

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FISCAL YEAR	Job No.	SHEET NO.	TOTAL SHEETS
1930	3164	7	2

INDEX OF SHEETS

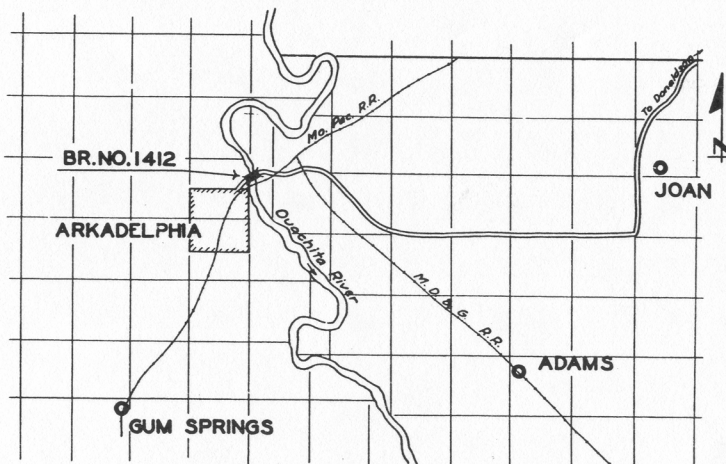
Sheet No. 1 Drawing No. 3017 Title Sheet  
" " 2 " " 3018 Layout and Details of Repairs

PLAN OF PROPOSED REPAIRS  
TO BRIDGE OVER  
OUACHITA RIVER  
CLARK COUNTY

ROUTE 67 SEC. 6  
JOB NO. 3164

QUANTITIES

Item No.	13	Dry excavation for structures	174	Cu. yds.
" "	54	Class "A" concrete	2260	" "
" "	56	Structural steel (truss bridges)	3660	Lbs.
" "	S.P.	1" asphalt plank	910	Sq. yds.
" "	S.P.	Maintaining traffic	Lump	Sum
" "	S.P.	Cleaning & painting existing structure	Lump	Sum
" "	S.P.	Repairing existing structure	Lump	Sum
Alternate of:				
Item No. S.P. & S.P.		Treated bridge timber	46.103	M.F.T.B.M.
Or alternate of:				
Item No. S.P. & S.P.		Redwood bridge timber	33.534	" "
" " S.P. & S.P.		Treated bridge timber	12.569	" "



The Specifications adopted by the State Highway Commission, May 30th., 1925 apply with subsequent revisions and Special Provisions noted apply to this Project.

- Pamphlet A Revised Sept. 1st, 1928
- B
- C
- D Revised July 1st, 1928
- E
- F
- G
- H Revised Oct. 1st, 1928
- I
- J Revised Jan. 1st, 1929
- K
- L Revised Jan. 1st, 1929

SPECIAL PROVISIONS

Item	No. of Sheets
Concrete aggregate	2
Bridge timber	12
Section B2	1
Material by Contractor	1
Maintaining traffic	1
Cleaning & painting existing structure	1
Repairing existing structure	1
Asphalt wearing surface	1
Aluminum paint	1

LAYOUT

Scale: 1" = 1 Mile

LENGTH OF PROJECT = 546'-0"  
LENGTH OF BRIDGES = 546'-0"  
LENGTH OF EMBANKMENT = 0

*M.B. Lane*  
BRIDGE ENGINEER

BRIDGES No. 1412

APPROVED \_\_\_\_\_  
CHAIRMAN, STATE HIGHWAY COMMISSION

APPROVED \_\_\_\_\_  
STATE HIGHWAY ENGINEER

DRAWING NO. 3017

SUMMARY OF BRIDGE QUANTITIES CODE NO. X032

ITEM NO.	ITEM	UNIT	END BENT NO. 1	END BENT NO. 2	PIER NO. 1	PIER NO. 2	PIER NO. 3	PIER NO. 4	SPANS 1 # 5	SPANS 2 # 4	SPAN 3	BRIDGE TOTALS
SP-801	COMMON EXCAVATION FOR STRUCTURES	CU. YD.	46	46	397	274	284	385	—	—	—	1,432
SP-802	CLASS A CONCRETE	CU. YD.	—	—	100.86	164.14	164.14	100.86	—	—	—	530.0
SP-802	CLASS S CONCRETE	CU. YD.	12.07	12.07	—	—	—	—	64.54	95.51	100.41	284.6
SP-802	SEAL CONCRETE	CU. YD.	—	—	62.00	101.65	101.65	62.00	—	—	—	327.3
SP-803	REINFORCING STEEL	Lb	1646	1646	6564	11,005	11,005	8,564	12,671	18,834	17,305	91,240
SP-804	PRECAST CONCRETE PILING (16" dia)	LIN. FT.	180	175	—	—	—	—	—	—	—	355
SP-805	STEEL PLATE GUARD BRIDGE RAILING (10 Ga)	LIN. FT.	—	—	—	—	—	—	240	360	—	600
SP-806	STRUCTURAL STEEL IN BEAM SPANS	Lb.	603	603	—	—	—	—	78,217	172,397	—	251,820
SP-806	STRUCTURAL STEEL IN TRUSS SPANS	Lb.	—	—	—	—	—	—	—	—	29,180	29,180
B10	UNTREATED TIMBER PILING	LIN. FT.	—	—	975	1525	1525	975	—	—	—	5,000
SP-812	BRIDGE NAME PLATE (TYPE C)	EACH	1	—	—	—	—	—	—	—	—	1
SP-817	RIPRAP	CU. YD.	10	35	—	—	—	—	—	—	—	45
SP 1007	REMOVAL OF EXISTING BRIDGE STRUCTURE AND MAINTENANCE OF TRAFFIC.	COMPLETE ITEM	—	—	—	—	—	—	—	—	—	100%
JOB 7547	ERECTION OF STRUCTURAL STEEL FURNISHED BY THE STATE.	COMPLETE ITEM	—	—	—	—	—	—	—	—	100%	100%

BRIDGE NAME PLATE TITLE - OUACHITA RIVER

SUMMARY OF BRIDGE QUANTITIES  
BRIDGE OVER OUACHITA RIVER  
CLARK COUNTY

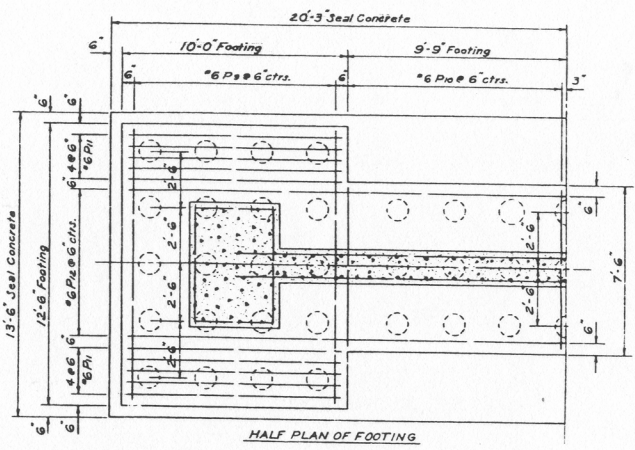
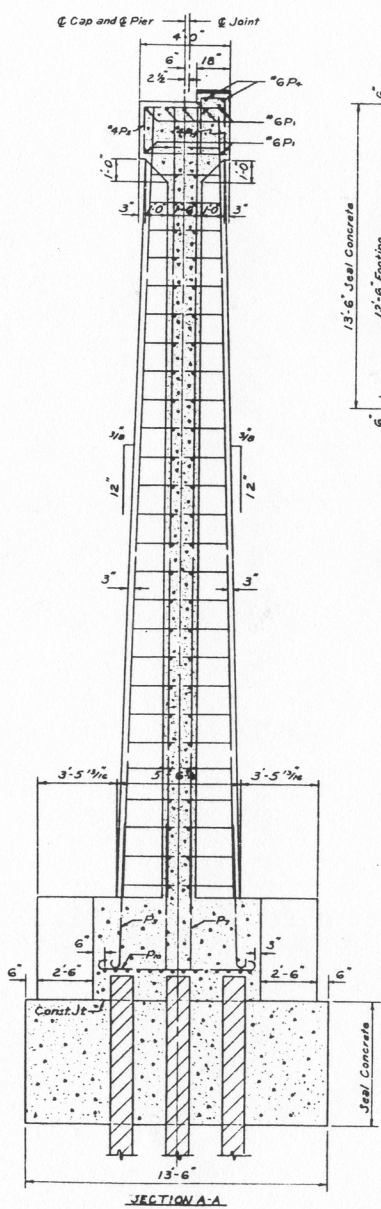
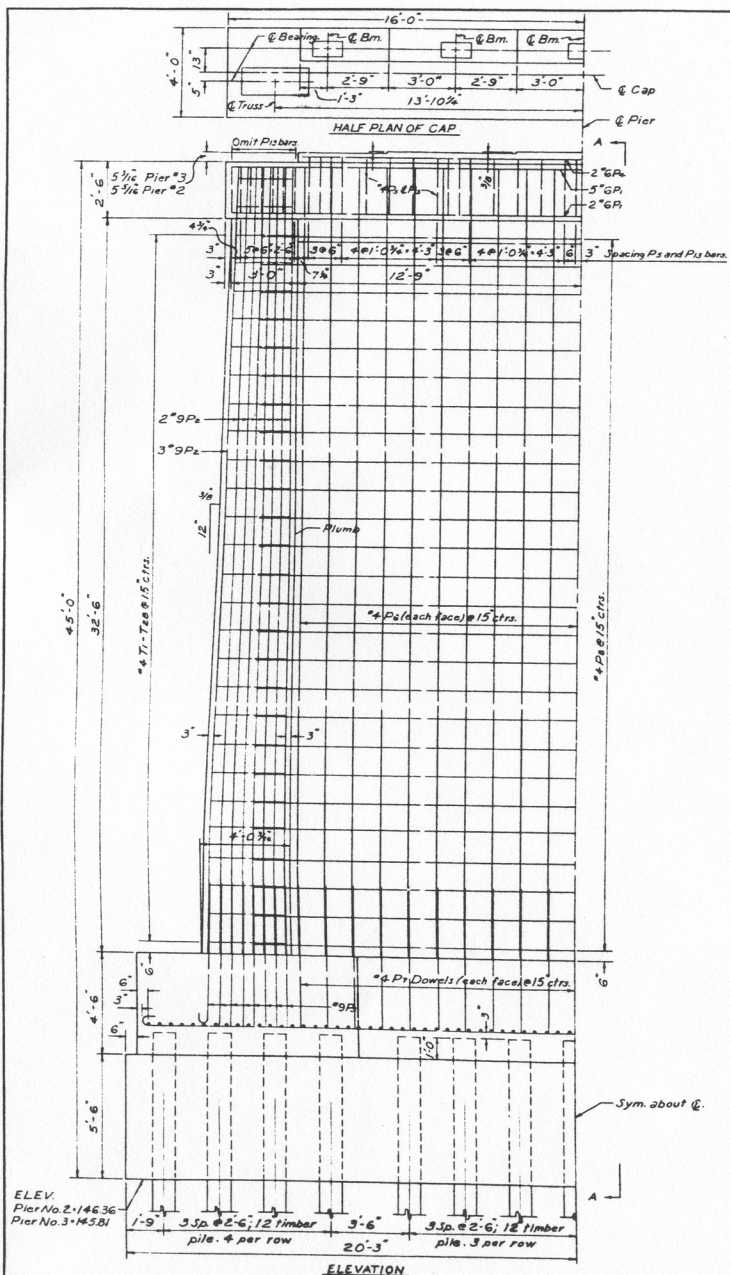
ROUTE 51 SEC. 2

