

FED. ROAD NO.	STATE	PROJECT	DATE	BY	REVISION
6	ARK.	5-50(9)			
JOB No.	12325	5	104		

SUMMARY OF BRIDGE QUANTITIES JOB NO. 10325 (CODE No. X03i)

ITEM NO.	ITEM	UNIT	BRIDGE NO. 2905			BRIDGE NO. 2906				BRIDGE NO. 2907				BRIDGE NO. 2908			TOTAL JOB NO. 10325
			BENTS 1 & 2	SPAN 1	TOTAL	BENTS 1 & 6	BENTS 2-5	SPANS 1-5	TOTAL	BENTS 1 & 4	BENTS 2 & 3	SPANS 1-3	TOTAL	BENTS 1 & 2	SPAN 1	TOTAL	
103	Dry Excavation For Structures	Yd.	66		66	116			116	84			84	93		93	359
SP & 802	Class "S" Concrete For Bridges	Cu. Yd.	25.00	31.82	56.82	23.84	23.52	117.15	164.51	20.54	10.34	61.65	92.53	22.07	31.78	53.85	367.71
SP & 803	Reinforcing Steel	Lb.	3039	5660	8699	2880	3380	20,325	26,585	2730	1690	10,905	15,325	2623	5736	8359	58,968
SP & 804	Concrete Piling (16" Octagonal)	Lin. Ft.	355		355	448	712		1160	348	237		585	313		313	2413
SP-805-3	Steel Plate Guard Rail (10 ga.)	Lin. Ft.	18.33	110.00	128.33	18.13		400	418.13	15.67		210	225.67	15.83	110	125.83	897.96
807	Structural Steel in Beam Spans	Lb.	1368	38,828	40,196	884		109,360	110,244	778		48,156	48,934	1186	38,546	39,732	239,106
929	Bridge Name Plates (Type 'C')	Each	1		1	1			1	1			1	1		1	4
* SP-1052-7	Removal of Existing Bridge Structures	Complete Item			27%				0				46%			27%	100%

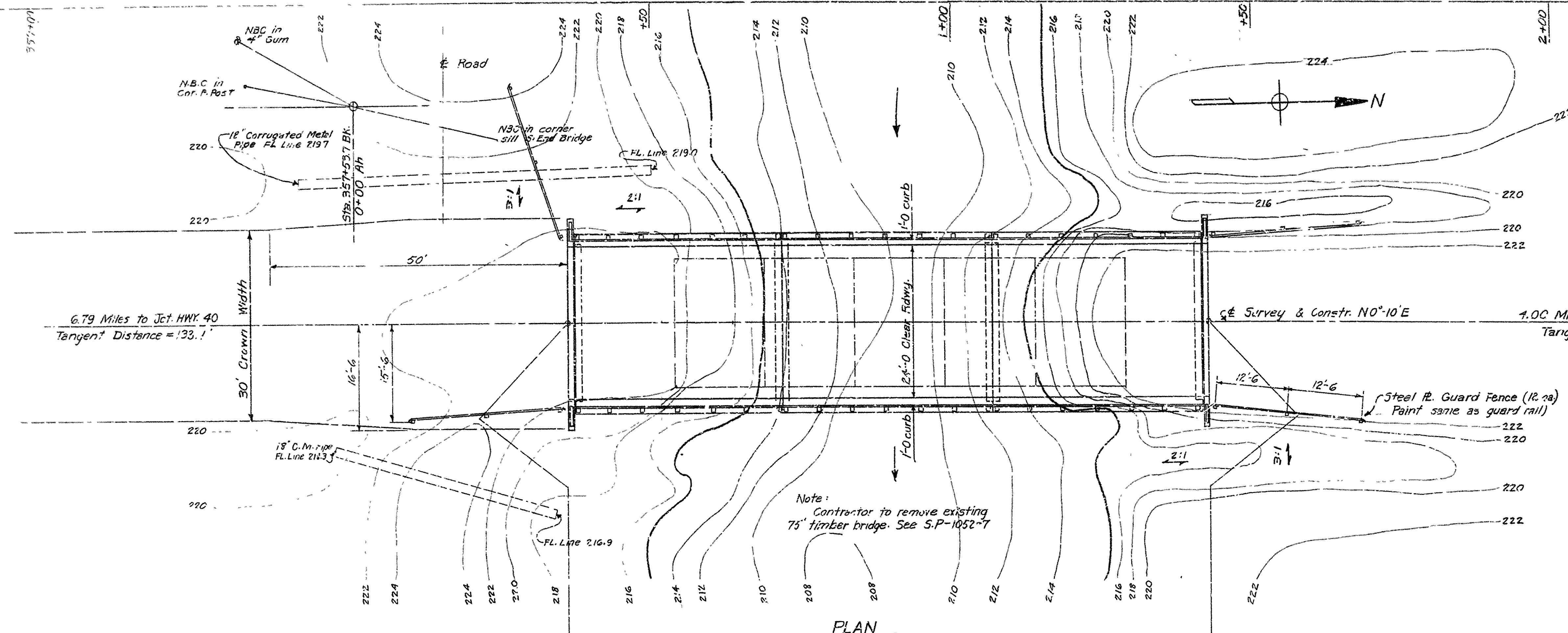
* This work shall include the maintaining of traffic during construction. The Contractor shall assume full responsibility for uninterrupted movement of traffic and shall construct and maintain a detour at Bridges 2905, 2907 & 2908, consisting of a temporary bridge and connecting gravelled ramps. The temporary structure shall have a minimum roadway width of 14 feet and a minimum design capacity of H12½ loading. Details of construction, kind and condition of materials shall be submitted for approval prior to construction. Materials from existing bridges may be used for this purpose provided they be not cut or otherwise damaged.

