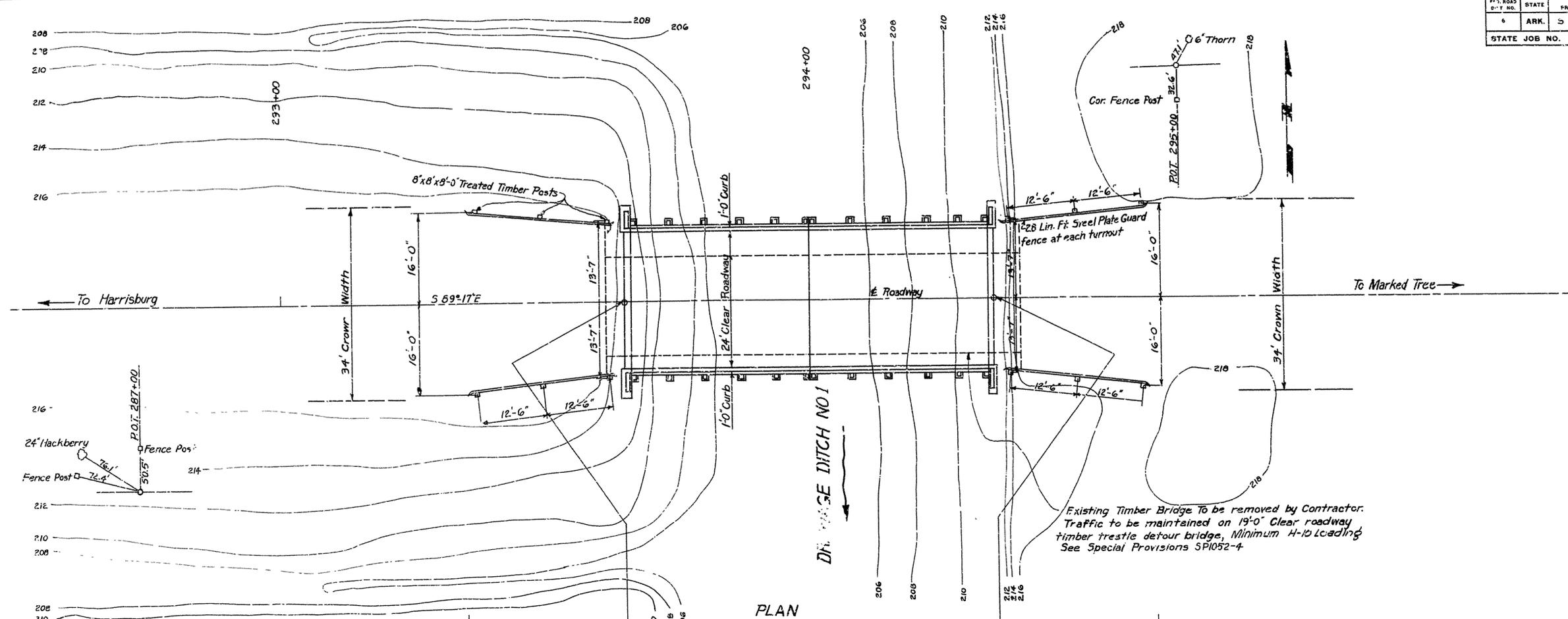
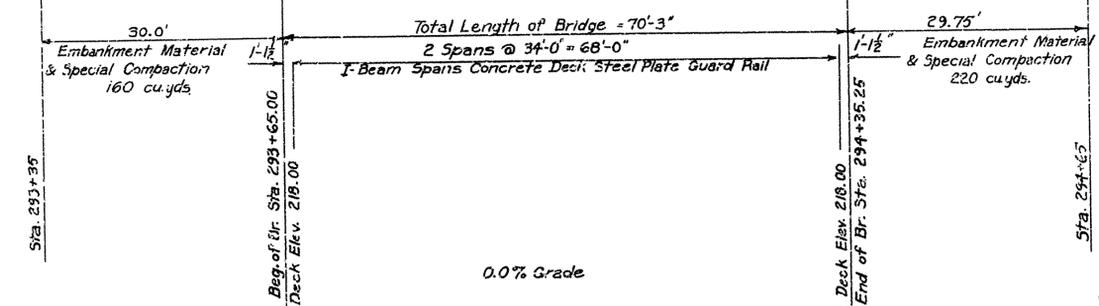


STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
ARK.	5 179 (4)		3	13
STATE JOB NO. 10340				



PLAN

Right of Way:  
60' Left  
70' Right



ELEVATION



Lengths of 16" Octagonal Precast Concrete Piling shown are for estimating purposes only. Actual lengths to be determined in the field. Drive this pile in Bent No. 2 as a test pile. For Details See Drawing No. 5218, 5219, 5219-A

Loading: H-15  
Stresses:  
Structural Steel 18000  $\frac{lb}{in^2}$   
Reinforcing Steel 18000  $\frac{lb}{in^2}$   
Class "S" Concrete 1000  $\frac{lb}{in^2}$  n=10

