1-⊔ 12"x 20.7#x 25'-0¾" C1L (OPP HAND)
1-⊔ 9"x 15#x 25'-0¾" C3 (OPP HAND)



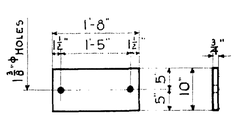
1-⊔ 12"x 20.7#x 32'-11⅝" C2R (AS SHOWN)
1-⊔ 12"x 20.7#x 32'-11⅝" C2L (OPP HAND)
1-⊔ 9"x 15#x 32'-11⅝" C4R (OPP HAND)



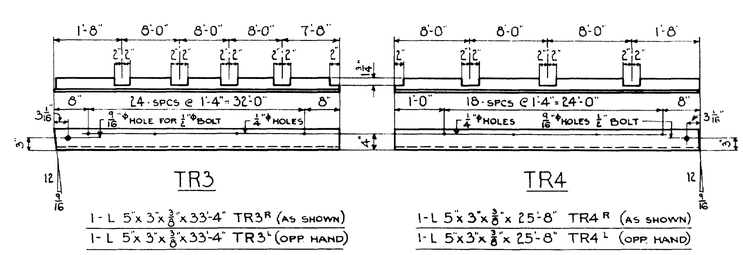
10"WF x 25#x 36'-6½" (B1) (8-REQ'D)
10"WF x 25#x 30'-10" (B2) (7-REQ'D)



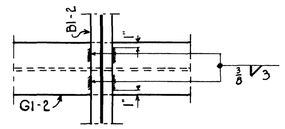
PL-10"x 1½" x 1'-8" BP1 (4-REQ'D)
PL-10"x 1½" x 1'-8" BP2 (4-REQ'D)



PL-10"x ¾"x 1'-8" BP3 (4-REQ'D)

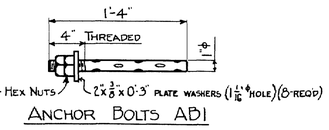


1-L 5"x 3"x ⅜"x 33'-4" TR3R (AS SHOWN)
1-L 5"x 3"x ⅜"x 33'-4" TR3L (OPP HAND)
1-L 5"x3"x ⅜"x 25'-8" TR4R (AS SHOWN)
1-L 5"x3"x ⅜"x 25'-8" TR4L (OPP HAND)



WELDING DIAGRAM

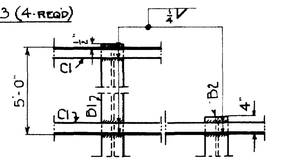
NEEDLE BEAMS TO GIRDERS



ANCHOR BOLTS AB1

16-REQ'D

ERECTION NOTE - LEAVE ⅜" GAP BETWEEN WASHER AND NUT (EXP. BEARING)



WELDING DIAGRAM

SIDEWALK STRINGERS TO NEEDLE BEAMS.

- NOTE -
STATE OF MAINE
STATE HIGHWAY COMMISSION
BRIDGE DIVISION
SPECIFICATIONS
STEEL HIGHWAY BRIDGES, 1945.

WELDING ALL WELDS TO BE 5/16 FILLET (FIELD) EXCEPT AS SHOWN.

DESIGN - HAMILTON
TRACE -
CHECK -

BRIDGE- 3836

STATE HIGHWAY COMMISSION
BRIDGE DIVISION

WESTERN AVENUE BRIDGE
OVER
MESSALONSKEE STREAM
IN THE CITY OF
WATERVILLE-KENNEBEC CO.

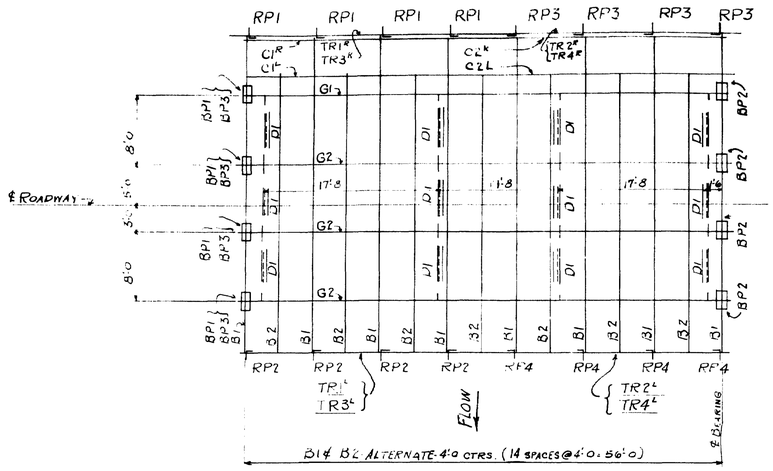
STEEL DETAILS

SHEET 4 OF 4 AUGUSTA, MAINE MAY 1947

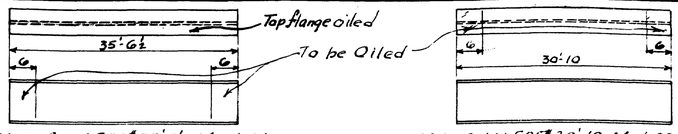
Note: Shop substitution on all rail angles 5"x3½"x ⅜" instead of 5"x3"x ⅜" Sept 1947

