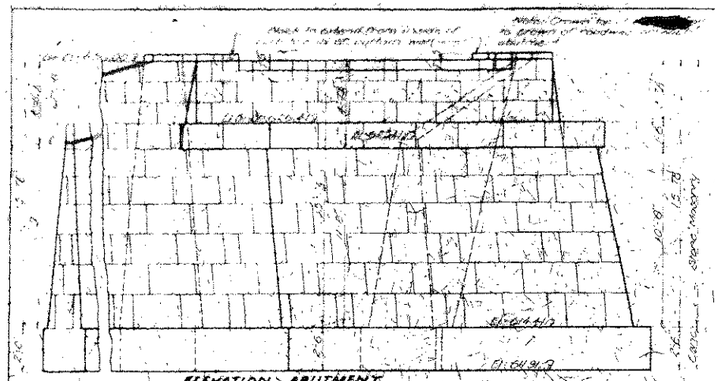
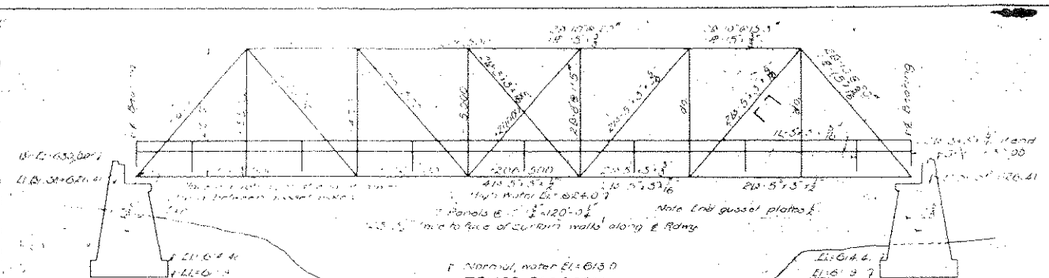
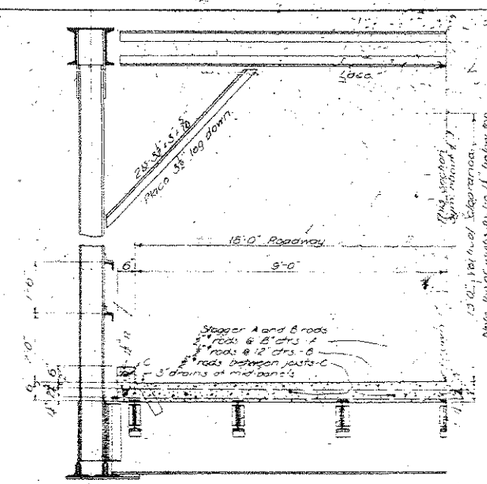






SUPERSTRUCTURE ESTIMATE

Structural steel	103,000 pounds
Reinforcing steel	9,730 pounds
1:2:4 Concrete	306 cu yds
Cast iron	1175 pounds

SUBSTRUCTURE ESTIMATE

Pier Excavation	290 (33) cu yds
Abut Excavation	850 (70) cu yds
Piling (Assume 20' @ long)	(4,500) lin ft
1:2:4 Concrete	109 cu yds
Reinforcing steel	(10,4) lbs
Cyclo masonry	116 cu yds
1:2:4 Concrete	695 (37) cu yds
Reinforcing steel	1,150 lbs

Note: Items 27 and 23 are alternate for item 6 in 1:2:4

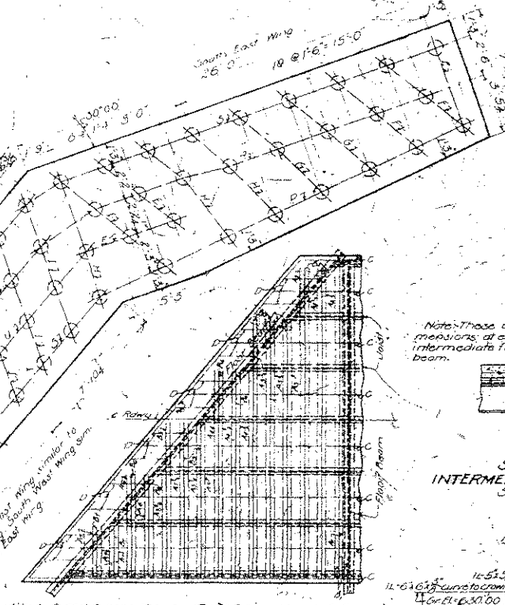
*Estimated quantities for concrete alternate

1923
W.VA.
STATE BRIDGE
NO. 867

Note: Place, name plate on end post 3-0" vertically above floor

BRONZE NAME PLATE
1 Required

Note: If concrete abutments are used make the width of top of curtain wall and wings 1'-0" in stead of 1'-6" Make all batters the same as shown on plan. Make floor also at top of footing 1'-3" instead of 2'-0" as shown



