

KENTUCKY DEPARTMENT OF HIGHWAYS

BRIDGE OVER ROUGH RIVER

GRAYSON - BRECKINRIDGE COUNTIES

HARDINSBURG - LEITCHFIELD ROAD

GENERAL NOTE

- SPECIFICATIONS** — Kentucky Department of Highways 1956 Standard with Amendments.
DESIGN LOAD — Bridge designed for H20-S16-44 as specified in R.R.S.H.O. 1957 Specifications.
CONCRETE — Class "A" Concrete to be used throughout.
REINFORCEMENT — Dimensions from face of concrete to bars are clear distances except as otherwise shown. Dimensions for bar spacing are distances center to center of bars.
- BEVELED EDGES** — All exposed edges to be beveled $\frac{3}{8}$ " unless otherwise noted.
PILING — Piling shall be driven to Solid Rock, or to sustain a minimum load of 50 tons per pile. Test Piles shall be driven where designated on plans to determine the length required. All test piles shall be accurately located so that they may be used in the finished structure. 12" B.P. 53" Steel Piles to be used. See Standard Drawing P17. Field splices will be allowed for piles over 60 ft. long or when piles are driven below cutoff elevation.
- CONSTRUCTION JOINTS** — Construction joints shall be made at locations shown on plans. Provide substantial keys at all construction joints.
ANCHOR BOLT HOLES — The Superstructure Contractor shall drill all anchor bolt holes and place anchor bolts. The Substructure Contractor shall exercise care in placing reinforcing steel in top of all substructure units to the dimensions shown.
- BEARING AREAS** — Bearing Areas to receive superstructure shall be finished smooth and level at the elevations shown on the plans.
- CONSTRUCTION NOTE** — If material for embankment is to be hauled over finished bridge, the roadway approaches for a minimum distance of 50 ft. from the back face of each abutment shall be brought to grade with compacted material and surfaced with traffic bound macadam.
- EXP. JT. MAT'L - COPPER STRIP** — The cost of these items to be included in unit price bid for Class "A" Concrete.
STRUCTURAL STEEL — See Sheet 14 for Note and Specifications. For purpose of payment Lump Sum Bid for structural steel includes structural steel, bolts, steel pins, cast iron, and lead plates.
- SHOP & MILL INSPECTION** — Kentucky Department of Highways.
WELDING — See note on Sheet 14.
C.I. DRAINS - W.I. PIPE — See Sheet 17 for foundry note and specifications of Wrought Iron Pipe.
PAINT — See note on Sheet 14.
RECORD SHOP DRAWINGS — A set of linen tracings of Approved Drawings of Shop Details shall become the property of the Department of Highways when the Contract is completed and before final payment is made. No direct payment shall be made for the record drawings but shall be included in the Lump Sum Bid for structural steel.
- PAINTING EXPANSION DAMS** — All exposed parts of Expansion Dams which cannot be painted after erection shall have two coats of Aluminum Paint applied before erection.
HANDRAIL — Alternate bids to be taken on Handrail.
 Alternate "A": Aluminum Handrail - see Standard Drawing H110.
 Alternate "B": Steel Handrail - see Standard Drawing H111.
 See Sheet 19 for spacing of Handrail Posts.
- REMOVE EXISTING STRUCTURE** — The materials may be cut in any desired lengths and removed in any manner the contractor desires. After removal the materials become the property of the contractor.

REFERENCES & ESTIMATES OF MATERIALS

ITEM	SHEET NO	CONCRETE		REINFORCEMENT		12" B.P. 53" STEEL PILES		STRUCTURE EXCAV.		STRUCT. STEEL LUMP SUM	HANDRAIL		6" W.I. PIPE DRAINS LIN. FT.	REMOVE EXISTING STRUCTURE LUMP SUM	
		CLASS "A" CU. YD.	MENT LB	FURNISH LIN. FT.	DRIVE LIN. FT.	COMMON CU YD	S. R. CU. YD.	ALUMINUM ALTERNATE "A" LIN. FT.	STEEL ALTERNATE "B" LIN. FT.						
SUBSTRUCTURE															
TITLE SHEET & QUANTITIES	1														
LAYOUT	2														
END BENT 1	3														
PIER 1	4 & 6	69.7	5359	1556											
PIER 2	5 & 6	268.7	30027			420	60								
ABUTMENT 2	7	326.7	48674			415	70								
PILE RECORD	8	91.2	4665			50	135								
SOUNDINGS	9, 10 & 11														
PILES	P 17														
TOTAL		756.3	88725	1556	1556	885	265								
SUPERSTRUCTURE															
120'-170'-120' CONT. R. GIRDER	12, 13 & 14														
SHOES	15														
EXPANSION DAMS	16														
DRAINS & CAMBER DIAGRAM	17														
SLABS (CONCRETE)	18	369.6	85414										123.33		
RAILING & PLINTH	19	34.0	3677												
ANCHOR BOLT PLAN	20										811	811			
ELEVATIONS	21														
ALUMINUM HANDRAIL	H110														
STEEL HANDRAIL	H111														
TOTAL		403.6	89091										123.33		

BILL OF INCIDENTAL MATERIALS

ITEM	NO REQ'D	SIZE	LOCATION
Prem. Exp. Jt. Mat'l	9	1/2" x 1/2" x 6"	Between Slabs
Drains	18	6" x 6" x 3/8"	Between Sidewalks
Copper Strip	9	1/2" x 3/8" x 2"	Between Slabs
			See Standard Dwg G-351 and Sheet 18 for details

Note: Quantities shown on Bill of Incidental Materials are approximate only and the Contractor is responsible for furnishing enough material to complete the work in accordance with the plans and specifications.

* 3-100' Standard Steel Truss Spans
 20' Roadway Concrete Slab (Existing)

G 351
 H110
 H111
 P17

Bridge over Rough River Sheet 1 of 2

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON - BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464+70.50 PROJECT NO. _____
 BRIDGE NUMBER _____ DRAWING NO. 1333
 DATE 14/1953

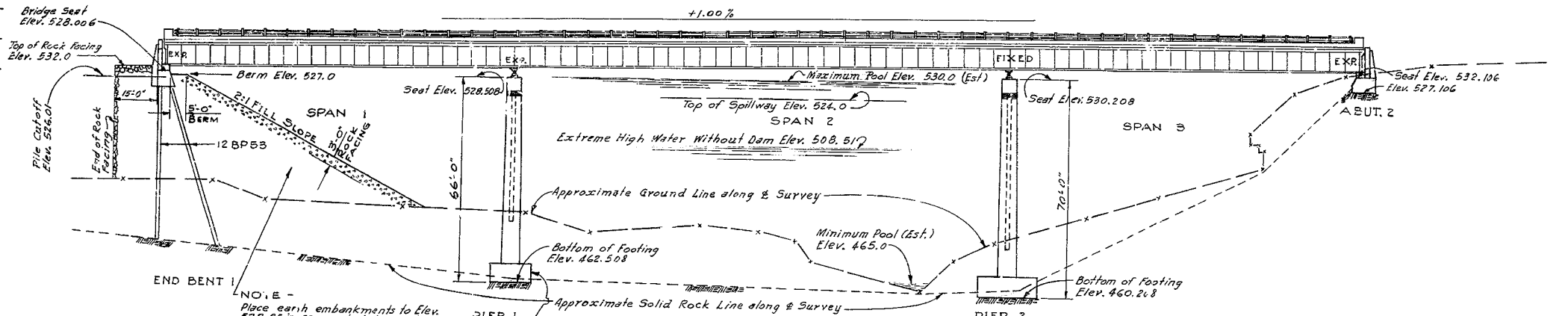
To LEITCHFIELD

To HARDINSBURG

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

DATUM

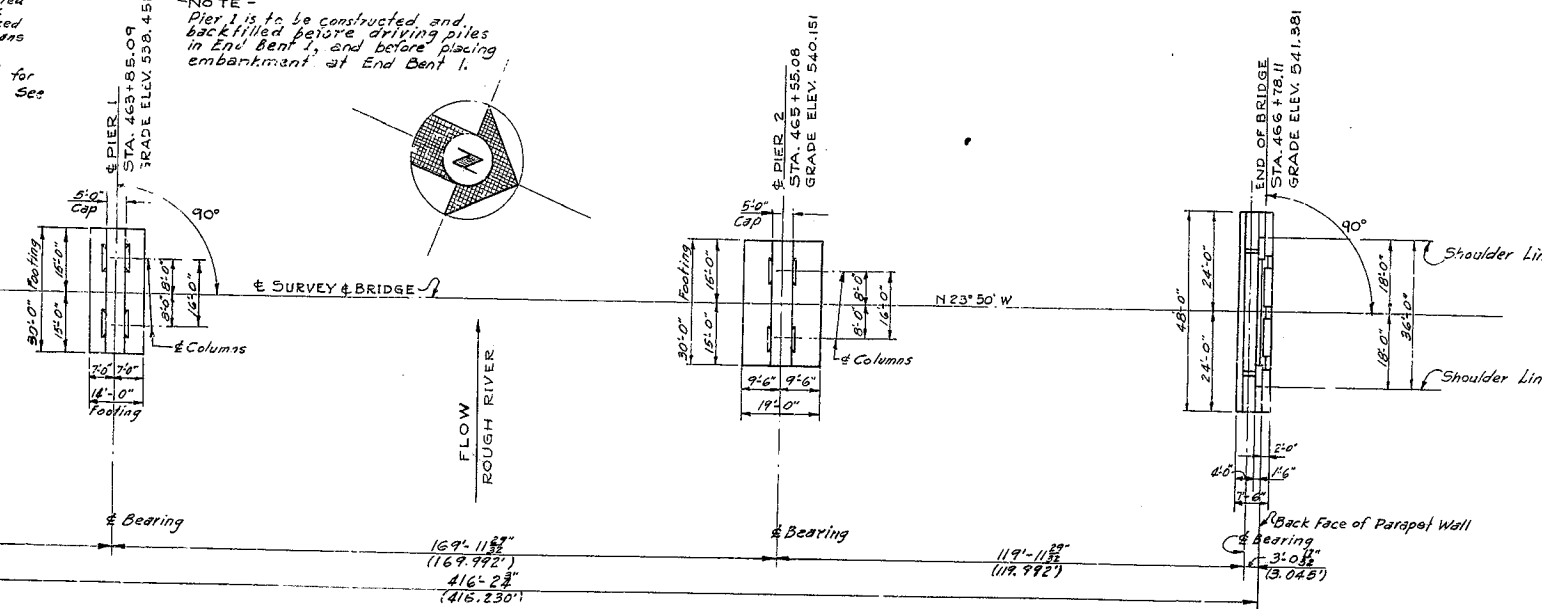
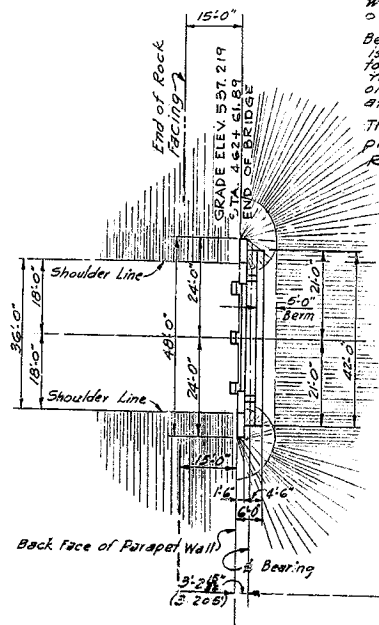
550
540
530
520
510
500
490
480
470
460
450



NOTE -
Place earth embankments to Elev. 522.85 in compacted layers in accordance with the specifications before driving piles. Care shall be taken in placing embankments so that large boulders will not interfere with driving of piles.
Berm in front of End Bent 1 is to be placed and compacted to Elev. 527.0 and 3'-0" thick rock fill facing to be placed on embankment before spans are erected.
There is to be no payment for placing 3'-0" Rock Facing. See Roadway Plans.

ELEVATION
12'-0" - 17'-0" - 12'-0" CONTINUOUS WELDED STEEL PLATE GIRDER SPANS
2'-6" ROADWAY H20 S16-44 LOADING 2'-2'-6" SAFETY CURBS
0" BKEW 2:1 FILL SL. PFS 36" SHOULDERS

NOTE -
Pier 1 is to be constructed and backfilled before driving piles in End Bent 1, and before placing embankment at End Bent 1.



PLAN (DECK REMOVED)

LAYOUT

BRIDGE OVER ROUGH RIVER SHEET 2

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

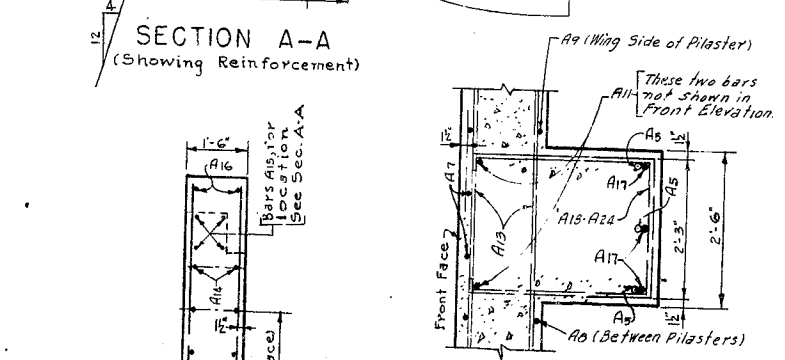
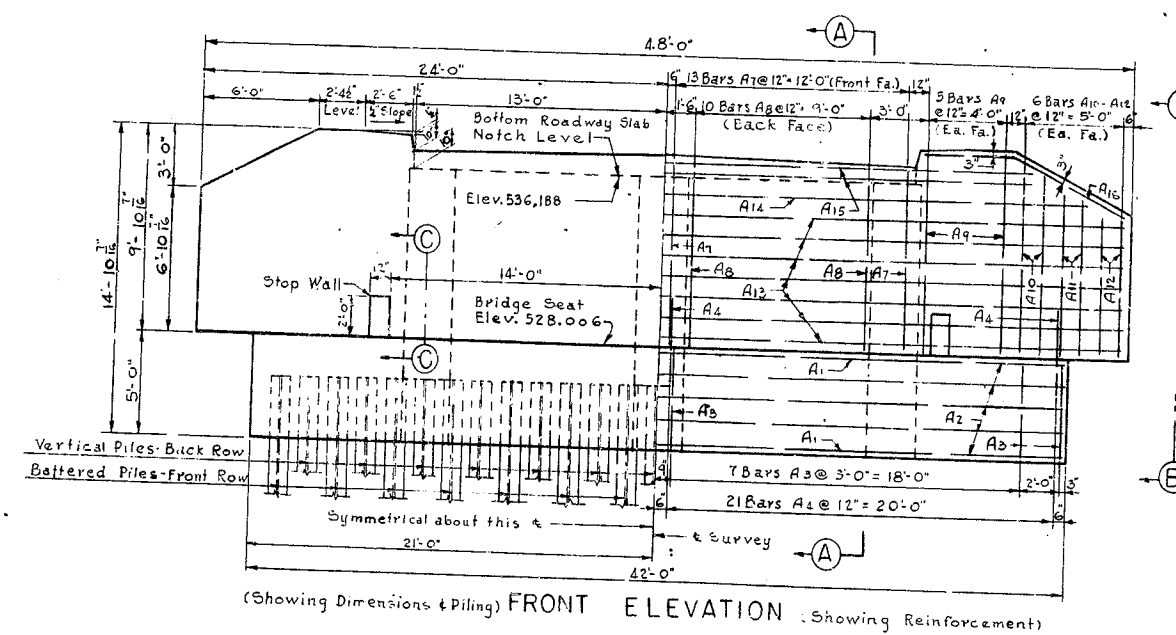
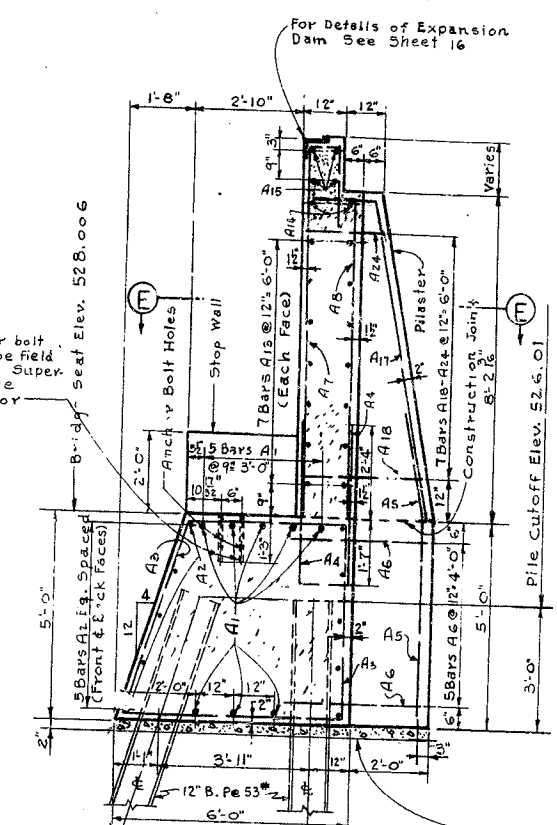
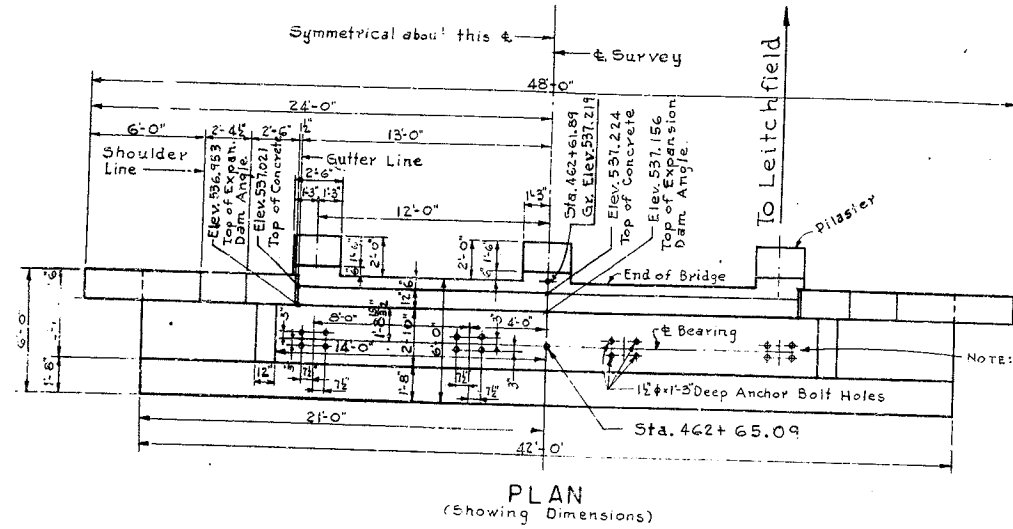
GRAYSON--BRECKINRIDGE
HARDINSBURG -- LEITCHFIELD
ROAD

STATION 464 + 70.00 PROJECT NO.

