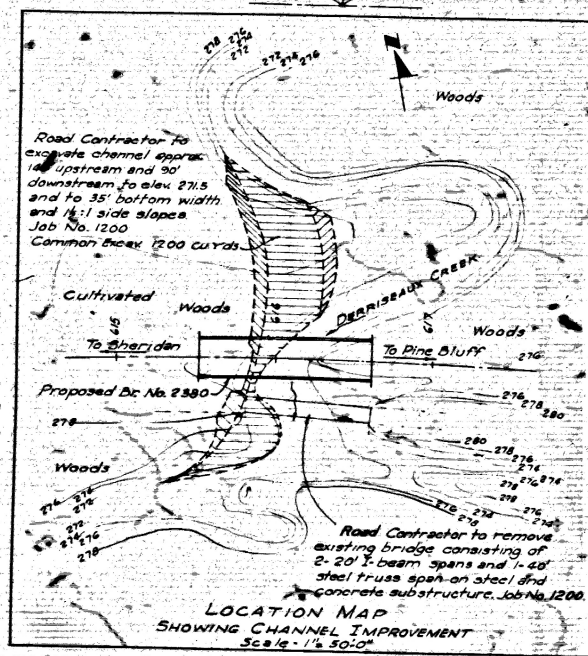
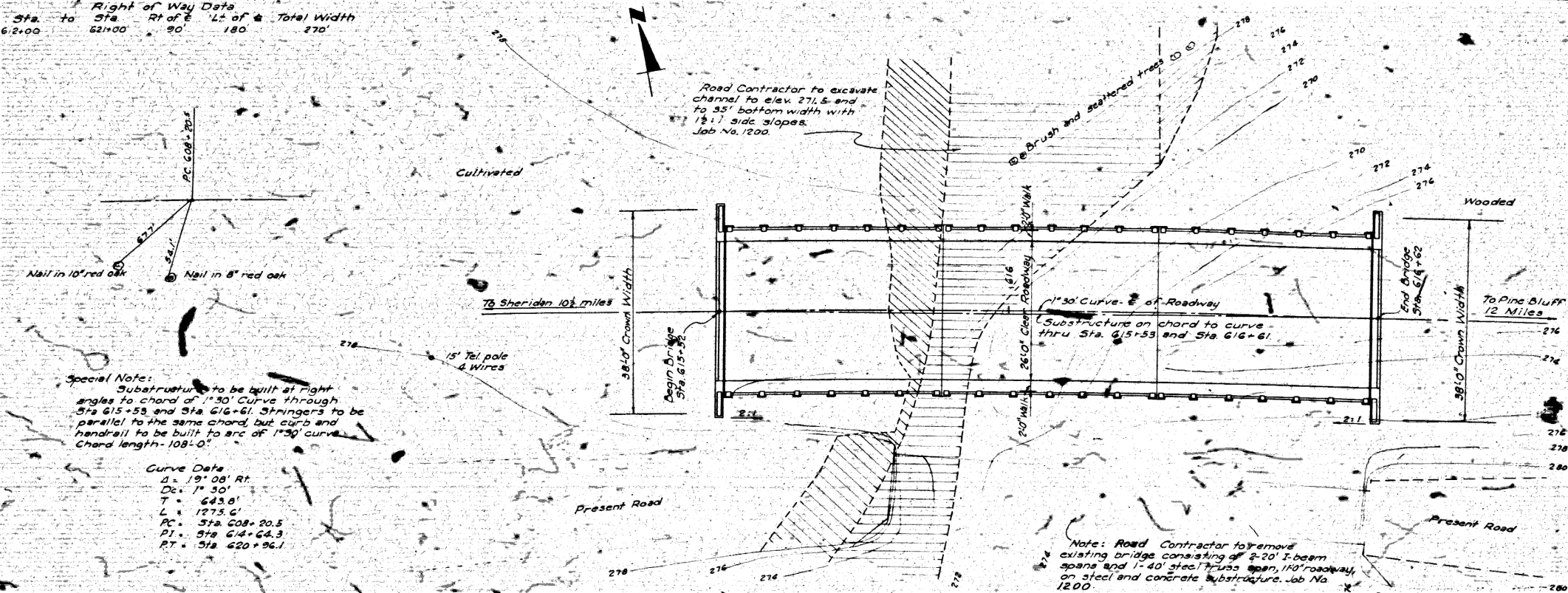


Sta. to	Sta. from	Rt of C	Lt of C	Total Width
62+00	62+00	90°	180°	270'

FED. ROAD DIST. NO.	STATE	FED. AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.	F-14 (S)	1946	7	17
STATE JOB NO. 6314				7	17