SUMMARY OF BRIDGE QUANTITIES
LEPANTO - NORTH
POINSETT & CRAIGHEAD COUNTIES
ROUTE 143 SEOS. 1&2
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By W.H.D. Date 8-26-53
Traced By W.H.D. Date 8-26-53
Checked By W.H.D. Date 8-26-53

BRIDGES NO. 2905-2908 INCL. DWG. NO. 8363

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	5-50(3)		27	104
JOB NO.			10325		

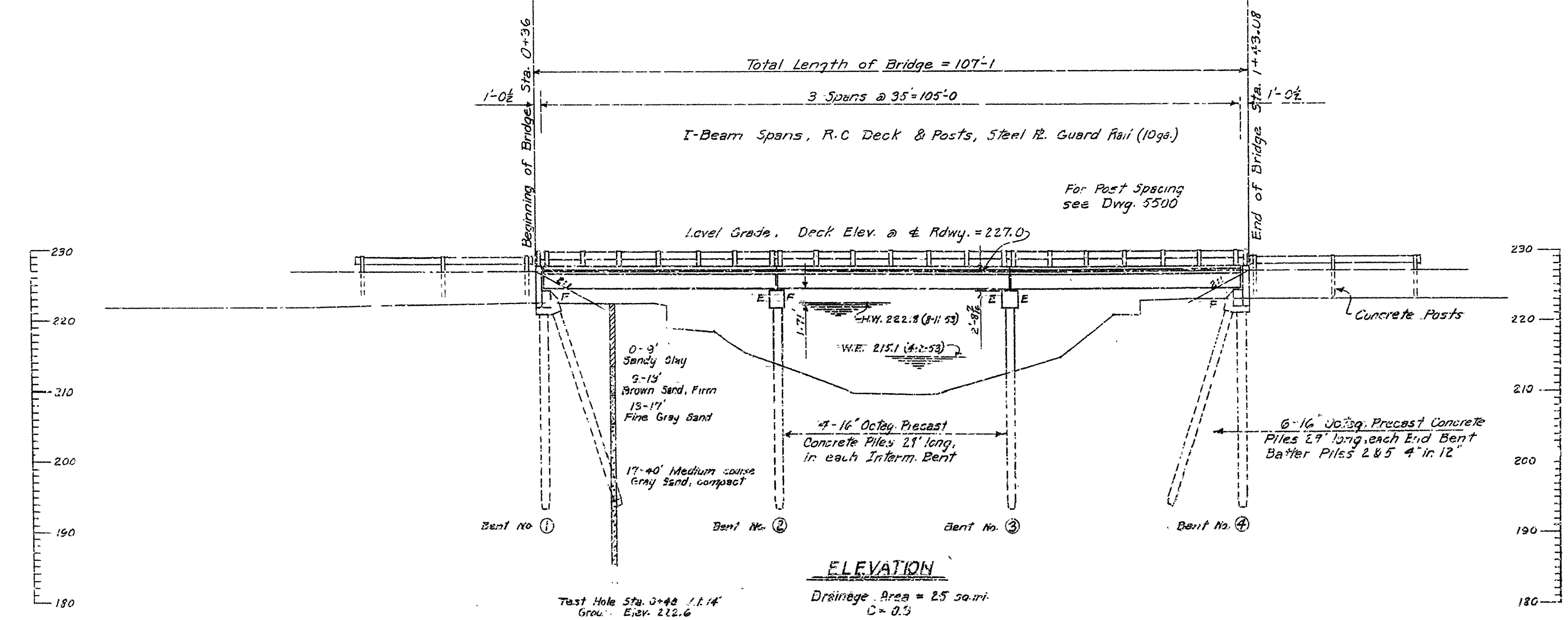


