CONTRACT PLANS BUREAU
MONTANA DEPARTMENT OF TRANSPORTATION

As-Built Drawings

The following are as-built drawings for the structures. MDT provides them for informational purposes only. They do not include drawings for modifications to the structures, such as joint replacements and guardrail revisions and may not completely represent current conditions. Thus, some of the information contained in these documents may be out of date or not applicable with regard to the advertised project. The contractor should not rely solely on the as-built drawings provided for bidding purposes nor does any data in these files supersede the data in the contract documents.

L0

U1

1-Fill. Pl. 34 1/2 x 1/2 x 0'-8 1/4" Bolt on for Shipment.

1-Cov. Pl. 30 x 11/16 x 43'-9 1/16"

13 Spaces @ 3'-3"

56 Spaces @ 6" = 28'-0"

44'-0 11/16" C. To C. of Pins.

8 Spaces @ 6" = 4'-0"

For E.P.1. -

For E.P.2. -

2-Pin Pls. 26 x 1/2 x 3'-6 3/8" Inside

2-Pin Pls. 24 1/2 x 2 x 2'-6 1/2" Outside.

2 Hinge Pls. 26 x 3/4 x 2'-3 5/8" Inside.

14 Spaces @ 3'-3'-6"

2 L's 4 x 4 x 5/8 x 44'-9 5/8"

2 Pls. 18 x 5/8 x 44'-6 1/2" Outside.

2 L's 4 x 4 x 5/8 x 43'-5 3/16"

4 Pls. 26 x 5/8 x 44'-9 1/2"

70 Spaces @ 6" = 35'-0"

44'-3 9/16"

2-Pin Pls. 26 x 3/4 x 4'-7 7/16"

2 Hinge Pls. 26 x 1/2 x 2'-10 1/2" Inside.

18 Spaces @ 3" = 4'-6"

Bore Hole For 9" Diam. Pin.

Bore Hole For 9" Diam. Pin.

3'-1" For E.P.1.

2'-11" For E.P.2.

4'-5 1/16" For E.P.1. & E.P.2.

For E.P.1.

For E.P.2.

1-Tie Pl. 30 x 7/16 x 3'-3"

1-Stiff. L 3 x 3 x 3/8 x 2'-6"

15 Alt. Lacing Spaces @ 1'-8 13/16" = 26'-0 3/16"

4@5 1/2" = 1'-10" Etc.

2-Bars 5 x 7/8 x 41'-1 3/8"

1'-8 3/16"

4@5 1/2" = 1'-10" Etc.

15-Lacing Bars 5 x 5/8 x 3'-0 3/8"

1-Tie Pl. 30 x 7/16 x 3'-0"

1-Lacing Bar 5 x 5/8 x 3'-4 6/8"

Shear outstanding legs of all stiffener L's on Tie Plates Thus

EP1-1 U1 U2 U3 U4 U4' U3' U2' U1' EP2-1

EP1-2 U1 U2 U3 U4 U4' U3' U2' U1' EP2-2

Required:

16 - End Posts As Shown And Noted - Mark E.P.1.

16 " " As Noted, opp. To Sketch - " E.P.2.

Notes:-

Material:- Steel

Rivets 7/8 diam., holes 15/16 diam.

All holes except't for Lacing, Tie & Lateral Pl's to be punched with a 25/32 die & reamed to 15/16 diam.

Holes for Lacing, Tie & Lateral Pl's to be punched 13/16 diam.

Paint:- Nobrac

C. M. & St. P. Ry.

Bridge and Building Dept.

TE. P. RY. & TUSLER CROSSINGS.

OVER YELLOWSTONE RIVER.

Details of End Posts.

Chicago:

Correct:

J. H. Prior

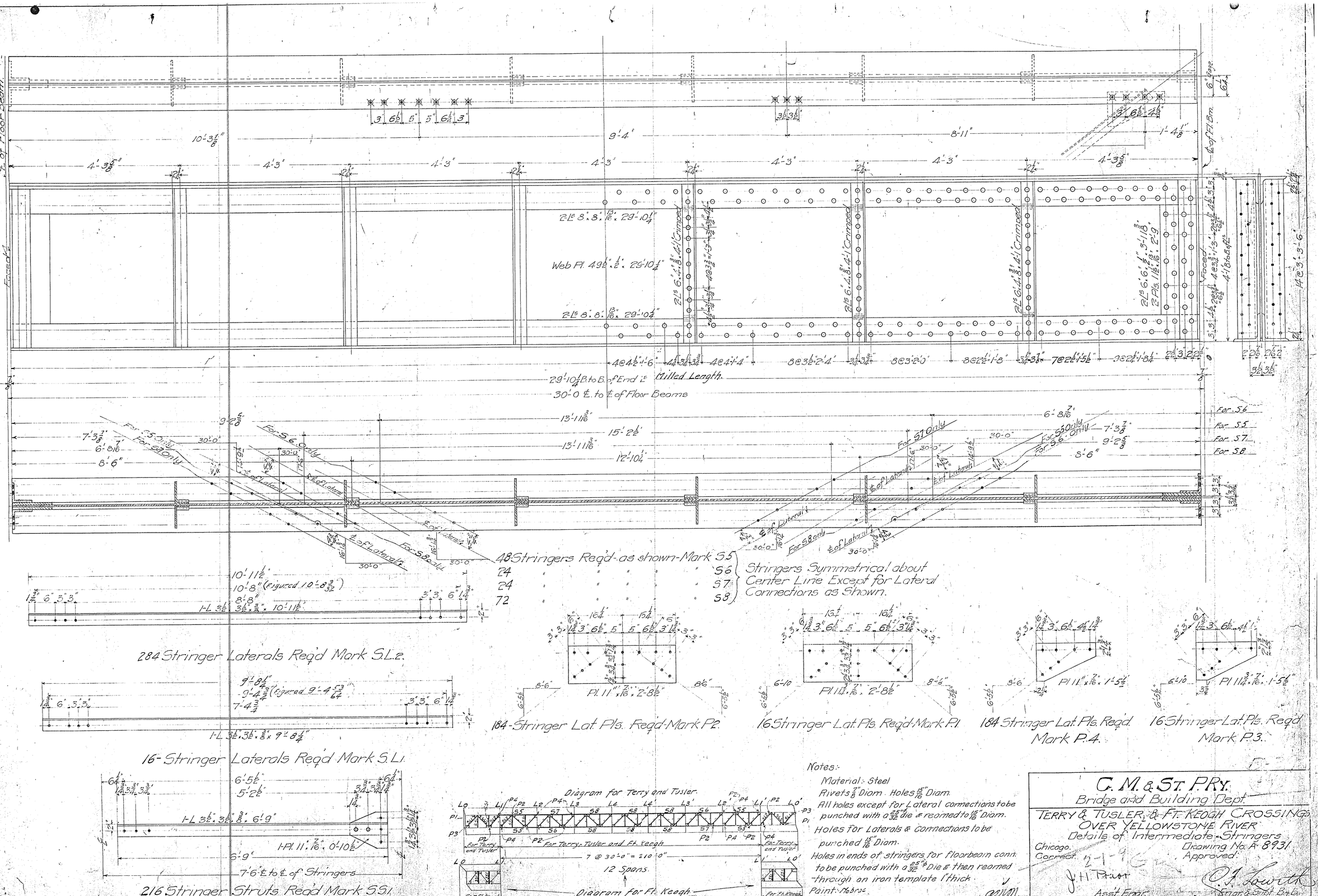
Asst. Engr.

Drawing No. A. 9157

Approved:

O. J. Lowrith

Engr. & Supt. B. & B.



48 Stringers Req'd - as shown - Mark S5
24 " " " " " S6
24 " " " " " S7
72 " " " " " S8
} Stringers Symmetrical about Center Line Except for Lateral Connections as Shown.

284 Stringer Laterals Req'd Mark S.L.2.

16 - Stringer Laterals Req'd Mark S.L.1.

216 Stringer Struts Req'd Mark S.S.1.

184 - Stringer Lat. Pls. Req'd Mark P.2.

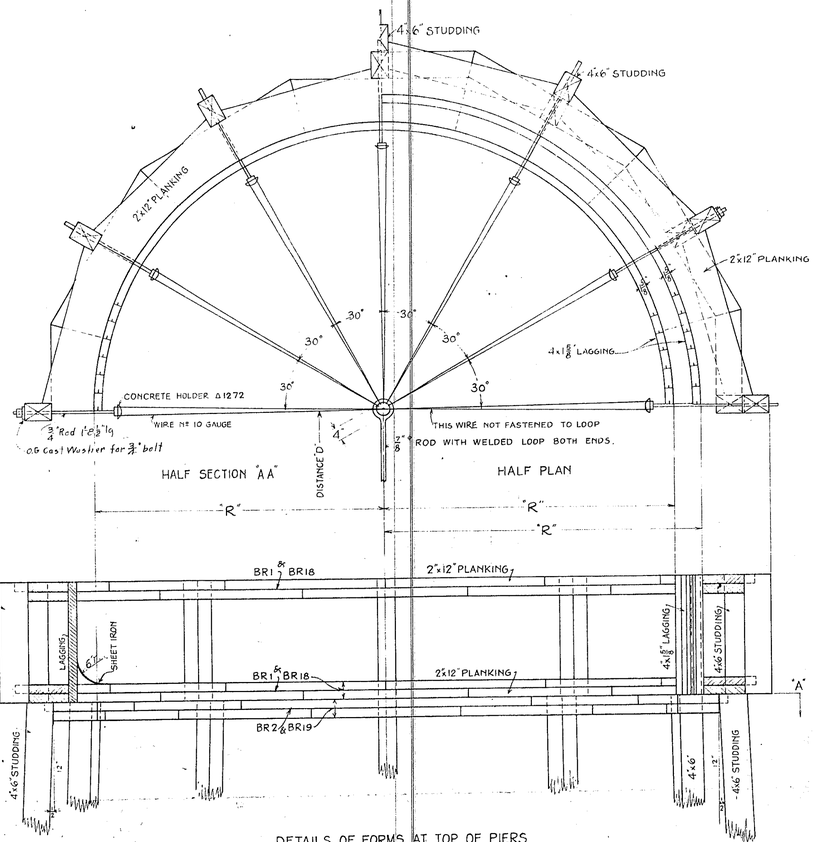
16 Stringer Lat. Pls. Req'd Mark P.1.

184 Stringer Lat. Pls. Req'd. Mark P.4.

16 Stringer Lat. Pls. Req'd Mark P.3.

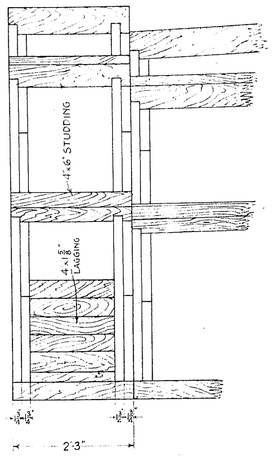
Notes:-
Material:- Steel
Rivets 7/8" Diam. Holes 15/16" Diam.
All holes except for Lateral connections to be punched with a 25/32" die & reamed to 15/16" Diam.
Holes for Laterals & connections to be punched 15/16" Diam.
Holes in ends of stringers for floorbeam conn. to be punched with a 25/32" Die & then reamed through an iron template 1" thick.
Paint:- Nebraska.

C. M. & St. P. Ry.
Bridge and Building Dept.
TERRY & TUSLER & FT. KEOGH CROSSINGS OVER YELLOWSTONE RIVER
Details of Intermediate Stringers
Chicago. Drawing No. A-8931
Correct. Approved.
J. H. Prior Ass't. Engr. C. J. Lowell Engr. & Supt. B. & B.



DETAILS OF FORMS AT TOP OF PIERS

NOTE: ALL WOODEN FRAMING SHOWN IN ABOVE SKETCH ORDERED AS ONE PIECE.



BILL OF PLATE WASHERS & BOLTS.