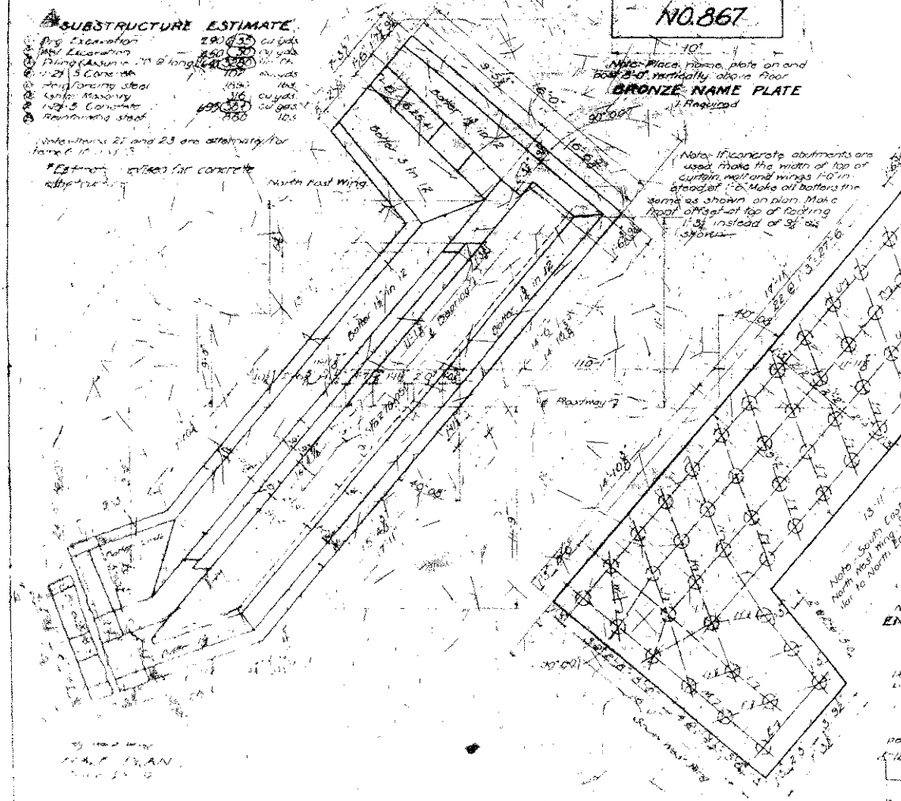
Note: A, C, and D bars shown dotted. B bars shown full.

END PANEL LAYOUT OF REINFORCING STEEL
Scale: 1/2" = 1'-0"

ASSUMED LOADING

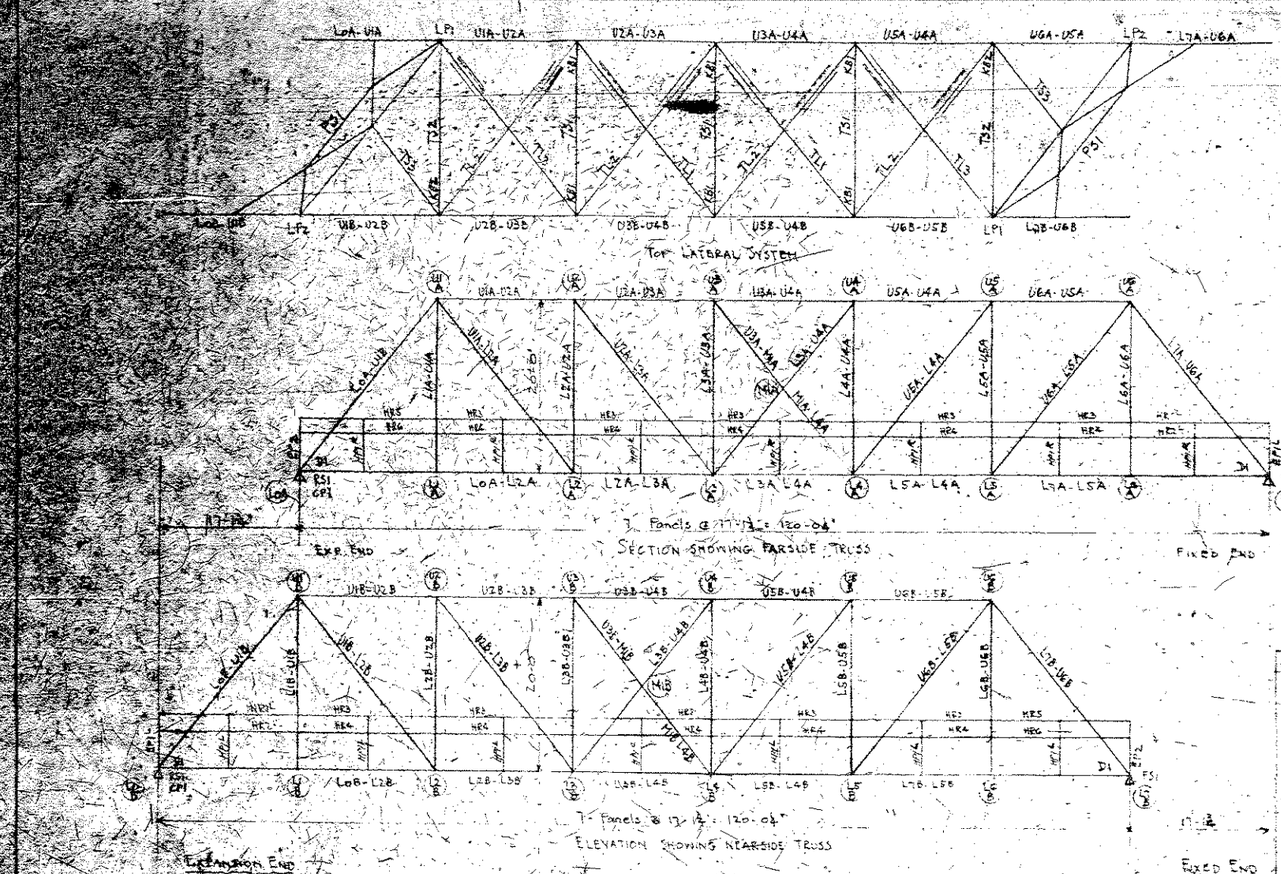
Dead load 1450 lbs per lin ft of truss
Live load 96" per sq ft of roadway, or 2-15 Ton rollers
Impact 1/2 of live load

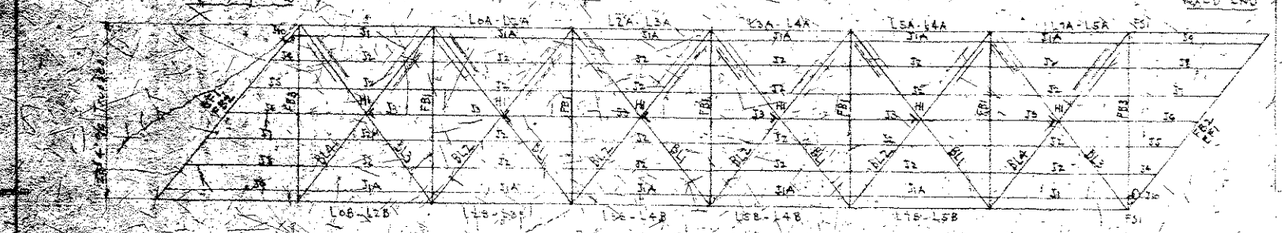
Note: Floor designed for a wearing surface of 2.5" per sq ft of roadway not included in this contract