PLAN

NOTES

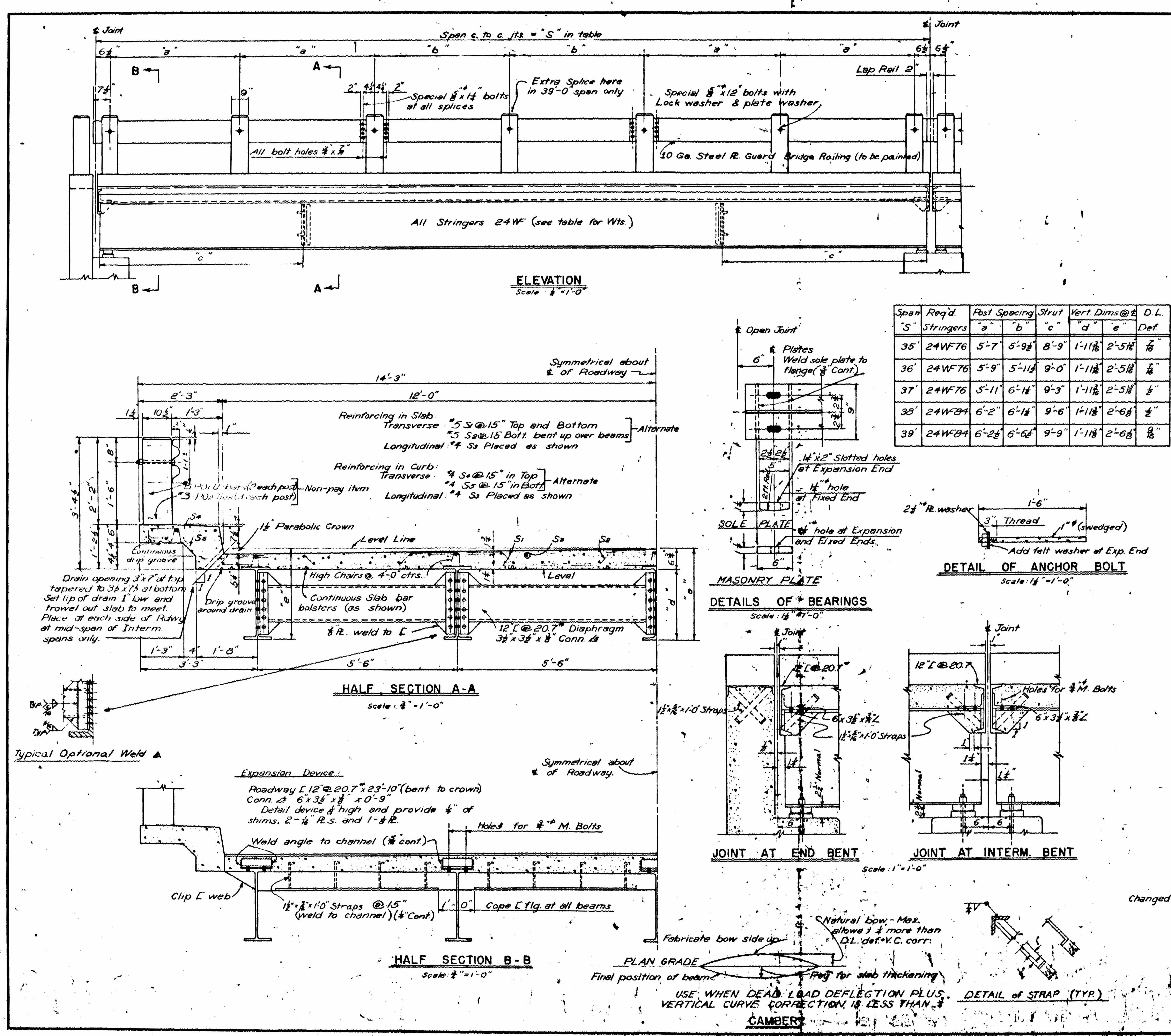
Bench Mark - Nail in side of power pole Sta. 1+92.1, Elev. = 222.9
 For General Notes and details of structure, see Dwg. 5500 and 5500 A
 Lengths of precast concrete piles shown are for estimating purposes only. Actual lengths to be determined in the field.
 Drive one 34' test pile at Bent #3.
 All piling to be driven to a minimum bearing of 30 tons.