36 - PLATE WASHERS MK. P - FOR TERRY CROSSING

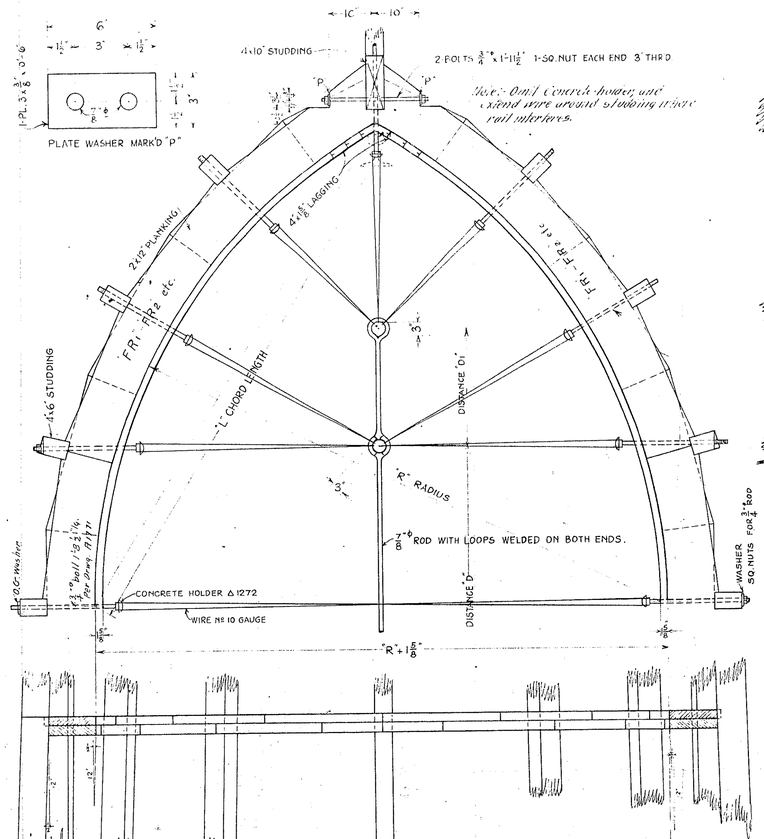
36 - BOLTS ¾"ø x 1'-11½" - 2 SQ. NUTS " " "

32 Plate Washers "P" For Tusler " "

32 Bolts ¾"ø x 1'-11½" - 2 SQ Nuts " "

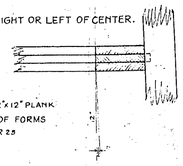
32 Plate Washers "P" For Miles City " "

32 - Bolts ¾"ø x 1'-11½" 2 SQ Nuts " " "

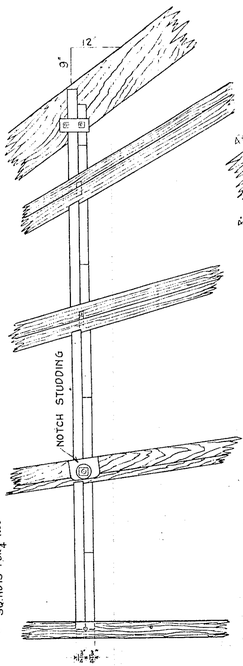


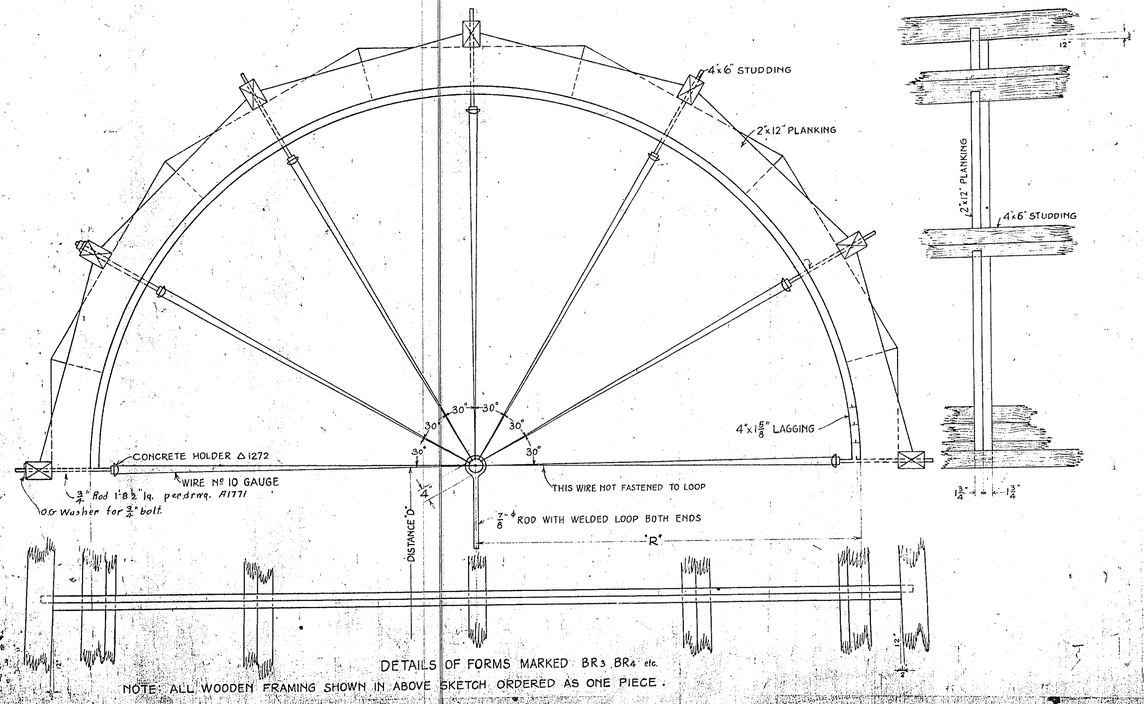
DETAILS OF FORMS MARKED 'FR1 - FR2 ' etc.

NOTE: ½ OF WOODEN FRAMING SHOWN IN ABOVE SKETCH ORDERED AS ONE PIECE BEING EITHER TO RIGHT OR LEFT OF CENTER.



DETAIL SHOWING 2"x12" PLANK FASTENED TO TOP OF FORMS FR14 FR17 FR23





DETAILS OF FORMS MARKED BR3 BR4 etc.

NOTE: ALL WOODEN FRAMING SHOWN IN ABOVE SKETCH ORDERED AS ONE PIECE.

Bill of Forms for { Piers Nos. 2 & 3 at Tusler / " " 1 & 2 " Terry / " " 1 & 2 " Miles City }

Nº PCS.	MARK	RADIUS "R"	LOCATION
4	BR1	5'-10⅝"	TUSLER CROSSING
8	BR1	"	TERRY "
2	BR2	5'-4⅛"	TUSLER "
4	BR2	"	TERRY "
2	BR3	5'-5½"	TUSLER "
4	BR3	"	TERRY "
2	BR4	5'-7½"	TUSLER "
4	BR4	"	TERRY "
2	BR5	5'-9½"	TUSLER "
4	BR5	"	TERRY "
2	BR6	5'-11⅜"	TUSLER "
4	BR6	"	TERRY "
2	BR9	6'-1½"	TUSLER "
2	BR9	"	TERRY "
2	BR10	6'-3½"	TUSLER "
2	BR10	"	TERRY "
2	BR11	6'-5⅝"	TUSLER "
2	BR12	6'-5½"	TERRY "
2	BR13	6'-7½"	" "
2	BR14	6'-9½"	" "
2	BR15	6'-11½"	" "
2	BR16	7'-1⅞"	" "
4	BR18	6'-1⅝"	MILES CITY "
2	BR19	5'-7⅝"	" " "
2	BR20	5'-8⅝"	" " "
2	BR21	5'-10⅝"	" " "
2	BR22	6'-0⅝"	" " "
2	BR23	6'-2⅝"	" " "
2	BR24	6'-4⅝"	" " "
2	BR25	6'-6⅝"	" " "
2	BR26	6'-8⅝"	" " "

BILL OF RODS

Nº PCS.	DISTANCES C TO C OF LOOP "D"	"D1"	Total Length	LOCATION
15	22'-0"	0'-0"	22'-0"	TERRY CROSSING
3	25'-5"	0'-0"	25'-5"	MILES CITY "
3	25'-0"	0'-0"	25'-0"	TUSLER "
3	25'-0"	2'-3"	27'-3"	TERRY "
3	25'-4"	"	27'-7"	MILES " "
3	27'-0"	"	30'-3"	TUSLER "
3	28'-0"	"	30'-3"	TERRY "
3	28'-6"	"	30'-9"	MILES " "
3	31'-0"	"	33'-3"	TUSLER "
3	31'-0"	"	33'-3"	TERRY "
3	31'-6"	"	33'-9"	MILES " "
3	34'-0"	"	36'-3"	TUSLER "
3	34'-0"	"	36'-3"	TERRY "
3	34'-6"	"	36'-9"	MILES " "
3	37'-0"	"	39'-3"	TUSLER "
3	37'-0"	"	39'-3"	TERRY "
3	37'-6"	"	39'-9"	MILES " "
2	38'-3"	"	40'-6"	TERRY "
1	39'-5½"	"	41'-8½"	TUSLER "
2	40'-0"	"	42'-3"	" "
1	39'-3"	"	41'-6"	TERRY "
1	40'-6"	"	42'-9"	MILES " "
2	45'-10"	"	48'-1"	TUSLER "
6	41'-3"	"	43'-6"	TERRY "
1	41'-11"	"	44'-2"	TUSLER "
4	43'-6"	"	45'-9"	MILES " "
2	43'-0"	"	45'-3"	TUSLER "
766	Concrete Holders complete Dr. A1271 FOR			TERRY
575				Tusler
575				Miles City

Bill of Forms for { Piers Nos. 2 & 3 at Tusler / " " 1 & 2 " Terry / " " 1 & 2 " Miles City }

Nº PCS.	MARK	RADIUS "R"	CHORD LENGTH	LOCATION
4	FR1	10'-5⅜"	10'-6¼"	TUSLER CROSSING "
4	FR2	10'-9⅜"	10'-10¼"	" "
4	FR3	11'-1⅜"	11'-2¾"	" "
4	FR4	11'-5⅜"	11'-6¼"	" "
4	FR5	11'-9⅜"	11'-10½"	" "
4	FR5	11'-9⅜"	11'-10¼"	TERRY "
4	FR8	12'-1⅜"	12'-2½"	TUSLER "
4	FR8	12'-1⅜"	12'-2¼"	TERRY "
4	FR9	12'-5⅜"	12'-6¼"	TUSLER "
4	FR9	12'-5⅜"	12'-6¼"	TERRY "
4	FR10	12'-9"	12'-9⅝"	TUSLER "
4	FR11	12'-9⅜"	12'-10¼"	TERRY "
4	FR12	13'-1⅜"	13'-2¼"	" "
4	FR13	13'-4½"	13'-5⅝"	" "
4	FR14	13'-7½"	13'-8⅝"	" "
4	FR15	13'-10⅜"	13'-11½"	" "
4	FR16	14'-2⅜"	14'-3"	" "
4	FR19	10'-11⅜"	11'-0¼"	MILES CITY "
4	FR20	11'-3⅝"	11'-4½"	" "
4	FR21	11'-7⅝"	11'-8½"	" "
4	FR22	11'-11⅝"	12'-0½"	" "
4	FR23	12'-3⅝"	12'-4½"	" "
4	FR24	12'-7⅝"	12'-8½"	" "
4	FR25	12'-11⅝"	13'-0½"	" "
4	FR26	13'-3⅝"	13'-4½"	" "

240 LIN. FT. OF #22 SHEET IRON 11" WIDE FOR TERRY
250 " " " " " Tusler
260 " " " " " Miles City

BRIDGE NOS.
TERRY AA-424, TUSLER AA-478 Ft. KEOGH B.B.B.

C.M.&ST.P.RY.
BRIDGE & BUILDING DEPT

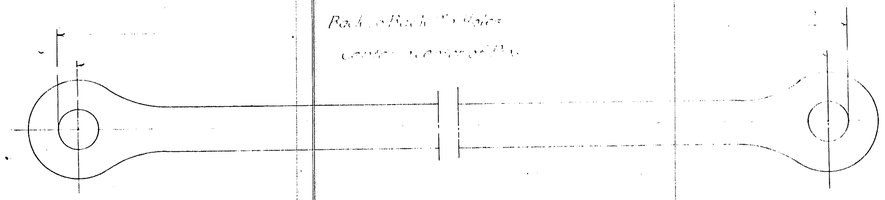
YELLOWSTONE RIVER CROSSINGS
DETAIL OF FORMS

CHICAGO, DEC. 15. 06.
CORRECT:

DRAWING No. A-1270
APPROVED:

J. T. Pratt
ASST. ENGR.

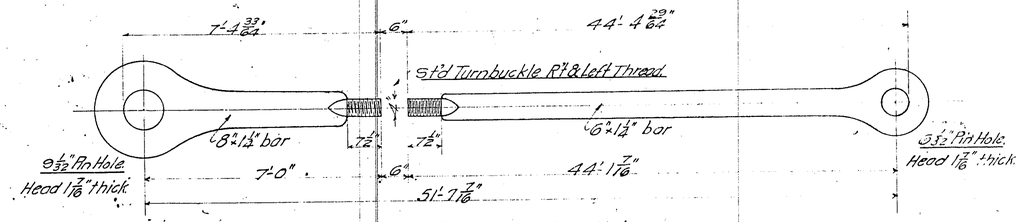
C. H. Lovell
ENG. & SUPT. B. & B.



