

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	E-141-C	1931	1	11

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	8161	1	11

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1	3105	Title Sheet
2	3106	Layout of Br. No. 1670
3	3107	Details of Substructure, Br. No. 1670
4	2301	Details of 40'-0" R.C.D. Girder Span
5	2416	Details of 90'-0" Low Truss Span
6	2417	Details of 90'-0" Low Truss Span, 1 Panel Skew, Left
7	3108	Layout of Bridge No. 1671
8	3109	Details of Abutments, Br. No. 1671
9	3110	Details of Piers and Bent, Br. No. 1671
10	2279	Details of Std 50'-0" R.C.D. Girder Span
11	2419	Details of 110'-0" Low Truss Span

PLAN OF PROPOSED BRIDGES  
ON  
MORRILLTON-BLACKVILLE ROAD  
CONWAY COUNTY

ROUTE 64 SEC. 7  
JOB No 8161  
FEDERAL AID PROJECT NO. E-141-C

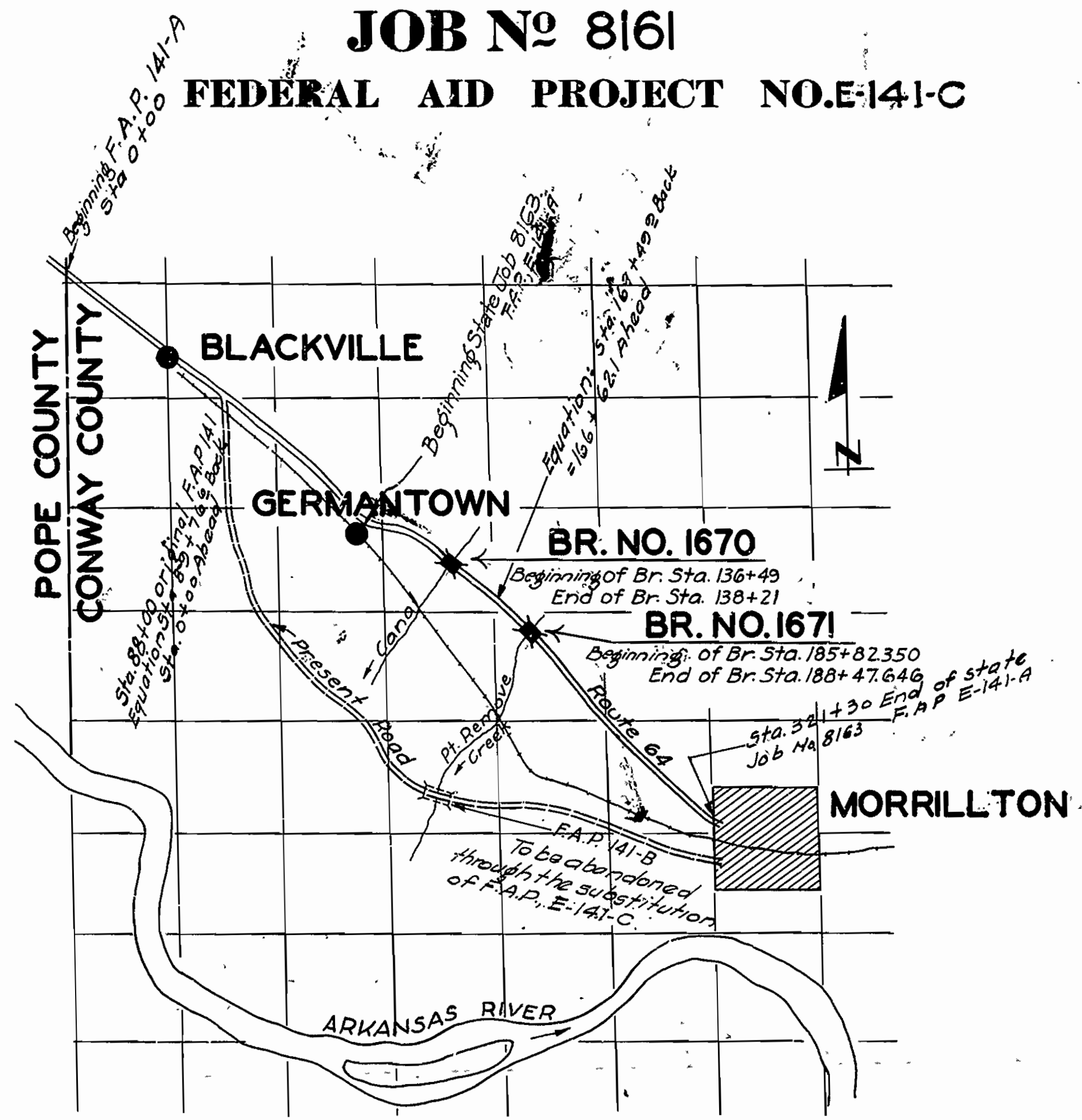
**QUANTITIES**

S.P.	Item	Quantity	Lump Sum
*S.P. 8	Removal of Existing Structure		2,290 Cu.Yds
"	Earth Excavation		1,230 Cu.Yds
"	Dry Excavation for Structures		860 Cu.Yds
"	Wet Excavation for Structures		4,144 Lin.Ft
"	Untreated Timber Piling		617.49 Cu.Yds
"	Class "A" Concrete		396.70 Cu.Yds
"	Class "S" Concrete		115.14 Cu.Yds
S.P. 8	Seal Concrete		115.14 Cu.Yds
"	Reinforcing Steel		166,699 Lbs
S.P. 8	Structural Steel (Trusses)		186,090 Lbs
S.P. 8	Rip Rap (1 ft. thick)		212 Cu.Yds
"	Concrete Railing for Structures		490 Lin.Ft.

\* indicates item is non-participating in Federal Aid - Federal Aid Markers of approved design are to be furnished to Contractor by State and are to be placed at beginning and end of bridges. State Furnished Cement

Item	Quantities & Units	Barrels per Unit	Approx Total Barrels Req'd.
Class "A" Concrete	617.49 Cu.Yds.	1.50	926
Class "S" Concrete	396.70 " "	1.75	694
Seal Concrete	115.14 " "	1.50	173
Concrete Railing	490 Lin.Ft.	0.065	32
Totals for Project			1,825

Note: The proposed bridges were provided for in the project agreement for F.A.P. 141-C. executed by the acting secretary on July 30, 1931.



LAYOUT  
Scale: 1" = 1 Mile

LENGTH OF PROJECT	= 437'-3 1/2" = 0.082 Mi.
LENGTH OF BRIDGES	= 437'-3 1/2" = 0.082
LENGTH OF EMBANKMENT	= 102'-8 1/2"
LENGTH OF JOB	= 540'-0"

Specifications approved by Chief, Bureau of Public Roads, September 28, 1925, and adopted by State Highway Commission May 30, 1925 with revisions and Special Provisions as follows:

**REVISIONS**

Pamphlet A	Revised Sept. 1st, 1928	Approved June 1st, 1929
" B	Revised Nov. 1st, 1929	
" C	Revised July 1st, 1930	
" D	Revised July 1st, 1930	Approved Nov. 24th, 1928
" E	Revised Jan. 1st, 1930	
" F	Revised Aug. 1st, 1929	
" G	Revised June 1st, 1929	
" H	Revised Jan. 1st, 1930	
" I	Revised Mar. 1, 1930	
" J	Revised Jan. 1st, 1929	Approved June 1st, 1929
" K	Revised May 30th, 1925	
" L	Revised Jan. 1st, 1929	Approved June 1st, 1929