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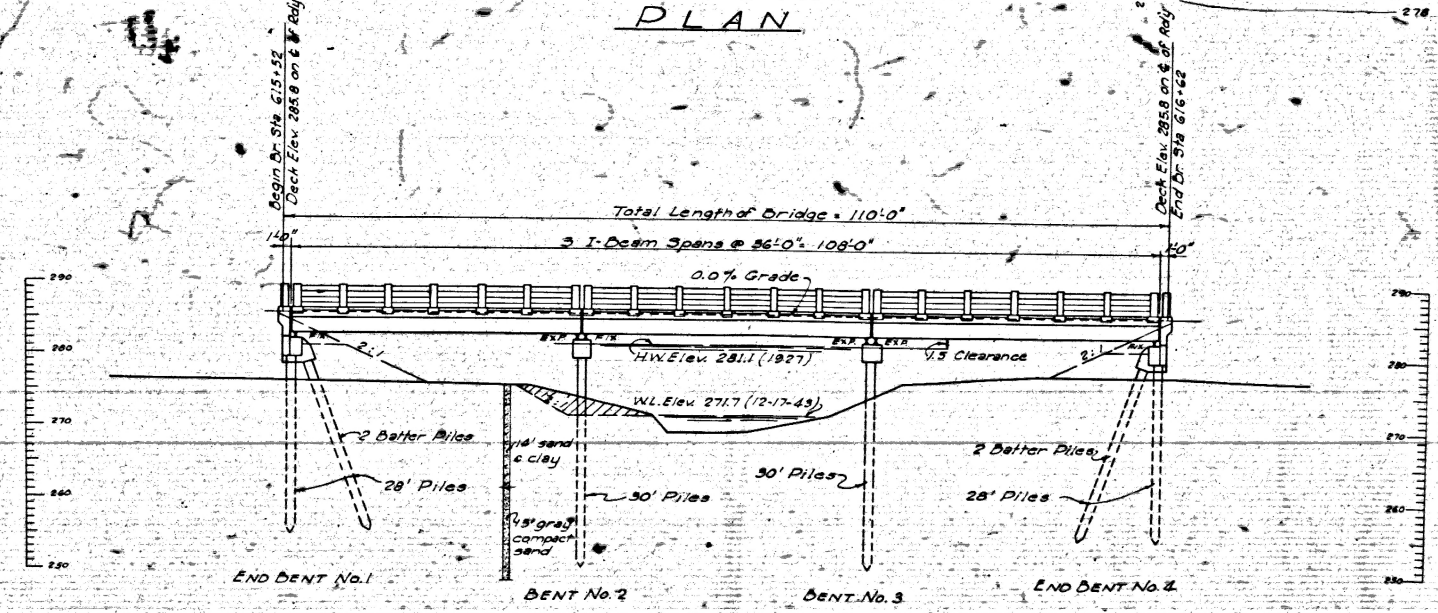
Special Note:
Substructure to be built at right angles to chord of 1°30' curve through Sta 615+53 and Sta 616+61. Stringers to be parallel to the same chord, but curb and handrail to be built to arc of 1°30' curve. Chord length-108'-0".

Curve Data
Δ = 19°08' Rt.
Dc = 1°50'
T = 643.6'
L = 1273.6'
PC = Sta 608+20.5
PT = Sta 614+64.3
PI = Sta 620+96.1

General Notes
All concrete to be Class 'B' and to be poured in the dry. All exposed corners to be chamfered 3" unless otherwise noted. All piling to be 16" octagonal precast concrete, and to be driven to a minimum capacity of 30 tons per pile and min. penetration of 20 ft. Lengths of piling shown are assumed. For estimating quantities only. Actual lengths to be determined in the field. Drive one pile in Bent No. 2 as a test pile. Cast test pile 35' long. Volume occupied by embedded pile heads will not be included in pay quantity of concrete caps. For Details of Pile Bents, see Dwg No. 5128. For Details of 36" I-Beam Spans, see Dwg No. 5125 & 5127. Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 1, 1940.

Design Live Load H20-AASHO 1941
Unit Stresses
Concrete (in 10) 1000 #/sq. in.
Reinforcing Steel 18,000 #/sq. in.
Structural Steel 18,000 #/sq. in.
Maximum Design Load on Piles 28 tons each

Drainage Area
10.99 miles c=0.8
D.M. Elev. 278.92 M.S.L.
Nail in 14" sweet gum 75' right of Sta 617+75