Eye Bars for TERRY & TUSLER

No.	Size	Thickness of Hd	Pin Hole	Length C to C Pin Holes	Length R & R Pin Holes	Pin Hole	Thickness of Hd	Mark
65	12"×2"	1 13/16"	9 1/32"	29'-11 1/32"	30'-9"	9 1/32"	1 13/16"	L2-L3
65	12"×2"	2 5/16"	9 1/32"	29'-11 1/32"	30'-9"	9 1/32"	2 5/16"	L3-L4
65	12"×2"	2 5/16"	9 1/32"	29'-11 1/32"	30'-9"	9 1/32"	2 5/16"	L4-L5
65	12"×2"	2"	9 1/32"	29'-11 1/32"	30'-9"	9 1/32"	2"	L3-L4
64	12"×1 7/8"	1 11/16"	9 1/32"	29'-11 1/32"	30'-9"	9 1/32"	1 11/16"	L2-L3
32	12"×1 3/4"	2"	9 1/32"	46'-4 5/8"	47'-1 3/32"	9 1/32"	2"	U1-L2
65	10"×1 3/4"	2"	9 1/32"	50'-0 1/16"	50'-9 3/32"	9 1/32"	2"	U2-L3
32	10"×1 1/2"	1 3/4"	9 1/32"	51'-7 7/16"	52'-4 5/32"	9 1/32"	1 3/4"	U3-L4
33	12"×1 3/4"	2"	9 1/32"	44'-4 3/32"	45'-1 3/32"	9 1/32"	2"	U1-L2
32	10"×1 5/8"	1 1/2"	9 1/32"	51'-7 7/16"	52'-4 5/32"	9 1/32"	1 1/2"	U3-L4

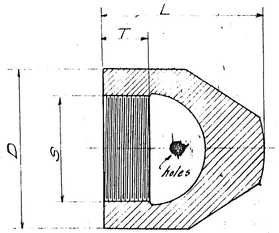
1 Extra Included for Full Size Test
1 " " " " " " "
1 " " " " " " "
1 " " " " " " "
1 Extra Included for Full Size Test
1 " " " " " " "



Make 98 Counters Mark U-L

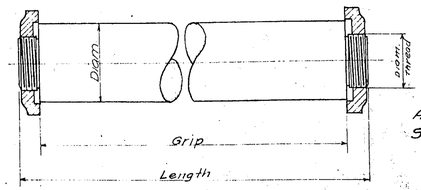
2 Extra Included for Full Size Test.

All Eye Bar Heads approximately 1/16 Thicker than Body of Bars.



Driving Nuts

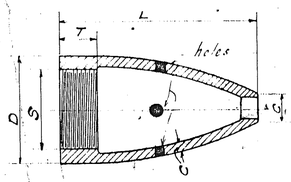
No. Reqd	L	T	D	S
12	9"	2 1/2"	9"	6"
8	6 3/4"	2"	6"	4 1/2"



Am Bridge Co's Standard pin nuts

Std. Pins with Lomas Nuts.

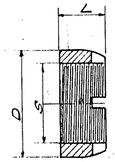
Number Required	Diameter	Grip	Mark	Diam. of Thread	Length
32	6"	1'-11 1/2"	U4	4 1/2"	2'-2 3/4"
32	9"	2'-2 3/8"	U3	6"	2'-7 1/8"
32	9"	2'-2 3/8"	U2	6"	2'-7 1/8"
32	9"	2'-1 13/16"	U1	6"	2'-6 7/16"
32	9"	2'-7 1/8"	L0	6"	3'-0"
32	9"	2'-7 1/8"	L2	6"	3'-0"
32	9"	2'-10 5/8"	L3	6"	3'-3 5/8"
32	9"	2'-11 1/2"	L4	6"	3'-4"



Long Pilot Nuts

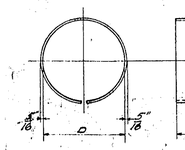
No. Reqd	D	S	L	T
8	9"	6"	15"	2 1/2"
8	6"	4 1/2"	11"	2"

Thickness of metal (c) to conform to Am. Br. Co's standard.



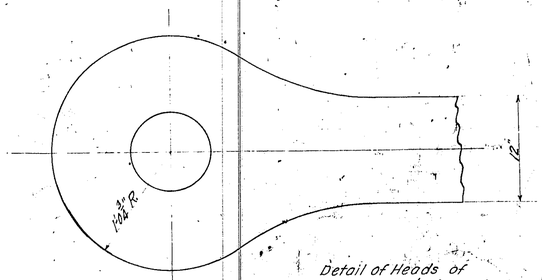
Short Pilot Nuts

No. Reqd	D	S	L
8	9"	6"	3"

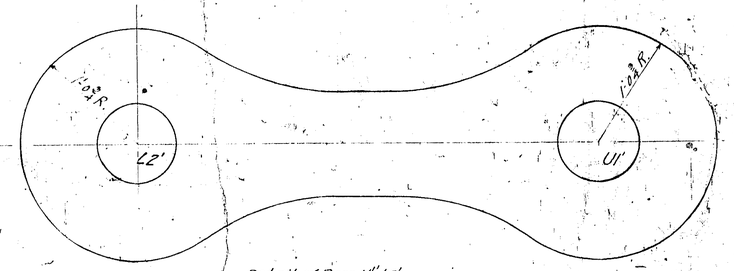


Ring Fillers

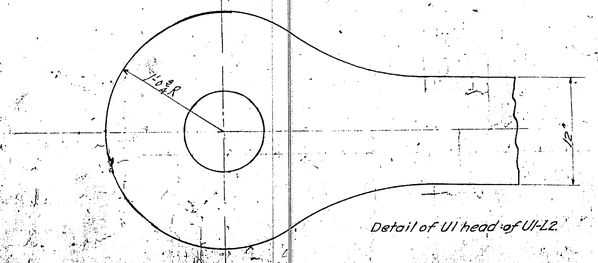
No. Reqd.	D	W	Mark
64	6 1/8"	3 1/2"	RF1
64	9 1/8"	3 1/2"	RF3
32	9 1/8"	4 1/2"	RF4



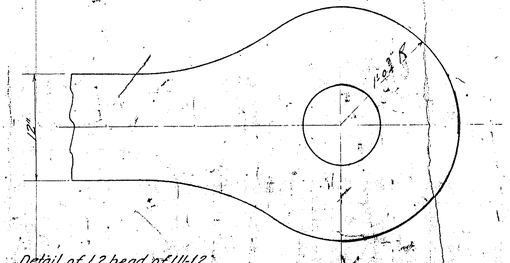
Detail of Heads of L2-L3, L3-L4, L4-L4', L3-L4', & L2-L3'.



Detail of Bars U1-L2'.



Detail of U1 head of U1-L2.



Detail of L2 head of U1-L2.

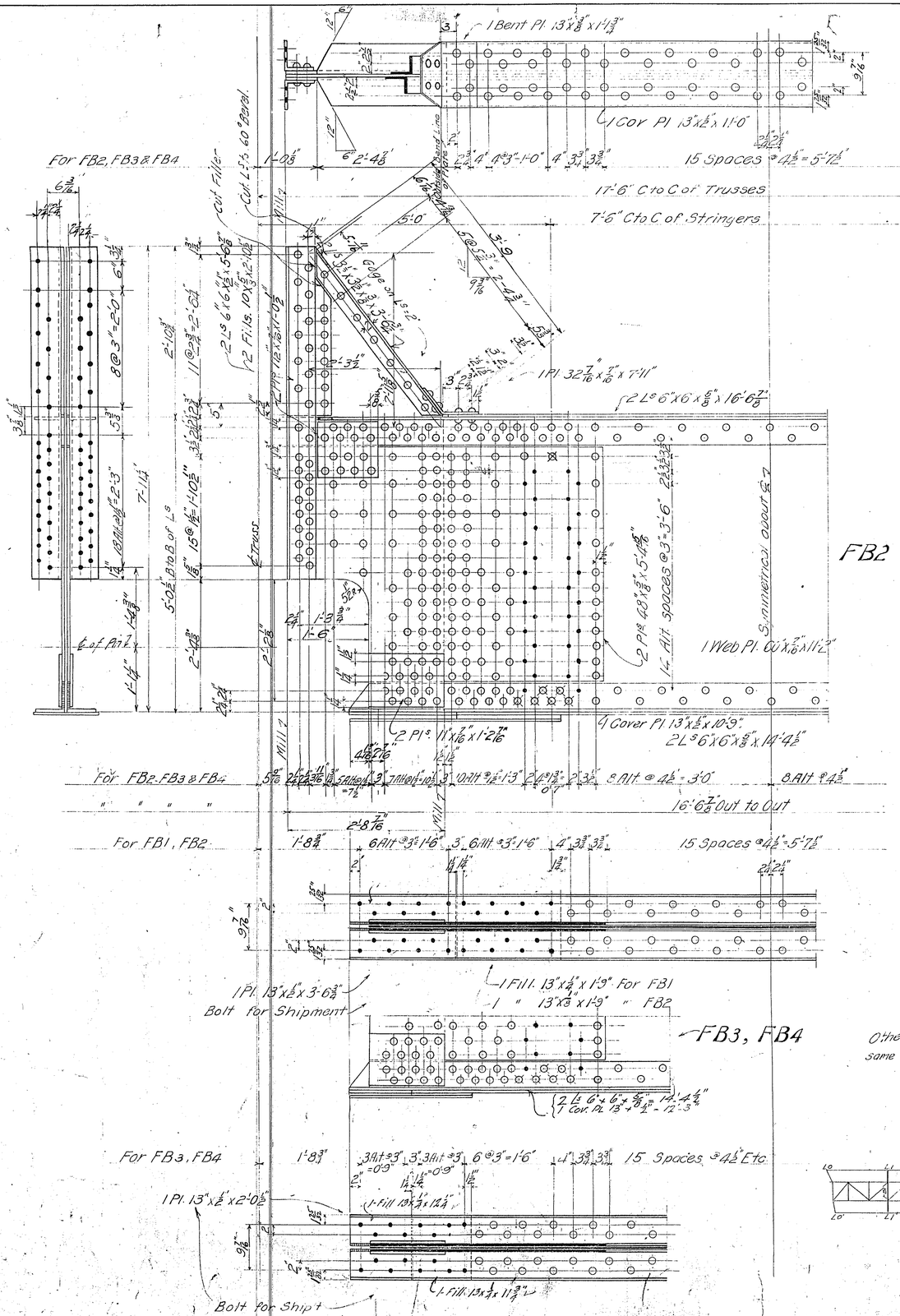
Note- All finished surfaces to be coated with White Lead & Tallow.

Paint- Nobrac

Note- Eye bar heads must not over-run.

BRIDGE NOS.
TERRY AA-424
TUSLER AA-478

C.M. & St. P. R'y.
Bridge & Building Department.
TERRY & TUSLER Crossings
over YELLOWSTONE RIVER
Eye Bars, Pins & Filling Rings
Chicago
Correct—
J. H. Tyson
Asst. Engr.
12-1-52
A-9186

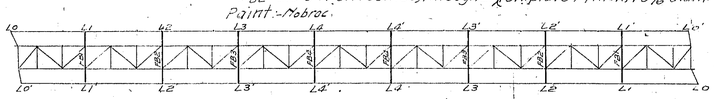


Required:-

24	Floor Beams as Shown and Noted. Mark FB1	8 of each reqd for TERRY
24	" " " " " " " FB2	8 " " " TUSLER
24	" " " " " " " FB3	8 " " " FT. KEOGH
24	" " " " " " " FB4	

Notes:-
Material:- Steel
Rivets ⅞" diam. Holes 15/16" diam.
Fill holes except lateral connections to be punched with a 25/32" die & then reamed to 15/16" diam.
Holes for lateral conns. to be punched 15/16" diam.
Holes for floorbeam & stringer conns to be punched with a 25/32" die & then reamed, through an iron template 1" thick, to 15/16" diam.
Paint:- Nobrac.

Otherwise the same as FB2



C.M.&St.P.Ry.
BRIDGE AND BUILDING DEPT.