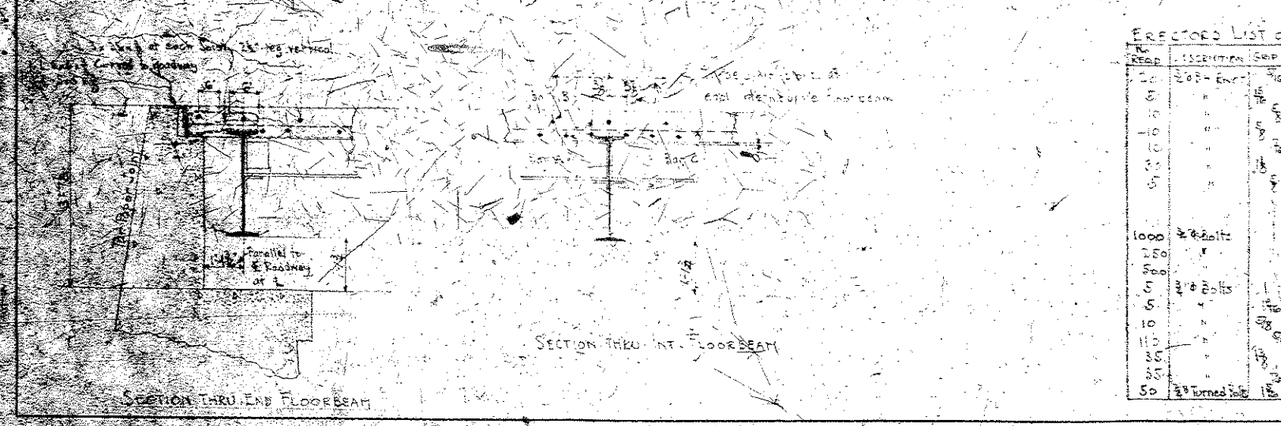


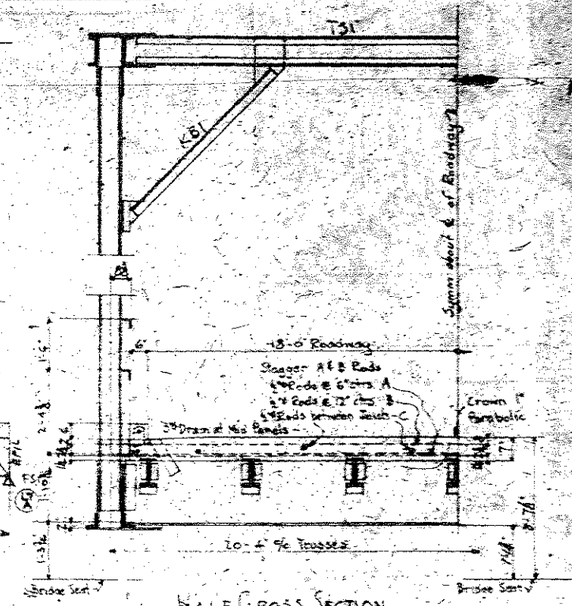
SUBSTRUCTURE
BILL OF REINFORCING STEEL

| | | |









Half Cross Section

Erectors List of Field Rivets - Excess

Reel	Description	Size	Length	Connection	No.	Description	Size	Length	Connection
85	¾" Ø Rivet	¾"	2½	End Post to Top Chord	30	¾" Ø Rivet	¾"	2	T52 to Top Chord
5	"	"	2½	Panel Point to End	90	"	"	2½	L0-L2 " " "
10	"	"	2	"	40	"	"	2	" " "
10	"	"	2½	"	40	"	"	2½	" " "
10	"	"	2	"	60	"	"	2	L2-L3 " "
5	"	"	2½	Post Chord	70	"	"	2½	" " "
5	"	"	2	"	55	"	"	2	L3-U4 " Chords
5	"	"	2½	FB4V "	55	"	"	2½	U3-L4 " "
5	"	"	2	FB1 "	10	"	"	2	U4-L4 " L5-U6
65	"	"	2½	Joists "	160	"	"	2½	U3-L3 & U5-L4 to Chords
5	"	"	2	Top Struts " Top Chords	75	"	"	2	U4-L5 " "
5	"	"	2½	" " "	195	"	"	2½	Floor Hangers " "
5	"	"	2	Laterals " "	515	"	"	2	Joists to FB1 & FB3
10	"	"	2½	Laterals " "	770	"	"	2½	Floorbeams to Bott Chords
10	"	"	2	Knee Braces " Struts & Posts	110	"	"	2	" " "
10.5	"	"	2½	L0-L2 etc. " L0 U3 etc.	85	"	"	2½	" " "
12.5	"	"	2	" " "	75	"	"	2	" " "
5	"	"	2½	" " "	15	"	"	2½	" " "
5	"	"	2	" " "	10	"	"	2	" " "
5	"	"	2½	" " "	10	"	"	2½	" " "
5	"	"	2	" " "	5	"	"	2	" " "
5	"	"	2½	" " "	5	"	"	2½	" " "
5	"	"	2	" " "	70	"	"	2	T53 " "
5	"	"	2½	" " "	5	"	"	2½	" " "
5	"	"	2	" " "	140	"	"	2	L7A " "

Erectors List of Field Rivets & Bolts - Excess

Reel	Description	Size	Length	Connection
10	2.08 - Rivets	¾"	2½	T53 " End Post
5	"	"	2½	L7A " Top Chord
10	"	"	2	" " Portal
10	"	"	2	LP2 " "
10	"	"	2½	" " Top Chord
35	"	"	2½	End Post " " "
5	"	"	2	" " "
1000	¾" Ø Bolts		2½	Erection Bolts
250	"		2	
500	"		2½	
5	¾" Ø Bolts		2	EP1 & EP2 to End Posts
5	"		2½	" " "
10	"		2½	End Hand Rail to H.R. Post
10	"		2	Hand Rail to Truss Posts
35	"		2½	" " "
35	"		2	H.R. Posts " Joists
50	¾" Turned Bolts		2½	FB2 FB3 " End Post

Approximate height of falsework - 21'-0"
Field Connections riveted except Hand Rail & End Floor beam which are bolted.