44-100

0 1 2 3 4 5 INCHES

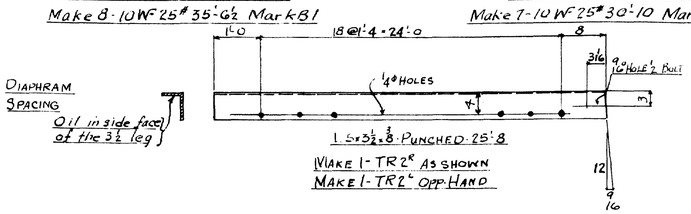


ERECTION DIAGRAM (SCALE 3/8" = 1'-0)



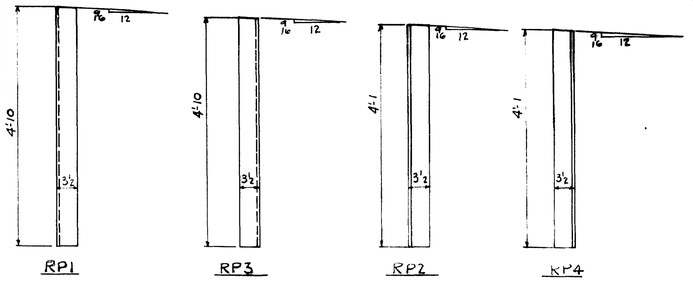
Make 8-10WF25# 35'-6½ Mark B1

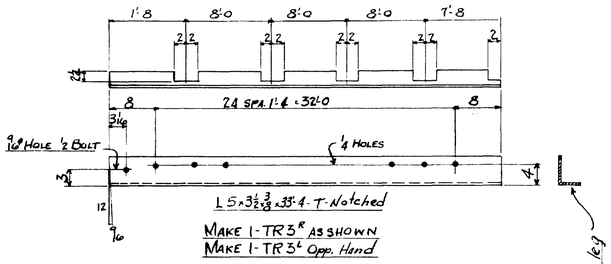
Make 7-10WF25# 30'-10 Mark B2



L 5 x 3½ x ⅜ PUNCHED 25'-8

Make 1-TR2R as shown
Make 1-TR2L Opp. Hand



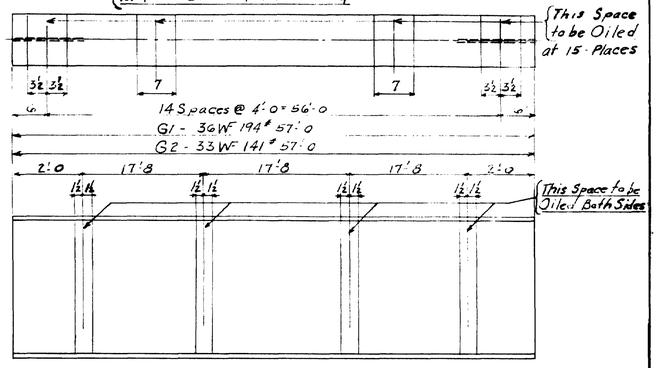


L 5 x 3½ x ⅜ x 33'-4 T Notched

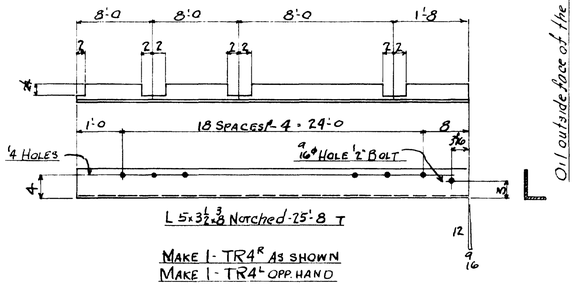
Make 1-TR3R as shown
Make 1-TR3L Opp. Hand

Oil garside faces of Angles

RP1	6 x 3½ x ⅜ BL	4'-10 T	Make 4
RP2	do	4'-1 T	" 4
RP3	do	4'-10 T	" 4
RP4	do	4'-1 T	" 4