B.M. R.R. Spike in 12" Cottonwood Tree  
50' Lt. Sta. 306+00 Elev. 212.09

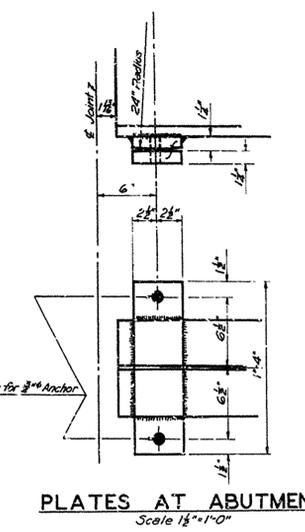
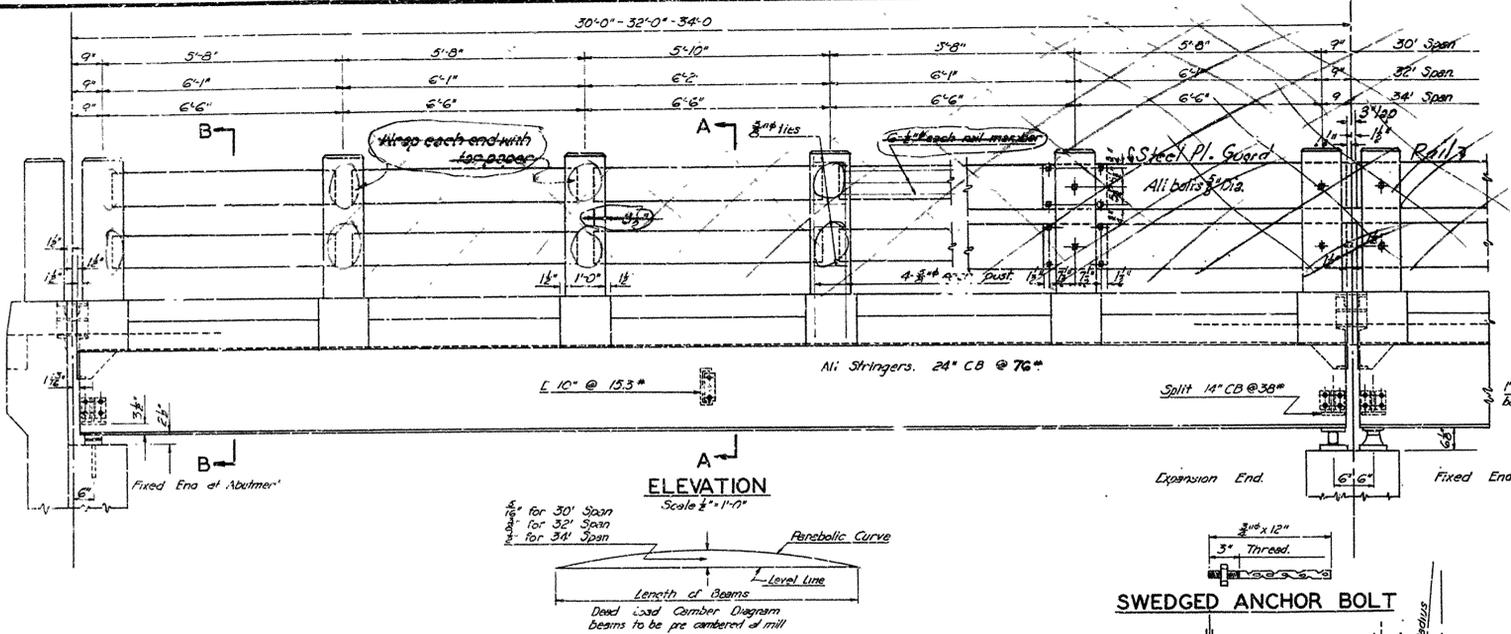
Existing Timber Bridge To be removed by Contractor. Traffic to be maintained on 19'-0" Clear roadway timber trestle detour bridge, Minimum H-10 Loading. See Special Provisions SP1052-4

LAYOUT OF  
BRIDGE OVER DRAINAGE DITCH NO.1  
HARRISBURG-HARRISBURG CORNER  
POINSETT COUNTY  
ROUTE 14 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
Drawn By: L.A.M., Date: 2-2-50  
Traced By: W.W.M., Date: 3-11-50  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scale: 1 inch = 10 ft.  
BRIDGE NO. 2594 DRAWING NO. 7615

*N.O. Smith*  
BRIDGE ENGINEER

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				



**LOADING H-15**

Load Distribution Outside Beams  
 Dead Load Per Foot = 975 #  
 Live Load Per Foot = 184 #  
 Conc. Live Load = (5200 # Mom. / 7500 # Shear) = 0.82 Wheel

Truck Live Load  
 Load Distribution Inside Beams  
 Dead Load Per Foot = 650 #  
 Live Load Per Foot = 264 #  
 Conc. Live Load = (7425 # Mom. / 10,725 # Shear) = 1.1 Wheel

**STRESSES**

Structural Steel = 18,000 #/sq.  
 Reinforcing Steel = 18,000 #/sq.  
 Concrete (f'c) = 1000 #/sq.

**GENERAL NOTES**

All concrete to be Class "S". All exposed corners to have 3/4" chamfer unless otherwise noted.

Reinforcing Steel: Where bolts are indicated use machine bolts. Structural shapes of equal or greater strength may be substituted for shapes shown but payment will be made on basis of shapes shown or those actually used whichever is the lesser.

All welded connections to be 3/8" fillet shop welds except as noted.

Shop Paint: All structural steel except surfaces in contact with concrete shall be given one coat of red lead and two coats of aluminum.

Field Paint: First White Lead tinted with Lamp Black, Second coat Aluminum.

All bearing and roadway expansion devices to be paid for as "Structural Steel in Beam Spans."