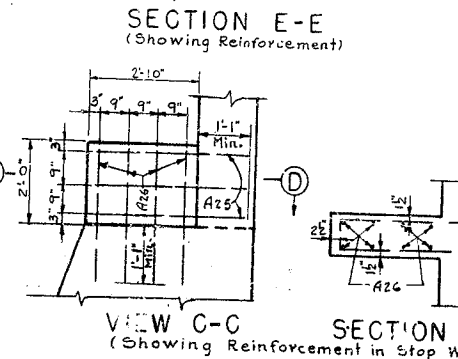
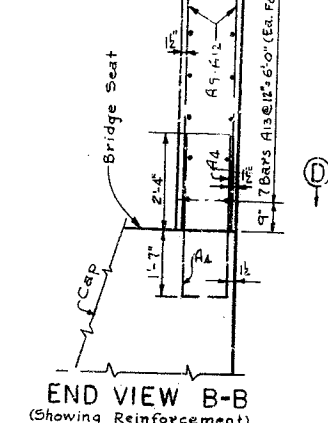
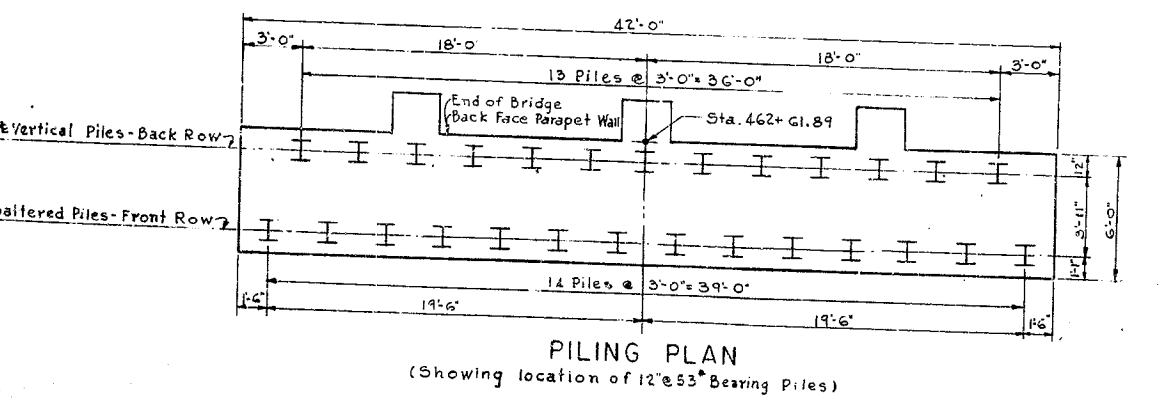
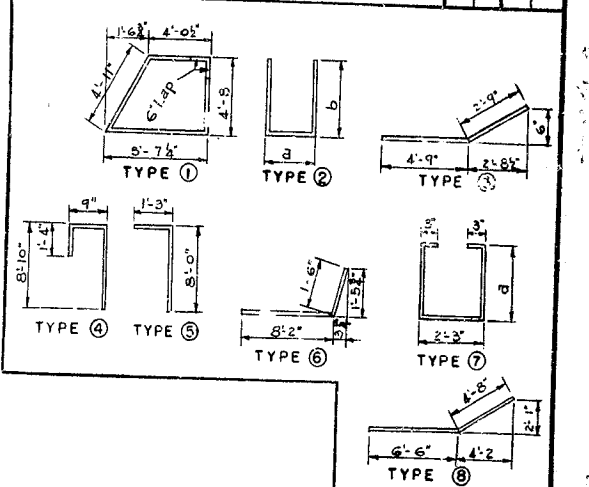
BRIDGE NUMBER	DRAWING NO.	SCALE
	13333	

REVISIONS
DATE
BY
DATE
BY
DATE
BY

DESIGNED BY: [Name]
CHECKED BY: [Name]
DATE: [Date]



Work	Type	No.	Length	Location	a	b
			ft. in.		ft. in.	ft. in.
A1	3/2	8	6 4 1/8	Cap		
A2		10	5 4 1/8	"		
A3	1	16	19 1/2	"		
A4	2	42	6 8 10	Dowels (in Cap)	1 3 3 11	
A5	3	9	8 7 6	(in Pilasters)		
A6	2	15	5 8 5	Pilasters & Cap	2 3 3 2	
A7	4	26	6 10 8	Parapet-Front Face		
A8	5	20	9 2	"-Back Face		
A9	Str.	20	9 8	Wings		
A10		8	8 10	"		
A11		14	7 10	"		
A12		8	6 10	"		
A13		14	4 7 8	Parapet Wall & Wing		
A14		2	43 8	"		
A15		4	3 7 8	"		
A16	8	4	11 2	Top of wings		
A17	6	9	8 9 8	Pilasters		
A18	7	3	5 8 6	"		
A19		3	8 2	"	3 0	
A20		3	7 10	"	2 10	
A21		3	7 6	"	2 6	
A22		3	7 2	"	2 4	
A23		3	6 10	"	2 2	
A24		3	6 6	"	2 0	
A25	2	6	4 8 1	Stop Walls	0 9 3 9	
A26	Str.	16	2 11	"		



ESTIMATE OF QUANTITIES
 Concrete, Class "A" 69.7 Yds.
 Reinforcement 5359. Lbs.

BRIDGE OVER ROUGH RIVER SHEET 2

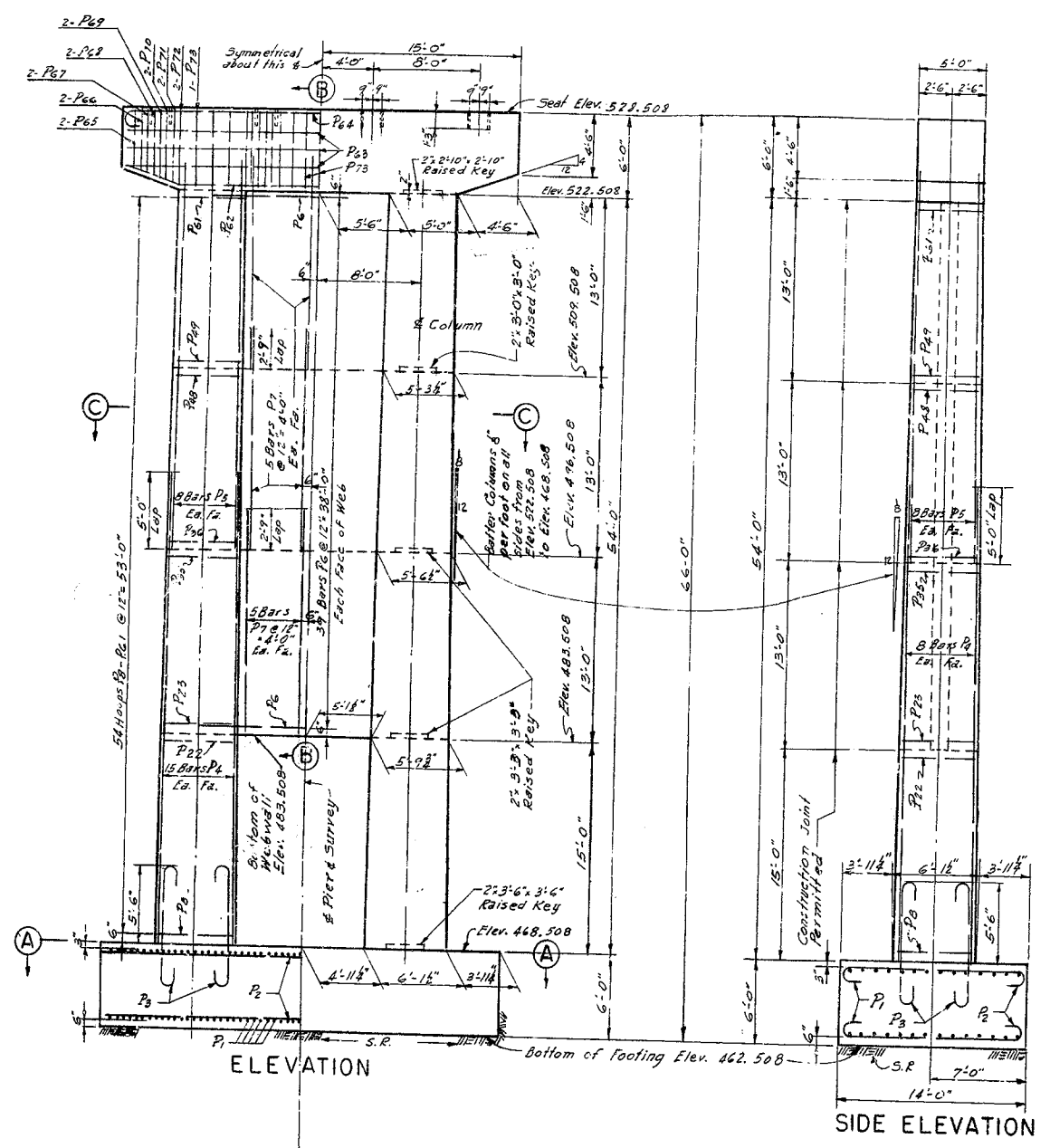
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
 GRAYSON--BRECKINRIDGE
 HARDINSBURG--LEITCHFIELD
 ROAD

STATION 464+70.00 PROJECT NO.
 BRIDGE NUMBER 13333

END BENT No. 1

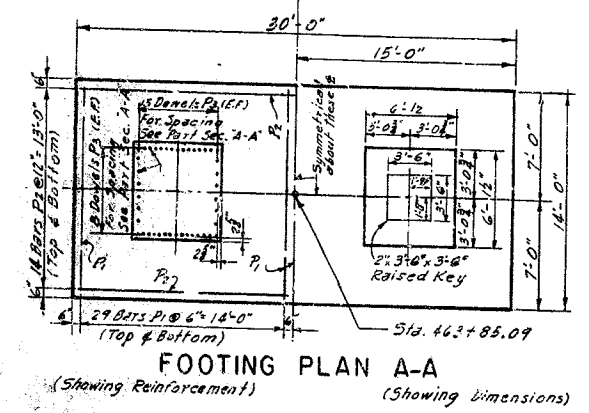
REVISIONS
 DATE
 BY
 CHECKED BY
 DATE
 BY

PER. NO.	DATE	PER. NO.	DATE	PER. NO.	DATE	TOTAL
7						



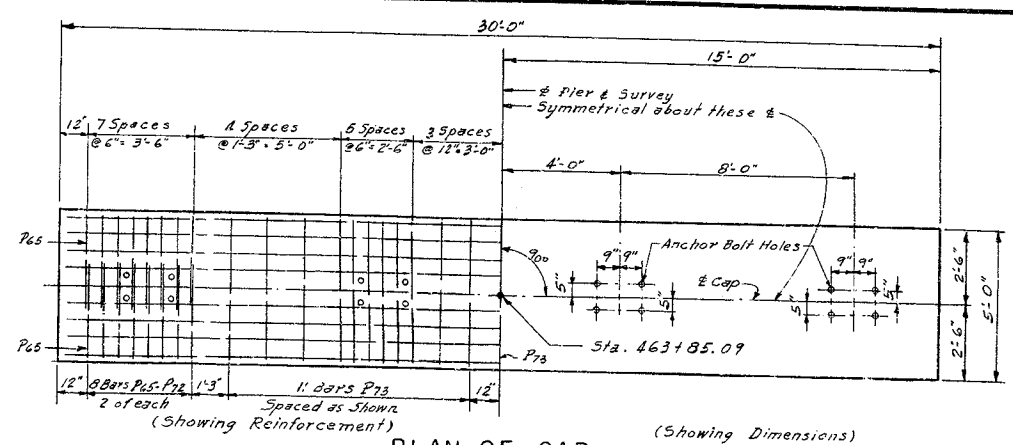
ELEVATION

SIDE ELEVATION

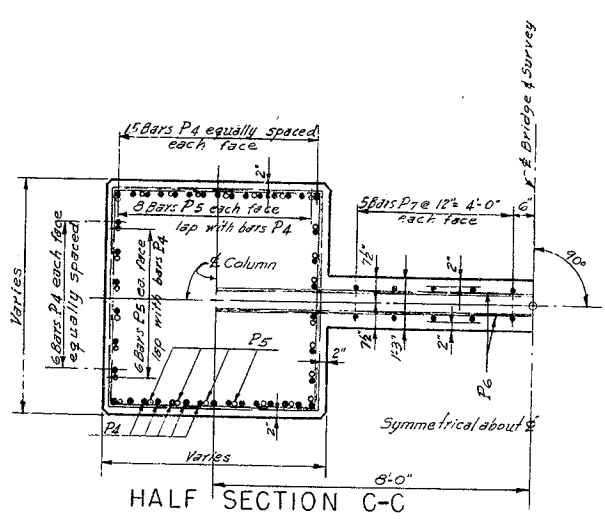


FOOTING PLAN A-A

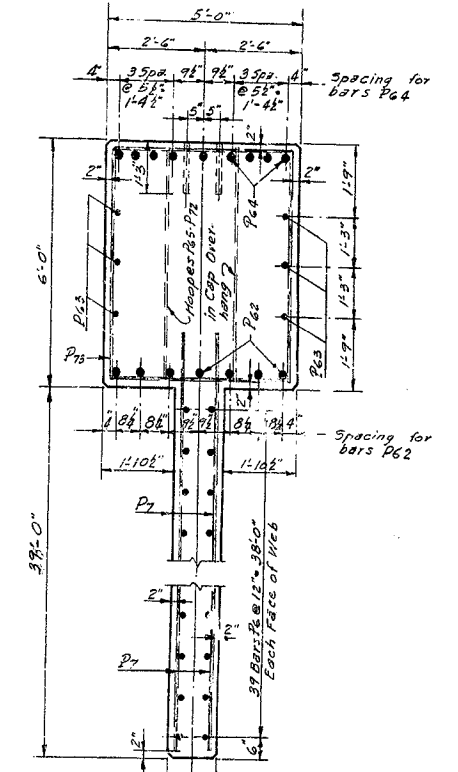
ESTIMATE OF QUANTITIES
 Concrete, Class "A" 268.7 Cu. Yds.
 Reinforcement 30027 Lbs.



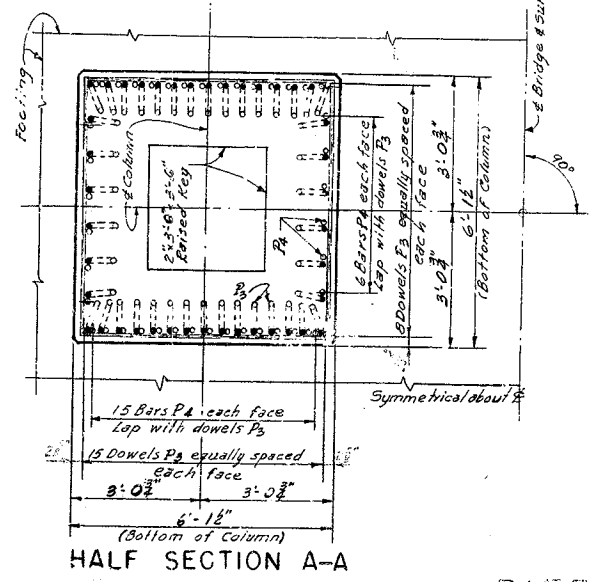
PLAN OF CAP



HALF SECTION C-C



PART SECTION B-B



HALF SECTION A-A

DETAILS OF PIER 1 WORK THIS SHEET WITH SHEET 6 PIER

BRIDGE OVER ROUGH RIVER SHEET 4

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON-BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464 + 70.00 PROJECT NO. _____

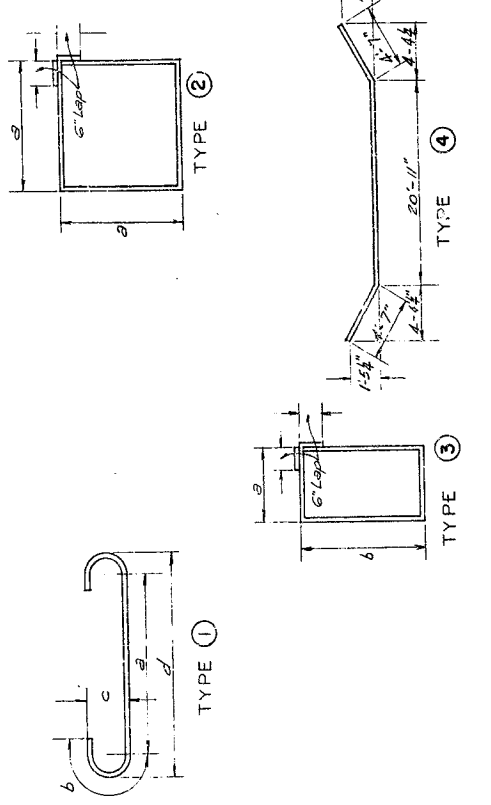
BRIDGE NUMBER _____ DRAWING NO. 13333 INDEX _____

PREPARED BY: [Name] DATE: [Date]
 CHECKED BY: [Name] DATE: [Date]
 APPROVED BY: [Name] DATE: [Date]

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

BILL OF REINFORCEMENT

PIER 1							PIER 2						
NO.	QTY	UNIT	DESCRIPTION	LENGTH	LOCATION		NO.	QTY	UNIT	DESCRIPTION	LENGTH	LOCATION	
				FT.	IN.	FT.					FT.	IN.	FT.
P1	118	1/2"	Top and Bottom of Footing	2	0	0	R1	118	1/2"	Top and Bottom of Footing	2	0	0
P2	514	3/4"	Footing to Shaft Dowels	7	5	1	R2	514	3/4"	Footing to Shaft Dowels	7	5	1
P3	84	1/2"	Vertical	5	9 1/2	0	R3	84	1/2"	Vertical	5	9 1/2	0
P4	84	1/2"	Vertical	5	9 1/2	0	R4	84	1/2"	Vertical	5	9 1/2	0
P5	84	1/2"	Vertical	5	9 1/2	0	R5	84	1/2"	Vertical	5	9 1/2	0
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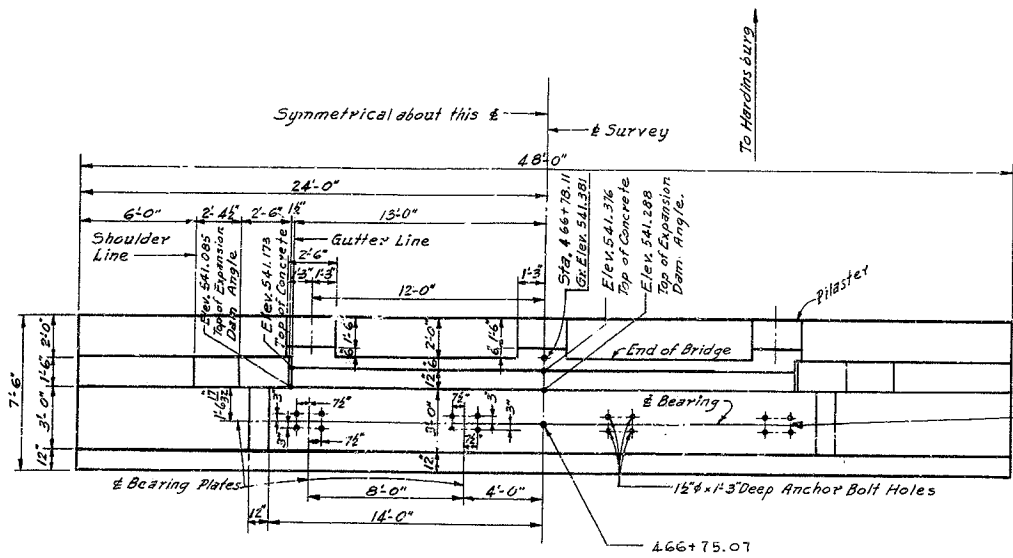
DETAILS OF PIERS 1 & 2
WORK THIS SHEET WITH SHEETS 4 AND 5

BRIDGE OVER KLUGH RIVER SHEET 6

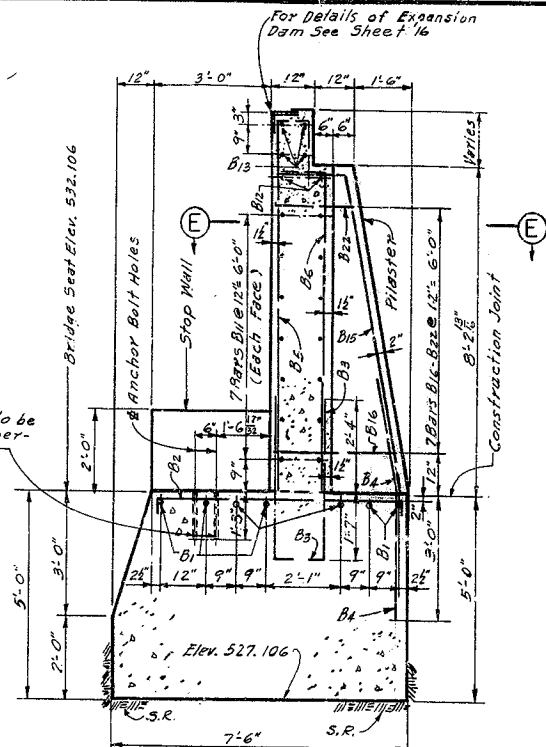
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAYSON - BRECKINRIDGE
ROAD
HARDINSBURG - LEITCHFIELD

STATION 464+70.00 PROJECT NO.