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.  
DRAWN BY: L.H.T. DATE: 11-24-58  
CHECKED BY: W.K.H. DATE: 11-24-58

*L.P. Wilson*  
BRIDGE ENGINEER

SCALE: \_\_\_\_\_  
BRIDGE NO. 1412 DRAWING NO. 10049



BAR LIST

MARK	SIZE	NO.	LENGTH	PIN DIA.	BENDING DIAGRAM
P1	6	7	31'-6"	Str.	
P2	9	34	34'-8"	Str.	
P3	9	34	8'-2"	9"	
P4	6	2	25'-0"	Str.	
P5	4	46	12'-1"	1 1/2"	
P6	4	42	34'-9"	Str.	
P7	4	42	4'-10"	Str.	
P8	4	52	28'-10"	Str.	
P9	6	38	13'-5"	4 1/2"	
P10	6	40	8'-5"	4 1/2"	
P11	6	20	10'-11"	4 1/2"	
P12	6	14	4'-5"	4 1/2"	
P13	4	32	6'-3"	1 1/2"	
T1-Tee	4	2 each	14'-11 1/2"	1 1/2"	

NOTES

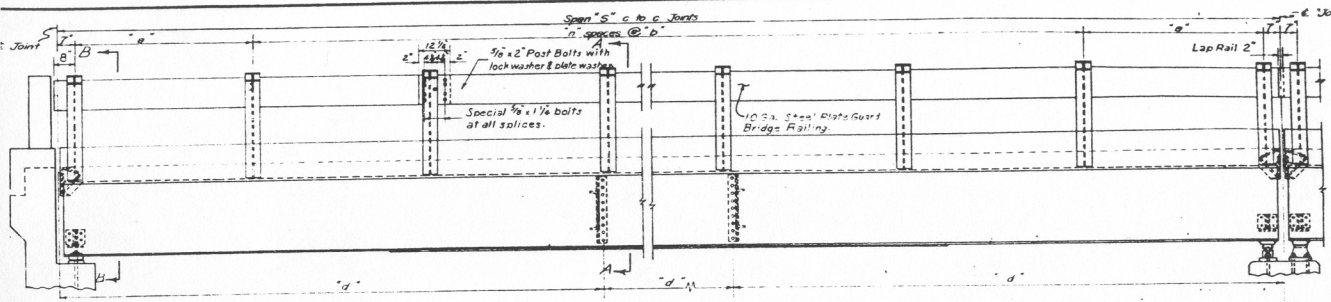
All concrete to be Class A unless noted.  
 All corners to be chamfered 1/4" unless noted.  
 For Superstructure Details see Drwg. Nos. 10051, 10052 & 5500Y.  
 For general notes see Drwg. No. 10050  
 Maximum permissible head of water on 5'-6" of Seal = 24'

SHEET 2 OF 2  
 DETAILS OF PIERS NOS. 2 & 3  
 BRIDGE OVER OUACHITA RIVER  
 CLARK COUNTY  
 ROUTE 51 SEC. 2  
 ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.  
 DRAWN BY L.M.T. DATE 11-17-58  
 CHECKED BY N.E.W. DATE 11-20-58  
 SCALE 3/8" = 1'-0"

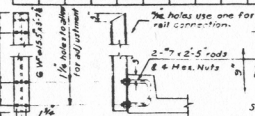
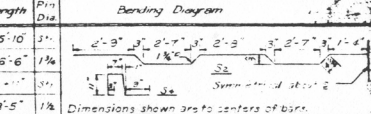
BRIDGE NO. 1412 DRAWING NO. 10054

STATE	PROJECT NO.	SCALE	DATE
ARKA			
STATE JOB NO.			



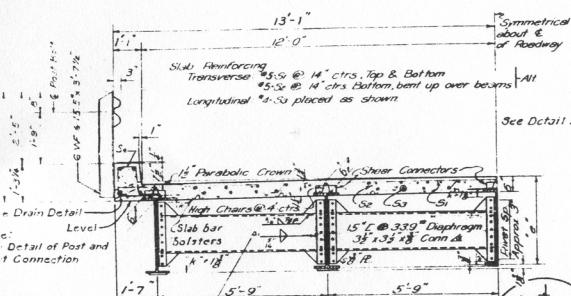
LIST OF REINFORCING STEEL

Span	Size	No. of Bars in Each Span	Length	Dist. Dia.					
60'	#5	104	120	130	140	154	25'-10"	1 1/2"	
65'	#5	51	53	64	65	73	77	26'-6"	
70'	#5	135				3'-0"		1 1/2"	
75'	#5	104	112	120	130	138	140	154	3'-5"

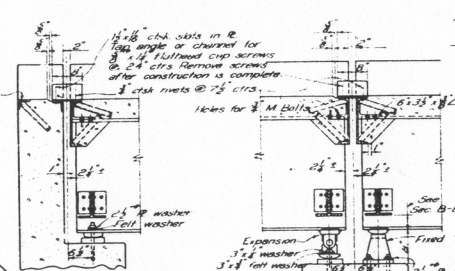


GENERAL NOTES

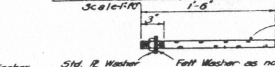
All concrete to be Class S All expansion joints to be chamfered.  
 Field connections for diaphragms to be riveted or bolted with high strength bolts.  
 Rivets & Open holes in concrete where noted otherwise may be substituted for shaped steel but payment will be made on basis of shapes shown or those actually used, whichever is less.  
 All welded connections to be fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and Railway Bridges, 3rd Edition 1936.  
 Shop Paint all structural steel except surfaces in contact with concrete shall be given one coat of red lead and one coat of zinc primer.  
 Fixed Point - 1st Cover - Red lead primed with lamp black.  
 2nd Cover - Masticum.  
 All bearing plates and roadway expansion devices to be paid for as Structural Steel in Beam Spans. Bearings shall be firmly secured in the manner set forth in the Specifications. The work and material are to be considered as subsidiary to the Main Structural Steel in Beam Spans and will not be paid for directly.  
 This drawing shows general features of design only. Shop drawings shall be made in accordance with the Specifications submitted and approved secured before fabrication is begun.  
 In order to secure a good riding surface it will be required that the floor shall strike off from curb to curb with approximately one third span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable warpage or deflection.  
 Reinforcing steel to be deformed bars of intermediate or hard grade. See Special Provisions. Steel to be accurately located in the forms and firmly held in place by means of steel wire supports, sufficient in number and size to prevent displacement during the course of construction. The wire supports will not be paid for directly, but will be considered subsidiary to the Main Reinforcing Steel.  
 Shop lists and bending diagrams of reinforcing steel, including wire supports shall be submitted and approved secured before fabrication is begun.  
 Material to be steel plate guard rail of the type shown or an equivalent rigid type as approved by the Engineer. The rail including posts and fastenings shall be paid for at the unit price bid per linear foot for Steel Plate Guard Bridge Railings.  
 SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications Road and Bridge Construction, adopted March 1, 1940.



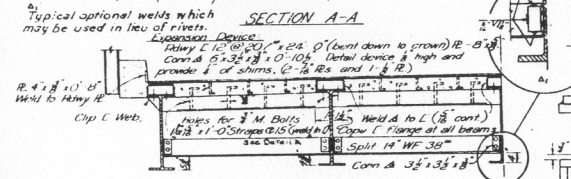
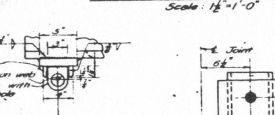
ELEVATION



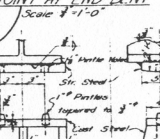
CAMBER DIAGRAM



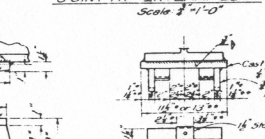
DETAIL OF ANCHOR BOLT



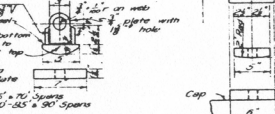
JOINT AT END BENT



JOINT AT INTERM BENT



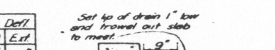
DETAILS OF BEARINGS AT INTERM BENTS & EXP. END FOR SINGLE SPAN BRIDGE



EXPANSION SHOE



BEARING PLATES AT END BENTS - MULTIPLE SPANS



DESIGN SPECIFICATIONS - AASHTO 1957

Design Live Load H-15

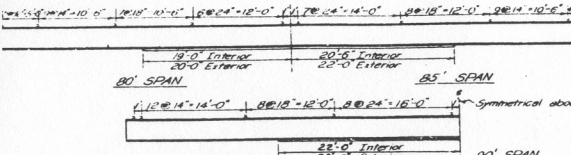
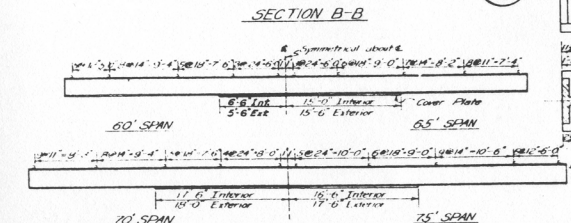
LOAD DISTRIBUTION

	Interior Stringer	Exterior Stringer
Dead Load	432% (11" of Bm)	487% (11" of Bm)
Composite Br. Action	68%	68%
Low Load (Composite Beam Action)	Each Stringer 1045 Wheel Impact or 0.52 Lane + 0.52 Spans	

DESIGN UNIT STRESSES

Class S Concrete (f <sub>c</sub> )	1200 psi
Structural Steel	18000 psi
Reinforcing Steel	20000 psi

NOTE: This drawing to be used only for 60' and 90' spans.