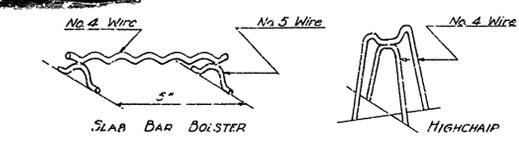
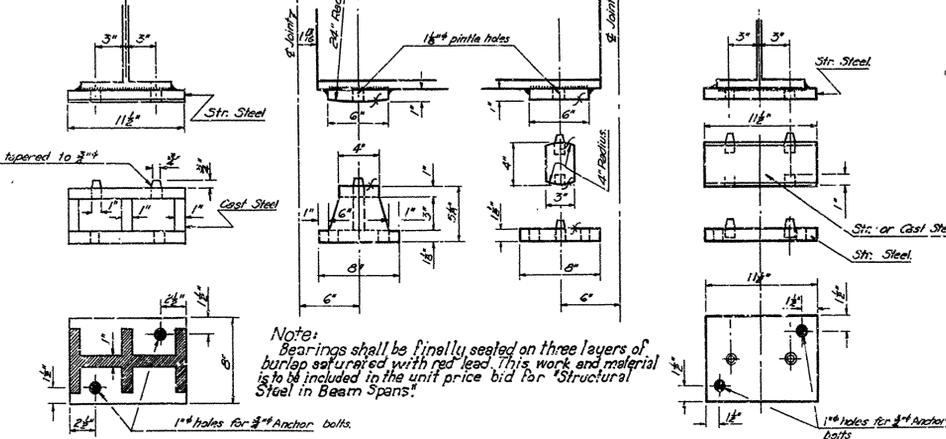
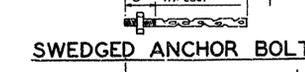
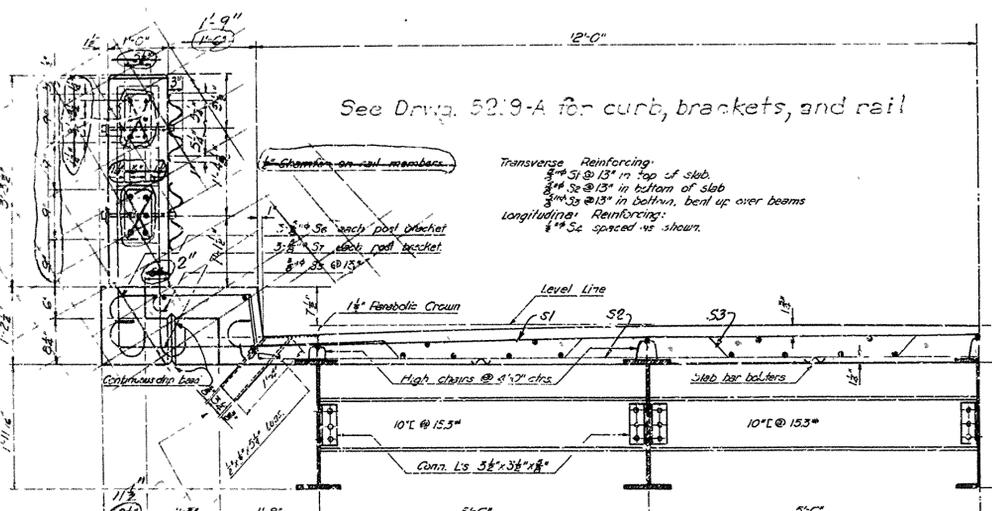
Weight of C.I. Drains to be included in weight of Reinforcing Steel.

Care shall be exercised to obtain 90° in the angle between flange and web of beams at bearing points.

This drawing shows general features of design only. Shop drawings shall be made in accordance with the Specifications, submitted and approval secured before fabrication is begun.

In order to secure a good riding surface it will be required that the floor slab be struck off from curb to curb with a half span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical deflection.

**SPECIFICATIONS:** Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, Adopted March 1st 1940.



All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire chair supports adequate to prevent displacement during the course of construction and to keep the steel a proper distance from the forms.

Bar supports are to be sufficient in number and sufficiently heavy to properly carry the steel they support. Wire sizes shall not be less than shown.

Wire supports will not be paid for directly but will be considered subsidiary to the item of "Reinforcing Steel". Shop lists and diagrams must be submitted for approval.

**LIST OF BENT BARS**

Mark	Size	Length	Bending Diagram
S1	3/8"	25'-9"	
S2	3/8"	26'-0"	
S3	3/8"	26'-0"	
S4	3/8"	3'-4"	
S5	3/8"	5'-0"	
S6	3/8"	5'-0"	
S7	3/8"	5'-0"	

Revised 8-14-48 Handrail Curb & brackets  
 Revised 12-9-46 Bars S1 & S3  
 " 2-28-47 Wl. of 24" CB  
 " 4-5-47 Ribbed Bolts  
 " 7-20-48 Handrail (Note Details shown thus do not apply after this revision date)  
 See also Drawg. No. 5219-1

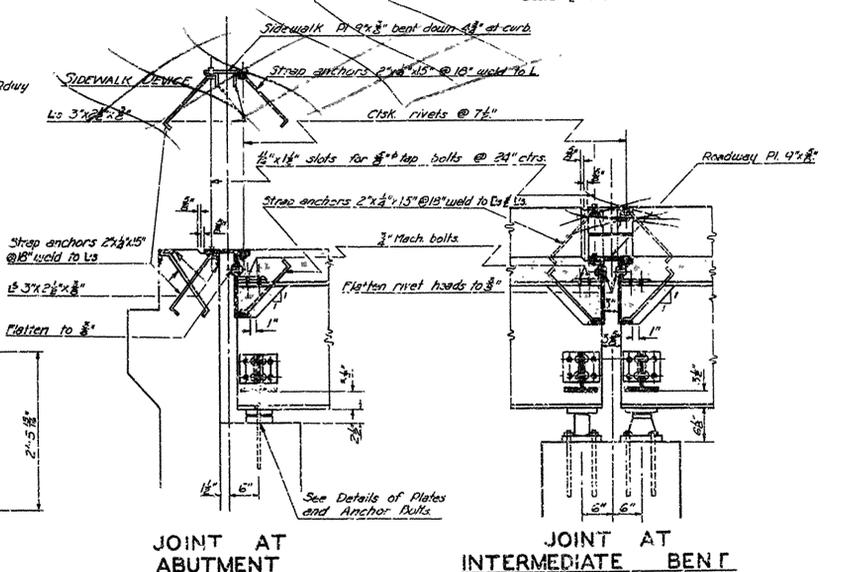
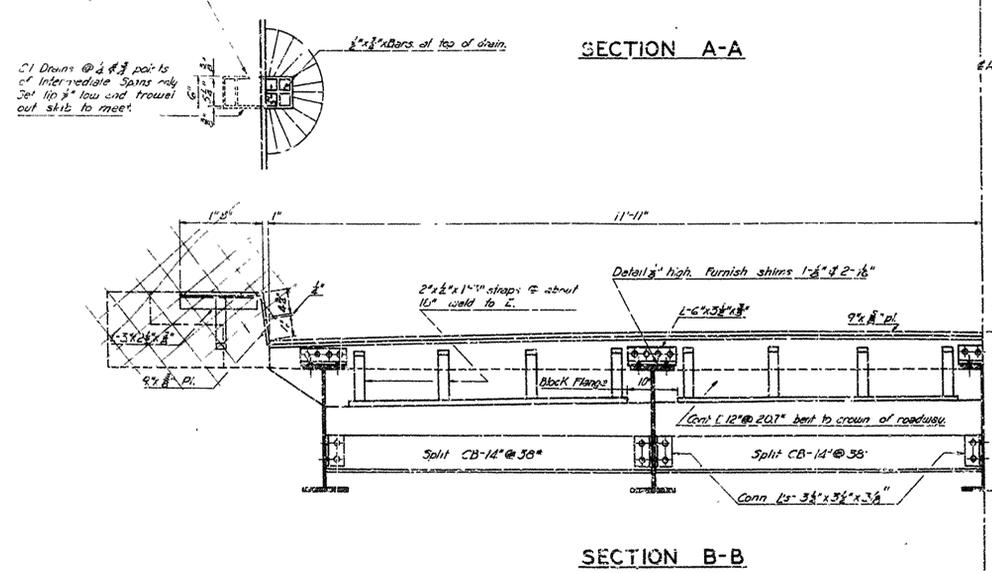
**DETAILS OF STANDARD 30'-32'-34' I-BEAM SPANS 24'-0" CLEAR ROADWAY 1'-6" WALKWAY**