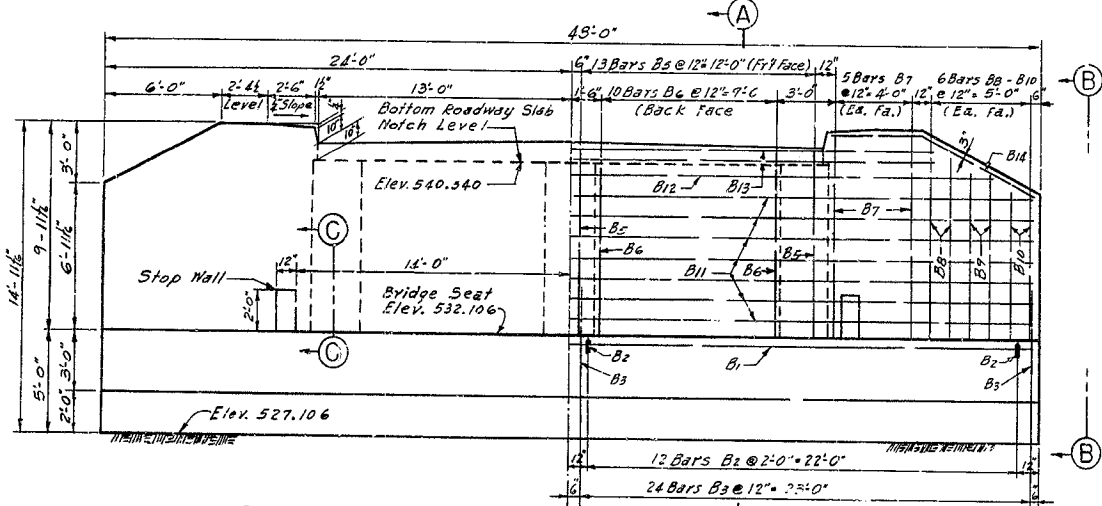
BRIDGE NUMBER: DRAWING
NO. 13333



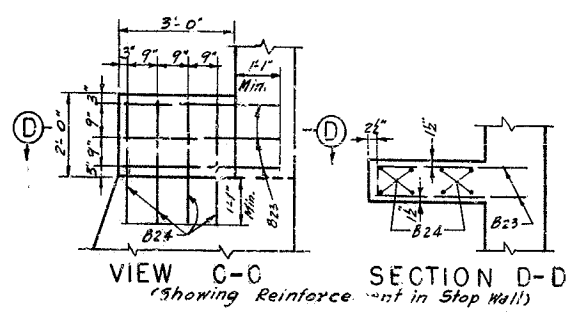
PLAN
(Showing Dimensions)



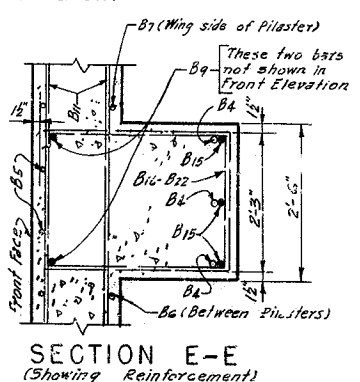
SECTION A-A
(Showing Reinforcement)



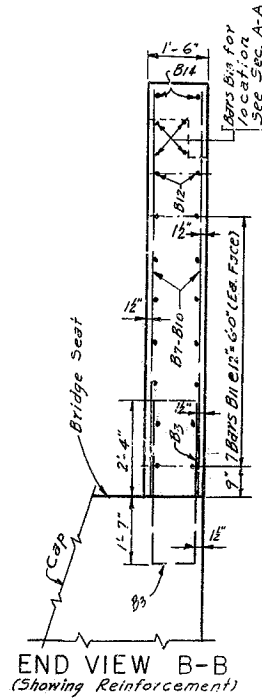
FRONT ELEVATION
(Showing Reinforcement)



VIEW C-C SECTION D-D
(Showing Reinforcement)

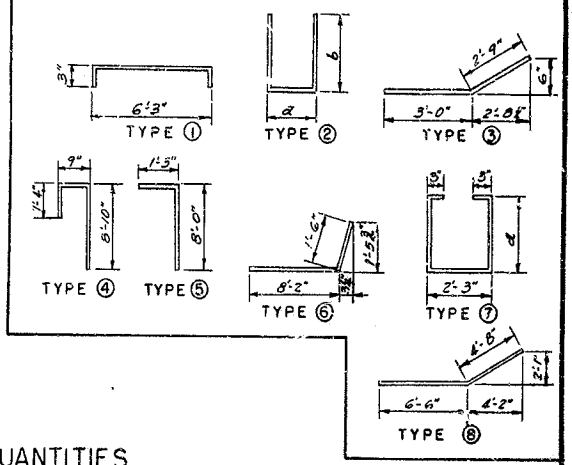


SECTION E-E
(Showing Reinforcement)



END VIEW B-B
(Showing Reinforcement)

BILL OF REINFORCEMENT									
Mark	Type	No	Bar Size	Length	Location	a	b		
				Fl. In.		Fl. In.	Fl. In.	Fl. In.	
B1	Stk	7	6	47	8				
B2	①	24	5	6	7				
B3	②	48	6	8	10			21	3
B4	③	9	8	5	9			3	11
B5	④	26	6	10	8				
B6	⑤	20	9	2					
B7	Stk	20	9	8					
B8	⑥	8	8	10					
B9	⑦	14	7	10					
B10	⑧	8	6	10					
B11	⑨	14	11	8					
B12	⑩	2	11	8					
B13	⑪	4	37	8					
B14	⑫	4	11	2					
B15	⑬	9	8	9					
B16	⑭	3	5	8					
B17	⑮	3	8	2				3	0
B18	⑯	3	7	10				2	10
B19	⑰	3	7	6				2	8
B20	⑱	3	7	2				2	6
B21	⑲	3	6	10				2	2
B22	⑳	3	6	6				2	0
B23	㉑	6	4	8	5	Stop Wall		0	9
B24	Stk	16	2	11					



ESTIMATE OF QUANTITIES
Concrete, Class "A" 91.2 Yds.
Reinforcement 4665 Lbs.

BRIDGE OVER ROUGH RIVER SHEET 7

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

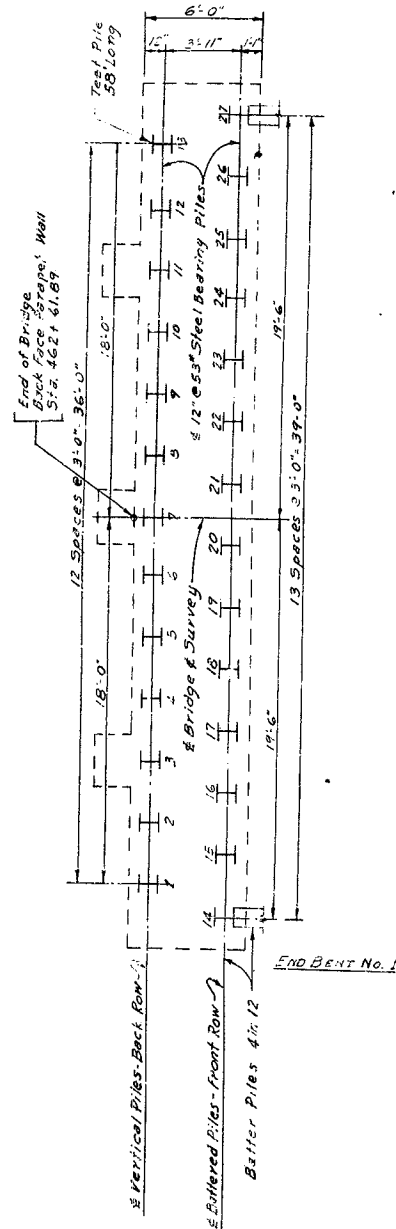
GRAYSON-BRECKINRIDGE
ROAD
HARDINSBURG — LEITCHFIELD

STATION 464 + 70.00 PROJECT NO.

BRIDGE NUMBER DRAWING INDEX
NO. 13333

ABUTMENT No. 2

TO LEITCHFIELD



PILE RECORD

Location	Pile No.	Cut-off Elev. As Shown On Plans	Tip of Pile Elevation As Driven	Pile Length In Place Lin. Ft.	Calculated Capacity in Excess of Tons
End Bent No. 1	1	526.01			
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	16				
	17				
	18				
	19				
	20				
	21				
	22				
	23				
	24				
	25				
	26				
	27		526.01		

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

CHECKED BY: [Signature] DATE: [] [] []
 REVISIONS:
 1. DATE: [] [] []
 2. DATE: [] [] []
 3. DATE: [] [] []

NOTE:
 This pile record does not replace the other records of piles required to be kept and submitted by the Resident Engineer.
 After all piles have been driven the Resident Engineer shall record the tip of pile elevation as driven, length of pile in place, and calculate the bearing capacity of each, and return one blue print copy of this sheet with this data to the Bridge Engineer to be recorded on the original plans. Length of piles in place shown hereon are the actual length of piles in the finished structure below cutoff elevation and are not necessarily the pay item.

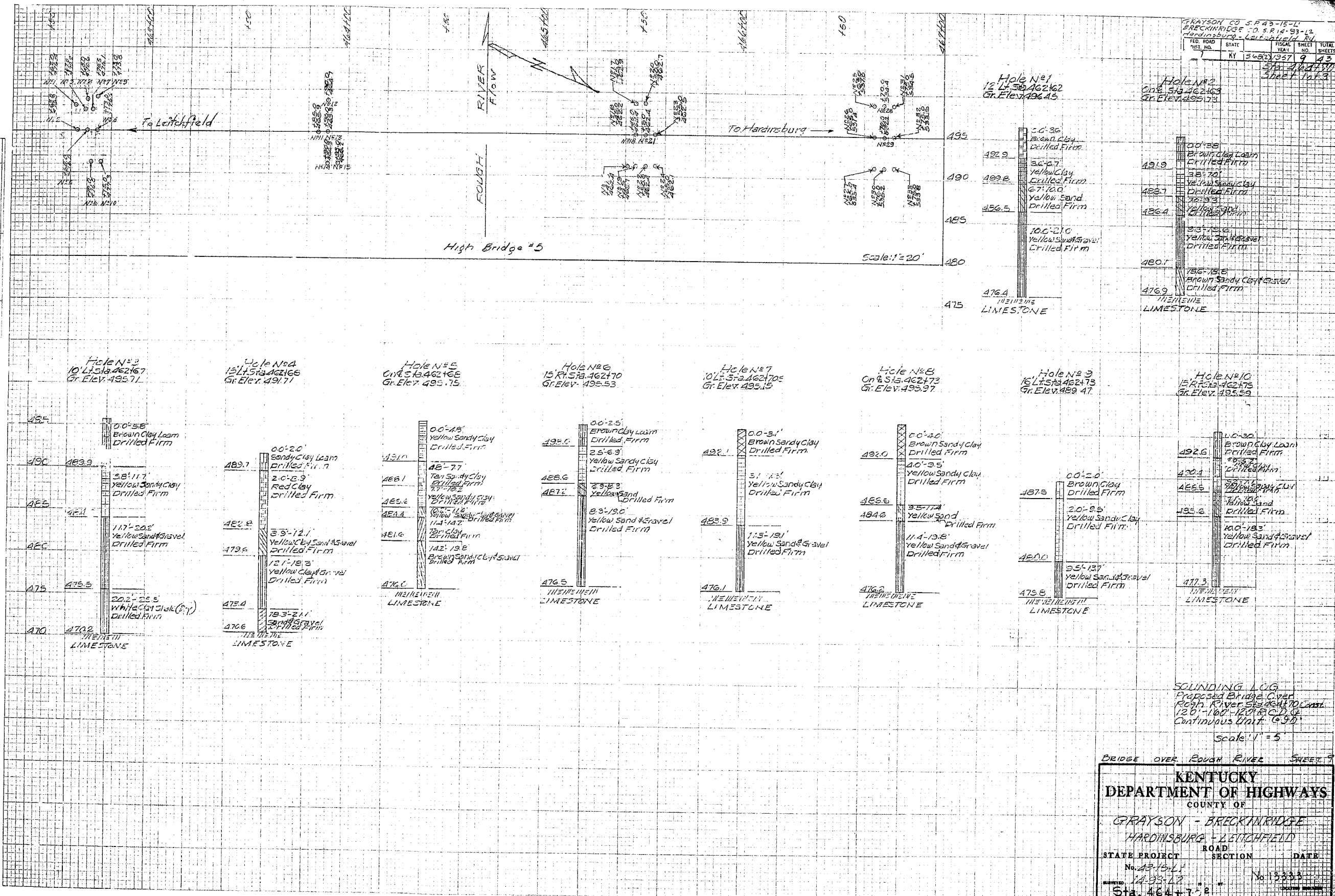
BRIDGE OVER ROUGH RIVER SHEET 8
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON BRECKINRIDGE
 HARDINGBURG — LEITCHFIELD
 ROAD
 STATION 464+70.00 PROJECT NO.
 BRIDGE NUMBER [] DRAWING NO. 19335

PILE RECORD

GRAYSON CO. S.P. 43-15-L
 BRECKINRIDGE CO. S.P. 14-93-L
 HARDINSBURG - LEITCHFIELD RD.
 KY 50621357 9 43
 SHEET NO. 1
 TOTAL SHEETS 3

DATE
 BY
 CHECKED
 APPROVED
 ENGINEER
 SURVEY
 NO. 1011
 DATE 12-1-43

DATE
 BY
 CHECKED
 APPROVED
 ENGINEER
 SURVEY
 NO. 1011
 DATE 12-1-43

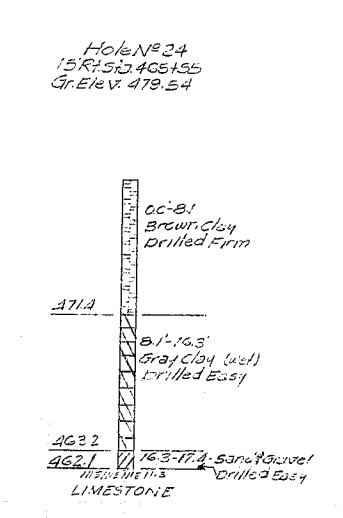
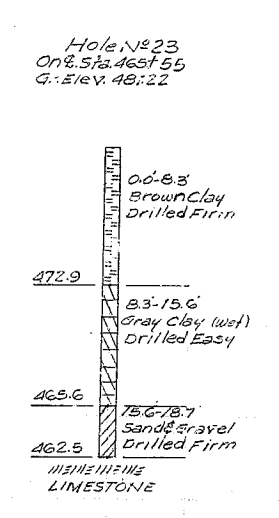
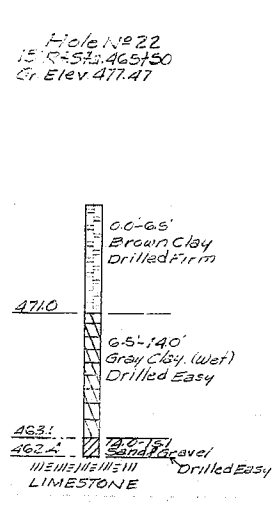
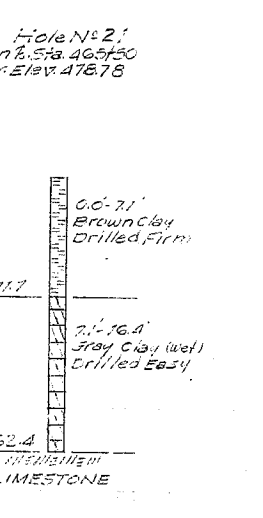
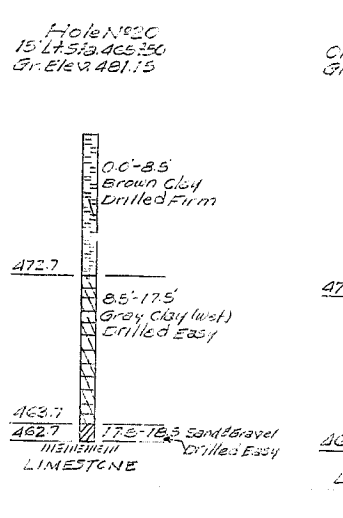
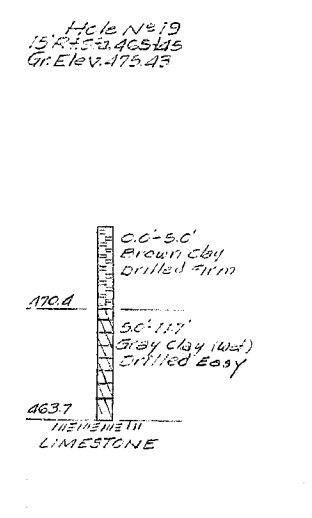
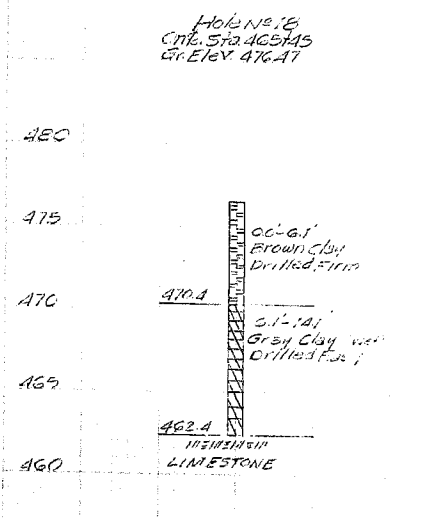
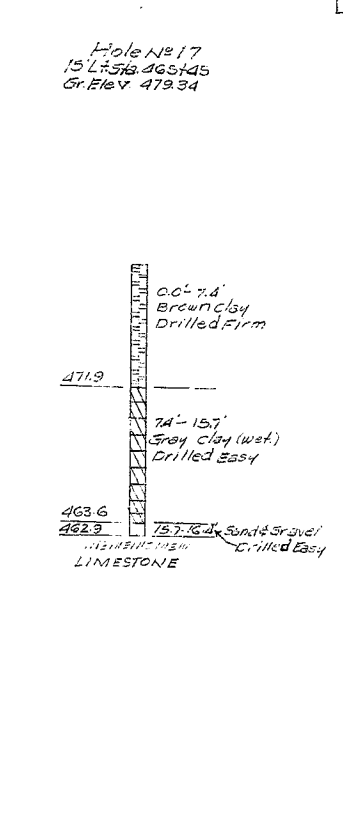
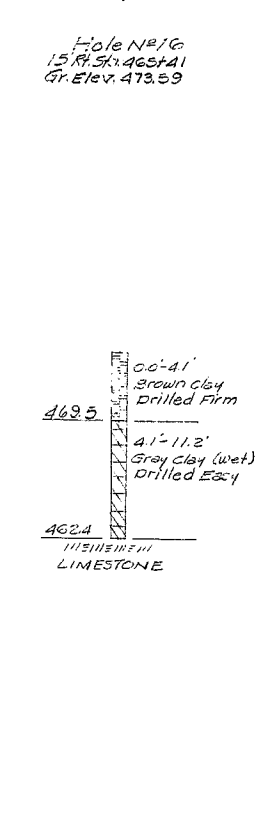
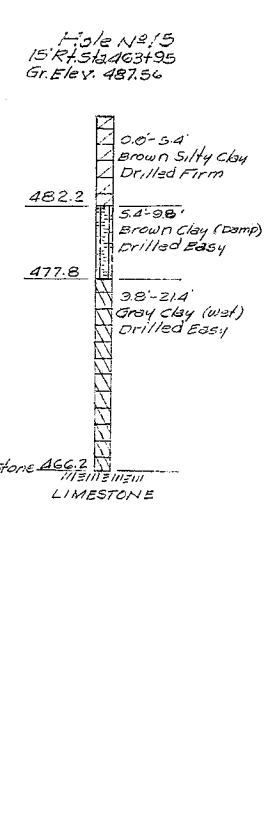
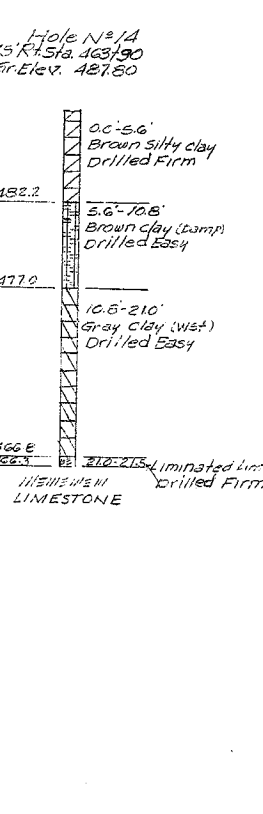
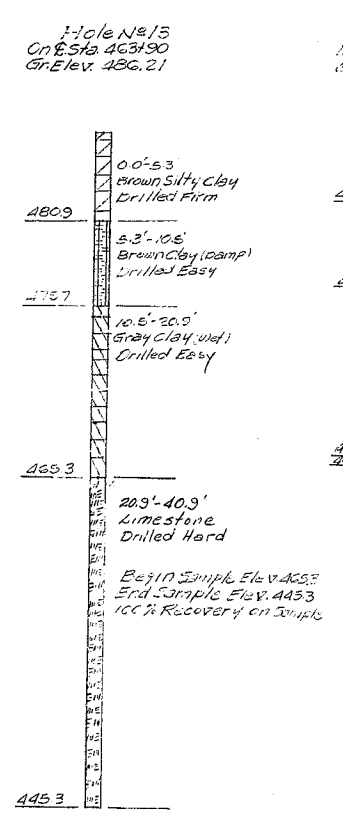
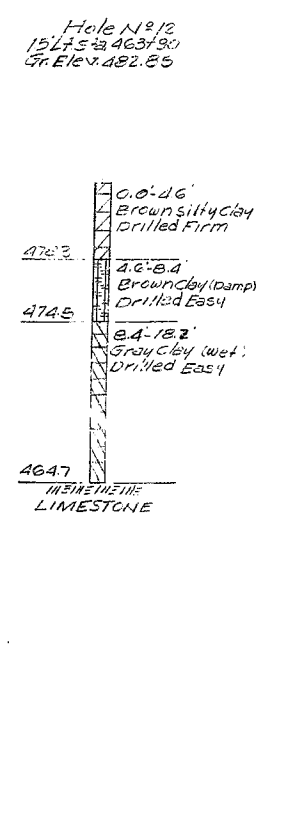
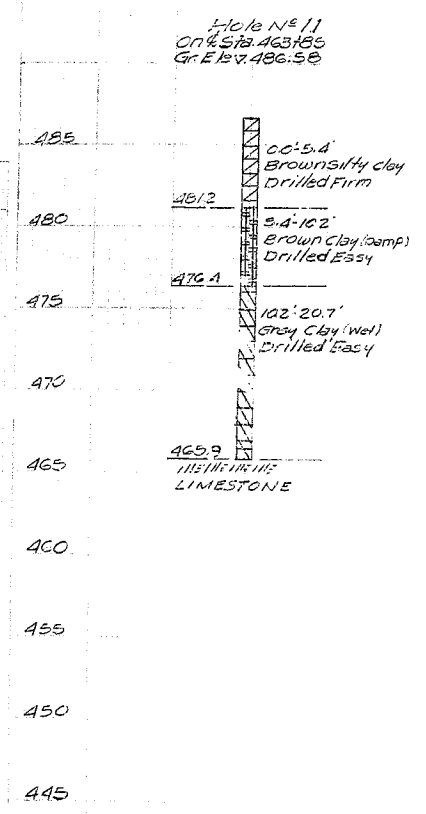


SOUNDING LOG
 Proposed Bridge Over
 Rough River Sta. 462470 to 462475
 120' - 160' - 120' C.D. & C.G.
 Continuous Unit (G.S.)
 Scale 1" = 5'

