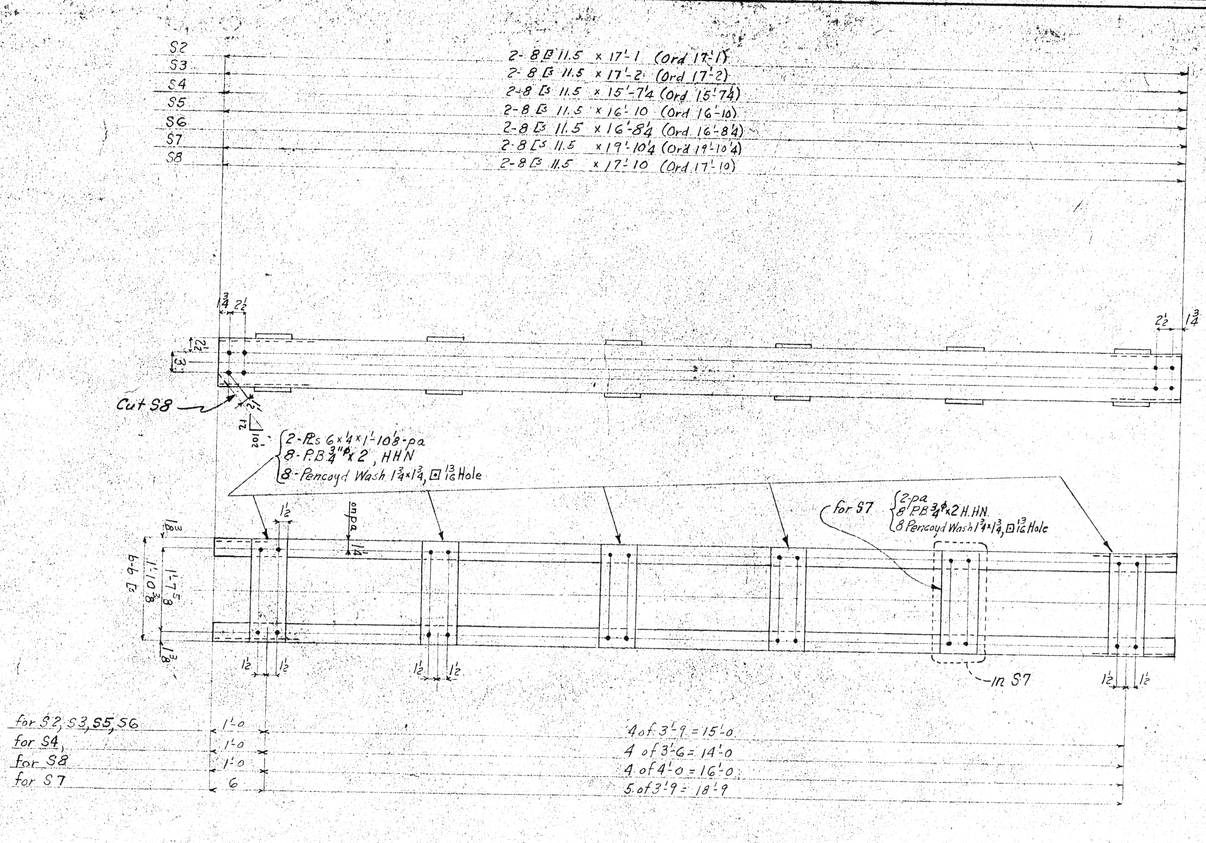
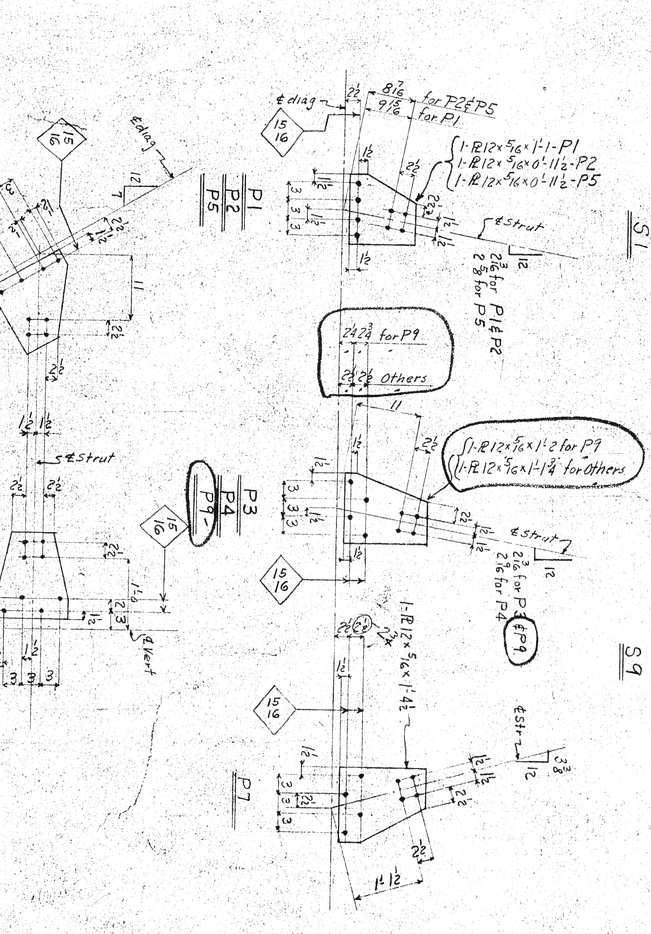
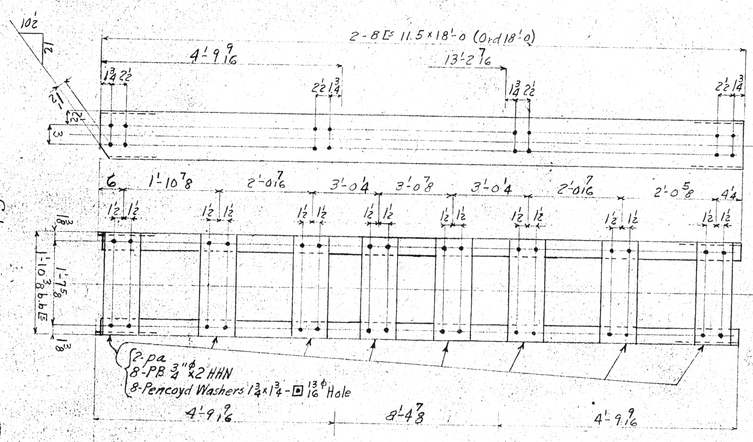
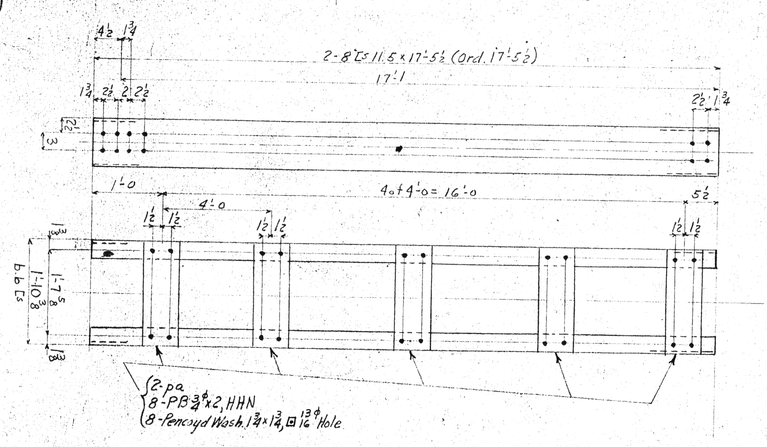
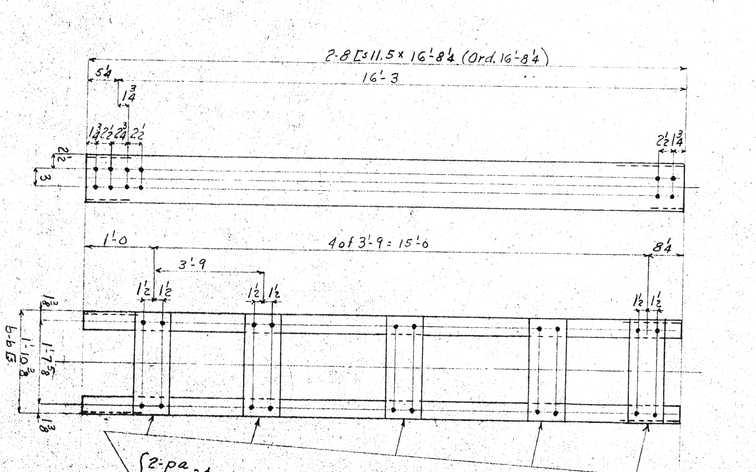

S2 2-8[11.5 x 17'-1 (Ord 17'-1)
S3 2-8[11.5 x 17'-2 (Ord 17'-2)
S4 2-8[11.5 x 15'-7¼ (Ord 15'-7¼)
S5 2-8[11.5 x 16'-10 (Ord 16'-10)
S6 2-8[11.5 x 16'-8¼ (Ord 16'-8¼)
S7 2-8[11.5 x 19'-10¼ (Ord 19'-10¼)
S8 2-8[11.5 x 17'-10 (Ord 17'-10)
Cut S8
2-Pls 6x¼x1'-10⅛-pa
8-PB ¾"ϕx2, HHN
8-Pencoyd Wash 1¾x1¾, □ 13/16 Hole
for S7
2-pa
8-PB ¾"ϕx2 H.HN
8-Pencoyd Wash 1¾x1¾, □ 13/16 Hole
in S7
for S2, S3, S5, S6 1'-0
for S4 1'-0
for S8 1'-0
for S7 6
4 of 3'-9 = 15'-0
4 of 3'-6 = 14'-0
4 of 4'-0 = 16'-0
5 of 3'-9 = 18'-9

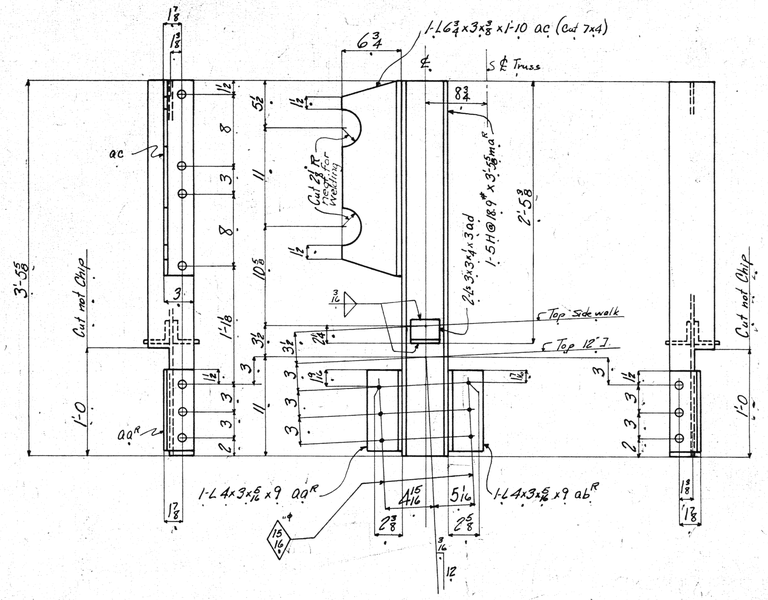

P1
P2
P5
P3
P4
P9
P6
P7
P8
1-PL 12x 5/16x 1'-1-P1
1-PL 12x 5/16x 0'-11½-P2
1-PL 12x 5/16x 0'-11½-P5
for P2 & P5
for P1
for P1 & P2
for P5
for P9
Others
1-PL 12x 5/16x 1'-2 for P9
1-PL 12x 5/16x 1'-1¼ for Others
for P3
for P4
1-PL 12x 5/16x 1'-4½
1-PL 13x 5/16x 1'-2
1-PL 12x 5/16x 1'-2½
℄ diag
℄ strut
℄ vert
15/16


S1
2-8[11.5x18'-0 (Ord 18'-0)
4'-9 9/16
13'-2 7/16
1'-10⅞
2'-0 7/16
3'-0¼
3'-0⅞
3'-0¼
2'-0 7/16
2'-0 5/8
2-pa
8-PB ¾"ϕx2 HHN
8-Pencoyd Washers 1¾x1¾-□ 13/16" Hole
4'-9 9/16
8'-4⅞
4'-9 9/16

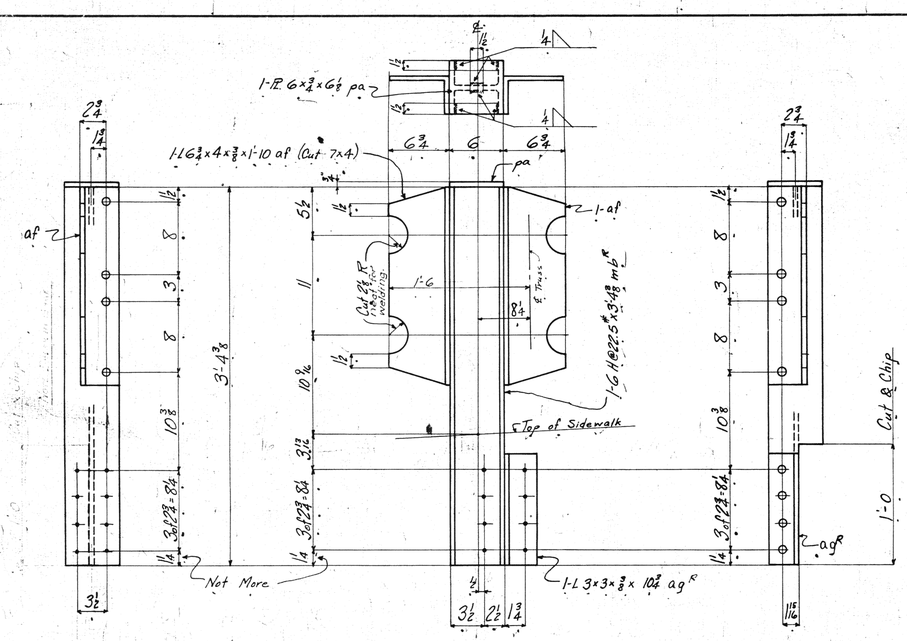

S9
2-8[11.5x17'-5½ (Ord 17'-5½)
17'-1
1'-0
4 of 4'-0 = 16'-0
5½
2-pa
8-PB ¾"ϕx2, HHN
8-Pencoyd Wash 1¾x1¾, □ 13/16" Hole


S11
2-8[11.5x 16'-8¼ (Ord 16'-8¼)
16'-3
1'-0
4 of 3'-9 = 15'-0
8¼
3'-9
2-pa
8-PB ¾"ϕx2-H.H.N
8-Pencoyd Wash 1¾x1¾, □ 13/16" Hole

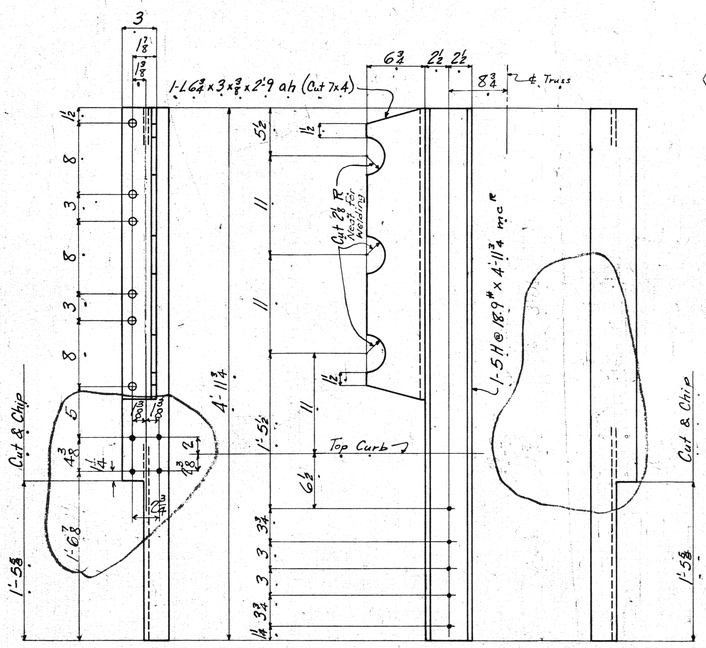
| Division | | |



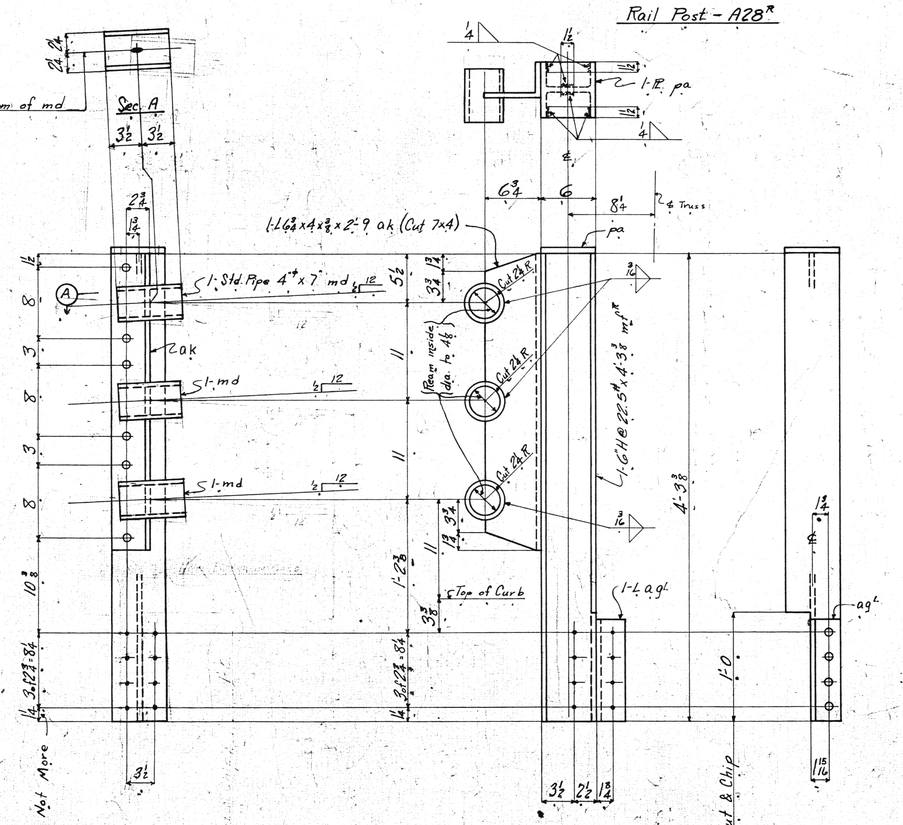
Rail Post - A38 R



Rail Post - A28 R



Rail Post - B27 R



Rail Post - B28 R

Order No.	Division 1.	2.	3.	4.	5.	6.	7.	Required Total No.	Description	Mark
H2527.				12	6	19	5	42	Rail Post	A38 R
H2527.	6	19	5					30	do.	A38 L
H2527.	1							1	do.	A28 R
H2527.				1				1	do.	A28 L
H2528.	6	19	5					30	do.	B27 R
H2528.				12	6	19	5	42	do.	B27 L
H2528.	1							1	do.	B28 R
H2528.				1				1	do.	B28 L

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ¾" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size.

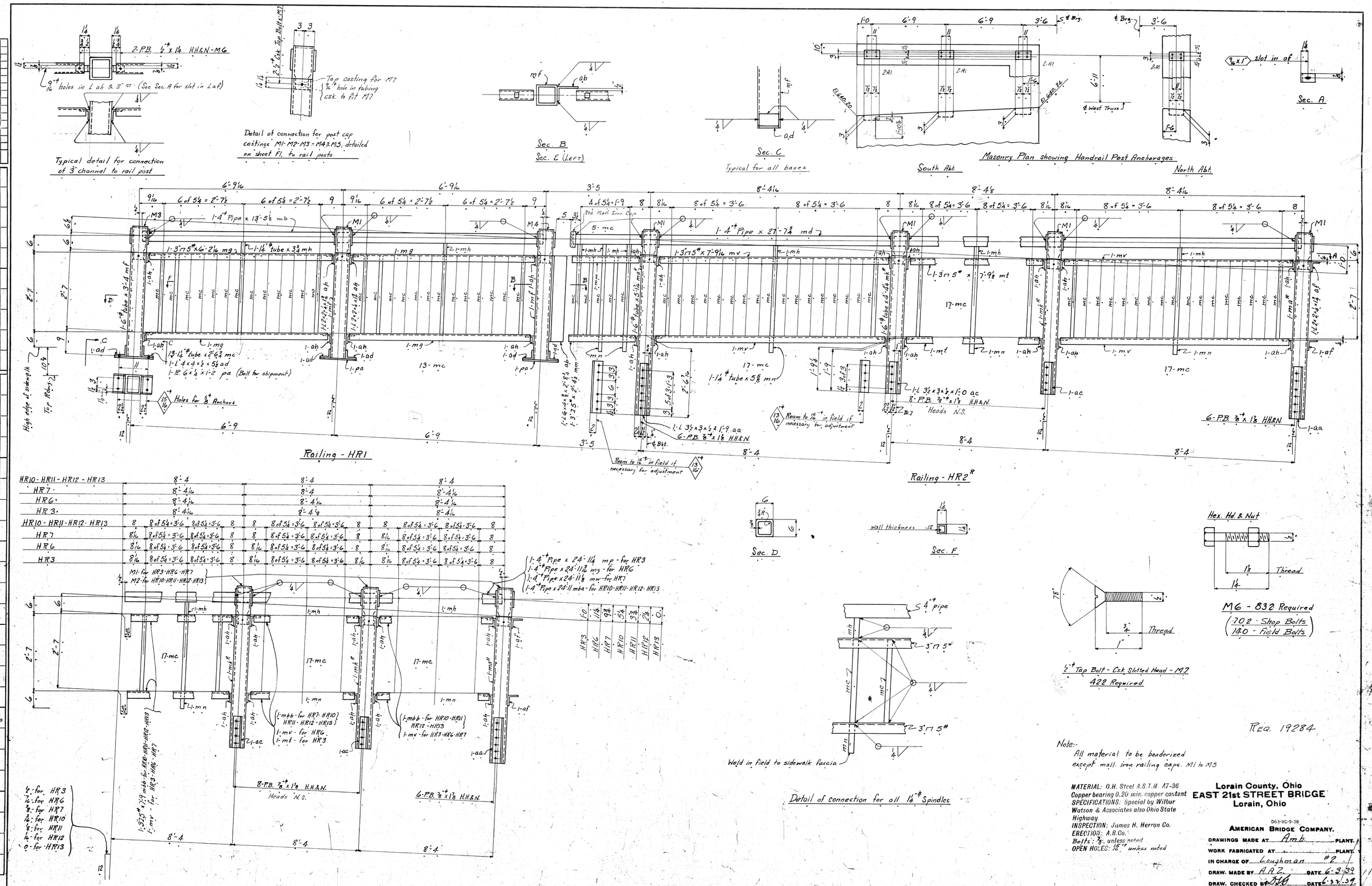
PAINT: Yes
CONTACT SURFACES: Yes

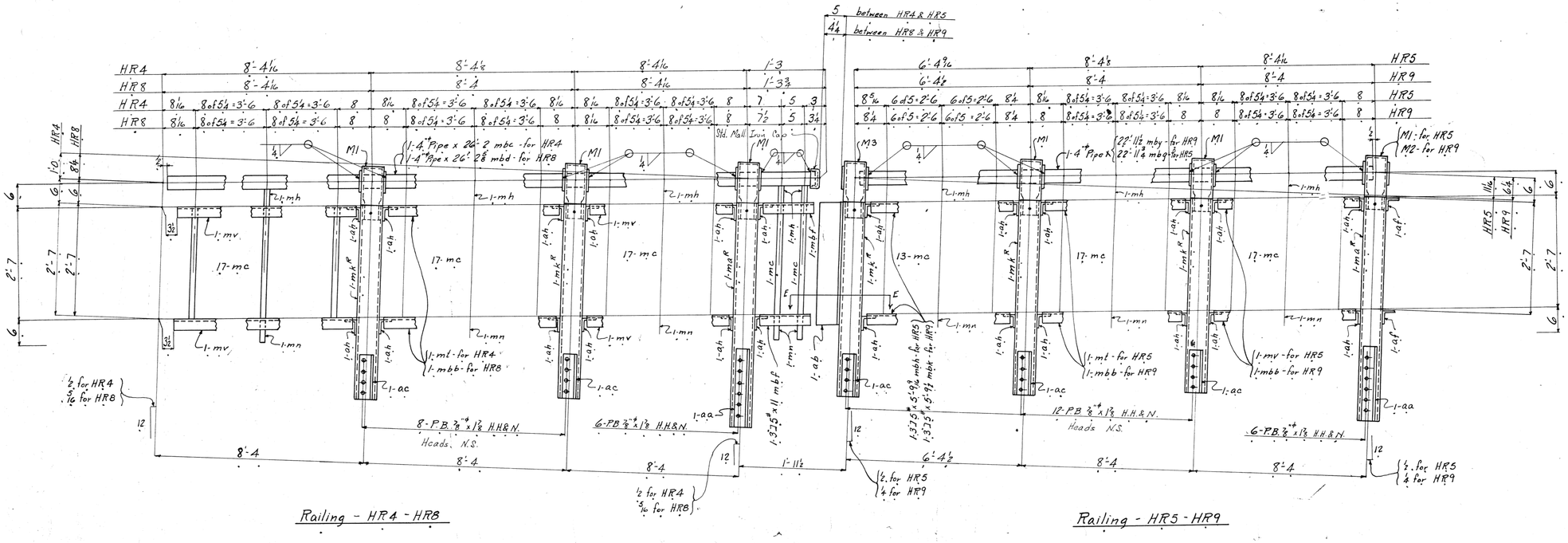
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb PLANT
WORK FABRICATED AT Amb PLANT
IN CHARGE OF Loughman #2
DRAW. MADE BY AAZ DATE 6-16-39
DRAW. CHECKED BY DAV DATE 6-26-39
ORDER No. H-2527 H-2528
SHEET No. 1

3

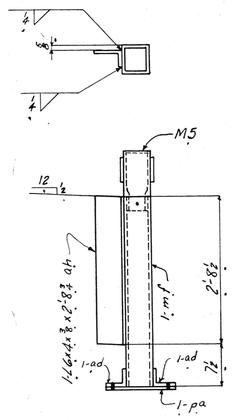
Rev. 9-15-39
Rev. 7-20-39


Typical detail for connection of 3" channel to rail post
Detail of connection for post cap castings M1-M2-M3-M4 & M5, detailed on sheet F1, to rail posts.
Sec. B
Sec. E (Left)
Sec. C
Typical for all bases
South Abt.
Masonry Plan showing Handrail Post Anchorages
North Abt.
Sec. A
Railing - HR1
Railing - HR2R
Railing - HR3R-HR6R-HR7R-HR10R-HR11R-HR12R-HR13
Sec. D
Sec. F
Detail of connection for all 1¼" Spindles
Hex. Hd. & Nut
M6 - 832 Required
(702 - Shop Bolts
140 - Field Bolts)
½" Tap Bolt - Csk. Slotted Head - M7
422 Required
Note:-
All material to be bonderized except mall. iron railing caps. M1 to M5
MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
Bolts: ⅞" unless noted
OPEN HOLES: 15/16" unless noted
PAINT: Yes.
CONTACT SURFACES: Yes.
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY A.R.Z. DATE 6-3-39
DRAW. CHECKED BY DATE 6-22-39
Revised - 7-17-39
ORDER No. H2526
SHEET No. 1-AB
REQ. 19284



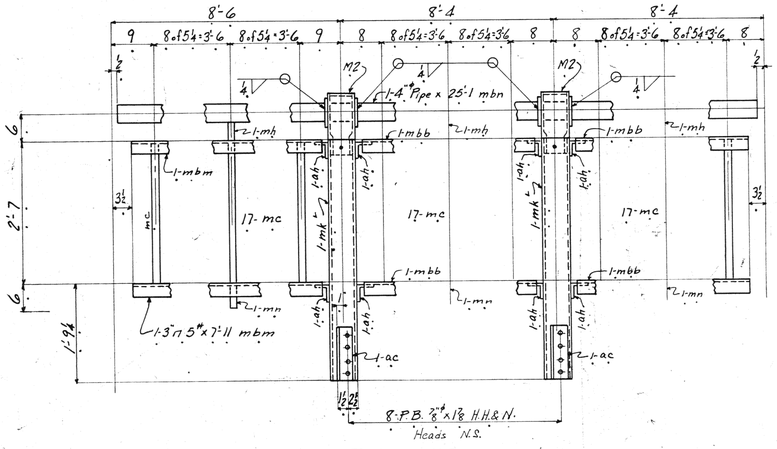
Railing - HR4 - HR8

Railing - HR5 - HR9

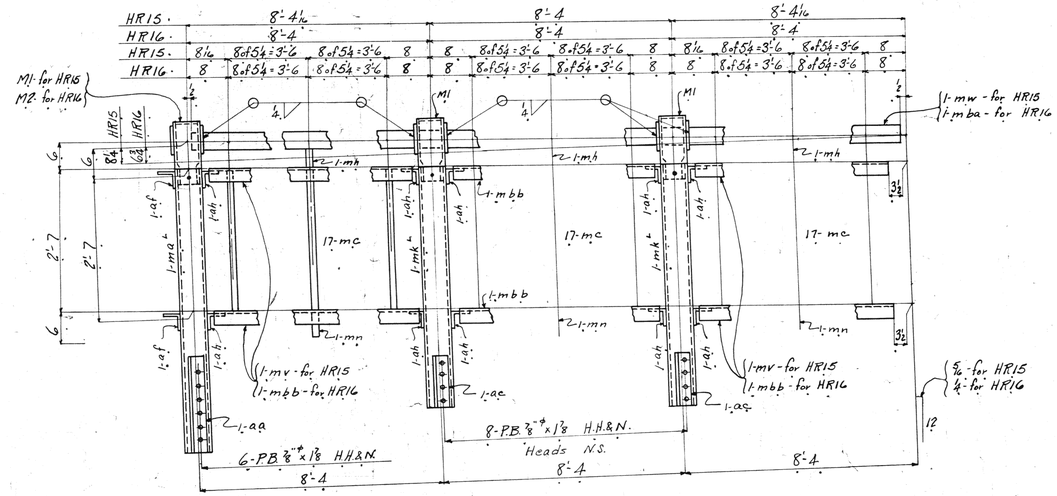


Rail Post - RP1

Dr. 1	2.	3.	4.	5.	6.	7.	REQUIRED		
Span 6	5	4	1	2	3	4	Total No.	Description	Mark.
			1.				1.	Hand Rail	HR1.
			1.				1.	do.	HR2R
1.							1.	do.	HR2L
			10.	5.	14.		29.	do.	HR3R
5.	14.						19.	do.	HR3L
			1.				1.	do.	HR4.
				1.			1.	do.	HR5.
					1.		1.	do.	HR6R
	1.						1.	do.	HR6L
					1.		1.	do.	HR7R
	1.						1.	do.	HR7L
					1.		1.	do.	HR8.
						1.	1.	do.	HR9.
						1.	1.	do.	HR10R
		1.					1.	do.	HR10L
						1.	1.	do.	HR11R
		1.					1.	do.	HR11L
						1.	1.	do.	HR12R
		1.					1.	do.	HR12L
						1.	1.	do.	HR13.
		1.					1.	do.	HR14.
	1.						1.	do.	HR15.
		1.					1.	do.	HR16.
1.							1.	Rail Post	RP1.



Railing - HR14

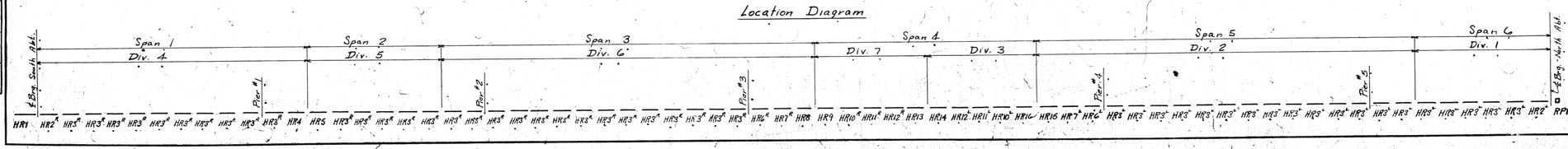


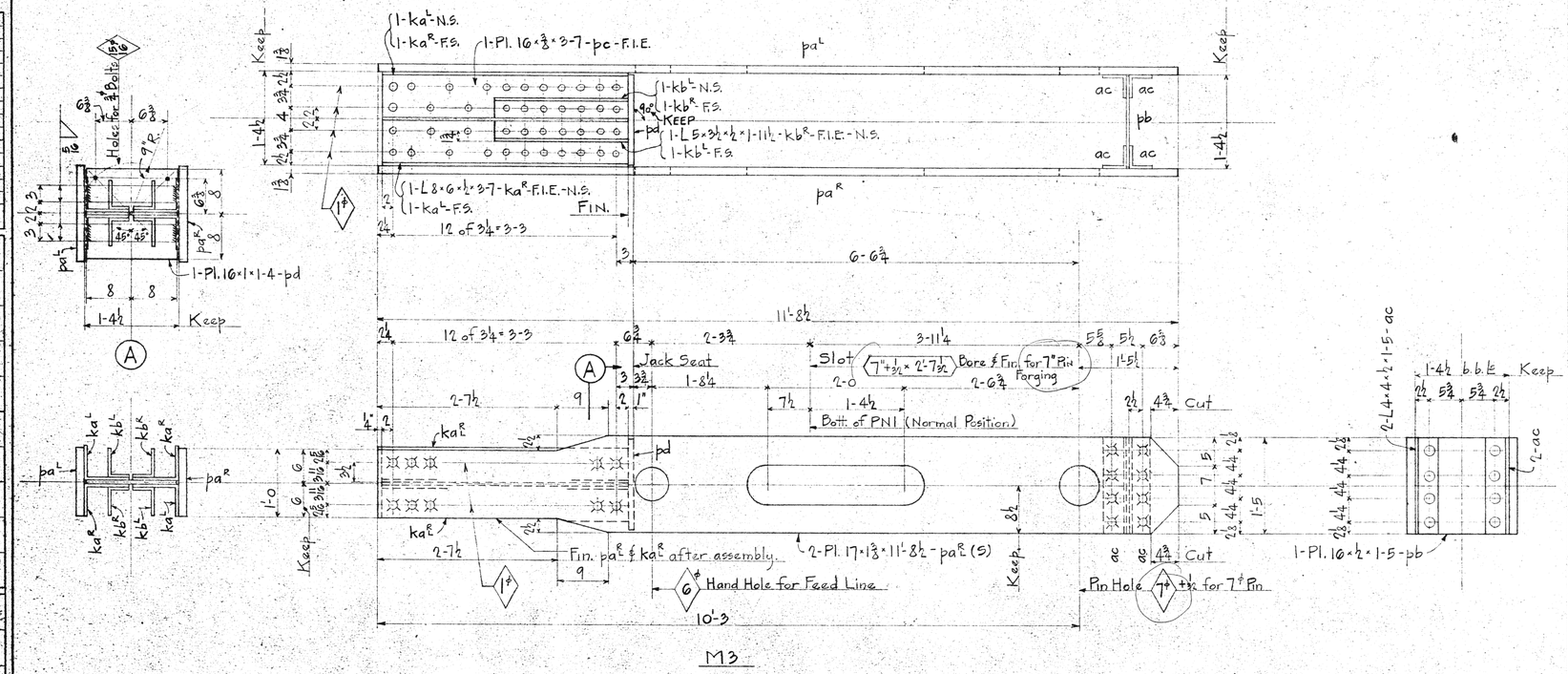
Railing - HR15 - HR16

REQ. 19284

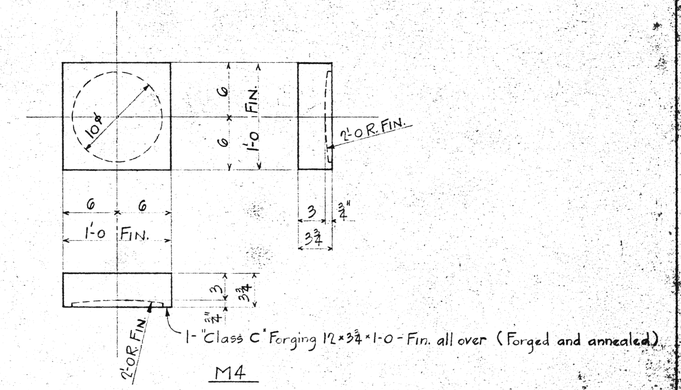
Note:-
All material to be bonderized except mall. iron railing caps M1 to M5

Location Diagram

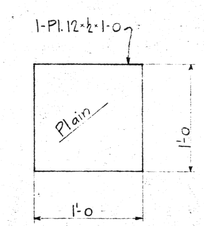

Span 1
Div. 4
Span 2
Div. 5
Span 3
Div. 6
Span 4
Div. 7
Div. 3
Span 5
Div. 2
Span 6
Div. 1
Pier #1
Pier #2
Pier #3
Pier #4
Pier #5
HR1 HR2R HR2L HR3R HR3R HR3R HR3R HR3R HR3R HR3R HR3R HR4 HR5 HR6R HR6R HR6R



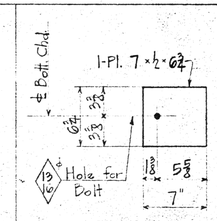
M3



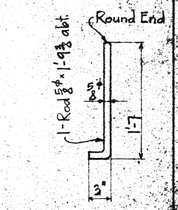
M4



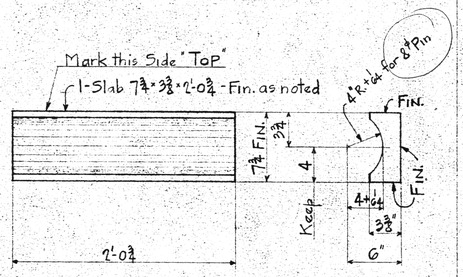
Shims M5 (U16-17)



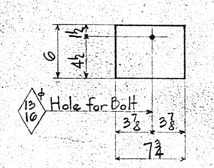
Shims M6 (U16-17)



M7

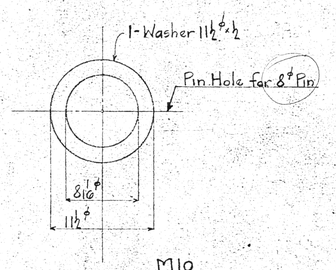


M8



1-Shim 6×½×7¾-M9
1- " 6×¼×7¾-M11
1- " 6×⅛×7¾-M12
1- " 6×1/16×7¾-M13

(L0-2)(L8-10)



M10

SPAN	4		5	REQUIRED		
DIV.	7	3	2	Total	Description	Mark
			2	2	Erection Link	M3
			2	2	Jack Cap	M4
			44	44	Shim	M5
			96	96	"	M6
			4	4	Bolt	M7
	2	2		4	Jacking Slab	M8
	80	80		160	Shim	M9
	4	4		8	Washer	M10
	4	4		8	Shim	M11
	4	4		8	"	M12
	4	4		8	"	M13

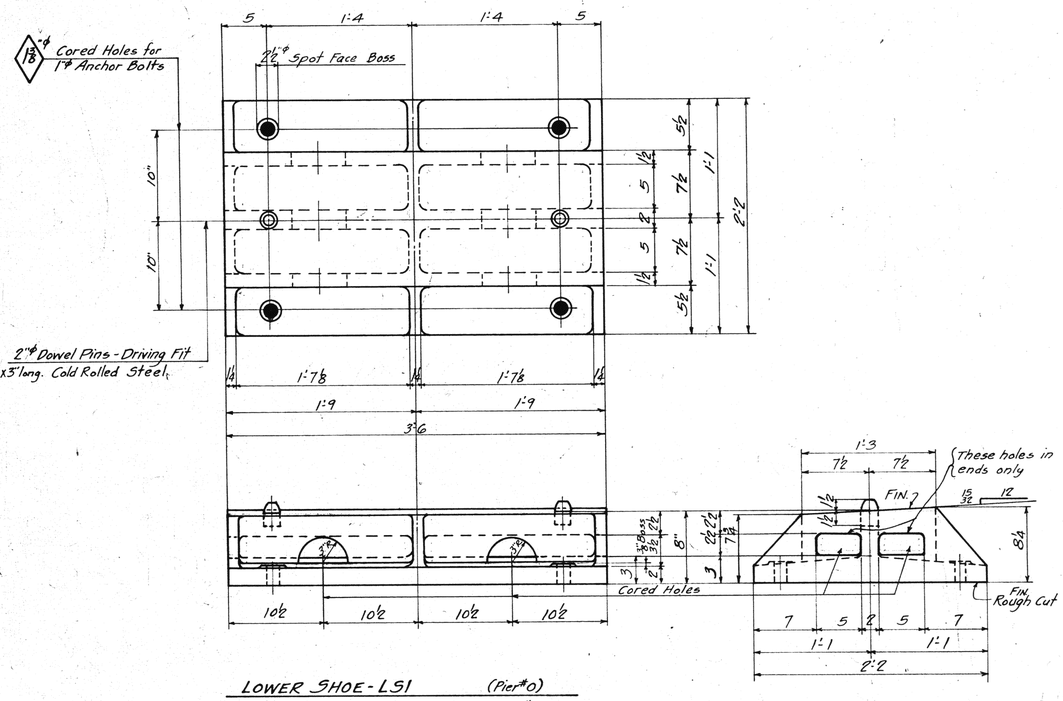
Note to Shop:-
All shims to be flat. All sharp edges of shims are to be removed.
Pieces M3 to M7 incl. are to be shop assembled with Top Chd. Sections U16-17, 5W & 5E det. on Sh. 253, H2524. See Sh. E2 for assembly.

Mat'l.: O.H. Steel A.S.T.M. A7-36
Rivets: ⅞" Unless Noted
Open Holes: As Noted
Holes in material more than ⅞" thick shall be drilled.

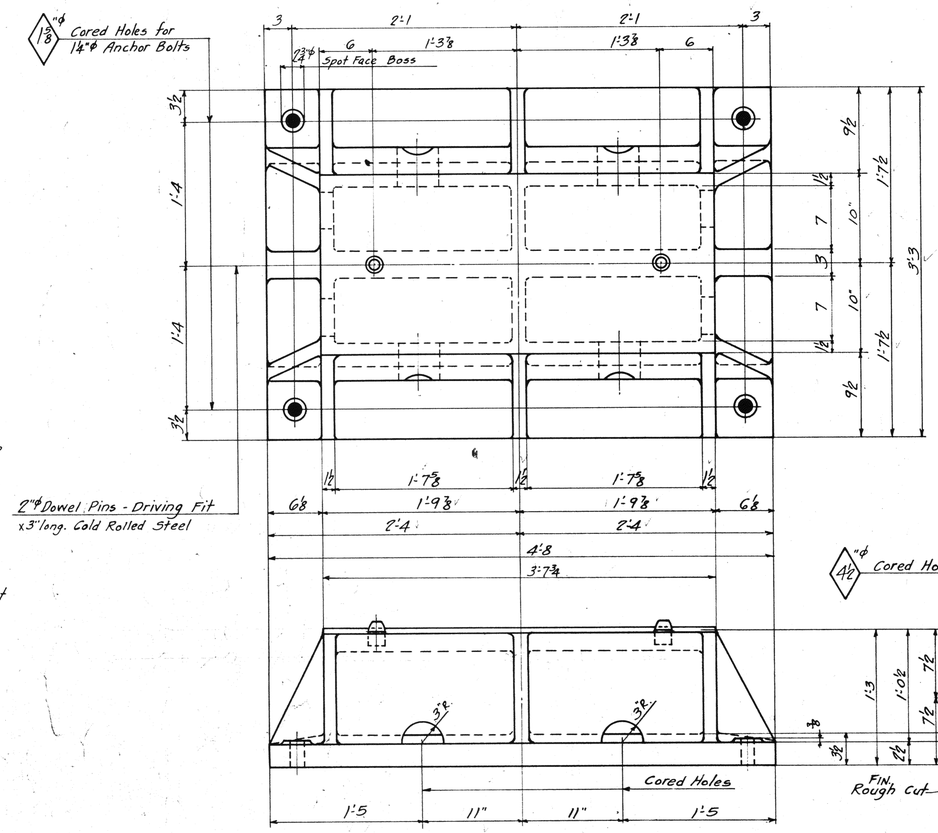
PAINT: No
CONTACT SURFACES: No
Adv. Bills-Eq. 1 2

LORAIN COUNTY, OHIO
EAST 21st STREET BRIDGE
LORAIN, OHIO

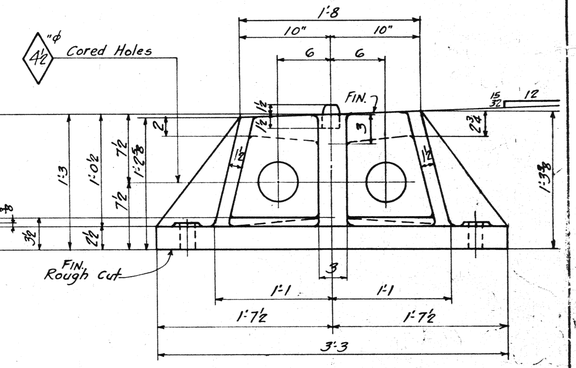
AMERICAN BRIDGE COMPANY
DRAWING MADE AT: Ambridge
WORK FABRICATED AT: Ambridge
IN CHARGE OF: Loughran
DRAW. MADE BY: N.G.R.
DRAW. CHECKED BY: OGR
ORDER NO. H2525

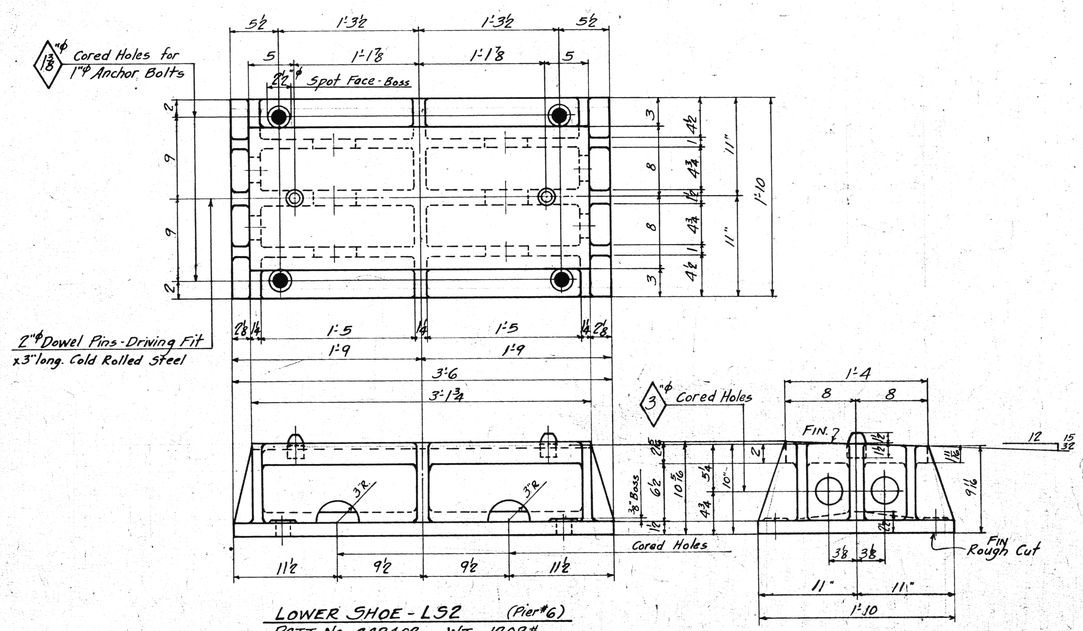


LOWER SHOE - LS1 (Pier #0)
PATT. No. AA9401Δ WT. = 1620#

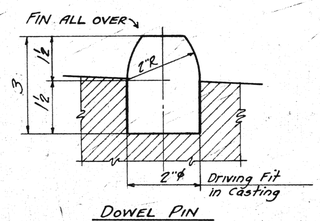


LOWER SHOE - LS3 (Piers 2 & 5)
PATT. No. AA9403Δ WT. = 3848#





LOWER SHOE - LS2 (Pier #6)
PATT. No. AA9402 WT. = 1209#



DOWEL PIN
(Enlarged Detail)

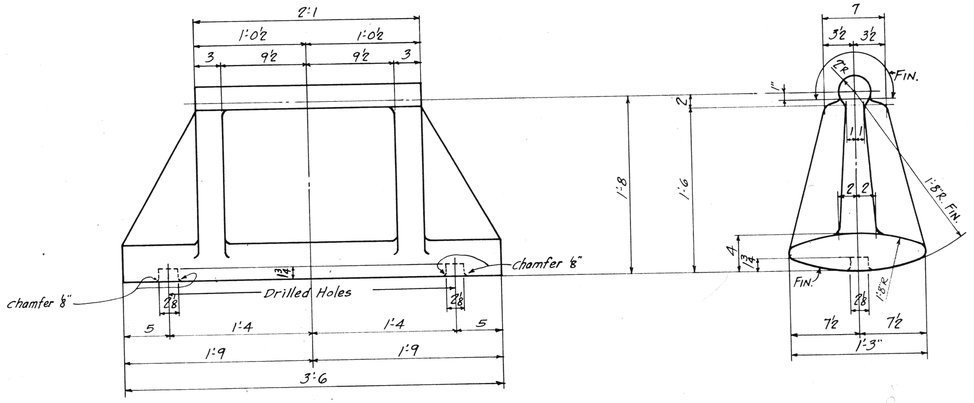
Req # C.S. 5418

DIV. 6 SPAN #3	DIV. 4 #1	DIV. 2 #5	DIV. 1 #6	Total No.	REQUIRED DESCRIPTION	MARK
	2			2	Lower Shoe	LS1
			2	2	" "	LS2
2		2		4	" "	LS3

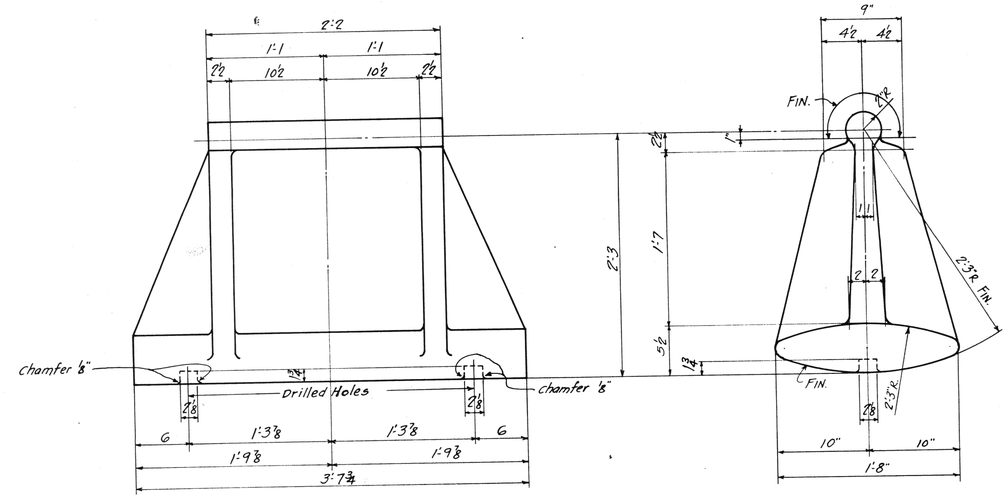
MATERIAL: Cast Steel Annealed ASTM A27-24, Class B, Medium
SPECIFICATIONS: Ohio State Highway
INSPECTION: James H. Herron Co.
All Fillets - 1" Radius
PAINT: Yes
FINISHED SURFACES: One Coat of White Lead & Tallow

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

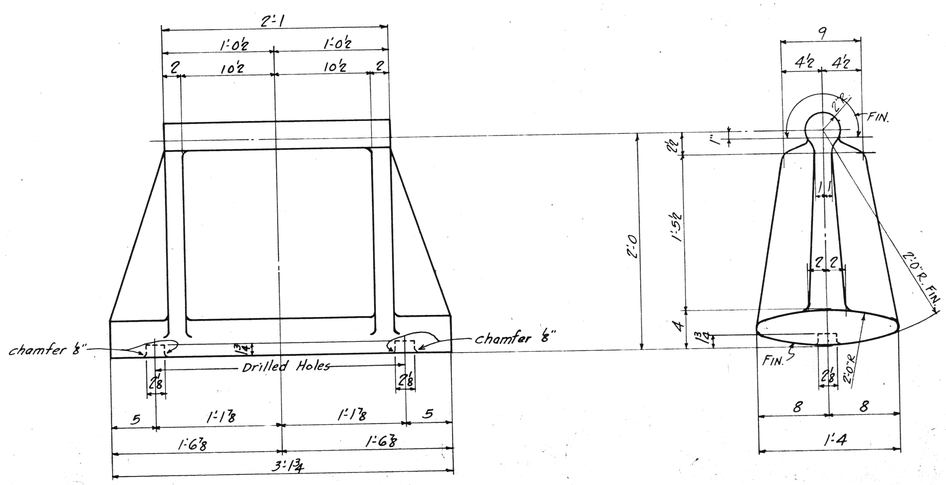
D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLAN
WORK FABRICATED AT Ambridge PLA
IN CHARGE OF Loughman I.D.R. #2
DRAW. MADE BY ALH DATE 5-15
DRAW. CHECKED BY DATE
ORDER No. H2524
SHEET No 101



ROCKER SHOE - RS1 (Pier #0)
PATT. No. AA9404 Δ WT. = 1245#



ROCKER SHOE - RS3 (Piers 2 & 5)
PATT. No. AA9406 Δ WT. = 2200#



ROCKER SHOE - RS2 (Pier #6)
PATT. No. AA9405 Δ WT. = 1410#

Req. # C.S. 5418

Div. G	Div. 4	Div. 2	Div. 1	REQUIRED		
SPAN # 9	#1	#5	#6	TOTAL No.	DESCRIPTION	MARK
	2			2	Rocker Shoe	RS1
			2	2	" "	RS2
2		2		4	" "	RS3

MATERIAL: Cast Steel Annealed A.S.T.M. - A27-24, class-B, Medium
SPECIFICATIONS: Ohio State Highway
INSPECTION: James H. Herron Co.
All Fillets = 1" Radius
PAINT: yes
FINISHED SURFACES: one coat of White Lead & Tallow.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.F. #2
DRAW. MADE BY ALH DATE 5-15
DRAW. CHECKED BY DATE
ORDER No. H2524
SHEET NO. 102

BOLTS							
Dia.	Grip	Head	Nut	No. Req'd			

BOLTS					
Dia.	Grip	Head	1-Nut	No. Req'd	

RIVETS		
Dia.	Grip	

RIVETS		
Dia.	Grip	

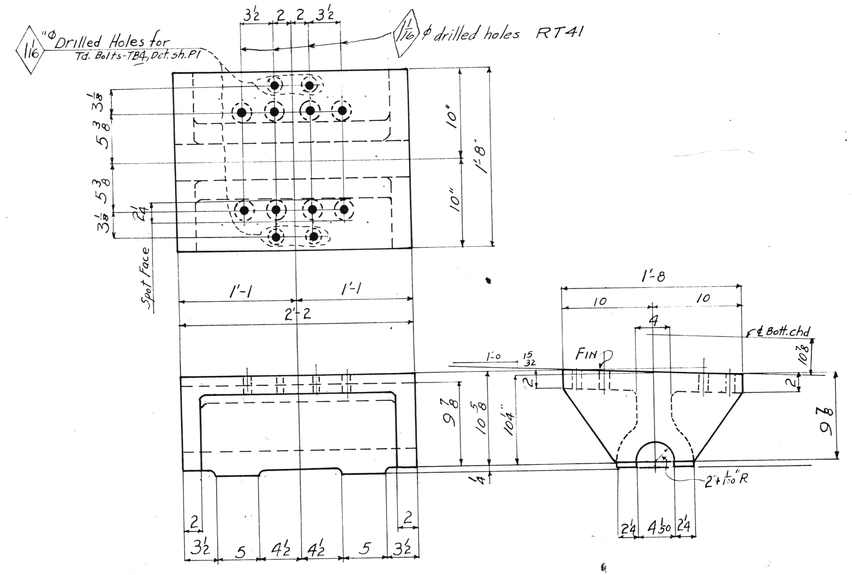
RIVETS		
Dia.	Grip	

RIVETS		
Dia.	Grip	

RIVETS		
Dia.	Grip	

RIVETS		
Dia.	Grip	

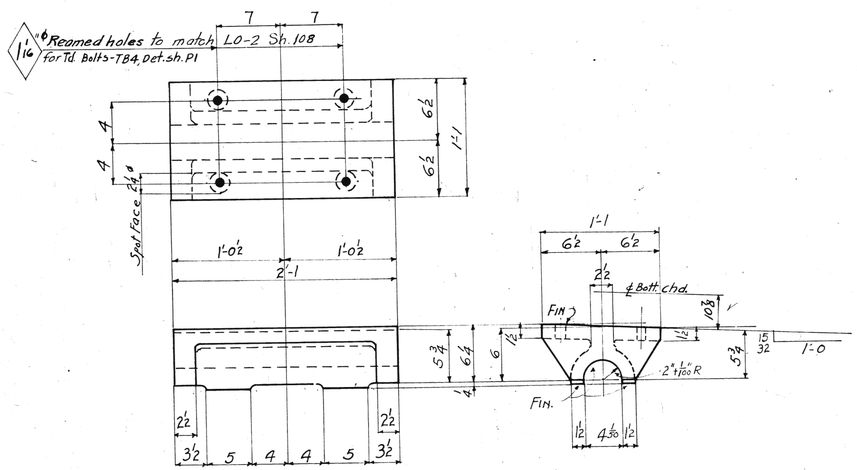
RIVETS		
Dia.	Grip	



UPPER SHOE - US2 Pier No. 2&5

PATT No. AA9416△ WT. = 728#

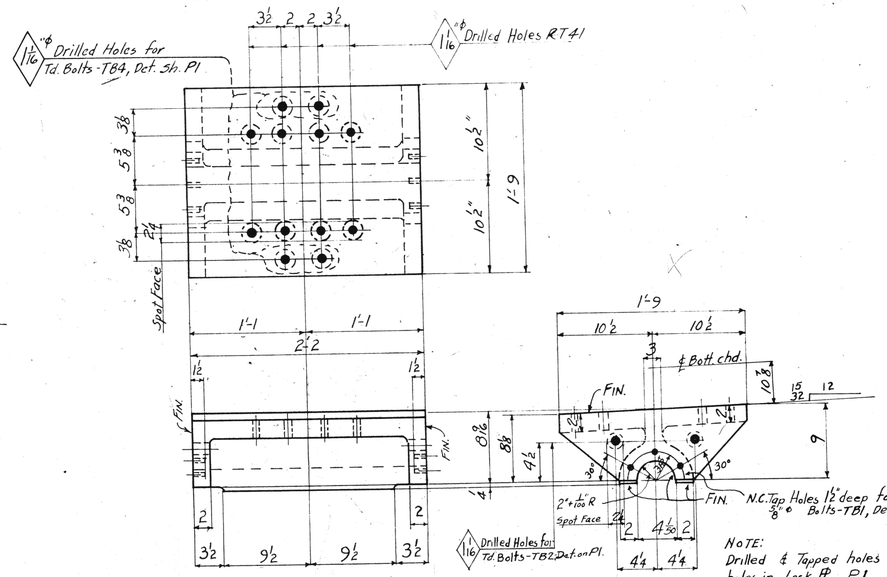
Note B { Shop assemble and ship bolted with 4 Turned Bolts, TB4 (Det on sh P1) (Tack weld "Shop and Field" nuts to castings), two castings US2 in Div 2 on L1-3, 5E and L1-3, 5W (Det. on sh 203)
(Two Castings US2 in Div 6 for L1-3, 3E and L1-3, 3W (Det on sh 203) shipped loose.



UPPER SHOE - US1 (Pier No. 0&6

PATT. No. AA9415△ WT. = 313#

Note A { Shop assemble and ship bolted (Tack weld nuts to castings) to L0-L2, 1-E and L0-L2, 1-W, Det. sh. 403 and L0-L2, 6-E & L0-L2, 6W, Det. sh. 108



NOTE:
Drilled & Tapped holes to match, holes in Lock Pt. P1 Det sh P1 P1, TB1, TB2, Det. sh. P1, shop assembled with US3

UPPER SHOE - US3 (Pier #1)

PATT. No. AA9417△ WT. 643#

Note C { Shop Assemble and Ship bolted (Tack weld nuts to castings) to L9-L11, 1-E & L9-L11, 1-W Det. sh. 408

Req CS 5420

Div. 4	5	6		2	1	REQUIRED		
Span 1	2	3		5	6	TOTAL NO.	DESCRIPTION	MARK
2					2	4	Upper Shoe	US1
		2		2		4	" "	US2
2						2	" "	US3

See Note "A" for shipping
" " "B" " "
" " "C" " "

MATERIAL: Cast Steel Annealed A.S.T.M., A27-24, class B, Medium
SPECIFICATIONS: Ohio State Highway

INSPECTION: James H. Herron Co.

All Fillets = ¼" Radius
PAINT: Yes
FINISHED SURFACES: One coat of white Lead & tallow

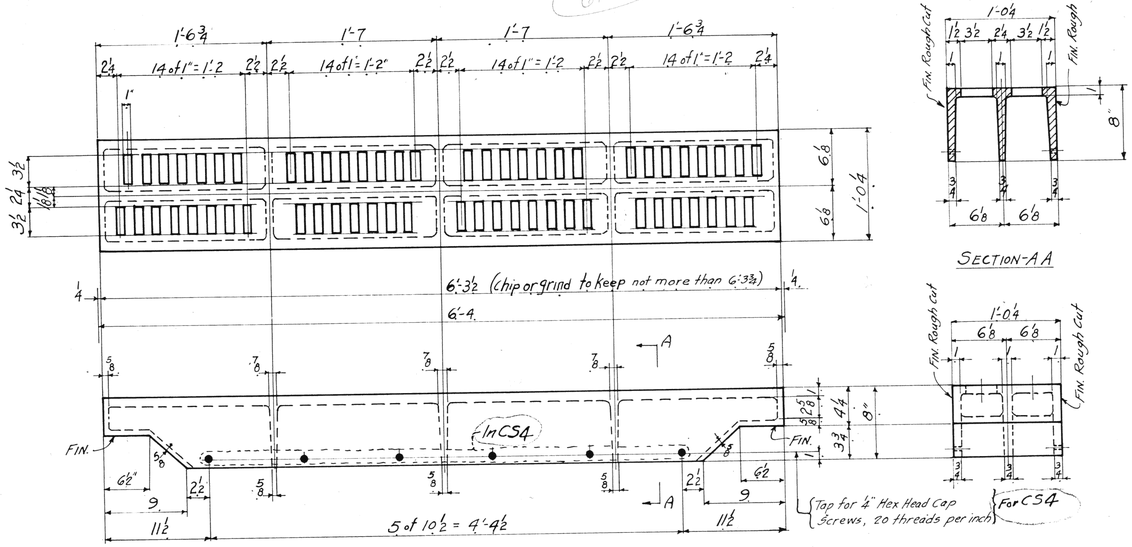
Lorain County, Ohio.
EAST 21st STREET BRIDGE
Lorain, Ohio

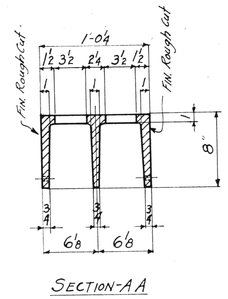
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY ALH (BAC) DATE 5-23-3
DRAW. CHECKED BY ERM DATE 5-31
ORDER No. H2524 SHEET NO. 103

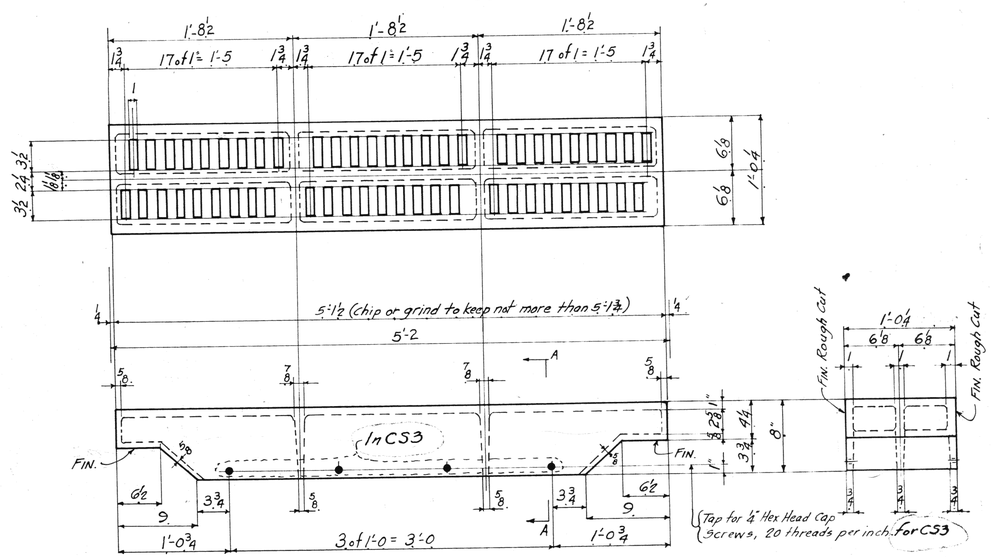
Rev 7-12-39 Rev 8-1-39 1





SECTION-AA

DRAIN CASTING - CS1
DRAIN CASTING - CS4
PATT. No. AA94094 WT. = 700#



DRAIN CASTING - CS2
DRAIN CASTING - CS3
PATT. No. AA94104 WT. = 555#

Req.# C.S.5418

DIV. 7	-6	-5	-4	-3	-2	-1	REQUIRED		
SPAN 4	-3	-2	-1	-4	-5	-6	TOTAL No.	DESCRIPTION	MARK
	15	5	10		15	5	50	Drain Castings	CS1
	6	2	4		6	2	20	" "	CS2
2				4			6		CS3
5				10			15		CS4

MATERIAL: Cast Steel Annealed
A.S.T.M. A27-24, Class B, Medium.
SPECIFICATIONS: Ohio State Highway

INSPECTION: James H. Herron Co.

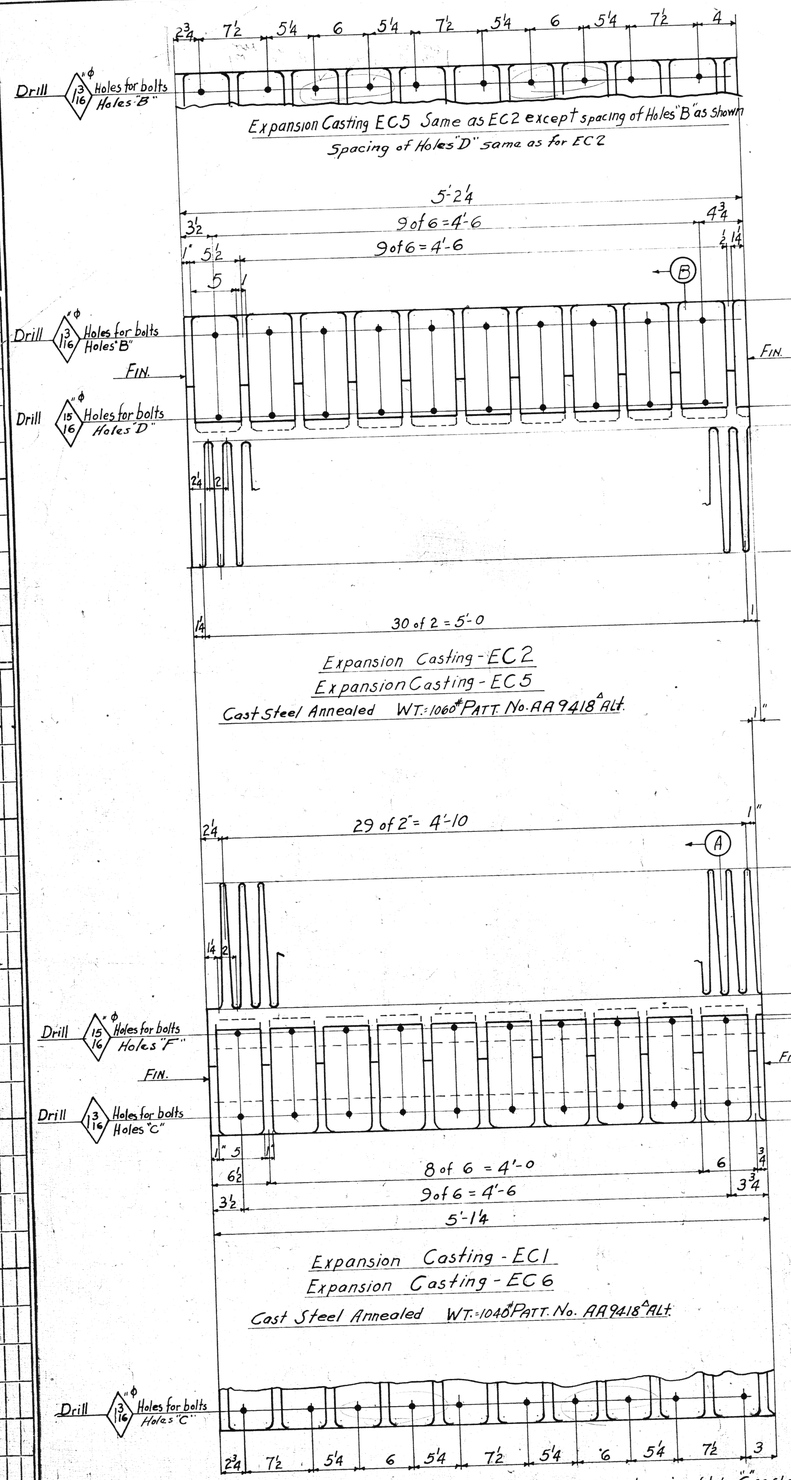
All Fillets = ½" Radius
PAINT: yes
FIN. SURFACES: One coat of white Lead & Tallow

Rev. 7-25-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DRE
DRAW. MADE BY ALH (AAS) DATE 5-22-39
DRAW. CHECKED BY DGR DATE 5-24-39
ORDER No. H2524
SHEET No. 154

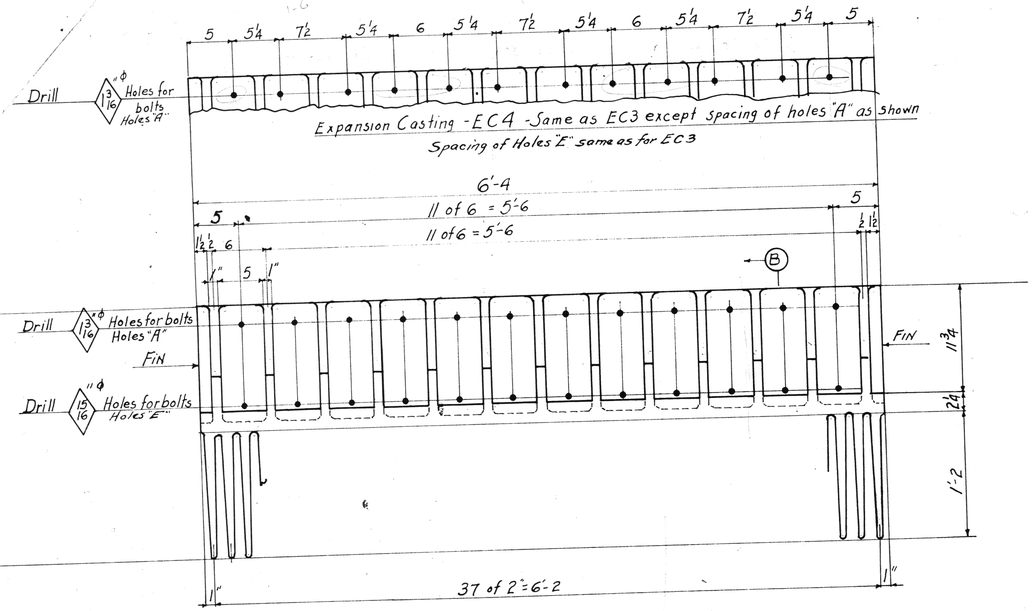


Expansion Casting EC5 Same as EC2 except spacing of Holes "B" as shown
Spacing of Holes "D" same as for EC2

Expansion Casting - EC2
Expansion Casting - EC5
Cast Steel Annealed WT.: 1060# PATT. No. AA 9418 Alt.

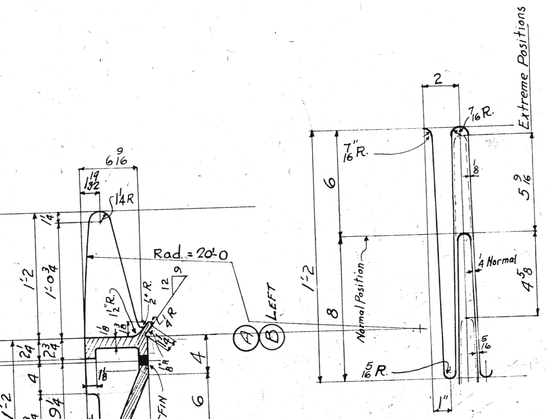
Expansion Casting - EC1
Expansion Casting - EC6
Cast Steel Annealed WT.: 1040# PATT. No. AA 9418 Alt.

Expansion Casting - EC6 - Same as EC1 except spacing of holes "C" as shown
Spacing of Holes "F" same as for EC1



Expansion Casting - EC4 - Same as EC3 except spacing of holes "A" as shown
Spacing of Holes "E" same as for EC3

Expansion Casting - EC3
Expansion Casting - EC4
Cast Steel Annealed - WT. 1295# PATT. No. AA 9418 Δ



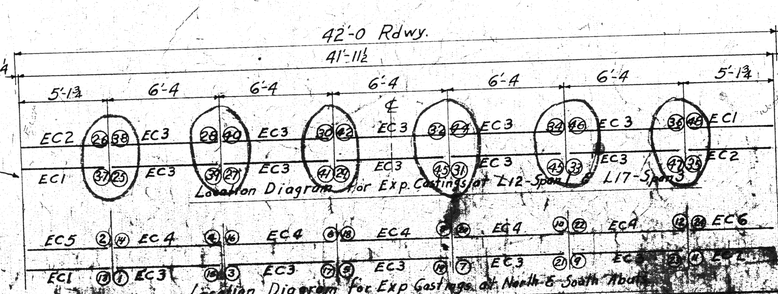
Enlarged Detail of Casting Finger

All fillets not given are ¾" Rad.
All Castings must be Straight and true to insure accurate matching of teeth.
Spot face, 2¼" ϕ around all holes for 1⅛" ϕ bolts.

East Side at Rdwy. for South Abut. & Rdwy Exp. Joints
West Side for North Abut.

East Side for North Abut.
West Side for South Abut. & Rdwy Exp. Joints

Numbers marked ① to ⑫ are match marks for Castings at North Abutment.
Numbers ⑬ to ㉒ are for South Abutment.
Numbers ㉓ to ㉜ are match marks for Castings Span #1
Numbers ㉝ to ㊻ are match marks for Castings Span #3



Location Diagram for Exp. Castings for L12-Span & L17-Span

Location Diagram for Exp Castings at North & South Abut.

Reg. No. CS5425

Div. 6	4	1	REQUIRED		
Span 3	1	6	Total No.	Description	Mark
2	3	1	6	Exp. Castings	EC1
2	3	1	6	"	EC2
10	15	5	30	"	EC3
	5	5	10	"	EC4
	1	1	2	"	EC5
	1	1	2	"	EC6

Material: Cast Steel Annealed
A.S.T.M. A27-24, Class B, Medium
Specifications: Ohio State Highway
Inspection: James H. Herron Co.

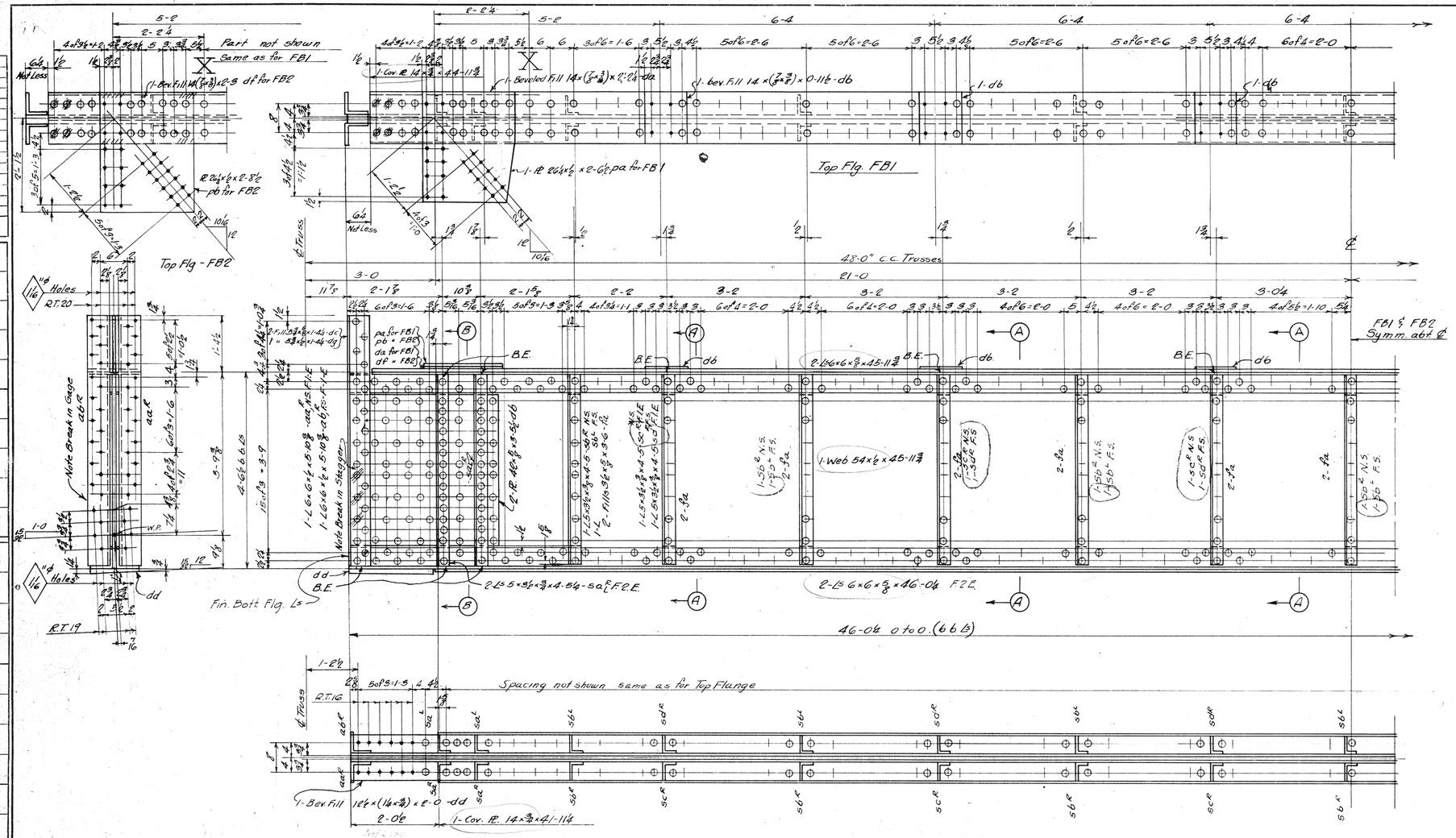
PAINT: Yes
EXPOSED SURFACES: One Coat white lead & tallow

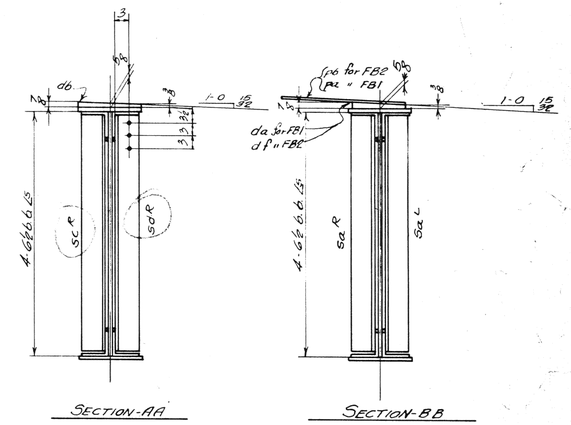
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT
WORK FABRICATED AT Amb. PLANT
IN CHARGE OF Leughman - DR #2
DRAW. MADE BY E.R.M. (B.&C.) DATE 4-28-39
DRAW. CHECKED BY F.E.S. DATE 4-6-39
ORDER No. H2524
SHEET No. 105





LIFTING WT. = 8 TONS

Div 4	Div 1	REQUIRED		
SPAN	SPANG	Total No.	DESCRIPTION	MARK
	1	1	End Floor Beam	FB1
1		1	" " "	FB2

MATERIAL: O.H. Steel A.S.T.M. A7-23
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" Unless noted; Open Holes 1/16" Unless Noted
REAMING: All holes in material 7/8 thick or less subpunched 1/16 and reamed to size. Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

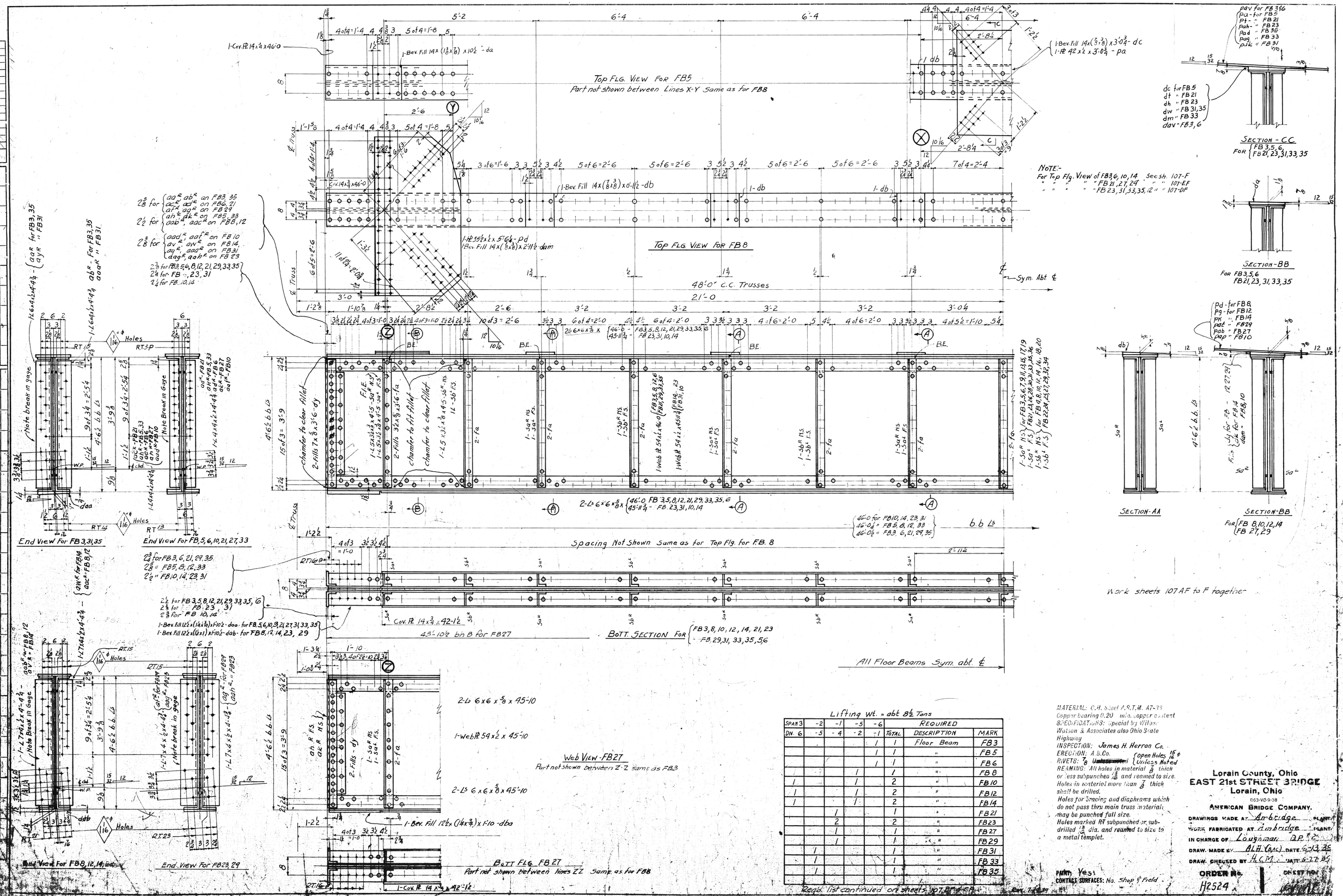
PAINT: yes
CONTACT SURFACES: No; Shop & Field

Rev. 7-26-39
Rev. 7-18-39
Rev. 7-12-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman DR. Hp
DRAW. MADE BY AL. HERR DATE 5-15-39
DRAW. CHECKED BY HCM DATE 6-26-39

ORDER No. H2524
SHEET NO. 106



Lifting Wt. = abt 8½ Tons							
SPAN 3	-2	-1	-5	-6	REQUIRED		
DN. 6	-5	-4	-2	-1	TOTAL	DESCRIPTION	MARK
				1	1	Floor Beam	FB3
				1	1	"	FB5
				1	1	"	FB6
			1		1	"	FB8
1			1		2	"	FB10
1			1		2	"	FB12
1			1		2	"	FB14
		1			1	"	FB21
		2			2	"	FB23
		1			1	"	FB27
		1			1	"	FB29
	1				1	"	FB31
	1				1	"	FB33
	1				1	"	FB35

Regd. list continued on sheets 107 BF & CF

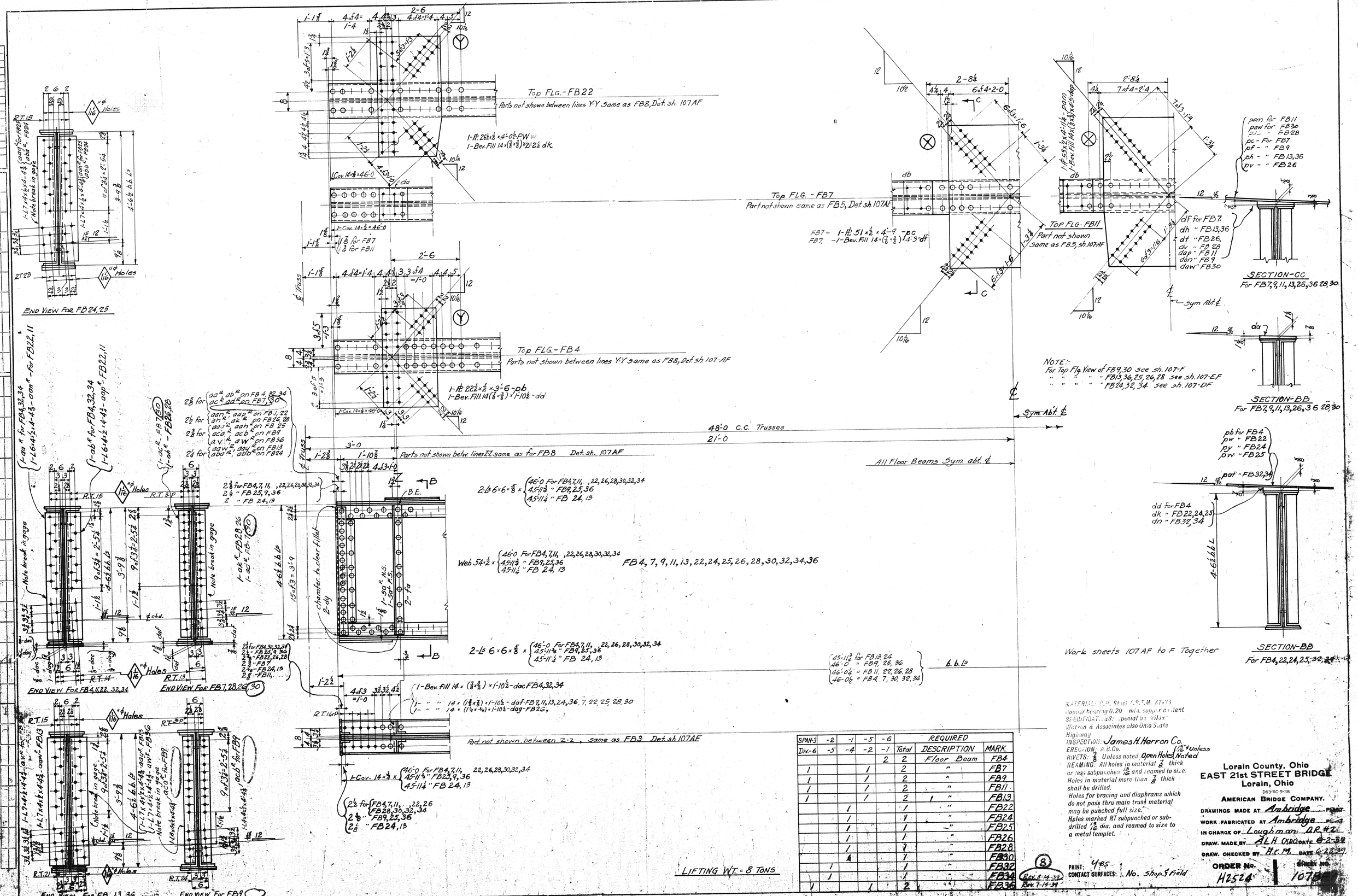
MATERIAL: C.H. Steel A.S.T.M. A7-38
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilson Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 ~~Unless noted~~ (open Holes 15/16 ϕ Unless Noted)
REAMING: All holes in material 3/8 thick or less subpunched 1/16 and reamed to size. Holes in material more than 3/8 thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 3/8 dia. and reamed to size to a metal templet.

PAINT: Yes!
CONTACT SURFACES: No. Shop & Field

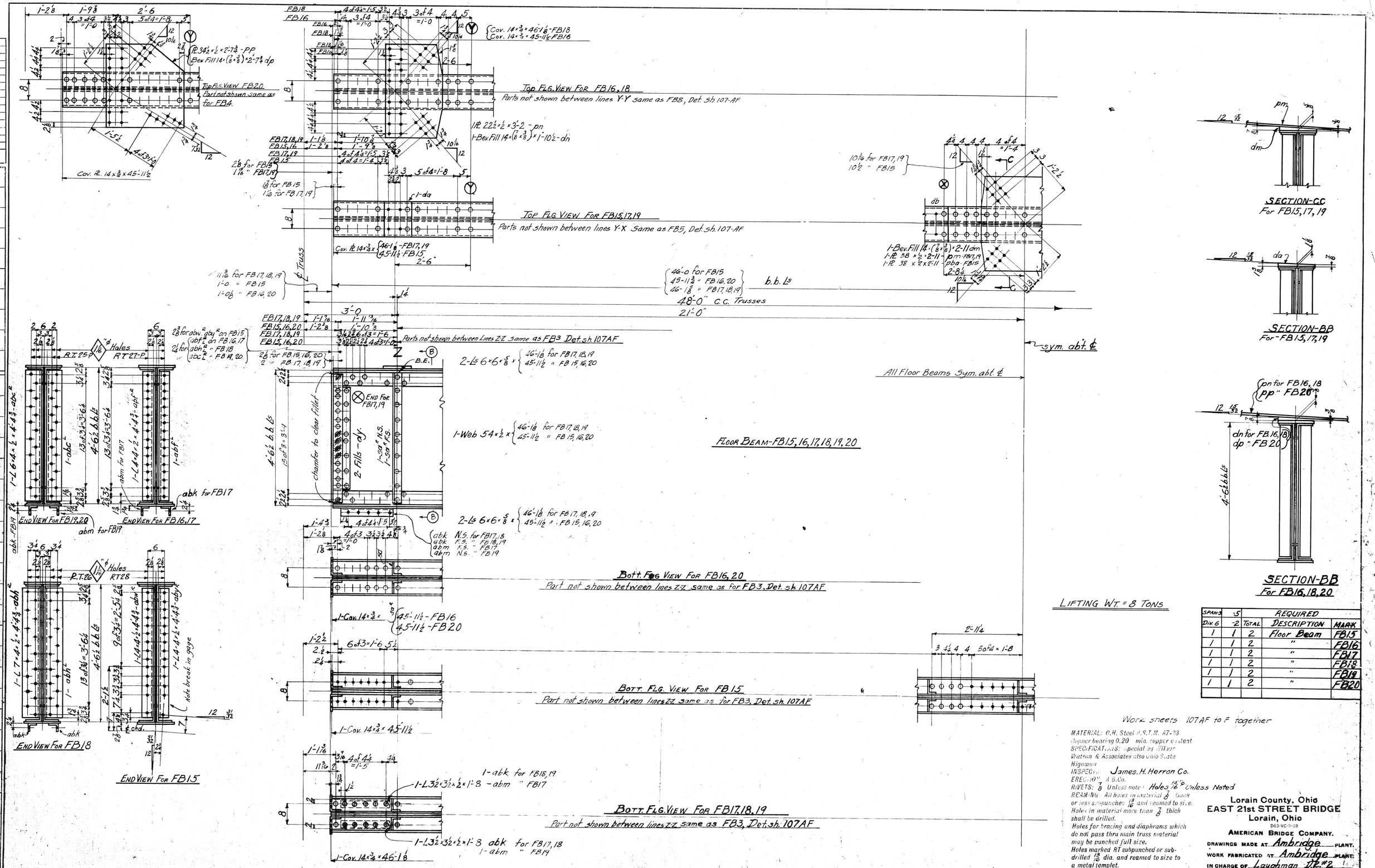
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VO-9-38
AMERICAN BRIDGE COMPANY.

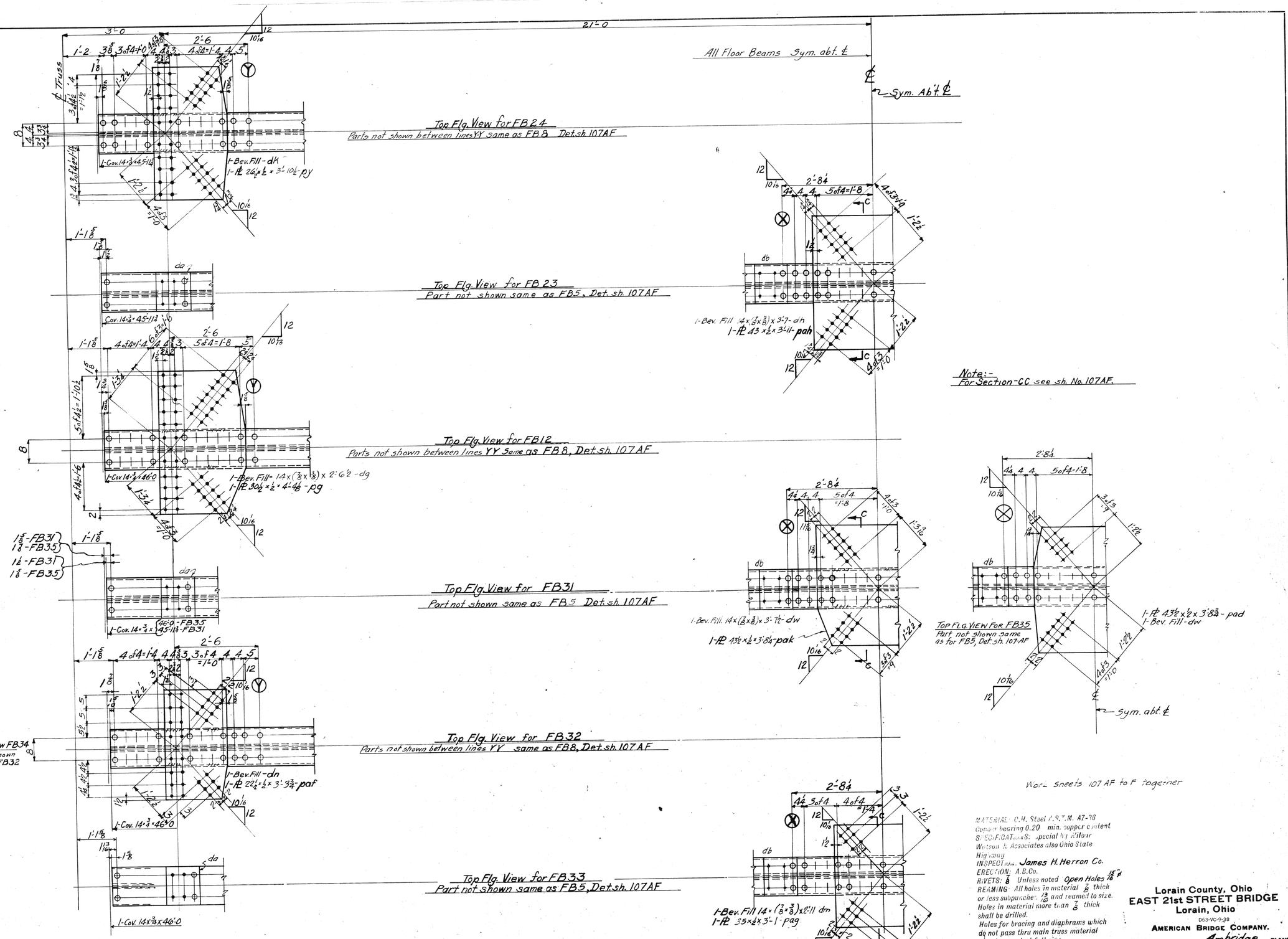
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY ALH (CAS) DATE 4-13-38
DRAW. CHECKED BY HCM DATE 6-27-38

ORDER No. H2524
SHEET No. 15



SPAN-3	-2	-1	-5	-6	REQUIRED		
Div-6	-5	-4	-2	-1	Total	DESCRIPTION	MARK
				2	2	Floor Beam	FB4
1			1		2	"	FB7
1			1		2	"	FB9
1			1		2	"	FB11
1			1		2	"	FB13
		1			1	"	FB22
		1			1	"	FB24
		1			1	"	FB25
		1			1	"	FB26
		1			1	"	FB28
		1			1	"	FB30
	1				1	"	FB32
	1				1	"	FB34
1			1		2	"	FB36


Top Flg. View FB20
Part not shown same as for FB4.
Top Flg. View For FB16, 18
Parts not shown between lines Y-Y same as FB8, Det. sh. 107-AF
Top Flg. View For FB15, 17, 19
Parts not shown between lines Y-X same as FB5, Det. sh. 107-AF
48'-0" C.C. Trusses
21'-0"
sym. abt. ℄
All Floor Beams Sym. abt. ℄
Parts not shown between lines Z-Z same as FB3 Det. sh. 107AF
End For FB17, 19
End View For FB19, 20
End View For FB16, 17
End View For FB18
End View For FB15
Floor Beam-FB15, 16, 17, 18, 19, 20
Bott. Flg. View For FB16, 20
Part not shown between lines Z-Z same as for FB3, Det. sh. 107AF
Bott. Flg. View For FB15
Part not shown between lines Z-Z same as for FB3, Det. sh. 107AF
Bott. Flg. View For FB17, 18, 19
Part not shown between lines Z-Z same as FB3, Det. sh. 107AF
Section-CC For FB15, 17, 19
Section-BB For FB15, 17, 19
Section-BB For FB16, 18, 20
Lifting Wt. = 8 Tons
Work sheets 107AF to F together
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
American Bridge Company.
Drawings made at Ambridge plant.
Work fabricated at Ambridge plant.
In charge of Laughman Dr. #2
Draw. made by A.L.H. (K.D.C.) Date 6-1-39
Draw. checked by H.C.M. Date 6-28-39
Order No. H2524
Sheet No. 107CF
Paint: Yes
Contact surfaces: No, Shop & Field
Rev. 7-26-39
Rev. 7-16-39



Note:-
For Section-CC see sh. No. 107AF.

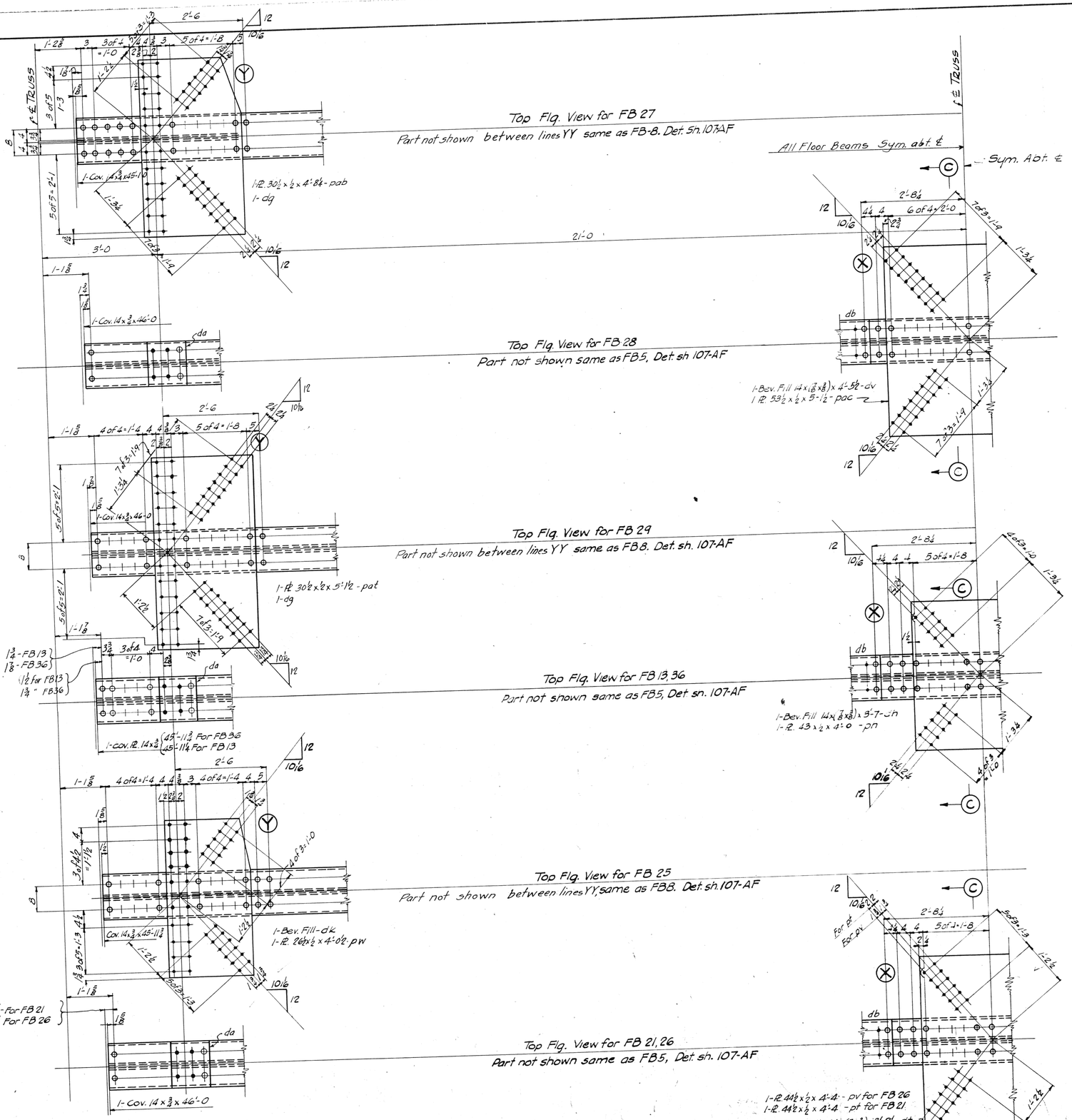
MATERIAL: C.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by d'Hour Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ Unless noted Open Holes 15/16"ø
REAMING: All holes in material ⅜ thick or less subpunched 13/16 and reamed to size. Holes in material more than ⅜ thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No. shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman DR #2
DRAW. MADE BY ALH (KOC) DATE 6-20-39
DRAW. CHECKED BY HCM DATE 6-28-39

ORDER No. H2524
SHEET NO. 107 DF



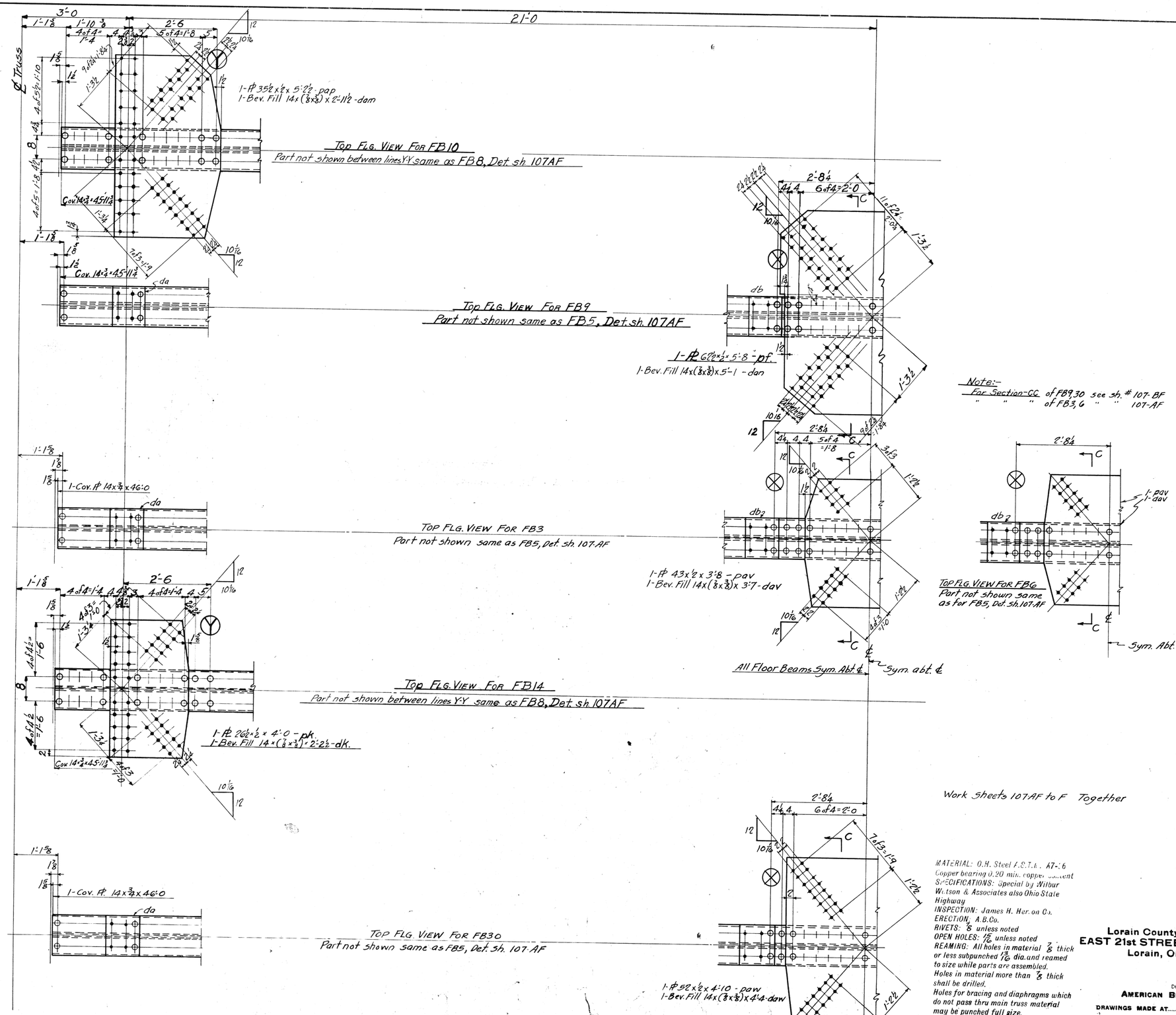
Note:
For section C-C for FB 21, 27, 29 - See Sh. No. 107-AF
For section C-C for FB 13, 25, 26, 28, 36 - See Sh. No. 107-BF

MATERIAL: P.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Hilbor Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron, Co.
ERECTION: A.B.Co.
RIVETS: ⅞ Unless noted. Open Holes 15/16
REAMING: All holes in material ⅞ thick or less subpunched 15/16 and reamed to size. Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 15/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY A.L.H.-J.R. DATE 6-19-39
DRAW. CHECKED BY H.C.M. DATE 6-28-39
ORDER No. H2524
SHEET NO. 107-EF



MATERIAL: O.H. Steel F.S.T.M., A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 15/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 15/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

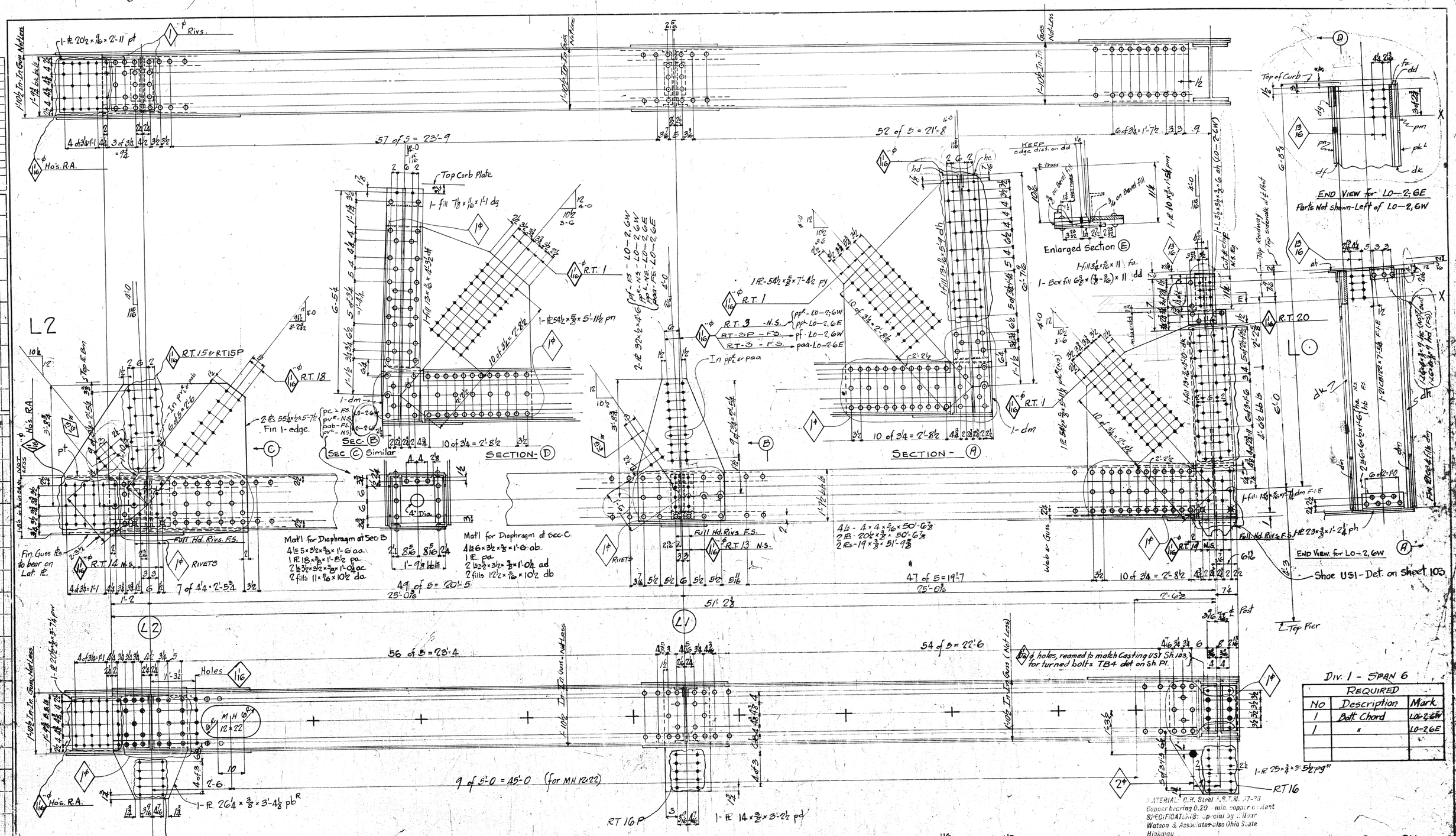
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman DR. #2
DRAW. MADE BY ALH. (KDC) DATE 6-20-39
DRAW. CHECKED BY HCM DATE 6-28-39

ORDER No. H2524

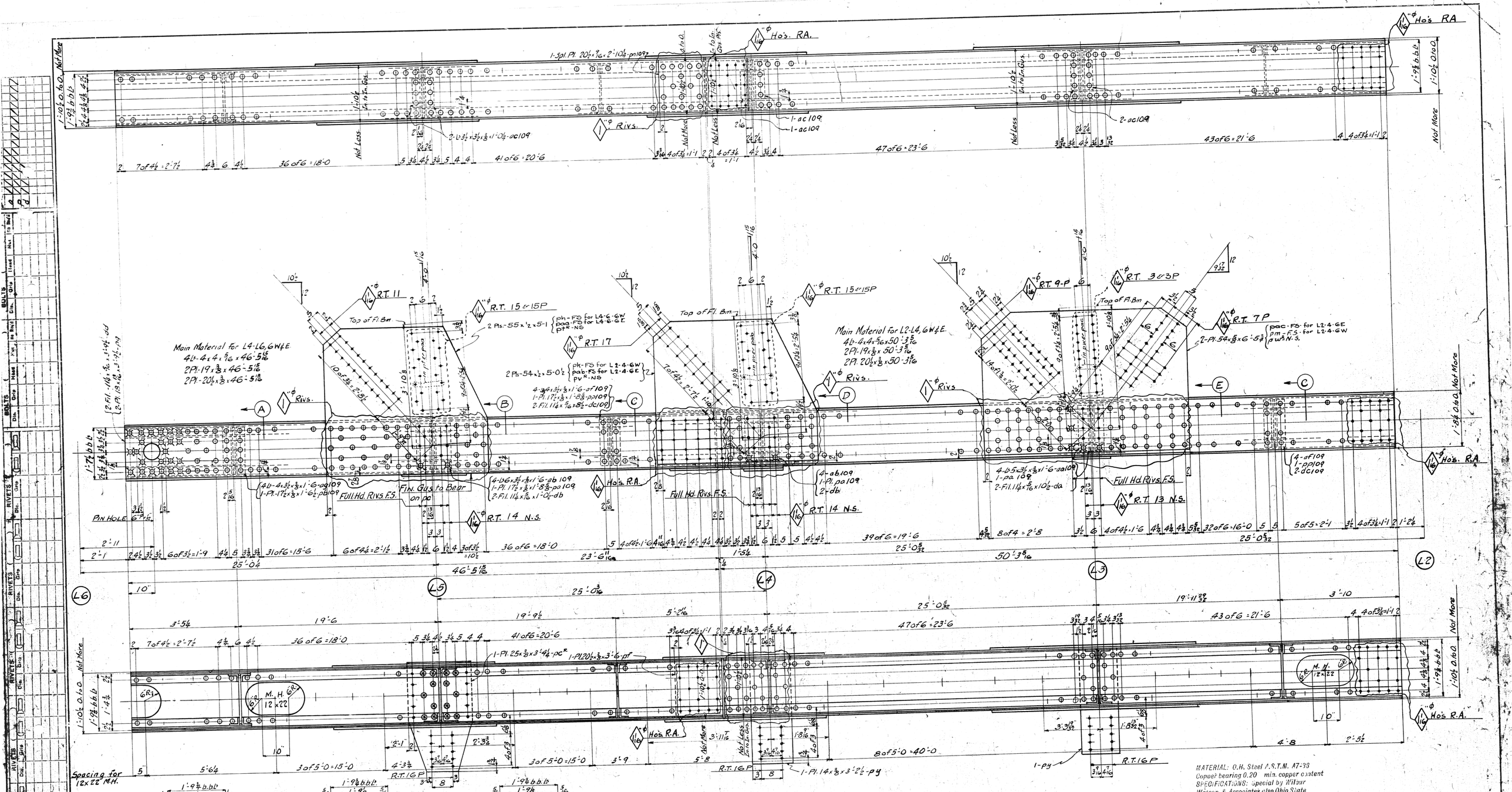
SHEET NO. 107F

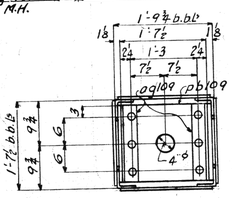


LO—2, 6W

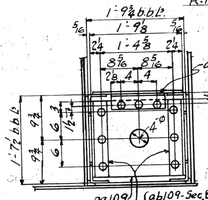
LO—2, 6E (Left except End View at L0, Sec. D, & Gussets at L1 & L2)

LIFTING WT: 7 tons

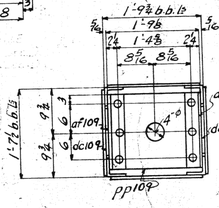




SECTION-A



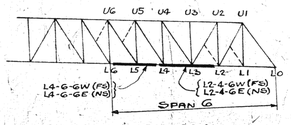
SECTION-B
SECTION-D
SECTION-E



SECTION-C

LIFTING WT. = 6 tons each { L2-4, 6W ; L2-4, 6E (Left of L2-4, 6W except gusset plates at L3 and L4-(F3))

LIFTING WT. = 5 tons each { L4-6, 6W ; L4-6, 6E (Left of L4-6, 6W except gusset plates at L5-(F3))



LOCATION DIAGRAM

Rev. 7/7/39
Rev. 7-12-39

SPAN 6 – DIV. 1

REQUIRED		
No	Description	Mark
1	Bottom Chord	L2-4, 6W
1	" "	L2-4, 6E
1	" "	L4-6, 6W
1	" "	L4-6, 6E

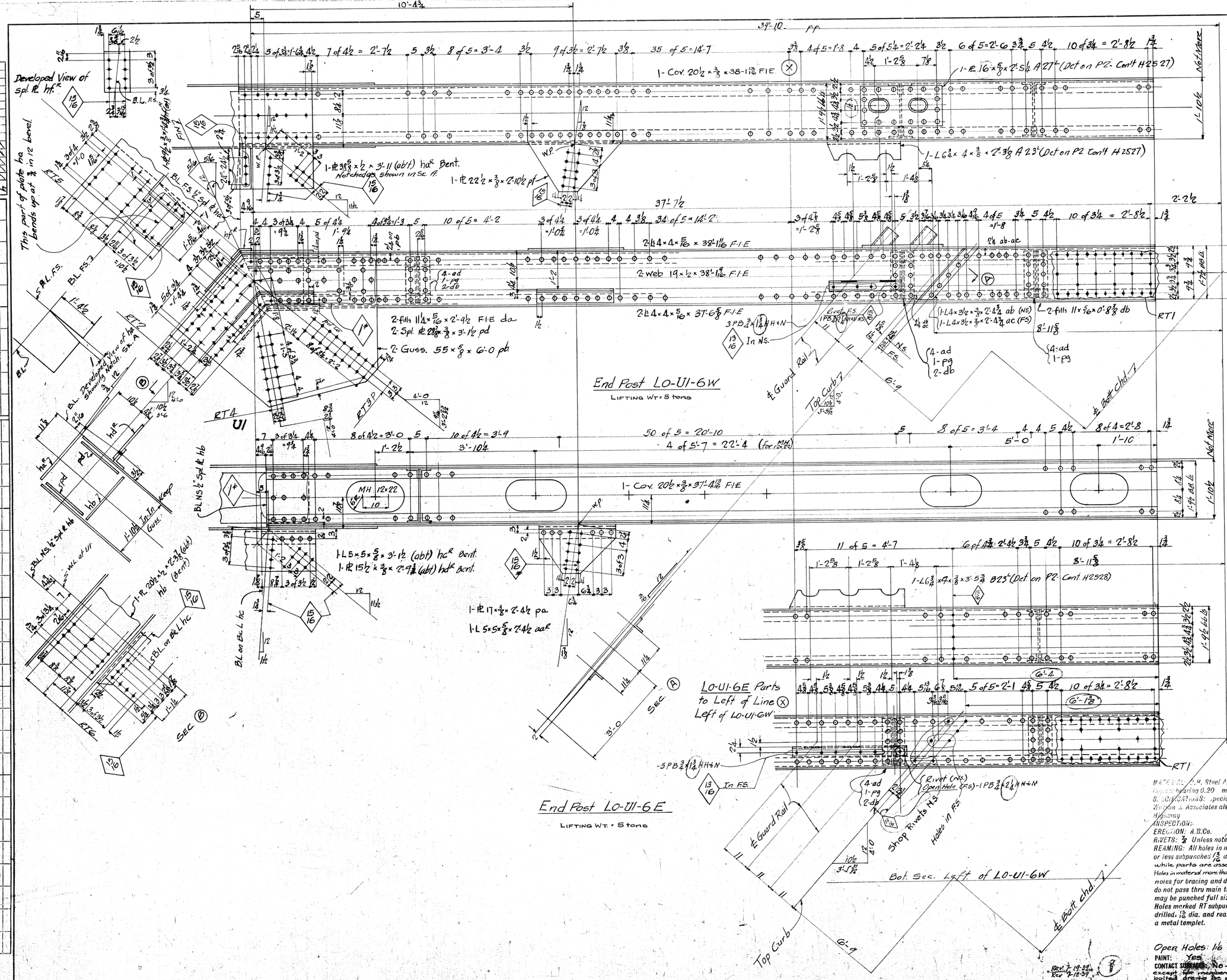
MATERIAL: O.H. Steel A.S.T.M. A7-38
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8" Unless noted ; 15/16" holes Unless noted
REAMING: All holes in material 7/8" thick or less subpunched 1/16" and reamed to size. Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 1/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords are assembled.

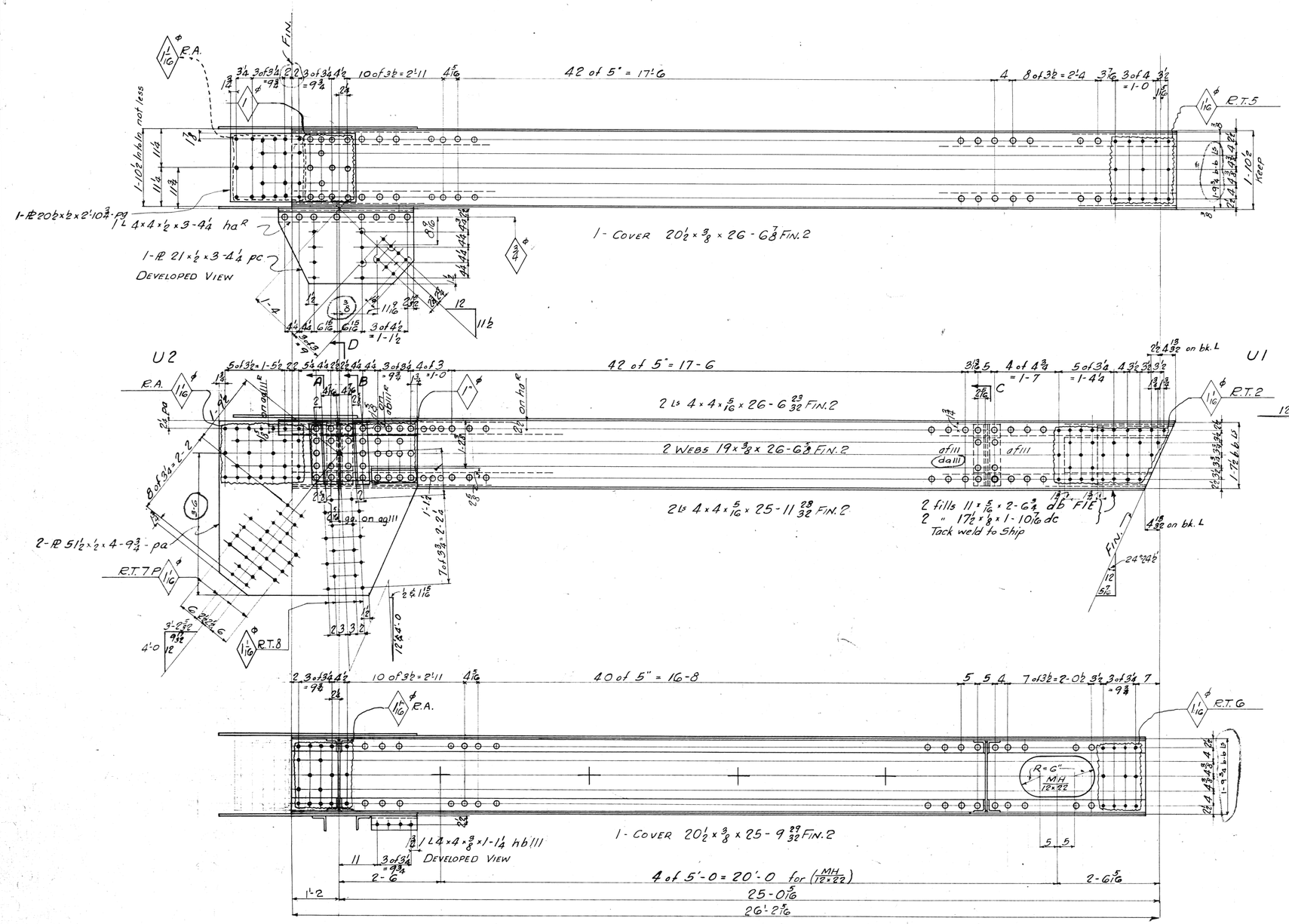
PAINT: Yes.
CONTACT SURFACES: Not shop or field

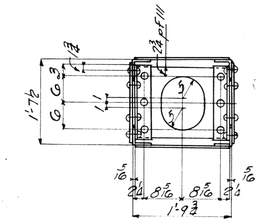
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

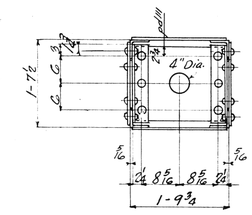
DRAWINGS MADE AT Ambridge — PLANT
WORK FABRICATED AT Ambridge — PLANT
IN CHARGE OF Loughman — DATE 7-2
DRAW. MADE BY ERM. RH — DATE 6/6/38
DRAW. CHECKED BY RHB — DATE 6-28-38
ORDER NO. H2524


End Post L0-U1-6W
LIFTING WT. 5 tons
End Post L0-U1-6E
LIFTING WT. 5 tons
L0-U1-6E Parts to Left of Line (X) Left of L0-U1-6W
Bot. Sec. Left of L0-U1-6W
Developed View of Spl. Pl. Inf.R
This part of plate ha bends up at 3/4 in 12 bevel.
1-Cov. 20 1/2 x 3/8 x 38-11 13/16 F.I.E
1-Cov. 20 1/2 x 3/8 x 37'-4 13/16 F.I.E
2-Web 19 x 1/2 x 38'-11 13/16 F.I.E
2-Guard Rail
Top Curb
Bott. chd.
Shop Rivets N.S.
Holes in F.S.
Diaphragm
Location Diagram
Span No. 6
SPAN #6 DIVISION #1
Required
Span 6 | No | Description | Mark
1 | 1 | End Post | L0-U1-6W
1 | 1 | End Post | L0-U1-6E
MATERIAL: S.H. Steel A.S.T.M. A7-38 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8 Unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled, 13/16 dia. and reamed to size to a metal templet.
Open Holes: 1/16 Unless Noted
PAINT: Yes
CONTACT SURFACES: No - Shop and Field except for members permanently bolted drawing as painted.
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman DE #2
DRAW. MADE BY HAE DATE 6-1-39
DRAW. CHECKED BY R.S.S. DATE 6-13-39
ORDER No. H2524
SHEET No. 11

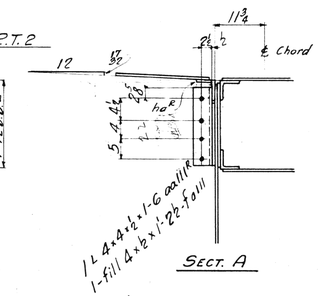




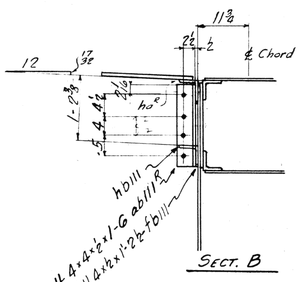
SECT. D



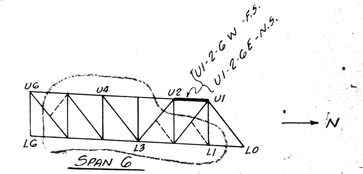
SECT. C



SECT. A



SECT. B



LOCATION DIAGRAM

SPAN 6 - DIVISION 1

REQUIRED		
No.	DESCRIPTION	MARK
1	Top Chord	U1-2-6W
1	" "	U1-2-6E

1 - TOP CHORD U1-2-6 W
1 - " " U1-2-6 E (LEFT)

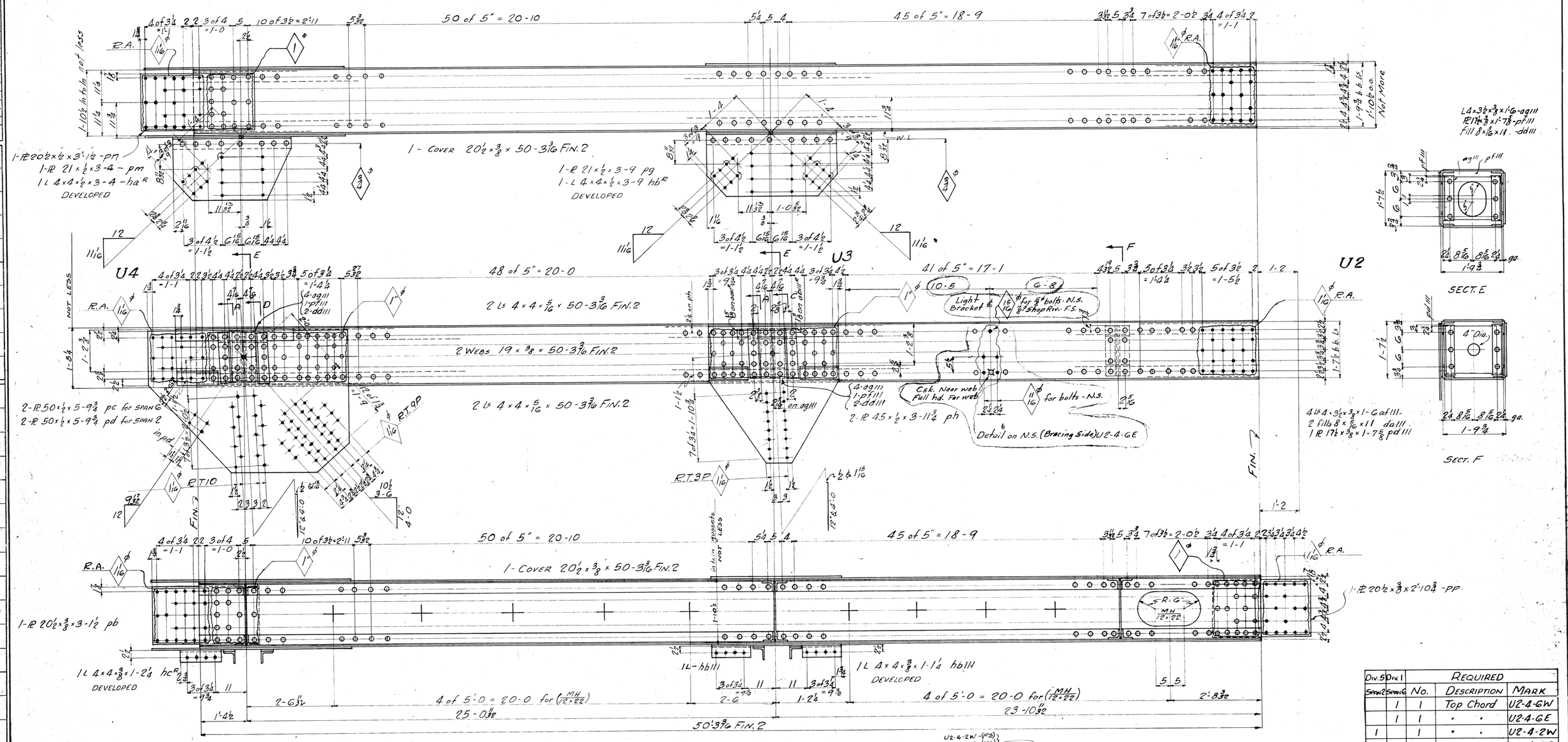
MATERIAL: C.H. Steel A.S.T.M. A7-36
Copper bearing 0.20
SPECIFICATIONS:
Watson & Associates Inc.
Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8" Unless noted. HOLES: 13/16" Unless Noted
REAMING: All holes in material 7/8" thick or less subpunched 1/16" and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: YES
CONTACT SURFACES: No - Shop & Field

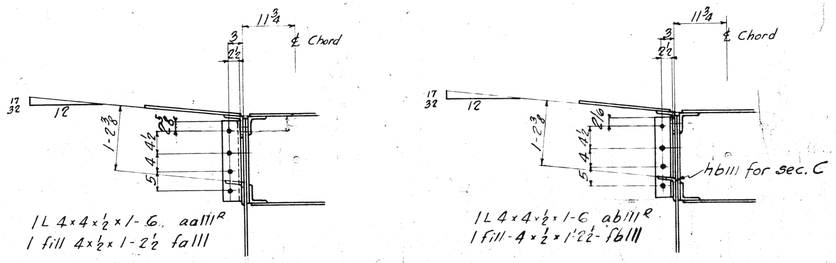
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE Oct. 39
DRAW. CHECKED BY V.G. DATE
ORDER No. H 2524
SHEET NO. 711

Rev 7-12-39

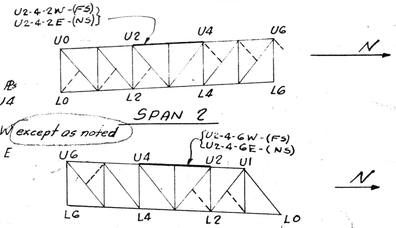
8





1- Top Chord U2-4-6 W } Alike Except PL pc & pd at U4
1- " " U2-4-2 E }
1- " " U2-4-6 E Left of U2-4-6 W except as noted
1- " " U2-4-2 W " " U2-4-2 E

Lifting wt. = 5 tons



Div. 5 Span 2	Div. 1 Span 6	Required No.	Description	Mark
	1	1	Top Chord	U2-4-6W
	1	1	" "	U2-4-6E
1		1	" "	U2-4-2W
1		1	" "	U2-4-2E

MATERIAL: O.H. Steel A.S.T.M. A7-33
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: ⅞" Unless noted HOLES: 13/16" Unless Noted
REAMING: All holes in material ⅜" thick or less subpunched 1/16" and reamed to size while parts are assembled.
Holes in material more than ⅜" thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked R.A. reamed while chords of trusses are assembled

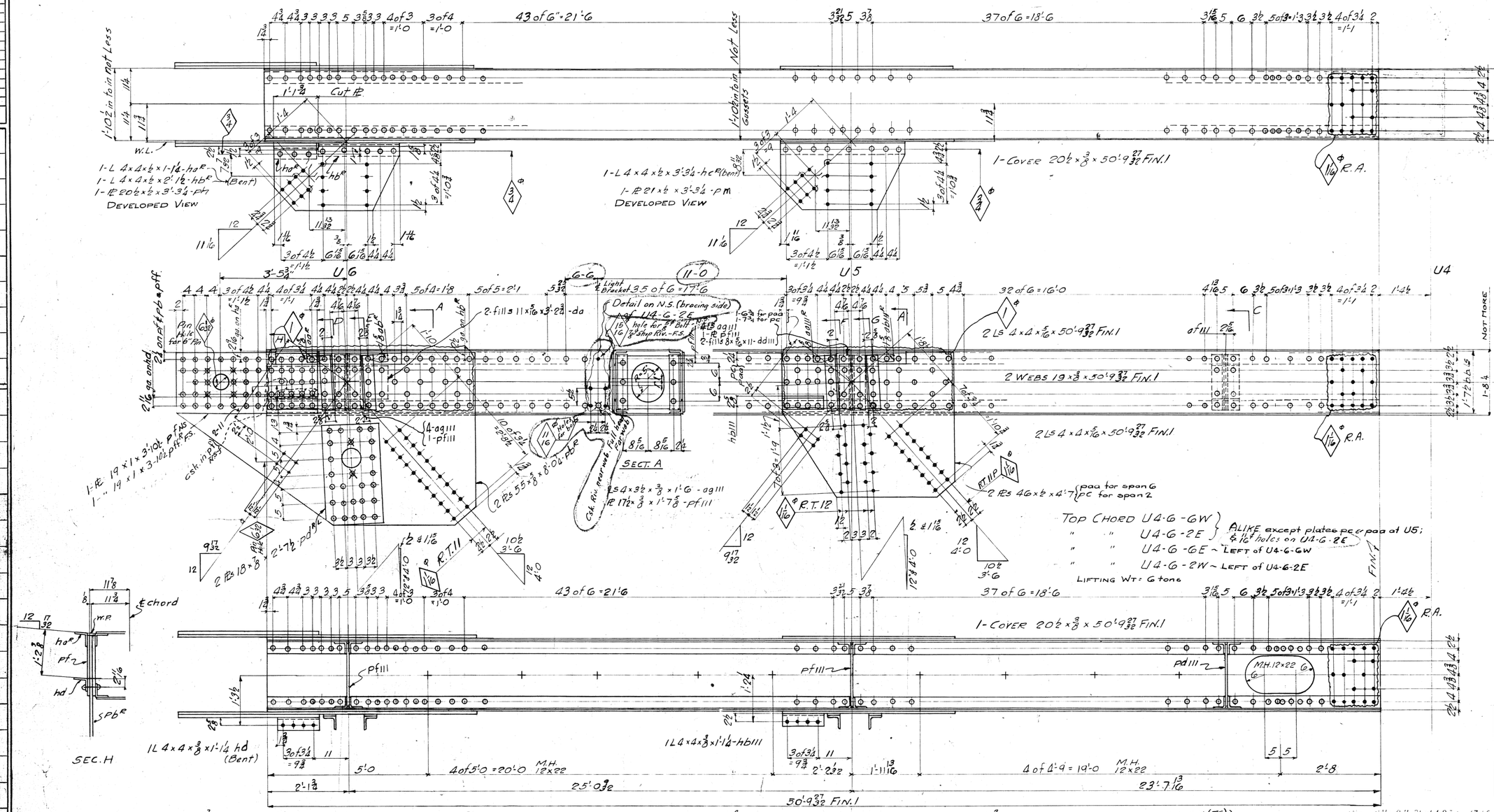
PAINT: YES
CONTACT SURFACES: No - Shop and Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D DATE 6-6-39
DRAW. CHECKED BY VG DATE

ORDER No. H2524
SHEET No. 112

Rev. 8-15-39 (5)
Rev. 7-12-39



Span 2 Div 5	Span 6 Div 1	No.	Description	Mark
	1	1	Top Chord	U4-G-6W
	1	1	" "	U4-G-6E
1		1	" "	U4-G-2E
1		1	" "	U4-G-2W

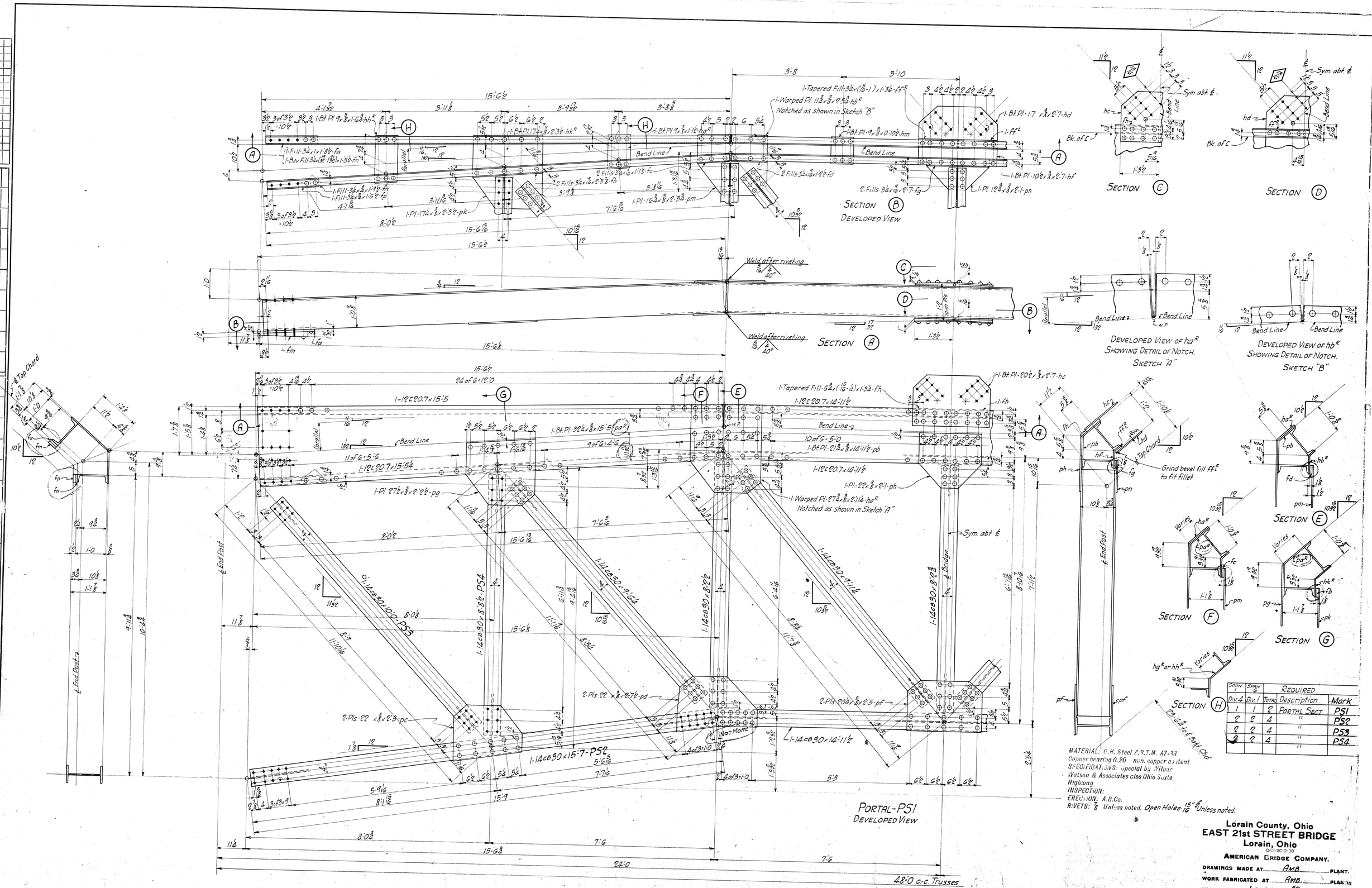
MATERIAL: O.H. Steel 1.8.7.1. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled. Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 1/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No - shop and field

Rev. 8-15-39
~~Rev. 7-12-39~~
Rev. 8-1-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE
DRAW. CHECKED BY VG DATE 5/22/39
ORDER No. H-2524
SHEET NO. 113



SPAN 1 Div. 4	SPAN 6 Div. 1	Total	REQUIRED Description	Mark
1	1	2	PORTAL SECT.	PS1
2	2	4	"	PS2
2	2	4	"	PS3
2	2	4	"	PS4
			"	

MATERIAL: O.H. Steel A.S.T.M. A7-38
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Milbur Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: ⅞ Unless noted. Open Holes-15/16 Unless noted.

All holes punched full size.

PAINT: -Yes
CONTACT SURFACES: No (Shop & Field.)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
DG2-W-2-38

AMERICAN BRIDGE COMPANY.

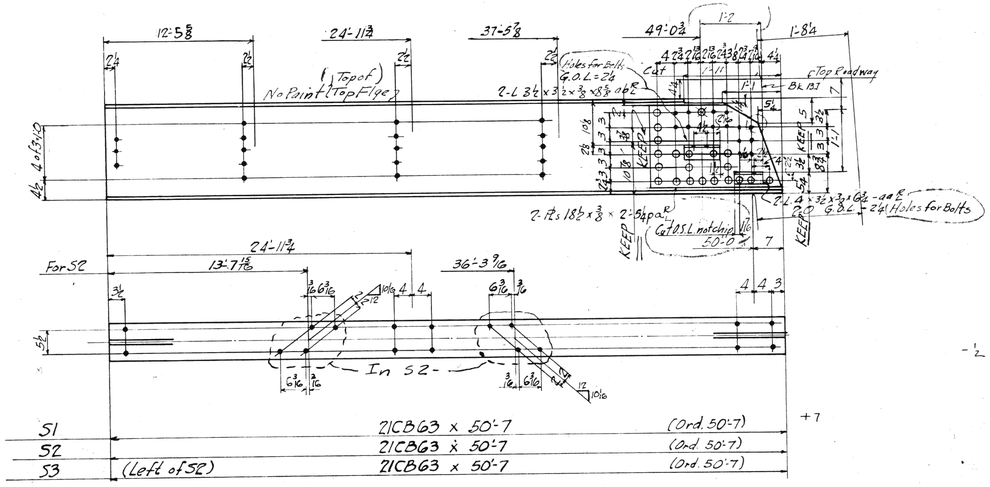
DRAWINGS MADE AT AMB PLANT.
WORK FABRICATED AT AMB PLANT.
IN CHARGE OF LOUGHMAN #2
DRAW. MADE BY D.G.R.-W.W.J. DATE 5-9-39
DRAW. CHECKED BY R.S.S. DATE 6-19-39

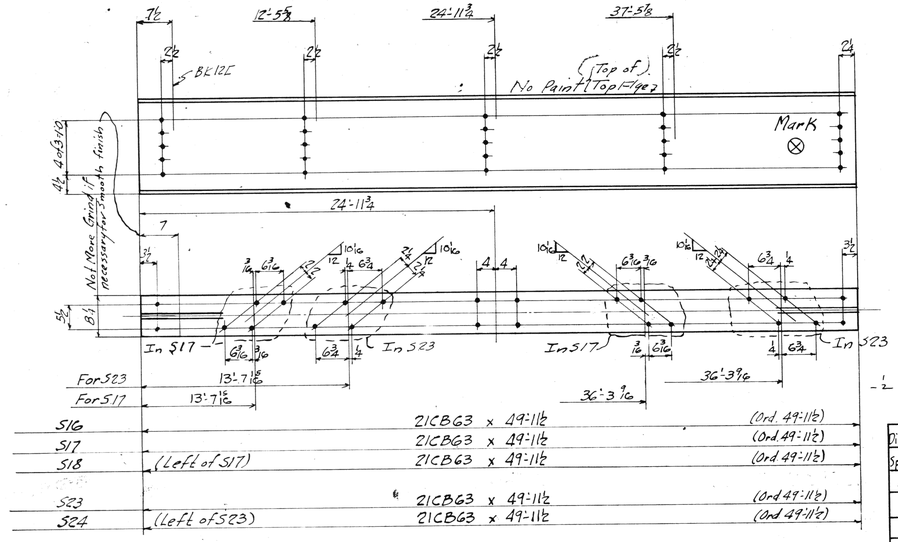
ORDER No. H2584
SHEET No. 1/12

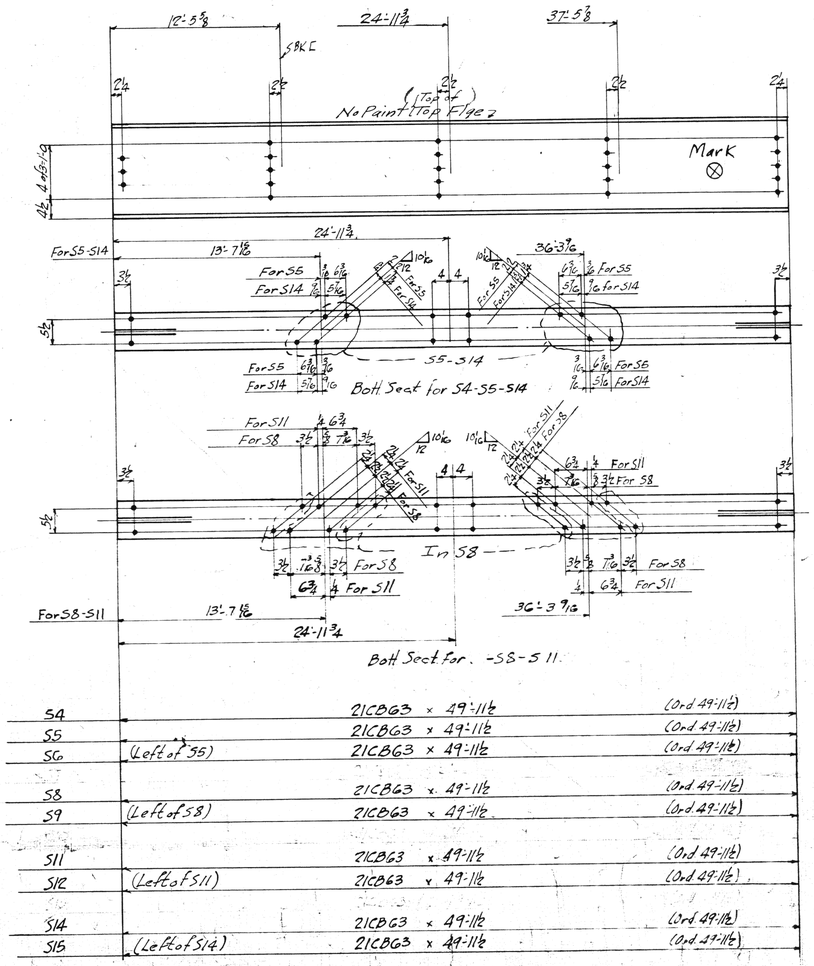
12

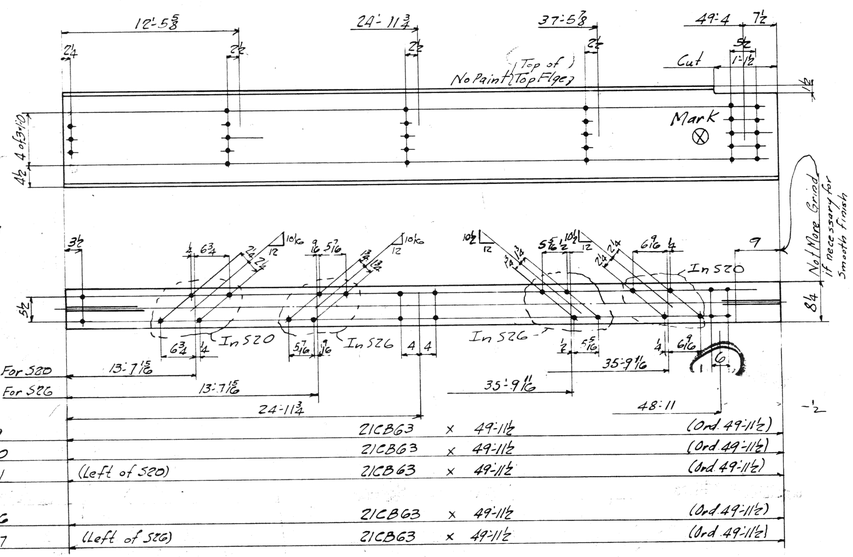
Rev. 7-18-39

45678923









Div 1 Span 6	Div 2 Span 5	Div 4 Span 1	Div 5 Span 2	Div 6 Span 3	Total No.	Description	Mark
4		4			8	Beams	S1
1		1			2	do	S2
1		1			2	do	S3
4	16	16	4	16	56	do	S4
1			1		2	do	S5
1			1		2	do	S6
	1			1	2	do	S8
	1			1	2	do	S9
	2	1		2	5	do	S11
	2	1		2	5	do	S12
	1	3		1	5	do	S14
	1	3		1	6	do	S15
4	+		4	4	16	do	S16
1			1		2	do	S17
1			1		2	do	S18
	8			8	16	do	S19
	1			1	2	do	S20
	1			1	2	do	S21
	1			1	2	do	S23
	1			1	2	do	S24
	1			1	2	do	S26
	1			1	2	do	S27

REQUIRED

STRINGERS

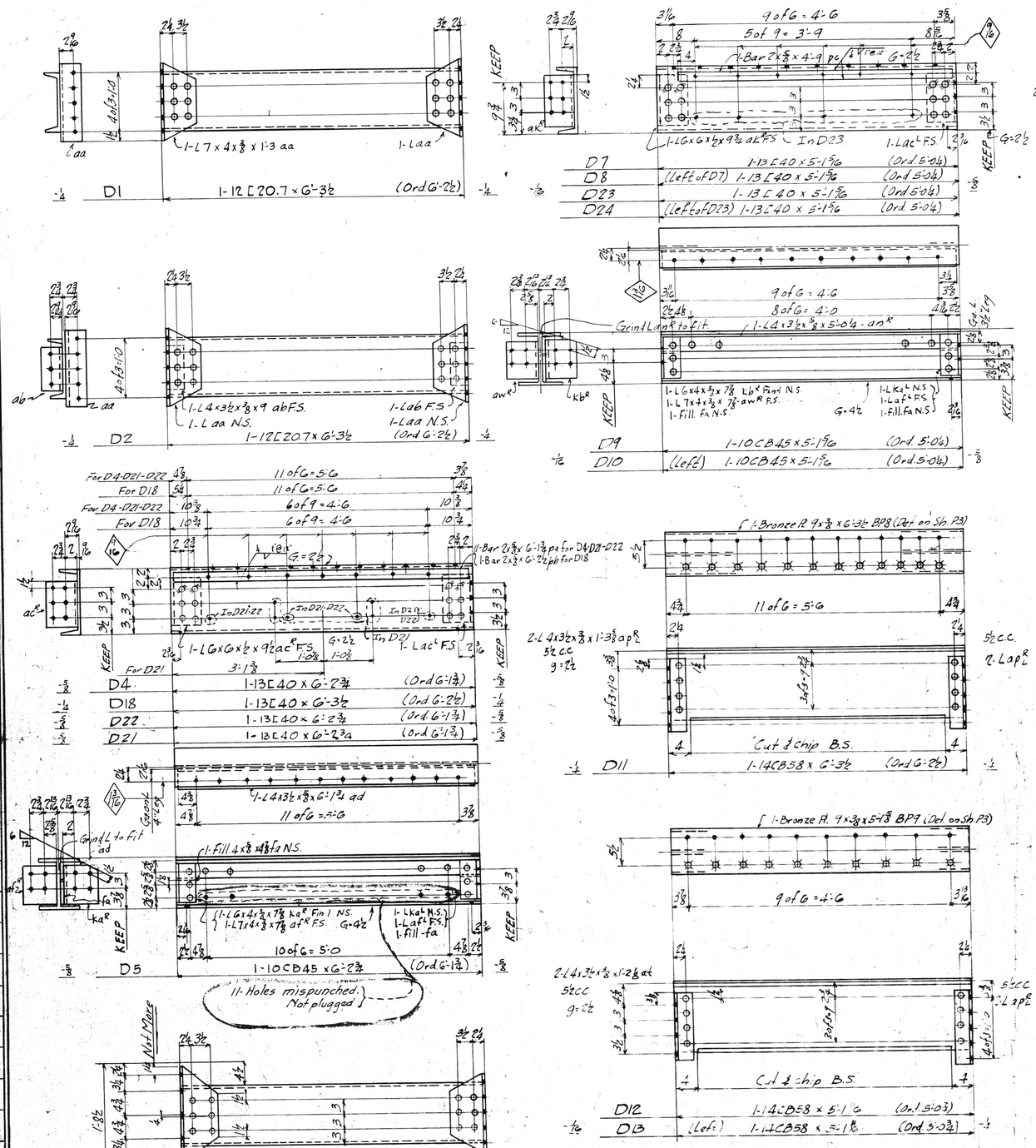
MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 1⅛" unless noted
REAMING: All holes punched full size except in material more than ⅜" thick shall be drilled.