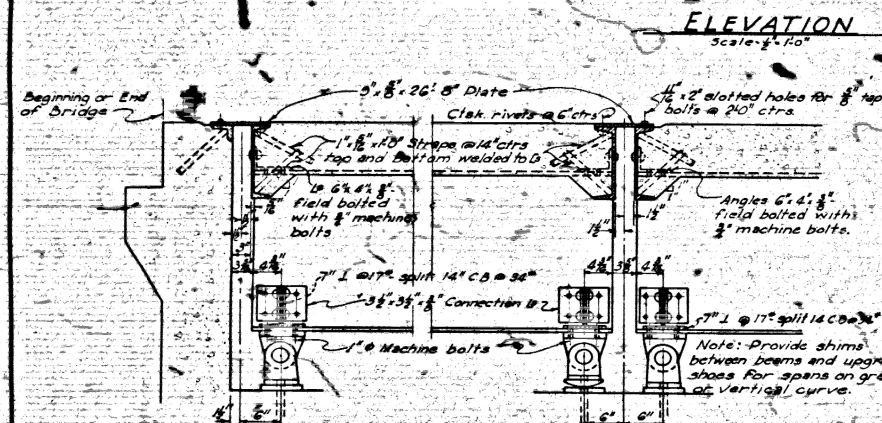
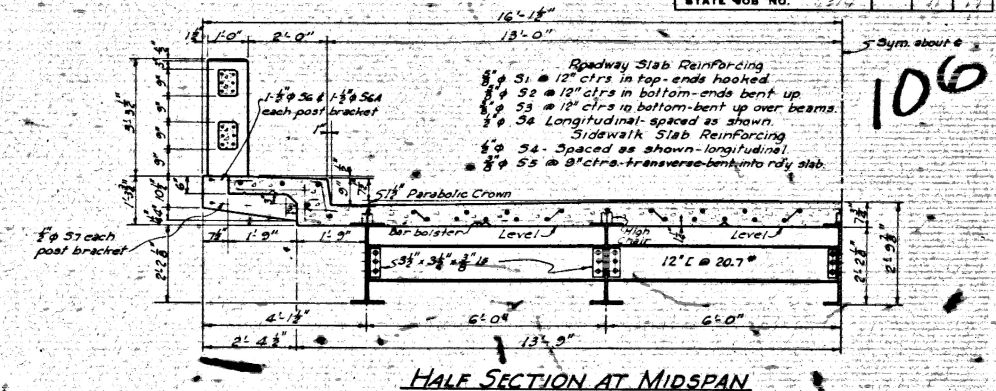
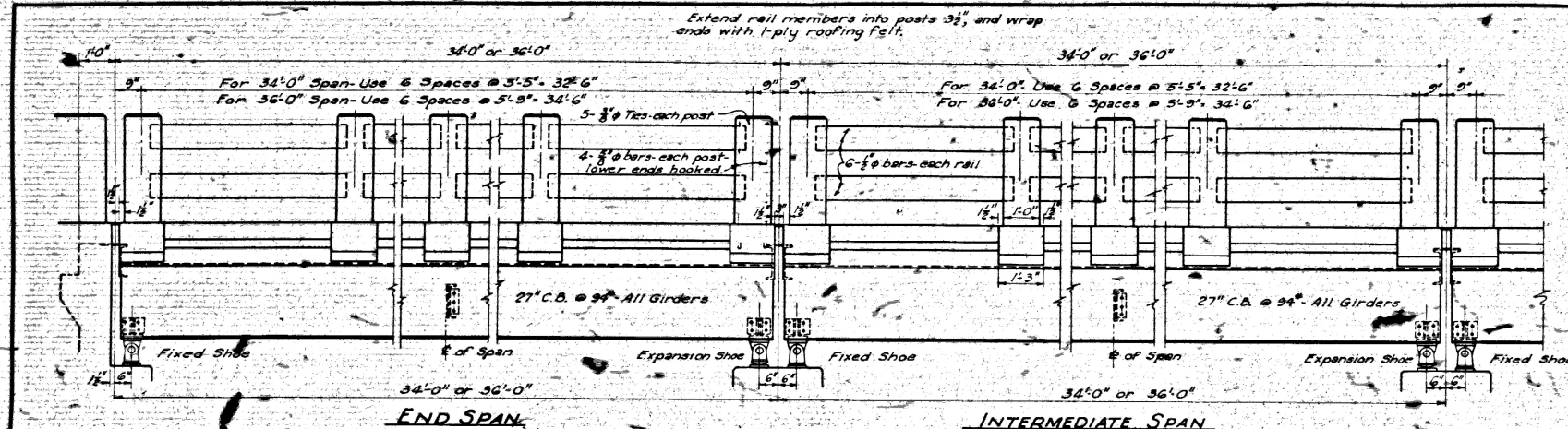


Item No.	Item	Quantity	Unit
SR802	Class 'B' Concrete for Bridges	124.7	Cu Yds
SR803	Reinforcing Steel	21,000	Lbs.
SR804	Concrete Piling (16" Octagonal Precast)	629	Lin. Ft.
805	Concrete Railing	235	Lin. Ft.
SR807	Structural Steel in Beam Spans	69,870	Lbs.
929	Bridge Name Plates, Type 'B'	12	Each

LAYOUT OF BRIDGE OVER DERRISEAUX CREEK SHERIDAN-PINE BLUFF ROAD GRANT COUNTY

ROUTE 270 SEQ. 10
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: M.B. Date: 1-15-44
Traced By: M.B. Date: 6-17-44
Checked By: Date:
BRIDGE NO. 2380 DRAWING NO. 6584

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	1-3-10	106	110
STATE WORK NO. 1-3-10				



LIST OF BENT BARS FOR SLABS

MARK	SIZE	LENGTH	BENDING DIAGRAM
S1	5/8"	27'-10"	51
S2	5/8"	27'-10"	52
S3	5/8"	28'-11"	53
S4	5/8"	6'-3"	54
S5	5/8"	10'-9"	55
S6	5/8"	10'-5"	56
S7	5/8"	9'-0"	57

Note: Dimensions relating to reinforcing steel are to center of bars.