Field Paint: First coat red lead, pigment same as shop paint with the addition of lamp black caste sufficient to give a dark brown color. Ship 53 Gallons. The second coat is to be graphite paint, containing not less than 25% pigment. The pigment shall contain from 60% to 66% total graphite carbon. Ship vehicle to be pure refined linseed oil with Japan dryer. Volatile vehicle not to exceed 5% of vehicle. Final finish to be the color of natural graphite. Ship 53 gallons.

Concrete Floor: 5.08 cu yds. of 1:2:4 mix.

Miscellaneous:
Field Paint - see Paint Note
1 Pilot Nut & Driving Plug
Bolts & Washers for False Work

Bill of Materials

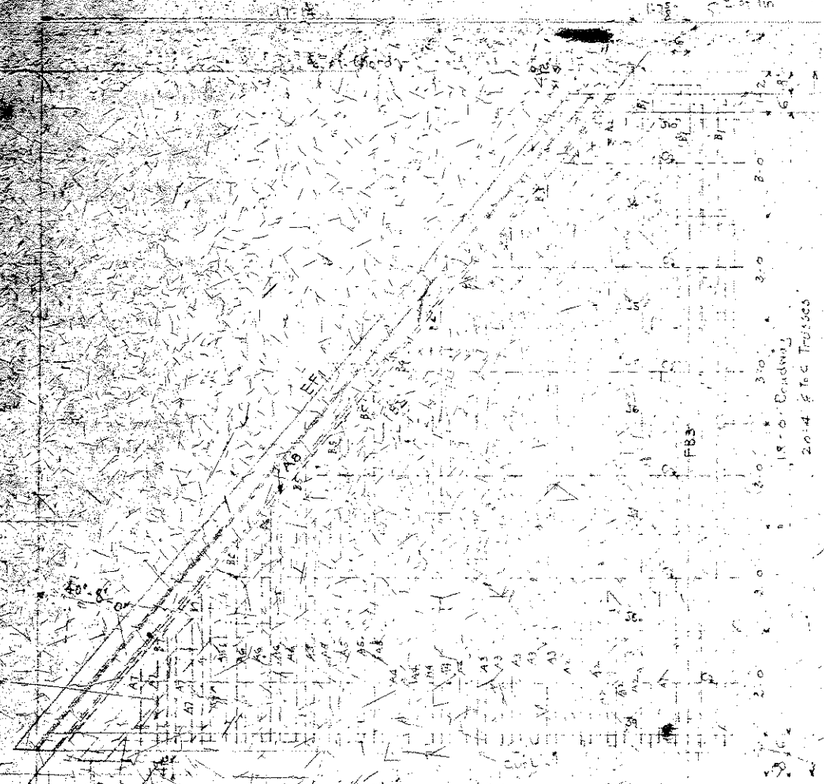
Mark	Description	Length	Weight

CONTRACT No. 3808
FOR
WIRT COUNTY, W. VA.