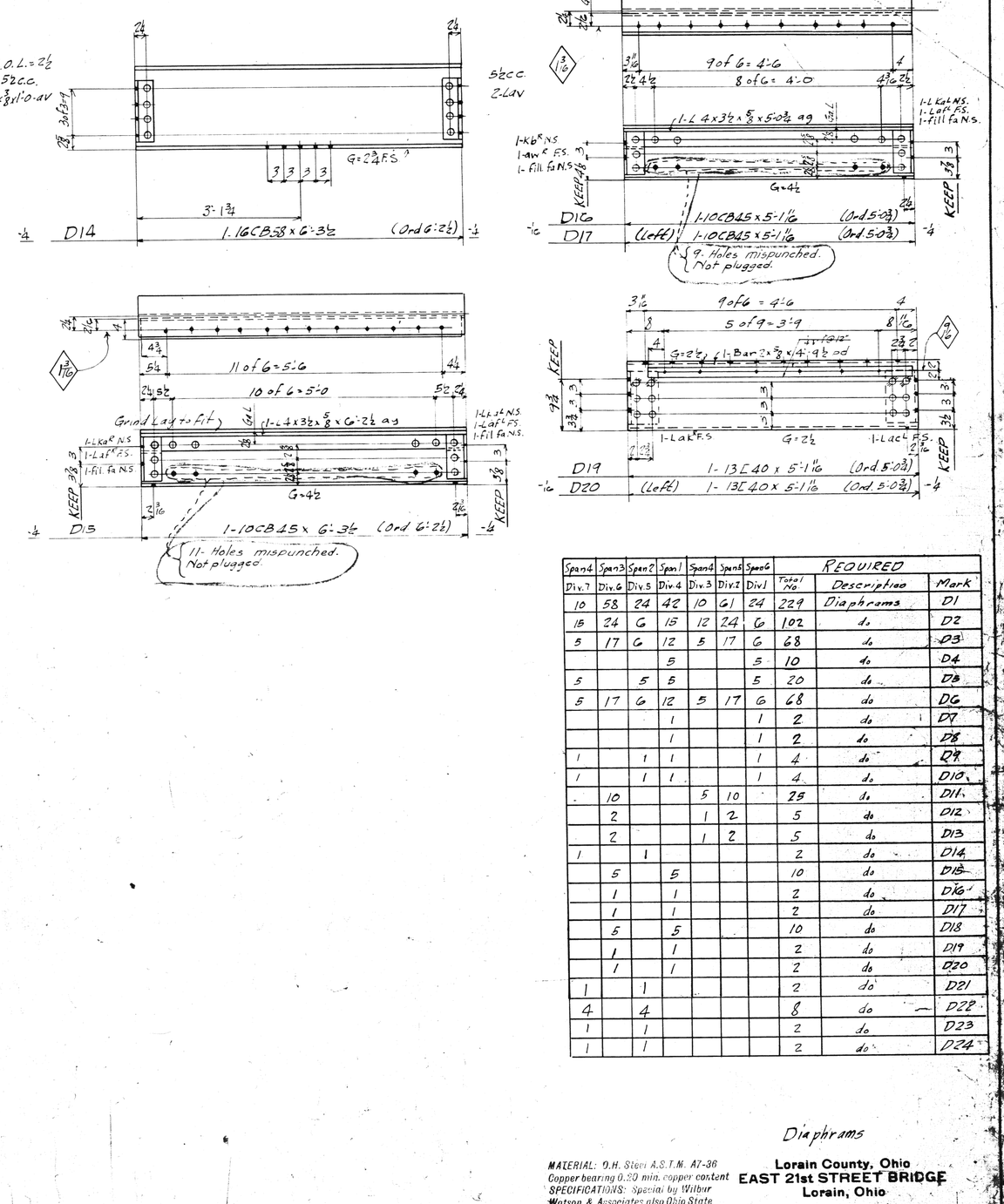
PAINT: Yes Except as Noted
CONTACT SURFACES: No Shop & Field

(9) Rev. 7-26-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Laughman D.R.#4
DRAW. MADE BY JR DATE
DRAW. CHECKED BY JEB DATE 6-26-39
ORDER No. H2524
SHEET No. 415





Span 4 Div. 7	Span 3 Div. 6	Span 2 Div. 5	Span 1 Div. 4	Span 4 Div. 3	Span 5 Div. 2	Span 6 Div. 1	Total No.	REQUIRED Description	Mark
10	58	24	42	10	61	24	229	Diaphrams	D1
15	24	6	15	12	24	6	102	do	D2
5	17	6	12	5	17	6	68	do	D3
			5			5	10	do	D4
5		5	5			5	20	do	D5
5	17	6	12	5	17	6	68	do	D6
			1			1	2	do	D7
			1			1	2	do	D8
1		1	1			1	4	do	D9
1		1	1			1	4	do	D10
	10			5	10		25	do	D11
	2			1	2		5	do	D12
	2			1	2		5	do	D13
1		1					2	do	D14
	5		5				10	do	D15
	1		1				2	do	D16
	1		1				2	do	D17
	5		5				10	do	D18
	1		1				2	do	D19
	1		1				2	do	D20
1		1					2	do	D21
4		4					8	do	D22
1		1					2	do	D23
1		1					2	do	D24

Diaphrams

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

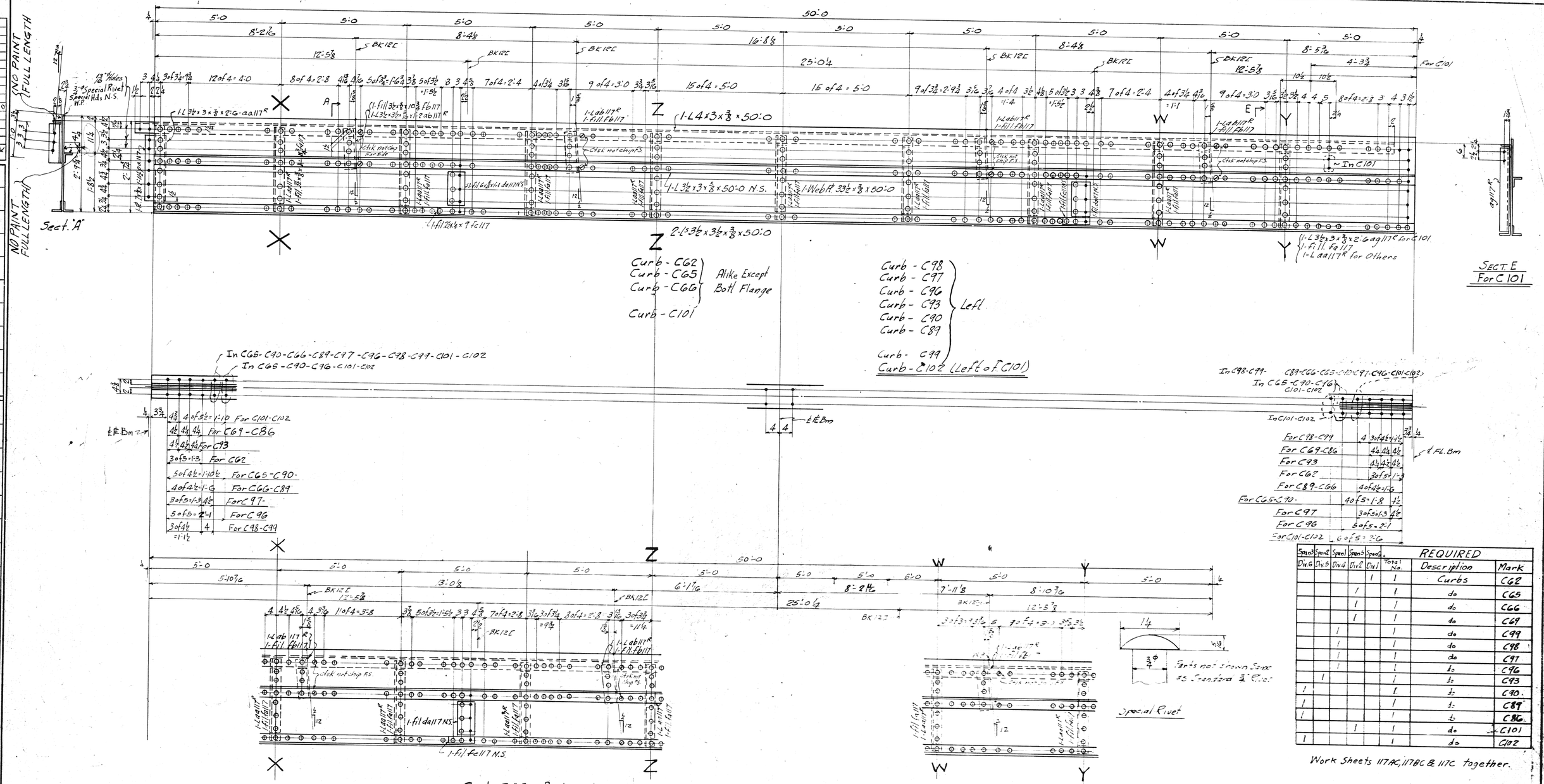
PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Rev. 8-15-39
Rev. 7-25-39
Rev. 7-14-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D53-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman DRAFT.
DRAW. MADE BY JR DATE
DRAW. CHECKED BY [illegible] DATE
ORDER No. H2524
SHEET No. 116



Span 3 Div. 6	Span 2 Div. 5	Span 1 Div. 4	Span 3 Div. 2	Span 2 Div. 1	Total No.	REQUIRED Description	Mark
				1	1	Curbs	C62
			1		1	do	C65
			1		1	do	C66
			1		1	do	C69
		1			1	do	C99
		1			1	do	C98
		1			1	do	C97
		1			1	do	C96
	1				1	do	C93
1					1	do	C90
1					1	do	C89
1					1	do	C86
			1		1	do	C101
1					1	do	C102

Work Sheets 117AC, 117BC & 117C together.

Div. 4 (Span 1) | Div. 5 (Span 2) | Div. 6 (Span 3) | Div. 7 | Span 4 | Div. 3 | Div. 2 (Span 5) | Div. 1 (Span 6)

C100 C99 C98 C97 C96 C95 C94 C93 C92 C91 C102 C101 C89 C88 C87 C86 C85 C84 C83 C82 C81 C80 C79 C78 C77 C76 C75 C74 C73 C72 C71 C70 C69 C68 C67 C66 C65 C64 C63 C62 C61

West Curbs

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

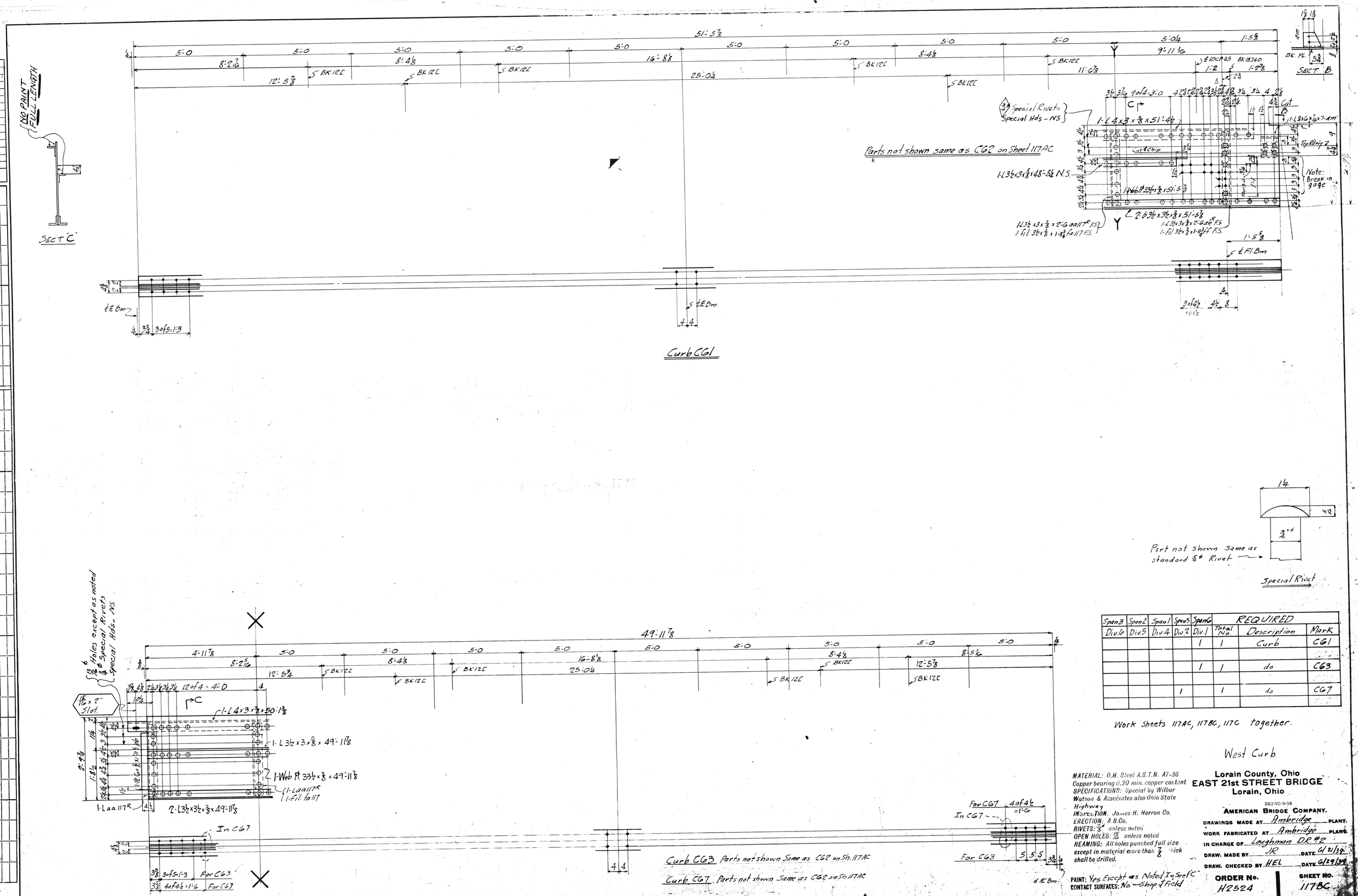
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman DR #2
DRAW. MADE BY JR DATE 6/21/39
DRAW. CHECKED BY HEL DATE 6/29/39

ORDER No. H2524 | SHEET NO. 117AC

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 1/8" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes Except as Noted In Sect'n
CONTACT SURFACES: No – Shop & Field

Rev. 8/15/39
Rev. 7-14-39



Span 3 Div. 6	Span 2 Div. 5	Span 1 Div. 4	Span 5 Div. 2	Span 6 Div. 1	REQUIRED Total No.	Description	Mark
				1	1	Curb	CG1
				1	1	do	CG3
			1		1	do	CG7

Work Sheets 117AC, 117BC, 117C together.

West Curb

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes Except as Noted In Sect C
CONTACT SURFACES: No — Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

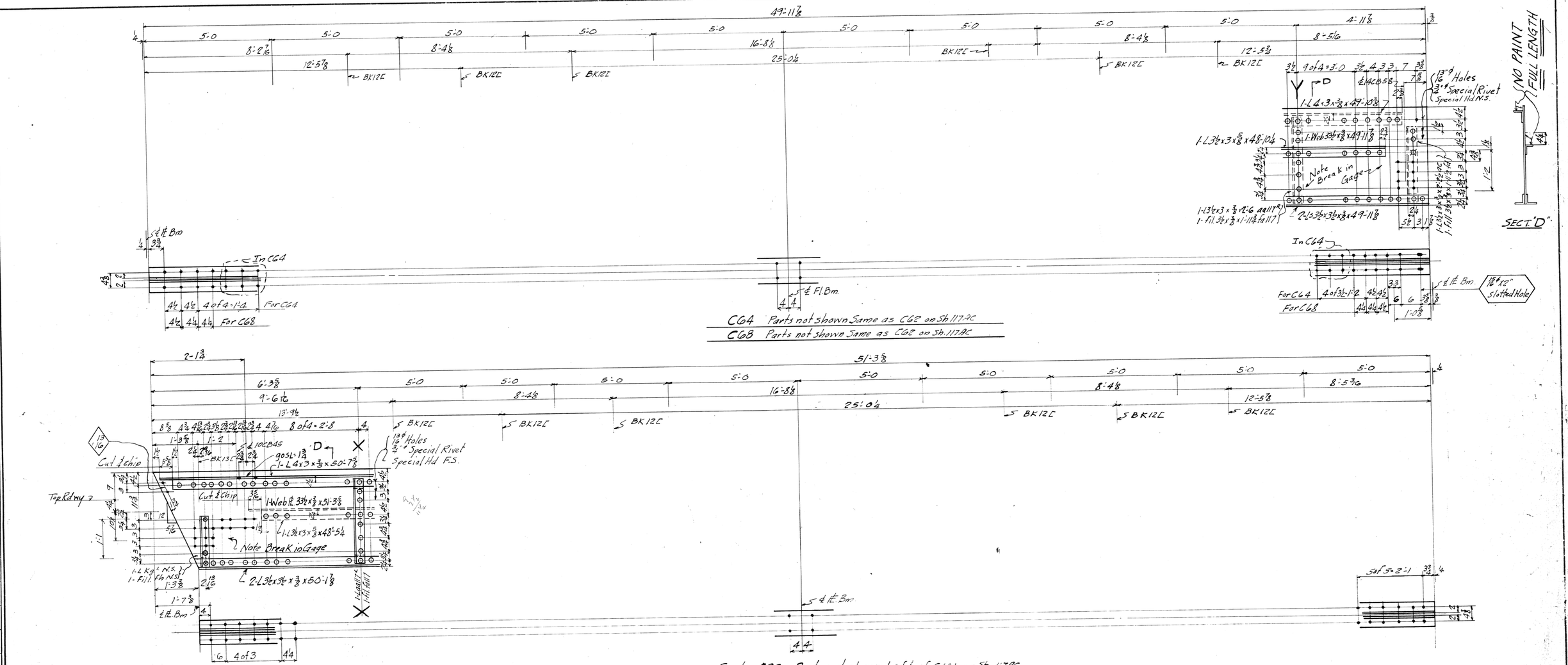
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman D.R. #2
DRAW. MADE BY JR DATE 6/21/39
DRAW. CHECKED BY HEL DATE 6/29/39

ORDER No. H2524
SHEET NO. 117BC

Rev. 8/16/39 Rev. 7/25/39



Span 8	Span 1	Span 5	REQUIRED		
Div 5	Div 4	Div 2	Total No	Description	Mark
		1	1	Curb	C64
		1	1	do	C68
	1		1	do	C95
1			1	do	C94

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes Except as Noted In Sect. "D"
CONTACT SURFACES: No - Shop & Field

WEST CURBS

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

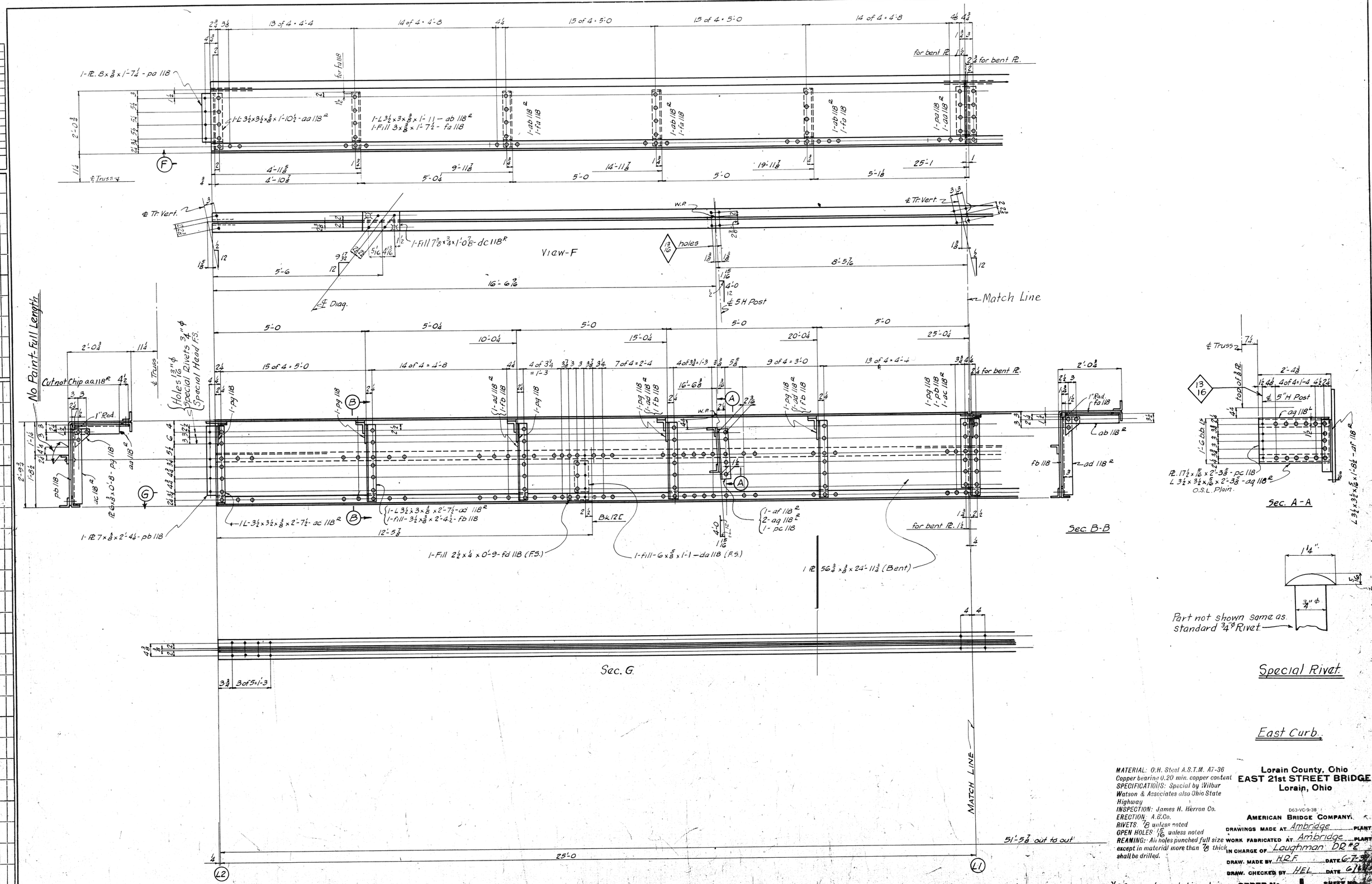
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.B. #2
DRAW. MADE BY JCR DATE 6-30-39
DRAW. CHECKED BY HEL DATE 7/13/39

ORDER No. H2524
SHEET NO. 117C

Rev. 7-24-39
Rev. 8-15-39
Rev. 9-6-39



MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY

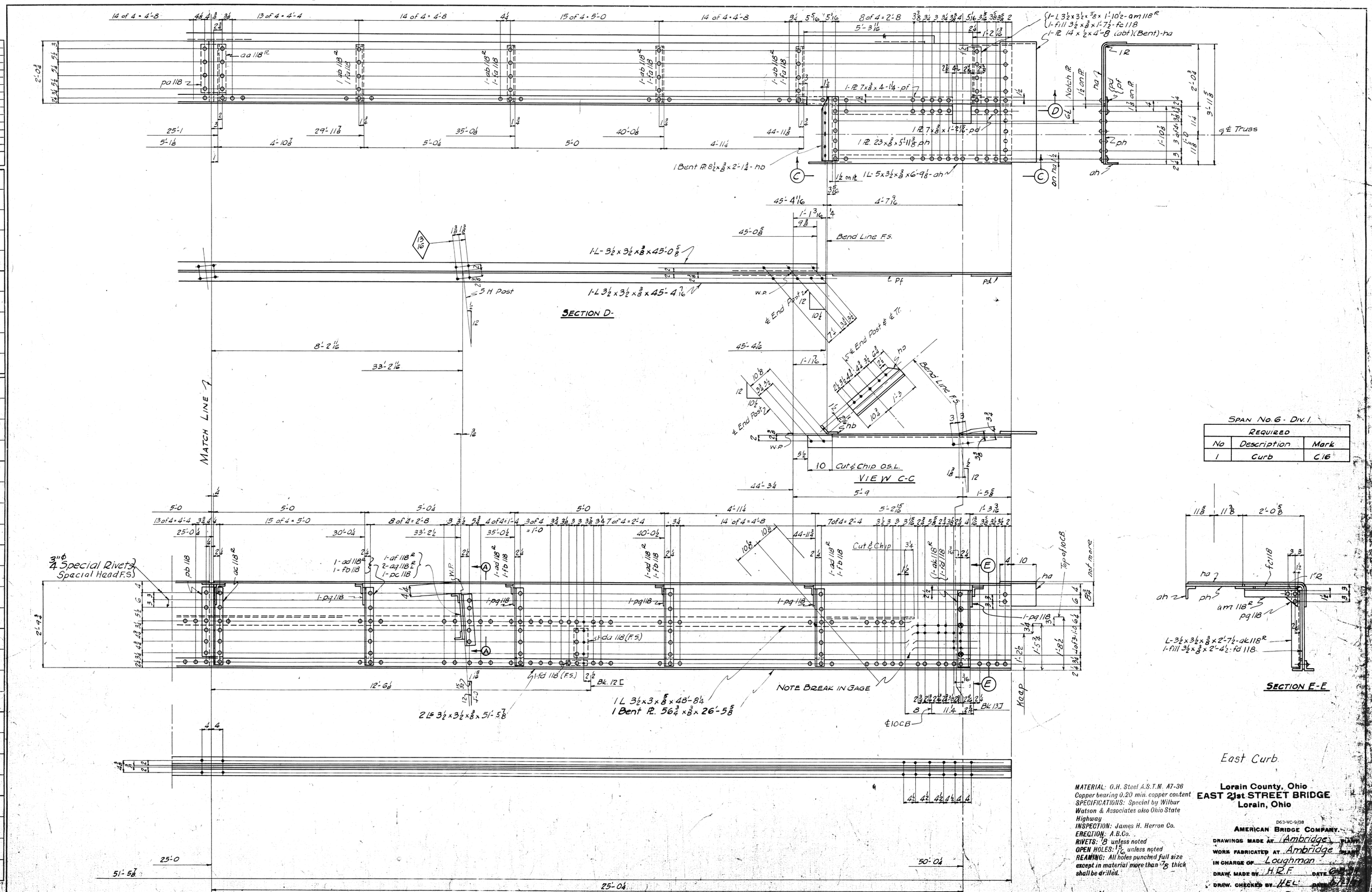
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman DR #2
DRAW. MADE BY H.R.F. DATE 6-7-39
DRAW. CHECKED BY HEL DATE 6/14/39

PAINT: Yes-except as noted in end view.
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524

SHEET No. 118 AB

Rev 7/12/39
Rev 8/15/39



SPAN No. 6 - DIV. 1

REQUIRED		
No	Description	Mark
1	Curb	C.16

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes punched full size except in material more than 5/8" thick shall be drilled.

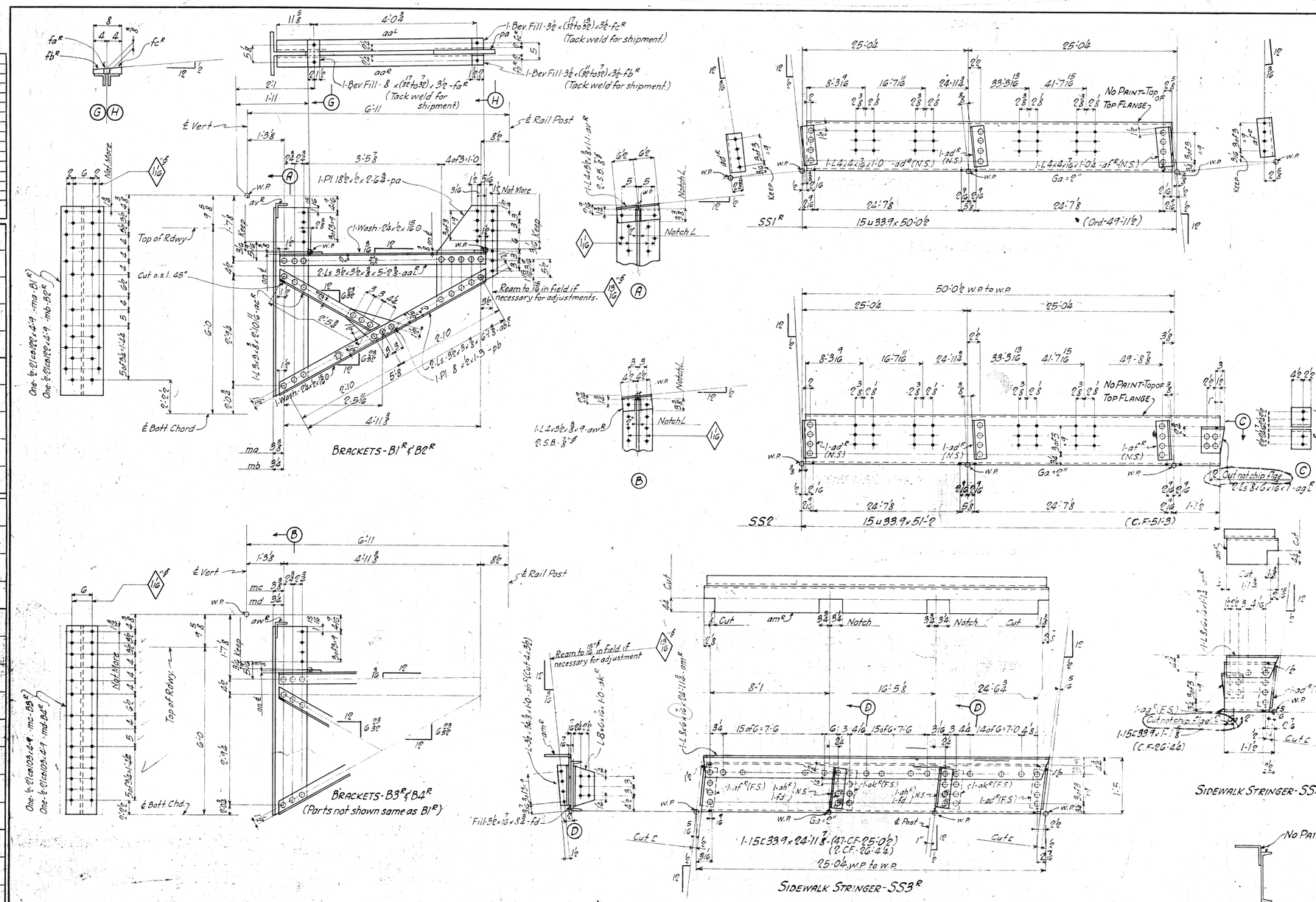
PAINT: Yes - except as noted in end view
CONTACT SURFACES: No - (Shop & Field) or SH. 11B AB

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-58

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge, PA.
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman
DRAW. MADE BY H.R.F. DATE
DRAW. CHECKED BY HEL DATE
ORDER No. H2524

Rev. 8/15/39 Rev. 7/12/39
Rev. 7/15/39



Span 3 Div 6	Span 2 Div 5	Span 1 Div 4	Span 5 Div 2	Span 6 Div 1	Required Total	Description	Mark
		1			1	Sidewalk Struts	SS8
		1			1	"	SS9
		1			1	"	SS10
		1			1	"	SS11
				3	3	Sidewalk Brkts	B1R
	3	1			4	"	B1L
			3	1	4	"	B2R
3		2			5	"	B2L
			3	1	4	"	B3R
3		2			5	"	B3L
				1	1	"	B4R
	1	2			3	"	B4L
			3	2	5	Sidewalk Stringers	SS1R
3	2	4			9	"	SS1L
				1	1	"	SS2
			12	6	18	"	SS3R
12	5	11			28	"	SS3L
				1	1	"	SS4
30	12	22			64	Sidewalk Strut	SS5R
			30	12	42	"	SS5L
17	6	11			34	"	SS6R
			17	6	23	"	SS6L
12	6	11			29	"	SS7R
			12	6	18	"	SS7L

SS5R	12u20.7x4'-3⅜	(Ord. 4'-3)	
SS10	12u20.7x4'-2¾	(C.F.-4'-3)	
SS11	12u20.7x4'-2 5/16	(C.F.-4'-3)	
SS6R	12u20.7x4'-9¾	(Ord. 4'-9¼)	
SS7R	12u20.7x4'-9 1/16	(Ord. 4'-9½)	
SS8	12u20.7x4'-10¼	(Ord. 4'-9¾)	
SS9	12u20.7x4'-10 13/16	(Ord. 4'-10¼)	

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes, Unless Noted.
CONTACT SURFACES: No (Shop & Field)

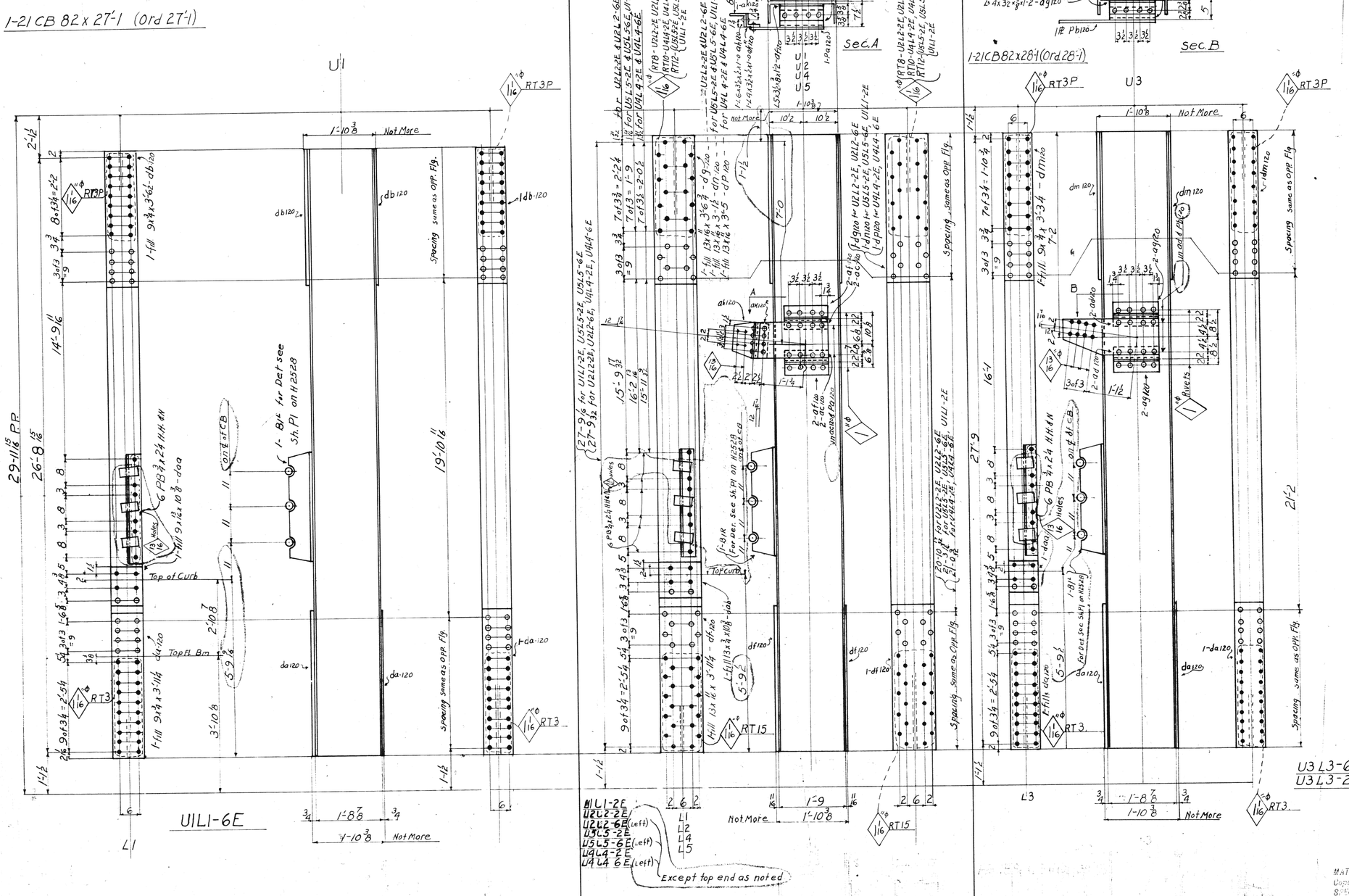
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT AMB. PLANT
WORK FABRICATED AT AMB. PLANT
IN CHARGE OF LOUGHMAN #2
DRAW. MADE BY W.W.J. DATE 6-15-38
DRAW. CHECKED BY DATE
ORDER No. 142784 WORK No. 47

Rev. 7-24-39
Rev. 7-20-39



Span 2	Span 6	Required		
Div 5	Div 1	Total	Description	Mark
	1	1	Vertical	U1L1-6E
1		1	do	U1L1-2E
1		1	do	U2L2-2E
	1	1	do	U2L2-6E
1		1	do	U4L4-2E
	1	1	do	U4L4-6E
1		1	do	U5L5-2E
	1	1	do	U5L5-6E
1		1	do	U3L3-2E
	1	1	do	U3L3-6E

MATERIAL: Oil. Steel A.S.T.M. A7-33
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Pitzer Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8 Unless noted Holes 15/16 φ Unless Noted
REAMING: All holes in material 3/8 thick or less subpunched 1/16 and reamed to size. Holes in material more than 3/8 thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 1/16 dia. and reamed to size to a metal templet.

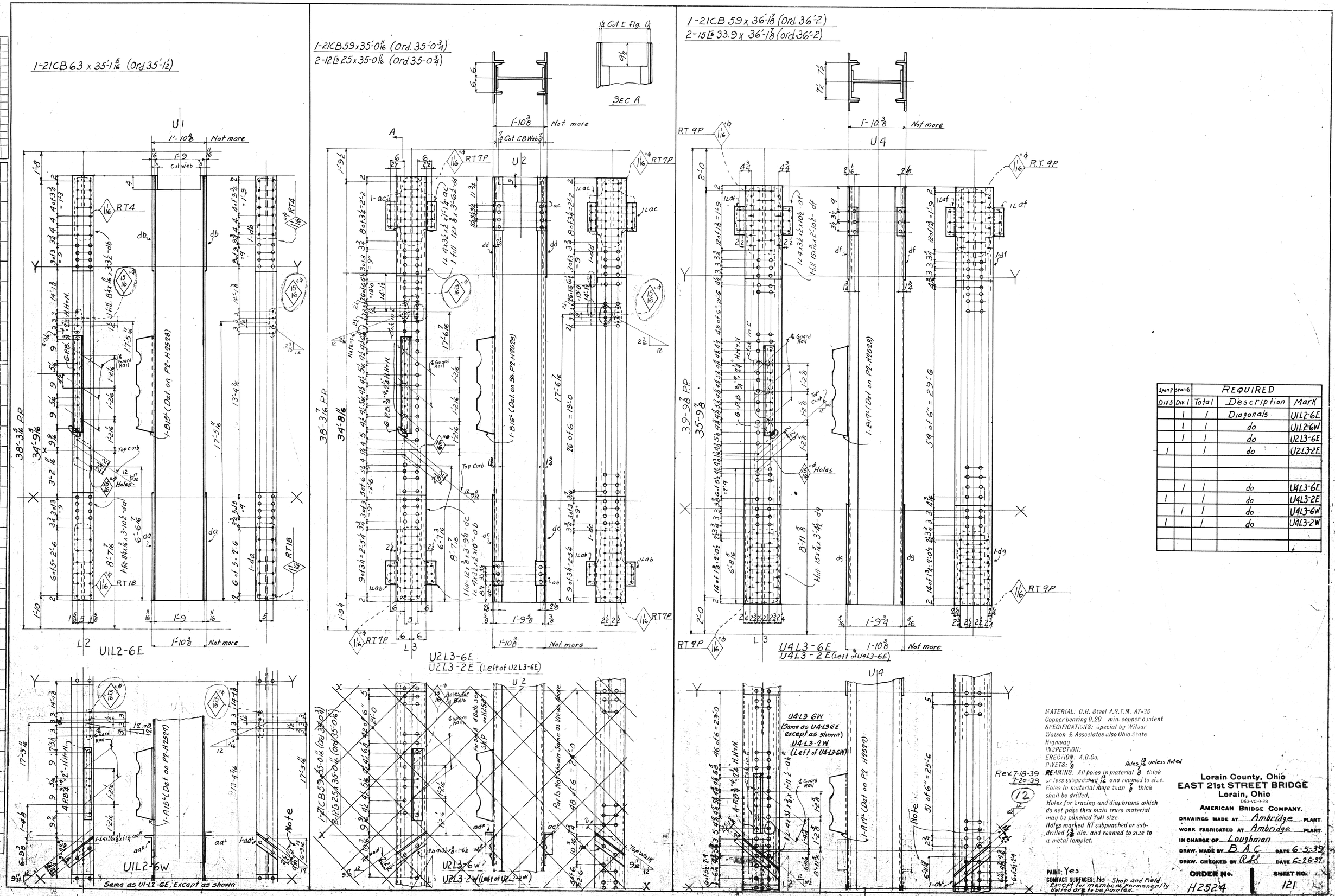
Rev. 7-18-39

PAINT: Yes
CONTACT SURFACES: No - Shop & Field Except members permanently bolted are to be painted

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-0-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY B.A.C. DATE 5-31-39
DRAW. CHECKED BY V.G. DATE
ORDER No. H-2524
SHEET NO. 120



Span 2	Span 6	REQUIRED		
Div 5	Div 1	Total	Description	Mark
	1	1	Diagonals	U1L2-6E
	1	1	do	U1L2-6W
	1	1	do	U2L3-6E
1		1	do	U2L3-2E
	1	1	do	U4L3-6E
1		1	do	U4L3-2E
	1	1	do	U4L3-6W
1		1	do	U4L3-2W

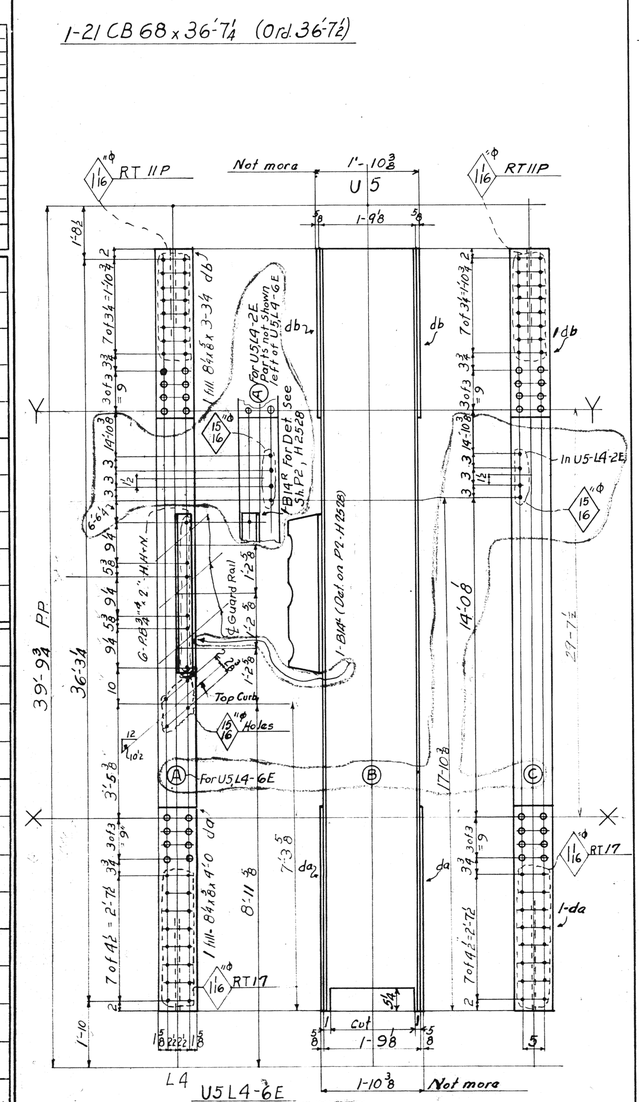
MATERIAL: O.H. Steel A.S.T.M. A7-33
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Milbour Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8 Holes 13/16 unless Noted
REAMING: All holes in material 7/8 thick unless subpunched 13/16 and reamed to size. Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

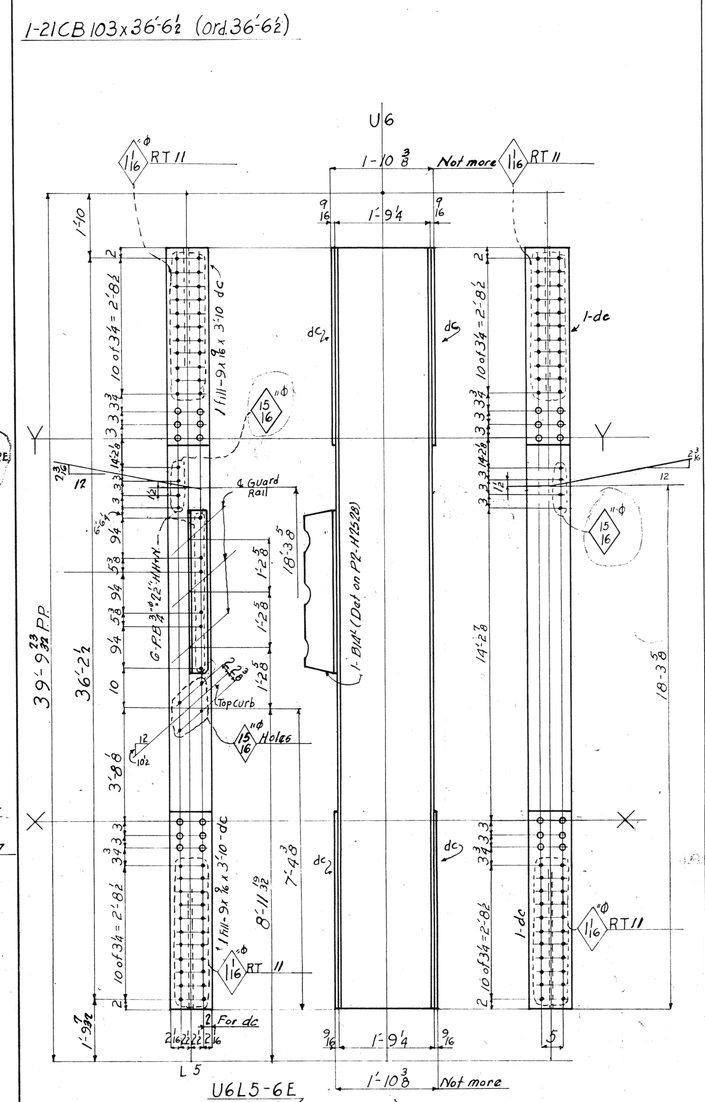
PAINT: Yes
CONTACT SURFACES: No - Shop and Field Except for members permanently bolted are to be painted.

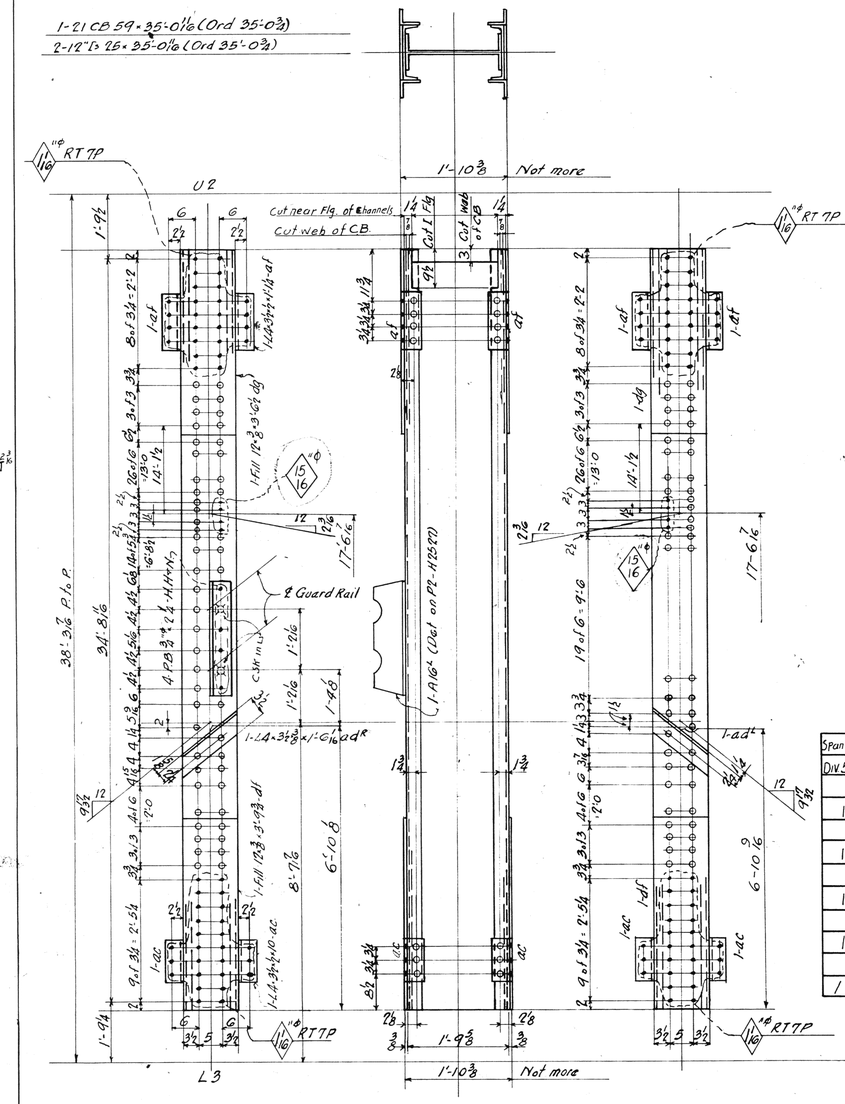
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY B.A.C. DATE 6-5-39
DRAW. CHECKED BY R.R. DATE 6-26-39

ORDER No. H2524
SHEET NO. 121

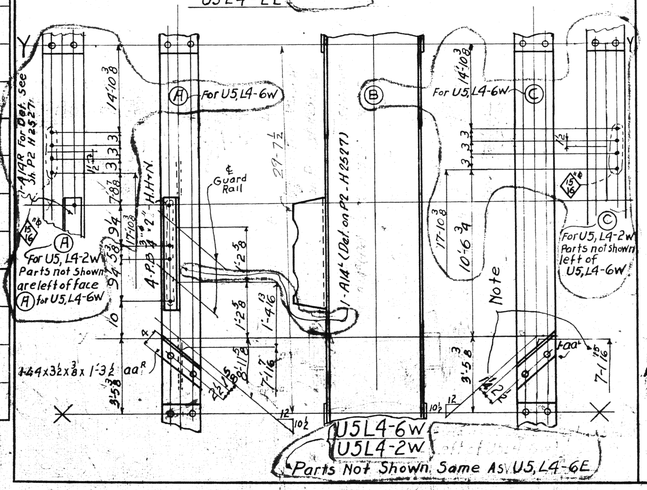


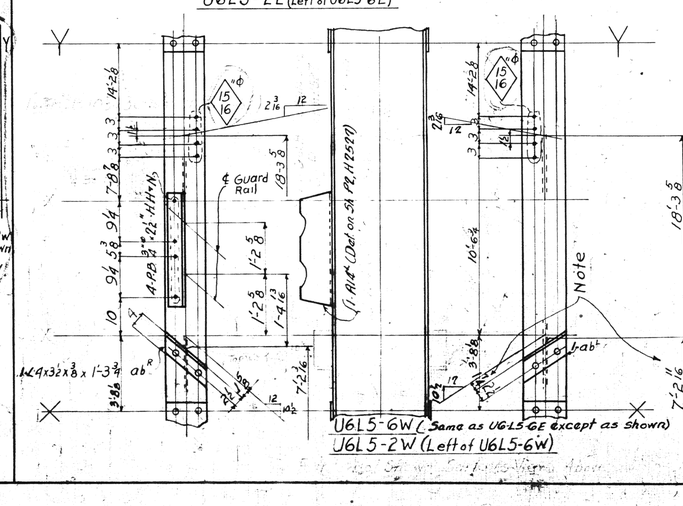




U2-L3-6W
U2-L3-2W (Left of U2L3-6W)

Span 2 Div. 5	Span 6 Div. 1	Total	Description	Mark
	1	1	Diagonals	U5L4-6E
1		1	do	U5L4-2E
	1	1	do	U5L4-6W
1		1	do	U5L4-2W
	1	1	do	U6L5-6E
1		1	do	U6L5-2E
	1	1	do	U6L5-6W
1		1	do	U6L5-2W
	1	1	do	U2L3-6W
1		1	do	U2L3-2W





MATERIAL: O.H. Steel A.S.T.M. A7-6
... per bearing 1.20 min. ... at
SPECIFICATIONS: Special by Shaw Wilson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
PAINT: A.B.Co.
RIVETS: 7/8" unless noted
BOLTS: 1 1/8" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 1 1/8" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 1 1/8" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop and Field Except for members permanently bolted are to be painted.

Rev. 7-18-39
7-20-39

(15)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

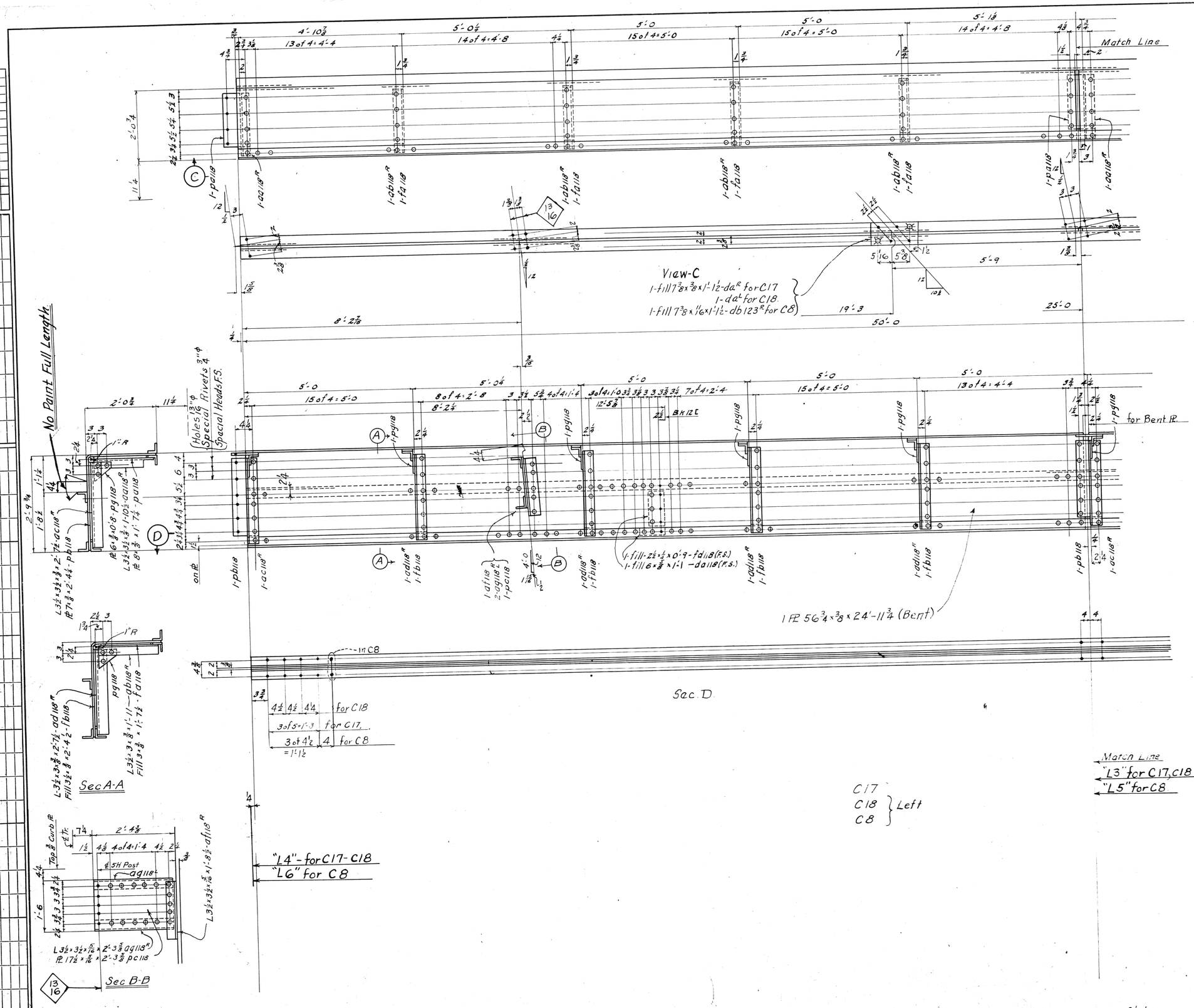
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY B.A.C. DATE 6-6-39
DRAW. CHECKED BY R.W. DATE 6-27-39

ORDER No. H2524

SHEET NO. 122



MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes-except as noted in end view.
CONTACT SURFACES: No (Shop & Field)

Rev. 8/18/39
Rev. 7/11/39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

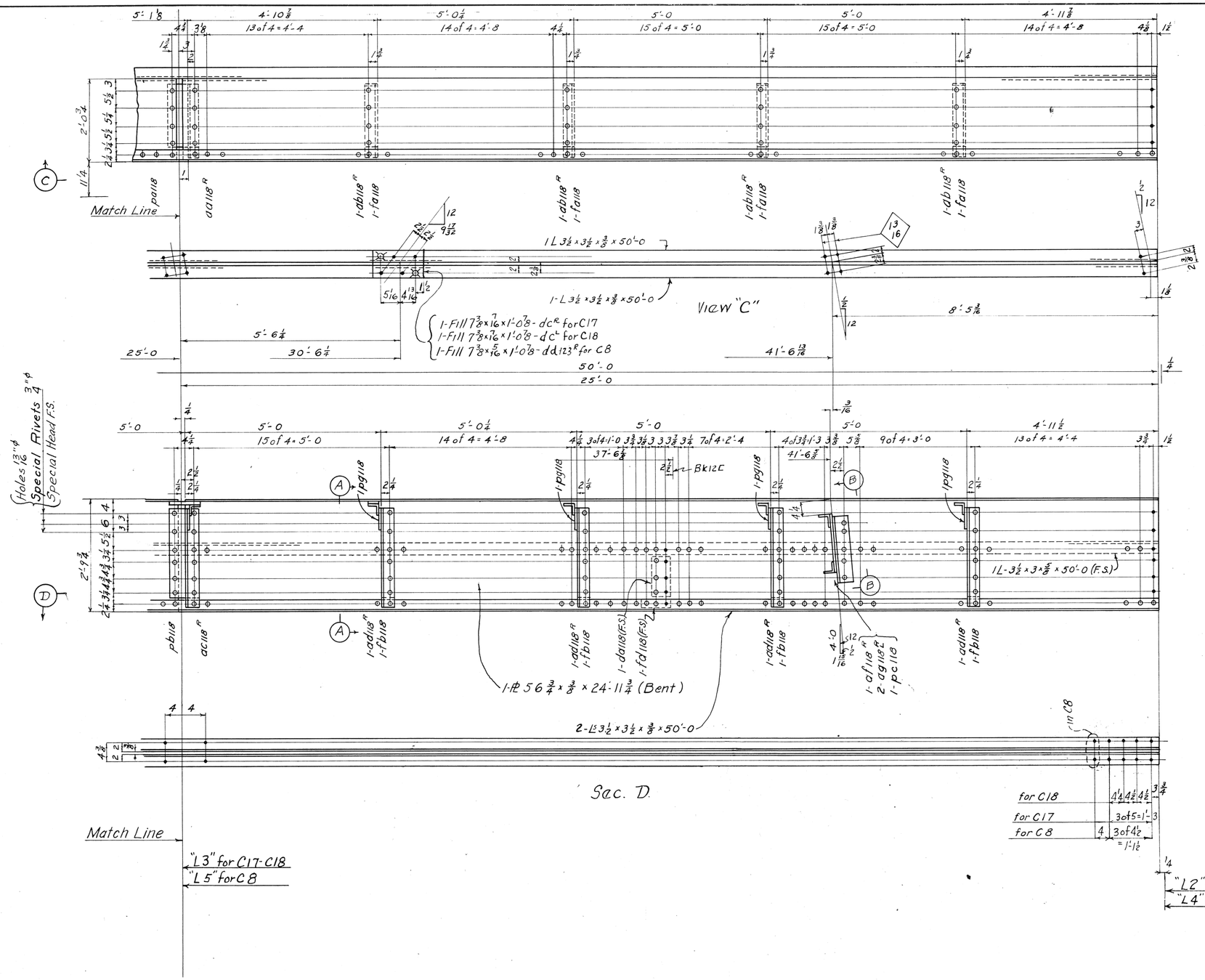
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb PLANT.
WORK FABRICATED AT Amb PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY HRF DATE 6-9-39
DRAW. CHECKED BY HEL DATE 6/23/39

ORDER No. H2524

SHEET NO. 123 AB



Span2	Span1	Span6	Required		
Div. 5	Div. 4	Div. 1	No.	Description	Mark
		1	1	Curb	C17
1			1	Curb	C18
	1		1	Curb	C8

C-17
C-18 } Left
C-8

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ shall be drilled.

PAINT: Yes-except as noted in end view
CONTACT SURFACES: No, SH123AB. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

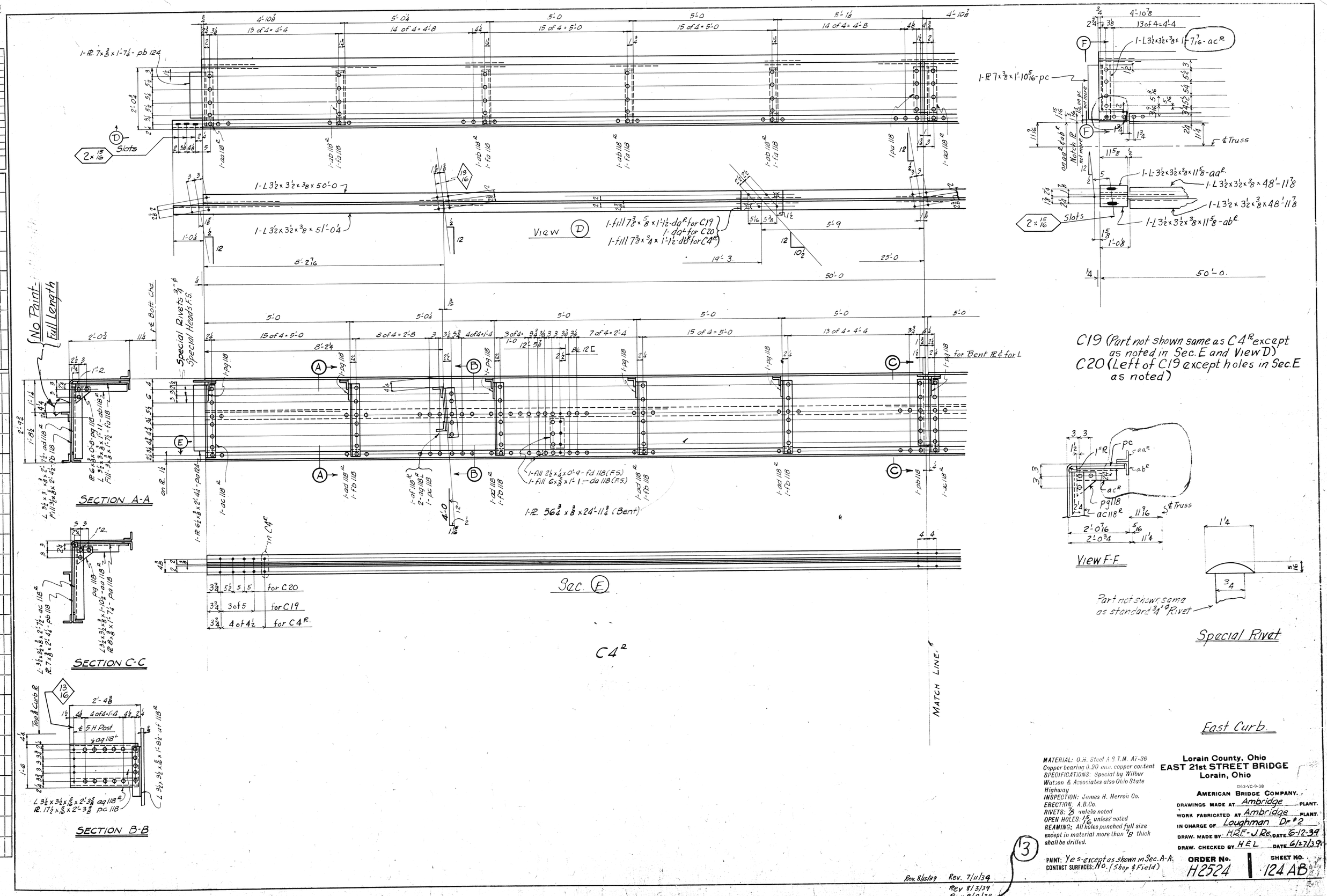
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb PLANT.
WORK FABRICATED AT Amb PLANT.
IN CHARGE OF Loughman DR.#2
DRAW. MADE BY H.R.F DATE 6-9-39
DRAW. CHECKED BY HEL DATE 6/22/39

ORDER No. H2524
SHEET NO. 123B

Rev. 7/11/39
Rev. 8/15/39



MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes-except as shown in Sec. A-A
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

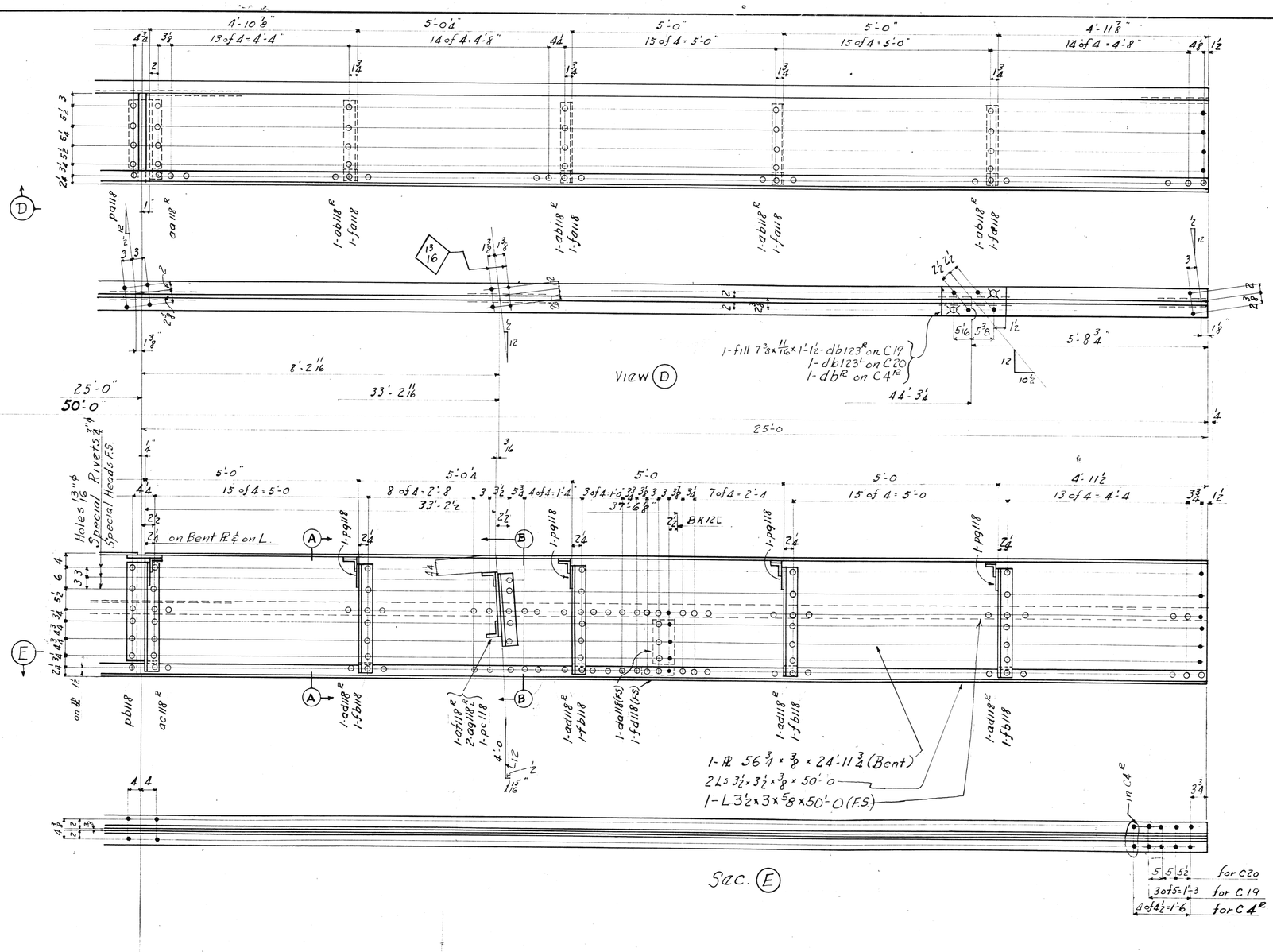
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman Dr #2
DRAW. MADE BY H.R.F.-J.Re. DATE 6-12-39
DRAW. CHECKED BY H.E.L. DATE 6/27/39

ORDER No. H2524
SHEET NO. 124 AB

Rev. 8/15/39 Rev. 7/11/39
Rev 8/3/39
Rev 9/8/39

(3)



Span 3	Span 2	Span 5	Span 6	Required		
Div 6.	Div 5	Div 2	Div 1	No	Description	Mark
			1	1	Curb	C19
	1			1	Curb	C20
		1		1	Curb	C4R
1				1	Curb	C4L.

East Curb

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes-except as shown in Sec. A-A 54124 A.B.
CONTACT SURFACES: No? (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

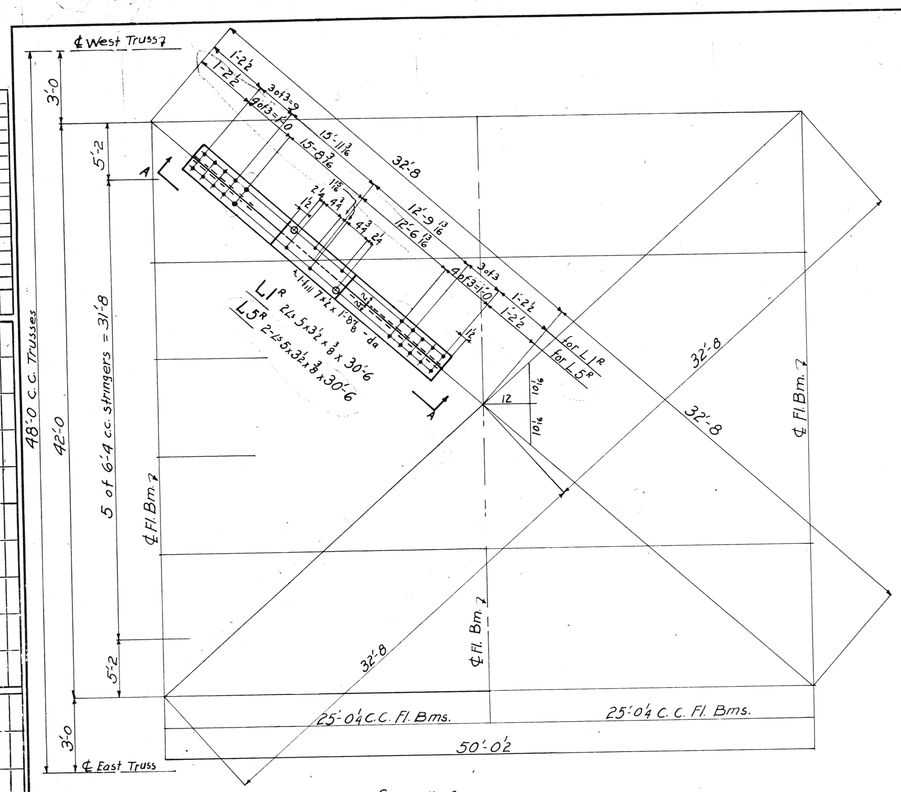
D63-VC-9-38

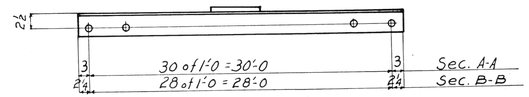
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb PLANT.
WORK FABRICATED AT Amb PLANT.
IN CHARGE OF Loughman Dr. No. 2
DRAW. MADE BY H.R.F. DATE 6-9-39
DRAW. CHECKED BY HEL DATE 6/27/39

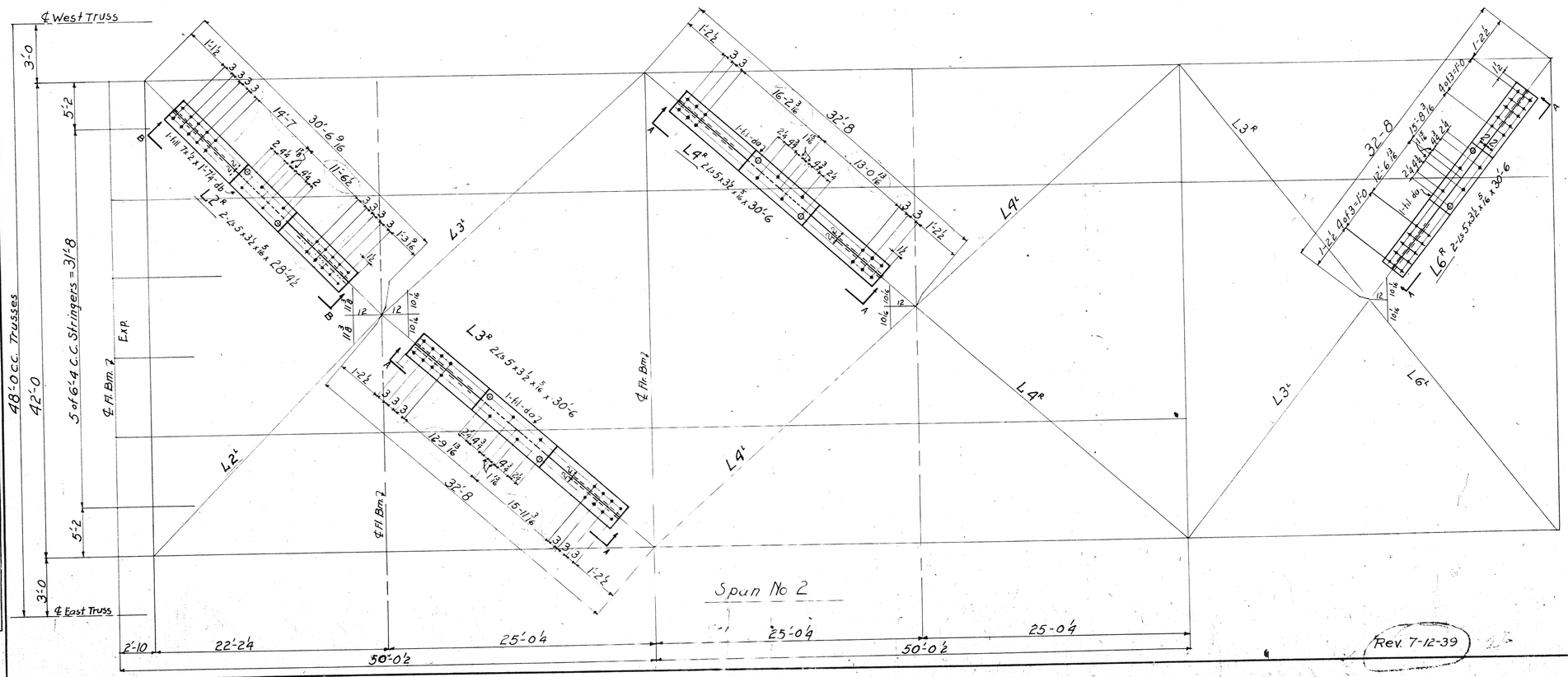
ORDER No. H2524
SHEET NO. 124 B.

Rev. 8/25/39 Rev. 7/11/39





Span 2	Span 6	REQUIRED		
Div 5	Div 1	Total	Description	Mark
	4	4	Bot. Laterals	$L1^R$
	4	4	do	$L1^L$
1		1	do	$L2^R$
1		1	do	$L2^L$
2		2	do	$L3^R$
2		2	do	$L3^L$
2		2	do	$L4^R$
2		2	do	$L4^L$
	2	2	do	$L5^R$
	2	2	do	$L5^L$
1		1	do	$L6^R$
1		1	do	$L6^L$



MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞
OPEN HOLES: 15/16
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: NO - Shop & Field, except members permanently bolted to be painted.

Rev. 7-12-39

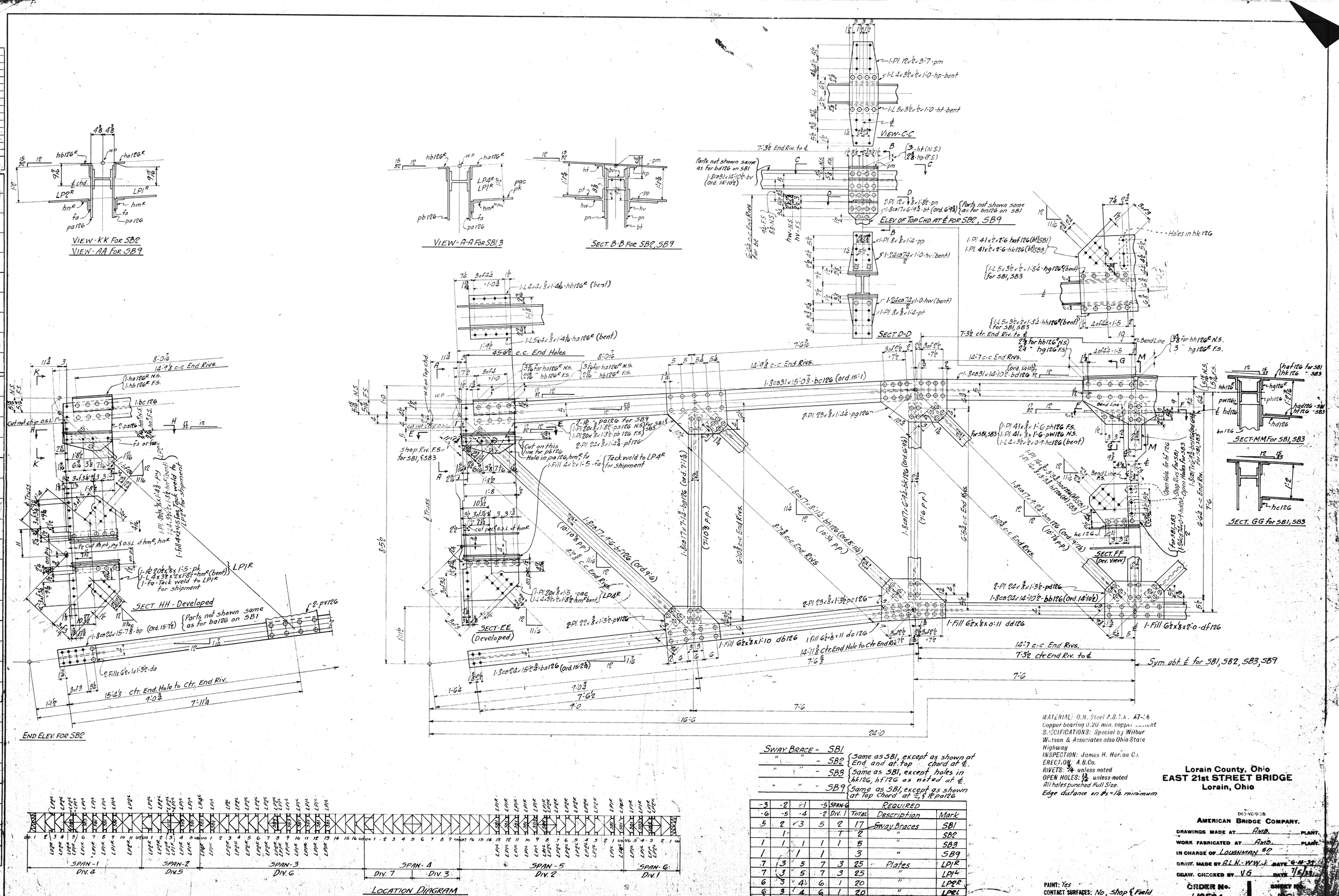
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY B.A.C. DATE 6-15-39
DRAW. CHECKED BY R.S.S. DATE 6-26-39

ORDER No. H2524
SHEET NO. 125



SWAY BRACE - SB1
" " - SB2 {Same as SB1, except as shown at End and at top chord at ℄.
" " - SB3 {Same as SB1, except holes in hk126, hf126 as noted at ℄.
" " - SB9 {Same as SB1, except as shown at Top Chord at ℄, & #pa126

-3	-2	-1	-5	SPAN-6		REQUIRED	
-6	-5	-4	-2	DIV. 1	TOTAL	Description	Mark
5	2	3	5	2	17	Sway Braces	SB1
	1			1	2	"	SB2
1	1	1	1	1	5	"	SB3
1		1	1		3	"	SB9
7	3	5	7	3	25	Plates	LP1R
7	3	5	7	3	25	"	LP1L
6	3	4	6	1	20	"	LP2R
6	3	4	6	1	20	"	LP2L
1			1		2	"	LP3R
1			1		2	"	LP3L

Rev. 7-17-39

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 3/4 unless noted
OPEN HOLES: 13/16 unless noted
All holes punched Full Size.
Edge distance on #s = 1/4 minimum

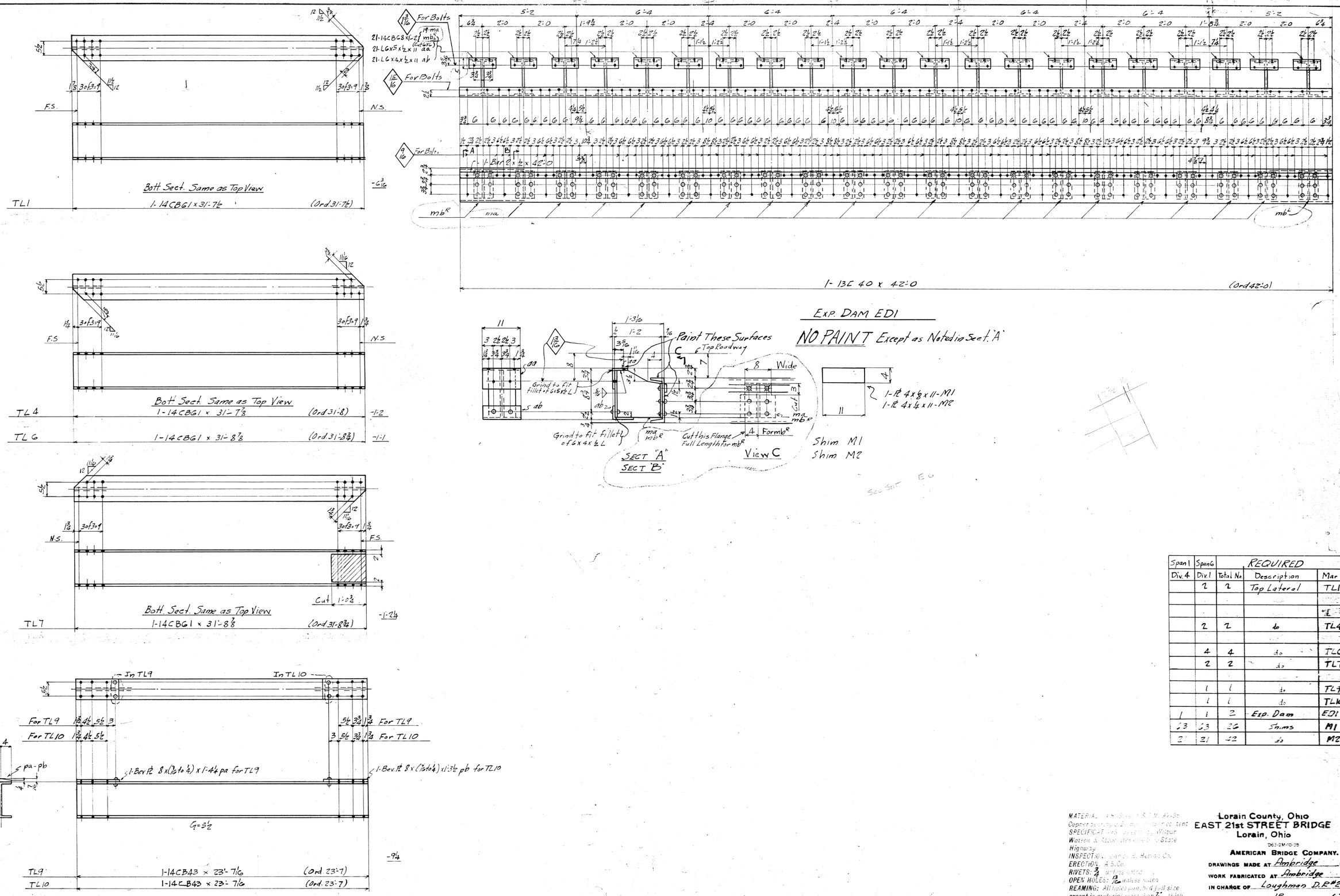
PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF LOUGHMAN #2
DRAW. MADE BY A.L.H.-W.W.-J. DATE 6-16-39
DRAW. CHECKED BY VG DATE 7/5/39
ORDER No. H2524 SHEET No. 1 PC



EXP. DAM ED1

NO PAINT Except as Noted in Sect. "A"

Span 1	Span 6	REQUIRED		
Div. 4	Div. 1	Total No.	Description	Mark
	2	2	Top Lateral	TL1
	2	2	do	TL4
	4	4	do	TL6
	2	2	do	TL7
	1	1	do	TL9
	1	1	do	TL10
1	1	2	Exp. Dam	ED1
13	13	26	Shims	M1
21	21	42	do	M2

MATERIAL: [illegible]
Copper bearing [illegible] minimum copper content
SPECIFICATIONS: [illegible] by Wilbur Watson & Associates and Ohio State Highway
INSPECTION: [illegible] H. Hanna Co.
ERECTION: A.B.Co.
RIVETS: ¾" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than ⅜" thick, shall be drilled.

PAINT: Yes Except as Noted
CONTACT SURFACES: No (Shop & Field)

Rev. 7-21-39
Rev. 7-18-39

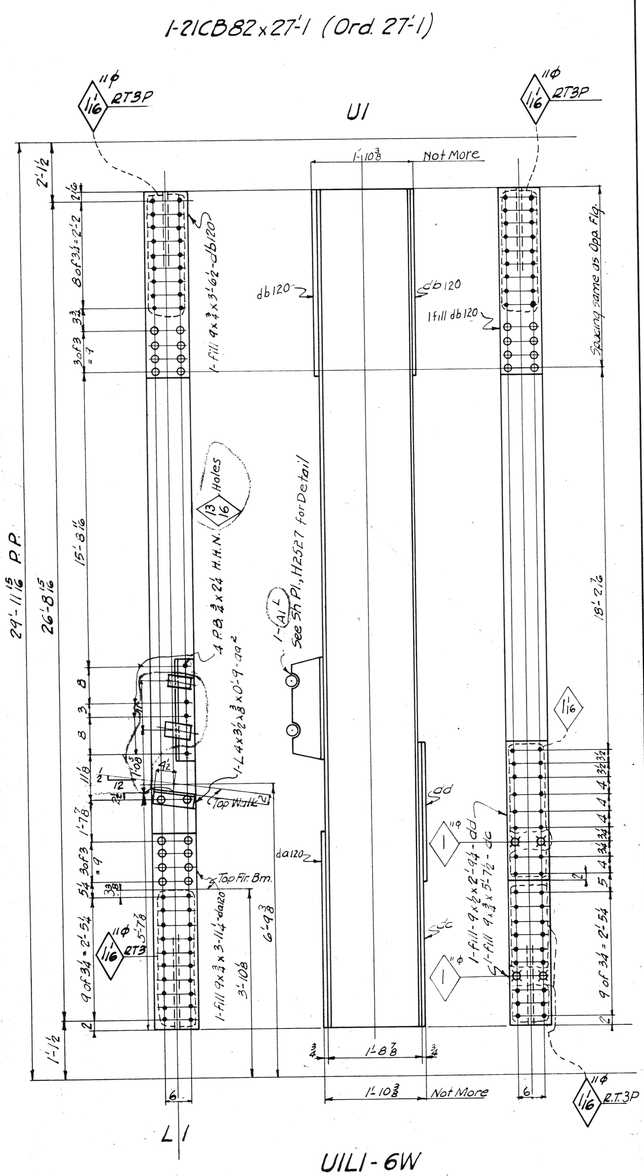
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

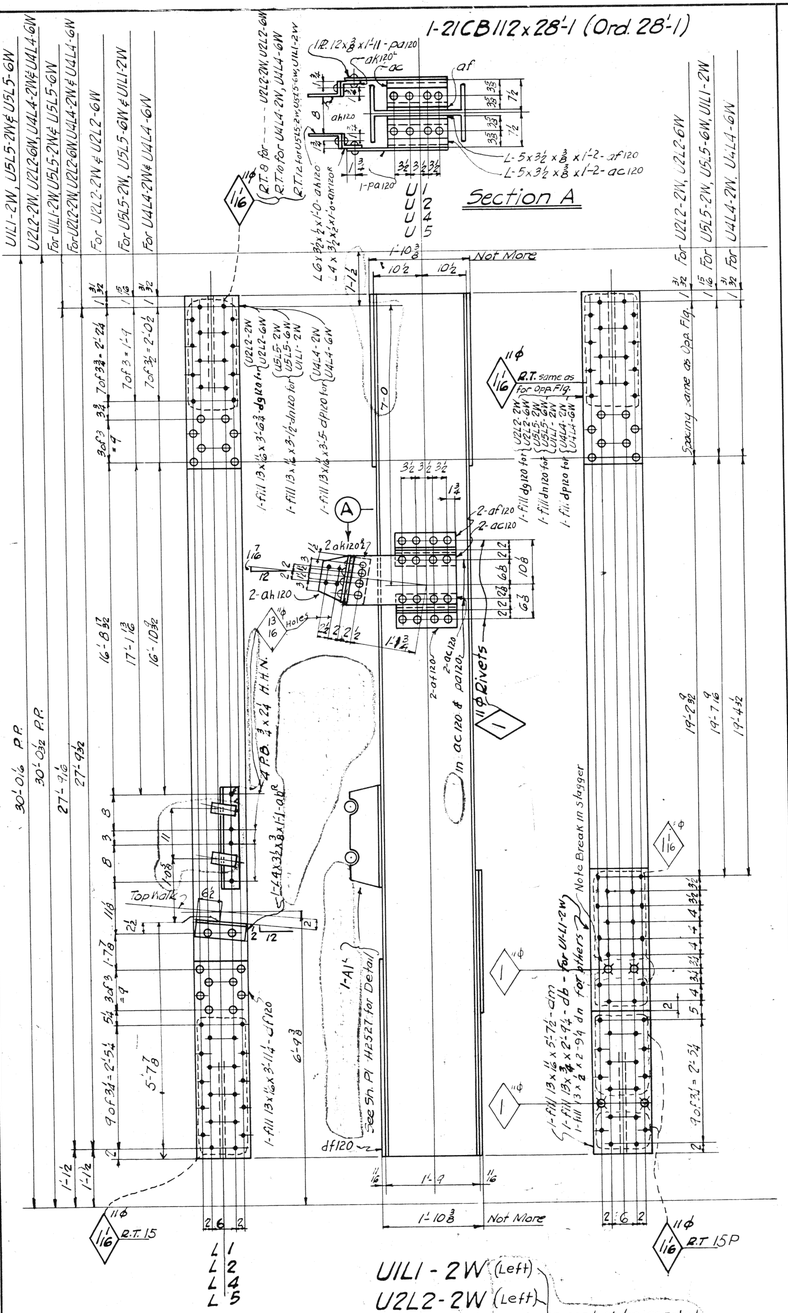
D63-2M-10-38

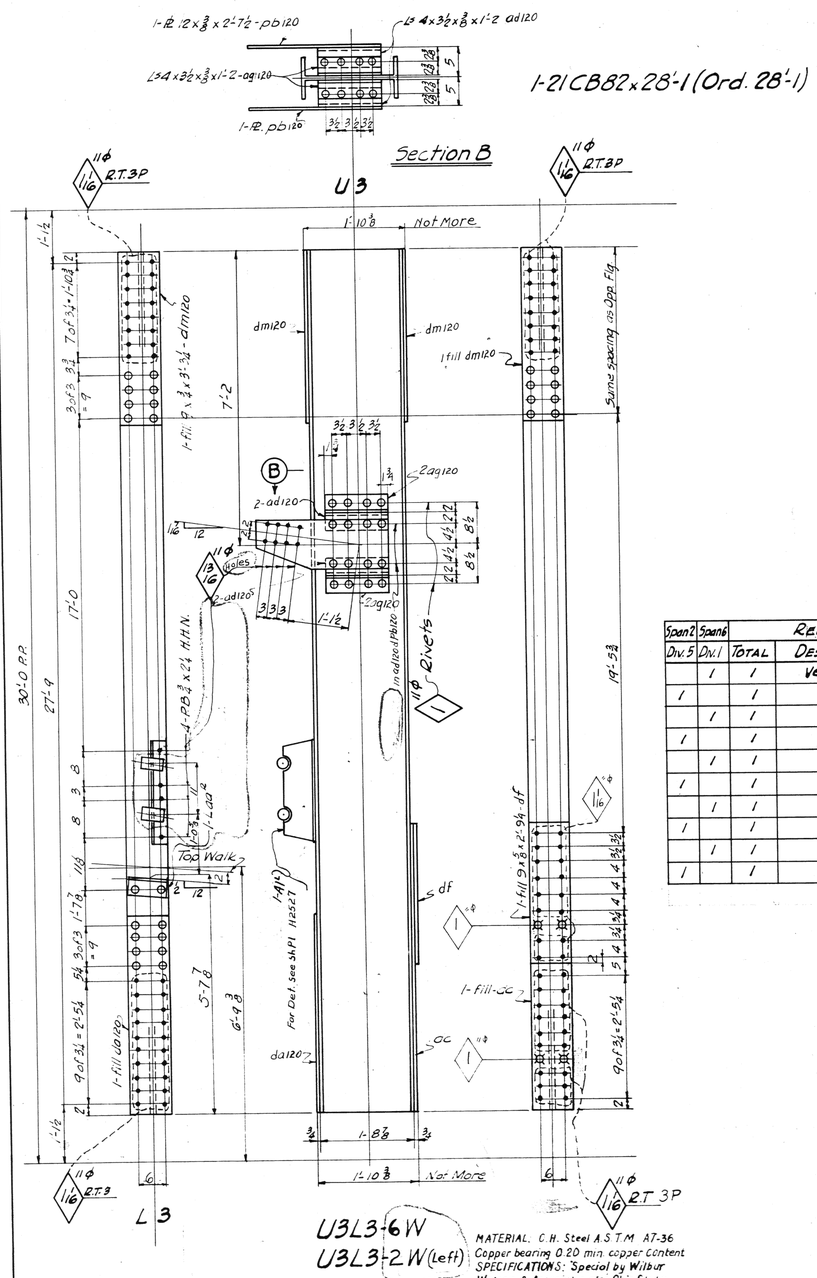
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY JR DATE 6-27-39
DRAW. CHECKED BY RBB DATE 6-28-39

ORDER No. H2524
SHEET NO. 127







Span 2 Div. 5	Span 6 Div. 1	Required Total	Description	Mark
	1	1	Vertical	U1L1-6W
1		1	do.	U1L1-2W
	1	1	do.	U2L2-6W
1		1	do.	U2L2-2W
	1	1	do.	U4L4-6W
1		1	do.	U4L4-2W
	1	1	do.	U5L5-6W
1		1	do.	U5L5-2W
	1	1	do.	U3L3-6W
1		1	do.	U3L3-2W

MATERIAL: C.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" Unless noted
OPEN HOLES: As Noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia and reamed to size while parts are assembled
Holes in material more than 7/8" thick shall be drilled
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT sub punched or sub-drilled 13/16" dia and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled

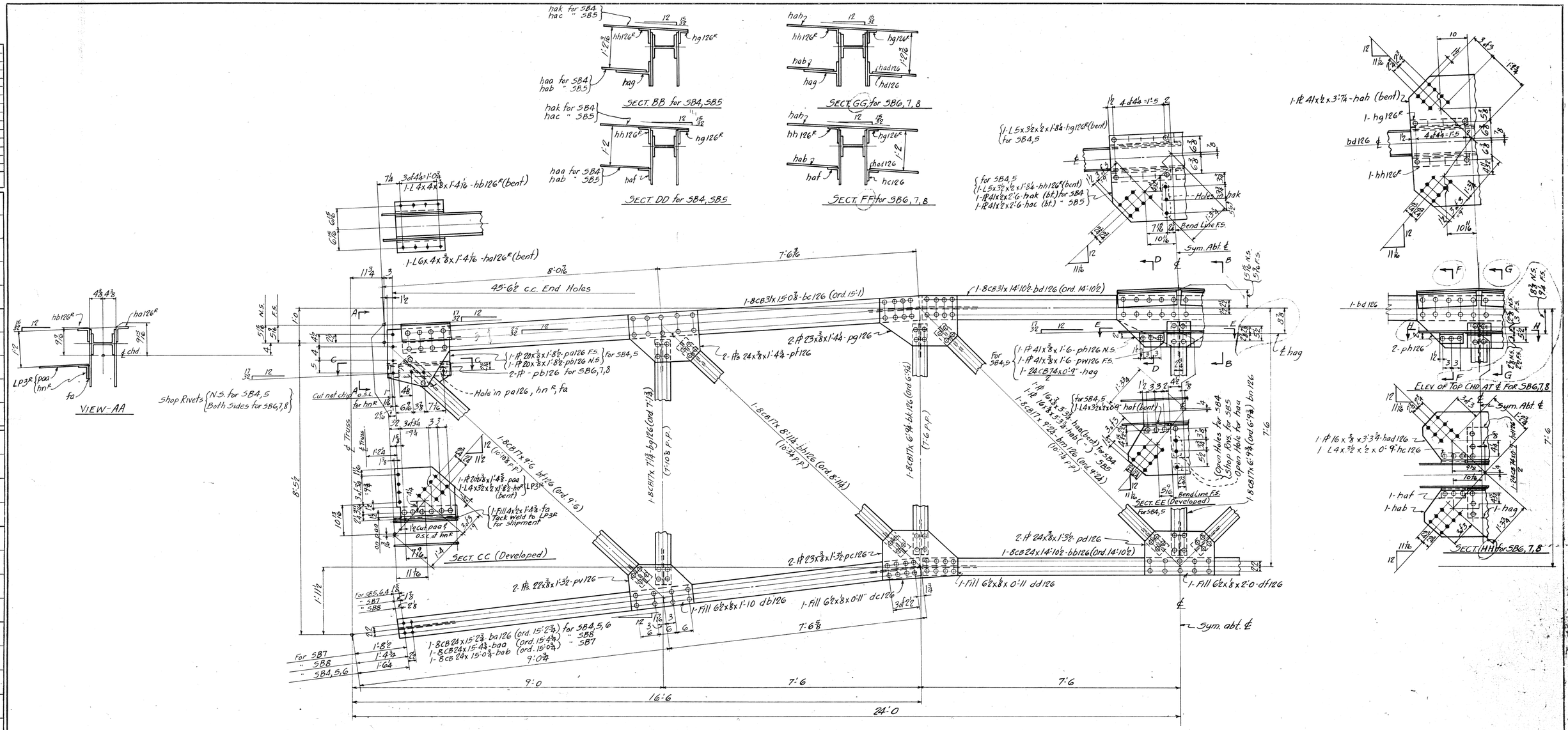
PAINT: Yes
CONTACT SURFACES: NO Shop & Field Except members permanently bolted are to be painted

Rev. 7-18-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

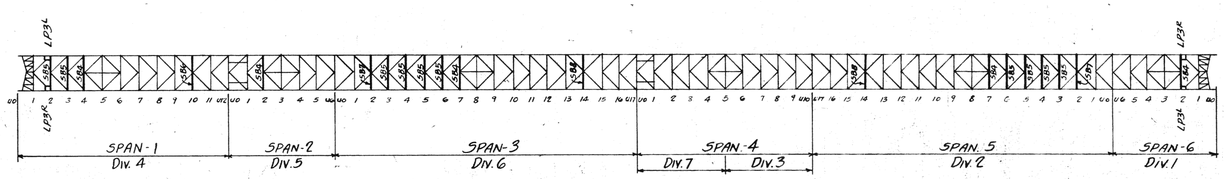
D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY B.A.C. (-J.R.C.) DATE 6-22-39
DRAW. CHECKED BY VG DATE 6/27/39

ORDER No. H2524
SHEET NO. 128



SWAY BRACE - SB4

" "	- SB5	Same as SB4, except holes in haa & hab as noted at ℄.
" "	- SB6	Same as SB4, except as shown and noted on Top Chd. at ℄, and pl. pb126
" "	- SB7	Same as SB4, except as shown & noted on Top Chd. at ℄, pl pb126, and Bott. Chd. bab.
" "	- SB8	Same as SB4, except as shown and noted on Top Chd. at ℄, pl. pb126, and Bott. Chd. baa



LOCATION DIAGRAM

SPAN 3	2	1	5	SPAN 6	REQUIRED		
DIV. 6	5	4	2	DIV. 1	TOTAL	DESCRIPTION	MARK
1	✓1	1	1	1	5	Sway Braces	SB4
4		2	4		10	" "	SB5
		1			1	" "	SB6
1			1		2	" "	SB7
1			1		2	" "	SB8
		1		1	2	Plates	LP3R
		1		1	2	"	LP3L

9

Rev. 7-26-39
Rev. 7-18-39

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ¾" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than ⅞" thick shall be drilled.

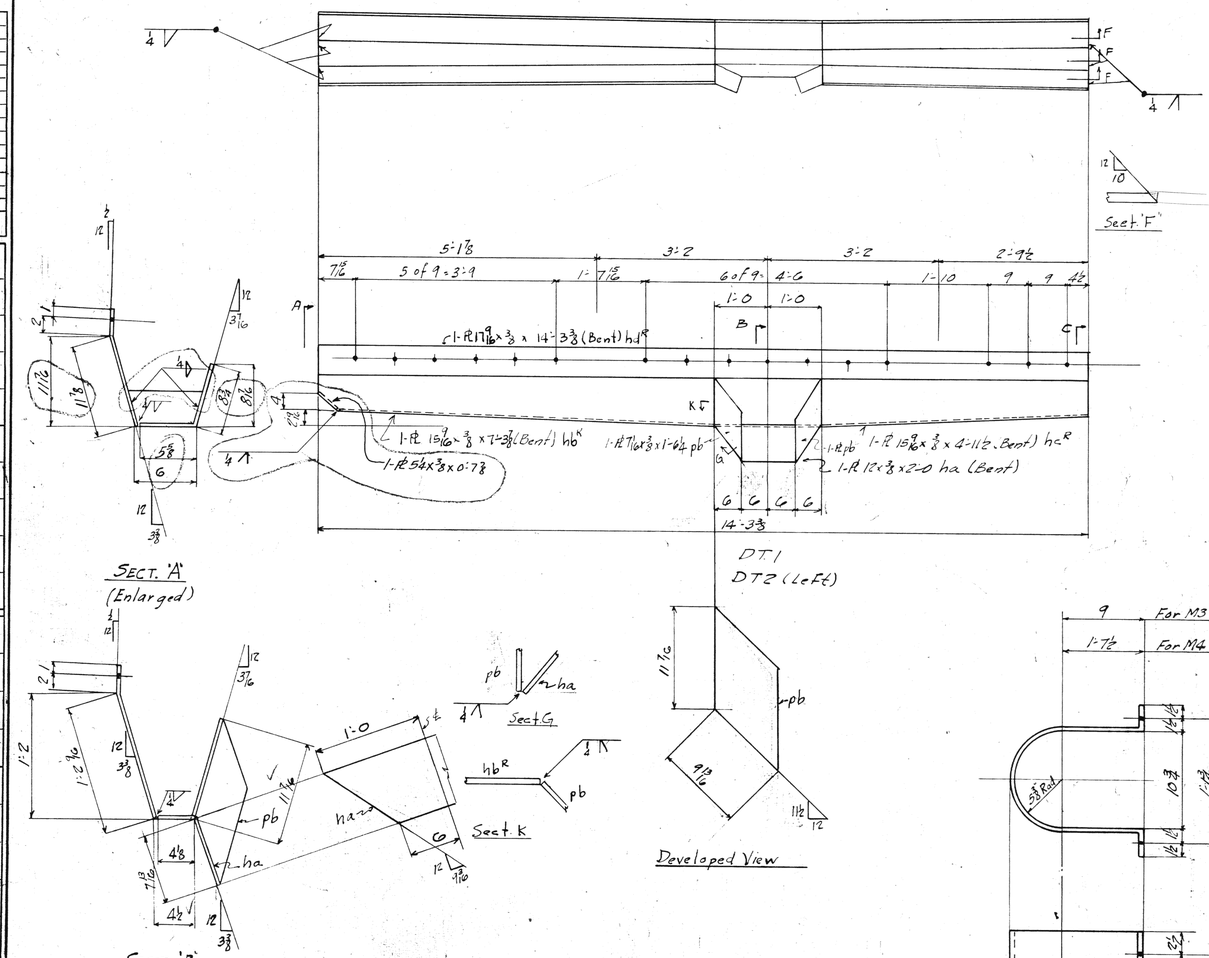
PAINT: Yes
CONTACT SURFACES: No, Shop & Field

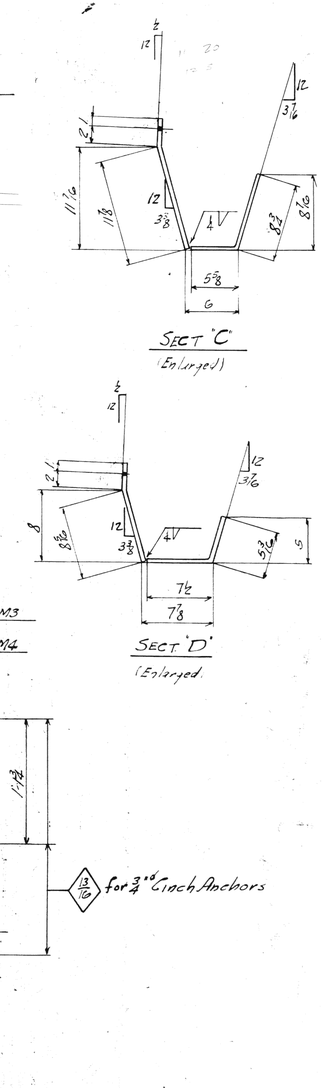
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-2M-10-38

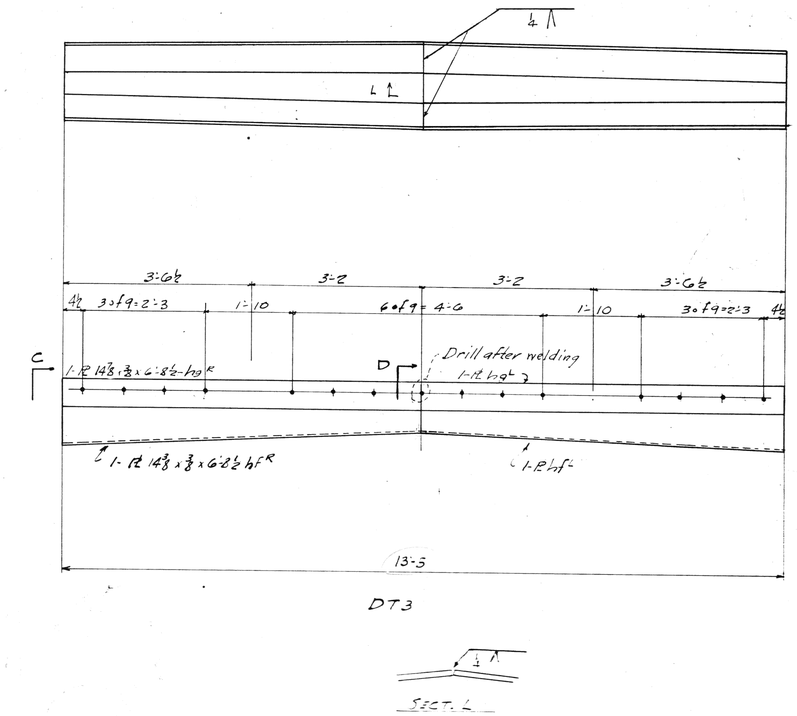
AMERICAN BRIDGE COMPANY.

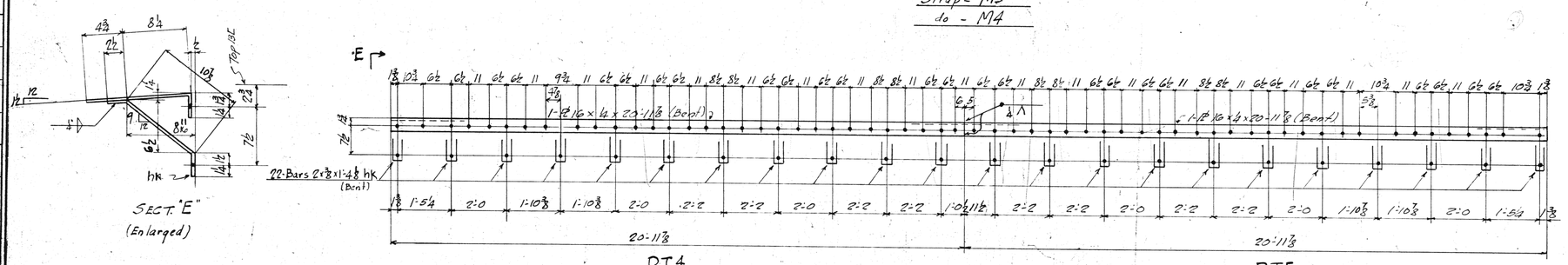
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY ALH DATE 7-6-39
DRAW. CHECKED BY JEB DATE 7-12-39

ORDER No. H2524
SHEET No. 129









Span	Span 6	REQUIRED		
Div 4	Div 1	Total No	Description	Mark
1	1	2	Drain Trough	DT1
1	1	2	do	DT2
1	1	2	do	DT3
1	1	2	do	DT4
1	1	2	do	DT5
8	2	10	Straps	M3
2	2	4	do	M4

Drain Troughs at Abutments

MATERIAL: O.H. Steel A.S.T.M A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: unless noted
OPEN HOLES: 1/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No

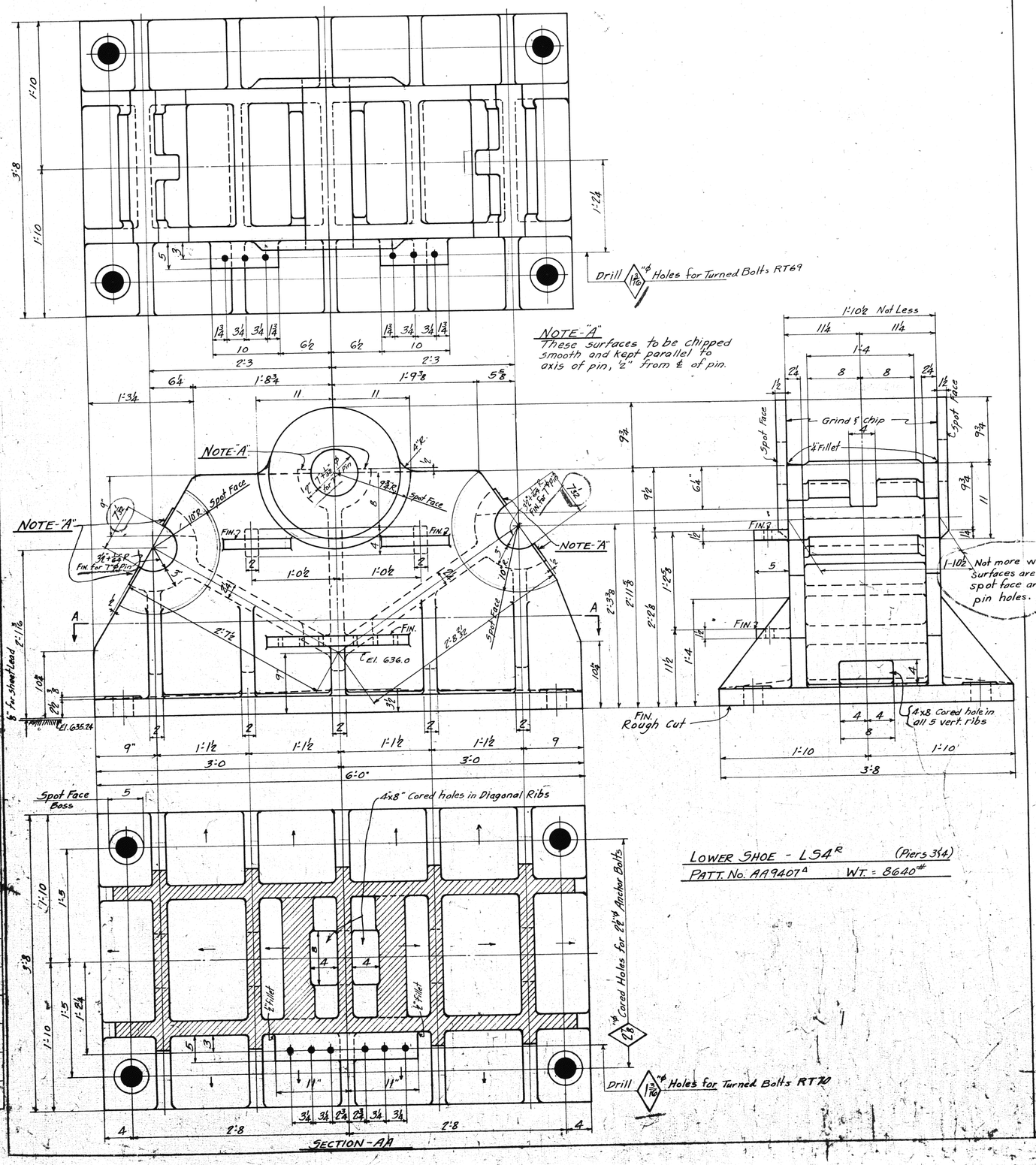
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman Dept #2
DRAW. MADE BY JCR DATE 7-5-39
DRAW. CHECKED BY [illegible] DATE 7-7-39

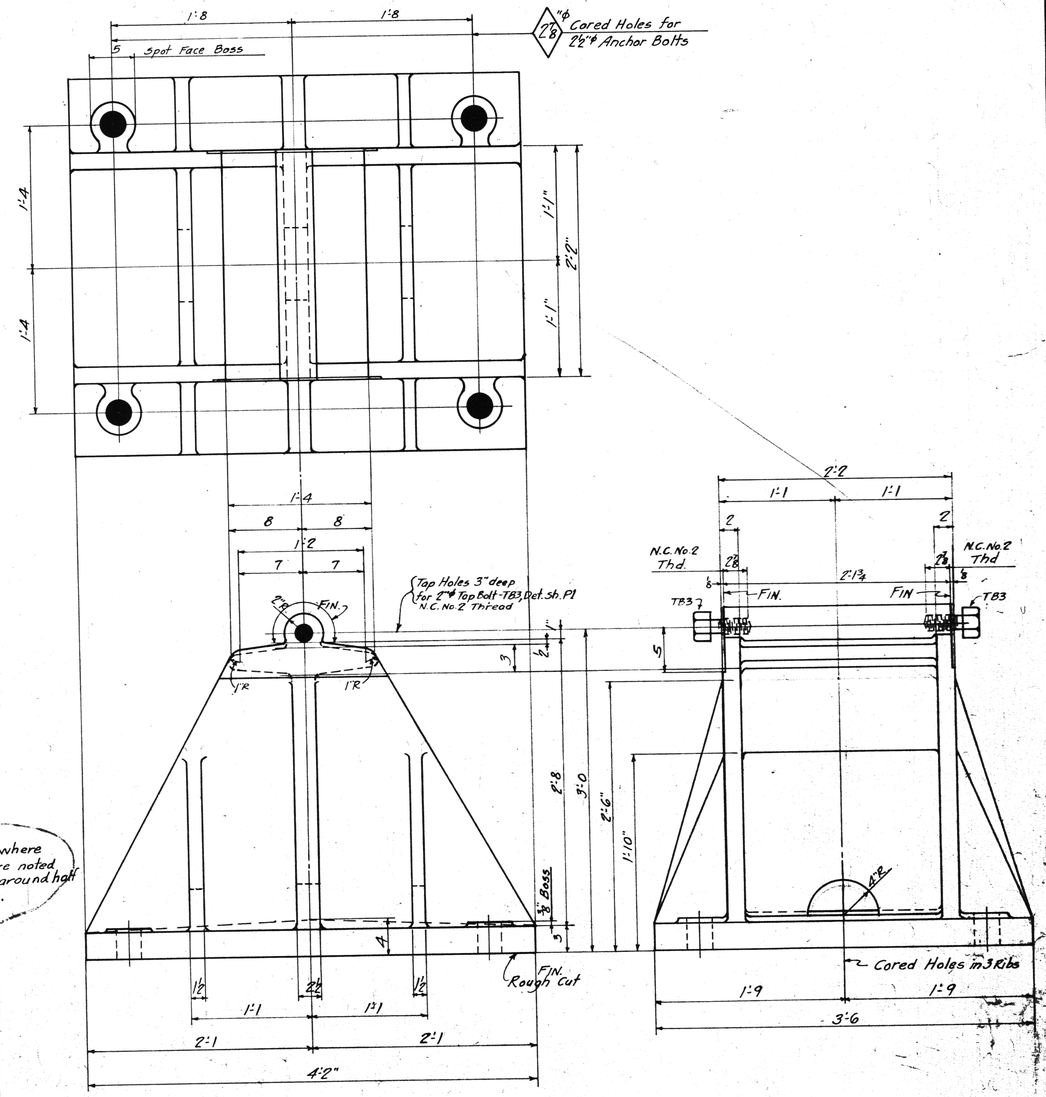
ORDER No. H2524
SHEET No. 130

Rev. 9-11-39



LOWER SHOE - LS4R (Piers 3 & 4)

PATT. No. AA9407Δ WT. = 8640#



LOWER SHOE-LS5 (Pier #1)

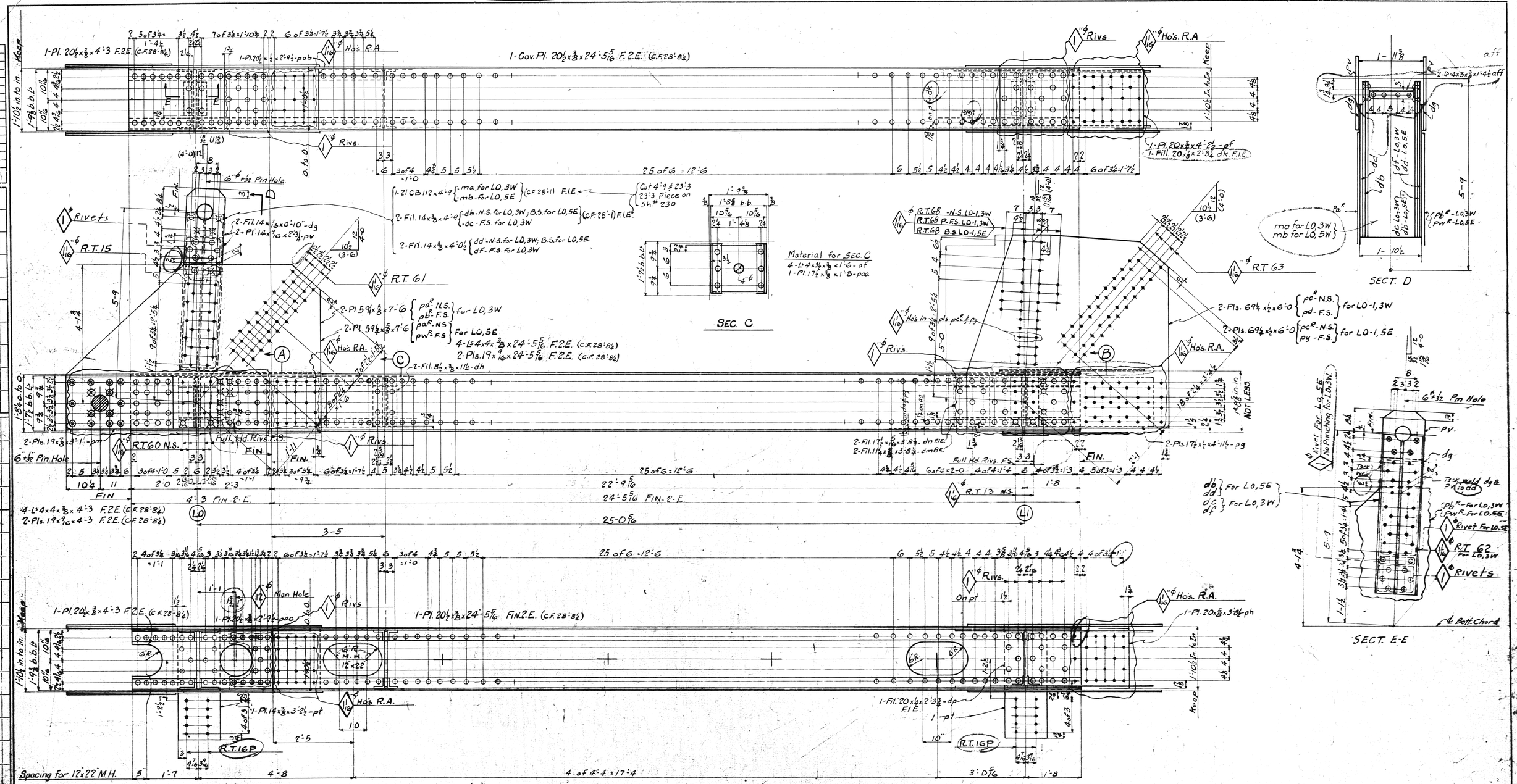
PATT. No. AA9408Δ WT. = 4905#

DW-A	-6	-2	Req.# C35418		
SPAN-1	-3	-5	TOTAL No.	REQUIRED DESCRIPTION	MARK
	1	1	2	Lower Shoes	LS4R
	1	1	2	" "	LS4L
2			2	" "	LS5

Rev. 7-31-39
Rev. 7-12-39
Rev. 6-22-39
Rev. 6-20-39
Rev. 6-12-39
Rev. 6-5-39
Rev. 6-1-39

MATERIAL: Cast Steel Annealed ASTM A27-24, Class-B, Medium
SPECIFICATIONS: Ohio State Highway
INSPECTION: James H. Herron Co.
All Fillets: 1" Radius except as noted.
PAINT: Yes
SURFACES: One coat of white Lead & Tallow

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC(P-38)
AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT: Ambridge
WORK FABRICATED AT: Ambridge
IN CHARGE OF: Loughman
DRAW. MADE BY: ALH
DRAW. CHECKED BY:
ORDER No. H2524



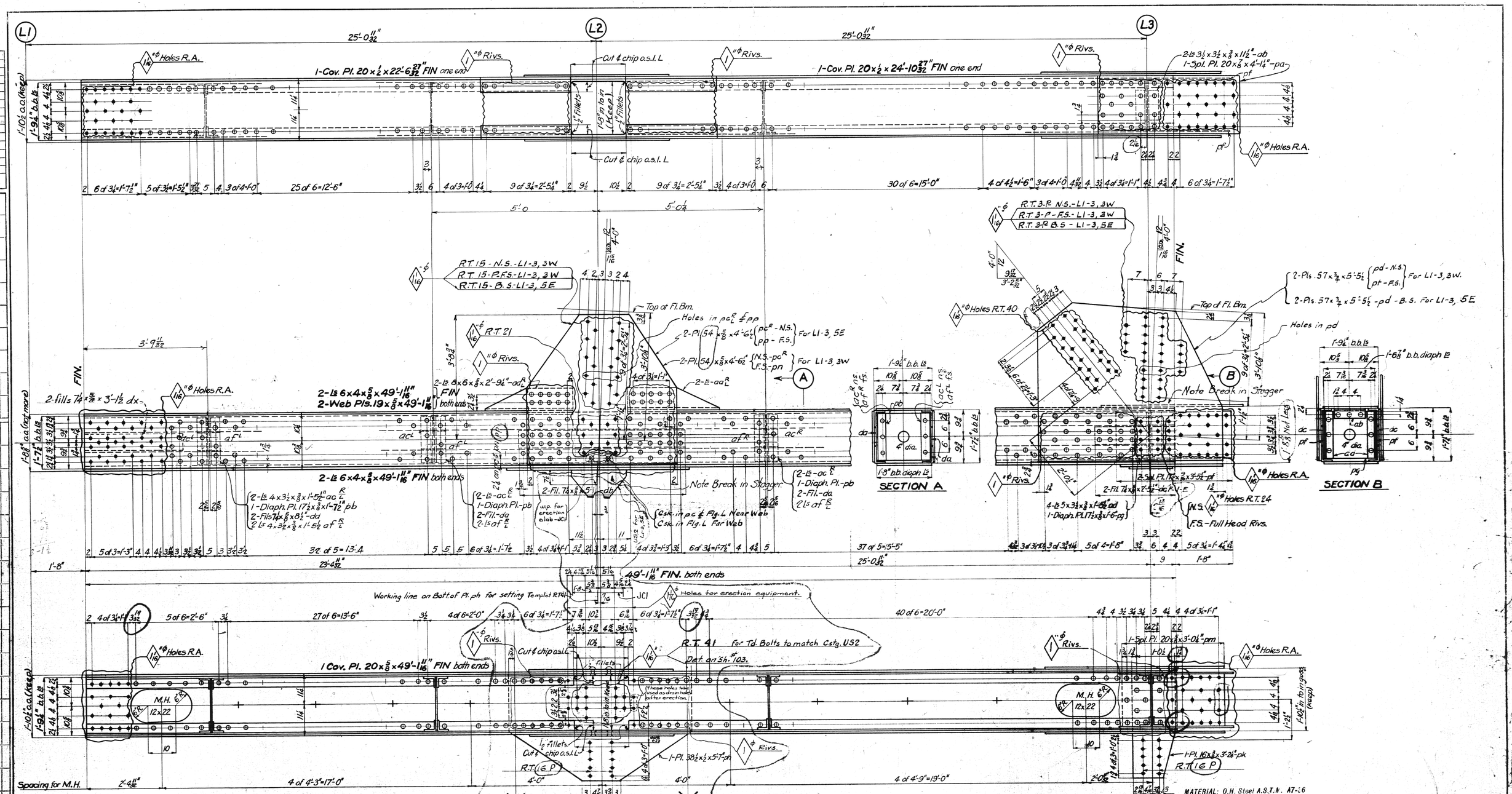
Span	3	5	REQUIRED		
Div.	6	2	Total No.	Description	Mark.
	1		1	Bottom Chord	LO-1, 3W
	1		1	" "	LO-1, 3E
		1	1	" "	LO-1, 5W
		1	1	" "	LO-1, 5E
	1		1	" "	LO, 3W
	1		1	" "	LO, 3E
		1	1	" "	LO, 5W
		1	1	" "	LO, 5E

23

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 13/16" unless noted
OPEN HOLES: 15/32" unless noted
REAMING: All holes in material ⅜" thick or less subpunched 13/32" dia. and reamed to size while parts are assembled.
Holes in material more than ⅜" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/32" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.
DRAW. MADE BY H.E.L. RW DATE 6/15/39
DRAW. CHECKED BY L.L. DATE 7-19-39
ORDER No. H2524
SHEET NO. 202



L1-3, 3W	
L1-3, 3E	(Left of L1-3, 3W except Pls. pn & pt) See Location Diagram
L1-3, 5E	(Same as L1-3, 3W except Pls. pn & pt & pv) and bottom Sec between lines "X & Y" as shown)
L1-3, 5W	(Left of L1-3, 3W except plate pv)

LIFTING WT = 7 TONS

SPAN 3	5	REQUIRED	
DIV. 6	2	Description	Mark
1		BOTTOM CHORD	L1-3,3W
1		" "	L1-3,3E
	1	" "	L1-3,5E
	1	" "	L1-3,5W

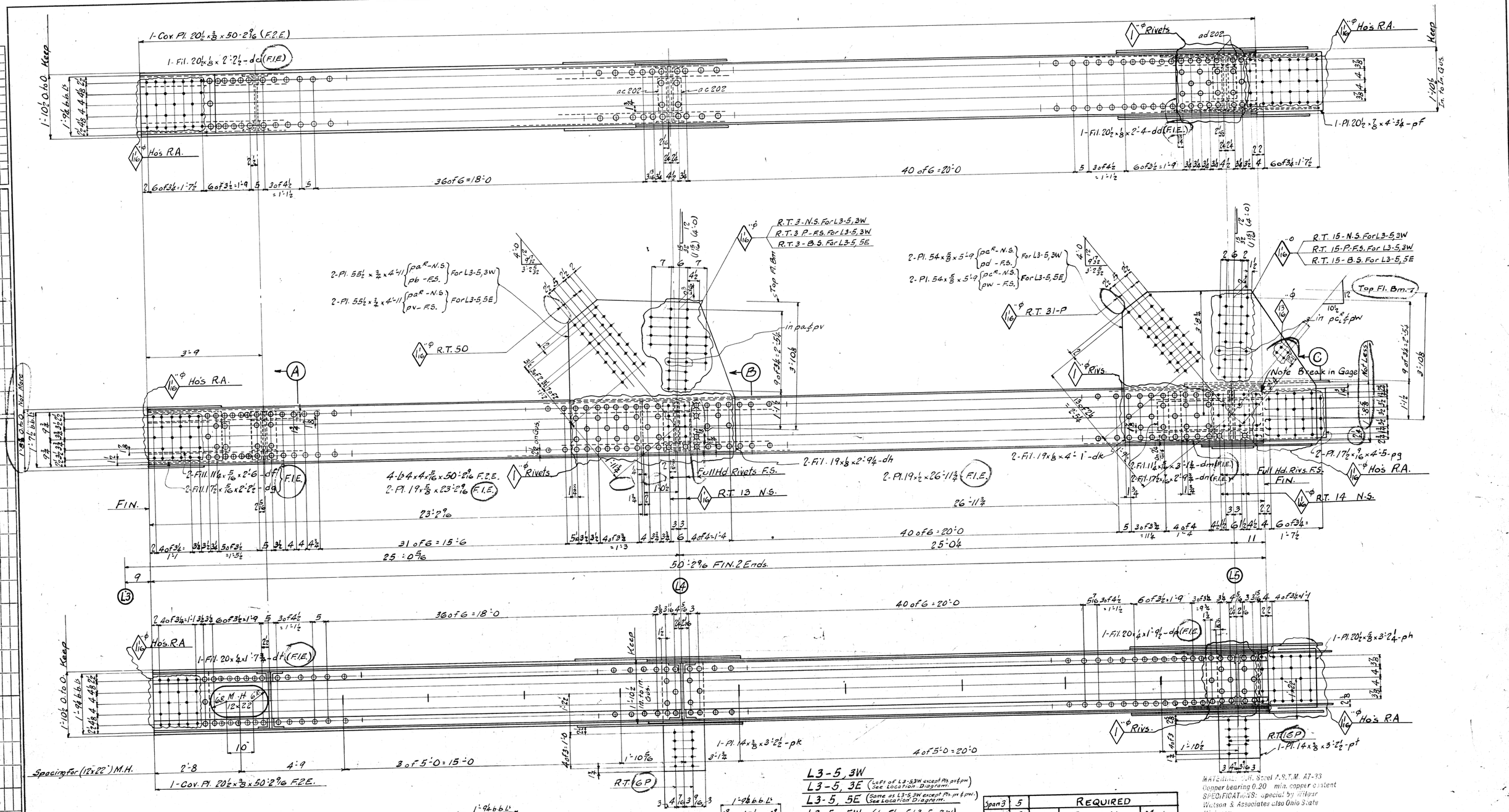
MATERIAL: O.H. Steel A.S.T.M. A7-26 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

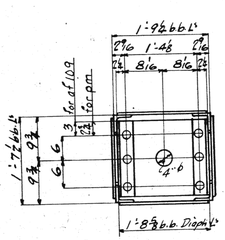
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY H.P.E. (Sig.) DATE 6-15-39
DRAW. CHECKED BY (Sig.) DATE 7-14-39
ORDER No. H2524
SHEET No. 202

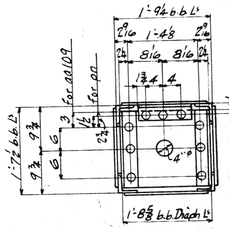
Rev 8-1-39





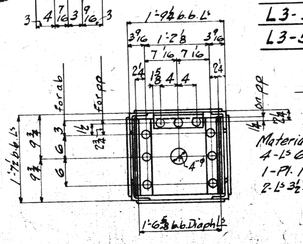
Material for Sec. A.
4-L 4 x 3½ x ⅜ x 1'-6 - ac 109
1-Pl. 17½ x ⅜ x 1'-7¾ - pm
2-Fil. 11¼ x 5/16 x 8½ - dc 109

SEC. A



Material for Sec. B
4-L 3½ x 3½ x ⅜ x 1'-6 - aa 109
2-Fil. 11¼ x 5/16 x 10½ - da
1-Pl. 17½ x ⅜ x 1'-7¾ - pm
2-L 3½ x 3½ x ⅜ x 11½ - ac 202

SEC. B

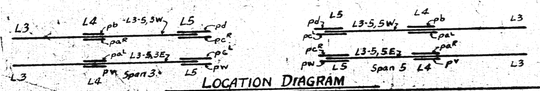


Material for Sec. C
4-L 6 x 3½ x ⅜ x 1'-6 - ab 109
1-Pl. 17½ x ⅜ x 1'-6 - pp
2-L 3½ x 3½ x ⅜ x 11¼ - ad 202

SEC. C

L3-5, 3W
L3-5, 3E (Left of L3-5, 3W except Pls. pv & pw. See Location Diagram.)
L3-5, 5E (Same as L3-5, 3W except Pls. px & pw. See Location Diagram.)
L3-5, 5W (Left of L3-5, 3W)

Lifting Wt. = 6 Tons



LOCATION DIAGRAM

Span 3	5	REQUIRED		
Div. 6	2	No	Description	Mark
	1	1	Bottom Chord	L3-5, 5W
	1	1	" "	L3-5, 5E
1		1	" "	L3-5, 3E
1		1	" "	L3-5, 3W

MATERIAL: O.H. Steel A.S.T.M. A7-33
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: ⅞ Unless noted; Open Holes 15/16 Unless Noted.
REAMING: All holes in material ⅜" thick or less subpunched 1/32" and reamed to size. Holes in material more than ⅜" thick shall be drilled.
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 1/32" dia. and reamed to size to a metal templet.
Holes Marked RA are to be reamed while chords of trusses are assembled.

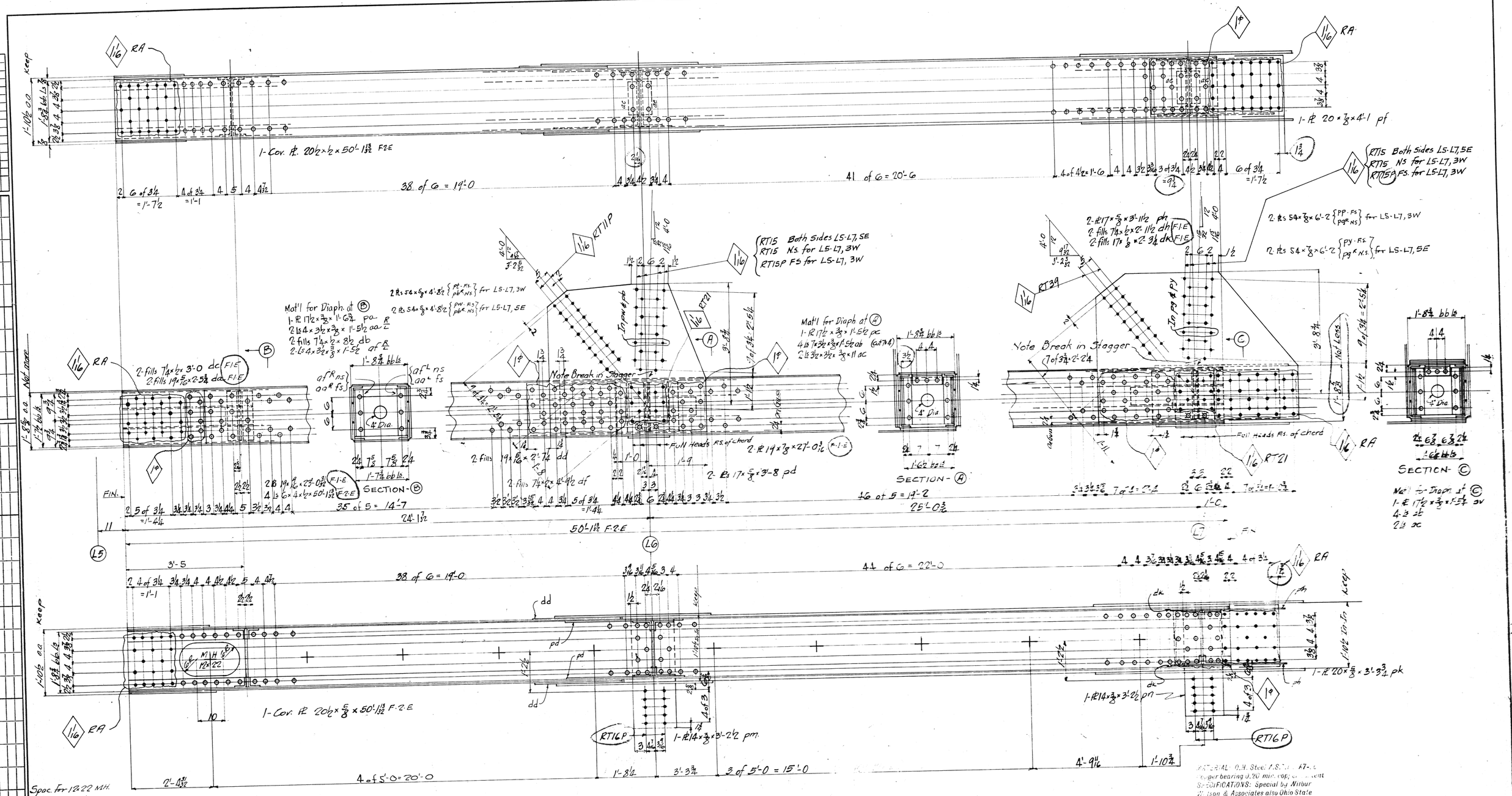
PAINT: Yes
CONTACT SURFACES: No - Shop & Field.

Rev. 8-7-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.F.
DRAW. MADE BY R.W. DATE 6/12/38
DRAW. CHECKED BY DATE 7-13-38

ORDER No. H2524
SHEET No. 204



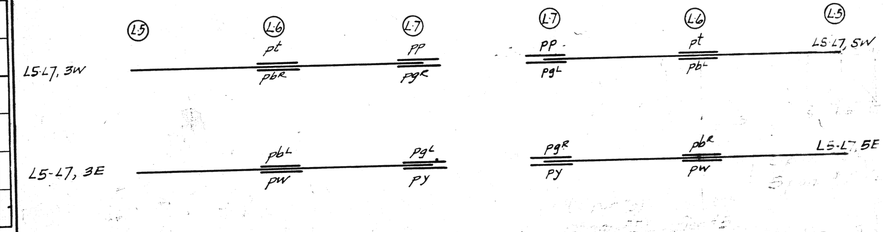
L5-L7-3W

L5-L7-3E Left of L5-L7, 3W except Pls pw & py - See Loc. Diag.

L5-L7-5W Left of L5-L7, 3W

L5-L7-5E Like L5-L7, 3W except Pls pw & py - See Loc. Diag.

Span	Div.	Required			
3	5		Total No.	Description	Mark
1		6	1	Lower Chord	L5-L7-3E
1		6	1	"	L5-L7-3W
	1	2	1	"	L5-L7-5E
	1	2	1	"	L6-L7-5W



Location Diagram

Lifting Wt. = 7 Tons

Rev. 8-7-39

(14)

MATERIAL: O.H. Steel A.S.T.M. A7-
Copper bearing 0.20 min. cop. content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 15/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 15/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

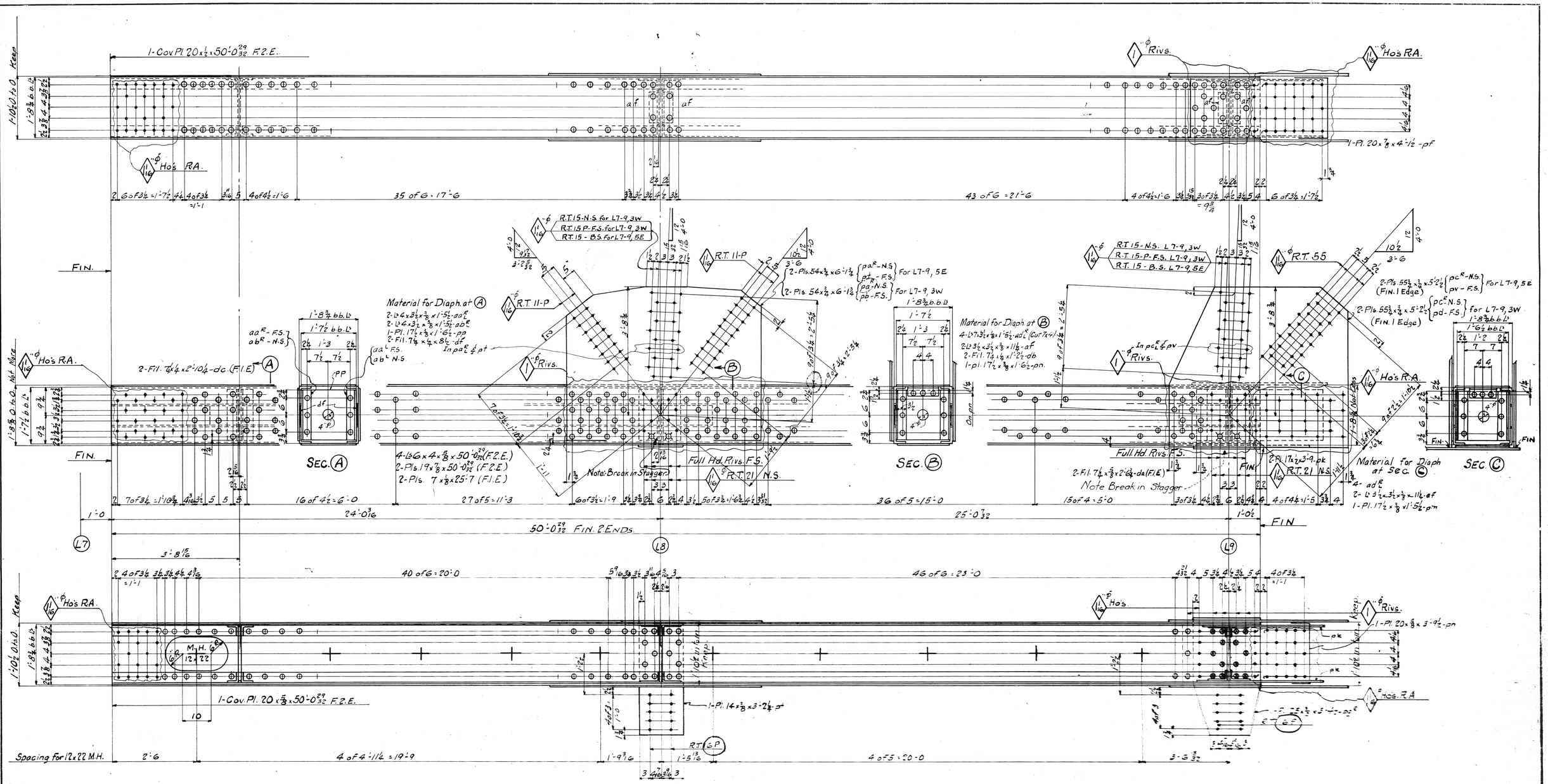
D63-VC-9-38

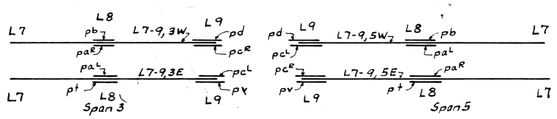
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JEM DATE 6-20-39
DRAW. CHECKED BY HGL DATE 7-13-39

ORDER No. H2524

SHEET NO. 205





LOCATION DIAGRAM

L7-9, 3W
L7-9, 3E (Left of L7-9, 3W except Pls. pt & pv) See Location Diagram.
L7-9, 5W (Left of L7-9, 3W)
L7-9, 5E Same as L7-9, 3W except Pls. pt & pv See Location Diagram.

Lifting Wt = 9 Tons

SPAN	3	5	REQUIRED		
DIV.	6	2	Total No.	Description	Mark
	1		1	Bottom Chord	L7-9, 3W
	1		1	" "	L7-9, 3E
		1	1	" "	L7-9, 5W
		1	1	" "	L7-9, 5E

Rev. 7-27-39

WATER: 12" O.D. Steel A.S.T.M. A7-b
Pipe bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes.
CONTACT SURFACES: No. - Shop & Field.