**SPECIAL PROVISIONS**

Item	No. of Sheets
Pamphlet I	51
Bridge Timber	12
Earth Excavation	3
Concrete Aggregate	2
Rip Rap	1
Field Engineers Office	1
Aluminum Paint	1
Seal Concrete	2
Section 8.2	1
Structural Steel	1
State Furnished Cement	3
All Material except Cement	1
Removal of Existing Structure	1
Labor	10
Partial payments	1

Approved Nov. 1, 1932  
Approved Nov. 1, 1932

APPROVED [Signature]

CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]

CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED [Signature]

STATE HIGHWAY ENGINEER

BRIDGES No. 1670 & 1671

DRAWING No. 3105

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	8161	7	11

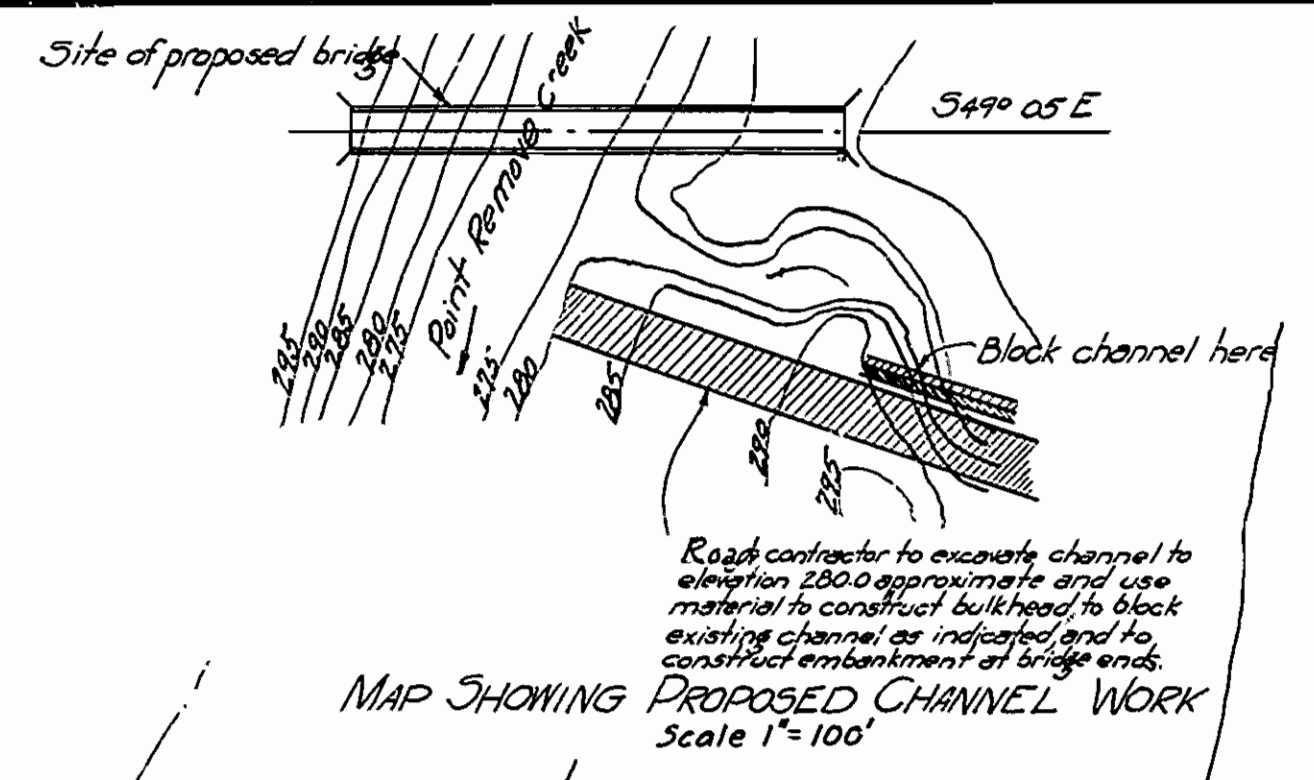
F.L. ROAD DIST. NO.	STATE	FED. A.D. DIST. NO.	SECTION
AR. E. 141C	1931	7	11

**RIGHT OF WAY DATA**

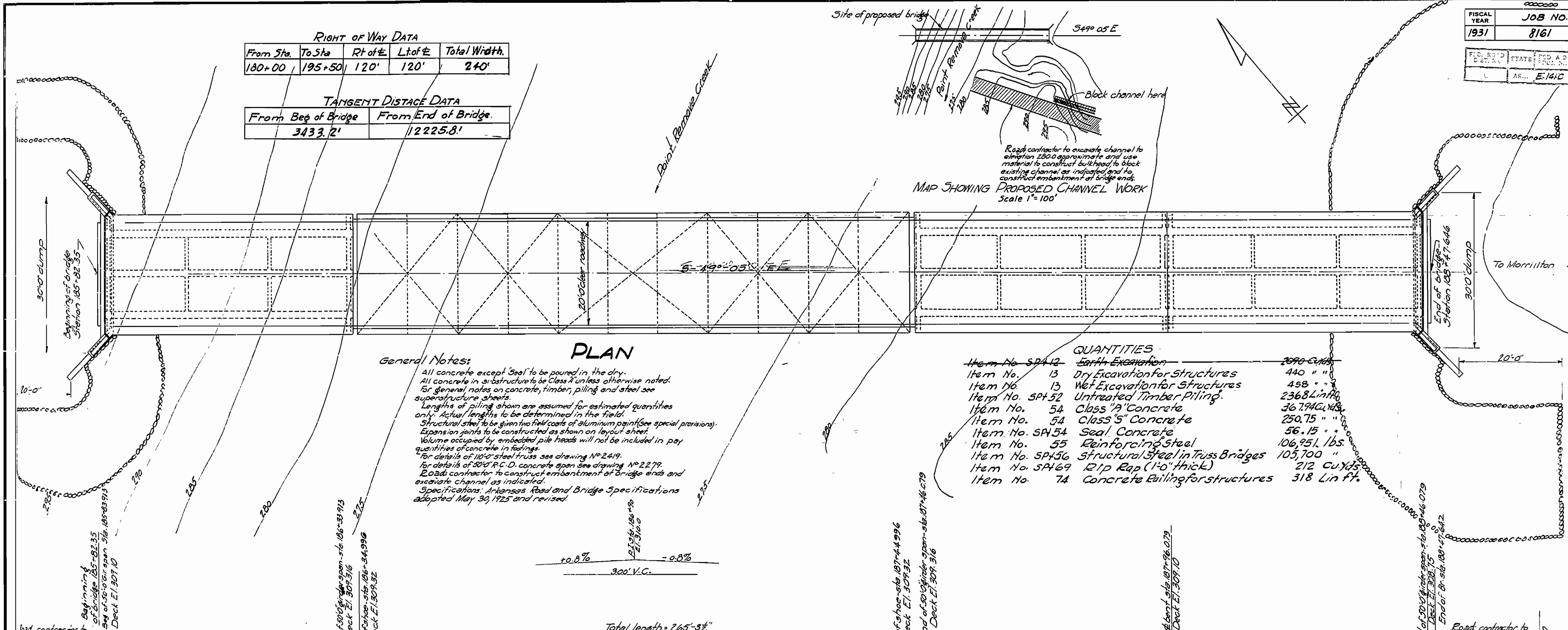
From Sta.	To Sta.	Rt of E.	Lt of E.	Total Width.
180+00	195+50	120'	120'	240'