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

Drawn By: L.P.C. Date: 8-30-44  
 Traced By: S.W.B. Date: 4-30-46  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

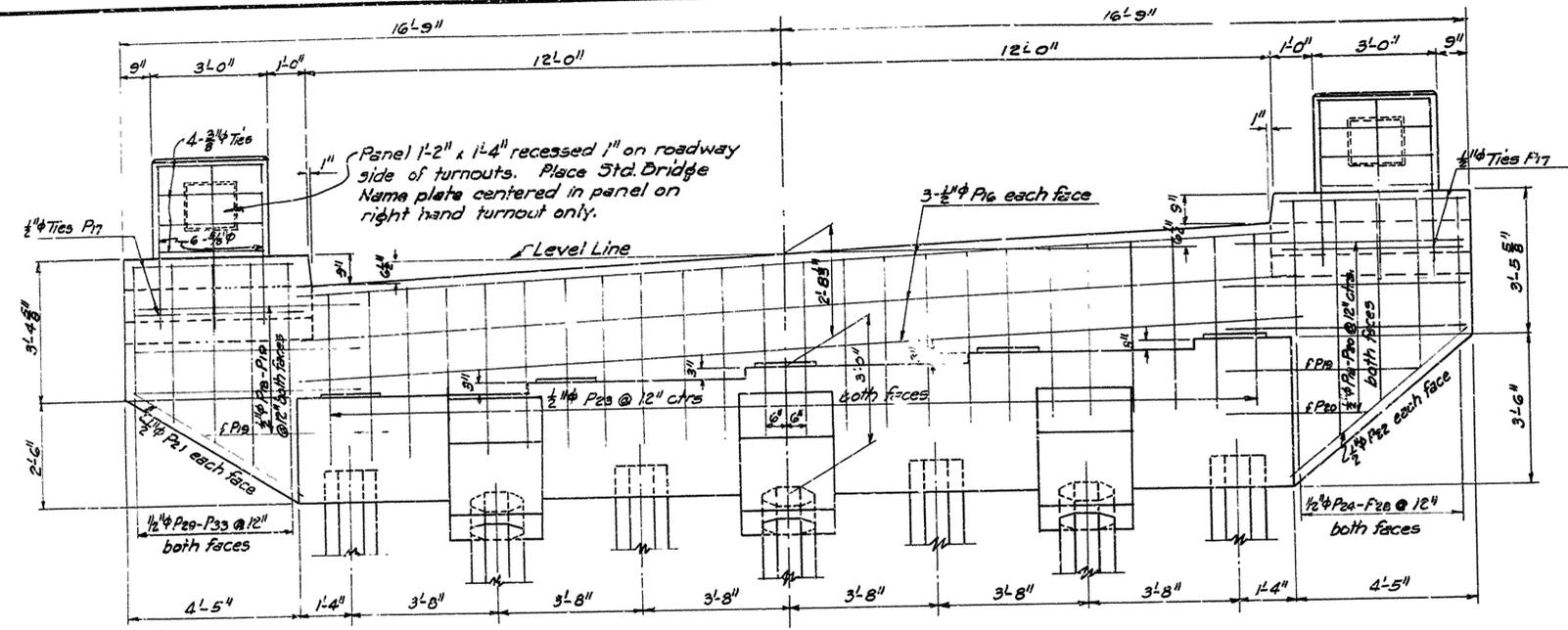
Scale: 3/4" = 1'-0"      3/8" AS SHOWN

**DRAWING NO. 5219.**

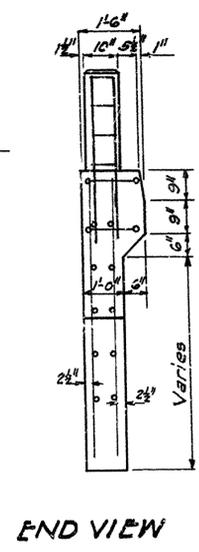


M.B. Garver  
 PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

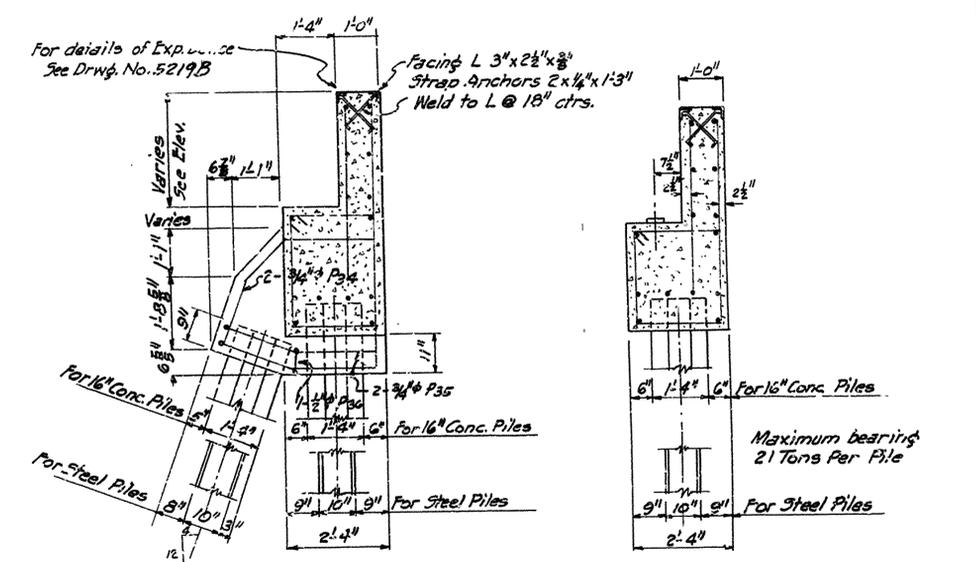
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO.					