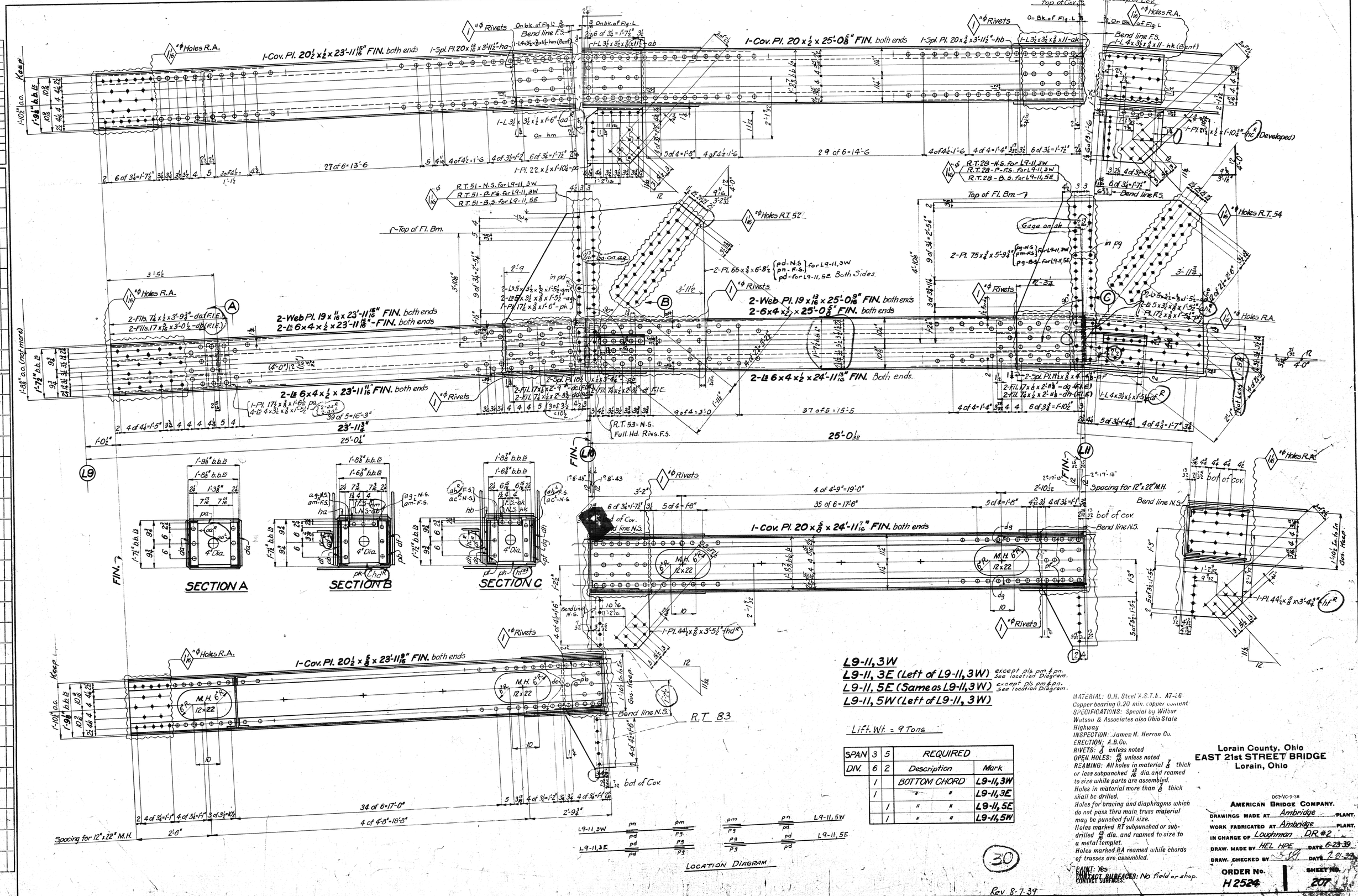
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D53-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY HEL RW DATE 6/19/39
DRAW. CHECKED BY HY DATE 7-13-39

ORDER No. H2524
SHEET No. 206



L9-11, 3W
L9-11, 3E (Left of L9-11, 3W) except pls pm & pn. See location Diagram.
L9-11, 5E (Same as L9-11, 3W) except pls pm & pn. See location Diagram.
L9-11, 5W (Left of L9-11, 3W)

Lift. Wt. = 9 Tons

SPAN	3	5	REQUIRED	
DIV.	6	2	Description	Mark
	1		BOTTOM CHORD	L9-11, 3W
	1		" "	L9-11, 3E
		1	" "	L9-11, 5E
		1	" "	L9-11, 5W

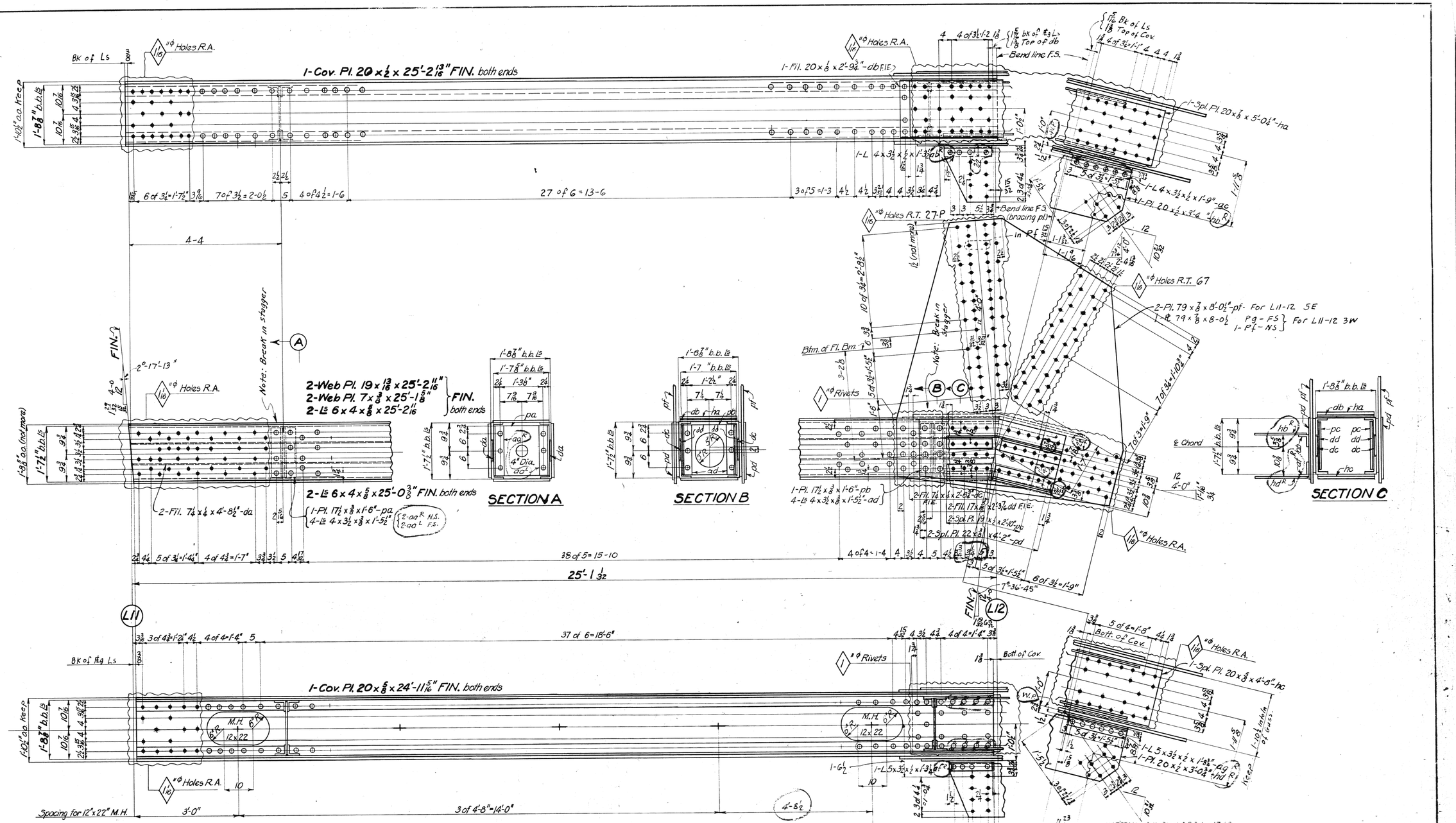
MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled. Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No field or shop.

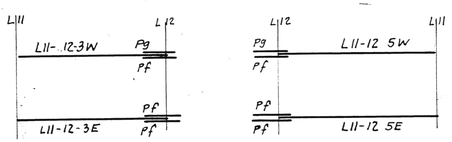
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DC3-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY HEL HPE DATE 6-23-39
DRAW. CHECKED BY DATE 7-21-39
ORDER No. H 2524
SHEET NO. 207

30

Rev 8-7-39





Location Diagram

L11-12, 3W
L11-12, 3E (Left of L11-12,3W) Except ft. pg.
L11-12, 5E (Same as L11-12,3W) Except ft. pg
L11-12, 5W (Left of L11-12,3W)

Lifting Wt. 5 Tons

SPAN	3	5	REQUIRED	
DIV.	6	2	Description	Mark
	1		BOTTOM CHORD	L11-12,3W
	1		" "	L11-12,3E
		1	" "	L11-12,5E
		1	" "	L11-12,5W

MATERIAL: O.H. Steel A.S.T.M. A7-16
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highways
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

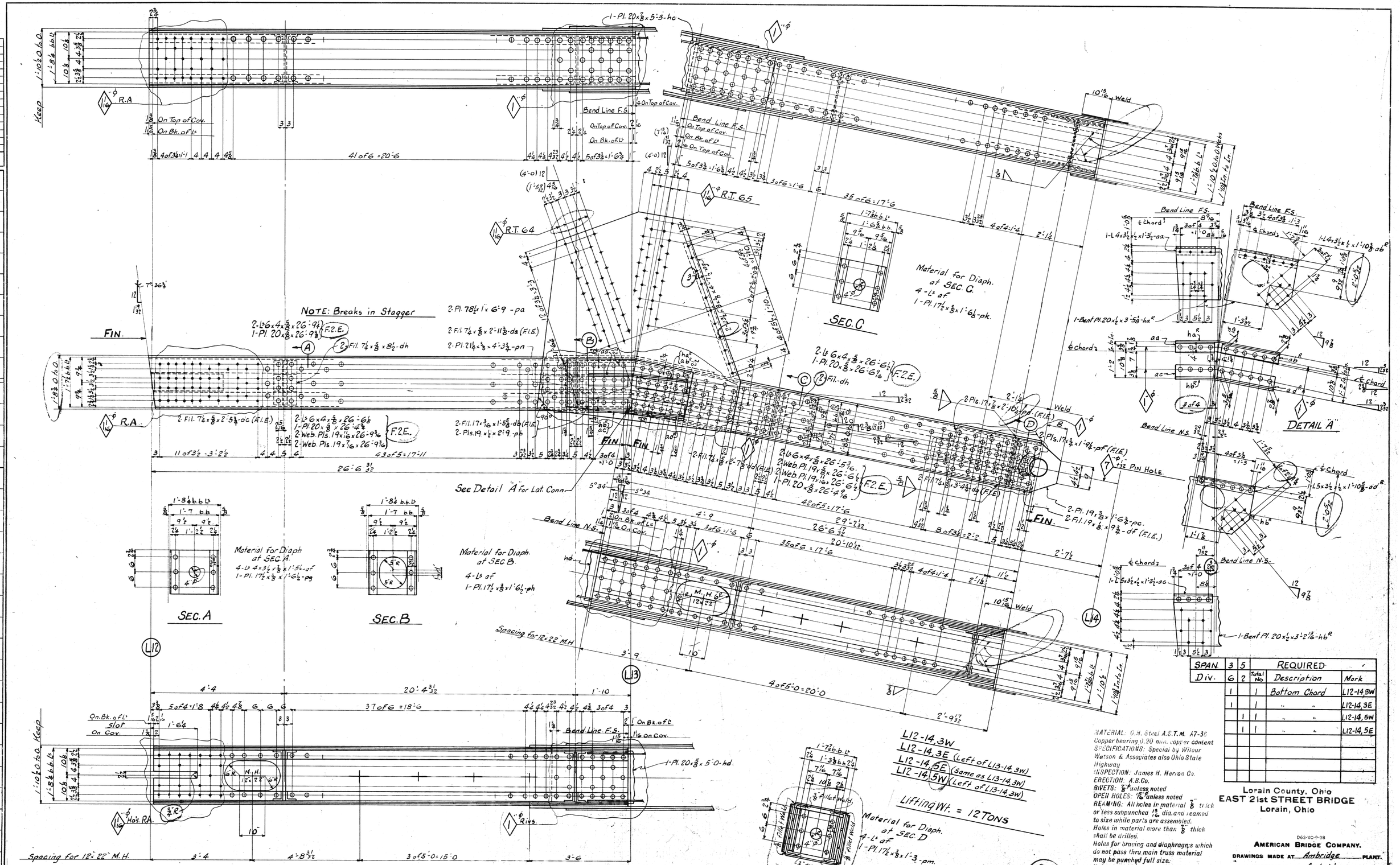
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DES-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman D.R.#2
DRAW. MADE BY H.P.E. DATE 7-3-39
DRAW. CHECKED BY W.S. DATE 7-21-39

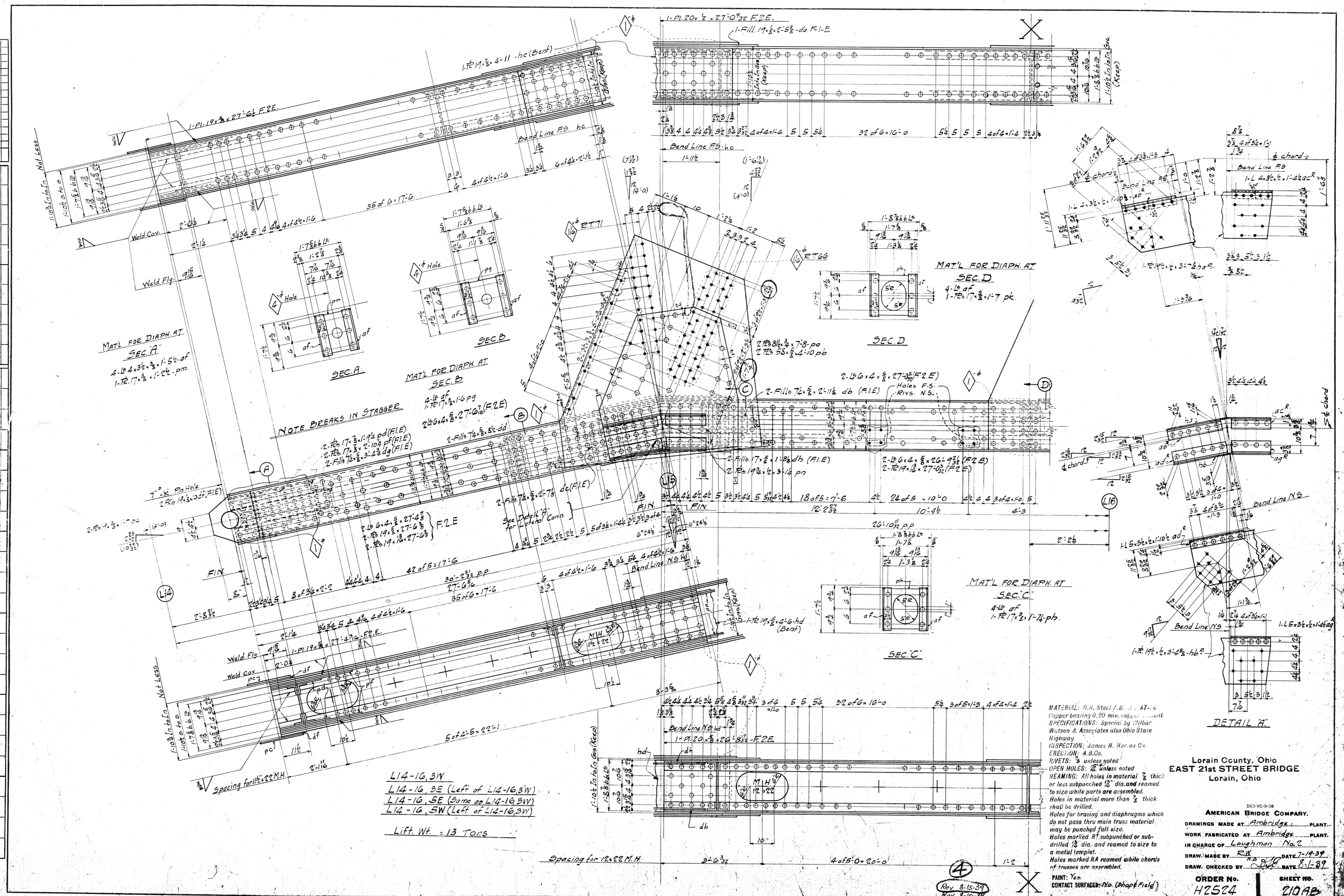
ORDER No. H2524
SHEET NO. 208

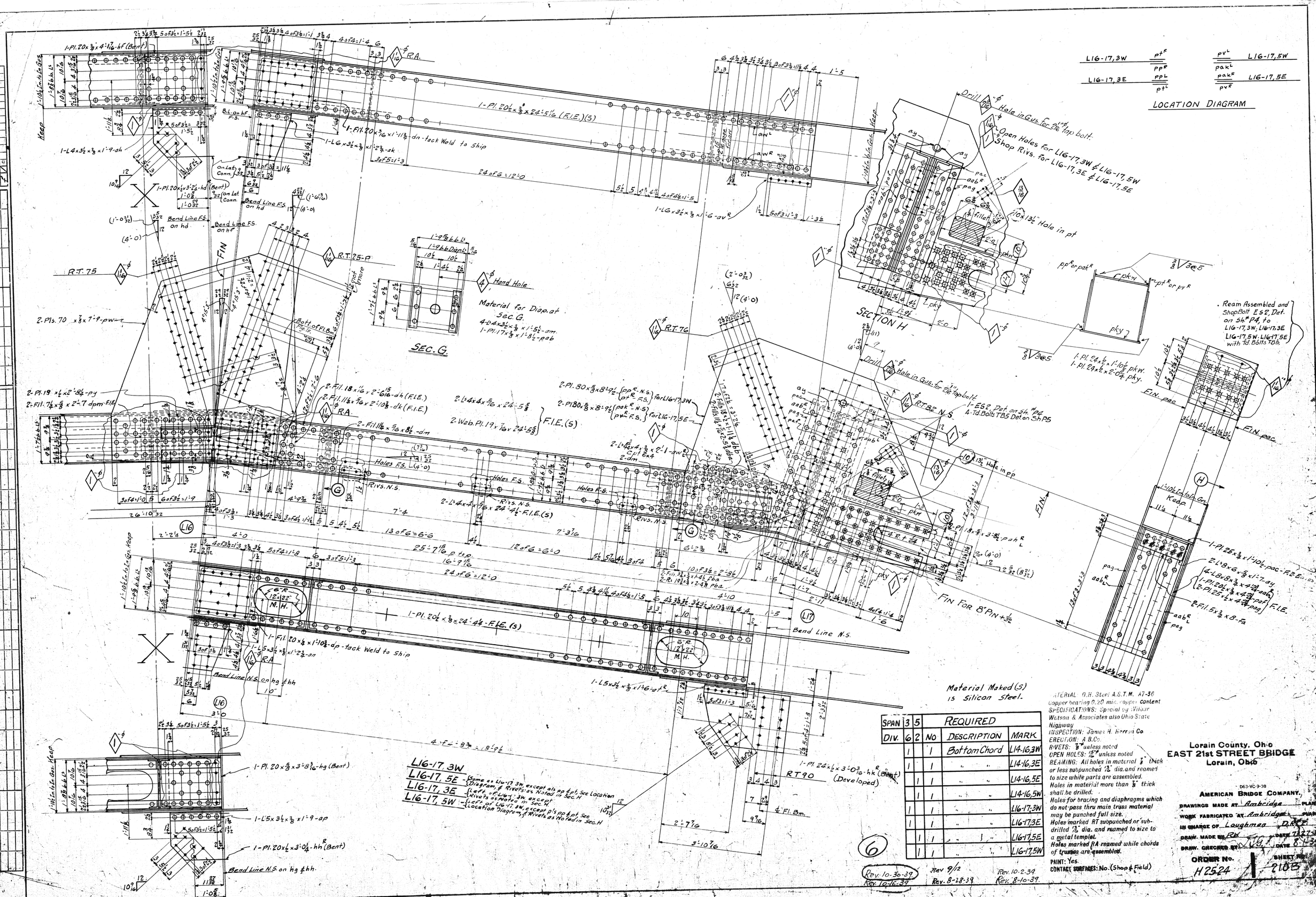
22

Rev 8-8-39



SPAN	3	5	REQUIRED	
Div.	6	2	Total No. / Description	Mark
	1		1 Bottom Chord	L12-14,3W
	1		1 " "	L12-14,3E
		1	1 " "	L12-14,5W
		1	1 " "	L12-14,5E


1-Pl.20 x 1/2 x 27'-0 9/32 F.2.E.
1-Fill.19 x 5/8 x 2'-5 5/8 -da. F.1-E
1-Pl.19 x 3/8 x 4'-11 -hc (Bent)
1-Pl.19 x 3/8 x 27'-6 1/2 F.2.E.
Bend Line F8 -hc
Bend Line F9 -hc
Bend Line N9 -hd
Bend Line N8 -hd
Weld Cov.
Weld Flg.
Not Less
35 of 6 = 17'-6
32 of 6 = 16'-0
42 of 5 = 17'-6
18 of 5 = 7'-6
24 of 5 = 10'-0
26'-10 1/2 p.p
30'-2 3/32 p.p
27'-6 5/16
5 of 4'-5 = 22'-1
4 of 5 = 20'-0
Spacing for 11 1/2" x 22" M.H.
Spacing for 12 x 22 M.H.
NOTE BREAKS IN STAGGER
MAT'L FOR DIAPH. AT SEC. A
4-Ls 4 x 3 1/2 x 3/8 x 1'-5 1/2 - af
1-Pl. 17 x 3/8 x 1'-2 1/2 - pm.
SEC. A
MAT'L FOR DIAPH. AT SEC. B
4-Ls af
1-Pl 17 x 3/8 x 1'-6 pg
2-Ls 6 x 4 x 5/8 x 27'-6 7/16 (F.2.E)
SEC. B
MAT'L FOR DIAPH. AT SEC. D
4-Ls af
1-Pl. 17 x 3/8 x 1'-7 pk.
SEC. D
MAT'L FOR DIAPH. AT SEC. C
4-Ls af
1-Pl 17 x 3/8 x 1'-7 1/2 - pb.
SEC. C
DETAIL "A"
L14-16, 3W
L14-16, 3E (Left of L14-16, 3W)
L14-16, 5E (Same as L14-16, 3W)
L14-16, 5W (Left of L14-16, 3W)
Lift Wt. = 13 Tons
MATERIAL: O.H. Steel F.S. A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes.
CONTACT SURFACES: No. (Shop & Field)
Rev. 8-15-39
Rev. 8-10-39
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY R.W. DATE 7-19-39
DRAW. CHECKED BY DATE 8-1-39
ORDER No. H2524
SHEET NO. 210AB



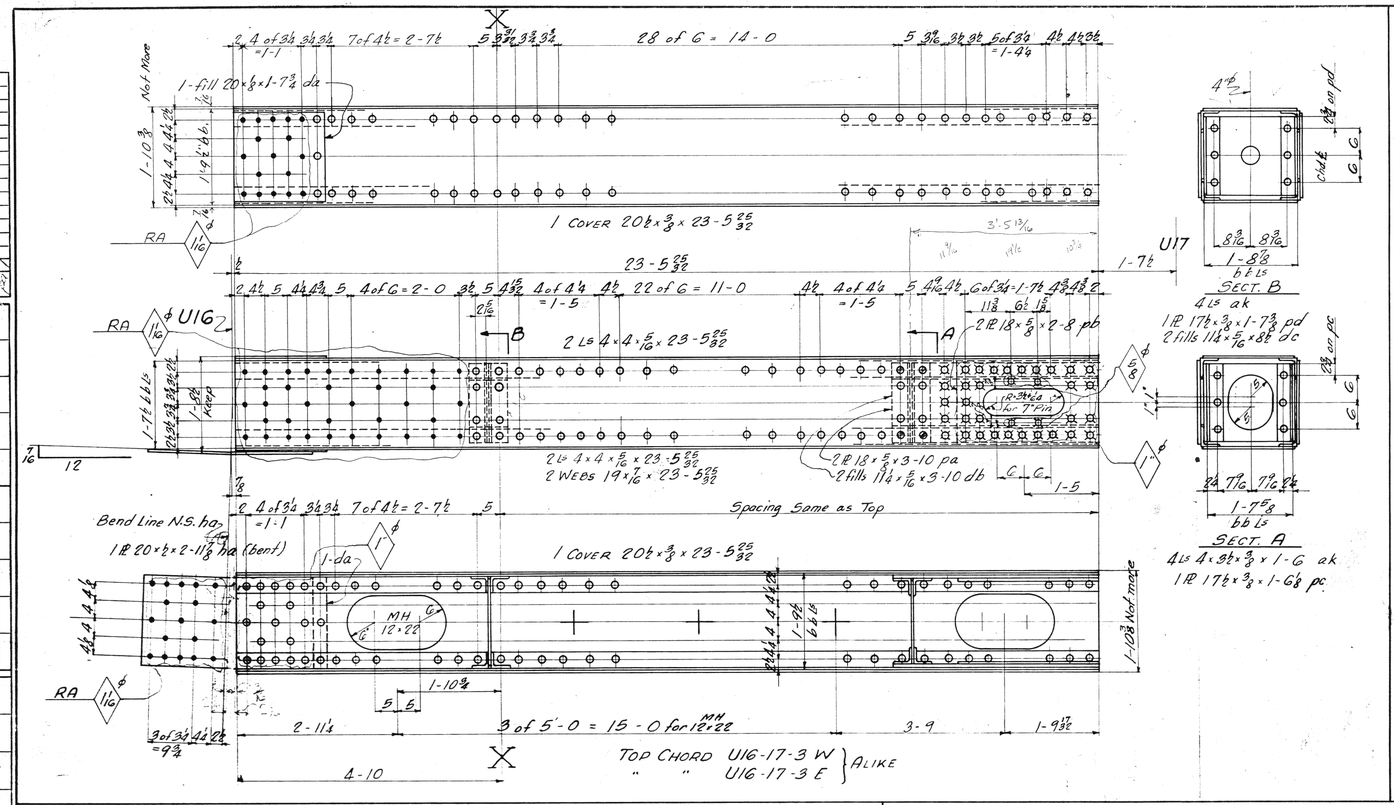
SPAN	3	5	REQUIRED		
DIV.	6	2	No	DESCRIPTION	MARK
	1		1	Bottom Chord	L14-16,3W
	1		1	" "	L14-16,3E
	1		1	" "	L14-16,5E
	1		1	" "	L14-16,5W
	1		1	" "	L16-17,3W
	1		1	" "	L16-17,3E
	1	1	1	" "	L16-17,5E
	1	1	1	" "	L16-17,5W

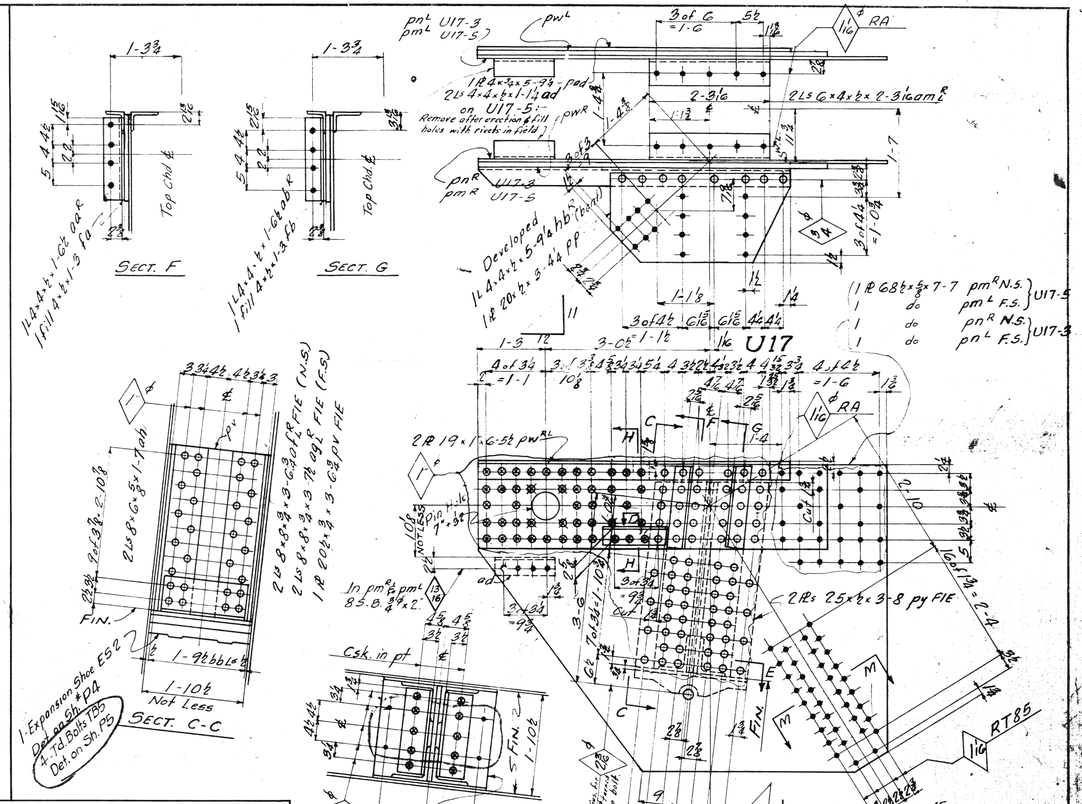
MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co
ERECTION: A.B.Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 3/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled. Holes in material more than 3/8" thick shall be drilled. Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size. Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet. Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes.
CONTACT SURFACES: No. (Shop & Field)

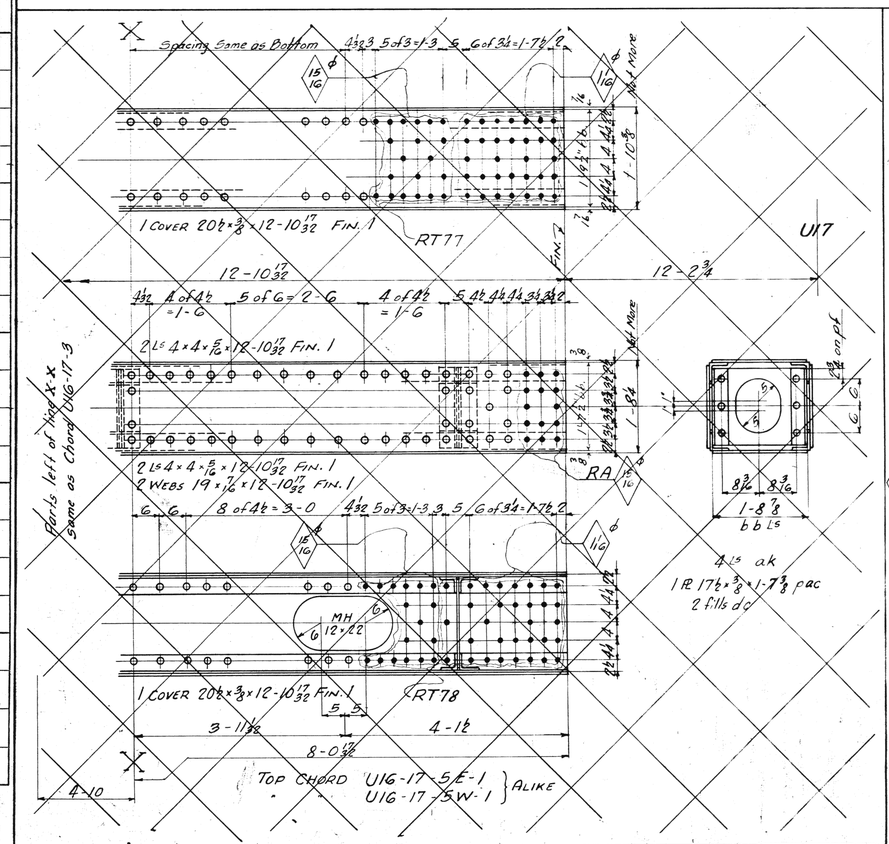
Rev. 10-30-39
Rev. 10-16-39
Rev 9/12
Rev. 8-28-39
Rev. 10-2-39
Rev. 8-10-39

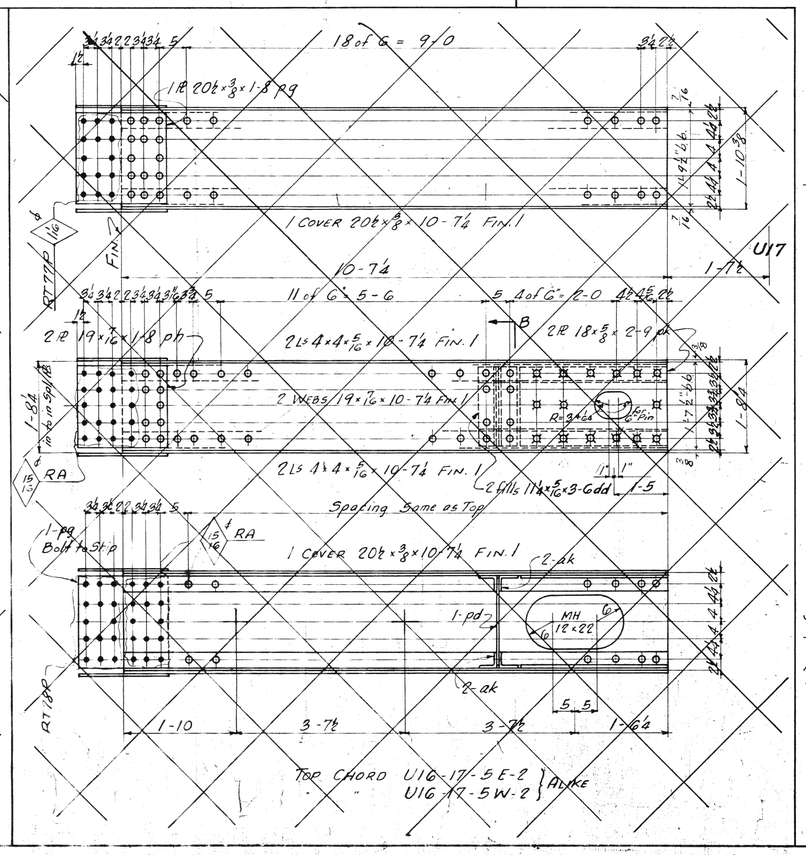
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Laughmen DATE
DRAW. MADE BY RH DATE 7/27/39
DRAW. CHECKED BY NG DATE 8/3/39
ORDER No. H2524
SHEET No. 2103









Gusset Plate U17-3W as shown on plan
" " U17-5E - - - -
" " U17-3E Left of U17-3W
" " U17-5W - " U17-5E

Span 3 Div. 6	Span 5 Div. 2	Required Total	Description	Mark
1		1	Top Chord	U16-17-3W
1		1	" "	U16-17-3E
1		1	Gusset PL	U17-3W
1		1	" "	U17-3E
	1	1	" "	U17-5W
	1	1	" "	U17-5E

MATERIAL: Q.A. Steel (A.S.T.M. A7-39) Copper bearing 0.20% min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords or trusses are assembled.

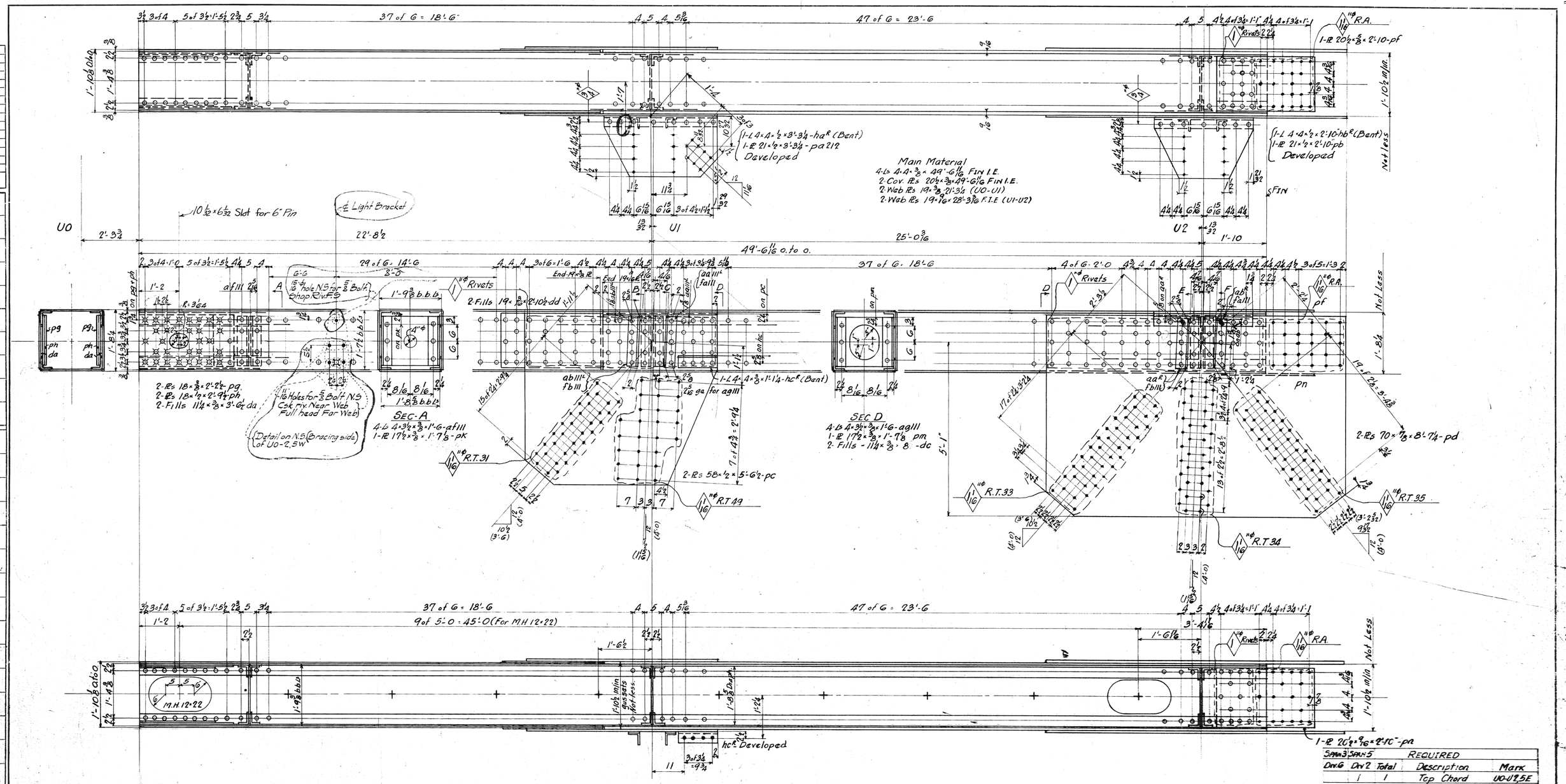
PAINT: YES
CONTACT SURFACES: No - Shop & Field

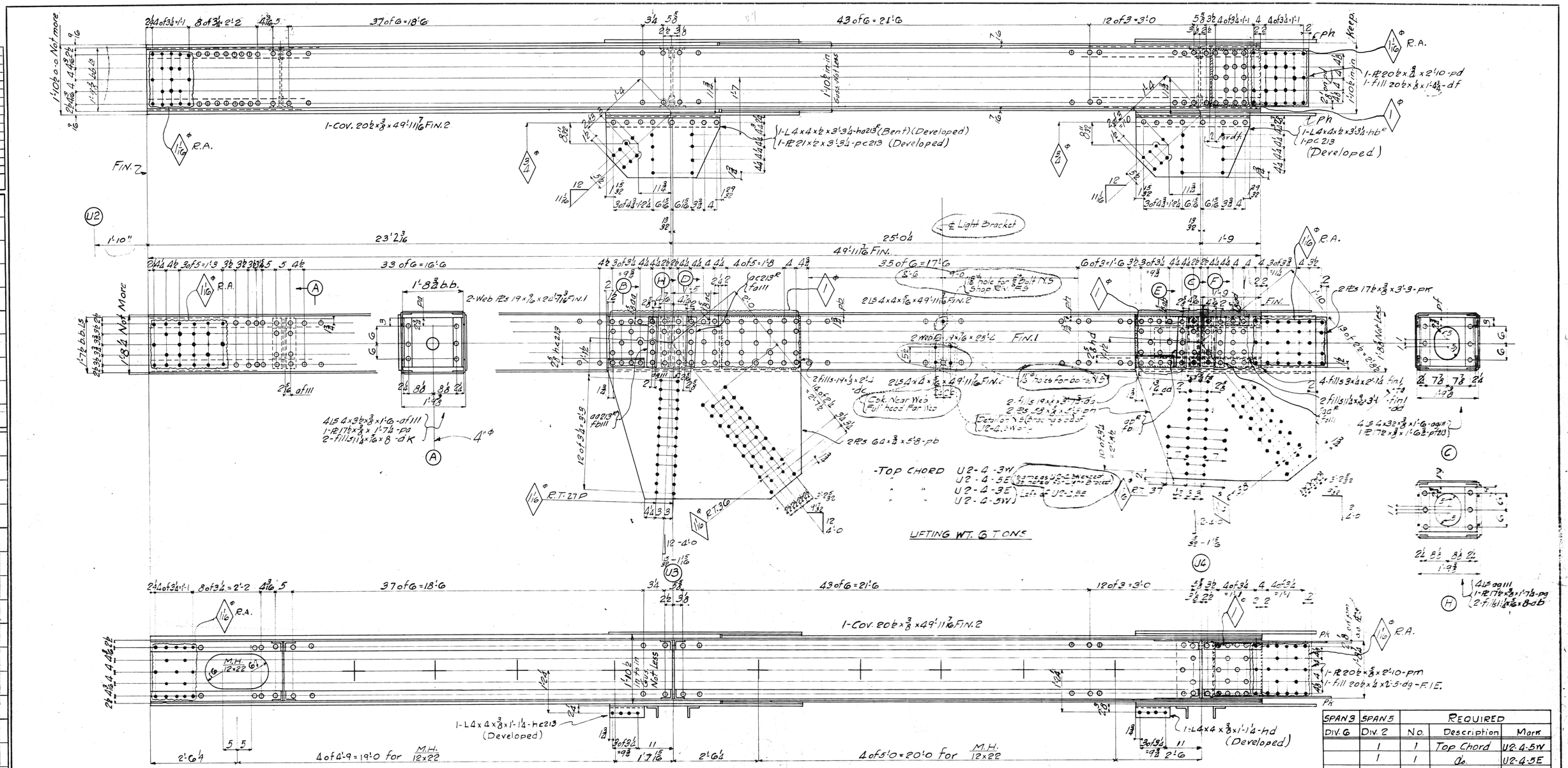
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-TO-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman #2
DRAW. MADE BY J. J. D. DATE 7-20-39
DRAW. CHECKED BY ALC DATE 7/22/39
ORDER No. H2524 SHEET No. 211

Rev. 10-2-39
~~Rev. 3-28-39~~

4


37 of 6 = 18'-6
47 of 6 = 23'-6
U0
U1
U2
10 1/32 × 6 1/32 Slot for 6" Pin
℄ Light Bracket
49'-6 1/16 o. to o.
25'-0 3/16
37 of 6 = 18'-6
47 of 6 = 23'-6
9 of 5'-0 = 45'-0 (For M H 12-22)
M.H. 12-22
Main Material
4-Ls 4 4 × 3/8 × 49'-6 1/16 Fin I.E.
2-Cov. Pls 20 1/2 × 3/8 × 49'-6 1/16 Fin I.E.
2-Web Pls 19 × 3/8 × 21'-3 1/4 (U0-U1)
2-Web Pls 19 × 7/16 × 28'-3 7/16 F.I.E (U1-U2)
Not Less
SEC-A
4-Ls 4 × 3 1/2 × 3/8 × 1'-6 - af III
1-Pl 17 1/2 × 3/8 × 1'-7 7/8 - pk
SEC D
4-Ls 4 × 3 1/2 × 3/8 × 1'-6 - ag III
1-Pl 17 1/2 × 3/8 × 1'-7 7/8 pm
2-Fills - 11 1/4 × 3/8 - 8 - dc
2-Pls 70 × 7/8 × 8'-7 1/4 - pd
1-Pl 20 1/2 × 3/8 × 2'-10 - pf
1-Pl 20 1/2 × 7/16 × 2'-10 - pa
hc Developed
Detail on N.S. (Bracing side) of U0-2, 5W
Span 3 Span 5 Required
Dwg 6 Dwg 2 Total Description Mark
1 1 Top Chord U0-U2, 5E
1 1 dc U0-U2, 3W
1 1 dc U0-U2, 5W
1 1 dc U0-U2, 3E
U0-U2, 5E
U0-U2, 3W
ALIKE
U0-U2, 5W Left of U0-2, 5E except as shown for Light Bracket
U0-U2, 3E Left of U0-2, 5E.
SEC "B"
SEC "E"
SEC "C"
SEC "F"
1-Fill 4 × 1/2 × 1'-2 1/2 - fb III
Sec "E" 1-L 4 × 4 × 1/2 × 1'-6 - aa
Sec "B" 1-L 4 × 4 × 1/2 × 1'-6 - ab III
Sec "C" 1-L 4 × 4 × 1/2 × 1'-6 aa III
Sec "F" 1-L 4 × 4 × 1/2 × 1'-6 - ab
1-Fill 4 × 1/2 × 1'-2 1/2 - fa III
Lt. Wt. 8 Tons
Span No. 3
Span No. 5
Rev. 8-21-39
Rev. 7-31-39
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-P-98
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman.
DRAW. MADE BY ER.M - J.L.B. DATE 6-20-39
DRAW. CHECKED BY A.L.C. DATE 7-17-39
ORDER No. H2524
SHEET No. 212
Holes marked R.A. reamed while chords are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop + Field
OPEN HOLES: 13/16" unless noted
Holes in material more than 7/8" thick shall be drilled.
Holes for tracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
REAMING: All holes in material 7/8" thick or less subpunched 13/16" and reamed to size, while parts are assembled.
RIVETS: 7/8" unless noted
INSPECTION:
ERECTION: A.B.Co.
Highway
Matson & Associates - Ohio State
DESIGN FOR FILES: Special Truss Not
Contract Type 0.D.O. Construction Cont
MATERIAL: Fin. Steel A.S.T.M. A-7-37
6



Span 3 Div. 6	Span 5 Div. 2	Required No.	Required Description	Mark
	1	1	Top Chord	U2-4-5W
	1	1	do.	U2-4-5E
1		1	do.	U2-4-3W
1		1	do.	U2-4-3E

Rev. 8-7-39.
Rev. 8-21-39

MATERIAL: O.H. Steel A.S.T.M. A7-36 copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Hervon Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: YES
CONTACT SURFACES: NO-Shop & Field

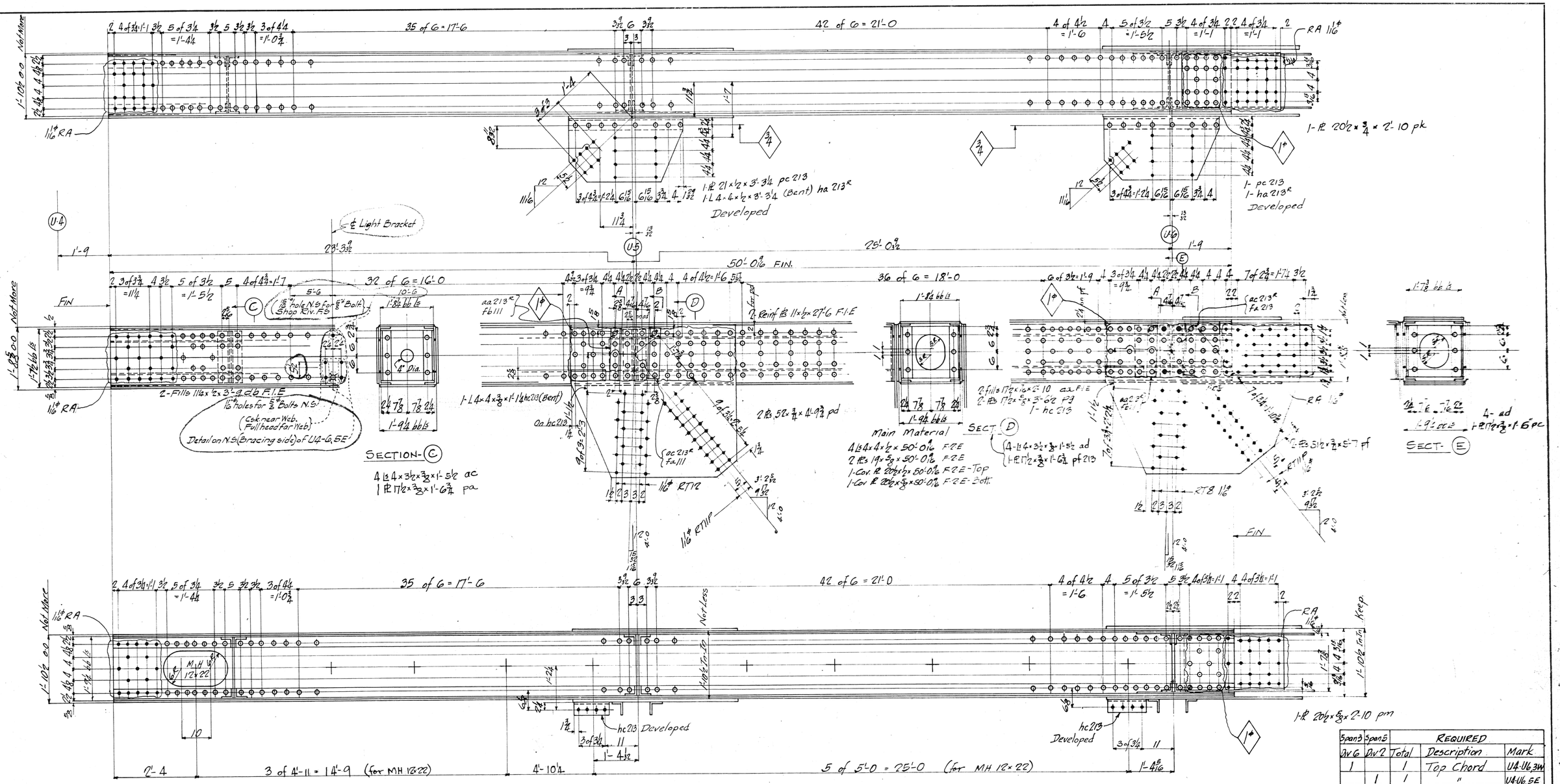
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

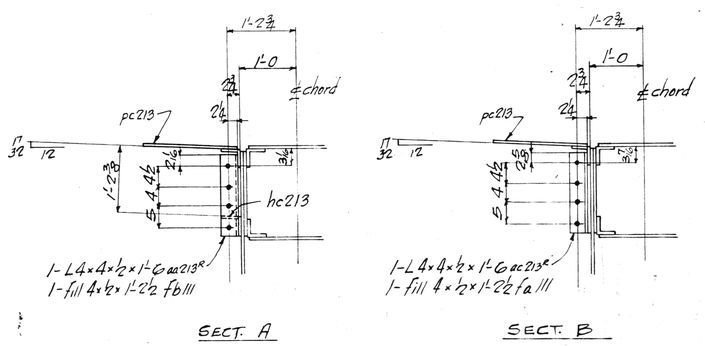
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY EJS DATE 6/22/39
DRAW. CHECKED BY ALC DATE 7-12-39

ORDER No. H-2524
SHEET NO. 213

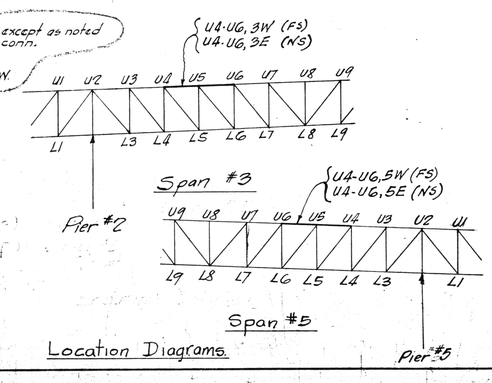


Span 3	Span 5		REQUIRED	
Dv 6	Dv 2	Total	Description	Mark
1		1	Top Chord	U4-U6, 3W
	1	1	"	U4-U6, 5E
1		1	"	U4-U6, 3E
	1	1	"	U4-U6, 5W



U4-U6, 3W
U4-U6, 5E — Same as U4-6, 3W except as noted for Light Bracket conn.
U4-U6, 3E
U4-U6, 5W — Left of U4-6, 3W.

LIFTING WT. = 8 Tons



Location Diagrams.

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

6

Rev. 8-21-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

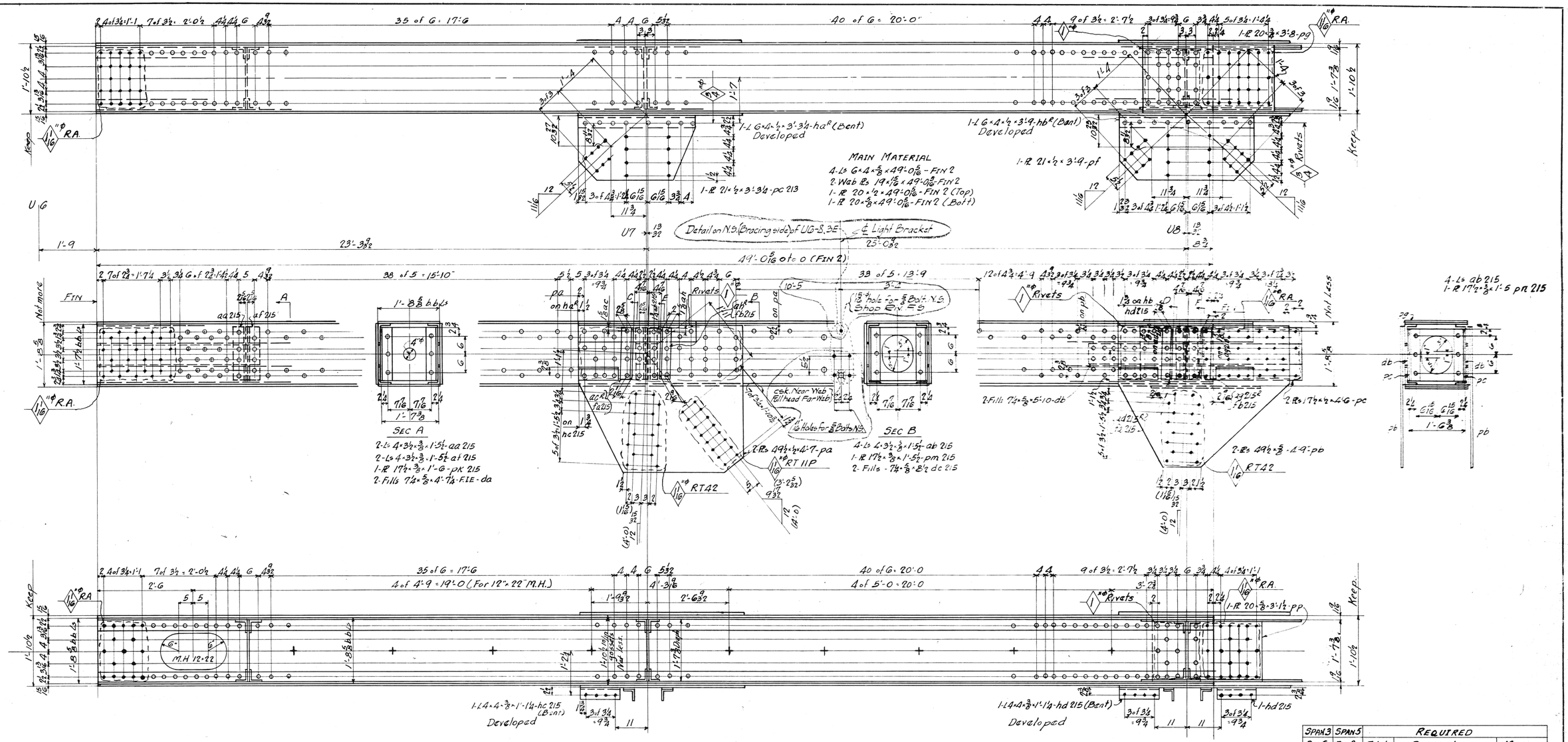
D53-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY J.E.M. DATE 6-23-39
DRAW. CHECKED BY A.L.C. DATE 7-12-39

ORDER No. H2524

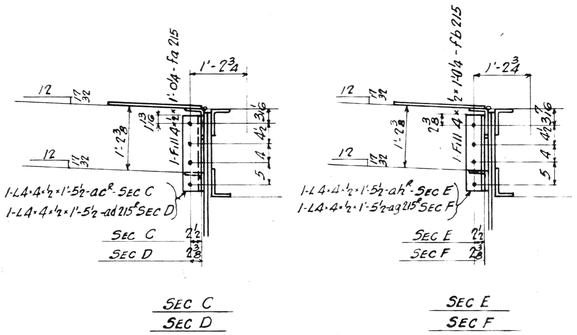
SHEET NO. 214

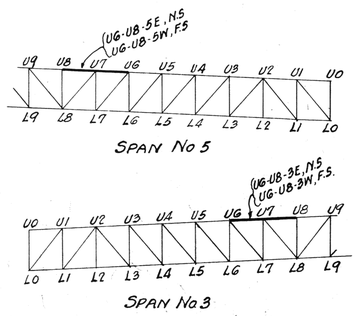


SPAN 3	SPAN 5	REQUIRED		
DIV G	DIV 2	Total	Description	Mark
1		1	Top Chord	UG-U8-3W
	1	1	do	UG-U8-5E
1		1	do	UG-U8-3E
	1	1	do	UG-U8-5W

UG-U8-3W } ALIKE
UG-U8-5E }
UG-U8-3E } Left of UG-8, 3W except as noted for Light Bracket Conn.
UG-U8-5W } Left of UG-8, 3W.

LIFTING WT.- 9 TONS





MATERIAL: O.H. Steel A.S.T.M. A7-36 copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No-Shop + Field

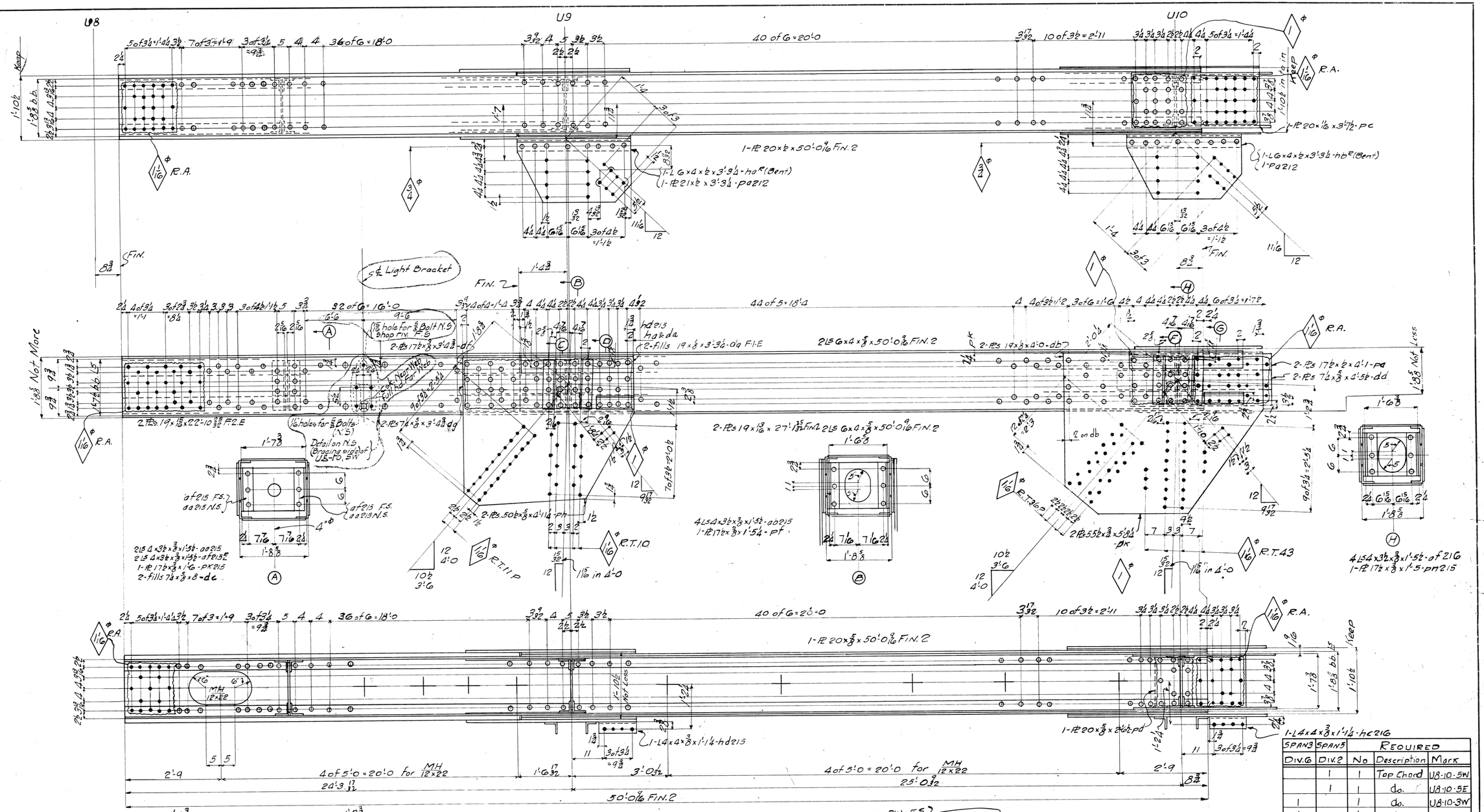
Rev. 8-21-39

(4)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY ERM-JLB DATE 6-27-39
DRAW. CHECKED BY ALC DATE 7-12-39

ORDER No. H2524
SHEET NO. 215



LIFTING WT. - 9 TONS

LOCATION DIAGRAM

SPAN 3	SPAN 5	REQUIRED			
DIV. 6	DIV. 2	No	Description	Mark
	1	1	Top Chord	U8-10-5W
	1	1	do.	U8-10-5E
1		1	do.	U8-10-3W
1		1	do.	U8-10-3E

MATERIAL: O.H. Steel A.S.T.M. A7-36 (Copper bearing 0.20 min.) ... Cement
SPECIFICATIONS: Special by Sverdrup & Parcel & Associates also Ohio State Highway
INSPECTION: James H. Harrison Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 3/16" dia. and reamed to size while parts are assembled.
Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked HT subpunched or subdrilled 3/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Rev. - 8-7-39
Rev. - 5-24-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

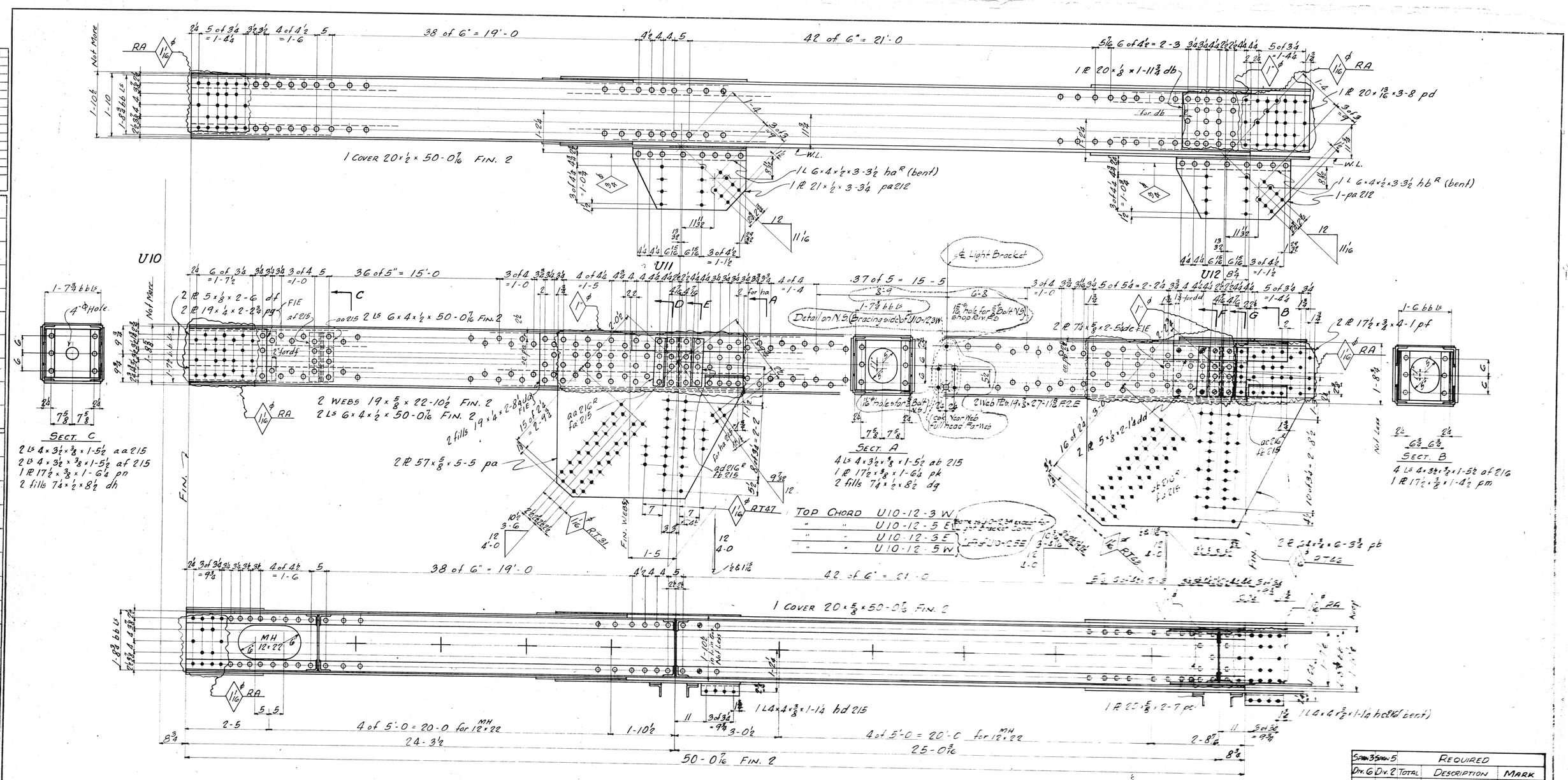
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY EJS DATE 6/25/39
DRAW. CHECKED BY ALC DATE 7-13-39

ORDER No. H-2524

SHEET NO. 216



Span 3 Div. 6	Span 5 Div. 2	Total	Required Description	Mark
1		1	Top Chord	U10-12-3W
1		1	" "	U10-12-3E
	1	1	" "	U10-12-5W
	1	1	" "	U10-12-5E

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: special by Albert Watson & Associates also Ohio State Highway
INSPECTION:
ERECTION: A.B.Co.
RIVETS: 7/8" Unless noted HOLES: 13/16" Unless Noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" and reamed to size while parts are assembled
Holes in mat'l. more than 7/8" thick shall be drilled
Holes for bracing and diaphrams which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: YES
CONTACT SURFACES: NO - SHOP & FIELD

LIFTING WT. 9 TONS
Rev - 8-8-39
Rev - 5-21-39

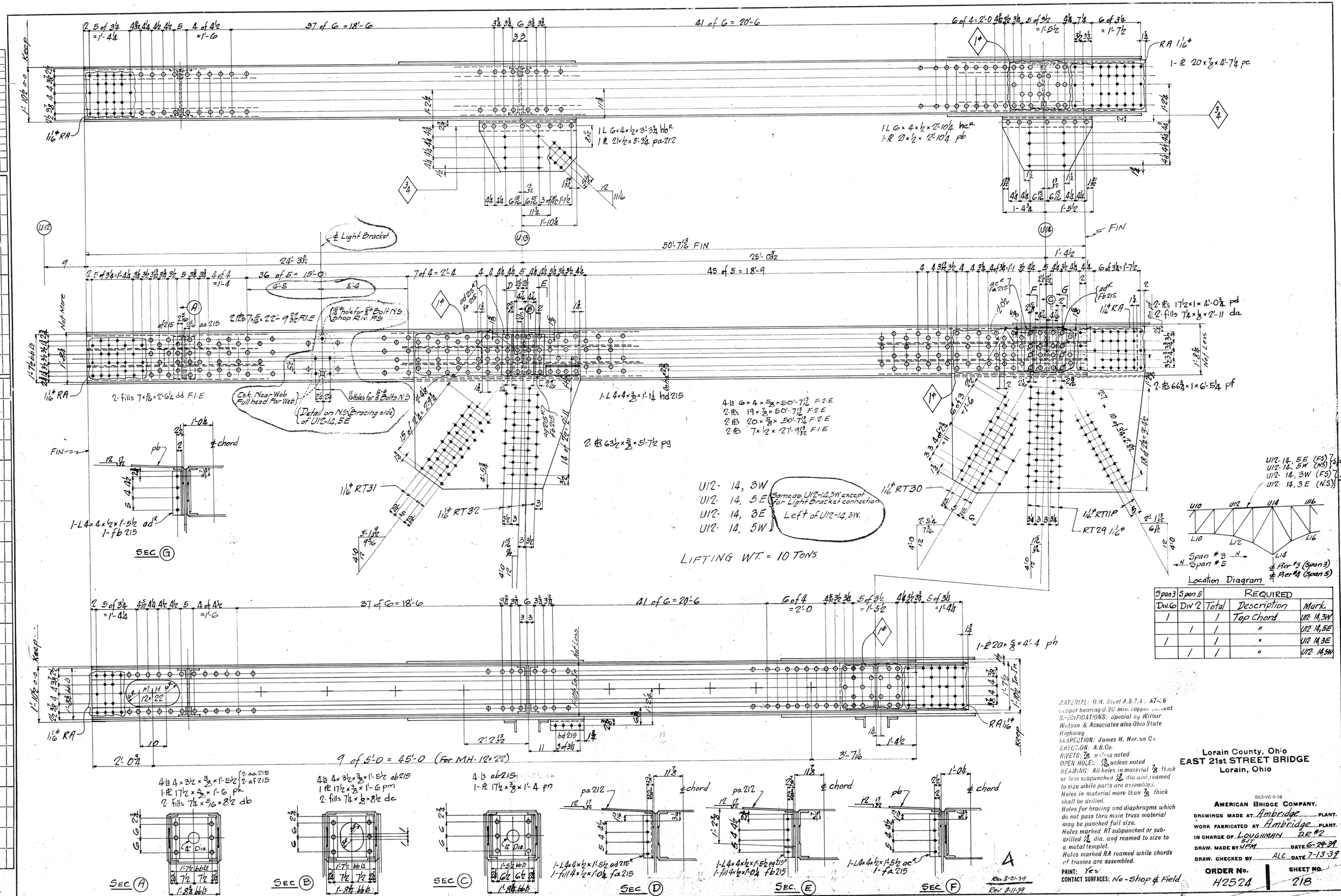
(4)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Bambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE 6-30-39
DRAW. CHECKED BY ALC DATE 7-13-39

ORDER No. H2524
SHEET NO. 217



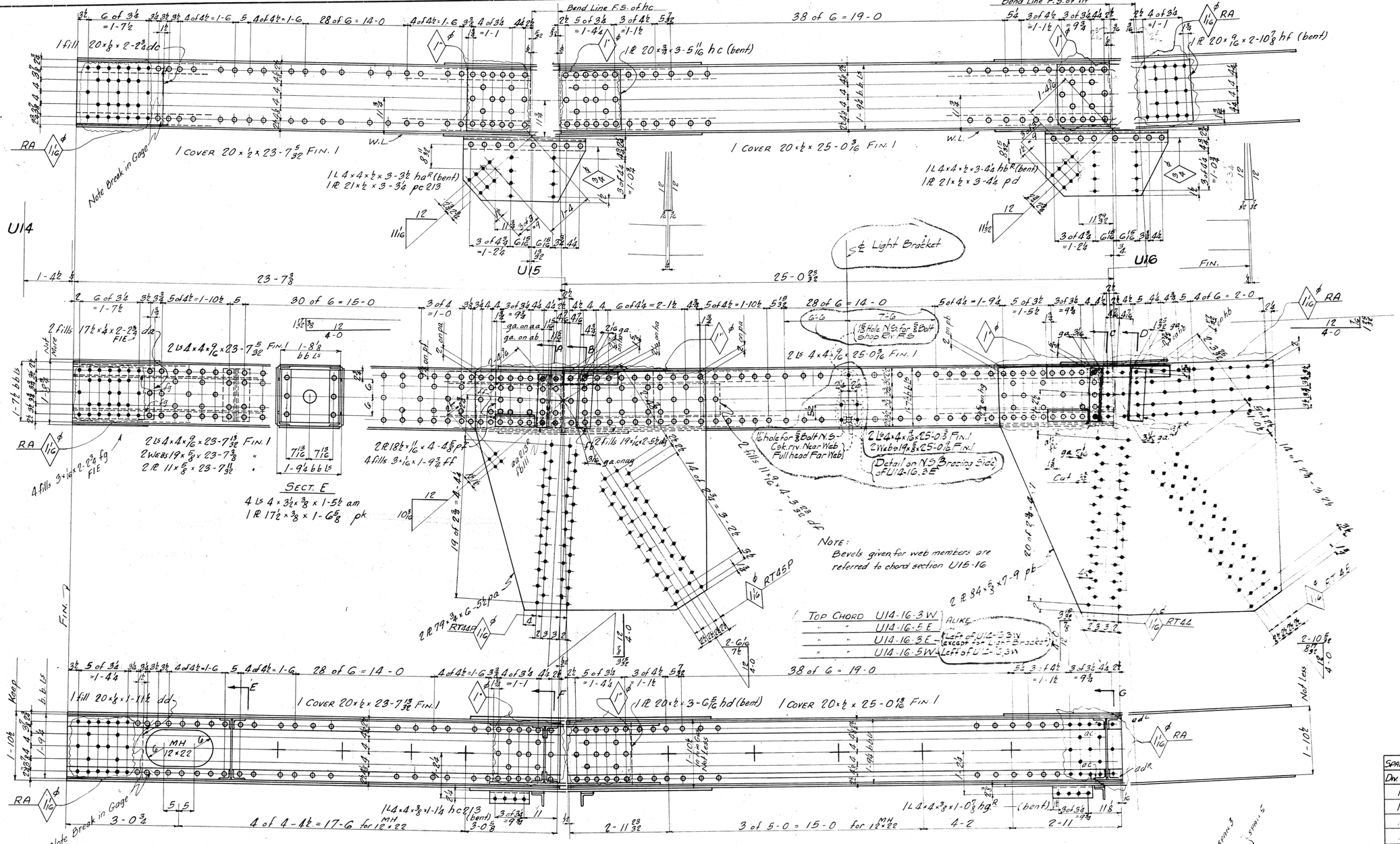
Span 3 Div. 6	Span 5 Div. 2	Total	Description	Mark
1		1	Top Chord	U12-14, 3W
	1	1	"	U12-14, 5E
1		1	"	U12-14, 3E
	1	1	"	U12-14, 5W

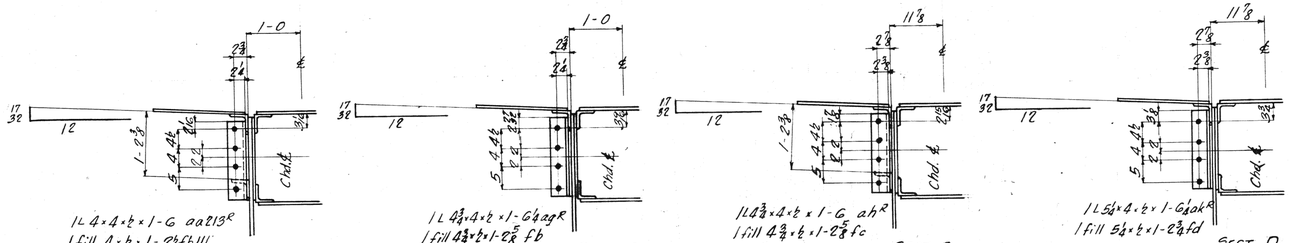
MATERIAL: O.H. Steel A.S.T.M. A7-26 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

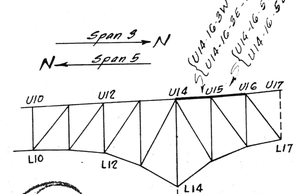
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman SJT DR #2
DRAW. MADE BY JFM DATE 6-29-39
DRAW. CHECKED BY ALC DATE 7-13-39

ORDER No. H2524 | **SHEET NO.** 218







4

Span 3	Span 5	Required		
Div. 6	Div. 2	Total	Description	Mark
1		1	Top Chord	U14-16-3W
1		1	" "	U14-16-3E
	1	1	" "	U14-16-5E
	1	1	" "	U14-16-5W

Lifting Wt. 9 Tons

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harmon Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled. Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material, may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: YES
CONTACT SURFACES: NO - Shop & Field

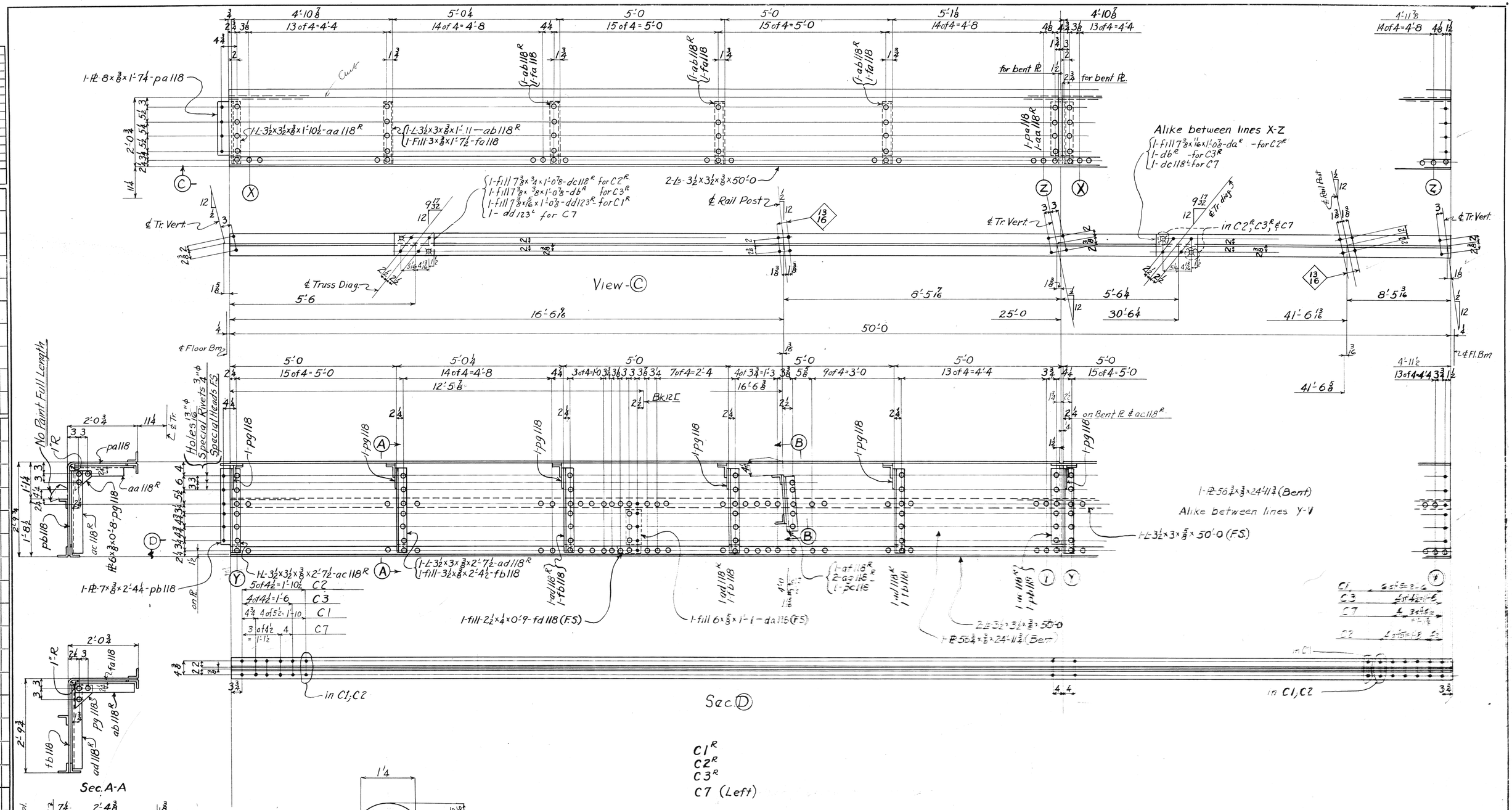
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE 7-10-39
DRAW. CHECKED BY ALC DATE 7-18-39

ORDER No. H2524 | SHEET NO. 219



Span 3 Div. 6	Span 1 Div. 4	Span 5 Div. 2	Required Na	Description	Mark
		1	1	Curbs	C1R
1			1	do	C1L
		1	1	do	C2R
1			1	do	C2L
		1	1	do	C3R
1			1	do	C3L
	1		1	do	C7

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes-except as noted in End View
CONTACT SURFACES: No (Shop & Field)

Rev. 8/18/39
Rev. 8/15/39

East Curb.

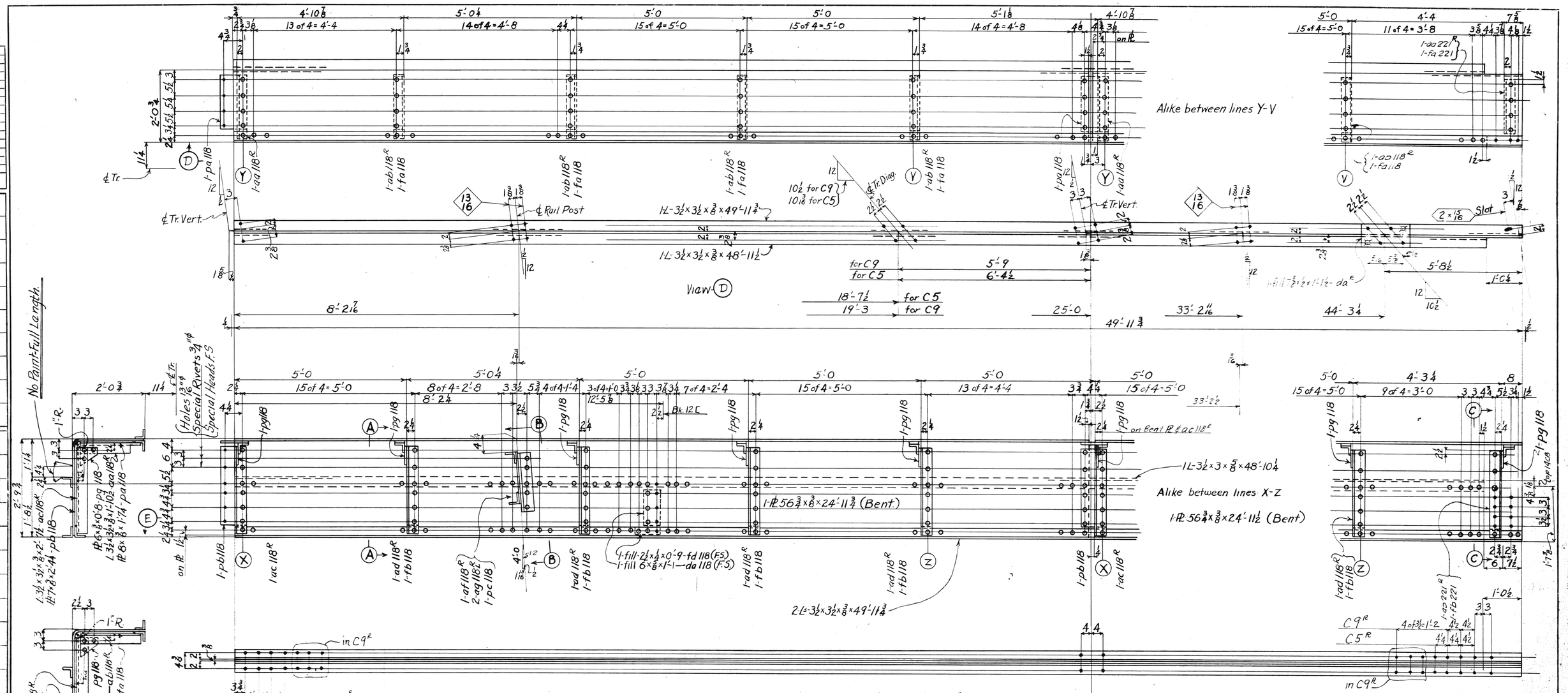
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HRF WTR DATE 6-13-39
DRAW. CHECKED BY HEL DATE 7/9/39

ORDER No. H2524
SHEET NO. 220



Span 3 Div. 6	Span 5 Div. 2	Required No.	Description	Mark
	1	1	Curb	$C9^R$
1		1	Curb	$C9^L$
	1	1	Curb	$C5^R$
1		1	Curb	$C5^L$

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes-except as noted in end view
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

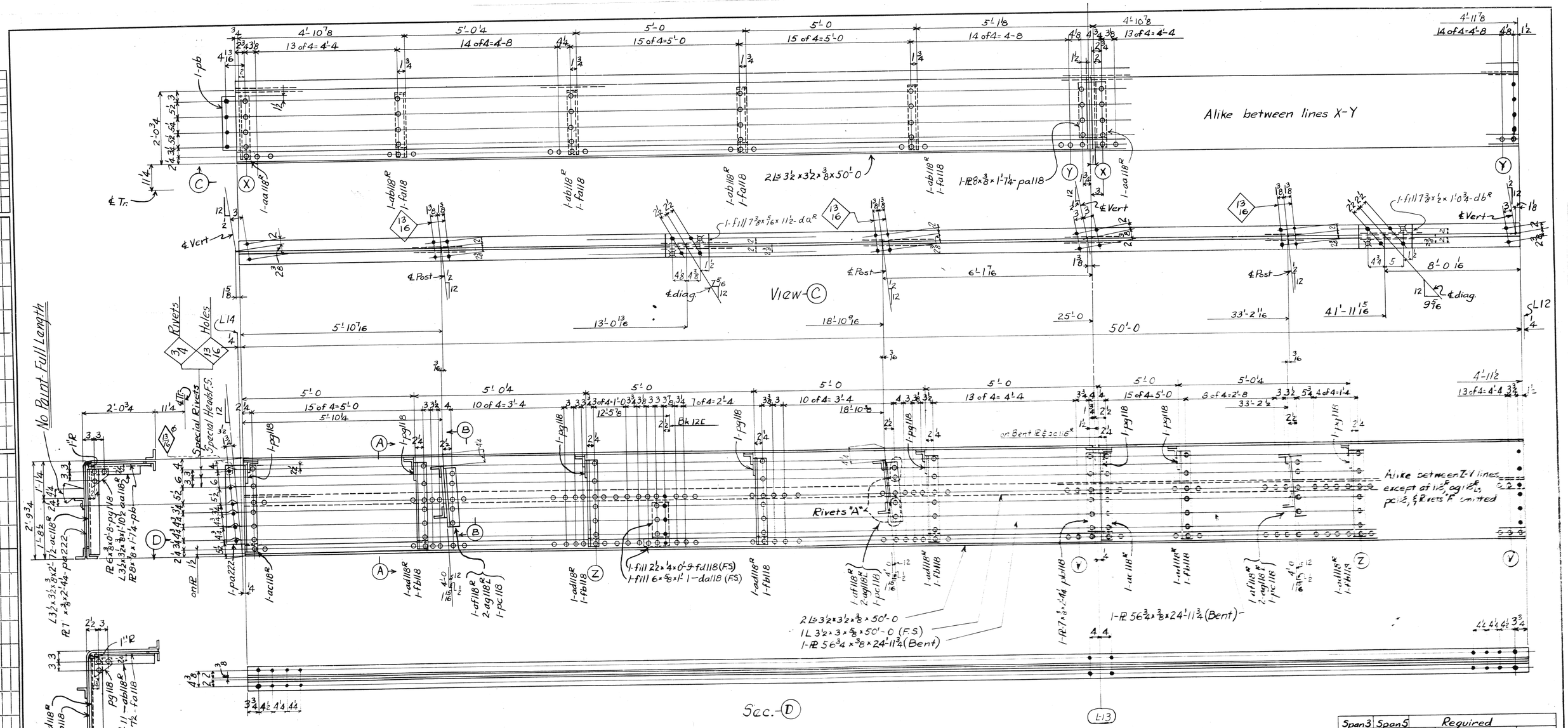
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR#2
DRAW. MADE BY H.R.F. W.T.R. DATE 6-14-39
DRAW. CHECKED BY H.E.L. DATE 7/8/39

ORDER No. H2524

SHEET NO. 221

Rev. 8/15/39
Rev. 8/3/39



Span 3 Div. 6	Span 5 Div. 2	No	Required Description	Mark
	1	1	Curb	C6R
1		1	Curb	C6L

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more th... ⅜ ...k shall be drilled.

PAINT: Yes.-except as noted in end view.
CONTACT SURFACES: No. (Shop & Field)

East Curb.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-VC-9-38

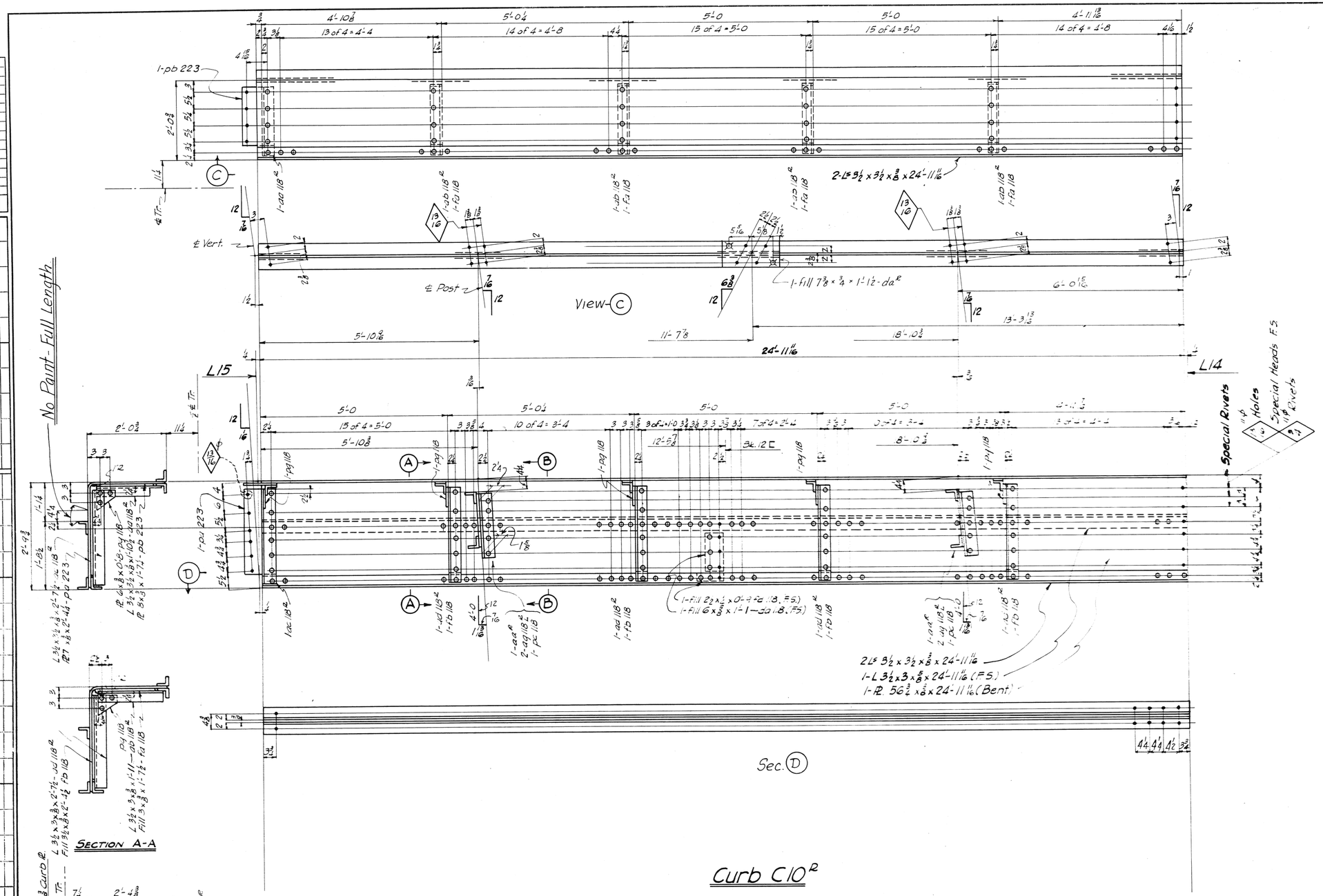
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HRF DATE 6-15-39
DRAW. CHECKED BY HEL DATE 7/8/39

ORDER No. H2524

SHEET NO. 222

Rev. 8/15/39



Span 3	Span 5	Required		
Div. 6	Div. 2	No.	Description	Mark
	1	1	Curb	C10R
1		1	Curb	C10L

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ¾ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than ⅜" thick shall be drilled.

East Curb.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

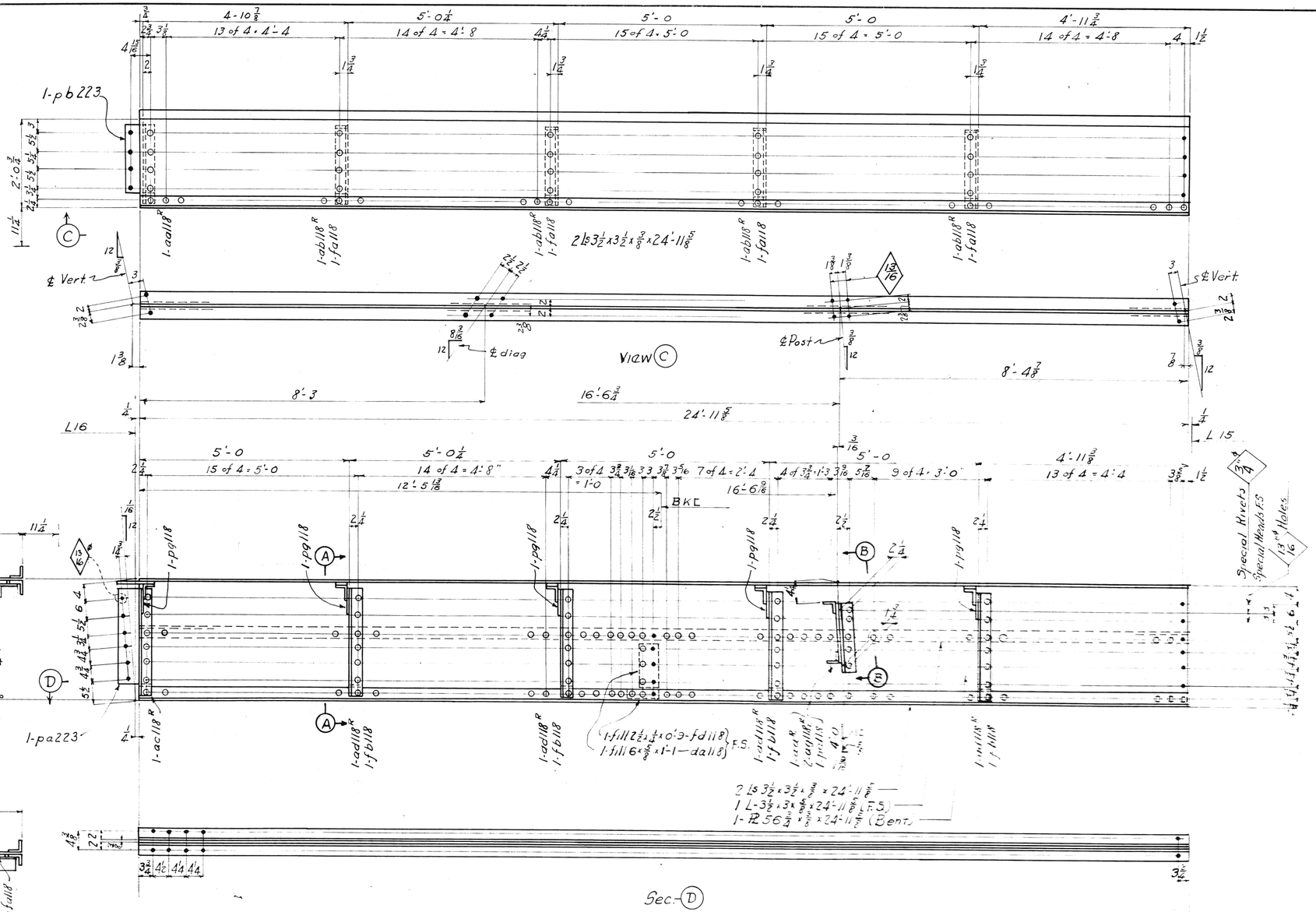
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY H.R.F.-J.R.e DATE 6-16-39
DRAW. CHECKED BY HEL DATE 7/8/39

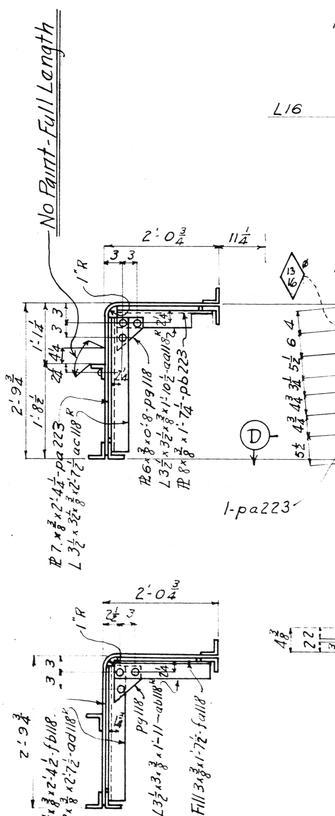
PAINT: Yes-except as noted in end view
CONTACT SURFACES: No (Shop & Field)

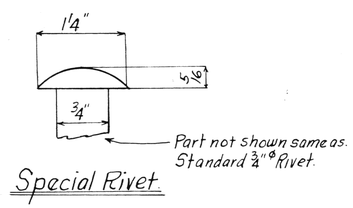
ORDER No. H2524

SHEET NO. 223

Revised 8/15/39







Special Rivet.

Span 3	Span 5	Required		
Div 6	Div 2	No.	Description	Mark
	1	1	Curb	C11R
1		1	Curb	C11L

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

East Curb.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

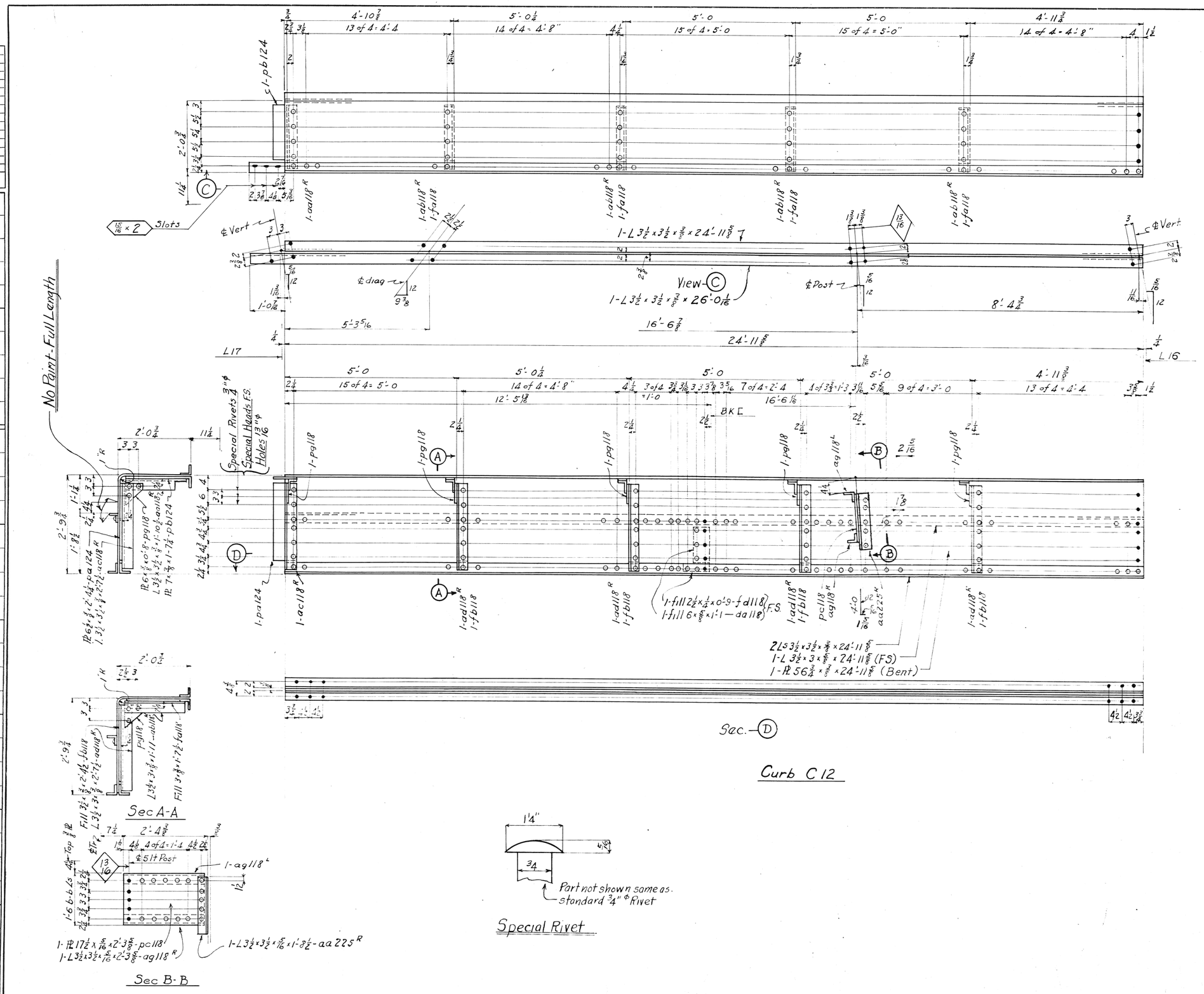
D63-VC-9-08
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. No 2
DRAW. MADE BY HRF DATE 6-16-39
DRAW. CHECKED BY HEL DATE 7/8/39

PAINT: Yes, except as noted in end view
CONTACT SURFACES: No. (Shop & Field)

ORDER No. H2524

SHEET NO. 224

Rev. 8/15/39



Curb C12

Span 5 - Div. 2

Required		
No	Description	Mark
1	Curb	C12

East Curb.

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes - except as noted in and view
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

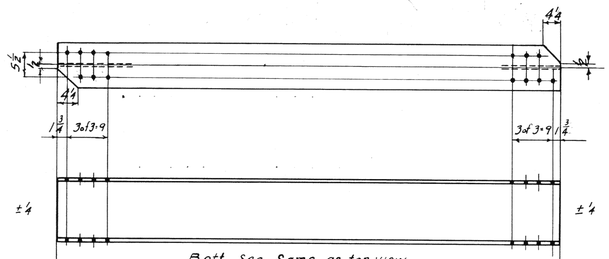
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HRF DATE 6-19-39
DRAW. CHECKED BY HEL DATE 7/8/39

ORDER No. H2524

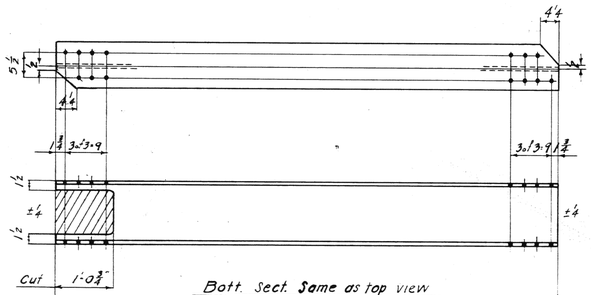
SHEET NO. 225

Rev. 8/15/39



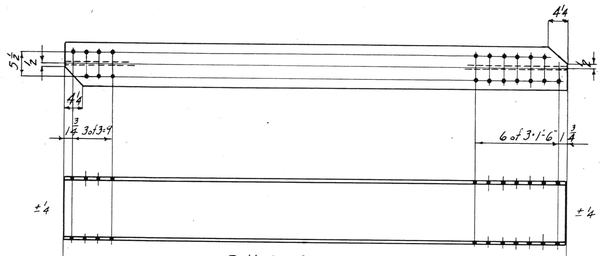
Bott. Sec. Same as top view

1'-2 1/4"	TL11	1-14 CB 61 × 31'-8 3/8"	(Ord. 31'-9")	1'-1"
1'-2 1/4"	TL12	1-14 CB 61 × 31'-7 3/8"	(Ord. 31'-8")	1'-2"
1'-2 7/16"	TL16	1-14 CB 61 × 31'-7 1/8"	(Ord. 31'-7 1/2")	1'-3"
1'-2 5/8"	TL17	1-14 CB 61 × 31'-6 5/8"	(Ord. 31'-7")	1'-4 1/32"



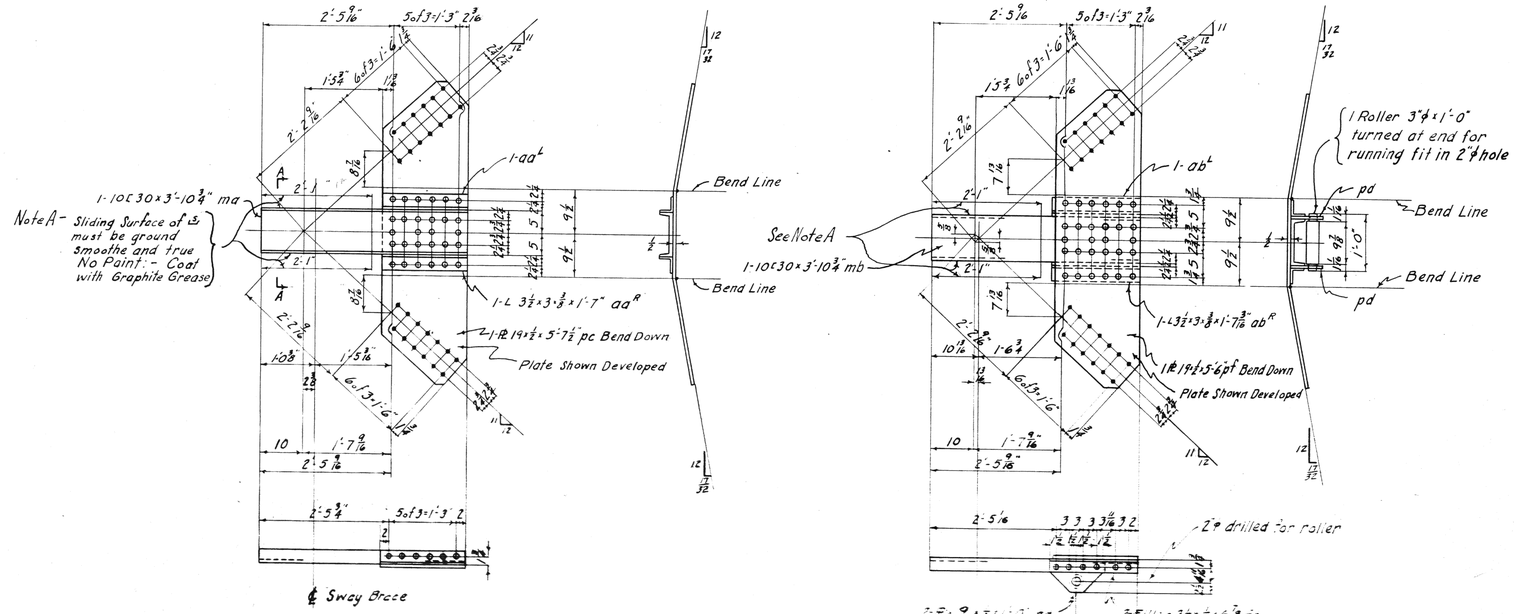
Bott. Sect. Same as top view

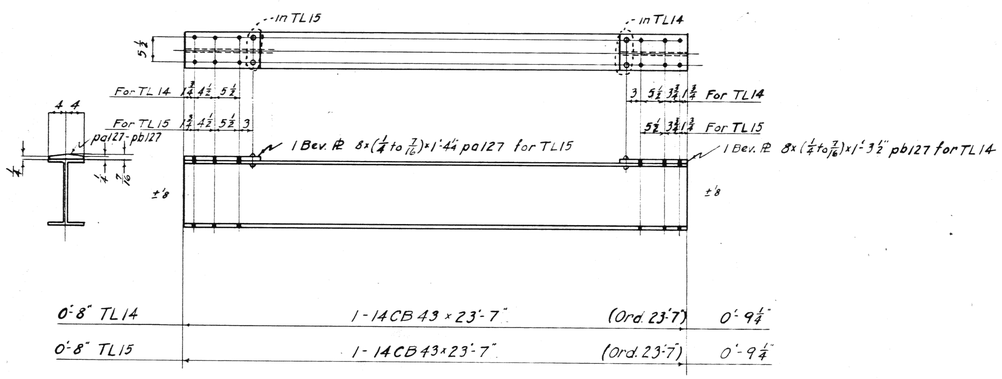
1'-2 1/4"	TL13	1-14 CB 61 × 31'-8 3/8"	(Ord. 31'-9")	1'-1"



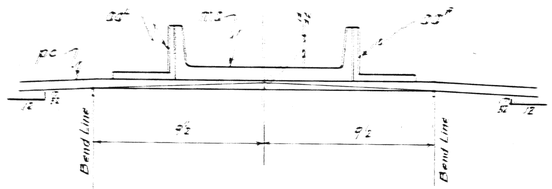
Bott. Sec. Same as top view

1'-2 5/8"	TL18	1 14 CB 61 × 30'-9 3/8"	(Ord. 30'-10 1/4")	2'-0 13/16"



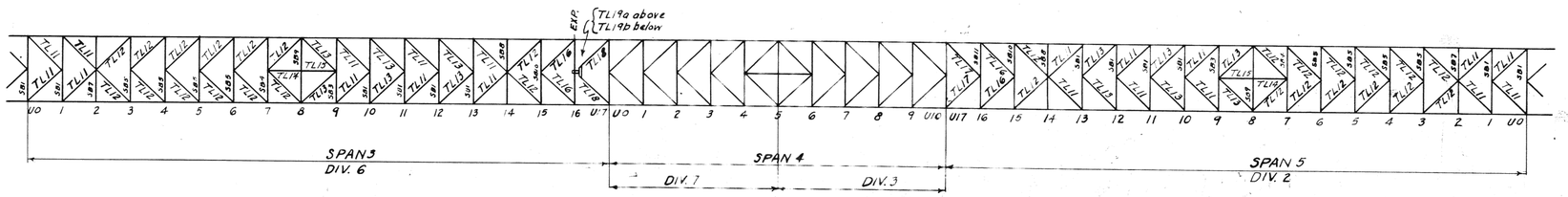


0'-8" TL14	1-14CB 43 × 23'-7"	(Ord. 23'-7")	0'-9 1/4"
0'-8" TL15	1-14CB 43 × 23'-7"	(Ord. 23'-7")	0'-9 1/4"



Section A-A Showing Location of W.P.

Sect-3 Sect-5			REQUIRED	
Div. 6	Div. 2	Total No.	Description	Mark
10	10	20	Top Lateral	TL11
14	14	28	do	TL12
6	6	12	do	TL13
1	1	2	do	TL14
1	1	2	do	TL15
2	2	4	do	TL16
	2	2	do	TL17
2		2	do	TL18
1		1	Top Lateral PL	TL19a
1		1	do	TL19b



LOCATION DIAGRAM

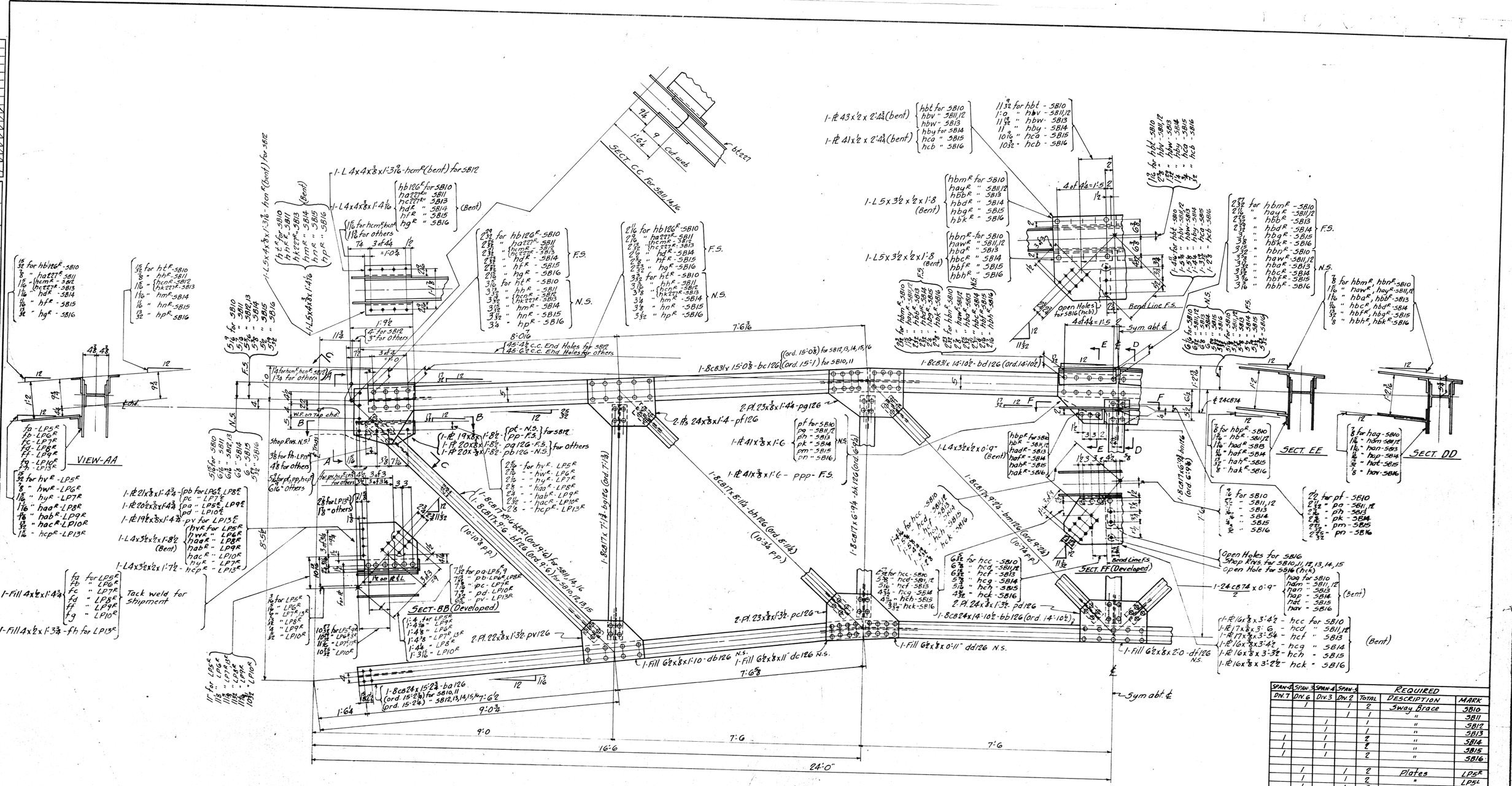
MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 3/4"
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size

PAINT: Yes - except as noted
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

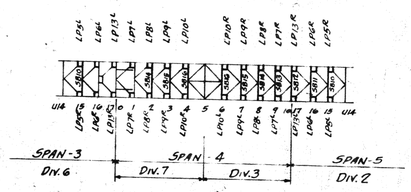
D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF LOUGHMAN D.R. #2
DRAW. MADE BY W.B.A. DATE 7-14-39
DRAW. CHECKED BY ALC DATE 7-21-39

ORDER No. H2524
SHEET No. 226



SWAY BRACE - SB10

"	"	- SB11 - Same as SB10, except as noted at end of Top chd ℄ at Top chd at ℄					
"	"	- SB12 -	"	"	"	"	
"	"	- SB13 -	"	"	"	"	
"	"	- SB14 -	"	"	"	"	
"	"	- SB15 -	"	"	"	"	
"	"	- SB16 -	"	"	"	"	



LOCATION DIAGRAM

SPAN-4 Div. 7	SPAN-3 Div. 6	SPAN-4 Div. 3	SPAN-5 Div. 2	TOTAL	REQUIRED DESCRIPTION	MARK
	1		1	2	Sway Brace	SB10
			1	1	"	SB11
		1		1	"	SB12
		1		1	"	SB13
1		1		2	"	SB14
1		1		2	"	SB15
		1		2	"	SB16
	1		1	2	Plates	LP5R
	1		1	2	"	LP5L
	1		1	2	"	LP6R
	1		1	2	"	LP6L
1		1		2	"	LP7R
1		1		2	"	LP7L
1		1		2	"	LP8R
1		1		2	"	LP8L
1		1		2	"	LP9R
1		1		2	"	LP9L
1		1		2	"	LP10R
1		1		2	"	LP10L
1		1		2	"	LP13R
1		1		2	"	LP13L

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 3/8" thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

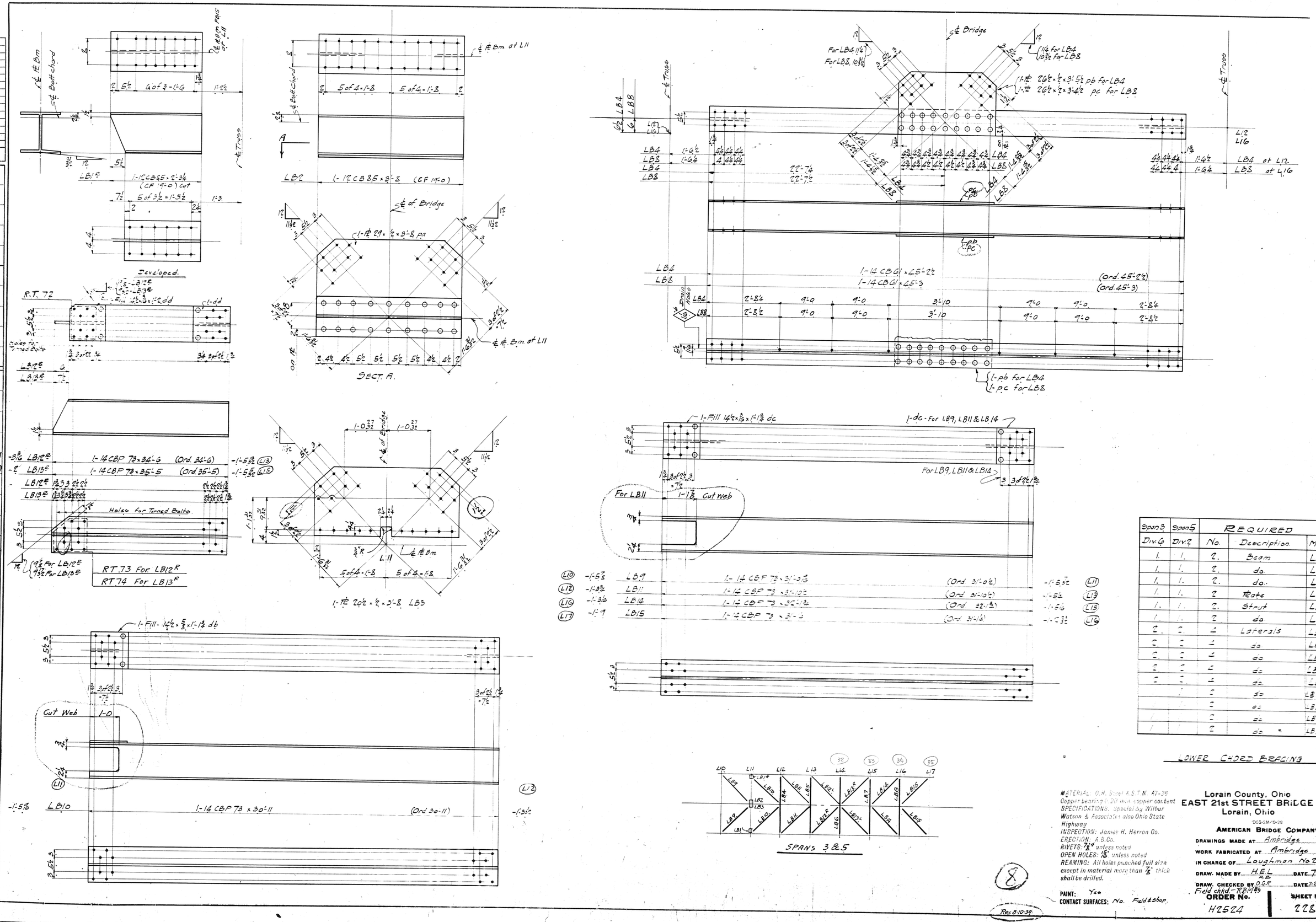
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman D.R. #2
DRAW. MADE BY ALH DATE 7-20-39
DRAW. CHECKED BY DGR DATE 7-27-39

ORDER No. H2524

SHEET NO. 227

Rev. 8-10-39



Span 3	Span 5	REQUIRED		
Div. G	Div. Z	No.	Description	Mark
1.	1.	2.	Beam	LB12R
1.	1.	2.	do.	LB13L
1.	1.	2.	do.	LB2
1.	1.	2	Rate	LB3
1.	1.	2.	Strut	LB4
1.	1.	2	do	LB8
2.	2.	4	Laterals	LB10
2.	2	4	do	LB9
2.	2	4	do	LB11
2	2	4	do	LB12
2	2	4	do	LB15
		2	do	LB12R
		2	do	LB12L
		2	do	LB13R
		2	do *	LB13L

LOWER CHORD BRACING

MATERIAL: O.H. Steel A.S.T.M. A7-28 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 1/16" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No. Field & Shop.

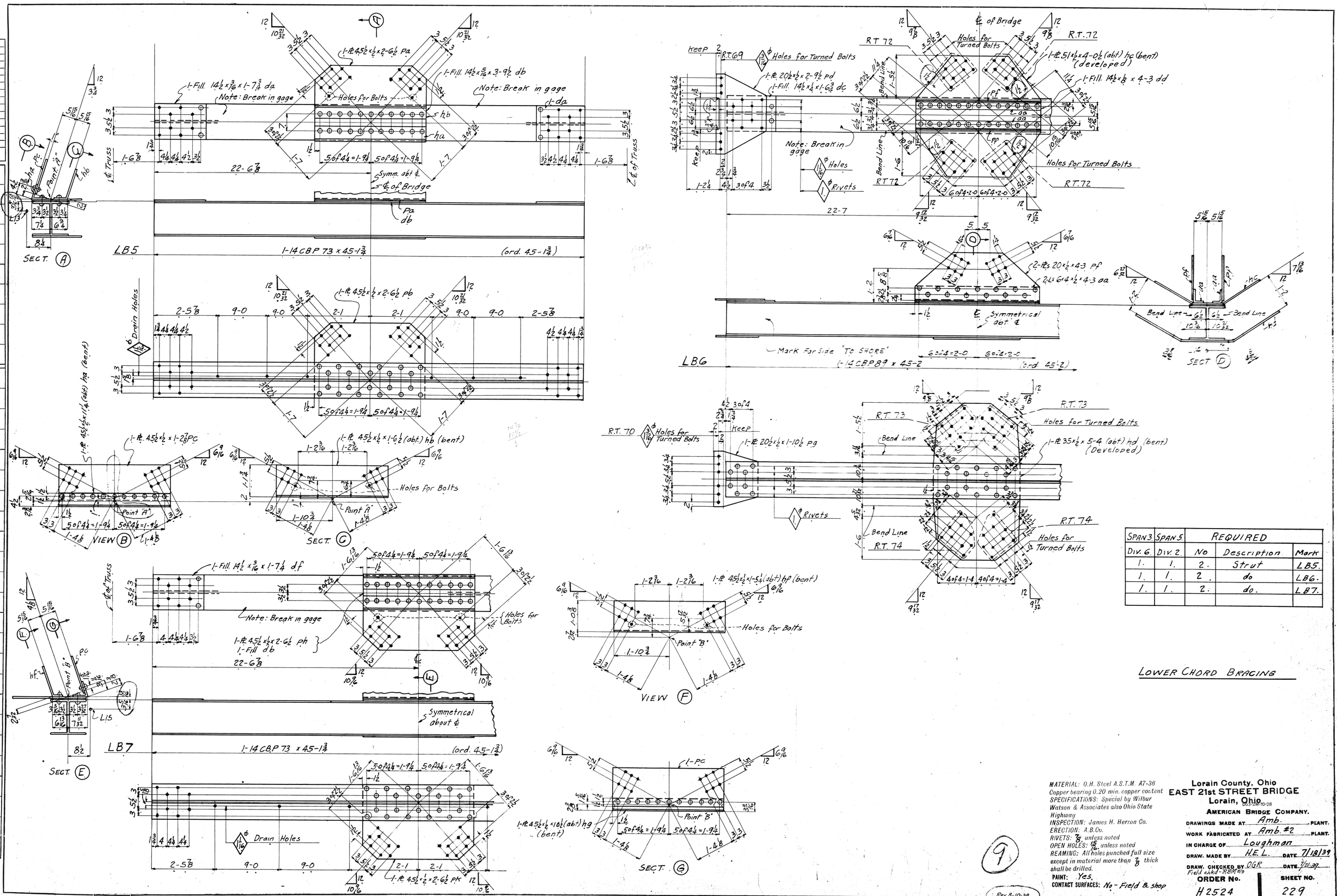
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DES-2M-10-28

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY H.E.L. A.B. DATE 7-11-39
DRAW. CHECKED BY O.G.R. DATE 7-21-39
Field chkd - RPM 8/39
ORDER No. H2524
SHEET NO. 228

Rev. 8-10-39



SPAN 3	SPAN 5	REQUIRED		
DIV. 6	DIV. 2	No	Description	Mark
1.	1.	2.	Strut	LB5.
1.	1.	2.	do	LB6.
1.	1.	2.	do.	LB7.

LOWER CHORD BRACING

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.
PAINT: Yes.
CONTACT SURFACES: No - Field & shop

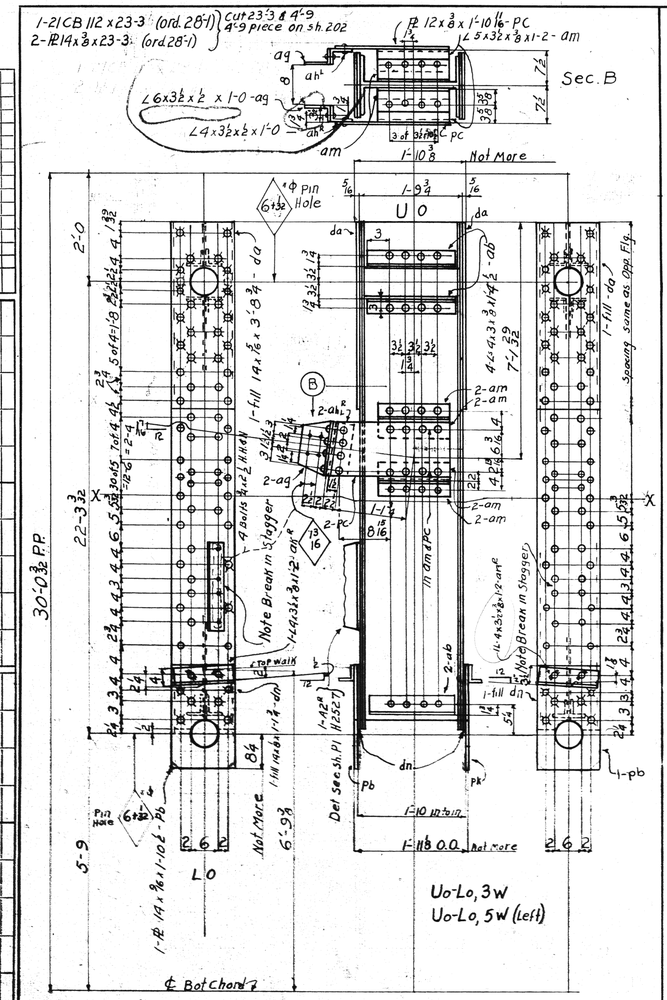
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
WCH-XM-70-38
AMERICAN BRIDGE COMPANY.

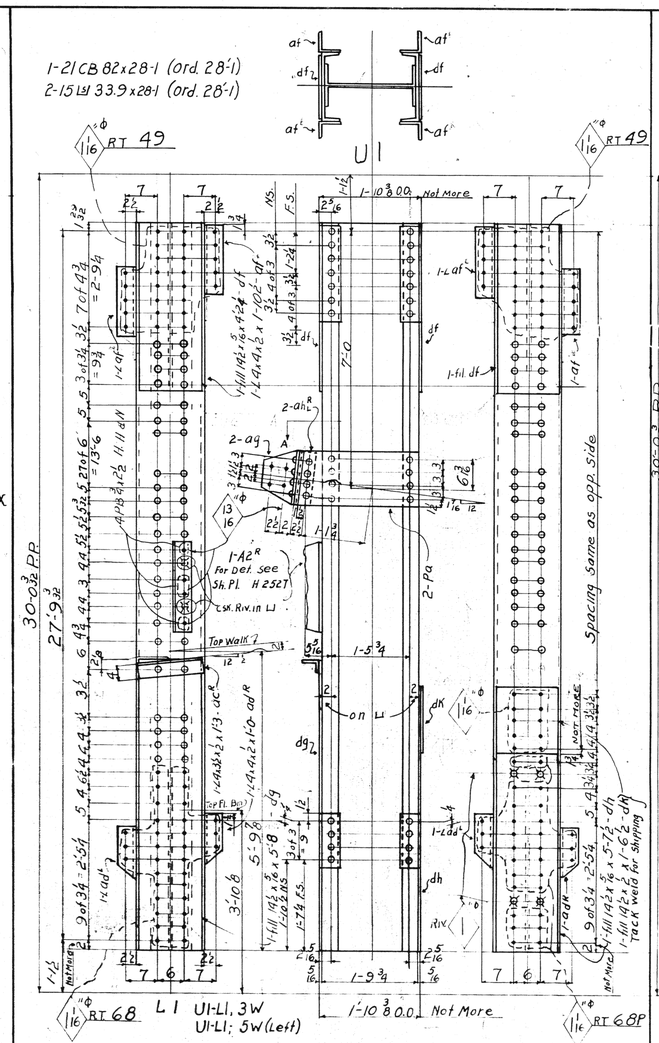
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. #2 PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY H.E.L. DATE 7/18/39
DRAW. CHECKED BY O.G.R. DATE 7/21/39
Field chkd - R.S.M. 8/9

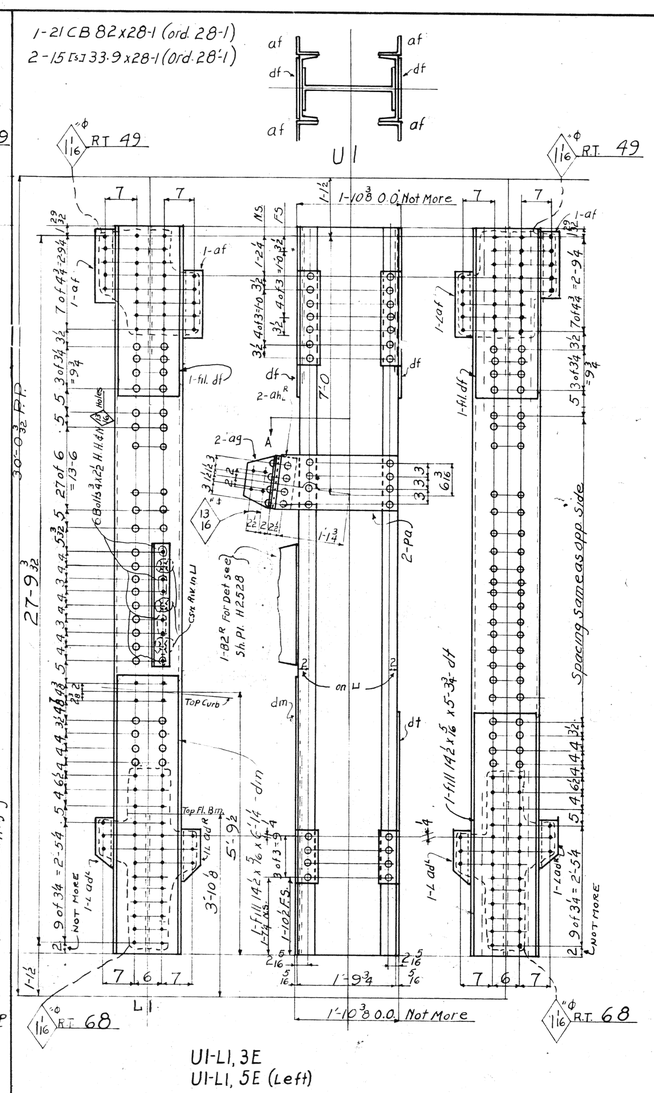
ORDER No. H2524
SHEET NO. 229

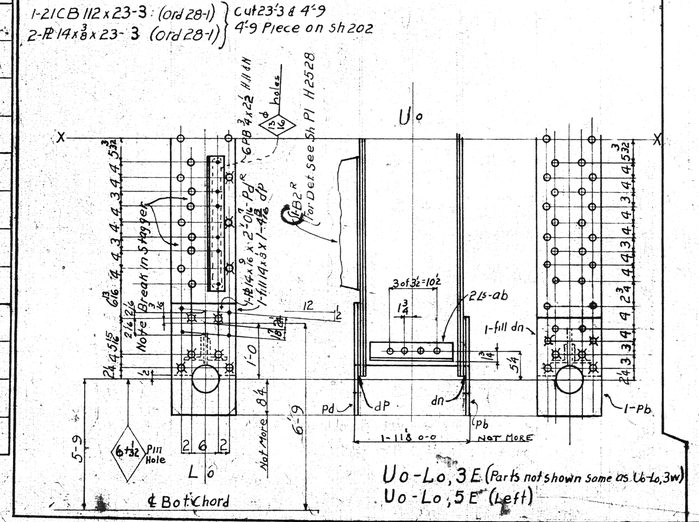
9

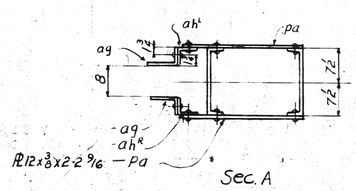
Rev. 8-10-39











Span 5 Div 2	Span 3 Div 6	Required Total	Description	Mark
	1	1	Vertical	Uo-Lo, 3W
1		1	do	Uo-Lo, 5W
	1	1	do	Uo-Lo, 3E
1		1	do	Uo-Lo, 5E
	1	1	do	UI-LI, 3W
1		1	do	UI-LI, 5W
	1	1	do	UI-LI, 3E
1		1	do	UI-LI, 5E

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.

Rev 8-14-39
Rev 8-4-39

4+

PAINT: Yes
CONTACT SURFACES: No Shop & Field except members permanently bolted are to be painted.

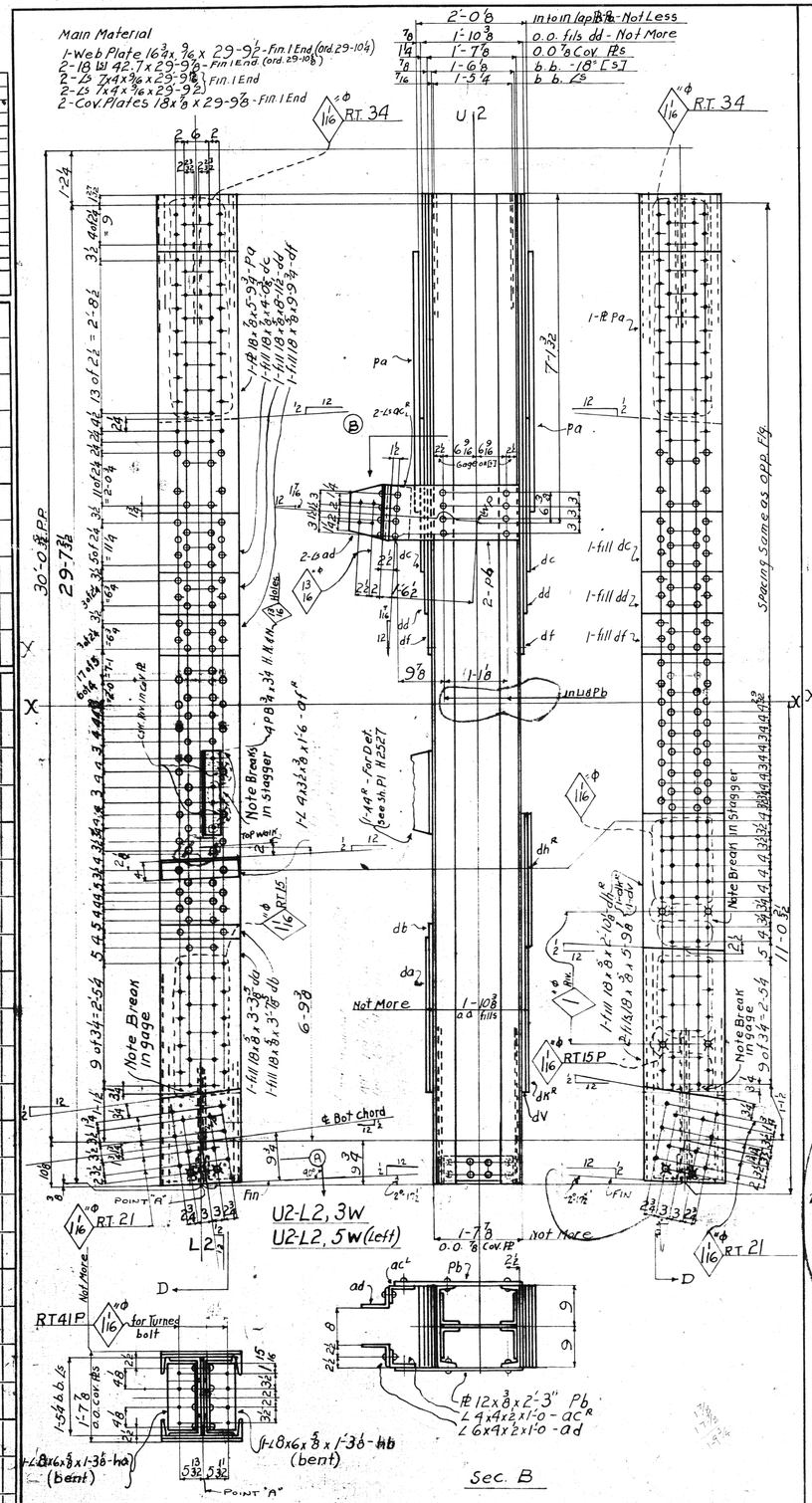
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY B.A.C. DATE 6-21-39
DRAW. CHECKED BY SJT DATE 7-27-39

ORDER No. H2524 | SHEET NO. 230



Span 3 Div 6	Span 5 Div 2	Required Total	Description	Mark
1		1	Vertical	U2-L2,3W
	1	1	do	U2-L2,5W
1		1	do	U2-L2,3E
	1	1	do	U2-L2,5E

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: as noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

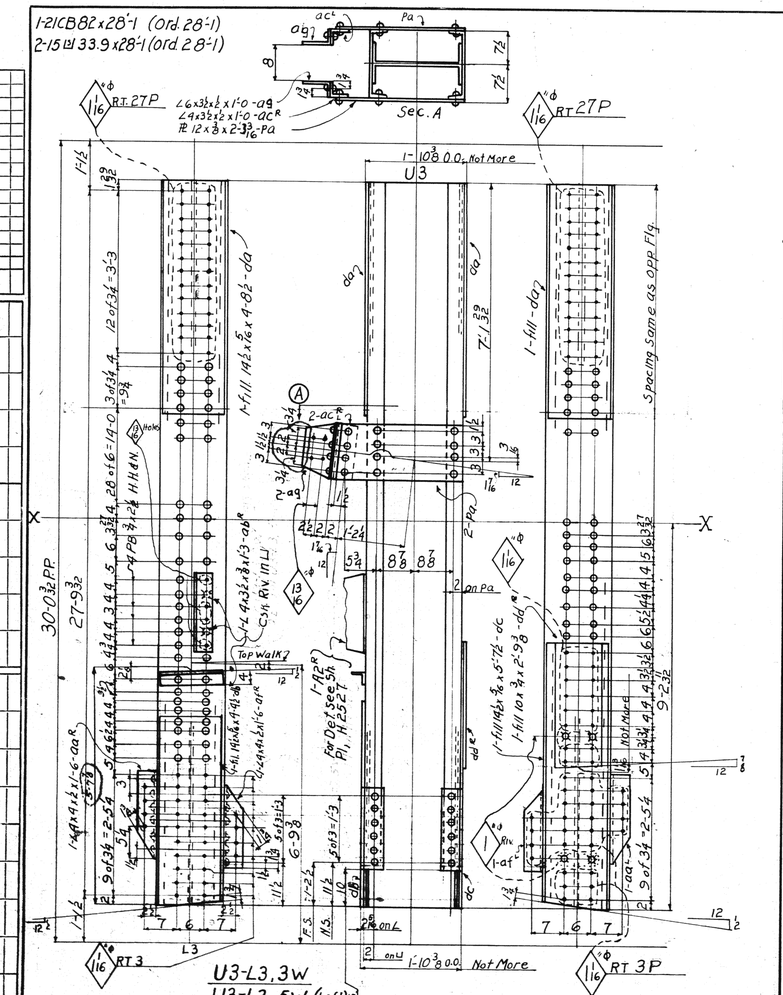
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY B.A.C. DATE 6-30-39
DRAW. CHECKED BY SJT DATE 7-20-39

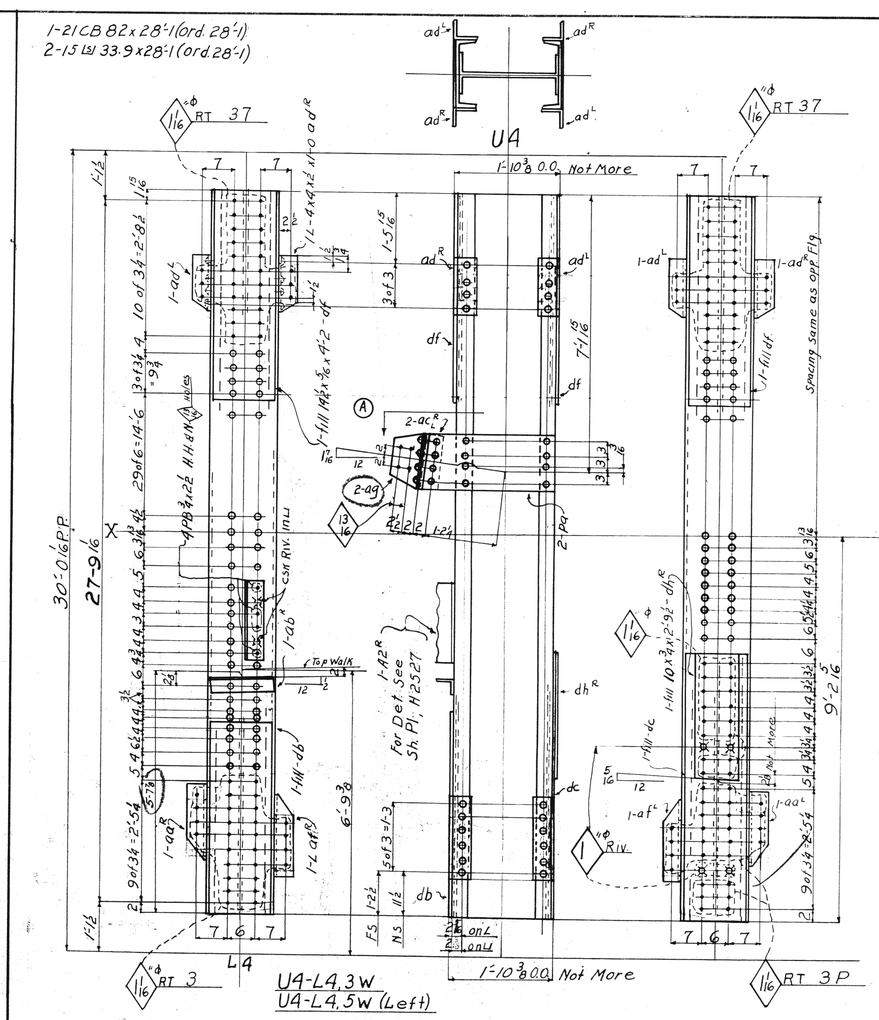
PAINT: Yes
CONTACT SURFACES: No - Shop and Field Except for members permanently bolted are to be painted.

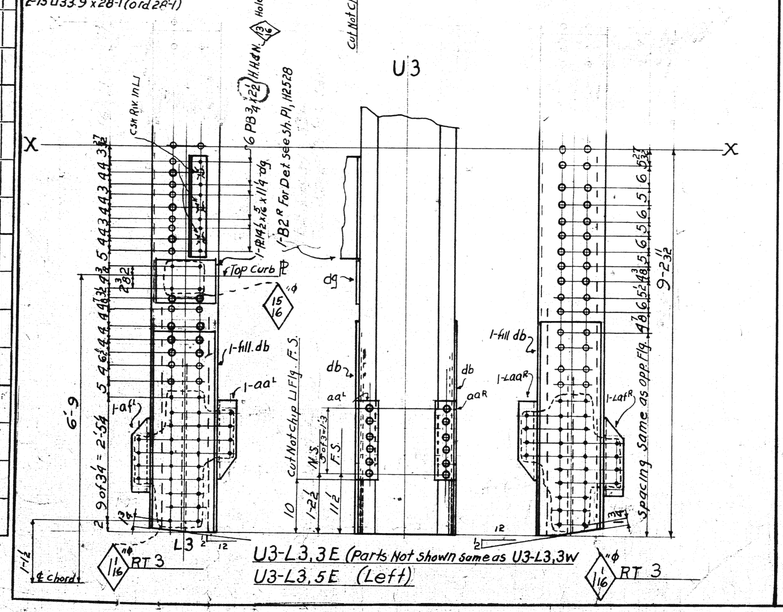
Rev 8-14-39
Rev 6-7-39

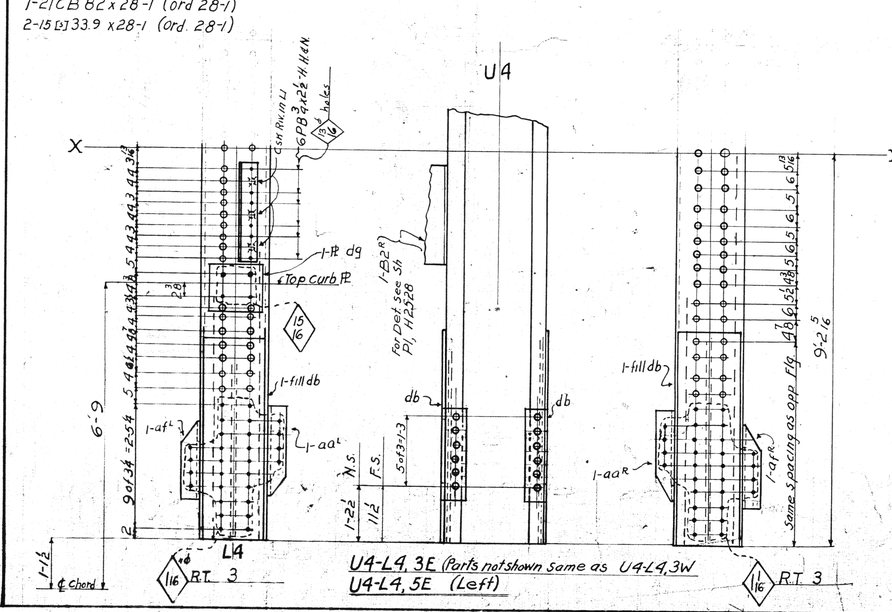
2

ORDER No. H2524 | SHEET No. 231









Span 3 Div 6	Span 5 Div 6	REQUIRED Total	Description	Mark
1		1	Vertical	U3-L3,3W
	1	1	do	U3-L3-5W
1		1	do	U3-L3-3E
	1	1	do	U3-L3,5E
1		1	do	U4-L4,3W
	1	1	do	U4-L4,5W
1		1	do	U4-L4,3E
	1	1	do	U4-L4,5E

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: as noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: NO - Shop & Field except members permanently bolted are to be painted

Rev 8-14-39
Rev - 8-7-39

5

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

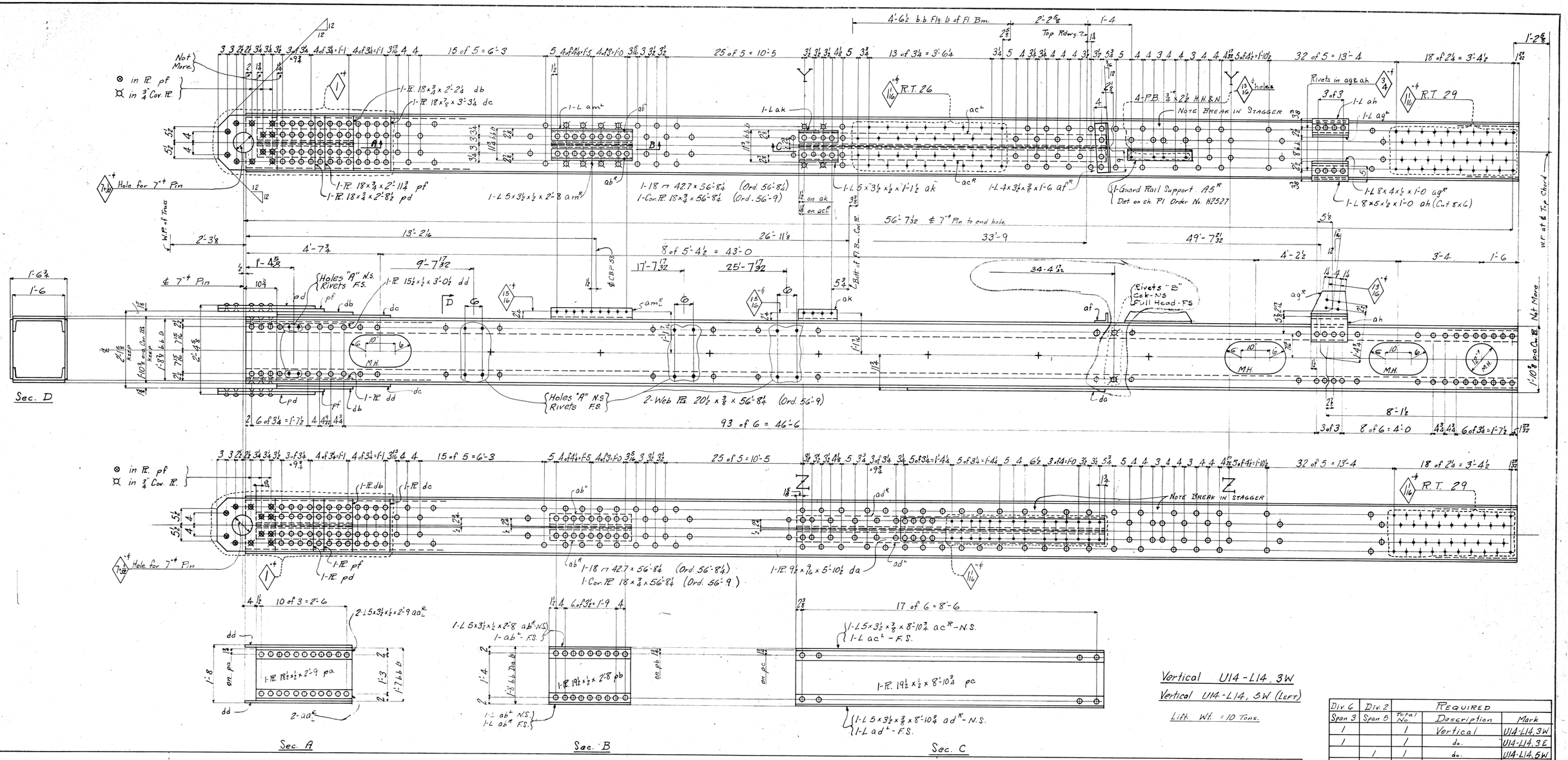
D63-2M-10-38

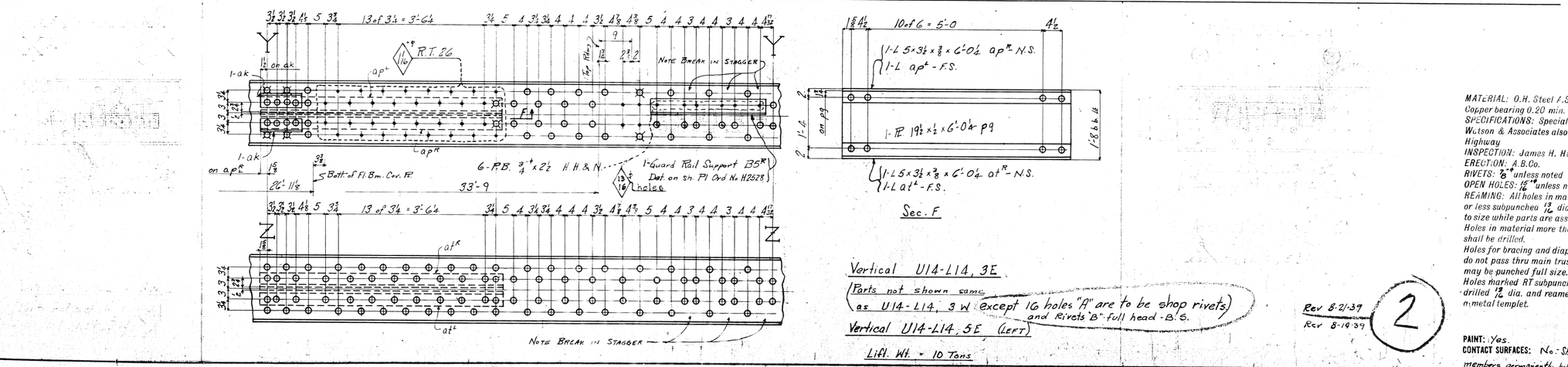
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY B.A.C. DATE 7-5-39
DRAW. CHECKED BY S.J.T. DATE 7-24-39

ORDER No. H2524

SHEET NO. 232





Vertical U14-L14, 3W

Vertical U14-L14, 5W (Left)

Lift. Wt. = 10 Tons.