Loading: H15 (A.A.S.H.O. 1949 Rev. 10/53)
 Stresses:
 Class "5" Concrete (n=10) 1200 #/sq.
 Reinforcing Steel 20,000 #/sq.
 Structural Steel 18,000 #/sq.



ELEVATION

LAYOUT OF BRIDGE
 OVER DITCH NO. 1
 LEPANTO - NORTH
 POINSETT & CRAIGHEAD COUNTIES
 ROUTE 143 SECS. 18 & 19
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, AR
 Drawn By: W.M. Date: 8-12-53
 Checkd By: Date: 8-26-53
 BRIDGE NO. 2907
 Scale: 1 in. = 10 ft.
 DRAWING NO. 8366



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

LIST OF REINFORCING STEEL									
Mark	Size	No. in Each Span	Length	Per Dia.	Bending Diagram				
S ₁	#5	56 58 60 62 64	25'-0"	Str	Symmetrical about center line				
S ₂	#5	27 28 29 30 31	25'-0"	Str	2'-9" 2'-4" 3'-0" 2'-4" 2'-9"				
S ₃	#4	47	5'-5"	Str	1'-11" 1'-11" 1'-11" 1'-11" 1'-11"				
S ₄	#4	56 58 60 62 64	4'-5"	Str	1'-11" 1'-11" 1'-11" 1'-11" 1'-11"				
S ₅	#4	54 56 58 60 62	3'-0"	Str	1'-11" 1'-11" 1'-11" 1'-11" 1'-11"				
P ₀₁	#5	28	5'-4"	Str	1'-11" 1'-11" 1'-11" 1'-11" 1'-11"				
P ₀₂	#3	42	2'-8"	Str	1'-11" 1'-11" 1'-11" 1'-11" 1'-11"				

• Non Pay Item

GENERAL NOTES

All concrete to be Class S. All exposed corners to have 1/4" chamfer unless otherwise noted. Field connections for diaphragms to be riveted or bolted with high strength bolts. Rivets - #4 except where noted otherwise. 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 1/4" fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway & Railway Bridges, 5th Edition 1956. Shop Paint - All structural steel, except surfaces in contact with concrete shall be given one coat of red lead and raw linseed oil before shipment. Field Paint - 1st Coat - Red lead tinted with lamp black. 2nd Coat - Aluminum Paint. All bearing plates and roadway expansion devices to be paid for as 'Structural Steel in Beam Spans'. Bearings shall be finally seated in a manner set forth by the Specifications. This work and material are to be considered as subsidiary to the item '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 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 full span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical 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 and to keep the steel a proper distance from the forms. The wire supports will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel. Shop lists and bending diagrams of reinforcing steel, including wire supports, shall be submitted and approval secured before fabrication is begun. Handrail to be steel plate guard bridge railing 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 R. Guard Bridge Railing. SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted March 1, 1940.

All concrete to be Class 5. All exposed corners to have $\frac{1}{4}$ " chamfer unless otherwise noted. Field Connections for diaphragms to be riveted or bolted with high strength bolts.

Rivets - $\frac{3}{4}$ " Open holes $\frac{1}{8}$ " except where noted otherwise.

Structural shapes of equal or greater strength may be substituted for shapes shown. Payment will be made on basis of shapes shown or those actually used, whichever is the lesser.

All welded connections to be $\frac{1}{4}$ " fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway & Railway Bridges, 5th Edition 1956.

Shop Paint - All structural steel, except surfaces in contact with concrete shall be given one coat of red lead and raw linseed oil before shipment.