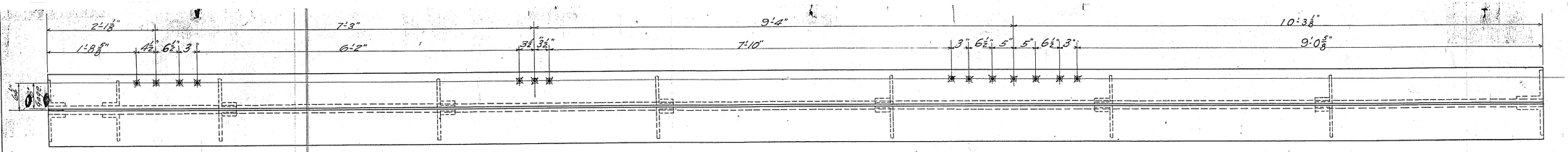
TERRY, TUSSLER & FT. KEOGH CROSSINGS
OVER YELLOWSTONE RIVER
DETAIL OF FLOOR BEAMS

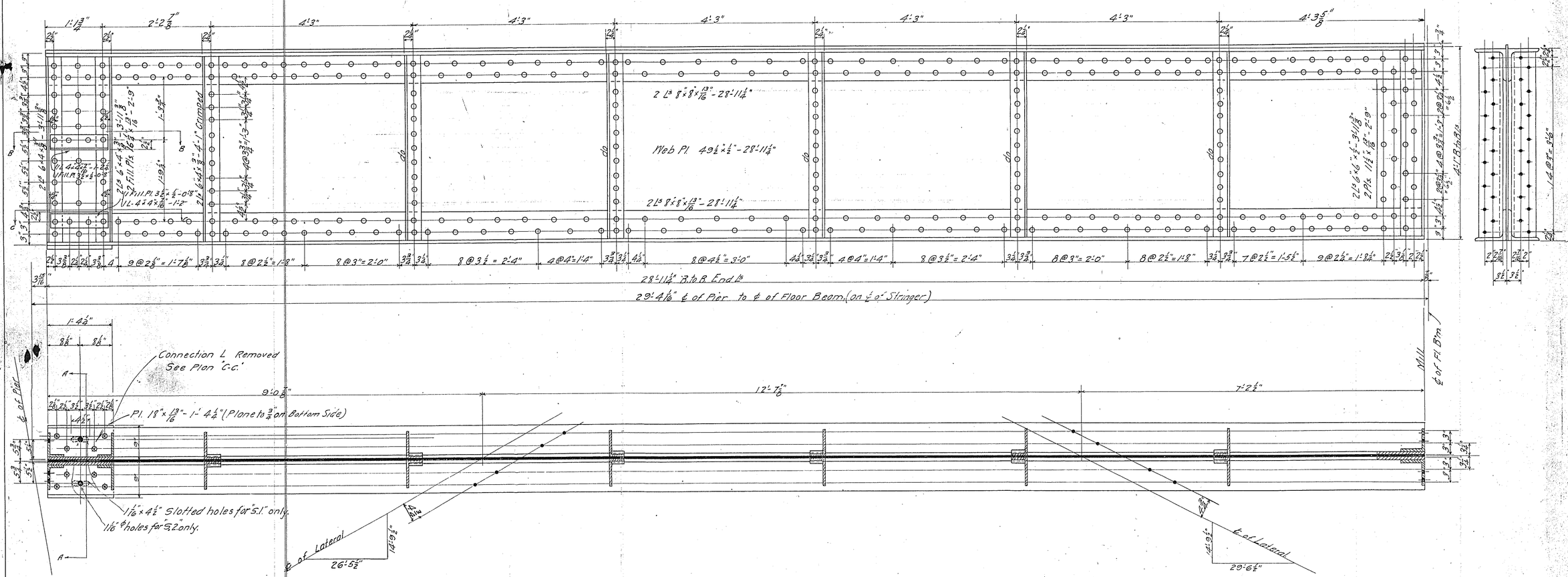
Chicago, Jan 29-1907 Drawing No A- 9185

Correct:- J.H. Prior Asst Engr.

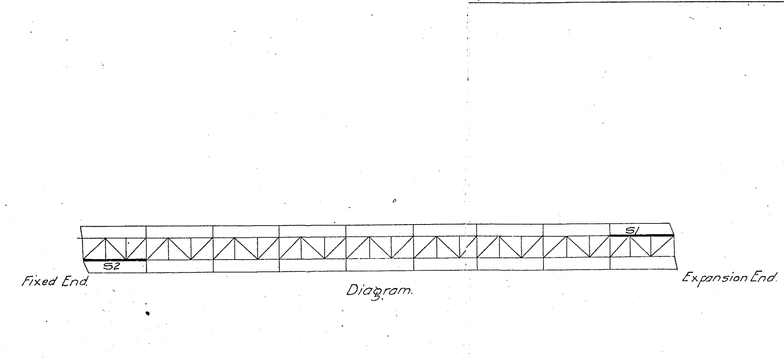
Approved:- O.J. Lowrth Engr & Supt B&B

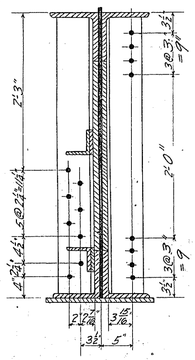
R.A.P.

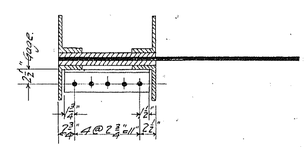


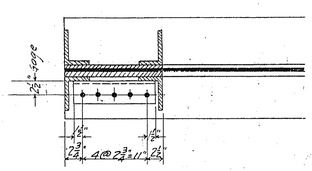


8 Stringers Req'd as shown Mark "S1"
4 " " " " & noted " "S2"









Notes:-
Material:- Steel
Rivets ⅞" diam. Holes 15/16" diam.
All holes except Lateral connections to be punched with a 25/32" die & reamed 15/16" diam.
Holes for Laterals & connections to be punched 15/16" diam.
Holes in ends of stringers for floorbeam conn. to be punched with a 25/32" die & then reamed through an iron template 1" thick.
Paint:- Nobrac

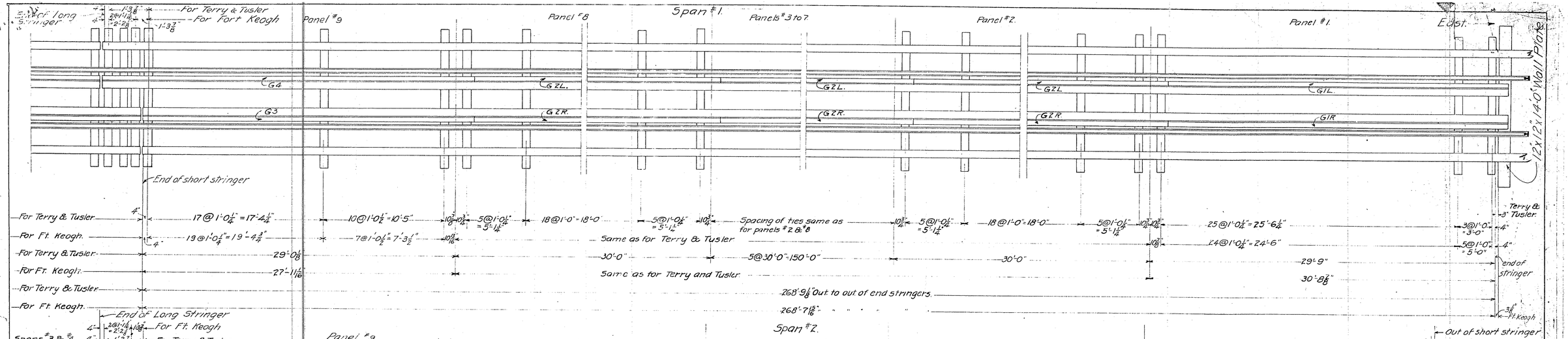
C. M. & St. P. Ry.
Bridge & Building Department.

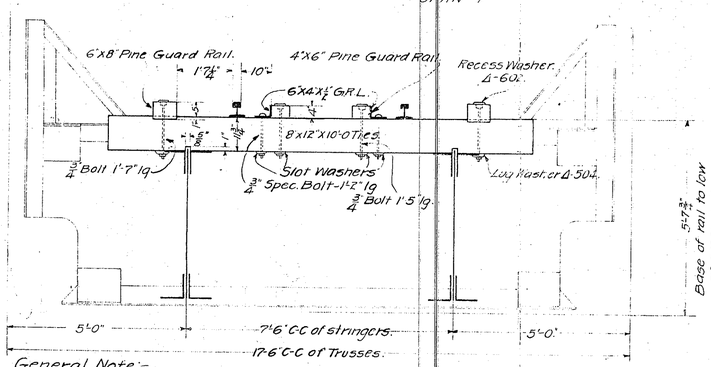
TERRY & TUSLER CROSSING over YELLOWSTONE RIVER.
Stringer Details at Piers.

Chicago Jan 30-07.
Correct—
J. H. Prior.
Asst Engr.

Drawing No A 9172
Approved—
O. J. Lowell
Engr & Supt B&B.

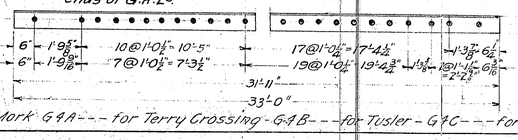
C-
2-1-07
A.M.M.





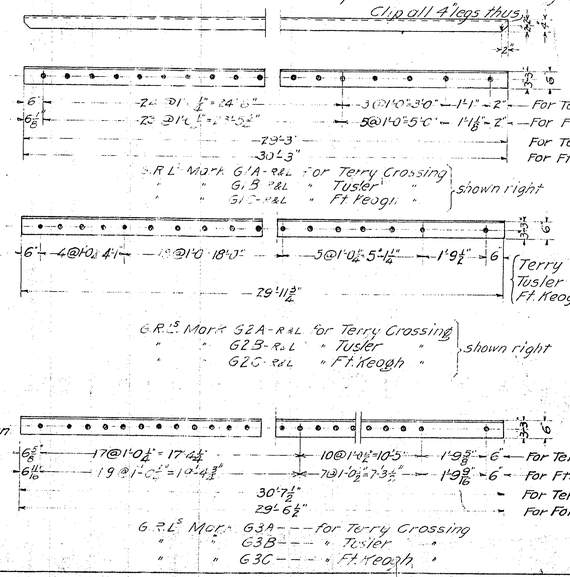
General Note:-

Inner 4"X6" Guard Rails, bolted at center and ends of each piece, spiked to each tie, where not bolted, with one 6"x⅝" spike and spliced as per Dr. A-3343. Outer 6"X8" Guard Rails notched for ties, bolted at ends and at intervals of not over 3 Ties, spiked to each tie, where not bolted, with one 9"x⅝" spike and spliced as per Dr. No. A-3343. 6"x4"x½" Guard Rail angles bolted at ends and at intervals of not over 3 Ties, with ⅞" special Bolts as per Dr. No. A-1542 Leave ¼" between ends of G.R.L^s.



G.R.L^s. Mark G4A--- for Terry Crossing - G4B--- for Tusler - G4C--- for Ft. Keogh

Layout of Guard Rail Angles.
Clip all 4 legs thus



Note:-
Material - Steel
Open holes - 1/16" ø
G.R.L^s to be marked with bridge number as well as with regular mark thus:
61A-R-Terry Crossing

Note: For Guard Rail Angles on Embankments see Drawing No C-1867

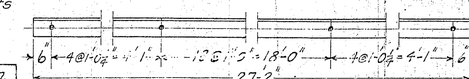
Bill of Material req'd for Terry, Tusler & Ft. Keogh. Complete Bill req'd for each crossing. Furnished by Ry. Co.

Terry No.	Tusler No.	Ft. Keogh. No.	Description.	Drg. No.
2.	2.	2.	Wall plates 12"X12"X40'lg. sized to 11⅞"	
1040.	1040.	1044.	Ties 8"X12"X10'-0"lg. sized to 11⅞"	
2400	2400	2400	Lin Ft. 6"X8" Pine guard rail.	
2400	2400	2400	" " 4"X6" " " "	
900.	900.	900.	Bolts ¾"X1'-7"lg. Sq Hd & Nut 3 Thd	
450.	450.	450.	" ¾"X1'-5"lg " " 2½" "	
900.	900.	900.	Spec. ¾"X1'-2"lg. " " 2½" "	A-1542.
920.	920.	920.	Lug Washers Δ-504.	A-1337
1400	1400	1400	Slot " for ¾" bolt.	2228
1400.	1400.	1400.	Recess " Δ-602.	6007
material revised 10/1/7	material revised 10/1/7	material revised 10/1/7		

Complete Bill of G.R.L^s required for each Crossing. Furnished by Contractor.