**FRONT ELEVATION END BENT**  
Cap Reinforcing Same as Intermediate Bent.

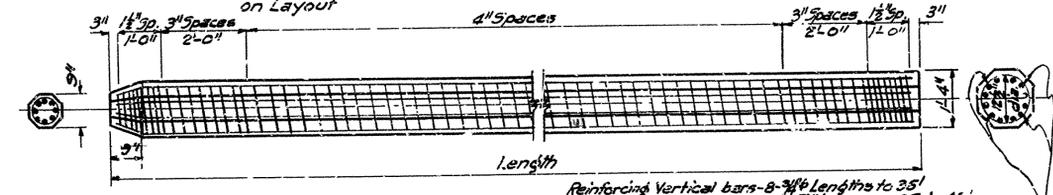


**END VIEW**



**SECTION AT BATTER PILES SECTION BETWEEN BATTER PILES**

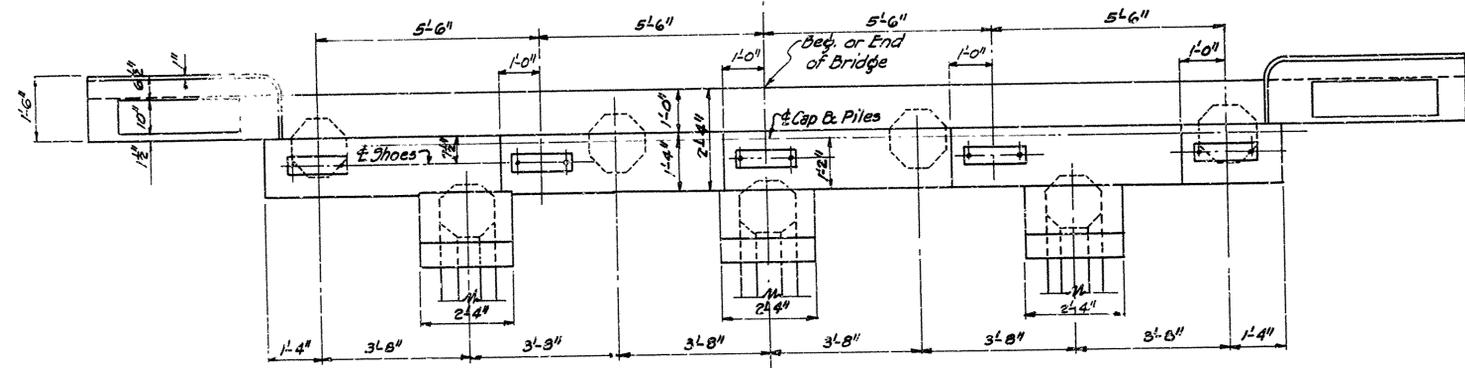
Use batter piles only when shown on Layout



Reinforcing Vertical bars - 8-3/8" Lengths to 35'  
5-7/8" " " 35' to 45'  
Spiral #4 Wire  
For lengths over 45' Add 4-3/8" thru middle third of Pile

**DETAILS OF 16" PRECAST CONCRETE PILE**

Note: When called for on Bridge Layout use steel bearing piles DF10 @ 42" instead of concrete piles. Note changes in dimensions at piles and number of bars P1, P11 in Caps