BRIDGE OVER ROUGH RIVER SHEET 9

KENTUCKY
DEPARTMENT OF HIGHWAYS
 COUNTY OF
 GRAYSON - BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 STATE PROJECT ROAD SECTION DATE
 No. 43-15-L No. 13333
 DRAWN 12-93-43
 Sta. 464+7.2

GRAYSON CO. S.P. 15-75-71		BRECKINRIDGE CO. S.P. 14-54-71		HARDINSBURG - LEITCHFIELD RD.	
FED. ROAD DIST. NO.	STATION	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
1	KY 5680	1957	10	13	



BRIDGE OVER ROUGH RIVER SHEET 10

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

GRAYSON - BRECKINRIDGE
HARDINSBURG - LEITCHFIELD
ROAD

STATION 464+70.2 PROJECT NO. 43-15-61

BRIDGE NUMBER DRAWING NO. 13339

GRAYSON CO. S.P. 15-11			
BRECKINRIDGE CO. S.P. 15-11			
HARDINSBURG - LEITCHFIELD RD.			
FED. ROAD DIST. NO.	STATE	FISCAL YEAR	TOTAL SHEETS
1	KY	1967	43

Hole No 25
15 Lt. Sta. 466765
Gr. Elev. 535.23

Hole No 26
On R. Sta. 466765
Gr. Elev. 535.03

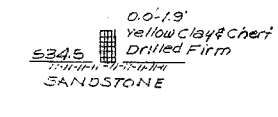
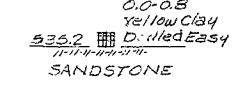
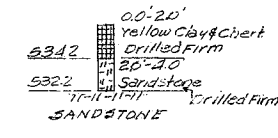
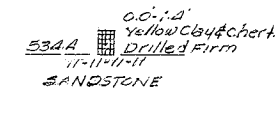
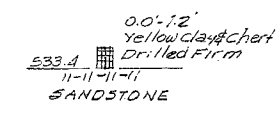
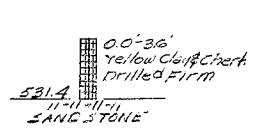
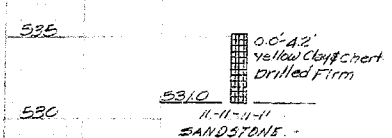
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15 Rt. Sta. 466770
Gr. Elev. 534.64

Hole No 28
15 Lt. Sta. 466770
Gr. Elev. 535.77

Hole No 29
On R. Sta. 466770
Gr. Elev. 536.18

Hole No 30
15 Rt. Sta. 466770
Gr. Elev. 536.02

Hole No 31
15 Lt. Sta. 466775
Gr. Elev. 536.40



Hole No 32
On R. Sta. 466775
Gr. Elev. 537.02

Hole No 33
15 Rt. Sta. 466775
Gr. Elev. 537.24



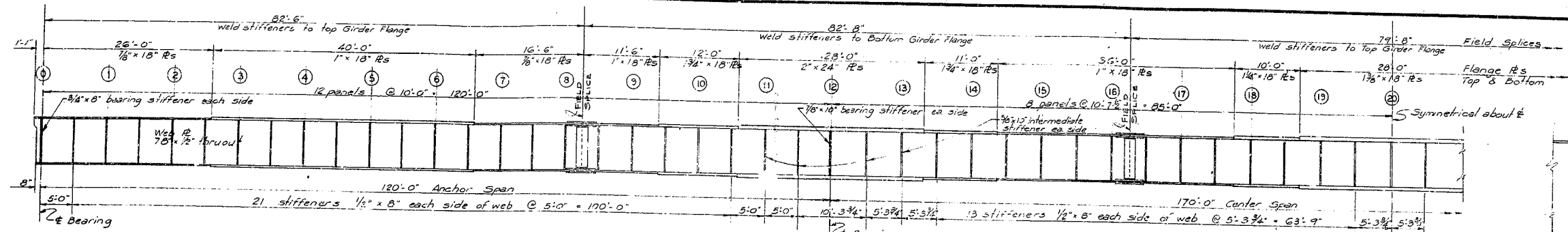
BRIDGE OVER ROUGH RIVER SHEET 11

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF

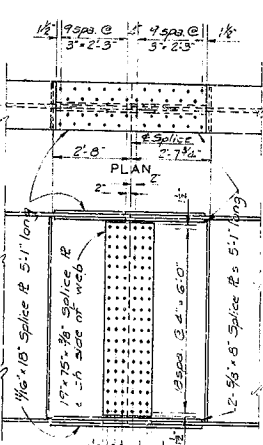
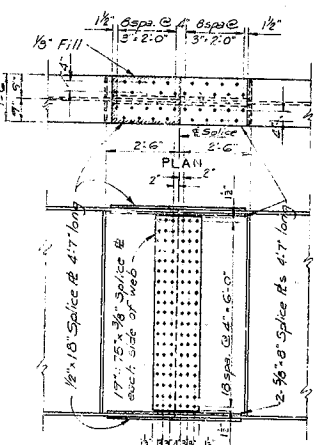
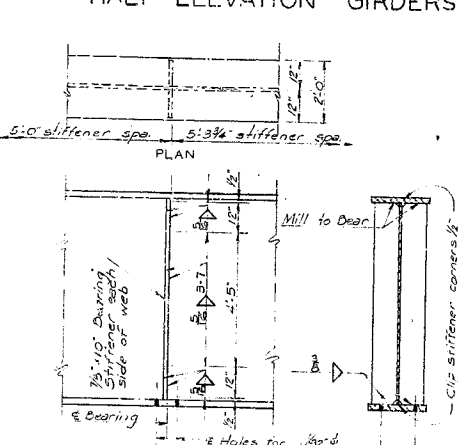
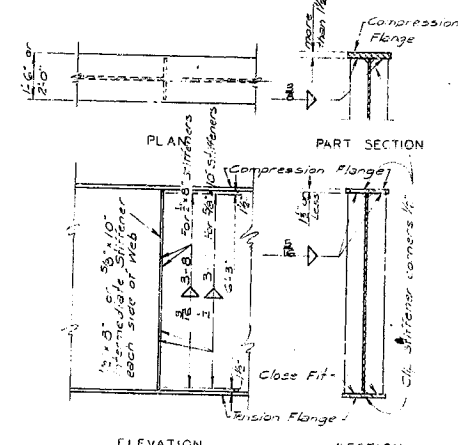
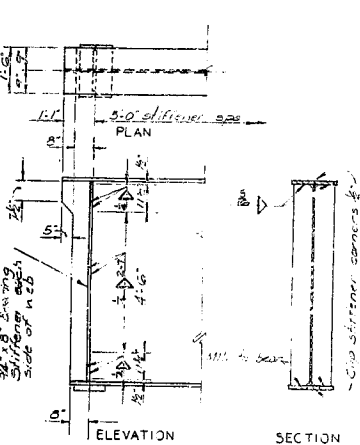
GRAYSON — BRECKINRIDGE
HARDINSBURG — LEITCHFIELD
ROAD

STATION 464 + 702 PROJECT NO. 43-15-11

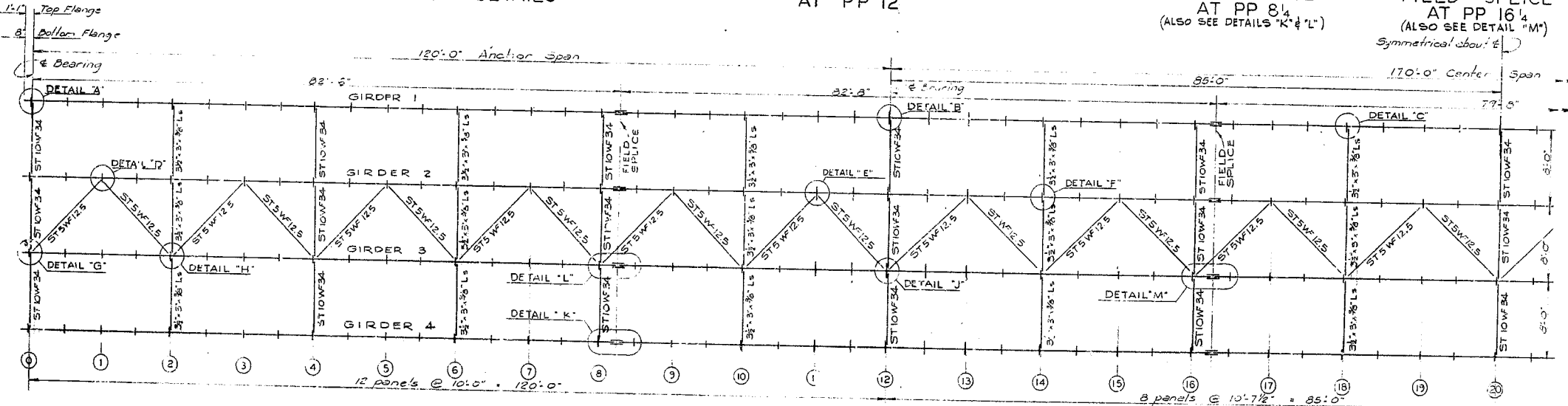
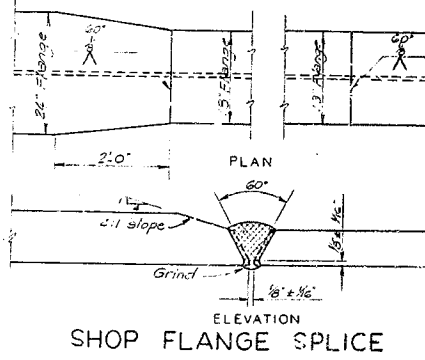
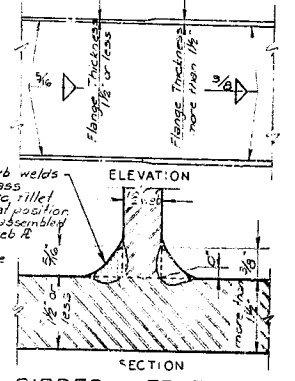
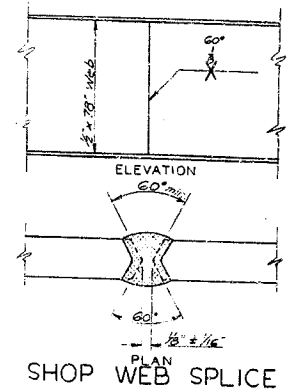
BRIDGE NUMBER	DRAWING NO. 13333	INDEX
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HALF ELEVATION GIRDERS 1 THRU 4



NOTE - Flange to web welds to be single pass submerged arc filled with the flat position with arc to be assembling with edge of web flange & before welding.



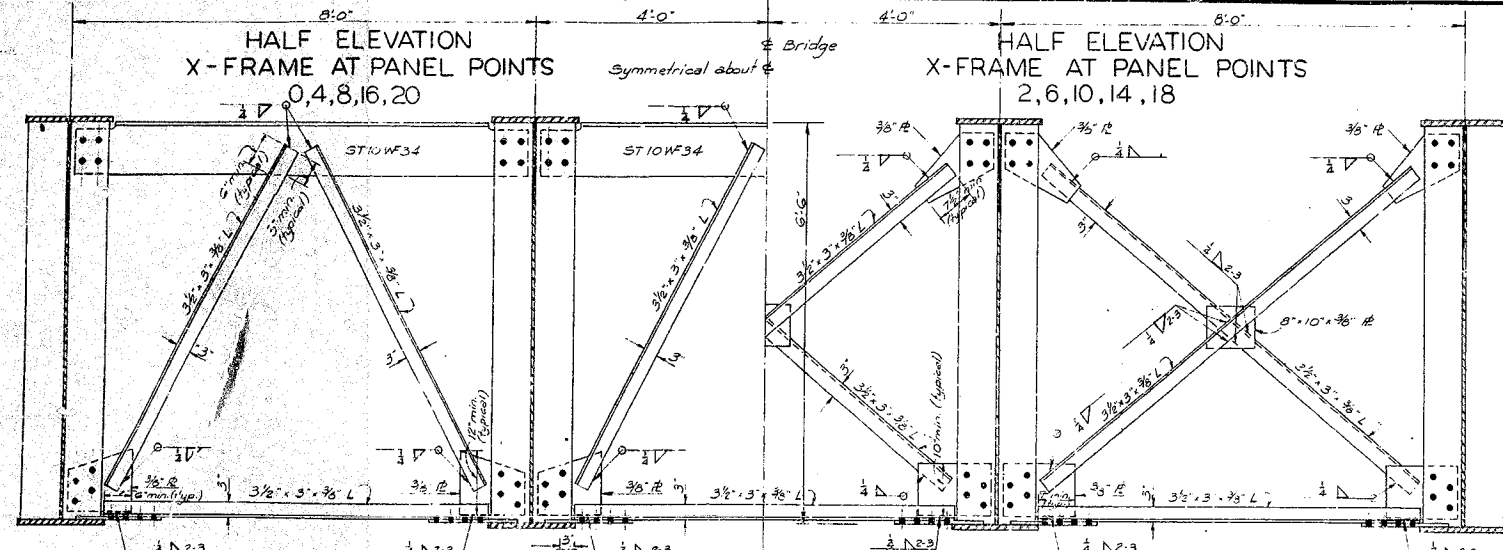
HALF FRAMING PLAN

120'-170'-120' CONT. WELDED PLATE GIRDER
WORK SHEETS 12 THRU 14 TOGETHER

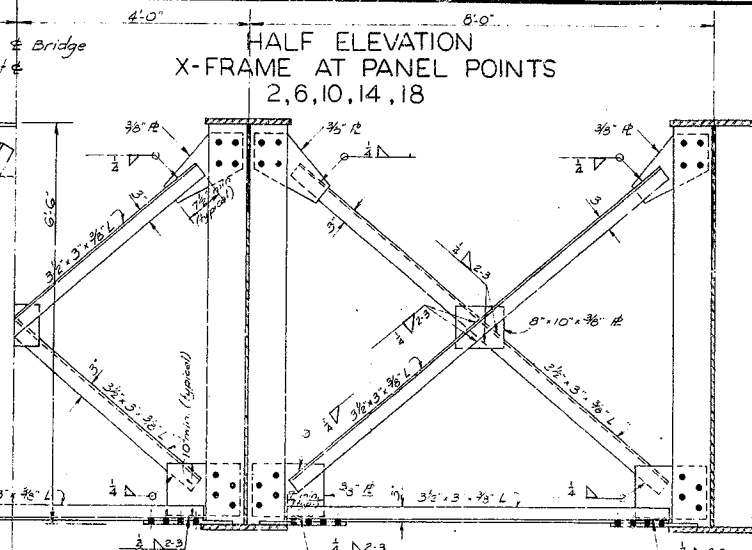
BRIDGE OVER ROUGH RIVER SHEET 12

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAYSON-E RECKINRIDGE
HARDINSBURG-LEITCHFIELD
RO. 10

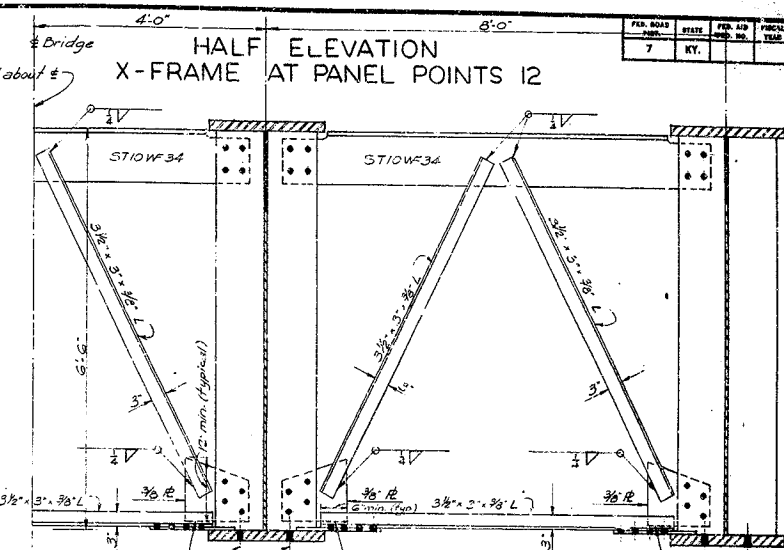
STATION 464 + 70.2 PROJECT NO. _____
BRIDGE NUMBER _____ DATE _____
NO. 13833



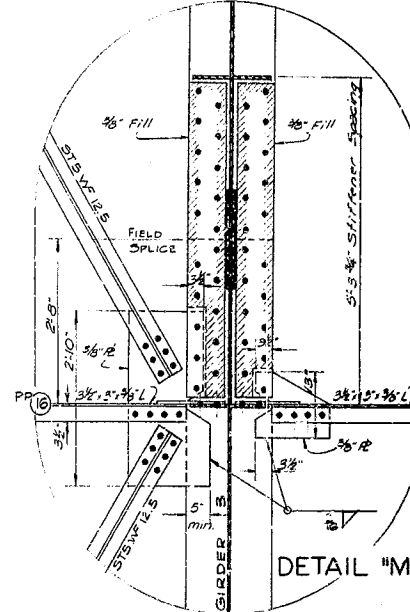
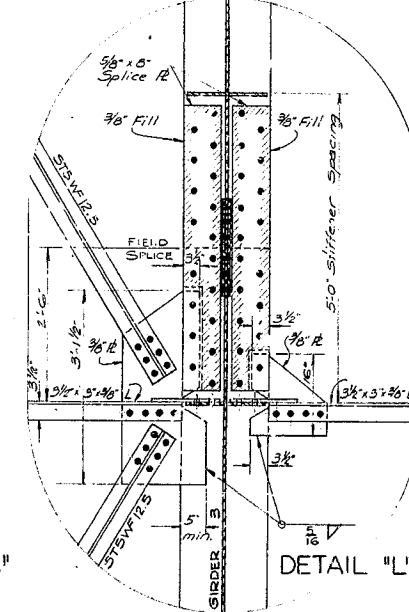
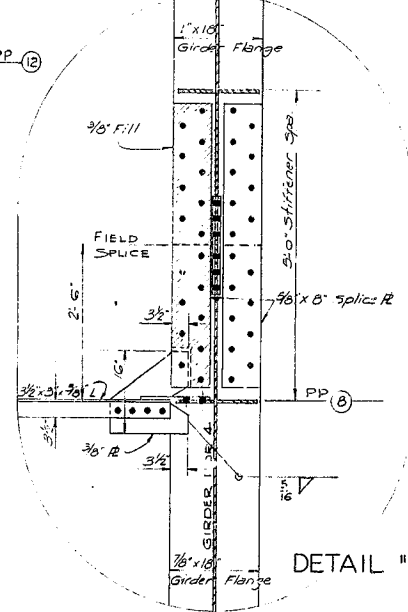
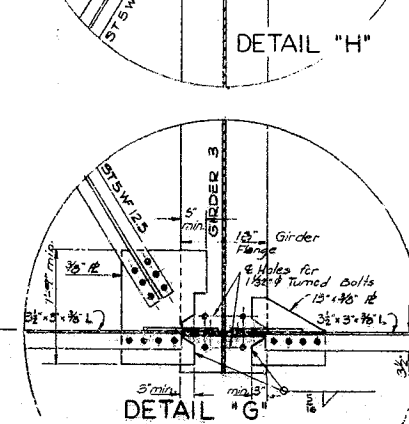
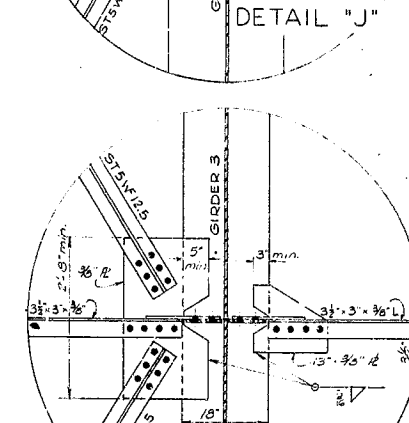
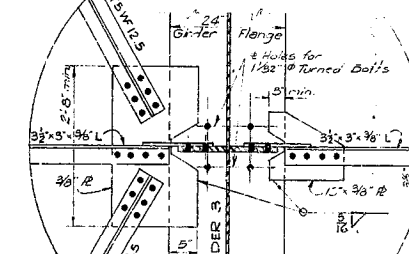
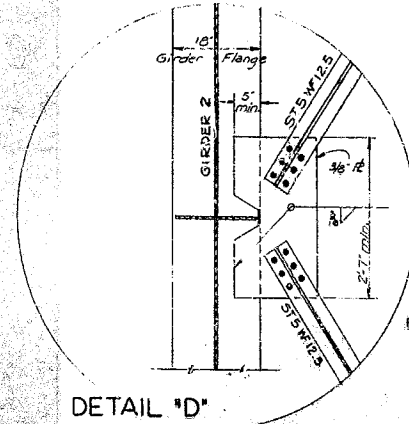
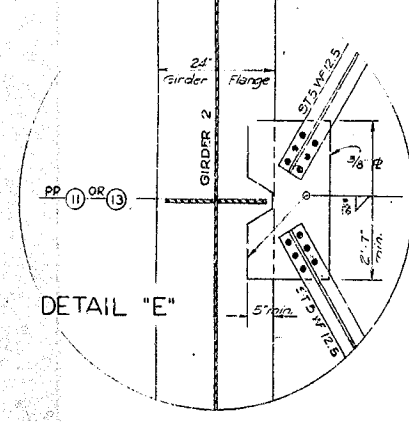
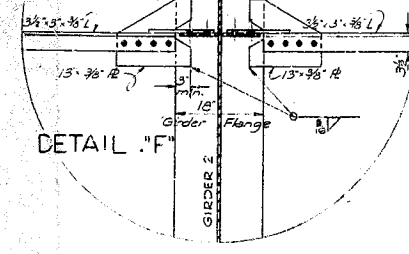
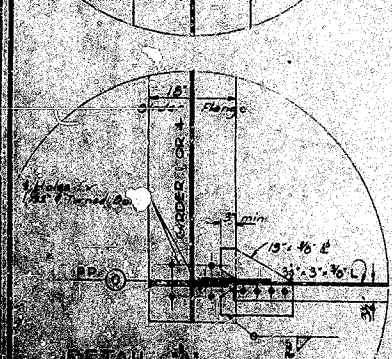
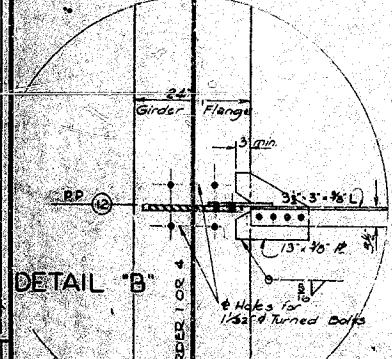
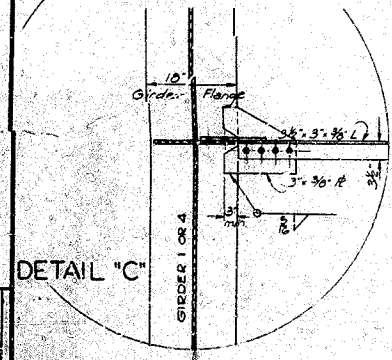
Symmetrical about ϵ



Symmetrical about ϵ



REV.	DATE	BY	CHKD.	APP.
7	KT.			