Field Paint - 1st Coat - Red lead tinted with lamp black.

2nd Coat - Aluminum Paint.

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

Bearings shall be finally seated in a manner set forth by the Specifications.

This work and material are to be considered as subsidiary to the item "Structural Steel in Beam Spans" and will not be paid for directly.

The following shop drawings shall be prepared and design of Shop drawings shall be made in accordance with the Specifications, submitted and approval secured before fabrication is begun.

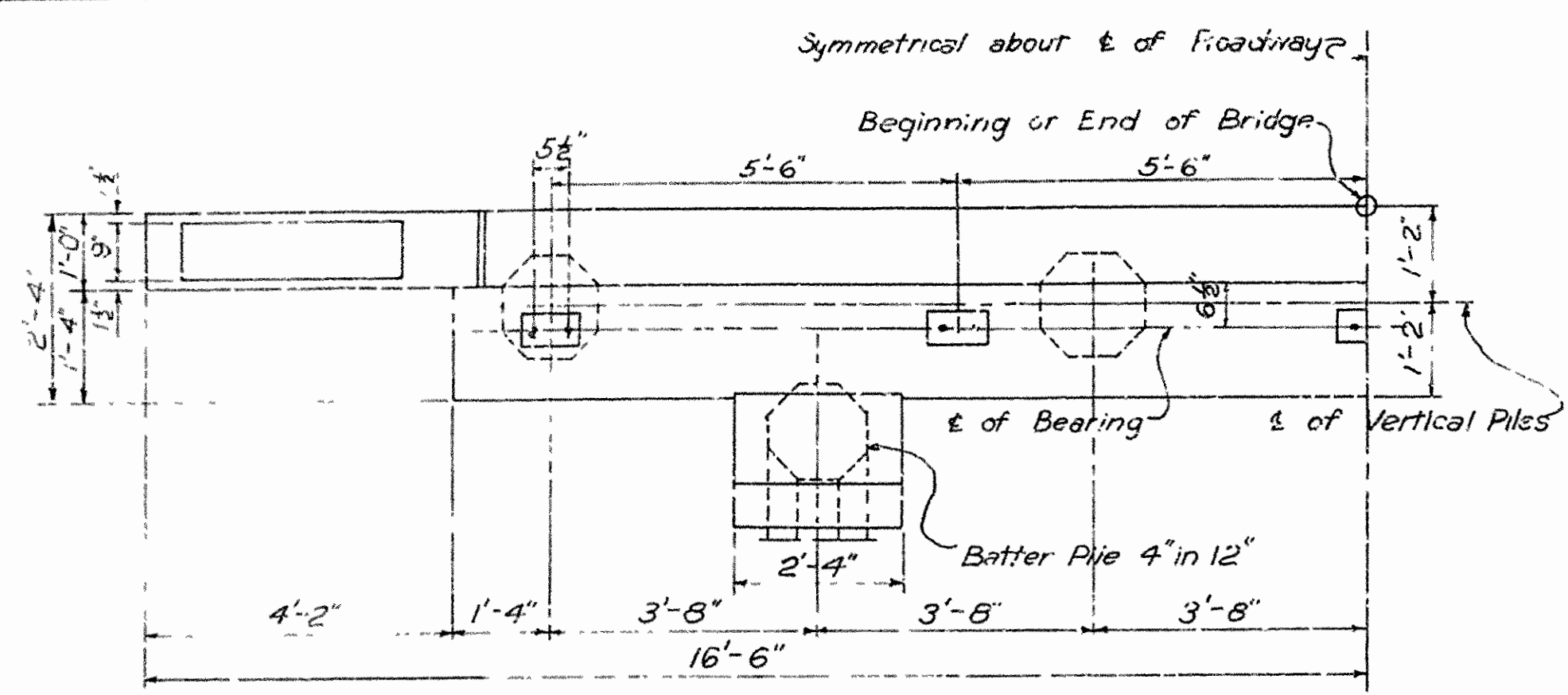
In order to secure a good riding surface it will be required that the floor slab be struck off from curb to curb with a full span length longitudinal strike-off. The strike-off shall be sufficiently stiff so as to have no appreciable vertical deflection.