**TANGENT DISTANCE DATA**

From Beg of Bridge	From End of Bridge
3433.2'	12225.8'



MAP SHOWING PROPOSED CHANNEL WORK  
Scale 1" = 100'



**General Notes:**

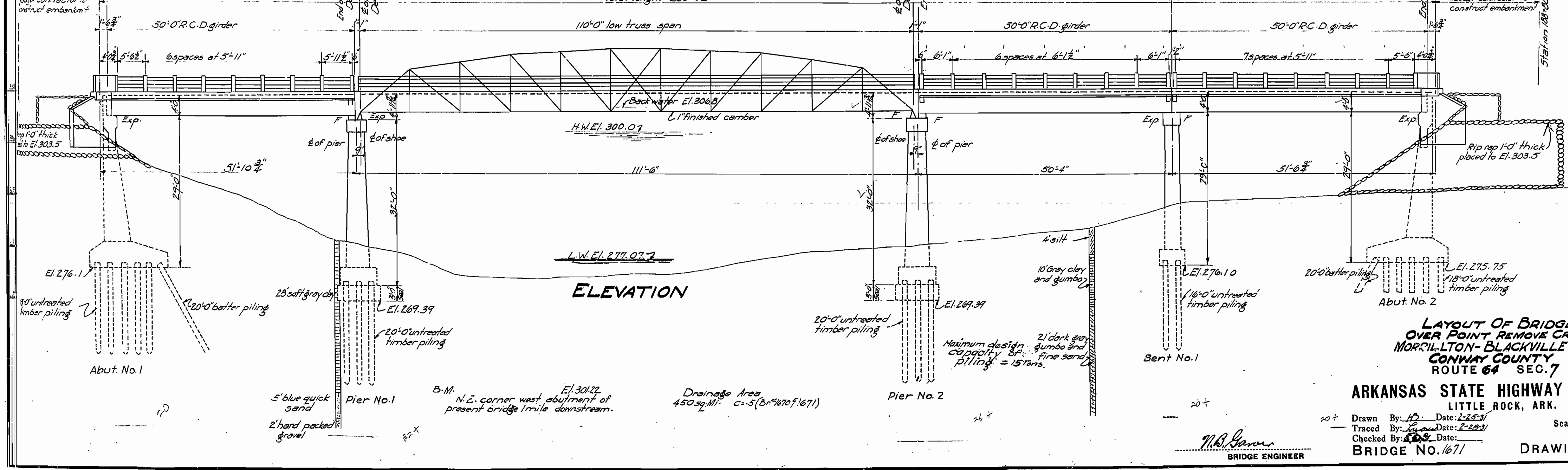
All concrete except Seal to be poured in the dry.  
All concrete in substructure to be Class B unless otherwise noted.  
For general notes on concrete, timber, piling and steel see superstructure sheets.  
Lengths of piling shown are assumed for estimated quantities only. Actual lengths to be determined in the field.  
Structural steel to be given two thick coats of aluminum paint (see special provisions).  
Expansion joints to be constructed as shown on layout sheet.  
Volume occupied by embedded pile heads will not be included in pay quantities of concrete in footings.  
For details of 110'-0" steel truss see drawing No. 2419.  
For details of 50'-0" R.C.D. concrete span see drawing No. 2279.  
Road contractor to construct embankment at bridge ends and excavate channel as indicated.  
Specifications: Arkansas Road and Bridge Specifications adopted May 30, 1925 and revised.

**PLAN**

**QUANTITIES**

Item No. SP412	Earth Excavation	2690 cu yds.
Item No. 13	Dry Excavation for Structures	440 "
Item No. 13	Wet Excavation for Structures	458 "
Item No. SP452	Untreated Timber Piling	2368 Lin ft.
Item No. 54	Class "B" Concrete	36794 cu yds.
Item No. 54	Class "S" Concrete	250.75 "
Item No. SP454	Seal Concrete	56.15 "
Item No. 55	Reinforcing Steel	106,951 lbs.
Item No. SP456	Structural Steel in Truss Bridges	105,700 "
Item No. SP469	Rip Rap (1'-0" thick)	212 cu yds.
Item No. 74	Concrete Railing for structures	318 Lin ft.

**ELEVATION**



**LAYOUT OF BRIDGE  
OVER POINT REMOVE CREEK  
MORRILLTON-BLACKVILLE ROAD  
CONWAY COUNTY  
ROUTE 64 SEC. 7**

**ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.**

Drawn By: *LD* Date: 2-25-31  
Traced By: *LD* Date: 2-28-31  
Checked By: *LD* Date: *LD*  
BRIDGE No. 1671  
Scale: 1 in. = 10 ft.  
DRAWING No. 3108

*M.B. Garver*  
BRIDGE ENGINEER

Drainage Area  
450 sq. Mi. C-5 (Br. 4670/1671)

B.M. N.E. corner west abutment of present bridge 1 mile downstream.  
E.I. 301.22