LOAD DISTRIBUTION TO GIRDERS

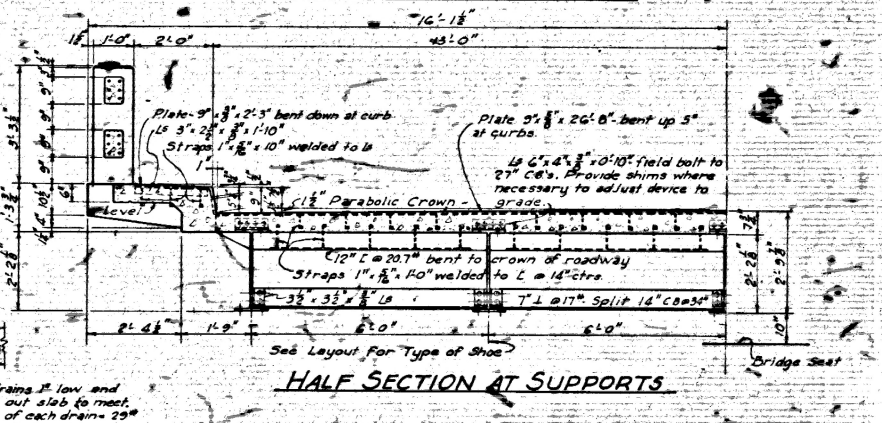
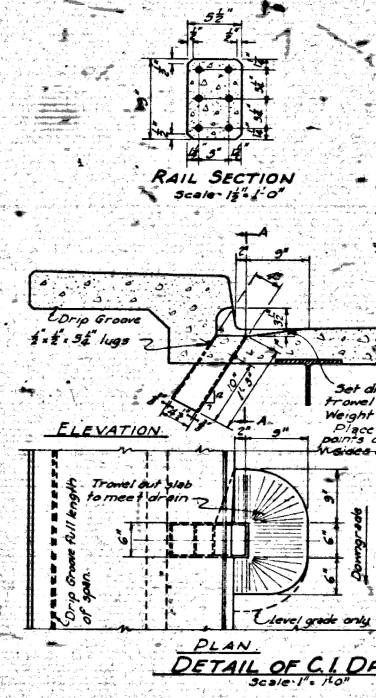
GIRDERS	DEAD LOAD	ROADWAY LIVE LOAD
Outside Girder	1120"/in.ft	0.833 Wheel's
Interior Girders	730"/in.ft	1.200 Wheel's

DESIGN LIVE LOAD- H20 LOADING, A.A.S.H.O 1941
WIDTH OF LANE- 10'-0" FEET

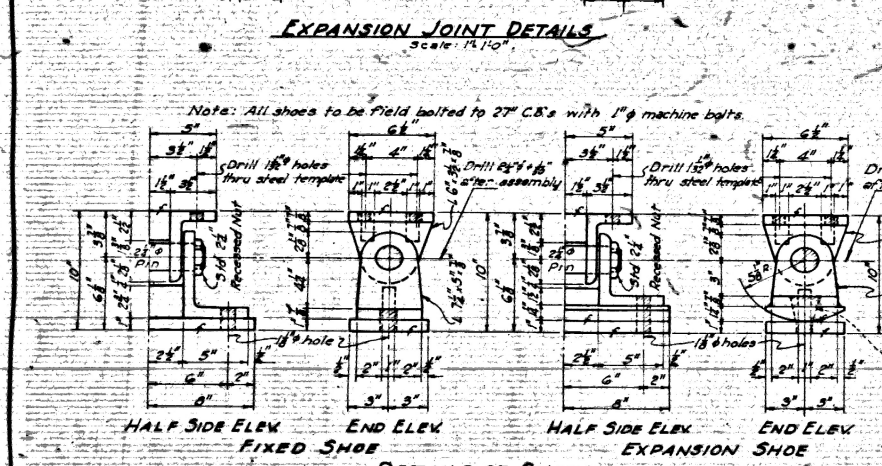
UNIT STRESSES

	1000' x 14' in
Class 5 Concrete (n=10)	18,000' x 14' in
Reinforcing Steel	18,000' x 14' in

General Notes:
All concrete to be Class 5. All exposed barriers to be chamfered 3/4" unless otherwise noted.
Rivets 3/4" Open holes 1/2". Unless turned bolts are specified, use machine bolts where bolts are indicated.
Structural shapes of equal or greater strength may be substituted for shapes shown but payment will be made on shapes shown or actually used whichever is the lesser.
All welded connections to be shop fillet welds, except as noted. Welding to be by the electric arc process.
All bearing and roadway expansion devices to be paid for at the unit price bid for Structural Steel in Beam Spans.
Reinforcing steel to be performed bars of structural or intermediate grade. Shop lists and bending diagrams must be submitted and approved before fabrication is begun.
Cast iron drains to be paid for as Reinforcing Steel and to be painted the same as structural steel.
Shop Paint: All structural steel shall be given one coat of red lead and raw linseed oil before shipment, except surfaces in contact with concrete.



REINFORCING STEEL NOTE
All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire supports of sufficient size and number to prevent displacement during the course of construction, and to keep the steel a proper distance from the forms. 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.