SUBJECT: HORSEHEAD BRIDGE ON PALESTINE-REEDY ROAD OVER BIG REEDY CREEK
DETAILS OF ERECTION PLAN

BUILT BY
THE OREGONIA BRIDGE CO.
LEETONIA, OHIO

DRAWN BY JN DATE
CHECKED BY CHH DATE 6-23-
GEN. PLAN NO. 14-C-1 SCALE SHEET 5 of



BILL OF MATERIAL

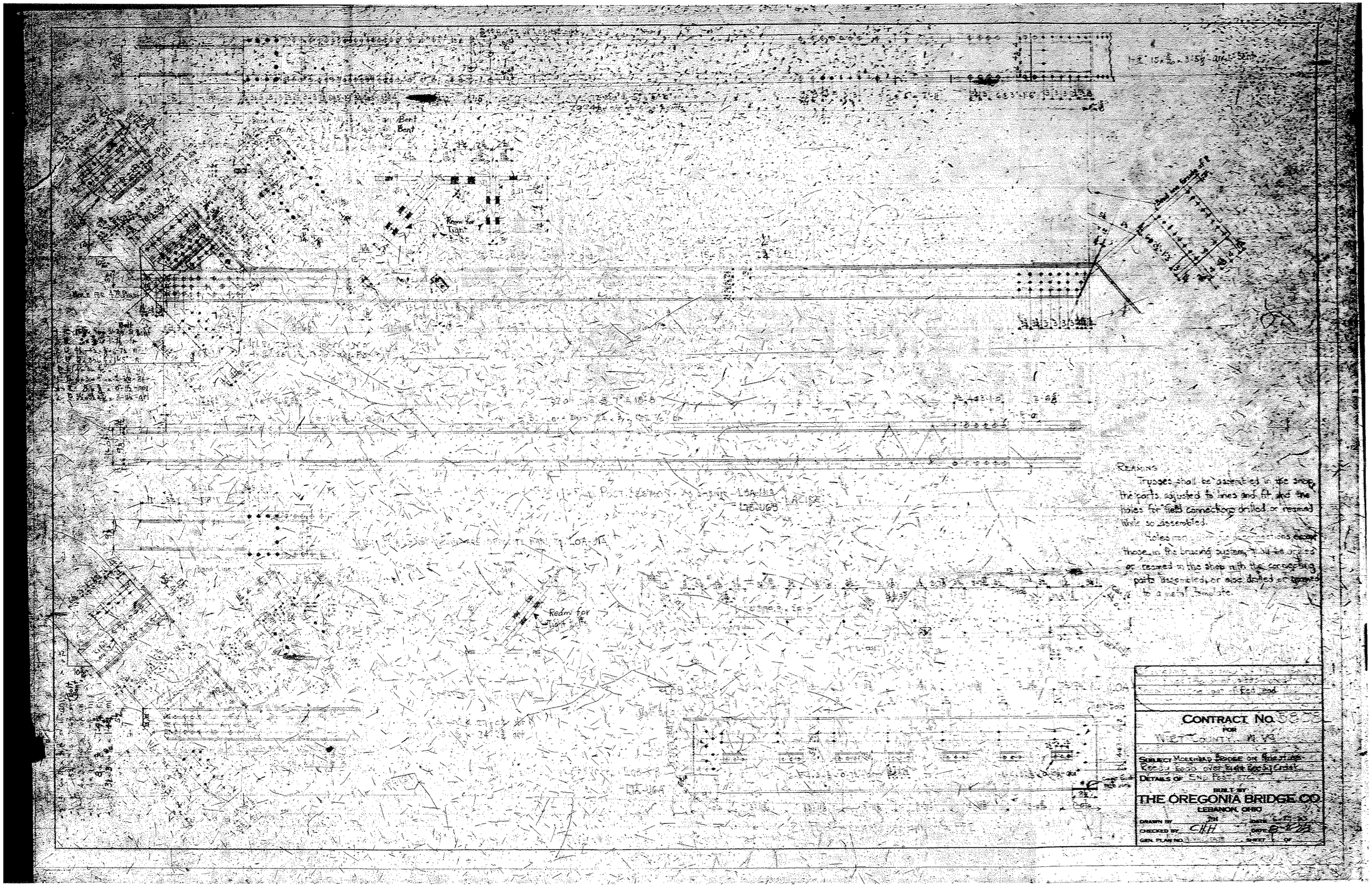
No.	Description	Length		Weight	Remarks
		Ft.	In.		

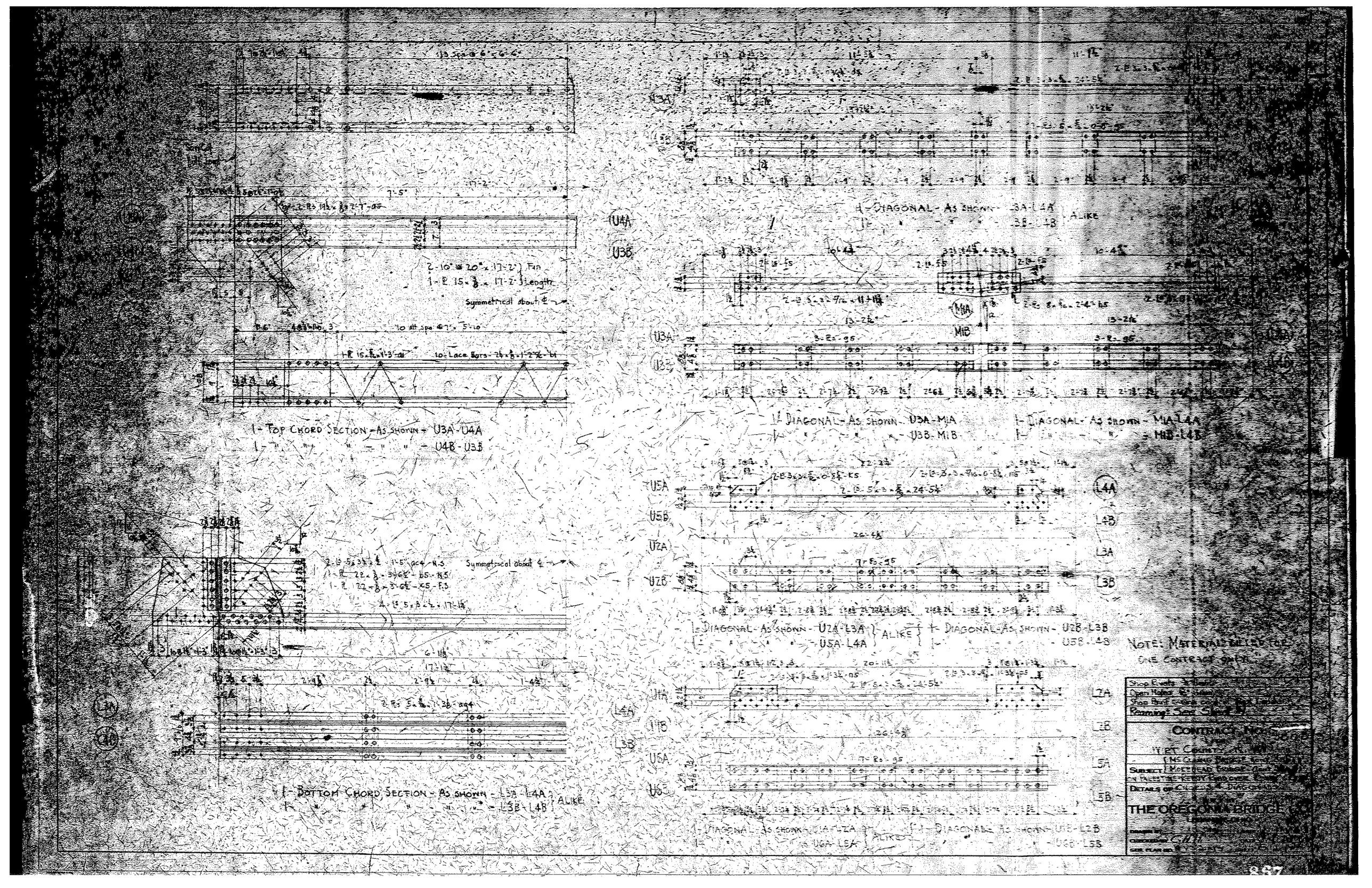
CONTRACT No. 3808
FOR
WIRT COUNTY W. VA.