Pier No. 1  
5' blue quick sand  
2' hard packed gravel

18' untreated timber piling

Abut. No. 1

20'-0" untreated timber piling

Pier No. 2

Bent No. 1

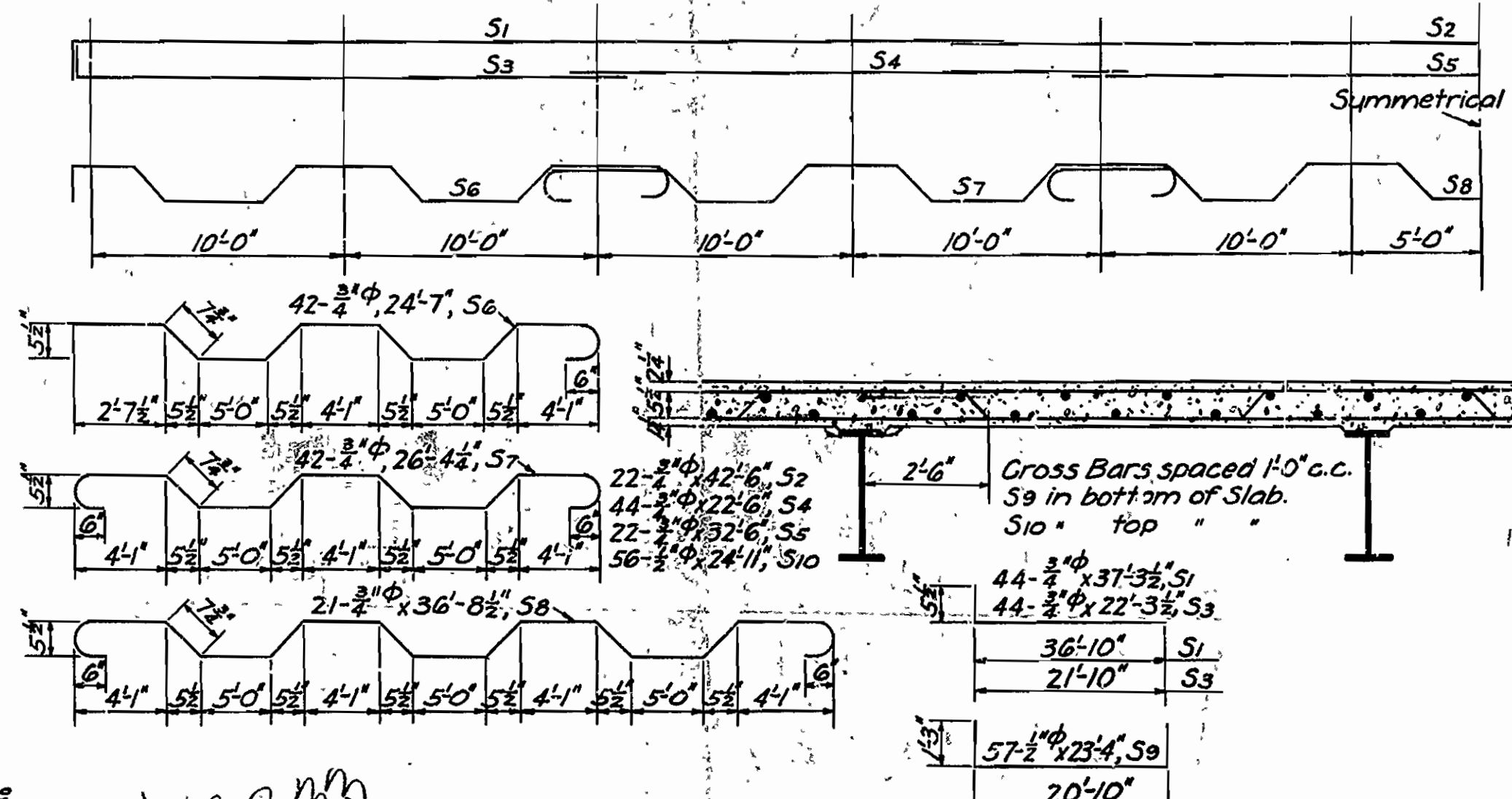
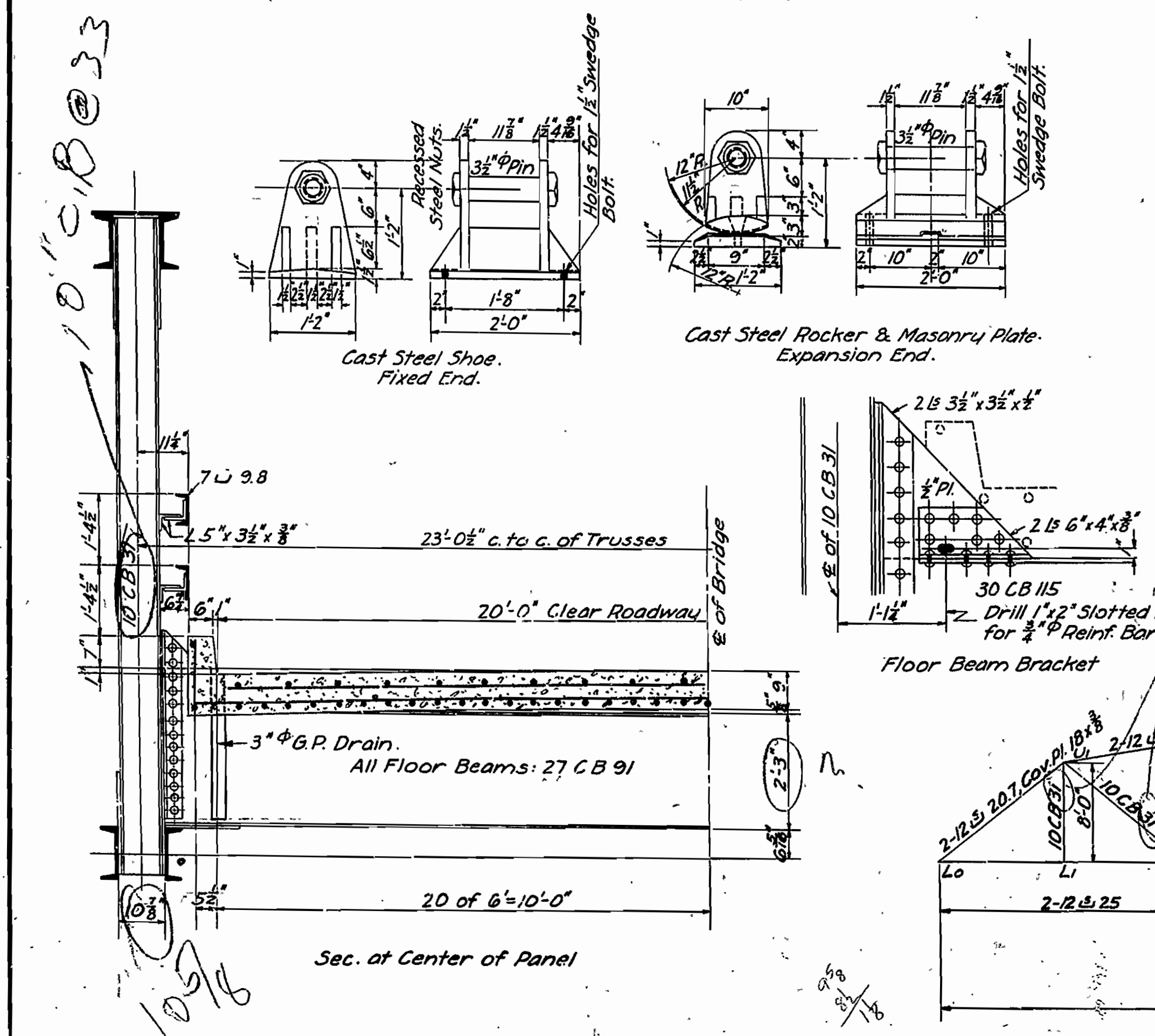
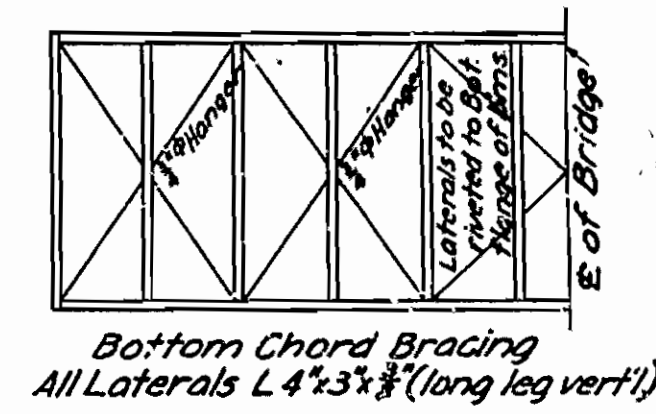
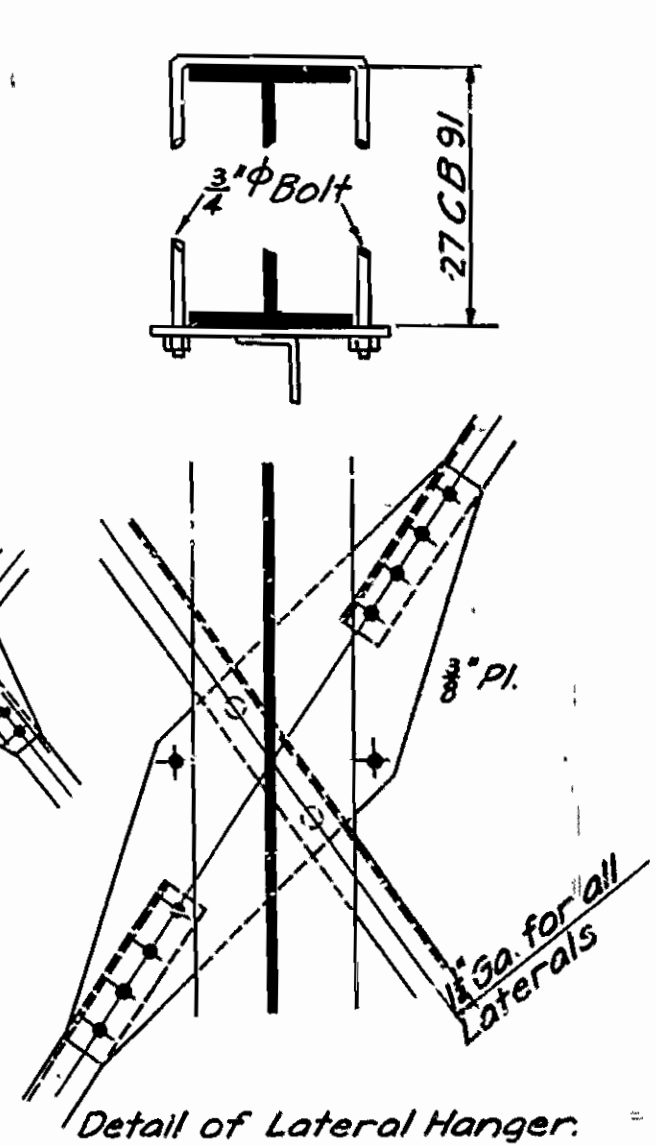
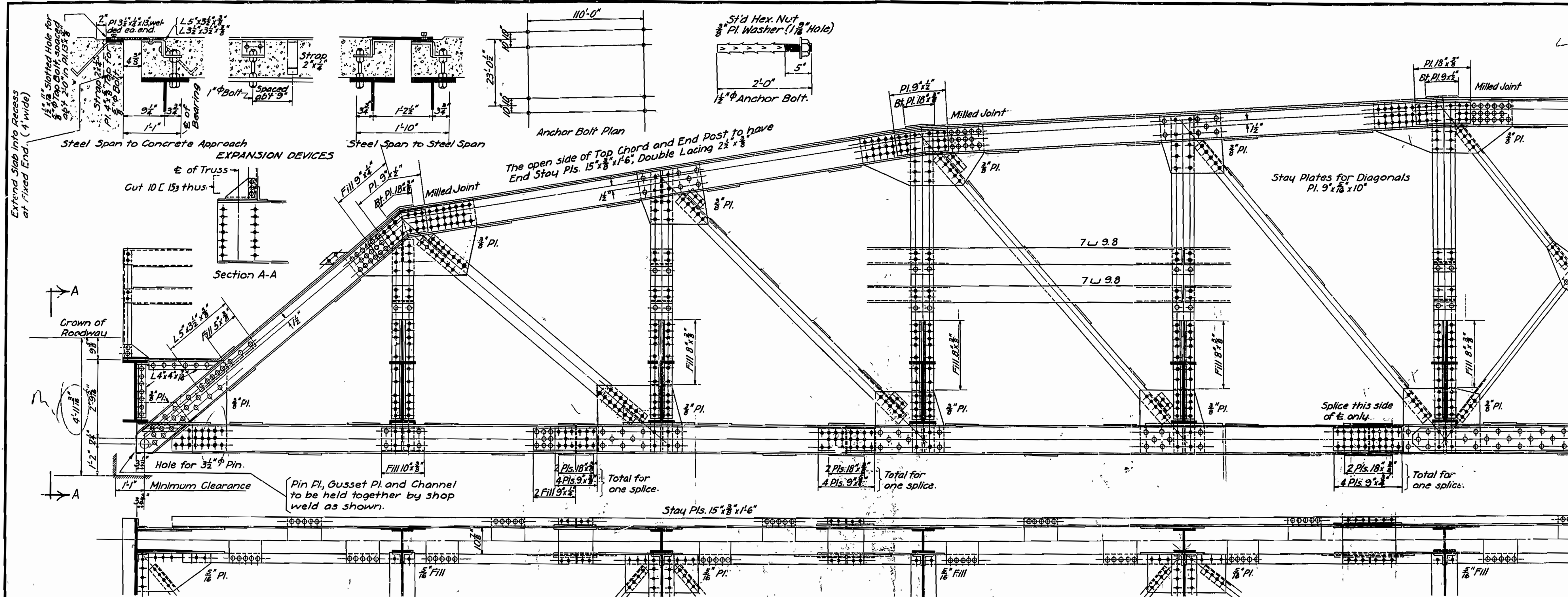
Abut. No. 2

