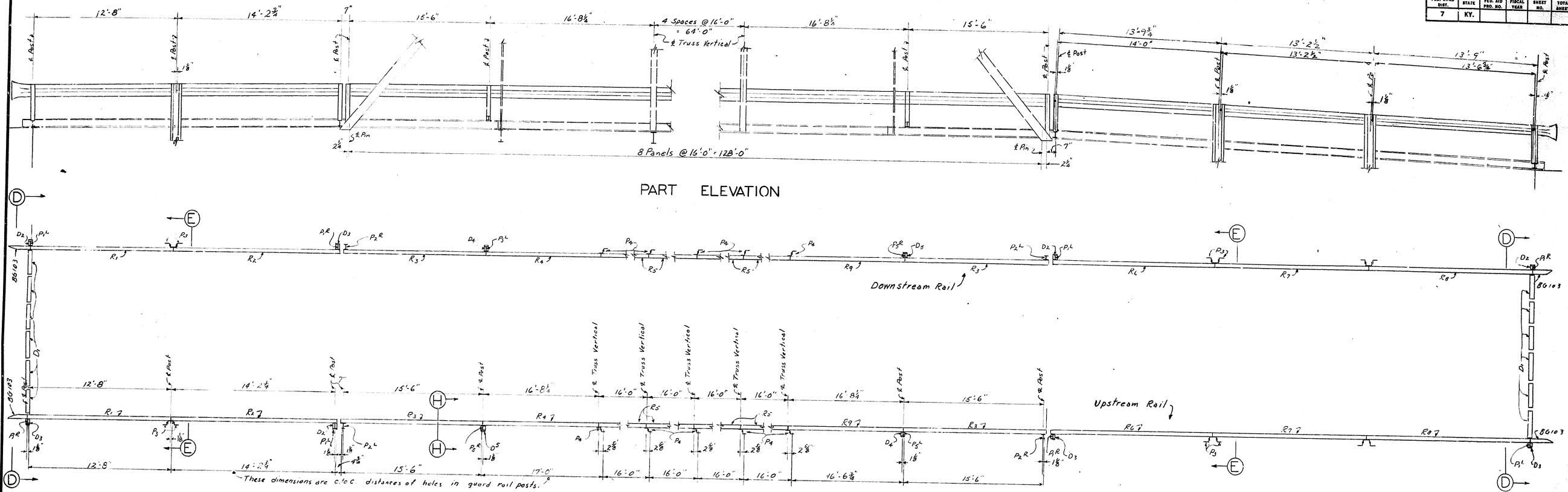
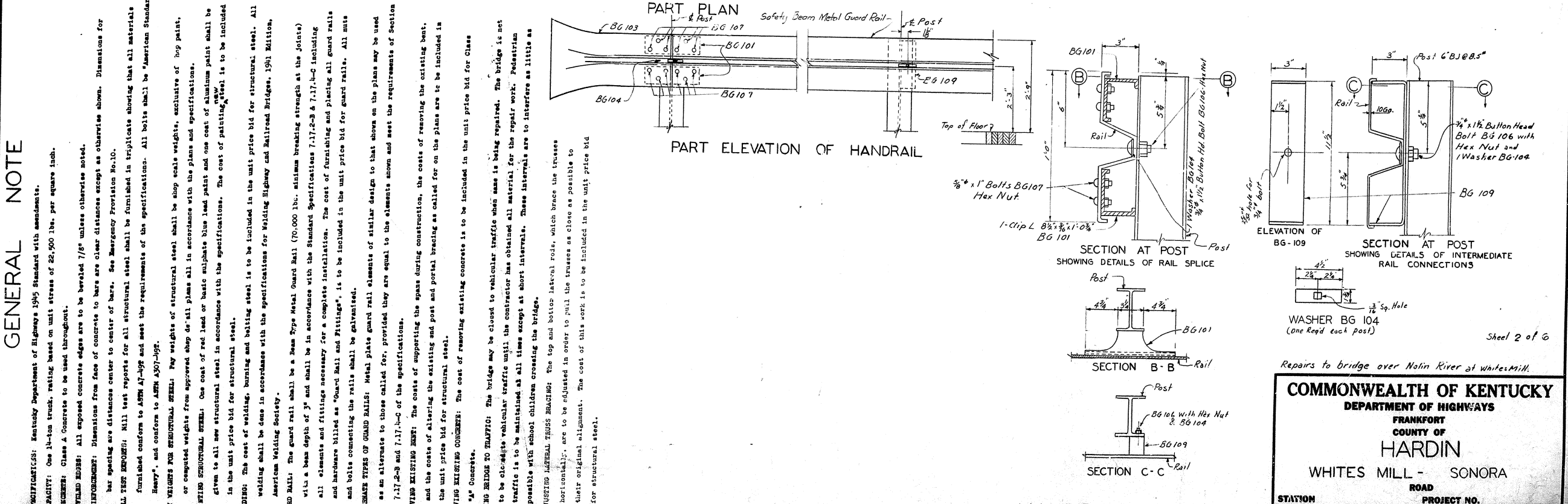




FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



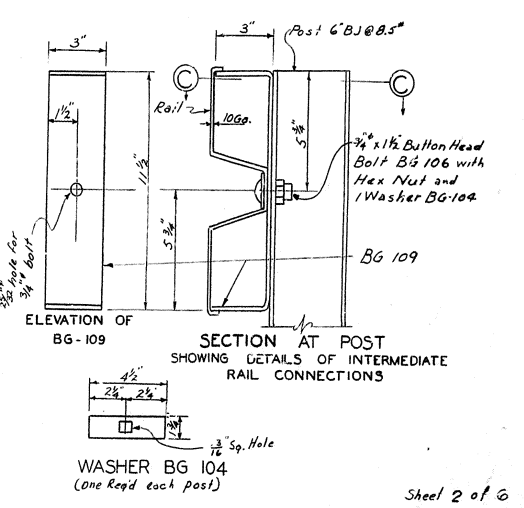
PART ELEVATION



PART PLAN

PART ELEVATION OF HANDRAIL

HANDRAIL



SECTION AT POST  
SHOWING DETAILS OF RAIL SPLICE

SECTION AT POST  
SHOWING DETAILS OF INTERMEDIATE RAIL CONNECTIONS

WASHER BG 104  
(One Req'd each Post)

Sheet 2 of 6

DESIGNED BY: D.L.B. CHECKED BY: J.B. BASKETT DATE: 1/15/32  
 REVISED: DATE: 1/15/32  
 TRACED BY: DATE: 1/15/32

**GENERAL NOTE**

**SPECIFICATIONS:** Kentucky Department of Highways 1945 Standard with amendments.

**CAPACITY:** One 14-ton truck rating based on unit stress of 26,500 lbs. per square inch.

**CONCRETE:** Class A Concrete to be used throughout.

**REINFORCEMENT:** All exposed concrete edges are to be beveled 7/8" unless otherwise noted.

**BAR SPACING:** Dimensions from face of concrete to bars are clear distances except as otherwise shown. Dimensions for spacing are distance center to center of bars. See Emergency Provision No. 10.

**MILL TEST REPORTS:** Mill test reports for all structural steel shall be furnished in triplicate showing that all materials furnished conform to ASTM A7-102 and meet the requirements of the specifications. All bolts shall be "American Standard Heavy", and conform to ASTM A307-102.

**PAY WEIGHTS FOR STRUCTURAL STEEL:** Pay weights of structural steel shall be shop scale weights, exclusive of shop paint, or computed weights from approved shop drawings in accordance with the plans and specifications.

**PAINTING STRUCTURAL STEEL:** One coat of red lead or basic sulphate blue lead paint and one coat of aluminum paint shall be given to all new structural steel in accordance with the specifications. The cost of painting steel is to be included in the unit price bid for structural steel.

**WELDING:** The cost of welding, burning and beveling steel is to be included in the unit price bid for structural steel. All welding shall be done in accordance with the specifications for Welding Highway and Railroad Bridges, 1941 Edition, American Welding Society.

**GUARD RAIL:** The guard rail shall be a Beam Type Metal Guard Rail (70,000 lb. minimum breaking strength at the joints) with a beam depth of 3" and shall be in accordance with the Standard Specifications 7-17.2-B & 7-17.4-C including all elements and fittings necessary for a complete installation. The cost of furnishing and placing all guard rails and hardware billed as "Guard Rail and Fittings", is to be included in the unit price bid for guard rails. All nuts and bolts connecting the rails shall be galvanized.

**ALTERNATE TYPES OF GUARD RAILS:** Metal plate guard rail elements of similar design to that shown on the plans may be used as an alternate to those called for, provided they are equal to the elements shown and meet the requirements of Section 7-17.2-B and 7-17.4-C of the specifications.

**REMOVING EXISTING MESH:** The costs of supporting the spans during construction, the costs of removing the existing mesh, and the costs of altering the existing and post and portal bracing as called for on the plans are to be included in the unit price bid for structural steel.

**REMOVING EXISTING CONCRETE:** The cost of removing existing concrete is to be included in the unit price bid for Class "A" Concrete.

**CLOSING BRIDGE TO TRAFFIC:** The bridge may be closed to vehicular traffic when same is being repaired. The bridge is not to be closed to vehicular traffic until the contractor has obtained all material for the repair work. Pedestrian traffic is to be maintained at all times except at short intervals. These intervals are to interfere as little as possible with school children crossing the bridge.

**ADJUSTING LATERAL TRUSS BRACING:** The top and bottom lateral rods, which brace the trusses horizontally, are to be adjusted in order to pull the trusses as close as possible to their original alignment. The cost of this work is to be included in the unit price bid for structural steel.

Repairs to bridge over Nolich River at Whites Mill.

**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  
 FRANKFORT  
 COUNTY OF  
**HARDIN**  
 WHITES MILL - SONORA  
 ROAD