When using steel to be deformed, bars of intermediate or hard grade, see

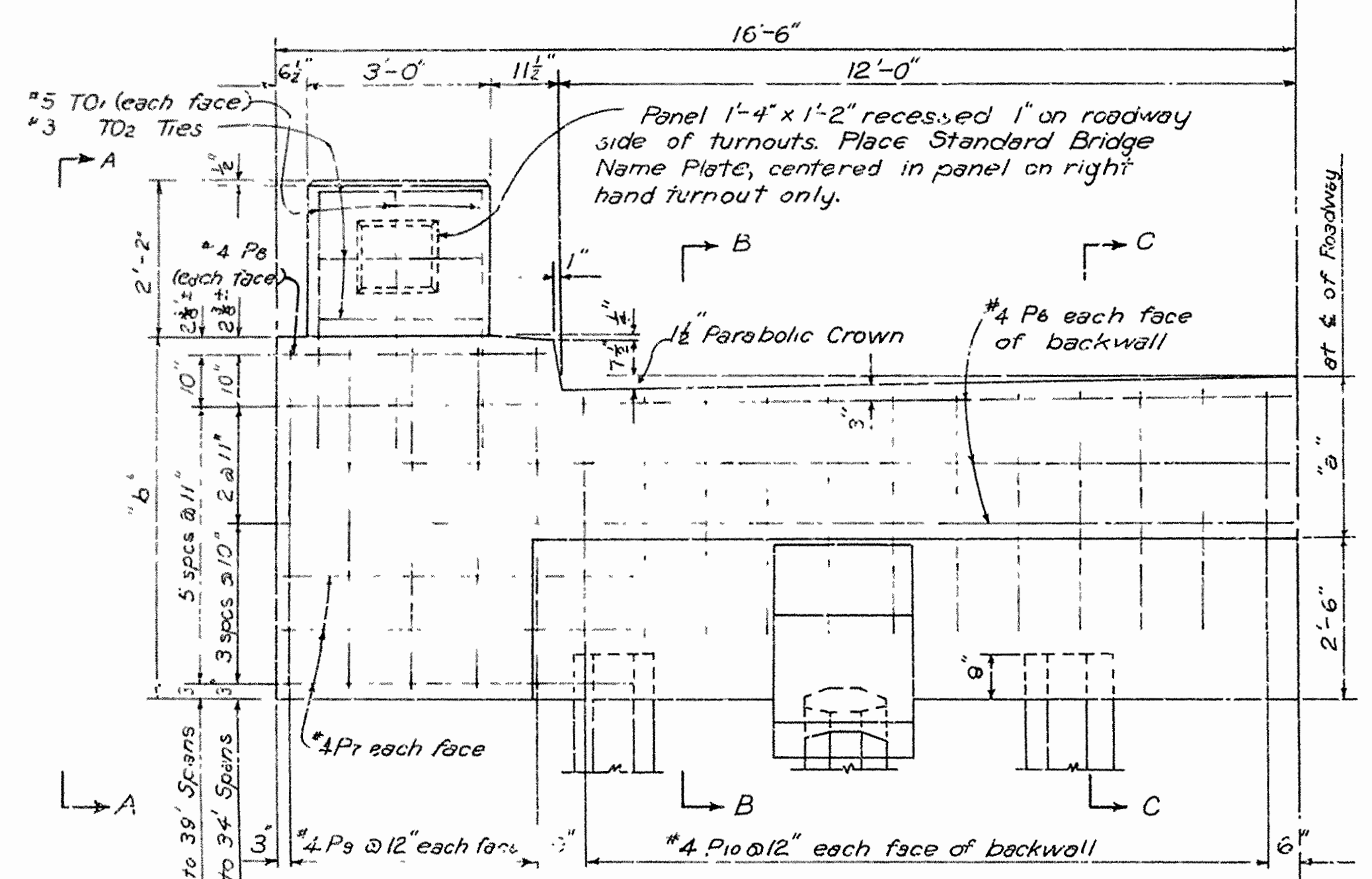
DETAILS OF BEARINGS									
Scale: 1/4" = 1'-0"									
JOINT AT END BENT									
JOINT AT INTERM. BENT									
Scale: 1/4" = 1'-0"									