VARIABLES

Span	Reinf. Stringer	Cover Plate	Post Spacing	Strut No. & d	D.I. Drift Int. Ext.
60	30W100	15'-0" x 11'-0"	6'-1" 5'-10"	4 3/8" x 2'-0"	1 1/2" 1 1/2"
65	30W100	15'-0" x 11'-0"	6'-0" 5'-9"	4 1/2" x 3'-2"	1 1/2" 1 1/2"
70	30W116	15'-0" x 11'-0"	5'-8" 5'-9"	4 1/2" x 3'-2"	1 1/2" 2"
75	30W130	15'-0" x 11'-0"	6'-1" 6'-2"	4 1/2" x 3'-2"	1 1/2" 2 1/2"
80	30W144	15'-0" x 11'-0"	5'-11" 6'-1"	4 1/2" x 3'-2"	2" 2 1/2"
85	35W150	15'-0" x 11'-0"	5'-11" 6'-0"	5 1/2" x 3'-4"	2 1/2" 2 1/2"
90	35W160	15'-0" x 11'-0"	5'-11" 6'-0"	5 1/2" x 3'-5"	2 1/2" 2 1/2"

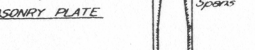
DRAIN DETAIL



SOLE PLATE



MASONRY PLATE



DETAILS OF STANDARD

60' & 90' COMPOSITE I-BEAM SPANS  
 24'-0" CLEAR RDWY. 10' CURBS

Revised before using

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

Drawn By: J.M.T. Date: 10-14-58

Checked By: J.M.T. Date: 10-20-58

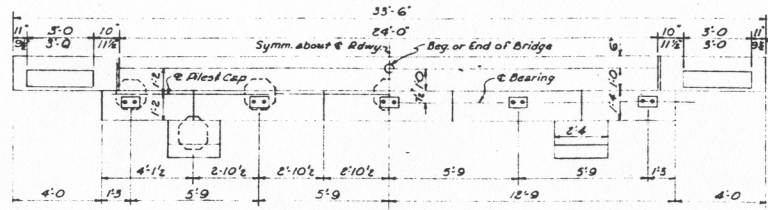
BRIDGE NO. DRAWING No: 5500-1

Scale: 1/4" = 1'-0"

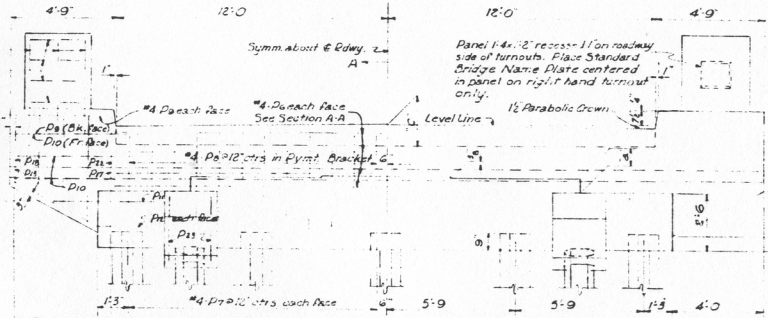
ORIGINAL

SPECIAL NOTE: Stud shear connectors, granular fill, solid flange or equal may be used in place of the channels shown, at the following ratios: 3/4" diameter stud in place of 1.02 inches of channel; 1/2" diameter stud in place of 0.52 inches of channel. The studs shall be a long and automatically welded to the beam flanges in accordance with recommendations of the manufacturer. Channel sections will be used as basis for measurement of structural steel in shear connectors.

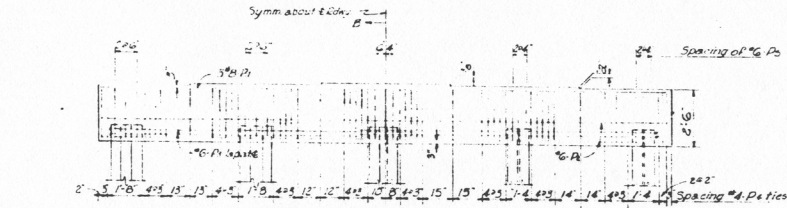
FEED NO.	STATE	FEED NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
JOB NO.					



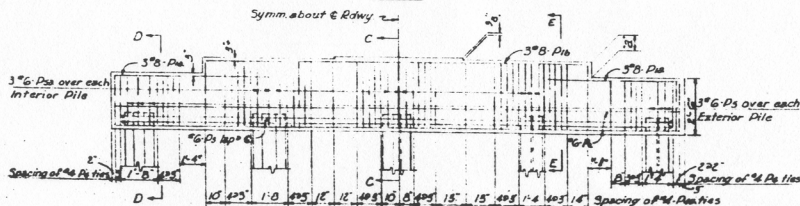
PLAN OF END BENT



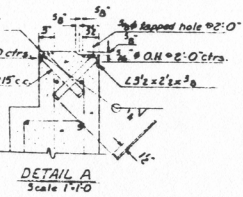
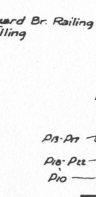
FRONT ELEVATION OF END BENT



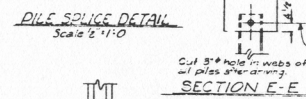
HALF ELEVATION OF CAP (16\"/>



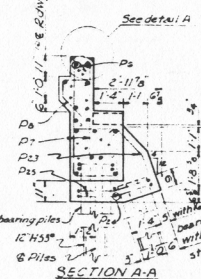
HALF ELEVATION OF CAP (16\"/>



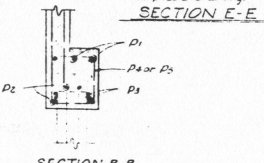
DETAIL A Scale 1\"/>



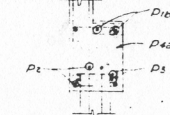
PILE SPICE DETAIL Scale 2\"/>



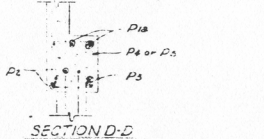
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

TABLE OF VARIABLE DIMENSIONS

SPAN LENGTH	BEAMS		VARIABLES			
	INTERIOR	EXTERIOR	A	B	C	d
60'±65'	30WF100	30WF108	1'	10'	3'-1 1/2"	-
70'	30WF116	30WF130	1'	10'	3'-1 1/2"	3"
75'	30WF116	30WF130	1'	10'	3'-1 1/2"	6"
80'	30WF116	30WF130	1'	10'	3'-1 1/2"	6"
85'	33WF130	33WF130	1'	10'	3'-4 1/2"	-
90'	33WF130	33WF130	1'	10'	3'-4 1/2"	4"
95'	33WF141	33WF141	1'	10'	3'-4 1/2"	4"
100'	33WF141	36WF150	1'	10'	3'-4 1/2"	4"
105'	36WF160	36WF160	1'	10'	3'-7 1/2"	-

NOTES:  
 All concrete to be class S. All exposed corners to have 1/4\"/>

BAR LIST FOR ONE END BENT

MARK	SIZE	No. per Bent	LENGTH	A	B	PIN DIA	BENDING DIAGRAM
D1	#8	5	25'-2"	-	-	Str.	A
D1a	#8	6	6'-6"	-	-	Str.	
D1b	#8	3	16'-11"	-	-	Str.	B
D2	#6	4	25'-2"	-	-	Str.	
D3	#6	4	28'-4"	13'-6"	7'-3"	Str.	C
D4	#4	4	8'-9"	2'-1 1/2"	1'-11 1/2"	1/2"	
D5	#4	3	8'-9"	2'-1 1/2"	1'-11 1/2"	1/2"	D
D6	#6	15	6'	2'-1 1/2"	1'-11 1/2"	2 1/4"	
D7	#4	6	27'-8"	27'-8"	1'-11 1/2"	2 1/4"	E
D8	#4	8	24'-0"	-	-	Str.	
D9	#4	8	48'-0"	5'-0"	-	Str.	F
D10	#4	24	24'-0"	4'-0"	-	Str.	
D11	#4	4	3'-6"	-	-	Str.	G
D12	#4	4	6'-5"	2'-3"	4'-2"	1 1/2"	
D13	#4	Each	Varies	-	-	Str.	H
D14	#4	Each	Varies	5'-3 1/2"	-	Str.	
D15	#4	Each	Varies	3'-5"	Varies	1 1/2"	I
D16	#4	Each	Varies	5'-7"	Varies	1 1/2"	
D17	#6	4	8'-0"	-	-	Str.	J
D18	#6	2	8'-9"	1'-11"	0'-5"	1 1/2"	
D19	#6	4	17'-7"	1'-10"	3'-3"	2 1/2"	K
D20	#5	12	3'-2"	-	-	Str.	
D21	#3	8	2'-11"	2'-0"	0'-6"	1 1/2"	L
D22	#3	8	2'-11"	2'-0"	0'-6"	1 1/2"	

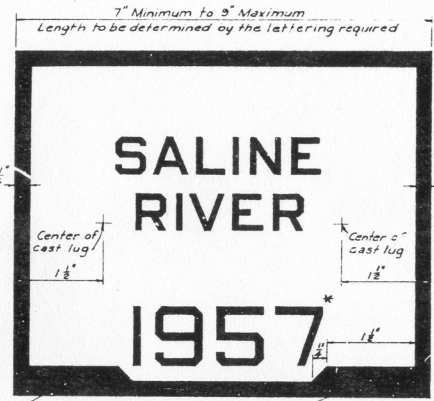
DETAILS OF STANDARD PILE END BENTS FOR 60'-90' COMPOSITE I-BEAM SPANS 24'-0" CLEAR ROADWAY 10' 8" 1/2" CURBS

ROUTE SEC.  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

DRAWN BY: L.H.T. DATE: 10-15-59  
 CHECKED BY: J.M.H. DATE: 10-20-59  
 BRIDGE NO. DRAWING NO. 5500

AMERICAN DRAWING

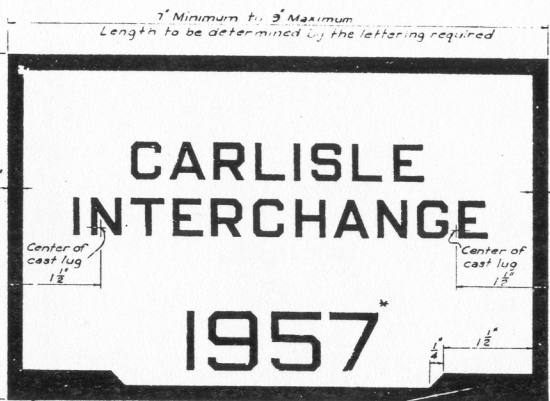
REVISED	BY	DATE	REVISION
5-31-60	ADL	6-5-72	
5-20-64	ADL	8-2-72	
9-20-68	ADL	10-12-72	



Stamp the design loading here with letters and numerals  $\frac{3}{8}$ " high. Example: H-20

Stamp the bridge number here with numerals  $\frac{3}{8}$ " high. Example: 3275.

