

STATE OF ARKANSAS  
STATE HIGHWAY DEPARTMENT

FISCAL YEAR	JOB NO.	SHEET No.	TOTAL SHEETS
1928	771	7	12

*Prop. Bridges - Camden, Ark. Dr. 696*

PLAN OF PROPOSED BRIDGES  
ON  
SMACKOVER-CAMDEN ROAD  
UNION-OUACHITA COUNTIES

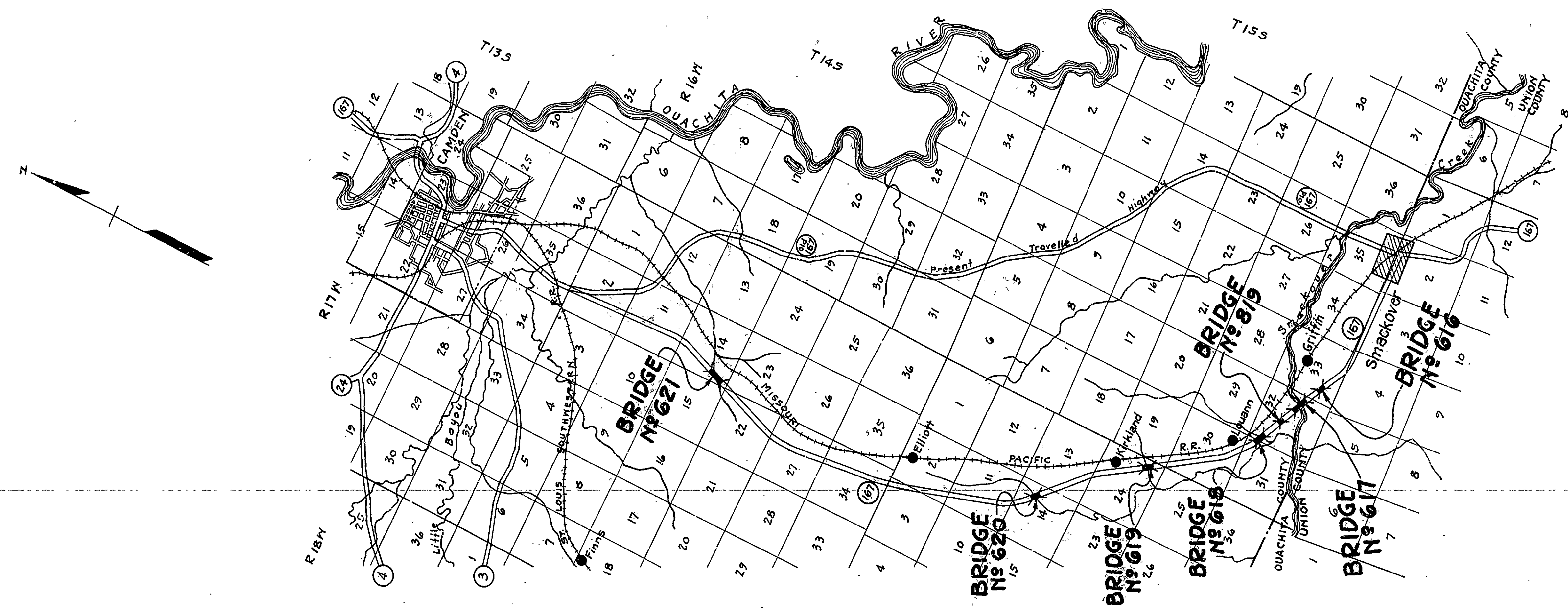
ROUTE 167 SEC. 2 & 3  
JOB No 771  
FEDERAL AID PROJECT No.

**INDEX OF SHEETS**

SHEET NO.	DRAW. NO.	DESCRIPTION
1	696	TITLE SHEET
2 34	697	LAYOUT OF BRIDGES NO. 616 & 819
3 35	698	DETAILS OF SUBSTRS. BRS. NO. 616 & 618
4 36	699	LAYOUT OF BRIDGE NO. 617
5 37	700	DETAILS OF SUBSTRS. BRIDGE NO. 617
6 38	93	DETAILS OF 80 FT. STEEL SPAN
7 39	701	LAYOUT OF BRIDGES NO. 618 & 619
8 40	702	DETAILS OF SUBSTRS. BRS. NO. 619, 620 & 621
9 41	703	LAYOUT OF BRIDGES NO. 620 & 621
10 42	704	DETAILS OF SUBSTRS. BRIDGE NO. 819
11 43	178	DETAILS OF 30 FT. SPAN
12 44	179	DETAILS OF 35 FT. SPAN

**QUANTITIES**

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
12	EARTH EXCAVATION	3335	CU. YDS.
13	DRY EXCAV. FOR STRUCTS.	762.67	CU. YDS.
13	WET EXCAV. FOR STRUCTS.	2345.88	CU. YDS.
54	CLASS "A" CONCRETE	1224.04	CU. YDS.
54	CLASS "S" CONCRETE	712.69	CU. YDS.
S.P.	SEAL CONCRETE	41.90	CU. YDS.
55	REINFORCING STEEL	260105	LBS.
56	STRUCTURAL STEEL	61600	LBS.
66	UNTR. TIMBER PILING	10404	LIN. FT.
69	RIP RAP	250	SQ. YDS.
74	CONC. RAILING FOR STRUCTS.	1330.34	LIN. FT.



**LAYOUT**  
Scale: 1" = 1 MILE  
GROSS LENGTH OF PROJECT 687'-0" = 0.1301 MILES  
NET LENGTH OF PROJECT 687'-0" = 0.1301 MILES

APPROVED [Signature]  
COMMISSIONER - STATE LANDS, HIGHWAYS AND IMPROVEMENTS

APPROVED [Signature]  
STATE HIGHWAY ENGINEER

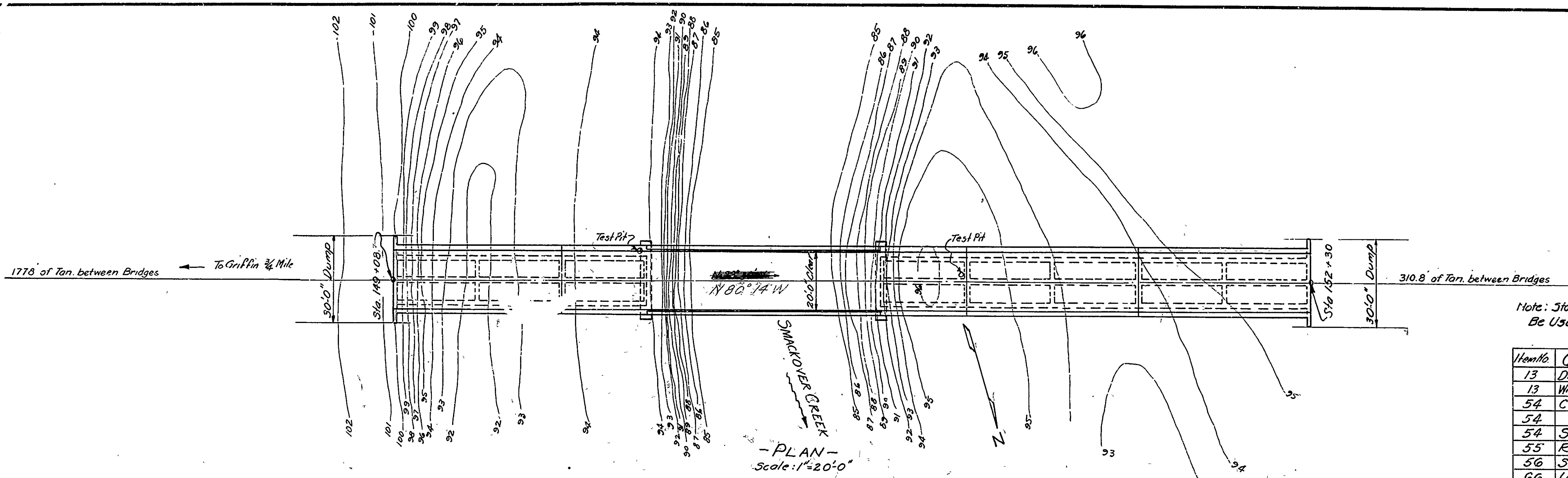
RECOMMENDED FOR APPROVAL [Signature]  
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL [Signature]  
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED [Signature]  
DIRECTOR - U. S. BUREAU OF PUBLIC ROADS