Div. 6 Span 3	Div. 2 Span 5	Required Total No.	Description	Mark
1		1	Vertical	U14-L14, 3W
1		1	do.	U14-L14, 3E
	1	1	do.	U14-L14, 5W
	1	1	do.	U14-L14, 5E

Vertical U14-L14, 3E

(Parts not shown same as U14-L14, 3W except 16 holes "A" are to be shop rivets and Rivets "B" full head-B.S.)

Vertical U14-L14, 5E (Left)

Lift. Wt. = 10 Tons

Rev 8-21-39
Rev 8-19-39

2

MATERIAL: O.H. Steel F.S.T.h. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harrison Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes.
CONTACT SURFACES: No - Shop & Field except for members permanently bolted are to be painted

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

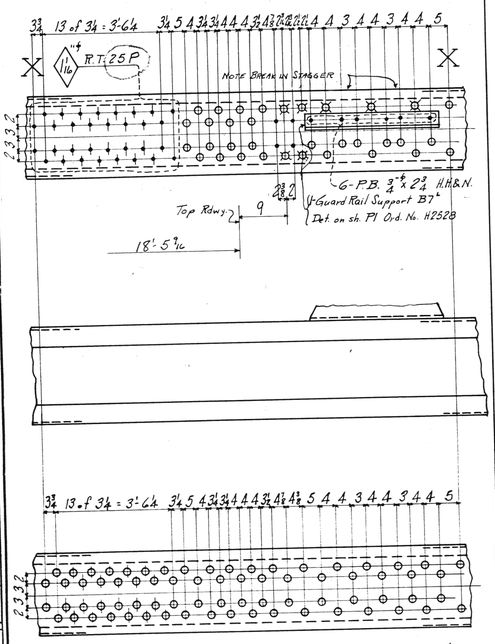
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

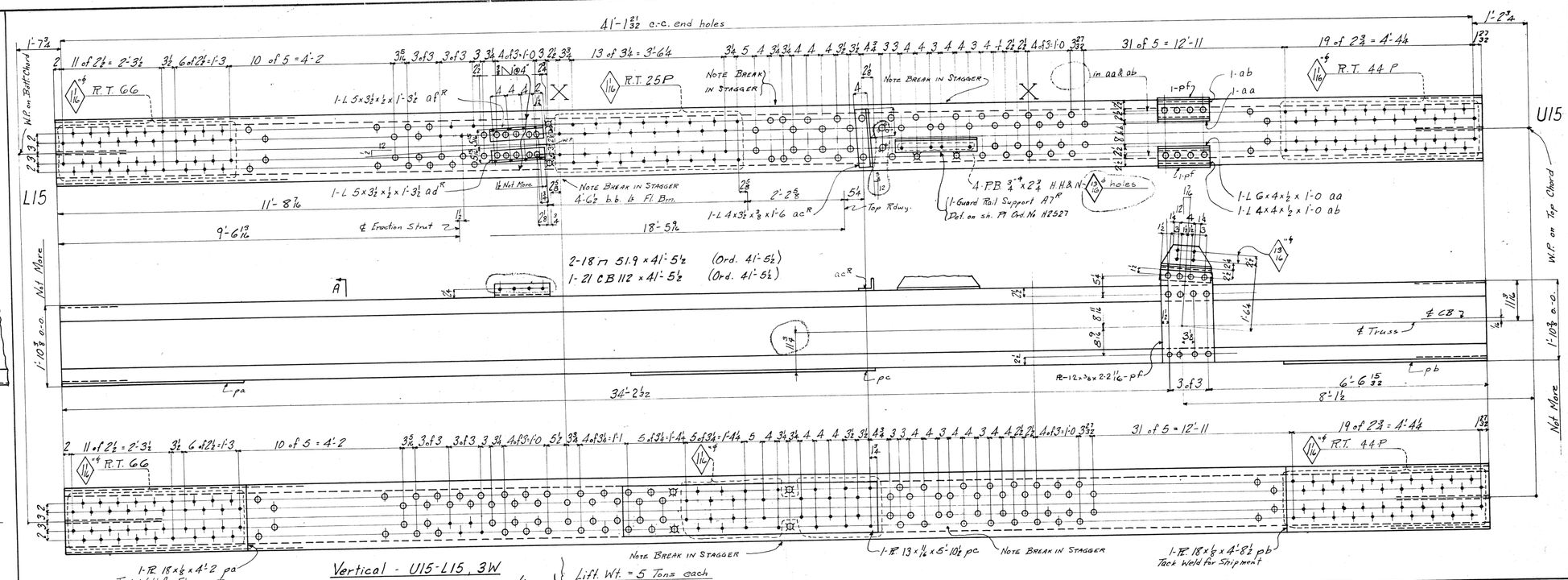
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY A.A.Z. DATE 7/7/39
DRAW. CHECKED BY SJT DATE 7-12-39

ORDER No. H2524

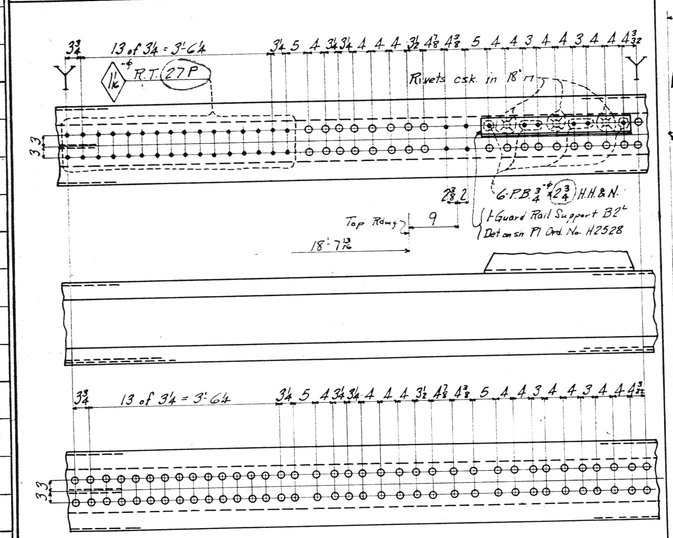
SHEET NO. 233



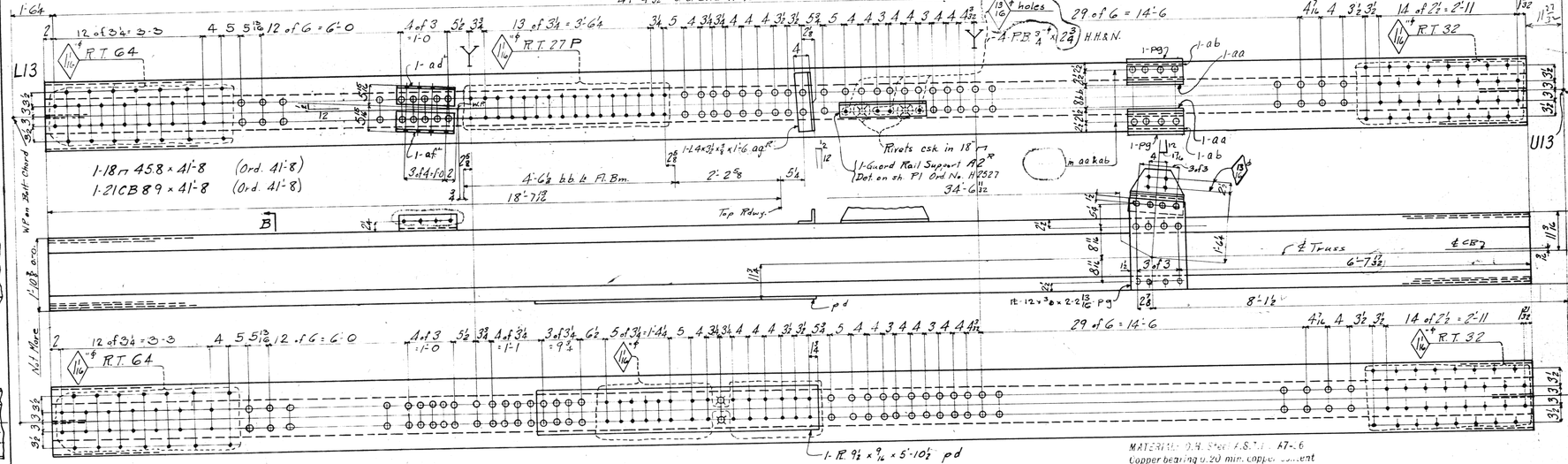
Vertical - U15-L15, 5E (Parts not shown same as U15-L15, 3W)
Vertical - U15-L15, 3E (LEFT)



Vertical - U15-L15, 3W
Vertical - U15-L15, 5W (LEFT)
Lift Wt. = 5 Tons each



Vertical - U13-L13, 5E (Parts not shown same as U13-L13, 3W)
Vertical - U13-L13, 3E (LEFT)



Vertical U13-L13, 3W
Vertical U13-L13, 5W (LEFT)
Lift Wt. - 5 Tons each

Sec. A

Sec. B

Div. 6	Div. 2	Required		
Span 3	Span 5	Total No.	Description	Mark
1		1	Vertical	U15-L15, 3W
1		1	do.	U15-L15, 3E
	1	1	do.	U15-L15, 5W
	1	1	do.	U15-L15, 5E
1		1	do.	U13-L13, 3W
1		1	do.	U13-L13, 3E
	1	1	do.	U13-L13, 5W
	1	1	do.	U13-L13, 5E

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harmon Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 1/16" dia. and reamed to size while parts are assembled. Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field except for members permanently bolted are to be painted

Rev 8-19-39
Rev 7-26-39

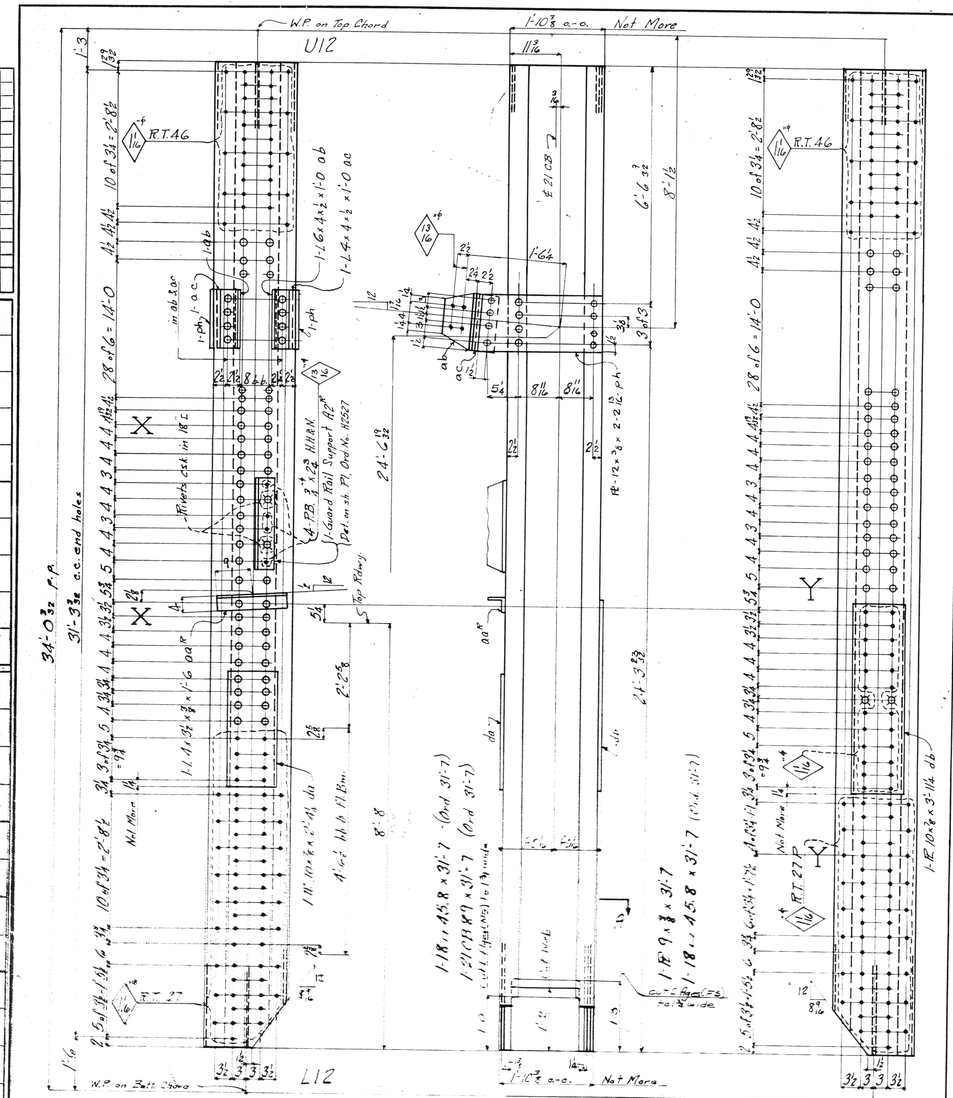
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

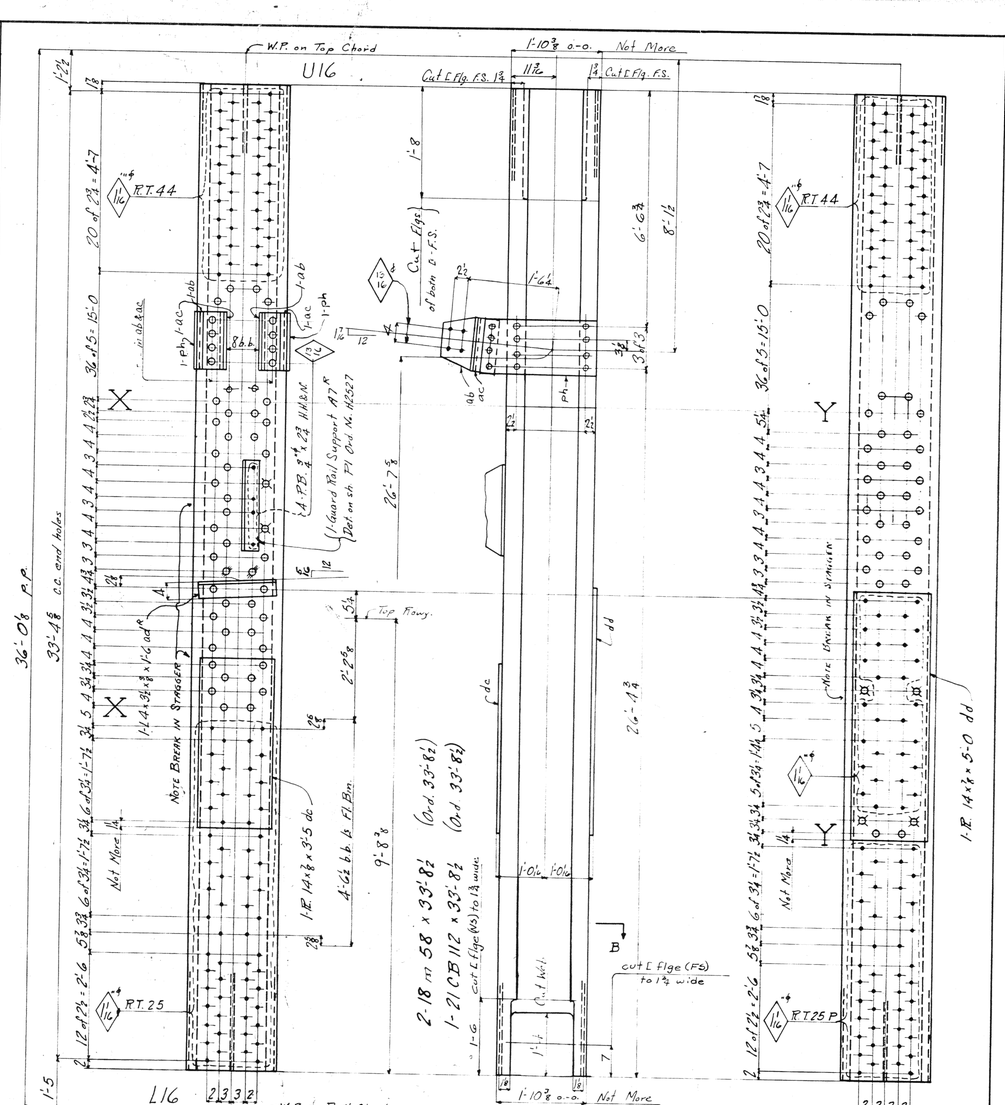
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY A.A.Z. DATE 7/17/39
DRAW. CHECKED BY SJT DATE 7-19-39

ORDER No. H2524
SHEET NO. 234

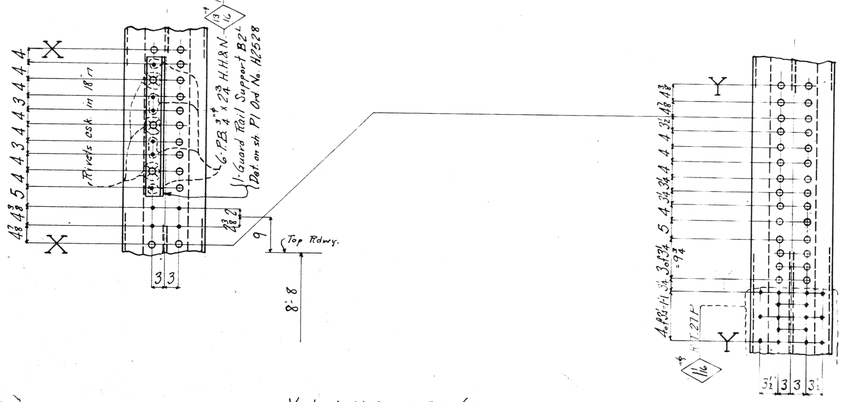


Vertical U12-L12, 3W
Vertical U12-L12, 5W (LEFT)

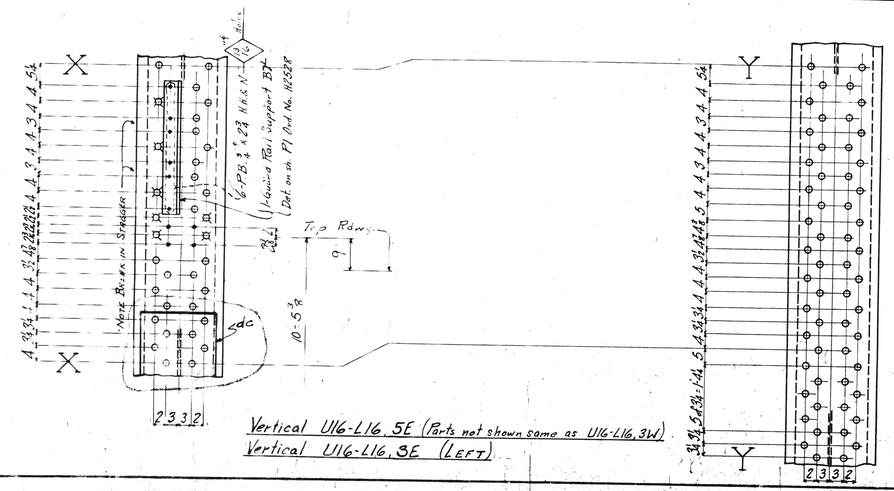


Vertical U16-L16, 3W
Vertical U16-L16, 5W (LEFT) } Lift Wt. = 5 Tons each

Div. 6	Div. 2	Required		
Span 3	Span 5	Total No.	Description	Mark
1		1	Vertical	U12-L12, 3W
1		1	do.	U12-L12, 3E
	1	1	do.	U12-L12, 5W
	1	1	do.	U12-L12, 5E
1		1	do.	U16-L16, 3W
1		1	do.	U16-L16, 3E
	1	1	do.	U16-L16, 5W
	1	1	do.	U16-L16, 5E



Vertical - U12-L12, 5E (Parts not shown same as U12-L12, 3W)
Vertical - U12-L12, 3E (LEFT)



Vertical U16-L16, 5E (Parts not shown same as U16-L16, 3W)
Vertical U16-L16, 3E (LEFT)

Rev. 11-17-39
Rev. 8-14-39
Rev. 7-26-39

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled. Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field except members permanently bolted are to be painted.

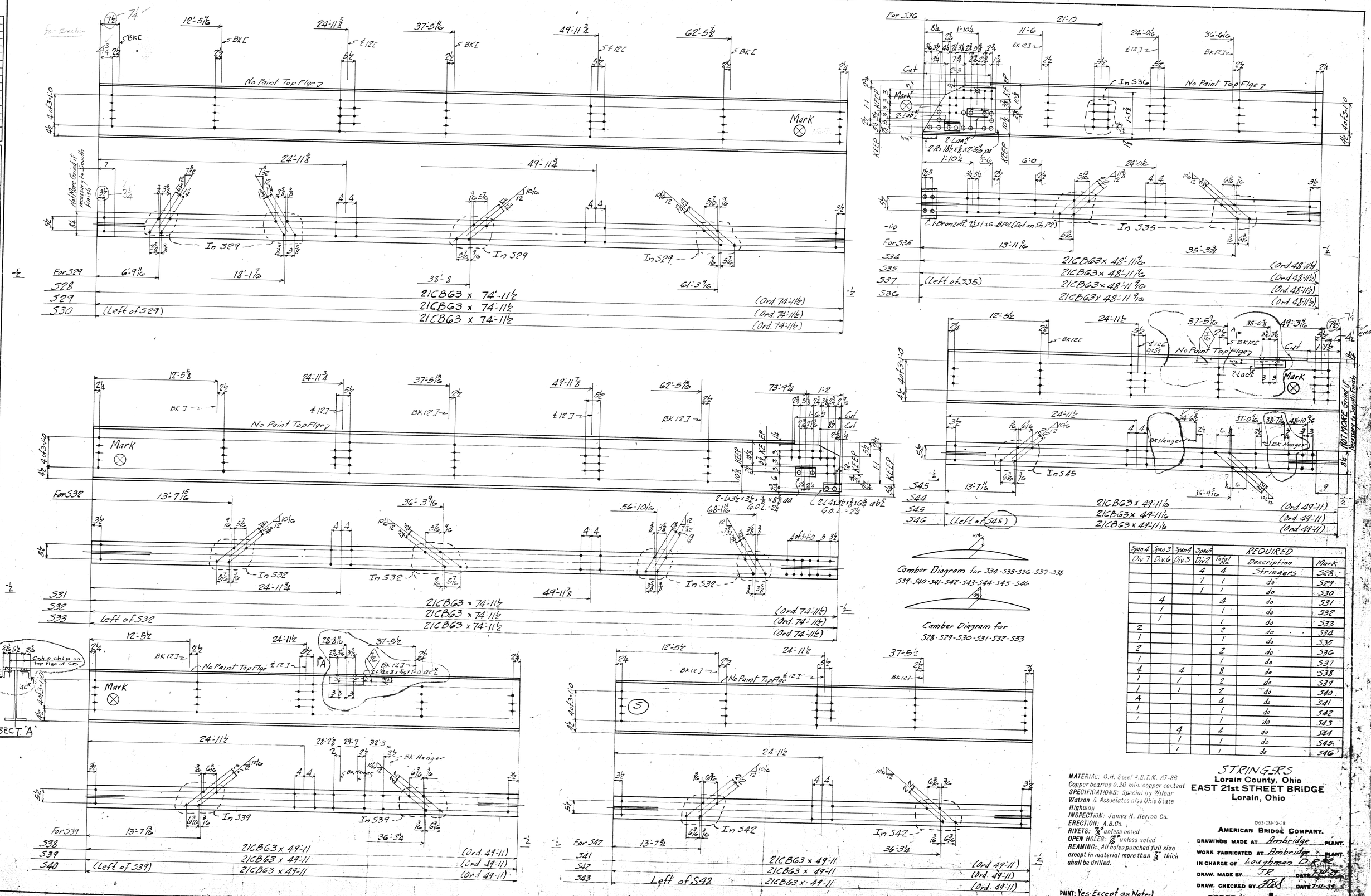
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Leughman #2
DRAW. MADE BY A.A.Z. DATE 7-18-39
DRAW. CHECKED BY S.J.T. DATE 7-21-39

ORDER No. H2524 **SHEET NO.** 235



Span 4 Div 7	Span 3 Div 6	Span 4 Div 3	Span 5 Div 2	REQUIRED Total No.	Description	Mark
			4	4	Stringers	S28
			1	1	do	S29
			1	1	do	S30
	4			4	do	S31
	1			1	do	S32
	1			1	do	S33
2				2	do	S34
1				1	do	S35
2				2	do	S36
1				1	do	S37
4		4		8	do	S38
1		1		2	do	S39
1		1		2	do	S40
4				4	do	S41
1				1	do	S42
1				1	do	S43
		4		4	do	S44
		1		1	do	S45
		1		1	do	S46

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes Except as Noted
CONTACT SURFACES: No Shop Field

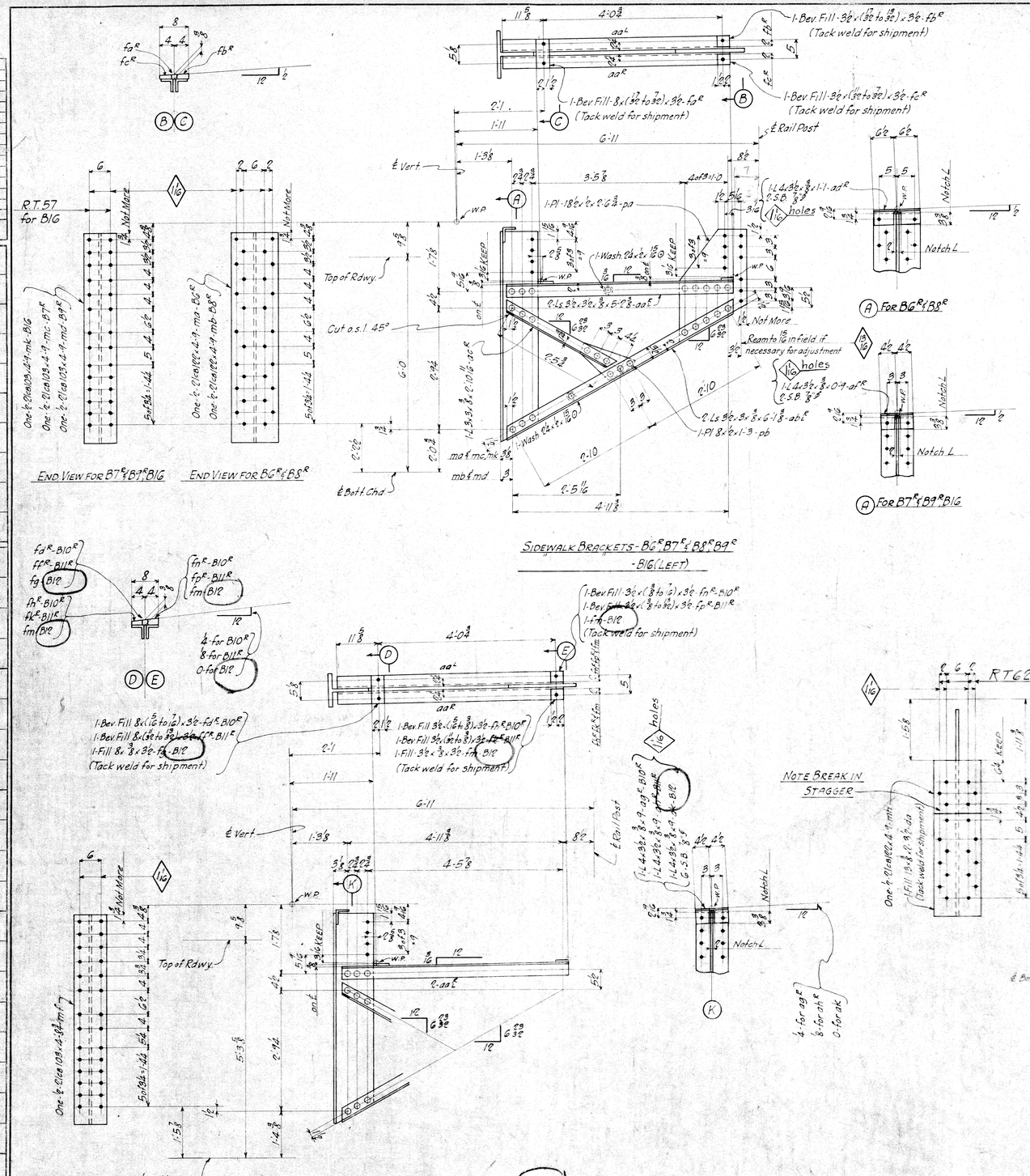
STRINGERS
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

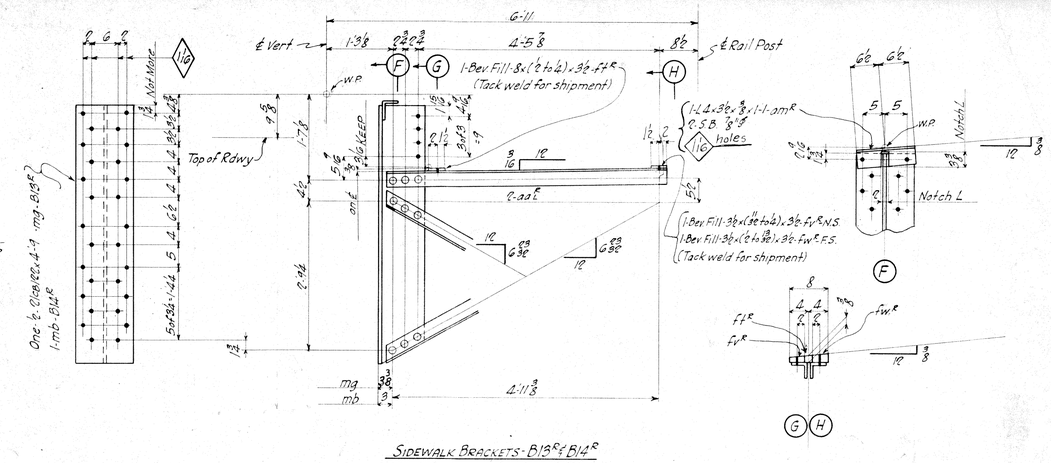
D63-CM-10-38

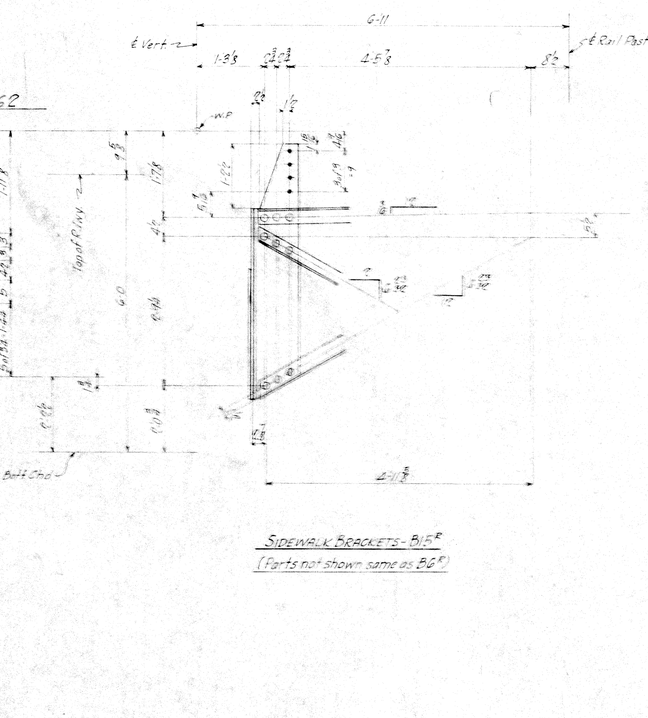
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.K.
DRAW. MADE BY JR DATE 7-4-39
DRAW. CHECKED BY [illegible] DATE 7-11-39

ORDER No. H2524
SHEET No. 236







Span 4	Span 3	Span 2	Span 1	Span 4	Span 5	Required		
Div. 7	Div. 6	Div. 5	Div. 4	Div. 3	Div. 2	Total	Description	Mark
					2	2	Sidewalk Brkts	B6^R
	2	1	3			6	"	B6^L
					4	4	"	B7^R
	4					4	"	B7^L
			1			1	"	B1G
				1		1	"	B9^R
	1					1	"	B9^L
				2		2		B10^R
2						2		B10^L
			1			1		B11^R
1						1		B11^L
			3			3		B1^R
								B13^R
								B13^L
								B14^R
								B14^L
								B15^R
								B15^L
								B8^R
								B8^L

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.
Holes marked R.T. subpunched or sub-drilled 13/16" reamed to size to metal templet.
PAINT: Yes
CONTACT SURFACES: No - (Shop & Field)

Rev. 8-16-39
Rev. 8-31-39

(10)

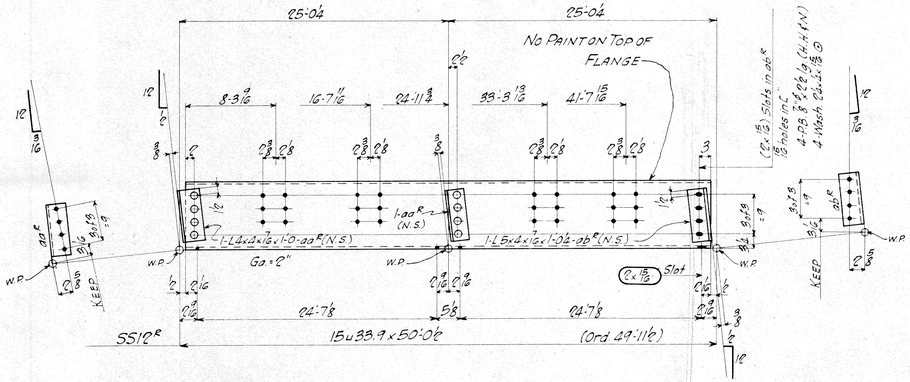
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

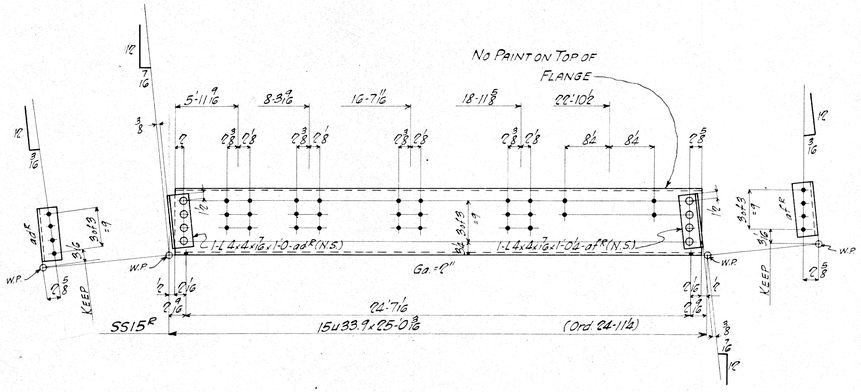
D63-VC-9-38

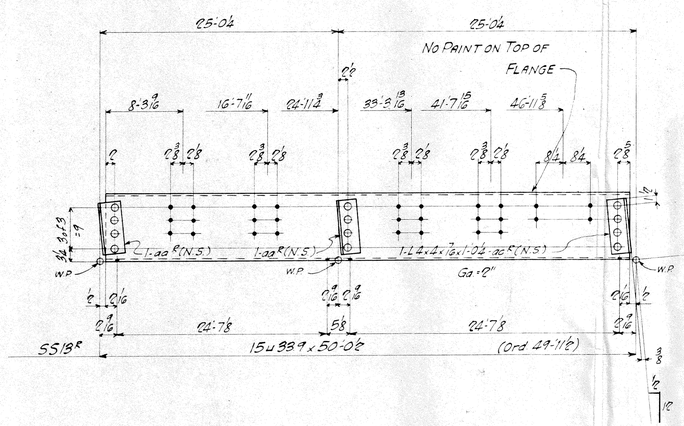
AMERICAN BRIDGE COMPANY.

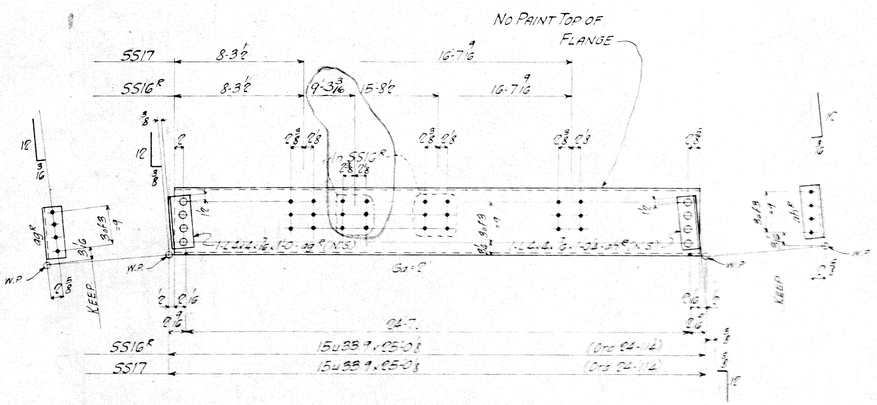
DRAWINGS MADE AT AMB. PLANT.
WORK FABRICATED AT AMB. PLANT.
IN CHARGE OF LOUGHMAN & C
DRAW. MADE BY W.W.J. DATE 7-11-39
DRAW. CHECKED BY FEB DATE 7-14-39

ORDER No. H2524
SHEET No. 237

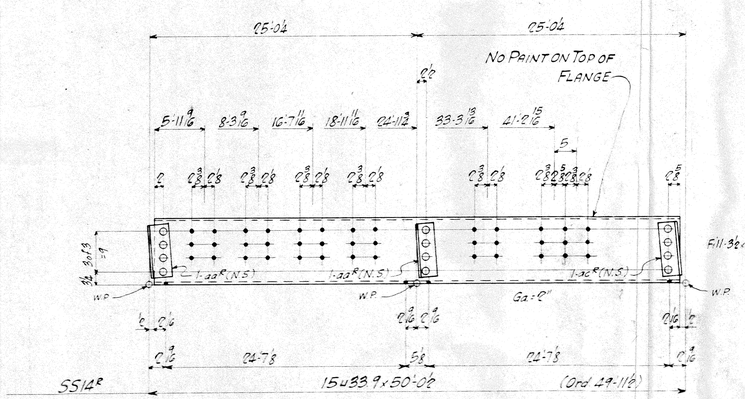


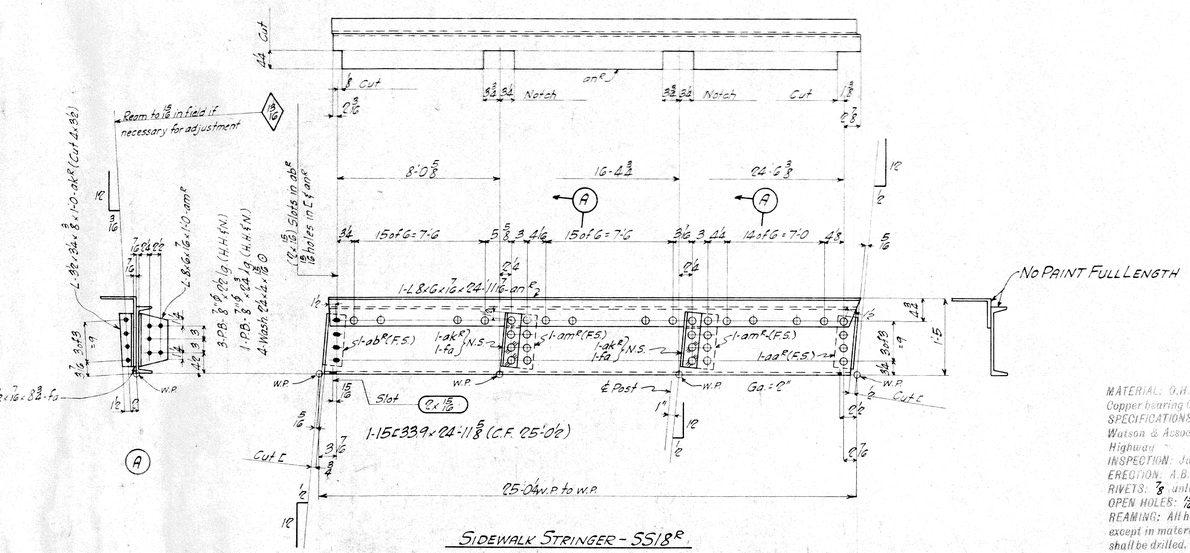






Sch. 3 Dwg. 5	Sch. 3 Dwg. 6	Required Total	Description	Mark
	?	?	Sidewalk Stringer	5SI8^R
?		?		5SI8^L
	/	/		5SI3^R
/		/		5SI3^L
	/	/		5SI4^R
				5SI4^L
	/	/		5SI5^R
/		/		5SI5^L
	/	/		5SI6^R
/		/		5SI6^L
	/	/		5S17
	?	?		5SI8^R
?		?		5SI8^L





Sidewalk Stringer - 5SI8^R

Sidewalk Stringers

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than 3/8 thick shall be drilled.

PAINT: Yes, Unless noted.
CONTACT SURFACES: -No- (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

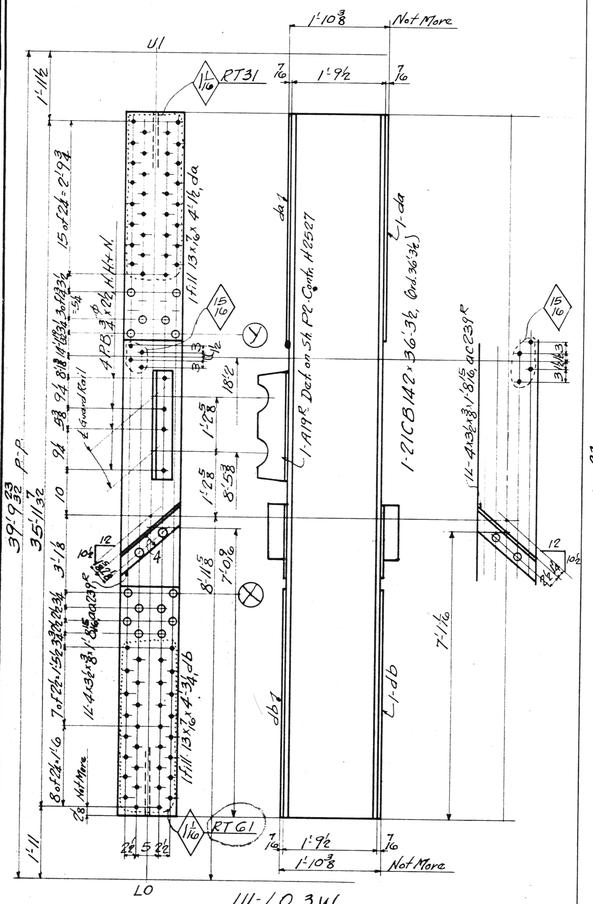
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

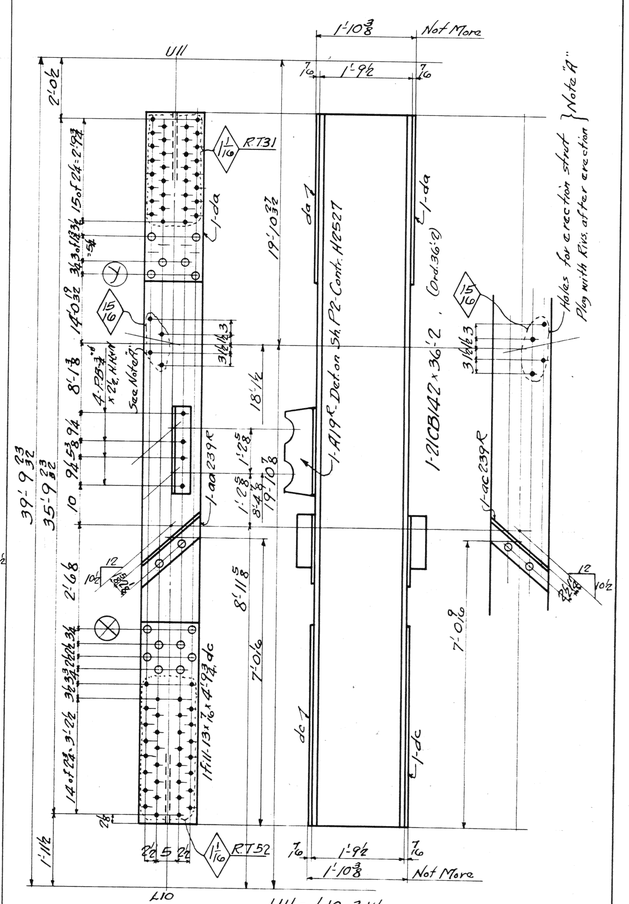
DRAWINGS MADE AT AMB. PLANT.
WORK FABRICATED AT AMB. PLANT.
IN CHARGE OF LOUGHMAN #2
DRAW. MADE BY W.W.J. DATE 7-28-39
DRAW. CHECKED BY [illegible] DATE 8-1-39

ORDER No. H2524
SHEET NO. 238

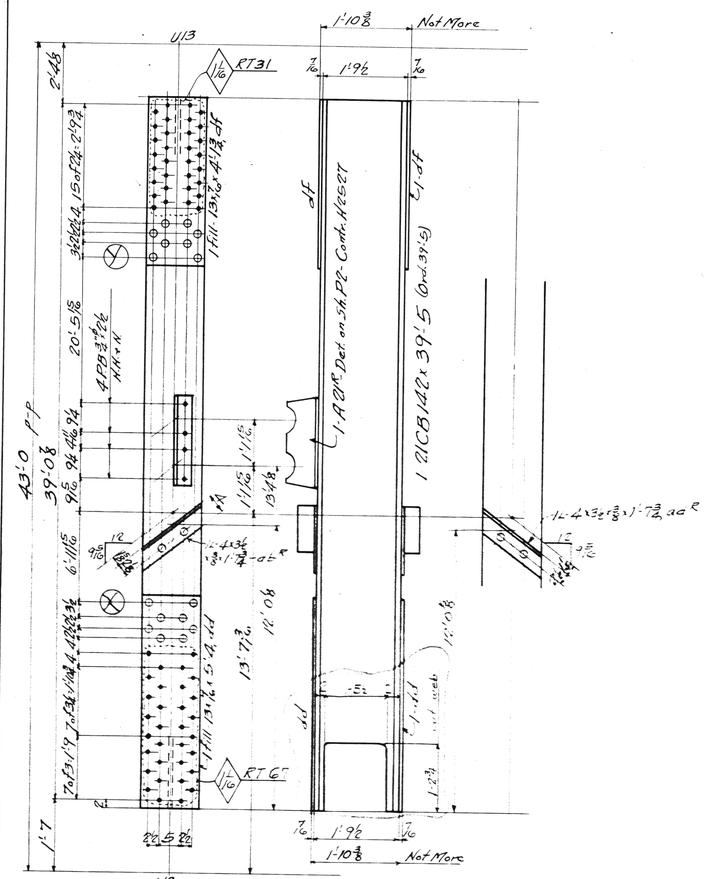
Rev. 9-12-39. (1)



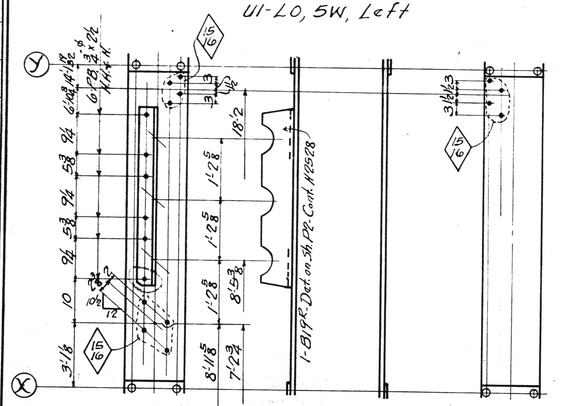
U1-L0, 3W
U1-L0, 5W, Left



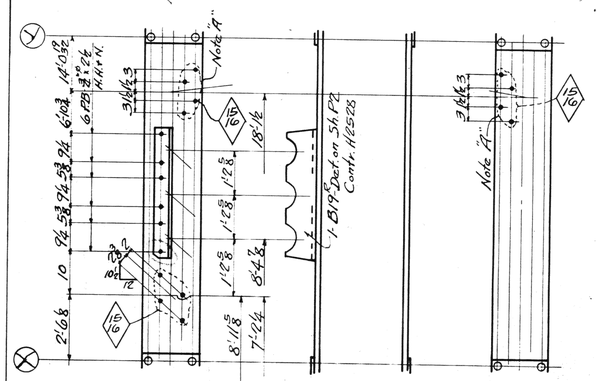
U11 - L10, 3W
U11 - L10, 5W, Left



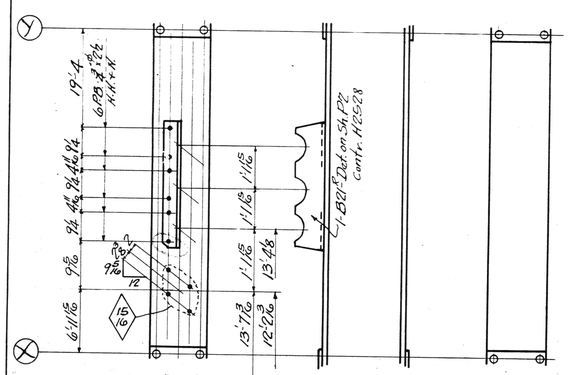
U13-L12, 3W
U13-L12, 5W, Left



U1-L0, 3E, Same as U1-L0, 3W except as shown between lines "X" & "Y"
U1-L0, 5E, Left



U11-L10, 3E, Same as U11-L10, 3W except as shown between lines "X" & "Y"
U11-L10, 5E, Left



U13-L12, 3E - Same as U13-L12, 3W except as shown between lines "X" and "Y"
U13-L12, 5E, Left

Span 3 Span 5 Dia. 6	Dia. 2	Total	REQUIRED Description	Mark
1		1	Diagonals	U1-L0, 3W
	1	1	do	U1-L0, 5W
1		1	do	U1-L0, 3E
	1	1	do	U1-L0, 5E
1		1	do	U11-L10, 3W
	1	1	do	U11-L10, 5W
1		1	do	U11-L10, 3E
	1	1	do	U11-L10, 5E
1		1	do	U13-L12, 3W
	1	1	do	U13-L12, 5W
1		1	do	U13-L12, 3E
	1	1	do	U13-L12, 5E

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No-(Shop & Field) except members permanently bolted are to be painted.

Rev 8-19-39

6

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

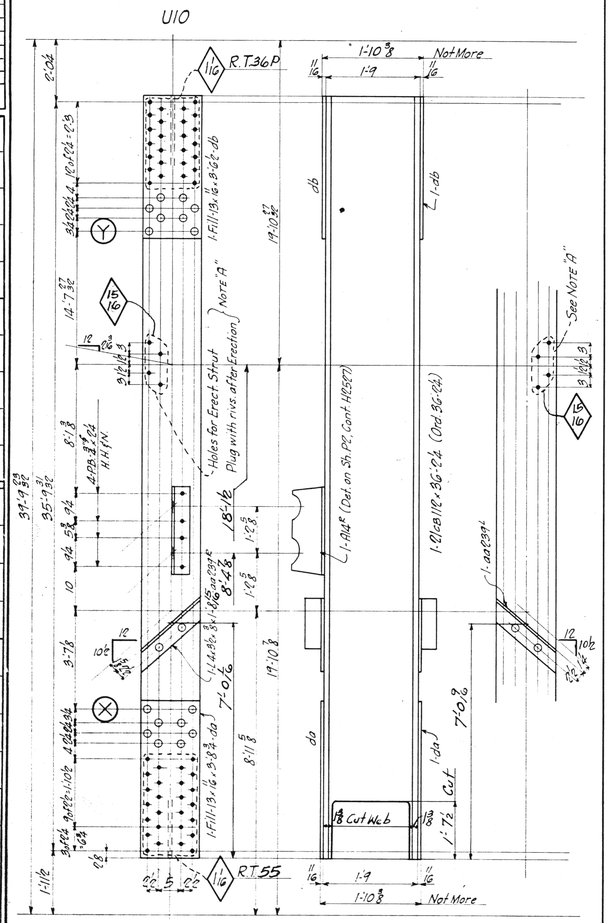
D63-VC-9-38

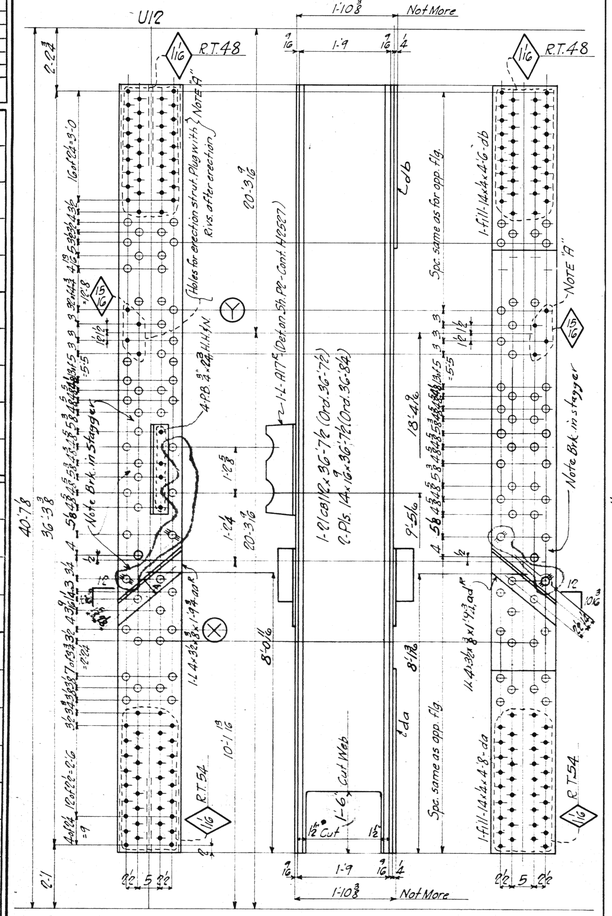
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.R. #2
DRAW. MADE BY E.R.M. DATE
DRAW. CHECKED BY SJT DATE 7-17-39

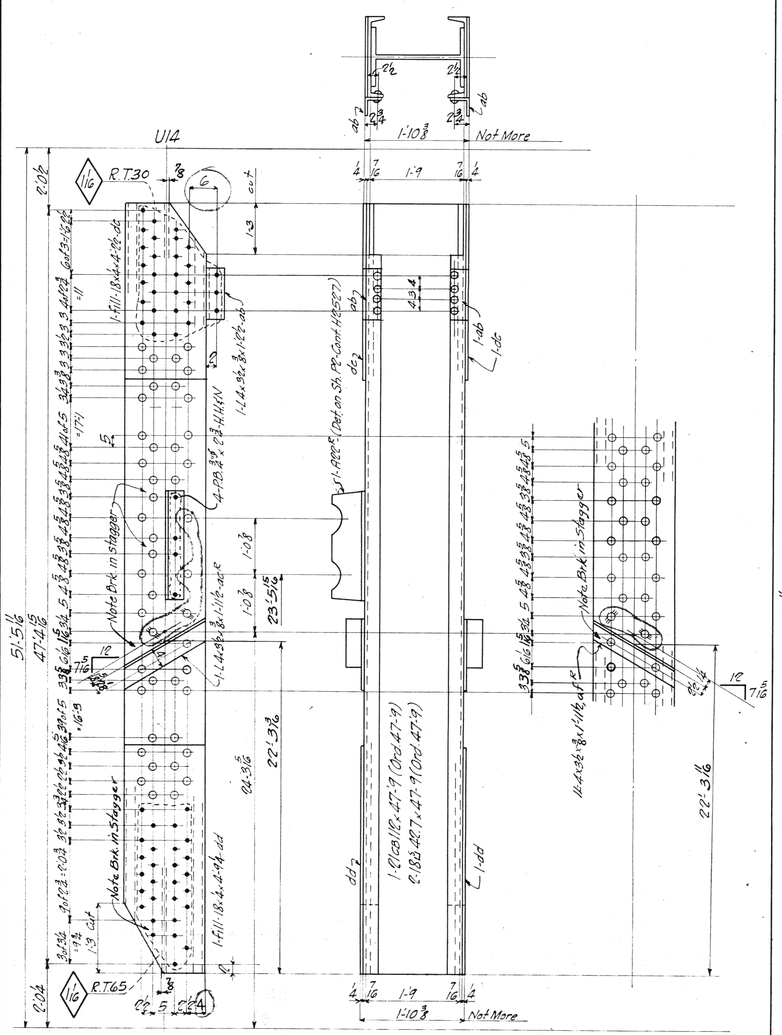
ORDER No. H2524

SHEET NO. 239


U10
R.T.36P
1-10 3/8"
Not More
1-9
Holes for Erect Strut
Plug with rivs after Erection
Note "A"
See Note "A"
1-Pl.1/2"x36"x24" (Ord 36-02)
1-Pl.1/2"x36"x24" (Ord 36-02)
1-Pl.1/2"x36"x24" (Ord 36-02)

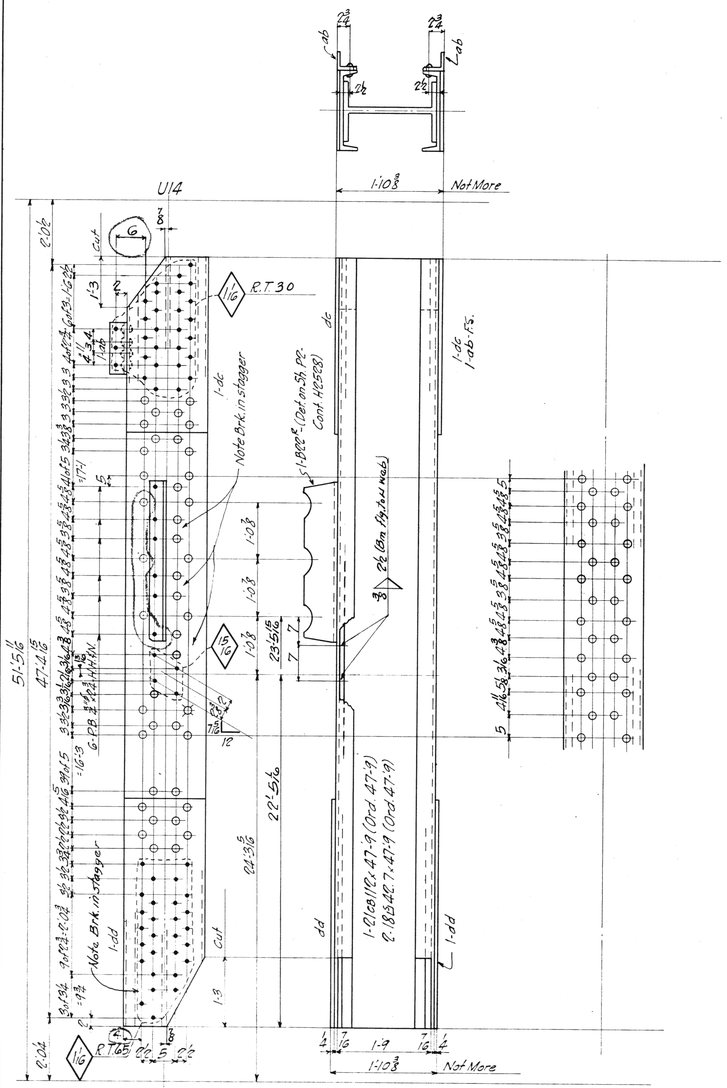


U12-L11, 3W
U12-L11, 5W (LEFT)



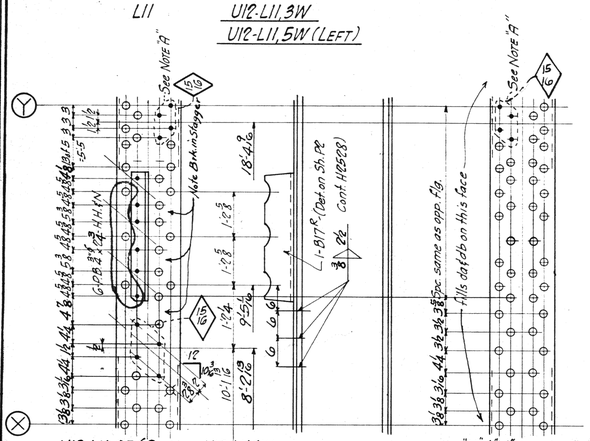
U14-L13, 3W
U14-L13, 5W (LEFT)

Lift Wt. - 6 Tons



U14-L13, 3E
U14-L13, 5E (LEFT)

Lift Wt. - 6 Tons



U12-L11, 3E (SAME AS U12-L11, 3W EXCEPT AS SHOWN BET. LINES "X" & "Y")
U12-L11, 5E (LEFT)

Span 3 Div. G	Span 5 Div. 2	Required Total	Description	Mark
1		1	Diagonals	U12-L11, 3W
	1	1	"	U12-L11, 5W
1		1	"	U12-L11, 3E
	1	1	"	U12-L11, 5E
1		1	"	U14-L13, 3W
	1	1	"	U14-L13, 5W
1		1	"	U14-L13, 3E
	1	1	"	U14-L13, 5E

MATERIAL: Bars, Steel - [illegible] AT-E
Copper bearing 0.20 min. [illegible]
SPECIFICATIONS: Specified by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Hanlon Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 3/8" thick or less subpunched 3/4" dia. and reamed to size while parts are assembled.
Holes in material more than 3/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field) except members permanently bolted are to be painted.

Rev 8-19-39

(12)

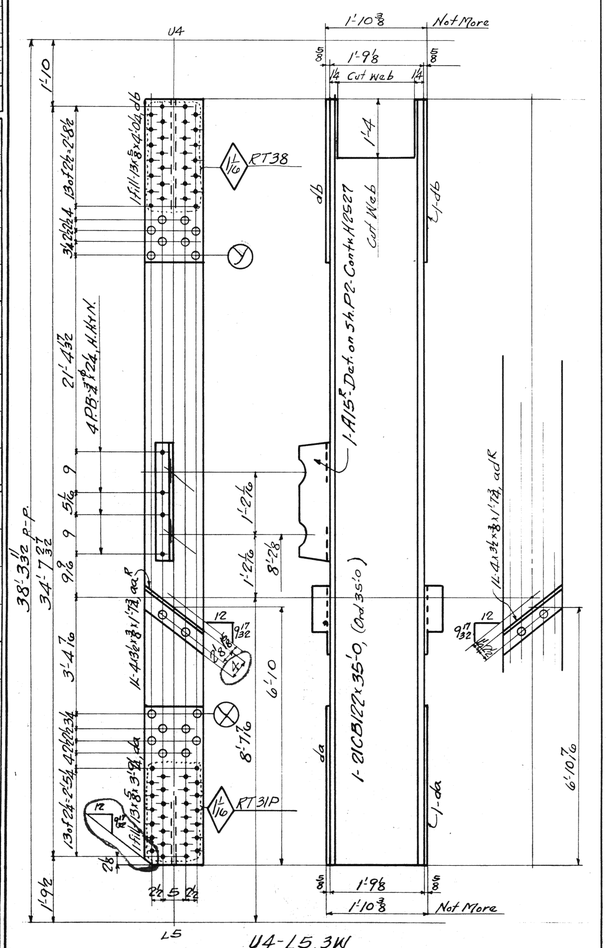
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

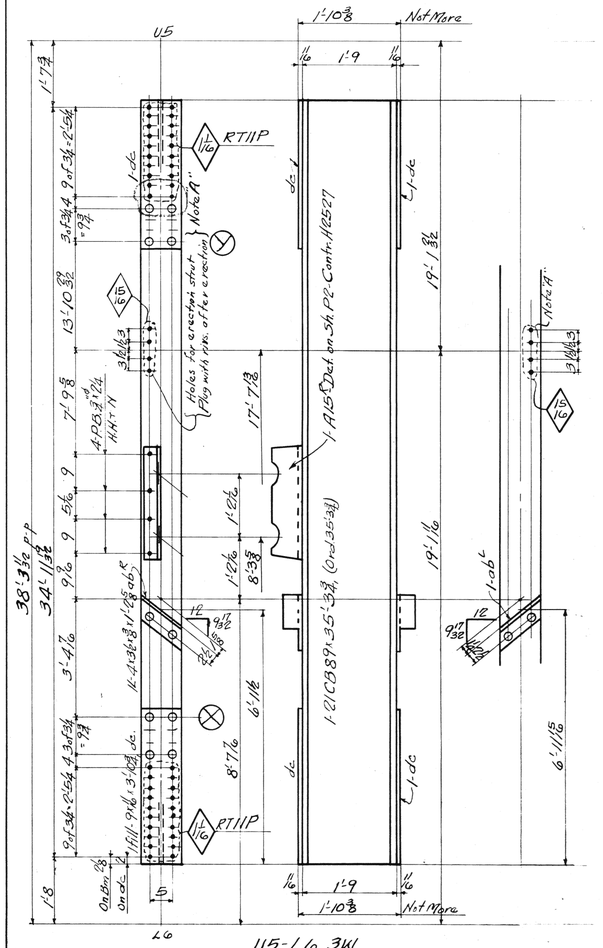
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT AMB. PLANT.
WORK FABRICATED AT AMB. PLANT.
IN CHARGE OF LOUGHMAN - #2
DRAW. MADE BY E.R.M.-W.W.J. DATE 7-17-39
DRAW. CHECKED BY SJT DATE 7-19-39

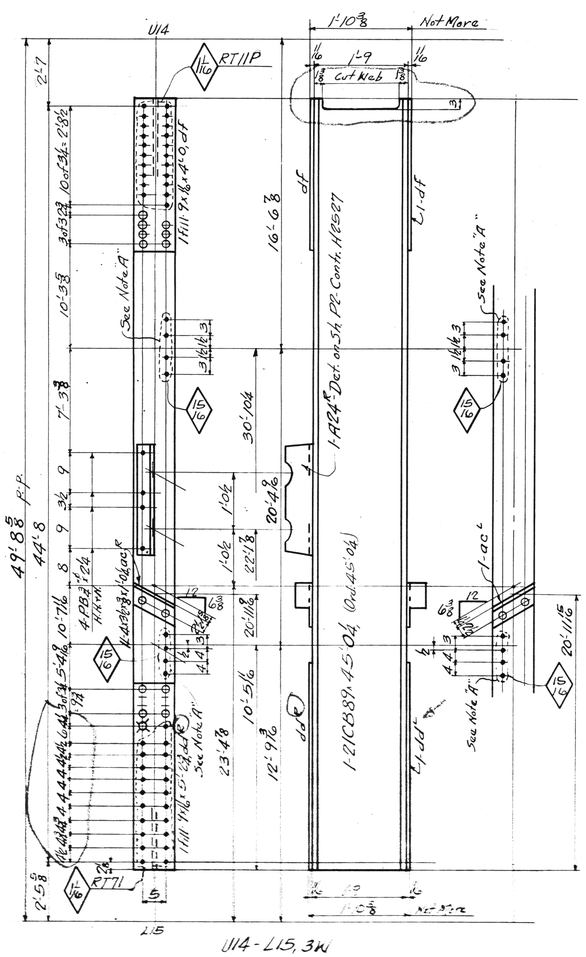
ORDER No. H2524 | SHEET NO. 241



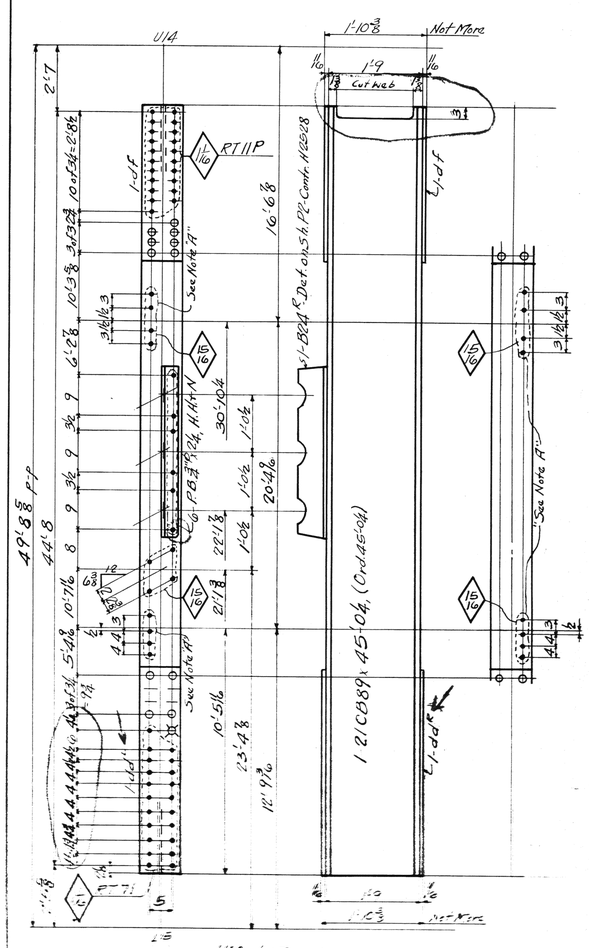
U4-L5, 3W
U4-L5, 5W, Left



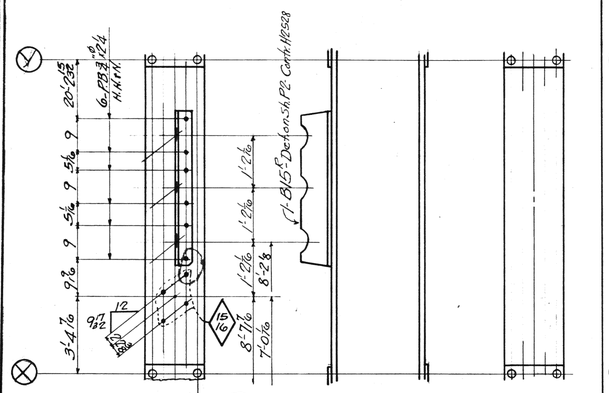
U5-L6, 3W
U5-L6, 5W, Left

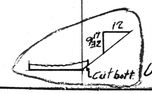


U14-L15, 3W
U14-L15, 5W Left

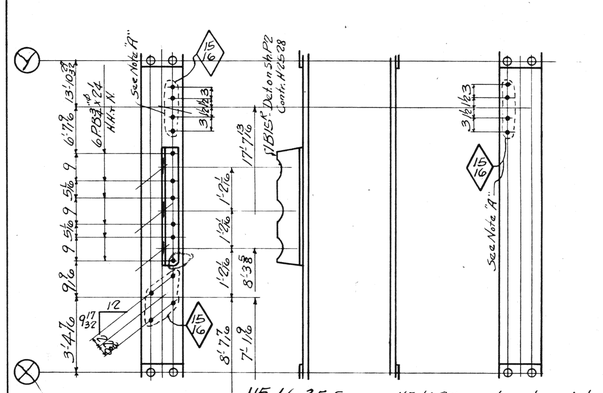


U14-L15, 3E
U14-L15, 5E, Left





U4-L5, 3E, Same as U4-L5, 3W except as shown (for butt. cut of bet. lines "X" and "Y")
U4-L5, 5E Left of U4-L5, 3E



U5-L6, 3E, Same as U5-L6, 3W except as shown bet. lines "X" and "Y"
U5-L6, 5E Left of U5-L6, 3E

Span 3 Div 6	Span 5 Div 2	Total	Description	Mark
1		1	Diagonals	U4-L5, 3W
	1	1	do	U4-L5, 5W
1		1	do	U4-L5, 3E
	1	1	do	U4-L5, 5E
1		1	do	U5-L6, 3W
	1	1	do	U5-L6, 5W
1		1	do	U5-L6, 3E
	1	1	do	U5-L6, 5E
1		1	do	U14-L15, 3W
	1	1	do	U14-L15, 5W
1		1	do	U14-L15, 3E
	1	1	do	U14-L15, 5E

REQUIRED

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No - (Shop & Field) except members permanently bolted are to be painted.

Rev. 8-14-39

17

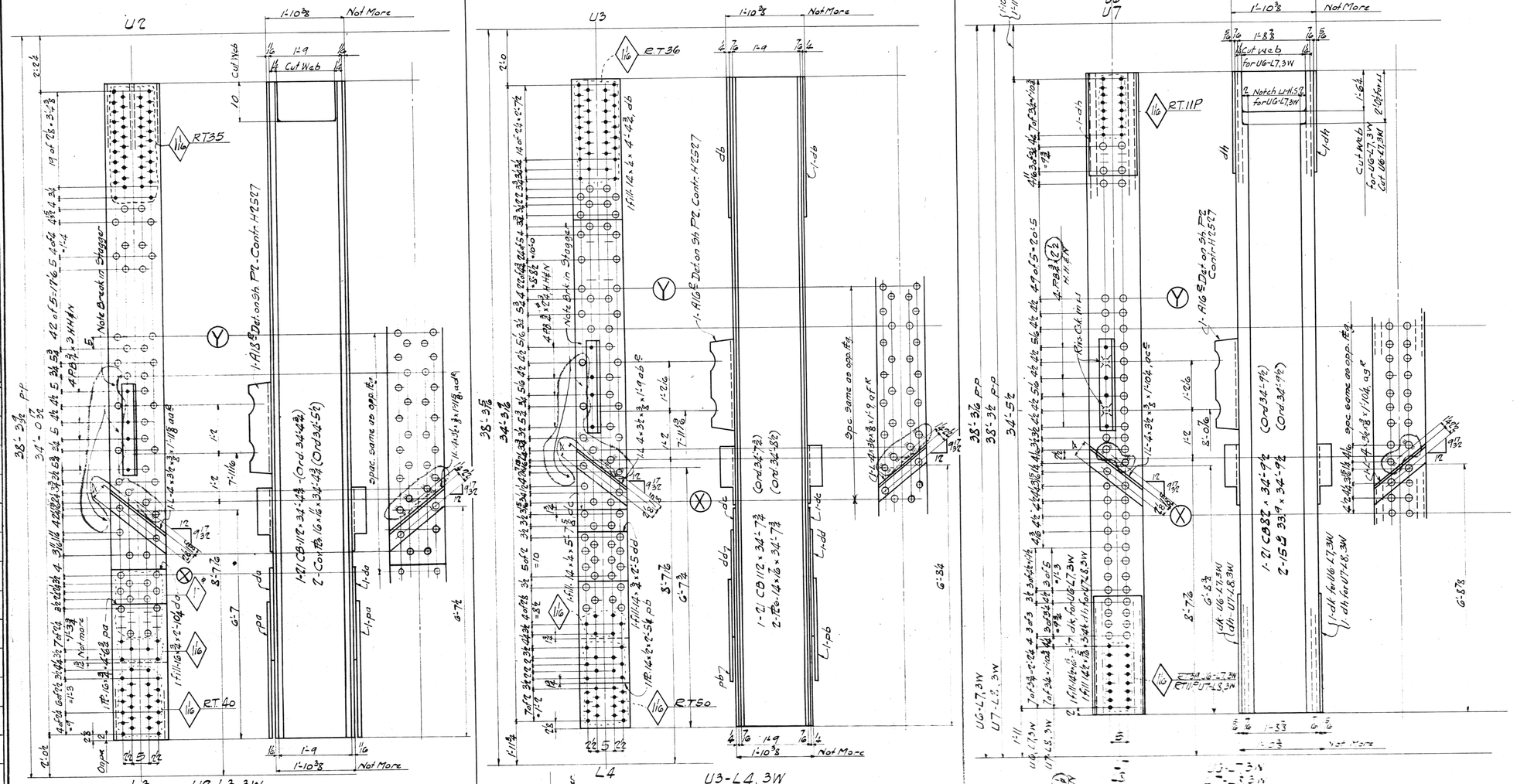
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D65-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.R.M.
DRAW. MADE BY E.R.M. DATE
DRAW. CHECKED BY SJT DATE 7-19-39

ORDER No. H2524 | **SHEET NO.** 242



Span 3 Div. 6	Span 5 Div. 2	Total	Required Description	Mark
1		1	Diagonals	U2-L3,3W
	1	1	do.	U2-L3,5W
1		1	do.	U2-L3,3E
	1	1	do.	U2-L3,5E
1		1	do.	U3-L4,3W
	1	1	do.	U3-L4,5W
1		1	do.	U3-L4,3E
	1	1	do.	U3-L4,5E
1		1	do.	UG-L7,3W
	1	1	do.	UG-L7,5W
1		1	do.	UG-L7,3E
	1	1	do.	UG-L7,5E
1		1	do.	U7-L8,3W
	1	1	do.	U7-L8,5W
1		1	do.	U7-L8,3E
	1	1	do.	U7-L8,5E

Err. 5-7-39
Err. 5-1-39

10

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

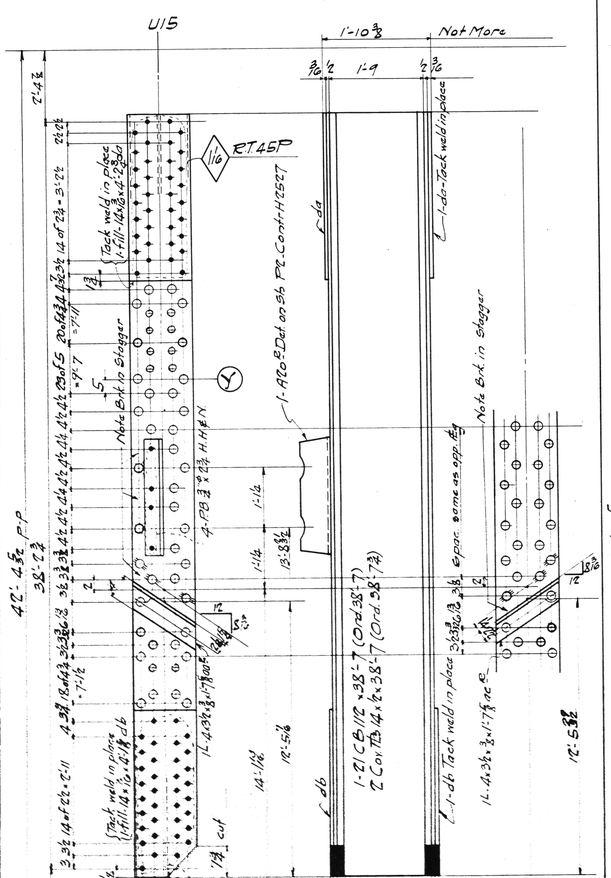
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

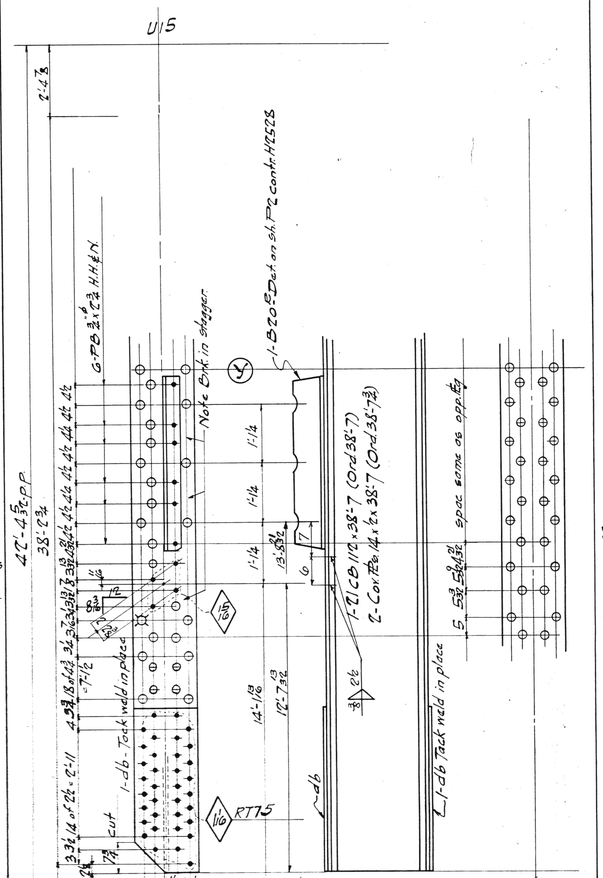
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman-No. 2.
DRAW. MADE BY E.R.M. DATE 7-12-39
DRAW. CHECKED BY S.J.T. DATE 7-21-39

ORDER No. H2524
SHEET NO. 243

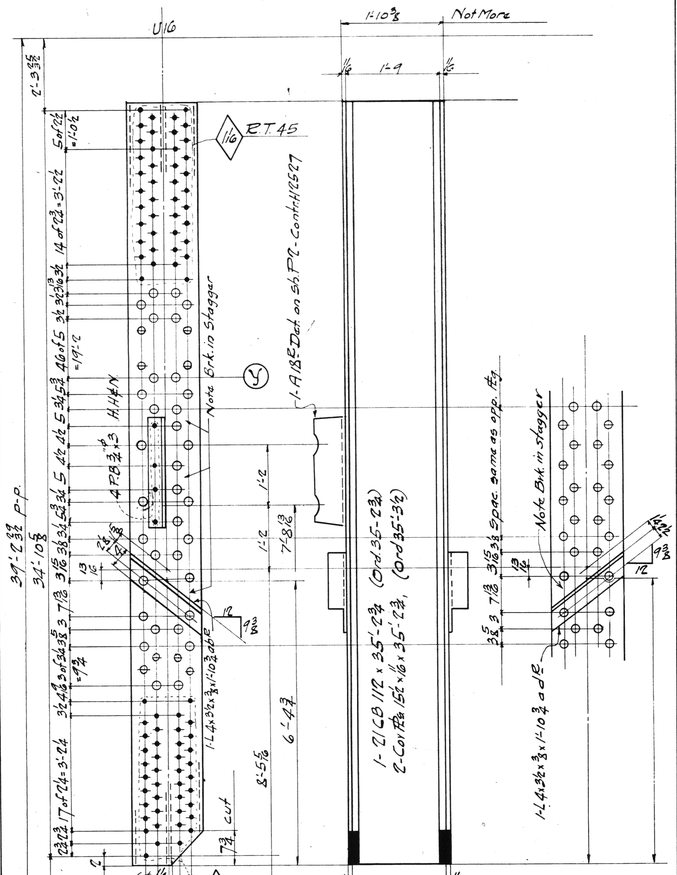
PAINT: Yes.
CONTACT SURFACES: No (Shop & Field) except members permanently bolted to be painted.



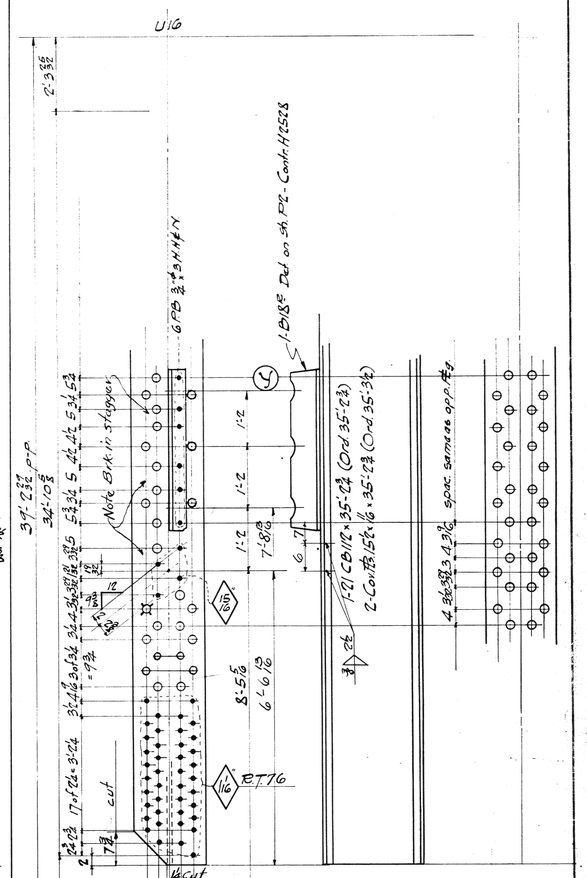
U15-L16, 3W
U15-L16, 5W, Left



U15-L16, 3E, Part not shown same as U15-L16, 3W
U15-L16, 5E, Left



U16-L17, 3W
U16-L17, 5W, Left.



U16-L17, 3E, Part not shown same as U16-L17, 3W.
U16-L17, 5E, Left.

Span 3	Span 5	REQUIRED		
Div. 6	Div. 2	Total	Description	Mark.
1		1	Diagonals	U15-L16, 3W
	1	1	do.	U15-L16, 5W
1		1	do.	U15-L16, 3E
	1	1	do.	U15-L16, 5E
1		1	do.	U16-L17, 3W
	1	1	do.	U16-L17, 5W
1		1	do.	U16-L17, 3E
	1	1	do.	U16-L17, 5E

Rev. 8-14-39

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled. Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes.
CONTACT SURFACES: No (except field) except members permanently bolted to be painted.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

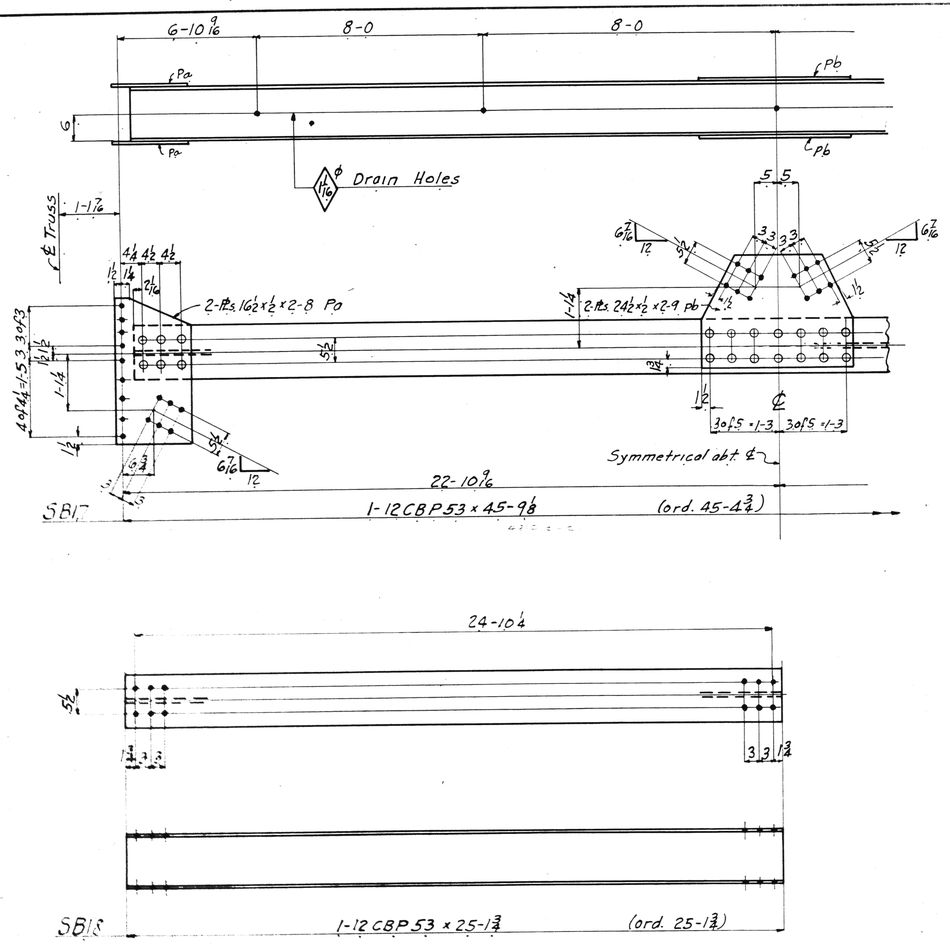
D63-2M-10-38

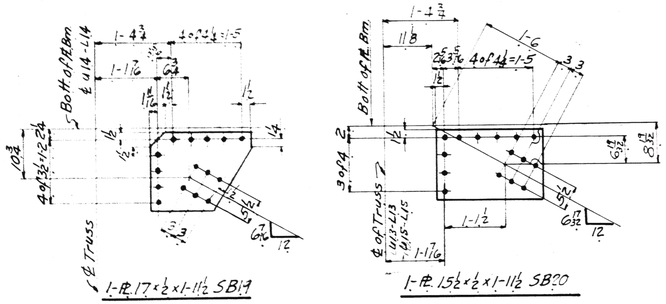
AMERICAN BRIDGE COMPANY.

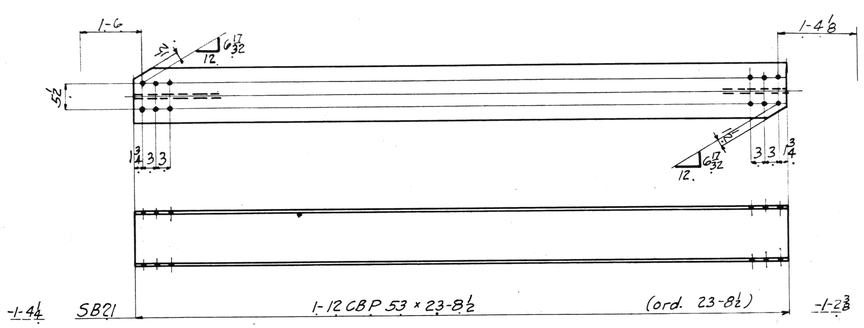
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman - No. 2
DRAW. MADE BY E.R.M. A.B. DATE
DRAW. CHECKED BY SJT DATE 7-21-39

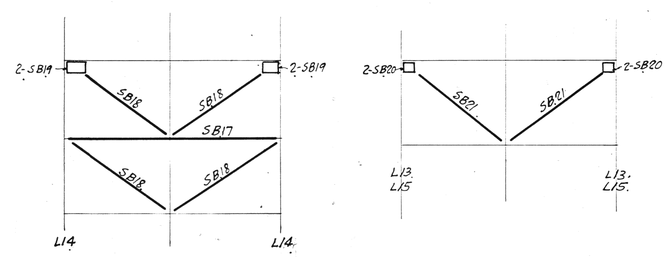
ORDER No. H2524

SHEET No. 244









Location Diagram

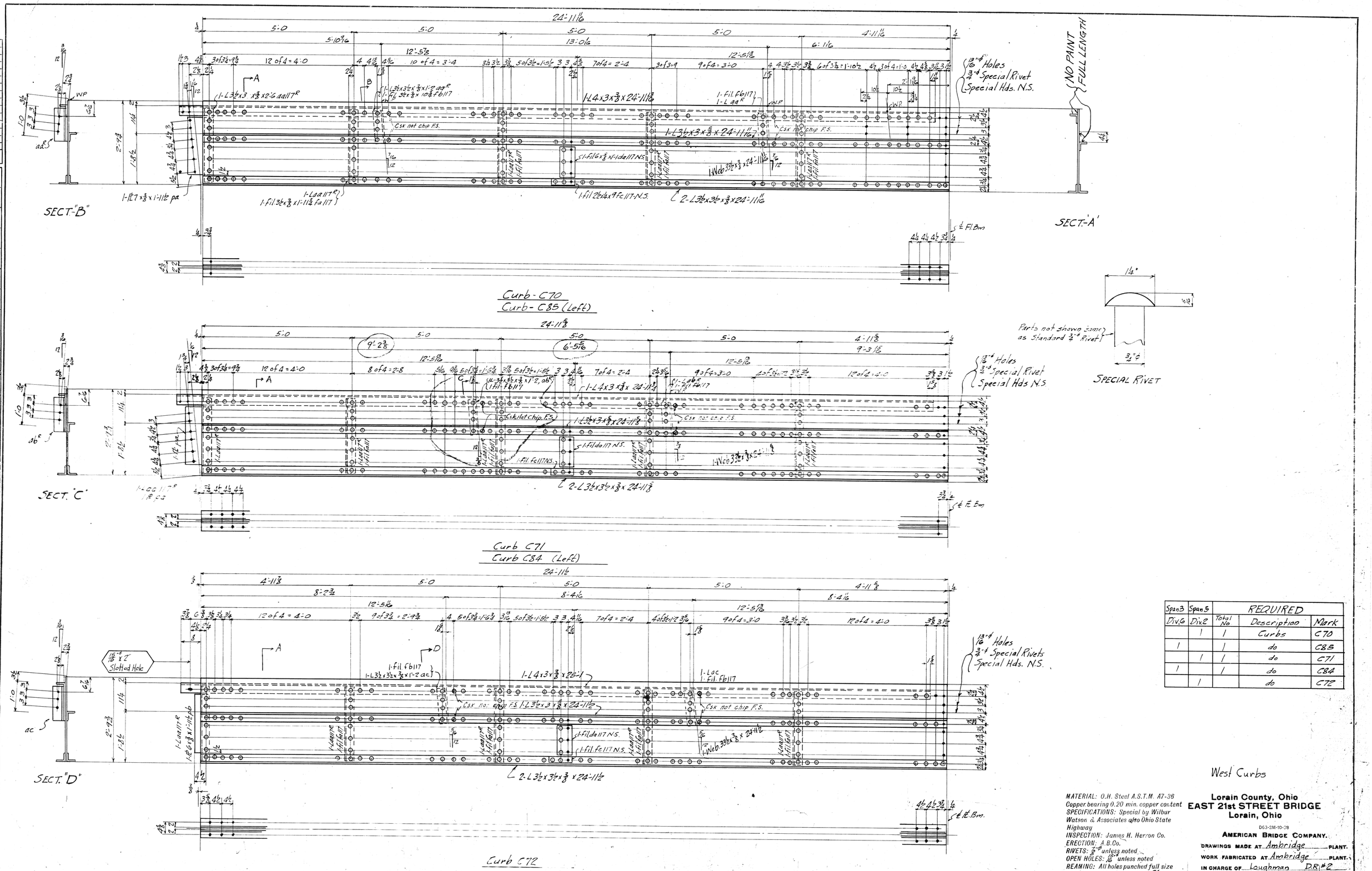
Span. 3.	Span 5.	REQUIRED		
Div. 6	Div. 2.	No.	Description	Mark
1.	1.	2.	Sway Bracing	SB17.
4.	4.	8.	do	SB18
4.	4.	8.	Plates	SB19
8	8.	16	do	SB20
4.	4.	8.	Sway Bracing	SB21.

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ inch shall be drilled.

PAINT: Yes.
CONTACT SURFACES: No-Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. #2 PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY HEL. DATE 7/17/39
DRAW. CHECKED BY DGP DATE 7/21/39
Field ckd. 7/21/39
ORDER No. H2524
SHEET NO. 245



Span 3	Span 5	REQUIRED		
Div. 6	Div. 2	Total No	Description	Mark
	1	1	Curbs	C70
1		1	do	C85
	1	1	do	C71
1		1	do	C84
	1		do	C72

West Curbs

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 3/8" thick shall be drilled.

PAINT: Yes Except as Noted in Sect 'A'
CONTACT SURFACES: No-Shop & Field

Rev. 9-12-39 (3)
Rev. 8/18/39
Rev. 8/15/39
Rev. 7-26-39

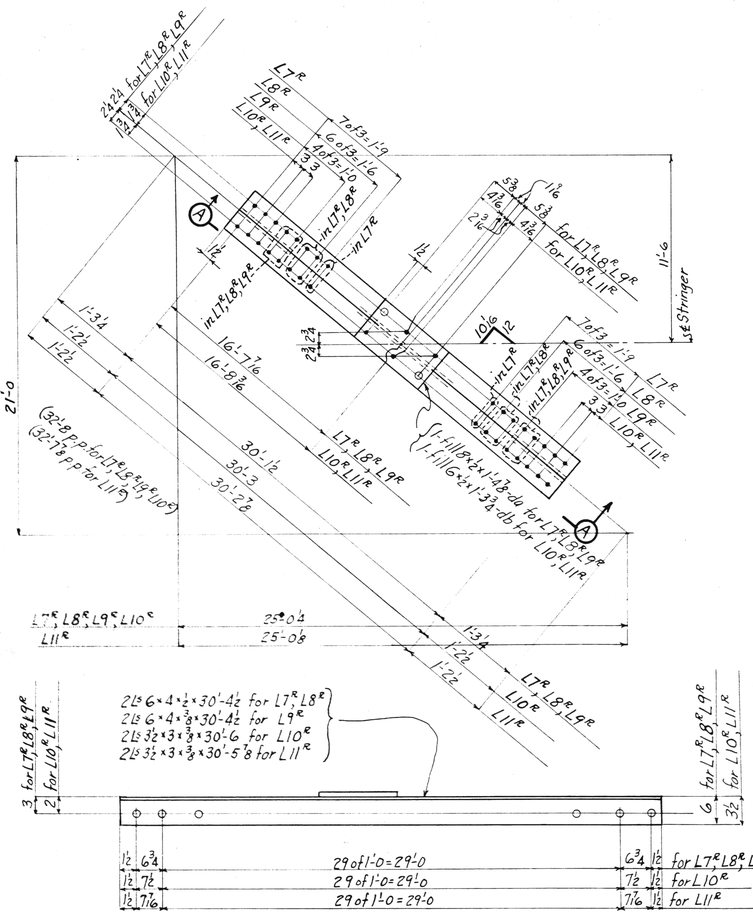
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

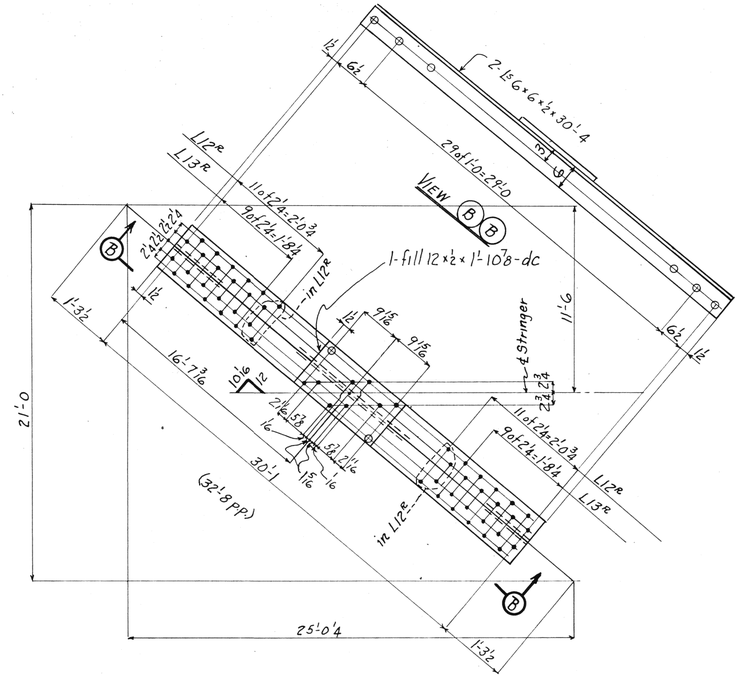
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

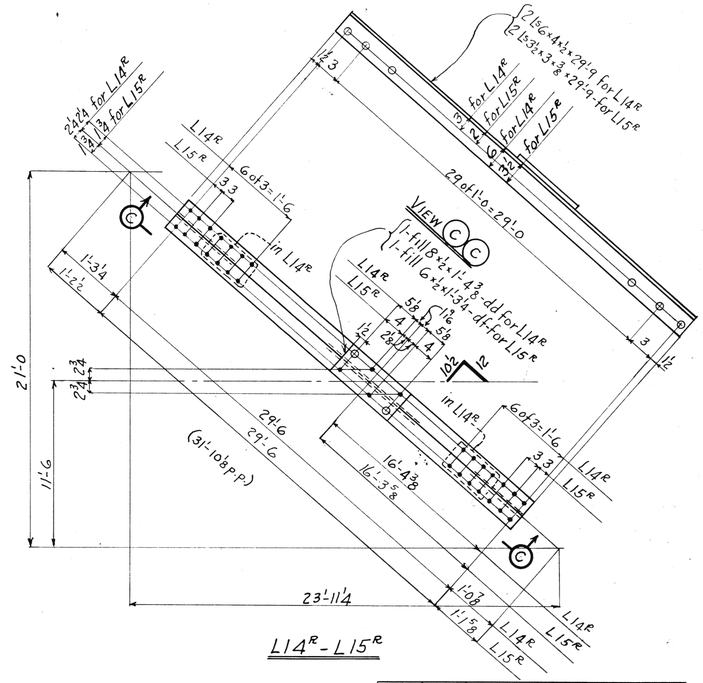
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman D.R. #2
DRAW. MADE BY JR DATE 7-11-39
DRAW. CHECKED BY [illegible] DATE 7-15-39

ORDER No. H2524
SHEET NO. 246





L12R - L13R

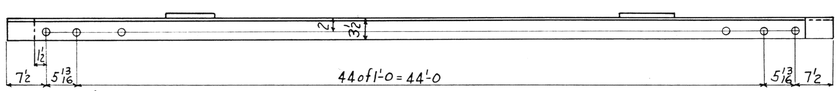


L14R - L15R

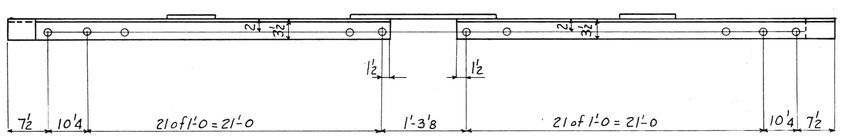
Span 3 Div. 6	Span 3 Div. 2	Required No.	Description	Mark
1	1	2	Lateral Braces	L7R
1	1	2	do	L7L
2	2	4	do	L8R
2	2	4	do	L8L
4	4	8	do	L9R
4	4	8	do	L9L
4	4	8	do	L10R
4	4	8	do	L10L
1	1	2	do	L11R
1	1	2	do	L11L
1	1	2	do	L12R
1	1	2	do	L12L
1	1	2	do	L13R
1	1	2	do	L13L
1	1	2	do	L14R
1	1	2	do	L14L
1	1	2	do	L15R
1	1	2	do	L15L
1	1	2	do	L16
1	1	2	do	L17
1	1	2	do	L18

VIEW A A

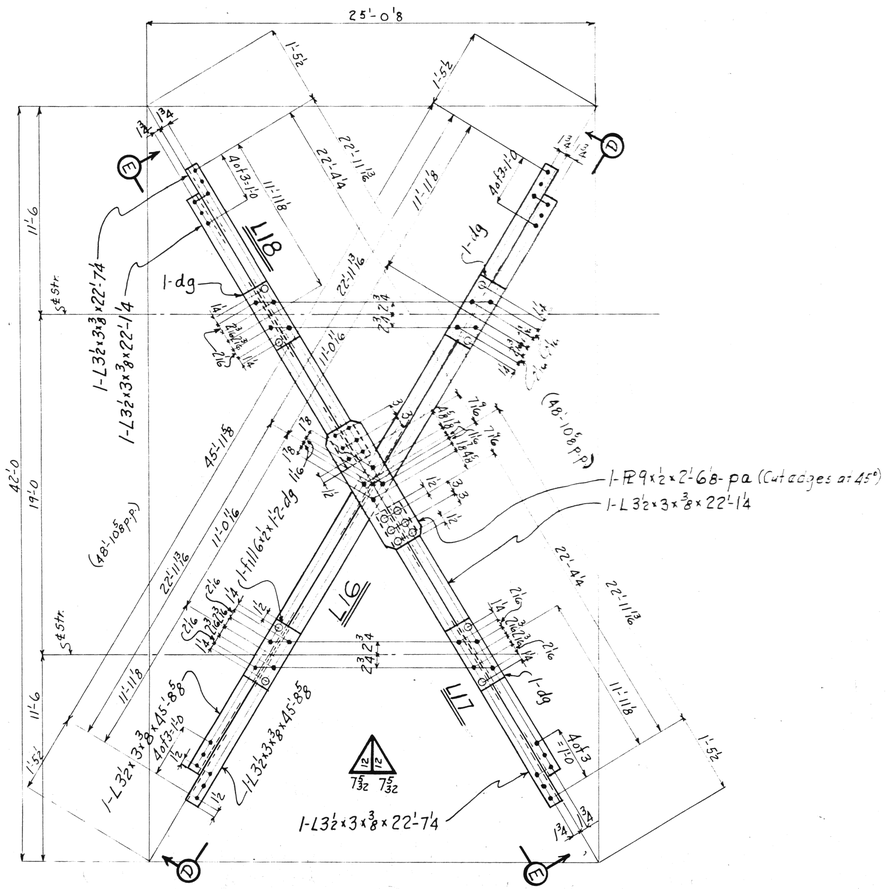
L7R - L8R - L9R - L10R - L11R



VIEW D D



VIEW E E



Lateral Bracing - (Bottom Chord)

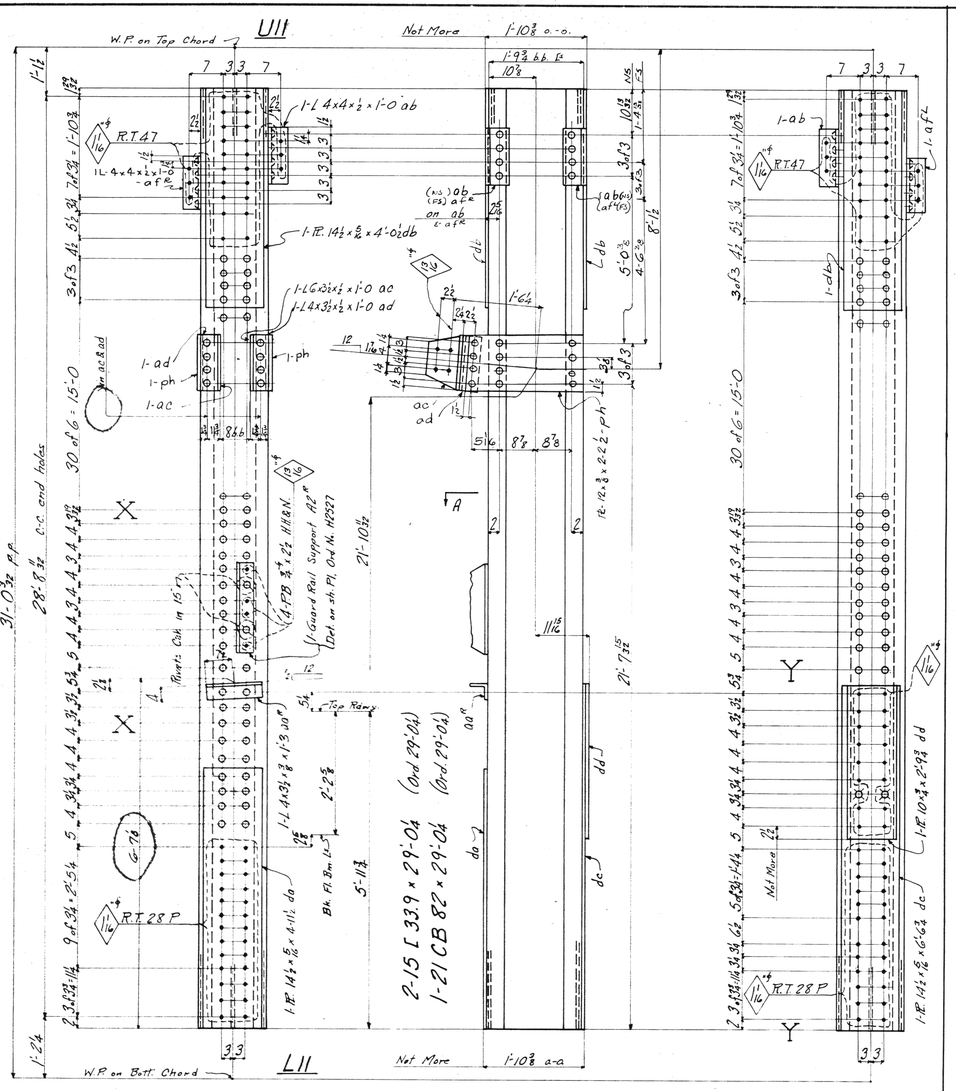
MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field.

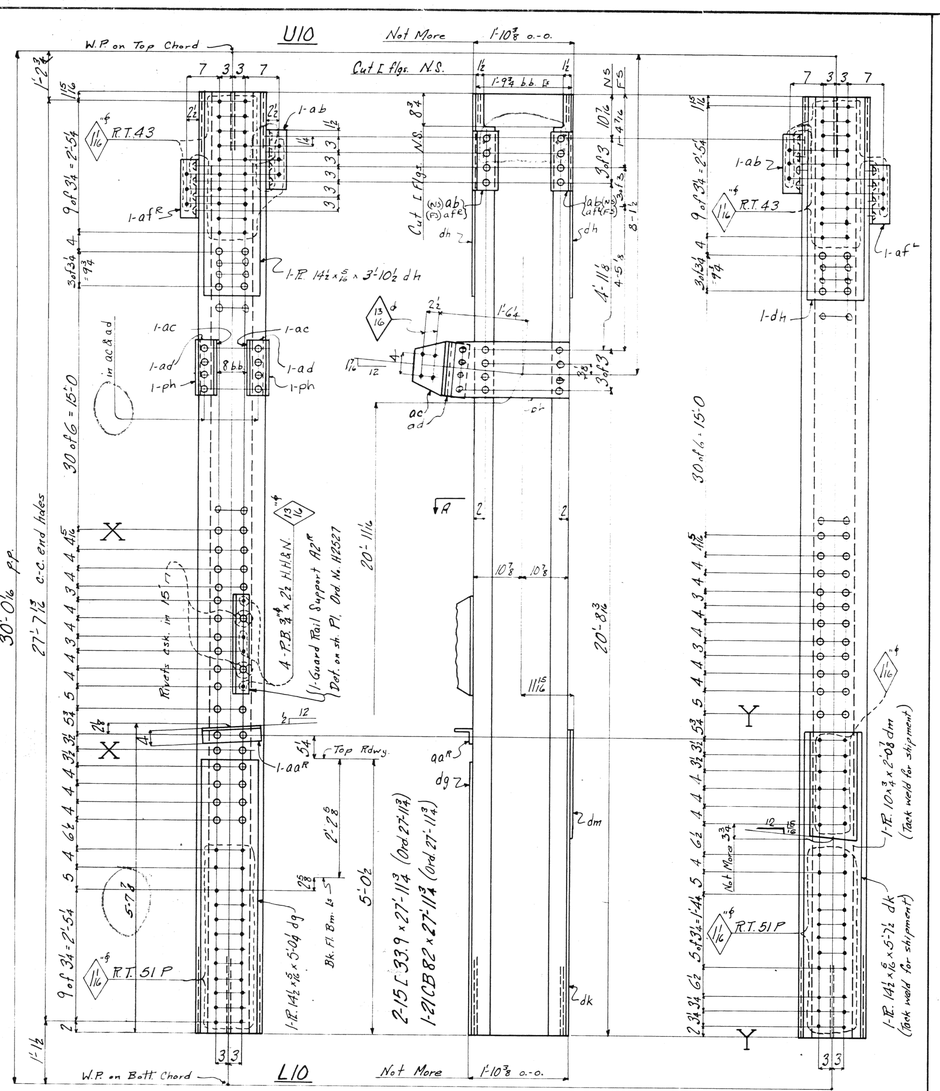
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY H.R.F. DATE 7-17-39
DRAW. CHECKED BY [illegible] DATE 7-26-39

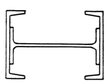
ORDER No. H2524
SHEET NO. 247



Vertical U11-L11, 3W
Vertical U11-L11, 5W (LEFT)

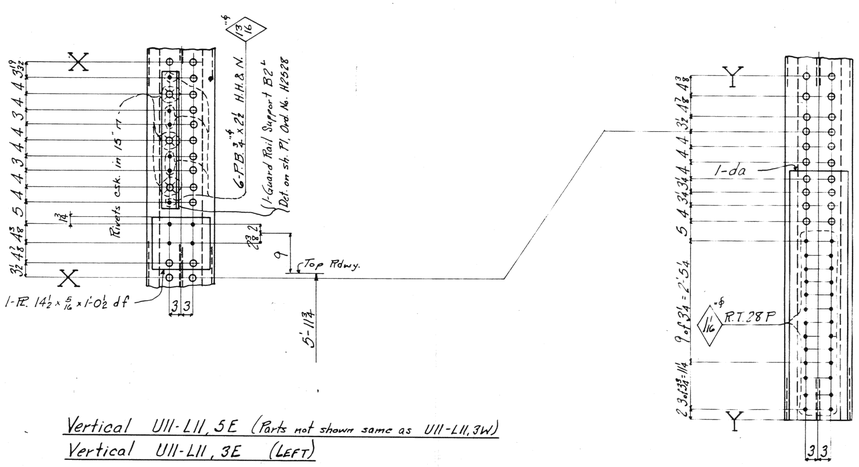


Vertical U10-L10, 3W
Vertical U10-L10, 5W (LEFT)

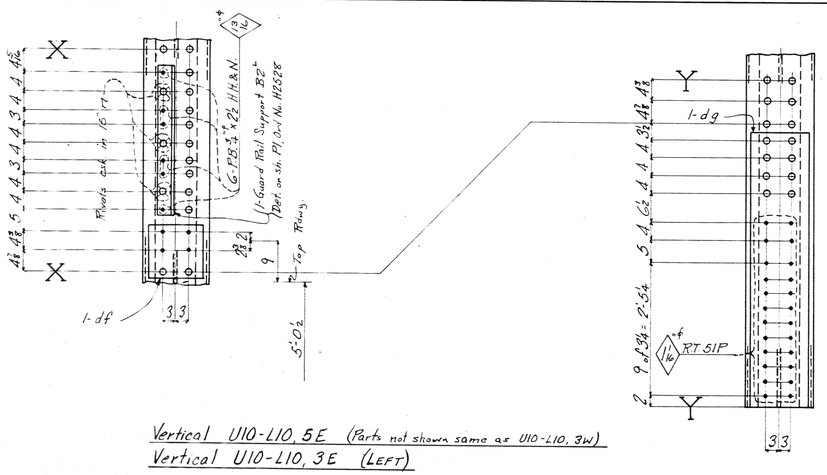


Sec A

Div. 6	Div. 2	Required		
Span 3	Span 5	Total No.	Description	Mark
1		1	Vertical	U11-L11, 3W
1		1	do.	U11-L11, 3E
	1	1	do.	U11-L11, 5W
	1	1	do.	U11-L11, 5E
1		1	do.	U10-L10, 3W
1		1	do.	U10-L10, 3E
	1	1	do.	U10-L10, 5W
	1	1	do.	U10-L10, 5E



Vertical U11-L11, 5E (Parts not shown same as U11-L11, 3W)
Vertical U11-L11, 3E (LEFT)



Vertical U10-L10, 5E (Parts not shown same as U10-L10, 3W)
Vertical U10-L10, 3E (LEFT)

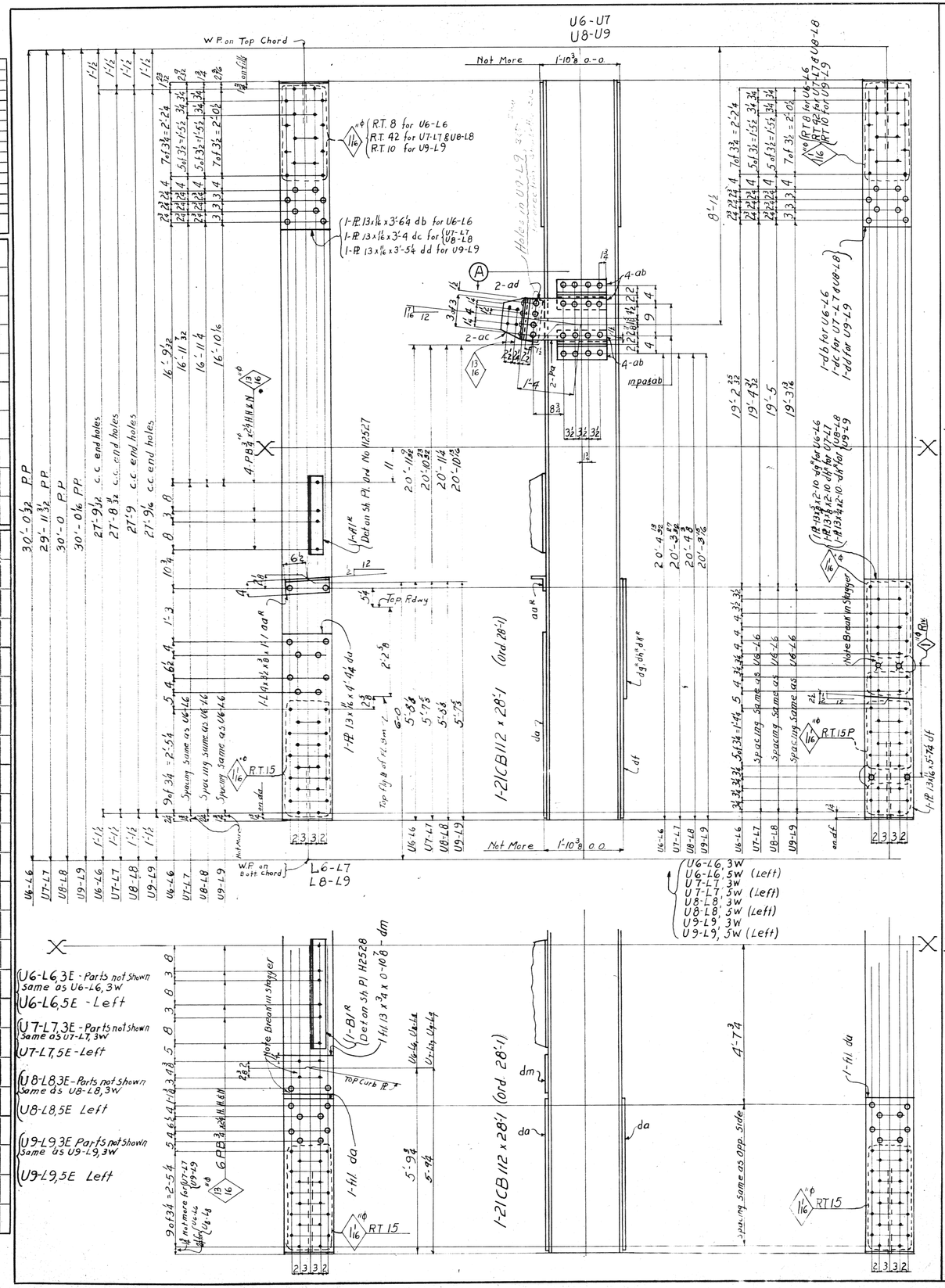
Rev 8-14-39
Rev 7-26-39
7

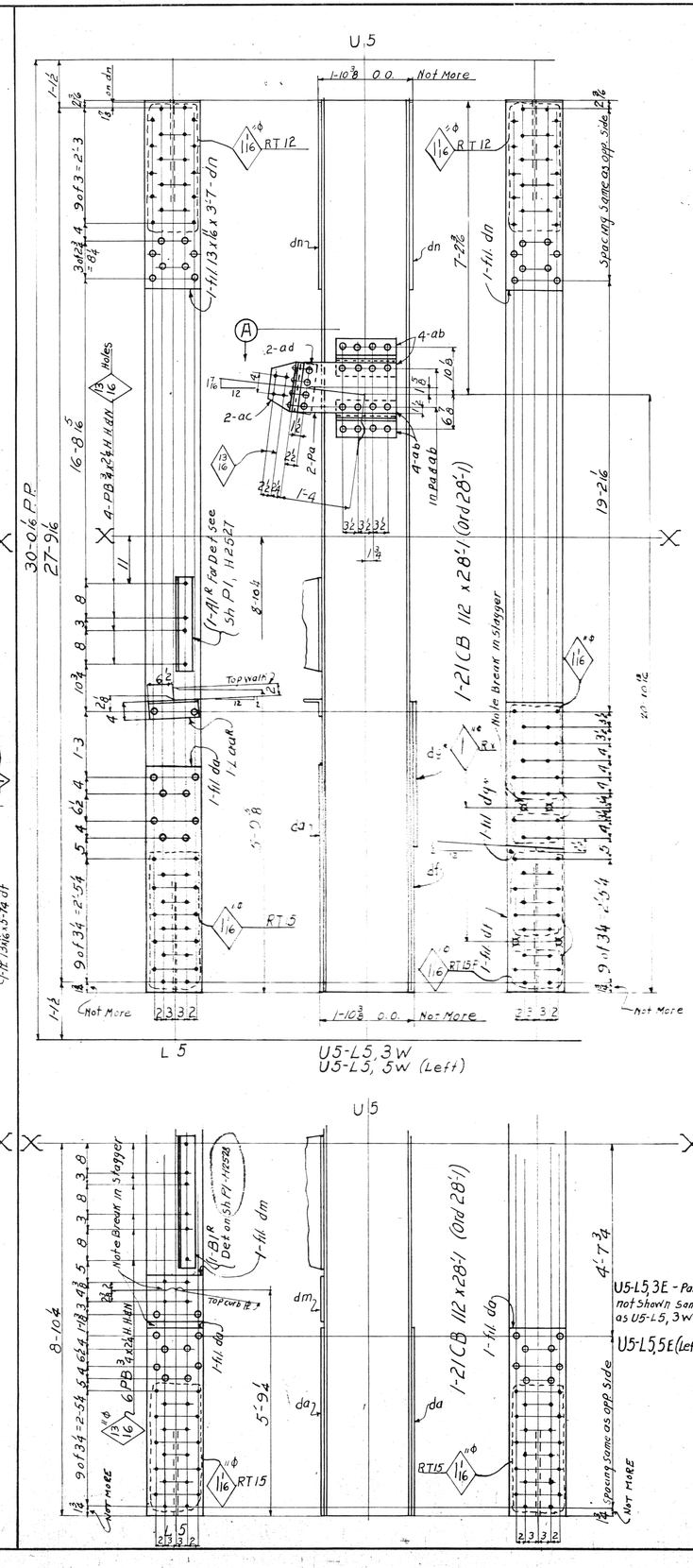
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru m. in truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal template.

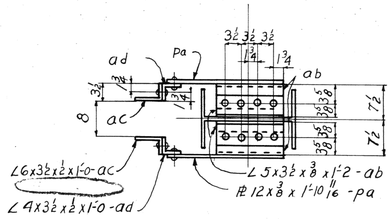
PAINT: Yes
CONTACT SURFACES: No - Shop & Field except members permanently bolted are to be painted

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DES-CM-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Leughman #2
DRAW. MADE BY A.A.Z. DATE 7-20-39
DRAW. CHECKED BY SJT DATE 7-24-39
ORDER No. H2524
SHEET NO. 248







Sec. A

Span 3 Div 6	Span 5 Div 2	Total	Description	Mark
1		1	Verticals	U6-L6,3W
	1	1	do	U6-L6,5W
1		1	do	U6-L6,3E
	1	1	do	U6-L6,5E
1		1	do	U7-L7,3W
	1	1	do	U7-L7,5W
1		1	do	U7-L7,3E
	1	1	do	U7-L7,5E
1		1	do	U8-L8,3W
	1	1	do	U8-L8,5W
1		1	do	U8-L8,3E
	1	1	do	U8-L8,5E
1		1	do	U9-L9,3W
	1	1	do	U9-L9,5W
1		1	do	U9-L9,3E
	1	1	do	U9-L9,5E
1		1	do	U5-L5,3W
	1	1	do	U5-L5,5W
1		1	do	U5-L5,3E
	1	1	do	U5-L5,5E

Rev 8-7-39
Rev 8-14-39

2

U6-L6, 3E - Parts not shown same as U6-L6, 3W
U6-L6, 5E - Left
U7-L7, 3E - Parts not shown same as U7-L7, 3W
U7-L7, 5E - Left
U8-L8, 3E - Parts not shown same as U8-L8, 3W
U8-L8, 5E Left
U9-L9, 3E Parts not shown same as U9-L9, 3W
U9-L9, 5E Left

U5-L5, 3E - Parts not shown same as U5-L5, 3W
U5-L5, 5E (Left)

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION A. B. Co.
RIVETS 7/8 unless noted
OPEN HOLES 15/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No-Shop & Field
Except members permanently bolted are to be painted.

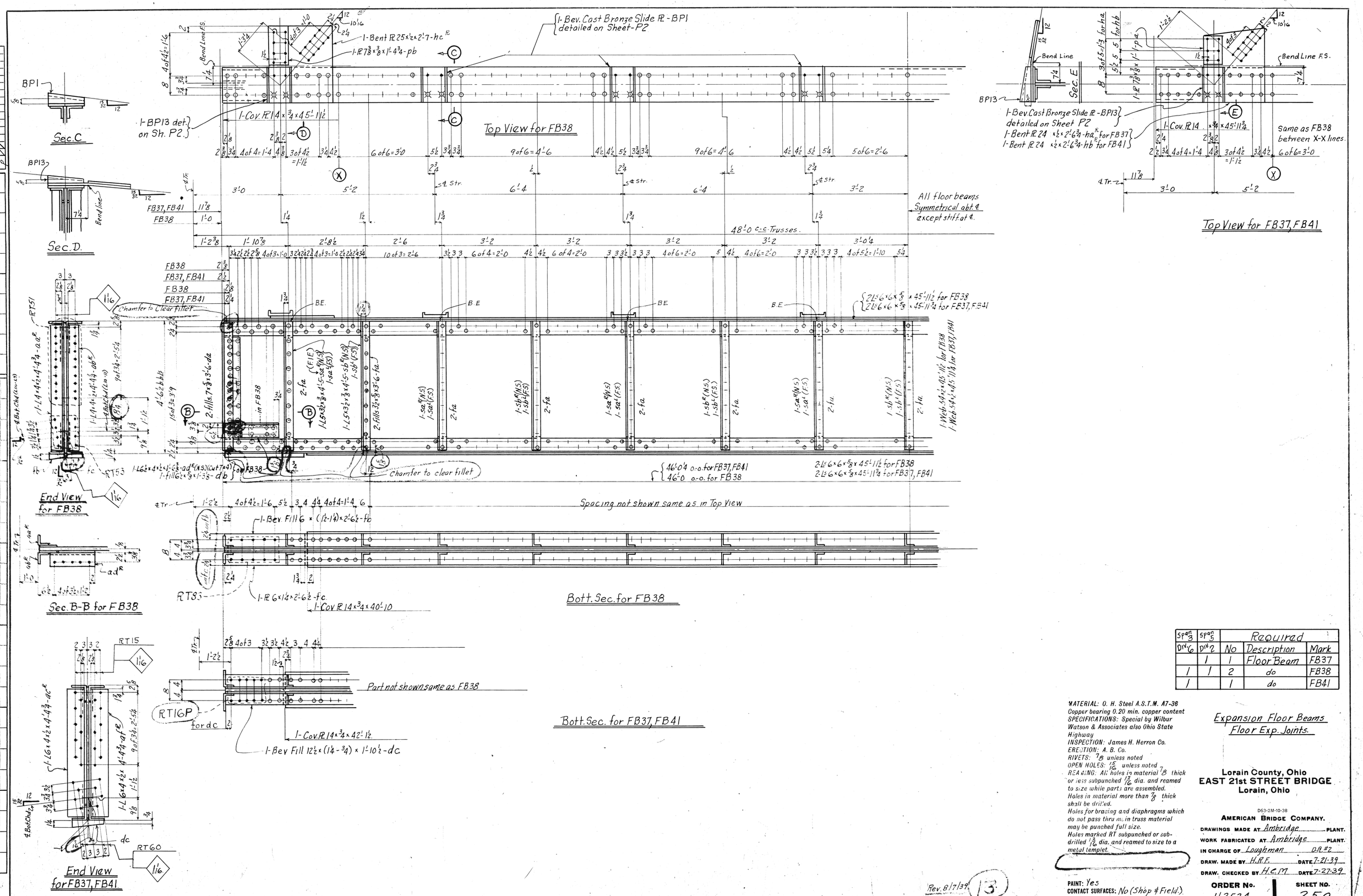
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY A.A.Z & B.A.C. DATE 7-27-39
DRAW. CHECKED BY SJT DATE 7-28-39

ORDER No. H2524
SHEET NO. 249



Span 3 Div 16	Span 5 Div 2	Required No	Description	Mark
	1	1	Floor Beam	FB37
1	1	2	do	FB38
1		1	do	FB41

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 15/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 15/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field).

Rev. 8/7/39 13

Expansion Floor Beams
Floor Exp. Joints.

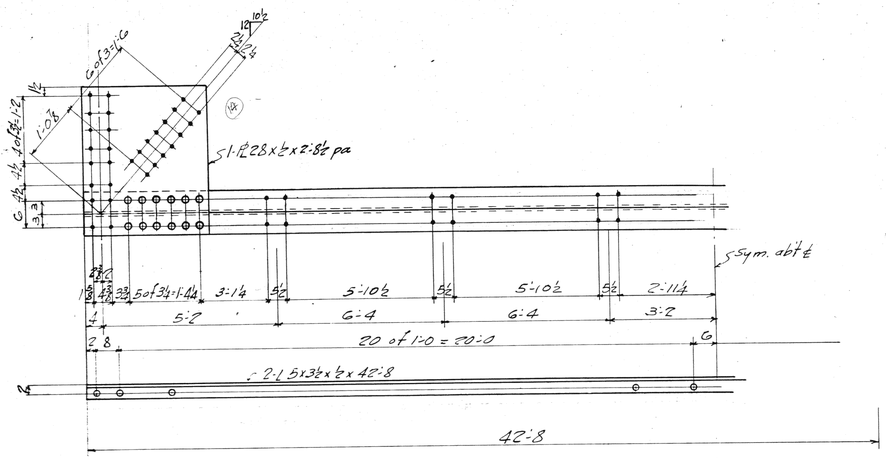
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

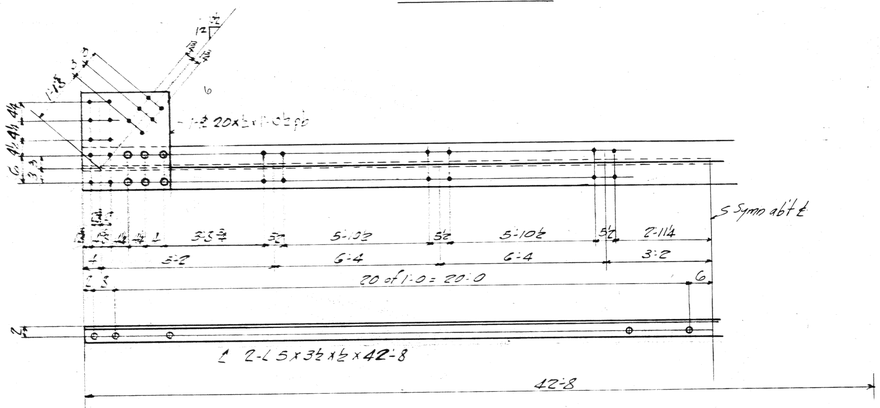
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman O.R. #2
DRAW. MADE BY H.R.F. DATE 7-21-39
DRAW. CHECKED BY H.C.M. DATE 7-27-39

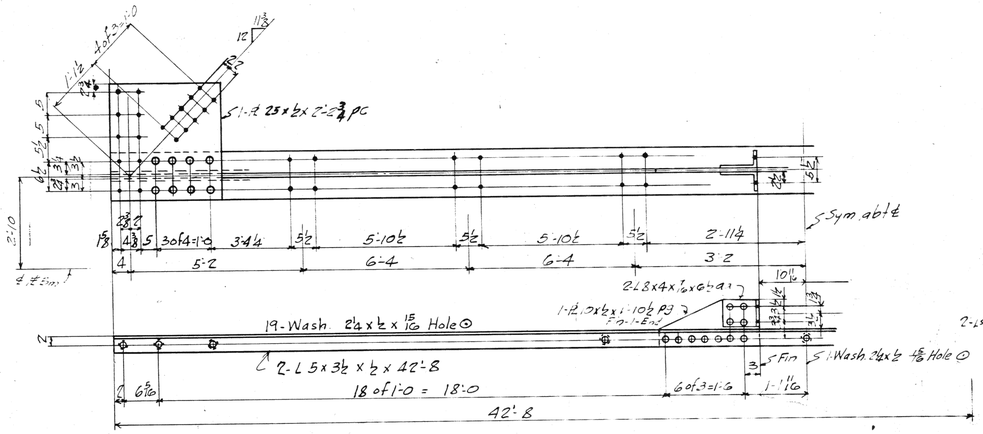
ORDER No. H2524.
SHEET NO. 250



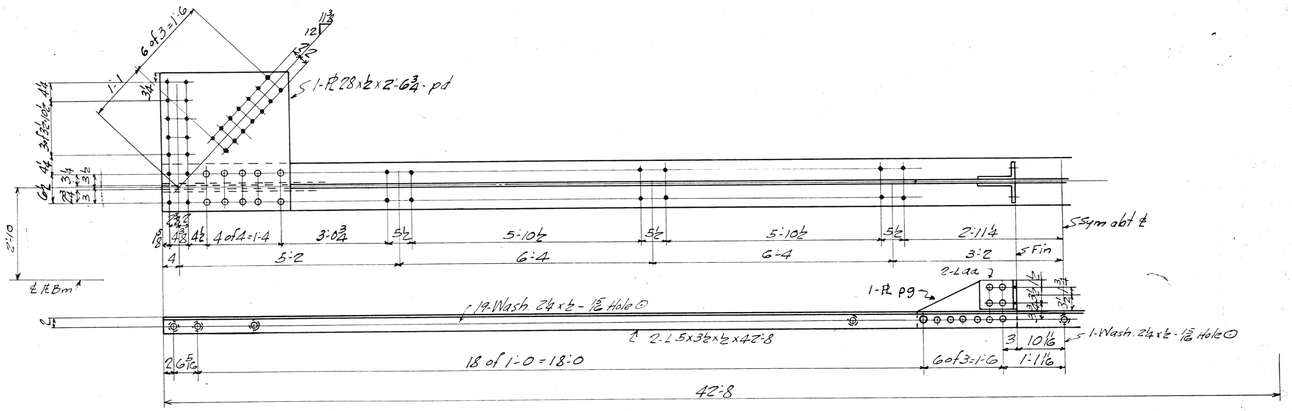
Floor Strut - FS1 ×2



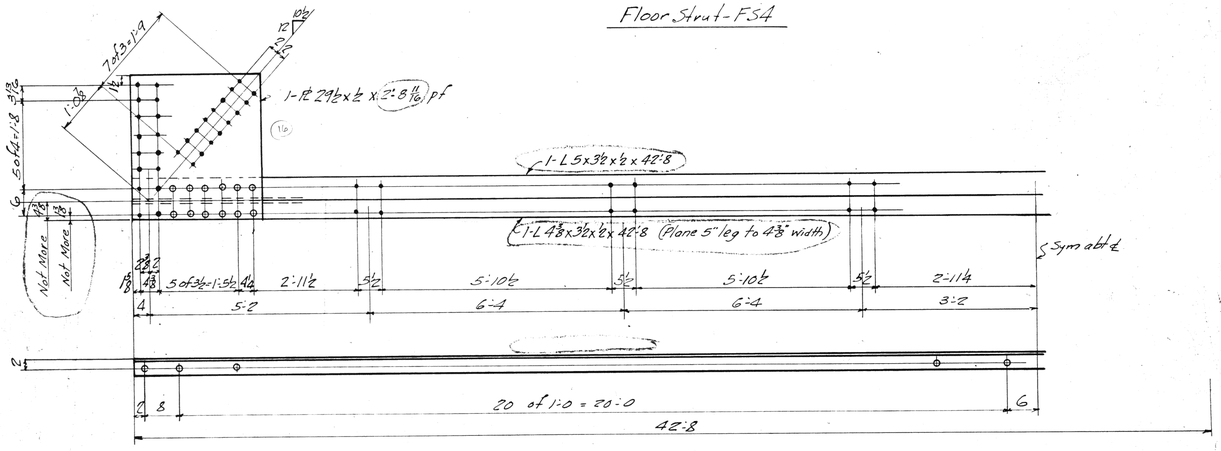
Floor Strut - FS2 ×2



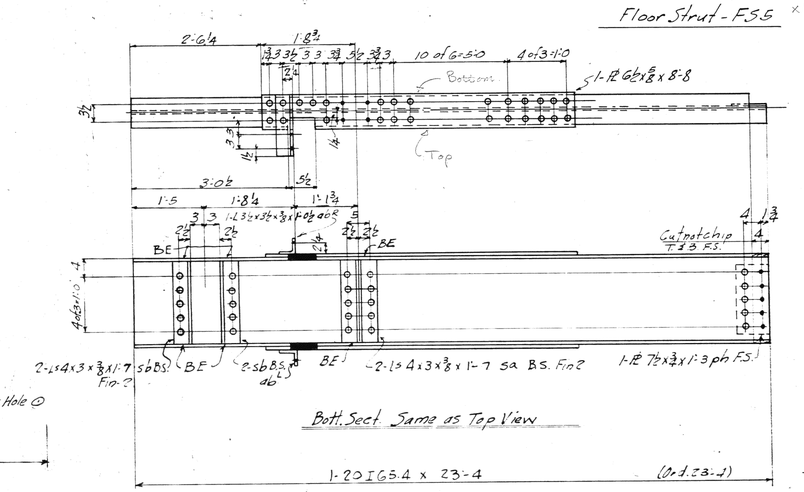
Floor Strut - FS3



Floor Strut - FS4



Floor Strut - FS5 ×1



Bott. Sect. Same as Top View

Exp. Tongue ET1

Span 4	Span 3	Span 2	Span 1	Span 5	REQUIRED		
Div 7	Div 6	Div 5	Div 3	Div 2	No	Description	Mark
	1			1	2	Floor Strut	FS1
	1			1	2	do	FS2
		1			1	do	FS3
1					1	do	FS4
			1		1	do	FS5
1		1			2	Exp. Tongue	ET1

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ¾" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes punched full size except in material more than ⅜" thick shall be drilled.

Exp. Tongues & Floor Struts

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DES-2-M-10-38

AMERICAN BRIDGE COMPANY.

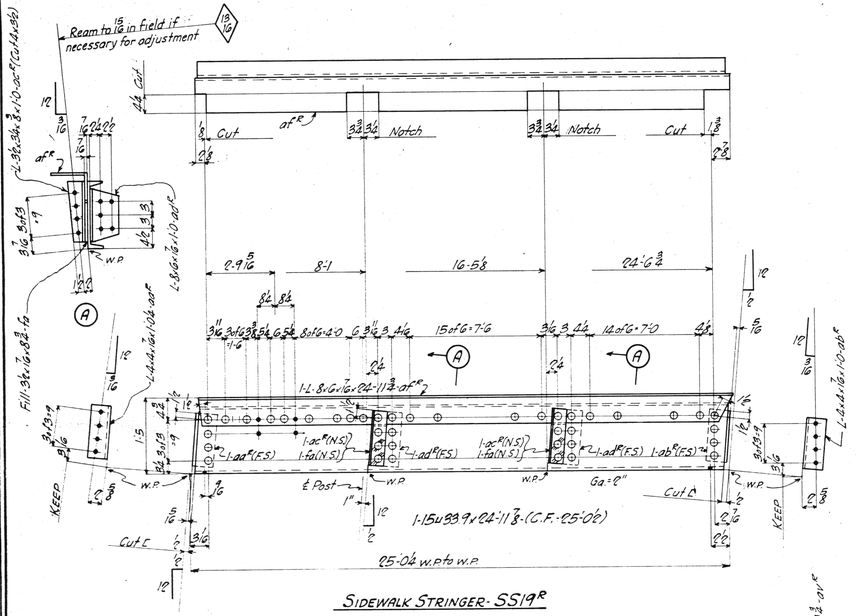
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JR DATE 7-20-39
DRAW. CHECKED BY FEB DATE 7-24-39

Rev. 9-6-39
Rev. 8-4-39

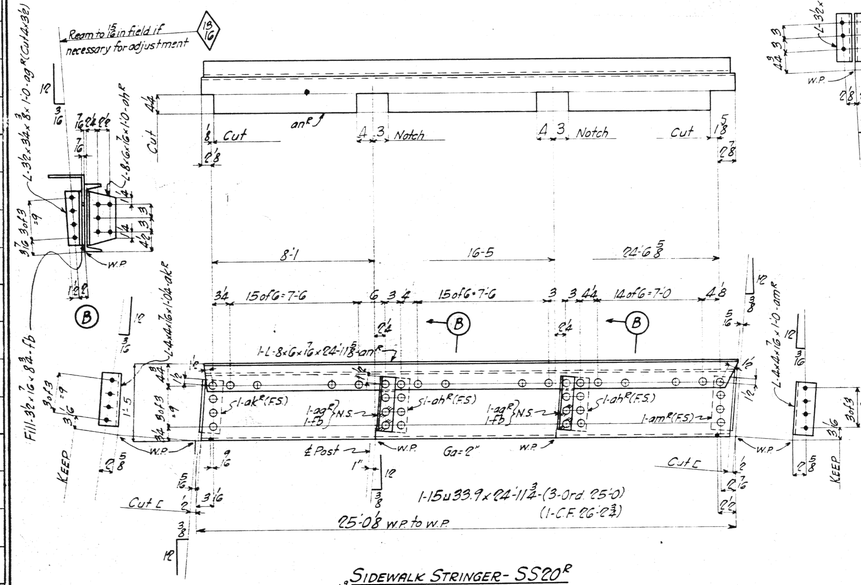
PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524

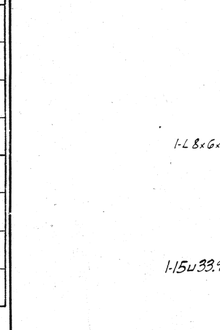
SHEET NO. 251



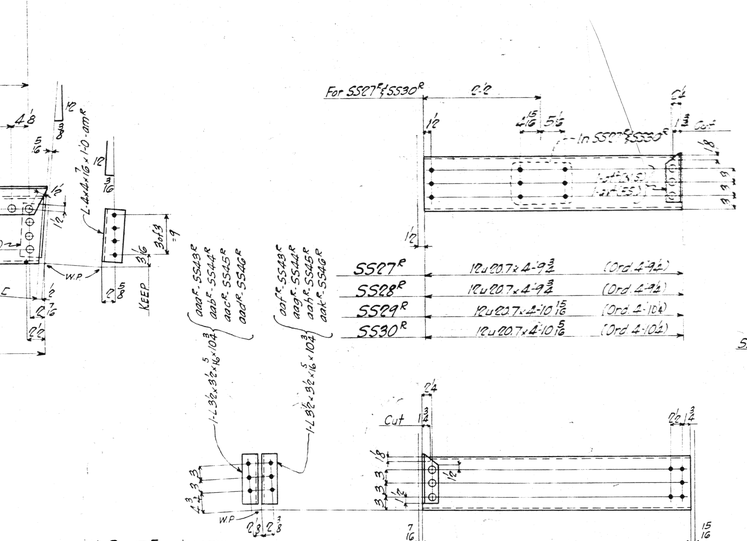
SIDEWALK STRINGER- SS19R



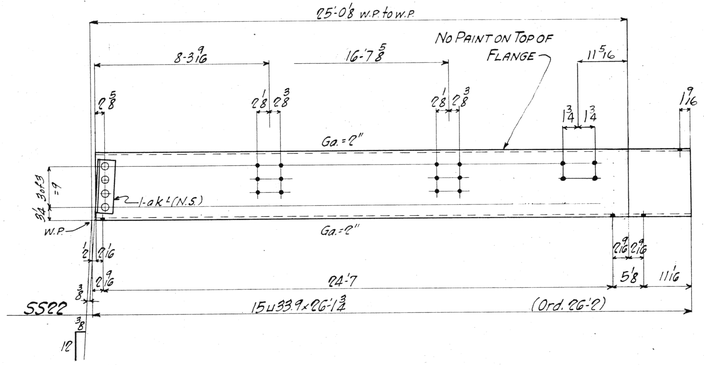
SIDEWALK STRINGER- SS20R

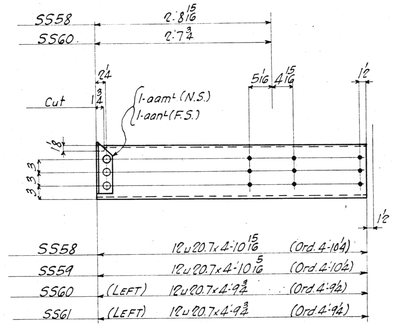


SIDEWALK STRINGER- SS21

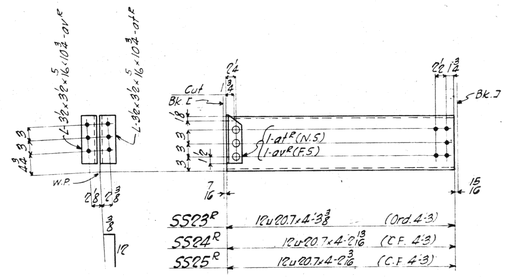


PAINT DIAGRAM FOR SS19R, SS20R, SS21

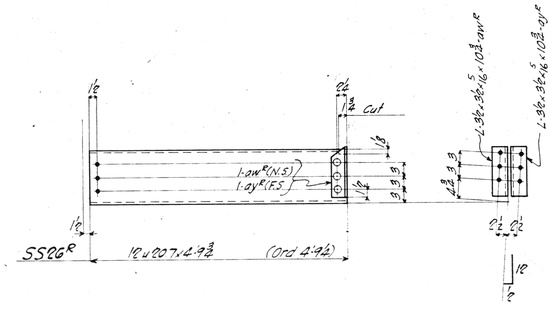




SS58	12u20.7x4'-10 15/16	(Ord. 4'-10¼)	
SS59	12u20.7x4'-10 5/16	(Ord. 4'-10¼)	
SS60	(LEFT) 12u20.7x4'-9 3/4	(Ord. 4'-9½)	
SS61	(LEFT) 12u20.7x4'-9 3/4	(Ord. 4'-9½)	

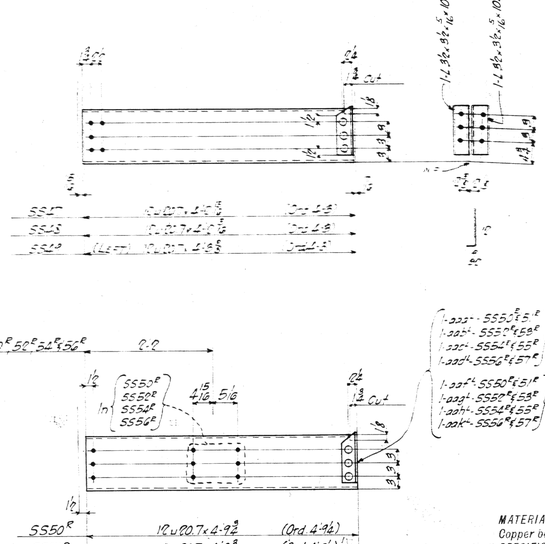


SS23R	12u20.7x4'-3 3/8	(Ord. 4'-3)
SS24R	12u20.7x4'-0 15/16	(C.F. 4'-3)
SS25R	12u20.7x4'-2 13/16	(C.F. 4'-3)

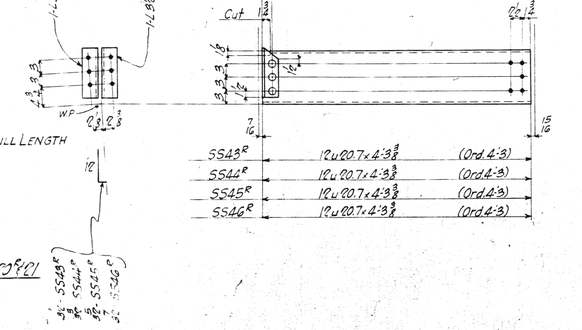


SS26R	12u20.7x4'-9 3/4	(Ord. 4'-9½)

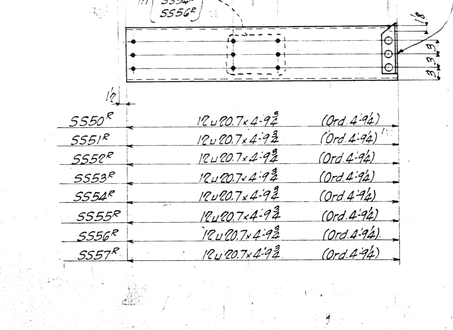
SS27R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS28R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS29R	12u20.7x4'-10 15/16	(Ord. 4'-10¼)
SS30R	12u20.7x4'-10 5/16	(Ord. 4'-10¼)



SS47	12u20.7x4'-3 3/8	(Ord. 4'-3)
SS48	12u20.7x4'-5 7/16	(Ord. 4'-3)
SS49	(LEFT) 12u20.7x4'-8 5/8	(Ord. 4'-3)



SS43R	12u20.7x4'-3 3/8	(Ord. 4'-3)
SS44R	12u20.7x4'-3 3/8	(Ord. 4'-3)
SS45R	12u20.7x4'-3 3/8	(Ord. 4'-3)
SS46R	12u20.7x4'-3 3/8	(Ord. 4'-3)



SS50R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS51R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS52R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS53R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS54R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS55R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS56R	12u20.7x4'-9 3/4	(Ord. 4'-9½)
SS57R	12u20.7x4'-9 3/4	(Ord. 4'-9½)

SPAN 1	SPAN 4		SPAN 3	SPAN 5		REQUIRED		
Div. 4	Div. 7	Div. 3	Div. 6	Div. 2		TOTAL	Description	Mark
	1					1	SIDEWALK STRUTS	SS53R
		1				1	"	SS53L
	1					1	"	SS54R
		1				1	"	SS54L
	1					1	"	SS55R
		1				1	"	SS55L
	1					1	"	SS56R
		1				1	"	SS56L
	1					1	"	SS57R
		1				1	"	SS57L
		1				1	"	SS58
		1				1	"	SS59
	1					1	"	SS60
	1					1	"	SS61
				1		1	SIDEWALK STRINGERS	SS19R
1			1			2	"	SS19L
				2		2	"	SS20R
			2			2	"	SS20L
			1			1	"	SS21
			1			1	"	SS22
			2			2	SIDEWALK STRUTS	SS23R
				2		2	"	SS23L
			1			1	"	SS24R
			1			1	"	SS24L
			1			1	"	SS25R
			1			1	"	SS25L
			1			1	"	SS26R
			1			1	"	SS26L
			1			1	"	SS27R
			1			1	"	SS27L
			1			1	"	SS28R
			1			1	"	SS28L
			1			1	"	SS29R
			1			1	"	SS29L
			1			1	"	SS30R
			1			1	"	SS30L
2			2			2	"	SS43R
	2					2	"	SS43L
2			2			2	"	SS44R
		2				2	"	SS44L
2			2			2	"	SS45R
	2					2	"	SS45L
2			2			2	"	SS46R
		2				2	"	SS46L
1	1					1	"	SS47
1		1				1	"	SS48
	2					2	"	SS49
1						1	"	SS50R
	1					1	"	SS50L
1						1	"	SS51R
	1					1	"	SS51L
1						1	"	SS52R
	1					1	"	SS52L

1-aaa^L - SS50^R & 51^R
1-aab^L - SS50^R & 51^R
1-aac^L - SS52^R & 53^R
1-aad^L - SS52^R & 53^R
1-aae^L - SS54^R & 55^R
1-aaf^L - SS54^R & 55^R
1-aah^L - SS56^R & 57^R
1-aak^L - SS56^R & 57^R
} N.S.

MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick, shall be drilled.

PAINT: Yes, Unless Noted.
CONTACT SURFACES: No (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

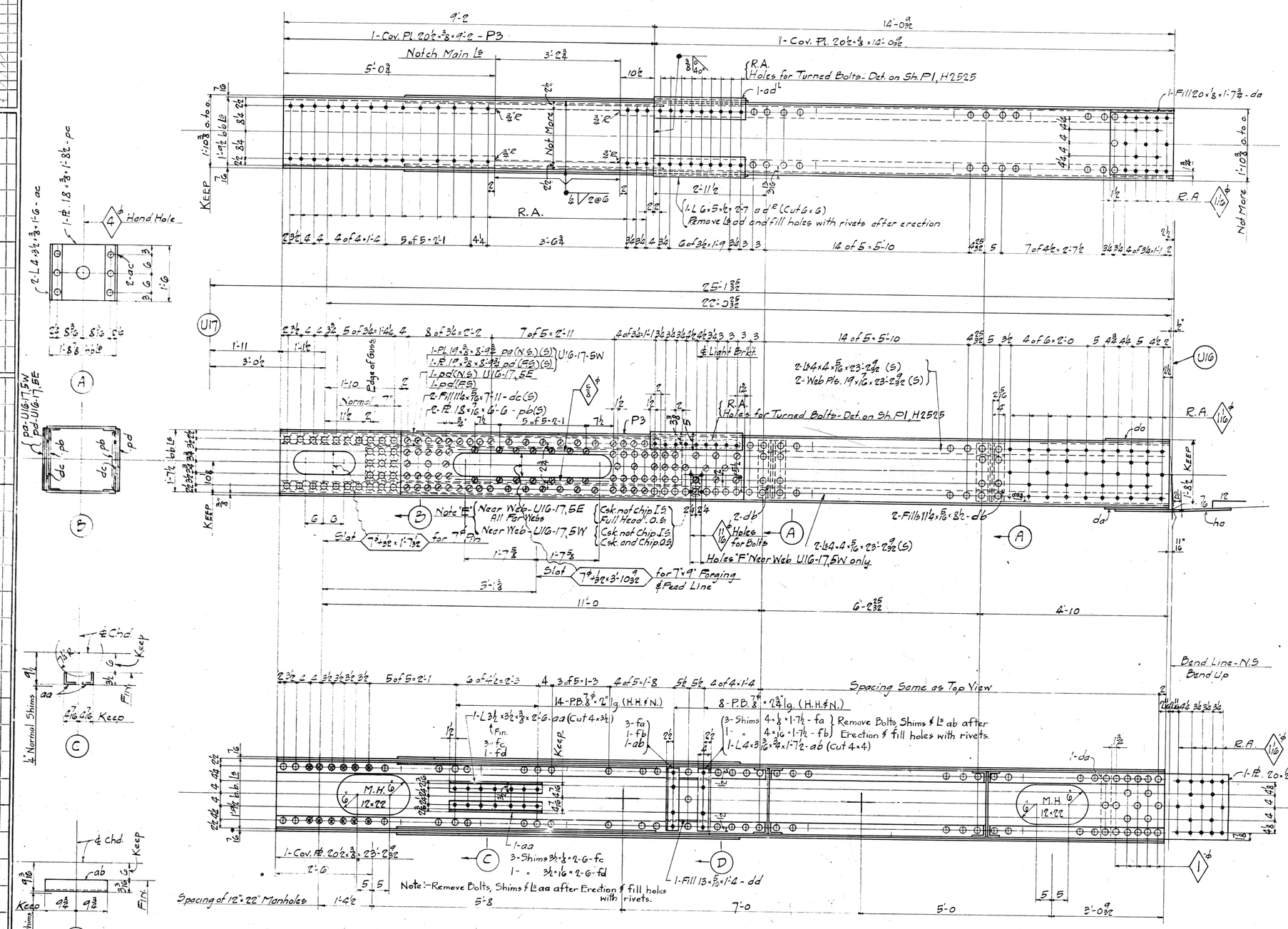
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT AMB. PLANT.
WORK FABRICATED AT AMB. PLANT.
IN CHARGE OF LOUGHMAN #2
DRAW. MADE BY W.W.J. DATE 8-3-39
DRAW. CHECKED BY H.C.M. DATE 8-9-39

ORDER No. H2524

SHEET No. 252

ADV. BILLS - Sh. # 118, 120, 262, 602



SPAN 5 - DIV. 2

REQUIRED		
No.	Description	Mark
1	Top Chord	U16-17.5W
1	do	U16-17.5E
2	Top Cover Plate	P3

U16-17.5W, U16-17.5E } Alike except for Note "E", Holes "F" & Pls. pa & pd.

Shop Assemble PN8 det. on Sh. F15, H2524, PN1, PN2 det. on Sh. F4, H2525 and M3, M4, M5, M6 & M7 det. on Sh. 2, H2525 in addition to hydraulic jack det. on Erect. Dept. Spec. Drwg. No. 288 with Top Chd. Sections det. on this sheet. See Sh. E2, H2525 for Assembly.

Material marked (S) is Silicon Steel.

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

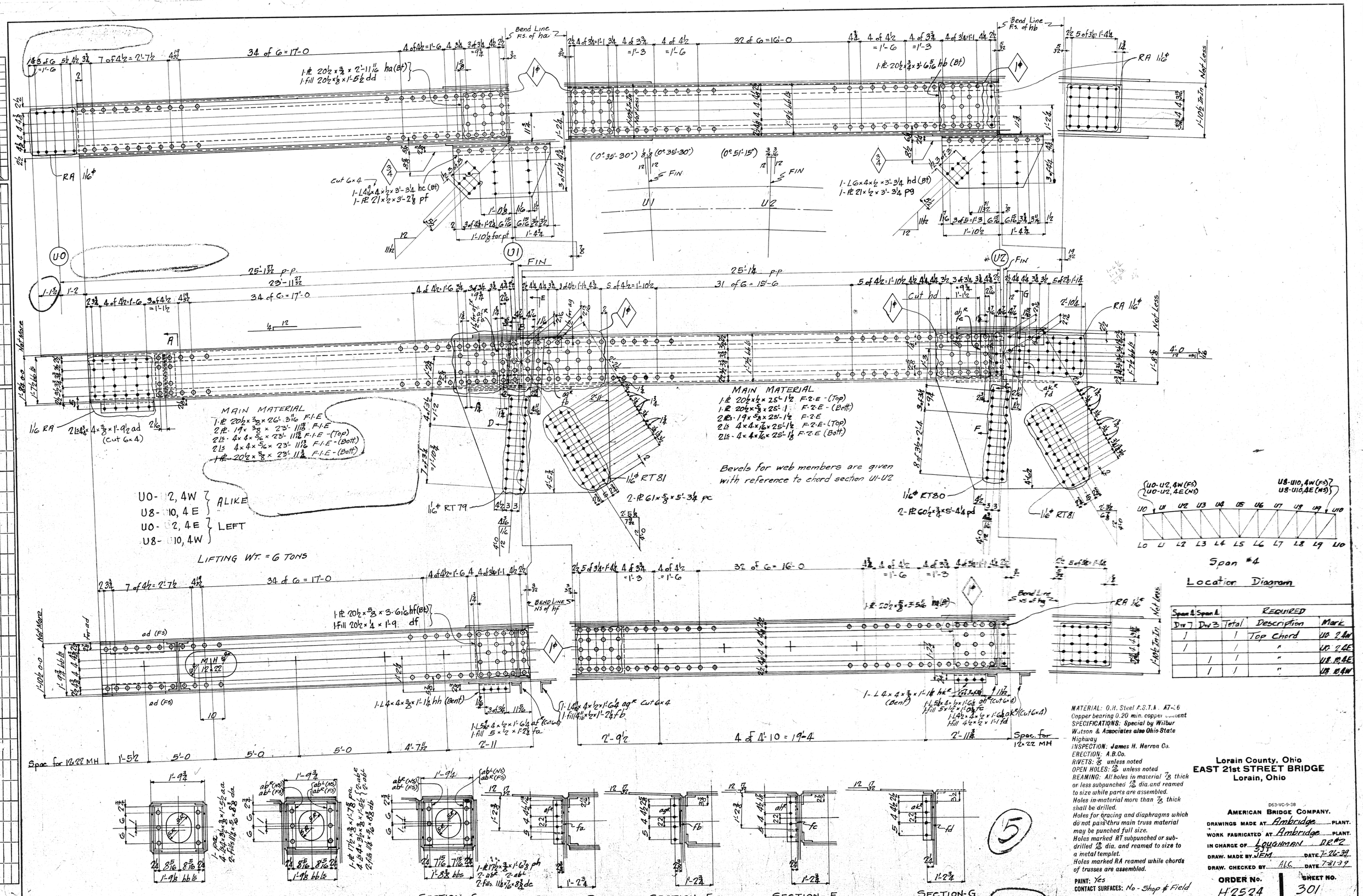
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED AT AMBRIDGE PLANT.
IN CHARGE OF LOUGHMAN D.R. #2
DRAW. MADE BY W.G.D. DATE 8/23/34
DRAW. CHECKED BY O.G.S. DATE 9-5-34

ORDER No. H2524
SHEET NO. 253

Adv. Bill - Pgs. 243, 256, 267 Mach. Surfaces: One Coat White Lead & Tallow.

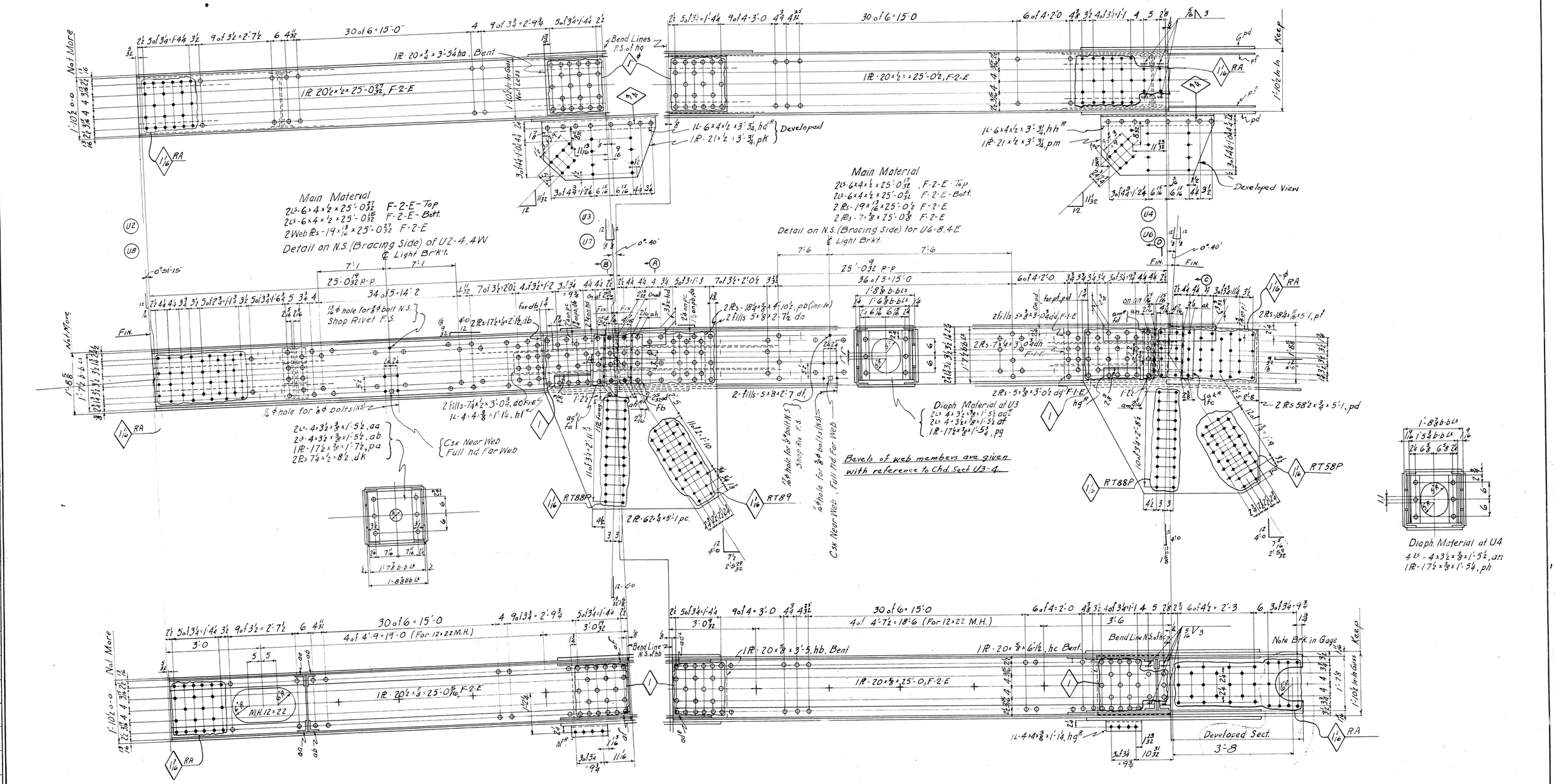


Span 2 Div 1	Span 2 Div 3	Required Total	Description	Mark
1		1	Top Chord	U0-U2 4W
1		1	"	U0-U2 4E
	1	1	"	U8-U10 4E
	1	1	"	U8-U10 4W

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF LOUGHMAN SYT DR. #2
DRAW. MADE BY JEM DATE 7-26-39
DRAW. CHECKED BY ALC DATE 7-31-39
ORDER No. H2524
SHEET NO. 301



Span 4 Div. 7	Span 4 Div. 3	Total	Description	Mark
1		1	Top Chord	U2—4, 4E
1		1	do	U2—4, 4W
	1	1	do	U6—8, 4E
	1	1	do	U6—8, 4W

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

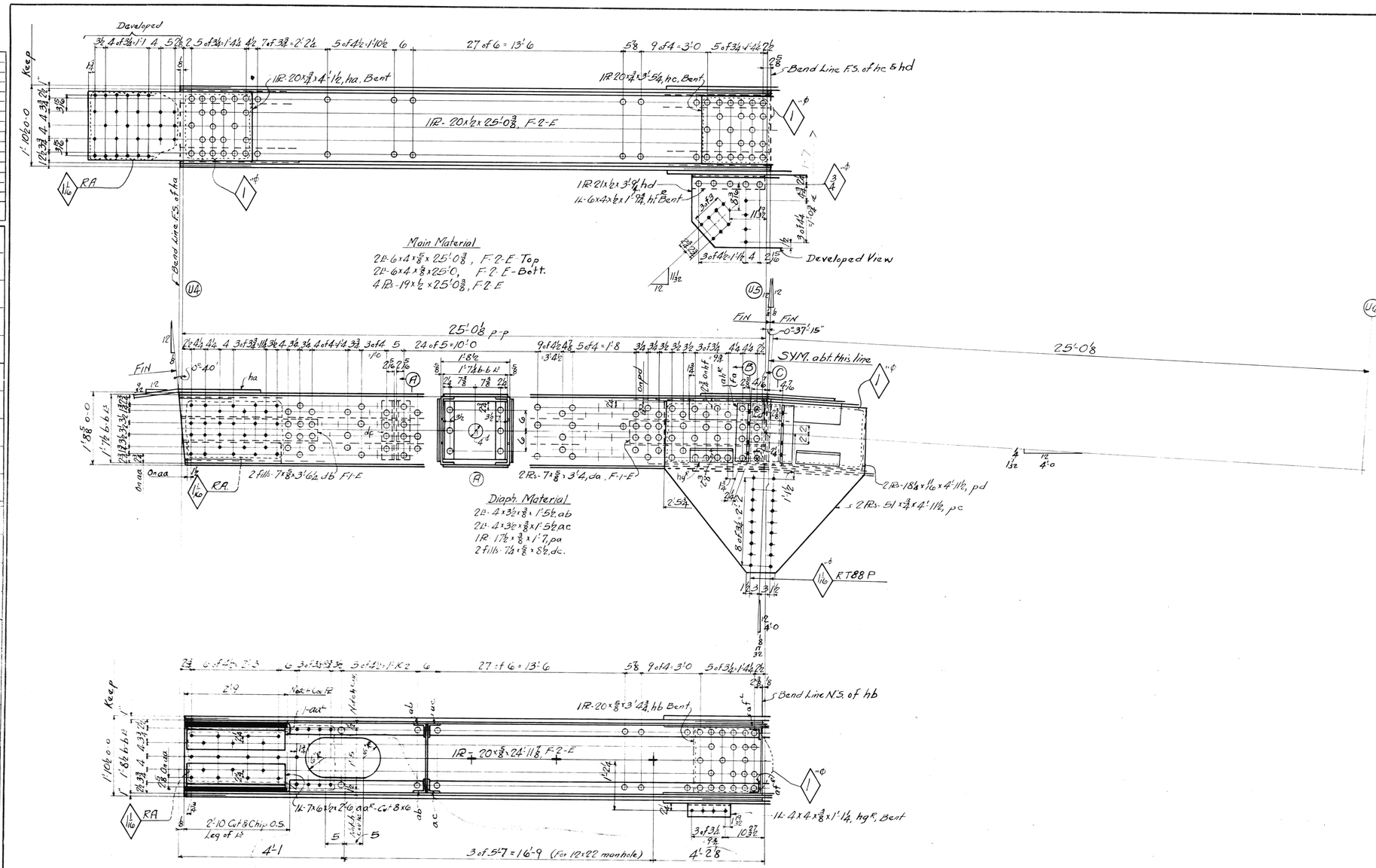
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY E.R.M. DATE 7-27-39
DRAW. CHECKED BY ALC DATE 8-2-39

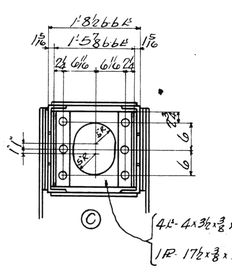
ORDER No. H2524 | **SHEET NO.** 302

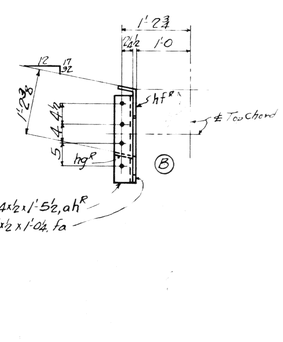
Rev. - 8-21-39
Rev. - 8-25-39

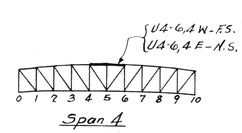


U4-6, 4W
U4-6, 4E } Alike

Lift Wt. - 9 Tons







Span 4

Span 4		REQUIRED	
Div. 3	Total	Description	Mark
1	1	Top chord	U4-6, 4W
1	1	do	U4-6, 4E

MATERIAL: 0.4 Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shop & field)

Rev. 8-25-39

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

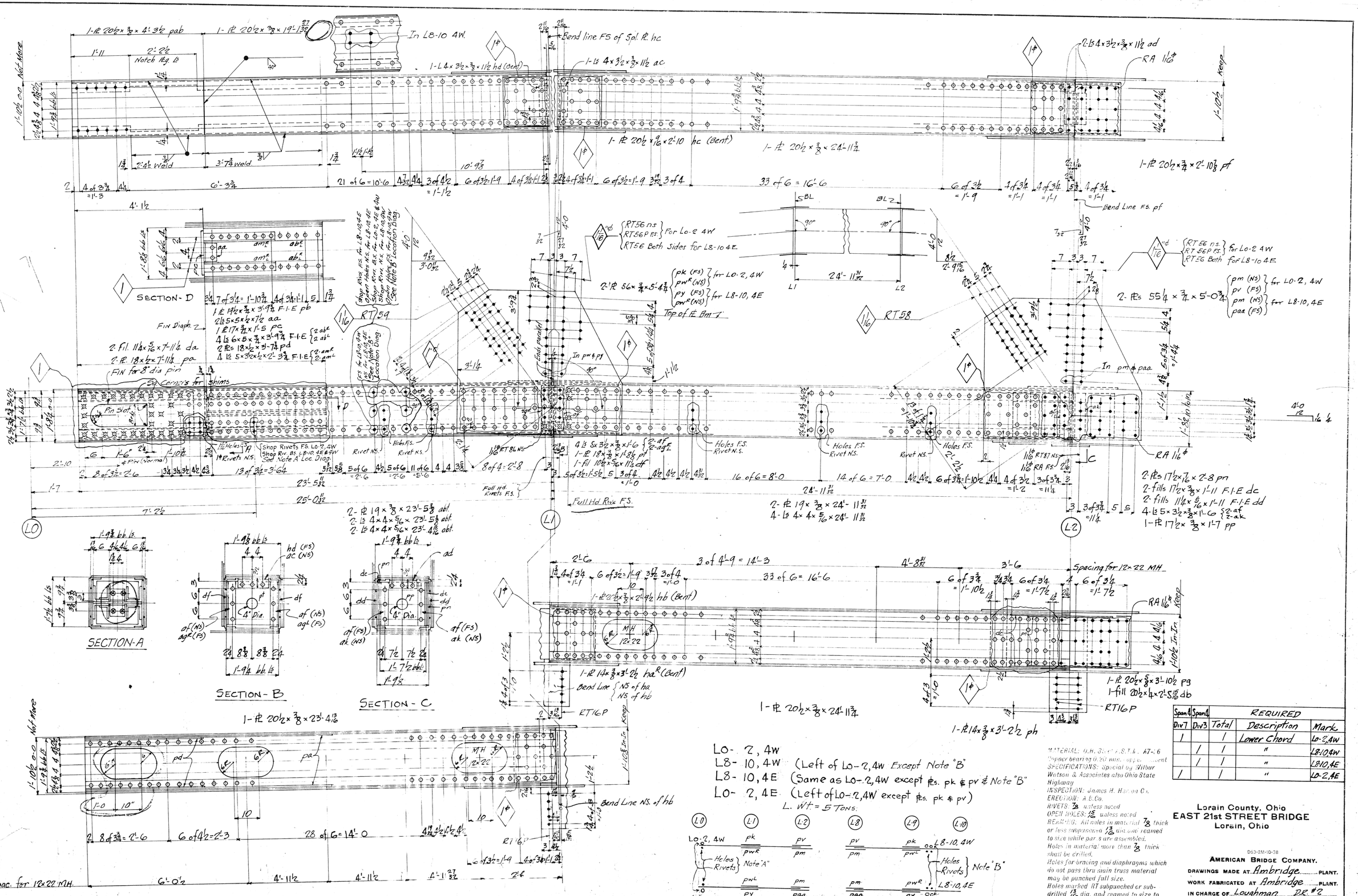
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

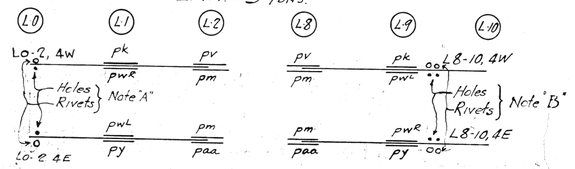
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.R. & Z.
DRAW. MADE BY E.R.M. DATE
DRAW. CHECKED BY A.L.C. DATE 8-2-39

ORDER No. H2524

SHEET NO. 303



Lo- 2, 4W
L8- 10, 4W (Left of Lo-2, 4W Except Pls. pk & pv & Note "B"
L8- 10, 4E (Same as Lo-2, 4W except Pls. pk & pv & Note "B"
Lo- 2, 4E (Left of Lo-2, 4W except Pls. pk & pv)
L. Wt = 5 Tons.



SPAN #4
Location Diagram

4

Rev. 8-29-39
Rev. 9-14-39

MATERIAL: O.H. Steel, S.T.M. A7-36
Copper bearing 0.20 min. [illegible] cent
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harlan Co.
ERECTION: A.B.Co.
RIVETS ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 1 1/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 1 1/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Span 4 Div 7	Span 4 Div 3	Total	Description	Mark
1		1	Lower Chord	Lo-2,4W
	1	1	"	L8-10 4W
	1	1	"	L8-10,4E
1		1	"	Lo-2,4E

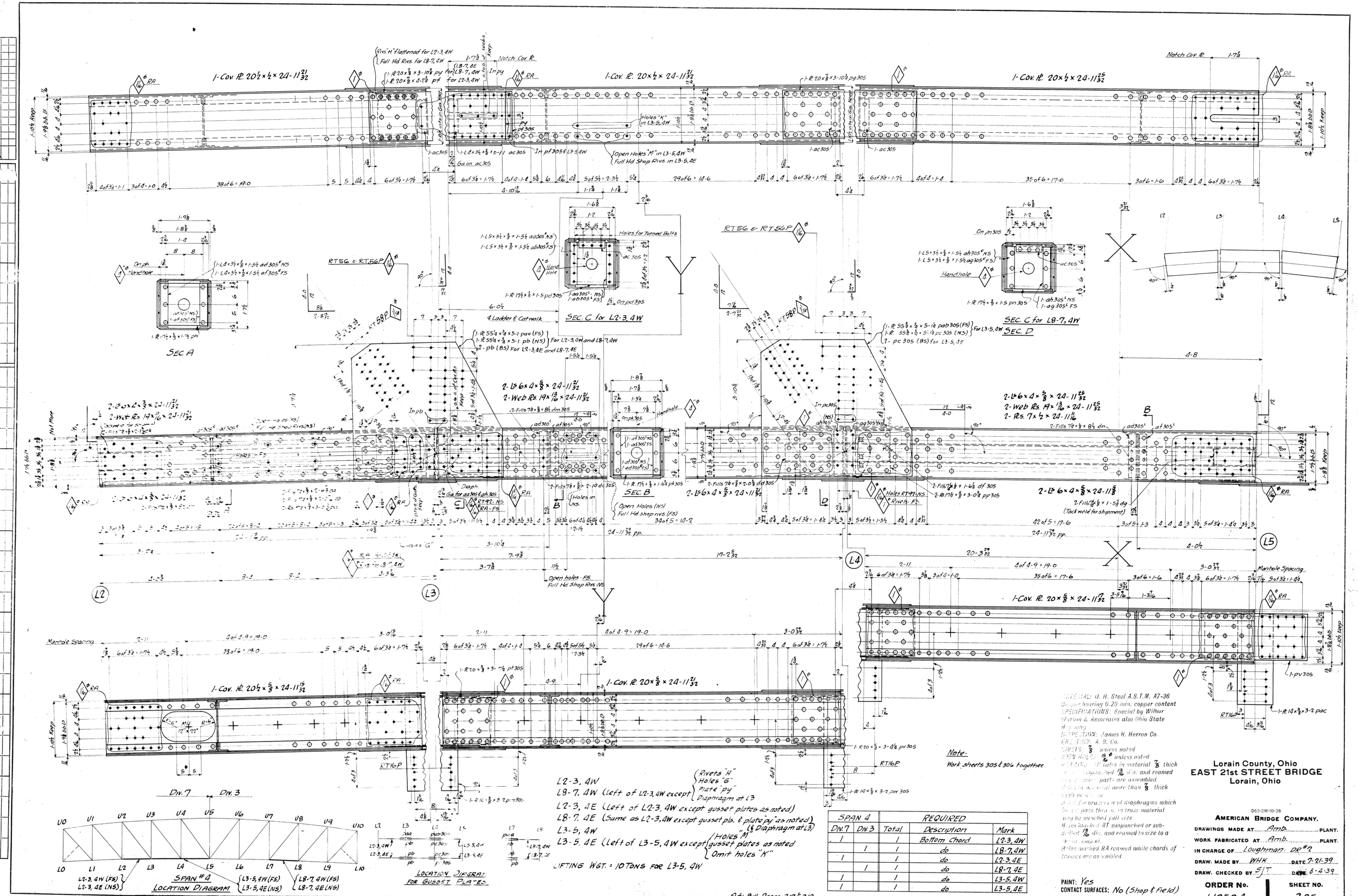
REQUIRED

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY JEM DATE 7-19-39
DRAW. CHECKED BY DATE

ORDER No. A-2524
SHEET NO. 304



SPAN 4		REQUIRED		
Div. 7	Div. 3	Total	Description	Mark
1		1	Bottom Chord	L2-3, 4W
	1	1	do	L8-7, 4W
1		1	do	L2-3, 4E
	1	1	do	L8-7, 4E
1		1	do	L3-5, 4W
1		1	do	L3-5, 4E

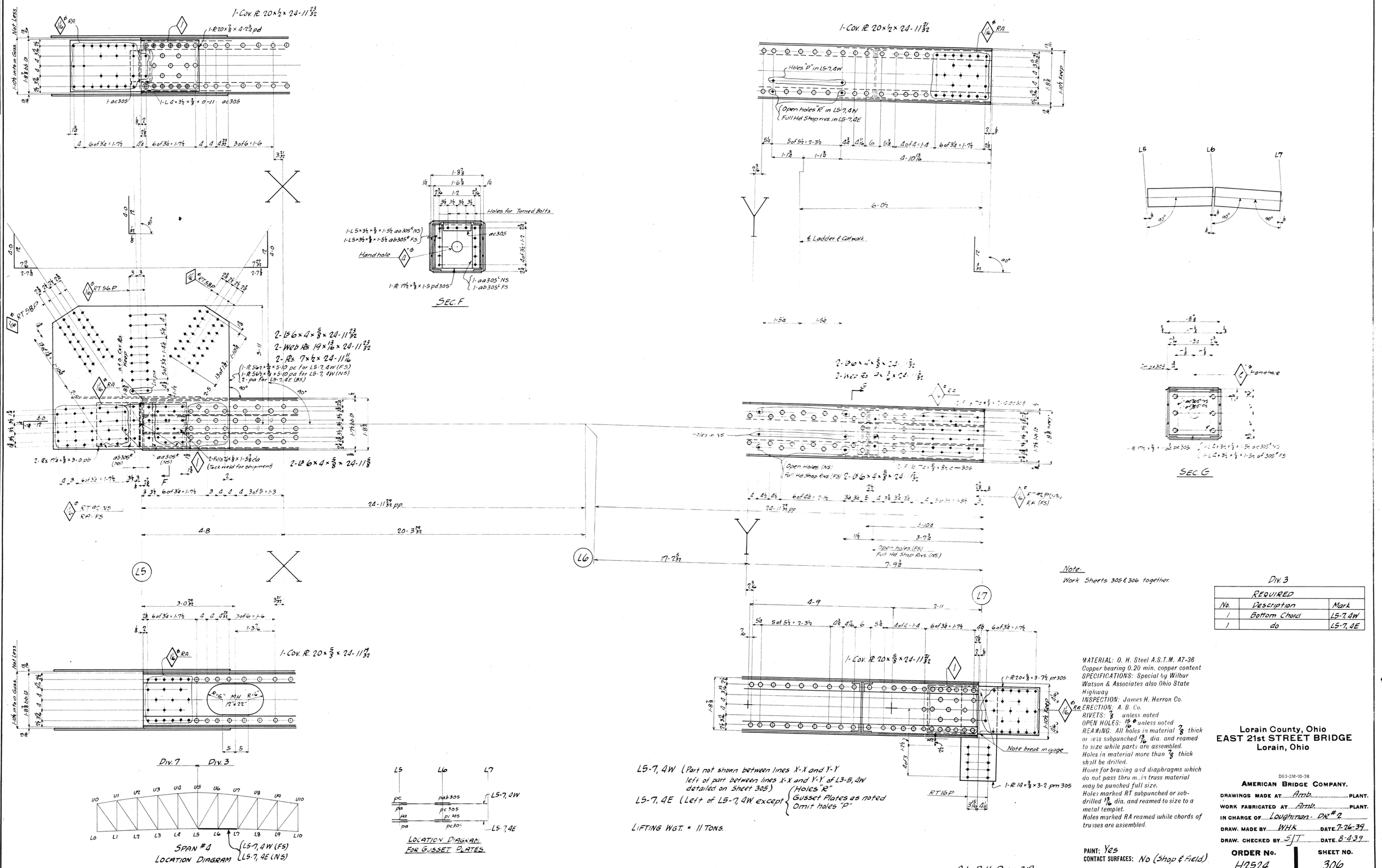
MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
FABRICATION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less punched 1/16 dia. and reamed as assembled parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass through truss material may be punched full size.
Holes marked RT suopunched or subdrilled 13/16 dia. and reamed to size to a drill template.
Holes marked RA reamed while chords of trusses are assembled.

Note-
Work sheets 305 & 306 together.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman. DR. #2
DRAW. MADE BY WHK DATE 7-21-39
DRAW. CHECKED BY SJT DATE 8-4-39
ORDER No. H2524
SHEET NO. 305



Note-
Work Sheets 305 & 306 together.

Div. 3

REQUIRED		
No.	Description	Mark
1	Bottom Chord	L5-7, 4W
1	do	L5-7, 4E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 ø unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

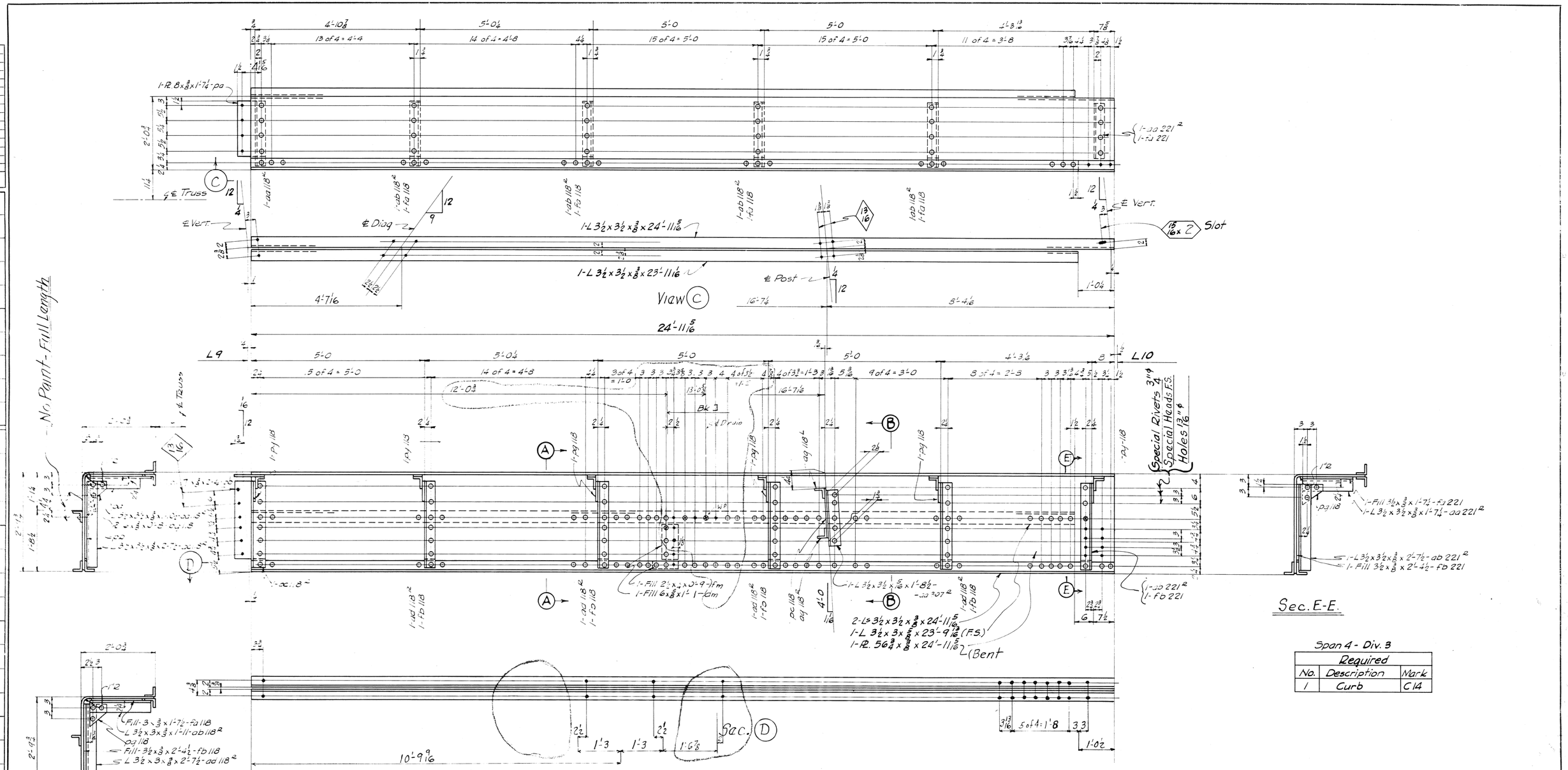
PAINT: Y25
CONTACT SURFACES: No (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

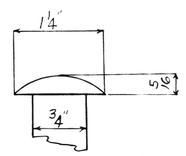
D63-2M-10-38
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - DR # 2
DRAW. MADE BY WHK DATE 7-26-39
DRAW. CHECKED BY SJT DATE 8-4-39

ORDER No. H2524
SHEET NO. 306



Curb C14



Part not shown same as standard 3/4" ϕ Rivet

Special Rivet

EAST CURB

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DESIGN 10-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F.-J.R.C. DATE 6-20-39
DRAW. CHECKED BY F.E.S. DATE 8-4-39

MATERIAL: [illegible]
Copper bearing [illegible] steel
SPECIFICATIONS: [illegible]
Watson & [illegible] State Highway
INSPECTION: [illegible] Co.
ERECTION: A.B.Co.
RIVETS: 3/4 [illegible]
OPEN HOLES: 13/16 [illegible]
REAMING: All holes [illegible] full size except in material more than 3/4 thick shall be drilled.

PAINT: Yes, except as noted in End View
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524

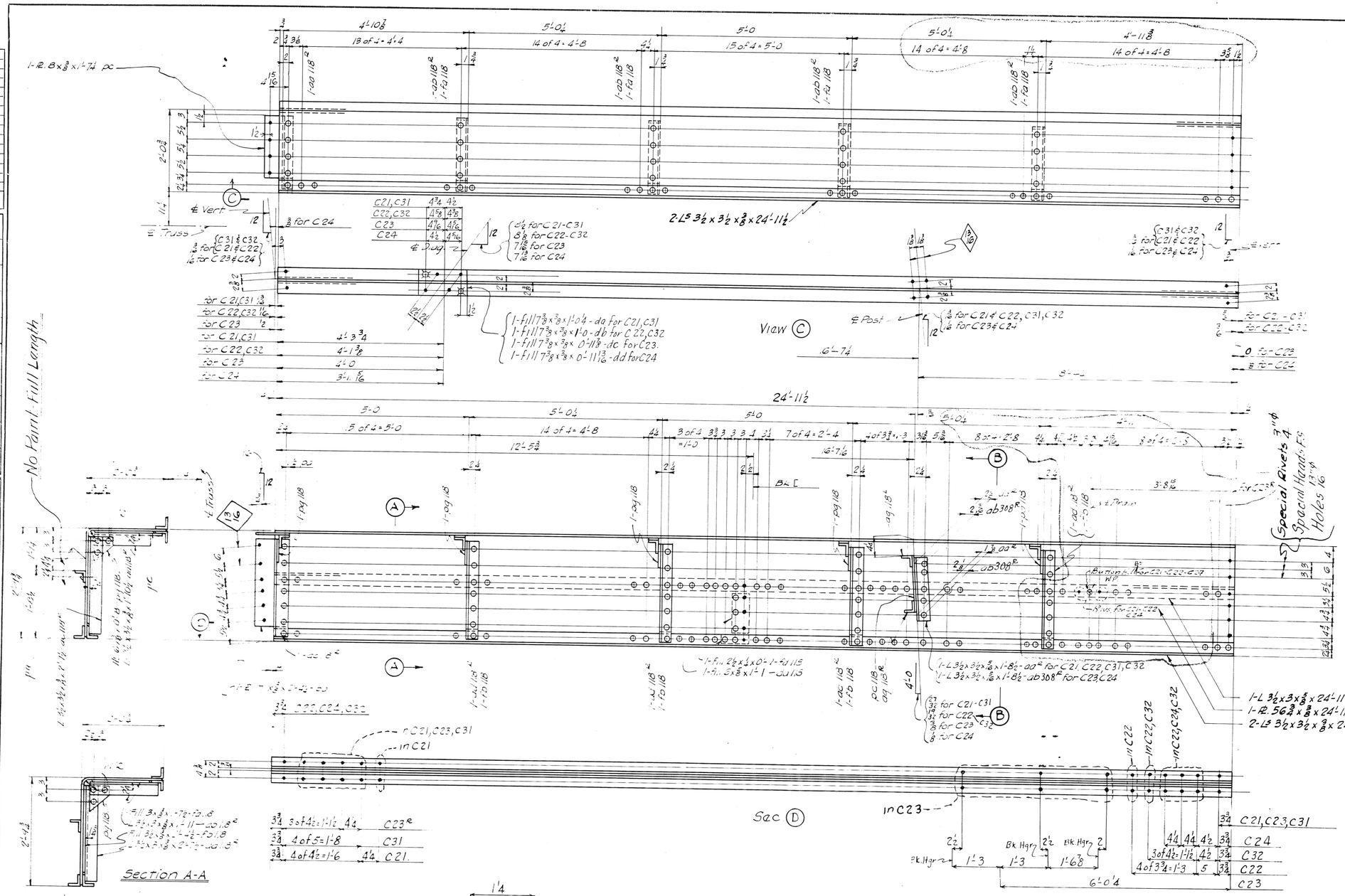
SHEET NO. 307

3 Rev. 8-22-39

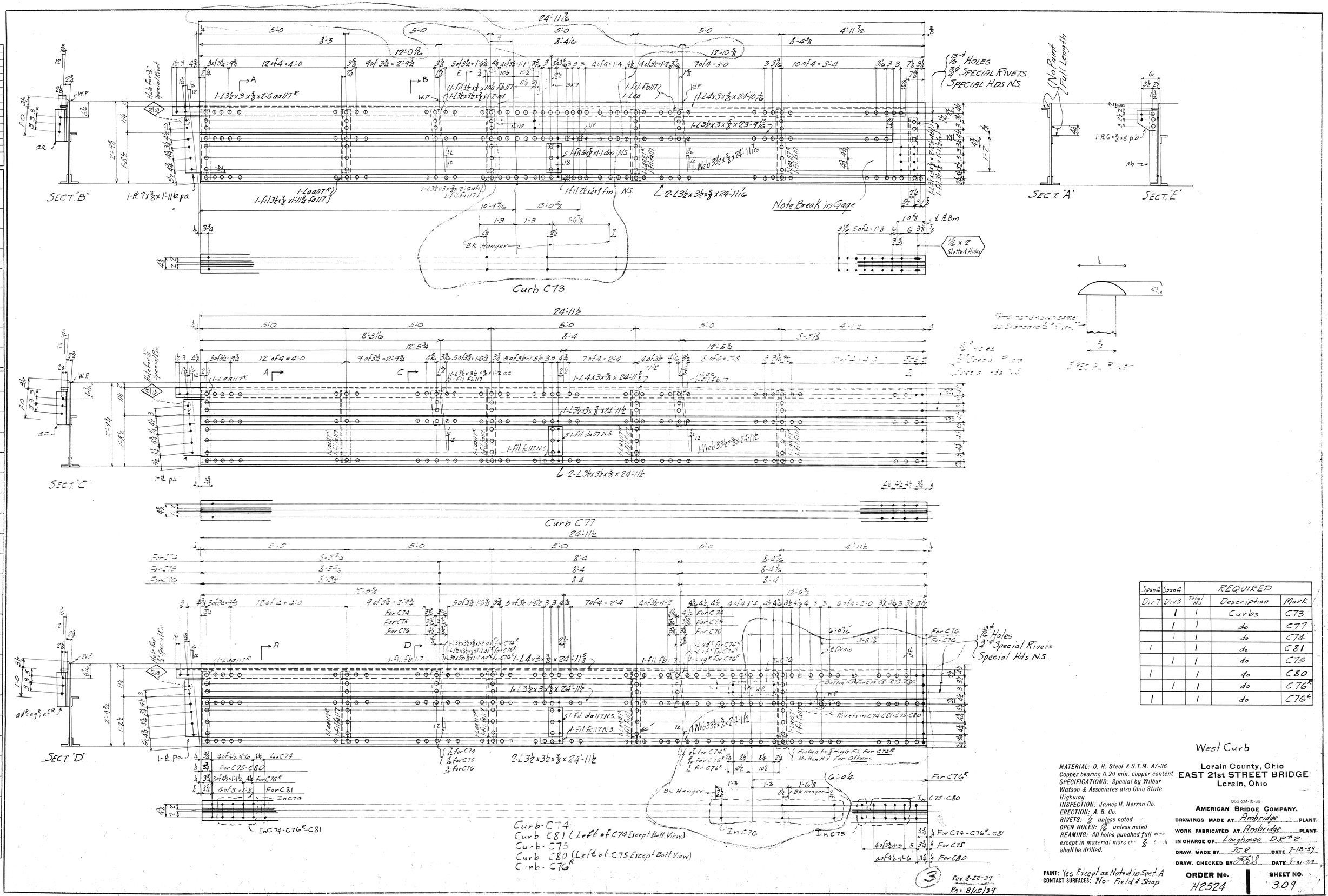
Advance Bill Pages 306, 125

Span 4 - Div. 3

Required		
No.	Description	Mark
1	Curb	C14



DIV. 7	DIV. 3	Required No.	Description	Mark
	1	1	Curb	C21
1		1	Curb	C31
	1	1	Curb	C22
1		1	Curb	C32
	1	1	Curb	C23R
1		1	Curb	C23L
	1	1	Curb	C24



Span 4	Span 4	REQUIRED		
Div 7	Div 3	Total No	Description	Mark
	1	1	Curbs	C73
	1	1	do	C77
	1	1	do	C74
1		1	do	C81
	1	1	do	C75
1		1	do	C80
	1	1	do	C76R
1		1	do	C76L

West Curb

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JCR DATE 7-13-39
DRAW. CHECKED BY FEB DATE 7-31-39

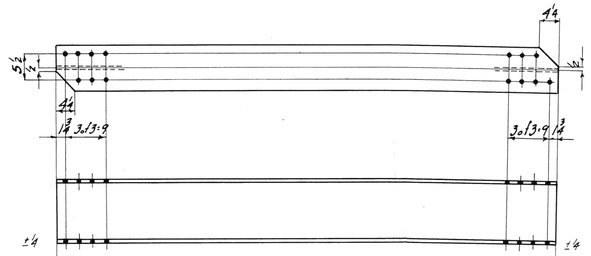
ORDER No. H2524

SHEET NO. 309

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

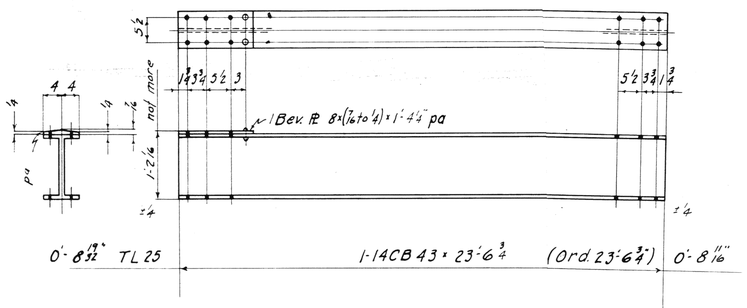
PAINT: Yes Except as Noted in Sect. A
CONTACT SURFACES: No - Field & Shop

Rev. 8-22-39
Rev. 8/15/39

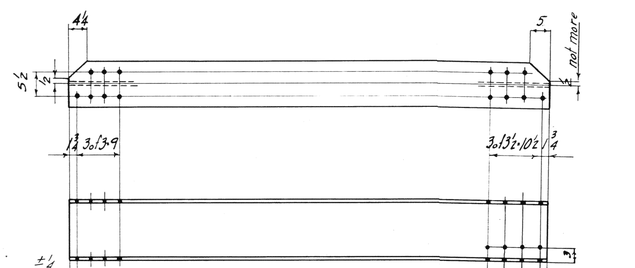


Bott. Sec. Same as top view

1'-2 5/8"	TL 20	1-14 CB 61 × 31'-6 5/8"	(Ord. 31'-7 1/2")	1'-4
1'-2 1/2"	TL 21	1-14 CB 61 × 31'-6 15/16"	(Ord. 31'-7 1/2")	1'-3 3/8"
1'-2 5/16"	TL 22	1-14CB61 × 31'-7 9/16"	(Ord. 31'-8")	1'-2 1/2"
1'-2 3/16"	TL 23	1-14CB61 × 31'-8 1/8"	(Ord. 31'-8 1/2")	1'-1 27/32"
1'-2"	TL 24	1-14CB61 × 31-8 7/8"	(Ord. 31'-9")	1'-1 1/8"

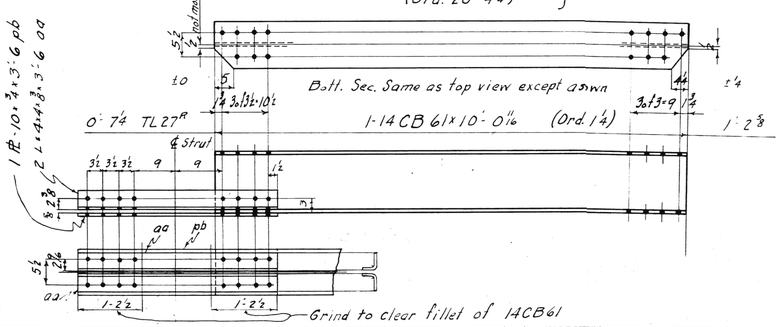


0'-8 19/32" TL 25 — 1-14CB 43 × 23'-6 3/4" (Ord. 23'-6 3/4") — 0'-8 11/16"

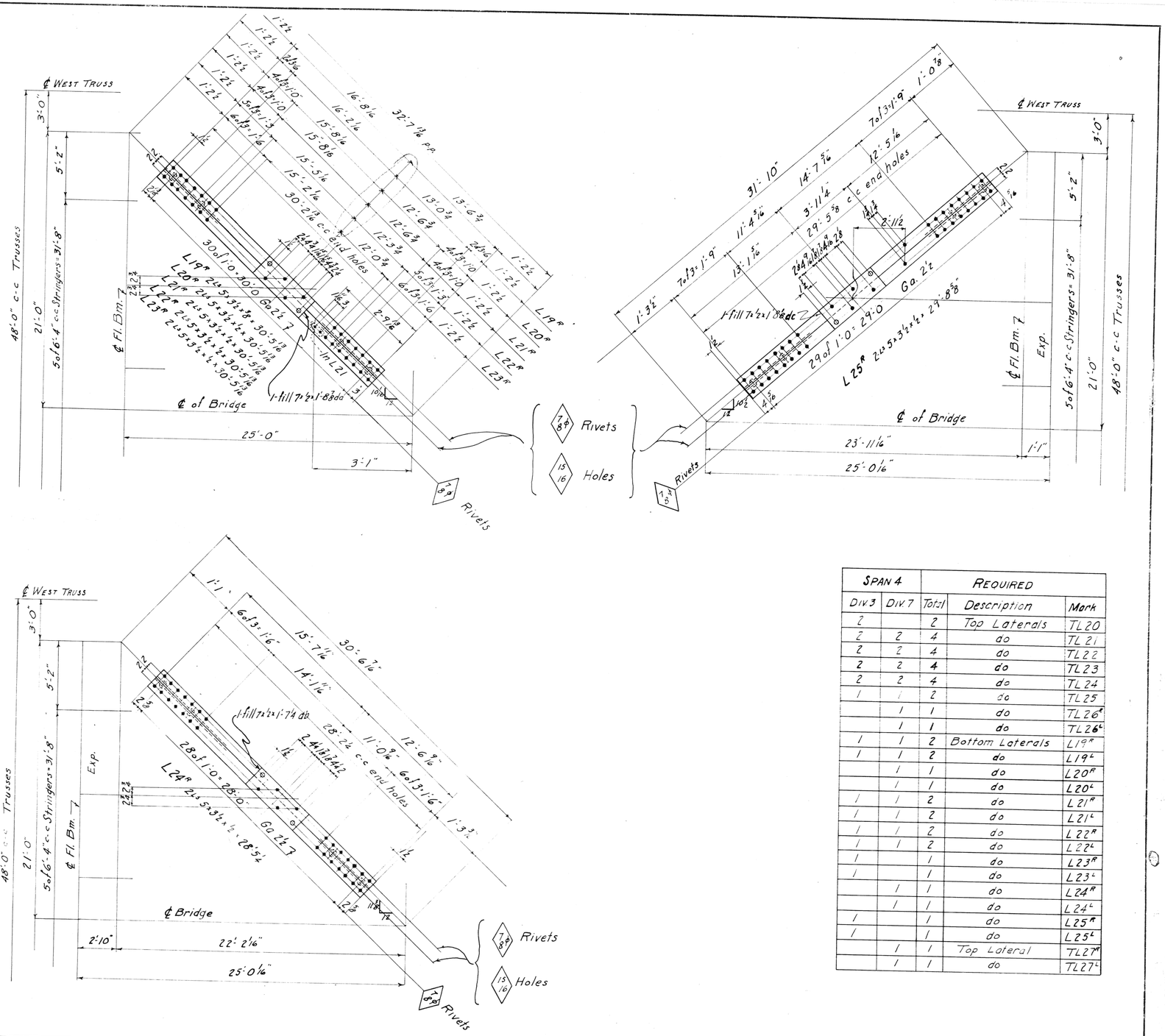


Bott. Sec. Same as top view except as shown

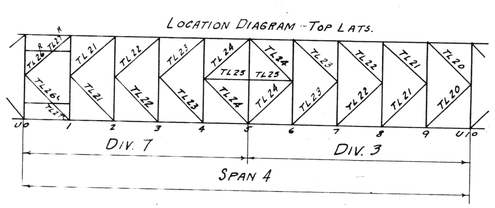
1'-4" TL 26R — 1-14CB 61 × 20'-3 7/16" (Ord. 20'-4 1/4") — 0'-7 1/4"

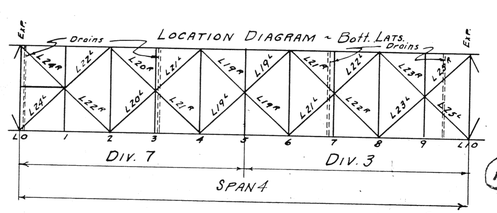


0'-7 1/4 TL 27R — Bott. Sec. Same as top view except as shown — 1-14CB 61 × 10'-0 1/16" (Ord. 1 1/4") — 1'-2 5/8"



SPAN 4		REQUIRED		
Div. 3	Div. 7	Tot.	Description	Mark
2		2	Top Laterals	TL 20
2	2	4	do	TL 21
2	2	4	do	TL 22
2	2	4	do	TL 23
2	2	4	do	TL 24
1	1	2	do	TL 25
	1	1	do	TL 26R
	1	1	do	TL 26L
1	1	2	Bottom Laterals	L19R
1	1	2	do	L19L
	1	1	do	L20R
	1	1	do	L20L
1	1	2	do	L21R
1	1	2	do	L21L
1	1	2	do	L22R
1	1	2	do	L22L
1		1	do	L23R
1		1	do	L23L
	1	1	do	L24R
	1	1	do	L24L
1		1	do	L25R
1		1	do	L25L
	1	1	Top Lateral	TL 27R
	1	1	do	TL 27L





MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes punched full size

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

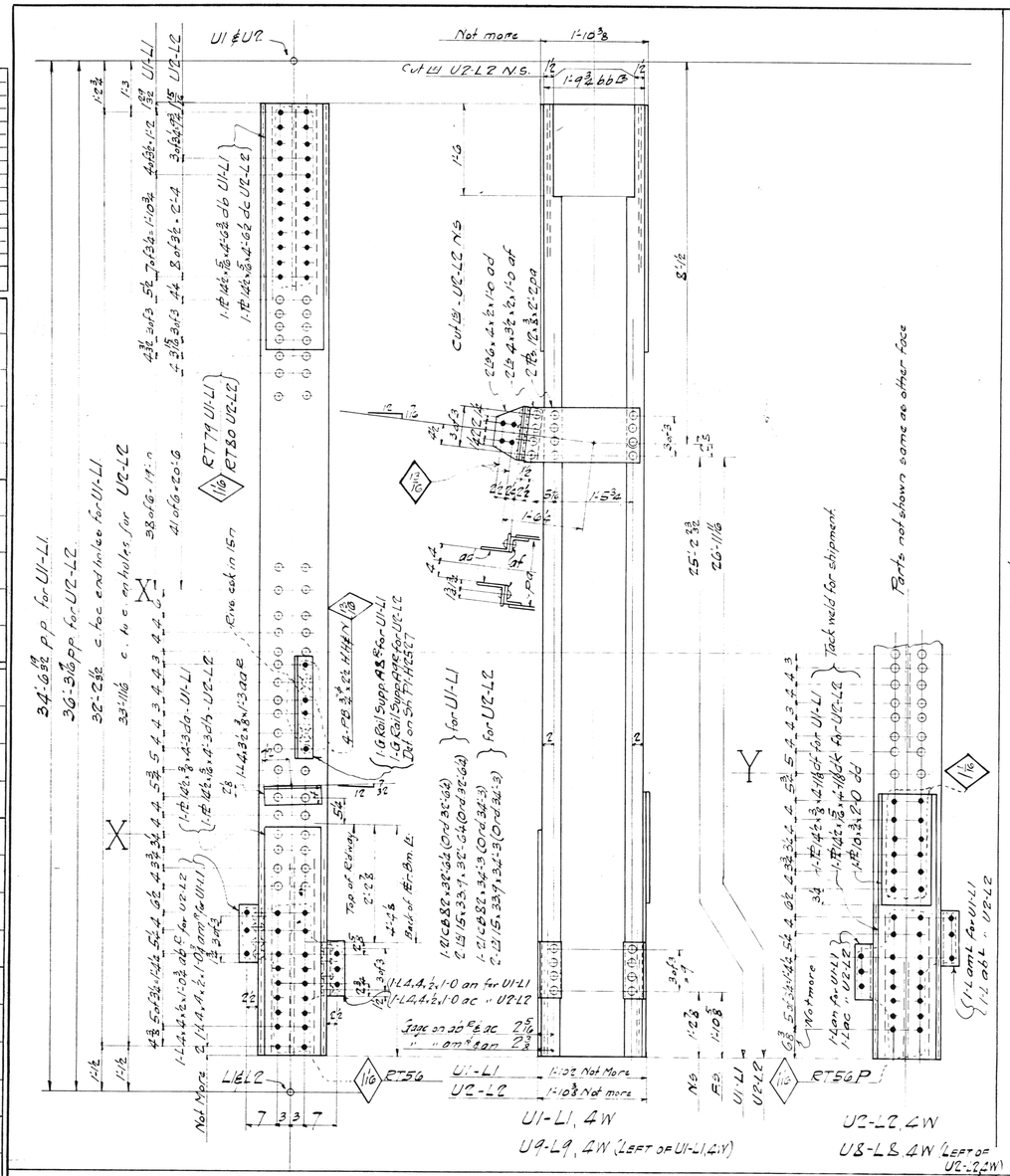
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

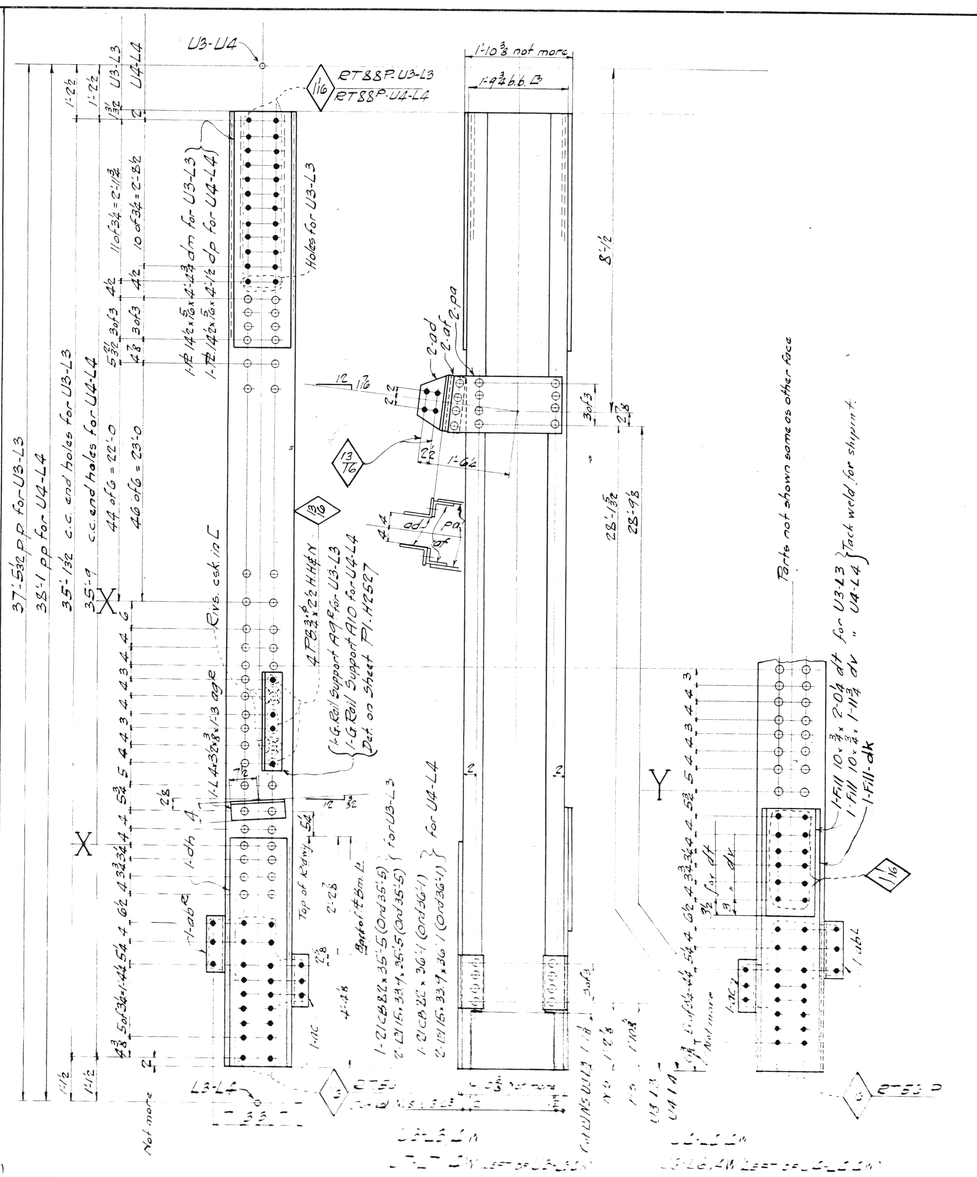
D63-2M-10-38

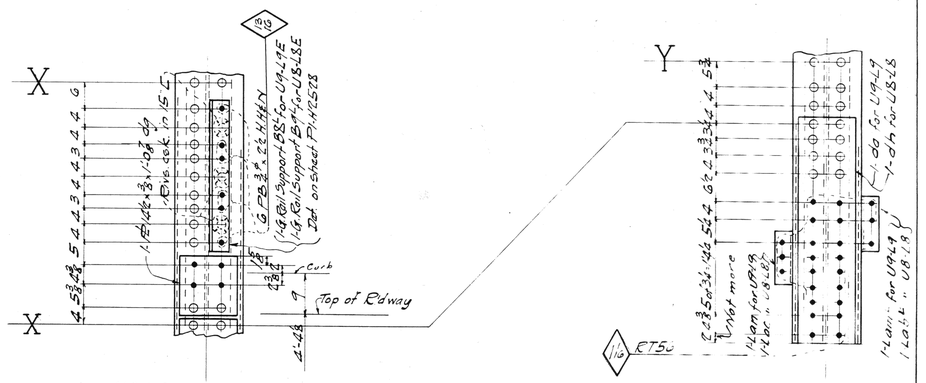
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman
DRAW. MADE BY W.B.A. DATE 7-24-39
DRAW. CHECKED BY ALC DATE 8-1-39

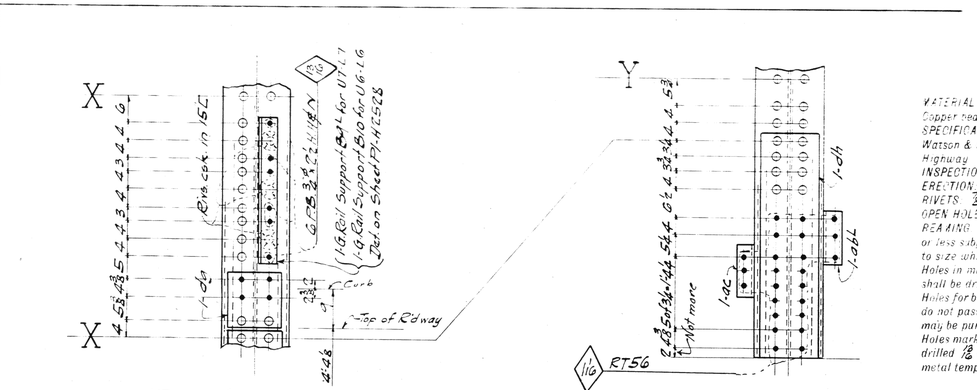
ORDER No. H2524
SHEET NO. 310

Rev. 11-17-39









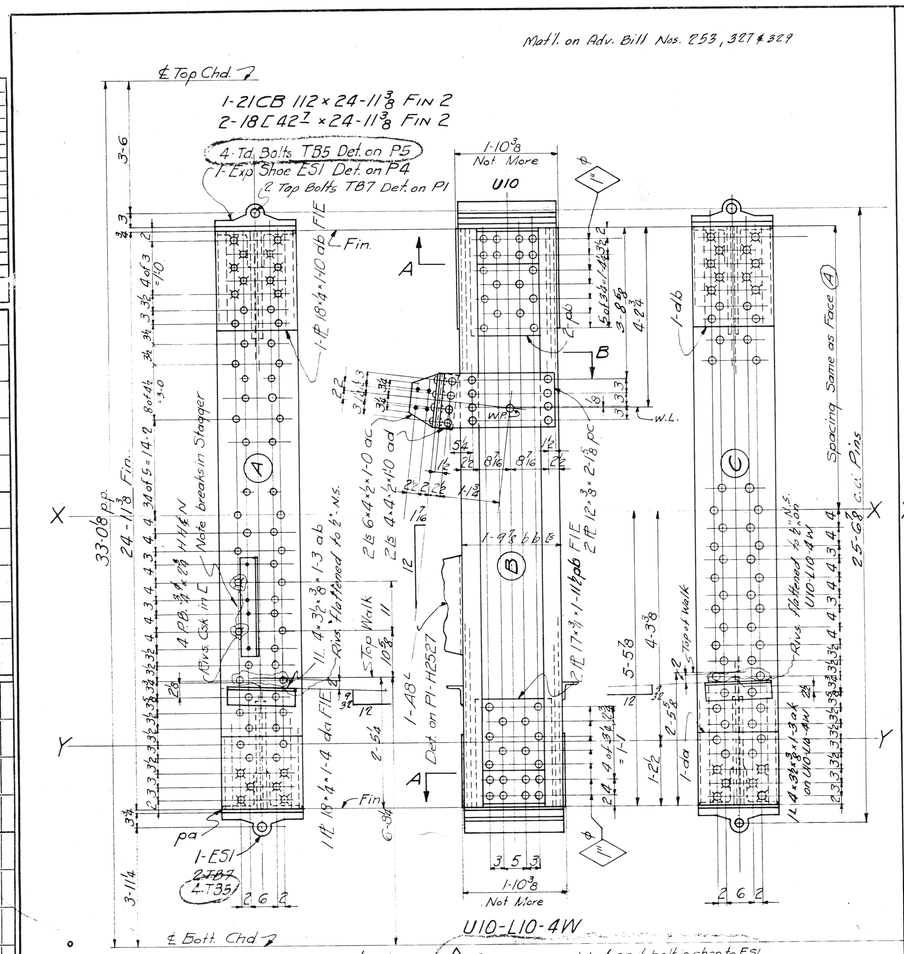
Span 4		REQUIRED		
Div. 7	Div. 3	Total	Description	Mark
1		1	Vertical	U1-L1-4W
1		1	do.	U1-L1, 4E
1		1	do.	U2-L2, 4W
1		1	do.	U2-L2, 4E
1		1	do.	U3-L3-4W
1		1	do.	U3-L3, 4E
1		1	do.	U4-L4, 4W
1		1	do.	U4-L4, 4E
			do.	U5-L5, 4W
			do.	U5-L5, 4E
			do.	U7-L7, 4W
			do.	U7-L7, 4E
			do.	U8-L8, 4W
			do.	U8-L8, 4E
			do.	U9-L9, 4W
			do.	U9-L9, 4E

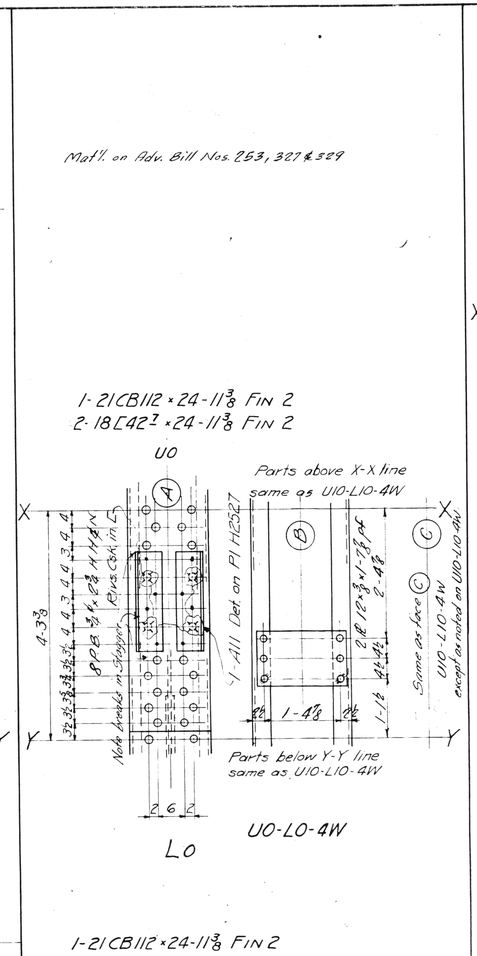
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20% min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 15/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

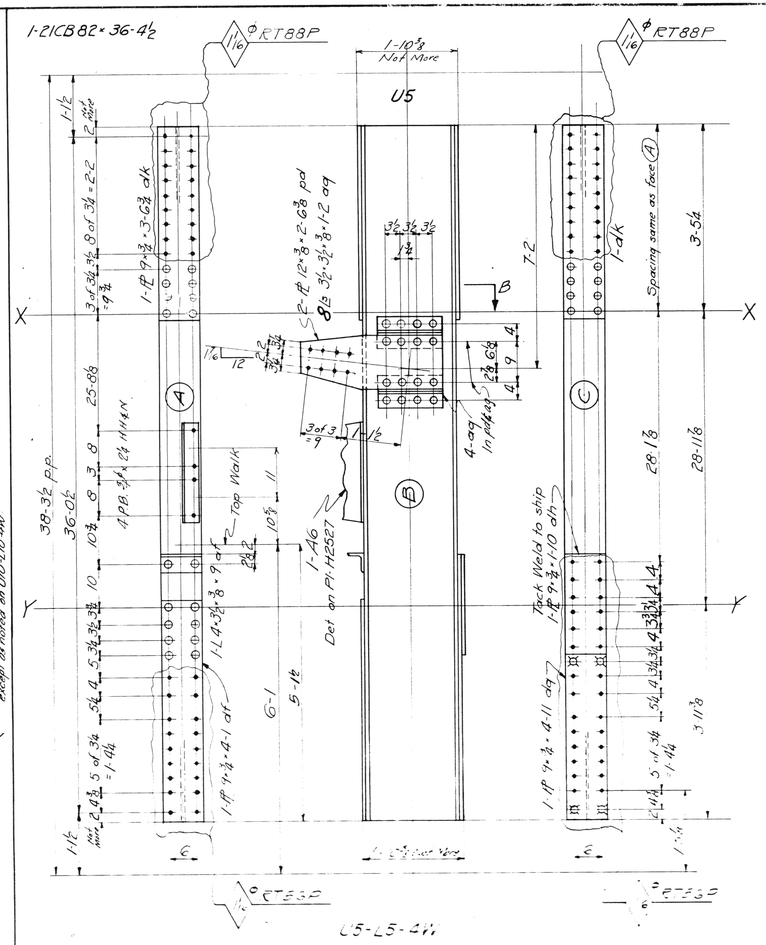
PAINT: Yes.
CONTACT SURFACES: No Shop & Field except members permanently bolted to be painted.

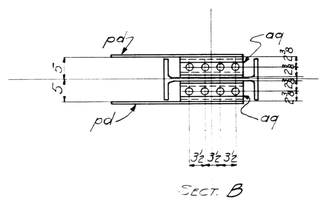
VERTICALS - SPAN 4
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

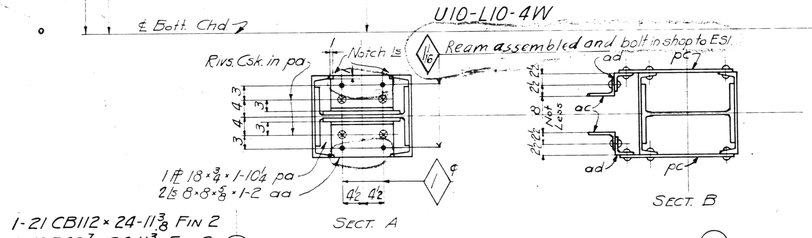
D53-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY F.E.S. DATE 7-26-39
DRAW. CHECKED BY S.J.T. DATE 8-2-39
ORDER No. H2524
SHEET NO. 311

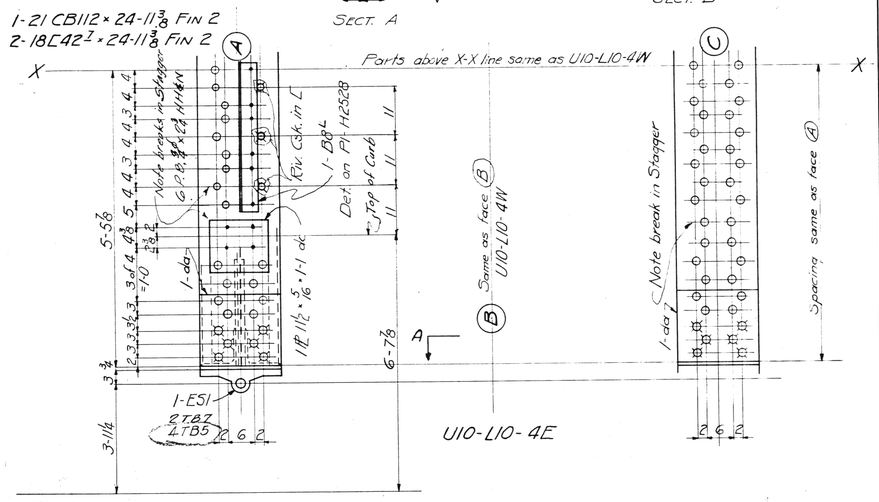


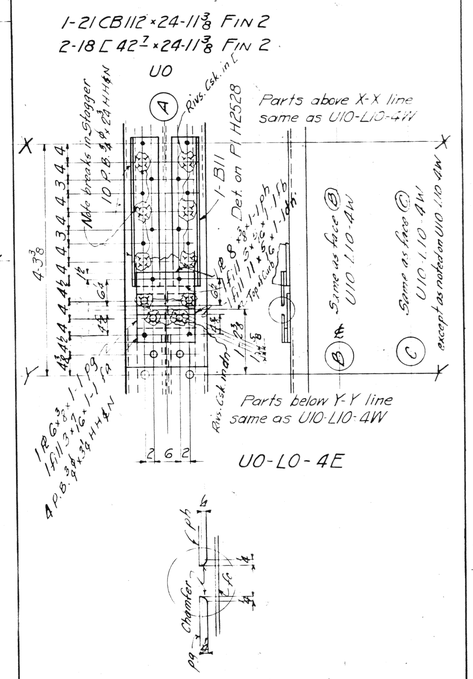


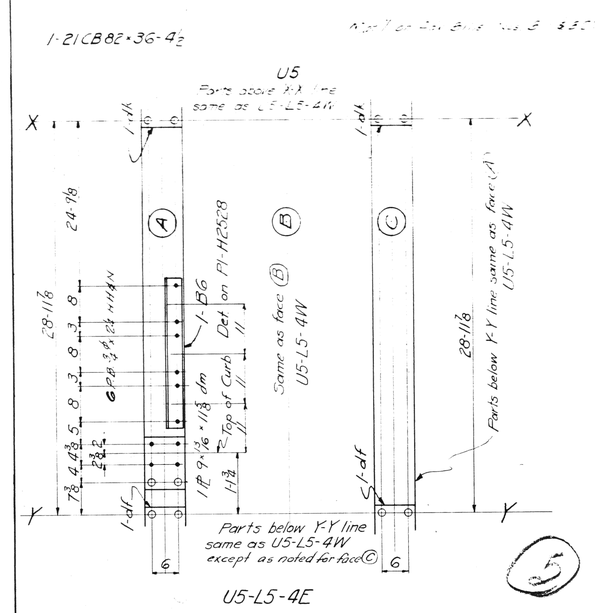












SPAN. 4

SUBCOM. 7	SUBCOM. 3	REQ'D TOTAL	REQ'D DESCRIPTION	MARK
	1	1	Vertico	U10-L10-4W
	1	1	"	U10-L10-4E
1		1	"	U0-L0-4W
1		1	"	U0-L0-4E
	1	1	"	U5-L5-4W
	1	1	"	U5-L5-4E

MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled. Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

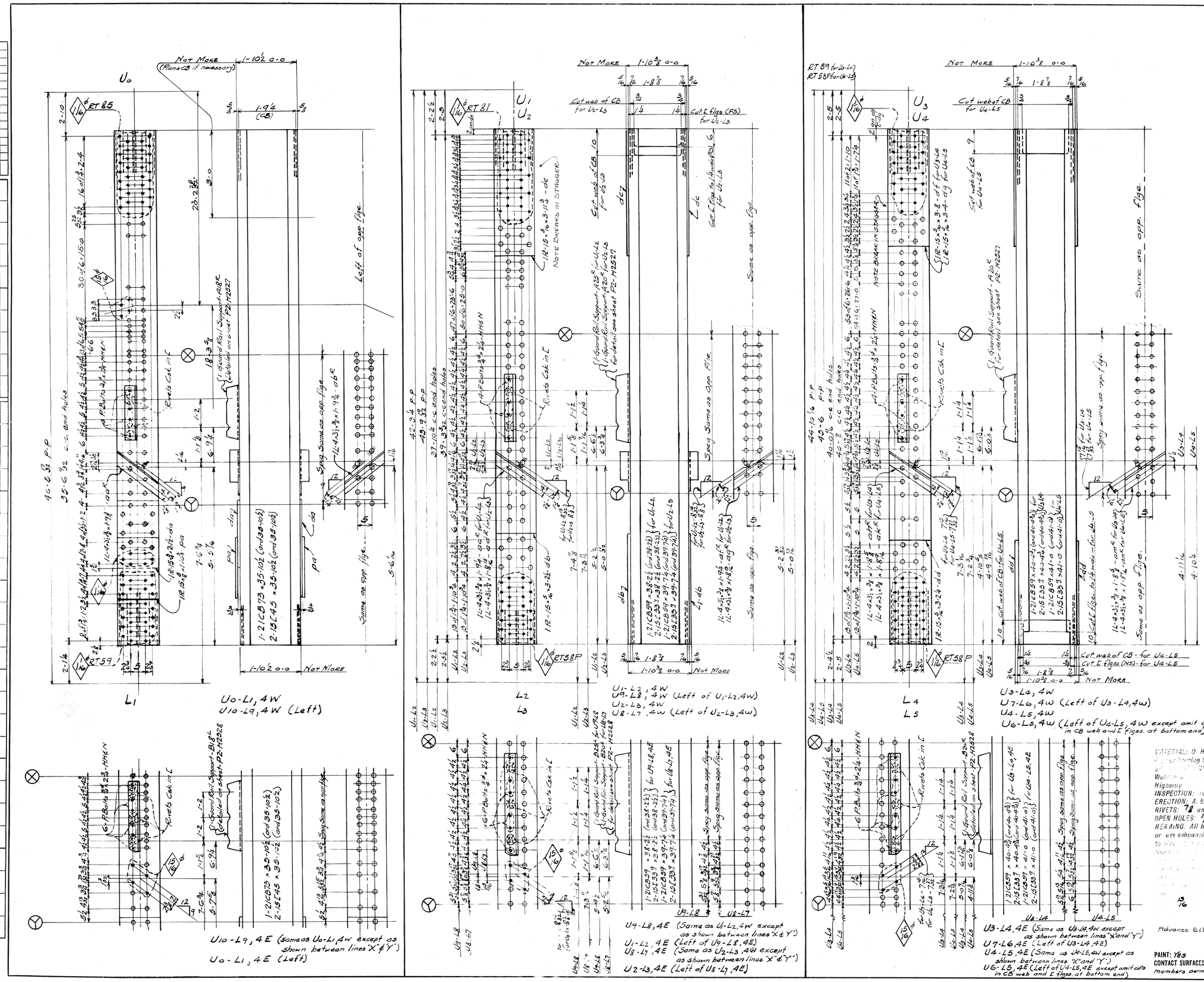
PAINT: Yes
CONTACT SURFACES: No - Shop & Field except members permanently bolted to be painted.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY JJD DATE 8-1-39
DRAW. CHECKED BY ALC DATE 8-8-39

ORDER No. H2524
SHEET NO. 312

Rev. 10-2-39



Spec'd	Spec'd	REQUIRED		
Div. 3	Div. 7	Total No.	Description	Mark
	1	1	Diagonal	U0-L1,4W
1		1	Do	U10-L9,4W
1		1	Do	U10-L9,4E
	1	1	Do	U0-L1,4E
	1	1	Do	U1-L2,4W
1		1	Do	U9-L8,4W
	1	1	Do	U2-L3,4W
1		1	Do	U8-L7,4W
1		1	Do	U9-L8,4E
	1	1	Do	U1-L2,4E
1		1	Do	U8-L7,4E
	1	1	Do	U2-L3,4E
	1	1	Do	U3-L4,4W
1		1	Do	U7-L6,4W
	1	1	Do	U4-L5,4W
1		1	Do	U6-L5,4W
	1	1	Do	U3-L4,4E
1		1	Do	U7-L6,4E
	1	1	Do	U4-L5,4E
1		1	Do	U6-L5,4E

MATERIAL: O. H. Steel A.S.T.M. A7-36
[illegible] having 0.20 min. copper content
S[illegible]NS: Special by Wilbur
Wat[illegible] as also Ohio State
Highway
INSPECTION: [illegible] S. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 [illegible] reamed to size [illegible]

Advance Bill pages 309c-320

PAINT: Yes
CONTACT SURFACES: No-Shop & Field except members permanently bolted are to be painted

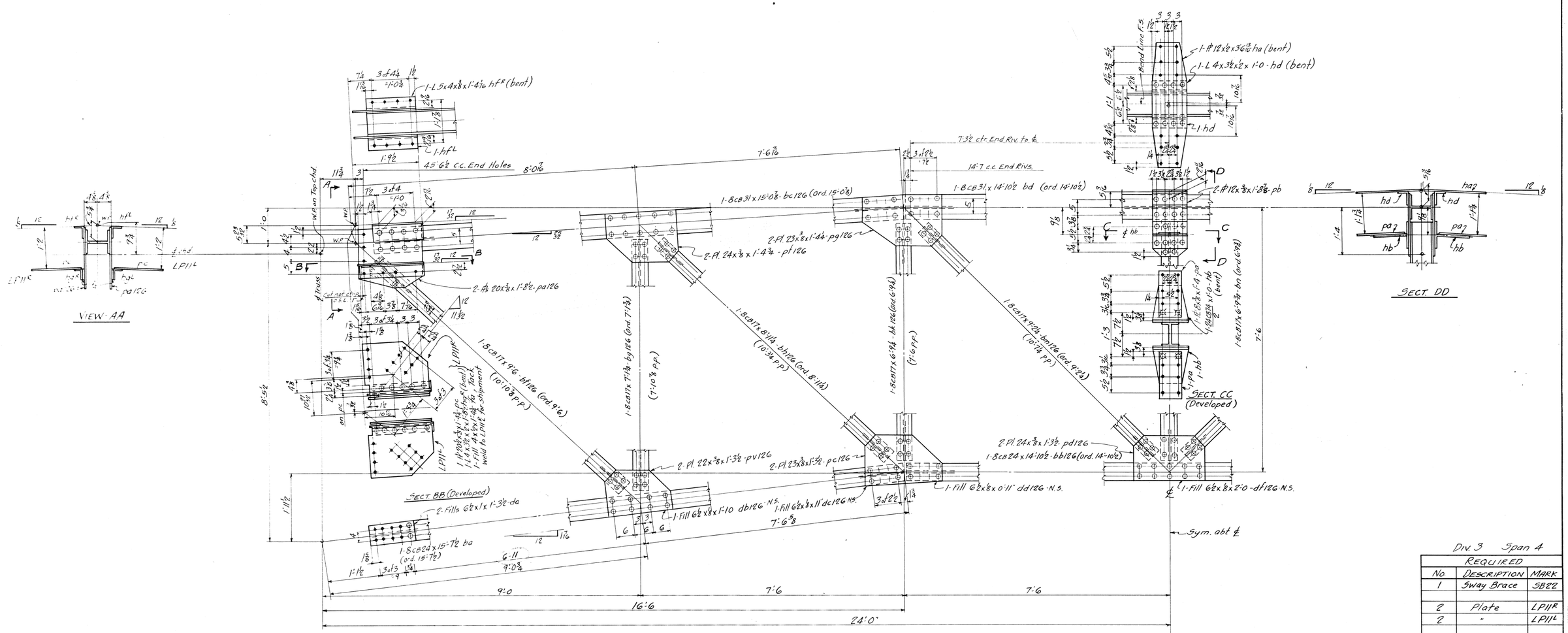
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

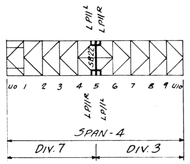
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR # 2
DRAW. MADE BY SJT DATE
DRAW. CHECKED BY ALC DATE 8-9-34

ORDER No. H2524
SHEET NO. 313





LOCATION DIAGRAM

Div. 3 Span 4

REQUIRED		
No.	DESCRIPTION	MARK
1	Sway Brace	SB22
2	Plate	LP11R
2	"	LP11L

MATERIAL: [illegible] Steel [illegible] A.S.T.M. 47-[illegible]
Carbon Steel [illegible]
SPECIFICATIONS: Section by Wilbur
H. Watson & Associates [illegible] Ohio State
Highway
INSPECTION: James H. Harron Co.
ERECTION: A. B. Co.
RIVETS: 3/4 ϕ unless noted
OPEN HOLES: 13/16 ϕ unless noted
REAMING: All holes punched full size except in material more than 3/8 thick shall be drilled.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

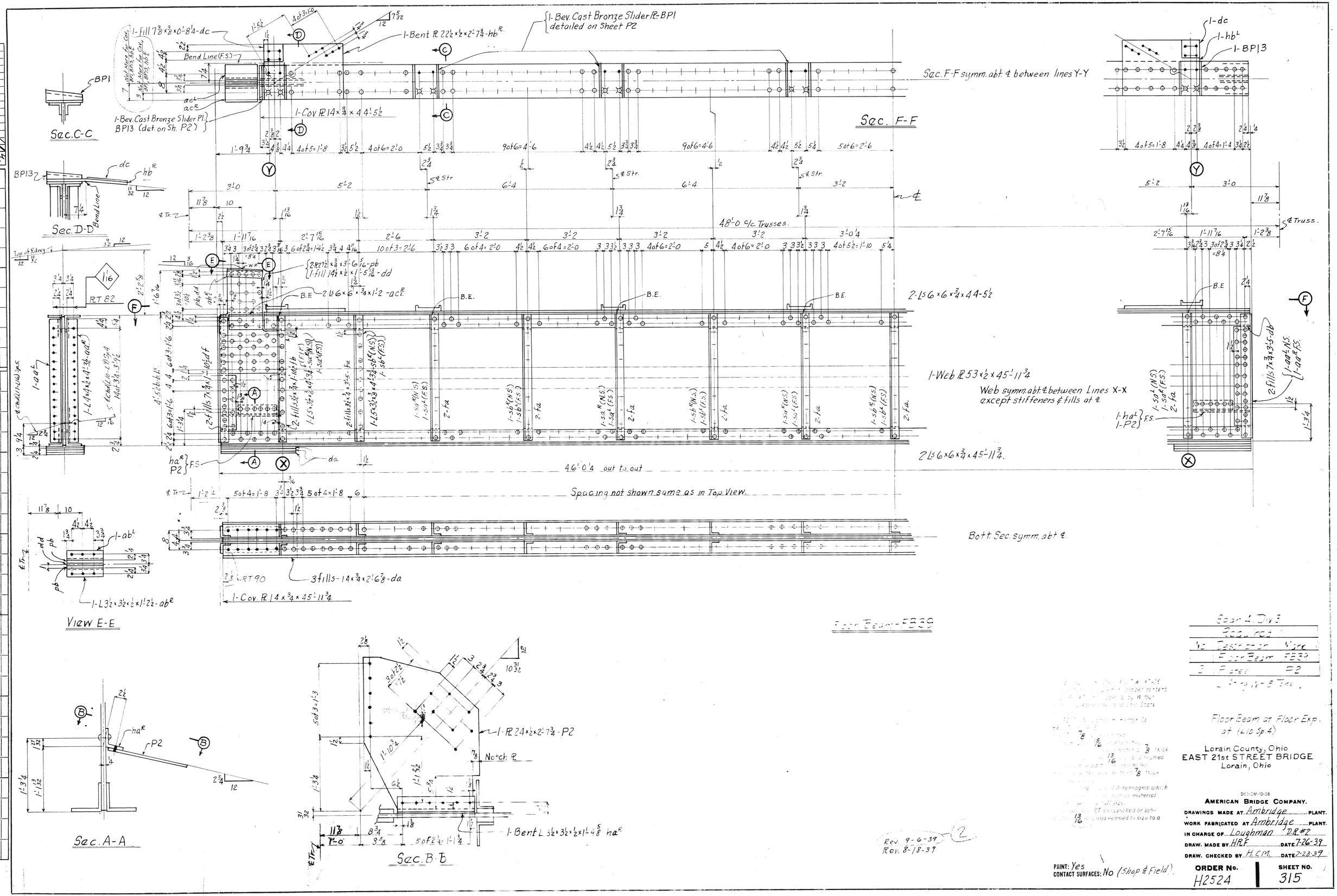
DESIGNED BY
AMERICAN BRIDGE COMPANY.

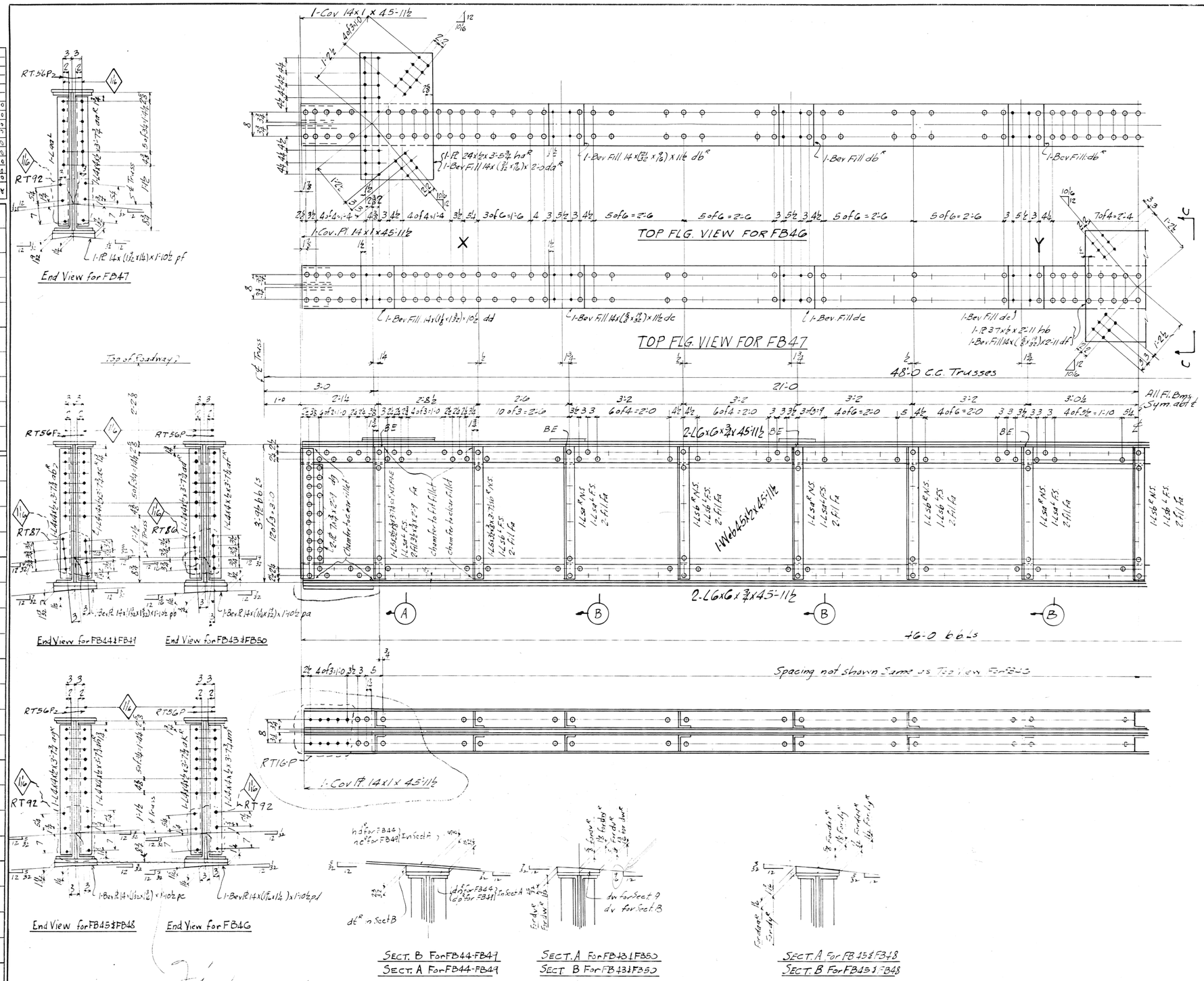
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY ALH DATE 7-25-39
DRAW. CHECKED BY O.G.E. DATE 7-31-39

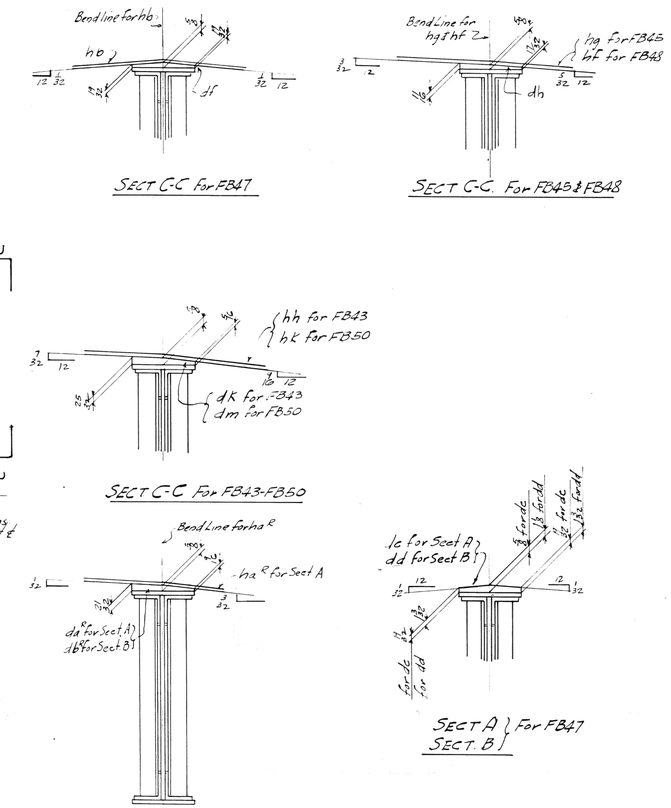
PAINT: Yes
CONTACT SURFACES: No, shop & Field

ORDER No. H2524

SHEET NO. 314


Sec. C-C
Sec. D-D
Sec. F-F
View E-E
Sec. A-A
Sec. B-B
Sec. F-F symm. abt. ℄ between lines Y-Y
48'-0 c/c Trusses.
46'-0 1/4 out to out
Spacing not shown same as in Top View.
Bott. Sec. symm. abt ℄
2-Ls 6×6×3/4×44-5 1/2
1-Web Pl 53×1/2×45'-11 3/4
Web symm. abt ℄ between Lines X-X except stiffeners & fills at ℄
2 Ls 6×6×3/4×45'-11 3/4.
1-Cov. Pl 14×3/4×45'-11 3/4
3 fills-14×3/4×2'-6 7/8-da
1-Bent Pl 22 1/2×1/2×2'-7 3/4-hb R
1-Bev. Cast Bronze Slider Pl-BP1 detailed on Sheet P2
1-Bev. Cast Bronze Slider Pl BP13 (det. on Sh. P2)
1-Cov. Pl 14×3/4×4 4'-5 1/2
1-Bent Pl 24 1/2×1/2×2'-7 3/4-P2
Notch Pl
1-Bent L 5 1/2×3 1/2×1/2×1'-4 5/8 ha R
Floor Beam-FB39
Floor Beam at Floor Exp. at (L16 Sp.4)
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY H.R.F. DATE 7-26-39
DRAW. CHECKED BY H.C.M. DATE 7-28-39
ORDER No. H2524
SHEET NO. 315
PAINT: Yes
CONTACT SURFACES: No (Shop & Field).
Rev. 9-6-39
Rev. 8-18-39
Span 4, Div 3
Floor Beam-FB39
Floor Beam
P2





Span 3	Span 4	REQUIRED		
Div.	Div.	No.	Floor Beam	Mark
			Floor Beam	FB43
			"	FB44
			"	FB45
		2	"	FB46
			"	FB47
			"	FB48
			"	FB49
			"	FB50

Mark Sheet 2 Bolts together

MATERIAL Unless noted A.S.T.M. A7-38
Copper bearing 0.20% min. copper content
SPECIFICATIONS Specific. by Wilbur Watson & Associates, 61st Drive South Highway
INSPECTION Homes & Hurron Co.
ERECTION A.B.Co.
RIVETS 7/8" unless noted
OPEN HOLES 13/16" unless noted
REAMING All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

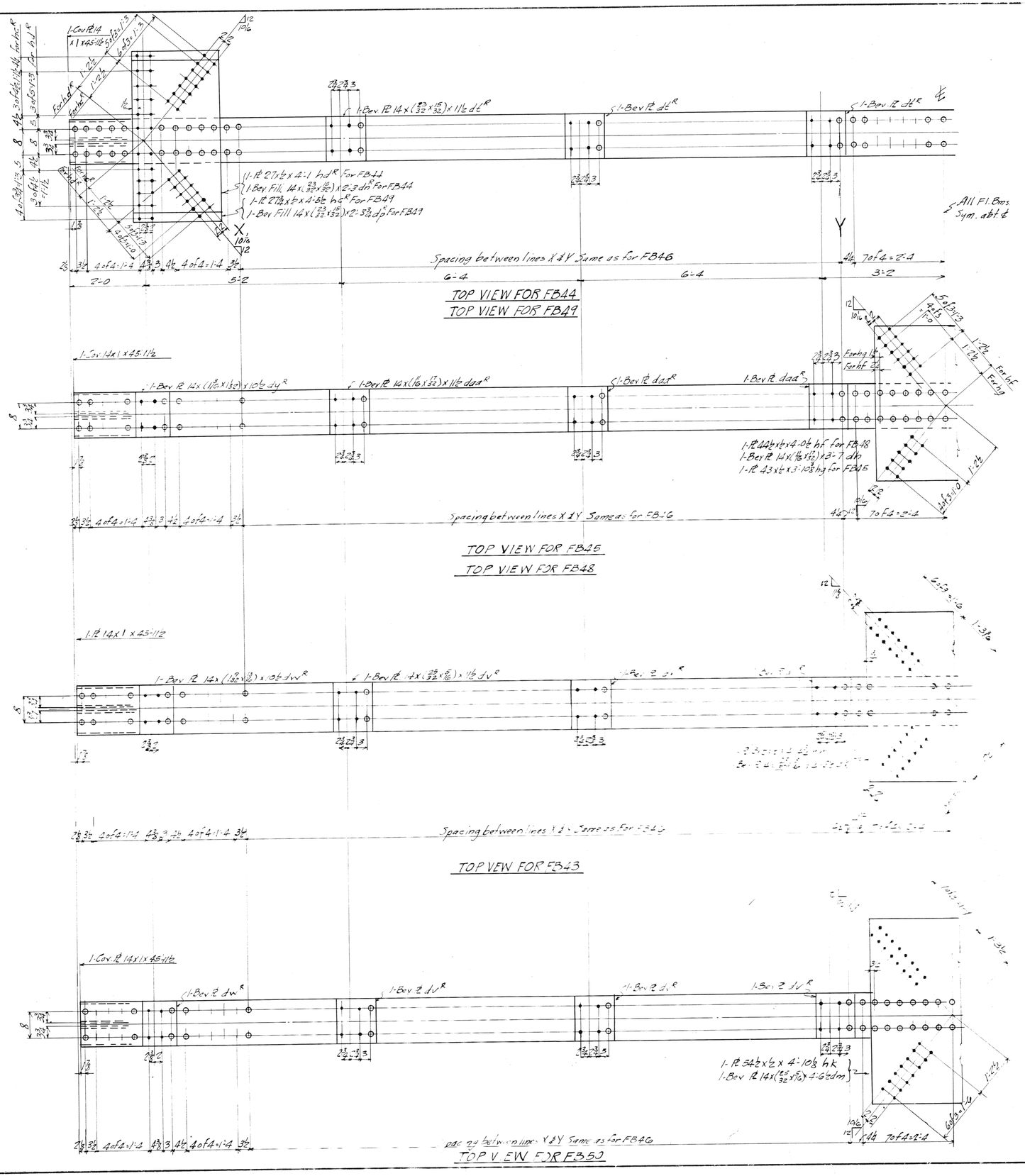
Floor Beams Span 4

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Laughman D.R. #2
DRAW. MADE BY JR DATE 7-28-39
DRAW. CHECKED BY H.K.M. DATE 8-2-39

ORDER No. H2524
SHEET NO. 316AB

(3) Rev. 8-25-39



Floor Beams Span 4

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain Ohio

D63-2M-10-38

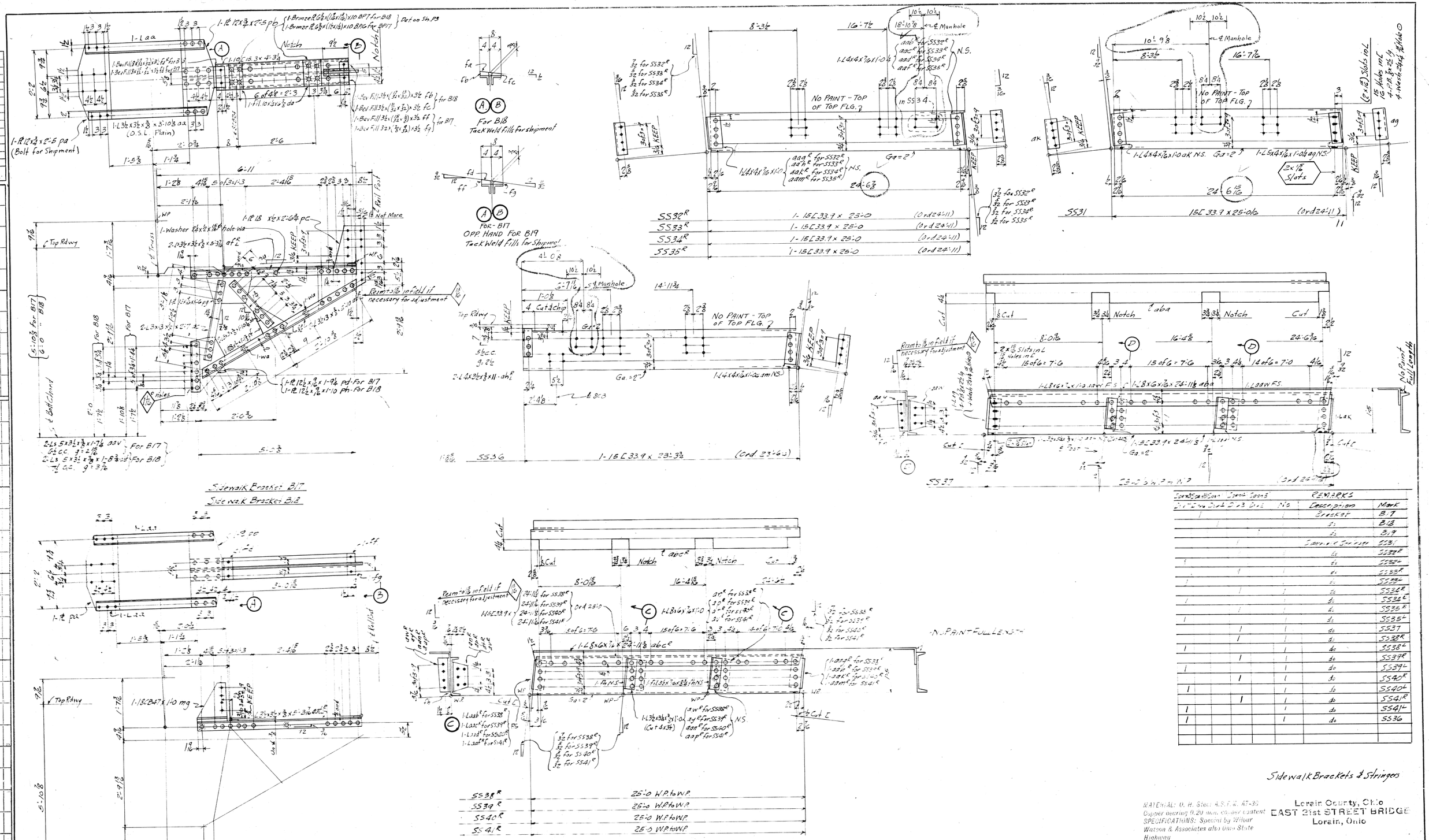
AMERICAN BRIDGE COMPANY.

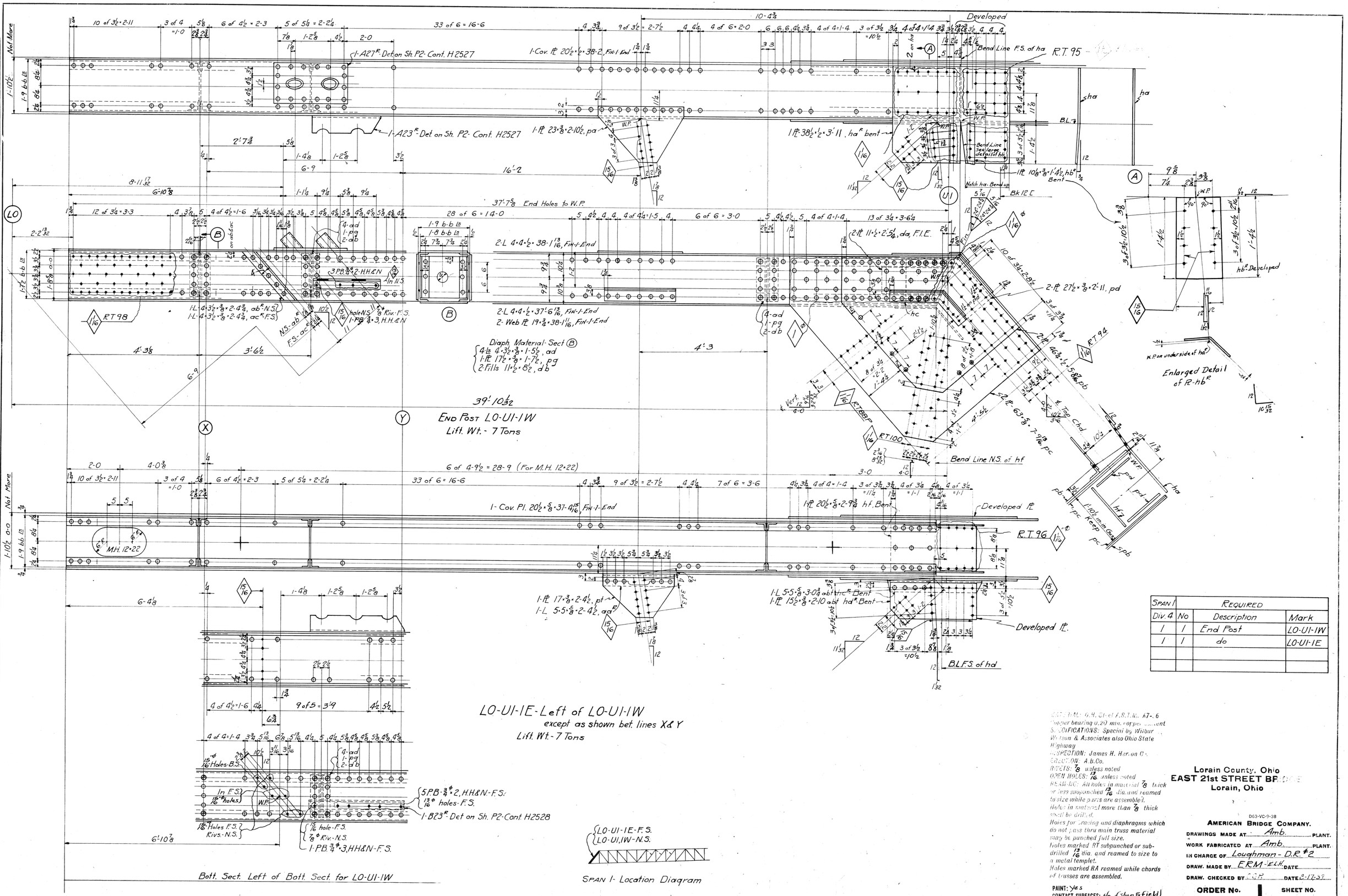
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Lorraman O.R.#1
DRAW. MADE BY JR DATE 7-31-39
DRAW. CHECKED BY H.C.Ma DATE 8-2-39

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524

SHEET NO. 316B


Sidewalk Bracket: B17
Sidewalk Bracket: B18
Sidewalk Bracket - B19
(Parts not shown Same as B17)
Sidewalk Brackets & Stringers
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specimen by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than 3/4 thick shall be drilled.
PAINT: Yes Unless Noted
CONTACT SURFACES: No (Shop & Field)
D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JCR DATE 8-4-39
DRAW. CHECKED BY H.C.M. DATE 8-13-39
ORDER No. H2524
SHEET NO. 317
Rev. 9-1-39.
Adv. Bill pages 118, 328, 406, 602
REMARKS
Description
Mark
Bracket B17
B18
B19
Stringer S331
S538R
S539L
S540R
S540L
S541R
S541L
S536



SPAN 1		REQUIRED	
Div. 4	No	Description	Mark
1	1	End Post	L0-U1-1W
1	1	do	L0-U1-1E

MATERIAL: 6.4. Steel of A.S.T.M. A7-.6
Rivet bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Harron Co.
FABRICATION: A.B.Co.
BOLTS: ⅞ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

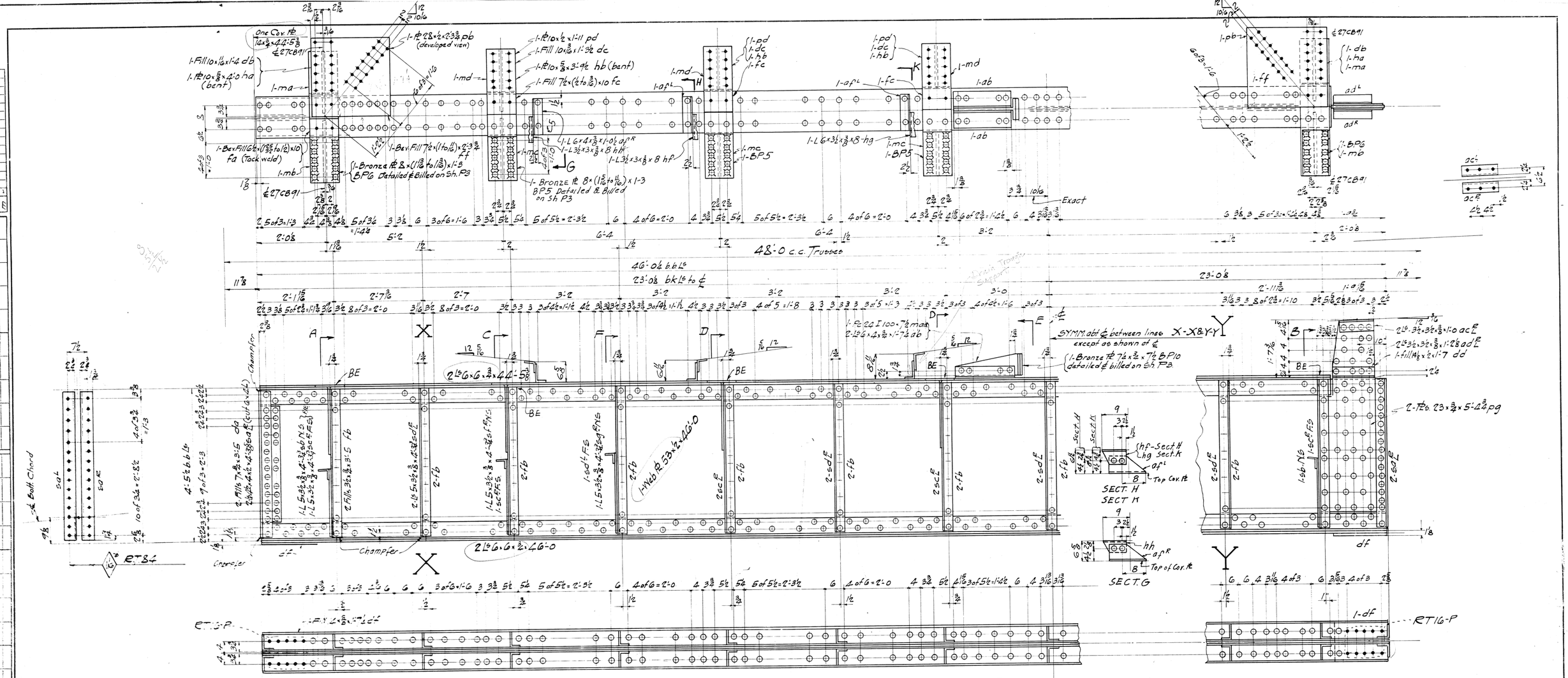
PAINT: Yes
CONTACT SURFACES: No (Shop & field) except members permanently bolted are to be painted.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.R. #2
DRAW. MADE BY ERM-ELH. DATE
DRAW. CHECKED BY CGR DATE 8-17-38

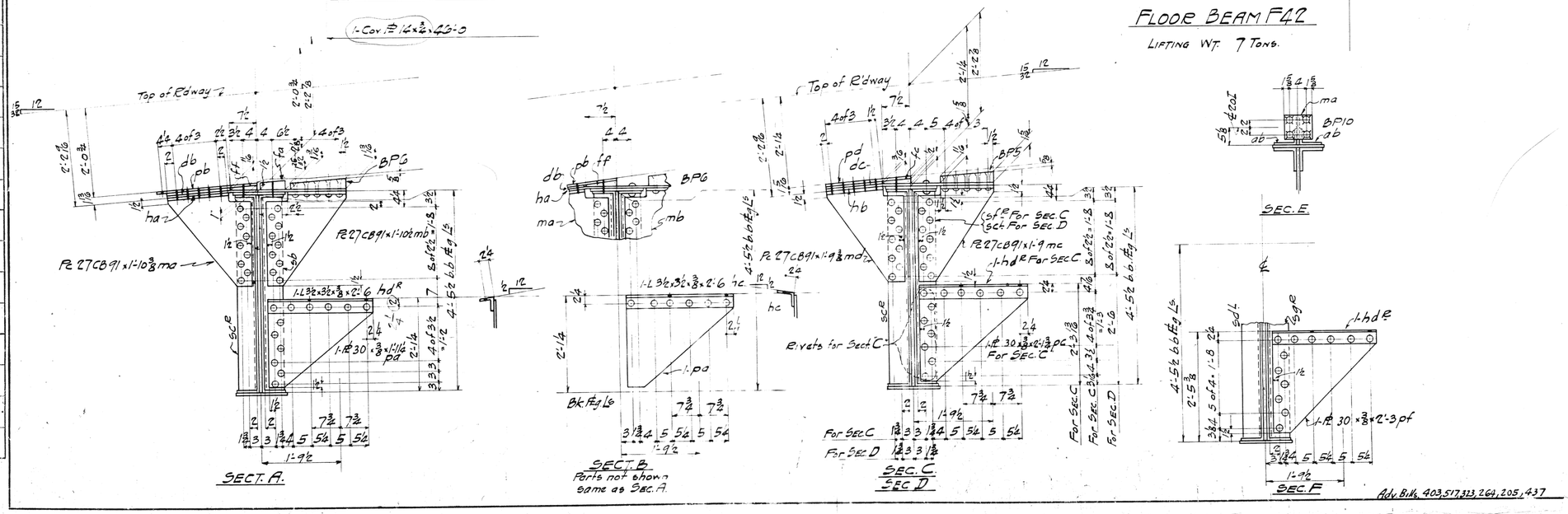
ORDER No. H2524
SHEET NO. 401

Adv. bill P.416



FLOOR BEAM F42

LIFTING WT. 7 TONS.



DIV. 4 SPAN 1.

REQUIRED		
No.	Description	Mark
1	FLOOR BEAM	FB42

MATERIAL: P.F. St. [illegible] % of [illegible] [illegible] to 0.20 min. copper [illegible] % 30 min. Tests: [illegible] special [illegible] Wilbur Watson & Associates also Ohio State [illegible]
Painting: [illegible]
Fire [illegible] B.O.
RIVETS: ⅞ unless noted. Open Holes: 15/16" unless noted
Ball Nut: All holes in main truss [illegible] ⅞ thick [illegible] 1⅛ [illegible] and reamed to size. Holes in material more than ⅞ thick shall be drilled.
Holes for Longitudinal and diaphrams which do not pass through main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 1/16 dia. and reamed to size to a metal template.

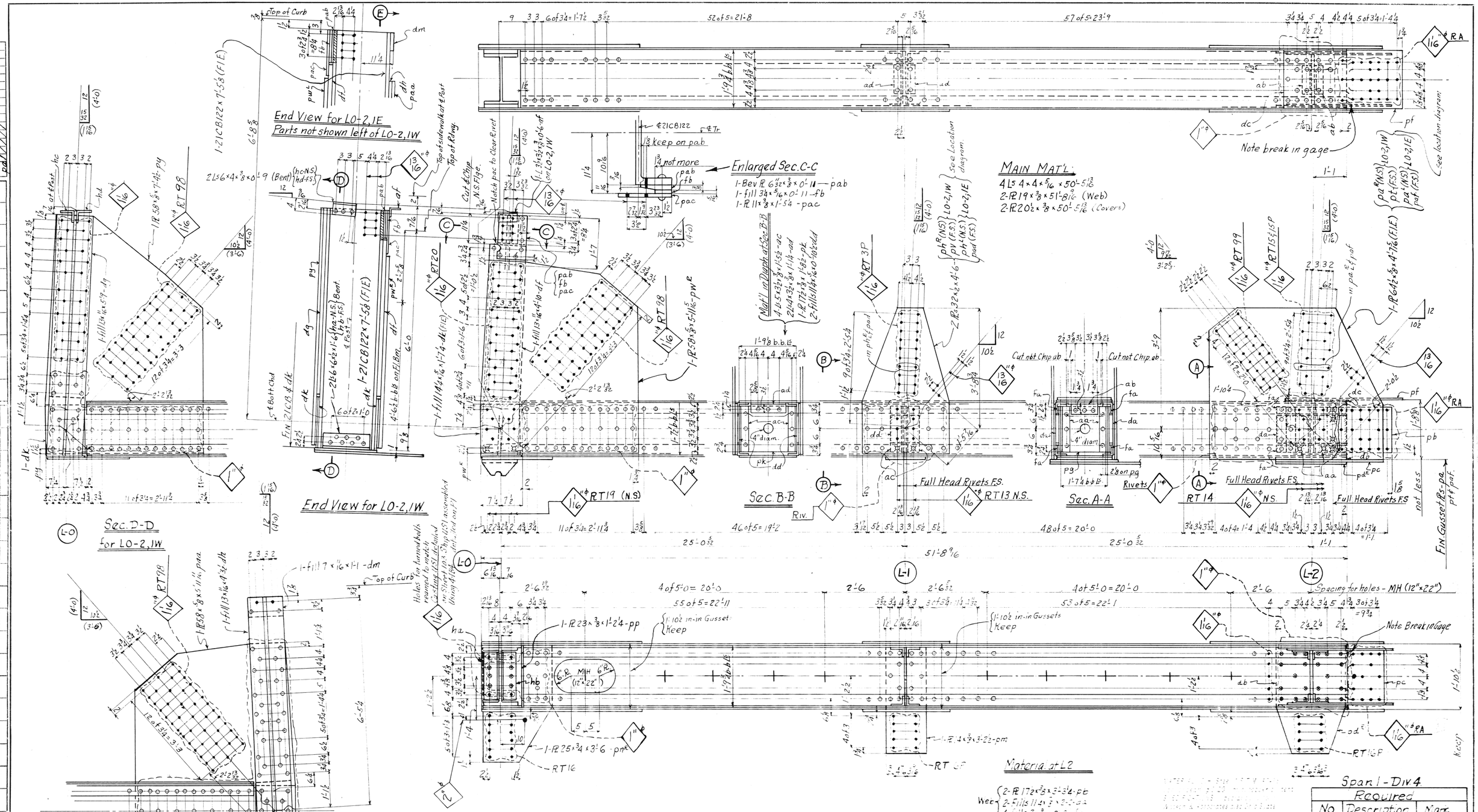
PAINT: Yes.
CONTACT SURFACES: No. Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
DESIGNED BY
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No 2
DRAW. MADE BY E.R.Y. HEL DATE 7-27-39
DRAW. CHECKED BY A.B. H.C.P.L. DATE 8-7-39

ORDER No. H2524
SHEET NO. 402

Adv. Bills, 403, 517, 313, 264, 205, 437



Span 1 - Div 4

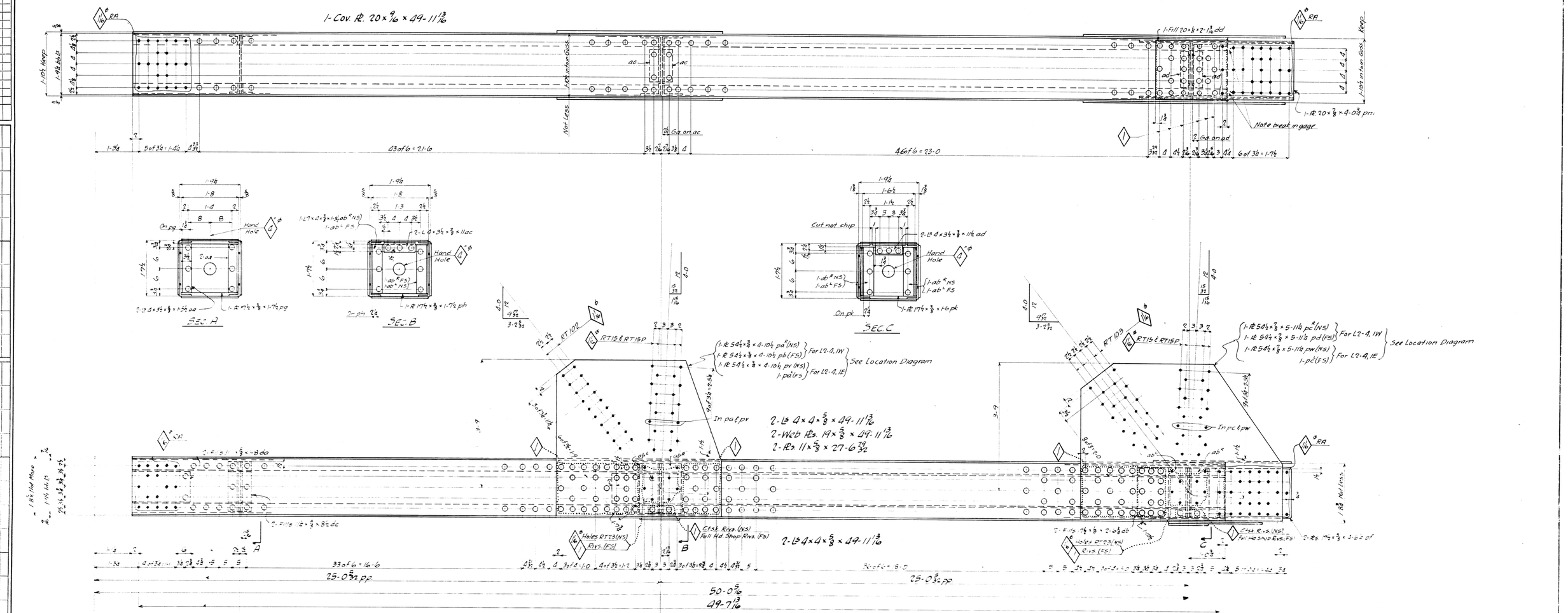
Required		
No	Description	Mark
1	Bottom Chord	LO-2,1W
1	do	LO-2,1E

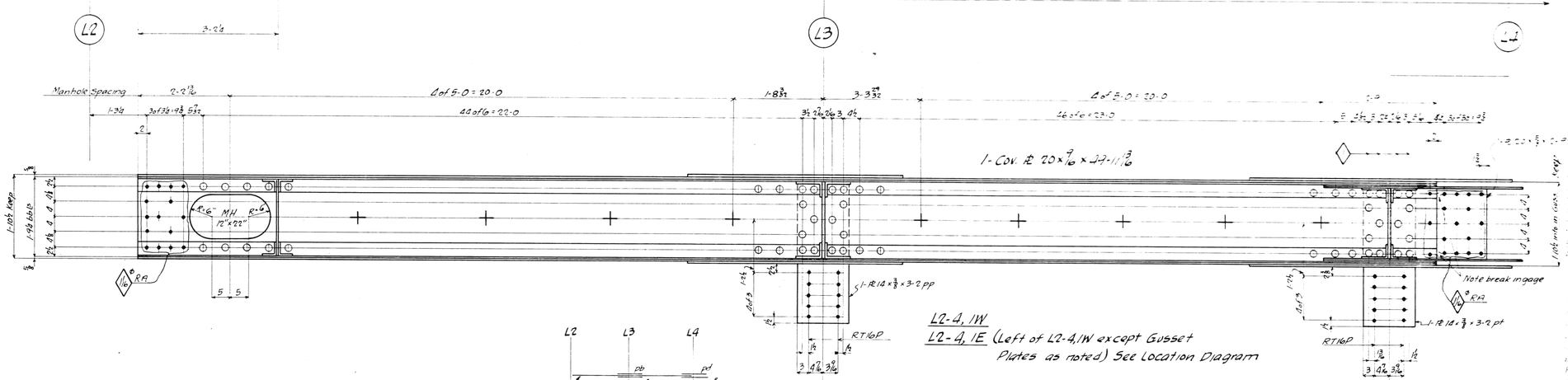
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
DESIGNED BY
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY HRF DATE 8-2-39
DRAW. CHECKED BY DATE

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524
SHEET NO. 403





SPAN #1 - DIV. 2		
REQUIRED		
No.	Description	Mark
	Bottom Chord	L2-4, 1W
	"	L2-4, 1E

L2-4, 1W
L2-4, 1E (Left of L2-4, 1W except Gusset Plates as noted) See Location Diagram

LIFTING WGT. - 8 TONS

LOCATION DIAGRAM FOR GUSSET PLATES

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

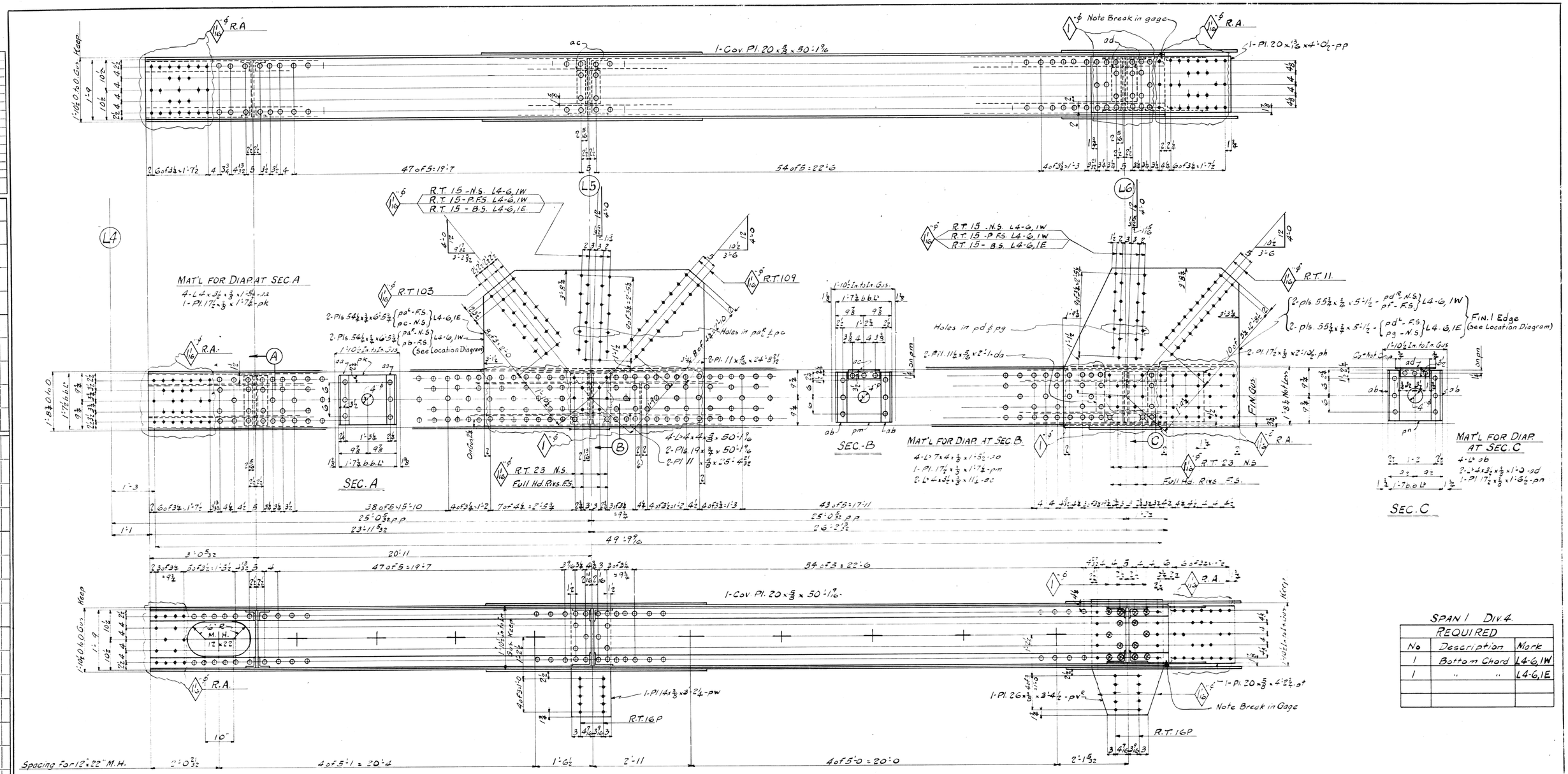
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - DR #2
DRAW. MADE BY WHK DATE 8-4-39
DRAW. CHECKED BY DATE

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

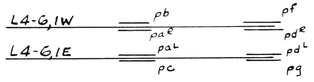
ORDER No. H2524
SHEET NO. 404

Adv. Bill Page-411



SPAN 1 DIV. 4.

REQUIRED		
No	Description	Mark
1	Bottom Chord	L4-6, 1W
1	" "	L4-6, 1E



LOCATION DIAGRAM

L4-6, 1W

L4-6, 1E - Left of L4-6, 1W except Pls. pc & pg - See Location Diagram

Lift Wt = 10 Tons.

PAINT: Yes.
CONTACT SURFACES: No. (Shop & Field)

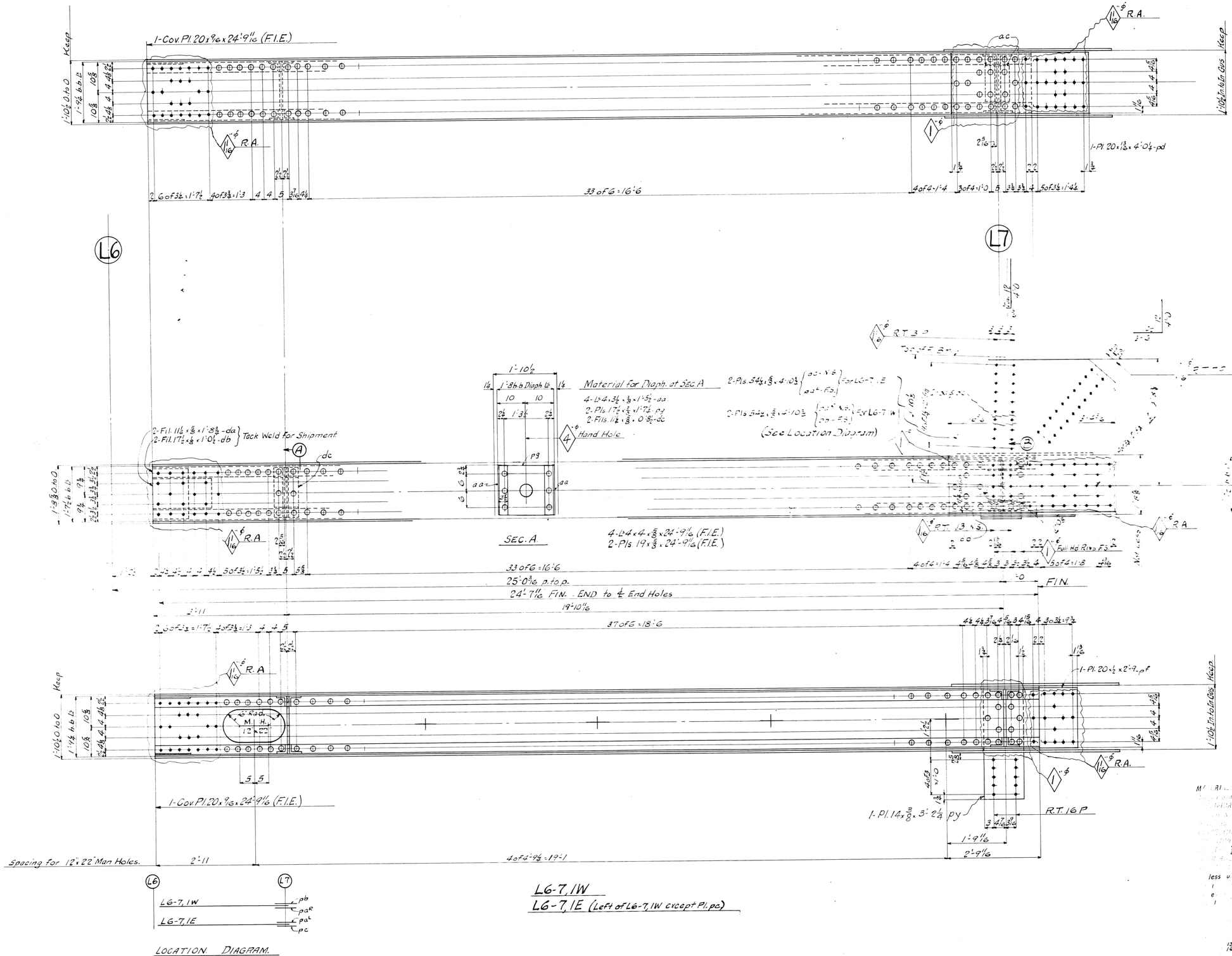
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY RW DATE 8-3-39
DRAW. CHECKED BY DATE

ORDER No. H2524 | SHEET NO. 1405



L6-7,1W
L6-7,1E (Left of L6-7,1W except Pl.pc)

DIVISION 4 SPAN 1

REQUIRED		
No	Description	Mark
1	Bottom Chord	L6-7,1W
1	" "	L6-7,1E

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

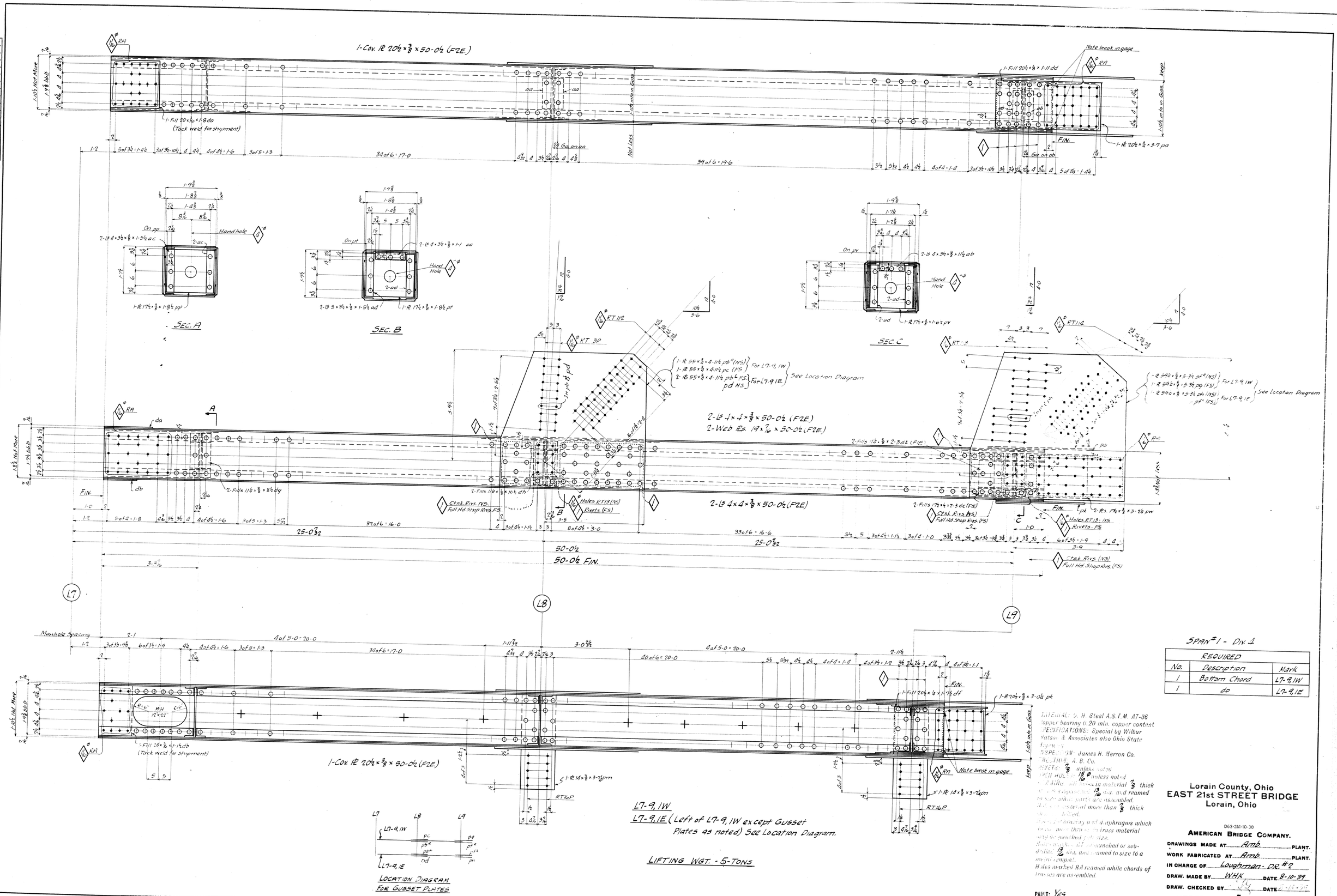
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY RW DATE 8-8-39
DRAW. CHECKED BY DATE

PAINT: Yes
CONTACT SURFACES: No. (Shop & Field)

ORDER No. H2524

SHEET NO. 406



SPAN #1 - Div. 1

REQUIRED		
No.	Description	Mark
1	Bottom Chord	L7-9, 1W
1	do	L7-9, 1E

MATERIAL: S. H. Steel A.S.T.M. A7-36 copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
FABRICATION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
Holes in drawing all drilled in material ⅞ thick or less subpunched 1/16 dia. and reamed to size when parts are assembled.
Holes in material more than ⅞ thick subpunched.
Holes in floorbeams and diaphragms which are more than 50 in. from material subpunched full size.
Holes in floor beams all subpunched or subdrilled 13/16 dia. and reamed to size to a mean template.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

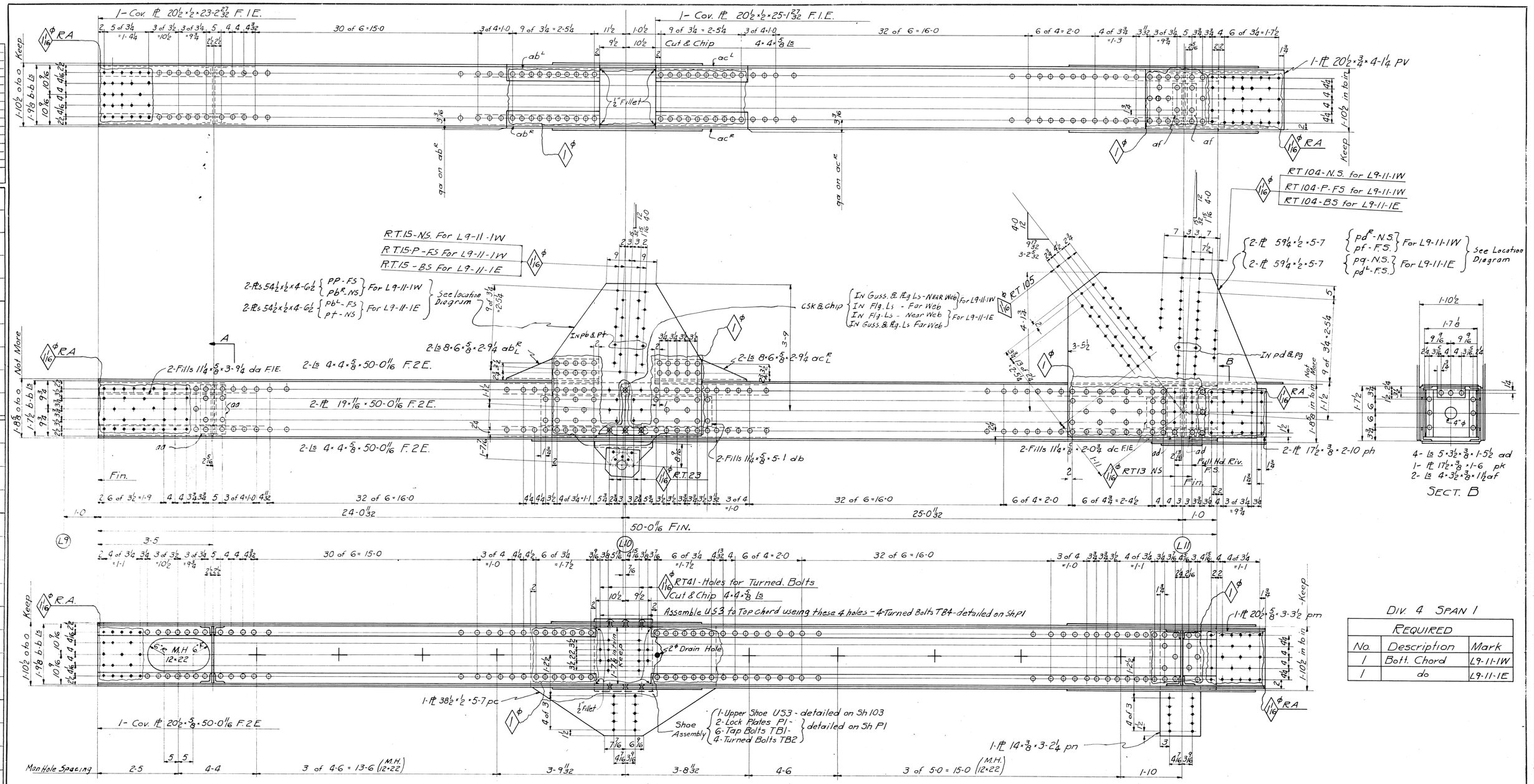
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - Dr. #2
DRAW. MADE BY WHK DATE 8-10-39
DRAW. CHECKED BY DATE

ORDER No. H2524
SHEET NO. 407



DIV. 4 SPAN 1

REQUIRED		
No.	Description	Mark
1	Bott. Chord	L9-11-1W
1	do	L9-11-1E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

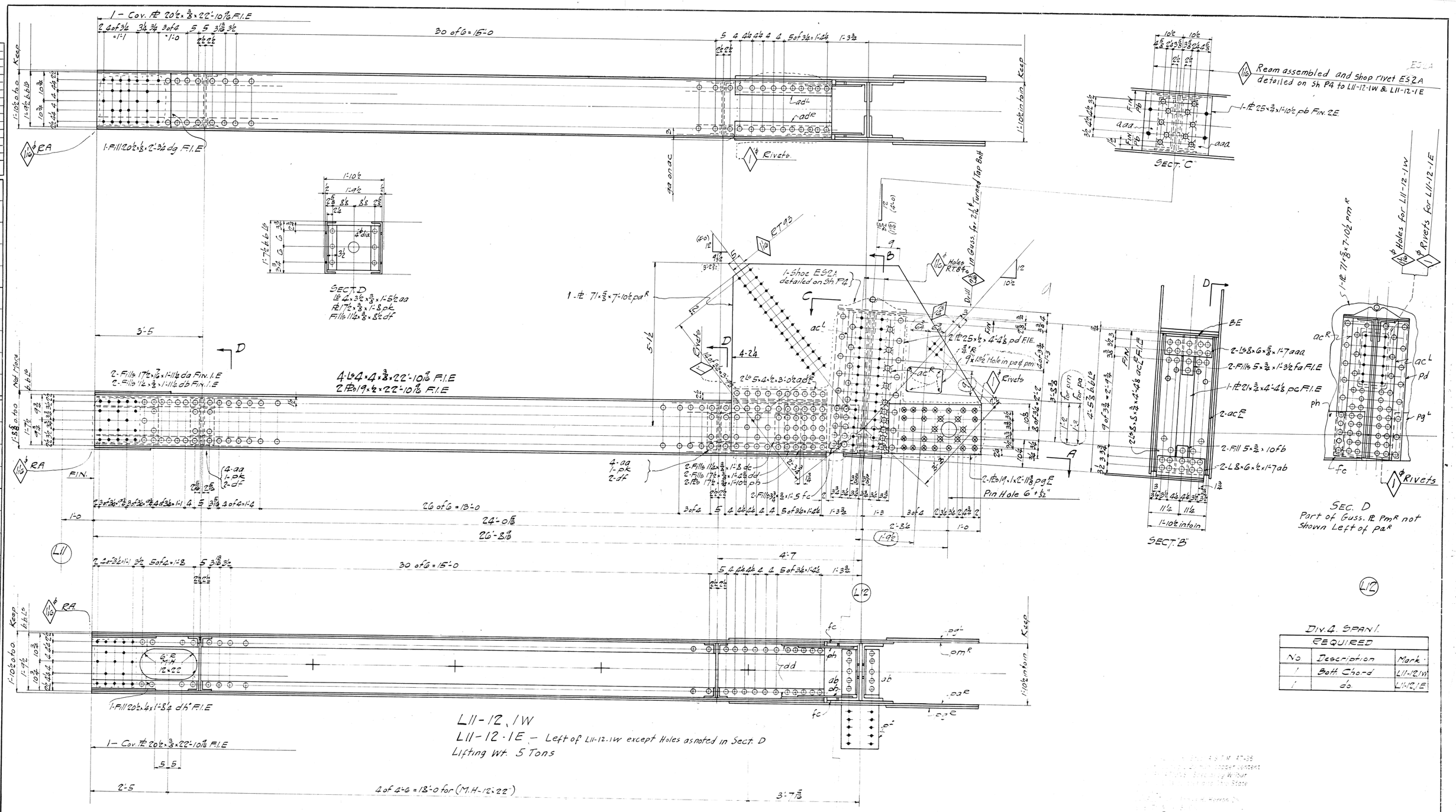
PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HEL-ELH DATE 8/9/39
DRAW. CHECKED BY DATE 7-16-39

ORDER No. H2524
SHEET NO. 408

Adv. Bill. Pg. 420



Div. 4. Span 1.

REQUIRED		
No	Description	Mark
1	Bott. Chord	L11-12.1W
1	do	L11-12.1E

Adv. Bill Pg 421, 4 New Sheet.