Crossing	No.	Mark.	No.	Mark.	No.	Mark.	No.	Mark.	
Terry	2.	G1A-R	26	G2A-R	6	G3A	4	G5A	
Terry	2.	G1A-L	26	G2A-L	6	G4A			
Tusler	2.	G1B-R	26	G2B-R	6	G3B	4	G5B	
Tusler	2.	G1B-L	26	G2B-L	6	G4B			
Ft. Keogh.	2.	G1C-R	26	G2C-R	6	G3C	4	G5C	
Ft. Keogh	2.	G1C-L	26	G2C-L	6	G4C			

Cut and fit 6/08



G.R.L^s Mark G5A for Terry Crossing
" " G5B " Tusler "
" " G5C " Ft. Keogh "

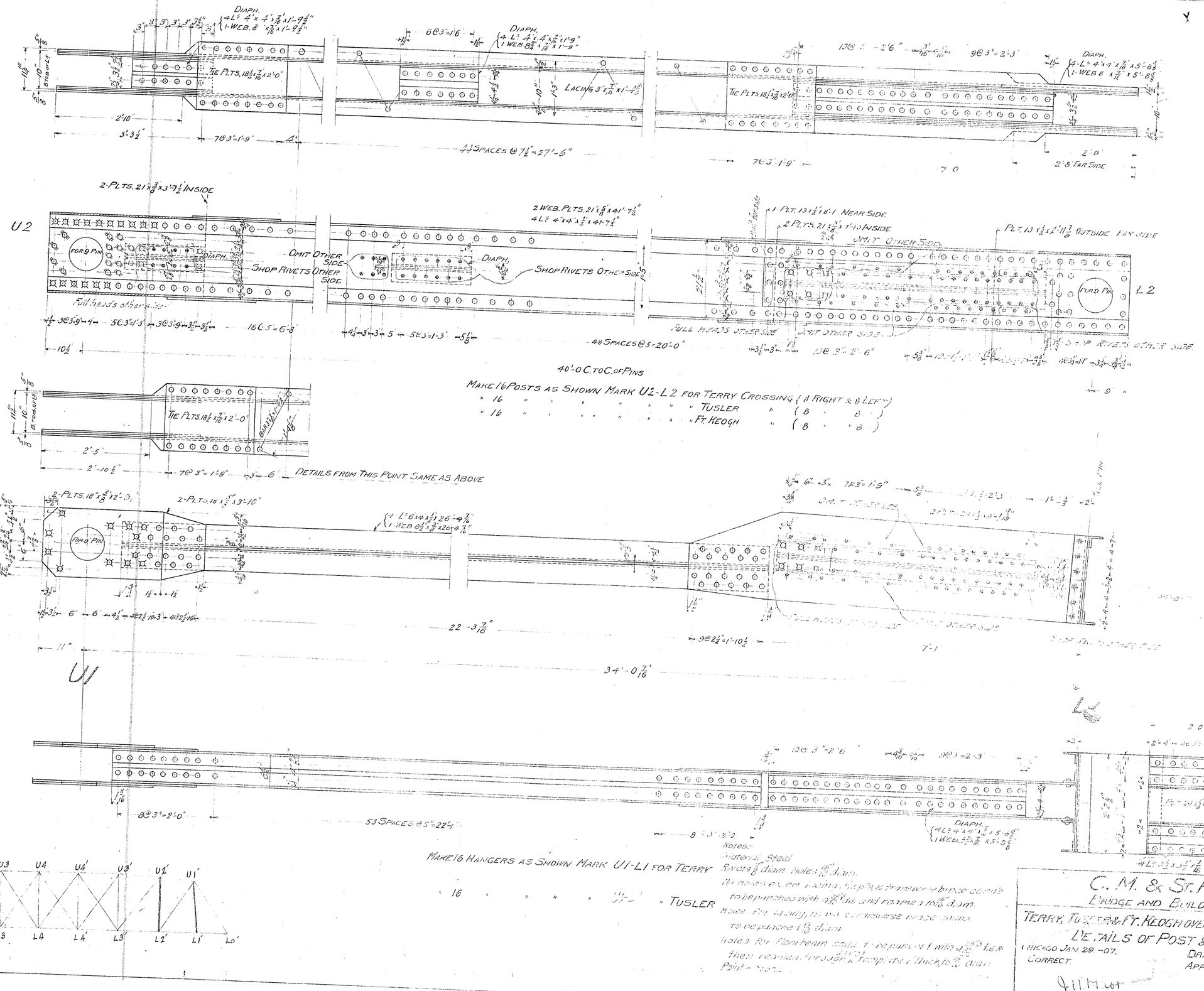
C. M. & St. P. Ry.
Bridge and Building Dept.

AA-424 TERRY, TUSLER & FT. KEOGH CROSSINGS
AA-478 Over Yellowstone River.
BB:8 Floor Plan.

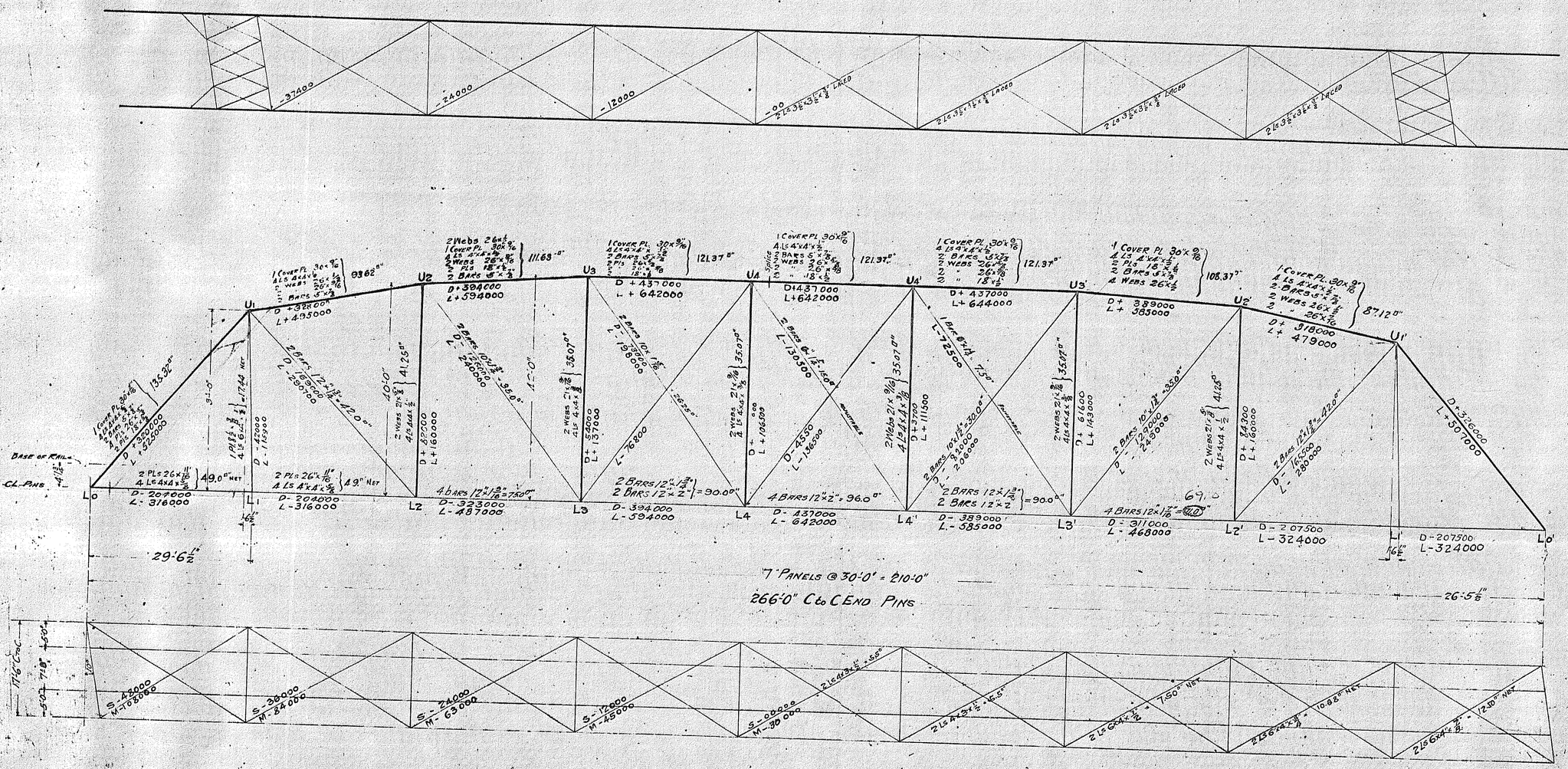
Chicago, Sept 10-07 Correct. J. H. Prior. Ass't. Engr.

Drawing No C-303 Approved. E. F. Loweth Engr. & Supt. B&B

H.T. GT


DIAPH. 4 L⁵ 4"x4"x7/16" x1'-9½" 1-WEB .8 7/16"x1'-7½"
TIE PLTS. 18½"x7/16"x2'-0"
6@3"=1'-6"
DIAPH. 4 L⁵ 4"x4"x7/16"x1'-9" 1 WEB .8 7/16"x1'-9"
LACING 3"x7/16"x1'-4½"
12@3"=2'-6"
9@3"=2'-3"
DIAPH. 4-L⁵ 4"x4"x7/16"x5'-0½" 1-WEB 8 7/16"x5'-0½"
TIE PLTS 18½"x7/16"x2'-0"
2'-0" FAR SIDE
7@3"=1'-9"
7'-0"
4 SPACES @ 7½"=27'-6"
2-PLTS. 21"x⅜"x3'-7½" INSIDE
U2
FOR 9" PIN
DIAPH.
OMIT OTHER SIDE
SHOP RIVETS OTHER SIDE
2 WEB PLTS. 21"x⅜"x4'-7½"
4 L⁵ 4"x4"x½"x4'-7½"
DIAPH.
SHOP RIVETS OTHER SIDE
1 PLT. 13"x⅜"x8'-1 NEAR SIDE
2 PLTS. 21"x⅜"x7'-1 INSIDE
OMIT OTHER SIDE
PLT. 13"x½"x2'-11½" OUTSIDE FAR SIDE
FOR 9" PIN
L 2
FULL HEADS OTHER SIDE
OMIT OTHER SIDE
SHOP RIVETS OTHER SIDE
3@3"=9"
5@3½"=1'-3"
3@3"=9"
3½"
3½"
16@5"=6'-8"
10½"
4½"
3@3"=9"
3"
5@3"=1'-3"
5½"
48 SPACES @ 5'-20'-0"
3½"
3@3"=9"
3"
13@3"=2'-6"
5⅜"
40'-0 C. TO C. OF PINS
MAKE 16 POSTS AS SHOWN MARK U2-L2 FOR TERRY CROSSING (8 RIGHT & 8 LEFT)
" 16 " " " " " " " TUSLER " (8 " 8 ")
" 16 " " " " " " " FT. KEOGH " (8 " 8 ")
TIE PLTS 18½"x7/16"x2'-0"
2'-5"
2'-10½"
7@3"=1'-9"
3"
6"
DETAILS FROM THIS POINT SAME AS ABOVE
2-PLTS. 18"x⅝"x12'-3"
2-PLTS. 18"x⅝"x3'-10"
FOR 9" PIN
4 L⁵ 6"x4"x⅝"x26'-4 7/16"
1 WEB 21½"x⅜"x20'-4 7/16"
6"
3"
7@3"=1'-9"
5⅜"
3½"
DIAPH.
1'-3"
2'-0"
2-4"=4'-0"
22'-3 7/16"
9@2½"=1'-10½"
7'-1"
34'-0 7/16"
11"
U1
U2
U3
U4
U4'
U3'
U2'
U1'
L0
L1
L2
L3
L4
L4'
L3'
L2'
L1'
L0'
8@3"=2'-0"
53 SPACES @ 5"=22'-1"
8@3"=2'-0"
MAKE 16 HANGERS AS SHOWN MARK U1-L1 FOR TERRY
" 16 " " " " " " TUSLER
Notes:-
Material, Steel
Rivets ⅞ diam. Holes 15/16 diam.
All holes except those for lacing, splice & transverse bridge comb to be punched with 7/8 die and reamed to 15/16 diam.
Holes for lacing, tie plate & transverse bridge beams to be punched 1 1/16 diam.
Holes for floor beam seat to be punched with 3/4 less then reamed through a template 1/2 thick to 7/8 diam.
Paint - one coat
L2
2'-0"
2'-4"=4'-0"
2'-4"=4'-0"
2'-0"
PLT. 24"x½"x2'-2½"
4 L⁵ 3½"x3½"x7/16"x2'-0"
DIAPH. 4 L⁵ 4"x4"x7/16" 1-WEB .8 7/16"x5'-5⅝"
C. M. & St. P. R'y.
BRIDGE AND BUILDING DEPT.
TERRY, TUSLER & FT. KEOGH OVER YELLOWSTONE RIVER.
DETAILS OF POST & HANGER.
CHICAGO JAN. 29 -07.
CORRECT
DRAWING NO. A 9164
APPROVED.

A 8860



STRINGERS 30'-0" 4:1" over L5

Steel 275 } 500# D.L. per Lin. Ft.
Track 225 }

$\frac{500 \times 30^2}{8}$ = 562.50 D.L. Moment
56.4 x 220 LL "
620770 Total "

$\frac{621}{8 \times 37.1}$ = 20.9" Net

2 Ls 8"x8"x$\frac{13}{16}$" = 21.44" Net

500 x 15 = 7500 D.L. Shear
86700 LL "
94200 Total "

$\frac{94200}{6000}$ = 15.7" Net

Web 49"x$\frac{5}{8}$" = 28.5" Gross
Stiffeners - 6"x4"x$\frac{3}{8}$"

INT. FLOOR BEAMS 5'-0" over L5

Assumed weight of beam = 300# per Lin. Ft.
Stringers 525 x 30 = 15750
Floor Beam Reaction LL = 115600
131350

$13^2 \times \frac{35}{8} \times 6.00$ = 671750
$\frac{300 \times 17.5^2}{2}$ = 11500
683250 Maximum

$\frac{683.25}{8.5 \times 4.7}$ = 17.1"

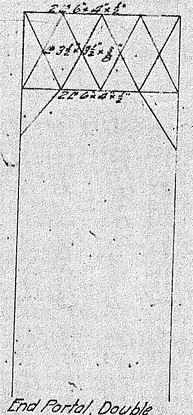
2 L 6"x6"x$\frac{13}{16}$" } 17.22" Net
1 PL 13"x½" }

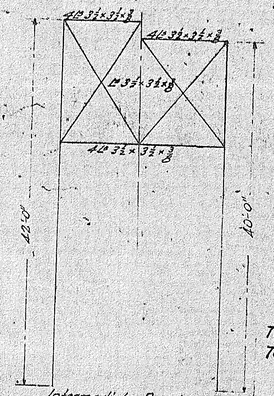
Plate 13'-10½" Long

Floor Beam Reaction 131350
17.5 x 150 2625
136975

$\frac{137000}{6376}$ = 21.45" Net

Web 60"x$\frac{9}{16}$"





BRIDGE NOS.