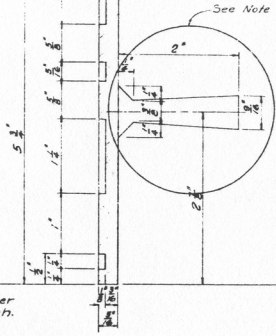
TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE  
STREAM CROSSINGS



Stamp the design loading here with letters and numerals  $\frac{3}{8}$ " high. Example: H-20

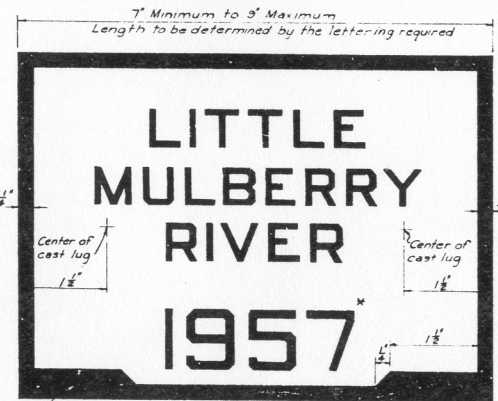
Stamp the bridge number here with numerals  $\frac{3}{8}$ " high. Example: 3277

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE  
GRADE SEPARATION STRUCTURES



Note: Alternate attachments may be used provided such attachments are submitted and approval secured before fabrication is begun.

**General Notes**  
 Name plates shall be either Bronze or Aluminum. Body of plate shall be  $\frac{3}{8}$ " thick, and include two tapering cone lugs  $\frac{3}{8}$ " to  $\frac{1}{2}$ " x 2" long.  
 Bronze: U.S. Government Specifications for Statuary Bronze.  
 Aluminum: Current A.S.T.M. Specifications, Serial Designation B26, Alloy 50704, Condition T6.  
 The border and all lettering shall be raised  $\frac{1}{8}$ " above face of plate. Top surface of raised border and lettering to be polished.  
 All lettering to be plain Gothic, square cut and not tapered. The number of plates required and the location shall be as shown on the plans.  
 Name on plate to be such as to suit each bridge, as shown on the plans.  
 Shop drawings of Bridge Name Plates shall be submitted and approval secured before fabrication is begun.  
 Specifications: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1972 and applicable Special provisions.



Stamp the design loading here with letters and numerals  $\frac{3}{8}$ " high. Example: H-20

Stamp the bridge number here with numerals  $\frac{3}{8}$ " high. Example: 3276

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE  
STREAM CROSSINGS



Stamp the design loading here with letters and numerals  $\frac{3}{8}$ " high. Example: H-20.

Stamp the bridge number here with numerals  $\frac{3}{8}$ " high. Example: 3278

TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE  
GRADE SEPARATION STRUCTURES

\* Year in which contract is awarded

Standard Specification Title No. 1-11  
 Specified Aluminum Alloy, A.S. 50704  
 Alternate Attachment: 5-12-2008, CAD: 24, 9-2008  
 8-6-72. Revised for 1972 Specs.

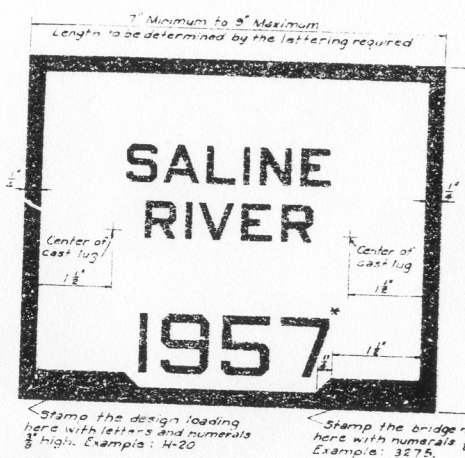
**DETAILS OF STANDARD  
TYPE C BRIDGE NAME PLATES**

ROUTE SEC.  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

DRAWN BY: H.D. DATE: 5-22-57  
 TRACED BY: DATE: SCALE: Full Size  
 CHECKED BY: J.H.K. DATE: 6-6-57  
 BRIDGE NO. DRAWING NO. 2389A

BRIDGE DESIGN ENGINEER

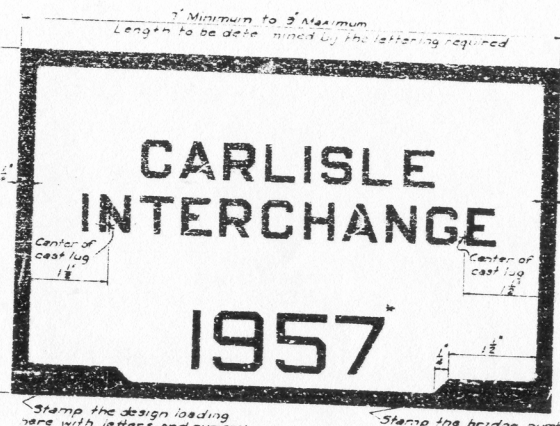
DATE	BY	DATE	BY
5-27-60	W.C.	4-15-55	W.C.
5-20-64	W.C.	8-2-52	W.C.
8-22-64	W.C.	7-5-50	W.C.



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3275.

TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE  
STREAM CROSSINGS



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3277

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE  
GRADE SEPARATION STRUCTURES

Note: Alternate attachments may be used provided such attachments are submitted and approval secured before fabrication is begun.



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3276

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE  
STREAM CROSSINGS



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3278

TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE  
GRADE SEPARATION STRUCTURES

**General Notes**  
 Name plates shall be either Bronze or Aluminum. Body of plate shall be 3/8" thick, and include two tapering cast lugs 1/2" to 3/4" x 2" long.  
 Bronze: U.S. Government Specifications for Statuary Bronze.  
 Aluminum: Current A.S.T.M. Specifications, Serial Designation B26, Alloy 330.0, Condition T6.  
 The border and all lettering shall be raised 3/8" above face of plate. Top surface of raised border and lettering to be polished.  
 All lettering to be plain Gothic, square cut and not tapered. The number of plates required and the location shall be as shown on the plans.  
 Name on plate to be such as to suit each bridge, as shown on the plan.  
 Shop drawings of Bridge Name Plates shall be submitted and approval secured before fabrication is begun.  
 Specifications Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1970 and applicable Special Provisions.

\* Year in which contract is awarded

Standard Specifications for Highway Construction, Edition of 1970 and applicable Special Provisions  
 Arkansas State Highway Commission  
 Alternate Attachment No. 2389A  
 8-8-72 Revised for 1970 Specs  
 9-15-70 Revised for 1970 Specs KDN

DETAILS OF STANDARD  
TYPE C BRIDGE NAME PLATES

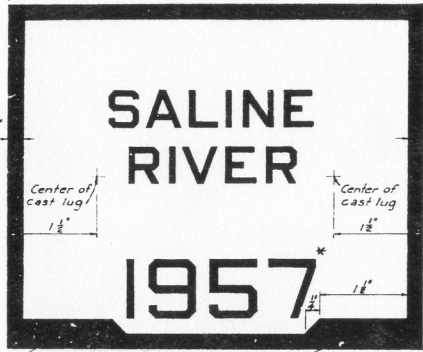
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: H.D. DATE: 5-28-57  
 CHECKED BY: W.C. DATE: 6-6-57  
 BRIDGE NO. SCALE: 1/4" = 1'-0"  
 DRAWING NO 2389A

W.C. Williams  
 STATE HIGHWAY ENGINEER

5-31-60	WVLS
5-20-64	WVLS
5-20-68	WVLS

7' Minimum to 9' Maximum  
Length to be determined by the lettering required

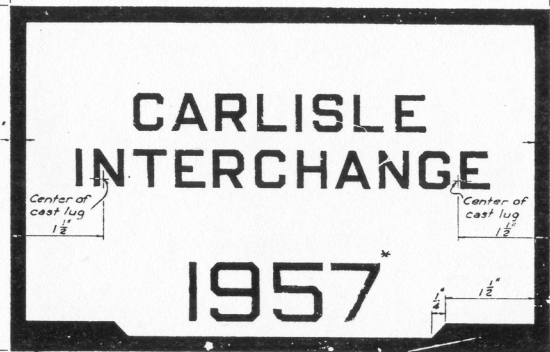


Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3275.

TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE  
STREAM CROSSINGS

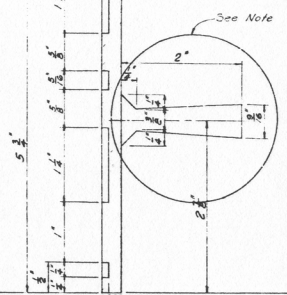
7' Minimum to 9' Maximum  
Length to be determined by the lettering required



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3277

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE  
GRADE SEPARATION STRUCTURES



Note: Alternate attachments may be used provided such attachments are submitted and approved secured before fabrication is begun.

General Notes

- Name plates shall be either Bronze or Aluminum.
- Body of plate shall be 3/8" thick, and include two tapering cast lugs 3/8" to 1/2" x 2" long.
- Bronze: U.S. Government Specifications for Statuary Bronze.
- Aluminum: Current A.S.T.M. Specifications, Serial Designation B26, Alloy 5052-0, Condition T6.
- The border and all lettering shall be raised 1/8" above face of plate. Top surface of raised border and lettering to be polished.
- All lettering to be plain Gothic, square cut and not tapered.
- The number of plates required and the location shall be as shown on the plans.
- Name on plate to be such as to suit each bridge, as shown on the plans.
- Shop drawings of Bridge Name Plates shall be submitted and approved before fabrication is begun.
- Specifications: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959, and associated Special Provisions.

\* Year in which contract is awarded

7' Minimum to 9' Maximum  
Length to be determined by the lettering required



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20

Stamp the bridge number here with numerals 3/8" high. Example: 3276

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE  
STREAM CROSSINGS

7' Minimum to 9' Maximum  
Length to be determined by the lettering required



Stamp the design loading here with letters and numerals 3/8" high. Example: H-20.