DETAILS OF SHOES

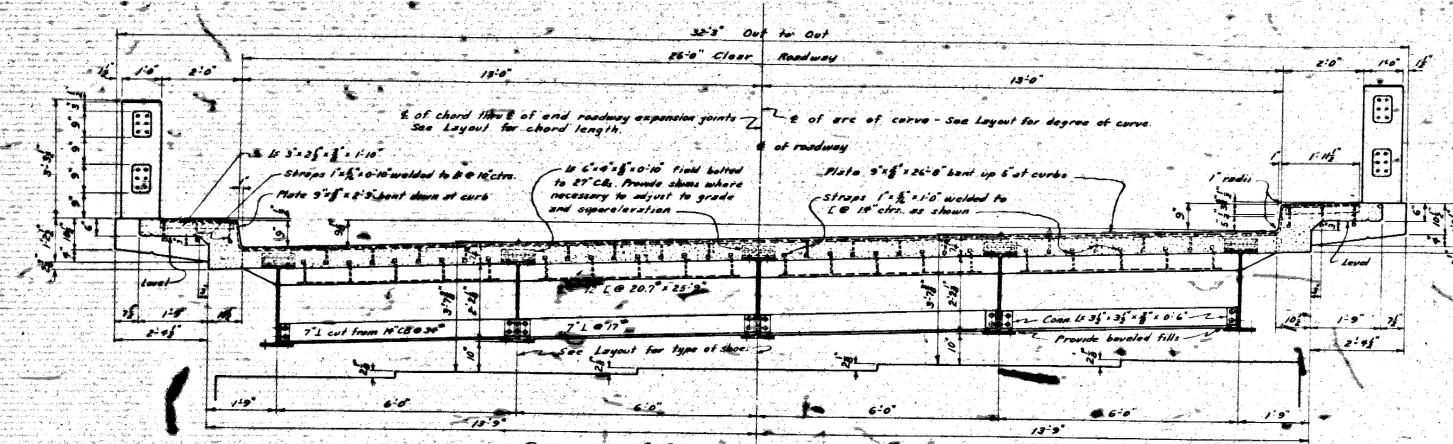
Shoe Notes: All shoes to be built from structural steel plates and shapes. All material to be welded together with 3/8" fillet welds extending entire length of all edges and surfaces in contact. Surfaces in contact to be milled to bear before welding.
Masonry plates shall be finally sealed on 5 layers of burlap saturated with red lead. This work and material to be included in the unit price bid for Structural Steel in Beam Spans.

DETAILS OF STANDARD
34'-0" AND 36'-0" I-BEAM SPANS
26'-0" CLEAR ROADWAY, 2'-2" SIDEWALKS
5 GIRDER TYPE
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: J.A. Traced By: H.B. Checked By: Date: 2-2-44
BRIDGE NO. DRAWING NO. 5125

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 63-1-10					

108

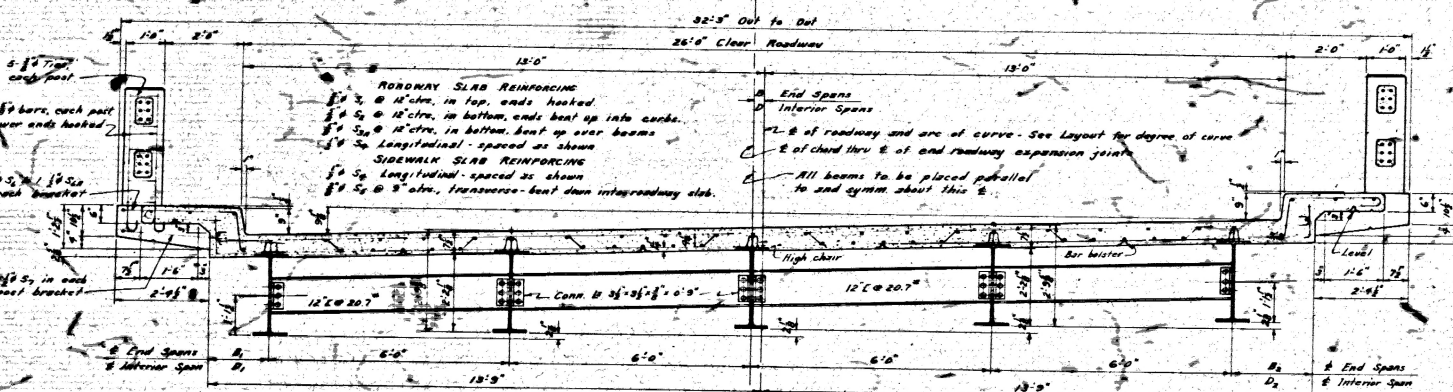
SPECIAL NOTE:
See Layout for degree of curve and chord length to be used for each bridge. Construct the substructure at right angles to the chord length used. All stringers are to be parallel to the same chord, but the curbs and handrails are to be built parallel to the arc of curve used.



SECTION A-A AT END BENT

Dimension shown are at E of roadway expansion joint.