TERRY	AA-424
TUSLER	AA-478

REFERRED TO ENGINEER
CONTR.
FROM
TO

Loading Cooper's E55

2-1-64 **C. M & St. P. R'y.**
Bridge and Building Dept.

TERRY & TUSLER CROSSING OF YELLOWSTONE RIVER.
Stress Sheet.
Drawing No. A 8860
Approved.
Chicago.
Correct.
J. H. Prior
Asst. Engr.

4 STRINGERS REQ'D - AS SHOWN MARK S9

4 " " " " " S10

Notes:-
Material:- Steel
Rivets ⅞" diam. Holes 15/16" diam.
All holes except lateral connections to be punched with 25/32" dia & reamed 15/16" diam.
Holes for Laterals & connections to be punched 15/16" diam.
Holes in ends of stringers for floorbeam conn. to be punched with a 25/32" dia & then reamed through an iron template 1" thick
Paint:- Nos 1 & 2

C. M. & ST. P. R'Y.
BRIDGE AND BUILDING DEPT.

TERRY & TUSLER CROSSING OVER YELLOWSTONE RIVER.
DETAILS OF STRINGERS AT ABUTMENTS.

CHICAGO, Tly. 18, 1907
CORRECT.

J. H. Prior
ASS'T. ENGR.

DRAWING No. A°9171
APPROVED:

O. J. Lowell
ENGR. OF STAT. B. & B.

G.M.M.

2 Pl. 6"x6"x1/2"-3'-11 3/8" x 3'-11 3/8"

2 Pl. 5-11 1/16" x 1/2" x 2'-3"

2 Pl. 6"x6"x1/2"-3'-11 3/8" x 3'-11 3/8"

2 Pl. 5-11 1/16" x 1/2" x 2'-3"

2 L^s 6"x4"x7/16" x 3'-11 3/8"

2 Fill. Pl. 10 1/2" x 1/2" x 2'-9"

1 L-6"x4"x7/16" x 1'-0"

2 L^s 6"x4"x7/16" x 3'-11 3/8"

2 Fill. Pl. 10 1/2" x 1/2" x 2'-9"

1 L-6"x4"x7/16" x 1'-0"

2 L^s 6"x6"x7/16" x 4'-1" CRIMPED

2 L^s 6"x6"x7/16" x 4'-1" CRIMPED

1 L-4"x4"x7/16" x 1'-2 1/2"

1 Fill. Pl. 3 1/2" x 3/8" x 0'-8"

1 L-4"x4"x7/16" x 1'-2 1/2"

1 Fill. Pl. 3 1/2" x 3/8" x 0'-8"

13 @ 2 1/4" = 2'-5 1/4"

2 L^s 8"x8"x 13/16" - 30'-3 1/8"

WEB. PL. - 49 1/2" x 1/2" - 30'-3 1/8"

2 L^s 8"x8"x 13/16" - 30'-3 1/8"

Do.

Do.

Do.

Do.

Do.

FACED

14 @ 3" = 3'-6"

8 @ 2 1/2" = 1'-8" 8 @ 3" = 2'-0" 8 @ 3 1/2" = 2'-4" 4 @ 4" = 1'-4" 8 @ 4 1/2" = 3'-0" 4 @ 4" = 1'-4" 8 @ 3 1/2" = 2'-4" 8 @ 3" = 2'-0" 8 @ 2 1/2" = 1'-8" 7 @ 2 1/2" = 1'-5 1/2" 9 @ 2 1/4" = 1'-8 1/4"

30'-3 1/8" B. TO B. END L^s

30'-7 15/16" ℄ OF PIER TO ℄ OF FLOOR BEAM (ON ℄ OF STRINGER)

℄ OF FL. BM.

℄ OF PIER

Connection L^s Removed. See Plan "C-C."

PL. 18 x 3/4" - 1'-4 1/4" (PLANE FROM 13/16" ON BOTTOM SIDE)

1 1/16" x 4 1/2" SLOTTED HOLES FOR S^3 ONLY

1 1/16" HOLES FOR S^4 ONLY

℄ OF LATERAL

NOTE: STRINGERS S3 AND S4 SAME EXCEPT FOR ANCHOR BOLT HOLES.

8 - STRINGER REQD. - AS SHOWN MARK S^3

4 " " " " " S^4

Fixed End. Diagram. Expansion End.

SECTION A-A

Plan "B-B."

Plan "C-C."

Notes:-

Material:- Steel

Rivets 7/8" diam. Holes 15/16" diam.

All holes except Lateral connections to be punched with a 25/32" die & reamed 15/16" diam.

Holes for Laterals & connections to be punched 15/16" diam.

Holes in ends of stringers for floorbeam conn. to be punched with a 25/32" die & then reamed through an iron template 1" thick.

Paint:- Nobroc

C. M. & ST. P. R'Y.

BRIDGE AND BUILDING DEPT.

TERRY & TUSLER & CROSSINGS OVER YELLOWSTONE RIVER.

DETAILS OF END STRINGERS AT PIERS.

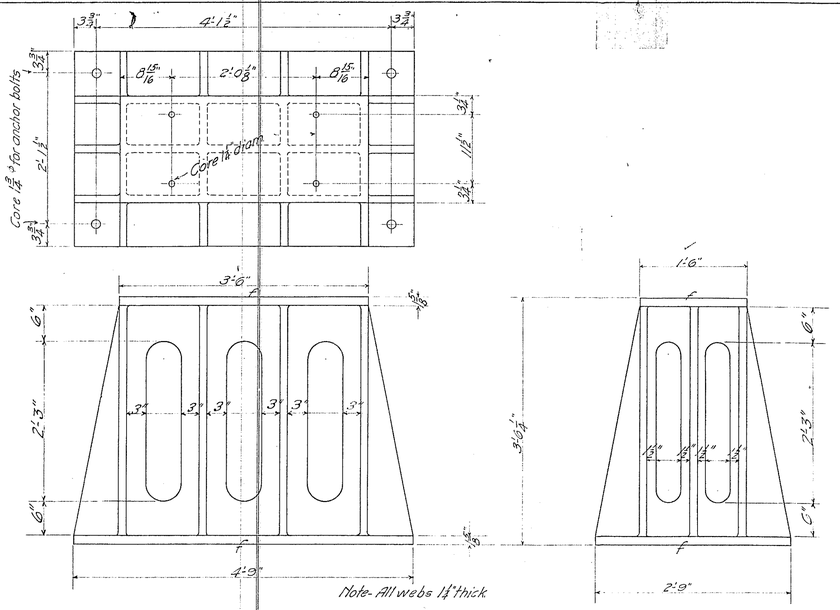
CHICAGO JAN. 22, 1907. DRAWING NO. A 9170

CORRECT. APPROVED.

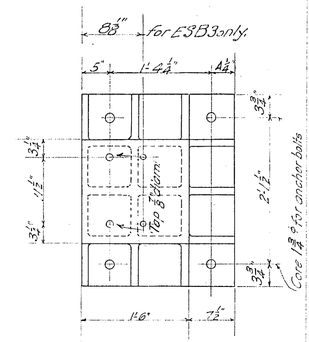
J. H. Pryor
ASS'T. ENGR.

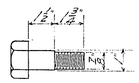
O. F. Lowrth
ENGR. & SUPT. B. & B.

C.M.M.

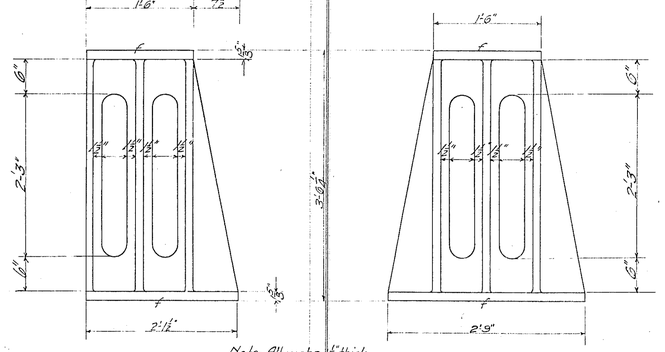


— Make 6 Stringer Blocks Mark SB1 for "TERRY" —
— " 6 " " " SB2 " TUSLER —
— " 6 " " " SB3 " FT. KEOGH —
— Material - Cast Iron —
— Furnish 72 bolts 1"ϕ x 5½" ⅓ Hex. hd. nut & ⅜" lock nut —





— Make 24 Turned Bolts for ESB1, 2 & 3 —



Note-All webs 1½" thick

— Make 4 Stringer Blocks Mark ESB1 for "TERRY" —
— " 4 " " " ESB2 " TUSLER —
— " 4 " " " ESB3 " FT. KEOGH —
— Material - Cast Iron —

Note-
Coat all finished surfaces with
White Lead & Tallow.
Paint - Nobrac

C. M. & St. P. R'y.
Bridge & Building Department.

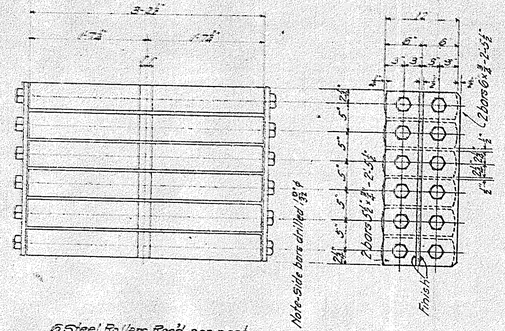
TERRY, TUSLER & FT KEOGH Crossings
over YELLOWSTONE RIVER
Details of Stringer Castings.

Chicago Jan. 23-07. Drawing No A 9169
Correct. — Approved —

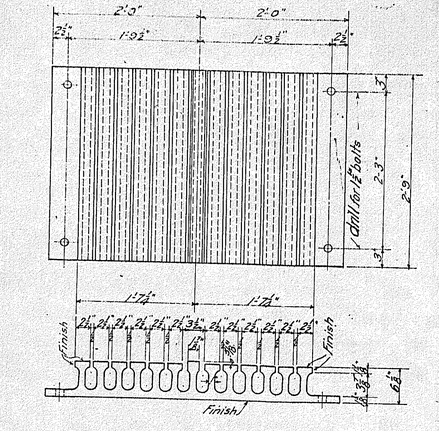
J. H. Prior
Asst Engr.

O. A. Lovett
Engr & Supt B&B

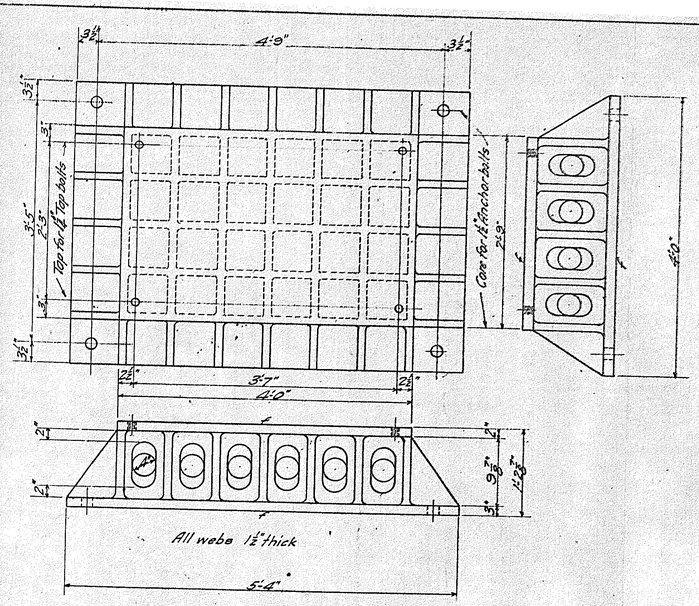
A.M.M.
RAP



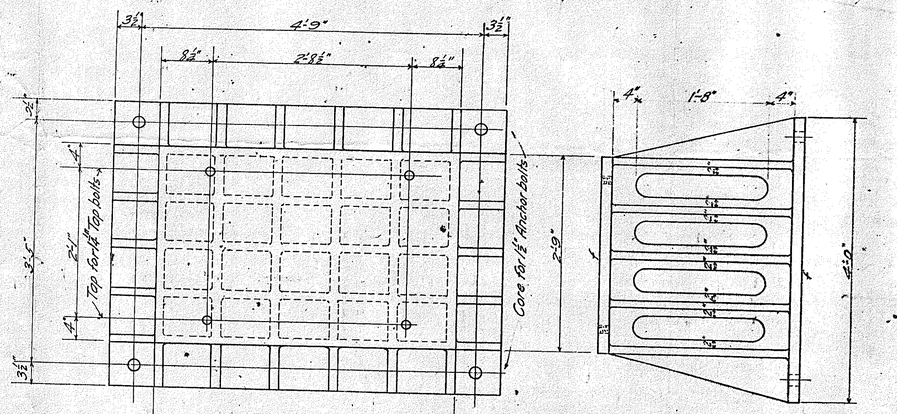
Make 8 Roller Nests Mark RN1 for "TERRY"
" 8 " " RN2 " "TUSLER"
" 8 " " RN3 " "FT. KEOGH"