**PLAN OF END BENT**

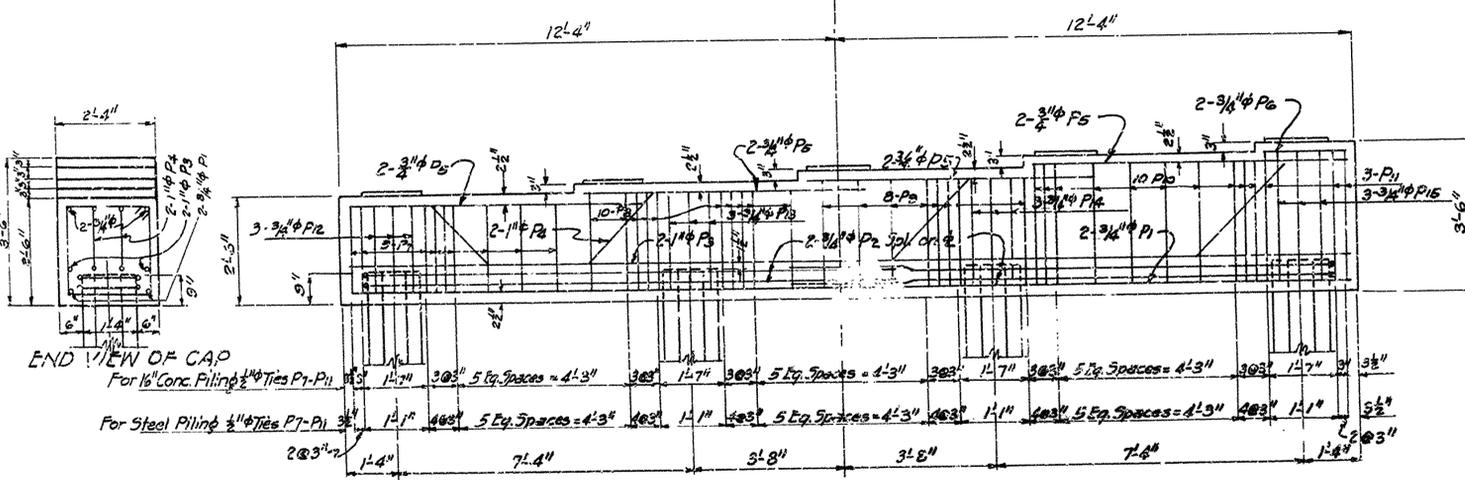
**LIST OF BENT BARS**

Mark	Size	Length	A	B	Diagram
P2	3/4"	27'-5"	13'-0"	1'-5"	
P2	1"	28'-9"			
P7	1/2"	8'-9"	1'-11"	2'-1"	
P8	1/2"	9'-3"	1'-11"	2'-4"	
P9	1/2"	9'-9"	1'-11"	2'-7"	
P10	1/2"	10'-3"	1'-11"	2'-10"	
P11	1/2"	10'-9"	1'-11"	2'-1"	
P12	3/4"	6'-1"	1'-11"	2'-1"	
P13	3/4"	6'-7"	1'-11"	2'-4"	
P14	3/4"	7'-1"	1'-11"	2'-7"	
P15	3/4"	8'-1"	1'-11"	3'-1"	
P17	1/2"	11'-9"	1'-11"	4'-5"	
P34	3/4"	8'-0"			
P35	3/4"	11'-3"			
P36	1/2"	5'-5"	5"	1'-11"	

General Notes:  
All concrete to be Class "5"  
Pile to be driven to a minimum capacity of 28 Tons.  
Facing angle at end bent and strap anchors to be included in the quantity for Structural Steel in Beam Spans.  
See Drwg. No. 5219B for additional general notes.

**STANDARD DETAILS OF PILE BENTS FOR 34' I-BEAM SPAN ON 3° CURVE 24' CLEAR ROADWAY 10" CURBS**

ROUTE SEC.  
**ARKANSAS STATE HIGHWAY COMMISSION**  
LITTLE ROCK, ARK.  
Drawn By: E.A.W. Date: 8-9-49  
Traced By: L.A.M.E. Date: 5-11-49  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scale: 1/2" = 1'-0"  
BRIDGE NO. \_\_\_\_\_ DRAWING NO. 5218-A

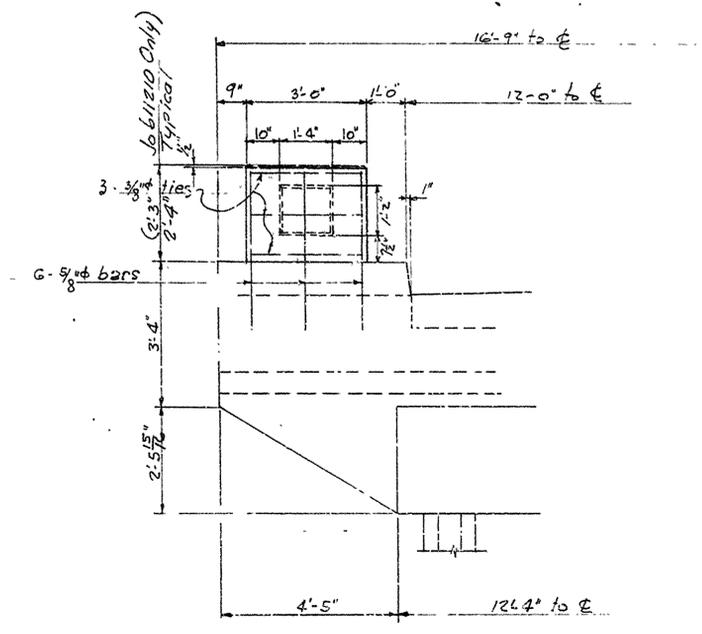
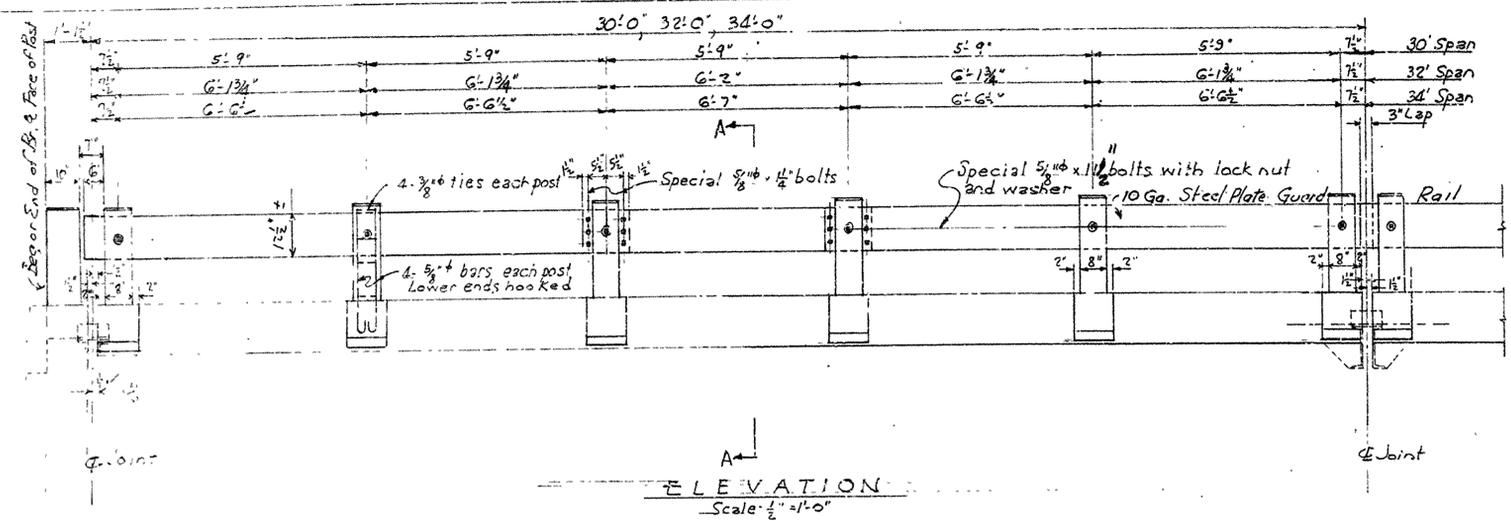