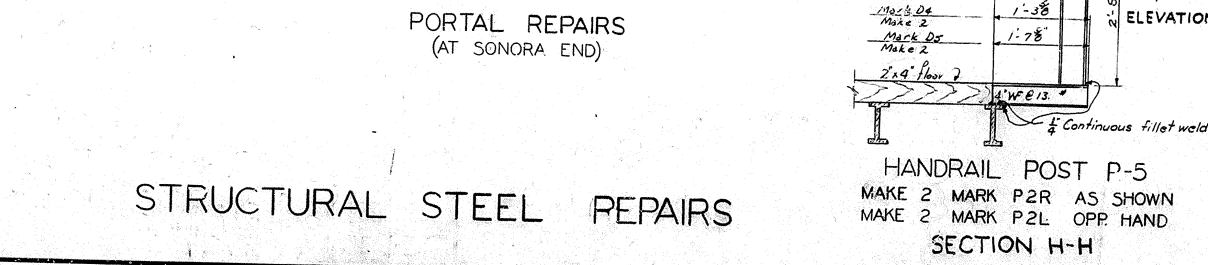
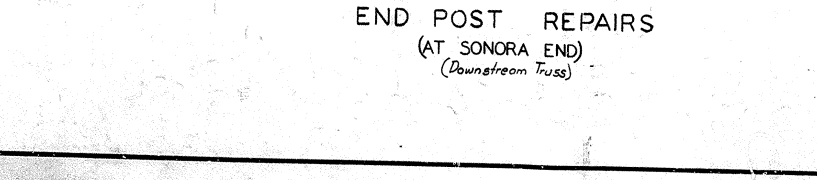
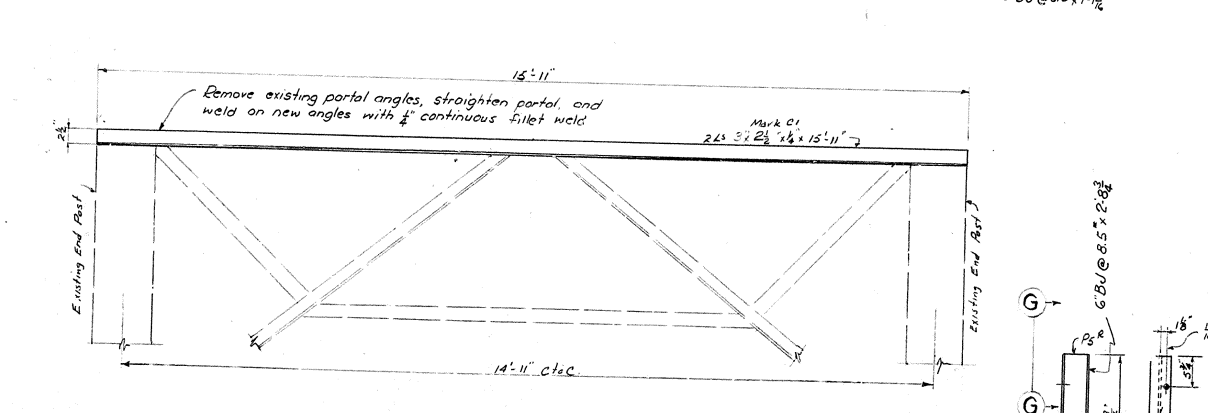
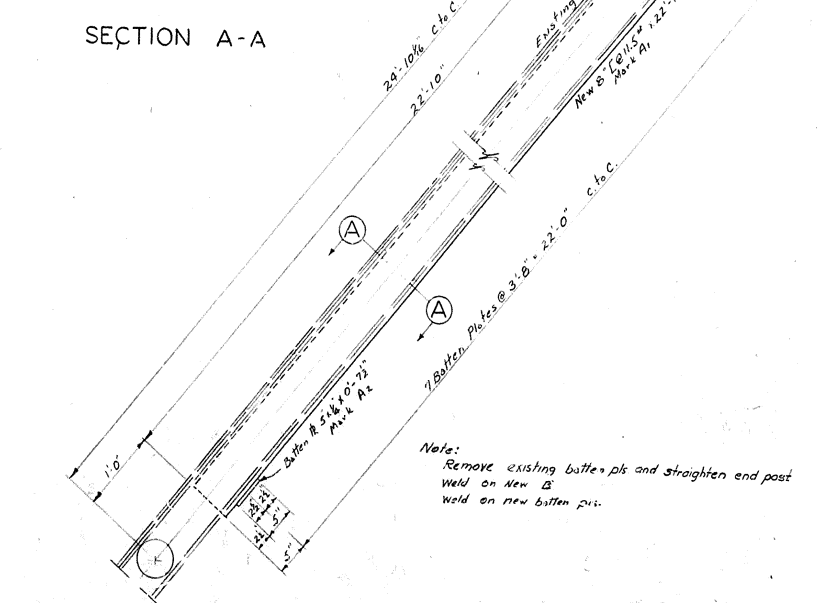