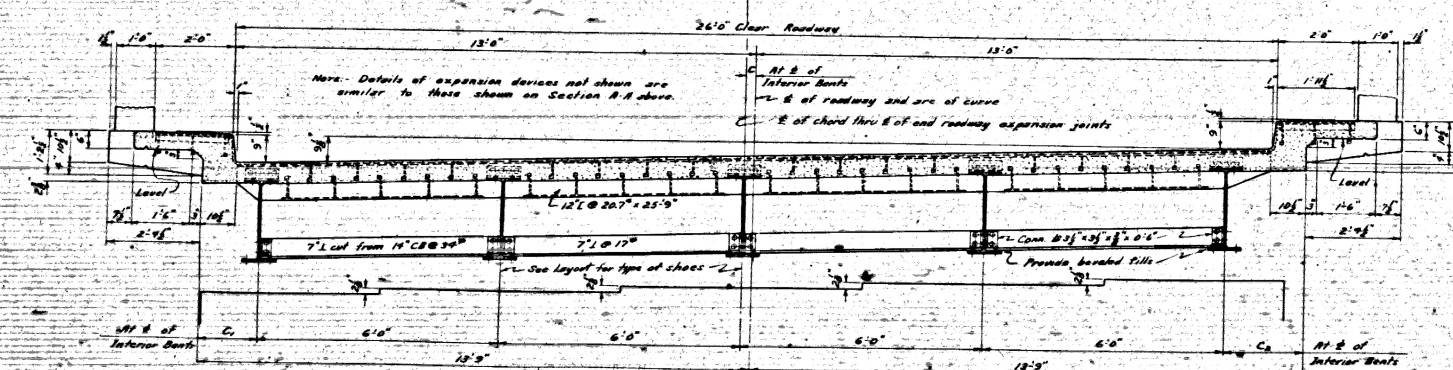
Note: Section A-A is similar to Section B-B, except that super-elevation is in reverse direction.



SECTION B-B AT E OF END SPANS

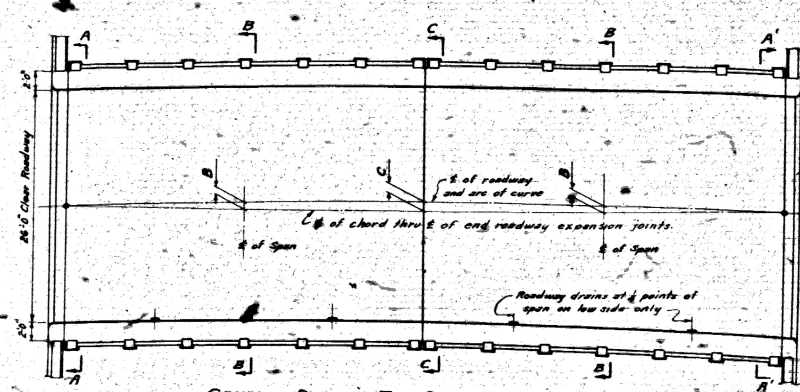
SECTION D-D AT E OF INTERIOR SPANS

Note: Thickness of slab shown includes 1" added to provide for dead load deflection.



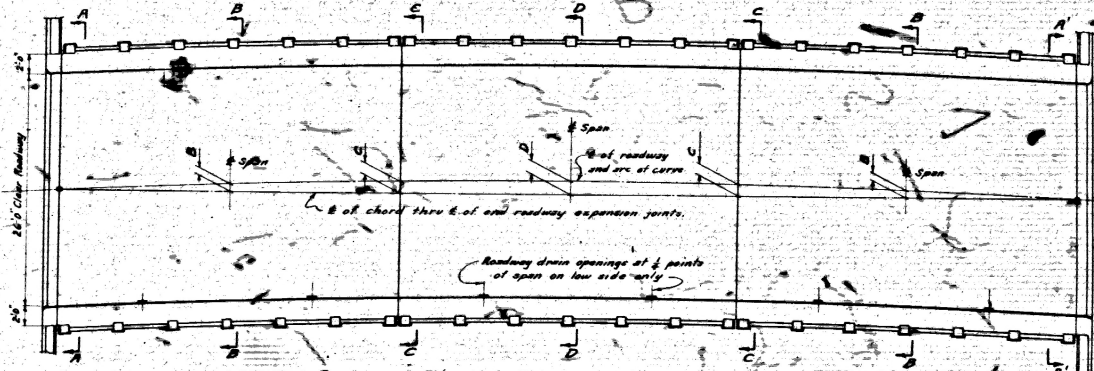
SECTION C-C AT INTERIOR BENTS

Dimensions shown are at E of interior bents.



GENERAL PLAN OF TWO SPAN UNIT - Scale: 1" = 10'

See Layout for degree of curve and chord length to be used.



GENERAL PLAN OF THREE SPAN UNIT - Scale: 1" = 10'

See Layout for degree of curve and chord length to be used.

VARYING DIMENSIONS

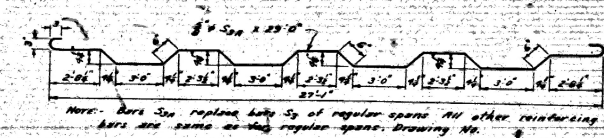
DEGREE OF CURVE	1° 00'	1° 30'	2° 00'
CHORD LENGTH	60'	72'	84'
B	1'-0"	1'-0"	1'-0"
B ₁	1'-0"	1'-0"	1'-0"
B ₂	1'-0"	1'-0"	1'-0"
C	1'-0"	1'-0"	1'-0"
C ₁	1'-0"	1'-0"	1'-0"
C ₂	1'-0"	1'-0"	1'-0"

THREE SPAN UNITS

DEGREE OF CURVE	1° 00'	1° 30'	2° 00'
CHORD LENGTH	102'	108'	114'
B	1'-0"	1'-0"	1'-0"
B ₁	1'-0"	1'-0"	1'-0"
B ₂	1'-0"	1'-0"	1'-0"
C	1'-0"	1'-0"	1'-0"
C ₁	1'-0"	1'-0"	1'-0"
C ₂	1'-0"	1'-0"	1'-0"
D	1'-0"	1'-0"	1'-0"
D ₁	1'-0"	1'-0"	1'-0"
D ₂	1'-0"	1'-0"	1'-0"

GENERAL NOTES

For details of Standard 34'-0" and 36'-0" I-Beam Spans - see girder type - see Drawing No. 5125. Details shown on this drawing supersede those shown on the Standard Drawing No. 5125. Details not shown are similar to those shown on the Standard. General Notes shown on Standard apply to this drawing also.