120'-170'-120' CONT. WELDED PLATE GIRDER
WORK SHEETS 12 THRU 14 TOGETHER

BRIDGE OVER ROUGH RIVER SHEET 13

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAYSON - BRECKINRIDGE
HARDINSBURG - LEITCHFIELD
ROAD

1 A 464-702 PROJECT NO.
DATE
NUMBER

no. 13333

DESIGNED BY C. C. COOK	CHECKED BY J. J. STANLEY	DATE 12/1/50
REVISED	DATE	DATE
BY	DATE	DATE

STRUCTURAL STEEL NOTE

SPECIFICATIONS: KENTUCKY DEPARTMENT OF HIGHWAYS STANDARDS, 1950 EDITION WITH AMENDMENTS.
DESIGN LOADING: BRIDGE IS DESIGNED FOR REG-FULL LOADING AS SPECIFIED IN A.A.S.H.O. SPECIFICATIONS, 1957 EDITION.
MATERIALS: A.S.T.M. SPECIFICATIONS HEREINAFTER DESIGNATED SHALL GOVERN THE MATERIALS FURNISHED.

MATERIAL

STRUCTURAL STEEL (STIFFENERS, BRACING, SPLICES, ANCHOR BOLTS, EXP. DIMS. SECT. & ROUGHEN, BEARING FLS.)	A572-50T
STRUCTURAL STEEL (FLANGE & WEB OF MAIN GIRDERS)	A572-50T
HIGH-STRENGTH BOLTS, NUTS & WASHERS	A490-50T
STEEL PINS	A490-50T
GRAY IRON CASTINGS	A188-50
MOLDED LEAD	ASTM B-29
LEAD PASTES, COMMERCIAL GRADE	A157-50T
STEEL MACHINE NUTS & BOLTS	A193-50T

WELDING: NOTARIZED TEST REPORTS IN TRIPLICATE SHALL BE FURNISHED TO THE KENTUCKY DEPARTMENT OF HIGHWAYS SHOWING THAT ALL MATERIALS FURNISHED CONFORM TO THE SPECIFICATIONS.
DIMENSIONS: DIMENSIONS ARE FOR A NOMINAL TEMPERATURE OF 60° FAHRENHEIT WITH DEAD LOAD ON THE STRUCTURE.
PAINT: ALL STRUCTURAL STEEL SHALL BE GIVEN ONE SHOP COAT OF TYPE 1, RED LEAD PAINT, AND TWO FIELD COATS OF ALUMINUM PAINT IN ACCORDANCE WITH THE SPECIFICATIONS, EXCEPT AS NOTED. SHOP PAINT SHALL NOT BE APPLIED TO SURFACES WHERE HIGH-STRENGTH STEEL BOLTS ARE USED FOR FIELD CONNECTIONS. SURFACES IN CONTACT WITH THE CONCRETE ARE NOT TO BE PAINTED.
SHOP ASSEMBLY: GENERAL REMARKING OF BOLTS FOR EACH FIELD SPlice WILL BE REQUIRED WITH ALL PARTS FOR EACH FIELD COMPLETELY SHOP ASSEMBLED, PARTS ADJUSTED TO LINES, AND GUMMER FIT FOR DRILLING OR REWORKING. THIS APPLIES TO FIELD SPICES IN GIRDERS ONLY. GIRDERS SHALL REMAIN ASSEMBLED FOR INSPECTION BY THE DEPARTMENT OF HIGHWAYS INSPECTOR. REVISIONS TO BE MATCHMAKED WHILE ASSEMBLED. OTHER FIELD CONNECTIONS SHALL BE DRILLED OR REWORKED IN THE SHOP WITH CONNECTION PARTS ASSEMBLED, OR SHALL BE DRILLED OR REWORKED TO A METAL TEMPLATE WITHOUT ASSEMBLY.
FIELD CONNECTIONS: HIGH-STRENGTH STEEL BOLTS TO BE USED IN ACCORDANCE WITH 5-2.3.1-4-5 (1) OF THE SPECIFICATIONS.
SHOP DETAIL DRAWINGS: THE CONTRACTOR SHALL SUBMIT SHOP DETAIL DRAWINGS OF ALL STRUCTURAL STEEL TO THE ENGINE ENGINEER FOR APPROVAL IN ACCORDANCE WITH SECTION 5-2.3.1-1 OF THE SPECIFICATIONS. THE SHOP DETAIL PLANS SHALL SHOW DEFINITE WELDING PROCEDURES FOR ALL FABRICATION WORK.

WELDING: WELDING AND WELDING MATERIALS SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY SPECIFICATIONS FOR WELDED TUBULAR AND RAILROAD BRIDGES, 1950 EDITION. NO DIRECT PAYMENT SHALL BE MADE FOR WELDING OR WELDING MATERIAL BUT PRICES FOR SHOP SHALL BE INCLUDED IN THE UNIT PRICE FOR EACH ITEM OF STRUCTURAL STEEL.
SHOP SPICES: ALL SHOP SPICES IN FLANGE PLATES AND WEB PLATES SHALL BE MADE WITH WELDING FLAP PLATE TO WEB PLATE. ALL SHOP WELDED SPICES SHALL BE MADE ON SHOP DRAWING.
SHOP WELDS: EXTENSION BARS SHALL BE USED IN MAKING BUTT JOINTS IN THE GIRDER FLANGES, SEE A.A.S. SECTION 506.4 (4). A SUBSIDIARY AND STOLE PASS FITTED WELD IN THE FLAT POSITION IS TO BE USED TO CORRECT THE FLANGE PLATES TO FIT WEB PLATES.
RADIOGRAPHIC TESTS: RADIOGRAPHIC TESTS OR DISCONTINUITY OF WELD IN JOINTS ARE TO BE MADE BY THE FERRUGY DEPARTMENT OF HIGHWAYS IN ACCORDANCE WITH A.S.T.M. E1-57 SPECIFICATIONS. THIS SERVICE IS TO BE AN INSPECTION OF HIGHWAYS. ALL BUTT WELDS SHALL BE OF SATISFACTORY QUALITY AS DETERMINED BY RADIOGRAPHIC INSPECTION. INTERPRETATION AND REPORTS SHALL BE DETERMINED BY THE KENTUCKY DEPARTMENT OF HIGHWAYS. RADIOGRAPHY SHALL BE USED IN CONNECTION WITH INSPECTION QUALIFICATION TESTS TO DETERMINE THE NATURE, EXTENT AND CORRECTION OF DEFECTS. RADIOGRAPHY SHALL BE MADE OF EACH WELDING OPERATOR'S WORK FOR UNUSUAL CIRCUMSTANCES, NOT OVER ONE OF THE SHOP WELDS WILL BE RADIOGRAPHED, BUT ONE OF THE SHOP BUTT JOINT FLANGE WELDS ARE TO BE RADIOGRAPHED. RADIOGRAPHY SHALL BE MADE OF EACH WELDING OPERATOR'S WORK FOR WELDS MADE BY THE ASSEMBLY OF THE BUILT UP GIRDERS. A SPOT RADIOGRAPH SHALL BE TAKEN FOR EACH 50 FEET OF LONGITUDINAL FLANGE WELD IN ADDITION TO THOSE NECESSARY FOR PROCEDURE QUALIFICATION. UNLESS SO DESIGNATED ON THE PLANS, NO RADIOGRAPHS WILL BE MADE OF THE SPICES, JOINTS, ETC. THE CONTRACTOR (INSPECTOR) WILL REMOVE DEFECTIVE WELDS AND REPLACE IT WITH ACCEPTABLE WORK AS IS PROVIDED IN PARAGRAPH 106. (4) OF THE A.A.S. SPECIFICATION.
SPICES OF BUTT WELDS THAT ARE SHOWN BY RADIOGRAPHY TO HAVE ANY OF THE FOLLOWING TYPES OF IMPERFECTIONS SHALL BE REWORKED AND REPAIRED:
 (1) ANY TYPE OF CRACK OR ZONE OF INCOMPLETE FUSION OR PENETRATION.
 (2) ANY ELONGATED SLAG INCLUSION WHICH HAS A DIMENSION GREATER THAN 1/8" FOR T UP TO 1/4", AND 1/3" FOR T FROM 1/4" TO 2 1/4", WHERE T IS THE THICKNESS OF THE THINNER PLATE BEING WELDED.
 (3) POROSITY IN EXCESS OF THAT SHOWN BY PICTURES STANDARD AS DESIGNATED IN SECTION VIII OF THE ASME BOILER CODE, PARAGRAPH 11.4.1, SUBPARAGRAPH (b) (1).
 (4) ANY TYPE OF CRACK OR ZONE OF INCOMPLETE FUSION OR PENETRATION.
 (5) ANY ELONGATED SLAG INCLUSION WHICH HAS A DIMENSION GREATER THAN 2/3" T WHERE T IS THE THICKNESS OF THE THINNER PLATE BEING WELDED. ANY SUCH IMPERFECTION 1/8" OR LESS SHALL BE ACCEPTABLE FOR ANY PLATE THICKNESS. IN ANY OF THE ABOVE RADIOGRAPHS, THE DISCOVERY OF SUCH IMPERFECTIONS SHALL REQUIRE THAT ADDITIONAL RADIOGRAPHS BE MADE OF EITHER THE AREA SHOWING DEFECTS, OR OTHER WORK DONE BY THE SAME OPERATOR WHOSE WORK IS NOT ACCEPTABLE.
STRUCTURAL STEEL: FOR PURPOSE OF PAYMENT "LUMP SUM BID" FOR STRUCTURAL STEEL INCLUDES STRUCTURAL STEEL, BOLTS, STEEL PINS, CAST IRON, LEAD PLATES OR PRESERVED FABRIC PLATES, IF USED.
FIELD SPICES: IF ADDITIONAL FIELD SPICES ARE PERMITTED IN GIRDERS, THESE SPICES SHALL BE AT THE CONTRACTOR'S EXPENSE AND SHALL BE INCLUDED IN THE LUMP SUM BID FOR STRUCTURAL STEEL.

ESTIMATE OF QUANTITIES

* STRUCTURAL STEEL	626,400	Lbs.
STEEL PINS	304	Lbs.
CAST IRON	1480	Lbs.
LEAD PLATES	316	Lbs.
TOTAL	628,500	Lbs.

* Does not include any weld material

WORK SHEETS 12 THRU 14 TOGETHER
 120'-170'-120' CONTINUOUS
 WELDED PLATE GIRDER

Bridges Over Rough River Sheet 14

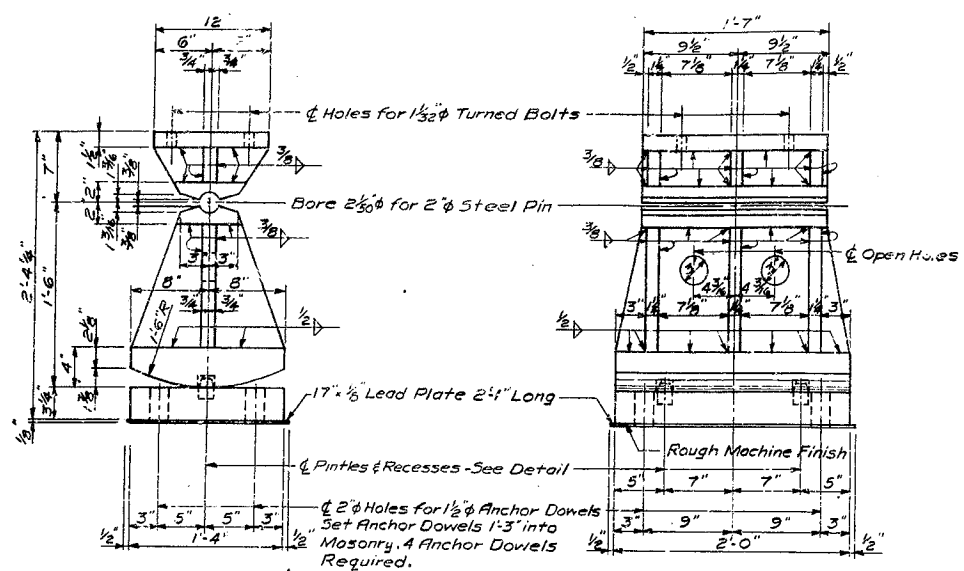
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON-BRECKINRIDGE
 HARDINSBURG-LEITCHFIELD

ROAD PROJECT NO.

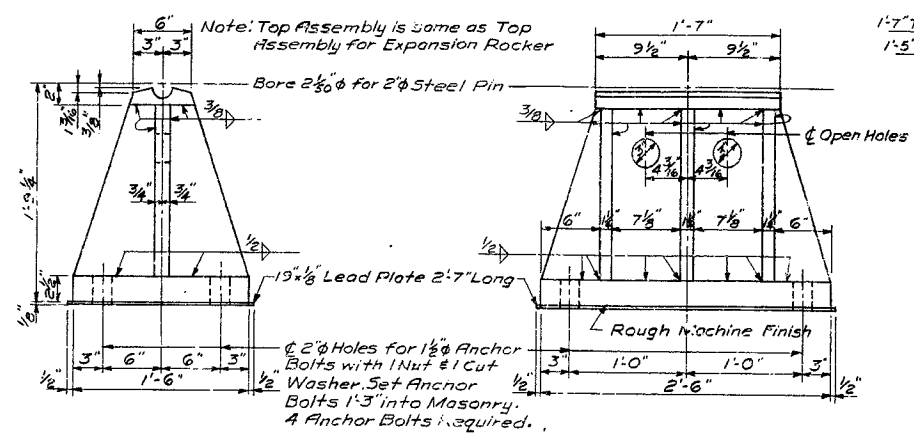
STATION 464+70.00

BRIDGE NUMBER DRAWING NO. 13333

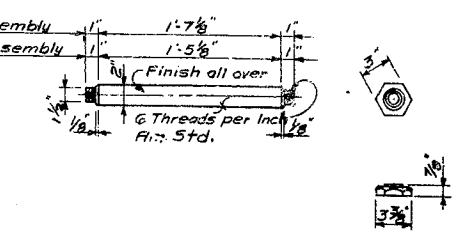
PROJ. NO.	STATION	TOTAL SHEETS	TOTAL SHEETS
7	KY.		



EXPANSION ROCKER
 4 Required
 Weight of 1 Assembly
 * Structural Steel = 1212.0 Lb.
 Pin Steel = 20.0 Lb.
 Lead Plate = 21.0 Lb.



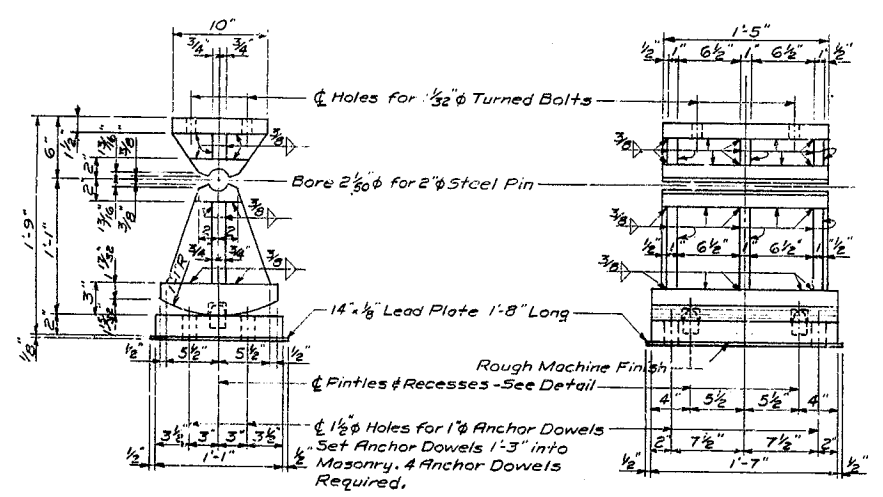
FIXED SHOE
 4 Required
 Weight of 1 Assembly
 * Structural Steel = 1015.0 Lb.
 Pin Steel = 20.0 Lb.
 Lead Plate = 30.0 Lb.



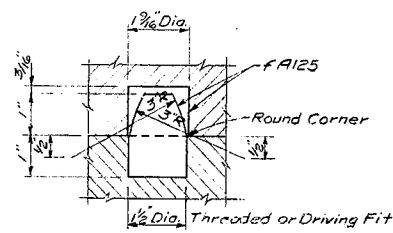
STEEL PIN
 8 Required 1'9 1/2" Long
 2 Required 1'7 1/2" Long
 Weight of 1'7 1/2" Long Pin = 20.0 Lb.
 Weight of 1'5 1/2" Long Pin = 18.0 Lb.

NOTES

- Specifications — Kentucky Department of Highways 1936 Standard with Amendments.
- Paint — All material shown on this sheet except finished surfaces of steel pins and pin bearing surfaces shall be given one shop coat of lead paint according to specifications. All exposed surfaces not in contact with concrete shall be given two field coats of aluminum paint in accordance with specifications.
- Welding Material — Welding material shall conform to the American Welding Society Specifications for Welded Highway and Railway Bridges, 1936 Edition and subsequent adopted amendments.
- Welding — The cost of welding material and labor to be included in the lump sum bid for structural steel. No direct payment will be made for welding and welding materials.
- Anchor Dowels — The cost of lead required to set anchor dowel and the cost of drilling anchor dowel holes shall be included in the lump sum bid for structural steel. The Contractor shall be responsible for keeping holes dry in wet and freezing weather. At the time of setting, anchor dowels are to be heated to a blue heat to assure free flow of lead to bottom of hole.
- White Lead & Tallow — Finished surfaces of steel pins and pin bearing surfaces in steel shoes shall be coated with white lead and tallow in accordance with current specifications with amendments.
- Plates — Plates must be true and free of warp.
- Mill Test Reports — Notarized statements in triplicate shall be furnished the Department of Highways showing that all structural steel furnished meets specifications.
- Shop Plans — The Contractor shall furnish the Department of Highways with complete shop detail plans in accordance with Article 5.23A.1. of the Specifications.
- Masonry Bearing Plates — One-eighth (1/8) inch thick iron plates or preformed fabric pads may be used.



EXPANSION ROCKER
 3 Required
 Weight of 1 Assembly
 * Structural Steel = 376.0 Lb.
 Pin Steel = 18.0 Lb.
 Lead Plate = 14.0 Lb.