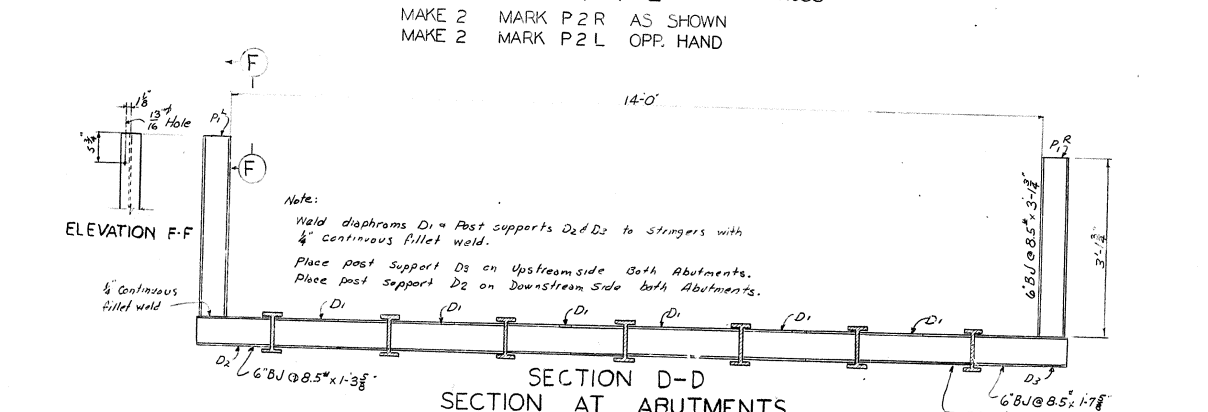
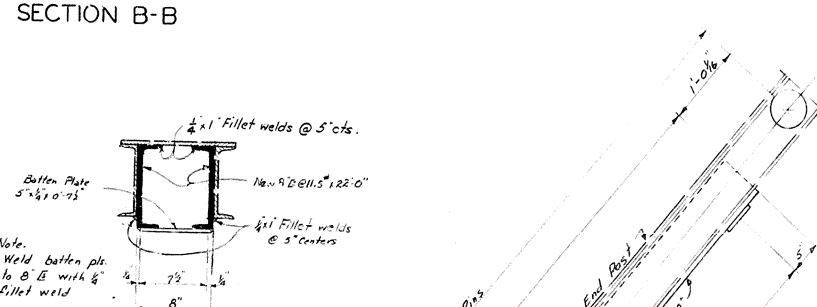
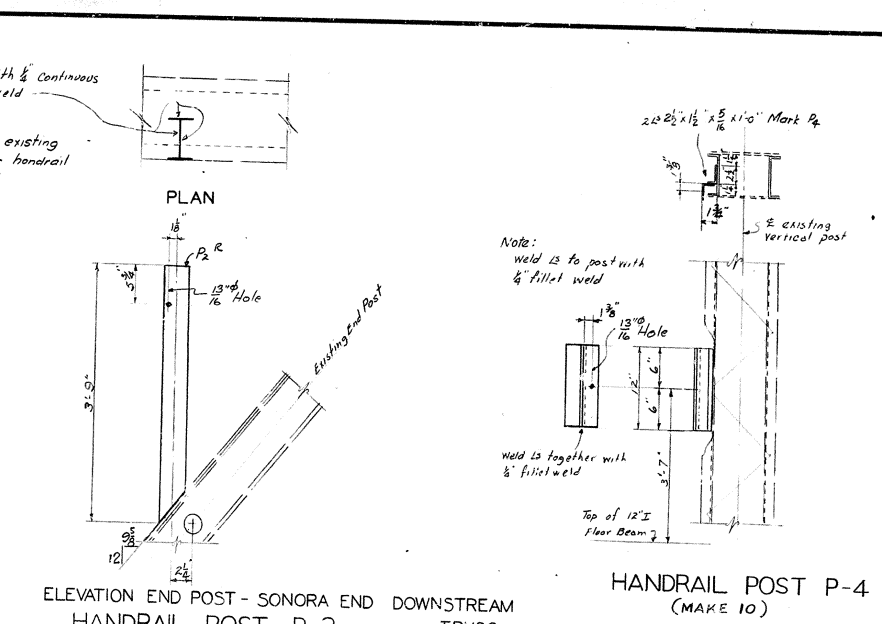
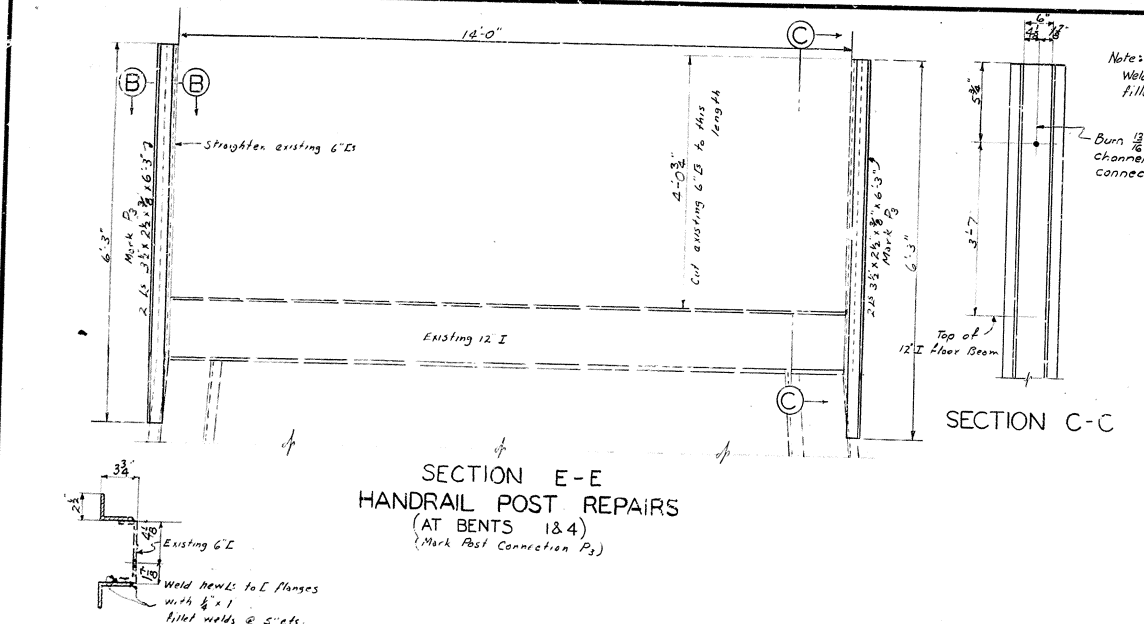
STATION  
 BRIDGE NUMBER 47-159-1