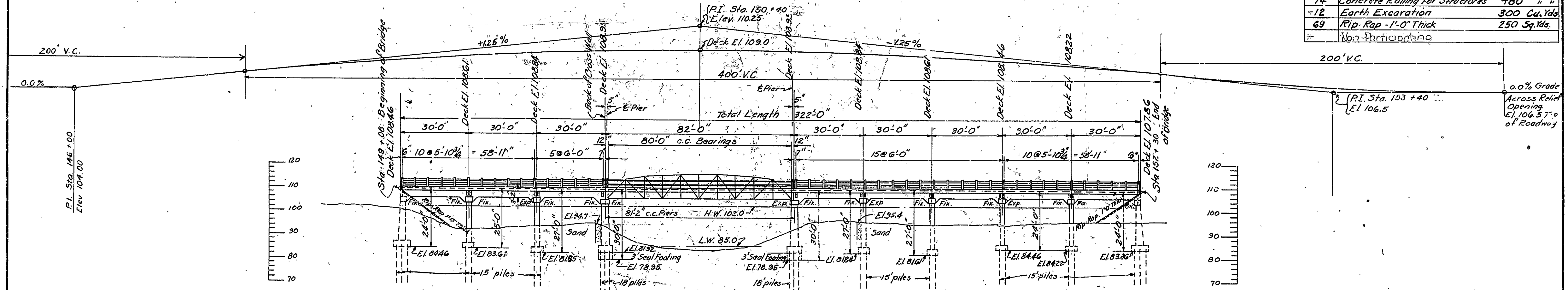
*N. B. Davis*  
BRIDGE ENGINEER

FISCAL YEAR	JOB	SHEET NO.	TOTAL SHEETS
	BRIDGE OVER SMOCKOVER CREEK, D.C. 699		
E.F.F.A.M. Proj. 1.		36	44
285-A			



Note: Stated Quantities Of Earth Excavation Are To Be Used In Abutment Fill

Item No.	QUANTITIES FOR BR. No. G17	Quantity
13	Dry Excavation for Structures	553.0 Cu.Yds.
13	Wet " " "	483.72 " "
54	Class-A Concrete	333.89 " "
54	" - S - "	312.81 " "
54	Seal Concrete (Class A)	41.9 " "
55	Reinforcing Steel	95000 Lbs.
56	Structural Steel in Truss	61600 " "
66	Untreated Timber Piling	2364 L.M.Ft.
74	Concrete Railing for Structures	480 " "
12	Earth Excavation	300 Cu.Yds.
69	Pip. Rap - 1'-0" Thick	250 Sq.Yds.
*	Non-Participating	



BM Nail in root of 20" Beech about 70' left of Sta. 151+35 Elev. 96.71  
 Note: Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field. Bearing capacity 15 Tons.

For details of structure see Drgs. No. 178-93-100  
 300.0 Cu. Yds. To Be Used In Dump

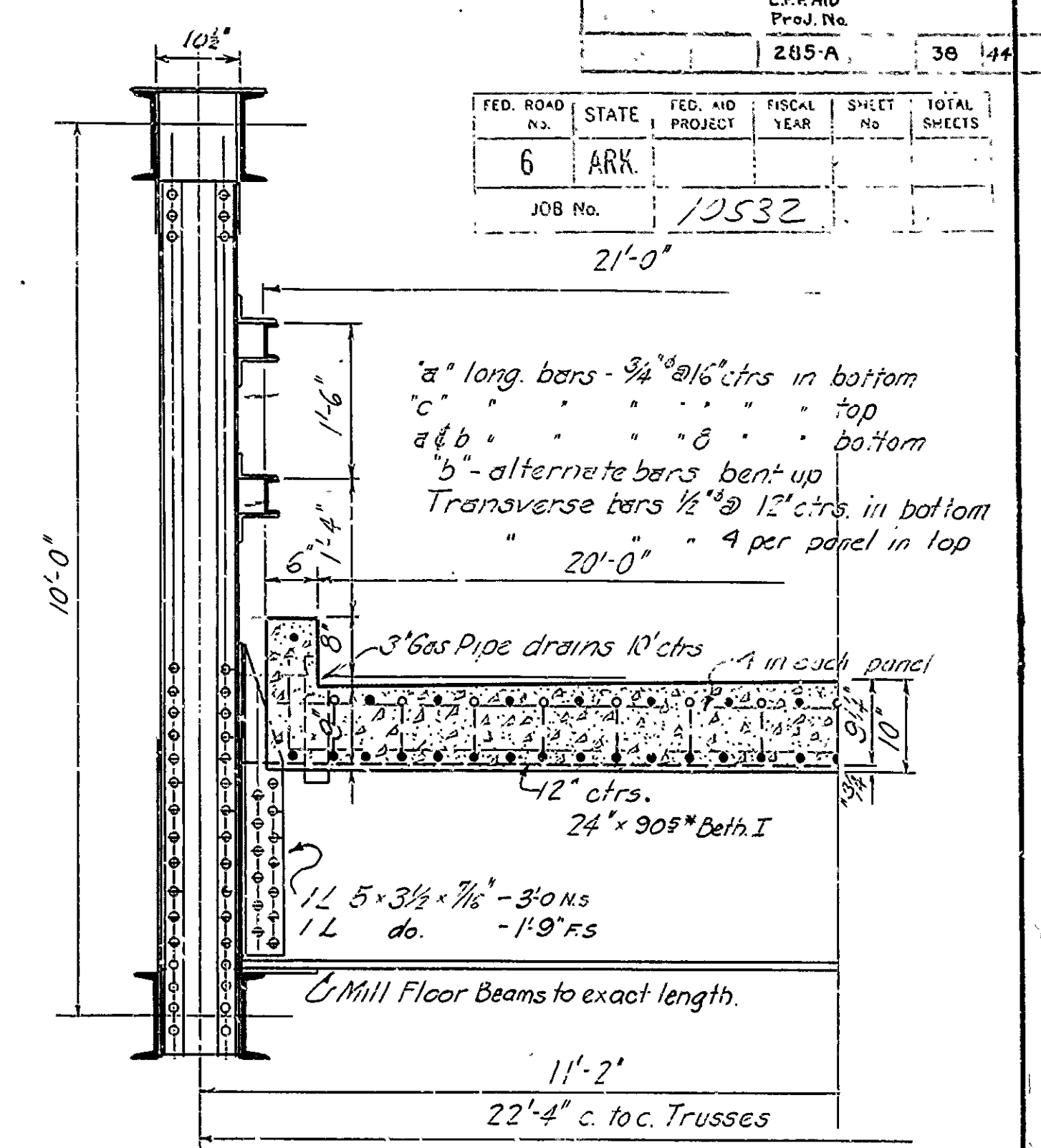
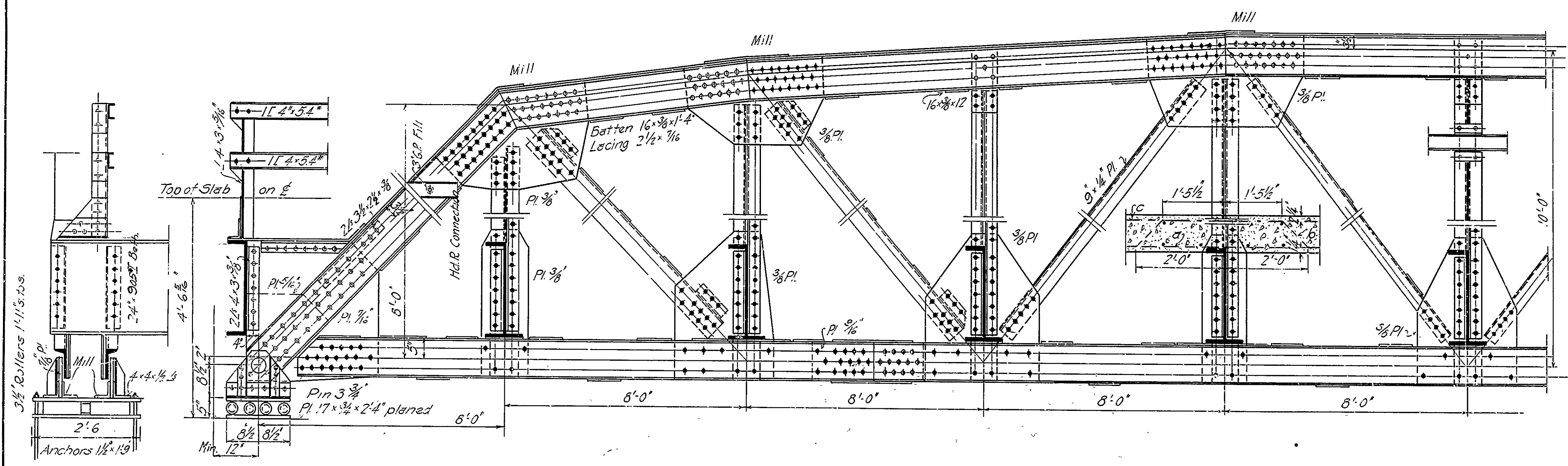
Drainage Area - 230,000 Acres  
 Topog. - 50% Wooded

LAYOUT OF  
 BRIDGE OVER SMOCKOVER CREEK  
 3/4 MILE N.O. OF GRIFFIN, OUACHITA-UNION CO. LINE.  
 ROUTE 167 SEC. 2 & 3  
 ARKANSAS STATE HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

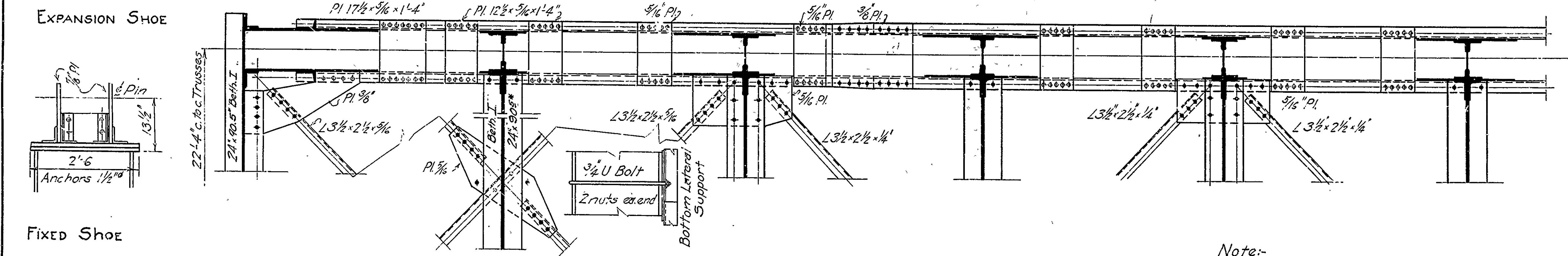
Revised E.A.P. No. 518-32 BHK  
 Sta. No. 699