20'

20'

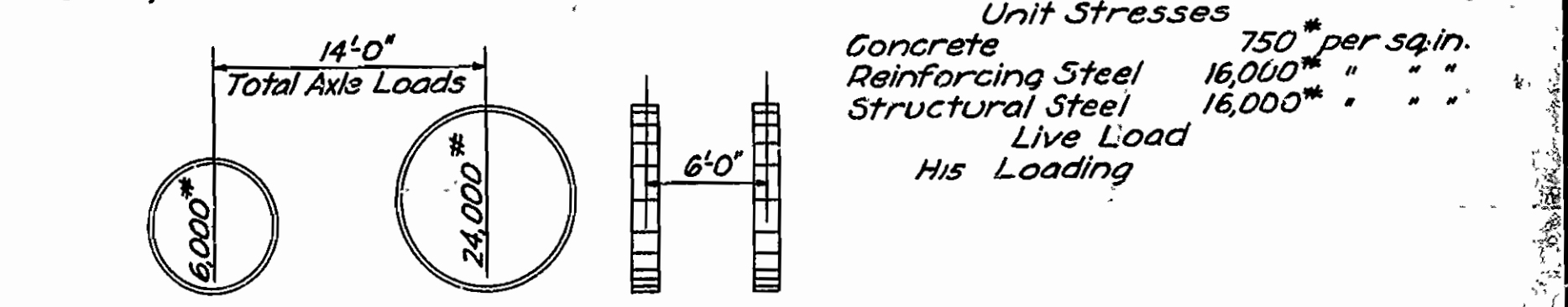


FISCAL YEAR	Dist	Stn	FAP	SHEET	TOTAL SHEETS
1931	6	ARK	E24-B	2	7



**Notes**

Rivets 3/4". Open holes 1/8".  
 All holes in truss connections to be sub-punched 1/8" and reamed to size while truss is assembled; this applies to field as well as shop rivets.  
 Floor beam connections to be sub-punched 3/8" and reamed to a metal template.  
 All field connections shall be riveted.  
 Shop paint: After being completely assembled and shop work finished, all pieces shall be given one coat of red lead and raw linseed oil before shipment.  
 Field paint: Apply two coats of different colors as specified by the engineer.  
 Floor Slab: Concrete to be Class 'S'. One inch has been added for wear.  
 All floor beams to be milled to exact length after riveting framing angles.  
 Shapes of equal or greater strength may be substituted for shapes shown, but payment will be made in accordance with sizes shown on this plan.  
 This drawing shows general features of design only.  
 Shop drawings shall be made in compliance with specifications, submitted and approved before fabrication is begun.  
 Specifications: Ark. Standard Road & Bridge Specifications, adopted May 30th, 1925 & Revised.