PROJECT NO.  
 DRAWING NO. 10397

STRUCTURAL STEEL	
No.	Description
2	A1 8" L @ 11.5' x 22'-10" End Post Repairs
7	A2 R2 5" x 4" x 0.75" "
8	P2 L3 3 1/2" x 2 1/2" x 3/8" x 6'3" Guardrail Post
2	C1 L3 3" x 2 1/2" x 3/8" x 15'-11" Portal
12	D1 6" BJ @ 8.2" x 1'-11 1/2" Diaphragms
4	D2 6" BJ @ 8.5" x 1'-3 1/2" Guardrail Post Supports
4	D3 6" BJ @ 8.5" x 1'-7 1/2" "
2	D4 4" WF @ 13" x 1'-3 3/8" Guardrail Post Supports
2	D5 4" WF @ 13" x 1'-7 3/8" "
4	P1 R 6" BJ @ 8.5" x 3'-1 1/2" Guardrail Posts
4	P1 L 6" BJ @ 8.5" x 3'-1 1/2" "
2	P2 R 6" BJ @ 8.5" x 3'-0" "
2	P2 L 6" BJ @ 8.5" x 3'-0" "
10	P3 2 L3 2 1/2" x 1 1/2" x 3/8" x 1'-0" "
2	P5 R 6" BJ @ 8.5" x 2'-8 1/2" "
2	P5 L 6" BJ @ 8.5" x 2'-8 1/2" "
4	R 4 3/8" x 2 1/2" x 3/8" x 5'-0 3/4" Bent No. 5 Handrail Posts
2	S1 6" L @ 13" x 17'-1" Column
2	S2 6" L @ 13" x 12'-0 1/2" "
1	T 16" WF @ 36" x 14'-0" Floor Beam
2	U1 L5 3 x 3 x 3/8 x 16'-3" X-Bracing
4	V L5 6 x 6 x 3/8 x 0'-11" Footings
20	W P1 9" x 3/8" x 0'-11" Columns
1	S3 6" L @ 13" x 0'-6" X-Bracing
4	U2 L5 3 x 3 x 3/8 x 13'-8" Bent 4 & 5
4	U3 L5 2 1/2 x 2 1/2 x 3/8 x 16'-9" "
2	S4 8" L @ 13.4" x 0'-3" "
0	X 3/4" Swedge Anchor Bolts, 1-2 lg. with Hex. Nuts

For additional structural steel, see Sheet No. 6

GUARDRAIL & FITTINGS	
No.	Description
10	BG101 Clip L 8" x 3/4" x 1'-0 1/2"
4	BG103 End rail sections
32	BG104 Washer
32	BG106 Button Hd bolts with Hex Nuts 1/2" x 1 1/2"
248	BG107 3/8" x 1"
8	BG109 Rail Supports
2	R1 Rail 12'-8" long
2	R2 " 14'-4 3/4" "
4	R3 " 15'-8" "
2	R4 " 16'-9 3/4" "
8	R5 " 16'-0" "
2	R6 " 13'-9 1/2" "
2	R7 " 13'-2 1/2" "
2	R8 " 13'-9" "
2	R9 " 16'-6 3/4" "



REVISIONS:

NO.	DATE	BY	REVISION
1	11/20/01	DLB	ISSUED FOR CONSTRUCTION
2	11/20/01	DLB	ISSUED FOR CONSTRUCTION

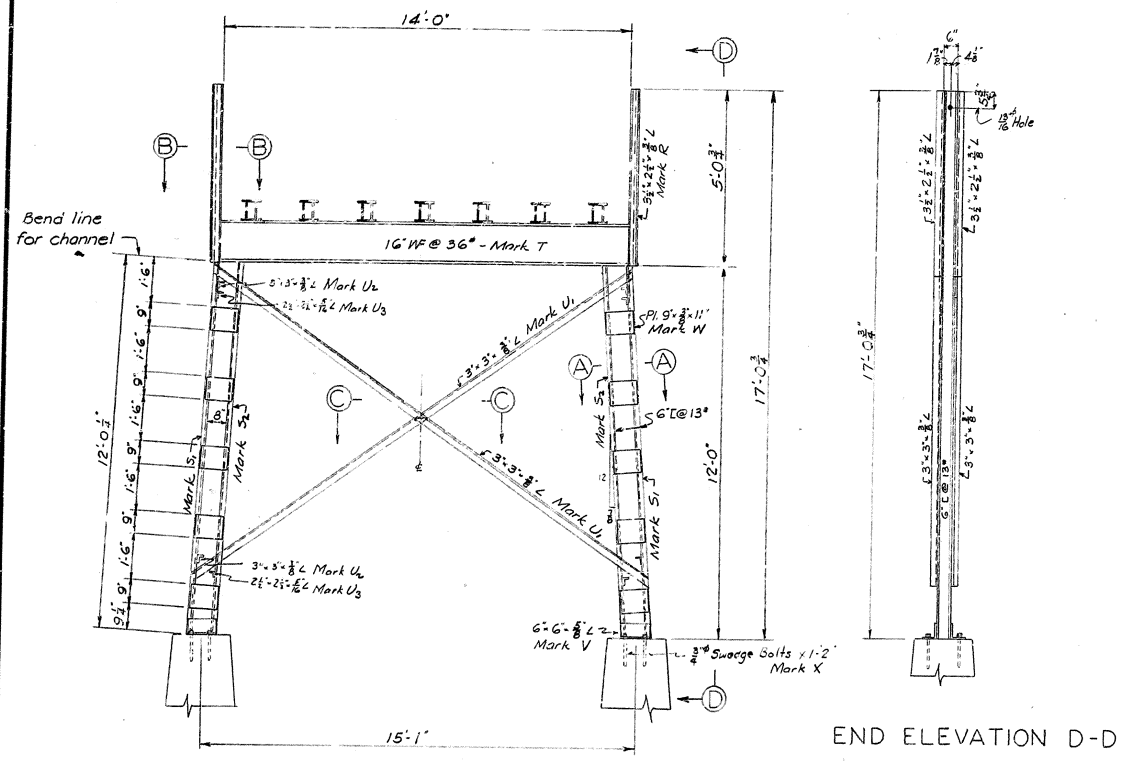
STRUCTURAL STEEL REPAIRS

Repairs to bridge over Nolin River at Whites Mill.

**COMMONWEALTH OF KENTUCKY**  
**DEPARTMENT OF HIGHWAYS**  
**FRANKFORT COUNTY OF**  
**HARDIN**  
**WHITES MILL - SONORA**  
**ROAD**

STATION: \_\_\_\_\_  
 BRIDGE NUMBER: 47-159-11  
 PROJECT NO.: \_\_\_\_\_  
 DRAWING INDEX: \_\_\_\_\_  
 NO. 10397

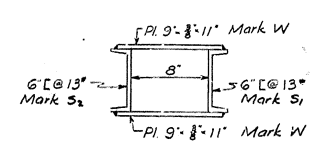
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7	KY.				