DETAIL OF PINDLE AND RECESS

* Weight includes Anchor Dowels, but does not include Lead Plate, Pin Steel, or Weld Material

SURFACE FINISH OF STEEL - SPECIFICATIONS	
Steel Slabs	A. S. A. 2000
Heavy Plates in Contact in Shoes, to be Welded	A. S. A. 1000
Milled Ends of Compression Members, Stiffeners & Fillers	A. S. A. 500
Bridge Rollers and Rockers	A. S. A. 250
Ribs and Pin Holes	A. S. A. 125

A. S. T. M. SPECIFICATIONS	
Structural Steel	A7-56T
Steel Pins	A 100-52T Grade 1016 to 1030 Incl.
Sheet Lead & Lead for Anchor Dowel Holes	B29-49

ROCKERS & SHOES

BRIDGE OVER ROUGH RIVER SHEET 15

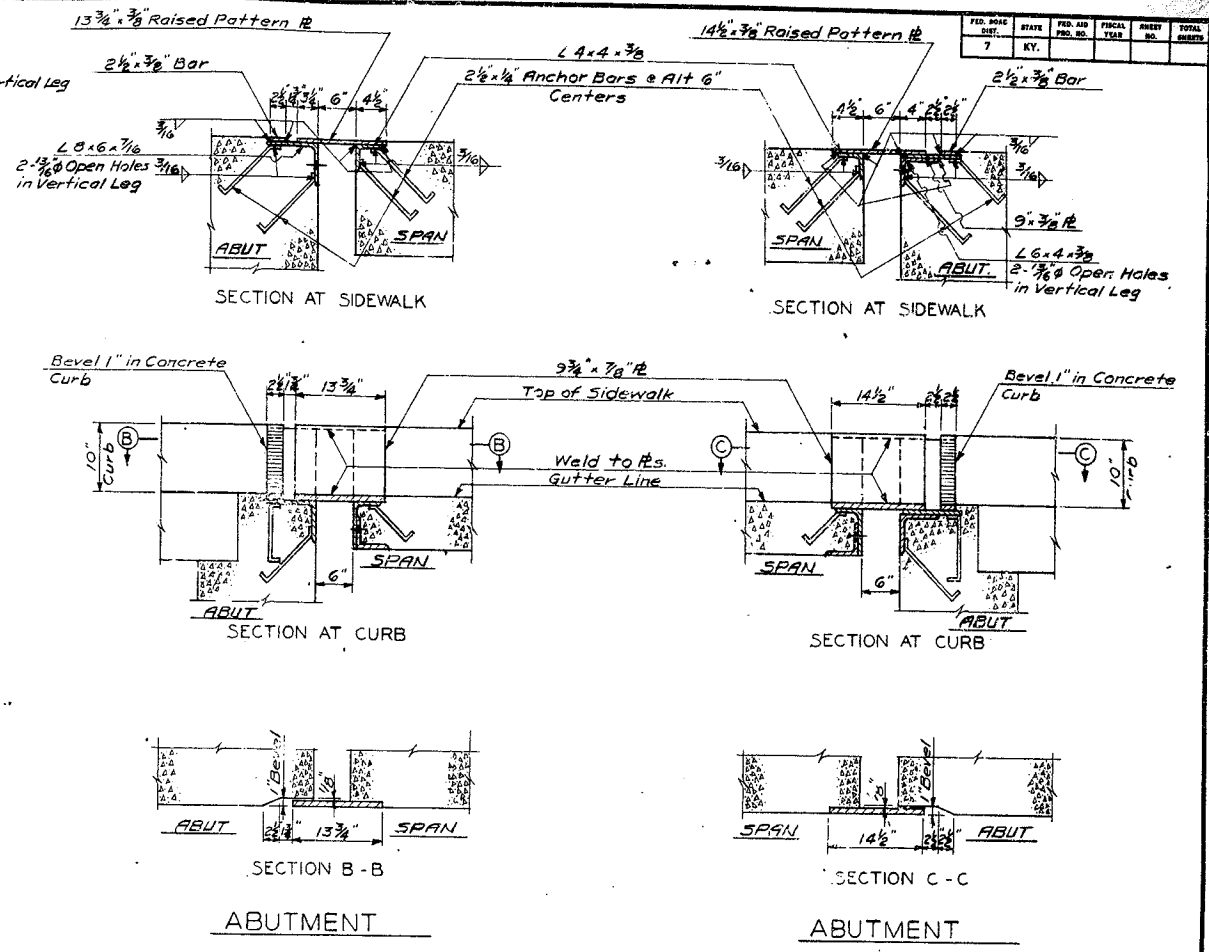
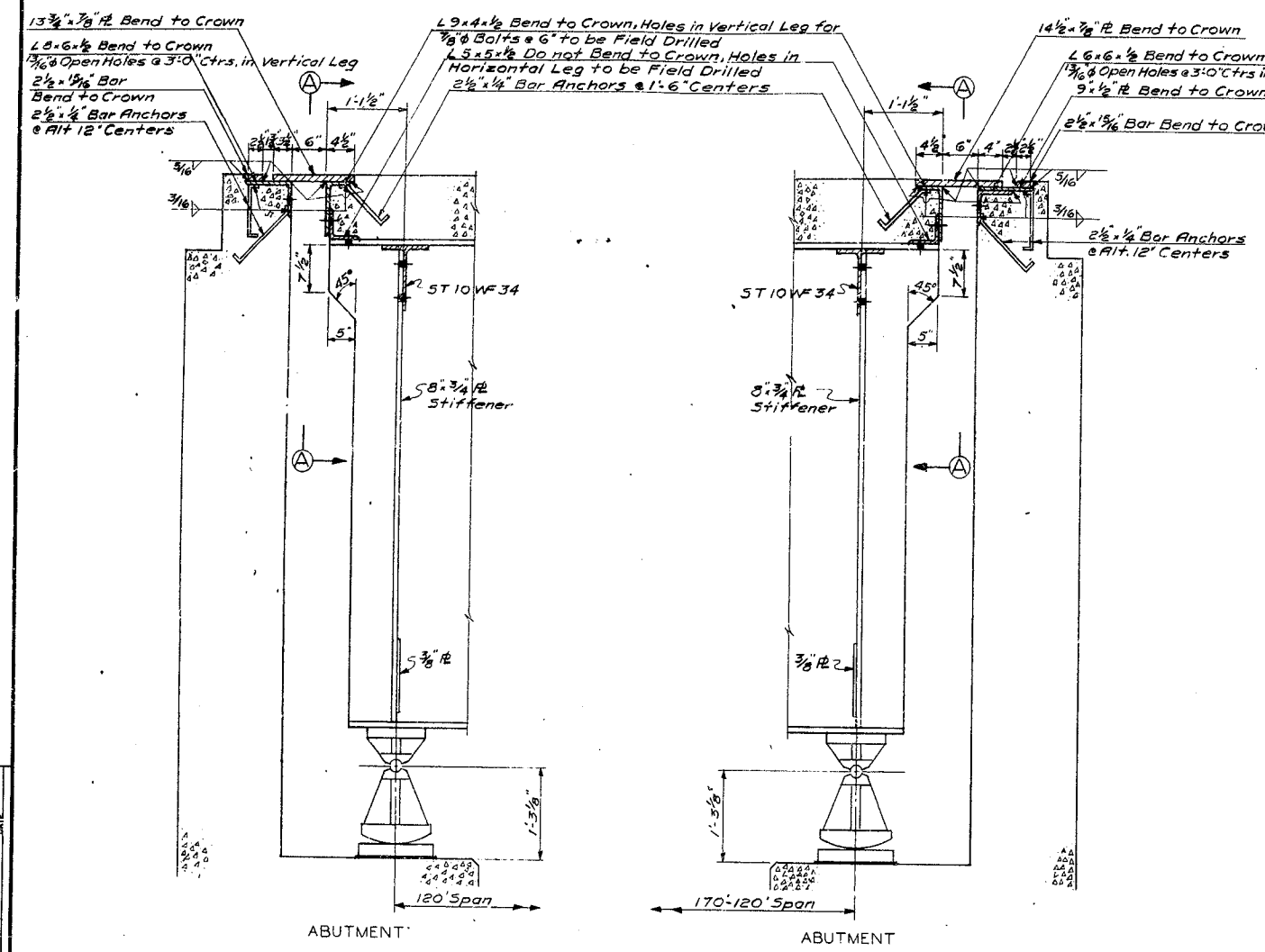
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF

GRAYSON-BRECKINRIDGE
 HARDINSBURG — LEITCHFIELD
 ROAD

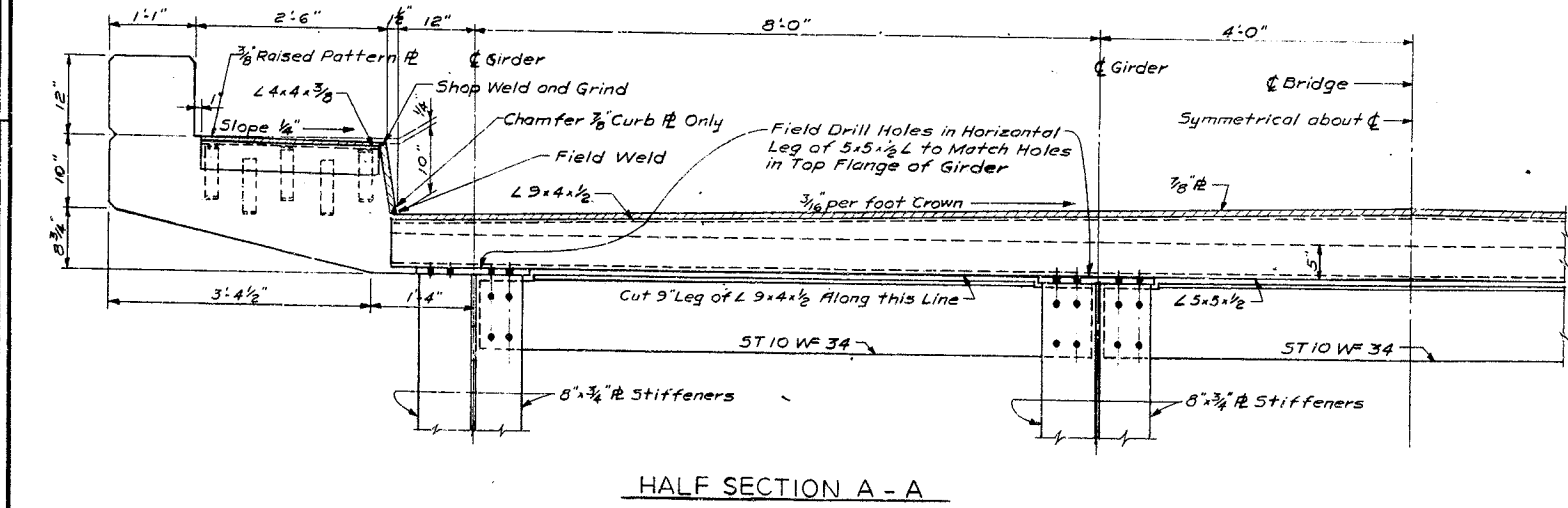
STATION 464 + 70.00 PROJECT NO.

BRIDGE NUMBER DRAWING NO. 13335

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



Note: All Expansion Devices are shown in normal position at a temperature of 60°F. and are detailed to these dimensions. At other temperatures dimensions will vary from those shown.



EXPANSION DETAILS

DESIGNED BY: [Signature] CHECKED BY: [Signature] DATE: [Date]
 DRAWN BY: [Signature] CHECKED BY: [Signature] DATE: [Date]
 TRACED BY: [Signature]

Bridge over Rough River Sheet 16

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF

GRAYSON-BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464 + 30.22 PROJECT NO. [Blank]
 BRIDGE NUMBER [Blank] DRAWING INDEX [Blank]
 NO. 13933

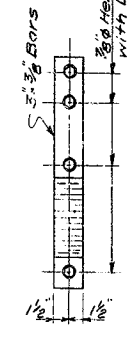
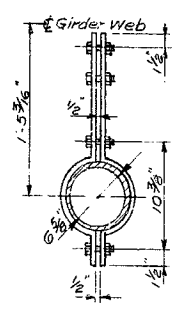
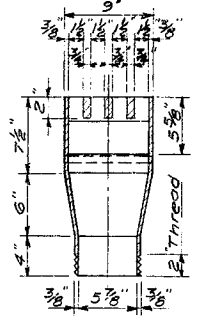
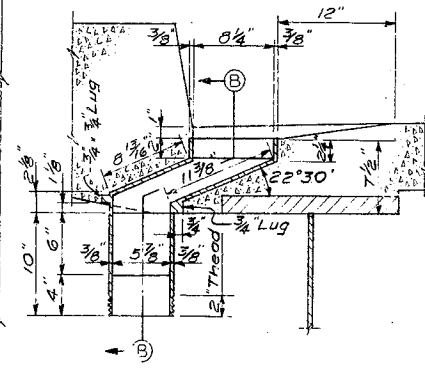
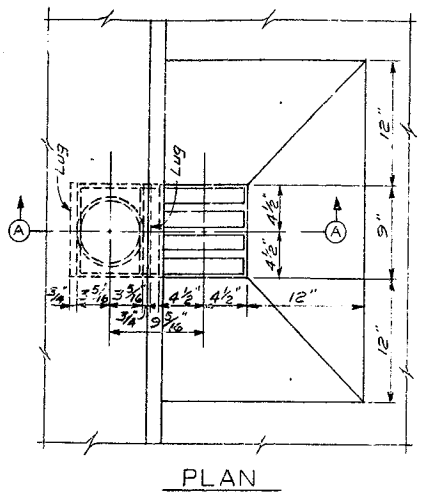
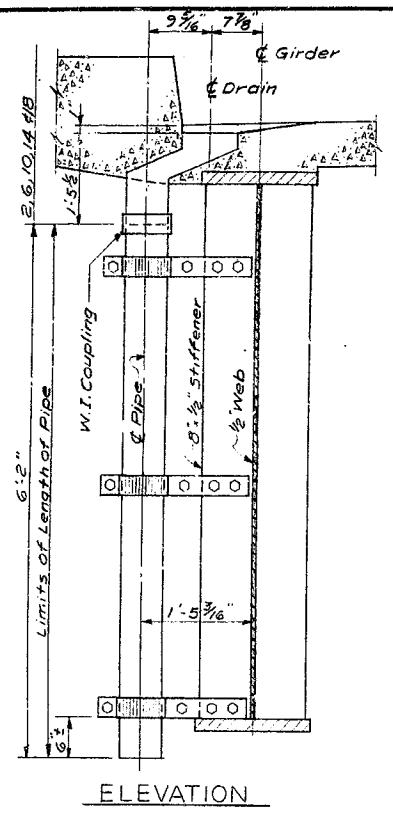
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				

NOTES

Foundry Note:
 All drains to be gray iron castings A.S.T.M. A48-56 except that tensile and transverse tests are not required. Form T-521 Report of Field Inspection of Castings is to be submitted to the Laboratory. Drains are to be furnished by the Superstructure Contractor and the cost of furnishing and placing same is to be included in the lump sum bid price for Structural Steel.

Wrought Iron Pipe:
 Wrought iron pipe is to be 6" Standard Weight 130 lb. per linear foot in accordance with A.S.T.M. A72-56T. Pipe, fittings, and connections are to be paid for at unit price per linear foot of pipe and connections complete in place. (Length to be measured along center line between limits shown on drawing.) Pipe and all fittings to be given one coat of red lead and two field coats of aluminum paint in accordance with the Specifications.

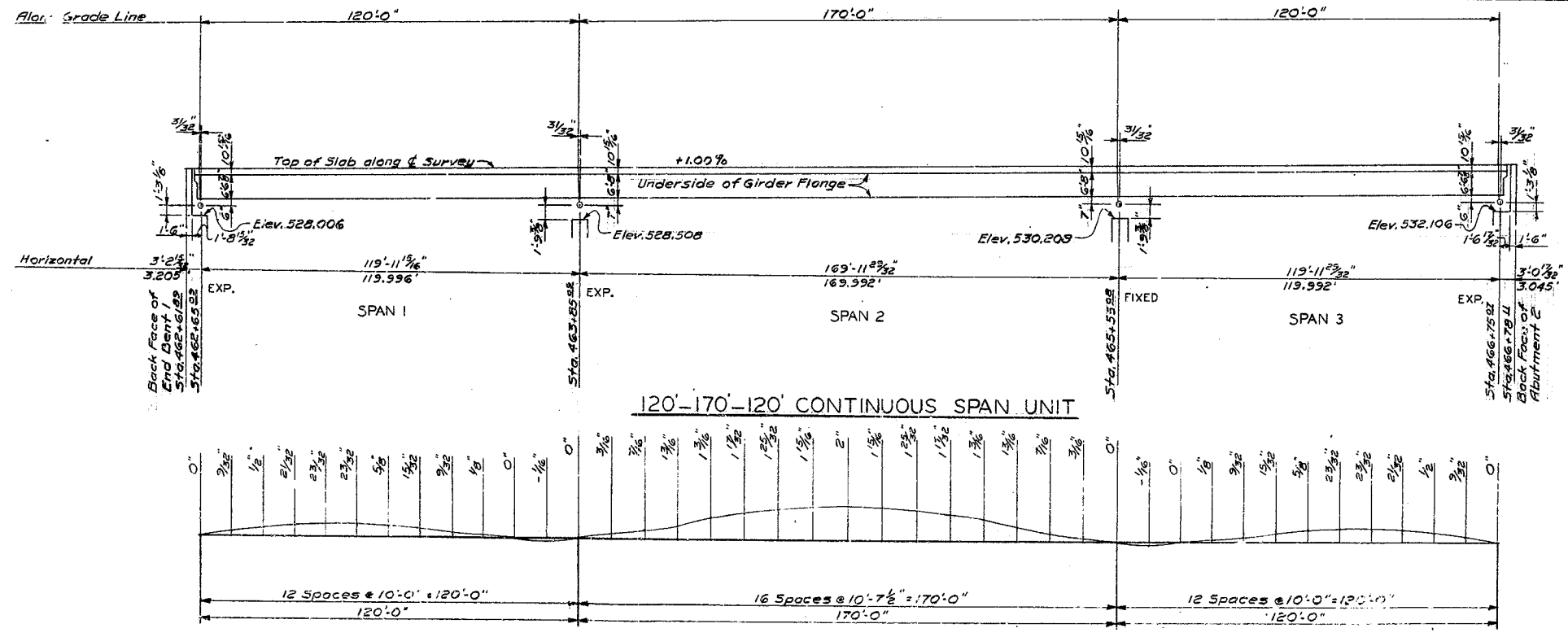
Total 6" Wrought Iron Pipe required = 123.33 Linear Ft.



PLAN SECTION A - A SECTION B - B DRAIN PIPE BRACKET

DRAINS

20 Required
 * Weight of Each Drain = 74.0 Lb.
 For Location of Drains See Sheet
 * Weight includes 5% for Fillets and Overrun.



NOTE
 Camber Diagram shown on this sheet includes the weight of concrete deck, handrail, future surfacing, and structural steel.

CAMBER DIAGRAM
 TOTAL DEAD LOAD

DRAINS, WROUGHT IRON PIPE, & CAMBER DIAGRAM

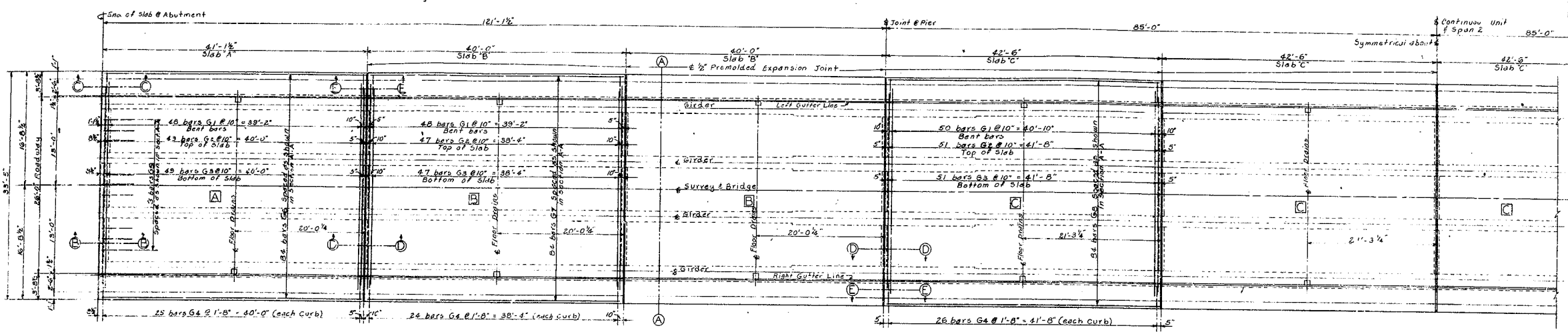
DESIGNED BY: C. P. Dodson
 CHECKED BY: C. G. G. G.
 DATE: 1/25/22
 REVISED: 1/25/22
 DATE: 1/25/22

Sheet 17

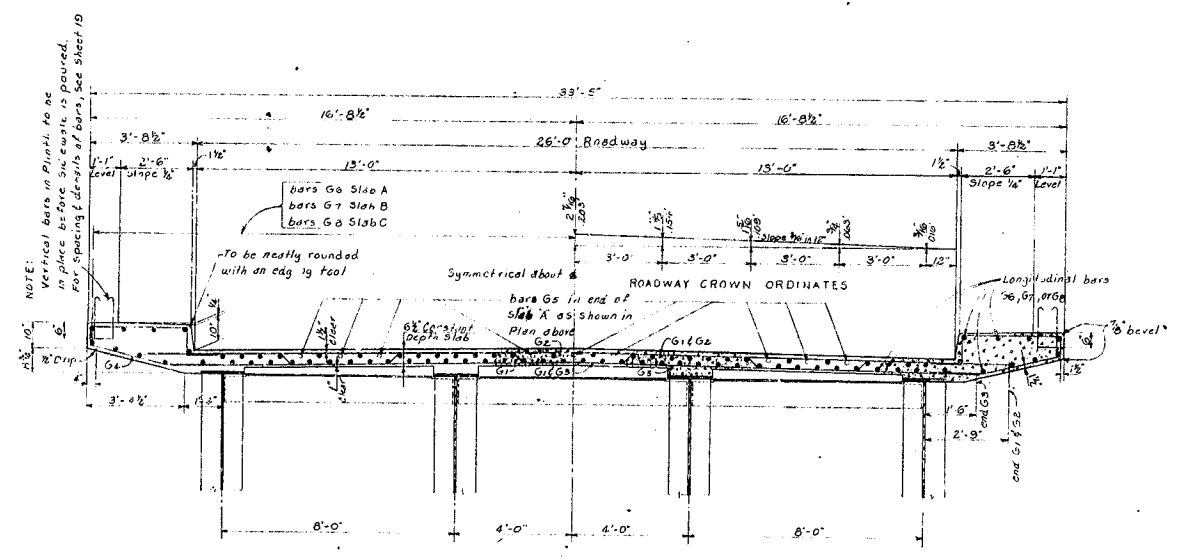
Bridge Over Rough River
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON - BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464+70.92	PROJECT NO.
BRIDGE NUMBER	NO. 12333

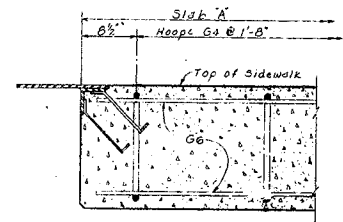
FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
7	KY.				