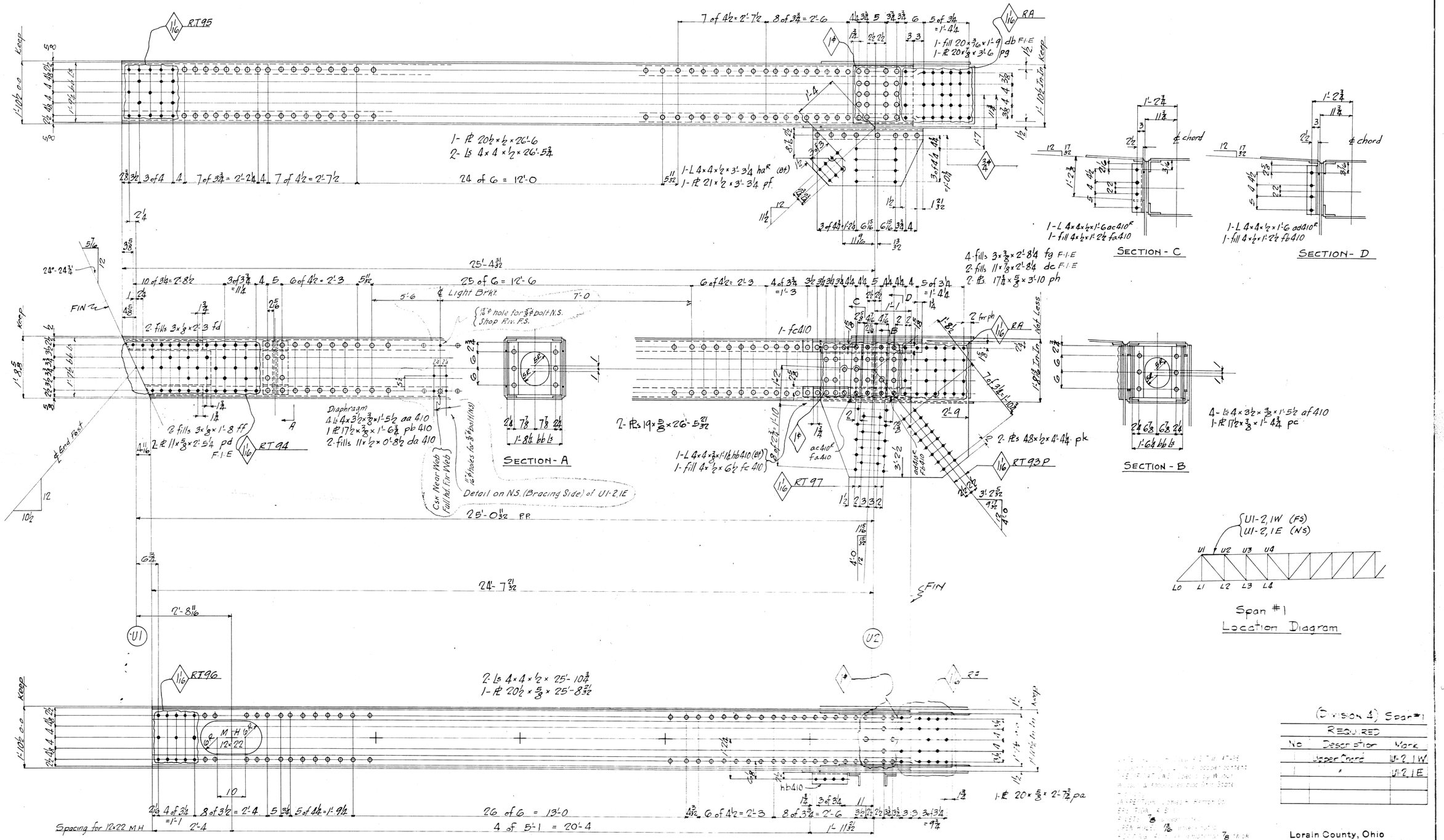
Rev. 10-30-39

PAINT: Yes.
CONTACT SURFACES: No. Shop & Field.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY HEL DATE 8-7-39
DRAW. CHECKED BY RD DATE 8-17-39

ORDER No. H2524
SHEET NO. 409



U1-2, 1W

U1-2, 1E (Left) — {Except as shown for Light Bracket Conn.}

Rev. 8-18-39 (Light Conn.)

Adv. Bill Pg. 417

(Division 4) Span #1

REQUIRED		
No	Description	Mark
	Upper Chord	U1-2, 1W
	"	U1-2, 1E

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

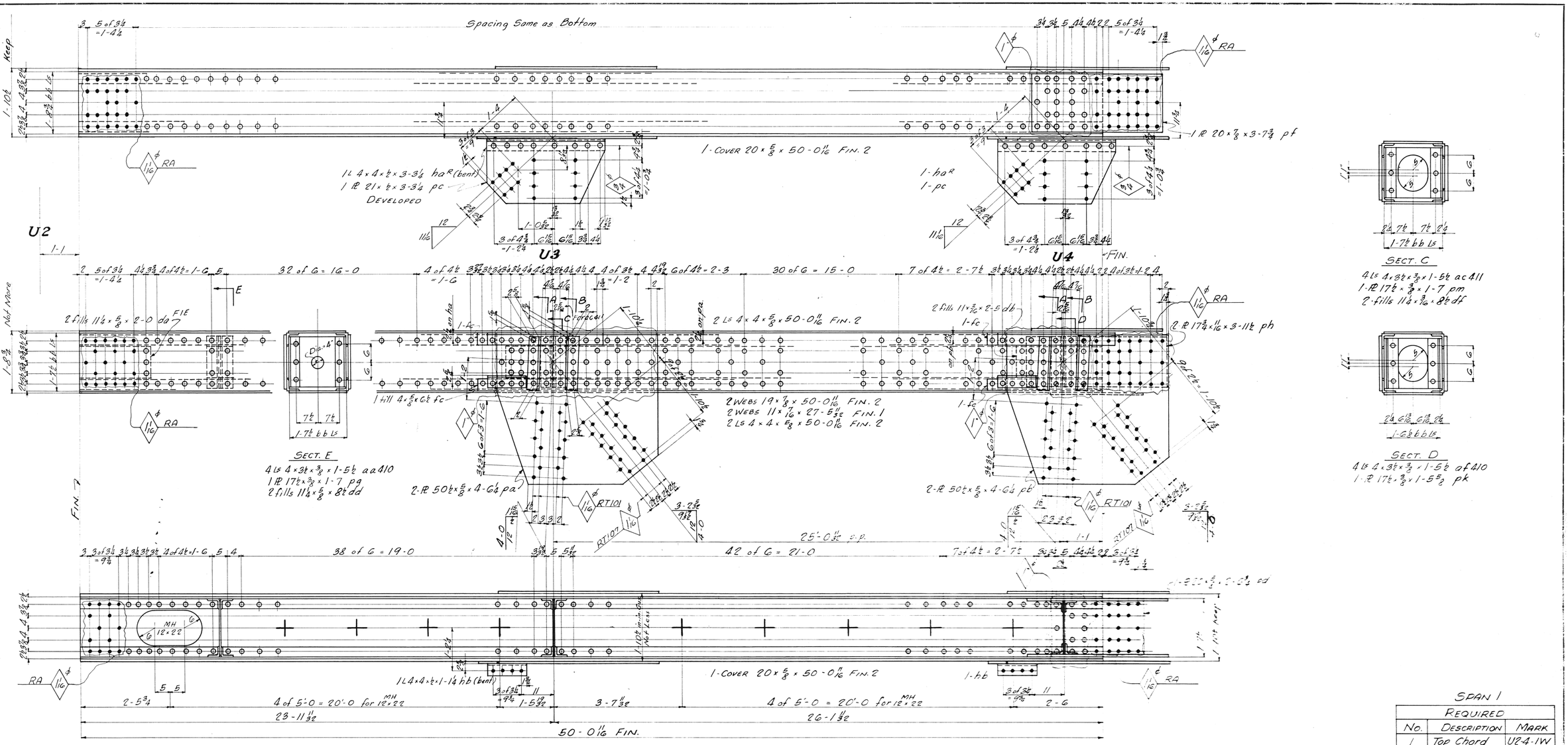
AMERICAN BRIDGE COMPANY.

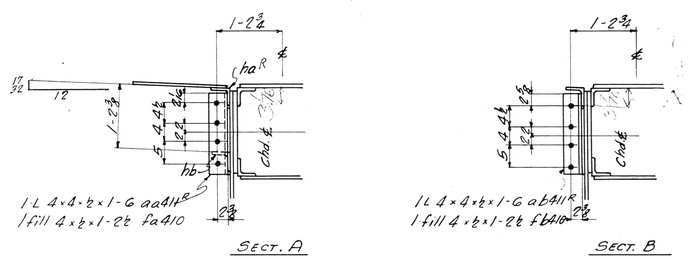
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman - D.R. #2
DRAW. MADE BY JEM DATE 8-4-39
DRAW. CHECKED BY ALC DATE 8-9-39

PAINT: Yes
CONTACT SURFACES: No.- Shop & Field

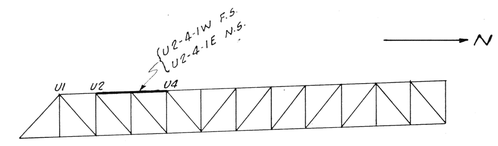
ORDER No. H2524

SHEET NO. 410





Top Chord U2-4-1W
" " U2-4-1E (Left)



Mat'l. on Adv. Bill No. 418

Span 1

Required		
No.	Description	Mark
1	Top Chord	U2-4-1W
1	" "	U2-4-1E

Lifting Wt. 9 Tons

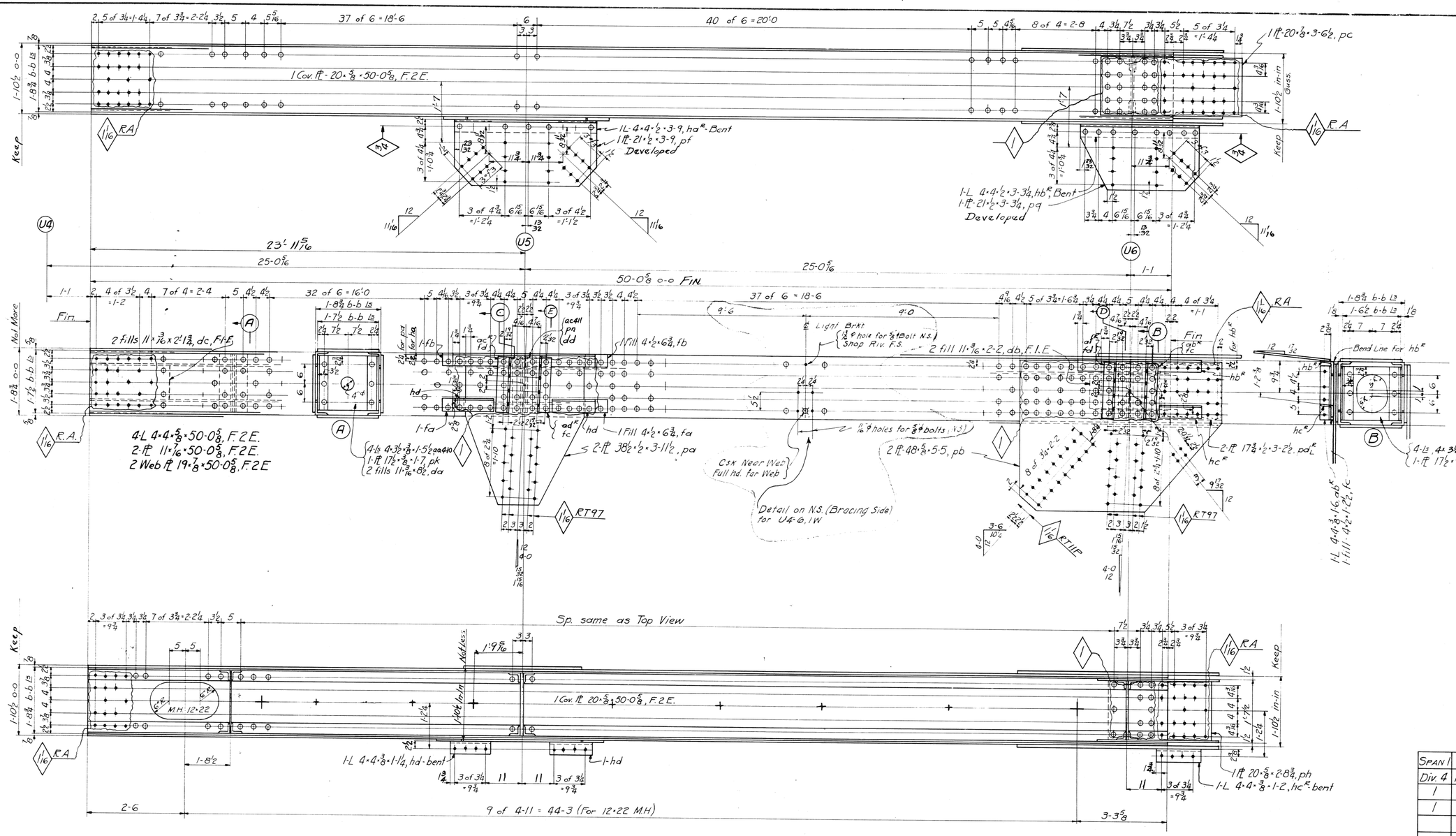
Material: U.S. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
Specifications: Special by Wilbur Watson & Associates also Ohio State
Erection: James H. Herron Co.
Paint: Red Lead & Co.
Rivets: 7/8" diameter unless noted
Bolts: 7/8" diameter unless noted
Bolts: 1" diameter unless in material 7/8 thick
Bolts: Shop assembled 13/16" dia. and reamed
Bolts: Field assembled parts are assembled.
Bolts: In material more than 7/8 thick
Bolts: Fitted
Bolts: Connecting angles and diaphragms which pass through chords or truss material are marked in shop full size.
Bolts: Marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a template.
Bolts: Marked RA reamed while chords of truss are assembled

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

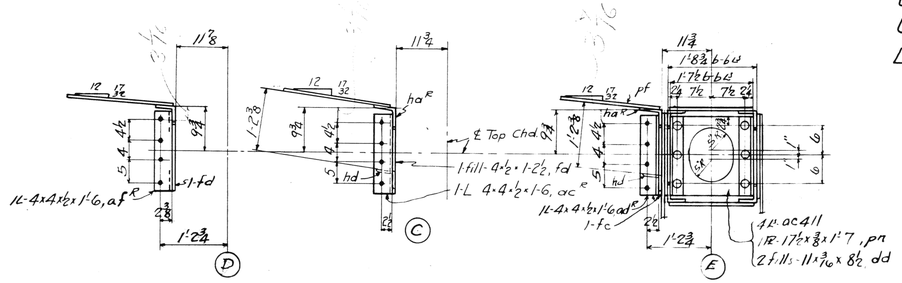
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE 8-9-39
DRAW. CHECKED BY ALC DATE 8-10-39

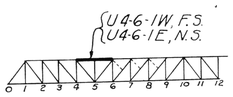
ORDER No. H2524
SHEET NO. 411



SPAN 1	REQUIRED		
Div. 4	No.	Description	Mark
1	1	Top Chord	U4-6, 1W
1	1	"	U4-6, 1E



U4-6, 1W
U4-6, 1E, Left - {Except as shown for Light Brkt. Conn.
Lift. Wt. - 8 Tons



SPAN 1
Location Diagram

MATERIAL: U. H. Steel A.S.T.M. A7-36 [illegible] bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur [illegible] & Associates also Ohio State [illegible]
FABRICATION: James H. Herron Co.
ERECTION: [illegible] Co.
[illegible] 7/8 φ [illegible]
[illegible] 13/16 φ [illegible]
[illegible] All pin material 7/8 thick [illegible] 13/16 dia. and reamed [illegible] when parts are assembled
[illegible] more than 7/8 thick [illegible]
[illegible] drawings which [illegible] brass material [illegible] be machined full size.
[illegible] punched AT subpunched or sub-drilled 13/16 dia. and reamed to size to a [illegible]
[illegible] RA reamed while chords of [illegible] are assembled

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

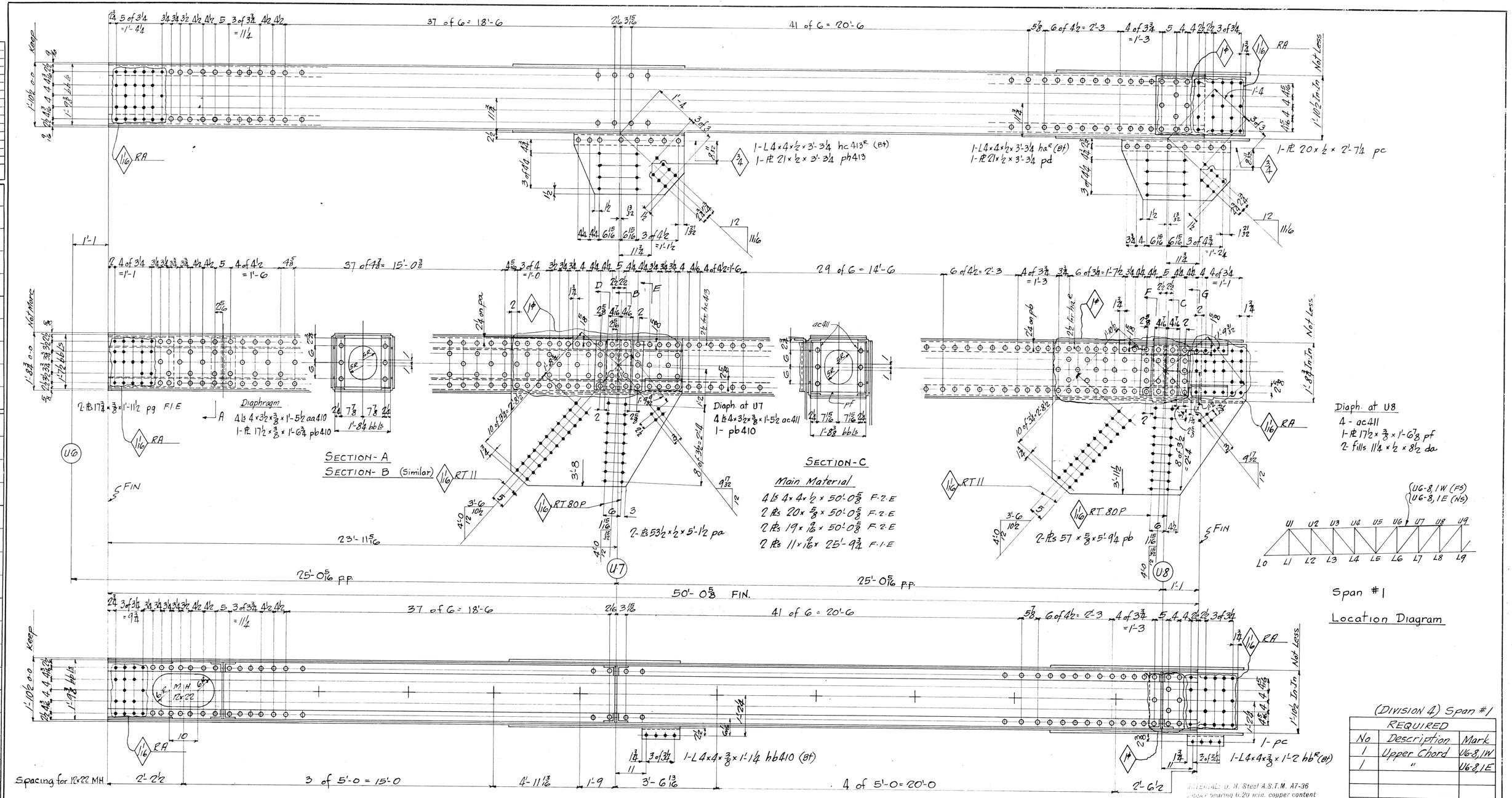
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.K. #2
DRAW. MADE BY E.R.M.-ELH DATE
DRAW. CHECKED BY ALC DATE 8-10-39

ORDER No. H2524 | SHEET NO. 412

Adv. Bill P.422



UG-8, 1W

UG-8, 1E (Left)

L. Wt. = 8 Tons

(DIVISION 4) Span #1

REQUIRED		
No	Description	Mark
1	Upper Chord	UG-8, 1W
1	"	UG-8, 1E

MATERIAL: U. H. Steel A.S.T.M. A7-36 copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS ⅞ unless noted
OPEN HOLES: 13/16 unless noted
Rivet holes all pl's in material ⅞ thick or less punched 13/16 dia. and reamed as the assembled parts are assembled.
Holes in material more than ⅞ thick shall be drilled.
Chord members and diaphragms which connect to truss material must be spaced full size.
Holes in chords, ST subpunched or subdrilled 13/16 dia. and reamed to size to a matching template.
Holes in web PA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Adv. Bill Pg. 423

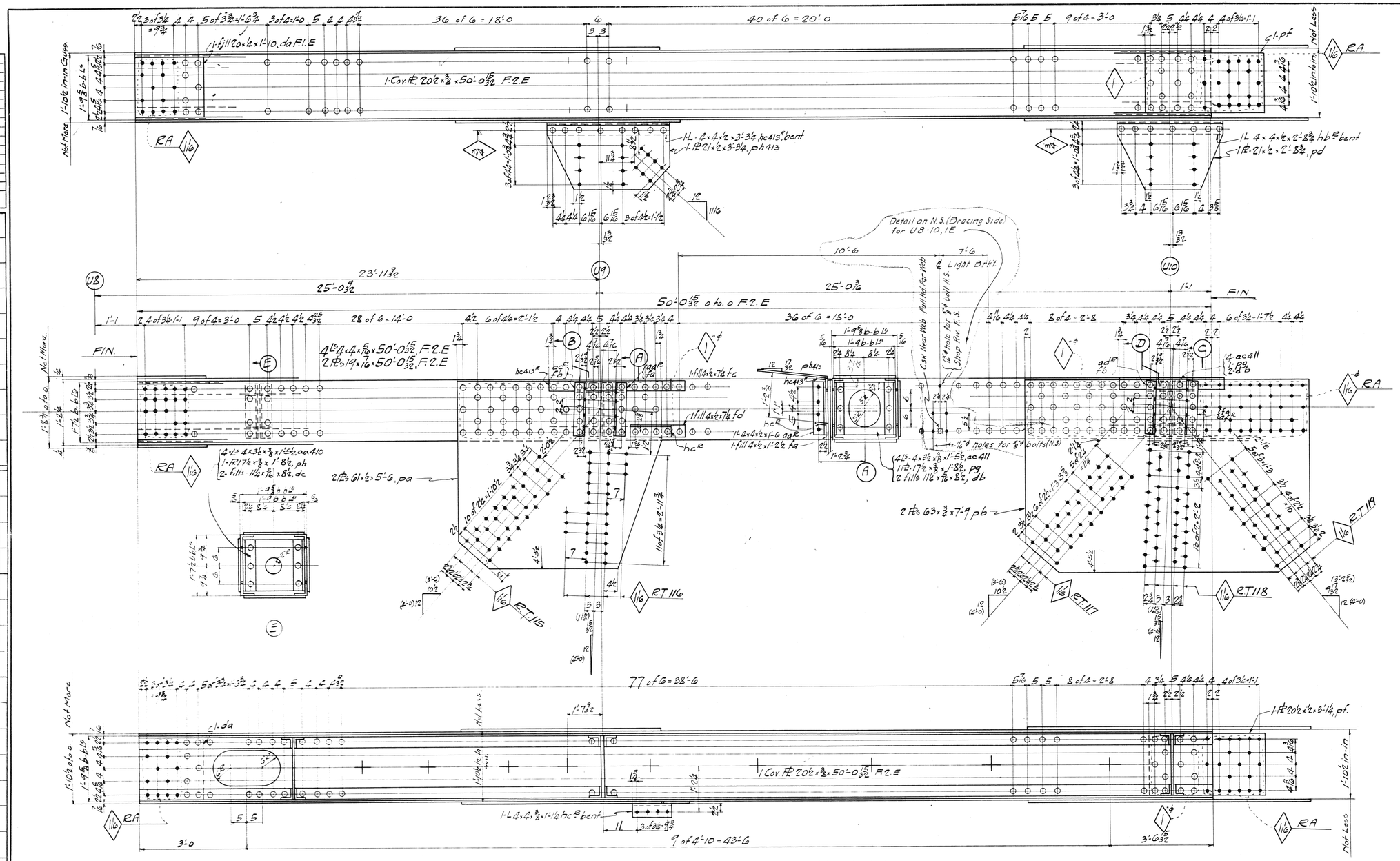
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

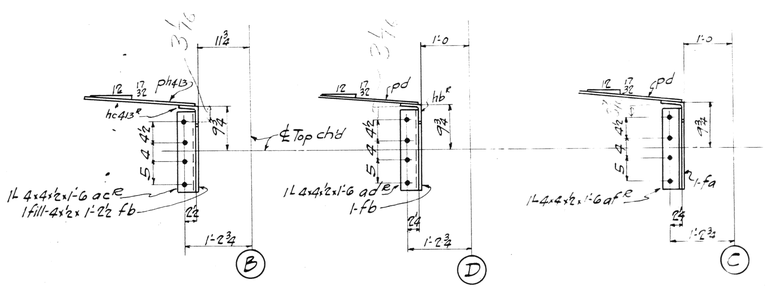
D63-2M-10-38

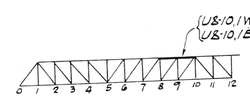
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JFM DATE 8-11-39
DRAW. CHECKED BY ALC DATE 8-14-39

ORDER No. H2524 | SHEET NO. 413







Span 1 - Location Diagram

U8-10, 1W
U8-10, 1E, Left - {Except as shown for Light Brkt. Conn.}
Lift Wt. - 6 Tons

Span 1		Required	
Div. 4	Total	Description	Mark
1	1	Top Chord	U8-10, 1W
1	1	do.	U8-10, 1E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shoot fitted)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

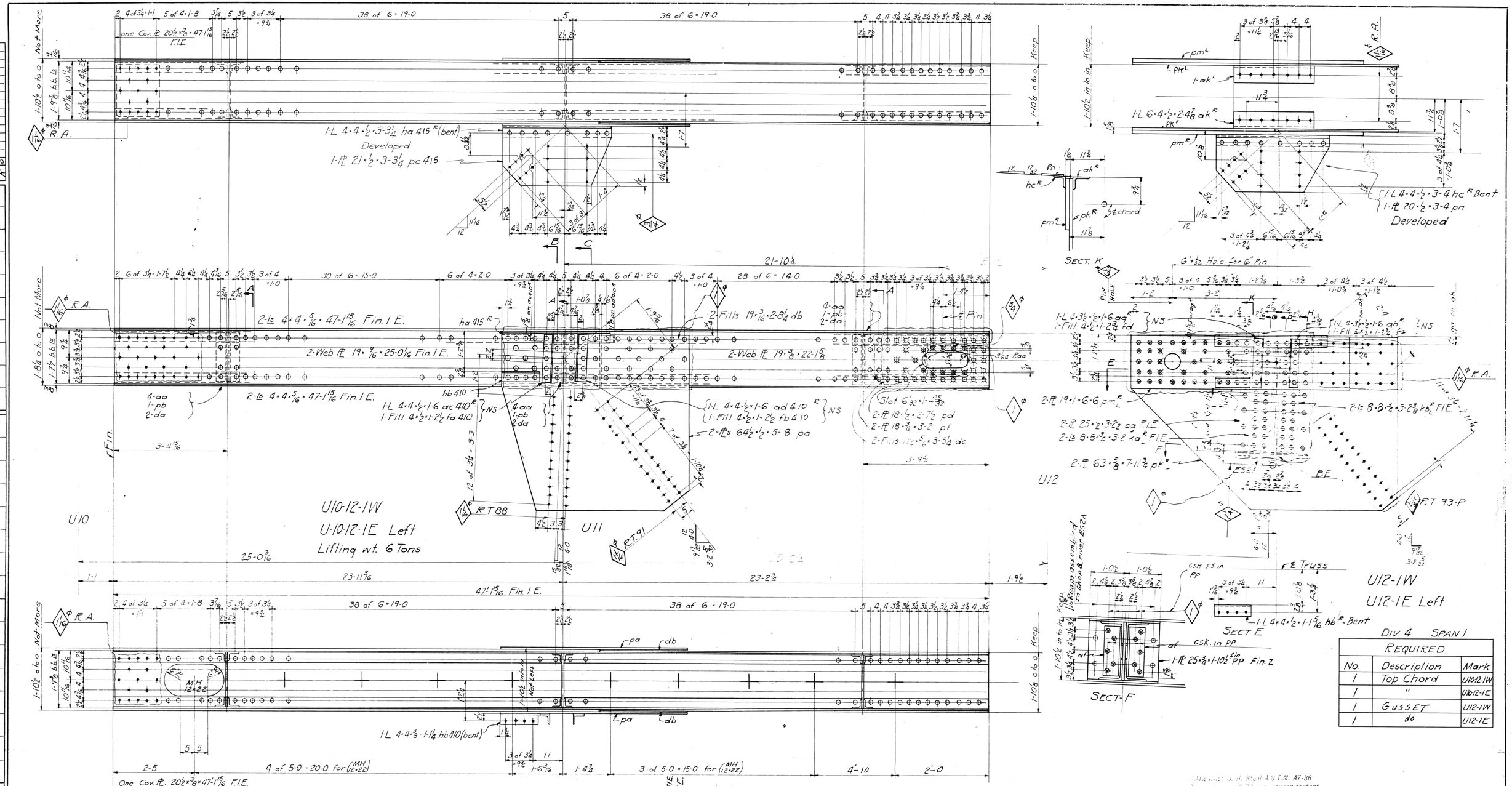
D63-2M-10-39

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY E.R.M. DATE 8-11-39
DRAW. CHECKED BY A.L.C. DATE 8-15-39

ORDER No. H2524
SHEET No. 414

Adv. Bill. Page 424, 438



DIV. 4 SPAN 1		
REQUIRED		
No.	Description	Mark
1	Top Chord	U10-12-1W
1	"	U10-12-1E
1	GUSSET	U12-1W
1	do	U12-1E

STRUCTURAL STEEL: A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specifying Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTORS: T. B. Co.
RIVETS: 7/8" high strength
OPEN HOLES: 13/16" ø. Pins in material 7/8" thick or less punched 13/16" dia. and reamed to size while parts are assembled. Holes in material more than 7/8" thick drilled 13/16" dia.
Holes in floor beams and diaphragms which connect to truss material may be punched full size.
Holes in floor BT stringers and subdeck, 13/16" dia. and reamed to size to a snug fit.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No Shop & Field

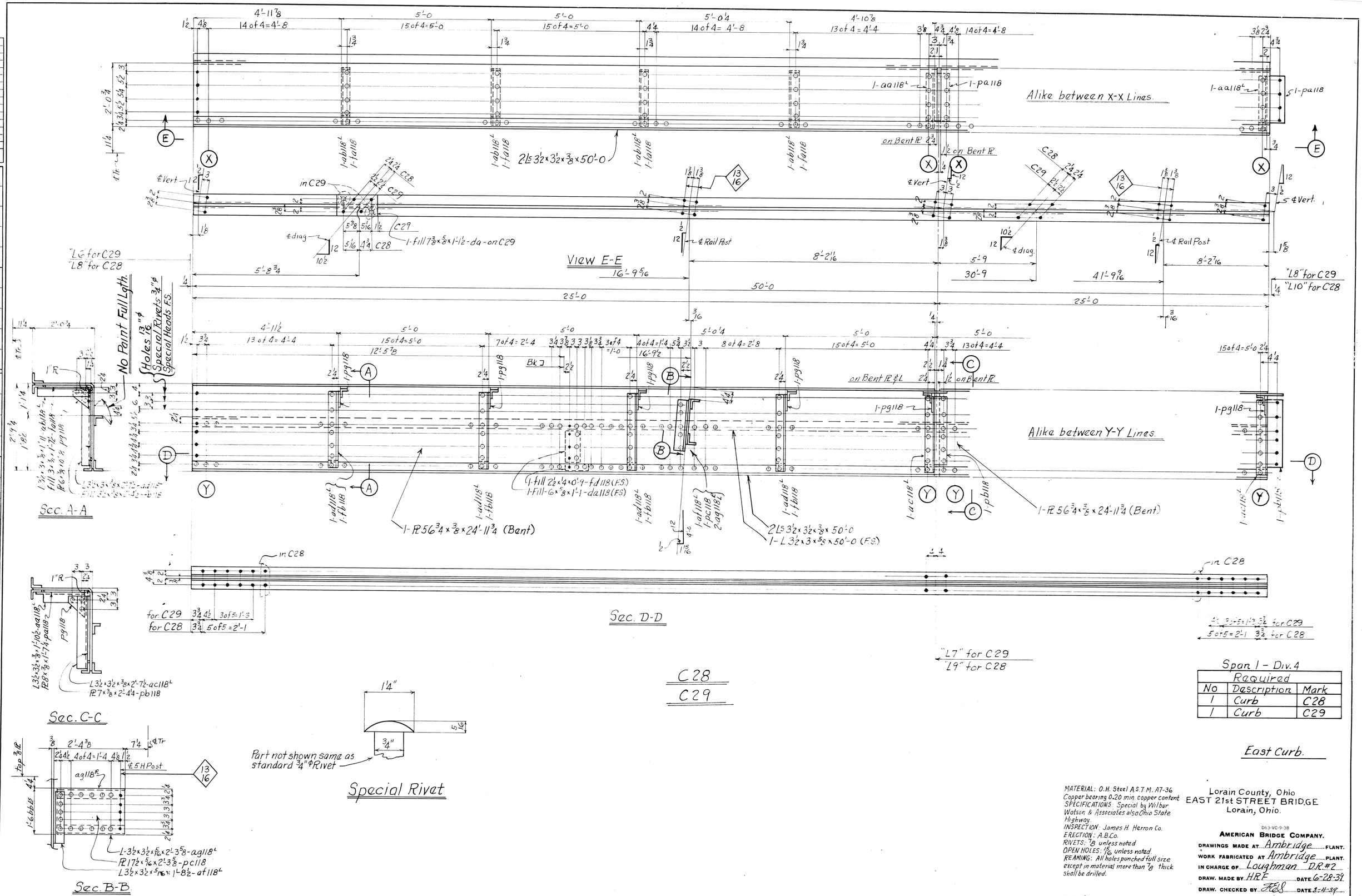
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HEL DATE 8/1/39
DRAW. CHECKED BY ALC. DATE 8-16-39.

ORDER No. H2524 | SHEET NO. 415



Span 1 - Div. 4

Required		
No	Description	Mark
1	Curb	C28
1	Curb	C29

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway.
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 13/16 unless noted.
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes. except as noted in Sec. A-A.
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio.

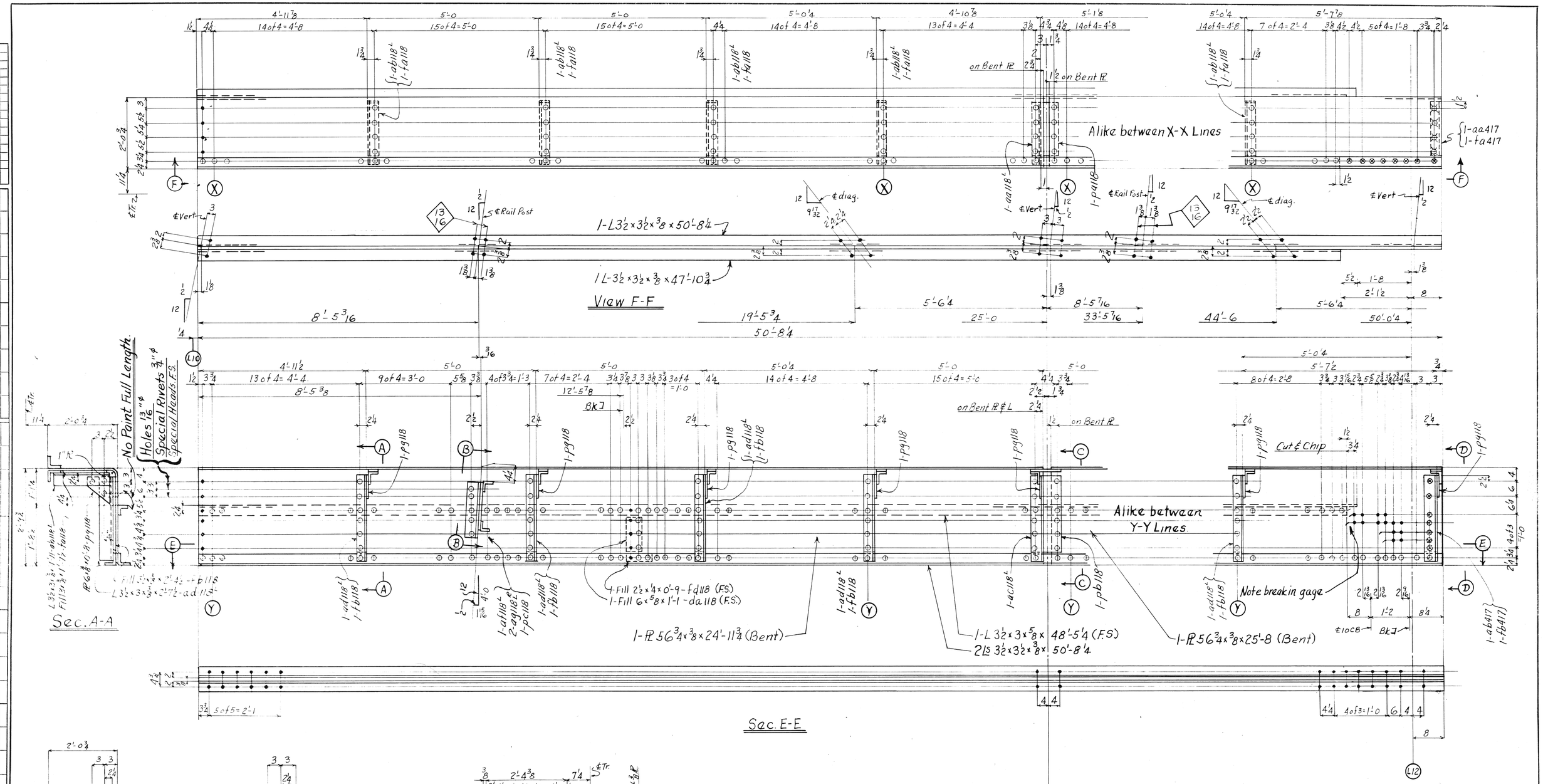
D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY HRF DATE 6-28-39
DRAW. CHECKED BY HES DATE 8-4-39

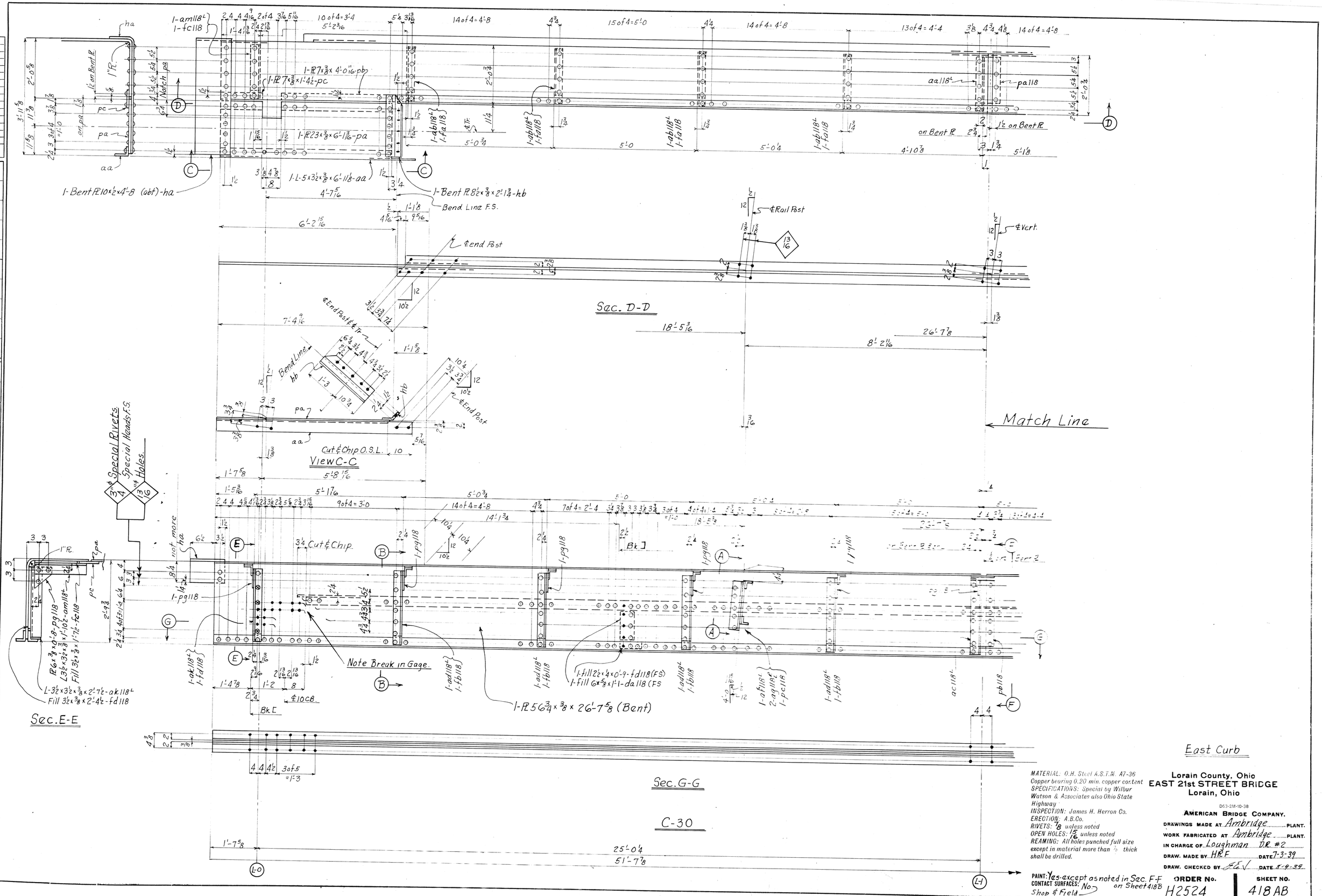
ORDER No. H2524 | SHEET NO. 416

Advance Bill Pages 116, 125



Required		
No.	Description	Mark
1	Curb	C27

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.



MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ½ thick shall be drilled.

PAINT: Yes except as noted in Sec. F-F on Sheet 418B
CONTACT SURFACES: Shop & Field — No

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

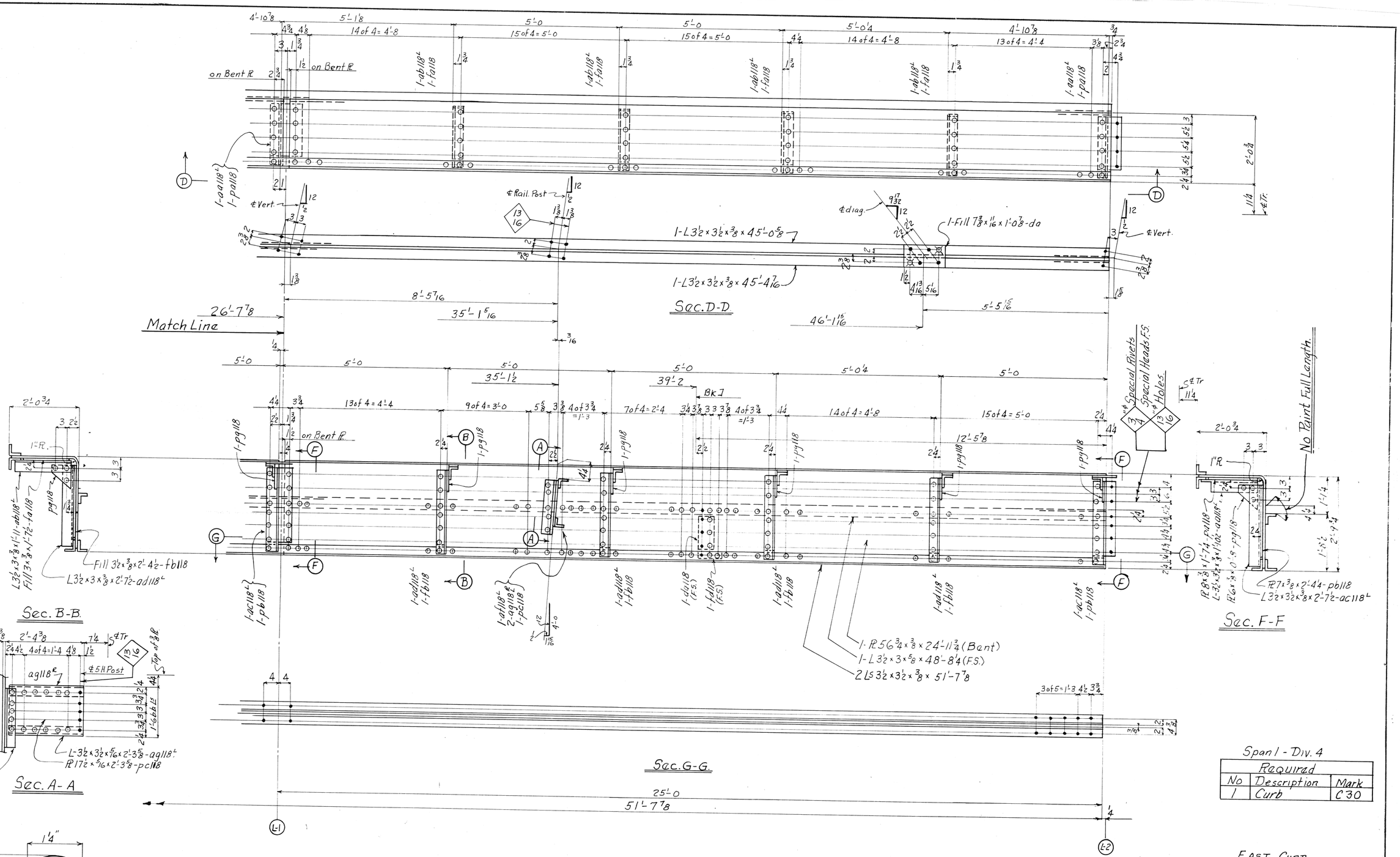
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY HRF DATE 7-3-39
DRAW. CHECKED BY FEV DATE 8-9-39

ORDER No. H2524

SHEET NO. 418 AB



Span 1 - Div. 4

Required		
No	Description	Mark
1	Curb	C30

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than thick shall be drilled.

PAINT: Yes, except as noted in Sec. F-F
CONTACT SURFACES: No / Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

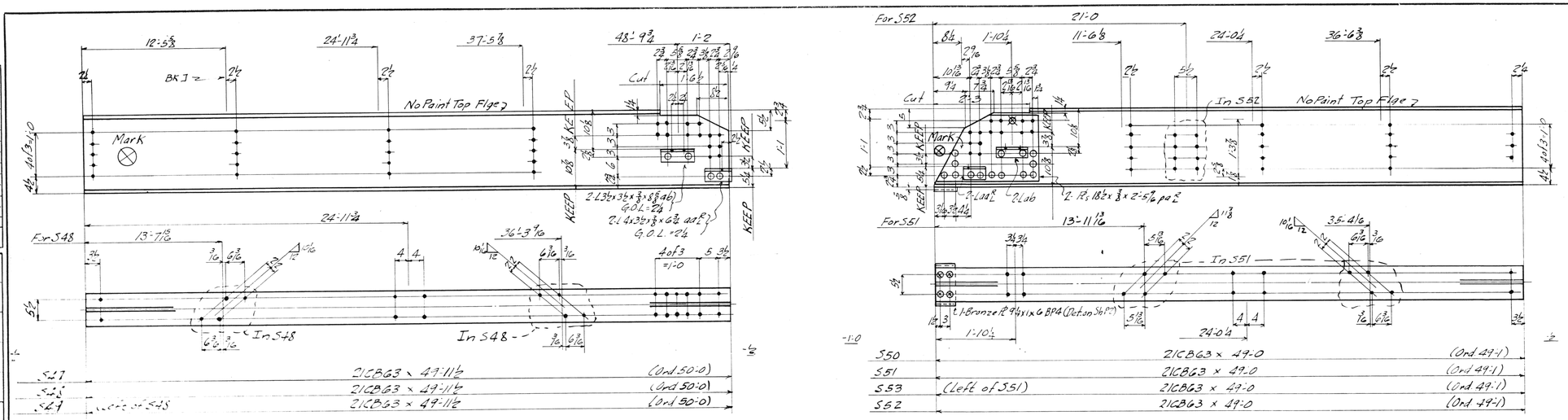
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY HRF DATE 7-3-39
DRAW. CHECKED BY [illegible] DATE 8-9-39

ORDER No. H2524
SHEET NO. 418B

Adv. Bill Page 125, 205.



Direct Load			REQUIRED	
Dia.	Grip	No.	Description	Mark
	1	1	Stringers	S47
			do	S48
			do	S49
1		1	do	S50
			do	S51
1		1	do	S52
		1	do	S53

MATERIAL: O.H. Steel A.S.T.M. 47-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specifications Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 3/8" thick shall be drilled.

PAINT: Yes Except as Noted
CONTACT SURFACES: No Shop & Field

Stringers

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY JR DATE 7-10-39
DRAW. CHECKED BY JHeS DATE 7-11-39

ORDER No. H2524

SHEET NO. 419

BOLTS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

BOLTS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

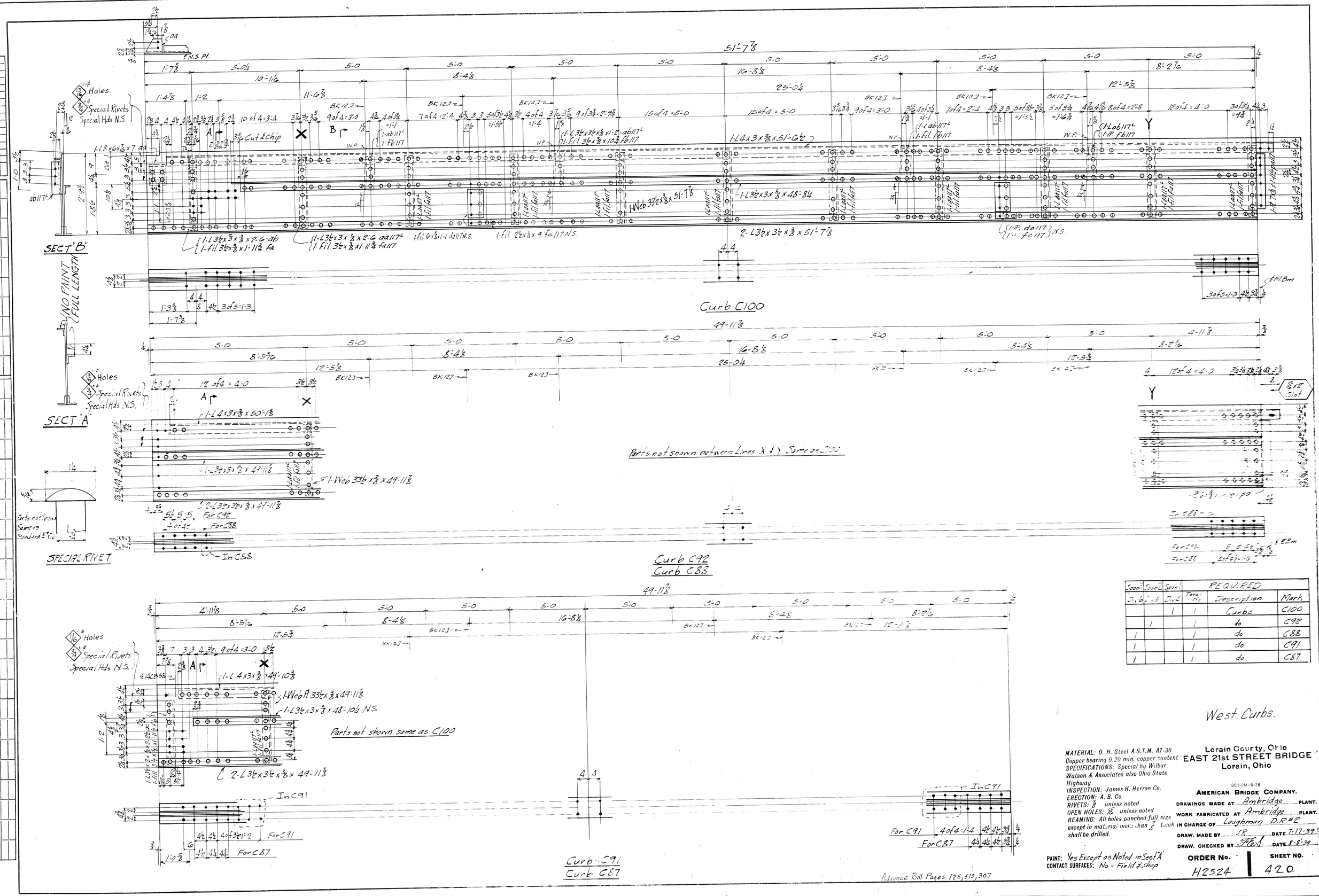
RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd

RIVETS Dia.	Grip	Holes	Plates	Ins. Shaft	Hole	Nut	No. Req'd



Span 1 Dwg.	Span 2 Dwg.	Span 1 Dwg.	Total No.	Description	Mark
		1	1	Curbs	C100
	1		1	do	C92
1			1	do	C88
1			1	do	C91
1			1	do	C87

REQUIRED

West Curbs.

MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ inch shall be drilled.

PAINT: Yes Except as Noted in Sect "A"
CONTACT SURFACES: No - Field & Shop

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

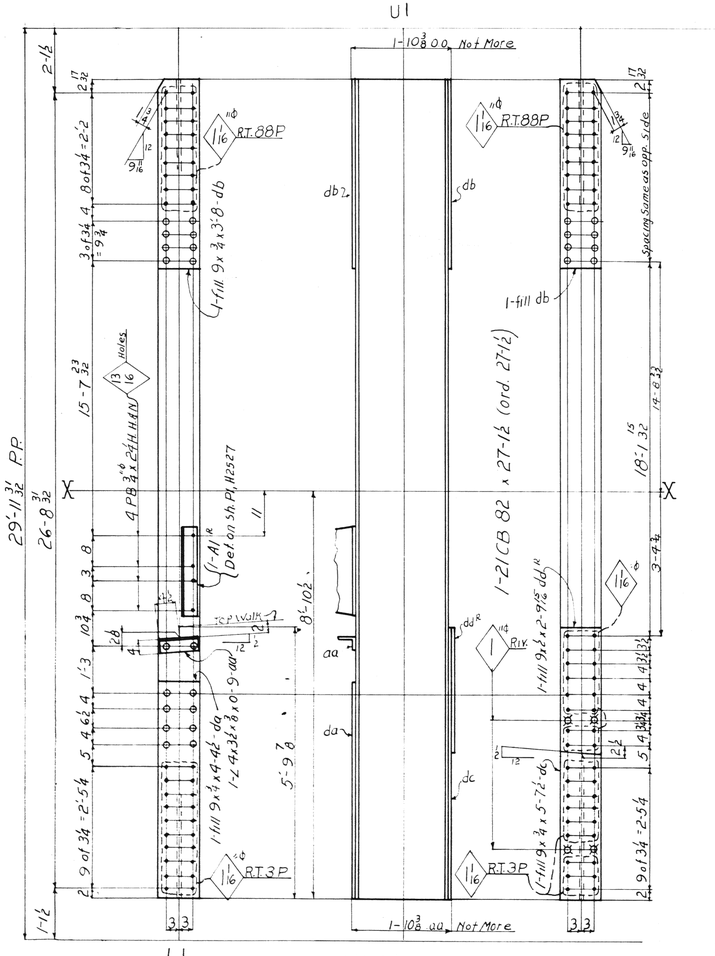
D63-2M-10-38

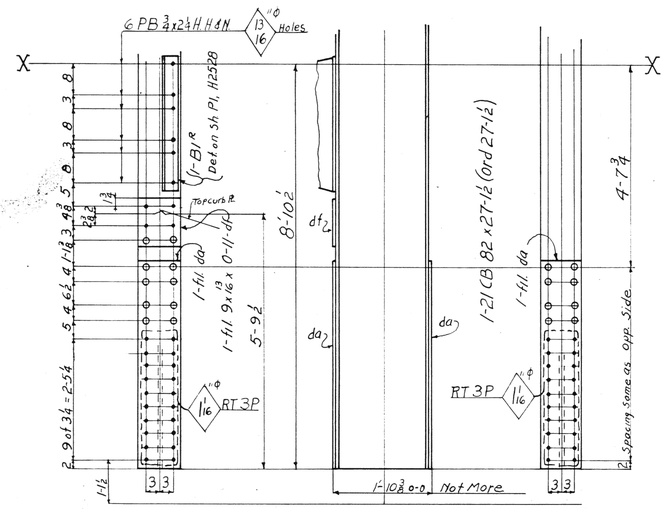
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY JR DATE 7-17-39
DRAW. CHECKED BY [illegible] DATE 8-8-39

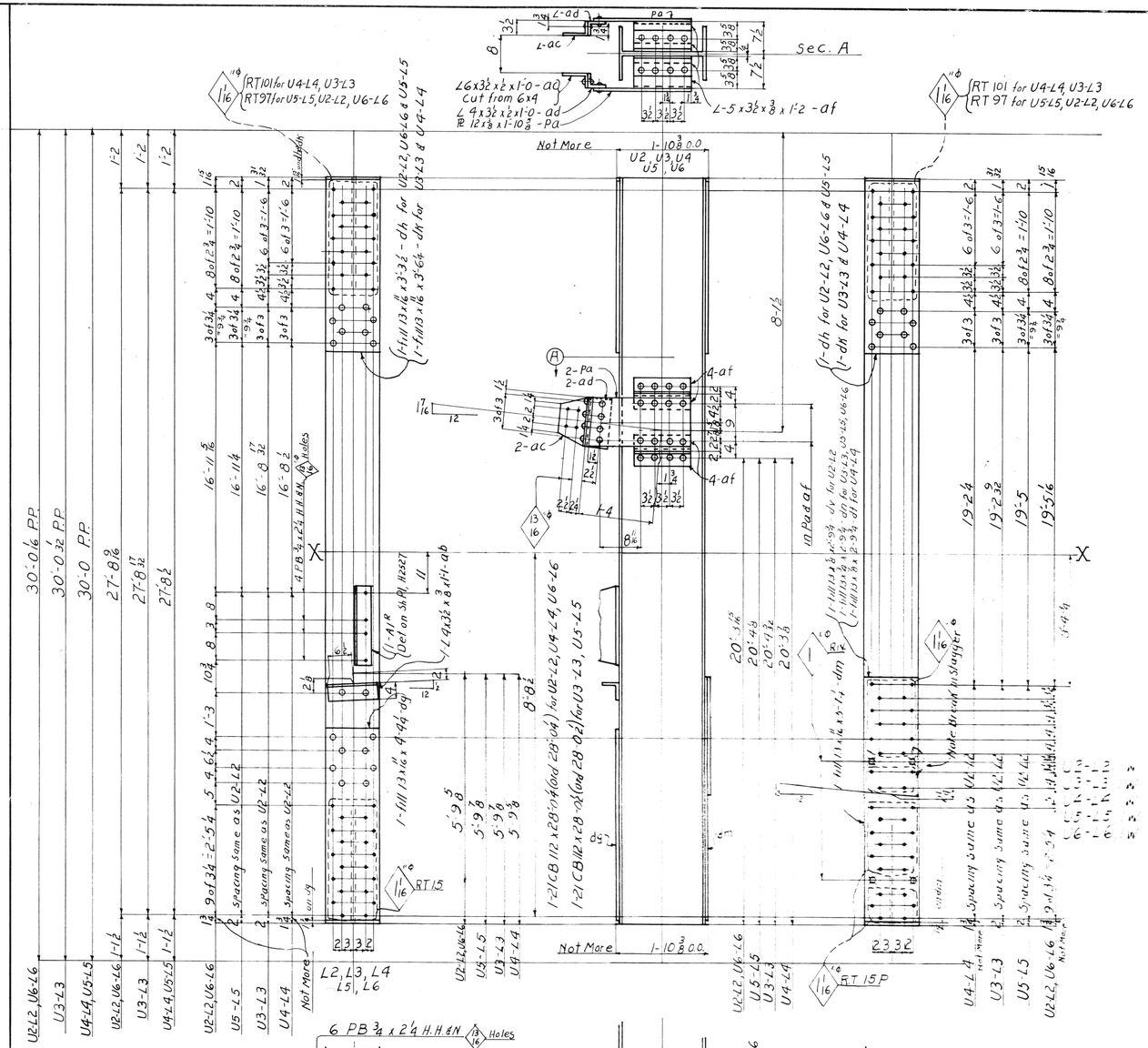
ORDER No. H2524

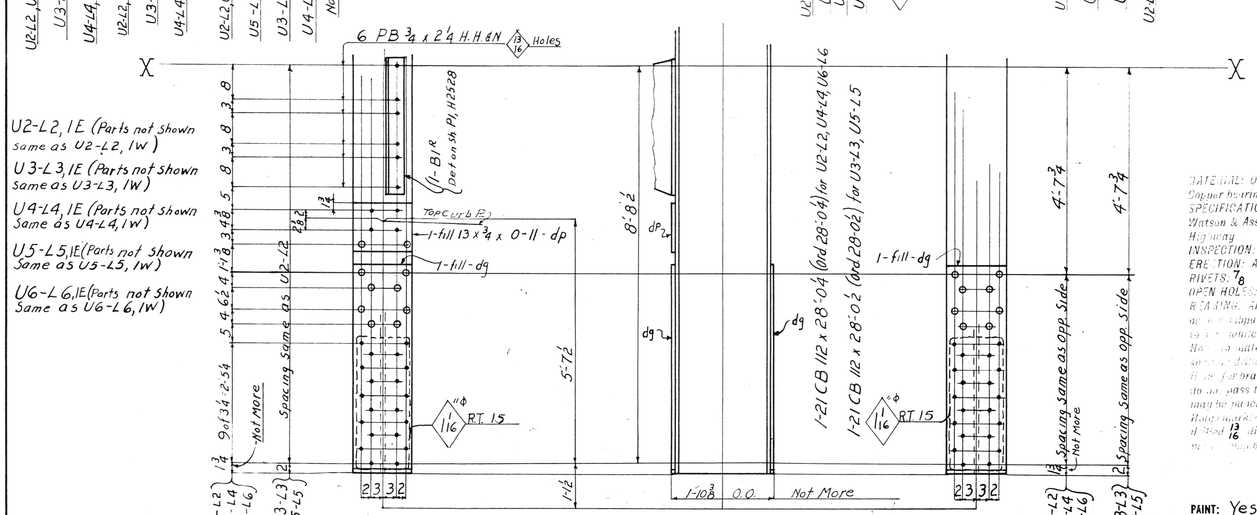
SHEET NO. 420





Adv. Bill Page 430-434 U1-L1, 1E (Parts not shown Same as U1-L1, 1W)





U2-L2, 1E (Parts not shown same as U2-L2, 1W)

U3-L3, 1E (Parts not shown Same as U3-L3, 1W)

U4-L4, 1E (Parts not shown Same as U4-L4, 1W)

U5-L5, 1E (Parts not shown Same as U5-L5, 1W)

U6-L6, 1E (Parts not shown Same as U6-L6, 1W)

Adv. Bill Page 430-431-434

Span-1 - Div 4

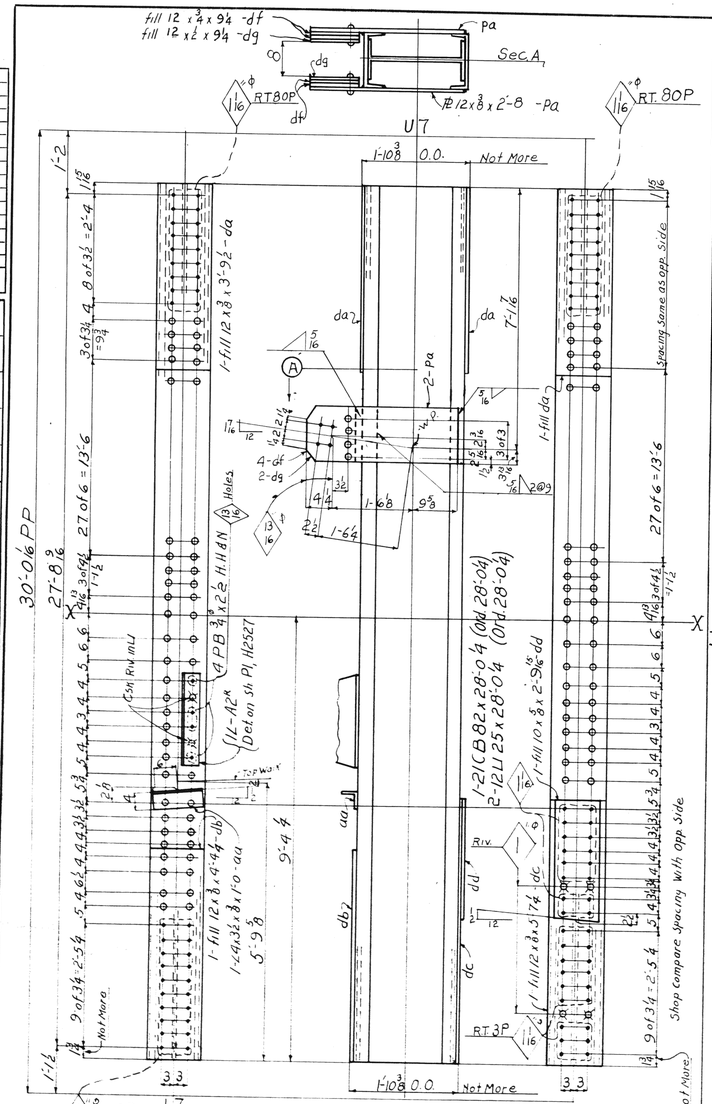
REQUIRED		
No.	Designation	Mark
1	see co	U-1 W
1	do	U-1 E
1	do	U2-L2, 1W
1	do	U2-L2, 1E
1	do	U3-L3, 1W
1	do	U3-L3, 1E
1	do	U4-L4, 1W
1	do	U4-L4, 1E
1	do	U5-L5, 1W
1	do	U5-L5, 1E
1	do	U6-L6, 1W
1	do	U6-L6, 1E

MATERIAL: U. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. S. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less punched 13/16" and reamed to 7/8" when parts are assembled. Holes in material more than 7/8" thick subpunched.
If use for bracing or gusset holes which do not pass through any truss material may be punched full size.
Holes marked "RT" subpunched or subdrilled 13/16" dia. and reamed to size to a template.

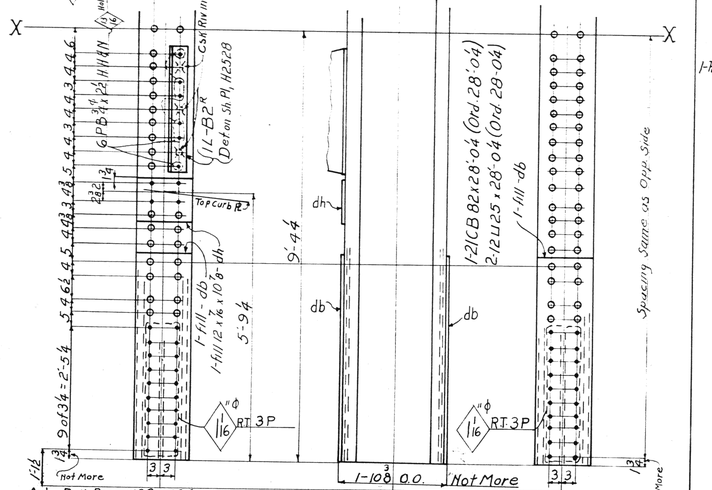
PAINT: Yes
CONTACT SURFACES: No - Shop & Field except members permanently bolted are to be painted.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

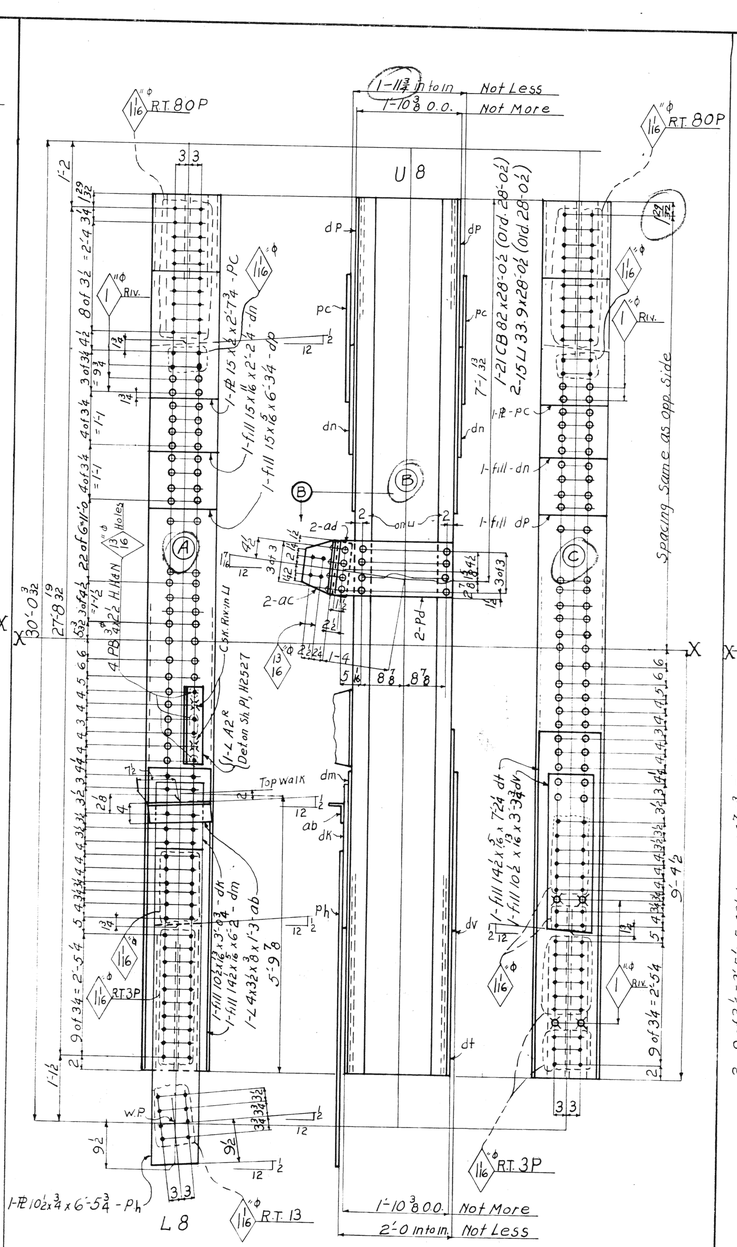
D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY B.A.C. DATE 8-1-39
DRAW. CHECKED BY SJT DATE 8-8-39
ORDER No. H2524
SHEET NO. 421



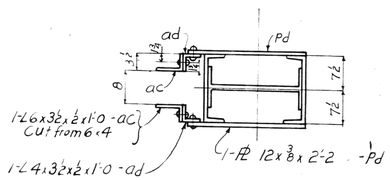
U7-L7,1W



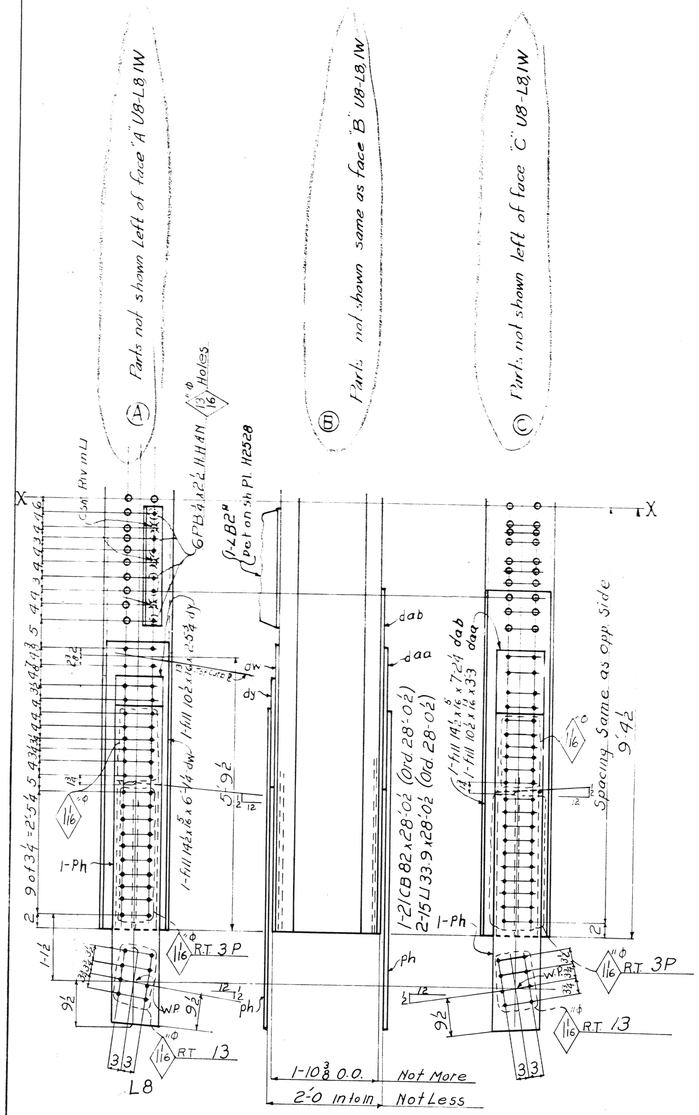
U7-L7,1E (Parts Not Shown Same as U7-L7,1W)



U8-L8,1W



Sec. B



U8-L8,1E (Parts not Shown Same as U8-L8,1W)

except as noted.

Span 1 - Div. 4

REQUIRED		
No.	Description	Mark
1	Vertical	U7-L7,1W
1	do	U7-L7,1E
1	do	U8-L8,1W
1	do	U8-L8,1E

MATERIAL: Q. H. Steel A.S.T.M. A7-36 except bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
FABRICATOR: James H. Herron Co.
ERECTOR: Fisher & Ludlow
THE FILLETS: ⅞ unless noted
ROLLED HOLES: 15/16 unless noted
[illegible] holes in material ⅞ thick
[illegible] punched 13/16 dia. and reamed [illegible] when parts are assembled.
[illegible] more than ⅞ thick
[illegible] for bracing and diaphragms which [illegible] than [illegible] truss material [illegible] punched 13/16 dia.
[illegible] AT subpanched or sub-punched 13/16 dia. and reamed to size to a [illegible]

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY B.A.C. DATE 8-7-39
DRAW. CHECKED BY SJT DATE 8-17-39
ORDER No. H2524
SHEET NO. 422

PAINT: Yes
CONTACT SURFACES: No - Shop & Field
Except members permanently bolted are to be painted.

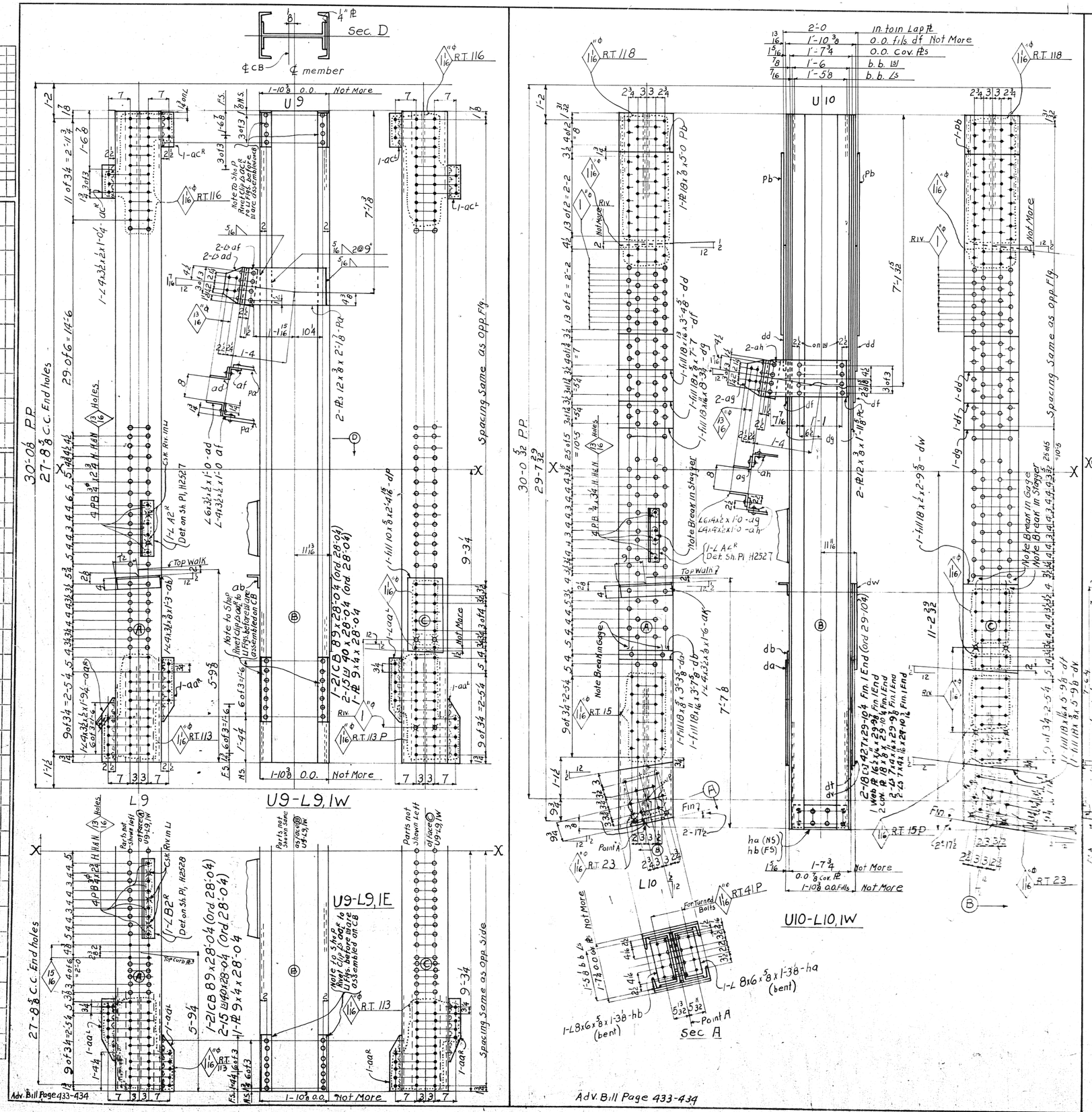
Adv. Bill Page 432-434

Adv. Bill Page 432-434

Adv. Bill Page 432-434

9

Rev 9/13/39



Span 1 - Div. 4

REQUIRED		
No.	Description	Mark
1	Vertical	U9-L9,1W
1	do	U9-L9,1E
1	do	U10-L10,1W
1	do	U10-L10,1E

Parts not shown Same as face Ⓐ U10-L10,1W

Parts not shown Left of face Ⓐ U10-L10,1W

Parts not shown Left of face Ⓒ U10-L10,1W

Parts not shown Same as face Ⓐ U9-L9,1W

Parts not shown Same as face Ⓒ U9-L9,1W

Parts not shown Left of face Ⓒ U9-L9,1W

Parts not shown Same as opp. Side

Note Break in Stagger

Note Break in Gage

Note to Shop: Rivet Clip ∠s at U9-L9 before U10 assembled

Note to Shop: Rivet Clip ∠s at U9-L9 before U9 assembled on CB

Top walk

Top Curb ∠s

Fin. 1 End

Fin. 1 End (Ord 29-104)

Fin. 1 End (Ord 28-04)

Not Shown

Not Scale

Not Approved

Not Approved for Construction

Not Approved for Shop Work

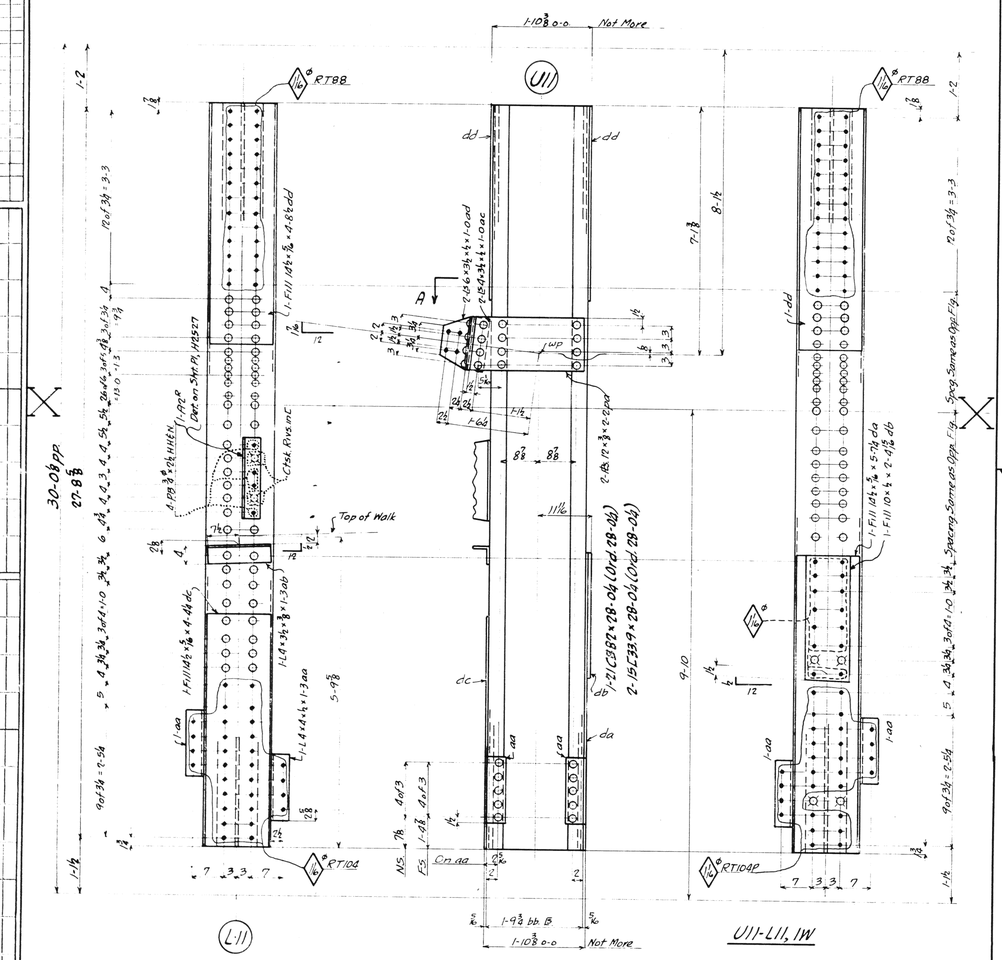
Not Approved for Erection

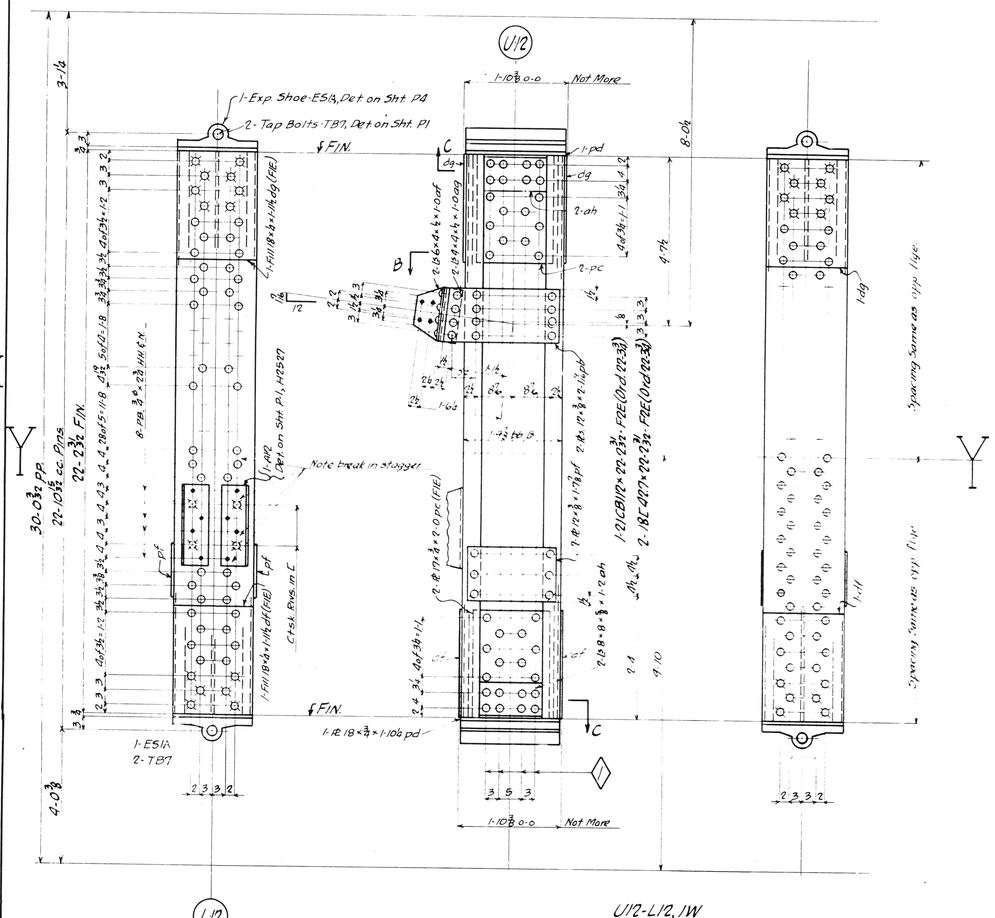
Not Approved for Shop & Erection

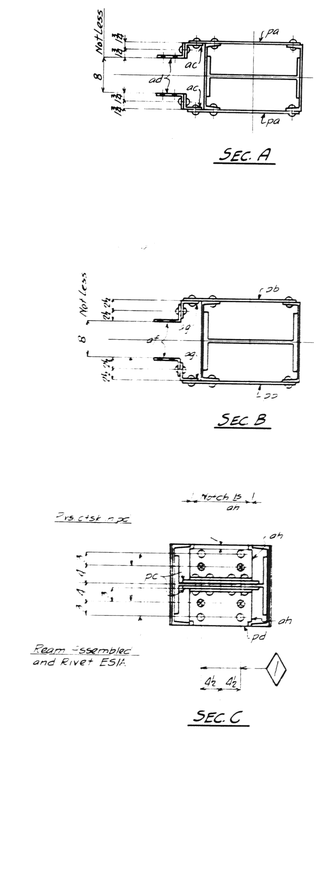
Not Approved for Shop Work & Erection

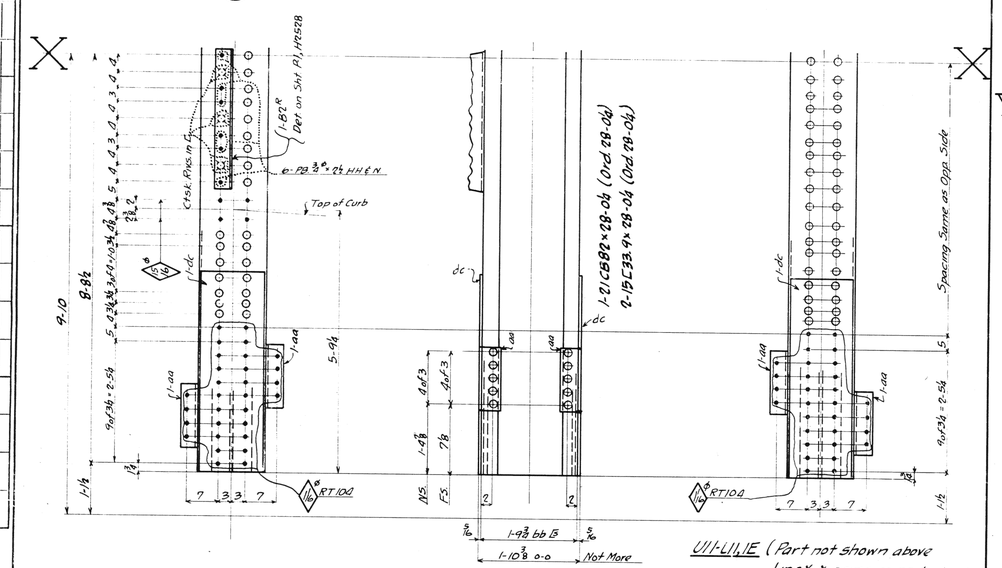
Not Approved for Shop Work & Erection

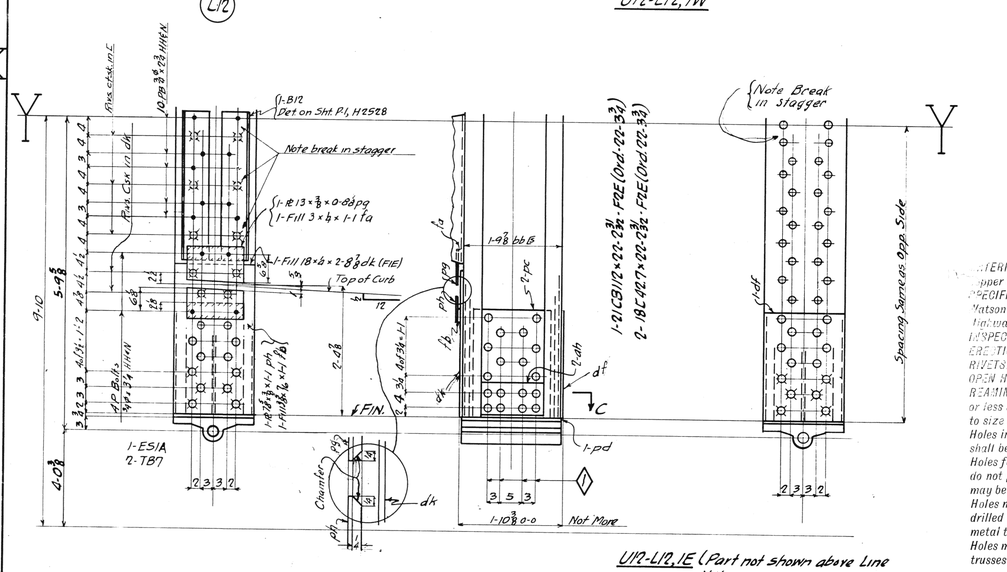
Not Approved for Shop Work











Adv. Bill Pages 434 & 439

Adv. Bill Pages 435 & 439

SPAN #1 - DIV. 4

REQUIRED		
No.	Description	Mark
1	Vertical	U11-L11, 1W
1	do	U11-L11, 1E
1	do	U12-L12, 1W
1	do	U12-L12, 1E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ ϕ unless noted
OPEN HOLES: 13/16 ϕ unless noted
REAMING: All holes in material ⅜ thick or less subpunched 1/16 dia. and reamed to size while parts are assembled. Holes in material more than ⅜ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 1/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)
Except members permanently bolted to be painted.

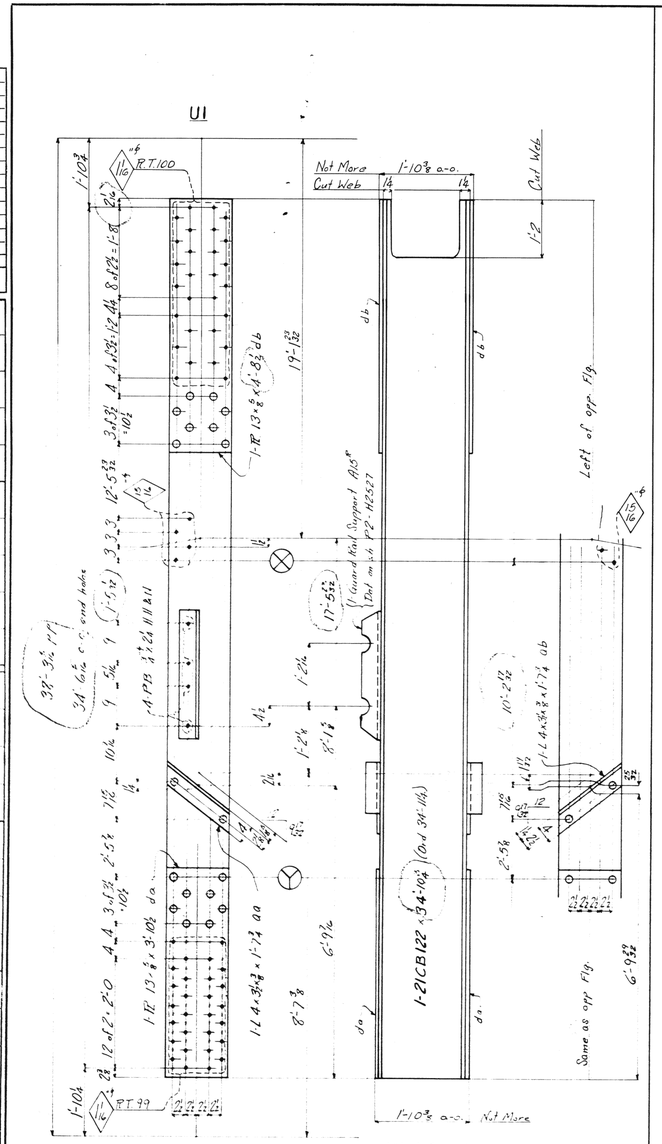
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

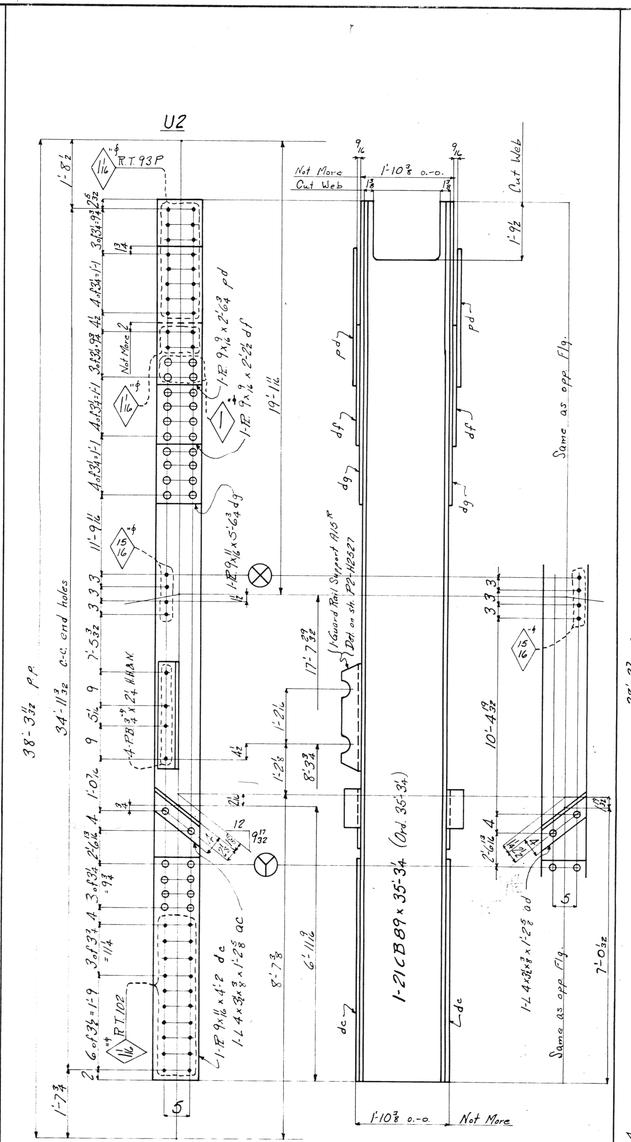
063-206-19

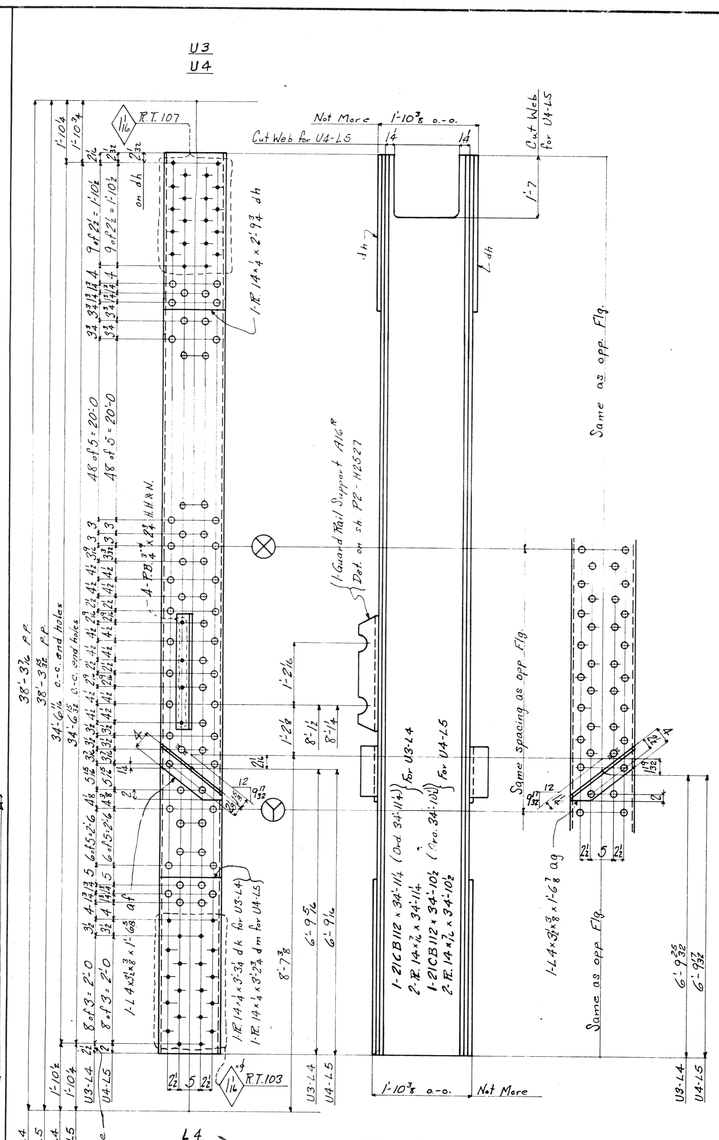
AMERICAN BRIDGE COMPANY.

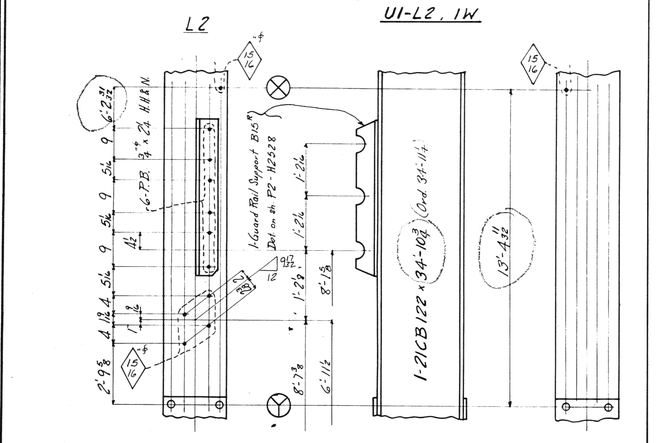
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - DR #2
DRAW. MADE BY WHK DATE 8-16-39
DRAW. CHECKED BY SJT DATE 8-21-39

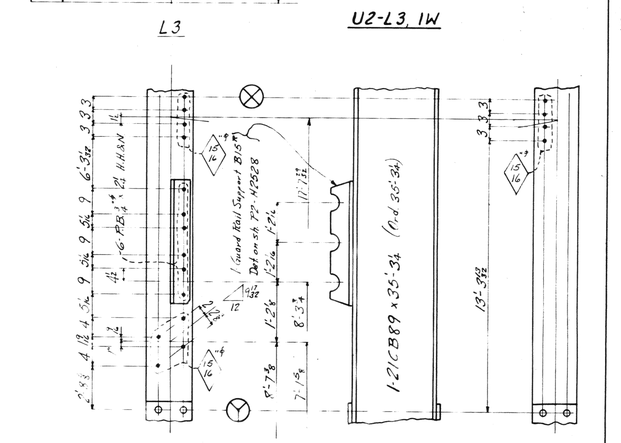
ORDER No. H2524 | SHEET NO. 424

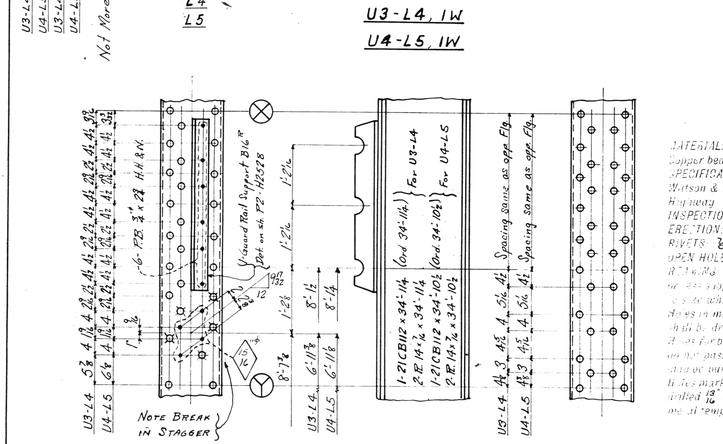












Span 1 – Div 4

REQUIRED		
No.	Description	Mark
1	Diagonal	U1-L2, 1W
1	do.	U1-L2, 1E
1	do.	U2-L3, 1W
1	do.	U2-L3, 1E
1	do.	U3-L4, 1W
1	do.	U3-L4, 1E
1	do.	U4-L5, 1W
1	do.	U4-L5, 1E

10

Rev 8-28-39

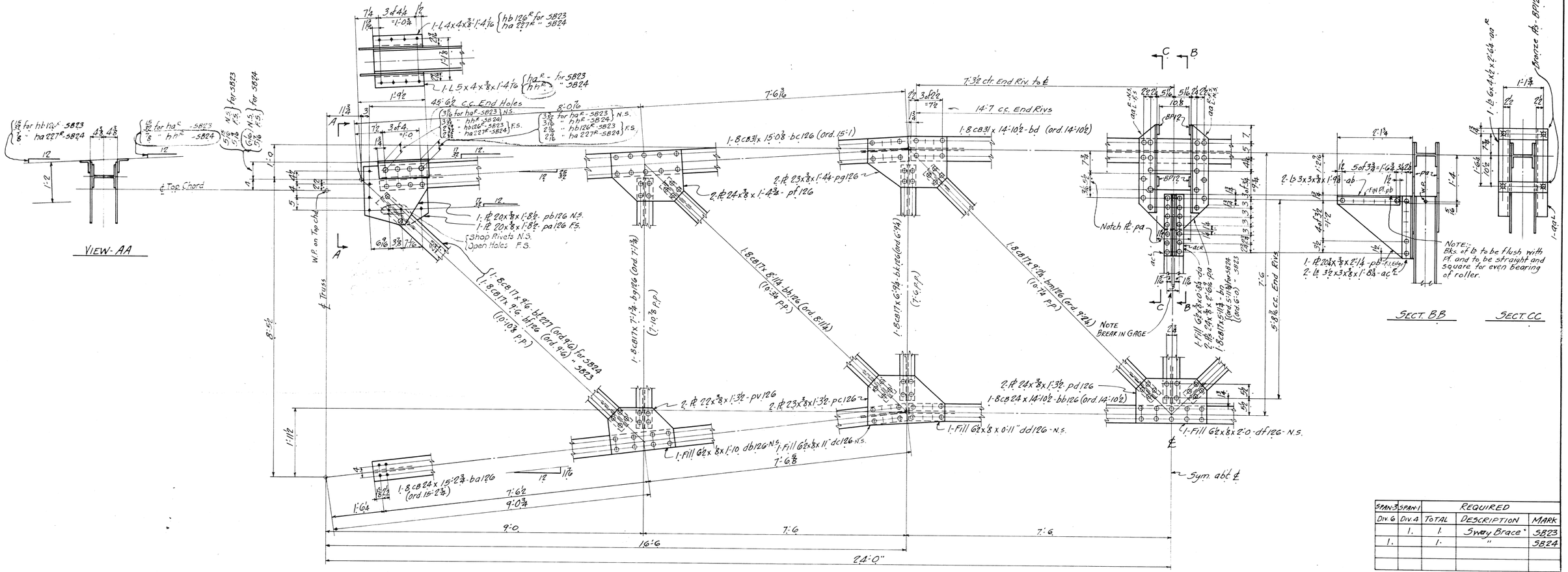
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: $\frac{3}{4}$" unless noted
OPEN HOLES: $\frac{13}{16}$" unless noted
REMARKS: All holes in material $\frac{7}{8}$" thick or less subpunched $\frac{13}{16}$" dia. and reamed to size while parts are assembled.
Holes in material more than $\frac{7}{8}$" thick shall be drilled.
Holes for bracing and diaphragms which do not pass through truss material shall be punched full size.
Holes marked RT subpunched or subdrilled $\frac{13}{16}$" dia. and reamed to size to a metal template.

PAINT: Yes
CONTACT SURFACES: No. Shop & Field except members permanently buried are to be painted

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY A.A.Z. DATE 8-7-39
DRAW. CHECKED BY S/T DATE 8-18-39
ORDER No. H2524
SHEET NO. 425

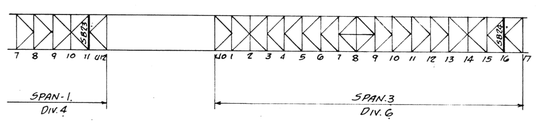
Adv. Bill Tgs. 427-428-434



SPAN-3	SPAN-1	REQUIRED		
DIV. G	DIV. 4	TOTAL	DESCRIPTION	MARK
	1.	1.	Sway Brace	5B23
1.		1.	"	5B24

SWAY BRACE - 5B23

" " - 5B24, Same as 5B23 except for Lb ha 227R, nhR, & diag. bt 227.



LOCATION DIAGRAM

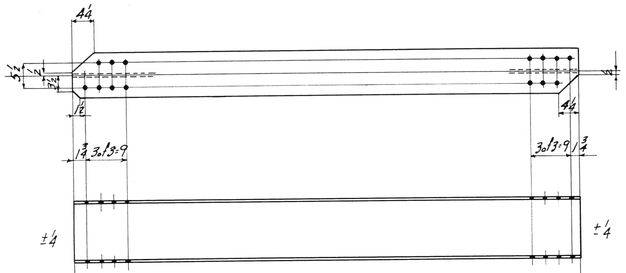
MATERIAL: O. H. Steel A.S.T.M. A7-38
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" ϕ unless noted
OPEN HOLES: 13/16" ϕ unless noted
REAMING: All holes punched full size except in material more than 7/8" thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No, Shop & Field

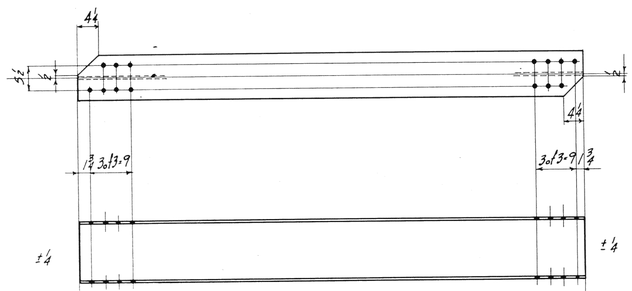
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D43-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY ALH DATE 7-27-39.
DRAW. CHECKED BY DEP DATE [illegible]

ORDER No. H2524
SHEET NO. 426

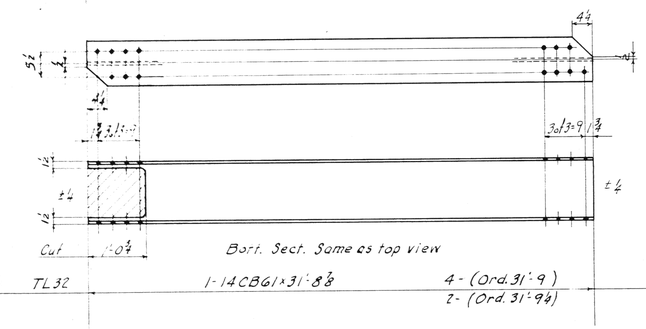


0'-6 5/16 TL28 1-14CB61 × 31'-7¼ (Ord. 31'-7¼) 1'-2¼

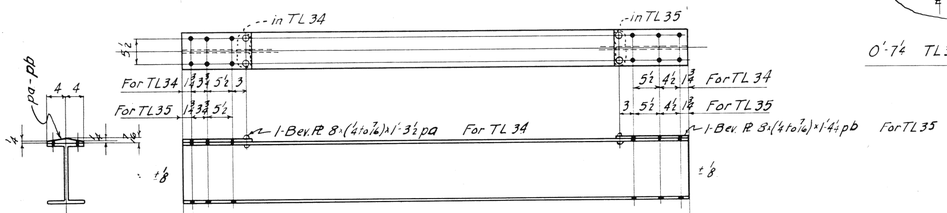


1'-2 TL29 1-14CB61 × 31'-7⅞ (Ord. 31'-8) 1'-2¼

1'-2¼ TL30 1-14CB61 × 31'-8⅞ 6-(Ord. 31'-9) 4-(Ord. 31'-9¼) 1'-1

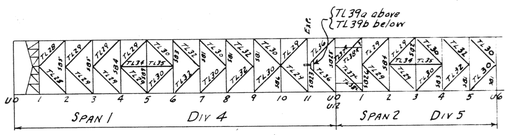


1'-2¼ TL32 1-14CB61 × 31'-8⅞ 4-(Ord. 31'-9) 2-(Ord. 31'-9¼) 1'-1

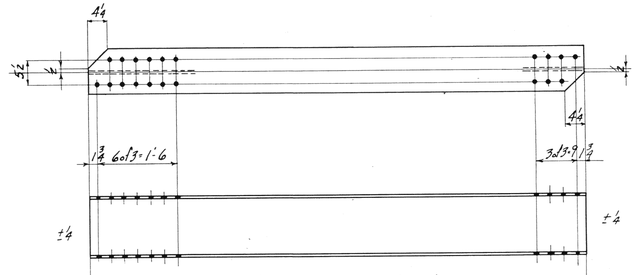


0'-9¼ TL34 1-14CB43 × 23'-7 (Ord. 23'-7½) 0'-8

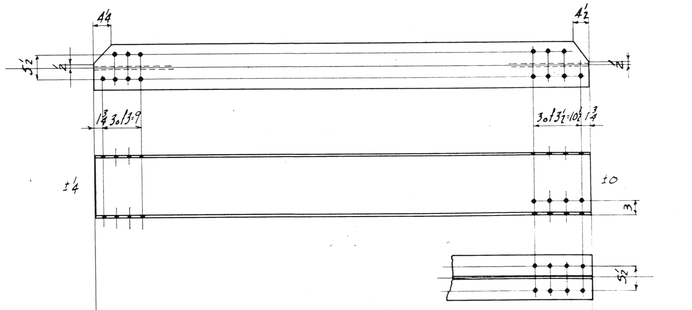
0'-9¼ TL35 1-14CB43 × 23'-7 (Ord. 23'-7) 0'-8



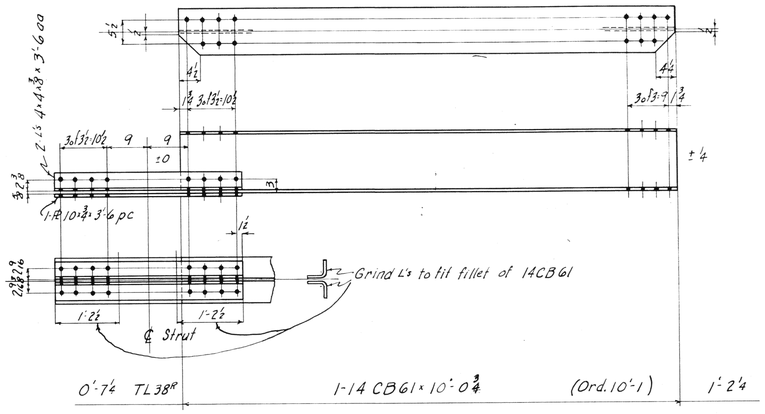
LOCATION DIAGRAM



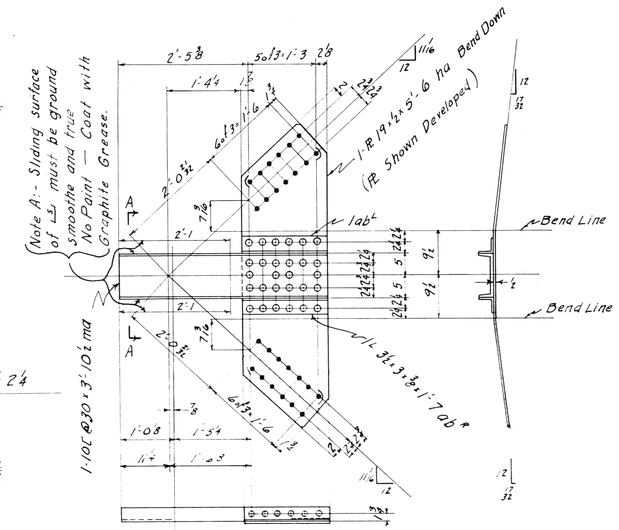
1'-10 29/32 TL36 1-14CB61 × 30'-11 (Ord. 30'-11) 1'-2¼



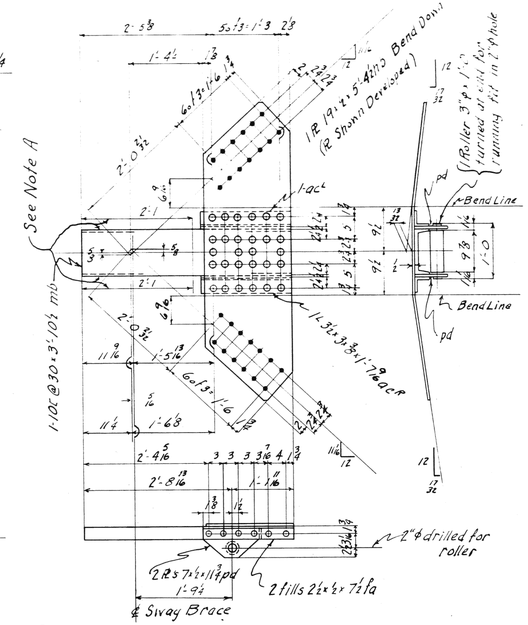
1'-2 TL37R 1-14CB61 × 20'-4⅞ (Ord. 20'-5½) 0'-7¼



0'-7¼ TL38R 1-14CB61 × 10'-0¾ (Ord. 10'-1) 1'-2¼

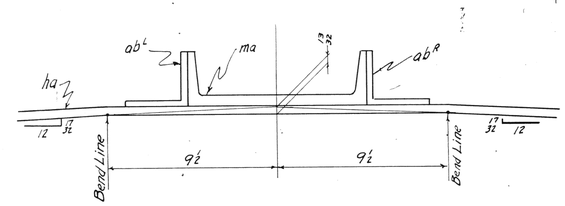


TL 39a



TL 39b

SPAN 1	SPAN 2	REQUIRED		
Div. 4	Div. 5	Total	Description	Mark
2		2	Top Lateral	TL28
8	4	12	" "	TL29
6	4	10	" "	TL30
4	2	6	" "	TL32
1	1	2	" "	TL34
1	1	2	" "	TL35
2		2	" "	TL36
	1	1	" "	TL37R
	1	1	" "	TL37L
	1	1	" "	TL38R
	1	1	" "	TL38L
1		1	Top Lateral PL	TL39a
1		1	" " "	TL39b



Sect. A-A Showing Location of W.P.

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ¾ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size

PAINT: Yes - (Except as noted)
CONTACT SURFACES: No - (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

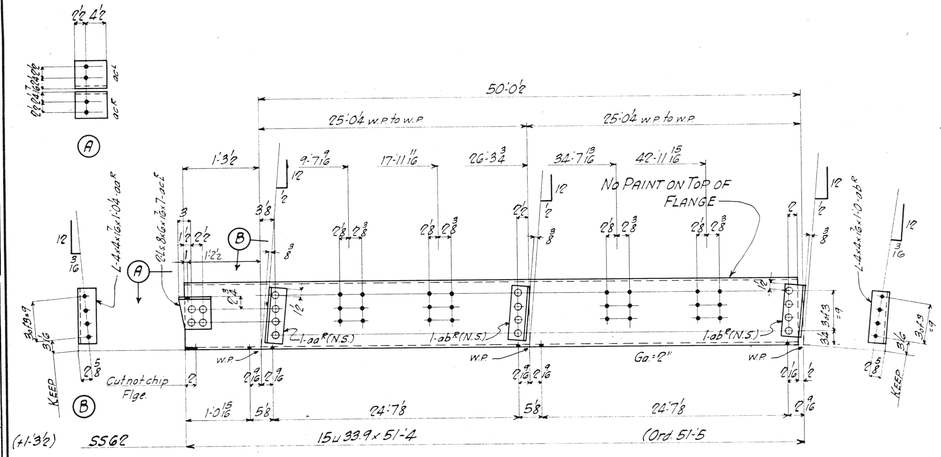
AMERICAN BRIDGE COMPANY.

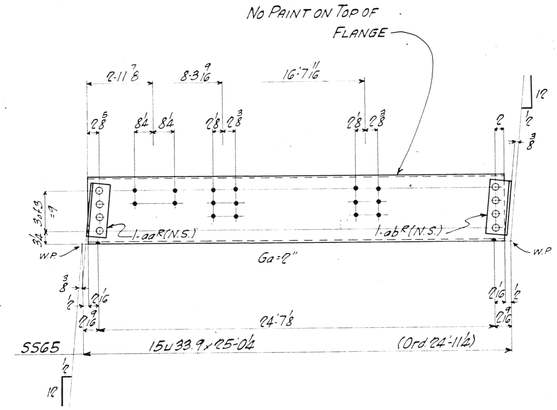
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY W.B.A. DATE
DRAW. CHECKED BY ALC DATE 8-17-39

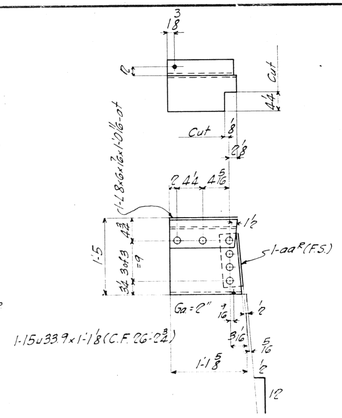
ORDER No. H2524

SHEET NO. 427

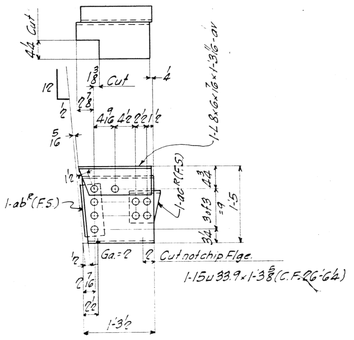
Advance Bill Order Pages - 413 - 514 - 512



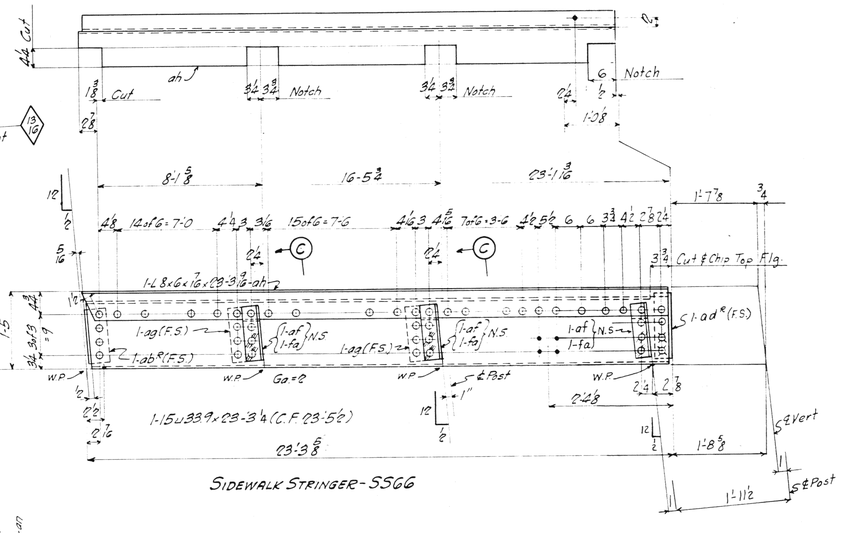




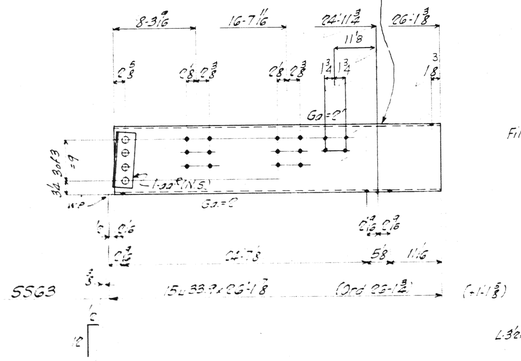
SIDEWALK STRINGER-SS67

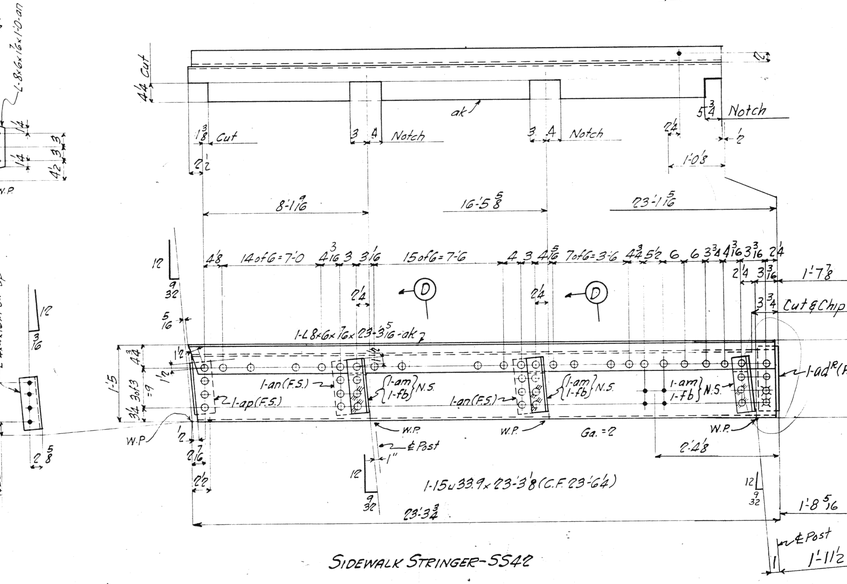


SIDEWALK STRINGER-SS68

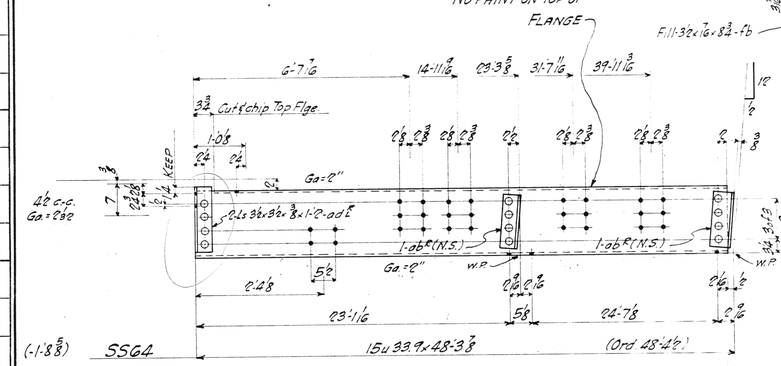


SIDEWALK STRINGER-SS66





SIDEWALK STRINGER-SS42



Span 4 Div 7	Span 3 Div 5	Span 1 Div 4	Total	Required Description	Mark
1			1	Sidewalk Stringer	SS42
		1	1	"	SS62
		1	1	"	SS63
	1		1	"	SS64
		1	1	"	SS65
	1		1	"	SS66
		1	1	"	SS67
		1	1	"	SS68

SIDEWALK STRINGERS

MATERIAL: O. H. Steel A.S.T.M. A7-33 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes, Unless Noted.
CONTACT SURFACES: -No- Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

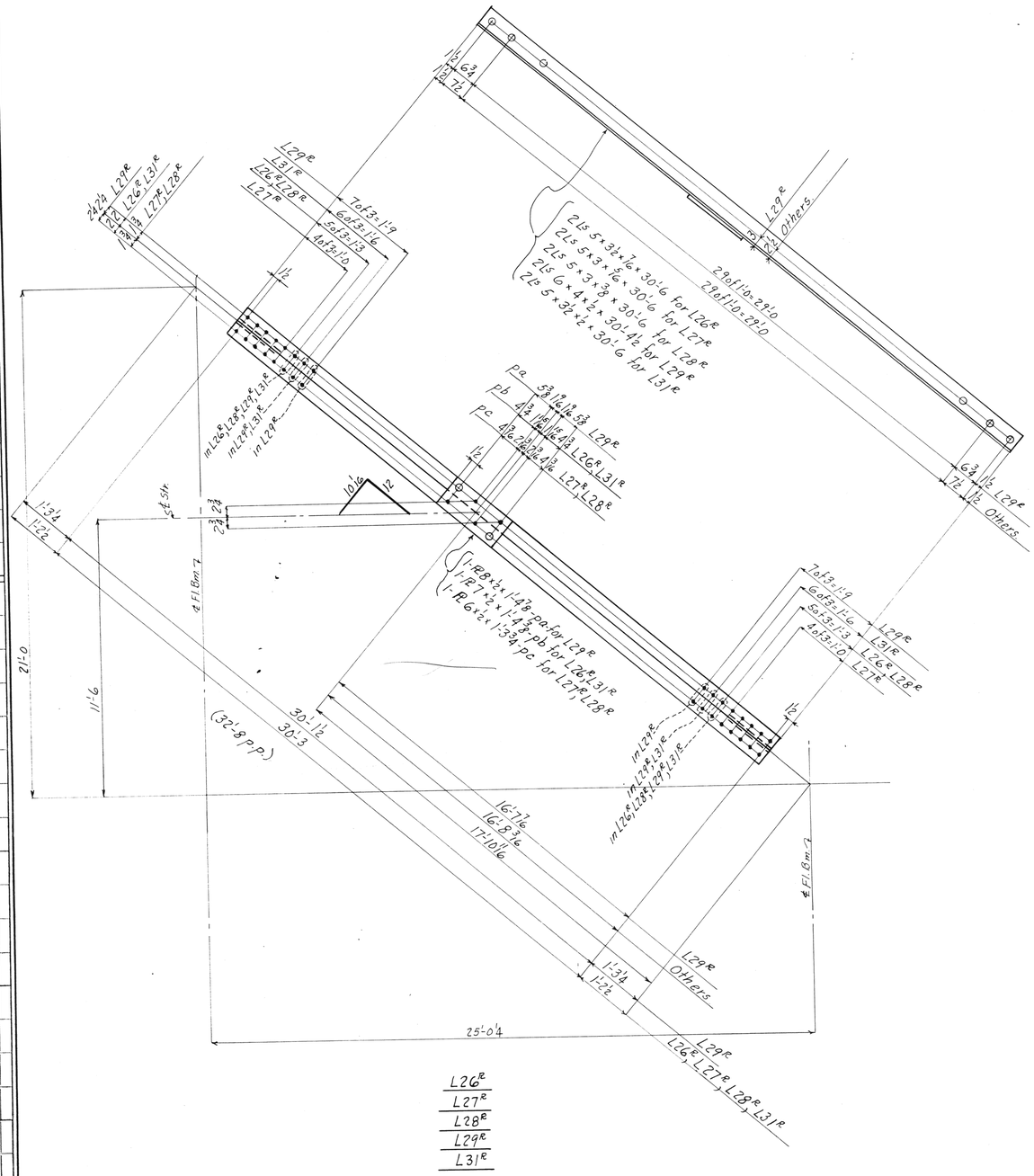
AMERICAN BRIDGE COMPANY.

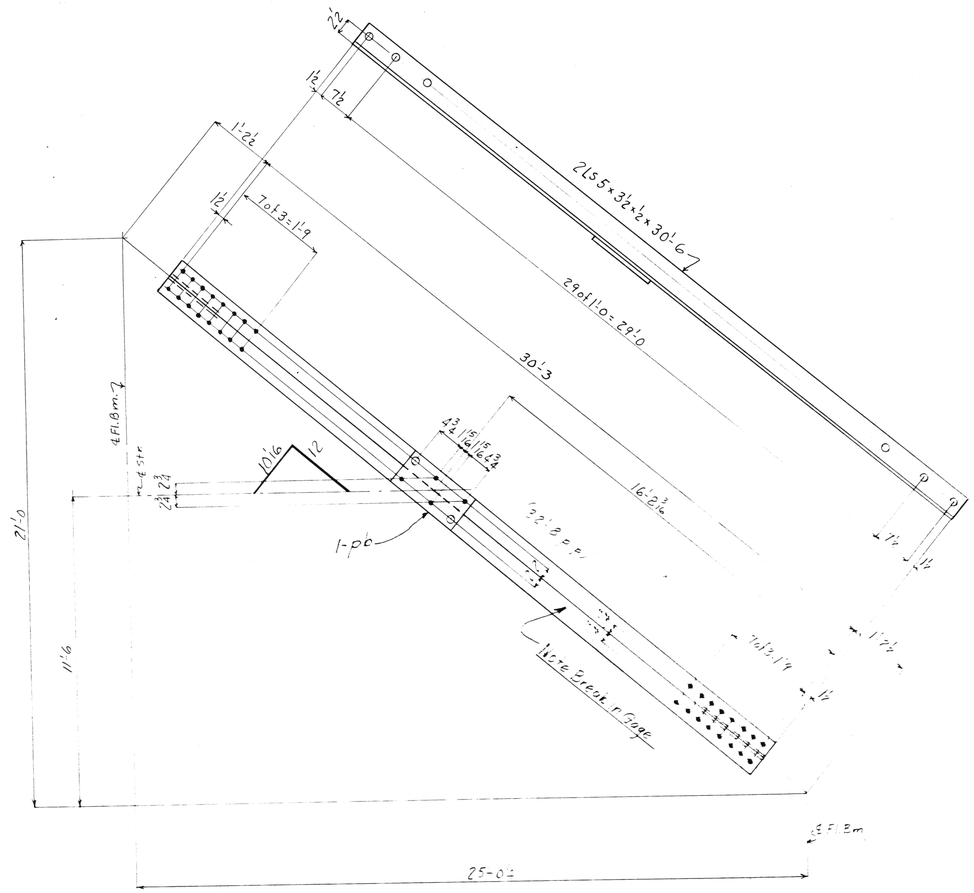
DRAWINGS MADE AT AMB. PLANT.
WORK FABRICATED AT AMB. PLANT.
IN CHARGE OF LOUGHMAN "C"
DRAW. MADE BY W.W.J. DATE 8-11-39
DRAW. CHECKED BY H.C.M. DATE 8-17-39

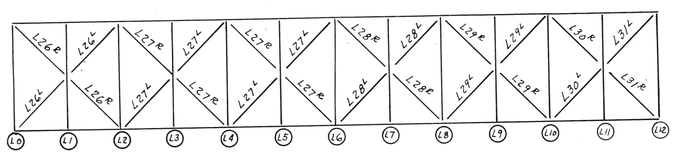
ORDER No. H2524

SHEET No. 428

ADV. BILLS Sh. # 118,602







Span 1 – Div. 4

Required		
No	Description	Mark
2	Bott. Laterals	L26R
2	do	L26L
4	do	L27R
4	do	L27L
2	do	L28R
2	do	L28L
2	do	L29R
2	do	L29L
1	do	L30R
1	do	L30L
1	do	L31R
1	do	L31L

Bottom Laterals.
Span 1.

MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8
OPEN HOLES: 15/16
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

PAINT: Yes
CONTACT SURFACES: No (Shop & field.)

Adv. Bill Page 124.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

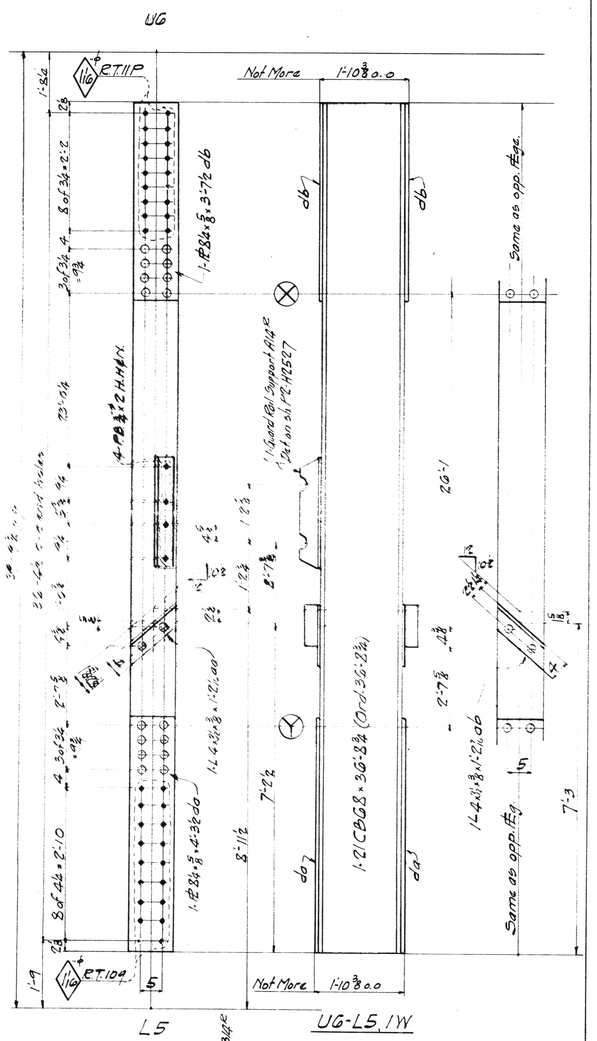
D63-2M-10-38

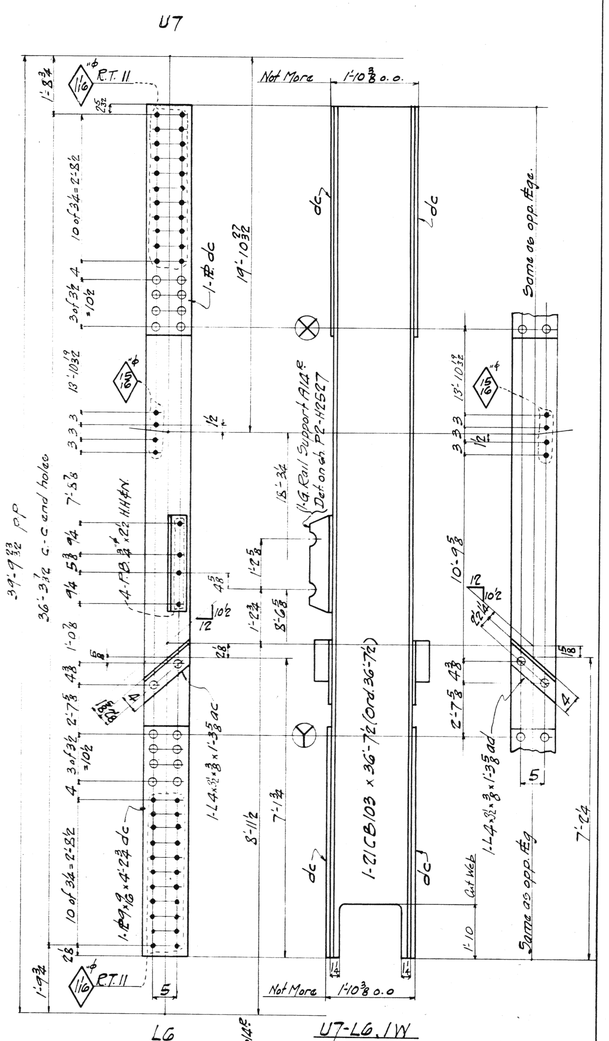
AMERICAN BRIDGE COMPANY.

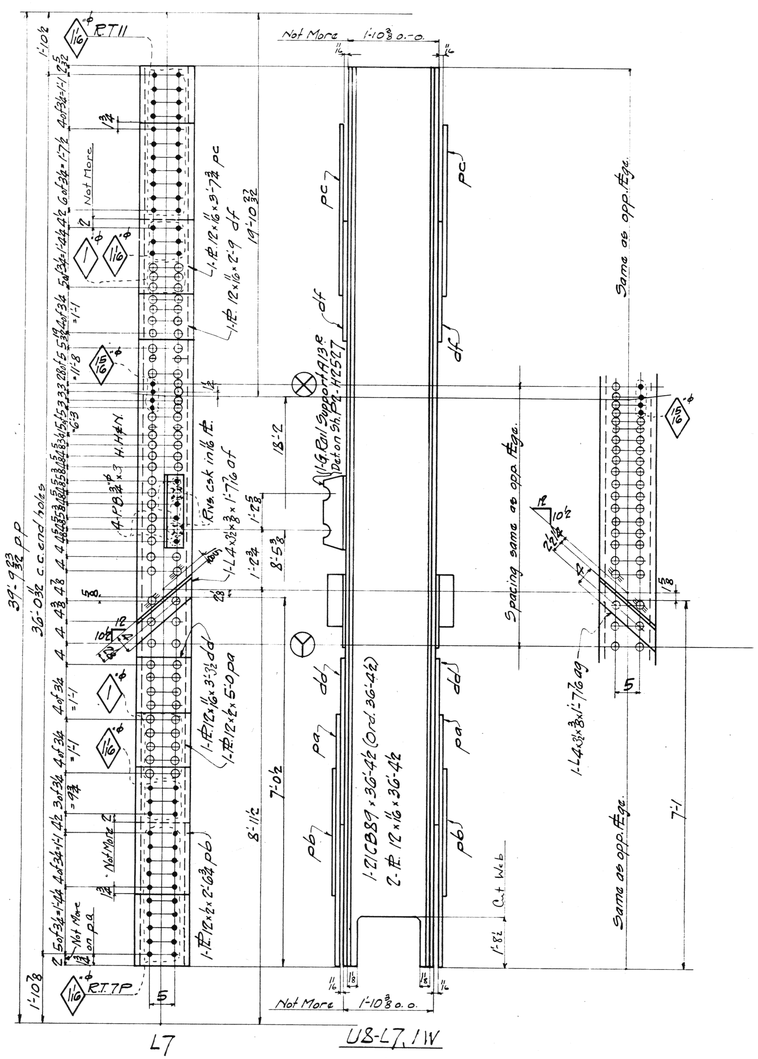
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F. DATE 8-9-39
DRAW. CHECKED BY E.R.M. DATE 8-11-39

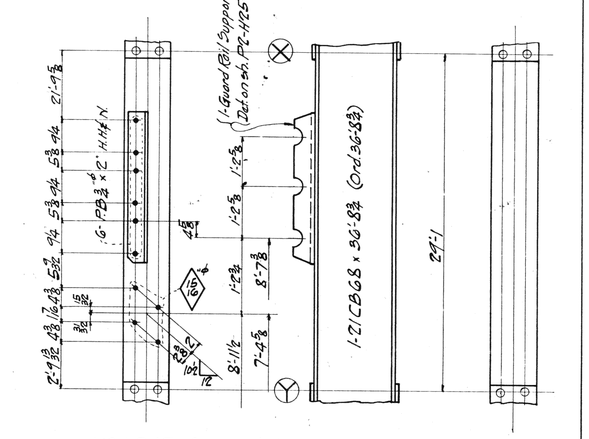
ORDER No. H2524

SHEET NO. 429

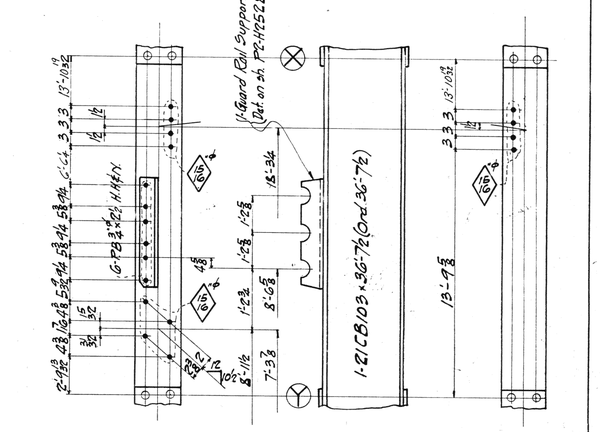




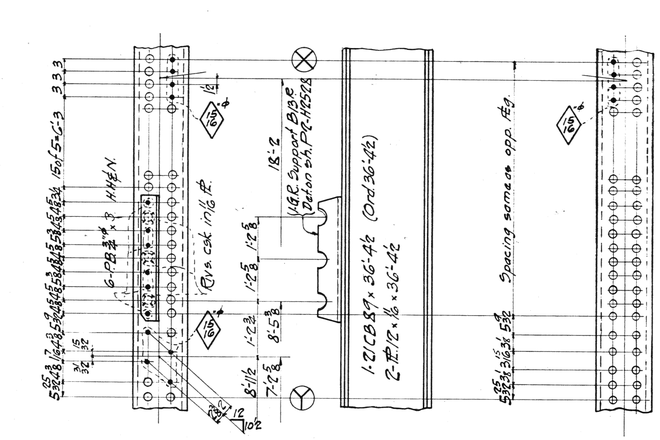




UG-L5, 1E (Parts not shown same as UG-L5, 1W)



U7-L6, 1E (Parts not shown same as U7-L6, 1W)



U8-L7, 1E (Parts not shown same as U8-L7, 1W)

Span 1 - Div. 4

REQUIRED		
No.	Description	Mark
1	Diagonal	UG-L5, 1W
1	do.	UG-L5, 1E
1	do.	U7-L6, 1W
1	do.	U7-L6, 1E
1	do.	U8-L7, 1W
1	do.	U8-L7, 1E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞" unless noted
BARN HOLES: 13/16" unless noted
REAMING: All holes in material ⅞" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled. Holes in material more than ⅞" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

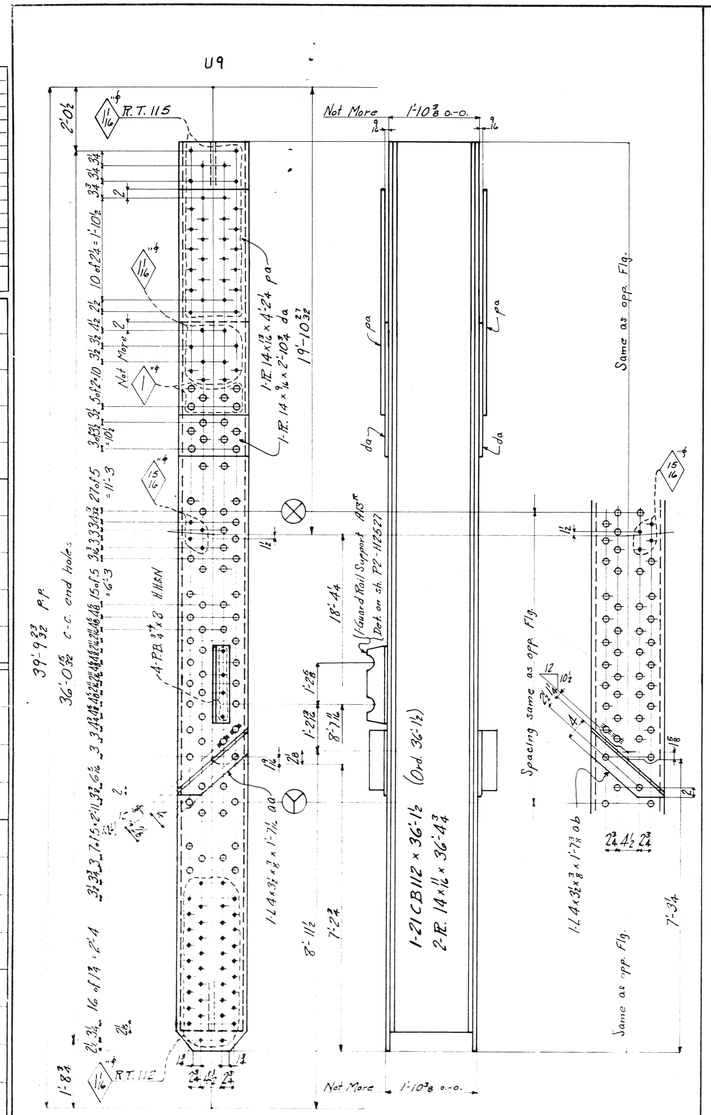
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY A.A.Z. A.B. DATE 8-11-39
DRAW. CHECKED BY S.T. DATE 8-18-39

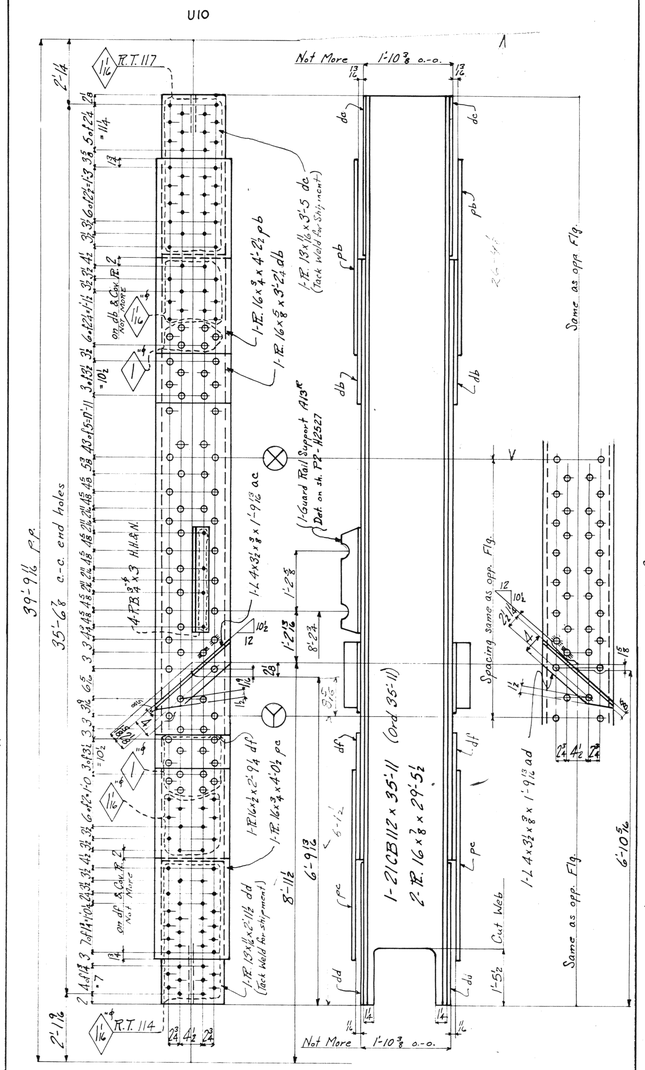
PAINT: Yes
CONTACT SURFACES: No-Shop & Field except members perm. bolted are to be painted.

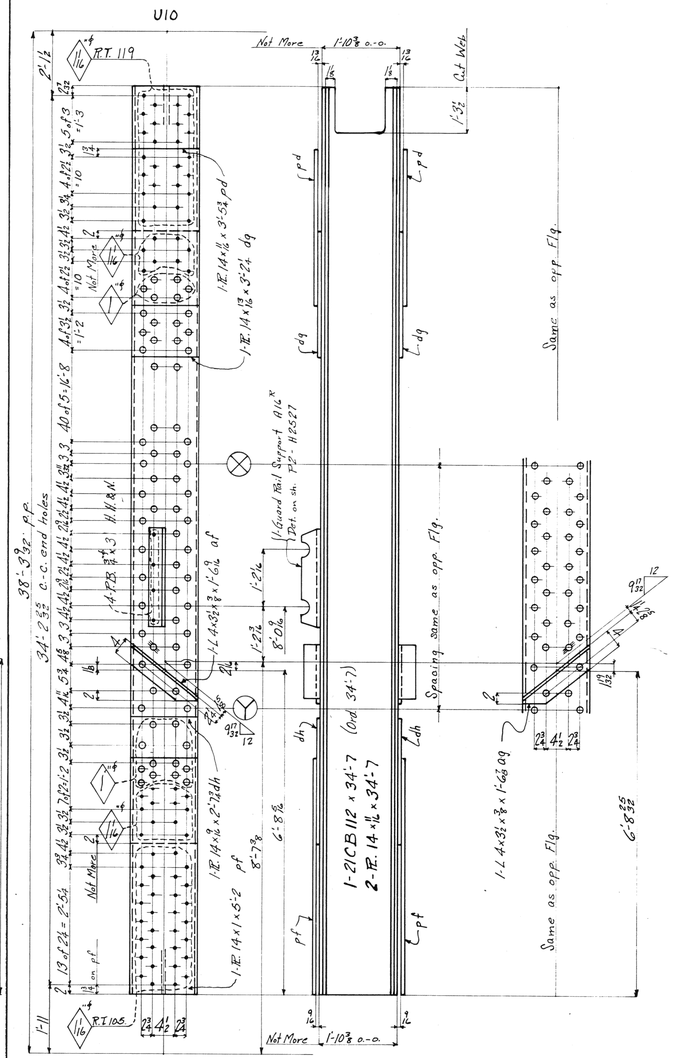
ORDER No. H2524

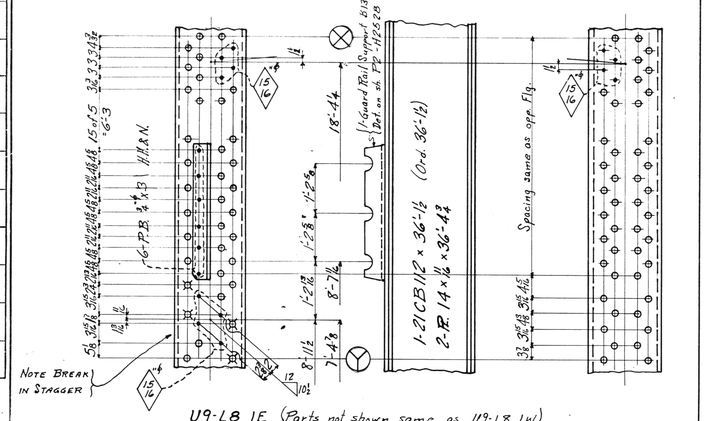
SHEET NO. 430

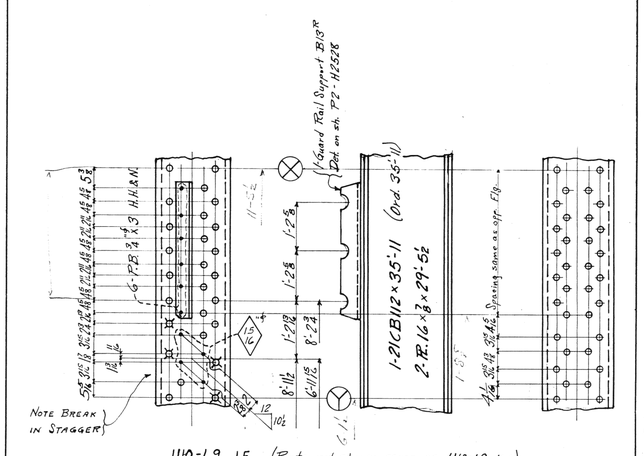
Adv. Bill Pgs. 428 & 434

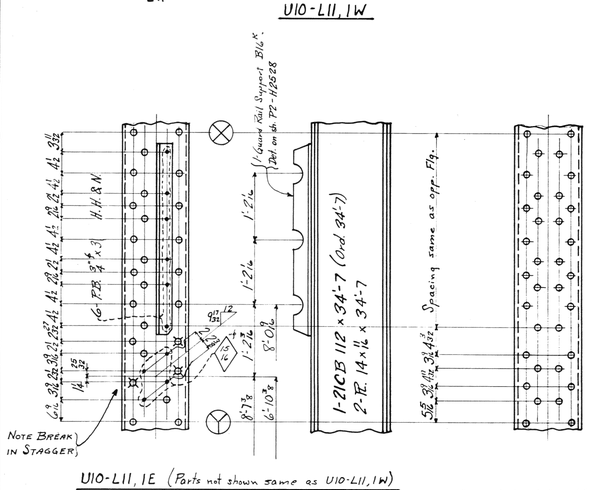












Span 1 - Div. 4

REQUIRED		
No.	Description	Mark
1	Diagonal	U9-L8, 1W
1	do.	U9-L8, 1E
1	do.	U10-L9, 1W
1	do.	U10-L9, 1E
1	do.	U10-L11, 1W
1	do.	U10-L11, 1E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material ⅜" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than ⅜" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

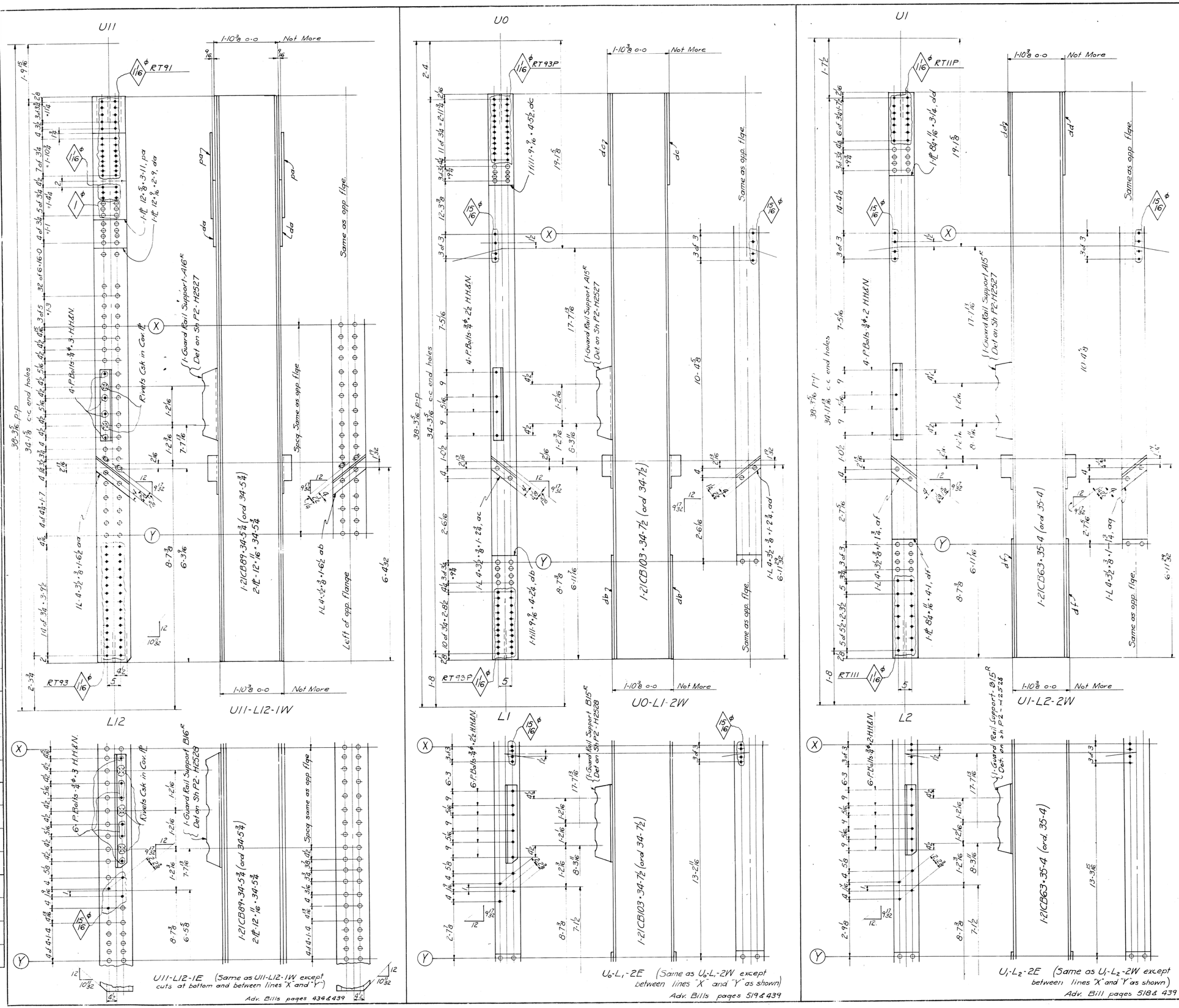
PAINT: Yes.
CONTACT SURFACES: No - Shop and Field except members permanently bolted are to be painted.