Drawn By: J.C.C. Date: 2-1-28  
 Traced By: J.C.C. Date: 2-1-28  
 Checked By: J.C.C. Date: 2-1-28  
 BRIDGE No. G17  
 Scale: 1 in. = 20 ft.  
 DRAWING No. 699

80' STEEL HWY. TRUSS 2' Rdwy. Dr. 73				
E.F.F. AID		SHEET No.		TOTAL
Proj. No.		285-A		38 144
FED. ROAD No.	STATE	FED. AID PROJECT YEAR	FISCAL YEAR	SHEET No.
6	ARK.			
JOB No.		10532		



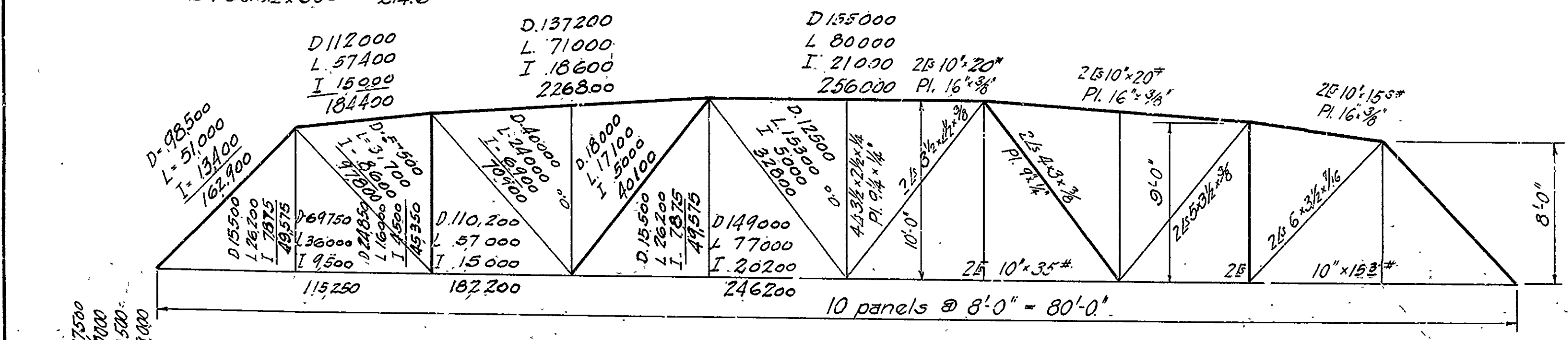
PARTIAL SECTION



Floor Beams  
 D.L.M. - 68800  
 L.L.M. - 163000  
 I.M. - 48700  
 Total 280500

$S = \frac{280,500 \times 12}{16,000} = 210.3$

$24' \text{ Beth. I } \times 905' = 214.6$



QUANTITIES  
 Struct. Steel 20,603# Shop Wt.  
 Rein. Steel 7925'  
 Conc. 'S' (81'-6") 53 1/2 cu yds.

M.B. Lerner  
 Bridge Engineer

Revised	FEAR No.	5-1032 SHK
	Sta. No.	

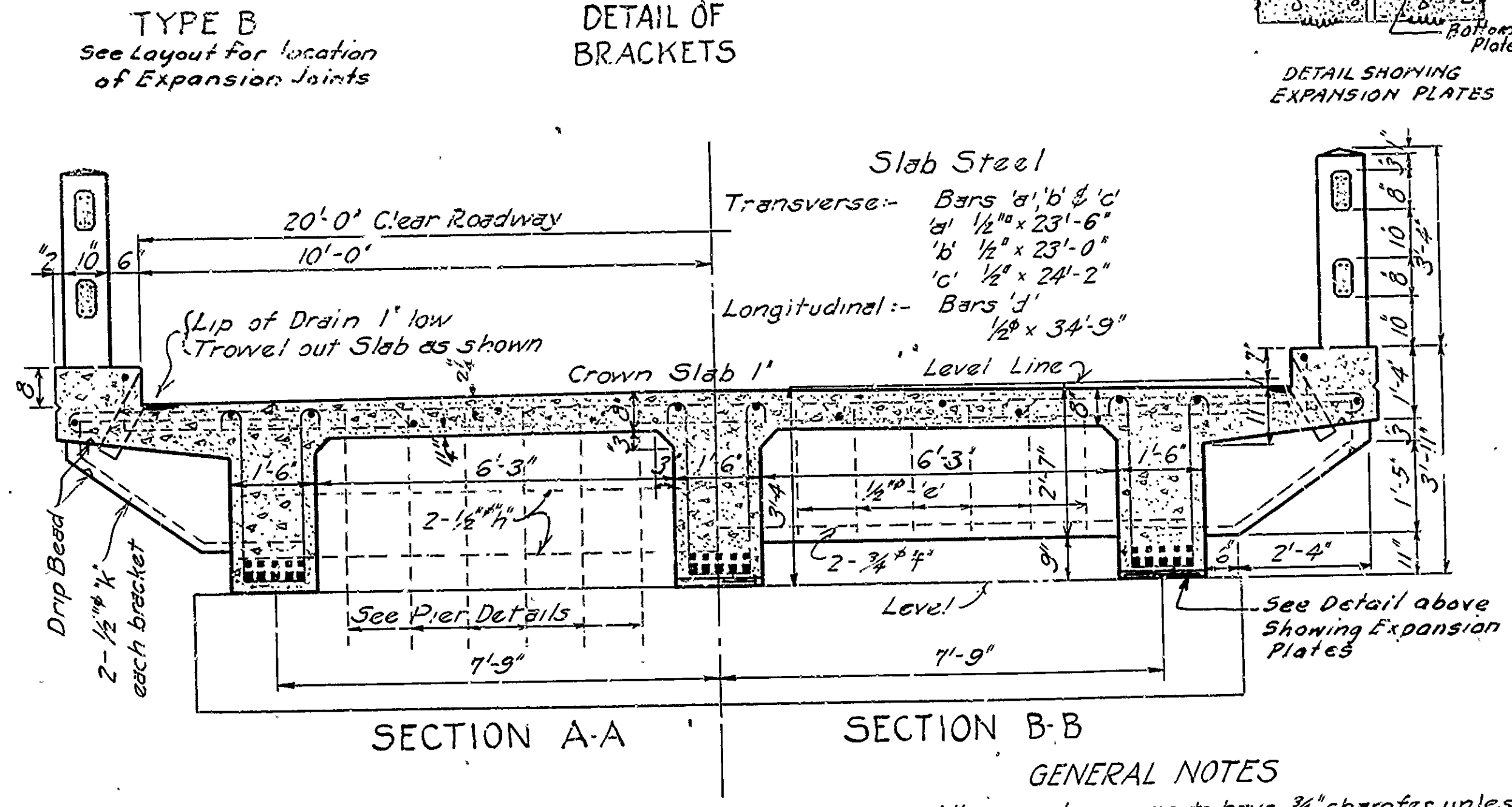
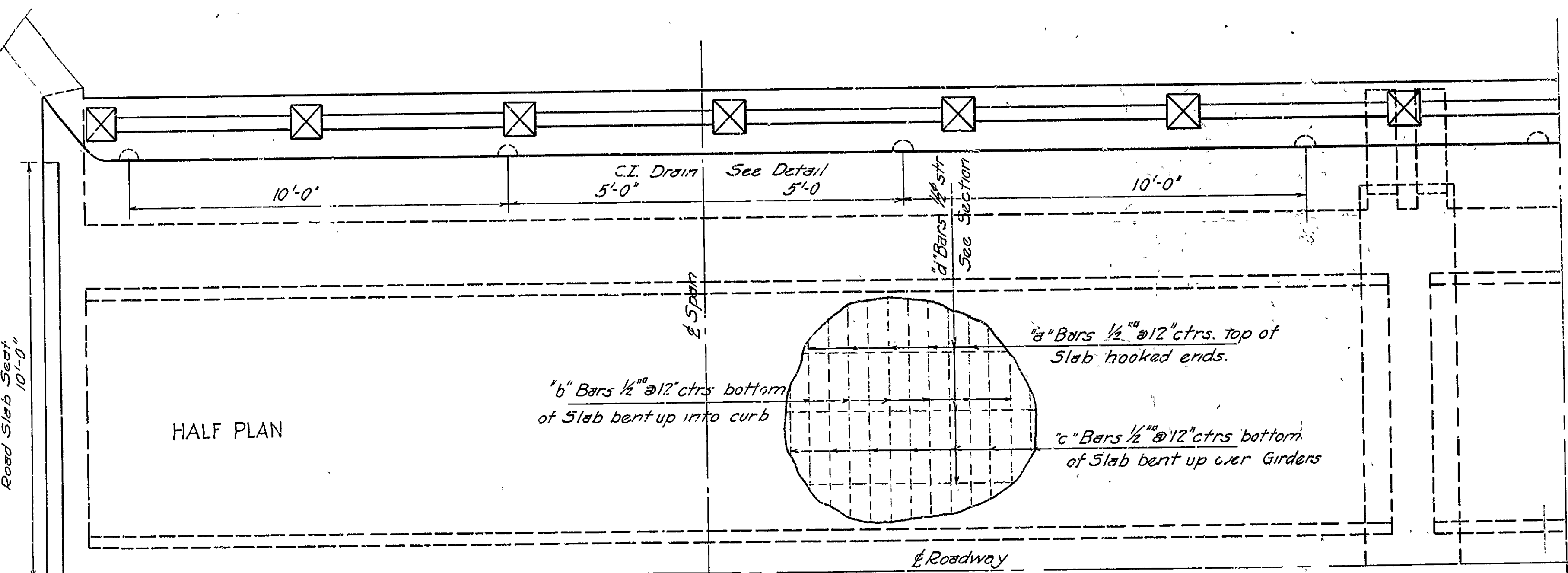
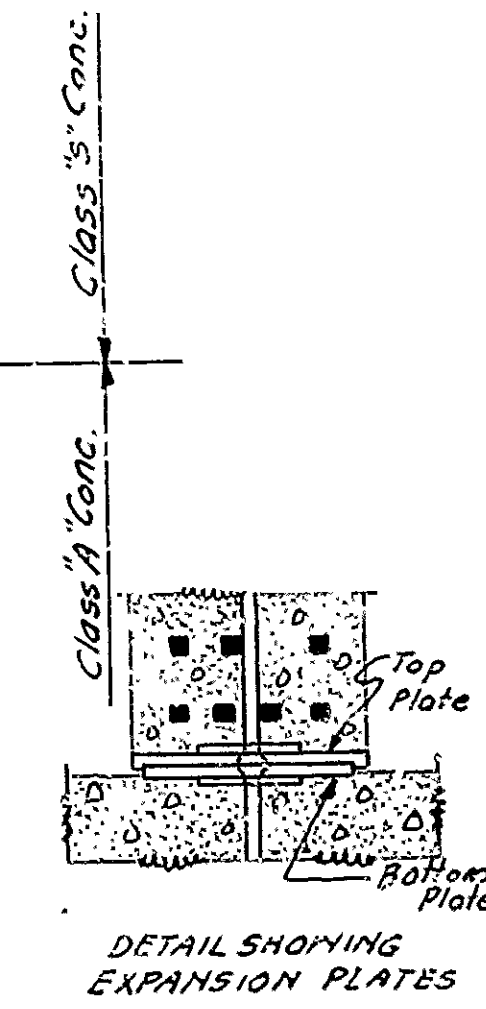
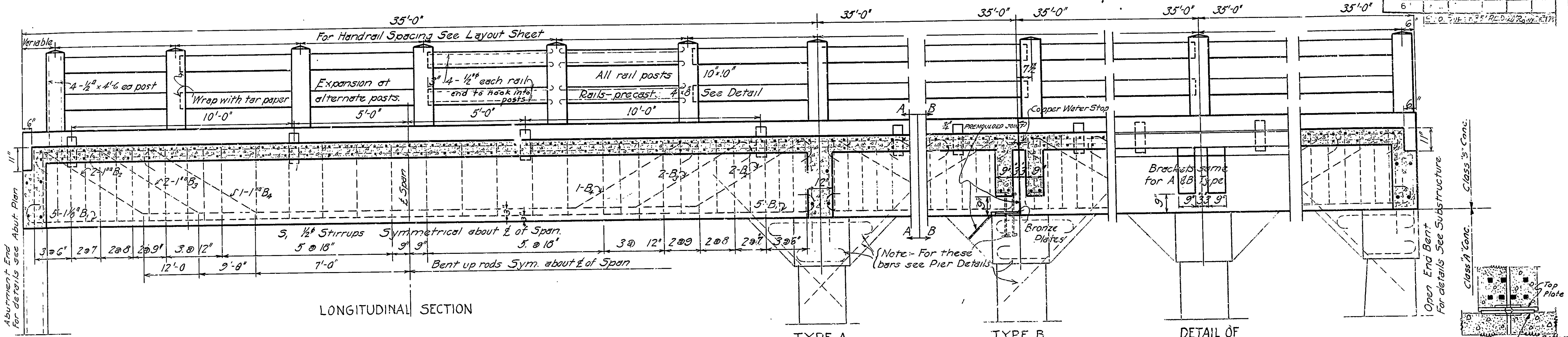
STANDARD PLAN  
 80'-0" STEEL HIGHWAY TRUSS  
 20'-0" Roadway Concrete Floor  
 ARKANSAS HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