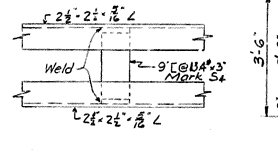
ELEVATION K-K

END ELEVATION D-D

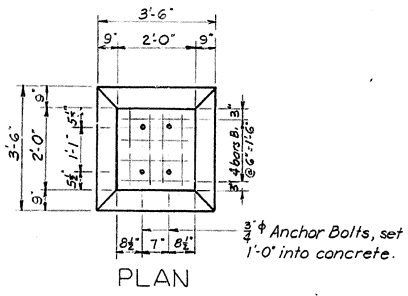
NOTE: All connections to be welded with  $\frac{3}{8}$ " continuous fillet weld unless otherwise indicated.



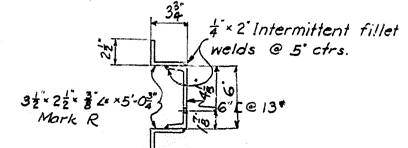
SECTION A-A



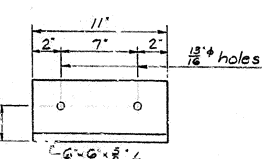
SECTION L-L  
(See Elevation, Sheet No. 1)



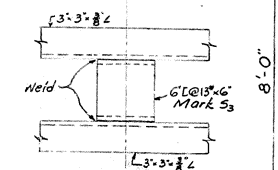
PLAN



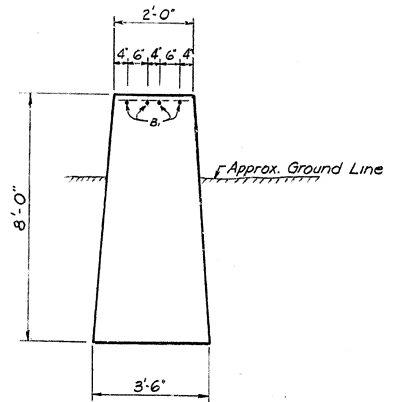
SECTION B-B



ANGLE MARK V  
(4 Required)

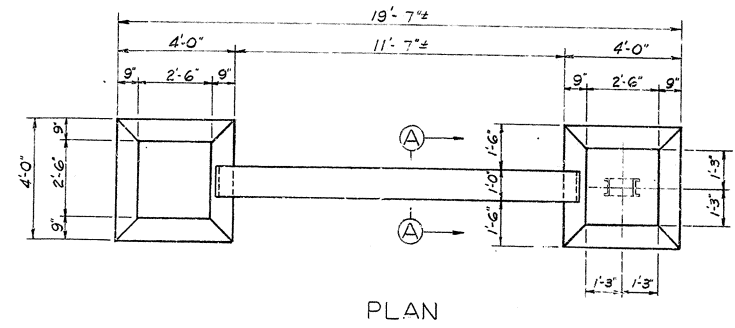


SECTION C-C

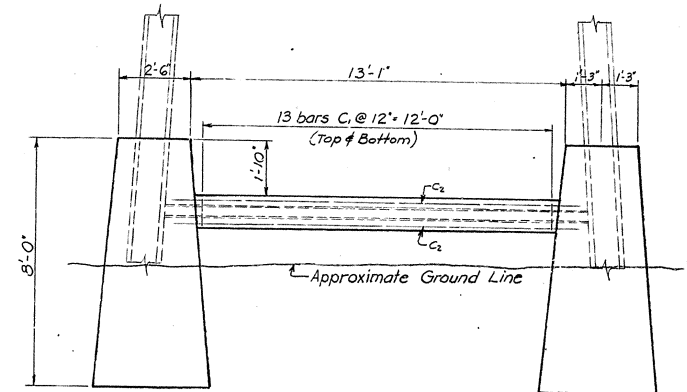


ELEVATION FOOTING  
(2 Required)  
For Bent No. 5

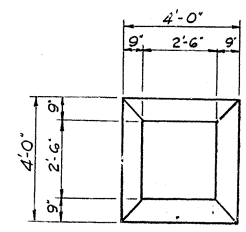
BENT NO. 5



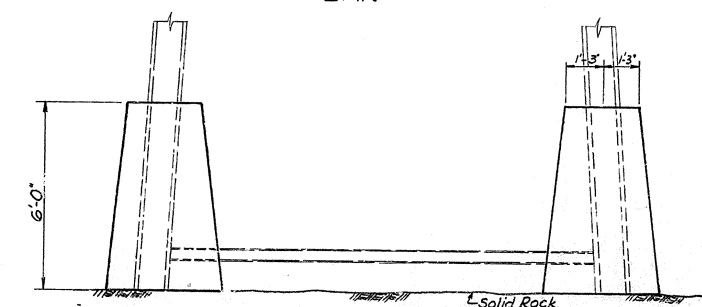
PLAN



ELEVATION

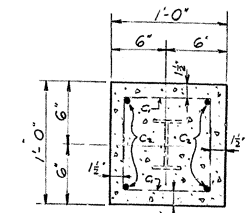


PLAN

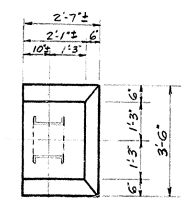


ELEVATION

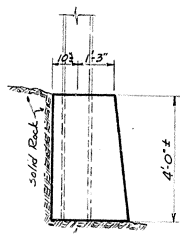
FOOTING (BENT NO. 1)