Adv. Bill Pgs. 429 & 434

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY A.A.Z. DATE 8-16-39
DRAW. CHECKED BY G.T. DATE 8-18-39

ORDER No. H2524
SHEET NO. 431



SPAN 1	SPAN 2	REQUIRED		
Div 4	Div 5	No.	Description	Mark
1		1	Diagonal	U_{11}-L_{12},1W
1		1	"	U_{11}-L_{12},1E
	1	1	"	U_0-L_1,2W
	1	1	"	U_0-L_1,2E
	1	1	"	U_1-L_2,2W
	1	1	"	U_1-L_2,2E

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. R. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less stapunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No - Shop and field except members permanently bolted are to be painted.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

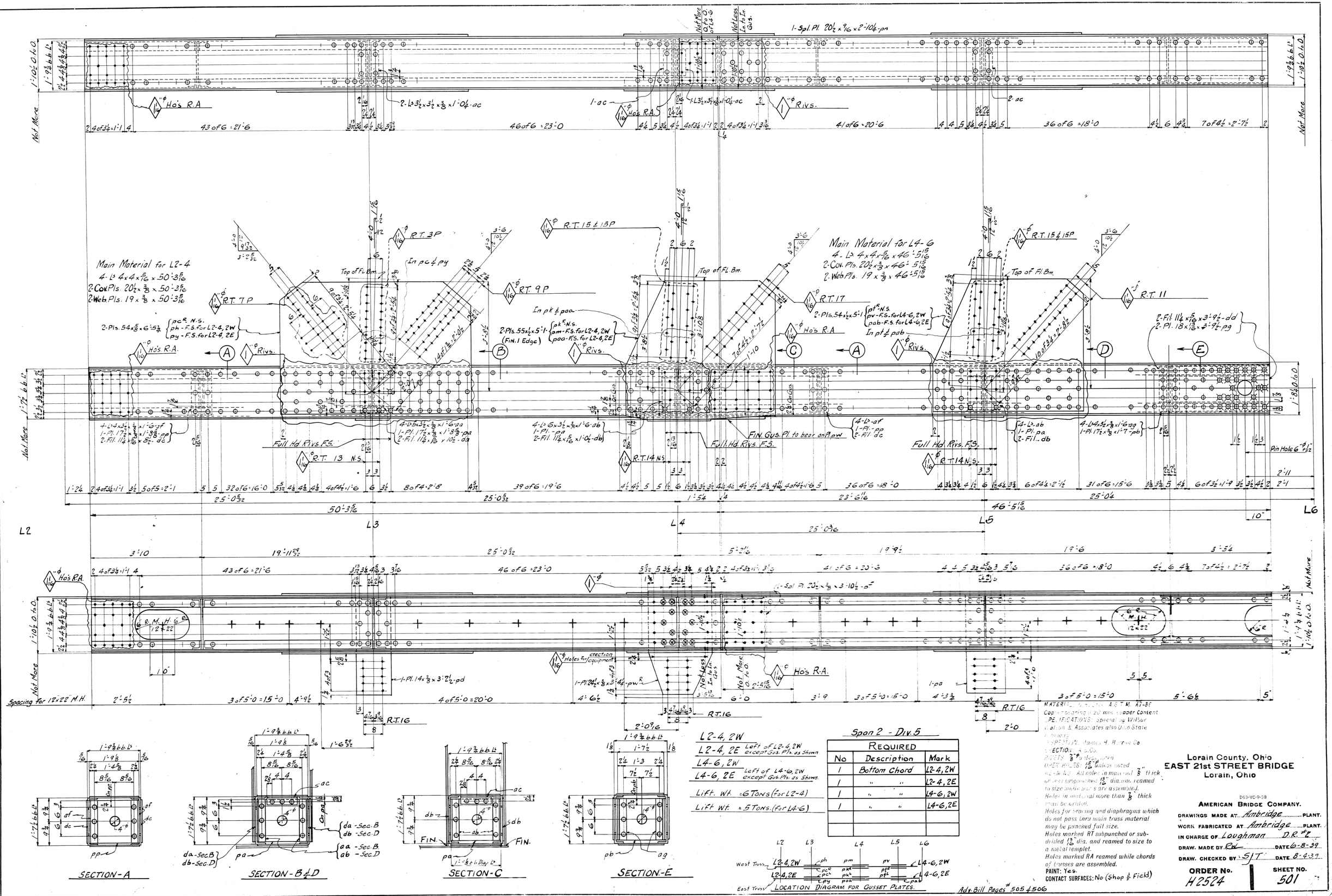
DC3-2205-5-79

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman - D.R. #2
DRAW. MADE BY ELH SJT DATE 8-15-39
DRAW. CHECKED BY DATE

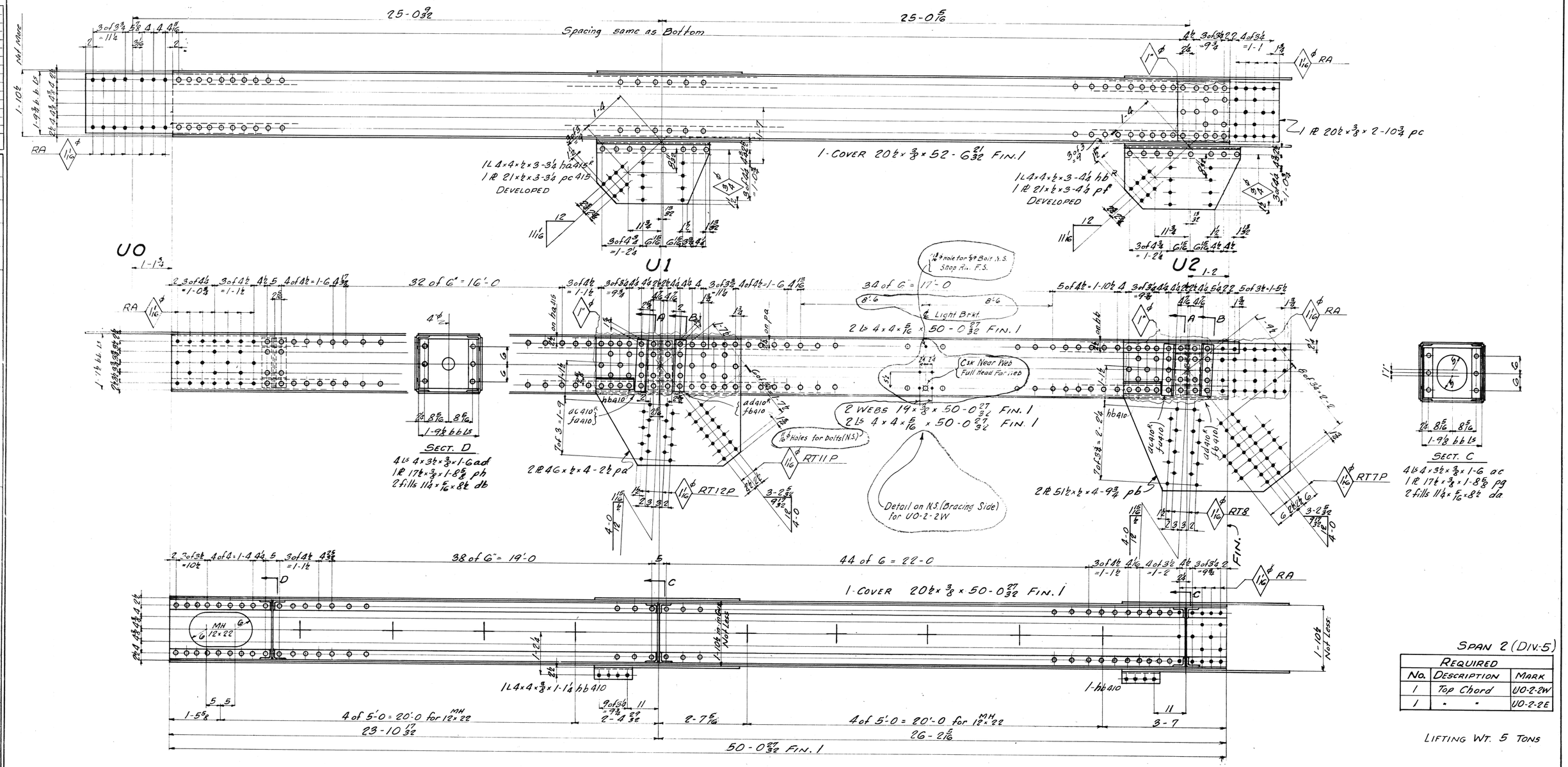
ORDER No. H2524

SHEET NO. 432



REQUIRED		
No	Description	Mark
1	Bottom Chord	L2-4, 2W
1	" "	L2-4, 2E
1	" "	L4-6, 2W
1	" "	L4-6, 2E

MATERIAL: [illegible] A.S.T.M. A7-38
Copper bearing w. 20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Bridge
INSPECTION: James H. Hunter Co.
SECTION: [illegible]
RIVETS: 3/4" ϕ unless noted
BOLTS: 3/4" ϕ unless noted
REAMED HOLES: 13/16" ϕ unless noted
Holes in all members not 3/8" thick or less subpunched 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 3/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.
PAINT: Yes
CONTACT SURFACES: No (Shop & Field)



SPAN 2 (DIV. 5)

REQUIRED		
No.	DESCRIPTION	MARK
1	Top Chord	UO-2-2W
1	" "	UO-2-2E

LIFTING WT. 5 TONS

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: J. B. Co.
RIVETS: 7/8" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes in material 7/8" thick or less stripped 13/16" dia. and reamed to size while parts are assembled.
Holes in material more than 7/8" thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16" dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: YES
CONTACT SURFACES: No - Shop & Field

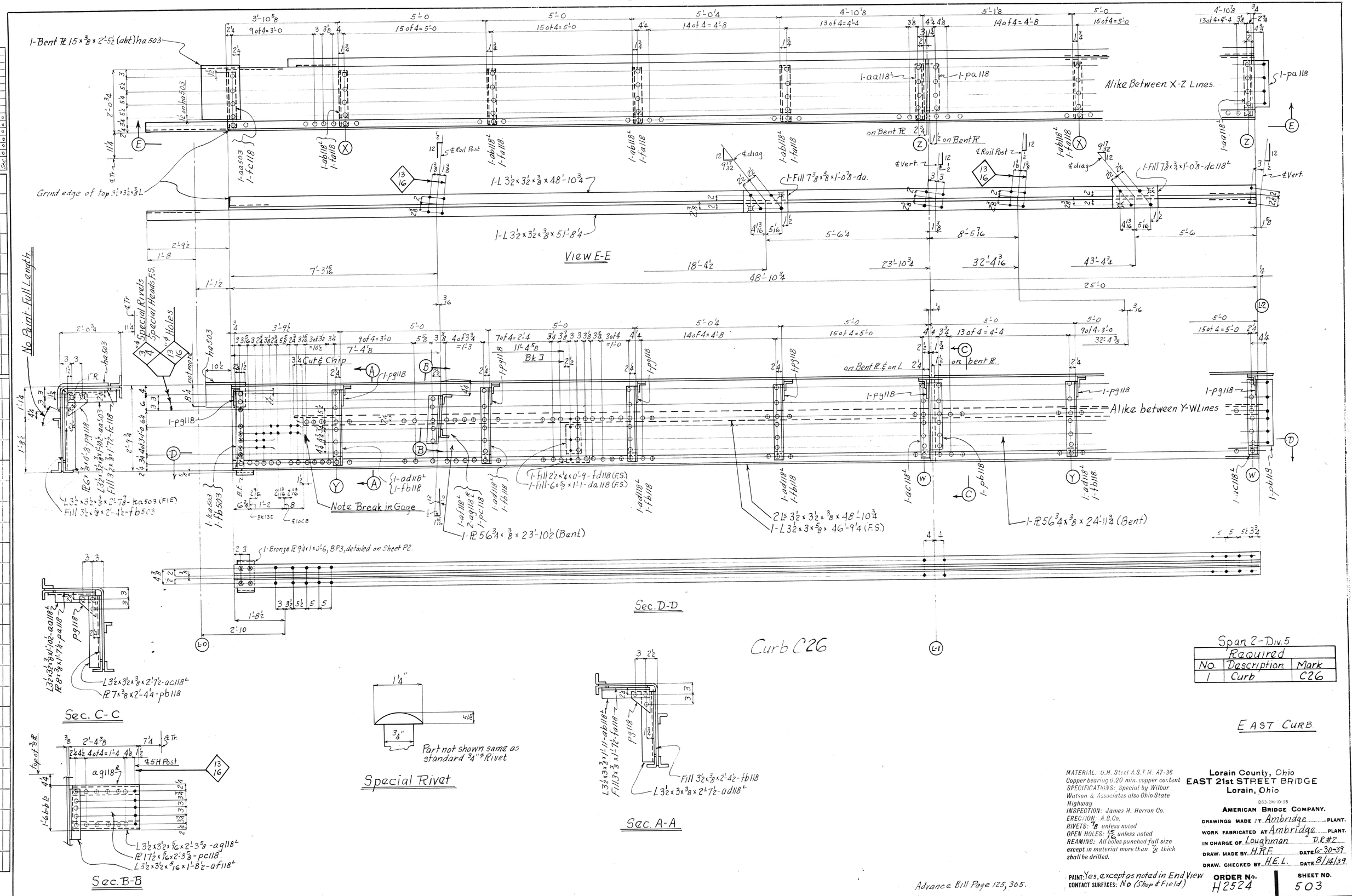
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

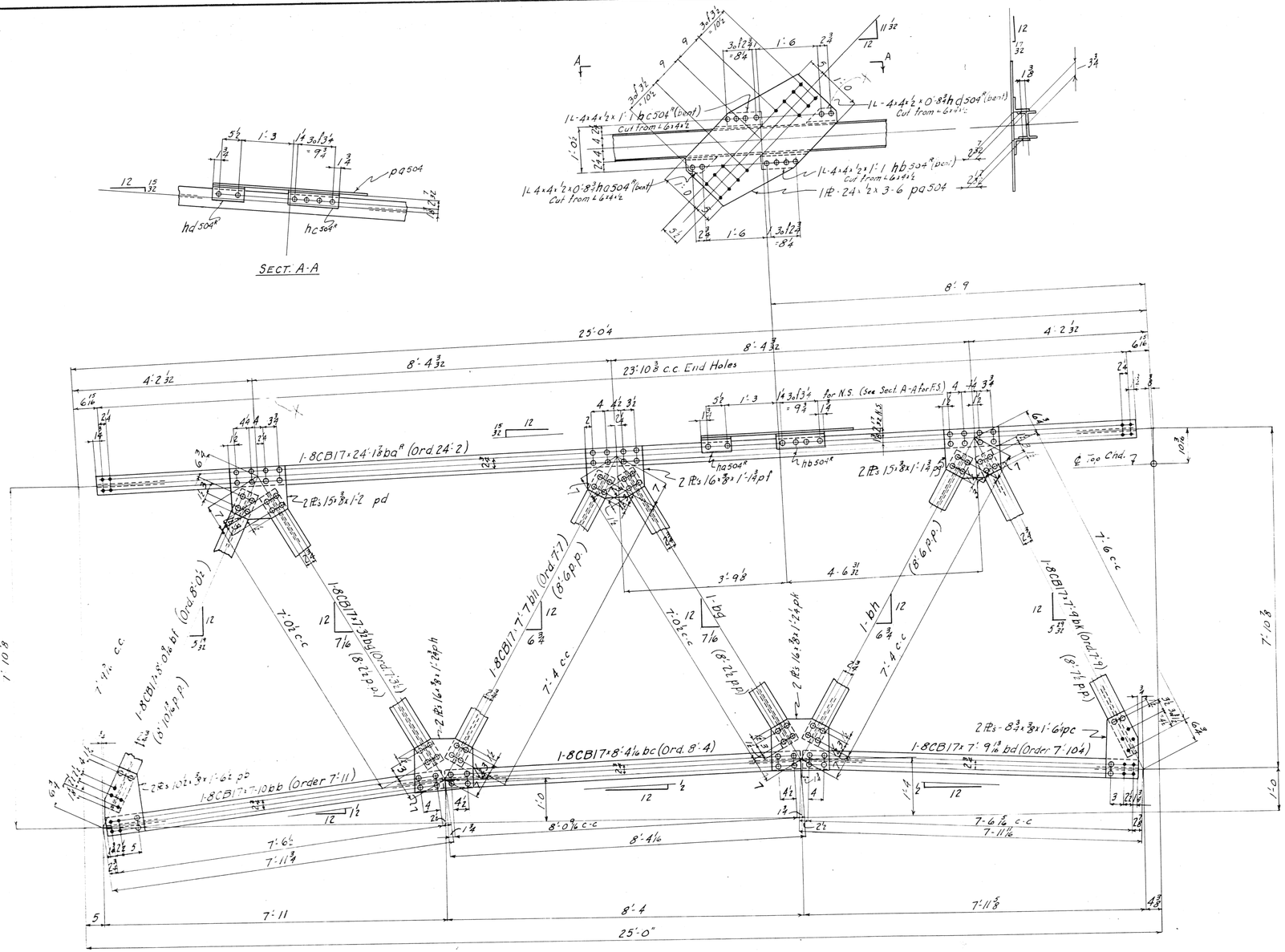
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY J.J.D. DATE 8-15-39
DRAW. CHECKED BY ALC DATE 8-16-39

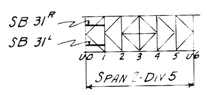
ORDER No. H2524
SHEET NO. 502

Mat'l. on Adv. Bill Nos. 518 & 521


1-Bent Pl 15×3/8×2'-5½ (obt.) ha503
Grind edge of top 3½×3½×3/8 L
1-L 3½×3½×3/8×48'-10¾
1-L 3½×3½×3/8×51'-8¼
1-Fill 7⅜×3/4×1'-0⅞-dc118
1-Fill 7⅜×3/4×1'-0⅞-da
View E-E
Alike Between X-Z Lines
Alike between Y-W Lines
No Paint-Full Length
Special Rivets
Special Heads F.S.
Holes not marked
Cut & Chip
Note Break in Gage
1-Pl 56¾×3/8×23'-10½ (Bent)
1-Pl 56¾×3/8×24'-11¾ (Bent)
2 Ls 3½×3½×3/8×48'-10¾
1-L 3½×3×5/8×46'-9¼ (F.S.)
1-Bronze Pl 9¼×1×0'-6, BP3, detailed on Sheet P2.
Sec. D-D
Sec. C-C
Sec. B-B
Sec. A-A
Special Rivet
Part not shown same as standard ¾" ø Rivet
Curb C26
Span 2-Div. 5
Required
No. Description Mark
1 Curb C26
EAST CURB
MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.
PAINT: Yes, exceptos noted in End View
CONTACT SURFACES: No (Shop & Field)
Advance Bill Page 125, 305.
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F. DATE 6-30-39
DRAW. CHECKED BY H.E.L. DATE 8/14/39
ORDER No. H2524
SHEET NO. 503



LONG. BRACE SB 31R
" " SB 31L



LOCATION DIAGRAM

SPAN 2	REQUIRED		
Div. 5	Total	Description	Mark
1	1	Long. Brace	SB31R
1	1	" "	SB31L

MATERIAL: U.S. Steel - S.T.M. A7-30
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specified by Wilbur Watson & Associates, Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: 3/4φ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size

PAINT: Yes
CONTACT SURFACES: No - (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

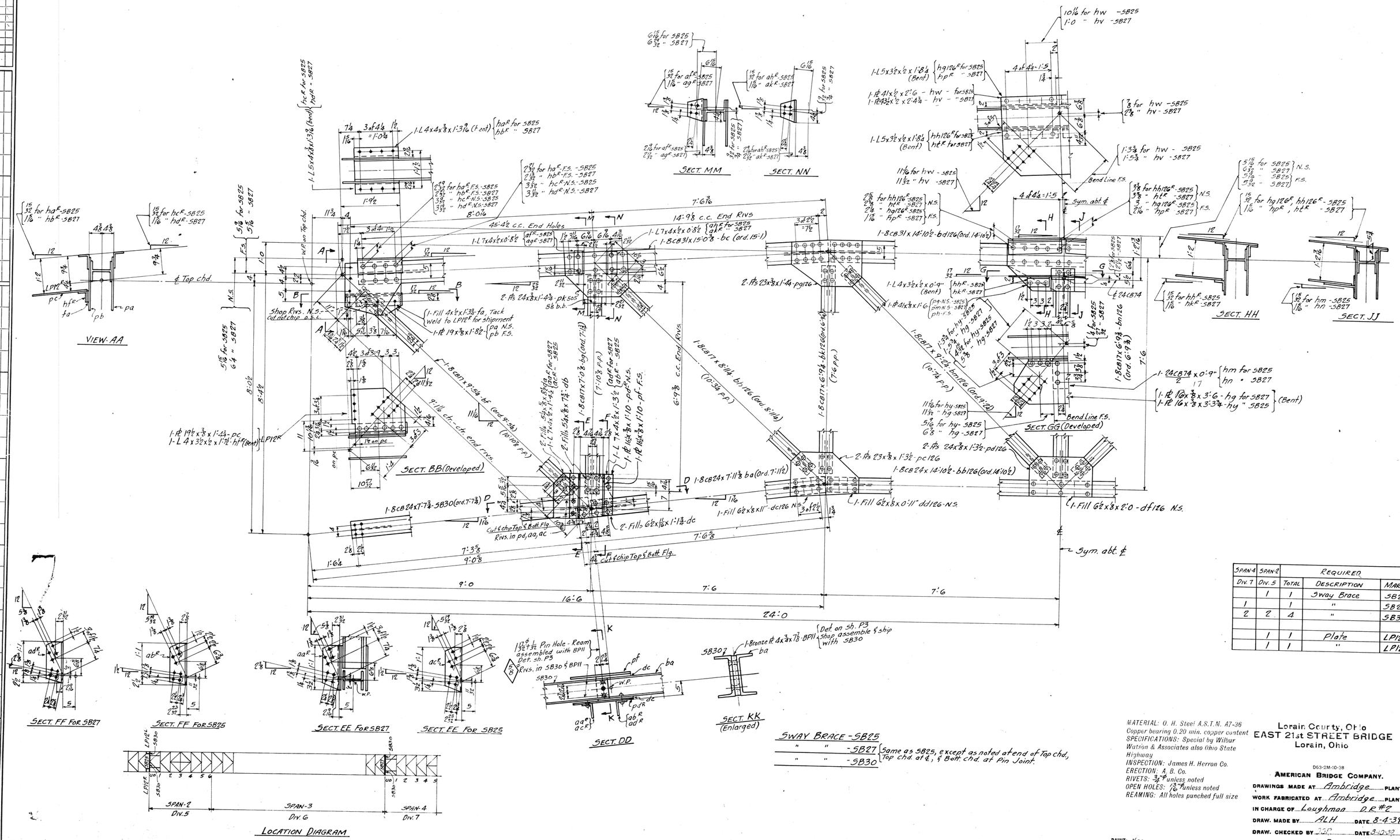
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY AL-F.B.A. DATE 8-8-39
DRAW. CHECKED BY DATE 8-14-39

ORDER No. H2524
SHEET NO. 504

Advance Bill Order Page 514



SPAN-4 Div. 7	SPAN-2 Div. 5	Required Total	Description	Mark
	1	1	Sway Brace	SB25
1		1	"	SB27
2	2	4	"	SB30
	1	1	Plate	LP12R
	1	1	"	LP12L

SWAY BRACE - SB25
" " - SB27 } Same as SB25, except as noted at end of Top chd., Top chd. at ℄, & Bott. chd. at Pin Joint.
" " - SB30

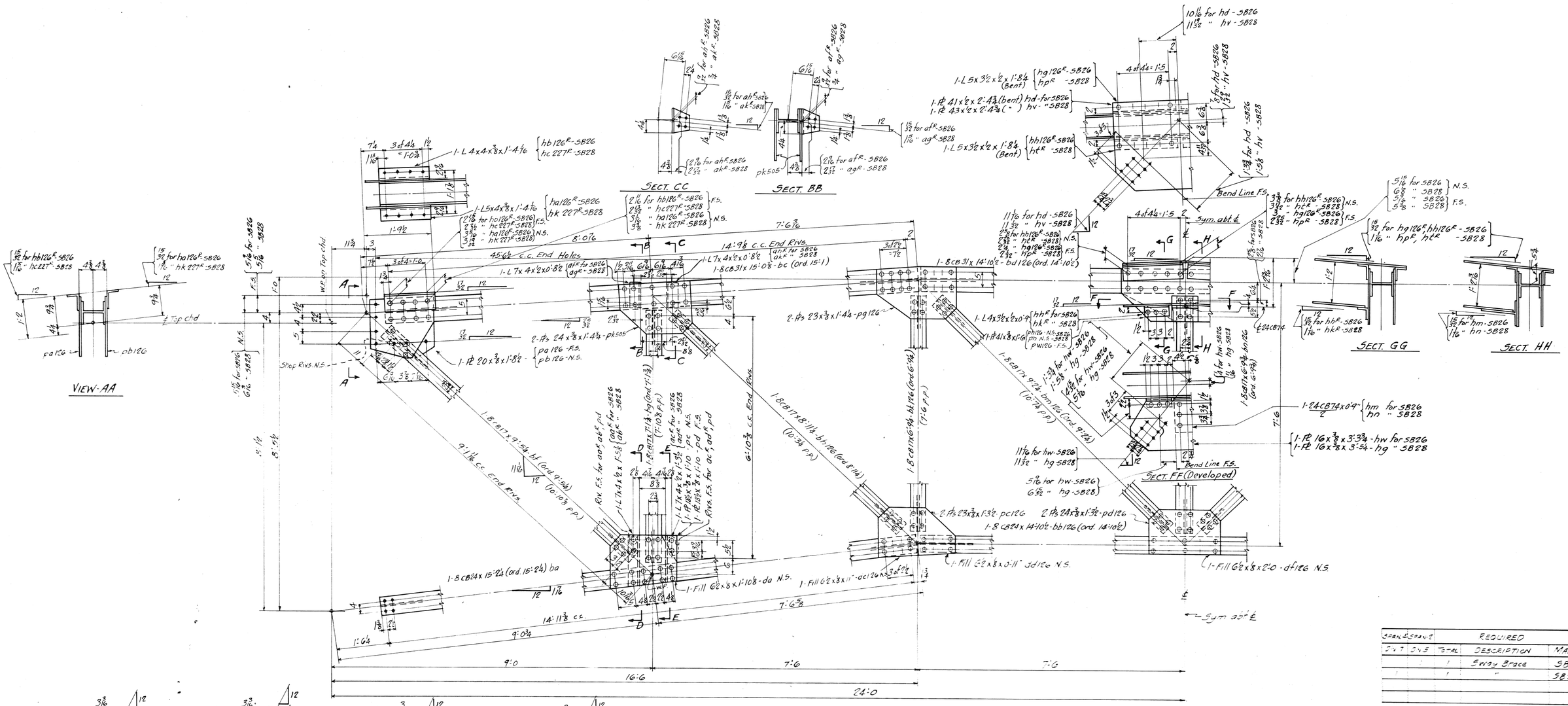
MATERIAL: O. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" ϕ unless noted
OPEN HOLES: 1/16" unless noted
REAMING: All holes punched full size

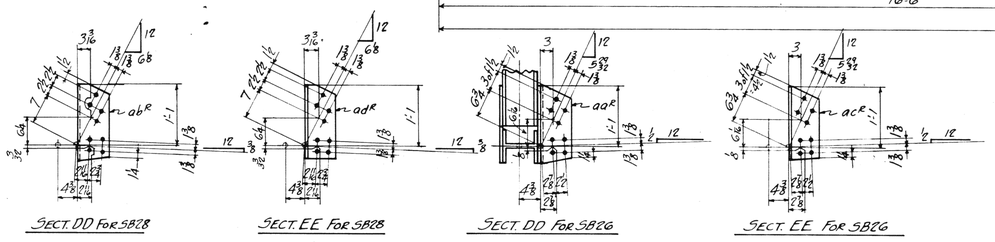
PAINT: yes
CONTACT SURFACES: No, Shop & Field

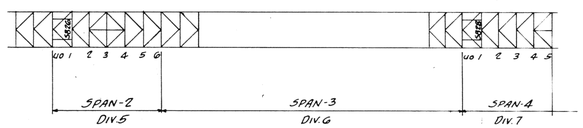
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY ALH DATE 8-4-39
DRAW. CHECKED BY DGP DATE 8-10-39

ORDER No. H2524
SHEET NO. 505







LOCATION DIAGRAM

SPAN 4	SPAN 2	REQUIRED		
SH 7	SH 5	TOTAL	DESCRIPTION	MARK
		1	Sway Brace	SB26
		1	"	SB28

MATERIAL: U. H. STRUC. A.S.T.M. A7-39
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specially Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" ø unless noted
OPEN HOLES: 13/16" ø unless noted
REAMING: All holes punched full size

PAINT: Yes
CONTACT SURFACES: No, Shop & Field

Adv. Bills 407, 408, 516

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

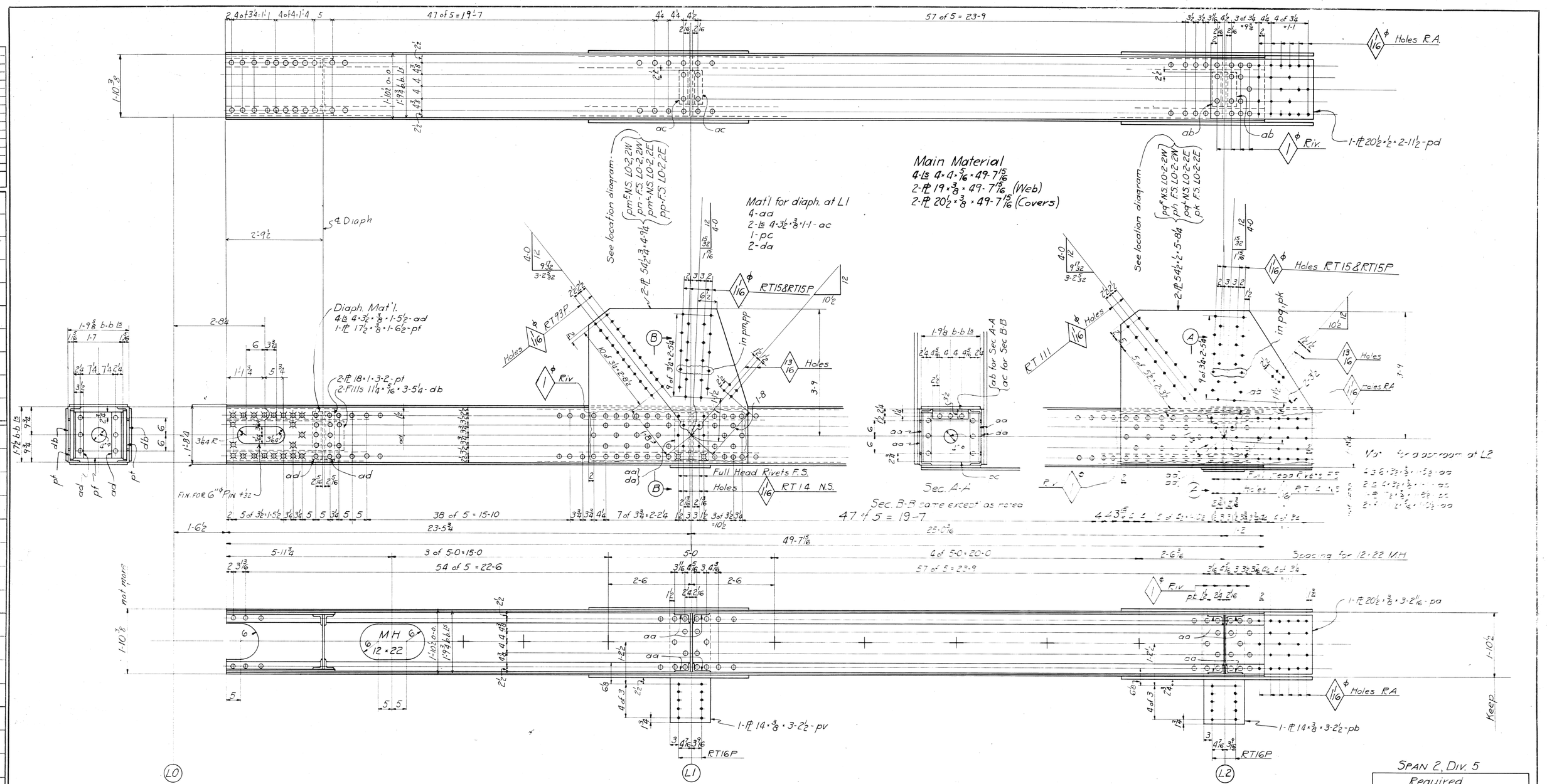
D63-CM-10-38

AMERICAN BRIDGE COMPANY.

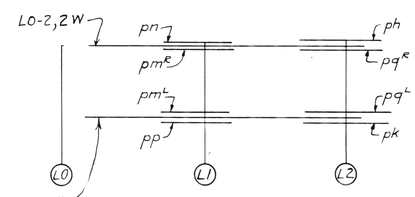
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY A.L.H. DATE 8-8-39
DRAW. CHECKED BY [illegible] DATE [illegible]

ORDER No. H2524

SHEET NO. 506



LO-2, 2W
LO-2, 2E (Left except Gusset Pl at L1 & L2)



Location diagram for Gusset Pls

Advance Bill Page 519

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes in material 7/8 thick or less subpunched 13/16 dia. and reamed to size while parts are assembled.
Holes in material more than 7/8 thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or subdrilled 13/16 dia. and reamed to size to a metal templet.
Holes marked RA reamed while chords of trusses are assembled.

PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

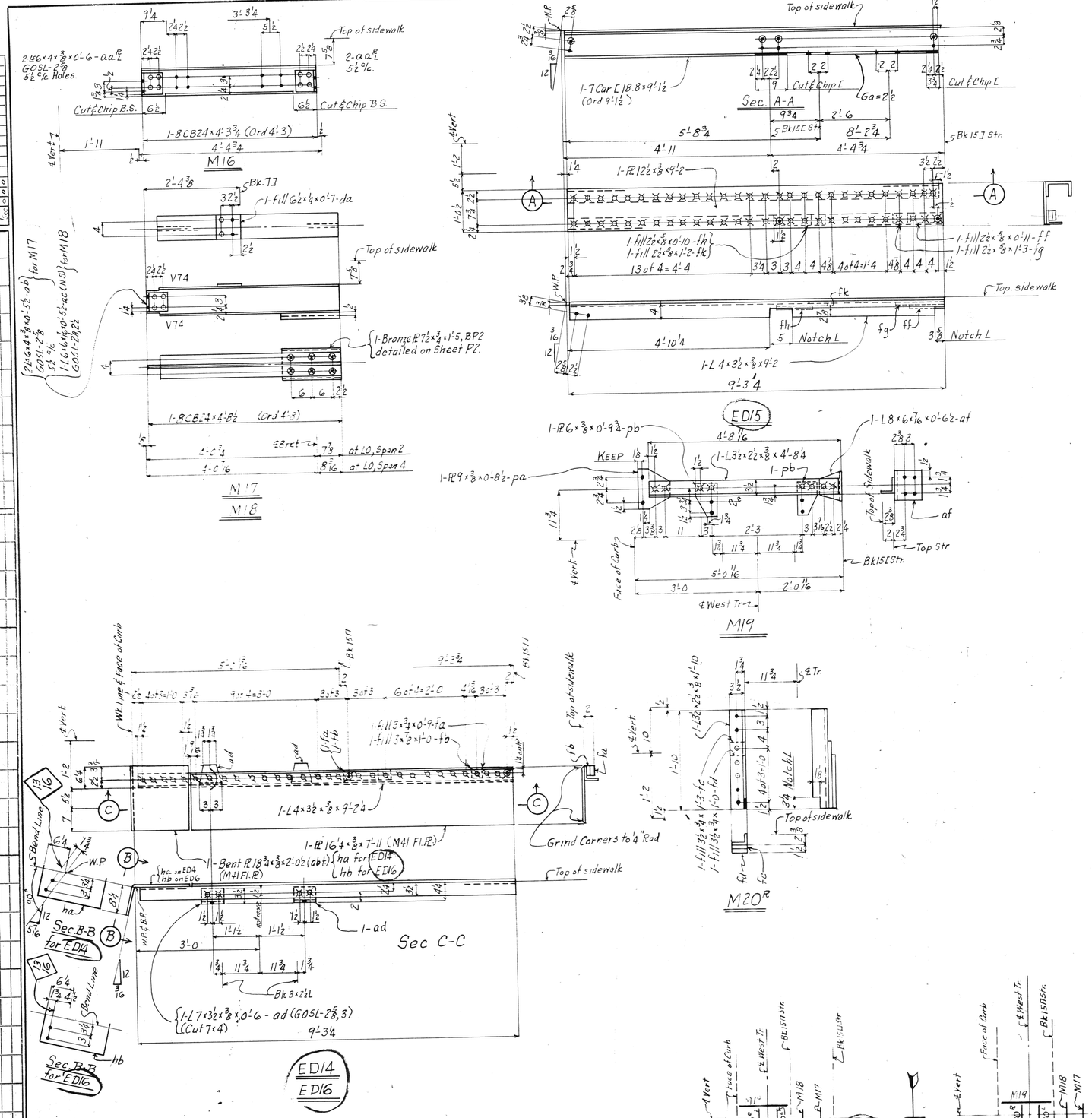
SPAN 2, DIV. 5

Required		
No	Description	Mark
1	Bott. Chord	LO-2,2W
1	Bott. Chord	LO-2,2E

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY H.R.F.-E.L.H. DATE 8-10-39
DRAW. CHECKED BY [illegible] DATE 8-17-39

ORDER No. H2524
SHEET NO. 507



Sp. 4 Div. 7	Sp. 2 Div. 5	Required No	Description	Mark
	1	1	Expansion Dam	ED14
1	1	2	Expansion Dam	ED15
1		1	Expansion Dam	ED16
1	1	2	Beam	M16
1	1	2	Beam	M17
1	1	2	Beam	M18
1	1	2	Angles	M19
1	1	2	Angles	M20R
1	1	2	Angles	M20L

Location Diagram for Sidewalk Expansion at L0, Span 2

Location Diagram for Sidewalk Expansion at L0, Span 4

9 Rev 9/12
Rev 9/4/39

Advance Bill Page 406-522-121

MATERIAL: O. H. Stee A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 7/8 unless noted
OPEN HOLES: 17/16 unless noted
REAMING: All holes punched full size except in material more than 7/8 thick shall be drilled.

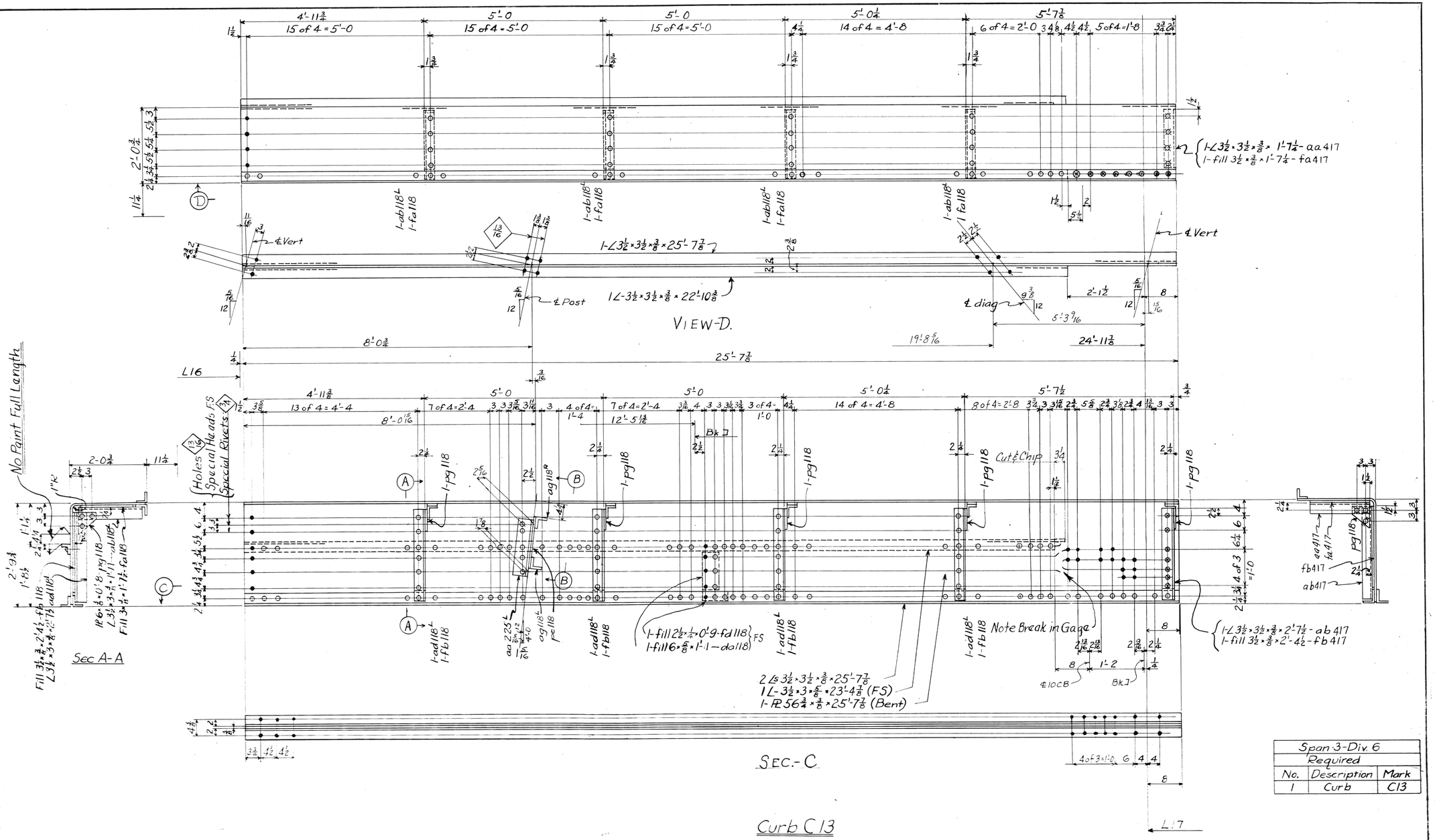
PAINT: Yes
CONTACT SURFACES: No (Shop & Field)

Sidewalk Expansion at L0, Sp. 2 - L0, Sp. 4.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F. DATE 8-16-39
DRAW. CHECKED BY H.C.M. DATE 8-18-39

ORDER No. H2524
SHEET NO. 508



Span 3-Div. 6		
Required		
No.	Description	Mark
1	Curb	C13

East Curb.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
DESIGN-DOS

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY HRF DATE 6-19-39
DRAW. CHECKED BY HEL DATE 8/19/39

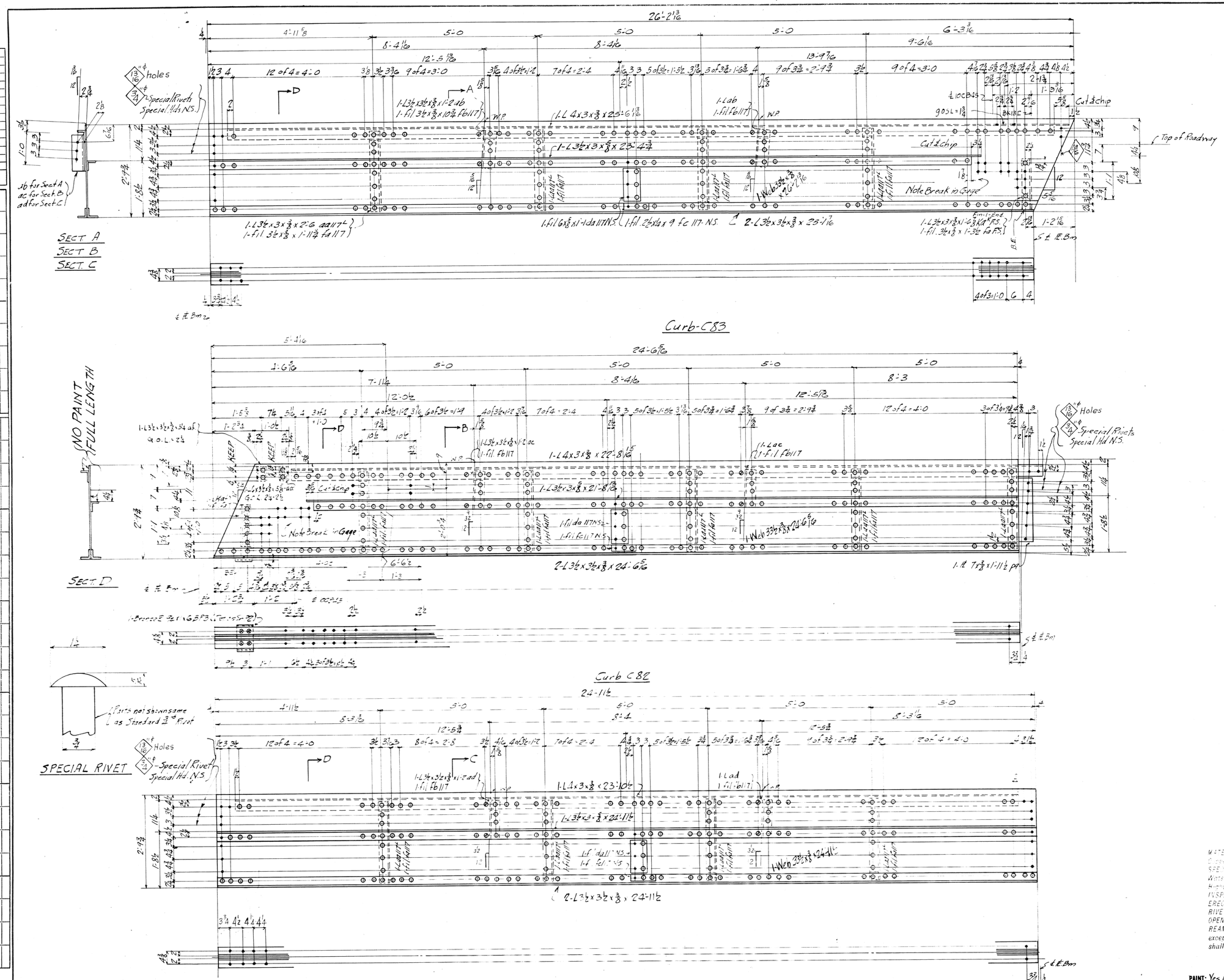
MATERIAL: O.H. Steel A.S.T.M. 47-39 Copper bearing 0.20% min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co
RIVETS: ⅞" unless noted
OPEN HOLES: 1 1/16" unless noted
REAMING: All holes punched full size except in material more than ⅞" thick shall be drilled.

PAINT: Yes, except as noted in Sec. A-A.
CONTACT SURFACES: No. (Shop & Field)

ORDER No. H2524

SHEET No. 601-A

Adv. Bill Pg. 204, 125.



Span-Left	Span-Right	REQUIRED		
Span	Span	No.	Description	Mark
		1	Curb	C83
1		1	do	C82
		1	do	C78

Mass: Curb

MATERIAL: U.H. Steel & S.T.M. 47-38
Engineering Department
SPECIFICATIONS: Sanitary Water
Watson & Associates (ass. Ohio State Highway
INSPECTION: James H. Herron, Co.
ERECTION: A. B. Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than 3/8" thick shall be drilled.

PAINT: Yes Except as Noted in Sect D
CONTACT SURFACES: No (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

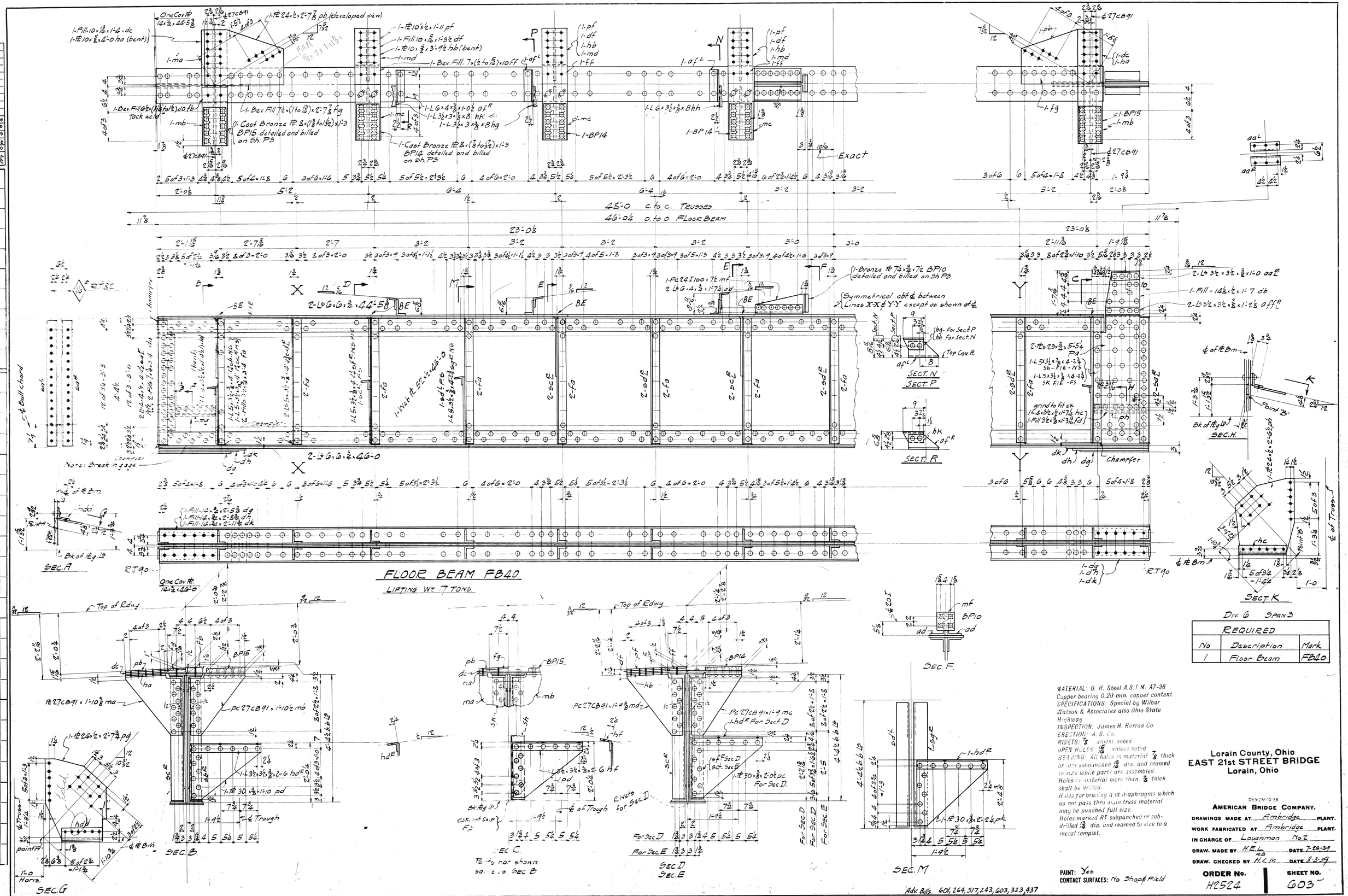
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.E.
DRAW. MADE BY JR DATE 7-24-39
DRAW. CHECKED BY FES DATE 8-8-39

ORDER No. H2524

SHEET NO. 602



REQUIRED		
No	Description	Mark
1	Floor Beam	FB40

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
READING: All holes in material ⅞ thick or less subpunched 13/16 dia. and reamed to size while parts are assembled. Holes in material more than ⅞ thick shall be drilled.
Holes for bracing and diaphragms which do not pass thru main truss material may be punched full size.
Holes marked RT subpunched or sub-drilled 13/16 dia. and reamed to size to a metal templet.

PAINT: Yes
CONTACT SURFACES: No Shop & Field

Adv. Bills. 601, 264, 517, 243, 603, 323, 437

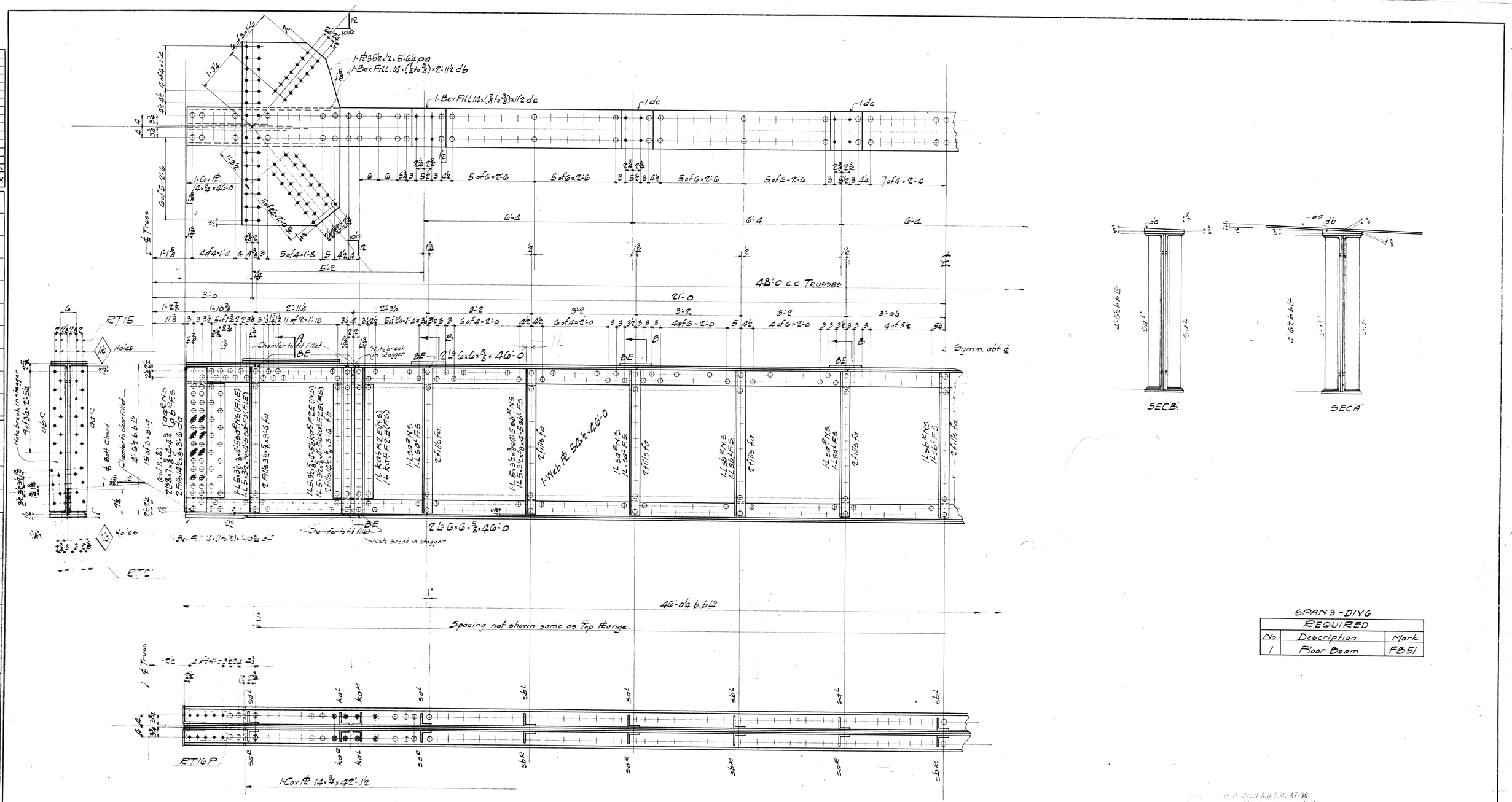
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY H.E.L. DATE 7-26-39
DRAW. CHECKED BY R.B. H.C.M. DATE 8-3-39

ORDER No. H2524
SHEET NO. 603



SPAN 3 - DIVG

REQUIRED		
No.	Description	Mark
1	Floor Beam	FB51

FLOOR BEAM FB51

LIFTING WT = 8½ TONS.

Adv. Bill Page. 202, 207 & 604.

PAINT: Yes.
CONTACT SURFACES: No. Shop & Field.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

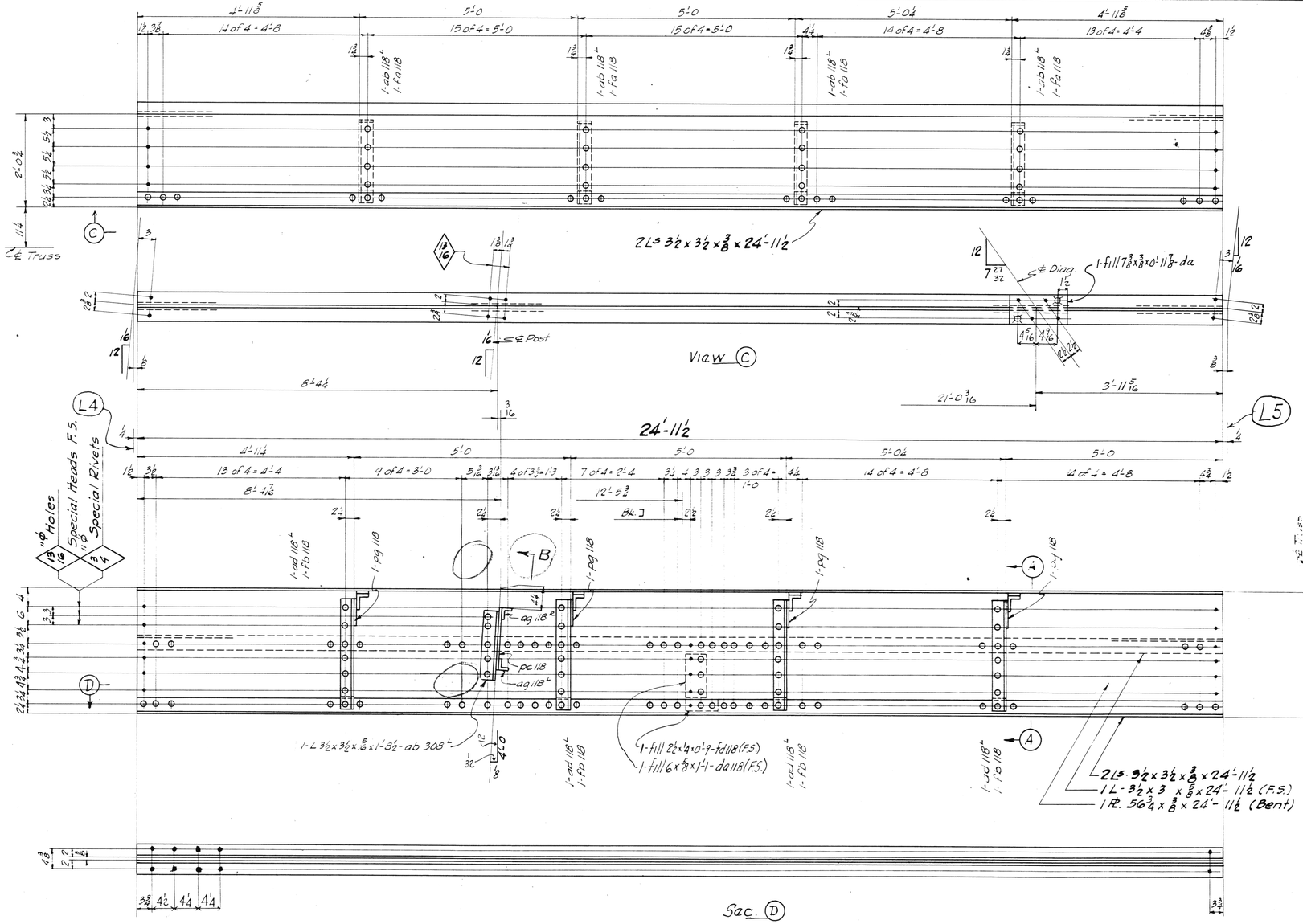
D63-2M-10-38

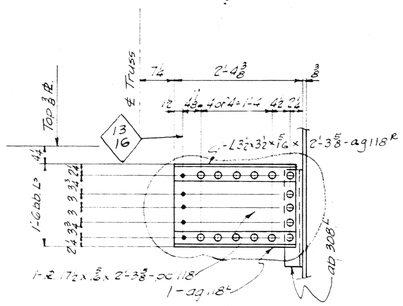
AMERICAN BRIDGE COMPANY.

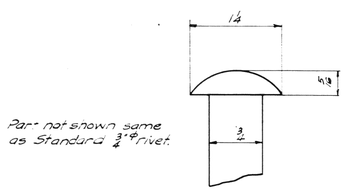
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman No. 2
DRAW. MADE BY A.B. DATE 8-7-39
DRAW. CHECKED BY H.C.M. DATE 8-10-39

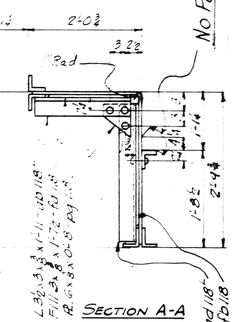
ORDER No. H2524

SHEET NO. 604









Span 4 - Div. 7

Required		
No	Description	Mark
1	Curb	C 25

CURB-C25

EAST CURBS

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞" unless noted
OPEN HOLES: 1 5/16" unless noted
REAMING: All holes punched full size except in material more than ⅞" thick shall be drilled.

PAINT: Yes-except as noted in Sec. A-A.
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

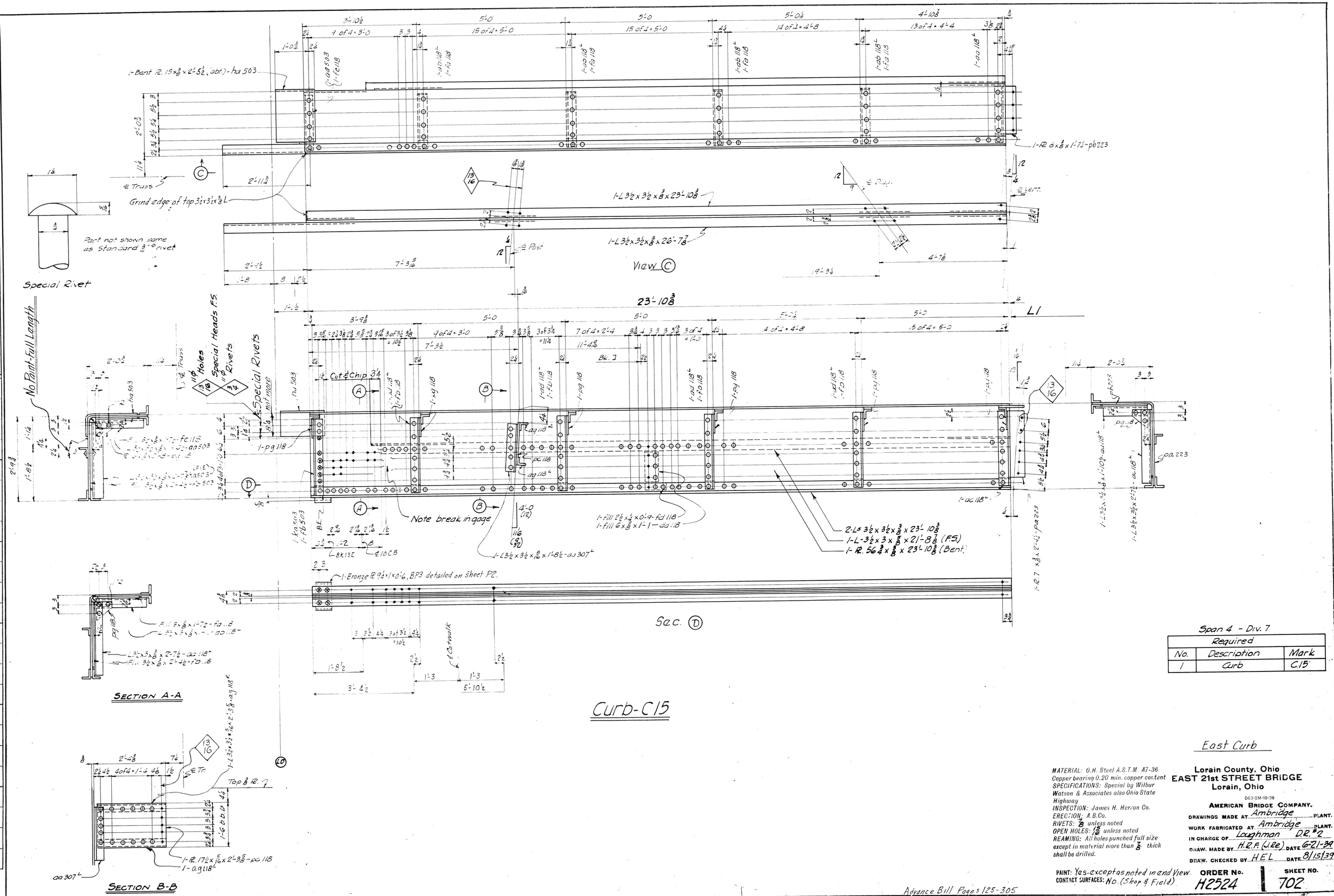
D63-2M-10-38

AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F. (J.Re.) DATE 6-20-39
DRAW. CHECKED BY H.E.L. DATE 8/14/39

ORDER No. H2524
SHEET NO. 701

Adv. Bill Page 125-305

Rev 9-29-39 Sect-B



Span 4 - Div. 7

Required		
No.	Description	Mark
1	Curb	C15

MATERIAL: O.H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ⅞ unless noted
OPEN HOLES: 15/16 unless noted
REAMING: All holes punched full size except in material more than ⅞ thick shall be drilled.

PAINT: Yes-exceptas noted in end View.
CONTACT SURFACES: No. (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

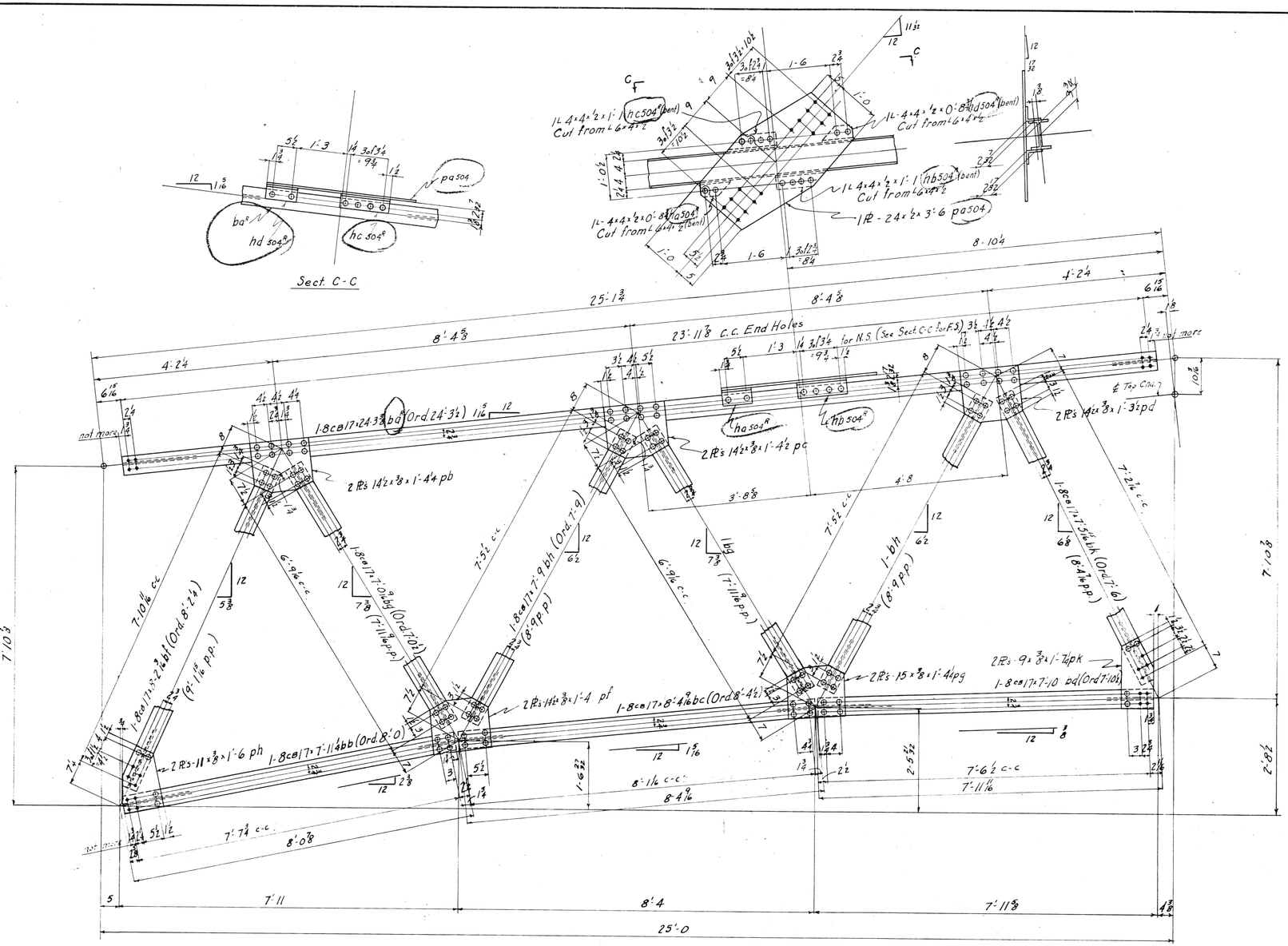
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY H.R.F. (J.R.e) DATE 6-21-39
DRAW. CHECKED BY H.E.L. DATE 8/15/39

ORDER No. H2524

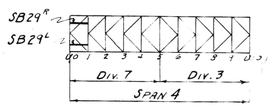
SHEET NO. 702

Advance Bill Pages 125-305



LONG. BRACE SB 29R
" " SB 29L

SPAN 4	REQUIRED		
Div. 7	Total	Description	Mark
1	1	Long. Brace	SB29R
1	1	" "	SB29L



LOCATION DIAGRAM

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Specie by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: ¾ unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size

PAINT: Yes
CONTACT SURFACES: No - (Shop & Field)

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

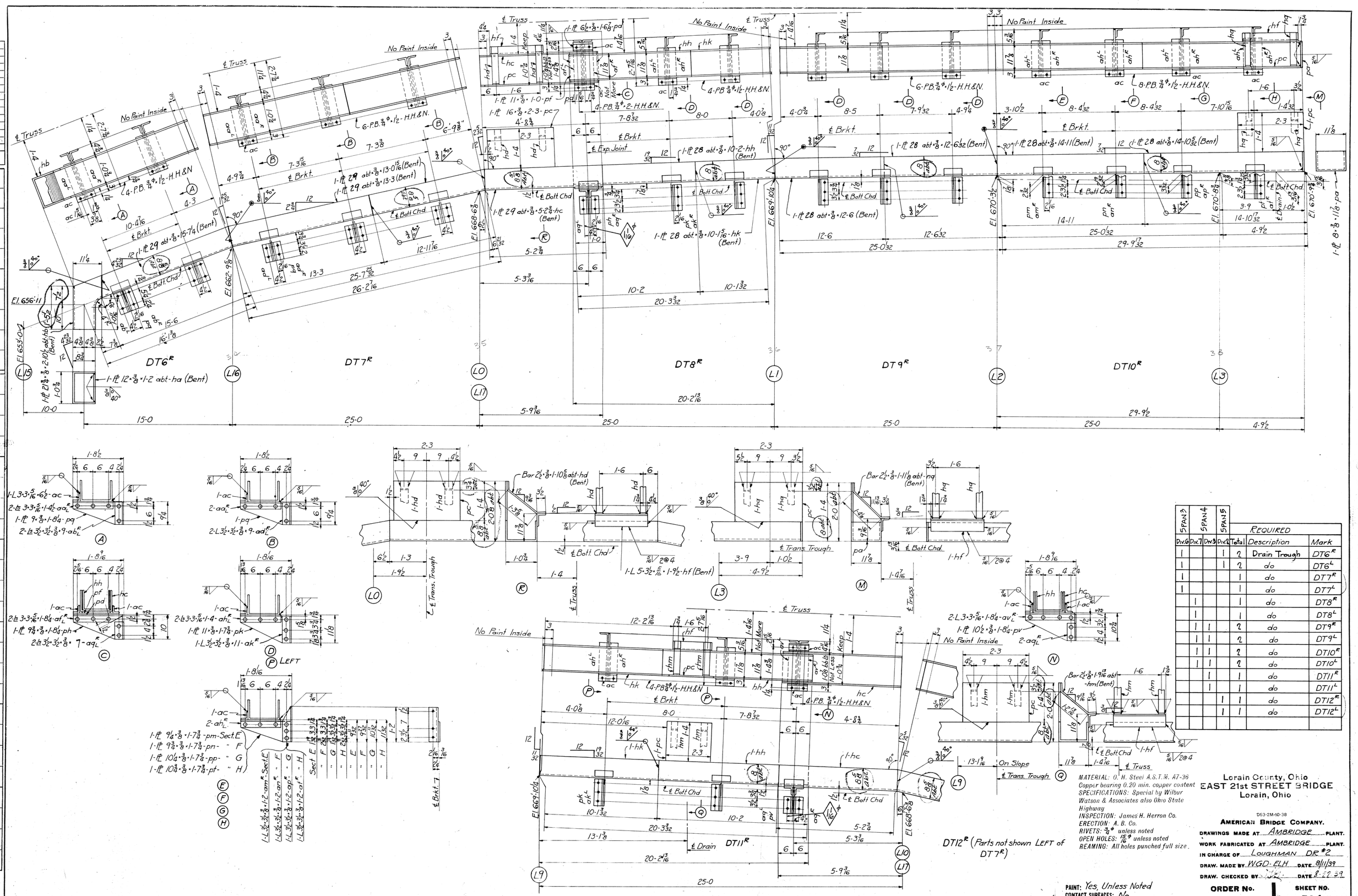
D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY ALH-W.B.R. DATE 8-3-39
DRAW. CHECKED BY O.G.R. DATE 8-3-39

ORDER No. H2524
SHEET NO. 703

Advance Bill Order Page 515



SPAN 3		SPAN 4		SPAN 5	REQUIRED		
Div. 6	Div. 7	Div. 3	Div. 2	Total	Description	Mark
1			1	2	Drain Trough	DT6R
1			1	2	do	DT6L
1				1	do	DT7R
1				1	do	DT7L
	1			1	do	DT8R
	1			1	do	DT8L
	1	1		2	do	DT9R
	1	1		2	do	DT9L
	1	1		2	do	DT10R
	1	1		2	do	DT10L
		1		1	do	DT11R
		1		1	do	DT11L
			1	1	do	DT12R
			1	1	do	DT12L

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ¾ϕ unless noted
OPEN HOLES: 15/16ϕ unless noted
REAMING: All holes punched full size.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED AT AMBRIDGE PLANT.
IN CHARGE OF LOUGHMAN DR #2
DRAW. MADE BY WGD-ELH DATE 8/11/39
DRAW. CHECKED BY DATE 8/22/39

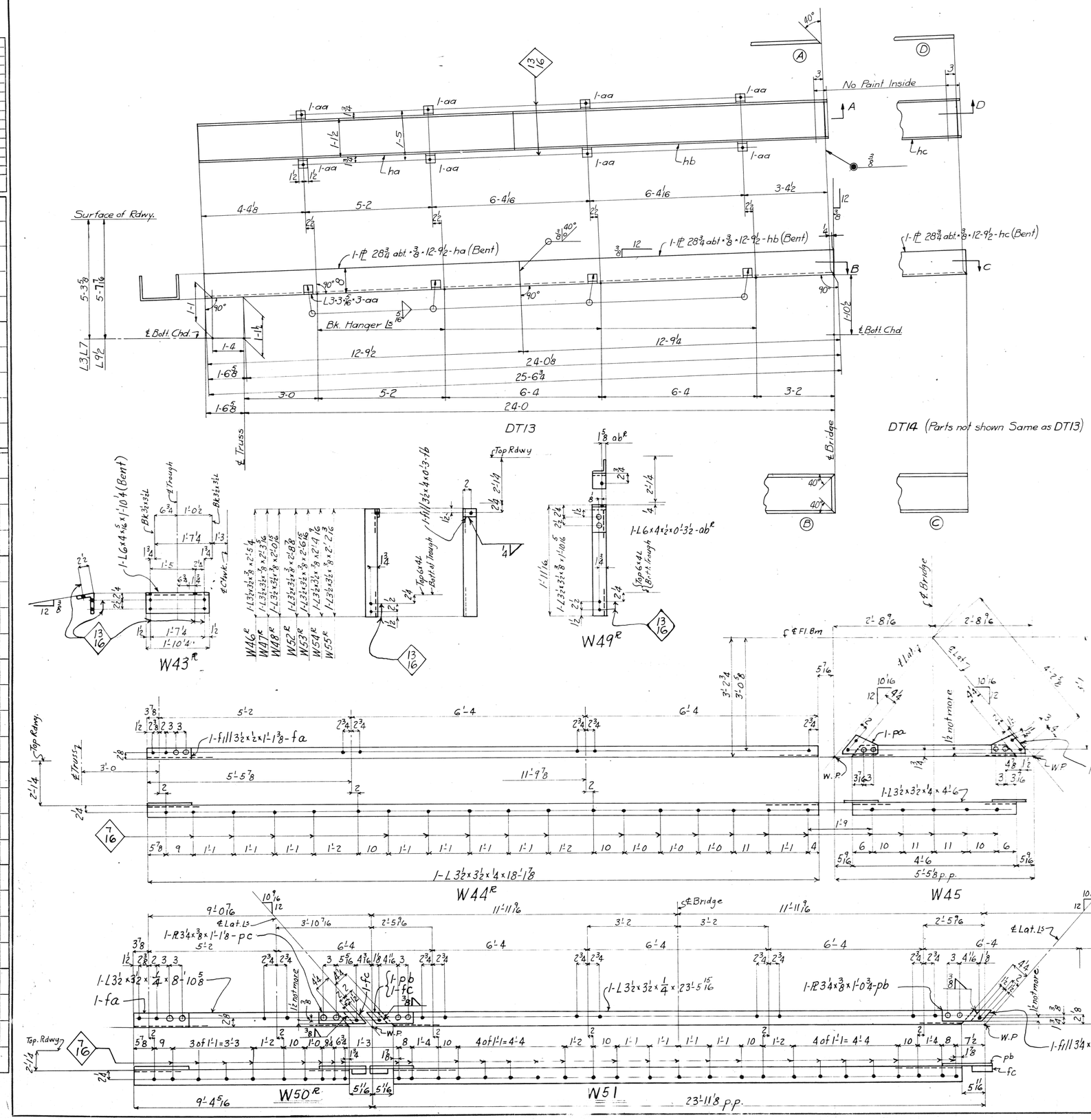
PAINT: Yes, Unless Noted
CONTACT SURFACES: No

ORDER No. H2524

SHEET NO. 704

Adv. Bills-Pgs 324, 325

Rev. 9/14



Span 4		Required		
Div 7	Div 3	No	Description	Mark
1	2	3	Drain Trough	DT13
1	2	3	do	DT14
4	8	12	Angles	W43R
1	1	2	do	W44R
1	1	2	do	W44L
1	1	2	do	W45
1	1	2	Hangers	W46R
1	1	2	do	W46L
1	1	2	do	W47R
1	1	2	do	W47L
1	1	2	do	W48R
1	1	2	do	W48L
1	1	2	do	W49R
1	1	2	do	W49L
	1	1	Angles	W50R
	1	1	do	W50L
	1	1	do	W51
	1	1	Hanger	W52R
	1	1	do	W52L
	1	1	do	W53R
	1	1	do	W53L
	1	1	do	W54R
	1	1	do	W54L
	1	1	do	W55R
	1	1	do	W55L
4	8	12	Angles	W43L

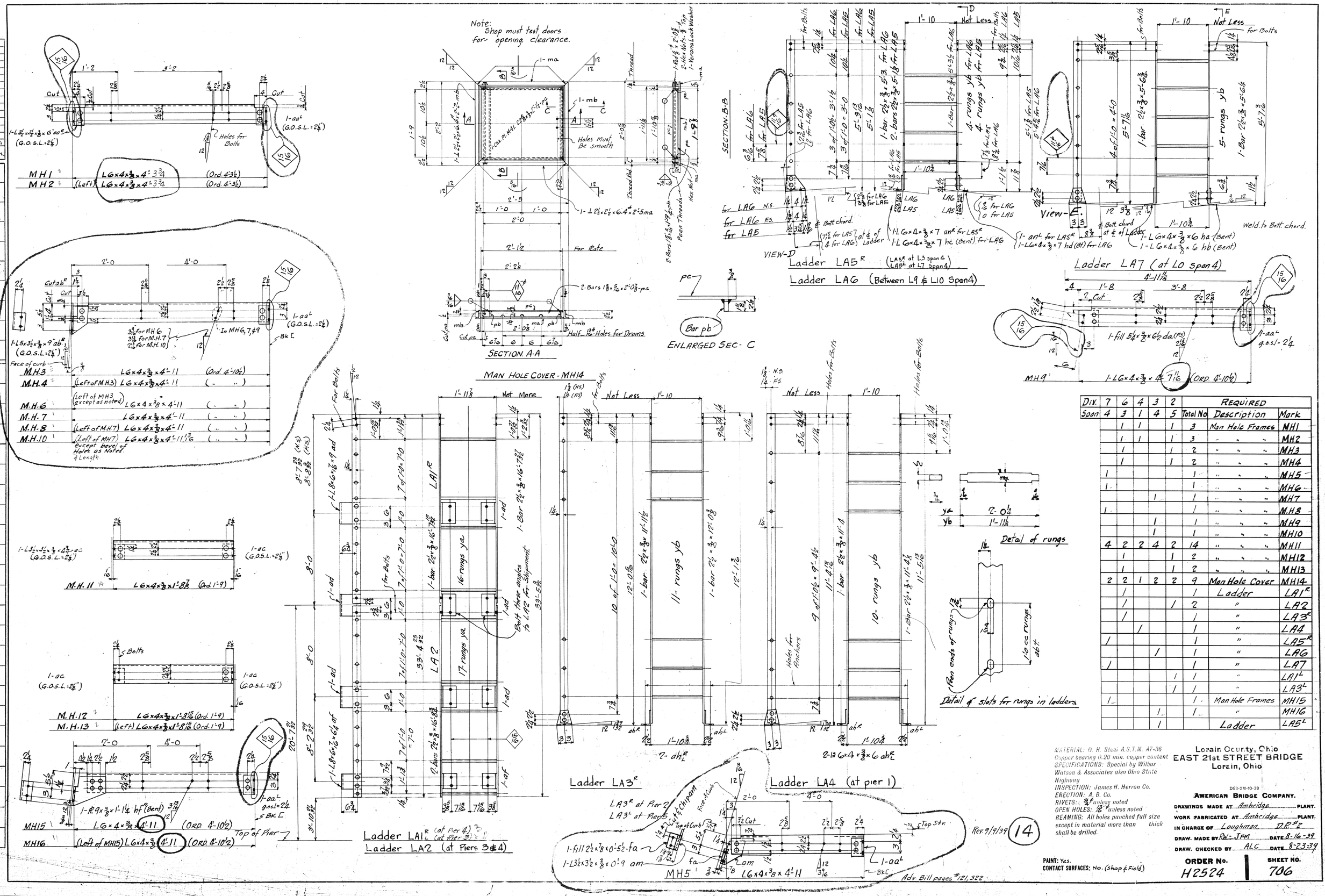
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. F. Co.
RIVETS: ⅞
OPEN HOLES: 15/16 ϕ unless noted.
REAMING: All holes punched full size.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2 (HEP) 10-24-38
DRAW. MADE BY W.G.D. - E.L.H. DATE 8/14/39
DRAW. CHECKED BY [illegible] DATE 8-22-39

PAINT: Yes, Unless Noted
CONTACT SURFACES: No (Shop & Field)

ORDER No. H2524
SHEET NO. 705



Div.	7	6	4	3	2	REQUIRED		
Span	4	3	1	4	5	Total No.	Description	Mark
		1	1		1	3	Man Hole Frames	MH1
		1	1		1	3	" " "	MH2
		1			1	2	" " "	MH3
		1			1	2	" " "	MH4
1						1	" " "	MH5
1						1	" " "	MH6
			1			1	" " "	MH7
1						1	" " "	MH8
			1			1	" " "	MH9
			1			1	" " "	MH10
4	2	2	4	2		14	" " "	MH11
	1			1		2	" " "	MH12
	1			1		2	" " "	MH13
2	2	1	2	2		9	Man Hole Cover	MH14
	1					1	Ladder	LA1R
	1			1		2	"	LA2
	1					1	"	LA3R
		1				1	"	LA4
1						1	"	LA5R
			1			1	"	LA6
1						1	"	LA7
				1		1	"	LA1L
				1		1	"	LA3L
1						1	Man Hole Frames	MH15
			1			1	"	MH16
			1				Ladder	LA5L

MATERIAL: U. H. Steel A.S.T.M. A7-36 Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4" unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size except in material more than thick shall be drilled.

PAINT: Yes.
CONTACT SURFACES: No. (Shop & Field)

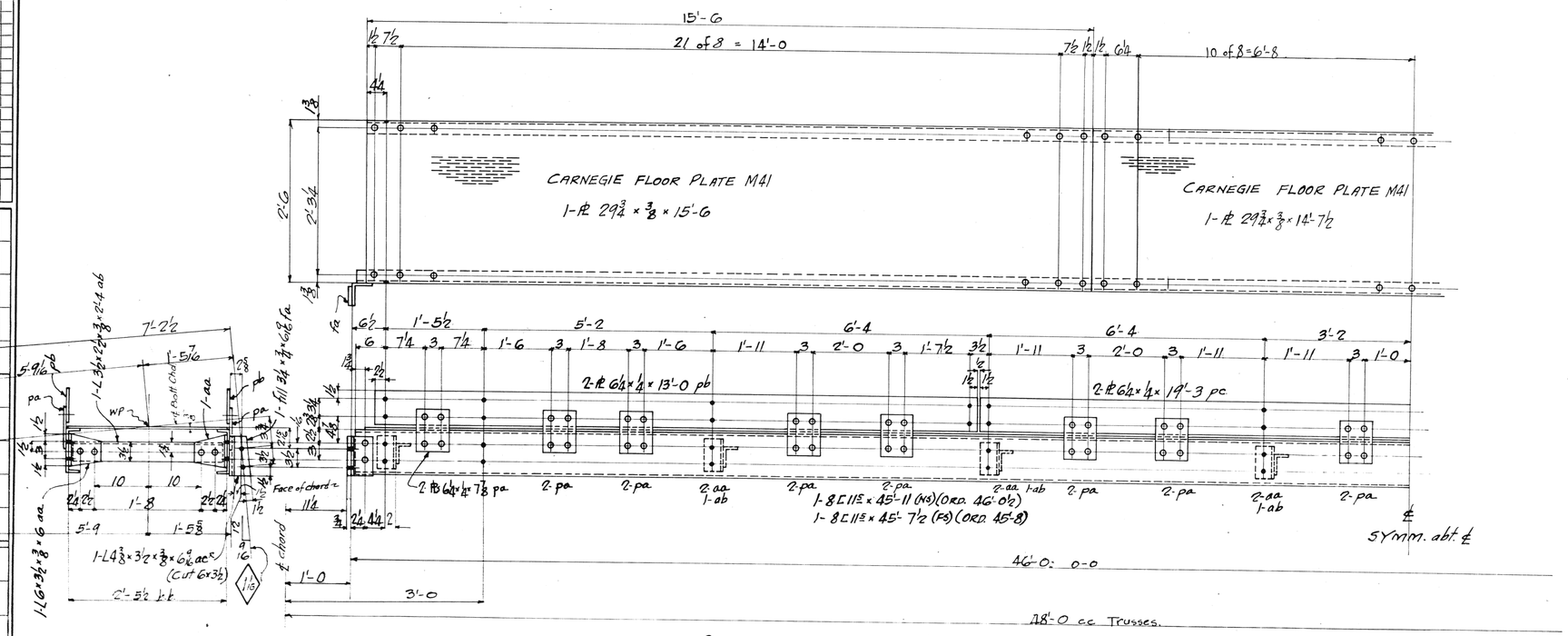
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

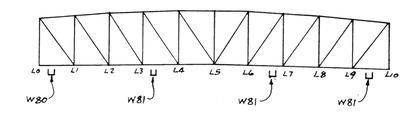
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R. #2
DRAW. MADE BY RW-JFM DATE 8-16-39
DRAW. CHECKED BY ALC DATE 8-23-39

ORDER No. H2524
SHEET NO. 706



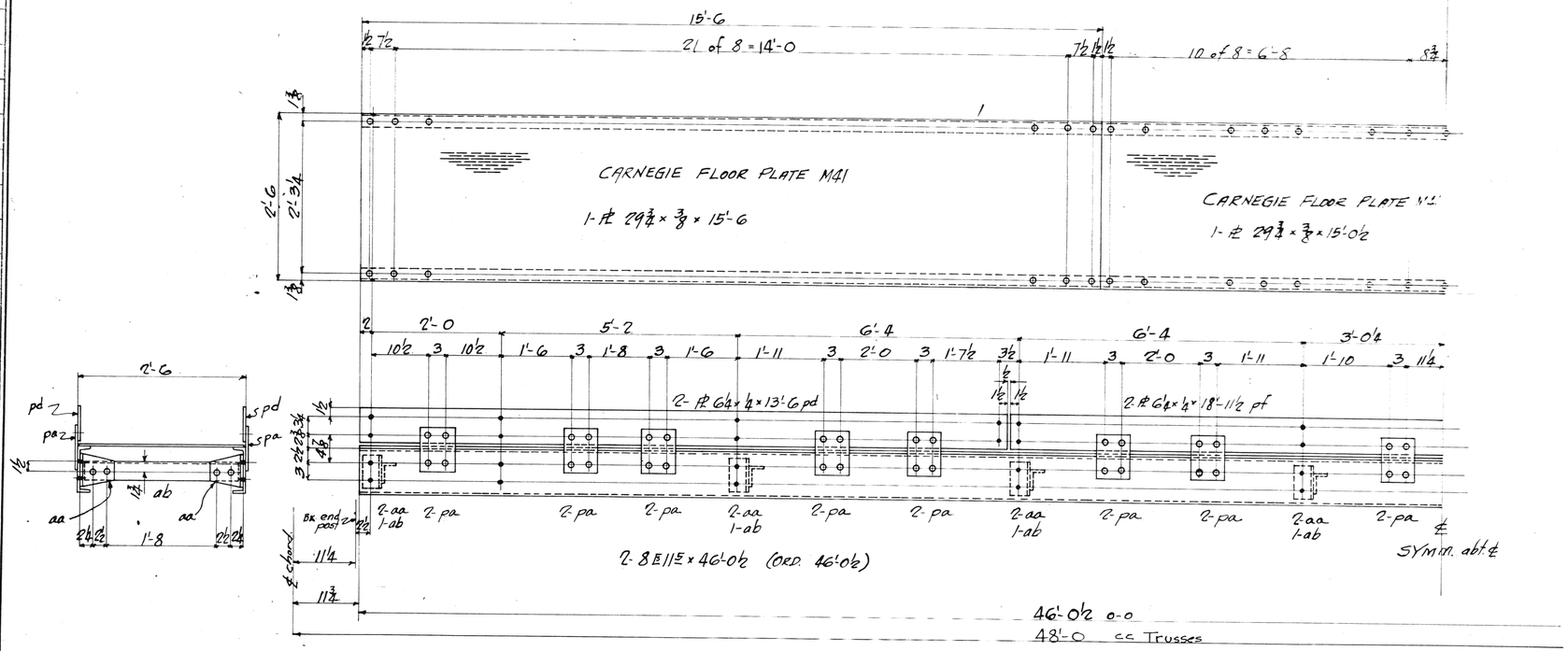
CATWALK - W80



SPAN #4

LOCATION DIAGRAM

Div 7 Div 3			REQUIRED	
Span 4 Span 4		No	Description	Mark
1		1	Catwalk	W80
1	2	3	"	W81



CATWALK - W81

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: ¾" unless noted
OPEN HOLES: ⅞" unless noted
REAMING: All holes punched full size except in material more with ⅜ inch shall be drilled.

PAINT: Yes
CONTACT SURFACES: No - Shop & Field

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

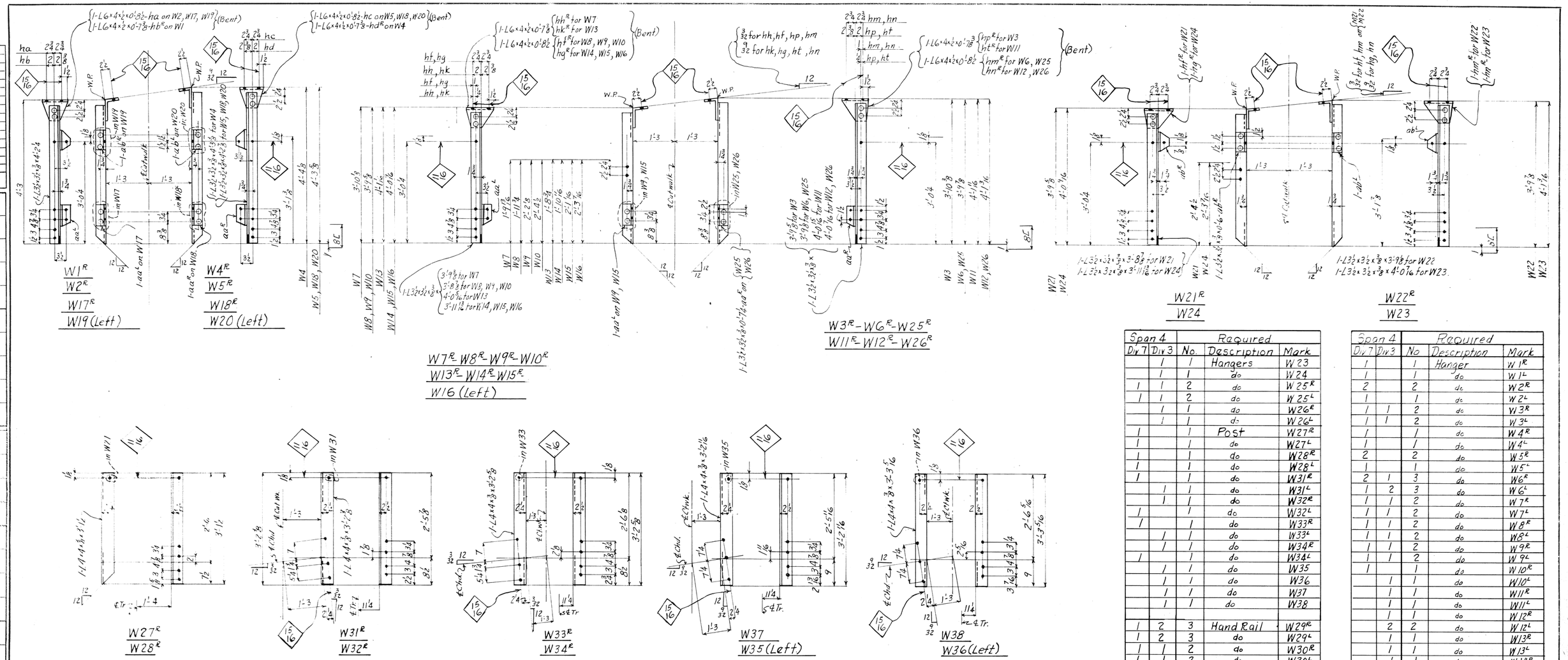
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF LOUGHMAN DR #2
DRAW. MADE BY JEM DATE 8-24-39
DRAW. CHECKED BY J.G.R. DATE 9-28-39

ORDER No. H2524

SHEET NO. 707

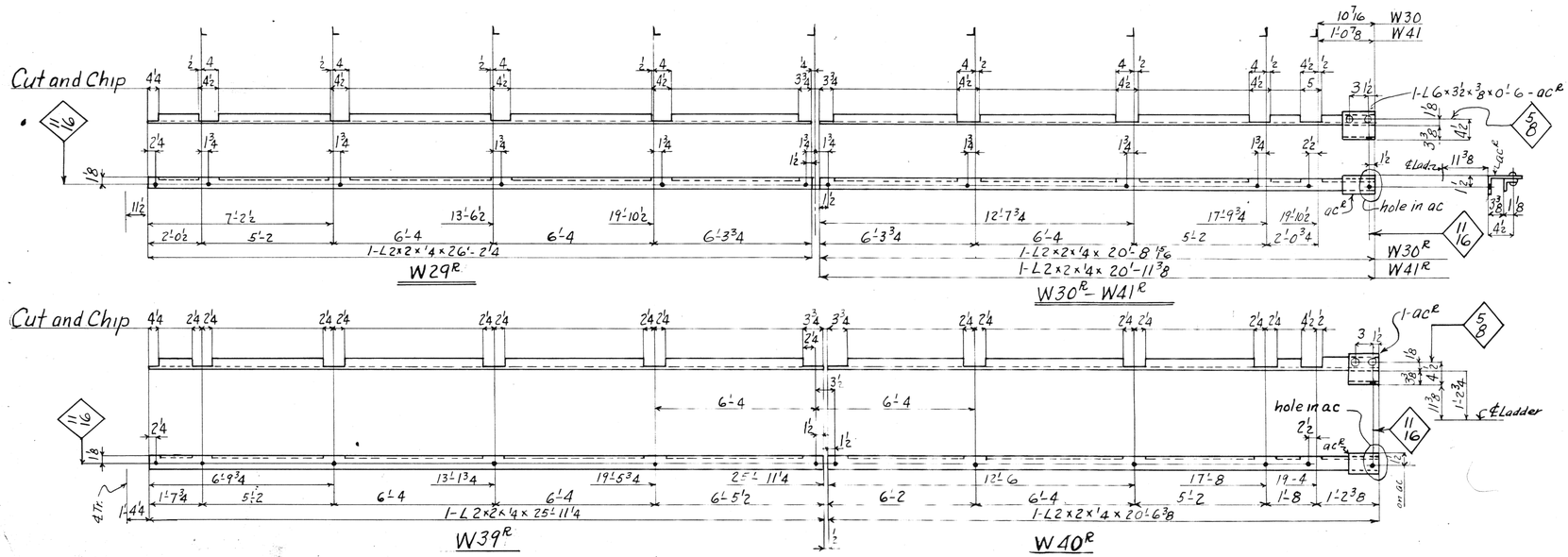
Adv. Bill Page 321

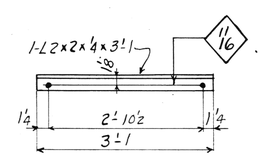


Span 4 Div 7	Span 4 Div 3	Required No.	Description	Mark
	1	1	Hangers	W23
	1	1	do	W24
1	1	2	do	W25R
1	1	2	do	W25L
	1	1	do	W26R
	1	1	do	W26L
1		1	Post	W27R
1		1	do	W27L
1		1	do	W28R
1		1	do	W28L
1		1	do	W31R
	1	1	do	W31L
	1	1	do	W32R
1		1	do	W32L
1		1	do	W33R
	1	1	do	W33L
	1	1	do	W34R
1		1	do	W34L
	1	1	do	W35
	1	1	do	W36
	1	1	do	W37
	1	1	do	W38
1	2	3	Hand Rail	W29R
1	2	3	do	W29L
1	1	2	do	W30R
1	1	2	do	W30L
1		1	do	W39R
1		1	do	W39L
1		1	do	W40R
1		1	do	W40L
	1	1	do	W41R
	1	1	do	W41L
2	2	4	do	W42

Span 4 Div 7	Span 4 Div 3	Required No	Description	Mark
1		1	Hanger	W1R
1		1	do	W1L
2		2	do	W2R
1		1	do	W2L
1	1	2	do	W3R
1	1	2	do	W3L
1		1	do	W4R
1		1	do	W4L
2		2	do	W5R
1		1	do	W5L
2	1	3	do	W6R
1	2	3	do	W6L
1	1	2	do	W7R
1	1	2	do	W7L
1	1	2	do	W8R
1	1	2	do	W8L
1	1	2	do	W9R
1	1	2	do	W9L
1		1	do	W10R
	1	1	do	W10L
	1	1	do	W11R
	1	1	do	W11L
	1	1	do	W12R
	2	2	do	W12L
	1	1	do	W13R
	1	1	do	W13L
	1	1	do	W14R
	1	1	do	W14L
	1	1	do	W15R
	1	1	do	W15L
	1	1	do	W16
1		1	do	W17R
1		1	do	W17L
1		1	do	W18R
1		1	do	W18L
1		1	do	W19
1		1	do	W20
	1	1	do	W21R
1		1	do	W21L
	1	1	do	W22R
1		1	do	W22L

Walkways - Span 4.





MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: 3/4 unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in mat. 1/2" or more thick shall be drilled.

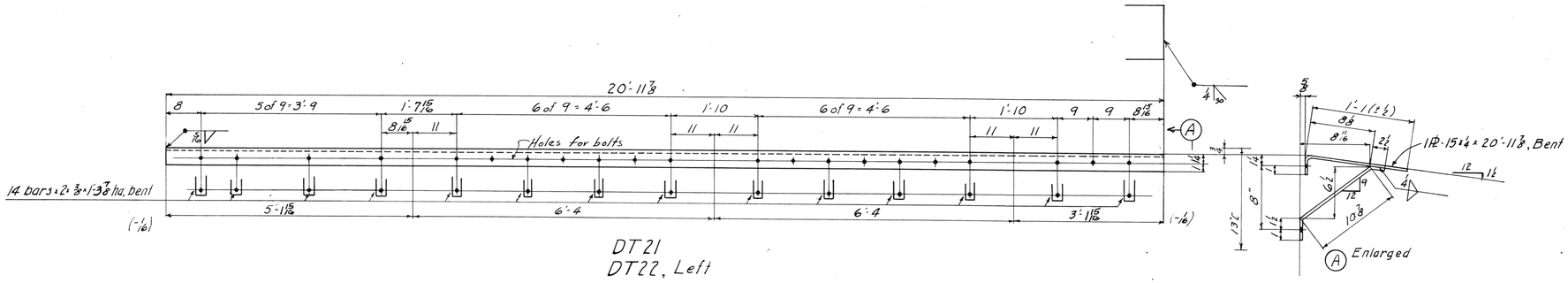
PAINT: Yes
CONTACT SURFACES: No (Shop & Field).

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

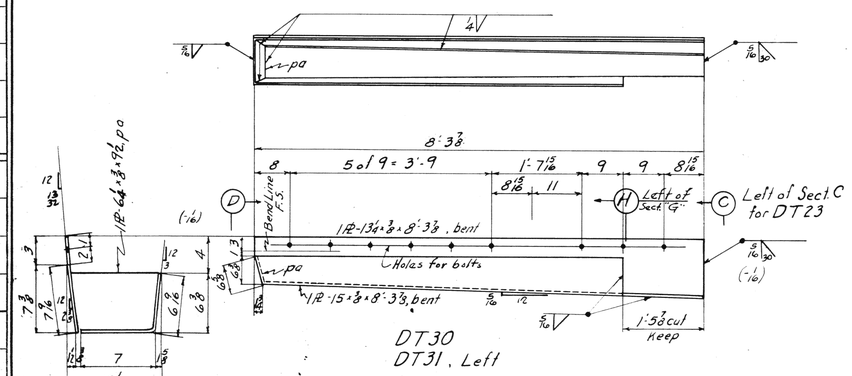
D83-CM-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED AT Ambridge PLANT.
IN CHARGE OF Loughman D.R.#2
DRAW. MADE BY HRF DATE 8-22-39
DRAW. CHECKED BY DATE 8-30-39

ORDER No. H2524
SHEET NO. 708

advance bill page 321-331



DT21
DT22, Left



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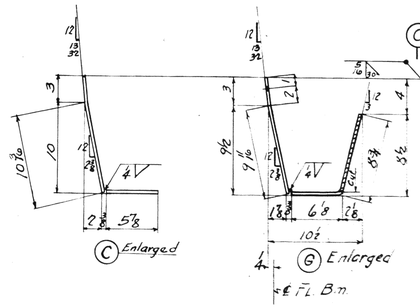
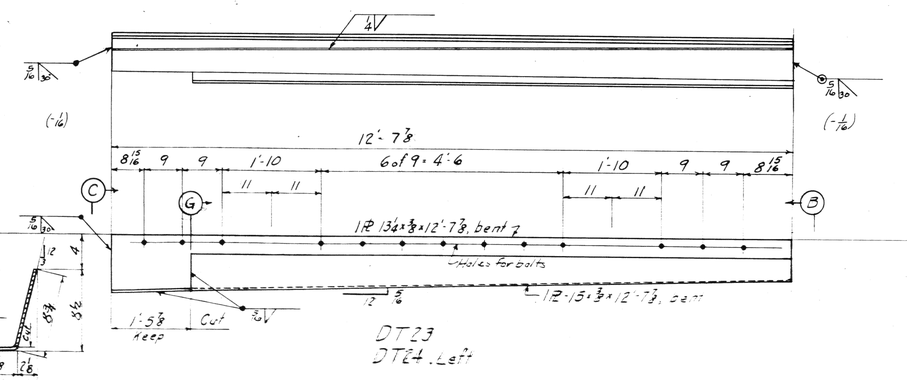
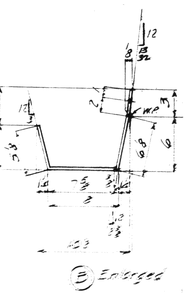
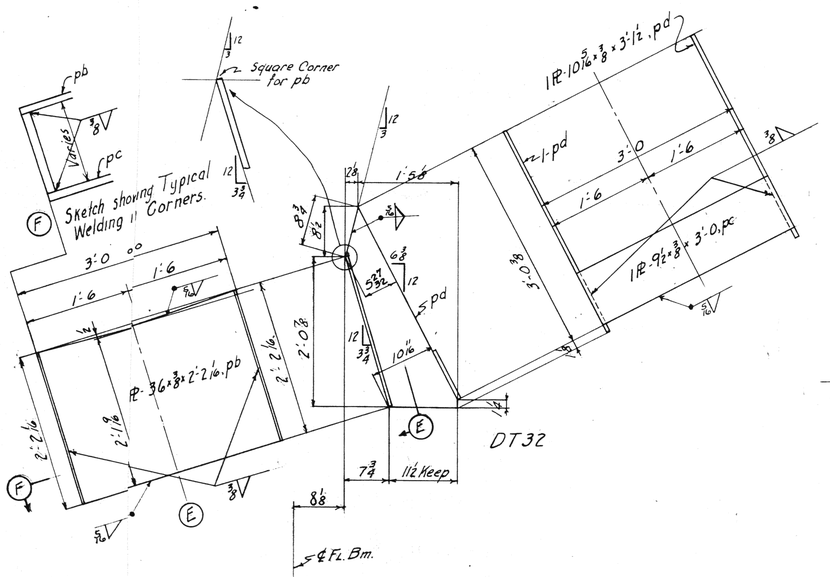
DT31, Left



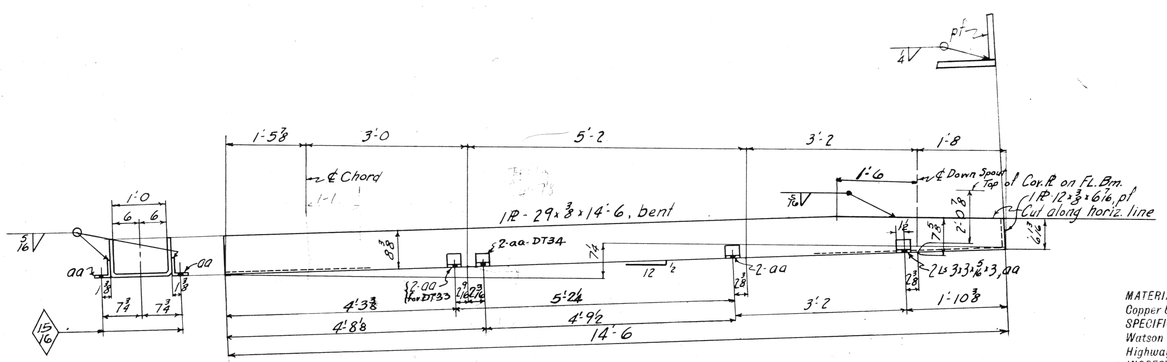


DT23
DT24, Left





DT32



DT33
DT34

Span 1 Div 4	Span 3 Div 6	Total No	Required Description	Mark
1	1	2	Drain Trough	DT21
1	1	2	do	DT22
1	1	2	do	DT23
1	1	2	do	DT24
1	1	2	do	DT30
1	1	2	do	DT31
2	2	4	do	DT32
1	1	2	do	DT33
1	1	2	do	DT34

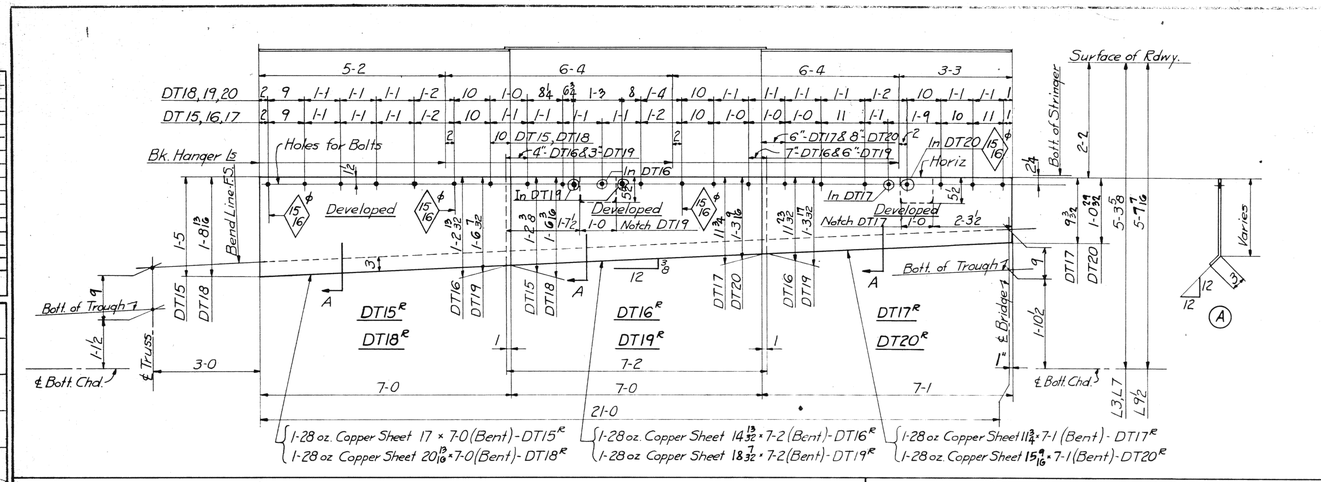
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS: — unless noted
OPEN HOLES: 13/16 unless noted
REAMING: All holes punched full size except in material more than thick shall be drilled.

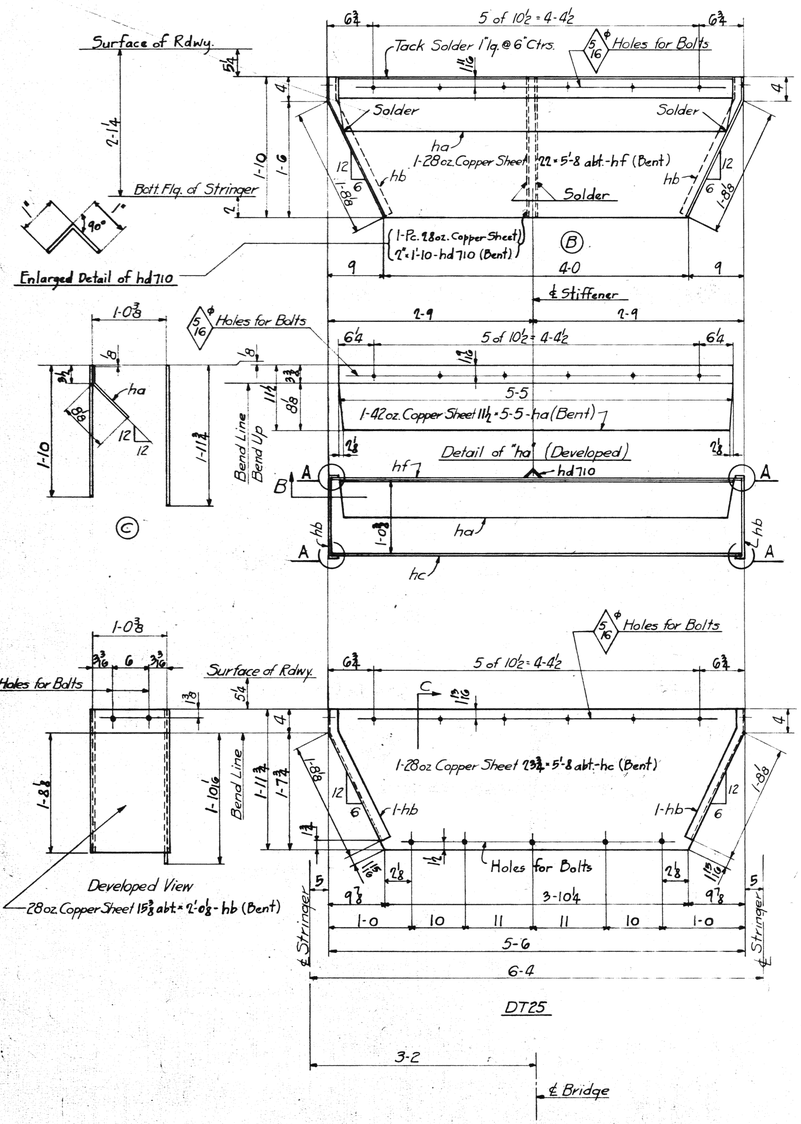
PAINT: Yes - (except within 3" of fld. welding)
CONTACT SURFACES: Yes

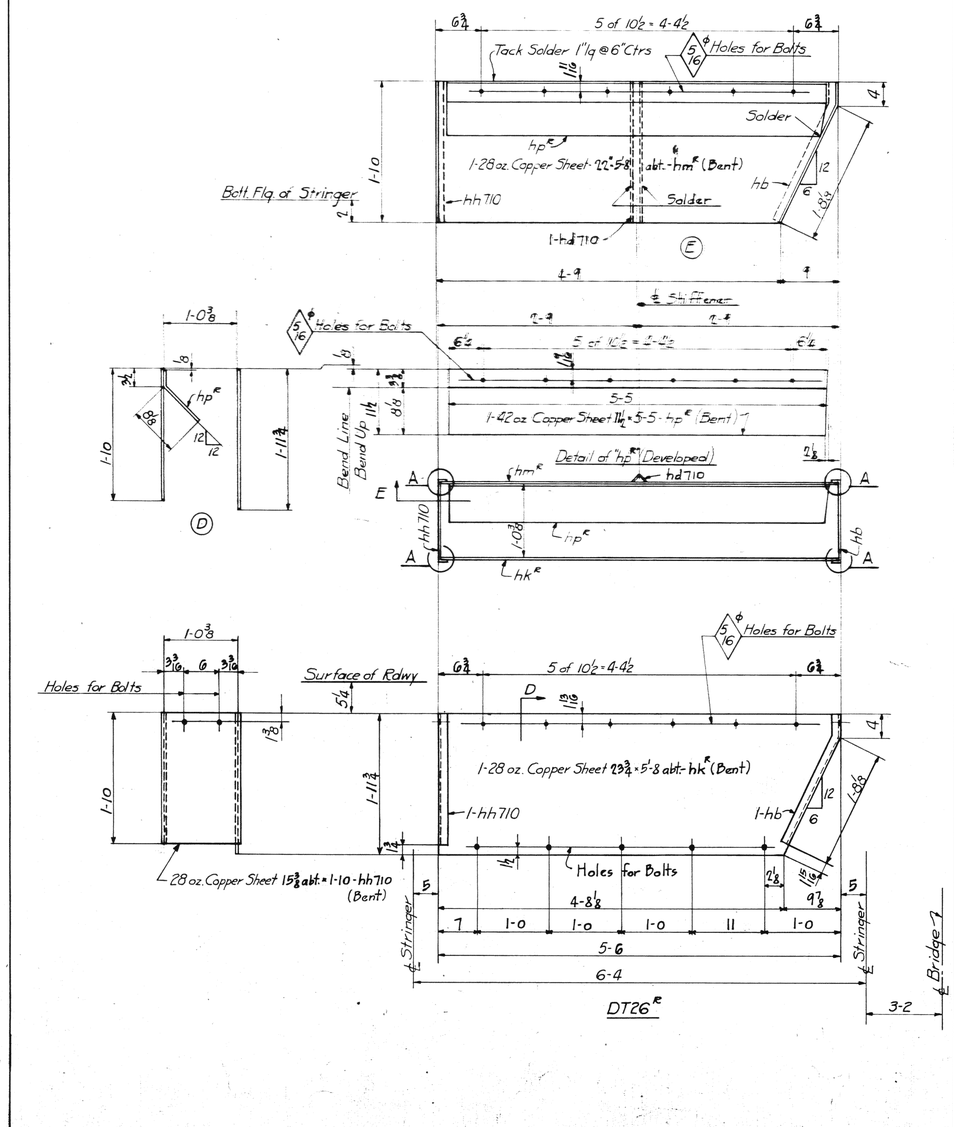
Lorain County, Ohio
EAST 21ST STREET BRIDGE
Lorain, Ohio

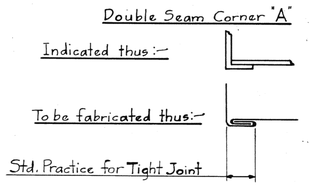
D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED AT Amb. PLANT.
IN CHARGE OF Loughman - D.R. #2
DRAW. MADE BY E.R.M.-H.A.A. DATE 8-22-39
DRAW. CHECKED BY DATE 8-14-39

ORDER No. H2524
SHEET No. 709









Shipping with Div. 7

Design 2		Required		
Div. 7	Div. 3	No.	Description	Mark
1	1	2	Copper Flashing	DT15R
1	1	2	do	DT15L
1	1	2	do	DT16R
1	1	2	do	DT16L
1	1	2	do	DT17R
1	1	2	do	DT17L
	1	1	do	DT18R
	1	1	do	DT18L
	1	1	do	DT19R
	1	1	do	DT19L
	1	1	do	DT20R
	1	1	do	DT20L
1	1	2	do	DT25
1	1	2	do	DT26R
1	1	2	do	DT26L

Reg-19932

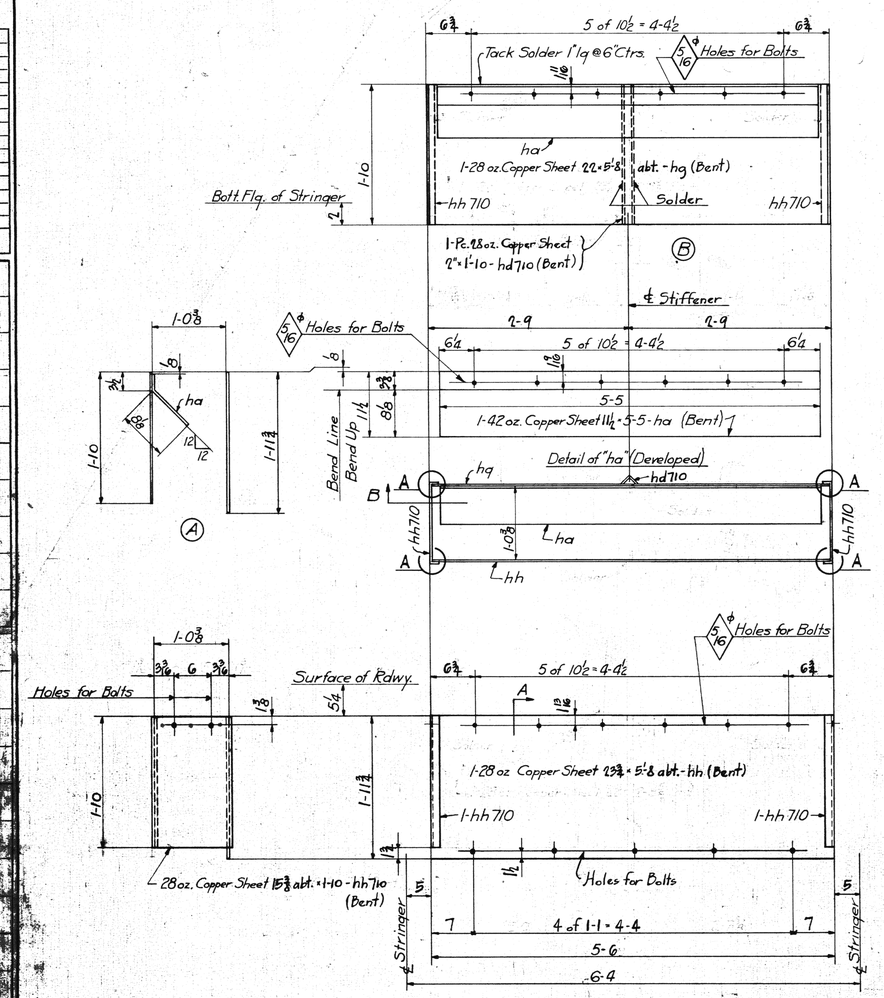
MATERIAL: Copper Sheets A.S.T.M. Std. for Fire-refined Copper.
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.
RIVETS:
OPEN HOLES: 7/16" unless noted
REAMING: All holes punched full size.

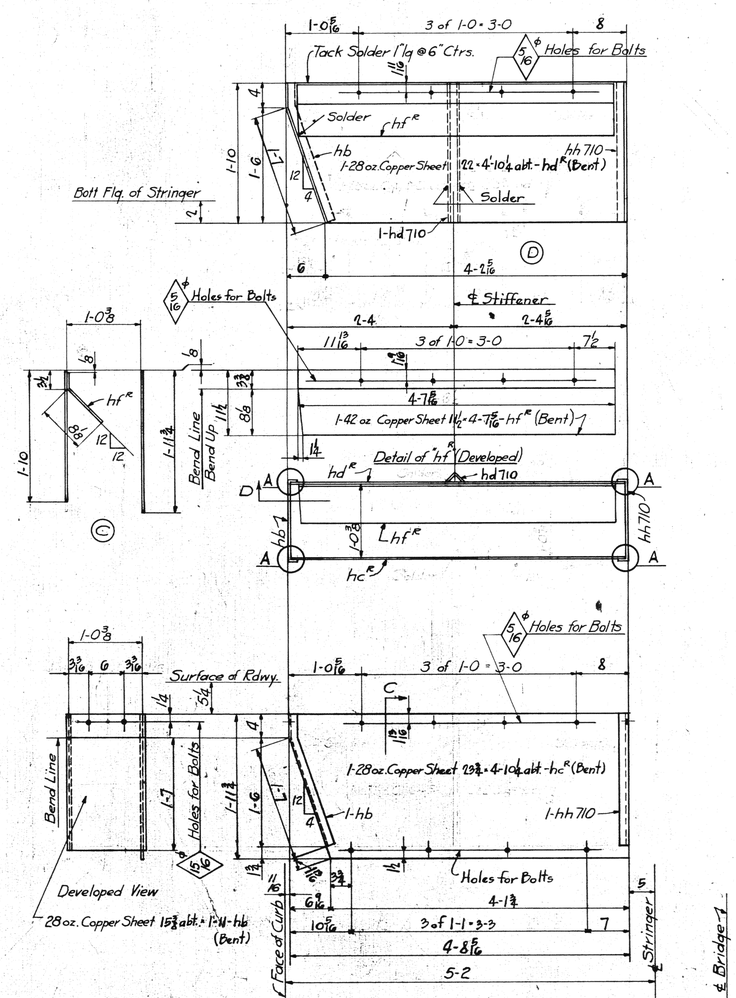
PAINT: No
CONTACT SURFACES: No

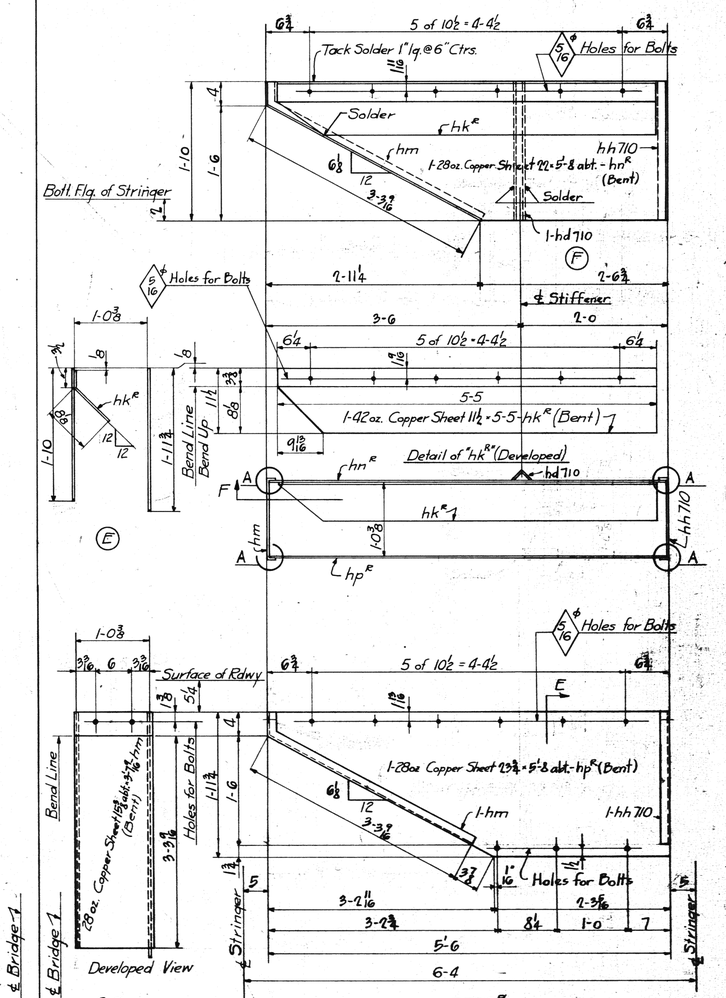
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED AT AMBRIDGE PLANT.
IN CHARGE OF LOUGHMAN D.R. #2
DRAW. MADE BY W.G.D.-E.L.H. DATE 8/16/39
DRAW. CHECKED BY SJT DATE 8-25-39

ORDER No. H2524
SHEET NO. 710







Double Seam Corner "A"

Indicated thus:—

To be fabricated thus:—

Std. Practice for Tight Joint

Ship with Div. 7 (Ship Direct)

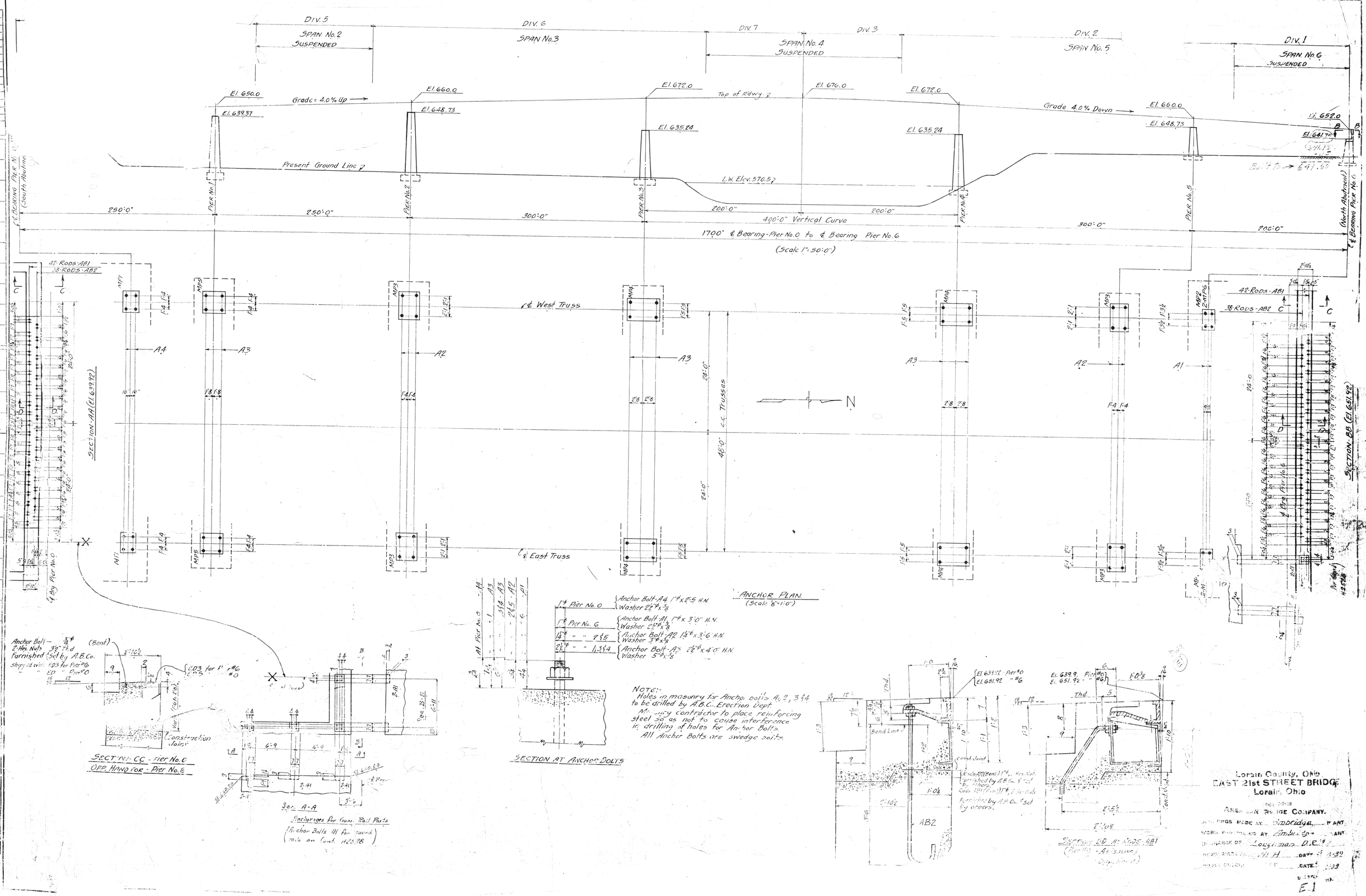
SPAN 4		REQUIRED		
Div. 7	Div. 3	No.	Description	Mark
2	5	7	Copper Flashing	DT27
1	2	3	do	DT28^R
1	2	3	do	DT28^R
	1	1	do	DT29^R
	1	1	do	DT29^R

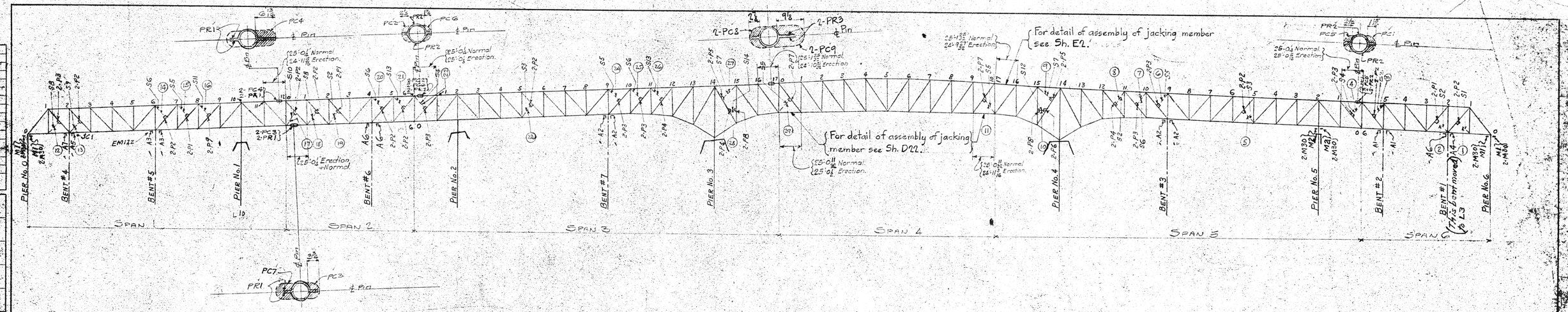
Req-19932

MATERIAL: Copper Sheets A.S.T.M. Std. for Fire-refined Copper
SPECIFICATIONS: Special by Wilbur Watson & Associates and Ohio State Highway
INSPECTION: James H. Merron Co.
ERECTION: J. B. Co.
RIVETS:
OPEN HOLES: 5/16" unless noted
REAMING: All holes punched full size

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

DOS-PM-10-3
PENNSYLVANIA BRIDGE COMPANY
DRAWING MADE AT AMBRIDGE PLANT
WORK ON HAND AT AMBRIDGE PLANT
IN STORAGE AT COLUMBIANA NO. 2
DRAWN BY J.P.F. DATE 9/1/39
DESIGNED BY S.H.F. DATE 9/1/39
ORDER NO. 19524
SHEET NO. 711


DIV. 5
SPAN No. 2
SUSPENDED
DIV. 6
SPAN No. 3
DIV. 7
DIV. 3
SPAN No. 4
SUSPENDED
DIV. 2
SPAN No. 5
DIV. 1
SPAN No. 6
SUSPENDED
El. 650.0
Grade = 4.0% Up
El. 660.0
El. 672.0
Top of Rdwy.
El. 676.0
El. 672.0
Grade 4.0% Down
El. 660.0
El. 652.0
El. 639.37
El. 648.73
El. 635.24
El. 635.24
El. 648.73
Present Ground Line
L.W. Elev. 570.57
Built to → 641.62
PIER No. 1
PIER No. 2
PIER No. 3
PIER No. 4
PIER No. 5
250'-0"
250'-0"
300'-0"
200'-0"
200'-0"
300'-0"
200'-0"
400'-0" Vertical Curve
1700' ℄ Bearing - Pier No. 0 to ℄ Bearing Pier No. 6
(Scale 1" = 50'-0")
(South Abutment)
(North Abutment)
42-Rods-AB1
38-Rods-AB2
℄ West Truss
℄ East Truss
24'-0" c.c. Trusses
N
SECTION-AA (El. 639.92)
SECTION-BB (El. 651.92)
ANCHOR PLAN
(Scale 1/8" = 1'-0")
Anchor Bolt-A4 1 1/8" x 2'-6" H.N.
Washer 2 1/2" x 5/8"
Anchor Bolt-A1 1 1/8" x 3'-0" H.N.
Washer 2 1/2" x 5/8"
Anchor Bolt-A2 1 1/4" x 3'-6" H.N.
Washer 3" x 5/8"
Anchor Bolt-A3 2 1/2" x 4'-0" H.N.
Washer 5" x 5/8"
Anchor Bolt - 3/4" (Bent)
2-Hex. Nuts 3/4" Thd.
Furnished & set by A.B.Co.
Construction Joint
SECTION-CC - Pier No. 0
OPP. HAND FOR - Pier No. 6
Sec. A-A
Anchorages for Guar. Rail Posts
(Anchor Bolts 1/1 Per guard rail on Cont. 1126.08)
SECTION AT ANCHOR BOLTS
NOTE:-
Holes in masonry for Anchor bolts A1, 2, 3 & 4 to be drilled by A.B.Co. Erection Dept.
It is the duty of contractor to place reinforcing steel so as not to cause interference in drilling of holes for Anchor Bolts.
All Anchor Bolts are swedge bolts.
Construction Joint
Furnished by A.B.Co. & set by others.
SECTION CD AT RODS AB1
(Pier No. 6 - As shown)
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
AMERICAN BRIDGE COMPANY.
E.1



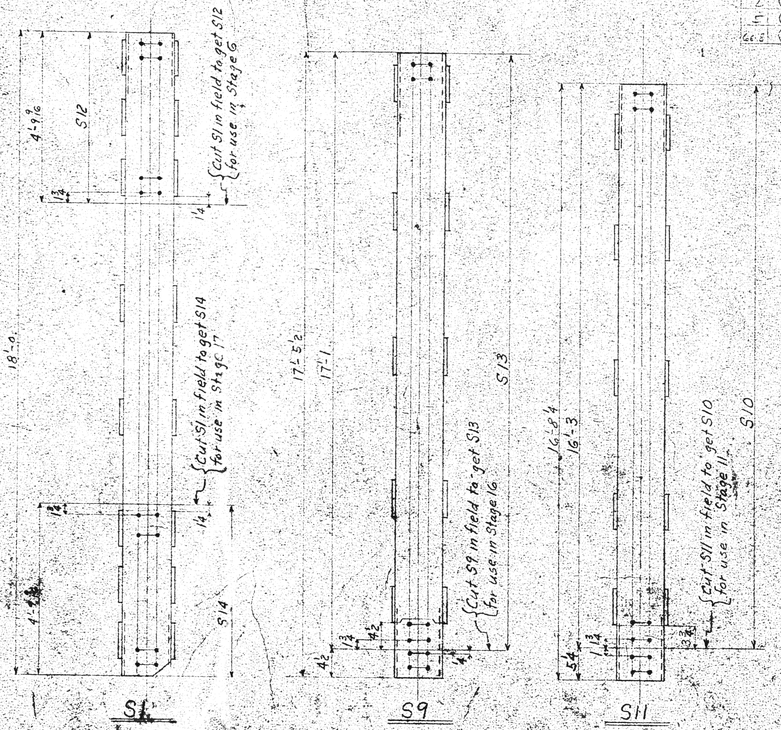
Strut Mk	Point	STAGE # Reqd	STAGE # Ner Reqd.
S1	1	1a	4
S2	2	1a	4
S3	3	2a	3
S4	4	2a	2b
S3	5	3	7
S5	6	5	6
S6	7	5	6
S2	8	5	6
S7	9	6	18
S12	10	6	18
S5	11	6	17
S8	12	9a	10b
S9	13	9a	10b
S6	14	10a	10b
S5	15	10a	10b
S11	16	10a	10b
S10	17	11	12
S8	18	11	15
S2	19	11	15
S6	20	12	13
S13	21	12	13
S4	22	12	13
S3	23	14	17
S5	24	16	17
S6	25	16	17
S13	26	16	17
S7	27	17	18
S14	28	17	18
S5	29	17	18

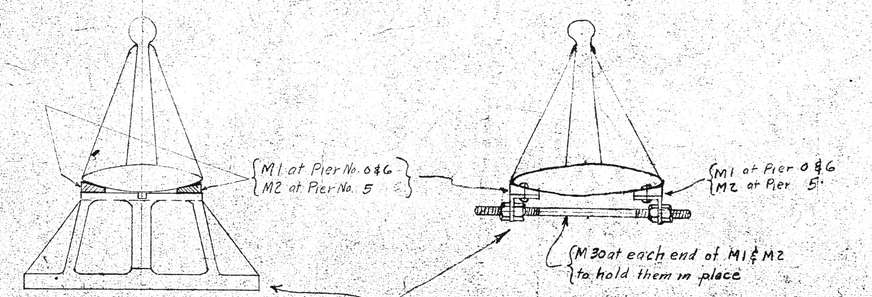
Point #	Strut Length	Also Used At Points (in successive order →)				Remarks
		9 @ 4'-9 9/16				
1	15-0	8 @ 4'-9 9/16				Cut in field
2	17-1	8	19			
3	17-2	5	23			
4	15-7 1/4	22				
6	16-10	11	15	24	29	
7	14-8 1/2	10	20	25		
9	19-10 1/4	✓				
12	17-10	13				
13	17-5 1/2	5 @ 17-1	26			2-PR3 Not cut in field
16	16-5 1/4	7 @ 16-3				Cut in field
21	19-10 1/4	✓				

PLATES Mark P	Used at	Also used at (in successive order →)	
2	1	14	20
1	2	19	
2	3	5	23
3	4	22	
3	6	24	
3	7	25	
4	8	26	
5	9	✓	
6 & 5	10	✓	
7	11	29	
3	12		
4	13	21	
1	13		
9	16	✓	
2	17		
2	18		
5	27		
6 & 5	28		

Use washers in field for S1's at this member as reqd.
Batten Plates - 6 x 4 at 4'-0 ctrs. bolted with 2-¾" bolts.