Designed By \_\_\_\_\_ Date \_\_\_\_\_  
 Traced By \_\_\_\_\_ Date \_\_\_\_\_  
 Checked By \_\_\_\_\_ Date \_\_\_\_\_

LIVE LOAD:- Uniform-100lbs per sq. ft. of Roadway  
 Concentrated- 2-15Ton Trucks as shown  
 Impac. - 100  
 Unit Stresses- See Ark. Highway Dept. Specif. 7/30/23  
 Rivets:- 3/4" diameter  
 Open Holes:- Rivet holes in main members punch 3/16" smaller than rivet. During shop assembly ream to 1/16" larger than rivet specified  
 All field connections riveted. Rivet holes in tension members so spaced that only one hole is deducted from each angle at point of maximum stress. Deduct two holes in each channel  
 Shop Paint:- One coat red lead & raw linseed oil.  
 Field Paint:- Two coats of different colors as approved  
 Batten Plates:- Spaced not over 3'-0" centers on tension members  
 Concrete Floor slab Class 'S' Extra 'I' was added for wear

Note:-  
 This drawing is general.  
 Shop drawings must be submitted and approved before fabrication is begun.

FED. ROAD DIST. NO.	STATE	SEC. AID NO.	SCALE	SHEET NO.	TOTAL SHEETS