**ELEVATION INTERMEDIATE BENT**

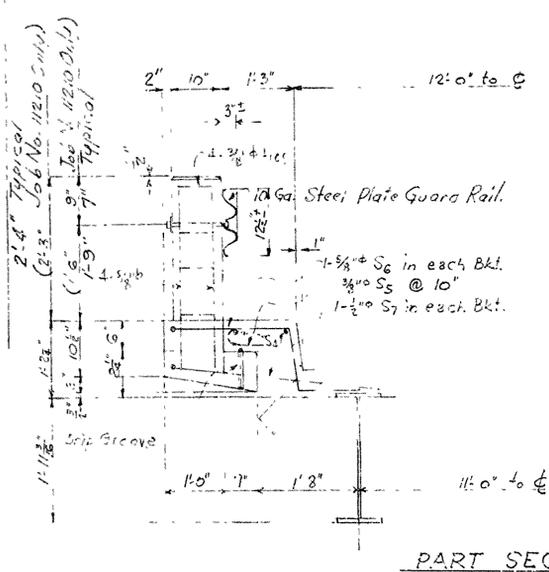
H.A. Sawyer  
PRINCIPAL HIGHWAY ENGINEER (BRIDGES)



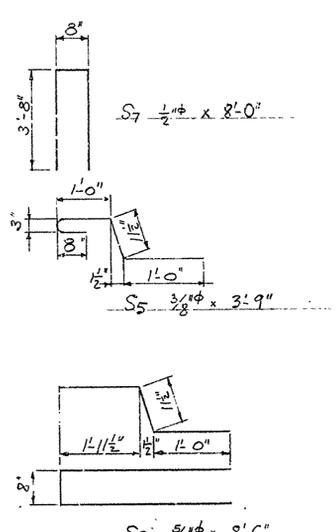
STATE ROAD DISTRICT	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6			
STATE JOB NO.			



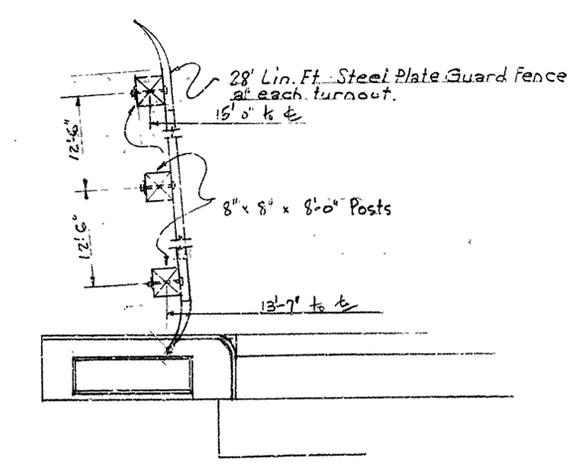
PART FRONT ELEVATION END BENT



PART SECTION A-A



Above bars replace bars of same marks shown on Drawg. No. 5219 other bars are as shown on Drawg. No. 5219.



PART PLAN OF END BENT

The Steel Plate Guard Rail shall be of the type shown or an equivalent rigid type as approved by the Engineer. The Steel Plate Guard Rail, including the concrete posts, shall be paid for at the unit price bid per linear foot for "Steel Plate Guard Rail".

DETAILS OF STEEL PLATE GUARD RAIL  
 REVISING CURB & HANDRAIL  
 STANDARD 30', 32', 34' I-BEAM SPANS  
 24'-0" CLEAR ROADWAY

E.A.W. 8-13-48 Scale: 3/4" = 1'-0" and as noted  
 DRAWING NO. 5219-A

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	S 179(4)		1	13
STATE JOB NO. 10340					13

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION  
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION  
ADOPTED MARCH 1, 1940 WITH THE SPECIAL PROVISIONS LISTED BELOW

INDEX OF SHEETS

SHEET NO.	DRAWG. NO.	DESCRIPTION
1	7613	Title Sheet Job No. 10340
2	7614	Quantity Sheet
3	7615	Layout Br. No. 2594
4	7616	Layout Br. No. 2595
5	7617	Layout Br. No. 519
6	5218	Details of Bents
7-8	5219-5219-A	Details of 36' I-Beam Spans
9	1888	Embankment at Bridge Ends
10	1891	Basis For Computing Excavation For Structures
11	1896	Standard Barricade, Warning and Signs
12	2388	Bridge Name Plates
13	GR5	Steel Plate Guard Fence

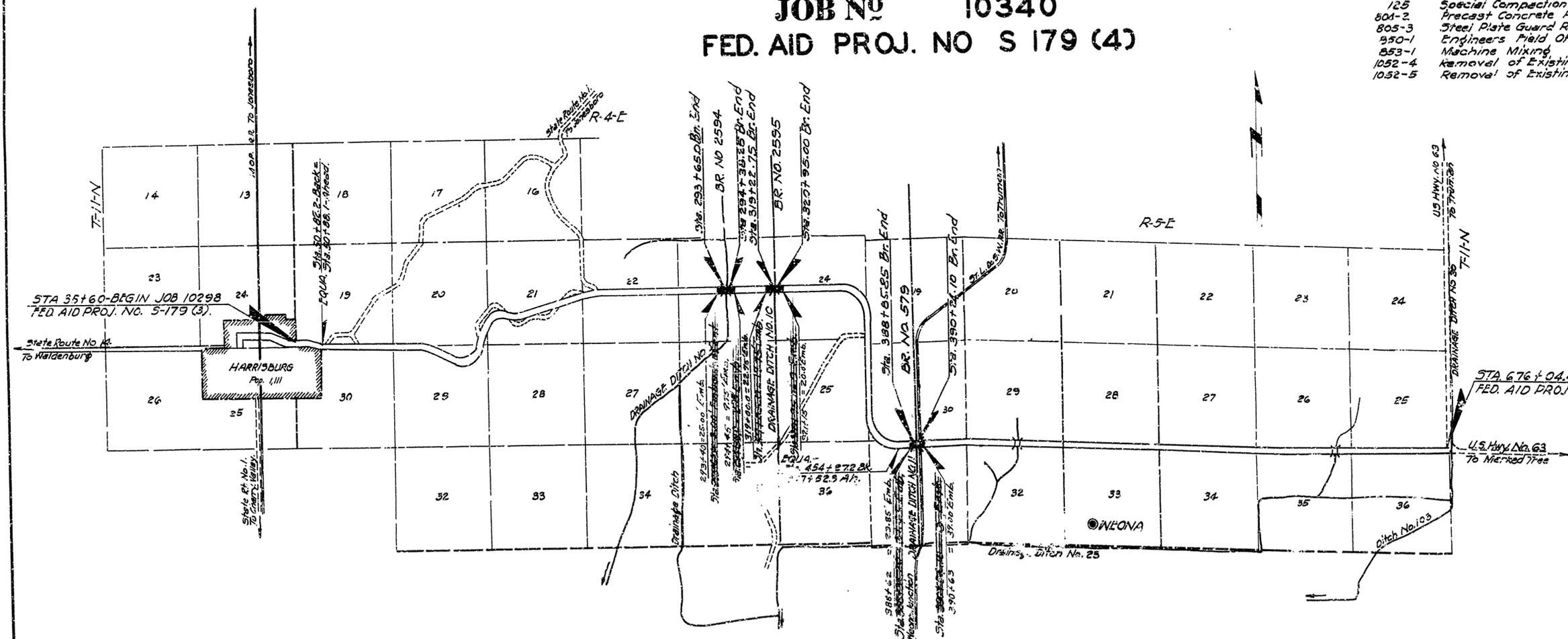
PLAN OF PROPOSED BRIDGES  
HARRISBURG - HARRISBURG CORNER