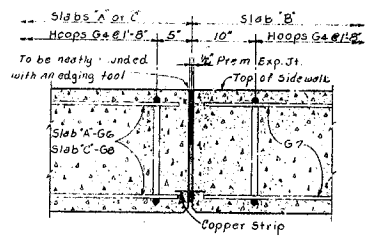
HALF PLAN OF ROADWAY FLOOR SLABS
LONGITUDINAL DIMENSIONS ARE SLOPE MEASUREMENTS ALONG GRADE



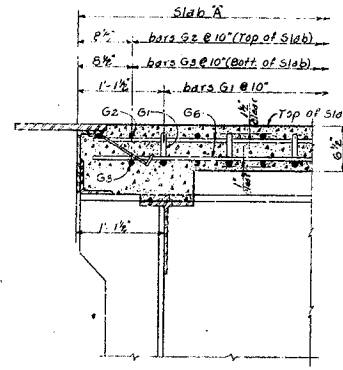
TYPICAL SECTION A-A



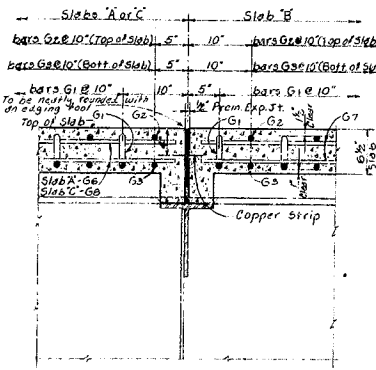
SECTION C-C



SECTION E-E

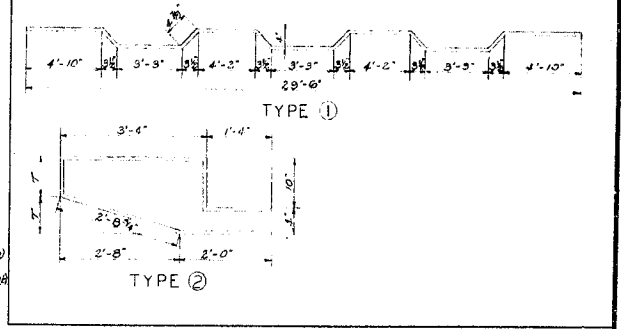


SECTION B-B

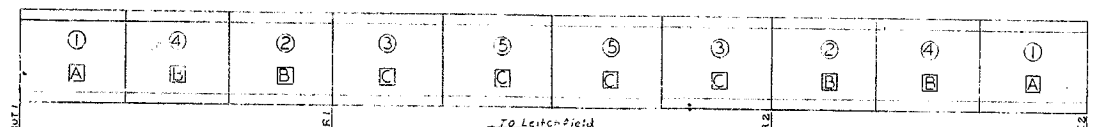


SECTION D-D

BILL OF REINFORCEMENT						
MARK	TYPE	NUMBER		BAR SIZE	LENGTH	LOCATION
		SLAB	SLAB			
G1	①	48	30	48B	5	All Slabs, Transverse
G2	Str.	49	37	49B	6	Top of all Slabs, Transverse
G3	Str.	49	37	49B	6	Bottom of all Slabs, Transverse
G4	②	50	52	50B	5	SideWalk Hoops, All Slabs
G5	Str.	9	18	4	5	End of Slabs A
G6	Str.	84	168	4	40	Longitudinal, Slab A
G7	Str.	84	336	4	38	Longitudinal, Slab B
G8	Str.	84	336	4	42	Longitudinal, Slab C



ESTIMATE OF QUANTITIES		
Concrete, Class X	363.6	Cu Yds.
Reinforcement	85414	Lbs.



SLAB POURING SEQUENCE

TOTAL NUMBER OF SLABS REQUIRED	
DESCRIPTION	NO. REQUIRED
SLABS A	2
SLABS B	4
SLABS C	4
TOTAL	10

DETAILS OF ROADWAY FLOOR SLABS

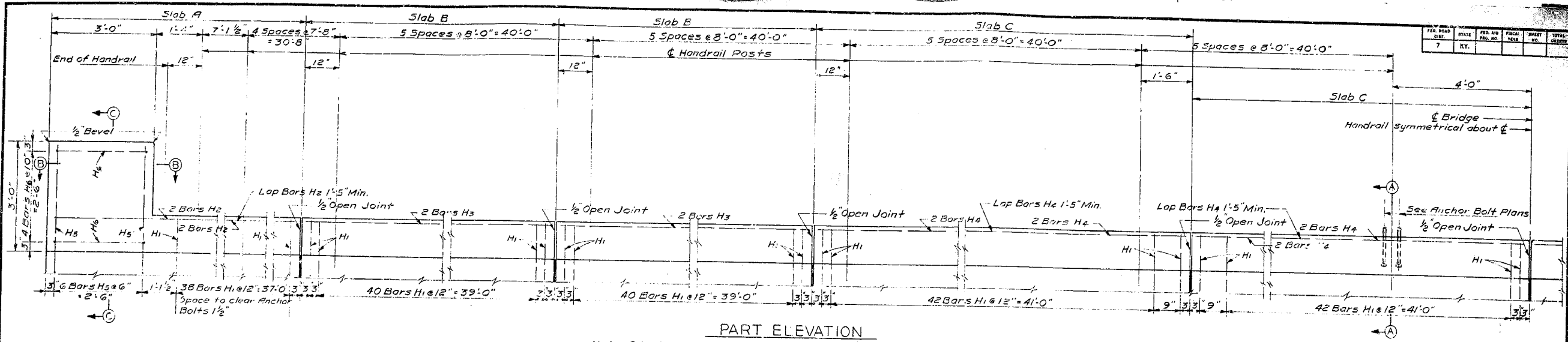
CHECKED BY: DATE:
 DESIGNED BY: DATE:
 DRAWN BY: DATE:
 TRACED BY: DATE:
 REVISIONS:

Bridge Over Rough River Sheet 18

COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
GRAYSON-BRECKINRIDGE
HARDINSBURG-LEITCHFIELD
ROAD

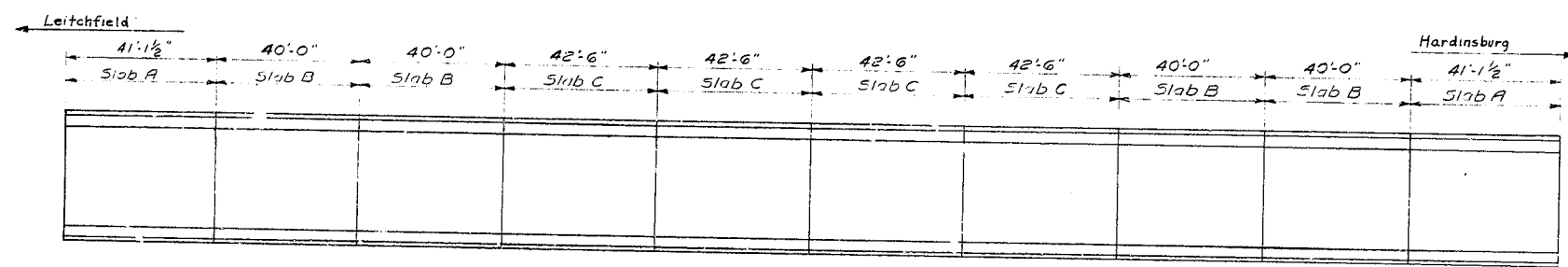
STATION 464+70² PROJECT NO.
 BRIDGE NUMBER DRAWING NO. 13333

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



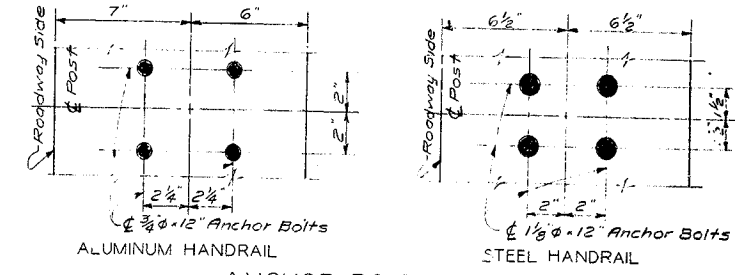
PART ELEVATION

Note: All edges on concrete are beveled 1/4" unless otherwise noted.



PLAN

PLAN & PART ELEVATION OF END POST, PLINTH, & HANDRAIL POST SPACING



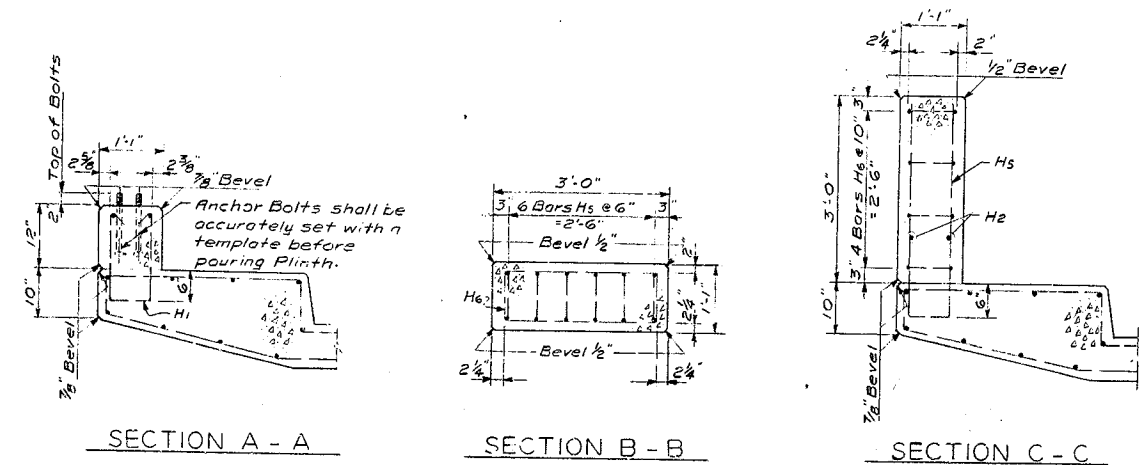
ANCHOR BOLT PLANS

BILL OF REINFORCEMENT

MARK	T-YPE	NO	BAR SIZE	LENGTH	LOCATION
				FT. IN.	
H1	①	840	4	4 2	Plinth
H2	5tr	16	4	21 1	Slab A
H3	"	16	4	39 9	Slab B
H4	"	32	4	21 10	Slab C
H5	②	24	5	7 2	Post
H6	③	16	3	7 2	"

NOTES

Aluminum Handrail -- For Aluminum Handrail Details not shown and General Note see Standard Drawing H110.
 Steel Handrail -- For Steel Handrail Details not shown and General Note see Standard Drawing H111.



SECTION A - A

SECTION B - B

SECTION C - C

HANDRAIL

ESTIMATE OF QUANTITIES

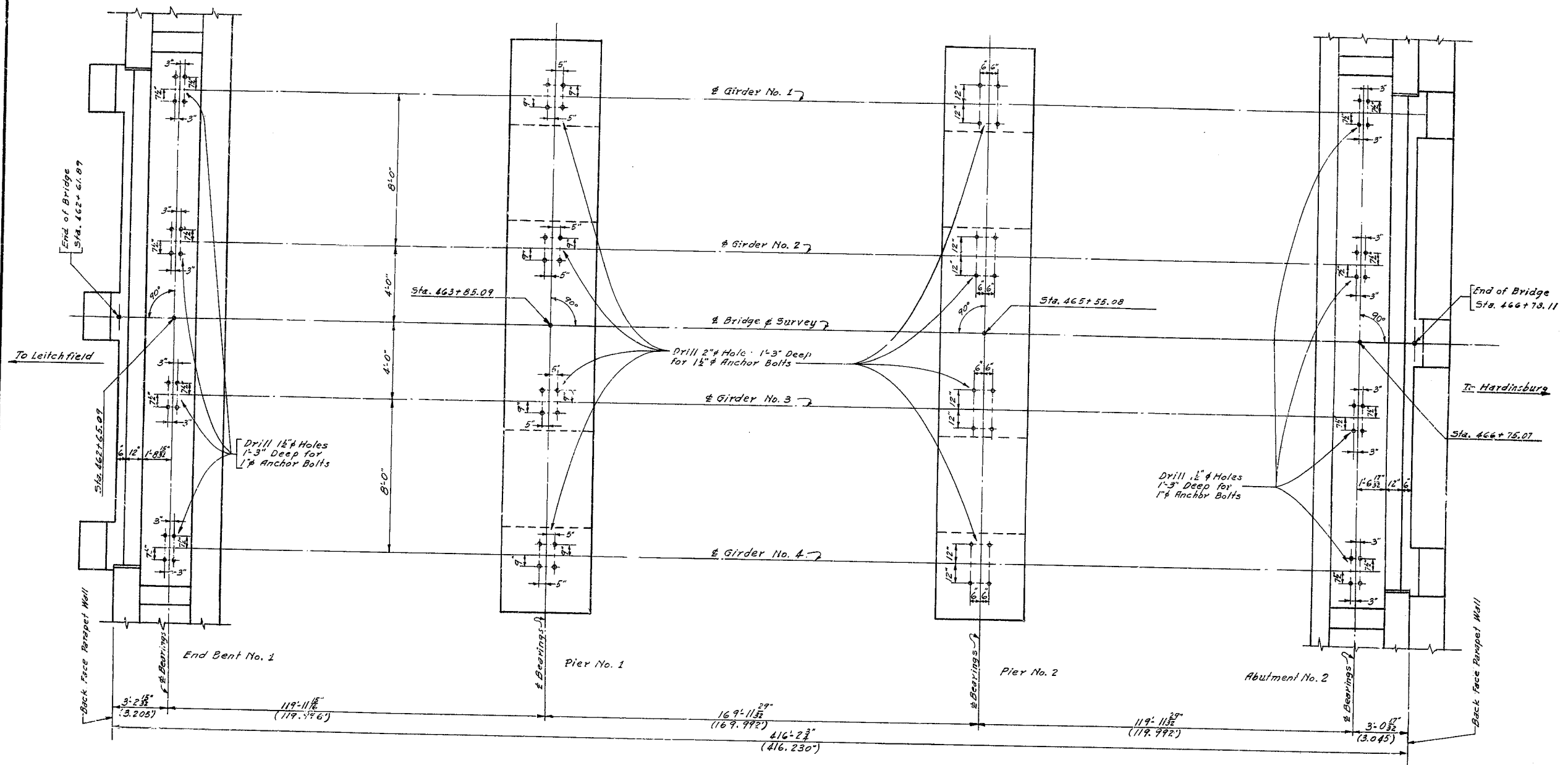
Handrail	811.2	Lin. Ft.
Concrete, Class "A"	34.0	Cu. Yd.
Reinforcement	3677	Lb.

Bridge over Rough River Sheet 19

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON-BRECKINRIDGE
 HARDINSBURG-LEITCHFIELD
 ROAD
 STATION 464 + 70.00 PROJECT NO.
 BRIDGE NUMBER DRAWING NO. 13333

DESIGNED BY: G. R. DOUGLASS DATE: 3/25/54
 CHECKED BY: [] DATE: []
 REVISIONS: [] DATE: []

FED. ROAD DIST.	STATE	FED. AID DIST. NO.	FISCAL YEAR	PROJECT NO.	SHEET NO.
7	KY.				



NOTE

Holes of depth and dimensions shown shall be drilled for Anchor Bolts by Superstructure Contractor, who shall be responsible for keeping holes dry in freezing weather. After Base Plates are properly set and Anchor Bolts are placed in drilled holes, molten lead shall be poured in holes and packed until holes are completely filled flush to top of base plates. The cost of drilling anchor bolt holes, furnishing lead and filling holes with molten lead shall be included in the "Lump Sum Bid" for Structural Steel. Anchor bolts shall be heated to a blue heat at time of pouring to assure flow of lead to bottom of holes.

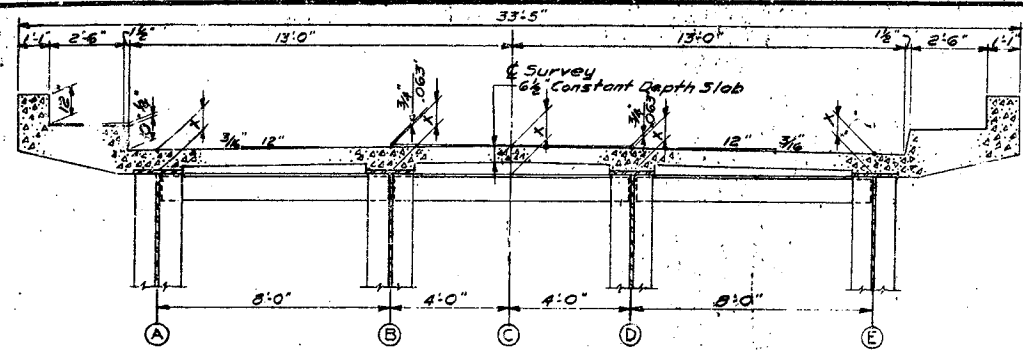
ANCHOR BOLT PLAN

BRIDGE OVER ROUGH RIVER SHEET 20

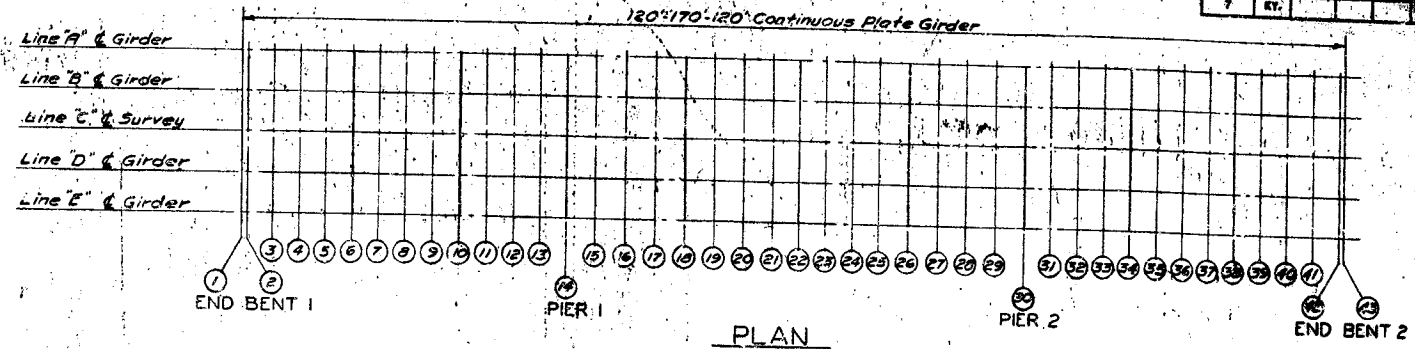
COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF
GRAYSON - BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464+70.00 PROJECT NO.

BRIDGE NUMBER DRAWING NO. 12312



TYPICAL CROSS SECTION



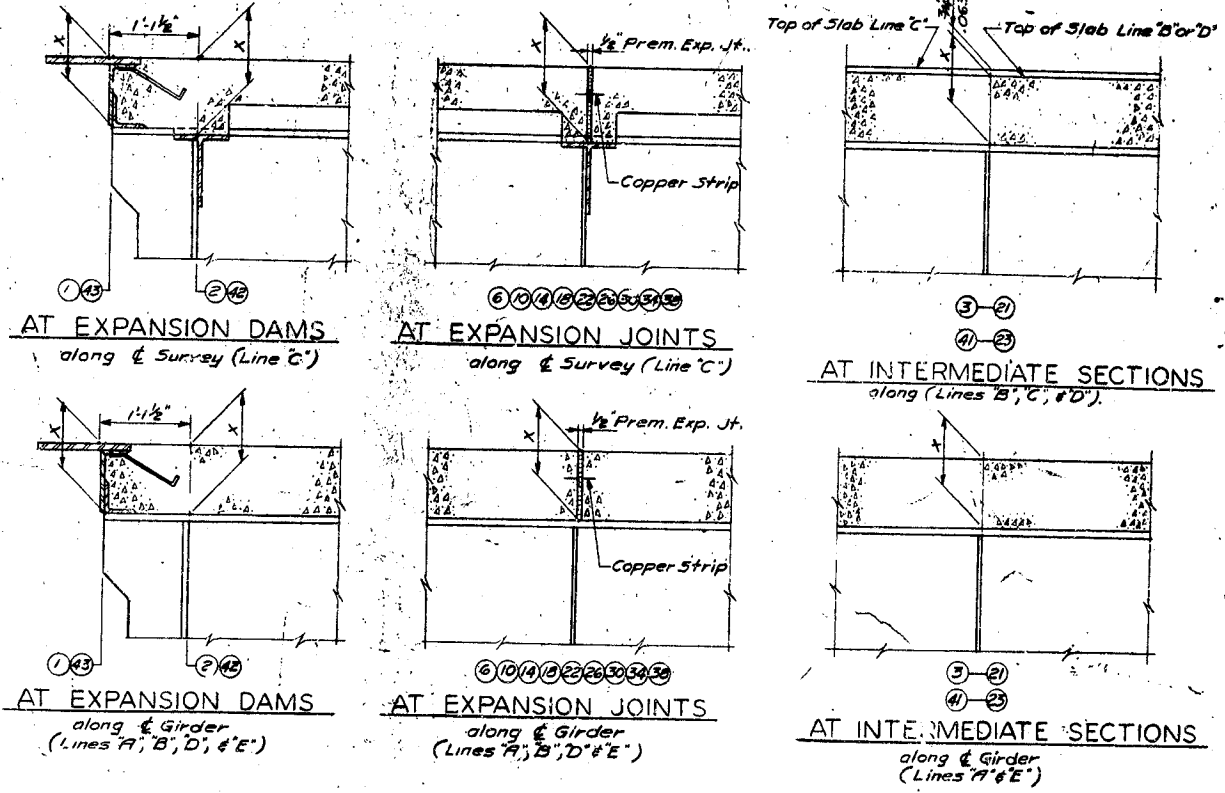
CONSTRUCTION NOTE

1. Take elevations on top of steel at points indicated after crossframes and lateral bracing are in place and after all falsework has been removed, but before forms for concrete slabs have been put in place. Read elevations to three decimals using target rod and enter readings in table under Steel Elevations.
2. Compute Dimension X as follows - Construction Elevation minus Steel Elevation equals Dimension X. Construction Elevations include camber due to weight of concrete slab, plinth, handrail, and future surfacing.
3. For setting templates measure Dimension X above top of steel for top of template. Do not set templates by elevations.
4. Construct handrail plinth to sidewalk grade. Do not add camber to handrail plinth.

TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 120'-170'-120' PLATE GIRDER

SECTION	STATION	LINE "A"			LINE "B"			LINE "C"			LINE "D"			LINE "E"		
		Const. El.	Steel El.	Dim. X	Const. El.	Steel El.	Dim. X	Grade El.	Const. El.	Steel El.	Dim. X	Const. El.	Steel El.	Dim. X	Const. El.	Steel El.
1	21+93.00	538.602			538.726			538.789			538.726			538.602		
2	21+95.00	538.602	0.51	0.59	538.726	0.53	0.62	538.789			538.726	0.53	0.62	538.602	0.52	0.61
3	21+97.00	538.620	0.63	0.71	538.744	0.65	0.74	538.807			538.744	0.65	0.74	538.620	0.64	0.73
4	21+99.00	538.635	0.75	0.83	538.759	0.77	0.86	538.822			538.759	0.77	0.86	538.635	0.76	0.85
5	22+01.00	538.645	0.87	0.95	538.769	0.89	0.98	538.836			538.769	0.89	0.98	538.645	0.88	0.97
6	22+03.00	538.650	0.99	1.07	538.774	1.01	1.10	538.850			538.774	1.01	1.10	538.650	1.00	1.09
7	22+05.00	538.649	1.11	1.19	538.773	1.13	1.22	538.864			538.773	1.13	1.22	538.649	1.12	1.21
8	22+07.00	538.644	1.23	1.31	538.768	1.25	1.34	538.878			538.768	1.25	1.34	538.644	1.24	1.33
9	22+09.00	538.634	1.35	1.43	538.758	1.37	1.46	538.892			538.758	1.37	1.46	538.634	1.36	1.45
10	22+11.00	538.622	1.47	1.55	538.746	1.49	1.58	538.906			538.746	1.49	1.58	538.622	1.48	1.57
11	22+13.00	538.611	1.59	1.67	538.735	1.61	1.70	538.920			538.735	1.61	1.70	538.611	1.60	1.69
12	22+15.00	538.603	1.71	1.79	538.727	1.73	1.82	538.934			538.727	1.73	1.82	538.603	1.72	1.81
13	22+17.00	538.600	1.83	1.91	538.724	1.85	1.94	538.948			538.724	1.85	1.94	538.600	1.84	1.93
14	22+19.00	538.602	1.95	2.03	538.726	1.97	2.06	538.962			538.726	1.97	2.06	538.602	1.96	2.05
15	22+21.00	538.613	2.07	2.15	538.737	2.09	2.18	538.976			538.737	2.09	2.18	538.613	2.08	2.17
16	22+23.00	538.629	2.19	2.27	538.753	2.21	2.30	538.990			538.753	2.21	2.30	538.629	2.20	2.29
17	22+25.00	538.651	2.31	2.39	538.775	2.33	2.42	539.004			538.775	2.33	2.42	538.651	2.32	2.41
18	22+27.00	538.675	2.43	2.51	538.798	2.45	2.54	539.018			538.798	2.45	2.54	538.675	2.44	2.53
19	22+29.00	538.695	2.55	2.63	538.819	2.57	2.66	539.032			538.819	2.57	2.66	538.695	2.56	2.65
20	22+31.00	538.719	2.67	2.75	538.836	2.69	2.78	539.046			538.836	2.69	2.78	538.719	2.68	2.77
21	22+33.00	538.722	2.79	2.87	538.846	2.81	2.90	539.060			538.846	2.81	2.90	538.722	2.80	2.89
22	22+35.00	538.726	2.91	2.99	538.850	2.93	3.02	539.074			538.850	2.93	3.02	538.726	2.92	3.01
23	22+37.00	538.722	3.03	3.11	538.846	3.05	3.14	539.088			538.846	3.05	3.14	538.722	3.04	3.13
24	22+39.00	538.712	3.15	3.23	538.836	3.17	3.26	539.102			538.836	3.17	3.26	538.712	3.16	3.25
25	22+41.00	538.695	3.27	3.35	538.819	3.29	3.38	539.116			538.819	3.29	3.38	538.695	3.28	3.37
26	22+43.00	538.674	3.39	3.47	538.798	3.41	3.50	539.130			538.798	3.41	3.50	538.674	3.40	3.49
27	22+45.00	538.651	3.51	3.59	538.775	3.53	3.62	539.144			538.775	3.53	3.62	538.651	3.52	3.61
28	22+47.00	538.629	3.63	3.71	538.753	3.65	3.74	539.158			538.753	3.65	3.74	538.629	3.64	3.73
29	22+49.00	538.613	3.75	3.83	538.737	3.77	3.86	539.172			538.737	3.77	3.86	538.613	3.76	3.85
30	22+51.00	538.602	3.87	3.95	538.726	3.89	3.98	539.186			538.726	3.89	3.98	538.602	3.88	3.97
31	22+53.00	538.600	3.99	4.07	538.724	4.01	4.10	539.200			538.724	4.01	4.10	538.600	4.00	4.09
32	22+55.00	538.603	4.11	4.19	538.727	4.13	4.22	539.214			538.727	4.13	4.22	538.603	4.12	4.21
33	22+57.00	538.611	4.23	4.31	538.735	4.25	4.34	539.228			538.735	4.25	4.34	538.611	4.24	4.33
34	22+59.00	538.622	4.35	4.43	538.746	4.37	4.46	539.242			538.746	4.37	4.46	538.622	4.36	4.45
35	22+61.00	538.634	4.47	4.55	538.758	4.49	4.58	539.256			538.758	4.49	4.58	538.634	4.48	4.57
36	22+63.00	538.644	4.59	4.67	538.768	4.61	4.70	539.270			538.768	4.61	4.70	538.644	4.60	4.69
37	22+65.00	538.649	4.71	4.79	538.773	4.73	4.82	539.284			538.773	4.73	4.82	538.649	4.72	4.81
38	22+67.00	538.650	4.83	4.91	538.774	4.85	4.94	539.298			538.774	4.85	4.94	538.650	4.84	4.93
39	22+69.00	538.645	4.95	5.03	538.769	4.97	5.06	539.312			538.769	4.97	5.06	538.645	4.96	5.05
40	22+71.00	538.635	5.07	5.15	538.759	5.09	5.18	539.326			538.759	5.09	5.18	538.635	5.08	5.17
41	22+73.00	538.620	5.19	5.27	538.744	5.21	5.30	539.340			538.744	5.21	5.30	538.620	5.20	5.29
42	22+75.00	538.602	5.31	5.39	538.726	5.33	5.42	539.354			538.726	5.33	5.42	538.602	5.32	5.41
43	22+77.00	538.602			538.726			539.368			538.726			538.602		

* Grade Elevation on & given for information only - see Construction Note.



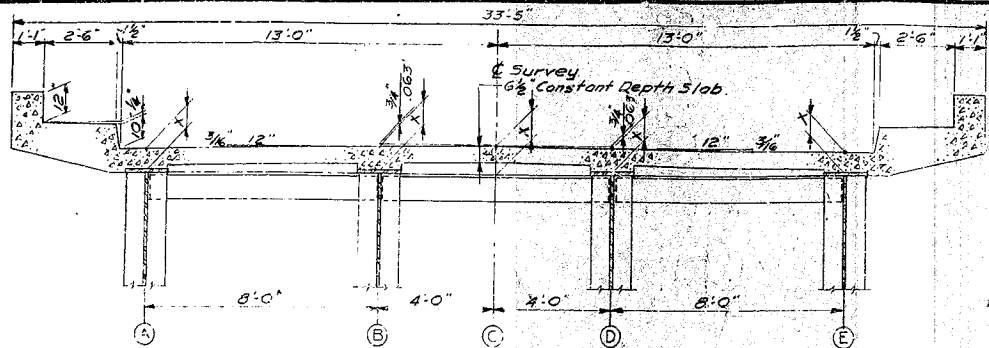
REVISED ELEVATIONS

Bridge Over North Fork of Rough River Sheet 20C

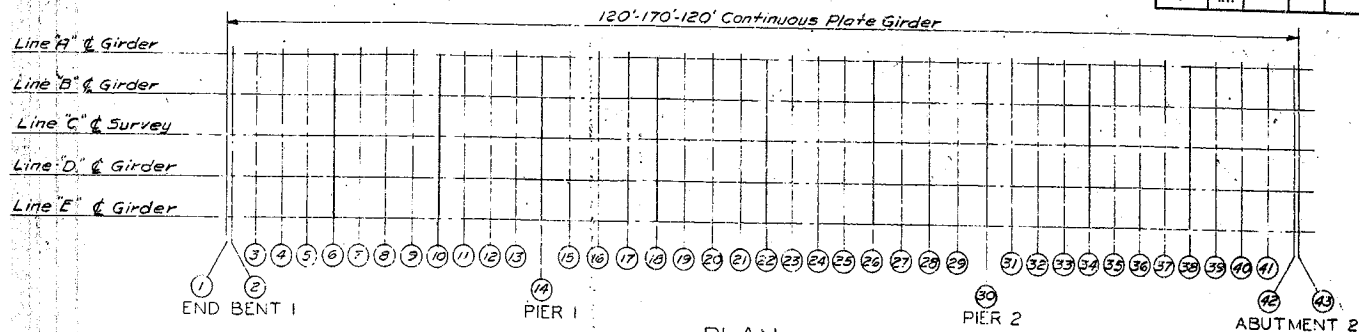
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS
FRANKFORT
COUNTY OF
BRECKINRIDGE
HARDINSBURG-LEITCHFIELD
ROAD

STATION 24+00.00 PROJECT NO. 12356

BRIDGE NUMBER 12356



TYPICAL CROSS SECTION



PLAN

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

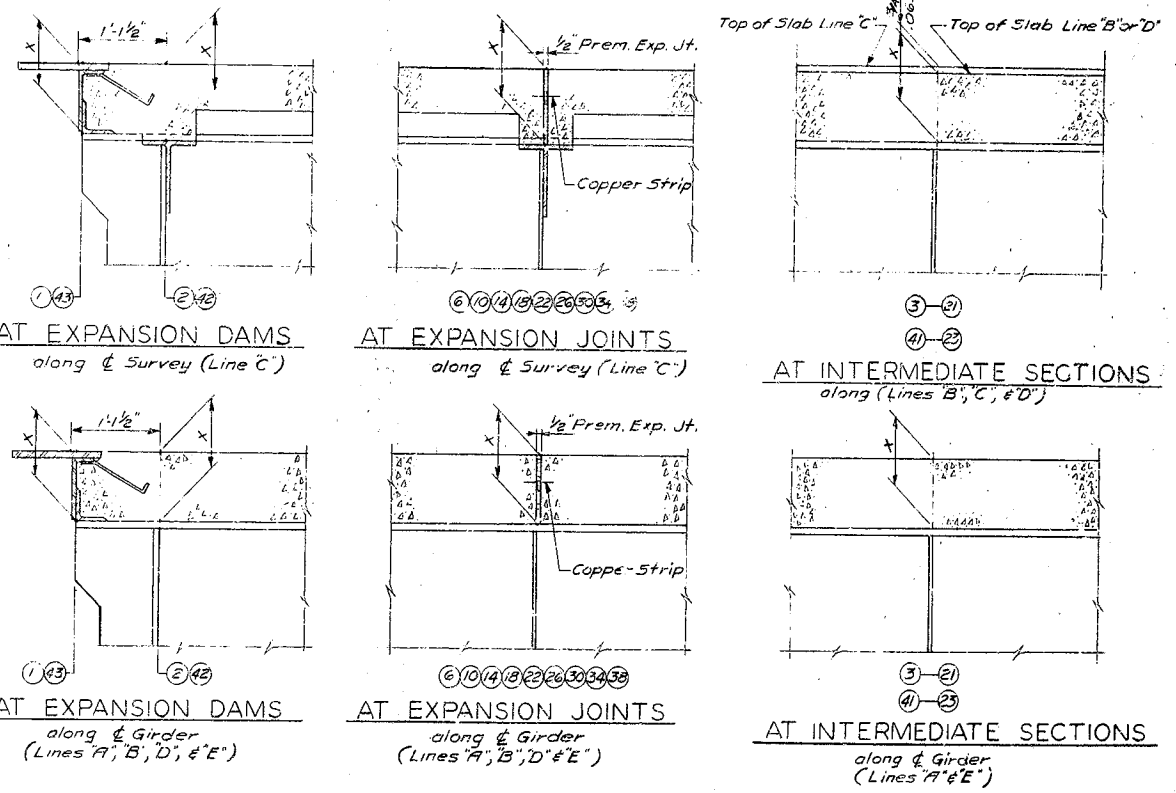
TABLE OF ELEVATIONS FOR SETTING SLAB FORMS FOR 120'-170'-120' PLATE GIRDER

SECTION	STATION	LINE "A"			LINE "B"			LINE "C"			LINE "D"			LINE "E"			
		Const. El.	Steel El.	Dim.X	Const. El.	Steel El.	Dim.X	Const. El.	Steel El.	Dim.X	Const. El.	Steel El.	Dim.X	Const. El.	Steel El.	Dim.X	
1	462+63.5	537.051			537.176			537.299	537.299			537.176			537.051		
2	462+65.5	537.063	536.453	.610	537.188	536.448	.740	537.250	537.250			537.188	536.450	.738	537.263	536.447	.596
3	462+72.8	537.126	.573	.607	537.306	.736	.736	537.350	537.368			537.306	.571	.734	537.180	.970	.610
4	462+85.5	537.295	.692	.603	537.420	.734	.734	537.460	537.483			537.420	.694	.720	537.295	.677	.618
5	462+95.5	537.465	.809	.596	537.530	.796	.734	537.550	537.573			537.530	.810	.720	537.405	.790	.615
6	463+05.5	537.511	.914	.597	537.656	.902	.754	537.650	537.678			537.626	.914	.722	537.511	.890	.621
7	463+15.5	537.670	537.003	.607	537.795	.936	.759	537.780	537.798			537.755	537.009	.720	537.610	.986	.624
8	463+25.5	537.705	.650	.615	537.830	537.911	.733	537.812	537.842			537.820	.101	.729	537.705	537.076	.629
9	463+35.5	537.795	.744	.691	537.920	.740	.760	537.950	537.982			537.920	.177	.743	537.795	.155	.640
10	463+45.5	537.883	.830	.645	538.008	.835	.769	538.080	538.070			538.008	.261	.747	537.883	.854	.629
11	463+55.5	537.971	.923	.632	538.076	.846	.750	538.150	538.159			538.076	.354	.742	537.971	.957	.614
12	463+65.5	538.064	.490	.574	538.189	.497	.692	538.250	538.251			538.189	.500	.689	538.064	.508	.559
13	463+75.5	538.160	.603	.557	538.285	.617	.660	538.350	538.348			538.285	.605	.680	538.160	.615	.565
14	463+85.5	538.263	.710	.593	538.388	.714	.674	538.450	538.450			538.388	.710	.678	538.263	.709	.554
15	463+95.5	538.380	.824	.586	538.505	.832	.673	538.566	538.567			538.505	.821	.684	538.380	.818	.562
16	464+05.5	538.502	.934	.578	538.627	.932	.693	538.668	538.690			538.627	.924	.702	538.502	.919	.589
17	464+15.5	538.630	.992	.609	538.755	.991	.764	538.769	538.817			538.755	.990	.762	538.630	.990	.640
18	464+25.5	538.750	538.122	.637	538.884	538.119	.765	538.975	538.947			538.884	538.124	.760	538.750	538.100	.629
19	464+35.5	538.887	.839	.648	539.012	.844	.768	539.081	539.078			539.012	.850	.762	538.887	.836	.681
20	464+45.5	539.010	.982	.624	539.135	.994	.741	539.188	539.197			539.135	.939	.756	539.010	.985	.625
21	464+55.5	539.126	.503	.617	539.251	.523	.728	539.314	539.314			539.251	.535	.716	539.126	.510	.616
22	464+70.5	539.236	.672	.614	539.361	.641	.720	539.400	539.424			539.361	.694	.707	539.236	.624	.612
23	464+80.5	539.337	.720	.619	539.464	.743	.721	539.466	539.526			539.464	.767	.704	539.337	.724	.615
24	464+91.5	539.435	.803	.632	539.560	.833	.727	539.513	539.622			539.560	.855	.705	539.435	.815	.620
25	465+01.5	539.525	.868	.657	539.650	.901	.749	539.619	539.712			539.650	.930	.700	539.525	.891	.634
26	465+12.5	539.609	.958	.651	539.734	.936	.736	539.725	539.797			539.734	939.011	.725	539.609	.990	.619
27	465+23.5	539.692	539.044	.648	539.817	539.080	.737	539.831	539.880			539.817	.891	.726	539.692	539.071	.621
28	465+33.5	539.777	.202	.575	539.902	.225	.677	539.938	539.965			539.902	.239	.663	539.777	.231	.594
29	465+43.5	539.867	.327	.540	539.992	.332	.660	540.044	540.053			539.992	.339	.648	539.867	.333	.534
30	465+55.5	539.943	.426	.537	540.089	.427	.661	540.150	540.150			540.089	.427	.661	539.943	.429	.534
31	465+65.5	540.050	.539	.524	540.185	.532	.659	540.250	540.248			540.185	.529	.656	540.050	.526	.534
32	465+74.5	540.163	.624	.539	540.288	.614	.674	540.350	540.351			540.288	.619	.649	540.163	.615	.548
33	465+84.5	540.271	.683	.568	540.396	.686	.740	540.450	540.459			540.396	.665	.731	540.271	.661	.610
34	465+94.5	540.383	.786	.597	540.508	.794	.752	540.550	540.570			540.508	.766	.742	540.383	.760	.623
35	466+04.5	540.495	.896	.599	540.620	.872	.748	540.650	540.672			540.620	.884	.736	540.495	.865	.630
36	466+14.5	540.604	540.021	.583	540.729	.929	.780	540.750	540.792			540.729	540.024	.725	540.604	.987	.617
37	466+24.5	540.710	.124	.586	540.835	.111	.724	540.850	540.892			540.835	.110	.725	540.710	540.090	.620
38	466+34.5	540.810	.224	.586	540.935	.214	.721	540.950	540.992			540.935	.209	.726	540.810	.187	.623
39	466+44.5	540.903	.315	.590	541.030	.307	.723	541.050	541.093			541.030	.303	.727	540.903	.282	.623
40	466+54.5	540.995	.395	.660	541.120	.388	.732	541.150	541.192			541.120	.380	.740	540.995	.361	.634
41	466+64.5	541.080	.472	.668	541.205	.456	.749	541.250	541.268			541.205	.460	.745	541.080	.448	.632
42	466+74.5	541.162	.542	.620	541.287	.533	.754	541.350	541.350			541.287	.535	.742	541.162	.525	.637
43	466+84.5	541.172			541.299			541.361	541.361			541.299			541.172		

* Grade Elevation on & given for information only - see Construction Note.

CONSTRUCTION NOTE

1. Take elevations on top of steel at points indicated after crossframes and lateral bracing are in place and after all falsework has been removed, but before forms for concrete slabs have been put in place. Read elevations to three decimals using target rod and enter readings in table under Steel Elevations. Compute Dimension X as follows - Construction Elevation minus Steel Elevation equals Dimension X. Construction Elevations include camber due to weight of concrete slab, plinth, handrail, and future surfacing. For setting templates measure Dimension X above top of steel for top of template. Do not set templates by elevations.
4. Construct handrail plinth to sidewalk grade. Do not add camber to handrail plinth.



BRIDGE OVER ROUGH RIVER SHEET 21

COMMONWEALTH OF KENTUCKY
 DEPARTMENT OF HIGHWAYS
 FRANKFORT
 COUNTY OF

GRAYSON-BRECKINRIDGE
 HARDINSBURG - LEITCHFIELD
 ROAD

STATION 464+70.00 PROJECT NO.

BRIDGE NUMBER DRAWING NO. 13323

ELEVATIONS