6					



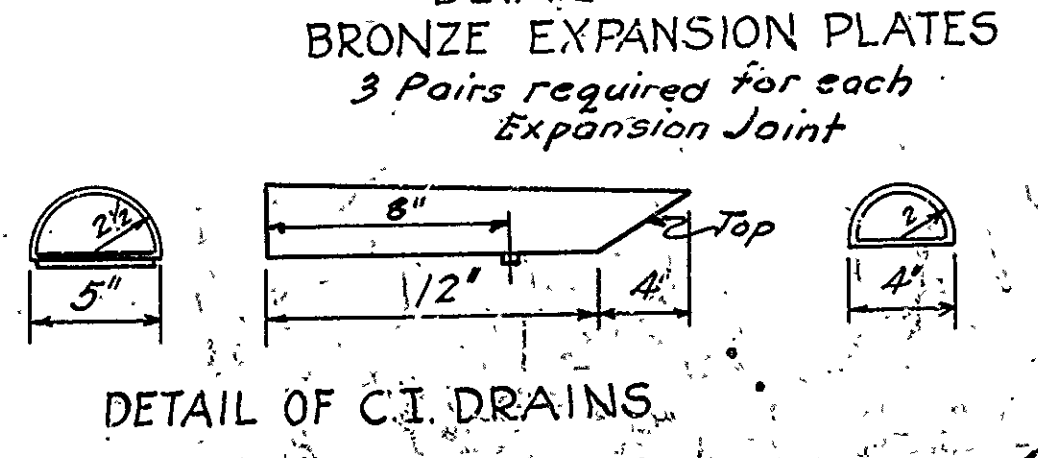
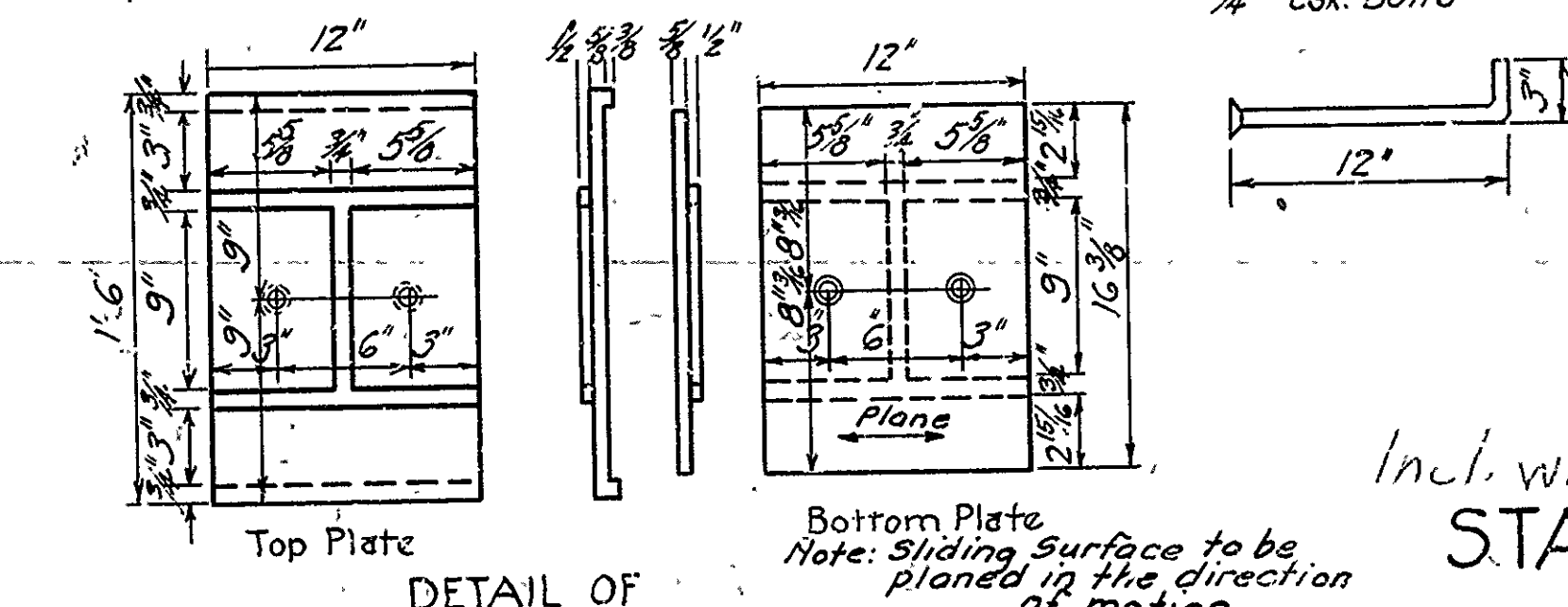
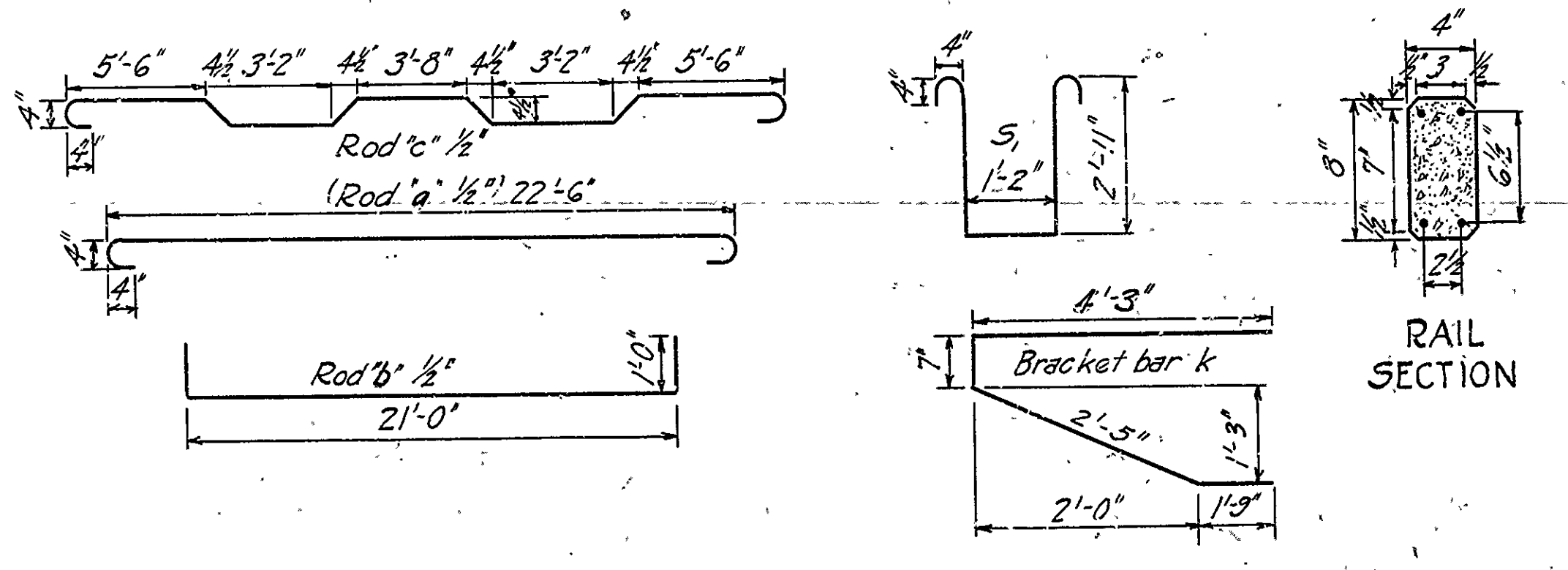
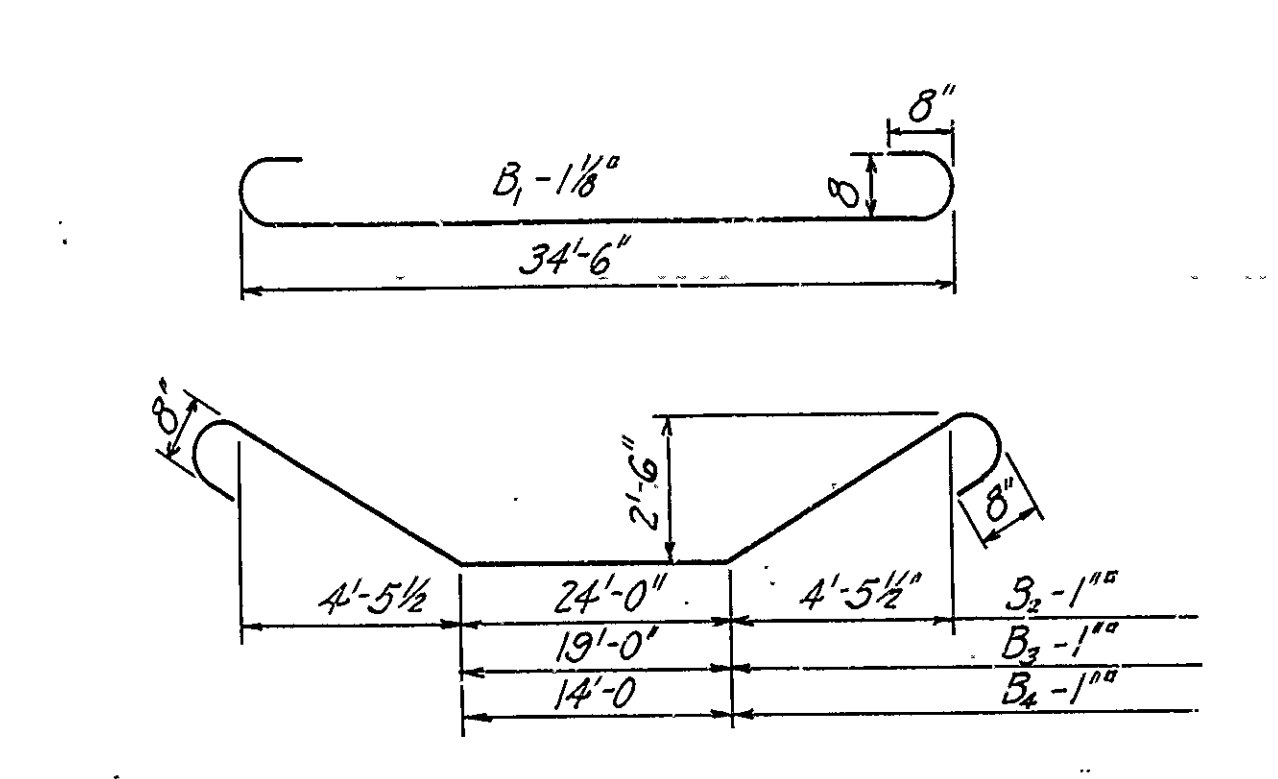
- GENERAL NOTES**
- All exposed corners to have  $\frac{3}{8}$ " chamfer unless otherwise noted.
  - Precast Concrete Handrails to be 1-3 Mix. Max. Agg. 4".
  - Rail Posts to be Class 'S' Concrete.
  - Reinforcing Steel to be deformed bars of Structural or Intermediate Grade. Shop List and Bending Diagrams of Steel must be submitted before fabrication. Drains and Exp. Devices to be paid for at the unit price bid for Reinf. Steel.
  - All concrete above Top Column Cap except Handrail, Class 'S'; below, Class 'A'.
  - Specifications - Ark. Standard Road and Bridge Specifications adopted May 30 1925.
  - Pour all Concrete in the dry.

Incl. with Job 4372 for information only.  
**STANDARD SUPERSTRUCTURE**  
 FOR  
**35 FT. R.C.D. GIRDER**  
**20 FT. ROADWAY**  
 ROUTE SEC.

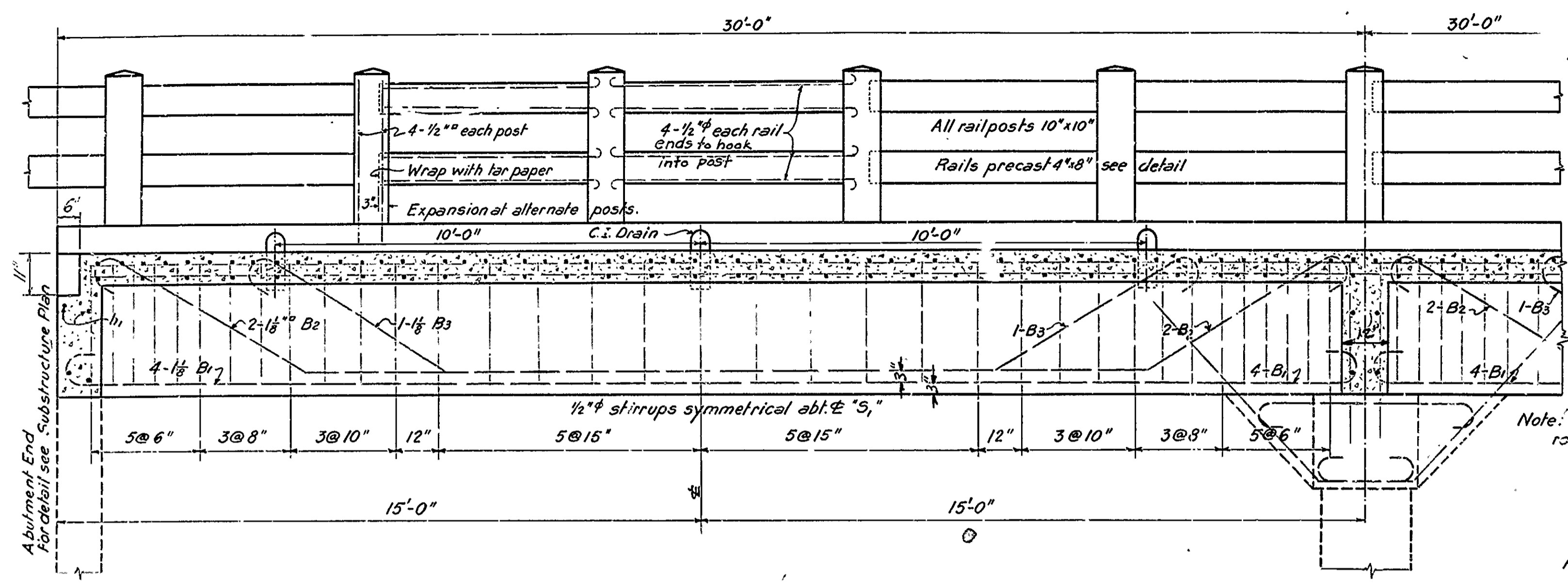
**ARKANSAS STATE HIGHWAY DEPARTMENT**  
 LITTLE ROCK, ARK.