Stamp the bridge number here with numerals 3/8" high. Example: 3278

TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE  
GRADE SEPARATION STRUCTURES

Approved by: [Signature]  
Specialty Aluminum Plate Co. Inc.  
Alternate Attachment: 100-100-008

DETAILS OF STANDARD  
TYPE C BRIDGE NAME PLATES

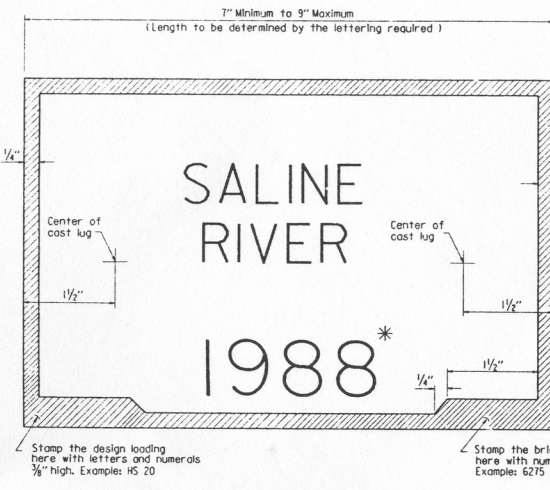
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: H.D. DATE: 5-22-57  
TRACED BY: DATE: \_\_\_\_\_  
CHECKED BY: H.H.K. DATE: 6-6-57  
SCALE: Full Size  
BRIDGE NO. \_\_\_\_\_ DRAWING NO. 2389A

BRIDGE DESIGN ENGINEER

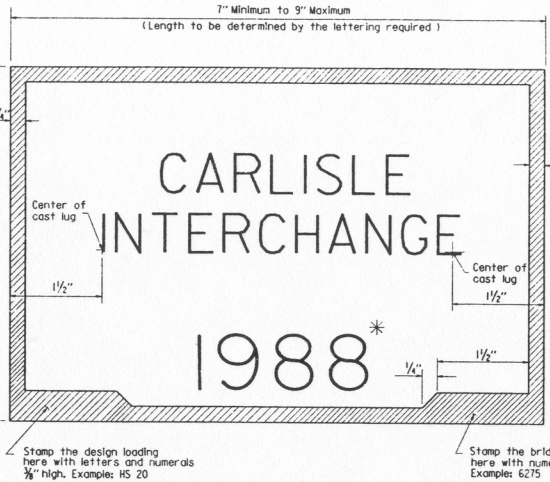
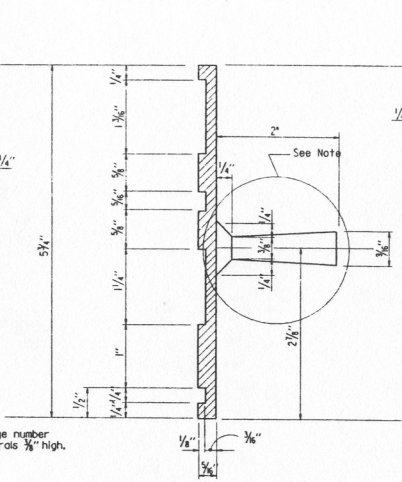


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
1-16-89	5-20-16-89			6	ARK.			
11-2-90	11-5-90							

① —NAME PLATES— 2389A



TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE  
STREAM CROSSINGS



TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE  
GRADE SEPARATION STRUCTURES

**GENERAL NOTES**

⚠ Name plates shall be either cast aluminum or bronze and shall meet the material requirements as specified in section 812 of the standard specifications.

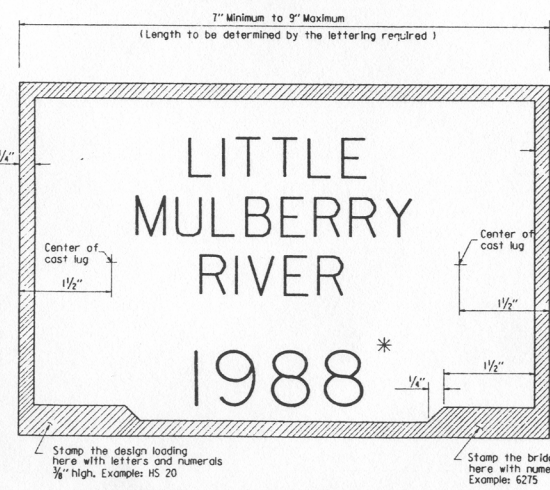
Body of plate shall be 3/16" thick and shall include two tapering cone lugs 3/16" to 3/8" x 2" long. The border and all lettering shall be raised 1/16" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

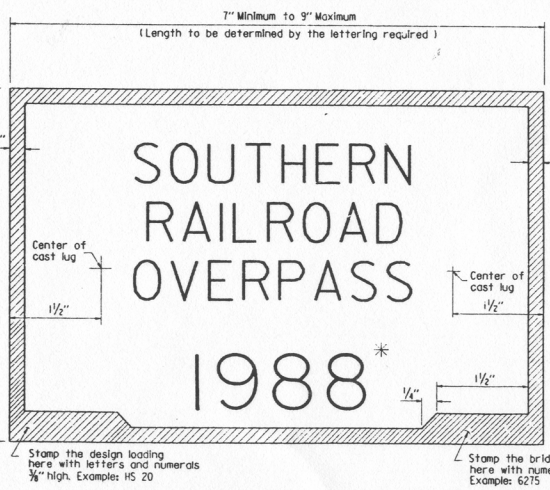
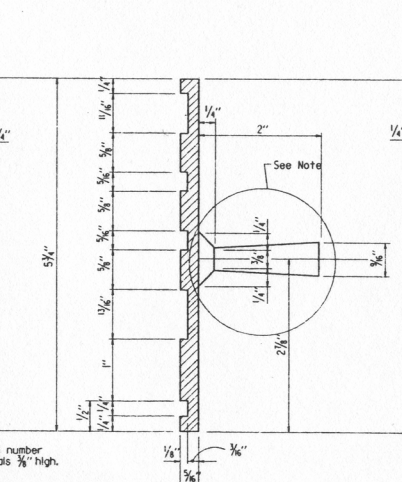
The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.

⚠ Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1991 Edition, with applicable Supplemental Specifications and Special Provisions.

Note: Alternate attachments may be used provided such attachments are submitted and approved secured before fabrication is begun.



TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE  
STREAM CROSSINGS



TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE  
GRADE SEPARATION STRUCTURES

\* Year in which contract is awarded.  
NOTE: 2389A REDRAWN AND REVISED 3-1-88, LDF

⚠ Revised notes: 1-16-89, LM  
⚠ Rev. General Notes: 11-2-90, W.Maj.

DETAILS OF STANDARD  
TYPE C BRIDGE NAME PLATES

ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: LDF DATE: 6-16-88  
CHECKED BY: CPB DATE: 6-16-88 SCALE: FULL SIZE  
DESIGNED BY: DATE: BRIDGE NO. DRAWING NO. 2389A

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-28-2000	4-28-00				6	ARK.		
							JOB NO.	
							NAME PLATES	2389A

GENERAL NOTES

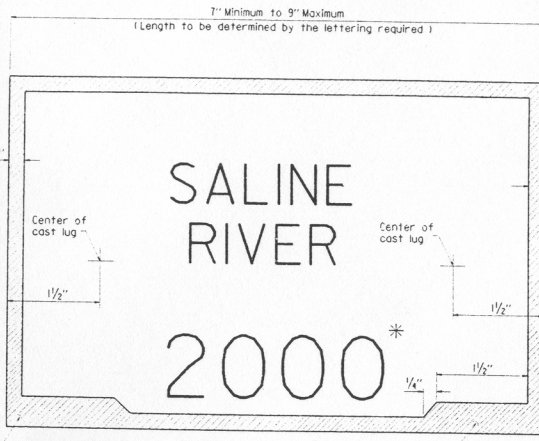
Specifications: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1996 Edition with applicable Supplemental Specifications and Special Provisions.

Name plates shall be either cast aluminum or bronze and shall meet the material requirements as specified in Section 82 of the Standard Specifications.

Body of plate shall be 3/8" thick and shall include two tapering cone lugs 3/8" to 7/8" x 2" long. The border and all lettering shall be raised 1/8" above the face of plate and shall be polished.

All lettering shall be plain gothic, square cut and not tapered.

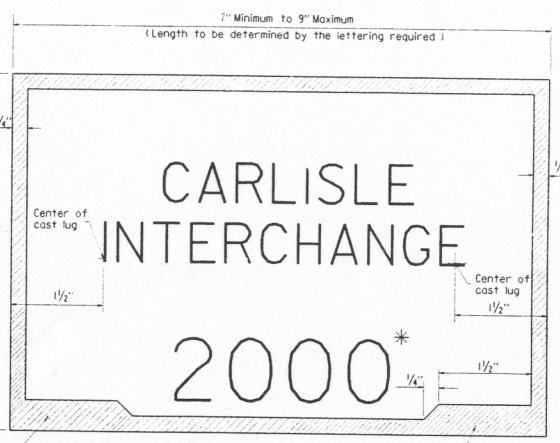
The number of plates required and the location and name on the plate for each bridge shall be as designated on the plans.



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 06275

TYPICAL BRIDGE NAME PLATE-STYLE 1-FULL SIZE  
STREAM CROSSINGS

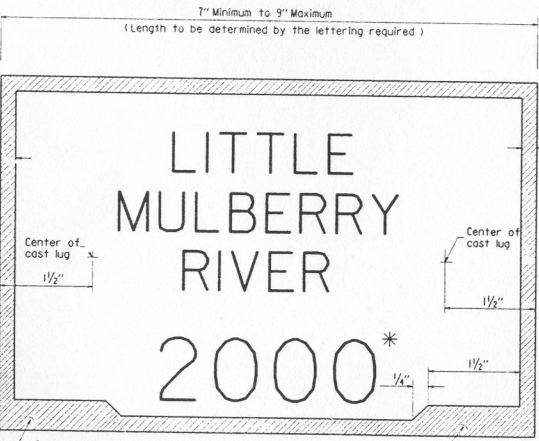


Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 06275

TYPICAL BRIDGE NAME PLATE-STYLE 3-FULL SIZE  
GRADE SEPARATION STRUCTURES

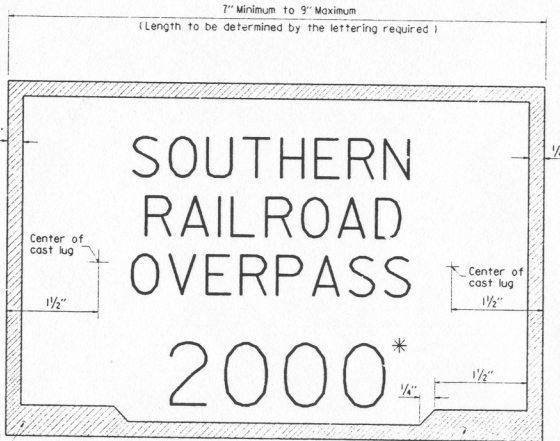
Note: Alternate attachments may be used provided such attachments are submitted and approved secured before fabrication is begun.