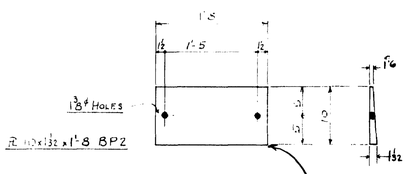


Make 1-Beam Mark G1
" 3-Beams " G2

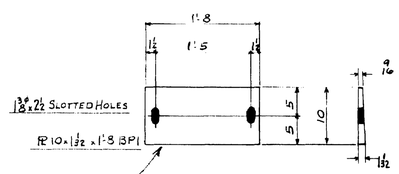


L 5 x 3½ x ⅜ x ⅜ Notched 25'-8 T

Make 1-TR4R as shown
Make 1-TR4L Opp. Hand

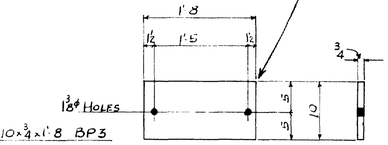


Make 4-BP2

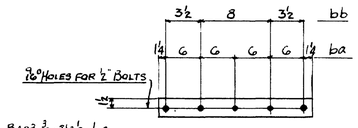


Make 4-BP1

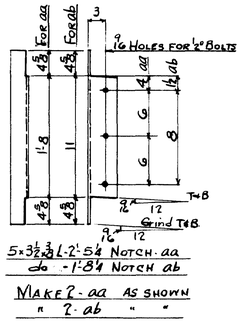
To be Oiled



Make 4-BP3

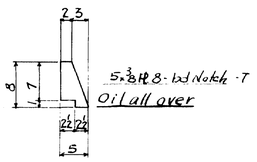


Make 2-ba
Make 2-bb

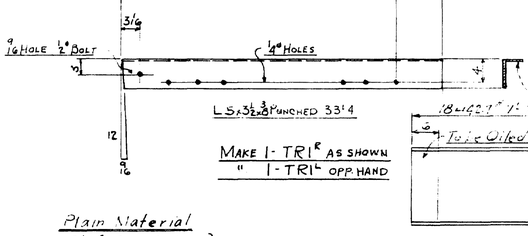


5 x 3½ x ⅜ L 2'-5¼ Notch aa
do 1'-8¼ Notch ab

Make 2-aa as shown
" 2-ab " "



Make 40-bd as shown



L 5 x 3½ x ⅜ Punched 33'-4

Make 1-TR1R as shown
" 1-TR1L Opp. Hand

Make 12-Diaphragms Mark D1

BEAMS ETC

MAINE STATE HIGHWAY COMMISSION
WESTERN AVENUE BRIDGE
WATERVILLE, MAINE

A.P. WYMAN, INC. CONTRACTORS

THE PHOENIX BRIDGE CO.
ENGINEERING DEPT.

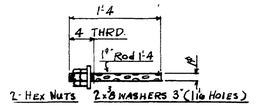
Cont. No. 756 C. O. No. 756-B
Drawg No. 1
Scale 1" = 1'-0
Drawn by A.L.Essig
Checked by J.F. Aug-1-'47
In charge of N.J. Fox
Date July 29, 1947

1-W-12 x 20.7# x 25'-0¾ C1R (As shown)	1-W-12 x 20.7# x 32'-11⅝ C2R (As shown)
1-W-12 x 20.7# x 25'-0¾ C1L (Opp. Hand)	1-W-12 x 20.7# x 32'-11⅝ C2L (Opp. Hand)
1-W-9 x 15# x 25'-0¾ C3 (Opp. Hand)	1-W-9 x 15 x 32'-11⅝ C4R (Opp. Hand)

NOTE TO ERECTOR:

USE THIS DRAWING IN CONJUNCTION WITH STATE HIGHWAY COMMISSION DRAWING SHEET-4 of 4

Revised: changed 5'-3¼ from TR2R, TR3R, TR4R, aa & ab to 5'-3⅛"
Revised 8-11-47 As per print recd 8-11-47 Also Pl. 6 x ½ x 4'



Make 16-Anchor Bolts AB1

Plain Material		
16 - 3½ x ⅜ Pls. 4'-bc		
8 - 4 x 4 x ⅜ L's 6" ac		
16 - do 4'-ad		To be Oiled
8 - 6 x 3½ x ⅜ L's 3'-ac		
24 - 6 x ⅜ Pls. 2'-4-be		

FIELD WORK: TO BE WELDED TO CURB C3, C4, & 5" GRID FLOOR @ 18"± CTRS.
CURB C3, C4, TO BE WELDED TO 5" GRID FLOOR @ 15"± CTR'S (FRONT)

NOTES:

SPECIFICATIONS: STRUCTURAL STEEL ASTM-A7-42
WORKMANSHIP: MAINE STATE HIGHWAY COMMISSION STEEL HIGHWAY BRIDGES 1945
OPEN HOLES: As noted
SHOP PAINT: ONE COAT of RED LEAD READY MIXED exce pt parts painted with Linseed Oil
PAINT-DESIGNATION M72-42 OF THE A.A.S.H.O.
SPECS. FOR HWY MATERIALS
LAST ASSEMBLY MARK:
SHOP LIST PAGES