Drawn By: *G.A.D.* Date: *1/24/28*  
 Traced By: *G.A.D.* Date: \_\_\_\_\_  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Scale:  $\frac{1}{2}$ " = 1' ft.  
 BRIDGE NO. \_\_\_\_\_ DRAWING NO. **179**

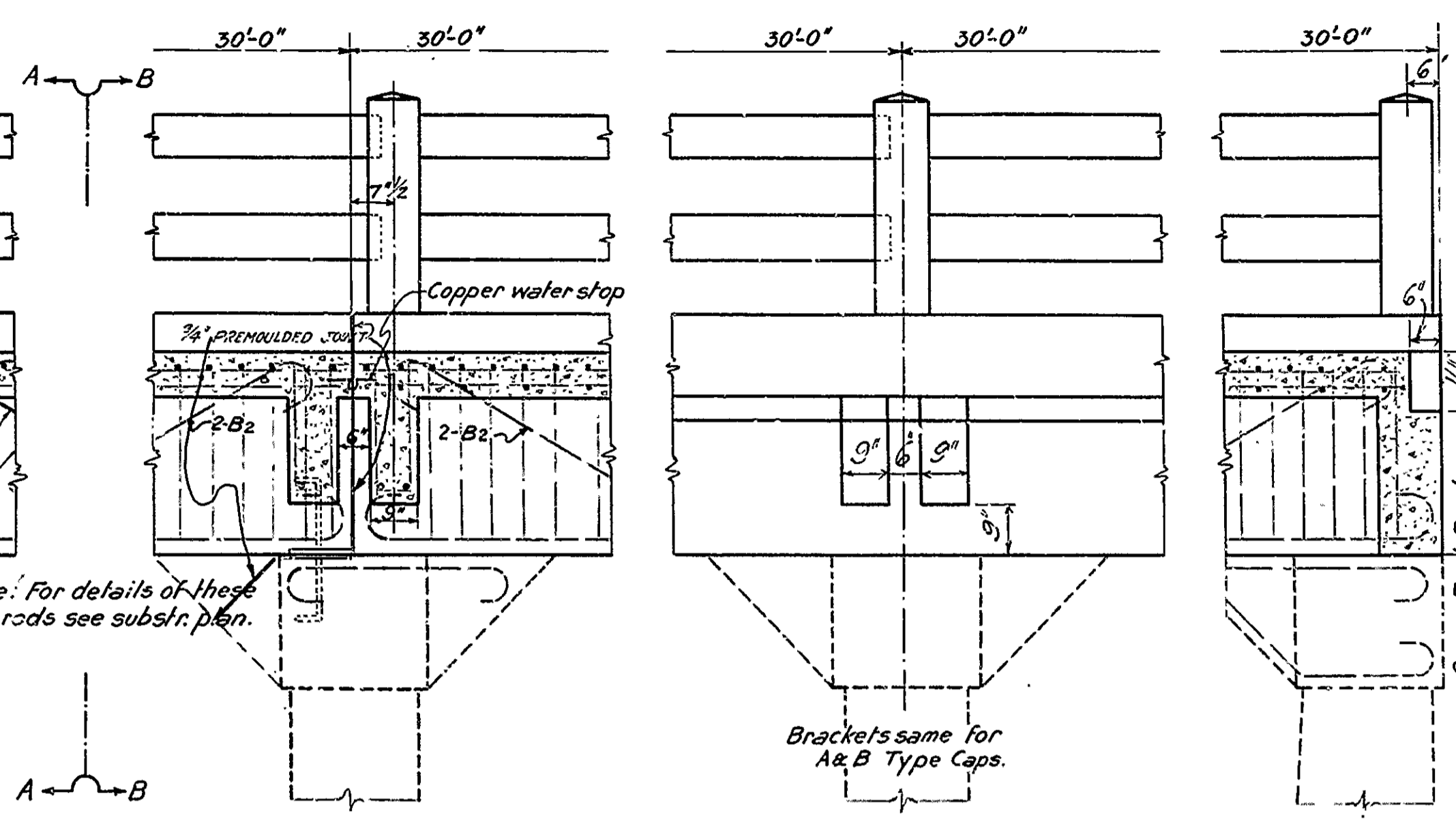
*M.B. Jones*  
 BRIDGE ENGINEER



FISCAL YEAR	JOB 7557	SHEET TOTAL	100
NO.	7557	NO.	32
STANDARD 30' R.C.D. GIRD. 20' ROADWAY			



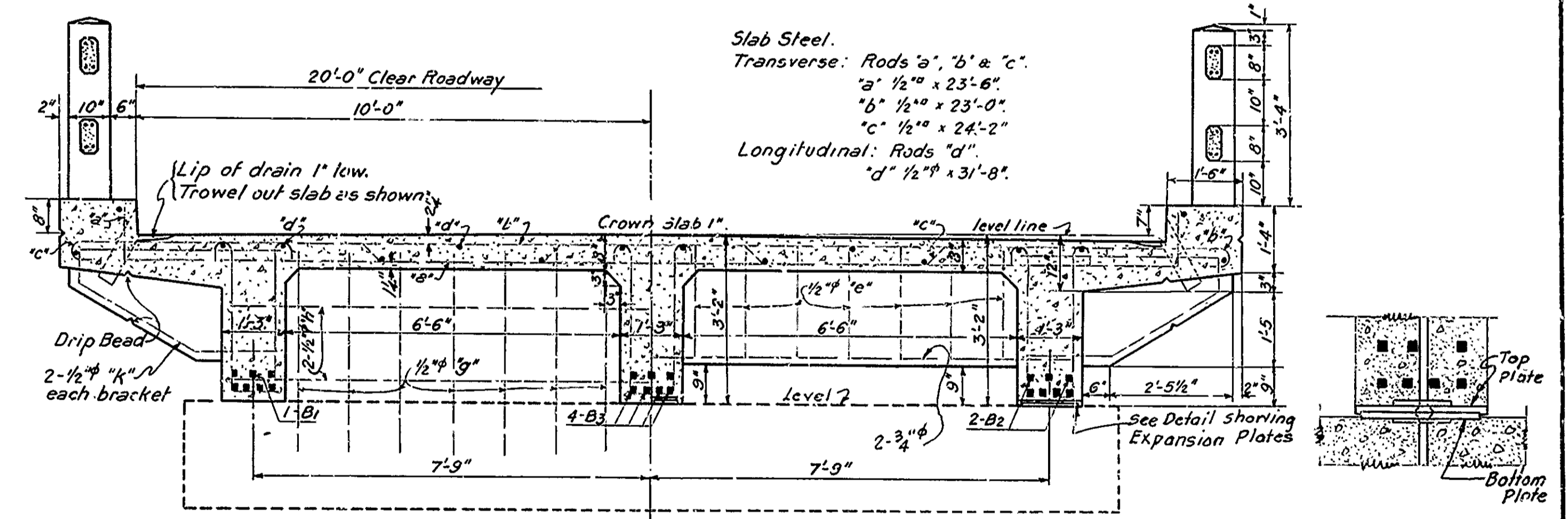
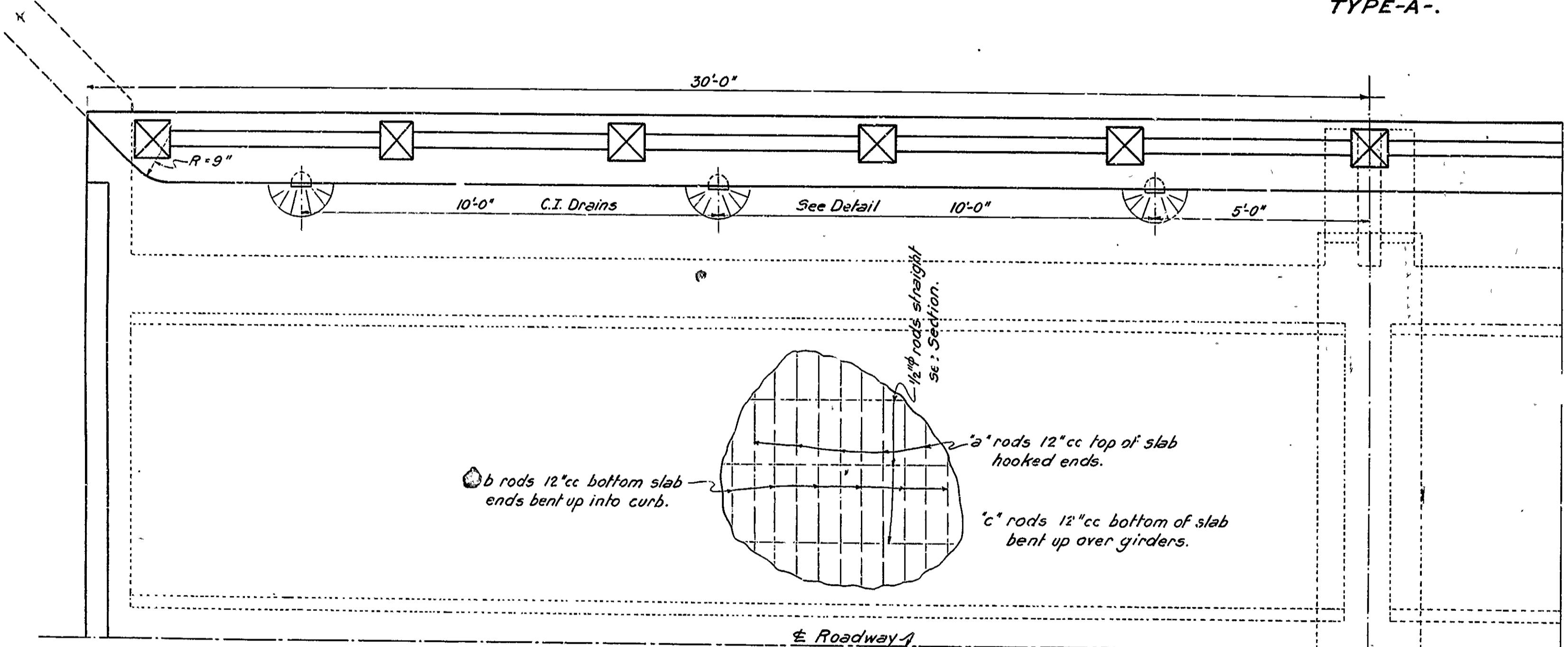
TYPE-A-