**ESTIMATED QUANTITIES**  
 Concrete, Class 'S' 68.6 Cu. Yds.  
 Reinforcing Steel 13,950 Lbs.  
 Structural Steel 103,700 "

## STANDARD PLAN 110' LOW TRUSS SPAN 20' CLEAR ROADWAY

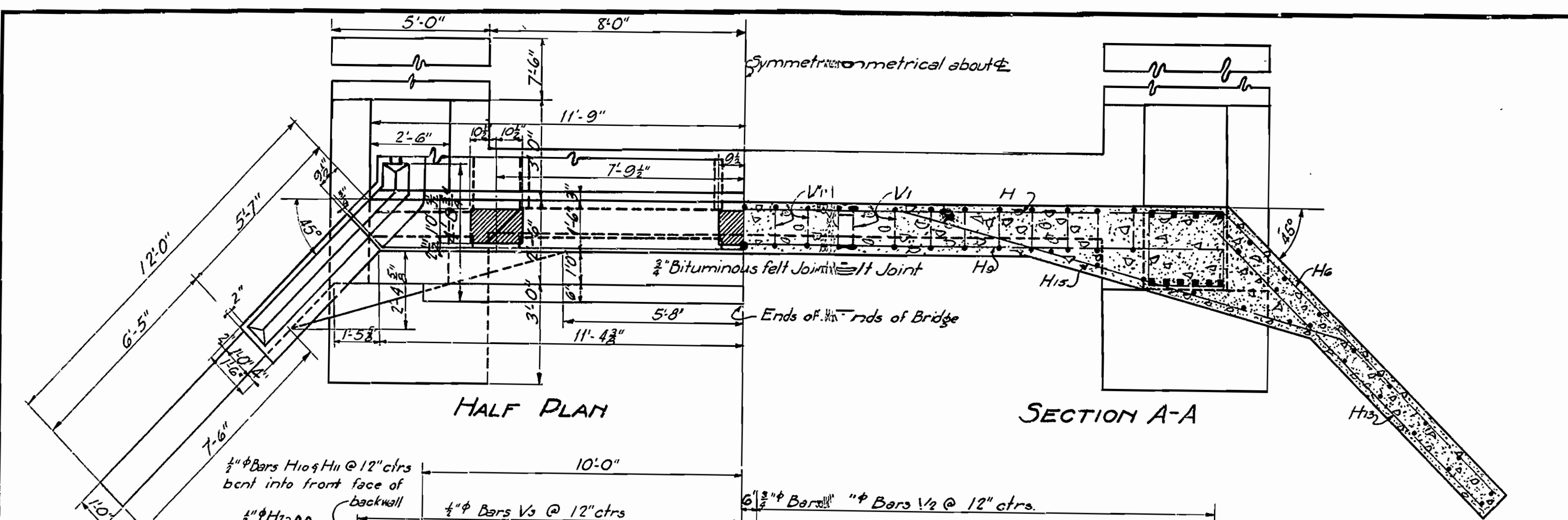
ROUTE SEC.  
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.  
 Drawn By: A Date: 4-20-30  
 Traced By: BA Date: 4-26-30  
 Checked By: Date:  
 Bridge No. [ ] Drawing No. 2419

MAX. REACTION  
 D=101.0  
 L=48.3  
 T=10.1  
 T=159.4

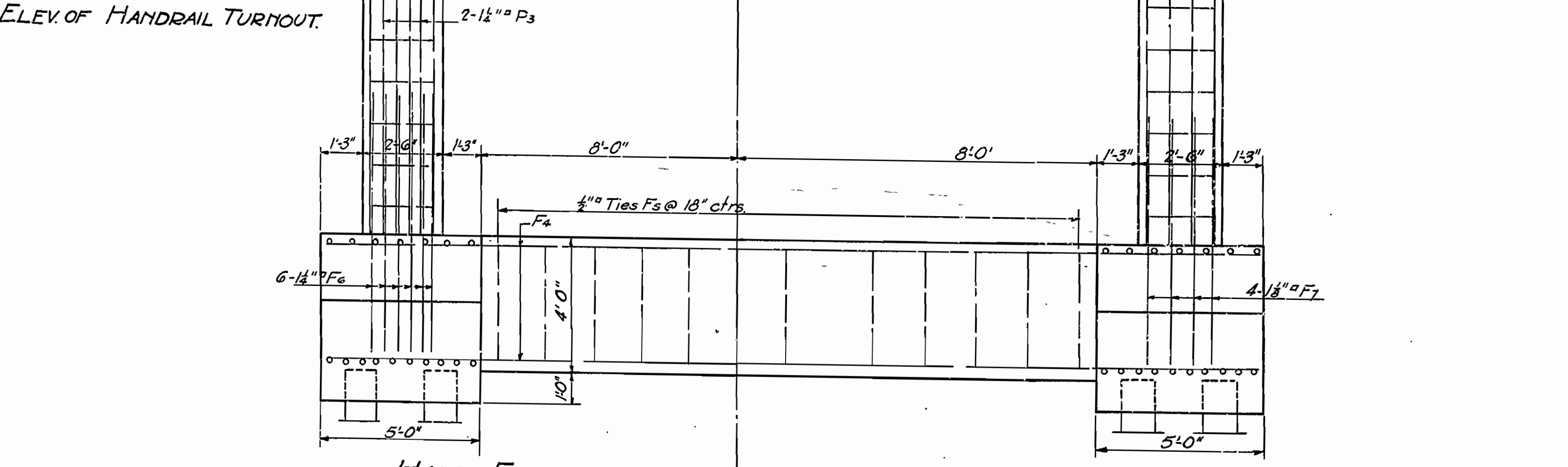
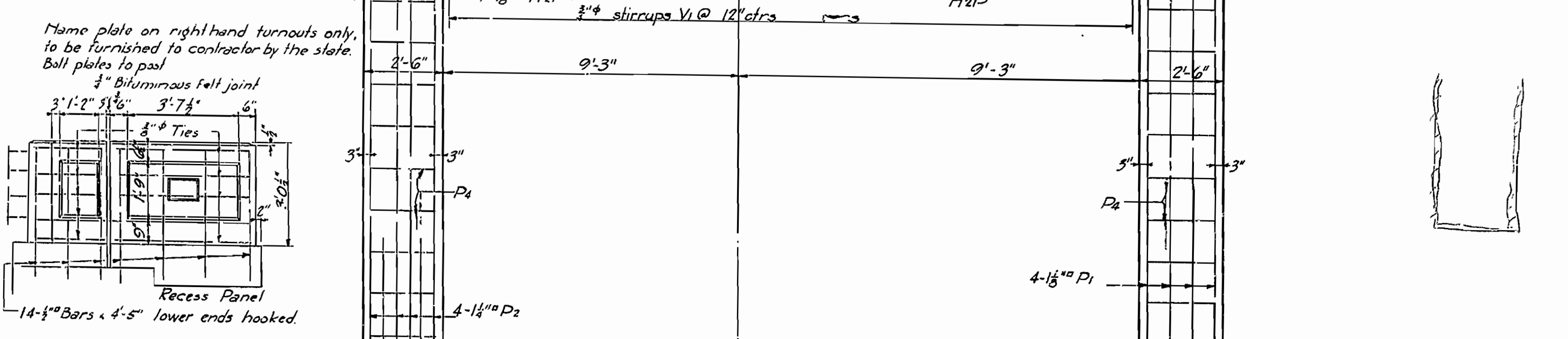
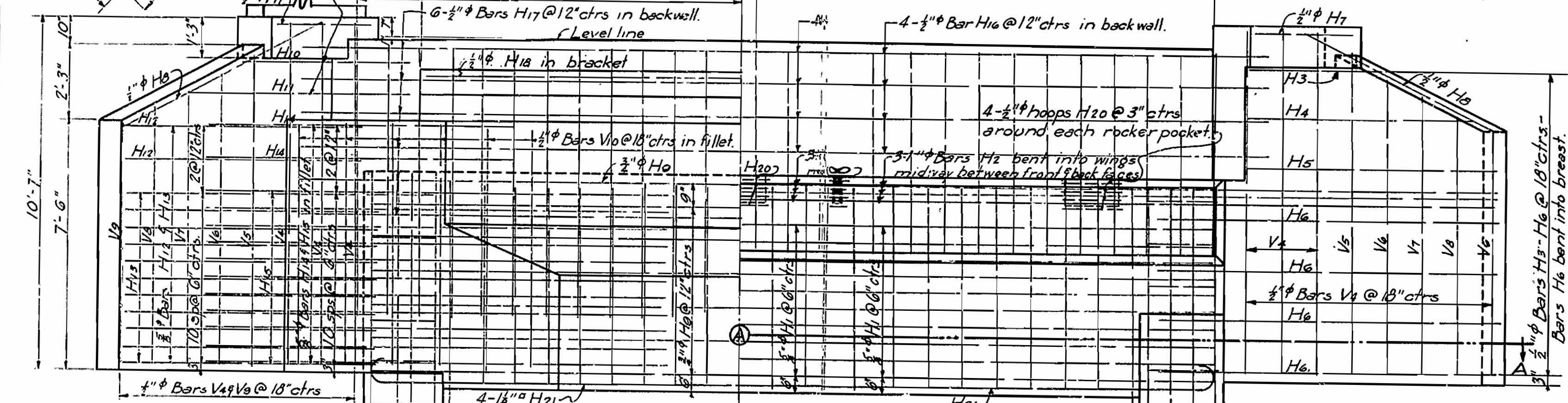
BRIDGE ENGINEER  
 BE No. 1671 widened & relocated on 2/27/31  
 No. Russellville as ex. 5264 10650