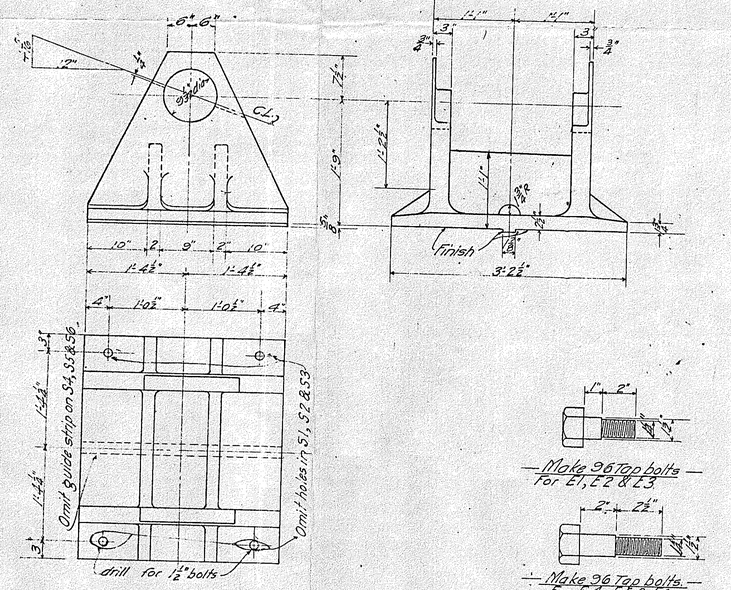
Make 8 Cast Steel Plates Mark RP1 for TERRY
" 8 " " " RP2 " TUSLER
" 8 " " " RP3 " Ft. KEOGH.



Make 8 Castings Mark E1 Cast Iron for "TERRY"
" 8 " " E2 " " "TUSLER"
" 8 " " E3 " " "Ft. KEOGH"



Make 8 Castings Mark E4 for "TERRY"
" 8 " " E5 " "TUSLER"
" 8 " " E6 " "Ft. KEOGH"
Material - Cast iron.



Make 8 Cast Steel Shoes as shown Mark S1 for "TERRY"
" 8 " " " " " " S2 "TUSLER"
" 8 " " " " " " S3 "Ft. KEOGH"
" 8 " " " " " Bnoted " S4 "TERRY"
" 8 " " " " " " S5 "TUSLER"
" 8 " " " " " " S6 "Ft. KEOGH"

Make 96 Top bolts for E1, E2 & E3.

Make 96 Top bolts for E4, E5 & E6.

Note-
Coat all finished surfaces with White Lead & Tallow
Point - Rebrac

JUL 6 1917

BRIDGE NOS.
TERRY AA-424
TUSLER AA-478
FT. KEOGH BB-8

C. M. & St. P. Ry.
Bridge & Building Department.
TERRY, TUSLER & FT. KEOGH CROSSINGS.
OVER YELLOWSTONE RIVER
Details of End Bearings.
Chicago. Drawing # A 3168
Correct- Approved-
J. H. Prior — O. F. Lovett
O.M.M. Asst Engr. — Engr. C. Struct. Br. C.

Tie Pl. 27"x½"x3'-0"

12-5"x⅝" Lacing Bars - 4'-1½" Long.

14-5"x⅝" Lacing Bars - 4'-3" Long.

59'-1½"

27'-9½"

31'-4"

Rivets Csk. and Chipped as Shown.
" Flattened ⅛" " "

Pin Pl. 2½"x11/16"x2'-8½"

Pin Pl. 18"x⅝"x3'-8½"

2 Web Pls. 26"x11/16"x59'-1½"

Bore Hole for 9" Pin.

L 0

L 1

L 2

Fill Pl. ½"x4"x2'-9"

10-5"x⅝" Lacing Bars - 4'-1½" Long

2-5"x⅝" Lacing Bars - 4'-5" Long.

2-5"x⅝" Lacing Bars - 4'-7" Long

12-5"x⅝" Lacing Bars - 4'-3" Long.

2-5"x⅝" Lacing Bars - 2'-3½" Long.

2" Drain Holes.

Pl. 38"x½"x6'-4½"

#16 Bottom Chords Req'd - Mark B.C.2. { 8 req'd for Terry. / 8 req'd for Tusler. }

L0 L1 L2 L3 L4 L4 L3 L2 B.C.2. L1 L0

Notes:
Material:- Steel
Rivets ⅞" diam. Holes 15/16" diam.
All holes except for lacing, tie & lateral pls to be punched with a 25/32" die & reamed to 15/16" diam.
Holes for lacing, tie pls & lateral pls to be punched 15/16" diam.

Paint:- Nubrix

C. M. & St. P. R'y.
Bridge and Building Dept.

TERRY & TUSLER CROSSING of YELLOWSTONE RIVER
Detail of Bottom Chord, - L0 - L2

Chicago, Jan. 31-07
Correct.
J. H. Prior
Ass't Engr.

Drawing No. A-9167
Approved.
O. J. Lowrth
Engr & Supt Br

14-5"x⅝" lacing bars 4'-1½" long

14-5"x⅝" Lacing bars 4'-3" long

Tie Pl. 27½"x⅜"x3'-0"

1'-4¾" 1'-4¾"

62'-2½"

30'-10½"

Pin Pl. 24½"x1⅛"x2'-8½"

Pin Pl. 15"x1⅝"x3'-8½"

Pin Pl. 24½"x1⅛"x2'-8½"

Pin Pl. 18"x⅝"x3'-8½"

Rivets 7/8" diam. Holes 15/16" diam.

Flat ends and sides of web plates flattened to 35/8" and 3 1/2" as shown

Section { 4 Ls 4"x4"x⅝"x62'-2½" / 2 Web Pls. 26"x⅜"x65'-2½" }

Bore Hole for 4" Pin

Bore Hole for 5" Pin

45@6'-2½"

20@3'-0"

45@6'-2½"

5 spaces @ 6'-2½" C. to C. of Pins

29'-11½"

L0

12 Lacing Bars – 5"x⅜"x4'-1⅝"

Tie Pl. 36"x⅜"x2'-9"

2-Bars 5"x⅜"x2'-7"

Pl. 2½"x⅜"x6'-9"

2" Drain Hole

L1

2-6"x⅝" Lacing Bars 4'-5" long

2-Lacing Bars 5"x⅜"x4'-7"

2" Drain Holes

Pl. 58"x⅜"x6'-4"

L2

12-6"x⅝" Lacing Bars 4'-3" long

2-5"x⅝" Lacing Bars 2'-3½" Long.

2" Drain Holes

Pl. 58"x⅝"x6'-3½"

L0 B.C.1 L1 L2 L3 L4 L4 L3 L2 L1 L0

L0 L1 L2 L3 L4 L4 L3 L2 L1 L0 BC1

4/16 Bottom Chords Req'd Mark B.C.1 { 8 Req'd for Terry / 8 " " Tusler }

Notes:-

Material:- Steel

Rivets ⅞" diam. Holes 15/16" diam.

All holes except for lacing, ties & lateral pls to be punched with a 25/32" die & reamed to 15/16" diam.

Holes for lacing ties & lateral pls to be punched 15/16" diam

Paint- Nobrac

C. M. & St. P. Ry.

BRIDGE & BUILDING DEPARTMENT

TERRY & TUSLER CROSSING

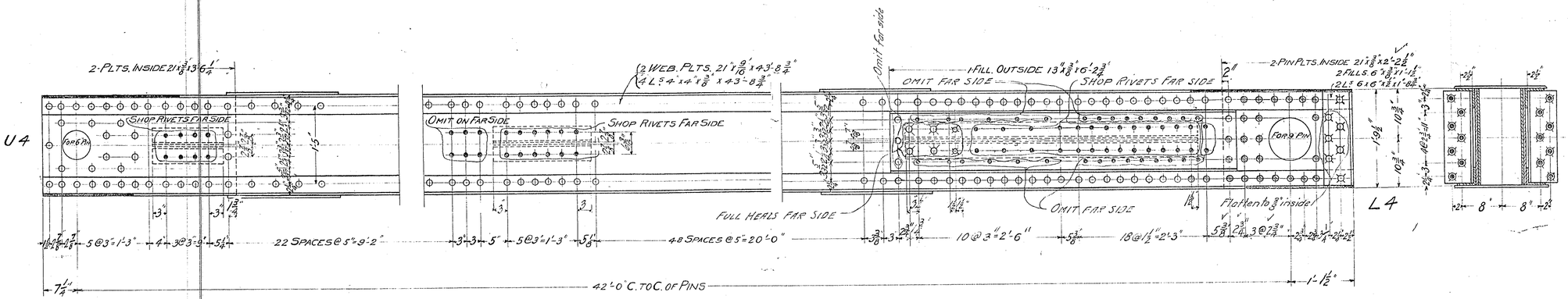
OVER YELLOWSTONE RIVER

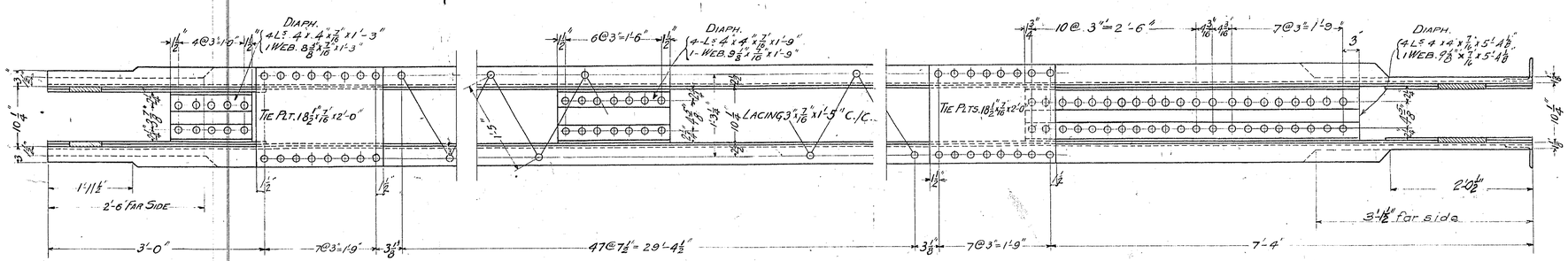
Detail of Bottom Chord L0-L2

Chicago Jan 31. 1907 Drawing No. 1-9166

Correct J. H. Taylor Asst Engr

Approved C. F. Loweth Engr & Supt. M. W. & B.

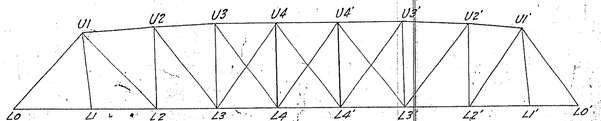




MAKE 16 POSTS AS SHOWN MARK U4L4 FOR TERRY CROSSING (8 RIGHT & 8 LEFT)

MAKE 16 " " " " " " " " TUSLER " (8 " " 8 ")

MAKE 16 " " " " " " " " FT. KEOGH " (8 " " 8 ")



Notes:-
Material:- Steel
Rivets 7/8" diam. Holes 15/16" diam.
All holes except lacing, tie plts. & transverse brace conn's. to be punched with a 25/32" die and reamed to 15/16" diam.
Holes for lacing, tie plts & transverse bracing conn's. to be punched 15/16" diam.
Holes for floorbeam conn. to be punched with a 25/32" die and then reamed though an iron template 1" thick to 15/16" diam.
Paint:- 1 shop coat

C. M. & St. P. R'y.
BRIDGE AND BUILDING DEPT.

TERRY, TUSLER & FT. KEOGH OVER YELLOWSTONE RIVER.
DETAILS OF POSTS U4-L4

CHICAGO, JAN. 30.-07. DRAWING NO. F 91 63
CORRECT. APPROVED.

J. H. Prior
ASS'T. ENGR

C. J. Lowett
ENGR. & SUP'T. P. & B.

1-Filling 1 7/16 x 0'-6 1/2" Bolt on for Shipment.

1-Bent Pl. 39 3/8 x 2 1/2 x 3'-1" Mark "TLP2" Bolt on for Shipment

4-Cov. Pl. 30 x 9/16 x 32'-6 5/8"

U1

U2

45-Spaces @ 6" = 22'-6"

32'-1 11/16" C. To C. of Pins.