POINSETT COUNTY  
ROUTE 14 SEC. 14  
JOB NO 10340  
FED. AID PROJ. NO S 179 (4)

PAMPHLETS

DIVISION	PART
I	
II	1, 3A, 8B, 9
III	
IV	

No.	SPECIAL PROVISIONS TITLE	No. SHEETS
	Required Contract Provisions	7
2-1	Revision of Article 2:11 (Appr. 2-3-41)	2
2-2	Equipment List Required	1
2-4	State License For Contractors	1
4-1	Revision of Article 4:3	1
8-3	Special Provisions Pertaining to the Required Contract Provisions for Federal Aid Projects	2
9-5	Partial Payments	1
104-27	Embankment Material	2
125	Special Compaction of Earthwork	3
804-2	Precast Concrete Piling	1
805-3	Steel Plate Guard Rail	1
950-1	Engineers Field Office	1
953-1	Machine Mixing	1
1052-4	Removal of Existing Bridges	1
1052-5	Removal of Existing Bridges	1



LAYOUT  
Scale: 1" = 3000'

FINAL LENGTH

LENGTH OF PROJECT	= 521.10 Lin. Ft. = 0.98 Miles	PROJECT	= 521.10 FEET OR 0.98 MILES
LENGTH OF BRIDGES	= 380.75 Lin. Ft. = 0.72 "	ROADWAY	= 140.35 " " 0.26 "
LENGTH OF EMBANKMENT	= 140.35 Lin. Ft. = 0.26 "	BRIDGES	= 380.75 " " 0.72 "
LENGTH OF JOB	= 521.10 Lin. Ft. = 0.98 "	JOB	= 521.10 " " 0.98 "

*N.B. Keiser*  
BRIDGE ENGINEER

APPROVED  
CHIEF ENGINEER-STATE HIGHWAY COMMISSION

APPROVED  
CHAIRMAN-STATE HIGHWAY COMMISSION

RECOMMENDED FOR APPROVAL  
DISTRICT ENGINEER  
DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

APPROVED  
DISTRICT ENGINEER  
DEPARTMENT OF COMMERCE  
BUREAU OF PUBLIC ROADS

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	ARK.	5 179 (4)		2	13
STATE JOB NO. 10340					13

BRIDGE QUANTITIES CODE NO. X031

Item No.	Item	Unit	Bridge No. 2594				Bridge No. 2595				Bridge No. 579				Total Job No. 5327
			Bents No. 1 & 3	Bent No. 2	Spans 1 & 2	Total	Bents No. 1 & 6	Bents No. 2-5 Incl.	Spans 1-5 Incl.	Total	Bents No. 1 & 5	Bents No. 2-4 Incl.	Spans 1-4 Incl.	Total	
103	Dry Excavation For Structures	Cu. yd.	15			15	15		15	40			40	70	
SP10:-27	Embankment Material	Cu. yd.	380			380	565		565	1,500			1,500	2,445	
SP125	Special Compaction of Earthwork	Cu. yd.	380			380	565		565	1,500			1,500	2,445	
SP & 802	Class "S" Concrete For Bridges	Cu. yd.	21.82	5.17	38.26	65.25	21.82	20.68	95.65	138.15	21.82	15.51	76.52	113.85	317.25
803	Reinforcing Steel	Lb.	3044	940	7472	11,456	3044	3760	10,680	25,484	3044	2820	14,946	20,810	57,750
SP & 804	Concrete Piling	Lin. Ft.	420	120		540	420	560		980	420	420		840	2,360
SP805-3	Steel Plate Guard Rail	Lin. Ft.	12		136	148	12		340	352	12		272	284	784
807	Structural Steel in Beam Spans	Lb.	1,235		33,190	34,425	35		83,383	84,618	1,235		66,652	67,887	186,930
906	24" Spelter Coated C.M. Pipe Culvert	Lin. Ft.									64			64	64
925	Steel Plate Guard Fence	Lin. Ft.	112			112	112			112	112			112	336
929	Bridge Name Plates (Type "A")	Each	1			1	1			1	1			1	3
SP1052-4	Removal of Existing Bridges	Each				1								1	2
SP1052-5	Removal of Existing Bridges	Each								1					1

SUMMARY OF QUANTITIES  
 HARRISBURG-HARRISBURG CORNER BRIDGES  
 POINSETT COUNTY  
 ROUTE 14 SEC. 14

ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 Drawn By: L.P.C. Date: 3-11-50  
 Traced By: W.W.M. Date: 3-12-50  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Scale: 1" = 10'  
 BRIDGE NO. 2594, 2595 & 579 DRAWING NO. 7614

*W.D. Lamm*  
 BRIDGE ENGINEER