Pin Crescents and Pin Rings detailed on sheets F2,3 & 5 — H2525





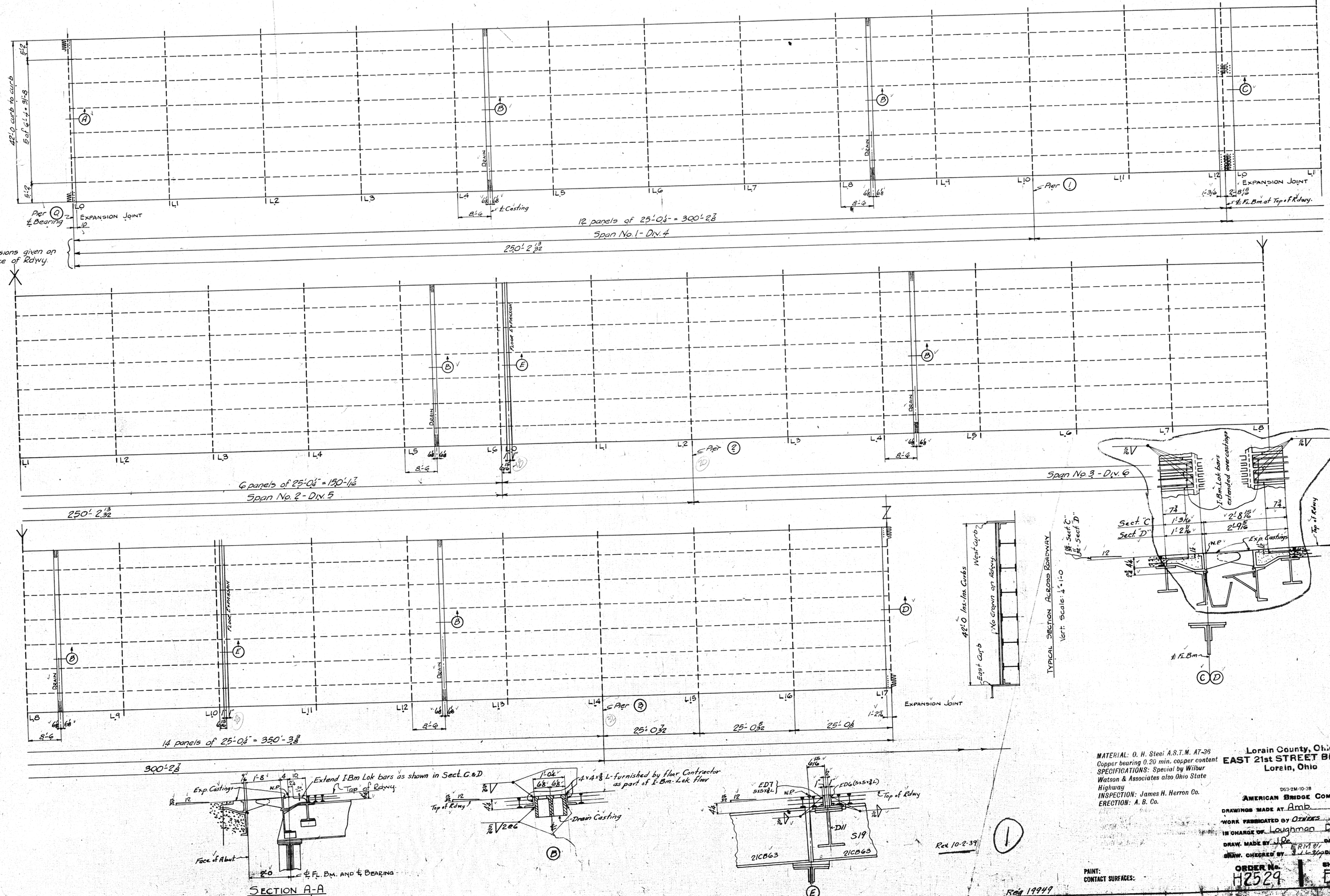
Typical Sketch at Pier No. 0, No. 5, & No. 6
Showing Beveled Bars for Blocking
Rocker Arm in Position During Erection

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

American Bridge Company
Drawing Made by: [illegible]
Work Fabricated by: [illegible]
In Charge of: [illegible]
Drawn Made by: [illegible]
Work Inspected by: [illegible]
Checked by: [illegible]

Rev. 1-2-39
[illegible]

Chicago Works



MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

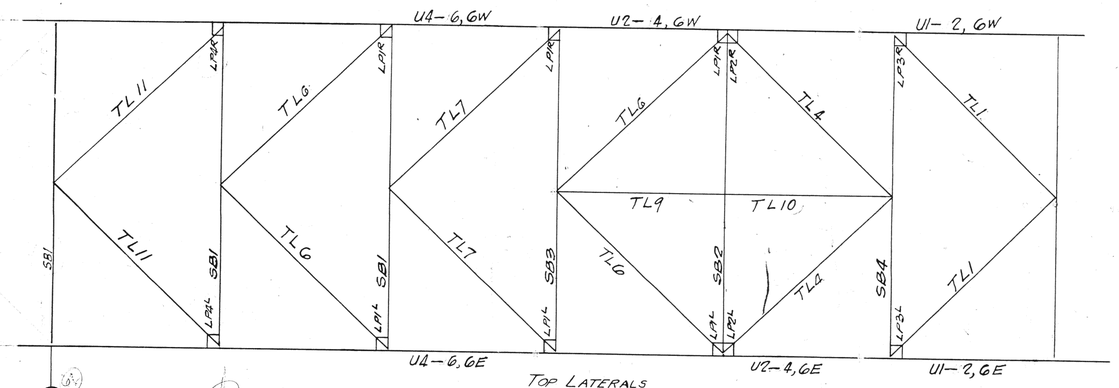
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Amb. PLANT
WORK FABRICATED BY Ottiges PLANT
IN CHARGE OF Loughman DR #2
DRAW. MADE BY JPe ERM 01 DATE
DRAW. CHECKED BY DATE

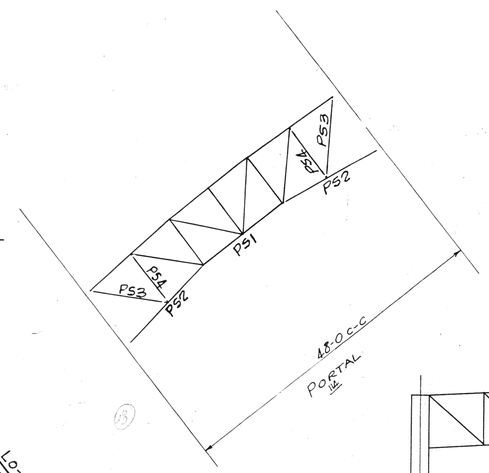
ORDER No. H2529 SHEET NO. E1

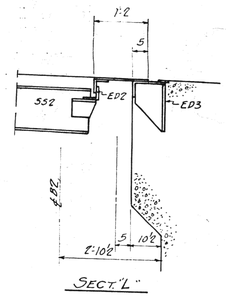
PAINT:
CONTACT SURFACES:

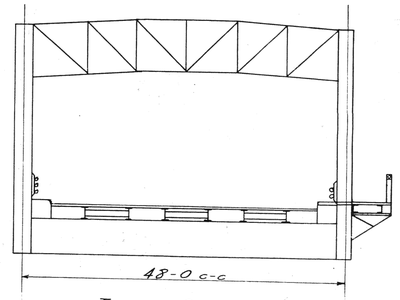
Reg 19949



TOP LATERALS

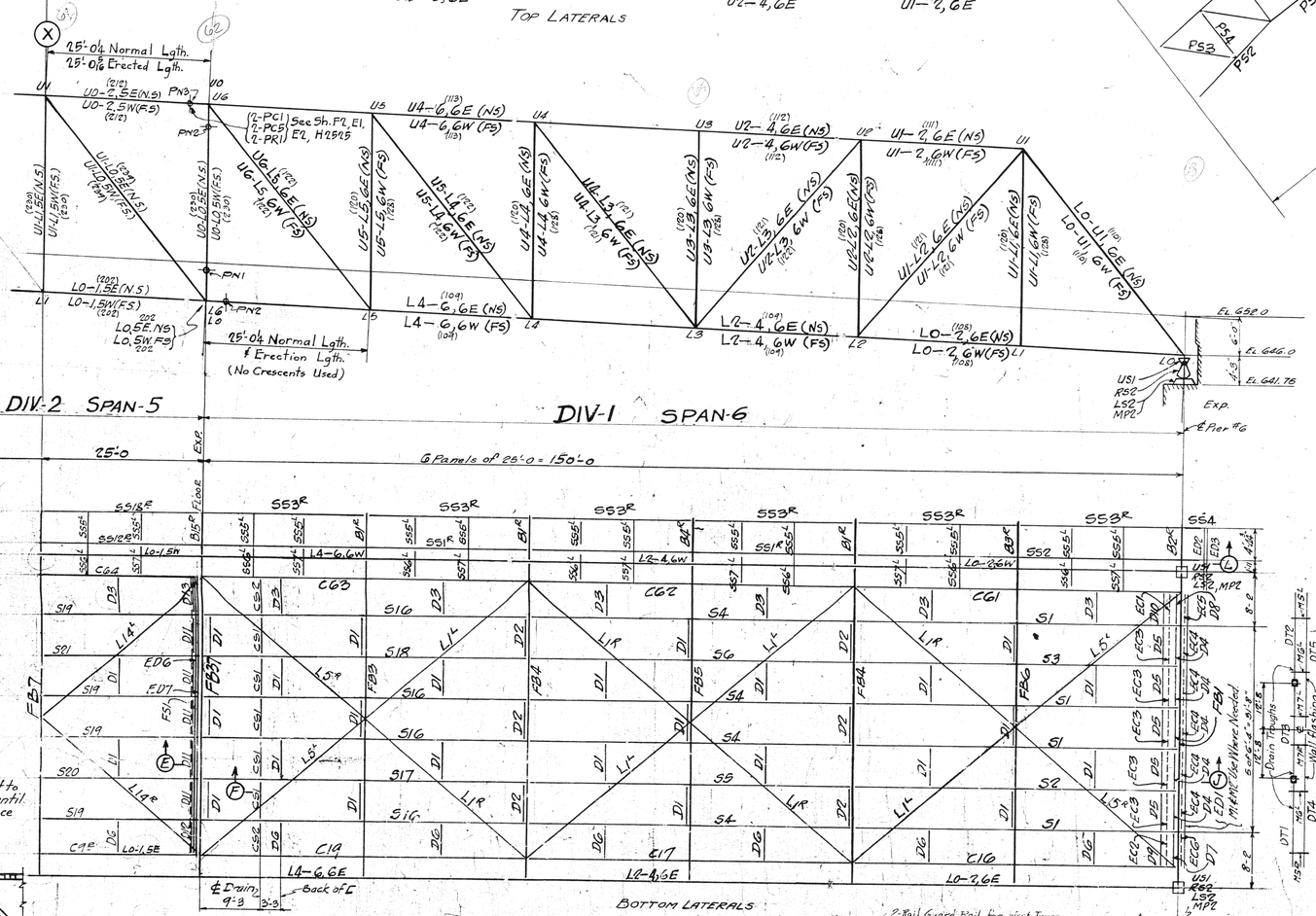


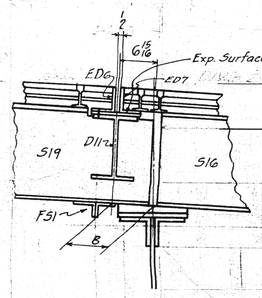


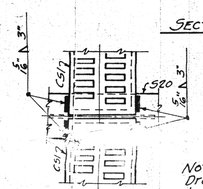


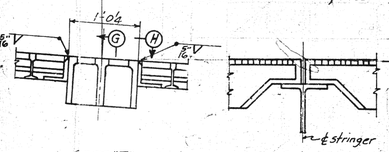
TYPICAL SECTION
SWAY BRACING

→ Cont'd on E3



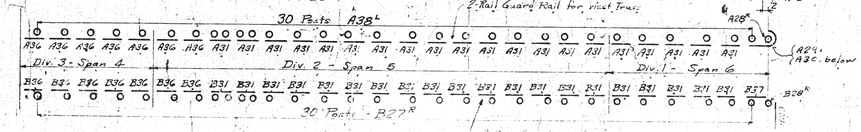






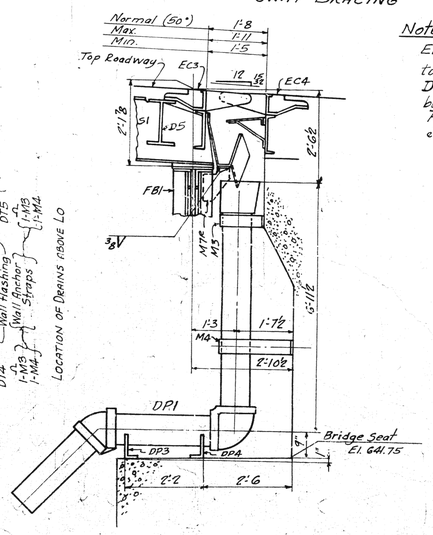
NOTE:
Drain Castings C91,2 not to be welded to Stringers until I-Beam-Lok Deck is in place

BOTTOM LATERALS



Guard Rail Erection Plan

Notes:- Rails below are same as top rails except A29 & A30 as noted

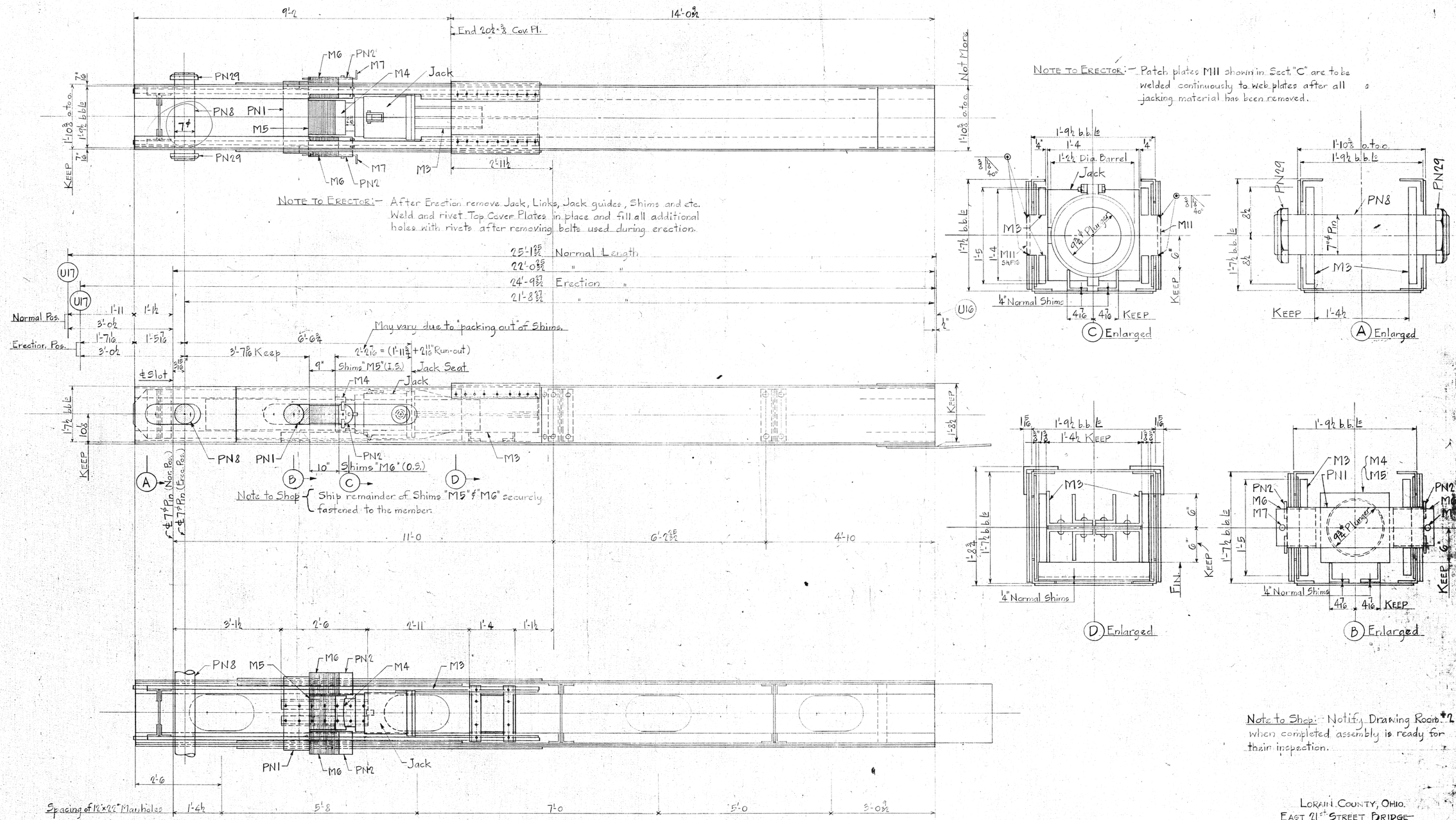


Notes:-
Ends of Stringers marked Ⓛ to be toward North abutment
Drive full head rivets in holes left blank by removing erection struts
For location of erection bolts and other erection material see Sh. E1 - Contr. #12595

ERECTION PLAN - SPAN 6

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE
DRAWINGS MADE AT Aml
WORK FABRICATED AT Aml
IN CHARGE OF Langman
DRAW. MADE BY RAR
DRAW. CHECKED BY
ORDER



LORAIN COUNTY, OHIO.
EAST 21st STREET BRIDGE
LORAIN, OHIO

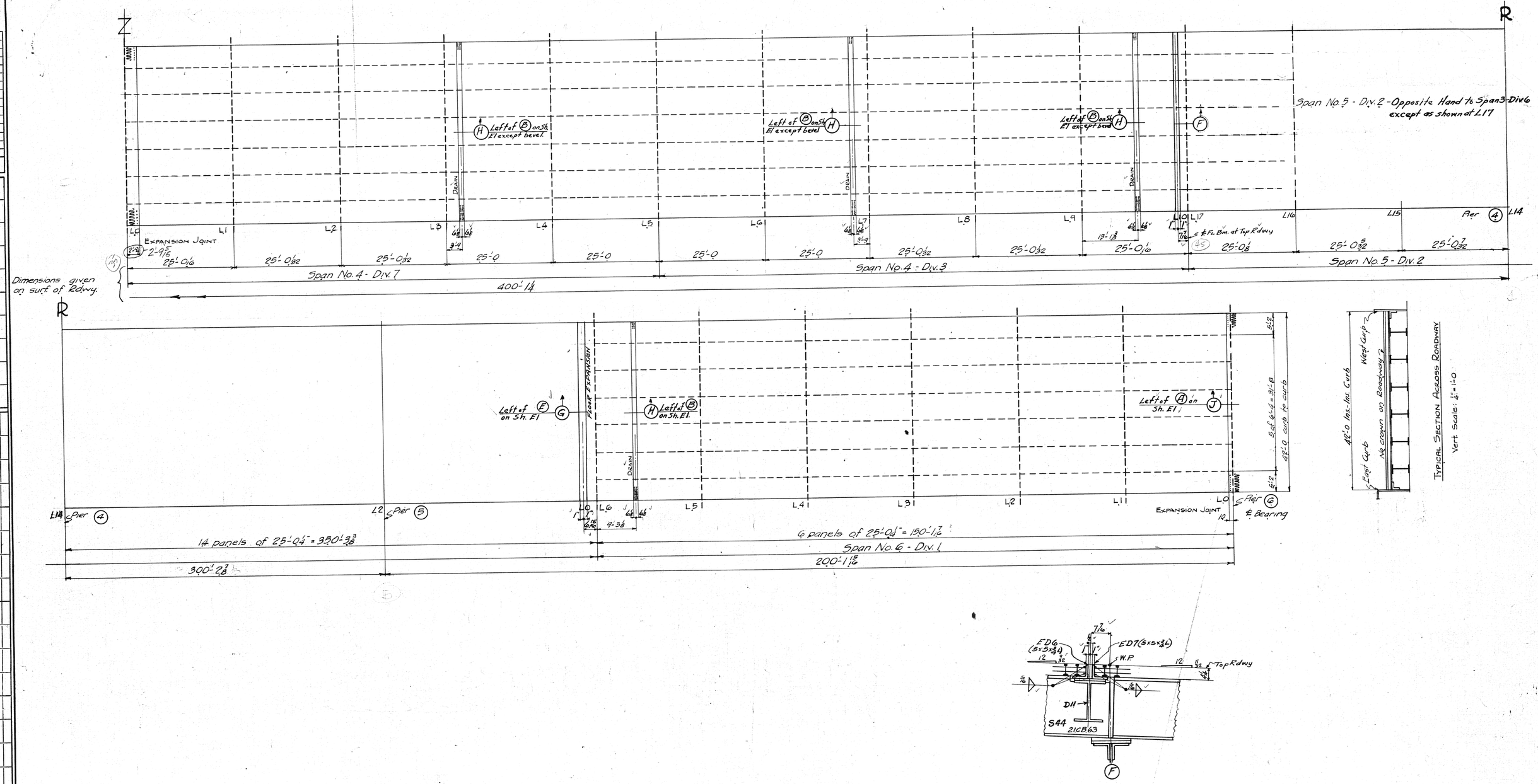
D63-3M-10-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED AT AMBRIDGE PLANT.
IN CHARGE OF Longman D.R. #2
DRAW. MADE BY W.G.D. DATE 9/1/34
DRAW. CHECKED BY O.G.R. DATE 9/13/34

ORDER No. H2525

SHEET No. E2



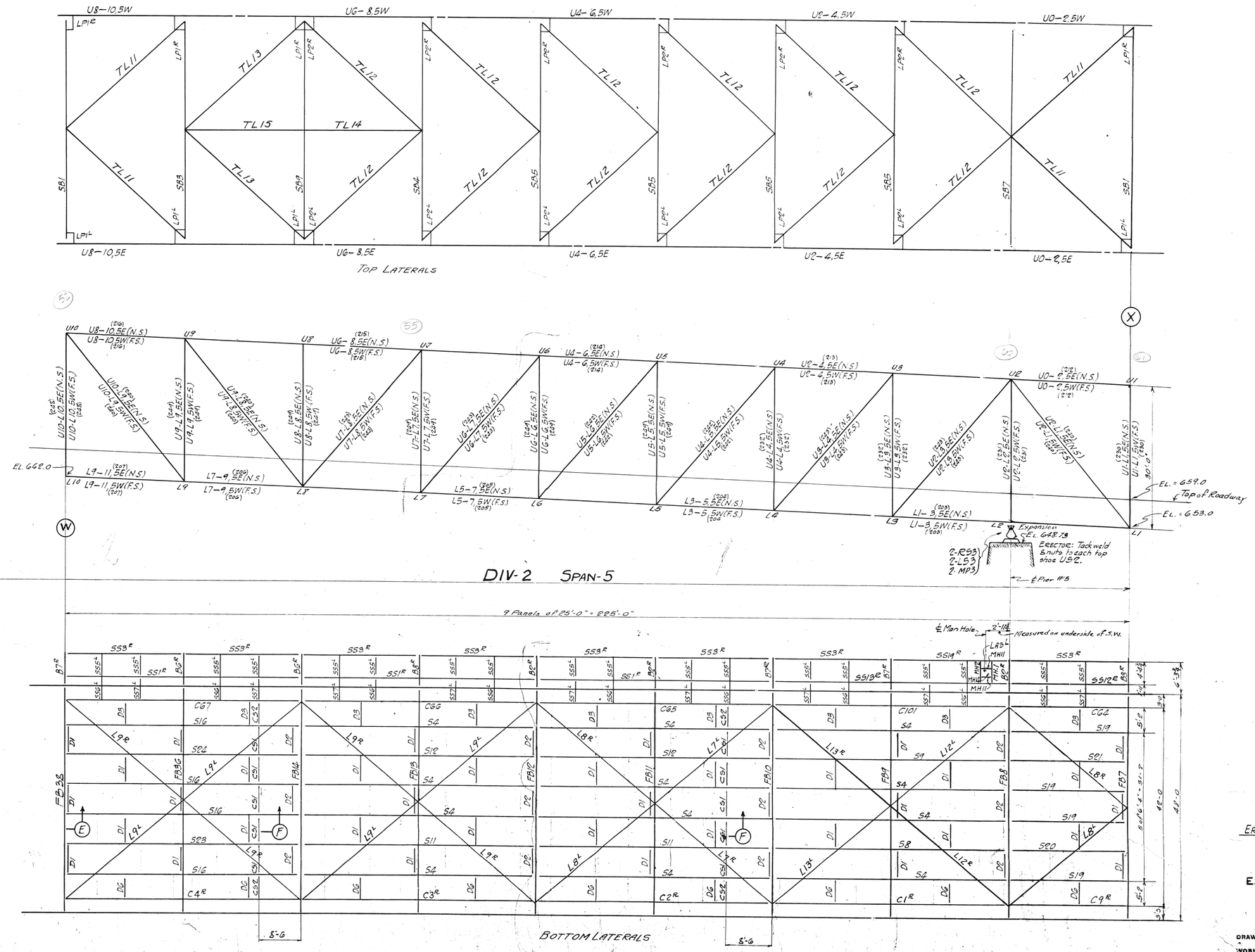
MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

1D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Amb. PLANT.
WORK FABRICATED BY OTHERS PLANT.
IN CHARGE OF Loughman DR. #2
DRAW. MADE BY JRC DATE
DRAW. CHECKED BY ERM SUL 9/19 DATE
ORDER No. H2529 SHEET NO. E2

PAINT:
CONTACT SURFACES:

Reg 19949



← Cont'd. on E4

Cont'd on E2 →

NOTE:
Ends of stringers marked Ⓦ to be toward North abutment.
For Sect. "E" see sh. E2
For Sect. "F" see sh. E2
For location of erection bents and other erection material see Sh. E1 Cont. No. 325

ERECTION DIAGRAM - SPAN 5
L1 to L10

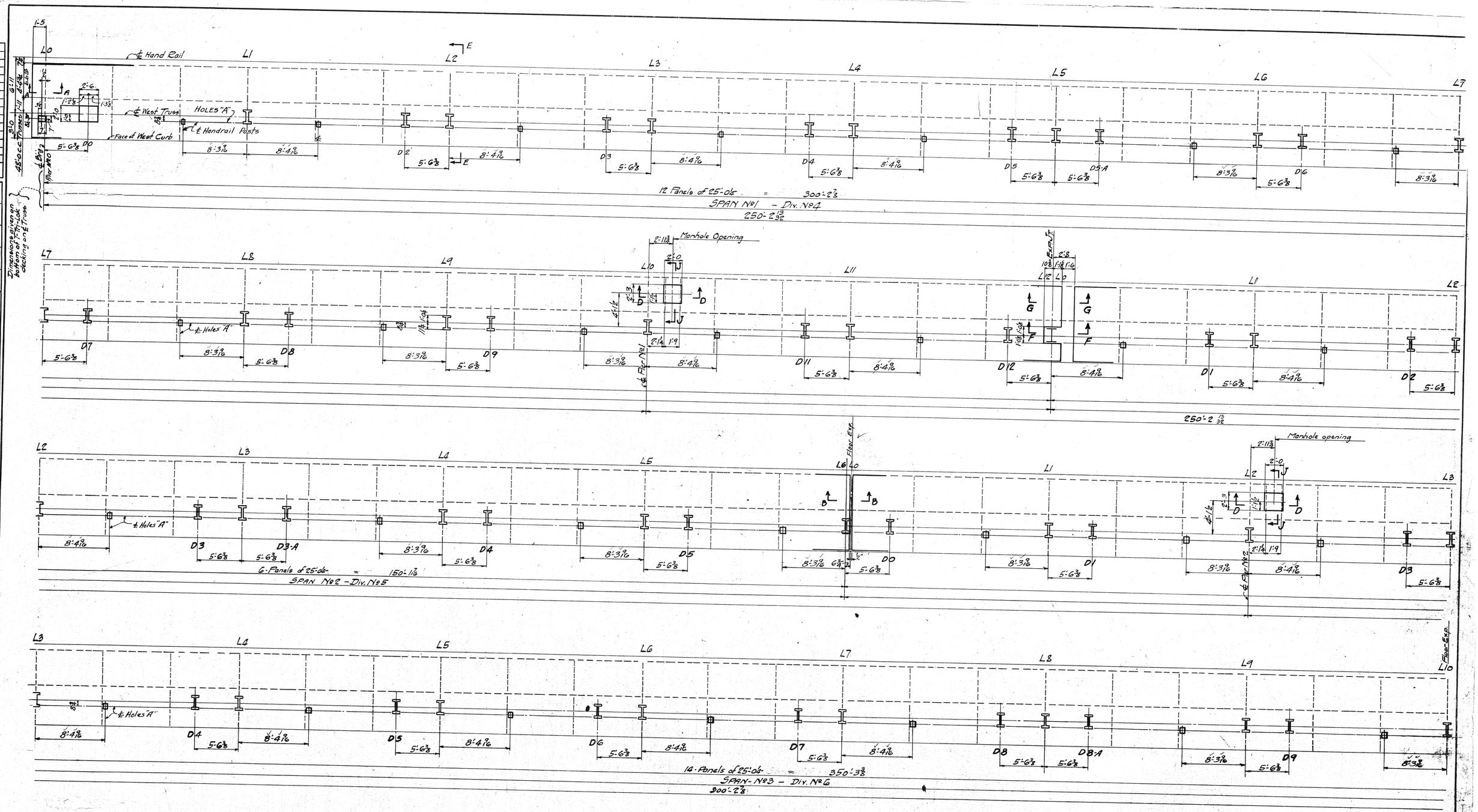
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-58

AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED AT AMBRIDGE PLANT.
IN CHARGE OF Loughman #2
DRAW. MADE BY R.R. DATE
DRAW. CHECKED BY DATE

ORDER No. H2524
SHEET NO. E3



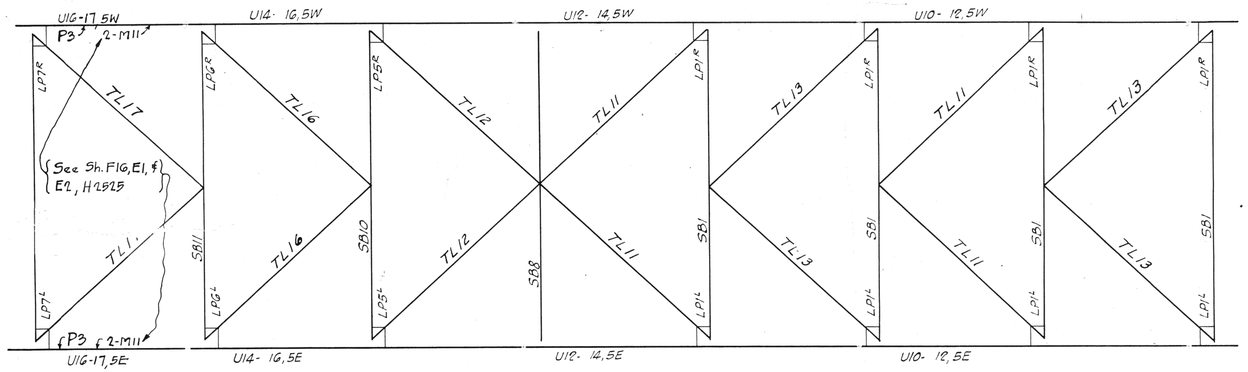
NOTE:
Work sheets E3 E4 & E5 together.
For Sections AA, BB, DD, EE, FF, GG, JJ See sh. E5.
For clearance dimensions at Verticals "L" and Diagonals "D" see Tables on sh. E5.
For Enlarged Plan of Holes "A" see sh. E4

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.

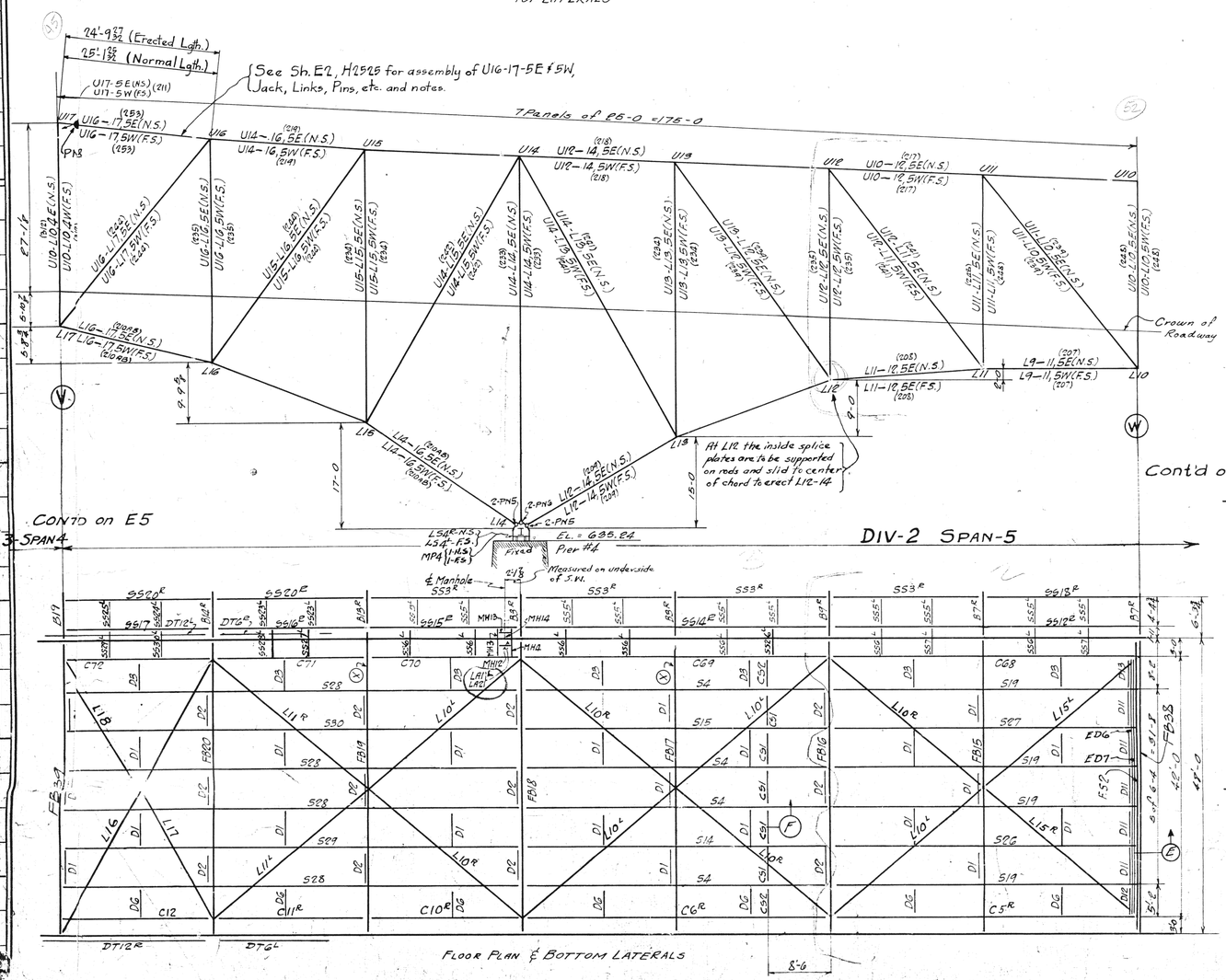
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT AMBRIDGE PLANT.
WORK FABRICATED By others
IN CHARGE OF Loughman No 2
DRAW. MADE BY A.L.H. AD DATE 8-28-39
DRAW. CHECKED BY E.R.M. DATE 9-13-39
ORDER No. H2529
SHEET No. E3

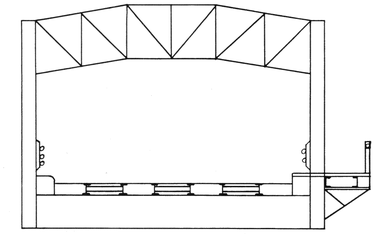
Reg. 19949



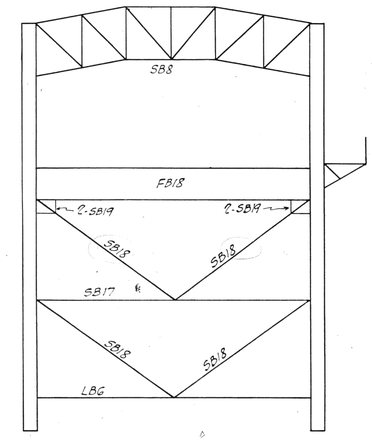
TOP LATERALS



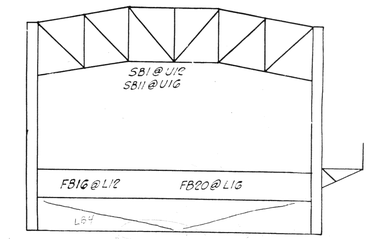
FLOOR PLAN & BOTTOM LATERALS



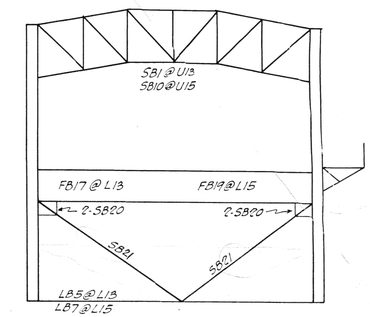
TYPICAL SECTION
SWAY BRACING



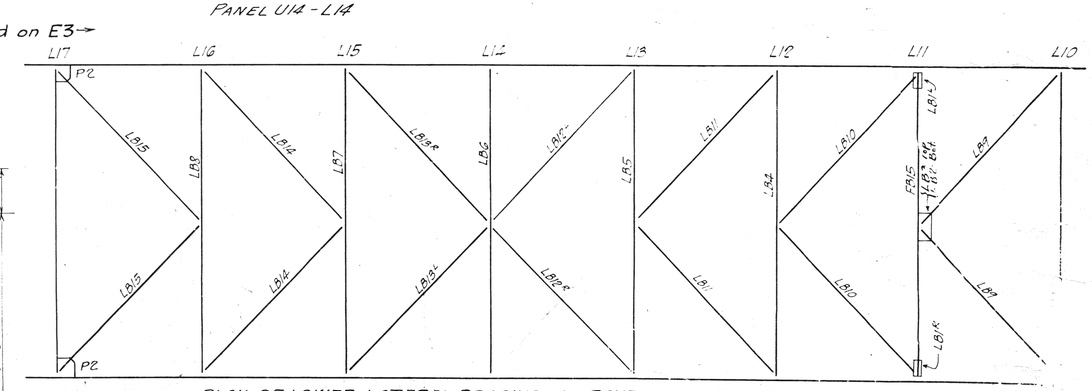
PANEL U14 - L14



PANELS U12, L12 - U16, L16



PANELS U13, L13 - U15, L15



PLAN OF LOWER LATERAL BRACING IN PANELS L10 TO L17 INC.

NOTE:
Ends of stringers marked ⊗ to be toward North abutment.
For Sect "E" see Sh. E2
For Sect "F" see Sh. E2
For location of erection bents and other erection material see Sh. E1 - Contr. H2525

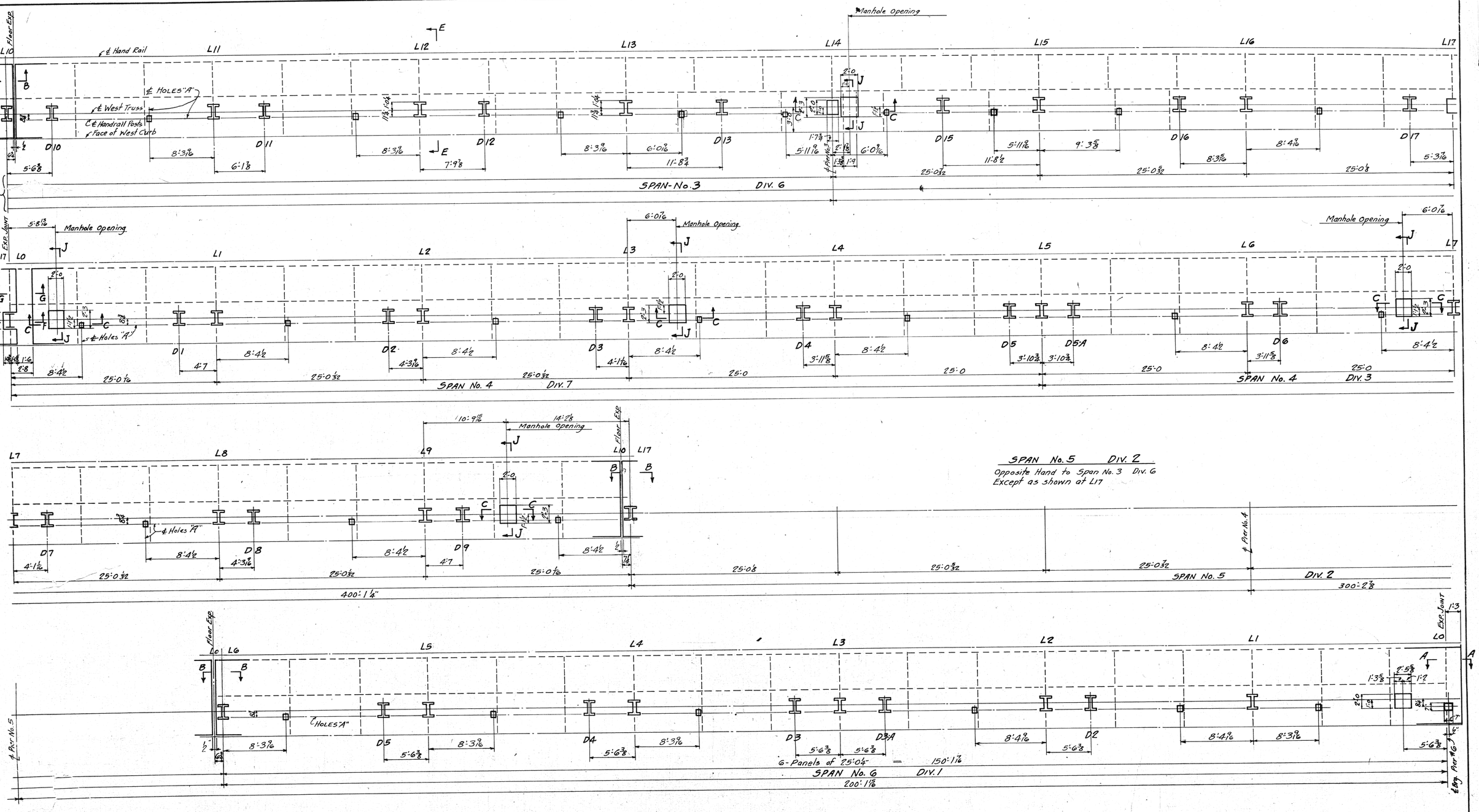
ERECTION PLAN - SPAN 5
L10 TO L17

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-1-33

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT: AMERICAN BRIDGE COMPANY
WORK FABRICATED AT: AMERICAN BRIDGE COMPANY
IN CHARGE OF: Lingham
DRAW. MADE BY: RNP DATE 6-16-32
DRAW. CHECKED BY: DATE
ORDER No. H2524
SHEET NO. E4



NOTE:
Work sheets E3, E4 & E5 together.
For Sections AA, BB, CC, DD, EE, FF, GG, JJ see sh. No. E5
For Clearance Dimensions at Verticals "L" and Diagonals "D" see Tables on sh. E5
For Enlarged Plan of Holes "A" see sh. E5

MATERIAL: O. H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A. B. Co.

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

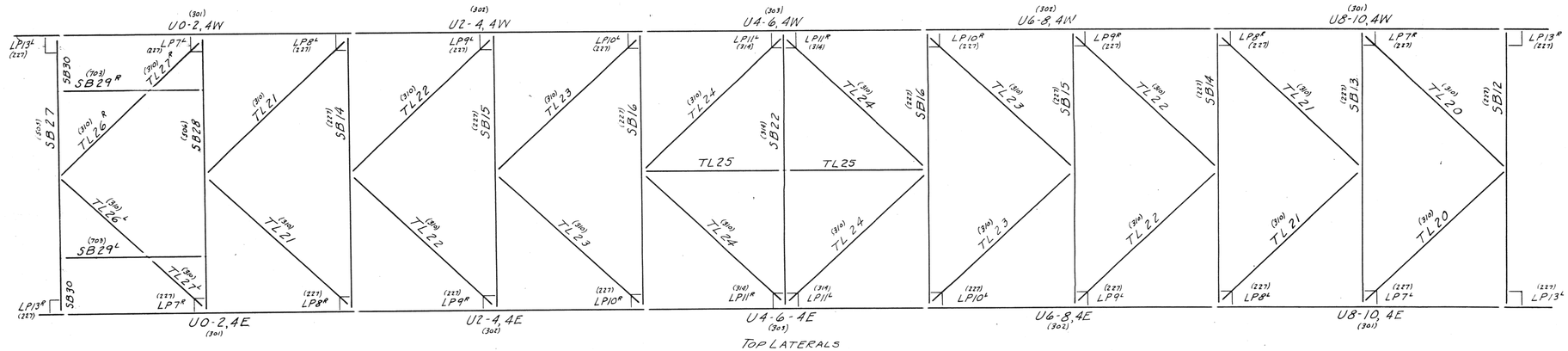
D63-2M-10-38

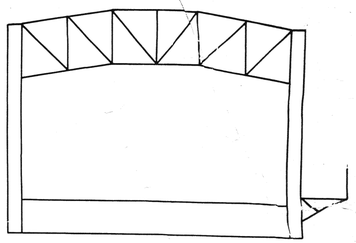
AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT.
WORK FABRICATED By others PLANT.
IN CHARGE OF Loughman DR #2
DRAW. MADE BY ALH DATE 9-1-39
DRAW. CHECKED BY E.R.H. DATE 9-13-39

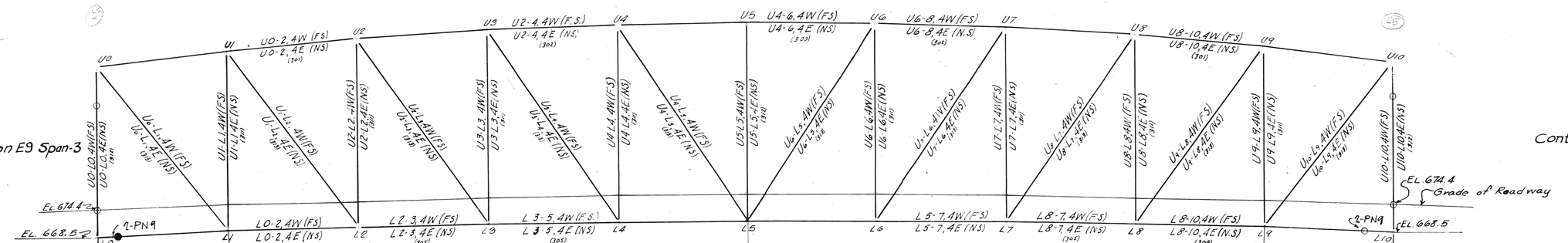
ORDER No. H2529
SHEET NO. E4

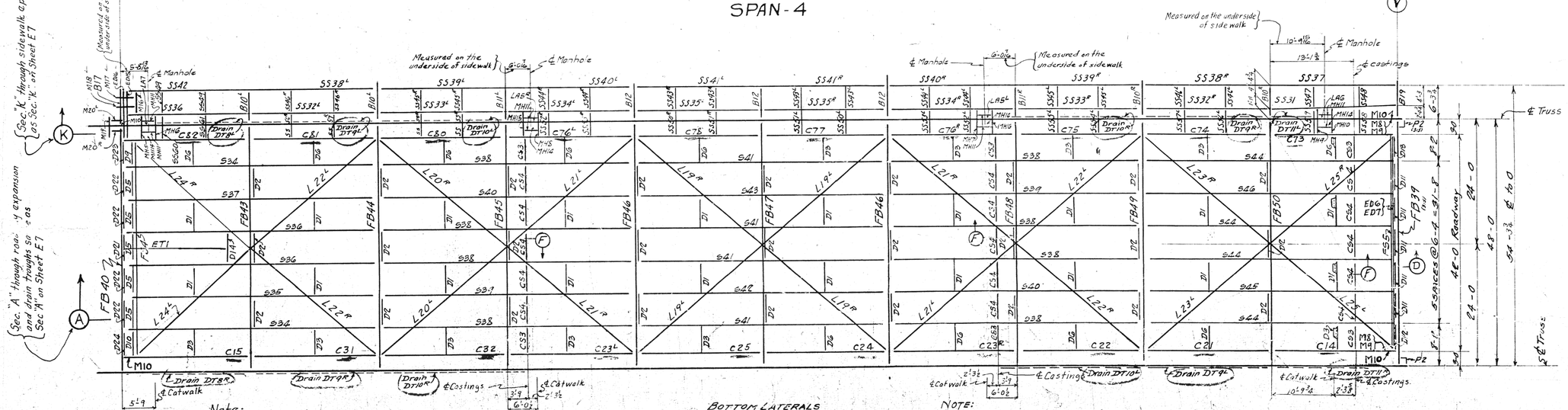
Req. #19949





TYPICAL SECTION
SWAY BRACING

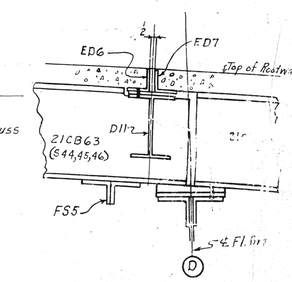




Note:
For Catwalk Framing, Drain Troughs, and Drain Trough Flashing
Near L0, L3, L7, and L9½ See Sheet E10

NOTE:
Ends of stringers marked ⊗ to be toward abutment
For location of erection bents and other
erection material see Sh. E1-Contr. #2525.

For Sect. F see Sh. E2



ERECTION DIAGRAM
SPAN 4

Lorain County, O.
EAST 21st STREET B
Lorain, Ohio

AMERICAN BRIDGE COM
DRAWINGS MADE AT AMERICAN BRI
WORK FABRICATED AT AMERICA
IN CHARGE OF
DRAW. MADE BY
DRAW. CHECKED BY

ORDER No.
142124

E-5

TABLE OF CLEARANCE DIMENSIONS FOR VERTICALS

LOCATION / DIMENSION	SPAN No.1 DIV. 4										
	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11
A	1'-10½	1'-10½	1'-10½	1'-10½	1'-10½	1'-10½	1'-11¼	2'-2	2'-0	1'-9¾	1'-11¼
B	2⅞	2⅞	2⅞	2⅞	2⅞	2⅞	4¼	5¾	4⅞	6¼	4⅞
C	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-2⅞	1'-2½	1'-2½	8⅞	1'-1⅞
D	2⅞	2⅞	2⅞	2⅞	2⅞	2⅞	4¼	5¾	4⅞	6¼	4⅞
E	1'-0	1'-2	1'-2	1'-2	1'-2	1'-2	1'-1	1'-4	1'-4	1'-7	1'-4
F	5⅞	5⅞	5⅞	5⅞	5⅞	5⅞	5¼	6¾	6⅞	7½	6⅞
G	2½	2½	2½	2½	2½	2½	2½	2½	2½	4	2½
H	5⅞	5⅞	5⅞	5⅞	5⅞	5⅞	5¼	6¾	6⅞	7½	6⅞

LOCATION / DIMENSION	SPAN No.2 DIV. 5				
	L0	L1	L2	L3	L4	L5
A		1'-10½	1'-10½	1'-10½	1'-10½	1'-10½
B		2⅞	2⅞	2⅞	2⅞	2⅞
C		1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼
D		2⅞	2⅞	2⅞	2⅞	2⅞
E	EXP. JOINT	1'-2	1'-2	1'-0	1'-2	1'-2
F		5⅞	5⅞	5⅞	5⅞	5⅞
G		2½	2½	2½	2½	2½
H		5⅞	5⅞	5⅞	5⅞	5⅞

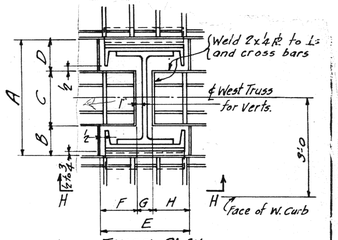
LOCATION / DIMENSION	SPAN No.3 DIV. 6															
	L0	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	L11	L12	L13	L14	L15	L16
A	2'-1½	1'-11¼	1'-9½	1'-11¼	1'-11¼	1'-10½	1'-10½	1'-10½	1'-10½	1'-11¼	1'-11¼	2'-0	2'-0	2'-0	1'-1⅞	2'-0
B	3½	4⅞	5⅞	4⅞	4⅞	2⅞	2⅞	2⅞	2⅞	4⅞	4⅞	5¼	5¼	–	5⅞	5½
C	1'-6½	1'-2	10¼	1'-2	1'-2	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-2	1'-2	1'-1½	1'-1½	–	1'-1	1'-1
D	3½	4⅞	5⅞	4⅞	4⅞	2⅞	2⅞	2⅞	2⅞	4⅞	4⅞	5¼	5¼	–	5⅞	5½
E	1'-3	1'-4	1'-7	1'-4	1'-4	1'-2	1'-2	1'-2	1'-2	1'-4	1'-4	1'-7	1'-7	1'-7½	1'-7	1'-7
F	6¼	6¾	7	6¾	6¾	5⅞	5⅞	5⅞	5⅞	6¾	6¾	8¼	8¼	–	8¼	8¼
G	2½	2½	5	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	–	2½	2½
H	6¼	6¾	7	6¾	6¾	5⅞	5⅞	5⅞	5⅞	6¾	6¾	8¼	8¼	–	8¼	8¼

LOCATION / DIMENSION	SPAN No.4 DIV. 7					SPAN No.4 DIV. 3				
	L0	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
A		1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-10½	1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-11½
B		4⅞	4⅞	4⅞	4⅞	2⅞	4⅞	4⅞	4⅞	4⅞	5¼
C		1'-2	1'-2	1'-2	1'-2	1'-6¼	1'-2	1'-2	1'-2	1'-2	1'-1
D		4⅞	4⅞	4⅞	4⅞	2⅞	4⅞	4⅞	4⅞	4⅞	5¼
E	EXP. JOINT	1'-4	1'-4	1'-4	1'-4	10	1'-4	1'-4	1'-4	1'-4	1'-7
F		6¾	6¾	6¾	6¾	3¾	6¾	6¾	6¾	6¾	8¼
G		2½	2½	2½	2½	2½	2½	2½	2½	2½	2½
H		6¾	6¾	6¾	6¾	3¾	6¾	6¾	6¾	6¾	8¼

LOCATION / DIMENSION	SPAN No.5 DIV. 2
A	
B	
C	(See Note on E4)
D	
E	
F	
G	
H	

LOCATION / DIMENSION	SPAN No.6 DIV. 1					
	L6	L5	L4	L3	L2	L1
A	2'-1½	1'-10½	1'-10½	1'-10½	1'-10½	1'-10½
B	3⅞	2⅞	2⅞	2⅞	2⅞	2⅞
C	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼
D	3⅞	2⅞	2⅞	2⅞	2⅞	2⅞
E	1'-3	1'-2	1'-2	10	1'-2	10
F	6¼	5¾	5¾	3¾	5¾	3¾
G	2½	2½	2½	2½	2½	2½
H	6¼	5¾	5¾	3¾	5¾	3¾

NOTE:
Dimension "A" is sym. about ℄ Truss, except as shown at L9-span 1; L12 & L13 - span 3.
Dimension "E" is sym. about ℄ Verticals and as shown in Typical Elevs. for diagonals.



TYPICAL PLAN
SIDEWALK DECK TRIM

TABLE OF CLEARANCE DIMENSIONS FOR DIAGONALS

LOCATION / DIMENSION	SPAN No.1 DIV. 4										
	D2	D3	D4	D5	D5-A	D6	D7	D8	D9	D11	D12
A	1'-10⅞	1'-10	1'-11⅜	1'-11⅜	1'-10¼	1'-10	2'-0	2'-0	2'-0¼	2'-0	2'-0
B	2	1⅞	2⅞	2⅞	1⅞	2	2⅞	2⅞	3	2⅞	2⅞
C	1'-6⅞	1'-6¼	1'-6⅞	1'-6⅞	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6¼
D	2	1⅞	2⅞	2⅞	1⅞	2	2⅞	2⅞	3	2⅞	2⅞
E	1'-7⅞	1'-9⅞	1'-8⅞	1'-8⅞	1'-1⅞	1'-2⅞	1'-6⅞	1'-9½	2'-0	1'-8⅞	1'-6⅞
F	7½	4⅞	8⅞	8⅞	4⅞	5¼	7⅞	8½	9⅞	8⅞	6⅞
G	4⅞	4⅞	4⅞	4⅞	4½	4⅞	4½	4½	4½	4⅞	4⅞
H	7½	4⅞	8⅞	8⅞	4⅞	5¼	7⅞	8½	9⅞	8⅞	6⅞
J	3	3	3	3	1⅞	1⅞	1⅞	1⅞	1⅞	3	3
K	1⅞	1⅞	1⅞	1⅞	3⅞	3¼	3⅞	3⅞	3⅞	1⅞	1⅞

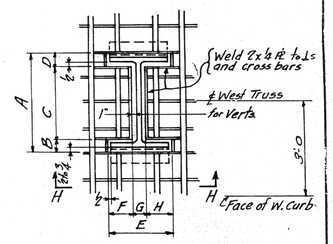
LOCATION / DIMENSION	SPAN No.2 DIV. 5				
	D1	D2	D3	D3-A	D4	D5
A	1'-10¼	1'-10	1'-11⅜	1'-11¼	1'-10	1'-10¼
B	2	1⅞	4¼	4⅞	1⅞	2
C	1'-6¼	1'-6⅞	1'-2⅞	1'-2	1'-6⅞	1'-6¼
D	2	1⅞	4¼	4⅞	1⅞	2
E	1'-2½	1'-1¼	1'-5⅞	1'-10⅞	1'-1⅞	1'-2⅞
F	5	4½	6⅞	9¼	4⅞	5⅞
G	4½	4¼	4⅞	4¼	4½	4⅞
H	5	4½	6⅞	9¼	4⅞	5⅞
J	3⅞	3	2⅞	1¼	1⅞	1½
K	1⅞	1¼	1⅞	1⅞	3⅞	3⅞

LOCATION / DIMENSION	SPAN No.3 DIV. 6																
	D0	D1	D3	D4	D5	D6	D7	D8	D8-A	D9	D10	D11	D12	D13	D15	D16	D17
A	1'-10½	2'-0	2'-0	1'-11⅞	1'-10⅞	1'-10	1'-11¼	1'-11¼	1'-10	1'-10	1'-10½	1'-11⅜	1'-10½	1'-11⅜	1'-10	1'-11½	2'-0
B	2⅞	2⅞	2⅞	2⅞	2	1⅞	4⅞	4⅞	1⅞	1⅞	2⅞	2¼	2⅞	5¼	1⅞	2⅞	2⅞
C	1'-6¼	1'-6¼	1'-6¼	1'-6¼	1'-6⅞	1'-6¼	1'-2	1'-2	1'-6⅞	1'-6¼	1'-6¼	1'-6⅞	1'-6¼	1'-0⅞	1'-6¼	1'-6	1'-6¼
D	2⅞	2⅞	2⅞	2⅞	2	1⅞	4⅞	4⅞	1⅞	1⅞	2⅞	2¼	2⅞	5¼	1⅞	2¾	2⅞
E	1'-8¼	1'-10⅞	1'-11¼	1'-8⅞	1'-7⅞	1'-2⅞	1'-9⅞	1'-9⅞	1'-2⅞	1'-8	1'-8¼	1'-9¼	1'-7¼	1'-1⅞	1'-0½	1'-8	1'-10⅞
F	7⅞	9⅞	9⅞	8⅞	7½	4⅞	8⅞	8⅞	5⅞	7⅞	7⅞	8⅞	7⅞	9⅞	4⅞	7⅞	9
G	4⅞	4½	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4½	4½	4⅞	4½	4½	3⅞	3¾	4¼	4⅞
H	7⅞	9⅞	9⅞	8⅞	7½	4⅞	8⅞	8⅞	5⅞	7⅞	7⅞	8⅞	7⅞	9⅞	4⅞	7⅞	9
J	1½	1⅞	3	3	3	3	3	3	1⅞	1⅞	1½	1⅞	1⅞	1¼	2⅞	2⅞	3
K	3¼	3⅞	1⅞	1⅞	1⅞	1⅞	1⅞	1⅞	3⅞	3⅞	3¼	3⅞	3⅞	2⅞	1⅞	1⅞	1⅞

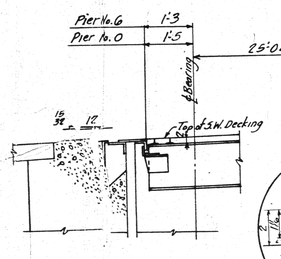
LOCATION / DIMENSION	SPAN No.4 DIV. 7					SPAN No.4 DIV. 3				
	D1	D2	D3	D4	D5	D5-A	D6	D7	D8	D9
A	2'-0	1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-11¼	1'-11¼	2'-0
B	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞
C	1'-2⅞	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2	1'-2⅞
D	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞	4⅞
E	1'-9¼	1'-9¼	1'-8⅞	1'-8⅞	1'-8¼	1'-8¼	1'-8⅞	1'-8⅞	1'-9¼	1'-9¼
F	8¼	8⅞	8⅞	8⅞	8¼	8¼	8⅞	8⅞	8⅞	8¼
G	4	4	3⅞	3⅞	3⅞	3¾	3⅞	3⅞	4	4
H	8¼	8⅞	8⅞	8⅞	8¼	8¼	8⅞	8⅞	8⅞	8¼
J	3	2⅞	2⅞	2⅞	2½	1¼	1¼	1¼	1¼	1¼
K	1¼	1¼	1¼	1¼	1¼	2½	2⅞	2⅞	2¾	3

LOCATION / DIMENSION	SPAN No.5 DIV. 2
A	
B	
C	(See Note on E4)
D	
E	
F	
G	
H	
J	
K	

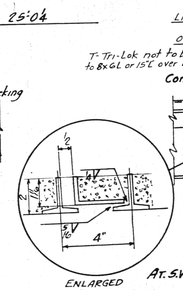
LOCATION / DIMENSION	SPAN No.6 DIV. 1					
	D5	D4	D3	D3-A	D2
A	1'-10¼	1'-10	1'-11¼	1'-11¼	1'-10
B	2	1⅞	4⅞	4¼	1⅞
C	1'-6¼	1'-6⅞	1'-2	1'-2⅞	1'-6⅞
D	2	1⅞	4⅞	4¼	1⅞
E	1'-2⅞	1'-1⅞	1'-10⅞	1'-6	1'-1⅞
F	5⅞	4⅞	9¼	6⅞	4½
G	4½	4⅞	4¼	4⅞	4¼
H	5⅞	4⅞	9¼	6⅞	4½
J	1⅞	1⅞	1¼	3	3⅞
K	3⅛	3⅞	2⅞	1¼	1¼

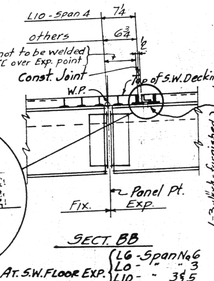


TYPICAL PLAN
SIDEWALK DECK TRIM

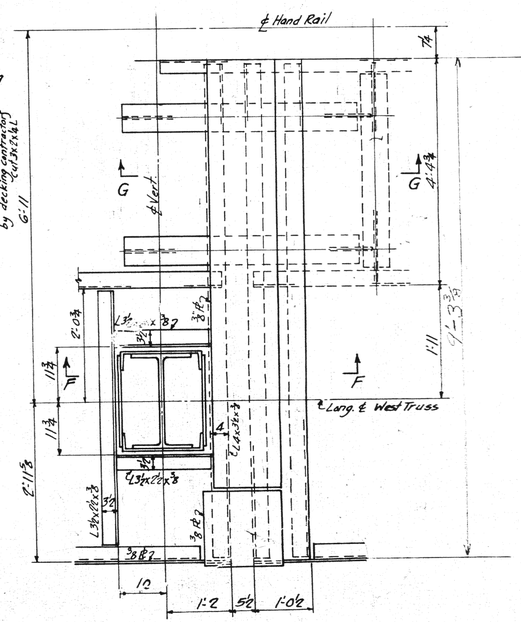


SECT. AA
SIDEWALK EXP. AT PIER No. 0 & 6

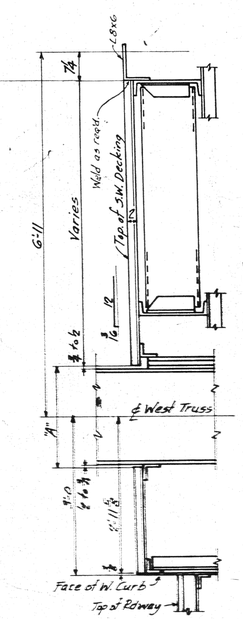




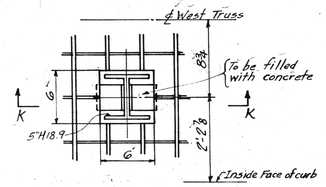
SECT. BB
AT S.W. FLOOR EXP. { L6 - Span No.6; L0 - " 3 & 5; L10 - " 4



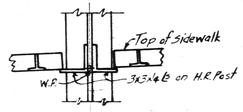
PLAN AT EXP. JOINT { L0 - Span 2; L0 - " 4



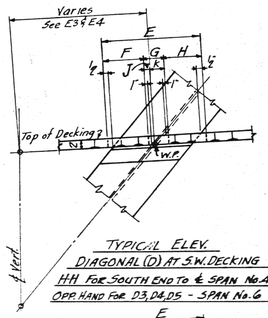
SECT. E.E.
TYPICAL SECT. AT S.W. BRKT.



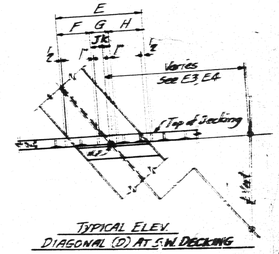
TYPICAL PLAN FOR HOLES "A"
(For Handrail Posts)



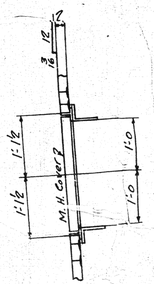
SECT. KK



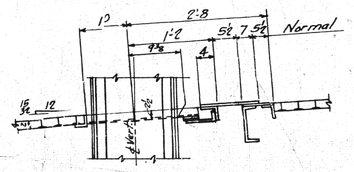
TYPICAL ELEV.
DIAGONAL (D) AT S.W. DECKING
HH FOR SOUTH END TO ℄ SPAN No.4
OPP. HAND FOR D3, D4, D5 - SPAN No.6



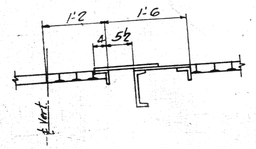
TYPICAL ELEV.
DIAGONAL (D) AT S.W. DECKING
HH FOR SOUTH END TO ℄ SPAN No.4
OPP. HAND FOR D-3, SPAN No.4 & D2, D3A, SPAN No.6



SECT. JJ



SECT. FF

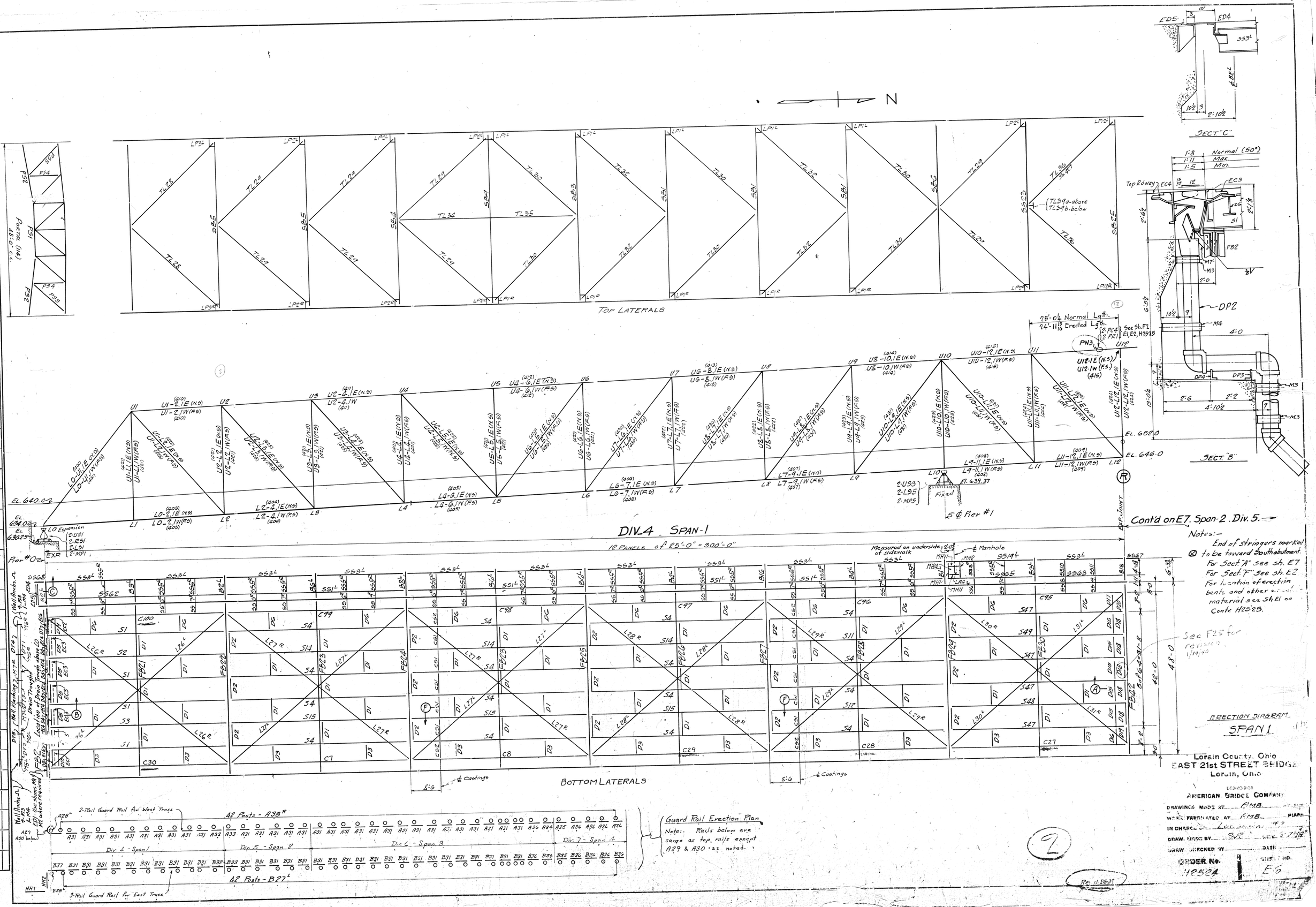


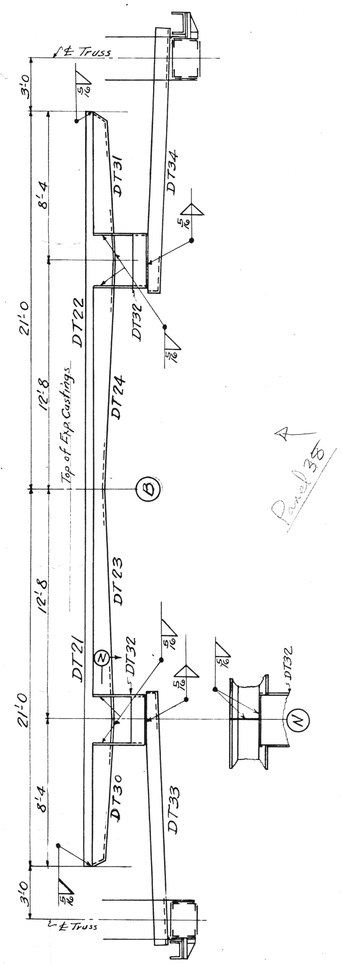
SECT. GG

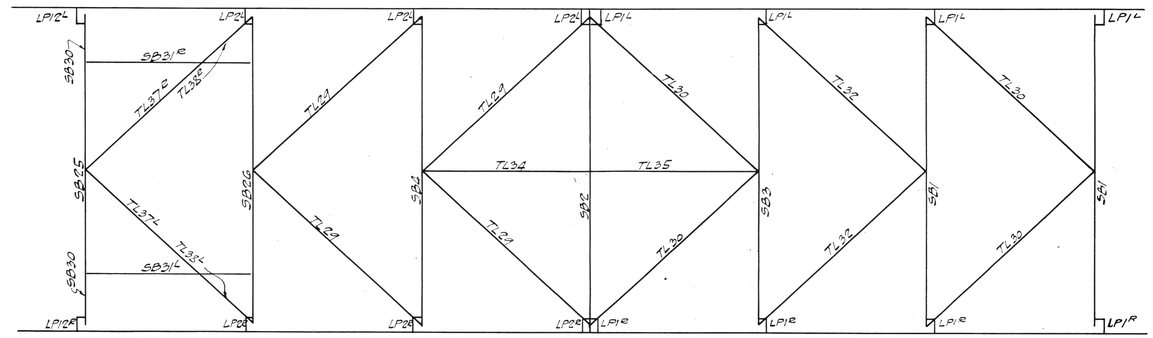
NOTE:
Work sheets E3, E4 & E5 Together.

MATERIAL: O. H. Steel A.S.T.M.
Copper bearing 0.20 min.
SPECIFICATIONS: Spe
Watson & Associate
Highway
INSPECTION:
ERECTION:

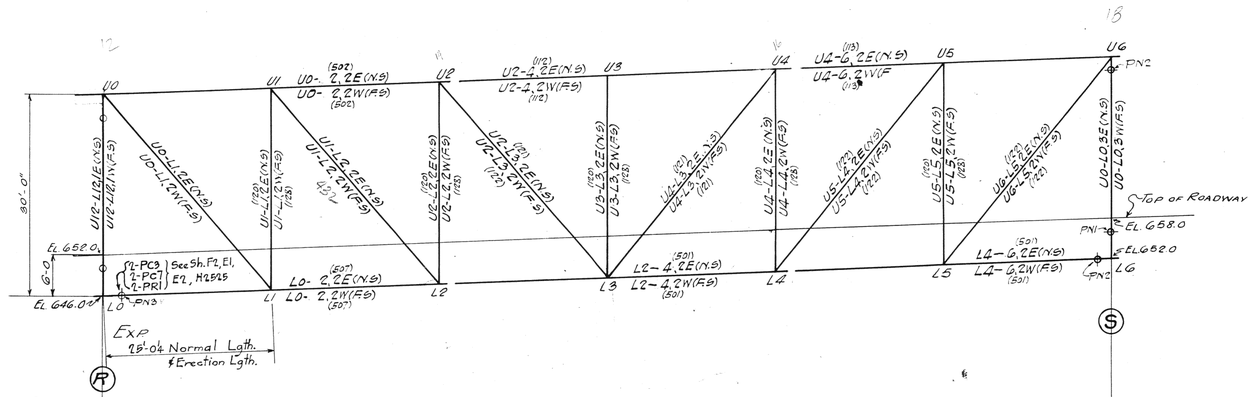
E5


N
TOP LATERALS
BOTTOM LATERALS
DIV. 4 SPAN-1
12 PANELS of 25'-0" = 300'-0"
Cont'd on E7. Span-2. Div. 5.
Pier #0
Pier #1
EXP. JOINT
SECT. "C"
SECT. "B"
Normal (50°)
Max.
Min.
Top Rdway
DP2
DP3
DP4
FB2
M3
M4
M7
S1
EC3
EC4
PN3
U12-1E (N.S.)
U12-1W (F.S.)
(415)
75'-0¼ Normal Lgth.
74'-11 15/16 Erected Lgth.
See Sh. E2
EL. 652.0
EL. 646.0
EL. 640.0
Fixed
Measured on underside of sidewalk
℄ Manhole
℄ Castings
Guard Rail Erection Plan
Note: Rails below are same as top rails except A29 & A30 as noted.
2-Rail Guard Rail for West Truss
3-Rail Guard Rail for East Truss
42 Posts - A38
42 Posts - B37
Div. 4 - Span 1
Div. 5 - Span 2
Div. 6 - Span 3
Div. 7 - Span 4
Notes:-
End of stringers marked ⊗ to be toward Southabutment.
For Sect. "A" see sh. E7
For Sect. "F" see sh. E2
For location of erection bents and other erection material see Sh. E1 on Contr. H2525.
See F25 for revised 1/11/40
ERECTION DIAGRAM
SPAN 1
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT PITTSBURGH
WORK FABRICATED AT PITTSBURGH
IN CHARGE
DRAW. MADE BY
DRAW. CHECKED BY
ORDER No. 48524
SHEET NO. E6
Rec. 11.26.31





TOP LATERALS

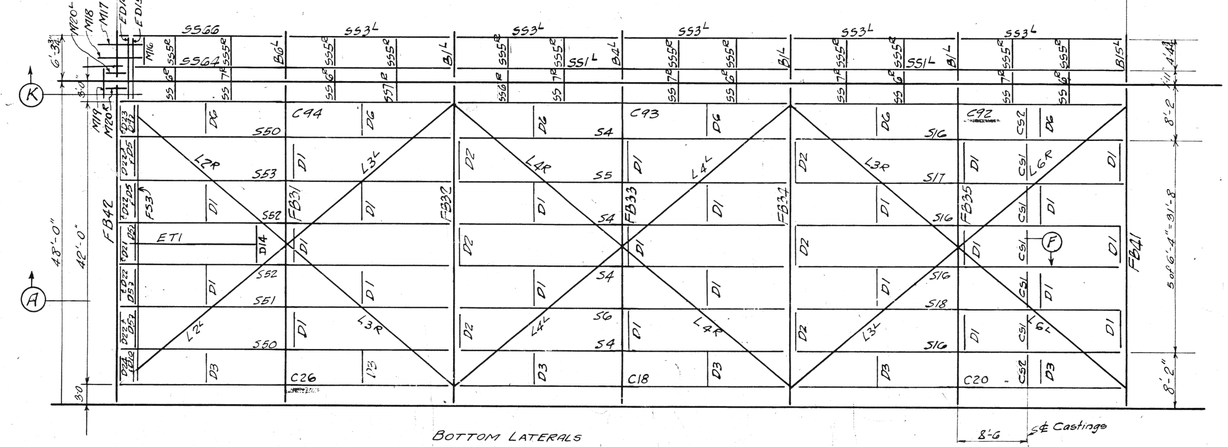


← Cont'd on E6. Span 1. Div 4

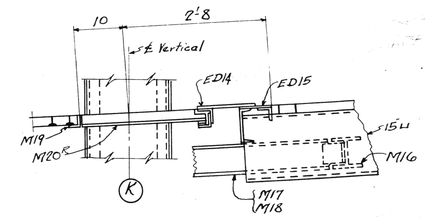
DIV-5 SPAN-2

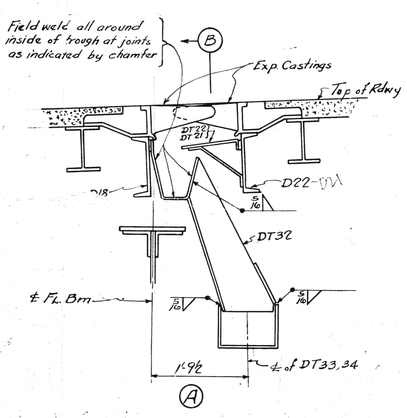
Cont'd on E8 Span 3 Div-6 →

6 PANELS 25'-0" = 150'-0"



BOTTOM LATERALS





Notes:-

End of Stringers marked ⊗ to be toward South abutment.
For location of erection bents and other erection material see Sh. E1 Contr. H2525
For Sect "F" see Sh. E2

ERECTION DIAGRAM

SPAN 2

Lorain County, Oh
EAST 21st STREET Bi
Lorain, Ohio

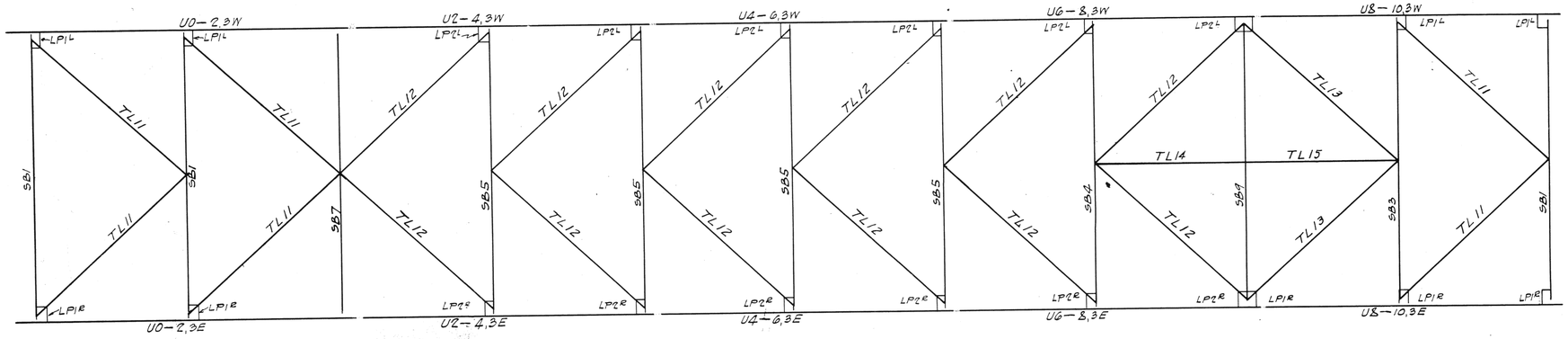
D63-VC-9-38

AMERICAN BRIDGE COMP

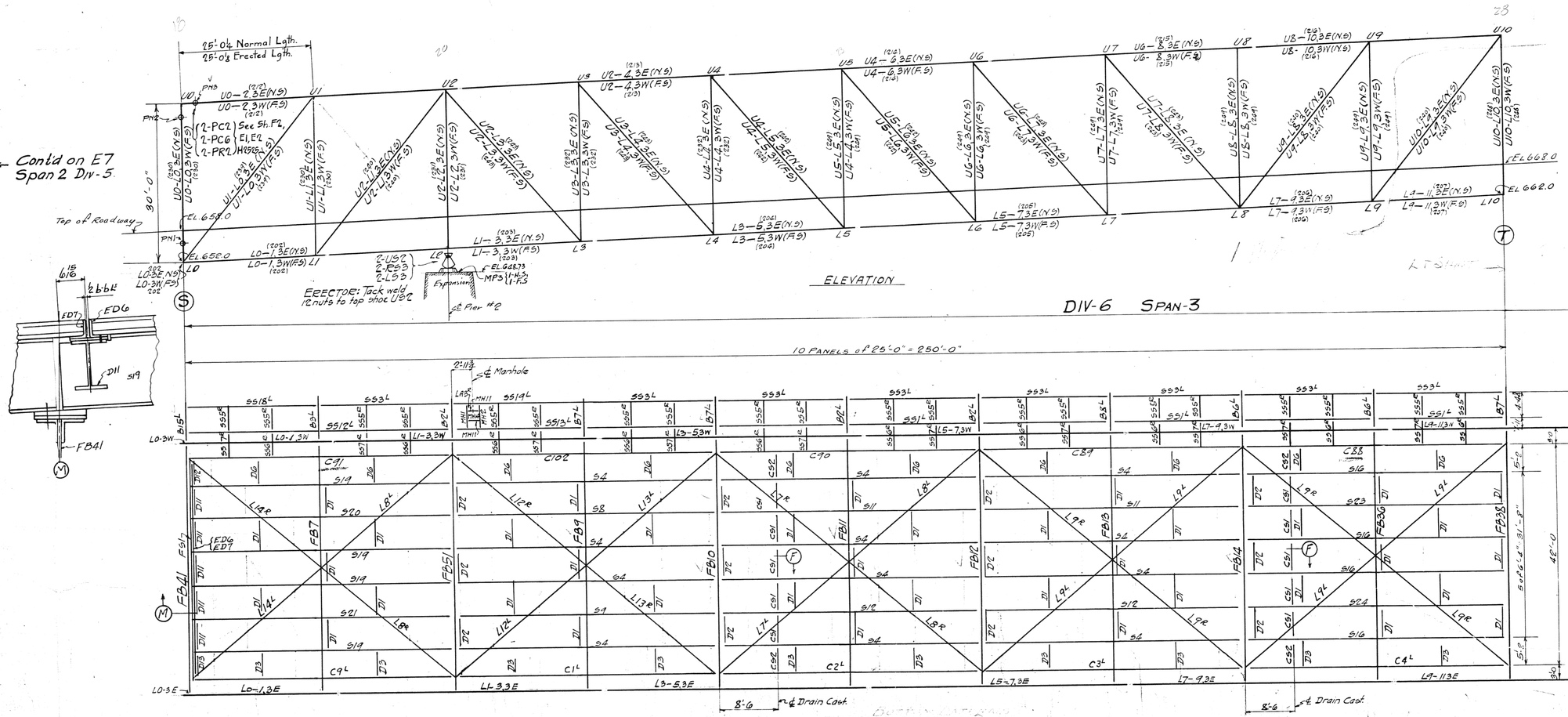
DRAWING MADE AT Ambridge
WORK FABRICATED AT Beaver Falls
IN CHARGE OF Loughman
DRAW. MADE BY RAR
DRAW. CHECKED BY

ORDER No. H2524

E7



TOP CHORD PLAN



ELEVATION

BOTTOM CHORD PLAN

Cont'd on E9 →

NOTE:
End of stringers marked ⊗ to be toward South abutment.
For location of erection bents and other erection material see Sh. E1 - Contr. H2525
For Sect 'F' see Sh. E2.

ERECTION DIAGRAM
SPAN 3 - L0 to L10

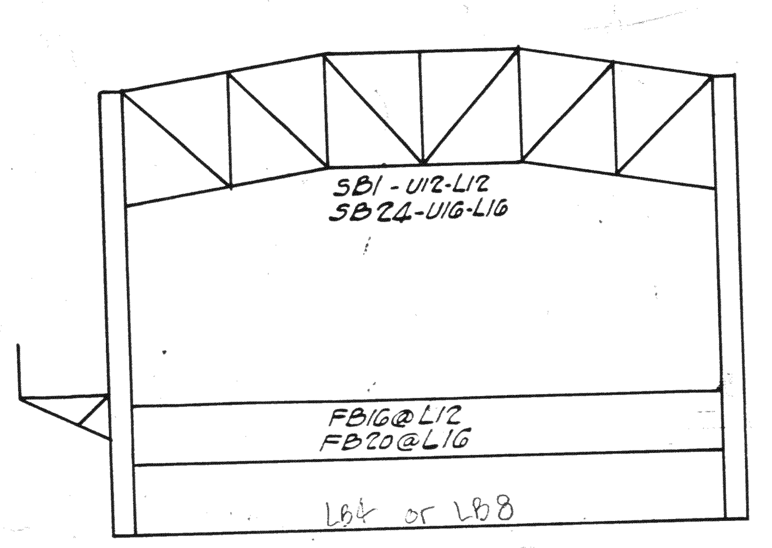
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

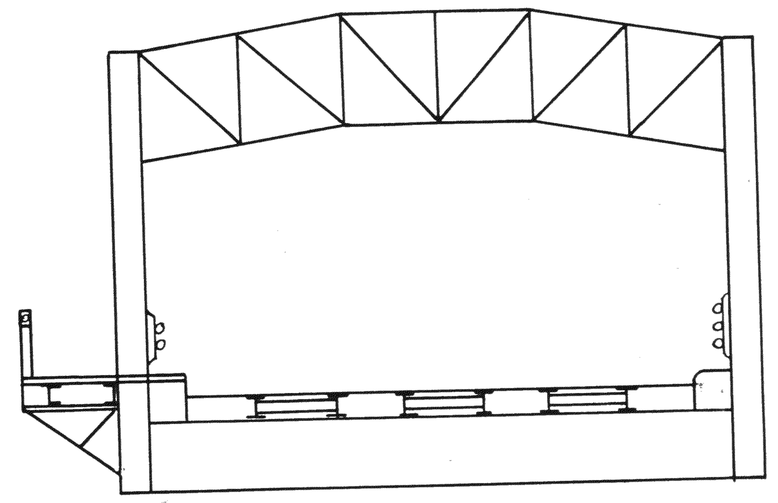
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT AMBRIDGE PLANT
WORK FABRICATED AT AMBRIDGE PLANT
IN CHARGE OF Loughman #2
DRAW. MADE BY R.N.R. DATE 6-39
DRAW. CHECKED BY DATE

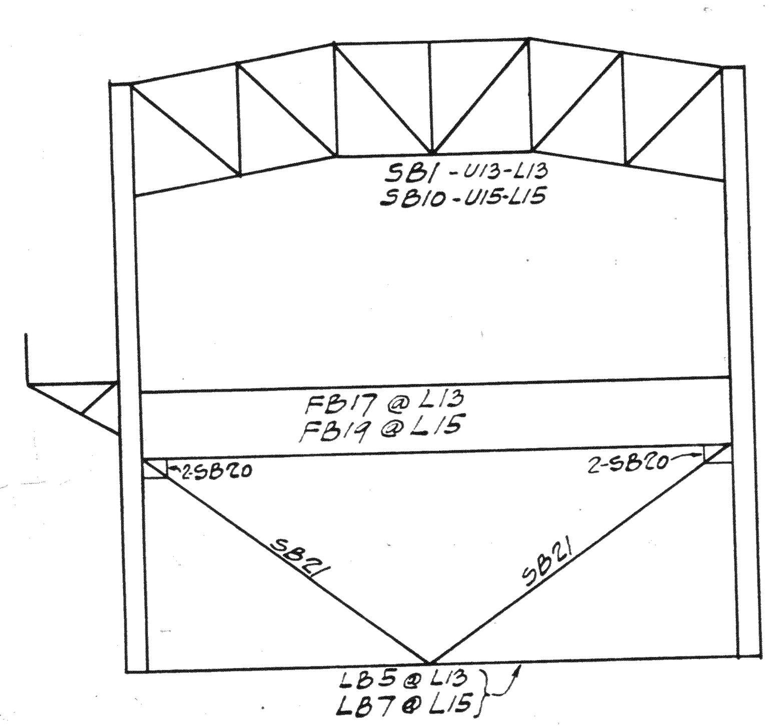
ORDER No. H2524
SHEET No. E8



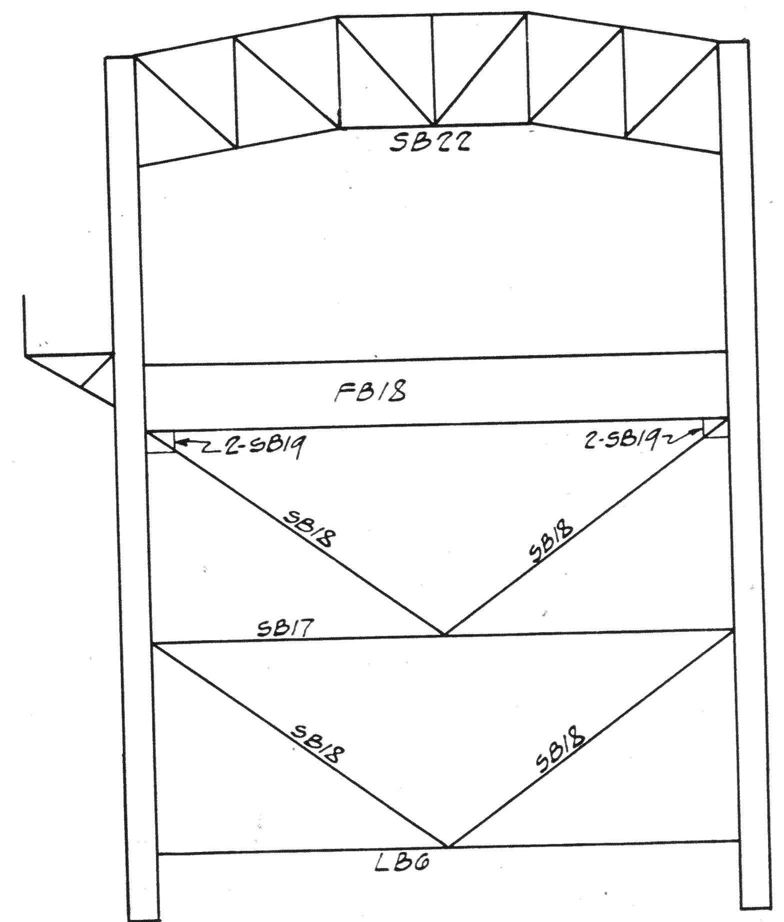
PANELS U12, L12, - U16 L16



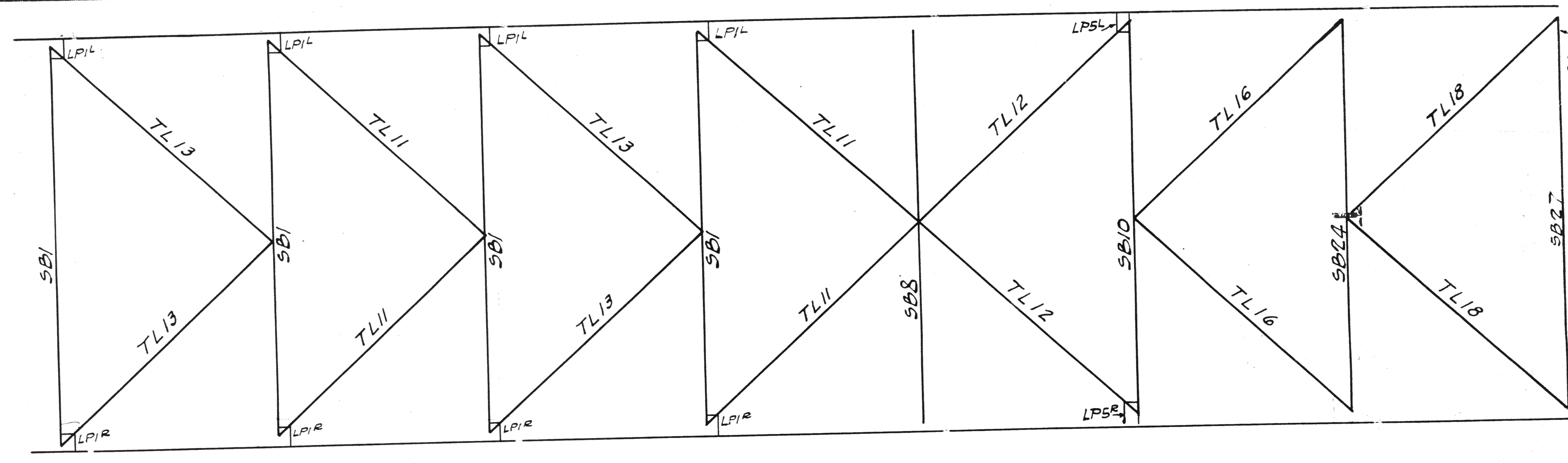
TYPICAL SECTION
SWAY BRACING



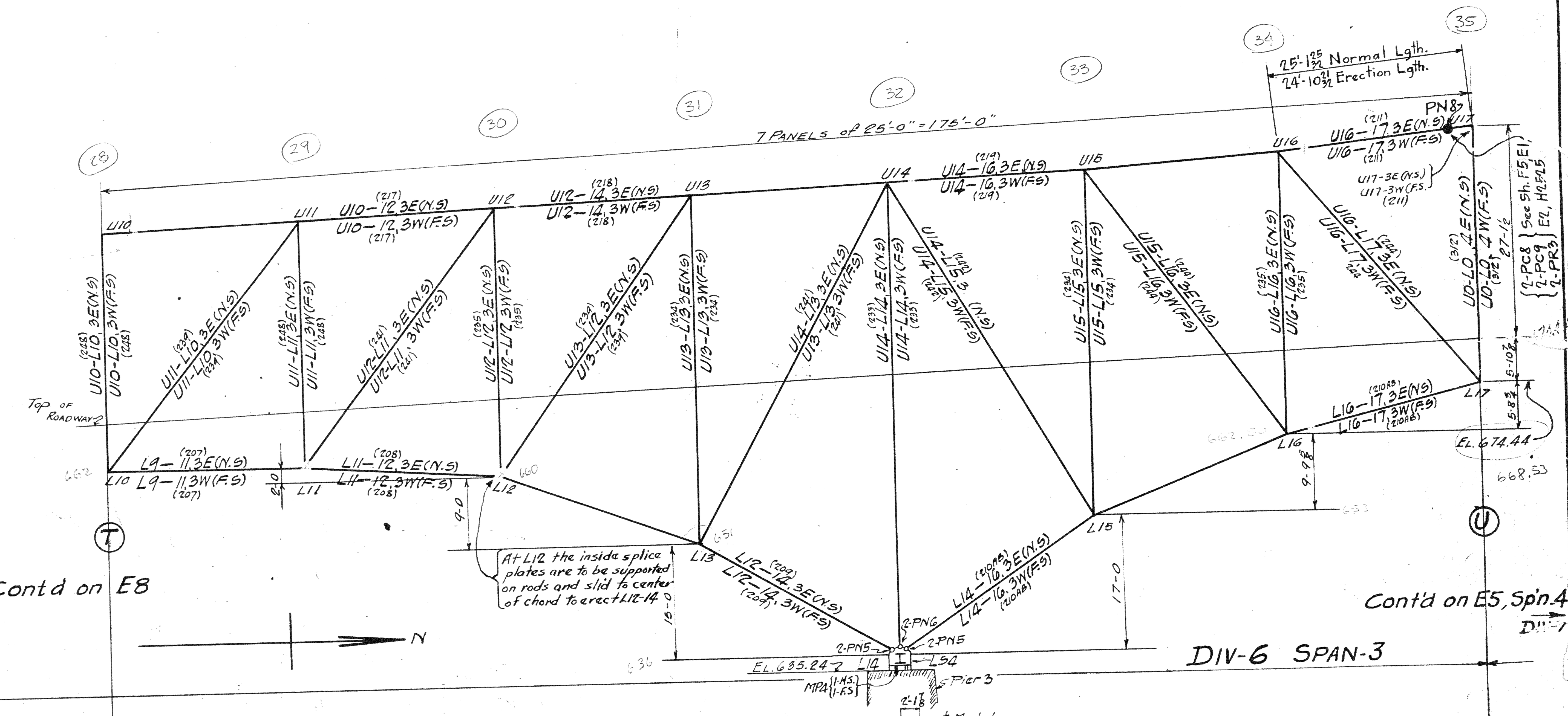
PANELS U13, L13-U15, L15
(31) (33)



(32)
PANEL U14-L14



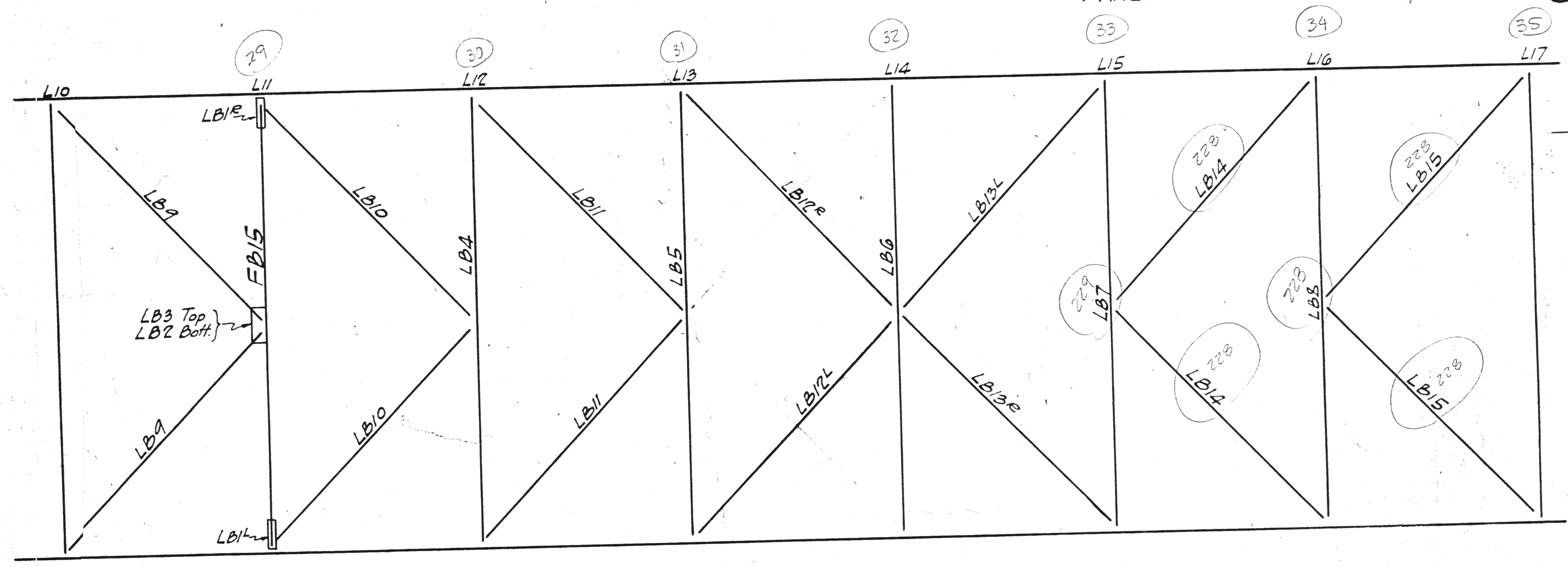
TOP LATERALS



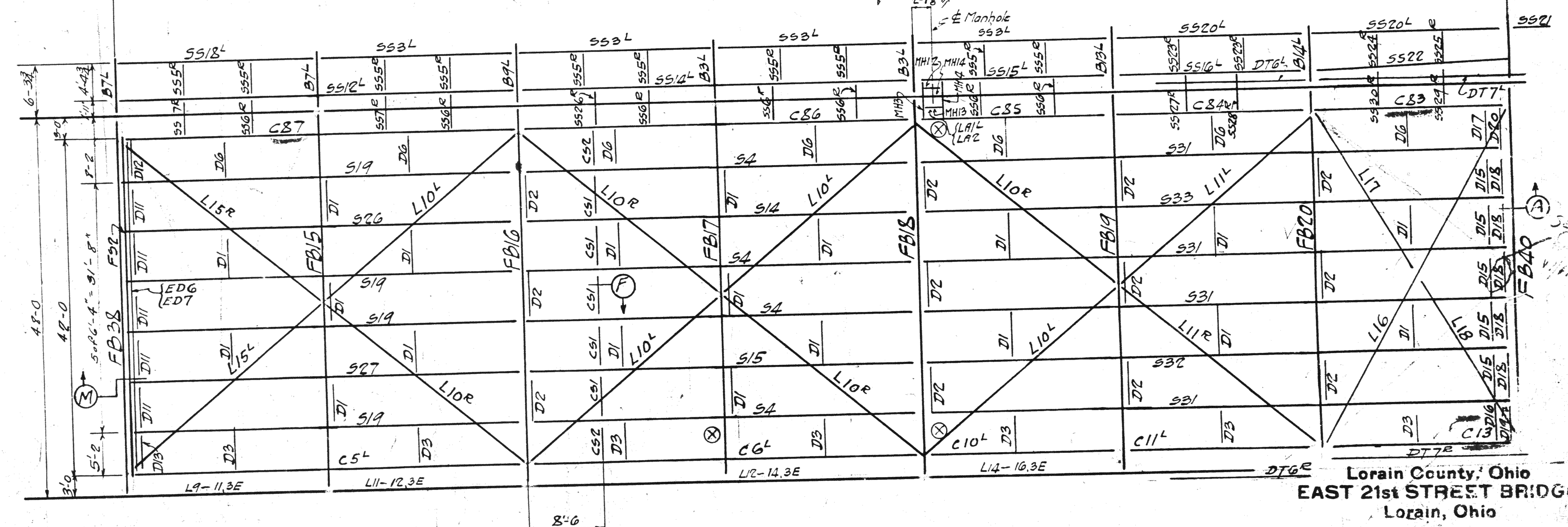
← Cont'd on E8

Cont'd on E5, Sp'n. 4

DIV-6 SPAN-3



PLAN OF LOWER LATERAL BRACING IN PANELS L10 TO L17 INC.



FLOOR PLAN & BOTTOM LATERALS

ERECTION DIAGRAM

SPAN 3 - L10 to L17

NOTE:

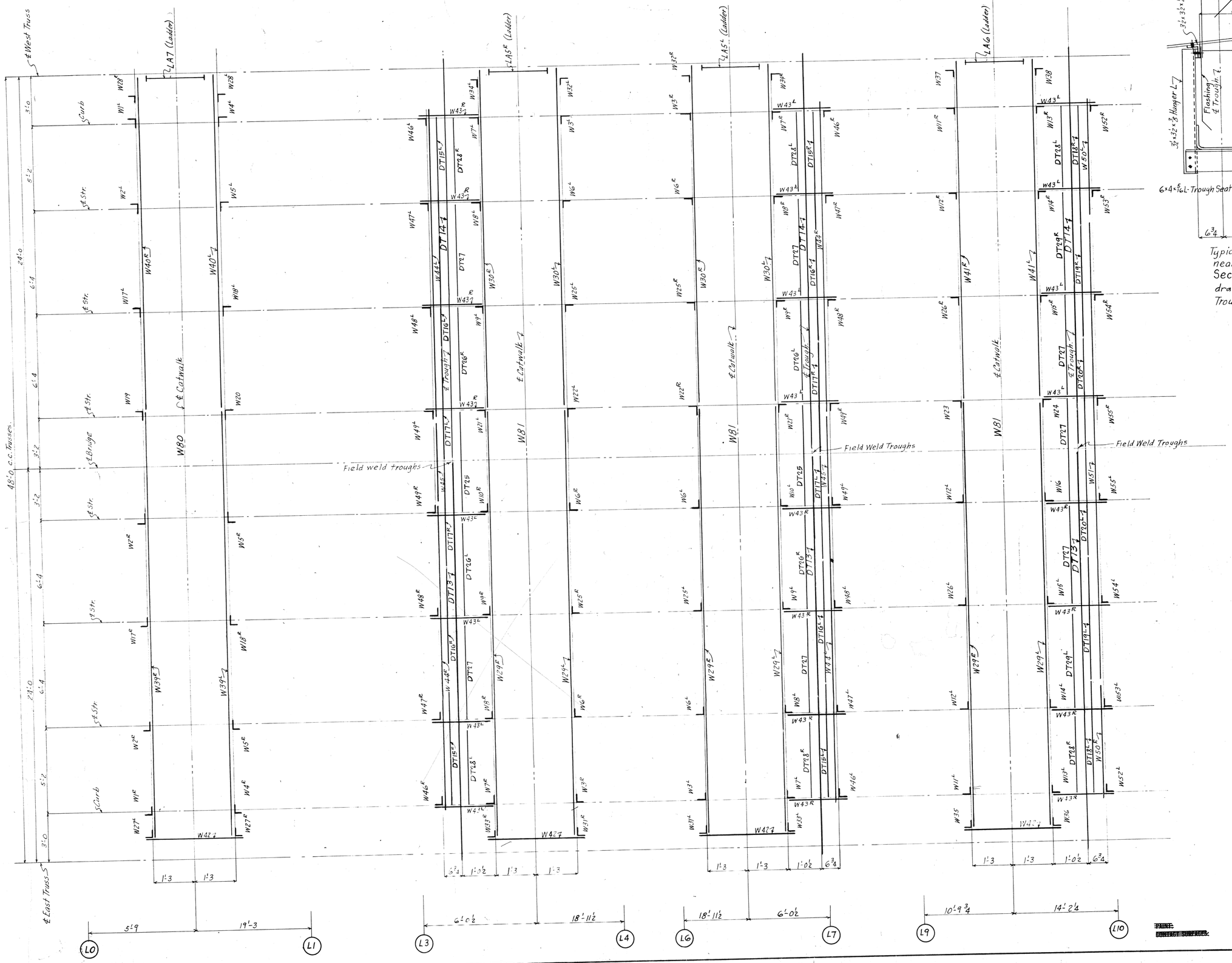
Ends of stringers marked ⊗ to be toward South abutment.
For location of erection bents and other erection material see Sh. E1 - Cont. H2525
For Sect. "F" see Sh. E2
For Sect. "A" see Sh. E7
For Sect. "M" see Sh. E8

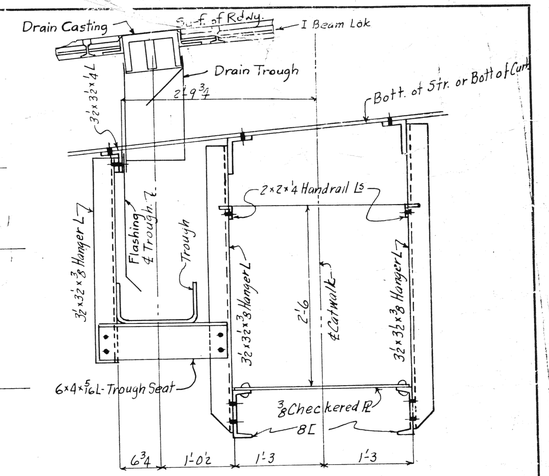
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-VC-9-38

AMERICAN BRIDGE COMPANY.

DRAWINGS MADE AT Ambridge PLANT
WORK FABRICATED AT Ambridge PLANT
IN CHARGE OF Loughman #2
DRAW. MADE BY RAR DATE
DRAW. CHECKED BY DATE
ORDER No. H2524
SHEET No. E7





Typical intermediate section for catwalks near L3, L7, and L9
Sec. for catwalk near L0 similar, except drains and supports omitted.
Trough at L0 shown on sheet E7.

Catwalks — Drain Troughs
Trough Supports.
Span 4

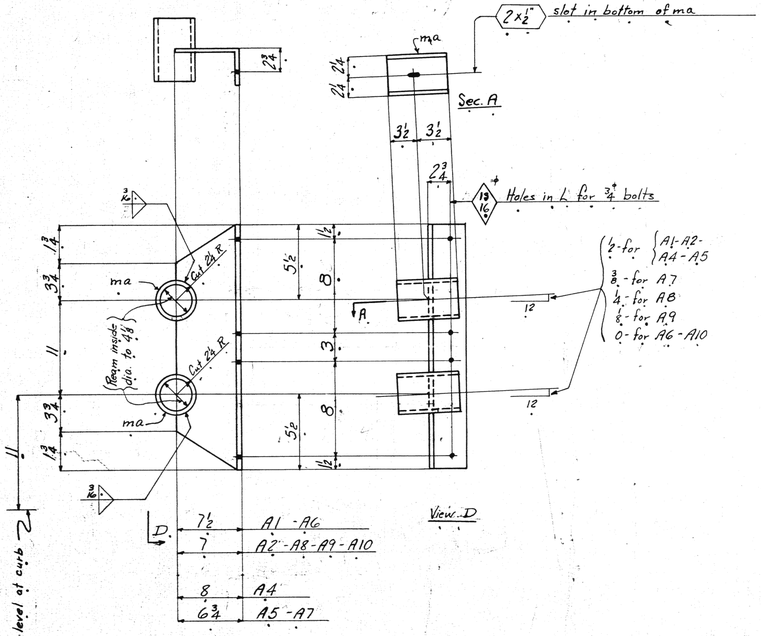
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

D63-2M-10-38

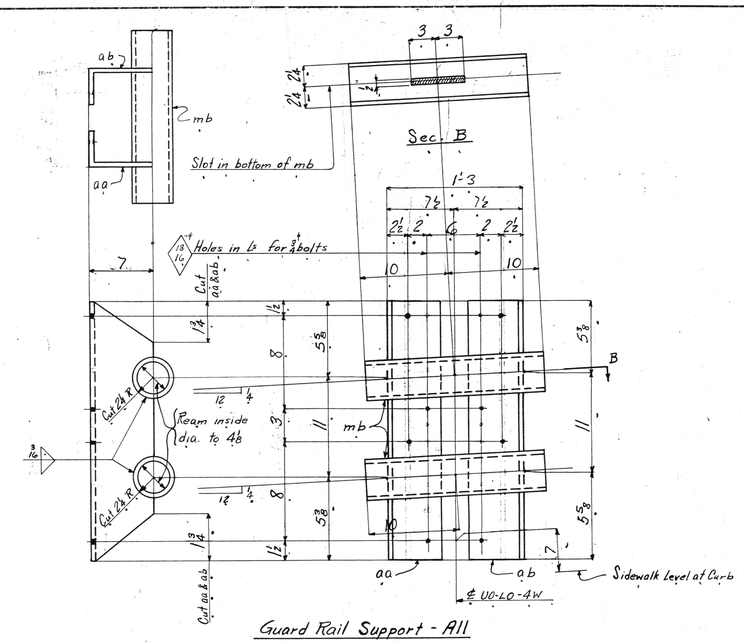
AMERICAN BRIDGE COMPANY.
DRAWINGS MADE AT Ambridge
WORK FABRICATED AT Ambridge
IN CHARGE OF Loughman D.B.#
DRAW. MADE BY HEF W.G.D. DATE
DRAW. CHECKED BY DATE

ORDER No. H2524

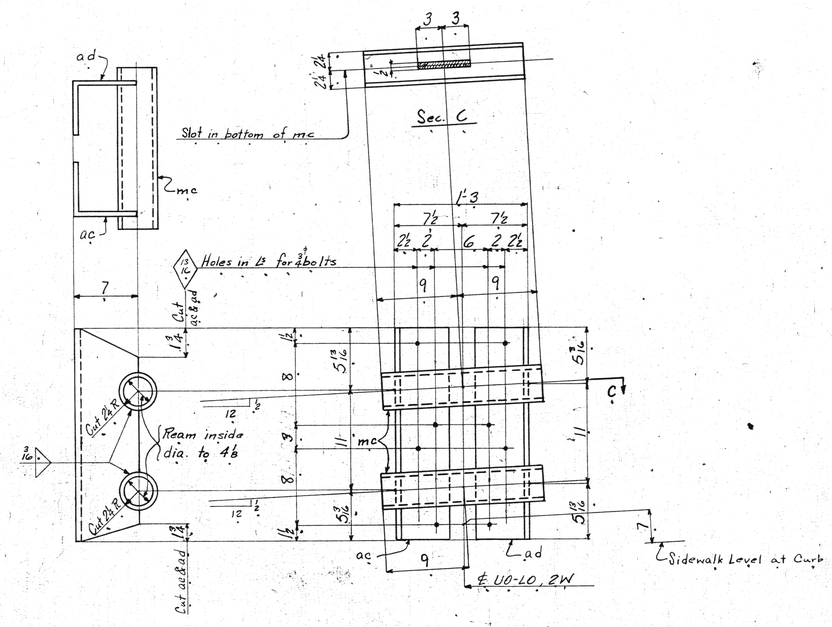
SHT E10 E



Guard Rail Supports - A1R-A2R-A4R-A5R-A6-A7R-A8R-A9R-A10



Guard Rail Support - A11



Guard Rail Support - A12

NOTE:
Guard Rail Supports revised, as called for on Str. P3, and marked thus +, are to be assembled on Verticals listed on lines marked +.

Table for Shop Assembling and Shipping

Mark	Division 1.	2.	3.	4.	5.	6.	7.	Ship on No.	Mark	Order No. H2524 Sh. No.
A1R.				6.				1.	U1-L1, 1W.	421
								1.	U2-L2, 1W.	421
								1.	U3-L3, 1W.	421
								1.	U4-L4, 1W.	421
								1.	U5-L5, 1W.	421
								1.	U6-L6, 1W.	421
A2R.				1.				1.	U11-L11, 1W.	424
A1R.					5.			1.	U1-L1, 2W.	128 +
								1.	U2-L2, 2W.	128 +
								1.	U3-L3, 2W.	128 +
								1.	U4-L4, 2W.	128 +
								1.	U5-L5, 2W.	128 +
A1R.						5.		1.	U5-L5, 3W.	249
								1.	U6-L6, 3W.	249
								1.	U7-L7, 3W.	249
								1.	U8-L8, 3W.	249
								1.	U9-L9, 3W.	249
A1L.	5.							1.	U1-L1, 6W.	128 +
								1.	U2-L2, 6W.	128 +
								1.	U3-L3, 6W.	128 +
								1.	U4-L4, 6W.	128 +
								1.	U5-L5, 6W.	128 +
A1L.		5.						1.	U5-L5, 5W.	249
								1.	U6-L6, 5W.	249
								1.	U7-L7, 5W.	249
								1.	U8-L8, 5W.	249
								1.	U9-L9, 5W.	249
A2R.				3.				1.	U7-L7, 1W.	422
								1.	U8-L8, 1W.	422
								1.	U9-L9, 1W.	423
A2R.						1		1.	U0-L0, 3W.	230
A2R.						7.		1.	U1-L1, 3W.	230
								1.	U3-L3, 3W.	232
								1.	U4-L4, 3W.	232
								1.	U10-L10, 3W.	248
								1.	U11-L11, 3W.	248
								1.	U12-L12, 3W.	235
								1.	U13-L13, 3W.	234
A2L.		7.						1.	U1-L1, 5W.	230
								1.	U3-L3, 5W.	232
								1.	U4-L4, 5W.	232
								1.	U10-L10, 5W.	248
								1.	U11-L11, 5W.	248
								1.	U12-L12, 5W.	235
								1.	U13-L13, 5W.	234
A2L.	.	1						1.	U0-L0, 5W.	230
A4R.				1.				1.	U10-L10, 1W.	423
A4R.						1.		1.	U2-L2, 3W.	231
A4L.		1.						1.	U2-L2, 5W.	231
A5R.						1.		1.	U14-L14, 3W.	233
A5L.		1.						1.	U14-L14, 5W.	233
A6.							1.	1.	U5-L5, 4W.	312
A7R.						2.		1.	U15-L15, 3W.	233
								1.	U16-L16, 3W.	233
A8L.			1.					1.	U10-L10, 4W.	312
A7L.		2.						1.	U15-L15, 5W.	233
								1.	U16-L16, 5W.	233
A8R.							1.	1.	U1-L1, 4W.	311
A8L.			1.					1.	U9-L9, 4W.	311
A9R.							2.	1.	U2-L2, 4W.	311
								1.	U3-L3, 4W.	311
A9L.			2.					1.	U8-L8, 4W.	311
								1.	U7-L7, 4W.	311
A10.							1.	1.	U4-L4, 4W.	311
A10.			1.					1.	U6-L6, 4W.	311
A11.							1.	1.	U0-L0, 4W.	312
A12.					1.			1.	U12-L12, 1W.	424

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE				LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1	26	26	L	7½	4	7/16	1	10		12-A1R. 10-A1L.		8x4 27-7	3
2	130	52	Std Pipe		4			7	ma	(Cut 8x4)			5
3													
4		20	L	7	4	⅜	1	10		12-A2R.		32-11	6
5		40							ma	8-A2L.			
6													
7													
8													
9		4	L	8	4	7/16	1	10		2-A4R.		27-7	3
10		4							ma	1-A4L.			
11		2	L	6¾	4	⅜	7	10		1-A5R. 1-A5L.		7x4 32-11	6
12									ma	(Cut 7x4)			

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE				LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
16		1.	L	7½	4	7/16	1	10		A6		8x4 27-7	3
17		2.							ma	(Cut 8x4)			
18													
19		4.	L	6¾	4	⅜	1	10		2-A7R. 2-A7L.		7x4 32-11	6
20		8.							ma	(Cut 7x4)			
21													
22		3.	L	7	4	⅜	1	10		1-A8R.		32-11	6
23		6.							ma	2-A8L.			
24													
25		4.	L	7	4	⅜	1	10		2-A9R.		32-11	6
26		8.							ma	2-A9L.			
27													
28		2.	L	7	4	⅜	1	10		A10		32-11	6
29		4.							ma				
30													

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE				LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
31		1-Rail Support A11											
32		7.	L	7.	6.	⅜	1.	10.	aa.	Cut 8x6		7-5	11
33		1.	L	7.	6	⅜	1.	10.	ab	Cut 8x6		7-5	11
34		2.	Pipe	4"			1.	8.	mb				5
35													
36		1-Rail Support A12											
37		1.	L	7.	6.	⅜	1.	10.	ac.	Cut 8x6		7-5	11
38		1.	L	7.	6.	⅜	1.	10.	ad.	Cut 8x6		7-5	11
39		2.	Pipe	4"			1.	6	mc.				5
40													
41													
42													
43													
44													
45													

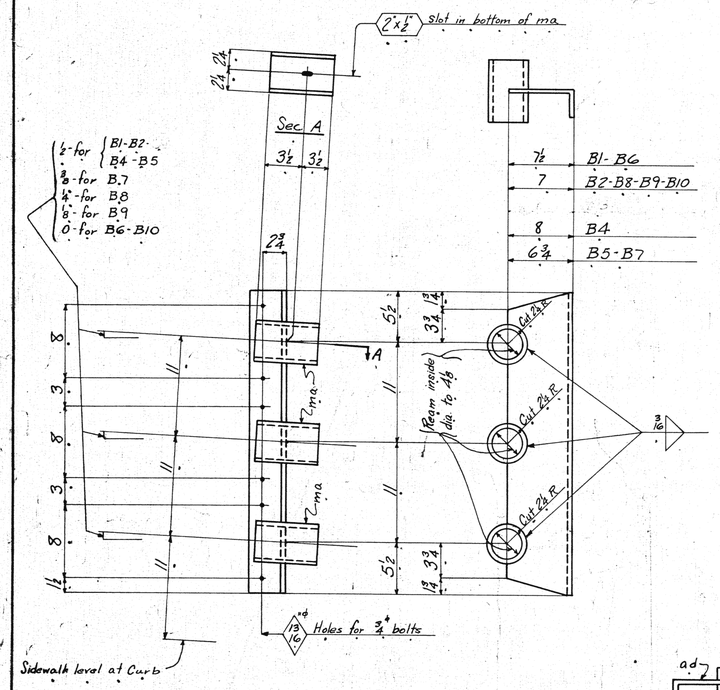
LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE				LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													
56													
57													
58													
59													
60													

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size

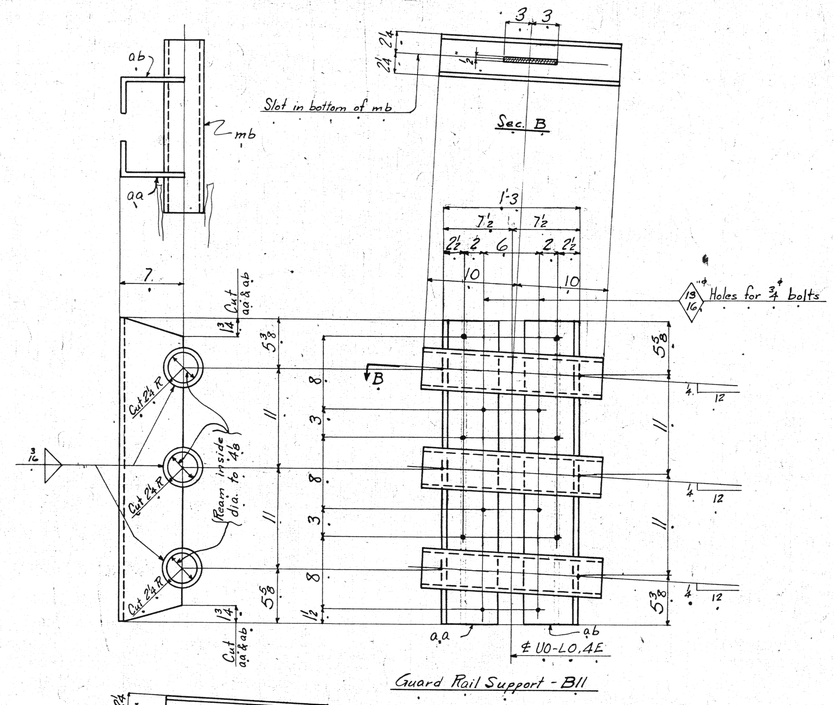
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT Ambr.
WORK FABRICATED AT Ambr.
IN CHARGE OF Loughmaker
DRAW. MADE BY A.A.Z.
DRAW. CHECKED BY
ORDER No. H2524
SHEET No.

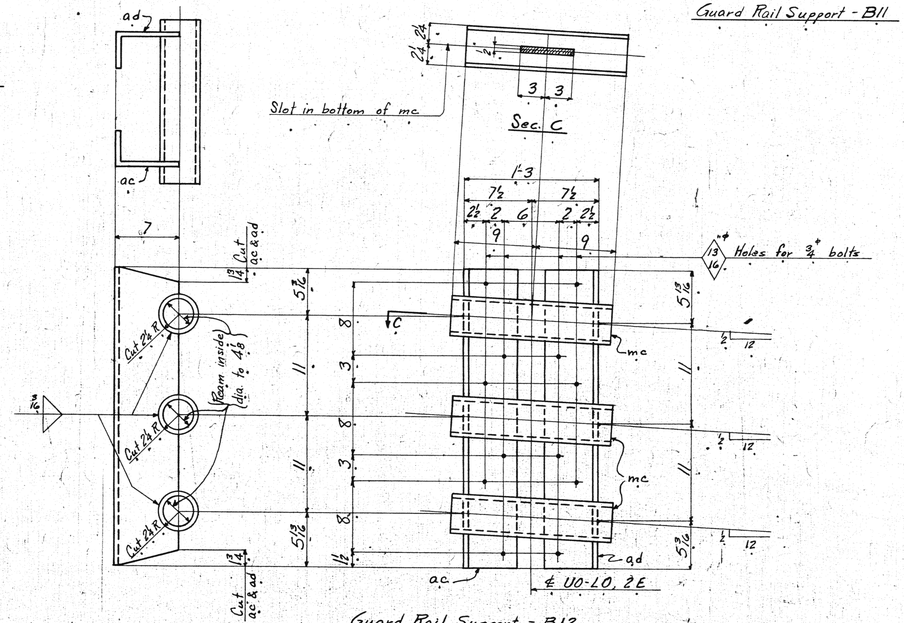
5
Rev. 8-7-39 Paint: Yes
Rev. 5-17-39



Guard Rail Supports - B1R-B2R-B4R-B5R-B6-B7R-B8R-B9R-B10



Guard Rail Support - B11



Guard Rail Support - B12

Mark	1.	2.	3.	4.	5.	6.	7.	No.	Mark	Ship on Order No. H2584 Stk. No.
B1R.				6.				1	U1-L1, 1E.	421
								1.	U2-L2, 1E.	421
								1.	U3-L3, 1E.	421
								1.	U4-L4, 1E.	421
								1.	U5-L5, 1E.	421
								1.	U6-L6, 1E.	421
B2R.				1.				1.	U11-L11, 1E.	424
B1R.					5.			1.	U1-L1, 2E.	120
								1.	U2-L2, 2E.	120
								1.	U3-L3, 2E.	120
								1.	U4-L4, 2E.	120
								1.	U5-L5, 2E.	120
B1R.						5.		1.	U5-L5, 3E.	249
								1.	U6-L6, 3E.	249
								1.	U7-L7, 3E.	249
								1.	U8-L8, 3E.	249
								1.	U9-L9, 3E.	249
B1L.	5.							1.	U1-L1, 6E.	120
								1.	U2-L2, 6E.	120
								1.	U3-L3, 6E.	120
								1.	U4-L4, 6E.	120
								1.	U5-L5, 6E.	120
B1L.		5.						1.	U5-L5, 5E.	249
								1.	U6-L6, 5E.	249
								1.	U7-L7, 5E.	249
								1.	U8-L8, 5E.	249
								1.	U9-L9, 5E.	249
B2R.				3.				1.	U7-L7, 1E.	422
								1.	U8-L8, 1E.	422
								1.	U9-L9, 1E.	423
B2R.						1		1.	U0-L0, 3E.	230
B2R.						7.		1.	U1-L1, 3E.	230
								1.	U3-L3, 3E.	232
								1.	U4-L4, 3E.	232
								1.	U10-L10, 3E.	248
								1.	U11-L11, 3E.	248
								1.	U12-L12, 3E.	236
								1.	U13-L13, 3E.	234
B2L.		7.						1.	U1-L1, 5E.	230
								1.	U3-L3, 5E.	232
								1.	U4-L4, 5E.	232
								1.	U10-L10, 5E.	248
								1.	U11-L11, 5E.	248
								1.	U12-L12, 5E.	236
								1.	U13-L13, 5E.	234
B2L.	1							1.	U0-L0, 5E.	230
B4R.				1.				1.	U10-L10, 1E.	[illegible]
B4R.						1.		1.	U2-L2, 3E.	[illegible]
B4L.		1.						1.	U2-L2, 5E.	[illegible]
B5R.						1.		1.	U14-L14, 3E.	[illegible]
B5L.		1.						1.	U14-L14, 5E.	[illegible]
B6.							1.	1.	U5-L5, 4E.	312
B7R.						2.		1.	U15-L15, 3E.	234
								1.	U16-L16, 3E.	235
B8L.			1.					1.	U10-L10, 4E.	312
B7L.		2.						1.	U15-L15, 5E.	234
								1.	U16-L16, 5E.	234
B8R.							1.	1.	U1-L1, 4E.	311
B8L.			1.					1.	U9-L9, 4E.	311
B9R.						2.		1.	U2-L2, 4E.	311
								1.	U3-L3, 4E.	311
B9L.			2.					1.	U8-L8, 4E.	311
								1.	U7-L7, 4E.	311
B10.							1.	1.	U4-L4, 4E.	311
B10.			1.					1.	U6-L6, 4E.	311
B11.							1.	1.	U0-L0, 4E.	312
B12.					1.			1.	U12-L12, 7E.	424

NOTE:
Guard Rail Supports revised, as called for on Sh. P3, and marked thus +, are to be assembled on Verticals listed on lines marked +.

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1	26.		L	7½	4	7/16	2	9.			16-B1R. 10-B1L.		8x4 21-4	1
2	198	198	Sh.	Pipe	4" +			7		ma	(Cut 8x4)			5
3	10.		L	7	4	3/8	2	9			12 B2R.		35-10	7
4	80.									ma	8-B2L.			
5														
6														
7	3.		L	8	4	7/16	2	9			2-B4R.		21-4	1
8										ma	1-B4L.			
9	2.		L	7½	4	3/8	2	9			1-B8R. 1-B8L.		7x4 35-10	7
10	4.									ma	(Cut 7x4)			

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
16		1.	L	7½	4	7/16	2	9			B6		8x4 21-4	1
17		3.								ma	(Cut 8x4)			
18														
19		4.	L	6¾	4	3/8	2	9			2-B7R. 2-B7L.		7x4 35-10	7
20		12.								ma	(Cut 7x4)			
21														
22		3.	L	7.	4.	3/8	2	9.			1-B8R.		35-10	7
23		9.								ma	2-B8L.			
24														
25		4.	L	7	4	3/8	2	9			2-B9R.		35-10	7
26		12.								ma	2-B9L.			
27														
28		2.	L	7	4	3/8	2	9			B10		35-10	7
29		6.								ma				
30														

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
31		1.	Rail Support + B11											
32		1.	L	7.	6	7/16	2.	9.		aa.	(Cut 8x6)		8x6 11-1	13
33		1.	L	7.	6	7/16	2.	9.		ab.	(Cut 8x6)		8x6 11-1	13
34		3.	Pipe	4" +			1.	8.		mb.				5
35														
36		1.	Rail Support + B12											
37		1.	L	7.	6	7/16	2.	9.		ac.	(Cut 8x6)		8x6 21-1	13
38		1.	L	7.	6	7/16	2.	9.		ad.	(Cut 8x6)		8x6 21-1	13
39		3.	Pipe	4" +			1.	6		ma				5
40														
41														
42														
43														
44														
45														

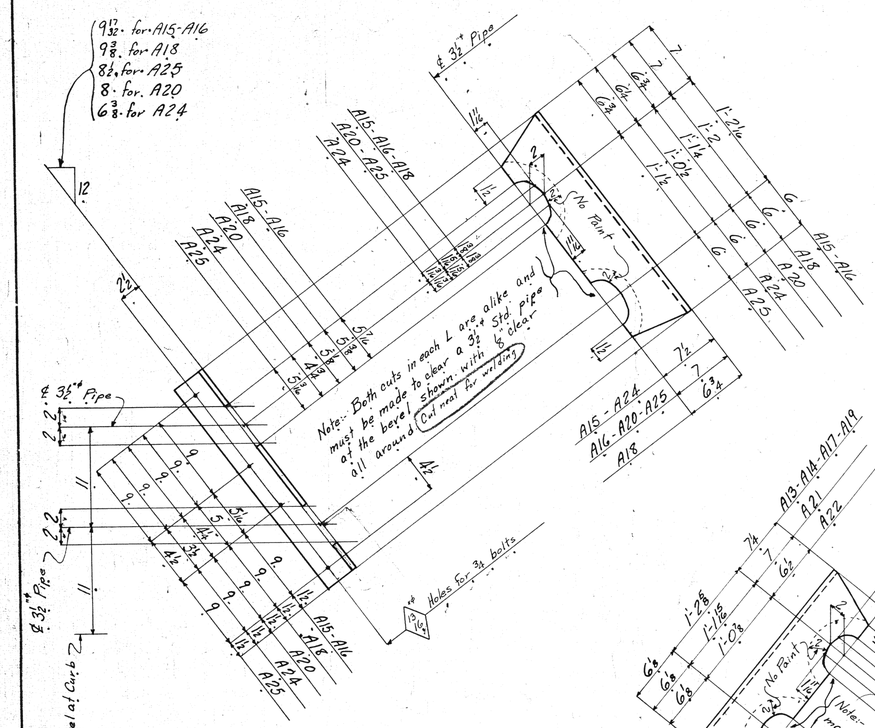
LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														

MATERIAL: O.H. Steel A.S.T.M. A7-39
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates and Ohio State Highway
INSPECTION: James H. Barron Co.
ERECTION: A.B.Co.
RIVETS: unless noted
OPEN HOLES: ⅞" unless noted
REMARKS: All holes punched full size

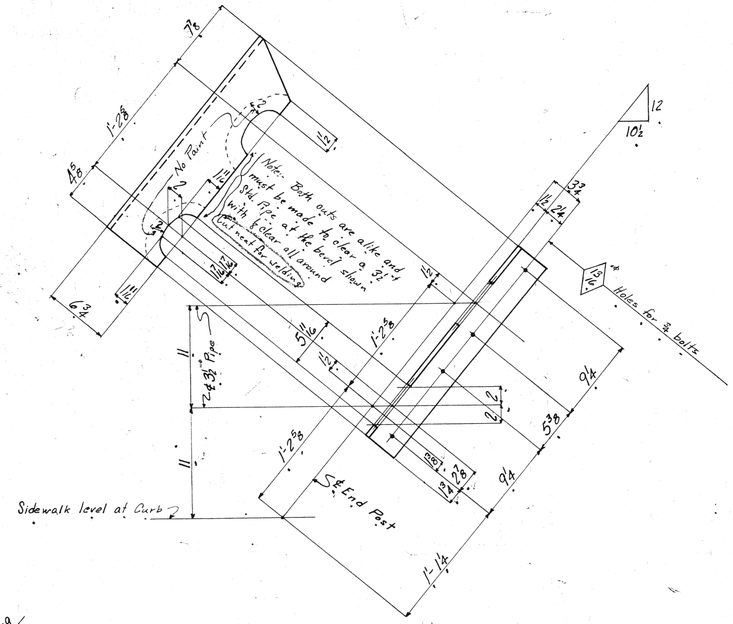
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY
DRAWINGS MADE AT: Pittsburgh
WORK FABRICATED AT: Pittsburgh
IN CHARGE OF: Lewis Brinar
DRAWN MADE BY: A.R.Z.
DRAWN CHECKED BY: [illegible]
ORDER No. H2584
SHEET No. P4

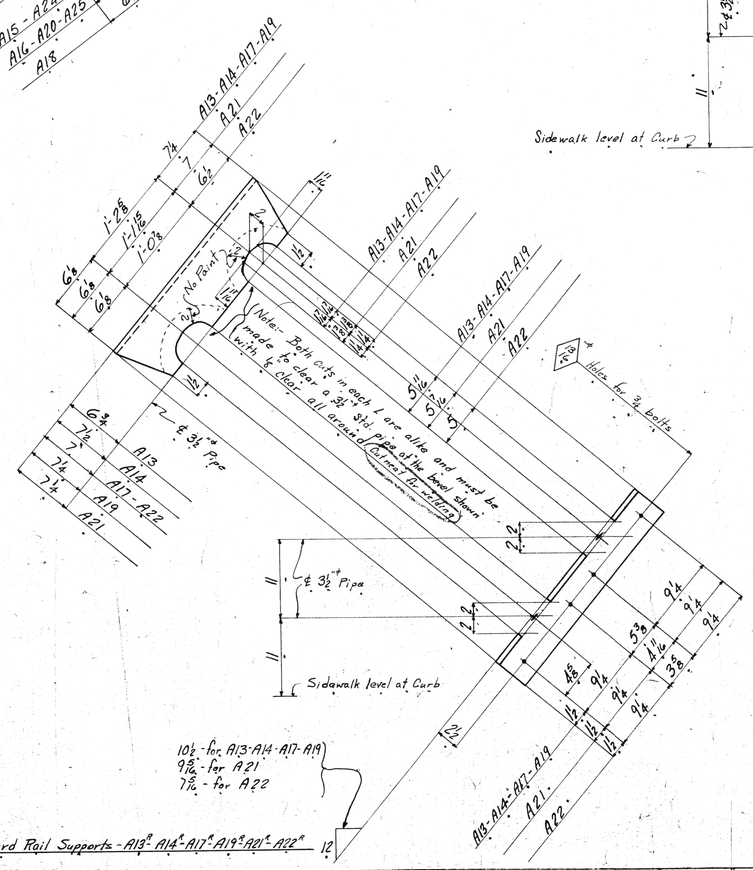
(4)
Rec. 9-7-39 Patch 1/25
Rec. 5-17-39



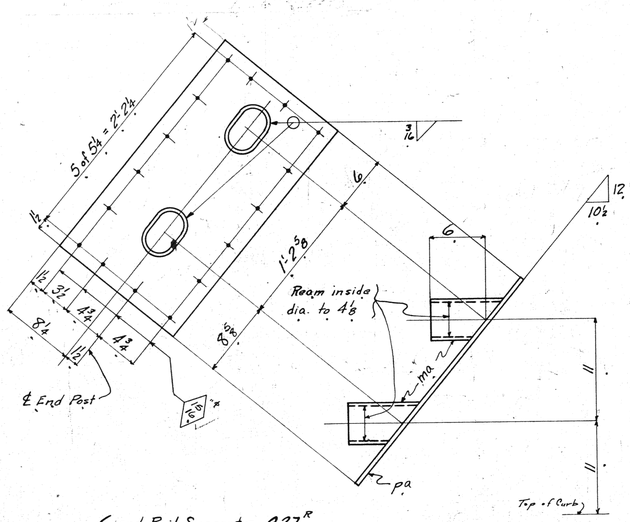
Guard Rail Supports - A15R A16R A18R A20R A24R A25R



Guard Rail Support - A23R



Guard Rail Supports - A13R A14R A17R A19R A21R A22R



Guard Rail Support - A27R

Table for Shop Assembling and Shipping												
Mark	Division 1.	2.	3.	4.	5.	6.	7.	Ship on Order No. H2524 No.	Mark	Sh. Wt.
A13R				3.				1.	U8-L7, 1W	430
								1.	U9-L8, 1W	431
								1.	U10-L9, 1W	431
A13R						1.		1.	U2-L1, 3W	240
A13L		1.						1.	U2-L1, 5W	240
A14R				2.				1.	U6-L5, 1W	430
								1.	U7-L6, 1W	430
A14R					2.			1.	U5-L4, 2W	122
								1.	U6-L5, 2W	122
A14R						2.		1.	U9-L8, 3W	240
								1.	U10-L9, 3W	240
A19R						1.		1.	U11-L10, 3W	239
A14L	2.							1.	U6-L5, 6W	122
								1.	U5-L4, 6W	122
A14L		2.						1.	U9-L8, 5W	240
								1.	U10-L9, 5W	240
A19L		1.						1.	U11-L10, 5W	239
A15R				2.				1.	U1-L2, 1W	425
								1.	U2-L3, 1W	425
A15R					2.			1.	U0-L1, 2W	432
								1.	U1-L2, 2W	432
A15R						2.		1.	U4-L5, 3W	242
								1.	U5-L6, 3W	242
A15L	1.							1.	U1-L2, 6W	121
A15L		2.						1.	U4-L5, 5W	242
								1.	U5-L6, 5W	242
A16R				4.				1.	U3-L4, 1W	425
								1.	U4-L5, 1W	425
								1.	U10-L11, 1W	431
								1.	U11-L12, 1W	432
A16R					1.			1.	U2-L3, 2W	122
A16R						3.		1.	U3-L4, 3W	243
								1.	U6-L7, 3W	243
								1.	U7-L8, 3W	243
A16L	1.							1	U2-L3, 6W	122
A16L		3.						1.	U3-L4, 5W	243
								1.	U6-L7, 5W	243
								1.	U7-L8, 5W	243
A17R					1.			1.	U4-L3, 2W	121
A17R						1.		1.	U12-L11, 3W	241
A17L	1.							1.	U4-L3, 6W	121
A17L		1.						1.	U12-L11, 5W	241
A18R						2.		1.	U2-L3, 3W	243
								1.	U16-L17, 3W	244
A18R							1.	1.	U0-L1, 4W	313
A18L		2.						1.	U2-L3, 5W	243
								1.	U16-L17, 5W	244
A18L			1.					1.	U10-L9, 4W	313
A19R						1.		1.	U1-L0, 3W	239
A19L		1.						1.	U1-L0, 5W	239
A20R						1.		1.	U5-L16, 3W	244
								1.	U12-L3, 4W	313
A20R							3.	1.	U3-L4, 4W	313
								1.	U4-L5, 4W	313
A20L		1.						1.	U15-L16, 5W	244
								1.	U6-L5, 4W	313
A20L			3.					1.	U7-L6, 4W	313
								1	U8-L7, 4W	313
A21R						1.		1.	U13-L12, 3W	289
A21L		1.						1	U13-L12, 5W	289
A22R						1		1	U14-L13, 3W	241
A22L		1.						1.	U14-L13, 5W	241
A24R						1.		1.	U14-L15, 3W	288
A24L		1.						1.	U14-L15, 5W	288
A25R							1	1.	U1-L2, 4W	313
A25L			1.					1.	U9-L8, 4W	313
A23R				1.				1.	L0-U1, 1W	401
A23L	1.							1.	L0-U1, 6W	110
A27R				1.				1.	L0-U1, 1W	401
A27L	1							1.	L0-U1, 6W	110

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1	6.	Ls	7½	4.	7/16	2.	3 1/16			A15R	(Cut 8x4)		8x4 31-6	2
2	3									A15L			8x4 31-6	2
3														
4	8.	Ls	7.	4.	⅜	2.	3 1/16			A16R			27-9	7
5	4.									A16L			27-9	7
6														
7	3.	Ls	6¾	4.	⅜	2.	3			A18R	(Cut 7x4)		7x4 41-1	4
8	3	—								A18L			7x4 41-1	4
9														
10	4.	Ls	7.	4.	⅜	2.	2.			A20R			21-9	8
11	4.									A20L			21-9	8
12														
13	1.	L.	7½.	4.	7/16	2.	0 3/8			A24R	(Cut 8x4)		8x4 31-6	2
14		Ls								A24L			8x4 31-6	2
15														
16	1.	L.	7.	4.	⅜	2.	2¼			A25R			21-9	8
17	1.									A25L			21-9	8
18														
19	4.	Ls	6¾	4.	⅜	2.	4.			A13R	(Cut 7x4)		7x4 41-1	4
20	1.									A13L			7x4 41-1	4
21														
22	6.	Ls	7½.	4.	7/16	2.	4.			A14R	(Cut 8x4)		8x4 32-9	1
23	4.									A14L			8x4 32-9	1
24														
25	2.	Ls	7.	4.	⅜	2.	4.			A17R			41-1	4
26	2.									A17L			41-1	4
27														
28	2.	L.	7½	4.	7/16	2.	4.			A19R	(Cut 8x4)		8x4 32-9	1
29	2.									A19L			8x4 32-9	1
30														

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
31		1.	L	7¼	4	7/16	2	3 1/16		A21R	(Cut 8x4)		8x4 31-6	2
32		1.								A21L			8x4 31-6	2
33														
34		1.	L	7	4	⅜	2	1⅛		A22R			41-1	4
35		1.								A22L			41-1	4
36														
37		1.	L	6¾	4	⅜	2	3⅛		A23R	(Cut 7x4)		7x4 41-1	4
38														
39		1.	L	6¾	4	⅜	2	3⅛		A23L			7x4 41-1	6
40														
41														
42														
43														
44														
45														

LINE	Total No. of Pieces on the Order	No. of Pcs. on Sheet	MATERIAL SHAPE					LENGTH Feet	Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
46		1-	Rail	Support						A27R				
47	2	1	Pl		1/16	⅝	2	5¼		pa			4-10½	16
48	4	2	4" ℄ Pipe					8		ma				5
49														
50		1-	Rail	Support						A27L				
51		1								pa				
52		2								ma				
53														
54														
55														
56														
57														
58														
59														
60														

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size

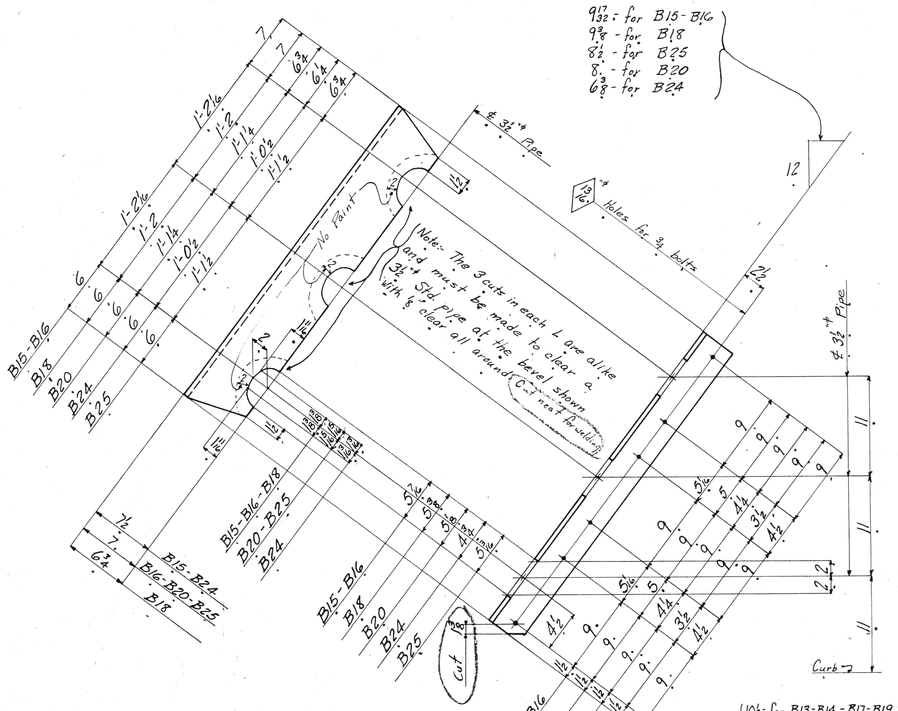
Paint:- Yes, except as noted.

Revised - 8-17-39 (4)

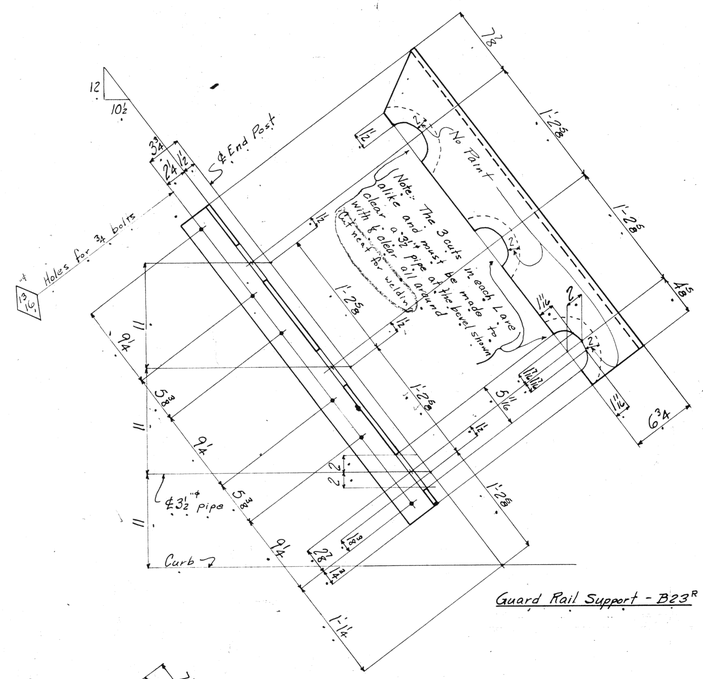
Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio

AMERICAN BRIDGE COMPANY

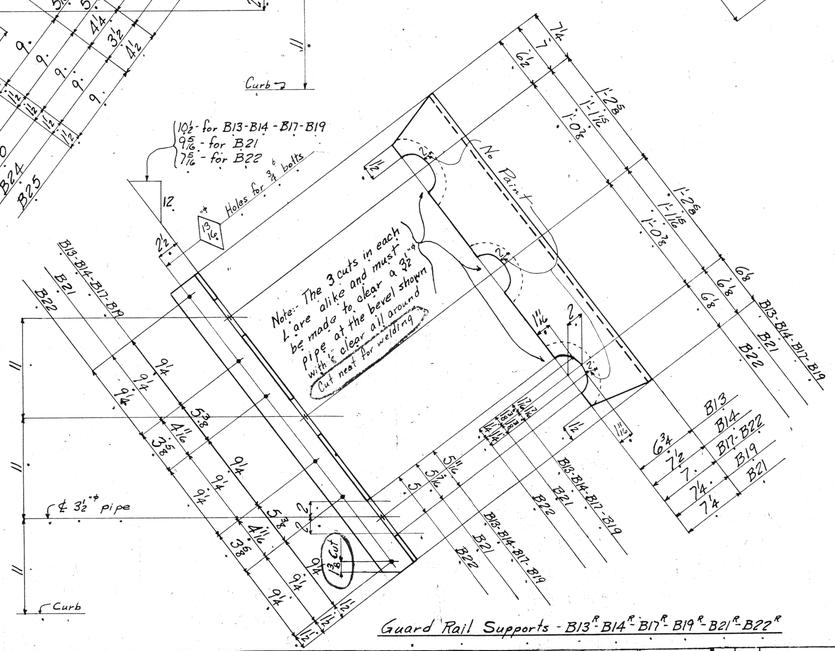
DRAWINGS MADE AT Amb.
WORK FABRICATED AT Amb.
IN CHARGE OF Loughman
DRAW. MADE BY G.R.Z. DATE
DRAW. CHECKED BY DATE
ORDER No. H2527 SHEET No.



Guard Rail Supports - B15R-B16R-B18R-B20R-B24R-B25R



Guard Rail Support - B23R



Guard Rail Supports - B13R-B14R-B17R-B19R-B21R-B22R

Mark	Division 1.	2.	3.	4.	5.	6.	7	Ship on No.	Mark	Sh. No.
B13R.				3.				1.	U8-L7, 1E.	430
								1.	U9-L8, 1E.	431
								1.	U10-L9, 1E.	431
B13R.						1.		1.	U2-L1, 3E.	240
B13L.		1.						1.	U2-L1, 5E.	240
B14R.				2.				1.	U6-L5, 1E.	430
								1.	U7-L6, 1E.	430
B14R.					2.			1.	U5-L4, 2E.	122
								1.	U6-L5, 2E.	122
								1.	U9-L8, 3E.	240
B14R.						2.		1.	U10-L9, 3E.	240
B19R.						1.		1.	U11-L10, 3E.	239
B14L.	2.							1.	U6-L5, 6E.	122
								1.	U5-L4, 6E.	122
								1.	U9-L8, 5E.	240
B14L.		2.						1.	U10-L9, 5E.	240
B19L.		1.						1.	U11-L10, 5E.	239
B15R.				2.				1.	U1-L2, 1E.	425
								1.	U2-L3, 1E.	425
B15R.					2.			1.	U0-L1, 2E.	432
								1.	U1-L2, 2E.	432
B15R.						2.		1.	U4-L5, 3E.	242
								1.	U5-L6, 3E.	242
B15L.	1.							1.	U1-L2, 6E.	121
B15L.		2.						1.	U4-L5, 5E.	242
								1.	U5-L6, 5E.	242
B16R.				4.				1.	U3-L4, 1E.	425
								1.	U4-L5, 1E.	425
								1.	U10-L11, 1E.	431
								1.	U11-L12, 1E.	432
B16R.					1			1.	U2-L3, 2E.	121
B16R.						3.		1.	U3-L4, 3E.	243
								1.	U6-L7, 3E.	243
								1.	U7-L8, 3E.	243
B16L.	1.							1.	U2-L3, 6E.	121
B16L.		3.						1.	U3-L4, 5E.	243
								1.	U6-L7, 5E.	243
								1.	U7-L8, 5E.	243
B17R.					1.			1.	U4-L3, 2E.	121
B17R.						1.		1.	U12-L11, 3E.	241
B17L.	1.							1.	U4-L3, 6E.	121
B17L.		1.						1.	U12-L11, 5E.	241
B18R.						2.		1.	U2-L3, 3E.	243
								1.	U16-L17, 3E.	244
B18R.							1.	1.	U0-L1, 4E.	313
B18L.		2.						1.	U2-L3, 5E.	243
								1.	U16-L17, 5E.	244
B18L.			1.					1.	U10-L9, 4E.	313
B19R.						1.		1.	U1-L0, 3E.	239
B19L.		1.						1.	U1-L0, 5E.	239
B20R.						1.		1.	U15-L16, 3E.	244
B20R.							3.	1.	U2-L3, 4E.	313
								1.	U3-L4, 4E.	313
								1.	U4-L5, 4E.	313
B20L.		1.						1.	U15-L16, 5E.	244
B20L.			3.					1.	U6-L5, 4E.	313
								1.	U7-L6, 4E.	313
								1.	U8-L7, 4E.	313
B21R.						1.		1.	U13-L12, 3E.	239
B21L.		1.						1.	U13-L12, 5E.	239
B22R.						1.		1.	U14-L13, 3E.	241
B22L.		1.						1.	U14-L13, 5E.	241
B24R.						1.		1.	U14-L15, 3E.	242
B24L.		1.						1.	U14-L15, 5E.	242
B25R.							1.	1.	U1-L2, 4E.	313
B25L.			1.					1.	U9-L8, 4E.	313
B23R.				1.				1.	L0-U1, 1E.	401
B23L.	1.							1.	L0-U1, 6E.	110

Table for Shop Assembling and Shipping — Order No. H2524

LINE	Total No. of Pieces on the Order	MATERIAL: No. of Pcs. on Sheet	SHAPE					LENGTH Feet	LENGTH Inches	ASSEMBLING MARK	REMARKS	CALCULATED WEIGHT FOR ONE SHIP. PIECE	ORDERED	ITEM
1		6.	Ls	7½	4	7/16	3	5⅝		B15R	(Cut 8x4)		8x4 31-0	2
2		3.								B15L			8x4 31-0	2
3														
4		8.	Ls	7	4	3/8	3	5⅝		B16R			41-4	6
5		4.								B16L			41-4	6
6														
7		3.	Ls	6¾	4	3/8	3	5		B18R	(Cut 7x4)		7x4 30-6	10
8		3.								B18L			7x4 30-6	10
9														
10		4.	Ls	7	4	3/8	3	3¼		B20R			32-10	8
11		4.								B20L			32-10	8
12														
13		1.	L	7½	4	7/16	3	1¼		B24R	(Cut 8x4)		8x4 16-7	4
14		1.								B24L			8x4 16-7	4
15														
16		1.	L	7	4	3/8	3	3¾		B25R			32-10	8
17		1.								B25L			32-10	8
18														
19		4.	Ls	6¾	4	3/8	3	6⅝		B13R	(Cut 7x4)		7x4 32-2	9
20		1.								B13L			7x4 32-2	9
21														
22		6.	Ls	7½	4	7/16	3	6⅝		B14R	(Cut 8x4)		8x4 25-0	3
23		4.								B14L			8x4 25-0	3
24														
25		2.	Ls	7	4	3/8	3	6⅝		B17R			32-2	9
26		2.								B17L			32-2	9
27														
28		2.	L	7¼	4	7/16	3	6⅝		B19R	(Cut 8x4)		8x4 25-0	3
29		2.								B19L			8x4 25-0	3
30														
31		1.	L	7¼	4	7/16	3	5		B21R	(Cut 8x4)		8x4 16-7	4
32		1.								B21L			8x4 16-7	4
33														
34		1.	L	7	4	3/8	3	2⅜		B22R			30-6	10
35		1.								B22L			30-6	10
36														
37		1.	L	6¾	4	3/8	3	5¾		B23R	(Cut 7x4)		7x4 30-6	10
38														
39		1.	L	6¾	4	3/8	3	5¾		B23L	(Cut 7x4)		7x4 35-10	7
40														
41														
42														
43														
44														
45														
46														
47														
48														
49														
50														
51														
52														
53														
54														
55														
56														
57														
58														
59														
60														

MATERIAL: O.H. Steel A.S.T.M. A7-36
Copper bearing 0.20 min. copper content
SPECIFICATIONS: Special by Wilbur Watson & Associates also Ohio State Highway
INSPECTION: James H. Herron Co.
ERECTION: A.B.Co.
RIVETS: unless noted
OPEN HOLES: 13/16" unless noted
REAMING: All holes punched full size

Lorain County, Ohio
EAST 21st STREET BRIDGE
Lorain, Ohio
AMERICAN BRIDGE COMPANY

DRAWINGS MADE AT Amb. PLANT
WORK FABRICATED AT Amb. PLANT
IN CHARGE OF Loughman
DRAW. MADE BY A.A. DATE 6-14-39
DRAW. CHECKED BY W.G. DATE 6-20-39

ORDER No. H2528
SHEET No. P-2

Paint:- Yes except as noted.

Rev. 11-8-17-39 (6)