FISCAL YEAR	JOB NO.	SHEET	TOTAL SHEETS
1931	8161	8	11
E-141C 1931		8	11

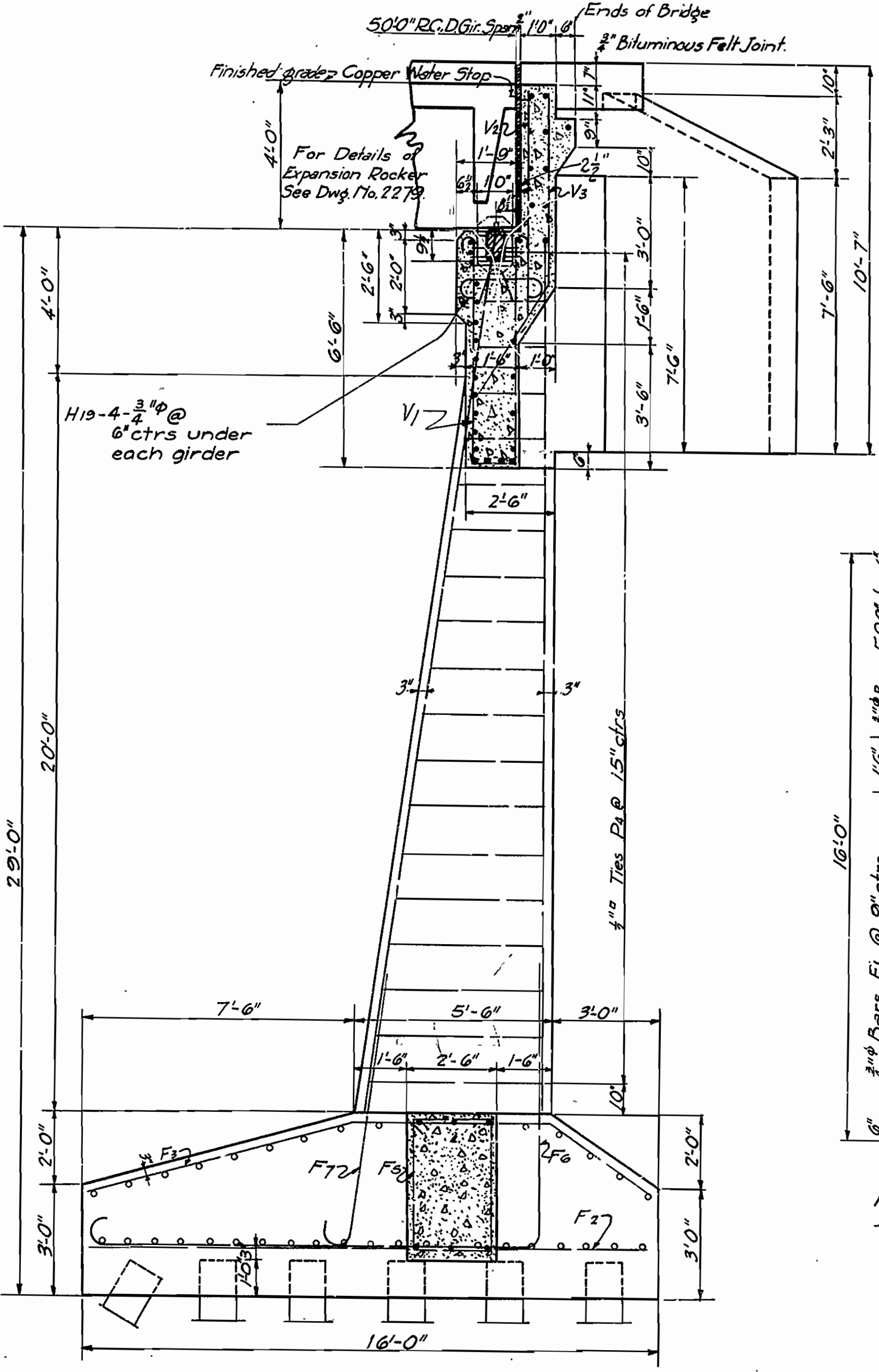


MARK	SIZE	LENGTH	BENDING DIAGRAM	MARK	SIZE	LENGTH	BENDING DIAGRAM
F6	1/2"	21'-1"		H6	1/2"	13'-9"	
F7	1/2"	8'-6"		H10	1/2"	7'-6"	
F5	1/2"	12'-3"		H11	1/2"	10'-3"	
P4	1/2"	Varies		H14	1/2"	10'-3"	
H20	1/2"	7'-11"		H15	1/2"	15'-6"	
H21	1/2"	25'-0"		V3	3/4"	8'-8"	
H19	3/4"	3'-9"		H2	1"	46'-0"	
V1	3/4"	14'-10"		F3	3/4"	16'-4"	