SUPPLEMENTARY DETAILS FOR STANDARD

34'-0" AND 36'-0" I-BEAM SPANS ON 1° 00', 1° 30' AND 2° 00' CURVES. 26'-0" CLEAR ROADWAY - 2 SIDEWALKS @ 2'-0". 5 GIRDER TYPE ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION, LITTLE ROCK, ARK.

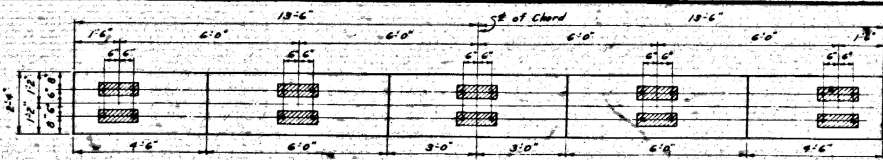
Drawn By: W.C.H. Date: 3-4-44. Traced By: W.C.H. Date: 6-20-44. Checked By: Date: . Scale: 1" = 10'. EXCEPT AS NOTED.

BRIDGE NO. DRAWING NO. 5127

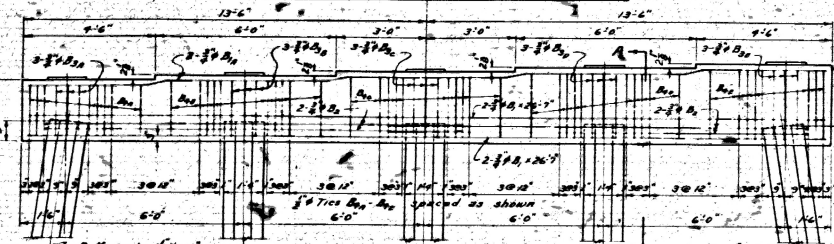
W.C.H. Principal Highway Engineer (Bridges)

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO. 109					

109



PLAN OF INTERMEDIATE BENT CAP



SIDE ELEVATION OF INTERMEDIATE BENT



DETAILS OF 16 OCTAGONAL PRECAST CONCRETE PILE

UNIT STRESSES

Class 5 Concrete (n=8) 1000 $\frac{lb}{in^2}$
Reinforcing Steel 18000 $\frac{lb}{in^2}$
Structural Steel 18000 $\frac{lb}{in^2}$

LIST OF BENT BARS

MARK	SIZE	LENGTH	A	B	BENDING DIAGRAM
B _{1a}	#4	26'-0"			
B ₂	#4	29'-2"	14'-1"	15'-0"	
B _{3a}	#4	6'-0"	2'-0"	2'-0"	
B _{3b}	#4	6'-0"	2'-0"	2'-0"	
B ₄	#4	7'-0"	2'-0"	2'-0"	
B _{5a}	#4	7'-0"	2'-0"	2'-0"	
B _{5b}	#4	7'-0"	2'-0"	2'-0"	
B _{6a}	#4	11'-0"			
B _{6b}	#4	8'-2"			
B _{7a}	#4	9'-1"	2'-2"	2'-0"	
B _{7b}	#4	9'-0"	2'-0"	2'-0"	
B _{8a}	#4	9'-0"	2'-0"	2'-0"	
B _{8b}	#4	10'-11"	2'-0"	2'-0"	
B _{9a}	#4	10'-0"	2'-0"	2'-0"	
B _{9b}	#4	5'-0"	1'-0"	0'-0"	
B ₁₀	#4	10'-0"			
B ₁₁	#4	9'-0"	2'-2"		
B ₁₂	#4	3'-1"	0'-0"		

GENERAL NOTES

All concrete to be Class 5. All exposed concrete to have 3" chamfers unless otherwise noted.
Shop lists and bending diagrams of reinforcing steel must be submitted and approved before fabrication is begun.
Volume occupied by reinforcement to be included in quantity of Class 5 Concrete.
Bills for each header are to be paid for at unit price but for reinforcing steel.
Maximum design pile load for intermediate bents is 27.0 kips and for end bents is 36.0 kips, respectively.
Piles to be driven to a minimum capacity of 30 tons.
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 4, 1936.

SPECIAL NOTE

Construct the bents at right angles to a chord through the E of end roadway expansion joint.
See Layout for degree of curve and chord length to be used for each bridge.
Turnout curve and pools to be constructed with roadway faces parallel to axis of curve.