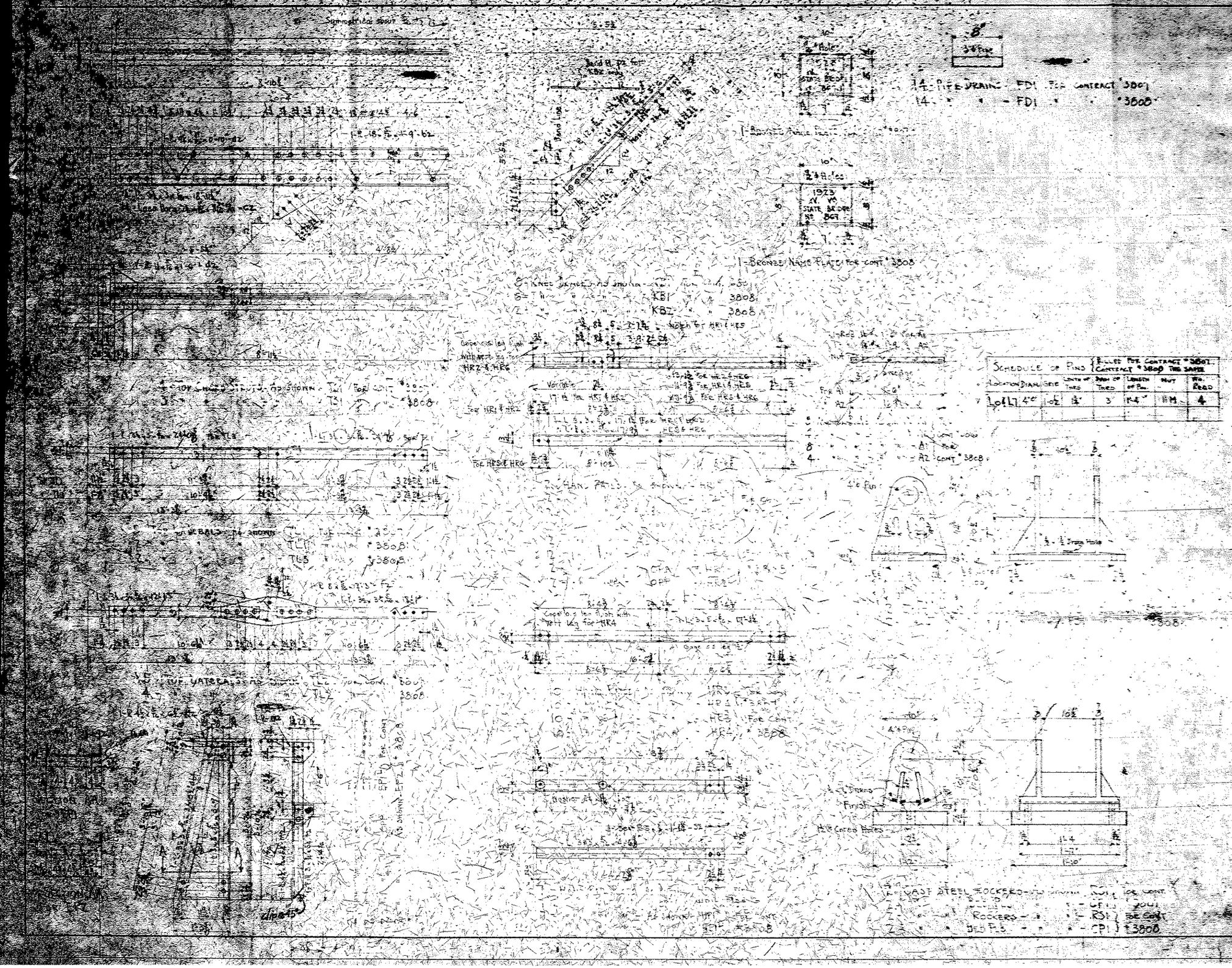
SUBJECT Morehead Bridge on Palestine Reedy Road over Right Reedy Creek
DETAILS OF Erection Diagram