18 Spaces @ 3" = 4'-6"

32'-6 11/16

44-Spaces @ 6" = 22'-0"

11 Spaces @ 3" = 2'-9"

18-Spaces @ 3" = 4'-6"

2 Pin Pls. 26 x 1/2 x 1'-2 3/8" Inside.

2 Pin Pls. 26 x 5/8 x 3'-1 7/8" Inside.

2-Ls 4 x 4 x 1/2 x 32'-6 5/8"

2-Pin Pls. 18 x 1/2 x 4'-10 1/2"

2-Pin Pls. 24 1/2 x 5/8 x 4'-5 5/8"

2-Ls 4 x 4 x 1/2 x 31'-9 1/4"

2-Web Pls 26 x 9/16 x 32'-6 1/2"

2-Web Pls 26 x 1/2 x 32'-6 1/2"

2-Pin Pls. 18 x 1/2 x 4'-7 5/8"

2-Pin Pls. 24 1/2 x 1/2 x 4'-1 7/8"

2-Pin Pls. 24 1/2 x 1/2 x 2'-7 7/8"

Bore Hole For 9" Diam. Pin.

2-Hinge Pls. 24 x 1/2 x 2'-7 7/8" Outside

2-Hinge Pls. 24 1/2 x 1/2 x 3'-0" Outside

1-L 3 1/2 x 3 1/2 x 1/2 x 1'-3" On this side only. Rivet on after assembling.

Bore Hole for 9" Diam. Pin.

11-Alt. Lacing Spaces @ 1'-9 7/8" = 20'-0 5/8"

6-Spaces @ 5 1/4" = 2'-10 1/2" 1/8" etc.

1-Bar 5 x 7/8 x 31'-7 1/8"

1-Stiff L 3 1/2 x 3 1/2 x 7/8 x 2'-6 0"

1-Tie Pl. 30 x 7/16 x 3'-3 3/8"

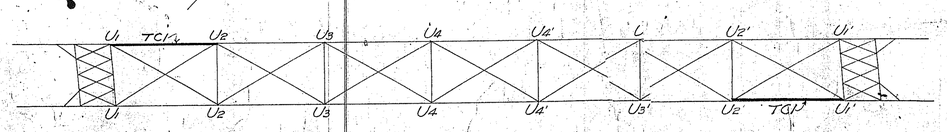
11-Lacing Bars 5 x 5/8 x 3'-0 3/8"

6 Spaces @ 5 1/4" = 2'-10 1/2" 1/8" Etc.

Required:

16-Top Chords As Shown. Mark TC1.

Shear outstanding legs of all stiffener Ls on Tie Plates Thus



Notes:-

Material:- Steel

Rivets 7/8" diam, holes 15/16" diam.

All holes except Lacing, Tie & Lateral Pls to be punched with a 25/32" die and reamed to 15/16" diam.

Holes for Lacing, Tie & Lateral Pls to punched 15/16" diam

Point:- Hobrac

C. M. & St. P. Ry.
Bridge and Building Dept.

TERRY & TUSLER CROSSINGS.
OVER YELLOWSTONE RIVER
Details of Top Chord-TC1.

Drawing No. A- 9162

Chicago:
Correct:

J. H. Prior
Asst. Engr.

Approved:

O. F. Lowell
Engr. & Supt. B&B.

1-Fill. 3"×7/16"×0'-8 5/8" Bolt on for Shipment.

Bend Line

1-Bent Pl. 30"×3/8"×1'-3" Bolt on for Shipment

1-Cov. Pl. 30"×9/16"×33'-7 7/8"

1-Splice Pl. 30"×7/16"×3'-3" Bolt on for Shipt.

U3

U4

19-Spaces @ 3"=4'-9"

38-Spaces @ 6"=19'-0"

33'-7 7/8"

13-Spaces @ 3"=3'-3"

4 @ 4"=1'-4"

6"

3'-3"

1'-7 1/2"

Mill.

4" Pin

30'-0 3/8" C. to C. of Pins.

38 Spaces @ 6"=19'-0"

20-Spaces @ 3"=5'-0"

16 Spaces @ 3"=4'-0"

11-Spaces @ 3"=2'-1 3/4"

2-Pin Pls. 26"×1/2"×2'-7 1/8" Inside.

2-L's 4"×4"×1/2"×33'-7 7/8"

2-Web Pls. 18"×1/2"×33'-7 3/4" Outside.

1'-4 1/4"

Bolt on for Shipment.

2-Splice Pls. 24 1/2"×2"×3'-3"

Bore Hole For 6" Diam. Pin

2-Pin Pls. 26"×1/2" — 4'-1 1/8" Inside.

2-Pin Pls. 24 1/2"×1/2" — 4'-1 1/8" Outside.

2-Pin Pls. 24 1/2"×1/2"×3'-7 7/8"

2-L's 4"×4"×1/2"×33'-7 1/4"

4-Web Pls. 26"×5/8"×33'-7 7/8"

Bore Hole For 6" Diam. Pin

2-Hinge Pls. 24"×1"×2'-2 1/2" Outside

33'-7"

11-Alt Lacing Spaces @ 1'-9 1/8"=19'-1 3/8"

8 @ 3"=2'-0"

6 @ 3"=1'-6"

6"

4 @ 4"=1'-4"

1-Bar 5"×5/8"×33'-7"

1-Stiff L 3"×3"×3/8"×2'-6" "a"

1-Tie Pl. 30"×7/16"×3'-3" "c"

1'-9 1/8"

11-Lacing Bars 5"×5/8"×3'-0 3/8"

1-Tie Pl. "c"

Notes.

Material. Steel

Rivets 7/8" diam. Holes 15/16" diam

All holes except for Lacing, Tie & Lateral Pls to be punched with a 25/32" die and reamed to 15/16" diam.

Holes for Lacing Tie and Lateral Pls to be punched 15/16" diam.

Top Chords which are spliced to be simultaneously assembled in shop and field connection holes reamed and pieces match marked before taking apart.

Paint. None

Shear outstanding legs of all stiffener Ls on Tie Plates Thus

Required:

12-Top Chords As Shown, Mark T.C.5.R } 4 of each for { Terry, Tusler, Ft. Keogh.

12- " " Opp. To Sketch, Mark T.C.5.L }

U1 U2 U3 T.C.5.R U4 U4' U3' U2' U1'

U1 U2 U3 T.C.5.L U4 U4' U3' U2' U1'

C.M. & St. P. Ry.

Bridge and Building Dept.

TERRY, TUSLER & FT. KEOGH CROSSINGS.

OVER YELLOWSTONE RIVER.

Details of Top Chords

Chicago: Correct: D

Drawing No. A 9161

Approved:

H. H. Pratt, Asst. Engr.

O. A. Lowrth, Engr. & Supt. B. & B.

1-Fill 3/16" × 7/16" × 0'-8 5/8" Bolt on for Shipment

Bend Line

1-Bent Pl. 30" × 5/8" × 1'-3" Bolt on for Shipment

1-Cov. Pl. 30" × 2/16" × 56'-5 1/2"

38-Spaces @ 6" = 19'-0"

13-Spaces @ 3" = 3'-3"

6" 40# I-Beams

56'-5 1/2"

3'-3"

U4

U3'

26'-5"

30'-0 3/8" C. To C. of Pins

16-Spaces @ 3" = 4'-0"

20 Spaces @ 3" = 5'-0"

2-Web Pls. 18" × 7/16" × 56'-5 3/8" Outside.

2-Pin Pls. 26" × 1/2" × 2'-7 1/8" Inside

2-Pin Pls. 26" × 1/2" × 4'-1 1/8" Inside

2-Pin Pls. 24" × 1/2" × 4"-1/8"

2-Pin Pls. 24" × 1/2" × 3'-7 3/8"

2-Hinge Pls. 24" × 7/16" × 2'-2 1/4" Outside

2-Bore Hole For 9" Diam. Pin

2-Hinge Pl.

2-Cl. of Pin

2-L's 4" × 4" × 1/2" × 56'-5 5/8"

4-Web Pls. 26" × 5/8" × 56'-5 1/2"

Bore Hole For 6" Diam Pin

56'-4 5/8"

11-Alt Lacing Spaces @ 1'-9" = 19'-4 3/8"

1-Bar 5" × 7/8" × (30'-0 2/8" / 26'-4 1/16")

1-Tie Pl. 30" × 7/16" × 3'-3" "C"

22-Lacing Bars 5" × 5/8" × 3'-0 3/8"

1-Tie Pl. "C"

1-Stiff L. 3" × 3" × 3/8" × 2'-6" "a"

1-Tie Pl. 30" × 7/16" × 3'-3"

Bolt On For Ship't.

Shear outstanding legs of all stiffener L's on Tie Plates Thus—

Required:-

12-Top Chords As Shown Mark T.C. 6 R. } 4-Read of each for Terry.
12- " " Opp To Sketch. Mark T.C. 6 L. } 4- " " " " Tusler.
4- " " " " Ft. Keogh.

Notes:-

Material: Steel

Rivets 7/8" diam., holes 15/16" diam.

All holes except for Lacing, Tie & Lateral Pl's to be punched with a 25/32" die and reamed to 15/16" diam.

Holes for Lacing, Tie & Lateral Pl's to be punched 15/16" diam.

Top Chords which are spliced to be simultaneously assembled in shop and field connection holes reamed and pieces match marked before taking apart.

Paint:-No. 2

C. M. & St. P. Ry.
Bridge and Building Dept.

TERRY, TUSLER & FT. KEOGH CROSSINGS
OVER YELLOWSTONE RIVER.
Details of Top Chords.

Chicago, Drawing No. A-9160
Correct: Approved:

J. H. Prior
Ass't Engr

C. A. Lowrth
Engr & Supt. B. & B.

2-1-5

Mill 3 1/16" × 0'-6" Bolt on for Shipt.

1-Cov. Pl. 30" × 9/16" × 29'-6 7/16"

1-Bent Pl. 40" × 1/2" × 2'-11 1/2" Bolt on for Shipment Mark TLP8

Bend Line 2

18 Spaces @ 3"=4'-6"

39 Spaces @ 6"=19'-6"

29'-18 3/4" C. To C. of Pins.

29'-6 7/16"

38" Spaces @ 6"=19'-0"

11 Spaces @ 3'-2"=29'

U2'

U1'

Mill

Out Hinge Pl.

2 Pin Pls. 26" × 5/8" × 3'-2 3/8". Inside.

2 L's 4" × 4" × 1/2" × 29'-6 7/16"

2 Pin Pls. 26" × 1/2" × 3'-2 9/16" Inside

Bore Hole For 9" Diam. Pin.

2 Pin Pls. 18" × 1/2" × 4'-8"

2 Pin Pls. 24 1/2" × 1/2" × 4'-2 5/16"

2 Pin Pls. 24 1/2" × 1" × 2'-8 1/16"

2 L's 4" × 4" × 1/2" × 28'-9"

2 Web Pls. 26" × 7/16" × 29'-6 5/16"

2 Web Pls. 26" × 1/2" × 29'-6 5/16"

2 Pin Pls. 18" × 1/2" × 4'-10 1/4"

2 Pin Pls. 24 1/2" × 5/8" × 4'-8 3/8"

NEAR SIDE ONLY. 1 L 3 1/2" × 3 1/2" × 1/2" × 1'-2"

2 Hinge Pls. 24 1/2" × 2" × 3'-0" Outside

2 Hinge Pls. 24" × 2" × 2'-3" Outside.

28'-7 1/2"

38" 8 @ 3"=2'-0" 3 @ 3 1/4" 6 @ 3"=1'-6" 3 @ 4 1/2" 3 @ 3 3/8"

9 Alt. Lacing Spaces @ 1'-10 5/8"=16'-11 5/8"

2 @ 3 3/8" 3 @ 3 1/4" 6 @ 3"=1'-6" 3 @ 4 1/2" 3 @ 3" 6 @ 3"=1'-6" 2 @ 3 3/8" 4 @ 3 3/8" 4 @ 3" 2 @ 3 7/8"

6 Spaces @ 6"=3'-0"

1-Bar 5" × 8 7/16" × 28'-6 15/16"

1-Stiff L 3" × 3" × 5/16" × 2'-6"-a"

1-Tie Pl. 30" × 7/16" × 3'-3"-b"

1-108 5/8"

6 Spaces @ 6"=3'-0"

9-Lacing Bars 5" × 5/16" × 3'-1 1/4"

L Tie Pl.-b

Shear outstanding legs of all stiffener L's on Tie Plates Thus

U1 U2 U3 U4 U4' U3' U2' TC2 U1'

U1 TC2 U2 U3 U4 U4' U3' U2' U1'

Required:

16- Top Chords As Shown. Mark TC2.

Notes:-

Material:- Steel.

Rivets - 7/8" Diam, Holes 15/16" Diam.

All holes except for Lacing, Tie & Lateral Pl's to be to be punched with a 13/16" die and reamed to 15/16" diam.

Holes for Lacing, Tie & Lateral Pl's to be punched 15/16" diam.

Paint:- Nobrac

C. M. & St. P. Ry.

Bridge and Building Dept.

TERRY & TUSLER CROSSINGS.

OVER YELLOWSTONE RIVER

Details of Top Chord TC2.

Chicago: Drawing No. A. 9158

Correct: Approved:

J. H. Tyrrell, Asst. Engr. C. J. Lowrth, Engr. & Supt. B. & B.

2-1-7

27th St.