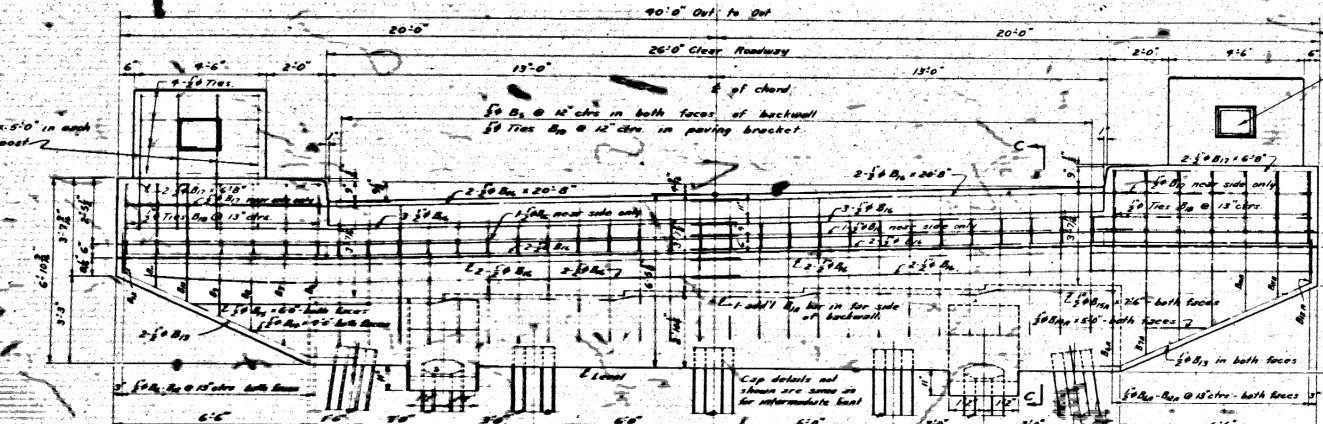
END ELEVATION

SECTION A-A

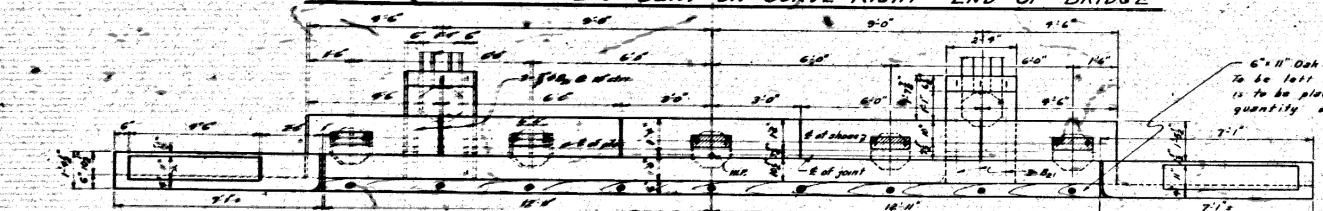
END VIEW B-B

SECTION C-C

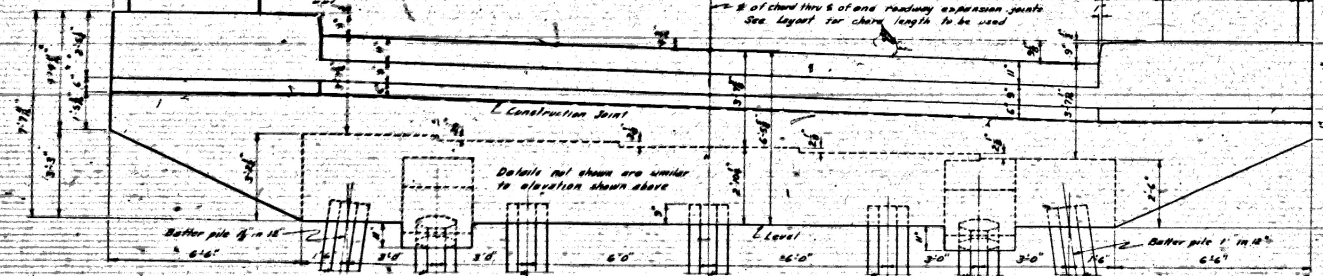
SECTION D-D



REAR ELEVATION OF END BENT ON CURVE LEFT-BEGINNING OF BRIDGE



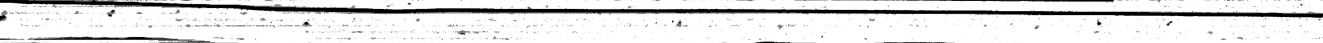
REAR ELEVATION OF END BENT ON CURVE RIGHT-END OF BRIDGE



PLAN OF END BENT



REAR ELEVATION OF END BENT ON CURVE RIGHT-BEGINNING OF BRIDGE



REAR ELEVATION OF END BENT ON CURVE LEFT-END OF BRIDGE

ROADWAY EXPANSION DETAILS AT END BENTS

Scale: 1" = 1'-0"
Notes: For detail of sidewalk expansion devices see Drawing No. 5125 and 5127.

DETAILS OF BENTS FOR STANDARD 34'-0" AND 36'-0" I-BEAM SPANS ON 1'-00', 1'-30', AND 2'-00" CURVES 26'-0" CLEAR ROADWAY 2 SIDEWALKS @ 2'-0" 5 GIRDER TYPE ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARK.

Drawn By: W.C.H. Date: 6-13-39
Traced By: W.C.H. Date: 6-23-39
Checked By: Date: _____

BRIDGE NO. _____ DRAWING NO. 5128

N.B. Larver
REGIONAL HIGHWAY ENGINEER, BRIDGE