SECTION A-A



PLAN



ELEVATION FOOTING  
(BENT NO. 2)  
(Downstream Column only)

FOOTING (BENT NO. 4)

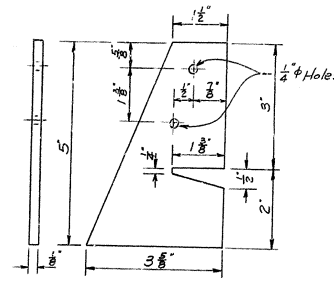
DESIGNED BY: \_\_\_\_\_ CHECKED BY: J.S.B. DATE: 11/5/50  
 REVISIONS: \_\_\_\_\_  
 TRACED BY: \_\_\_\_\_  
 REVISIONS: \_\_\_\_\_  
 DATE: 4-57

Sheet 4 of 6  
Repairs to bridge over Nolin River at Whites Mill

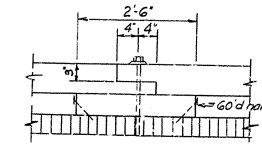
**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  
 FRANKFORT  
 COUNTY OF  
 HARDIN  
 WHITES MILL - SONORA  
 ROAD

STATION	PROJECT NO.
BRIDGE NUMBER 47-159-1	DRAWING INDEX NO. 10397

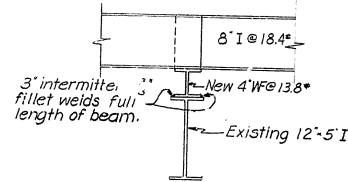




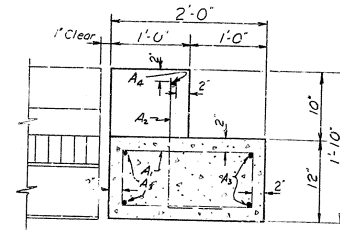
ANCHOR PLATE



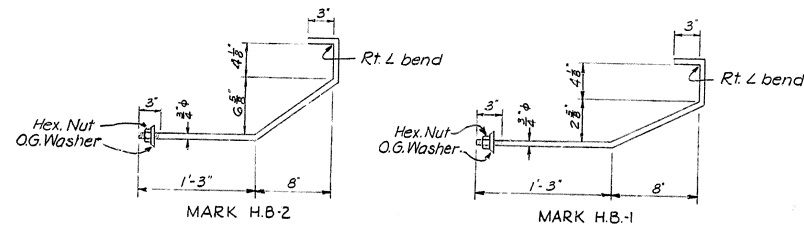
WHEEL GUARD SPLICE



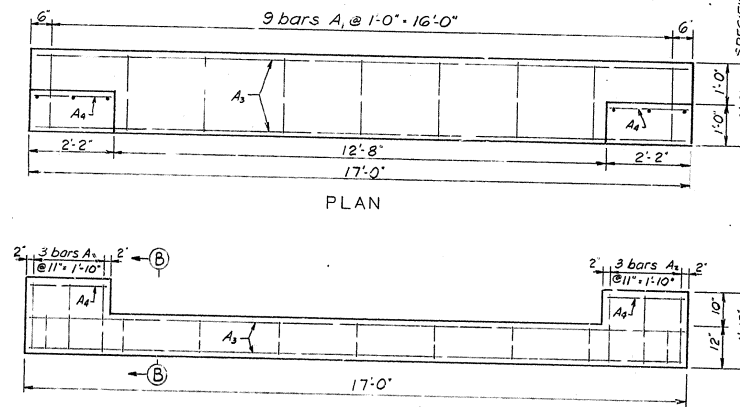
SECTION A-A



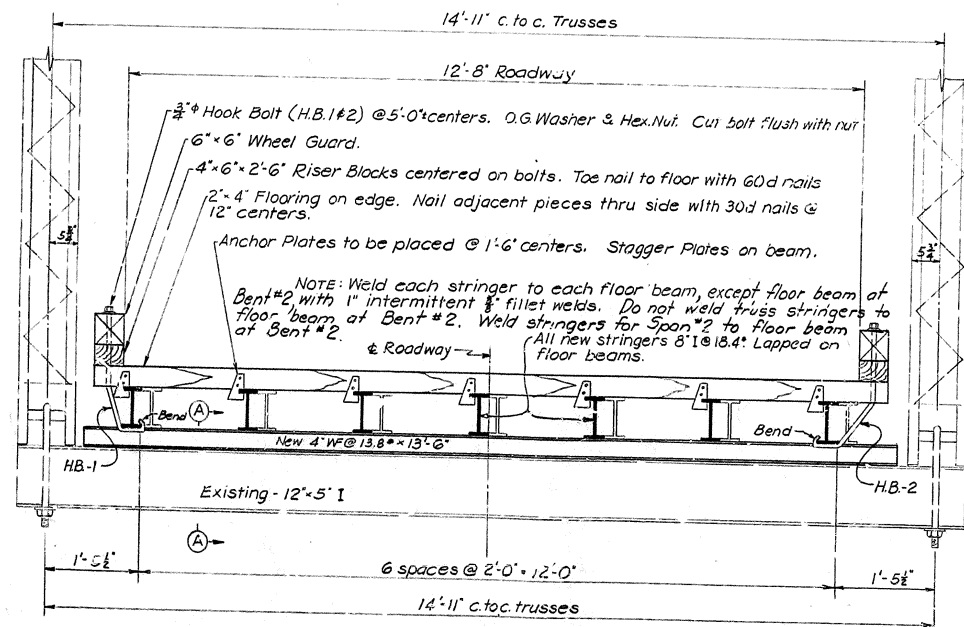
SECTION B-B



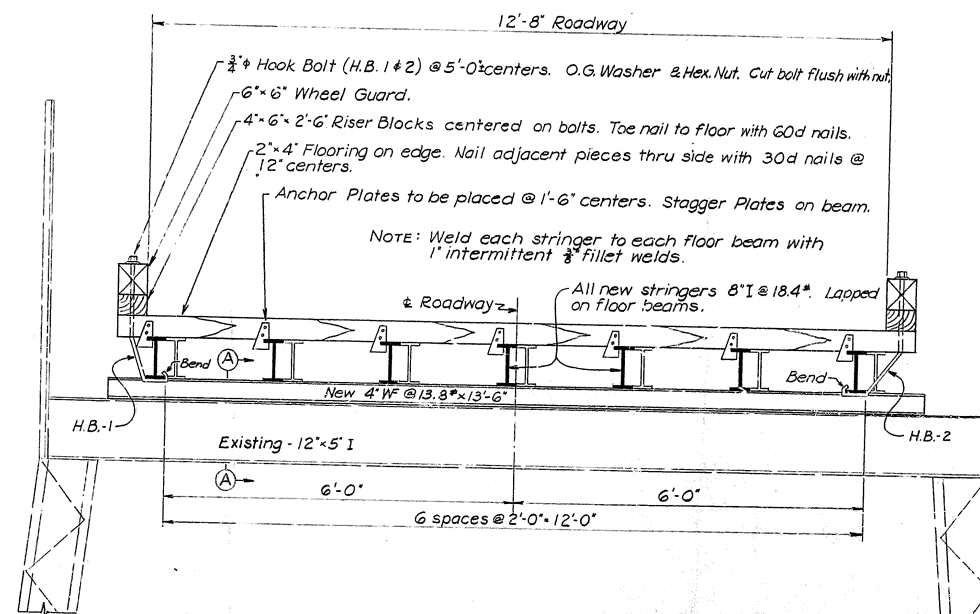
HOOK BOLTS



ELEVATION PARAPET



TYPICAL SECTION (Through Truss)



TYPICAL SECTION (Except Bent No. 5) (through Approach Span)

**GENERAL NOTE (CONTINUED)**  
 SPECIFICATIONS: Kentucky Department of Highways, 1945 Edition with amendments.  
 All new steel shall be painted with one shop coat of red lead or zinc chromate primer and one field coat of aluminum paint in accordance with the specifications. Cost of painting new steel is to be included in the unit bid price for structural steel.

**REMOVING FLOOR & STRINGERS:** The cost of removing the existing floor plank & stringers and stacking them near the site at the direction of the engineer, is to be included in the unit price bid for structural steel.

**WELDING:** All welding shall be done in accordance with the specifications for Welding Highway and Bridge Structures, 1947 Edition, American Welding Society. The cost of welding is to be included in the unit price bid for structural steel.

**TREATED LUMBER:** To be treated southern yellow pine in accordance with section 7-19-2-A, 23 #4 of the specifications and creosoted in accordance with section 7-20. The cost of all hot bolts and other hardware is to be included in the unit price bid for treated lumber.