TYPE-B-

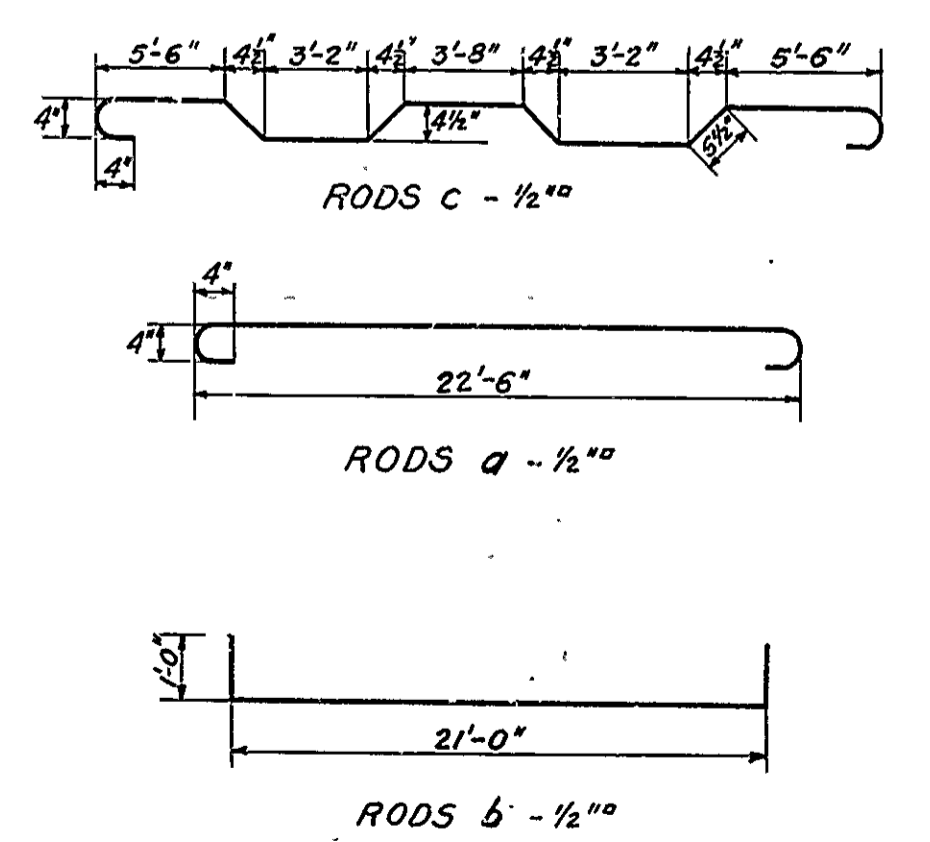
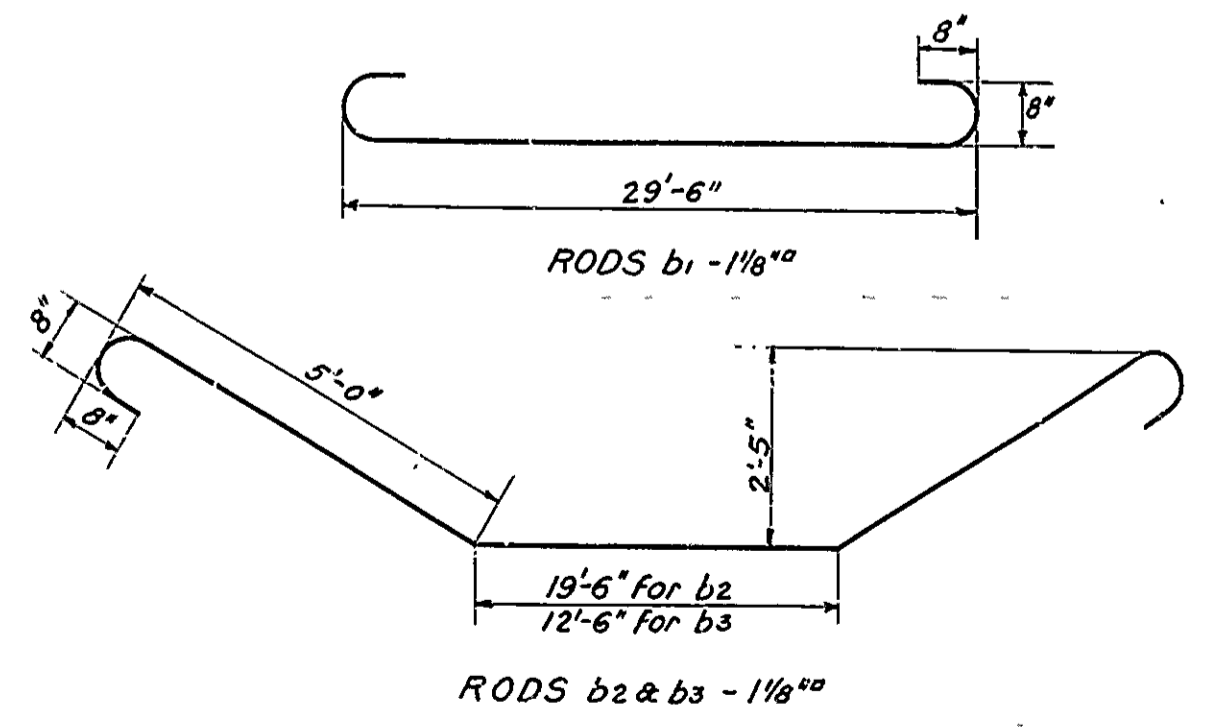
See Layout for location of Expansion Joints

DETAIL OF BRACKETS.

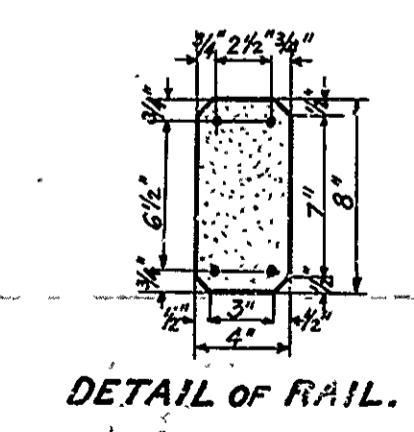
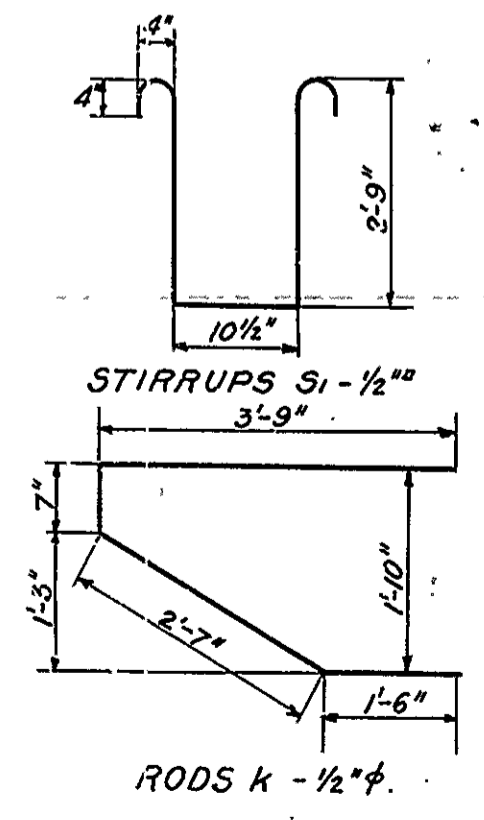


SECTION A-A.