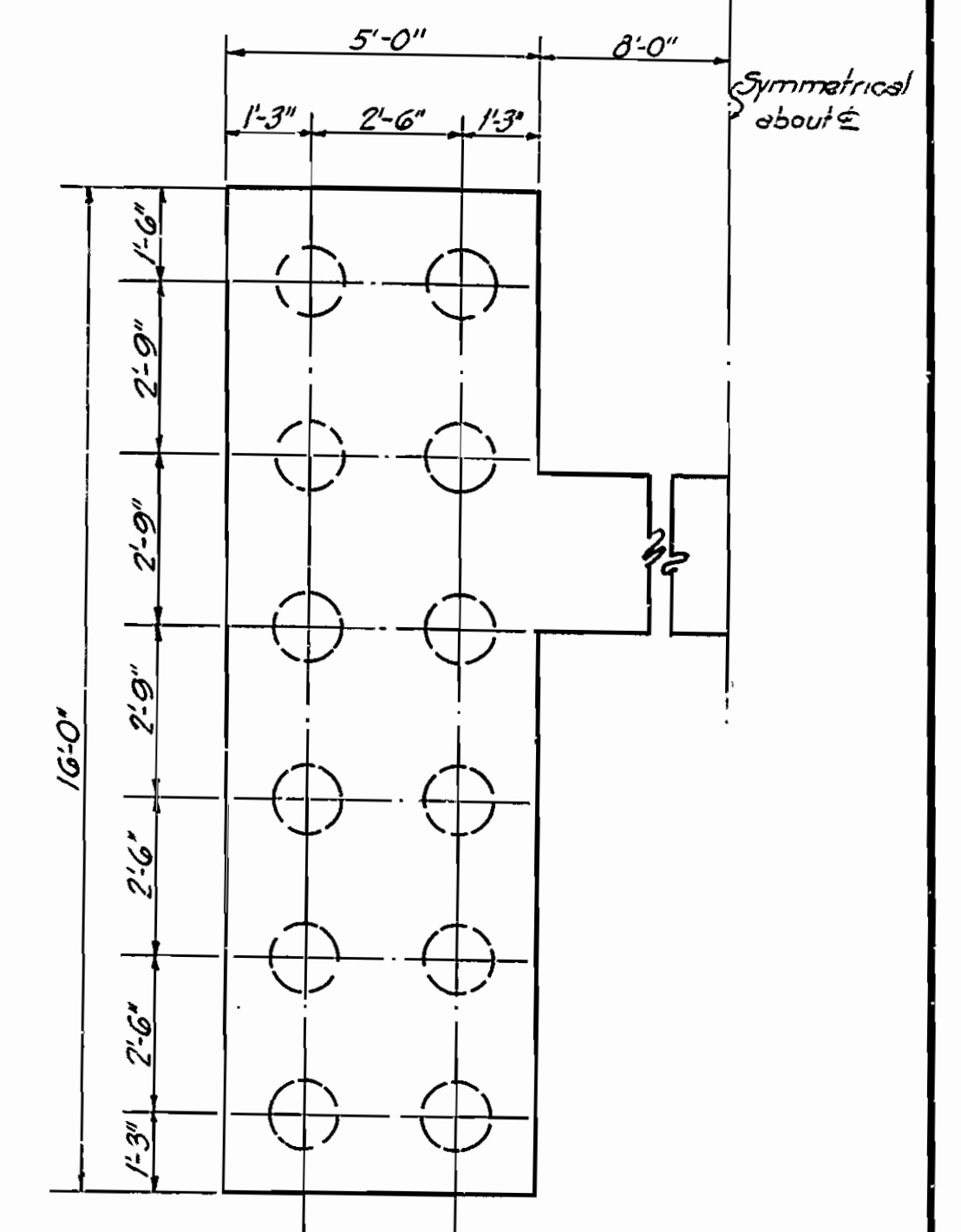


HALF ELEVATION Showing Steel in Back Face  
 HALF ELEVATION Showing Steel in Front Face

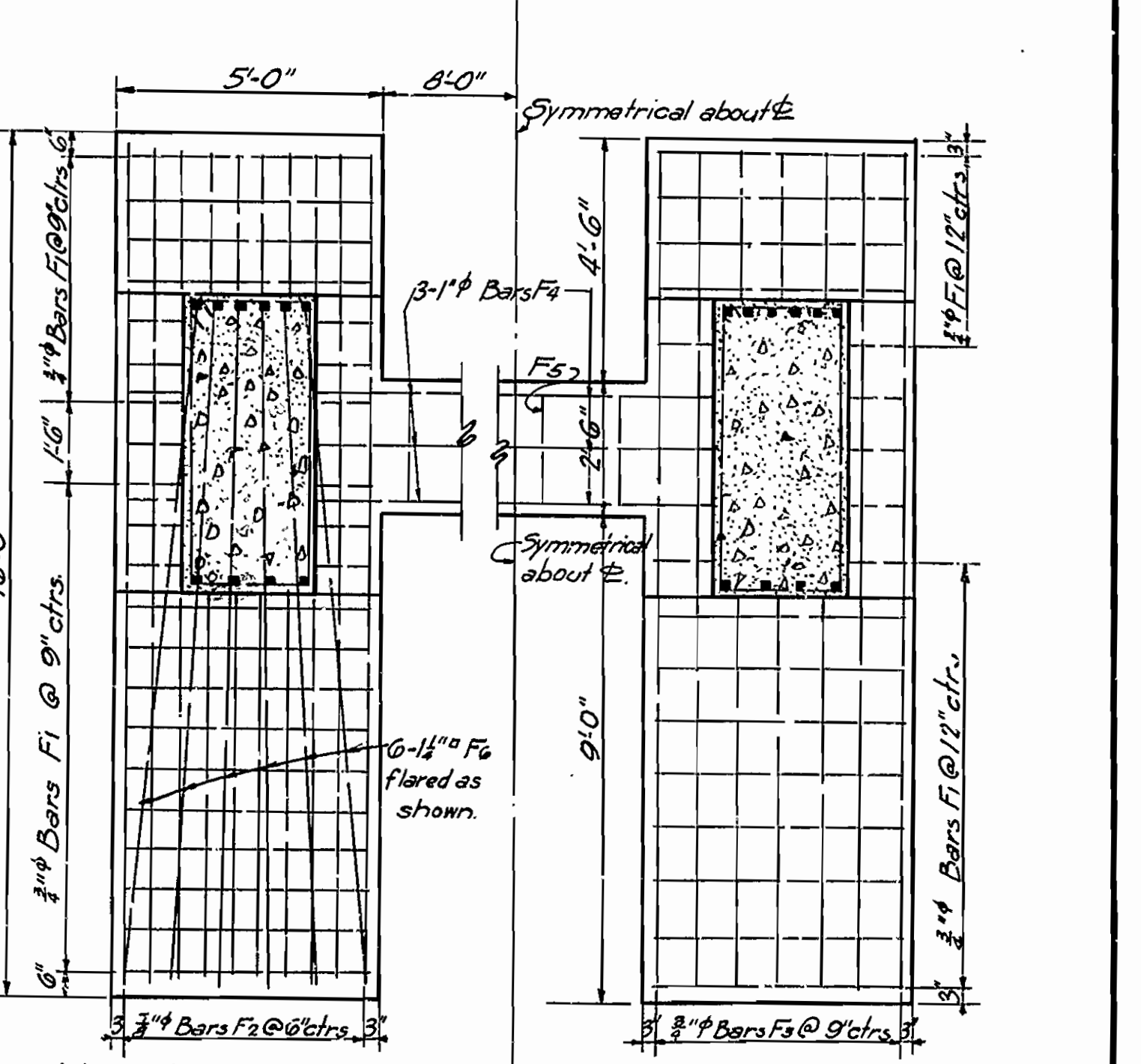
For Details of Superstructure, See Dwg. No. 2279.



SECTION ON E



HALF PILE PLAN



HALF FOOTING PLAN Showing Steel in Bottom  
 HALF FOOTING PLAN Showing Steel in Top

DETAILS OF ABUTMENTS  
 FOR BRIDGE OVER POINT REMOVE CREEK  
 MORRILTON-BLACKWELL ROAD  
 CONWAY COUNTY  
 ROUTE 64 SEC. 7

ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn By: *E.E.* Date: 2-22-31  
 Traced By: *E.M.M.* Date: 3-4-31  
 Checked By: *E.O.G.* Date: 4-23-31  
 Scale: 3/8" = 1'-0"  
 BRIDGE NO. 1671. DRAWING NO. 3109

*N.B. Stevens*  
 BRIDGE ENGINEER