**CONCRETE:** Class "A" Concrete is to be used in parapets.

**MILL TEST REPORTS:** Mill test reports for all structural steel shall be furnished in triplicate showing that all materials furnished conform to ASTM A-1-48 and meet the requirements of the specifications.

**PAYWEIGHTS OF STRUCTURAL STEEL:** Pay weights of structural steel shall be shop scale weights, exclusive of shop paint or coating, and shall be from approved shop detail plans, all in accordance with the plans and specifications.

**CLEANING AND PAINTING:** All existing steel remaining in the structure shall be cleaned of rust and other foreign matter and painted with a coat of red lead or zinc chromate primer and a coat of aluminum paint in accordance with the specifications. The completion date of painting (year and month) shall be stated on the structure as directed by the engineer. Letters or figures shall be the inches high and paint shall contrast with background.

**BILL OF MATERIAL**  
**STRUCTURAL STEEL**

NO.	DESC.	LENGTH	REMARKS
7	8" I @ 18.4"	15 0	Stringers Mark S1
7	"	16 0	"
56	"	16 8	"
7	"	15 7	"
7	"	13 10	"
7	"	14 2	"
11	4" WF @ 13.8"	13 6	Floor Beam

**CREOSOTED LUMBER**

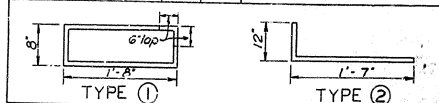
1268	2" x 4" S1E	14 0	Flooring
26	6" x 6" S1S1E	16 0	Wheel Guard
22	4" x 6" S1S1E	10 0	Riser Blocks

**HARDWARE**

931	Anchor Plates	See Detail
4.4	Hook Bolts	Mark H.B.-1 with Hex Nut & O.G. Washer
4.4	"	HB-2
8	Keys 30d	Common Wire Nails
15	Lbs 60d	"

**REINFORCEMENT**

MARK	TYPE	No.	SIZE	LOCATION
A1	①	18	1/2"	Parapet
A2	②	12	"	"
A3	Str	8	"	"
A4	"	4	"	"



Sheet 6 of 6  
Repairs to bridge over Nolin River at Whites Mill.

**COMMONWEALTH OF KENTUCKY**  
 DEPARTMENT OF HIGHWAYS  
 FRANKFORT  
 COUNTY OF  
**HARDIN**  
 WHITES MILL - SONORA  
 ROAD

STATION: 47-159-1 PROJECT NO. 10397

DESIGNED BY: \_\_\_\_\_ CHECKED BY: J.R.M. DATE: \_\_\_\_\_  
 REVISIONS: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 DATE: \_\_\_\_\_