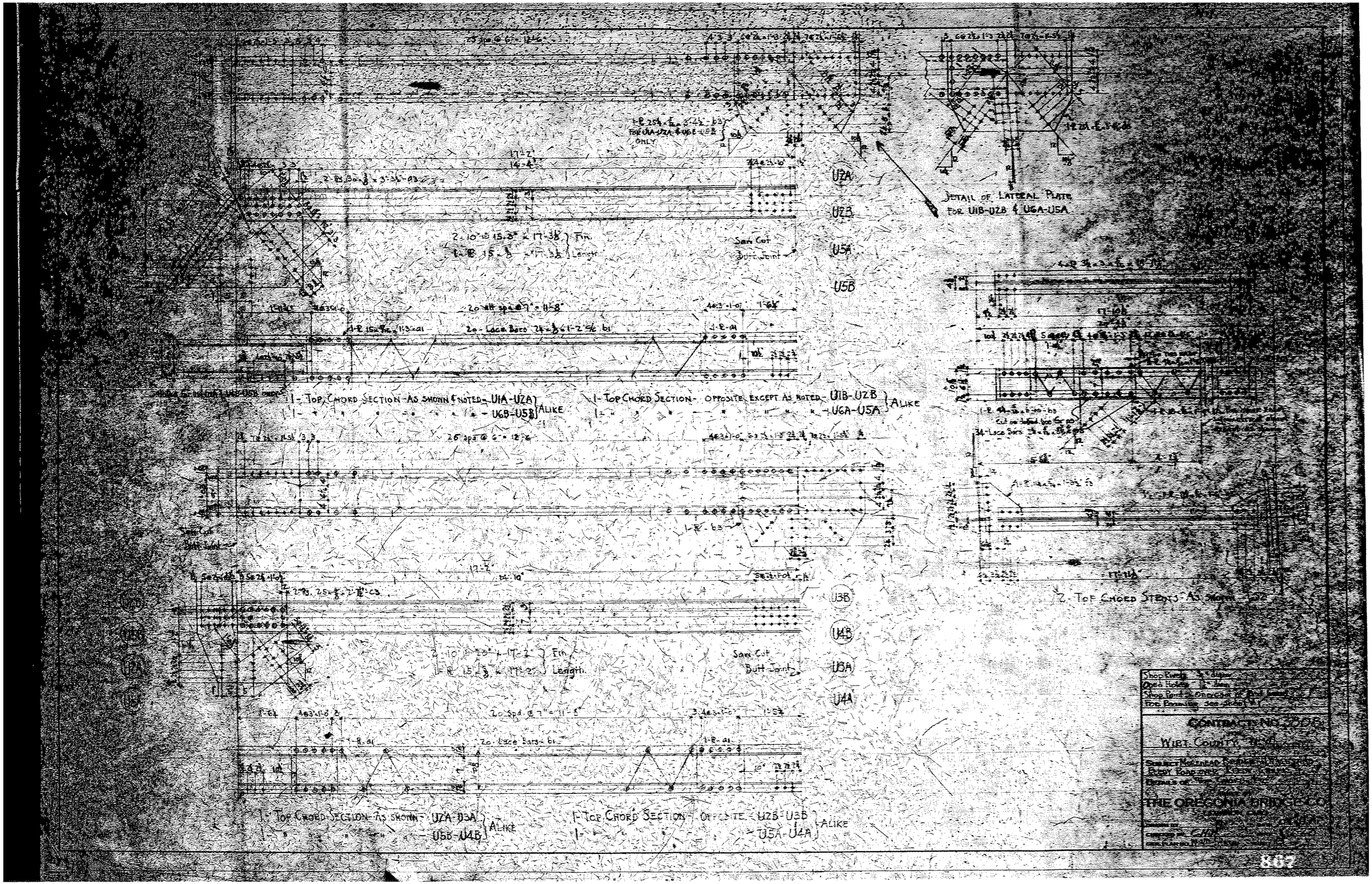
BUILT BY
THE OREGONIA BRIDGE CO.
LEBANON, OHIO.

DRAWN BY [illegible] DATE [illegible]
CHECKED BY C.H.H. DATE 7/31/23
GEN. PLAN NO. W. Va. 3808 SHEET 82 OF