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 06275

TYPICAL BRIDGE NAME PLATE-STYLE 2-FULL SIZE  
STREAM CROSSINGS



Stamp the design loading here with letters and numerals 3/8" high. Example: HS 20

Stamp the bridge number here with numerals 3/8" high. Example: 06275

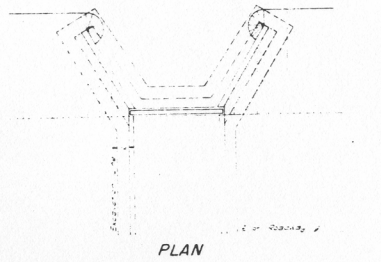
TYPICAL BRIDGE NAME PLATE-STYLE 4-FULL SIZE  
GRADE SEPARATION STRUCTURES

\*Year in which contract is awarded.



DETAILS OF STANDARD  
TYPE C BRIDGE NAME PLATES  
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: MJT DATE: 09-28-2000 FILENAME: 02389A.STD  
CHECKED BY: JGT DATE: 09-28-2000 SCALE: NOT TO SCALE  
DESIGNED BY: STD DATE: \_\_\_\_\_  
BRIDGE NO. \_\_\_\_\_ DRAWING NO. 2389A

PROJECT NO.	DATE	BY	CHECKED	SCALE	DATE
6	ARK				
JOB NO.					

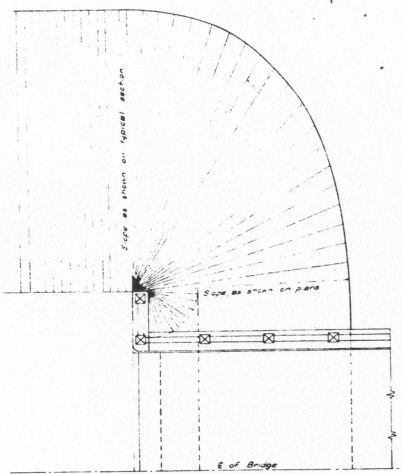


PLAN

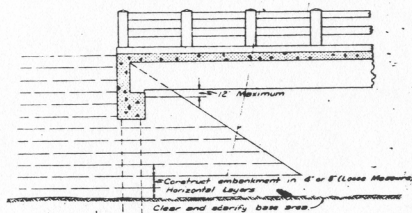


LONGITUDINAL SECTION

BOX CULVERT

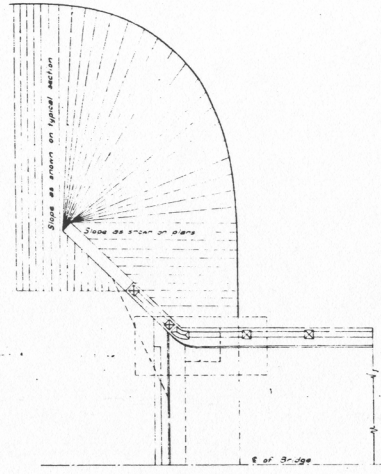


HALF PLAN

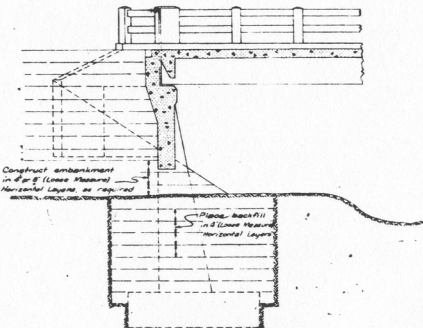


LONGITUDINAL SECTION

OPEN END ABUTMENT

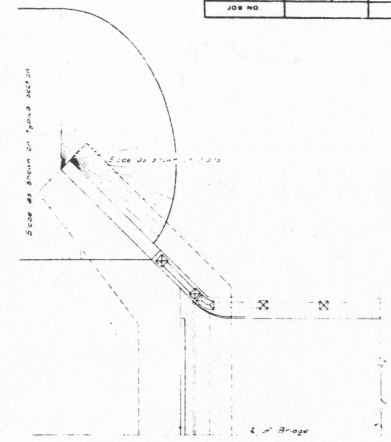


HALF PLAN

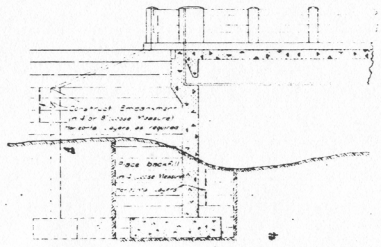


LONGITUDINAL SECTION

SEMI-OPEN ABUTMENT

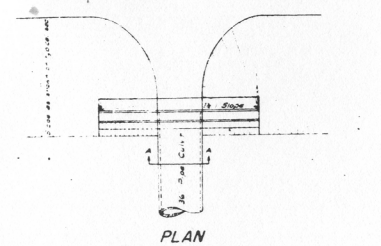


HALF PLAN

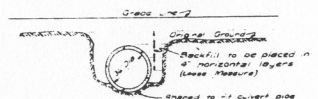


LONGITUDINAL SECTION

WINGWALL ABUTMENT



PLAN



SECTION A-A

PIPE CULVERT

**CONSTRUCTION OF THE BRIDGE - END EMBANKMENT**

The bridge-end embankment shall be understood to mean not less than 20 feet of embankment adjacent to the end of the bridge together with the side slopes and slopes underneath the bridge-end and around the end of wingwalls.

The surface area to be occupied by this embankment shall first be cleared of all debris and vegetable matter and then scarified so as to completely expose the raw earth. The foregoing shall be done before any of the base surface is spored by material taken from the structure excavations.

Embankment material shall be of approved quality free from light and porous or perishable matter.

The fill shall be constructed in horizontal layers to the thickness required be specified in the specifications for Embankment Material, Section 106, and shall be compacted in accordance with the specifications for Special Compaction of Earthwork, Section 107.

**BACKFILLING EXCAVATION**

In so far as is practicable, abutment excavations shall be cut to the size shown by the plans with allowance of 18" on all sides as permitted by the specifications. Greatly oversized and flared cuts, sometimes made to avoid the use of shoring will not be permitted.

When the abutment excavation is ready for backfill it shall be cleared of all confining material, unless otherwise directed by the engineer, and of all debris and unsuitable fill material.

The space around the wall or columns shall then be carefully filled to the original ground line in horizontal layers to the thickness specified in the specifications for Embankment Material, Section 106 and shall be compacted in accordance with the specifications for Special Compaction of Earthwork, Section 107.

ARKANSAS STATE HIGHWAY COMMISSION  
 DETAILS OF  
**EMBANKMENT CONSTRUCTION AT  
 BRIDGE ENDS AND  
 BACKFILL FOR STRUCTURES**

REVISED 7-10-57

DRWG. NO. 1888 (REV)

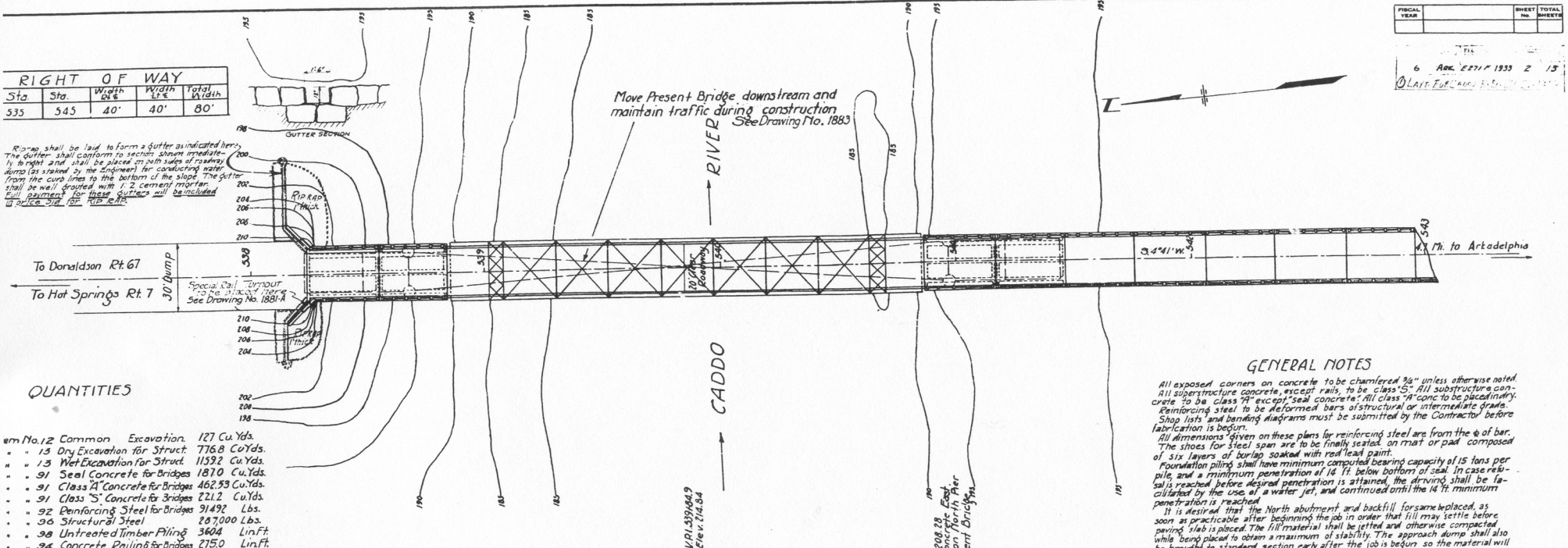
Notes relative to construction of bridge-end embankments and backfilling excavations shall be applicable to backfilling culvert excavations and the construction of embankments over and adjacent to culverts.

FISCAL YEAR		SHEET NO.	TOTAL SHEETS
6	Apr. 22/1933	2	15

DATE FOR CHANGE RECORD

RIGHT OF WAY			
Sta.	Sta.	Width 24'±	Total Width
535	545	40'	80'

Roads shall be laid to form a gutter as indicated here. The gutter shall conform to section shown immediately to right and shall be placed on both sides of roadway dump (as raised by the Engineer) for conducting water from the curb lines to the bottom of the slope. The gutter shall be well drained with 1/2 cement mortar full pavement for these gutters will be included in price bid for R.P.P.R.