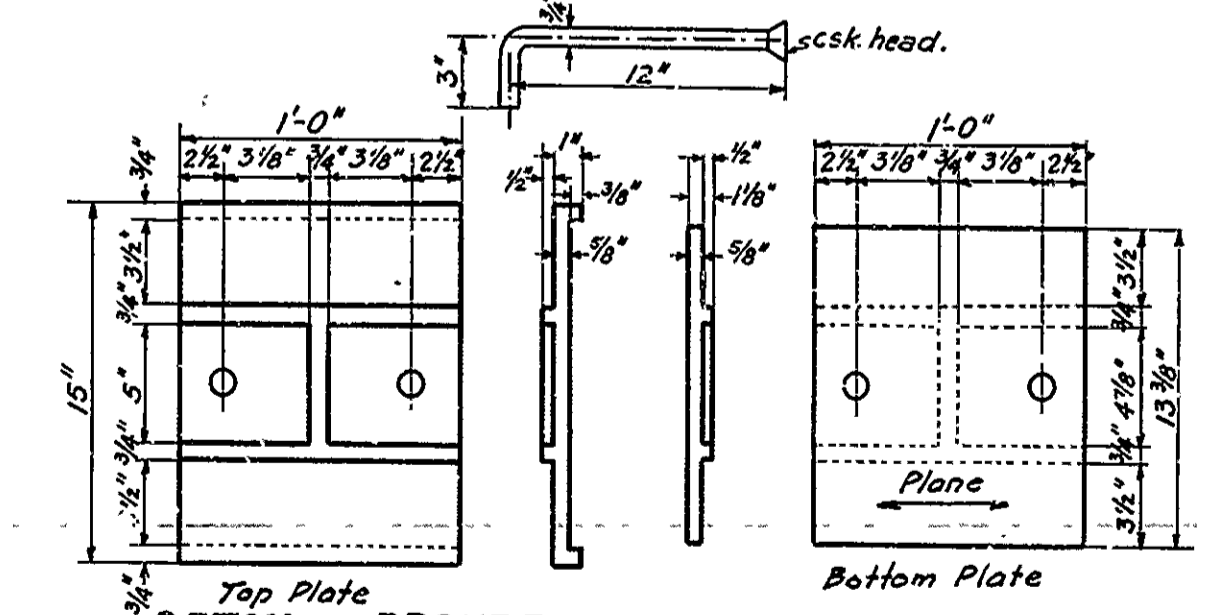
SECTION B-B.



BENDING DETAILS.



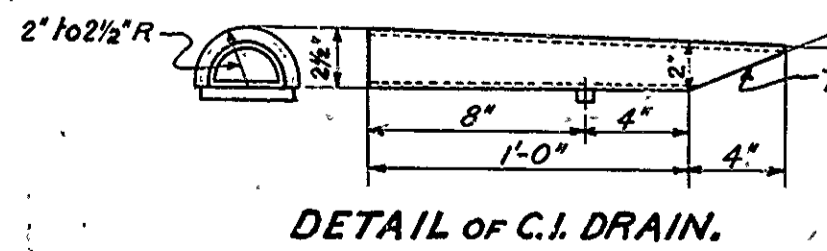
DETAIL OF RAIL.



DETAIL OF BRONZE EXPANSION PLATES AND ANCHORS.

3 pairs required for each Expansion Joint

NOTE: Sliding surface to be planed in the direction of motion.



DETAIL OF C.I. DRAIN.

For details for widening bridges No. 573 & 574, see Drwg. No. 178-A  
 For details for widening Bridge No. 693 See Drwg. No. 8555

Notes:  
 All exposed corners to have 1/4" Chamfer unless otherwise noted.  
 Precast concrete handrails to be 1:3 Mix. Max. aggregate 1/4".  
 Rail posts to be Class 5 concrete.  
 Reinforcing steel to be deformed bars of structural or intermediate grade.  
 Shoplist and bending diagrams of reinforcing steel must be submitted by contractor before fabrication is begun.  
 Drains and Exp. Devices to be paid for at unit price bid for Reinf. Steel.  
 All concrete above top of column caps, except handrail, to be Class "5".  
 All concrete below top of column caps to be Class "A" Concrete.  
 All concrete to be poured in the dry.  
 Specifications: Arkansas Standard Road and Bridge Specifications, adopted May 30th, 1925.

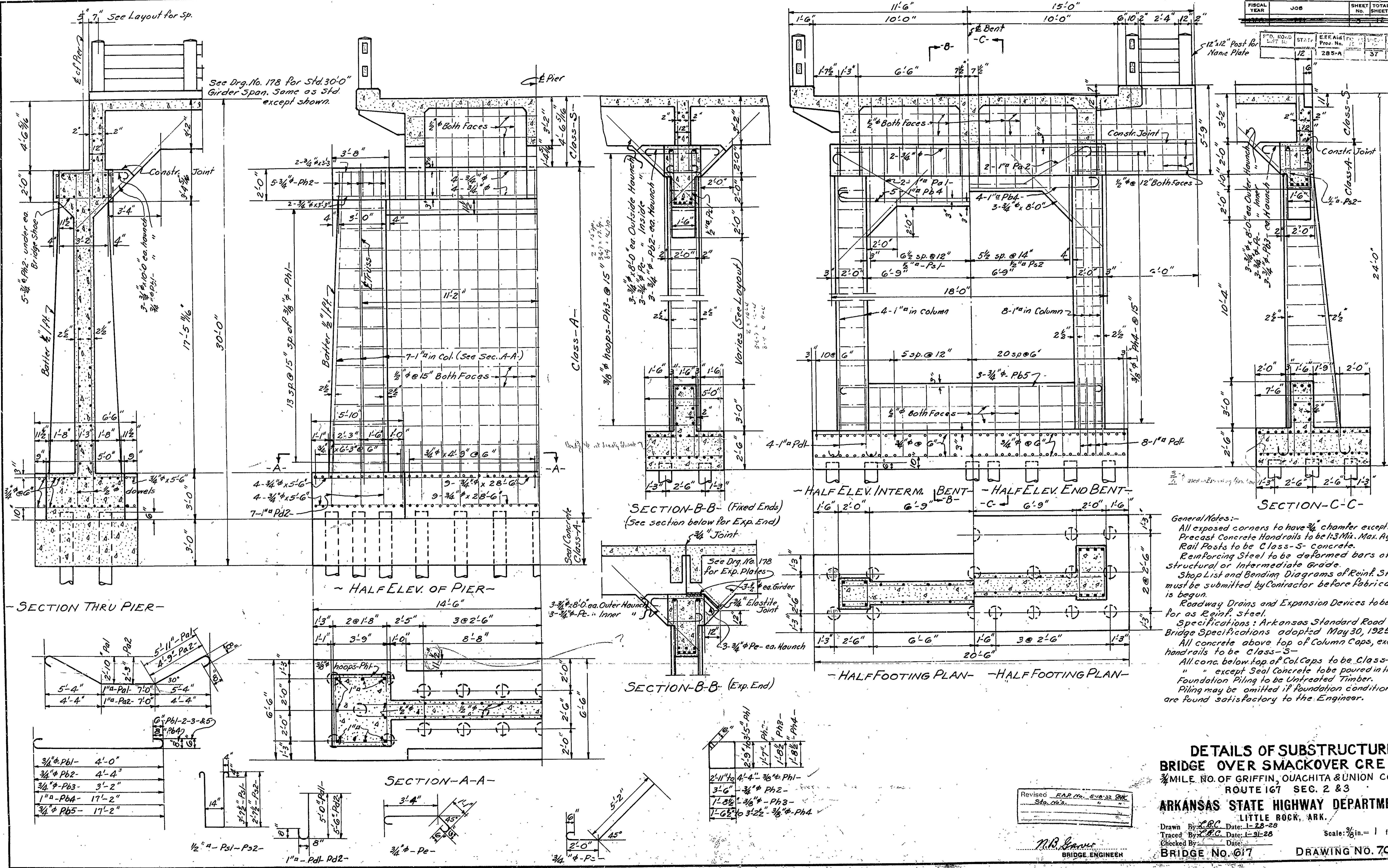
ORIGINAL DETAILS  
 STANDARD SUPERSTRUCTURE  
 FOR  
 30 FT. R.C.D. GIRDER.  
 20 FT. ROADWAY.  
 ROUTE SEC.

ARKANSAS STATE HIGHWAY DEPARTMENT  
 LITTLE ROCK, ARK.

Drawn By: GAD Date: 12/25/25  
 Traced By: J.S. Date: 1-21-26  
 Checked By: Date:  
 Scale: in. = 1/2 ft. = 1  
 BRIDGES NO. DRAWING NO. 178

M.R. [Signature]  
 BRIDGE ENGINEER

FISCAL YEAR	JOB	SHEET NO.	TOTAL SHEETS
1925	285-A	37	44



**General Notes:-**  
 All exposed corners to have 3/4" chamfer except noted.  
 Precast Concrete Handrails to be 1:3 Mix. Max. Agg. 1/4".  
 Rail Posts to be Class-S-5 concrete.  
 Reinforcing Steel to be deformed bars of structural or intermediate grade.  
 Shop List and Bending Diagrams of Reinf. Steel must be submitted by Contractor before fabrication is begun.  
 Roadway Drains and Expansion Devices to be paid for as Reinf. Steel.  
 Specifications: Arkansas Standard Road & Bridge Specifications adopted May 30, 1925.  
 All concrete above top of Column Caps, except handrails to be Class-S-5.  
 All conc. below top of Col. Caps to be Class-A-1 except Seal Concrete to be poured in the dry.  
 Foundation Piling to be Untreated Timber.  
 Piling may be omitted if foundation conditions are found satisfactory to the Engineer.

**DETAILS OF SUBSTRUCTURE BRIDGE OVER SMACKOVER CREEK**  
 3/4 MILE. NO. OF GRIFFIN, OUACHITA & UNION CO. LINE.  
 ROUTE 167 SEC. 2 & 3  
**ARKANSAS STATE HIGHWAY DEPARTMENT**  
 LITTLE ROCK, ARK.  
 Drawn By: *E.C.C.* Date: 1-28-28  
 Traced By: *E.C.C.* Date: 1-31-28  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
**BRIDGE NO. 617**      **DRAWING NO. 700**

Revised - F.A.R. No. 5-10-32 P.H.K. Sta. 063.

*N.R. Jones*  
 BRIDGE ENGINEER