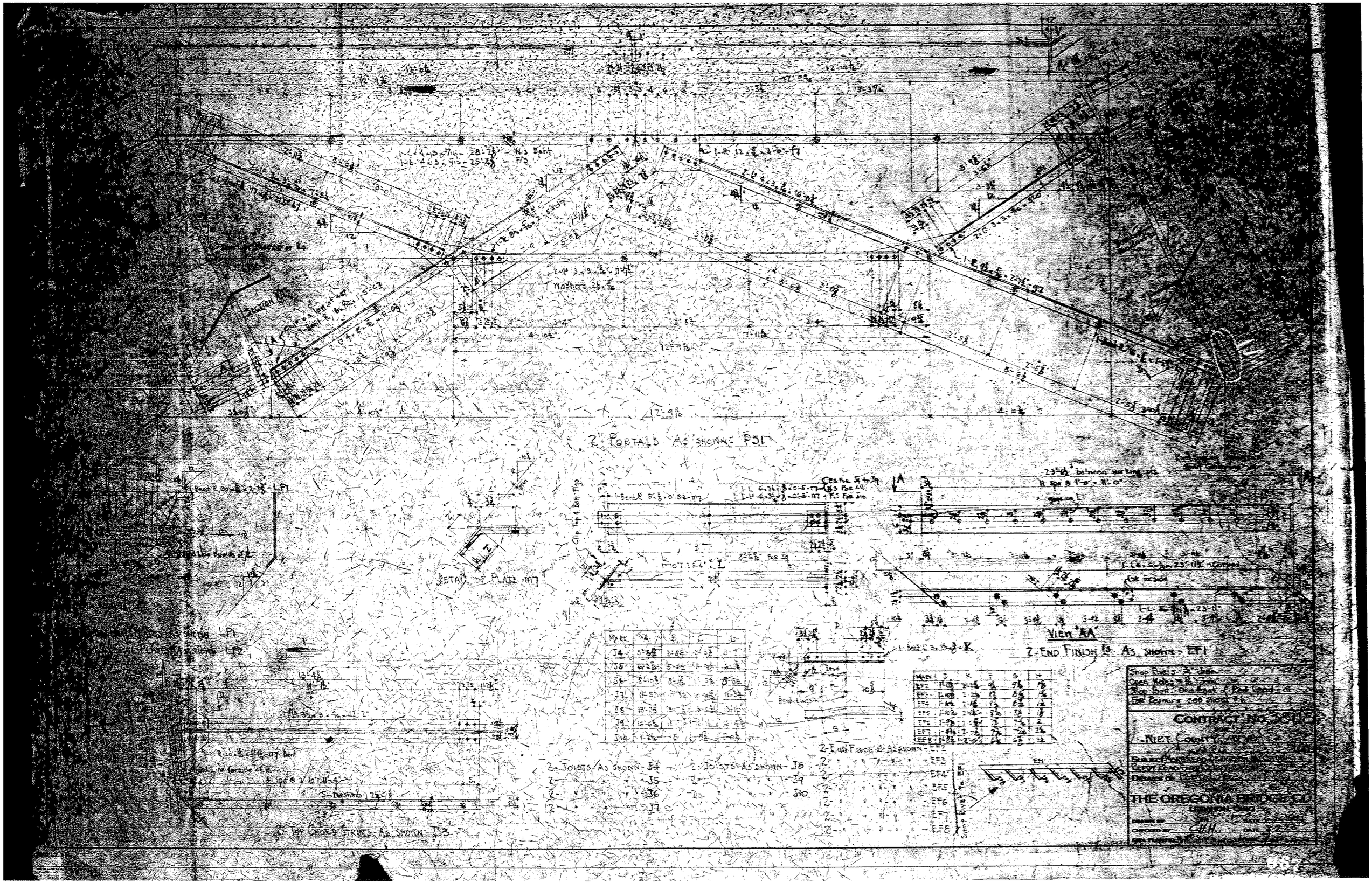

Bent
Bent
Ream for
Tight
Bolt
Ream for
Tight
Bolt
Bolt
Bolt
REAMING
Trusses shall be assembled in the shop, the parts adjusted to lines and fit, and the holes for field connections drilled or reamed while so assembled.
Holes in
connections except those in the bracing system, shall be drilled or reamed in the shop with the corresponding parts assembled, or else drilled or reamed to a steel template.
CONTRACT NO.
FOR
SUBJECT
DETAILS OF
BUILT BY
THE OREGONIA BRIDGE CO.
LEBANON, OHIO
DRAWN BY
CHECKED BY
GEN. PLAN NO.
SHEET
OF


1 - Top Chord Section - As shown - U3A - U4A
1 - " " " - " " - U4B - U3B
2 - 10" x 20" x 17-2" Fin
1 - PL 15 x 3/8 x 17-2 3/4 Length
Symmetrical about ℄
10 - Lace Bars
1 - Diagonal - As shown - U3A - M1A
" - U3B - M1B
1 - Diagonal - As shown - M1A - L4A
" - M1B - L4B
1 - Diagonal - As shown - U2A - L3A
" - U4A - L4A
Alike
1 - Diagonal - As shown - U2B - L3B
" - U4B - L4B
1 - Diagonal - As shown - U1A - L2A
" - U5A - L5A
Alike
1 - Diagonal - As shown - U1B - L2B
" - U5B - L5B
1 - Bottom Chord Section - As shown - L3A - L4A
" " " - L3B - L4B
Alike
Note: Materials shown for one contract only
Contract No.
Subject
Details of
THE OREGONIAN BRIDGE
Designed by
Computed by
Checked by
CHP
857


Symmetrical about ℄
14 Pipe Drains - FD1 For Contract 3807
14 " " - FD1 " " 3808
1-Bronze Name Plate for Cont. 3808
KB1 " 3808
KB2 " 3808
1973
N.Y.S.
STATE BRIDGE
No. 867
Schedule of Pins (Alike for Contract 3807, Contract 3808 the same)
Location Diam. Grip Length of Thrd. Depth of Thrd. Length of Pin Nut No. Req'd
Lot 17 4" 6" 3" 3" 14" HM 4
Shop Rivets 4" diam.
Open Holes 3/4" diam. unless noted
Shop Paint: One coat of Red Lead
For Remarks See Sheet 1
CONTRACT No. 3808
FOR
NIAGARA COUNTY, N.Y.
(Mt. Cleveland Bridge Contract 3807)
SUBJECT (Mercury Bridge Contract 3808)
ON PALESTINE RIVER SHORE
DETAILS OF MISCELLANEOUS
PREPARED BY
THE OREGONIA BRIDGE CO.
CLEVELAND, OHIO.
DRAWN BY
DATE
APPROVED BY
DATE
SEE PLAN NO.
DATE


U2A
U2B
U5A
U5B
U3B
U4B
U3A
U4A
Saw Cut
Butt Joint
Detail of Lateral Plate
for U1B-U2B & U6A-U5A
1 - Top Chord Section - As shown & noted - U1A-U2A
1 - " " " " " " - U6B-U5B
Alike
1 - Top Chord Section - Opposite except as noted - U1B-U2B
1 - " " " " " " - U6A-U5A
Alike
1 - Top Chord Section - As shown - U2A-U3A
U5B-U4B
Alike
1 - Top Chord Section - Opposite - U2B-U3B
U5A-U4A
Alike
2 - Top Chord Sections - As shown
Contract No.
Wirt County
The Oregonia Bridge Co.

Post - As shown - L1A - U1A
L6A - U6A
L2A - U2A
L5A - U5A
L3A - U3A
L4A - U4A
For Both Contracts
Post - As shown - L1B - U1B
L6B - U6B
L2B - U2B
L5B - U5B
L3B - U3B
L4B - U4B
For Both Contracts
Slot 1/2 x 1/4
U2B
U3B
U4B
U5B
U6B
L1B
2-Bottom Laterals - As shown - BL3 - For Contract 3808
2-Bottom Laterals - As shown - BL4 - For Contract 3808
2-Bottom Laterals - As shown - BL1 - Stock Lengths
BL1
BL2
3808
Floorstone
Flange Plate
Stringer
For J1
For J1A
J1A
Contract No.
Multnomah County, Oregon
Superior Iron Works, Inc.
Portland, Oregon
Dates of Insp. 1-1-1964 - 1-1-1964
THE OREGONIA BRIDGE CO.
Portland, Oregon
Drawn by
Checked by
Date
Rivet Sizes
Open Holes
Slip Holes
Reaming: See Sheet #


2-Portals As shown PS1
Detail of Plate 1117
View 'AA'
2-End Finish 13 As shown - EF1
2-Joists As shown - J4
2-Joists As shown - J5
2-Joists As shown - J6
2-Joists As shown - J7
2-Joists As shown - J8
2-Joists As shown - J9
2-Joists As shown - J10
2-Top Cross Struts As shown - J3
2-End Finish 12 As shown - EF2
2-End Finish 12 As shown - EF3
2-End Finish 12 As shown - EF4
2-End Finish 12 As shown - EF5
2-End Finish 12 As shown - EF6
2-End Finish 12 As shown - EF7
2-End Finish 12 As shown - EF8
Contract No. 5006
Niet County
The Oregonia Bridge Co.
Lebanon, Ohio