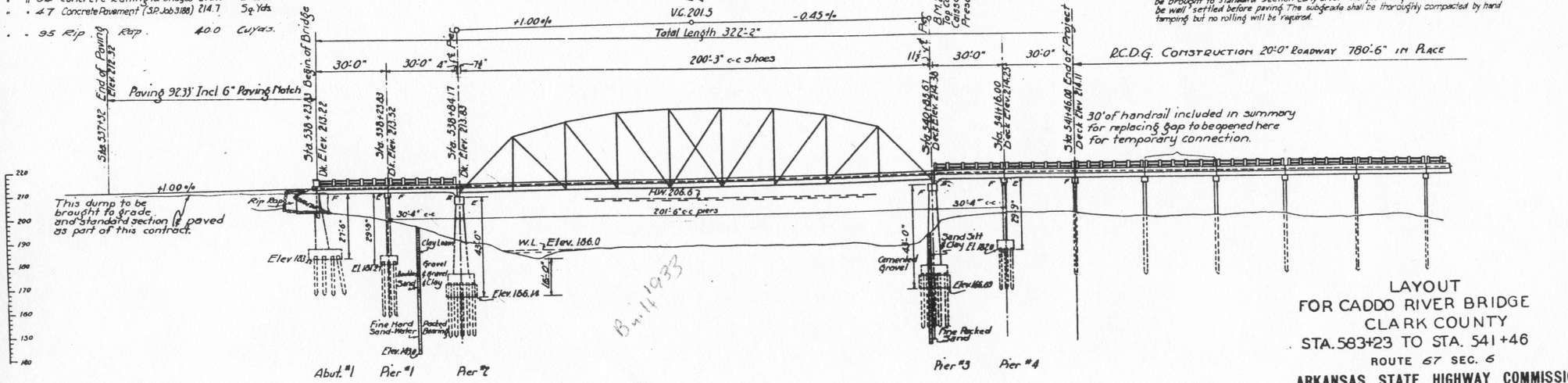


QUANTITIES

- em No. 12 Common Excavation 127 Cu Yds.
- 13 Dry Excavation for Struct. 776.8 Cu Yds.
- 13 Wet Excavation for Struct. 1152 Cu Yds.
- 91 Seal Concrete for Bridges 1870 Cu Yds.
- 91 Class A Concrete for Bridges 462.93 Cu Yds.
- 91 Class S Concrete for Bridges 221.2 Cu Yds.
- 92 Reinforcing Steel for Bridges 91492 Lbs.
- 96 Structural Steel 287000 Lbs.
- 98 Untreated Timber Piling 3604 Lin Ft.
- 94 Concrete Paving for Bridges 2750 Lin Ft.
- 47 Concrete Pavement (32' x 6' x 8") 214.7 Sq. Yds.
- 95 Rip Resp. 40.0 Cu Yds.

GENERAL NOTES

All exposed corners on concrete to be chamfered 3/8" unless otherwise noted.  
 All superstructure concrete, except rails, to be class "S". All substructure concrete to be class "A" except seal concrete. All class "A" concrete to be placed in dry.  
 Reinforcing steel to be deformed bars of structural or intermediate grade.  
 Shop lists and bending diagrams must be submitted by the Contractor before fabrication is begun.  
 All dimensions given on these plans for reinforcing steel are from the 6 of bar.  
 The shores for steel span are to be finally seated on mat or pad composed of six layers of burlap soaked with red lead paint.  
 Foundation piling shall have minimum computed bearing capacity of 15 tons per pile and a minimum penetration of 14 ft. below bottom of seal. In case refusal is reached before desired penetration is attained, the driving shall be facilitated by the use of a water jet, and continued until the 14 ft. minimum penetration is reached.  
 It is desired that the North abutment and backfill for same be placed, as soon as practicable after beginning the job in order that fill may settle before paving slab is placed. The fill material shall be jetted and otherwise compacted while being placed to obtain a maximum of stability. The approach dump shall also be brought to standard section early after the job is begun so the material will be well settled before paving. The subgrade shall be thoroughly compacted by hand tamping but no rolling will be required.



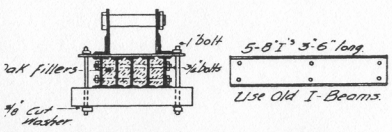
LAYOUT FOR CADDO RIVER BRIDGE CLARK COUNTY STA. 538+23 TO STA. 541+46 ROUTE 67 SEC. 6

ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Traced By: \_\_\_\_\_ Date: 2-10-32  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 BRIDGE No. 899 SCALE: 1" = 20'  
 DRAWING No. 1860

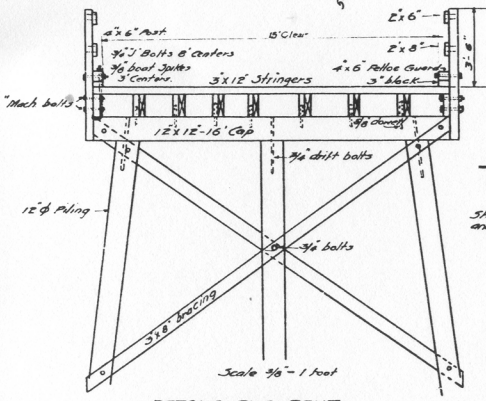
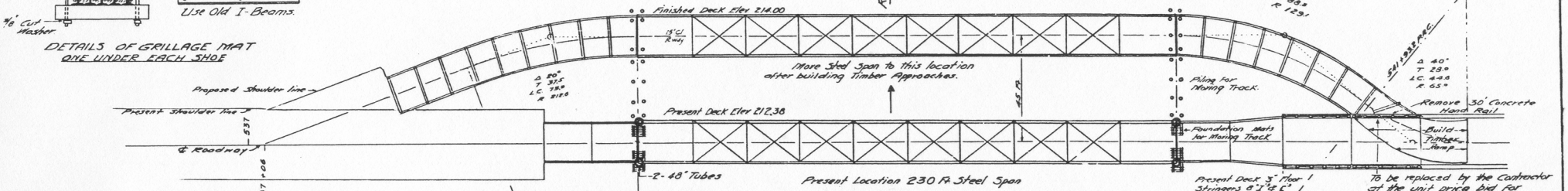
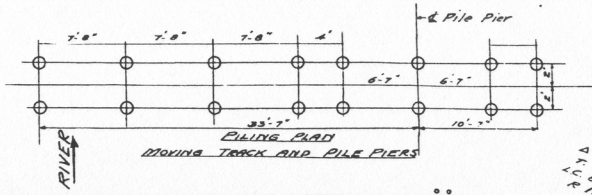
H.B. Gann  
 BRIDGE ENGINEER

FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	6	13

6 ARK. E.T.I.F. 1935 8 13

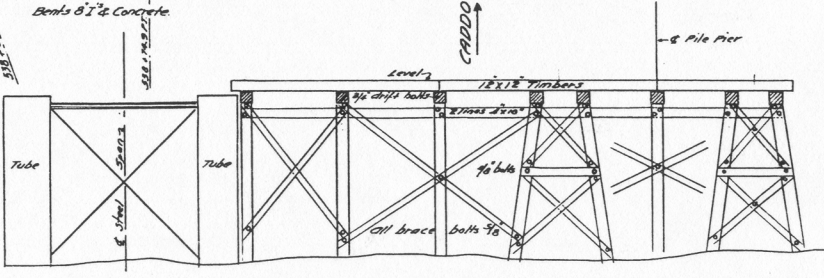


DETAILS OF GRILLAGE MAT ONE UNDER EACH SHOE

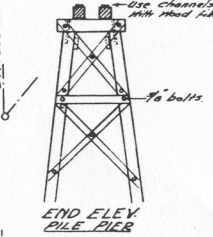


DETAILS PILE BENT

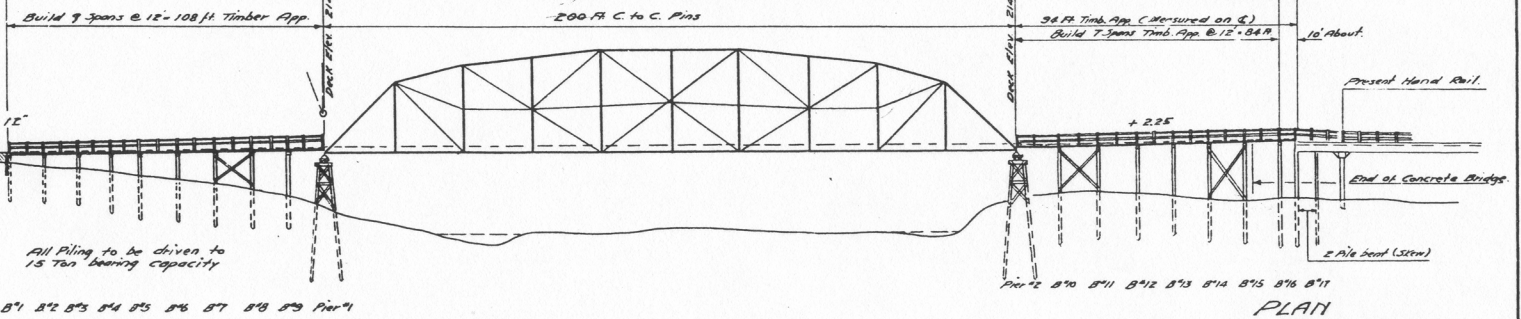
Note: Use 9 lines Stringers on Curves Use 8 on Tangent Superelevate Roadway on Curve turnouts Maximum 12" Build Embankment



ELEVATION MOVING TRACK AND PILE PIER FOR STEEL SPAN



END ELEV PILE PIER



All Piling to be driven to 15 Ton bearing capacity  
871 872 873 874 875 876 877 878 879 Pier 1

PLAN FOR MOVING 230 FT STEEL SPAN AND BUILD TIMBER TRESTLE AND EARTH APPROACHES CADDO RIVER BRIDGE ROUTE 67 SEC. 6

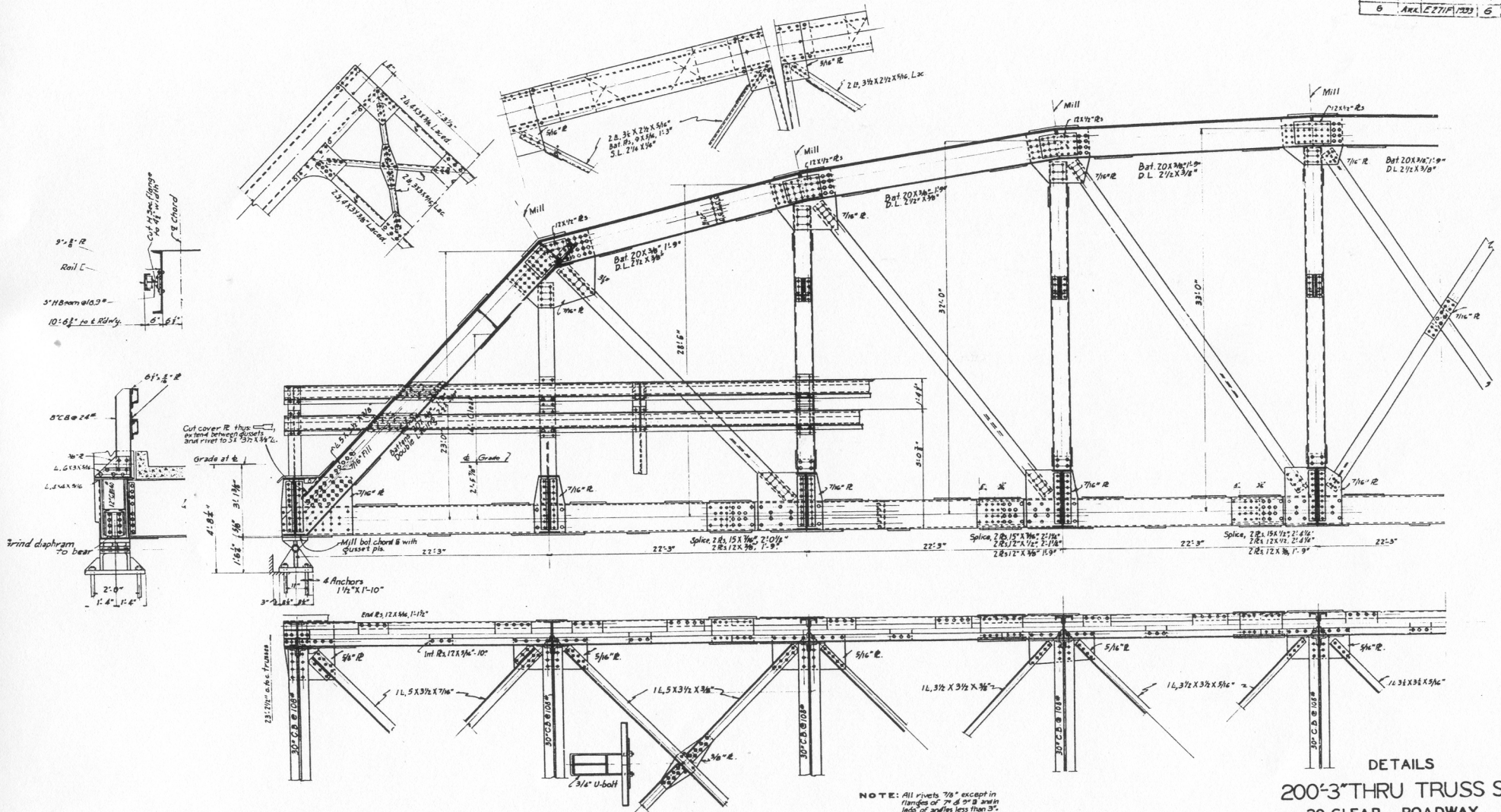
ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARK.

Drawn By: N.B. Date: 8-25-32  
Traced By: Date: \_\_\_\_\_  
Checked By: Date: \_\_\_\_\_  
Scale: 1/4" = 10'-0"  
BRIDGE No. 699 DRAWING No. 1885

N.B. BRIDGE ENGINEER

FISCAL YEAR	SHEET NO.	TOTAL SHEETS

DATE	REV.	BY	REASON
6	ARKA	E271F/1233	6 13



DETAILS  
 200'-3" THRU TRUSS SPAN  
 20 CLEAR ROADWAY  
 ROUTE 67 SEC. 6

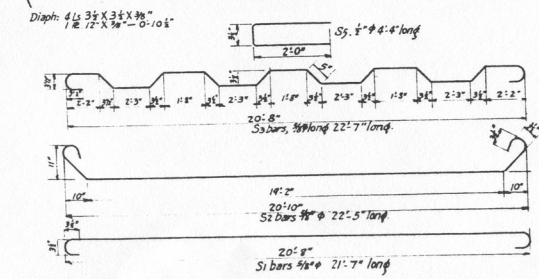
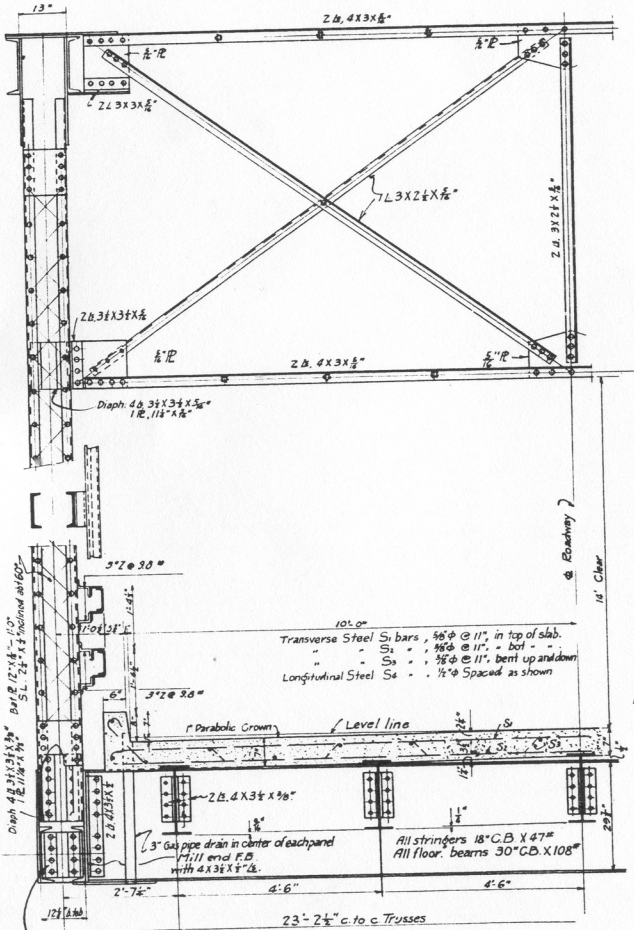
ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

Drawn By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Traced By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 BRIDGE NO. 3537

*A. B. Blaine*  
 BRIDGE ENGINEER

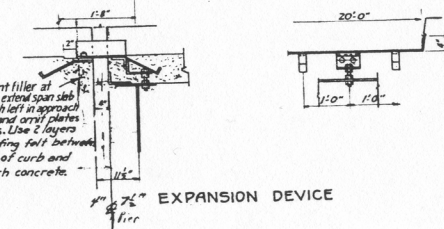
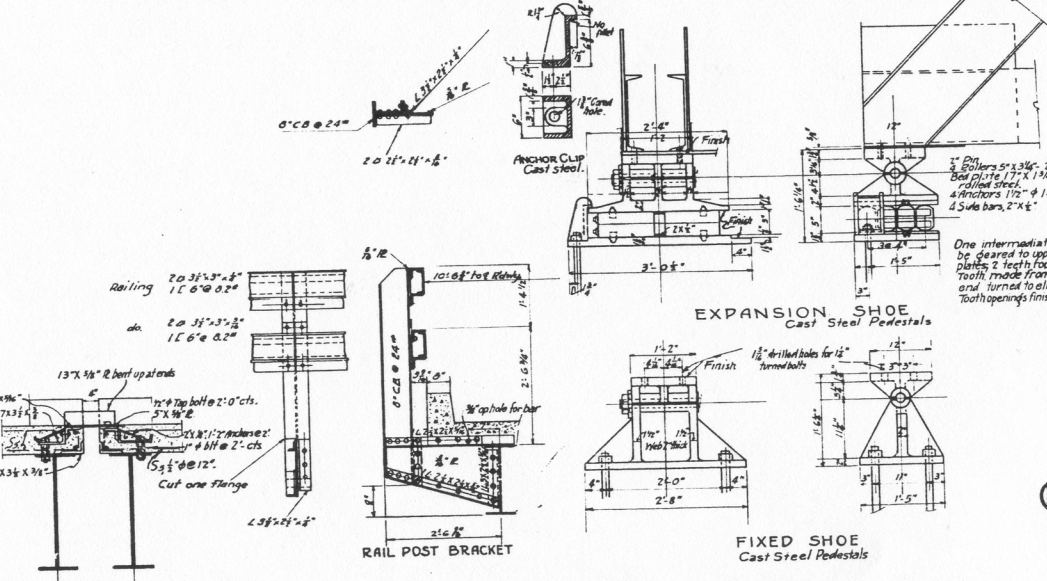
Scale: 1/2" = 1' on Plans  
 1/8" = 1' in Details  
 DRAWING NO. 3536  
 1 of 2 Drawings

FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6 - W.K. EZZIE 1933	7	13

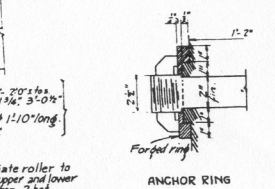


Reaction	DL 177.7	LL 69.8	T 247.5	DL + 185.5	LL + 60.2	T + 245.7	DL + 215.5	LL + 85.0	T + 300.5	DL + 246.6	LL + 97.3	T + 343.9	DL + 266.0	LL + 104.8	T + 370.8

STRESSES & MAIN MEMBERS



NOTES:  
 All rivets to be 7/8" (open holes 1/16" except 3/4 rivets in flanges of 9" and 7" B, and in legs of 8" less than 3". All holes in truss connections to be punched 1/16" and reamed to size while truss is assembled, this applies to both field and shop connections. Floor beam and stringer connections to be sub-punched and reamed to size thru a metal template.  
 All field connections to be riveted.  
 All floor beams and stringers to be milled to exact length after framing angles have been riveted.  
 Shapes of equal or greater strength may be substituted for structural shapes shown, provided, however, will be made in accordance with sizes given here with.  
 Shop paint: After complete assembly and shop work finished, all pieces shall be given one coat of red lead and raw linseed oil.  
 Floor slabs: Apply two coats, See Specifications p 96.36  
 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: Arkansas Standard Road and Bridge Specifications adopted May 30, 1925, and revised.



ANCHOR RING

DESIGN DATA  
 Unit Stresses: Concrete 750 lbs per sq. in.  
 Reinforcing steel 16000  
 Structural Steel 16000  
 Live load: H-15 loading.



ESTIMATED QUANTITIES  
 Concrete Class 'S' : 27.3 Cu-yds.  
 Reinforcing Steel : 18030 lbs.  
 Structural Steel : 287000 lbs.  
 Cast Steel : to be allowed as structural.

DETAILS  
**200'-3" THRU TRUSS SPAN**  
 20 CLEAR ROADWAY  
 ROUTE 67 SEC. 6  
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.

Drawn By: \_\_\_\_\_ Date: Sept 1932  
 Traced By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

Scale: *As indicated*  
 BRIDGE NO. 238 DRAWING NO. 3537  
 1 of 2 Drawings

M.B. Lane  
 BRIDGE ENGINEER