DETAILS OF STANDARD 35'-39' I-BEAM SPANS									
24'-0" CLEAR RDWY. 1'-0" CURBS									
ARIZONA STATE HIGHWAY COMMISSION									
LITTLE ROCK, ARK.									
Drawn By: W.W.M. Date: 12-20-52									
Traced By: W.W.M. Date: 6-2-53 Checked by: E.E.H. Date: 12-20-54									
Checked By: [Signature] Date: 12-20-54									
BRIDGE NO. DRAWING NO. 5500									

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

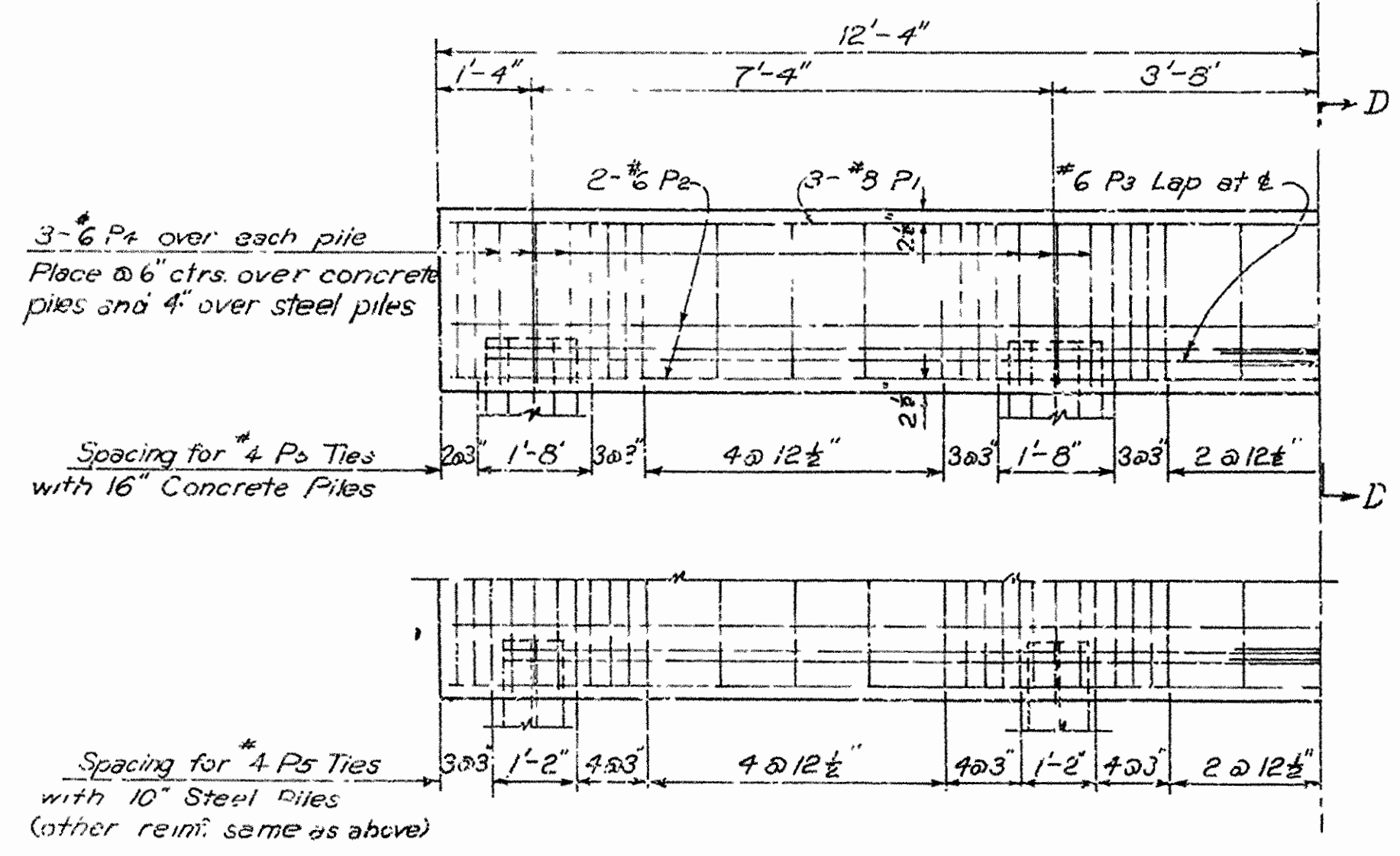


HALF PLAN OF END BENT

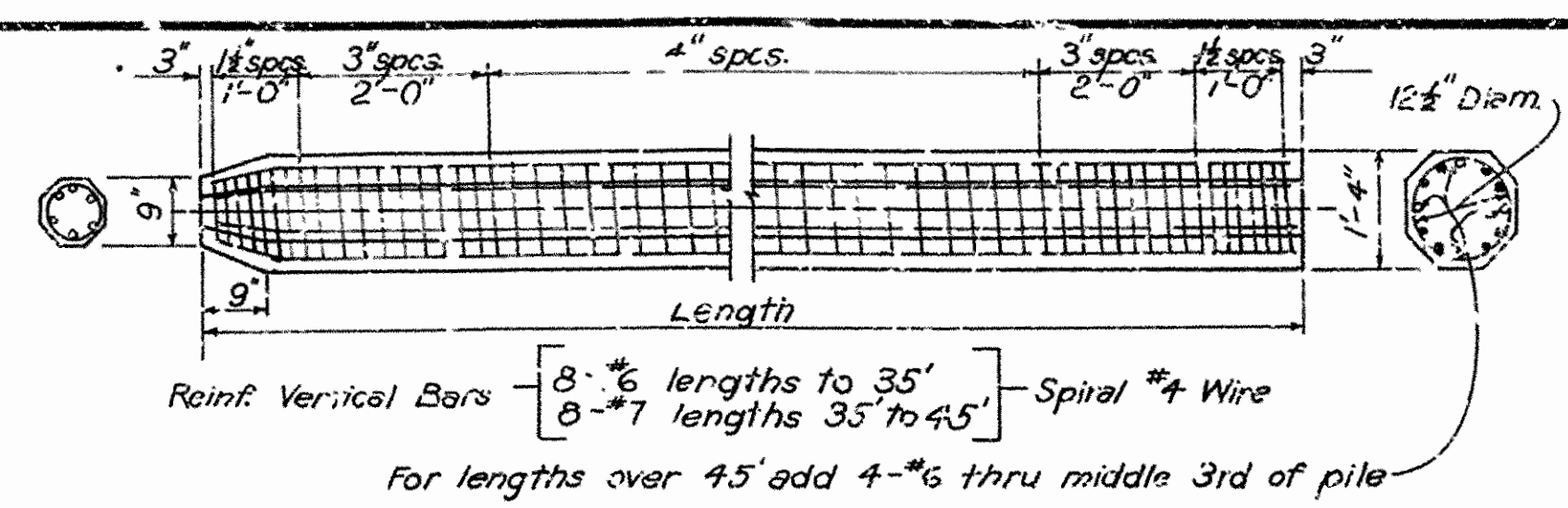


HALF ELEVATION END BENT

Cap Reinforcing same as shown for Intermediate Bent



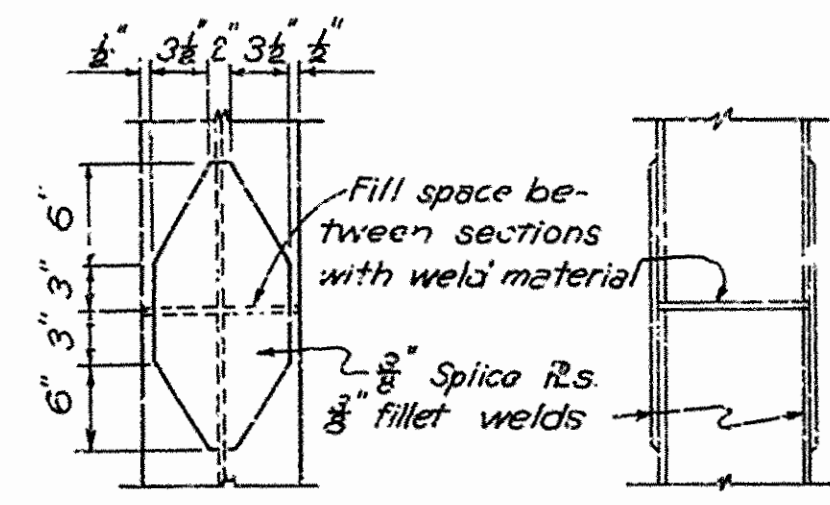
HALF ELEVATION INTERMEDIATE BENT



DETAILS OF 16" PRECAST CONCRETE PILE

LIST OF VARIABLES

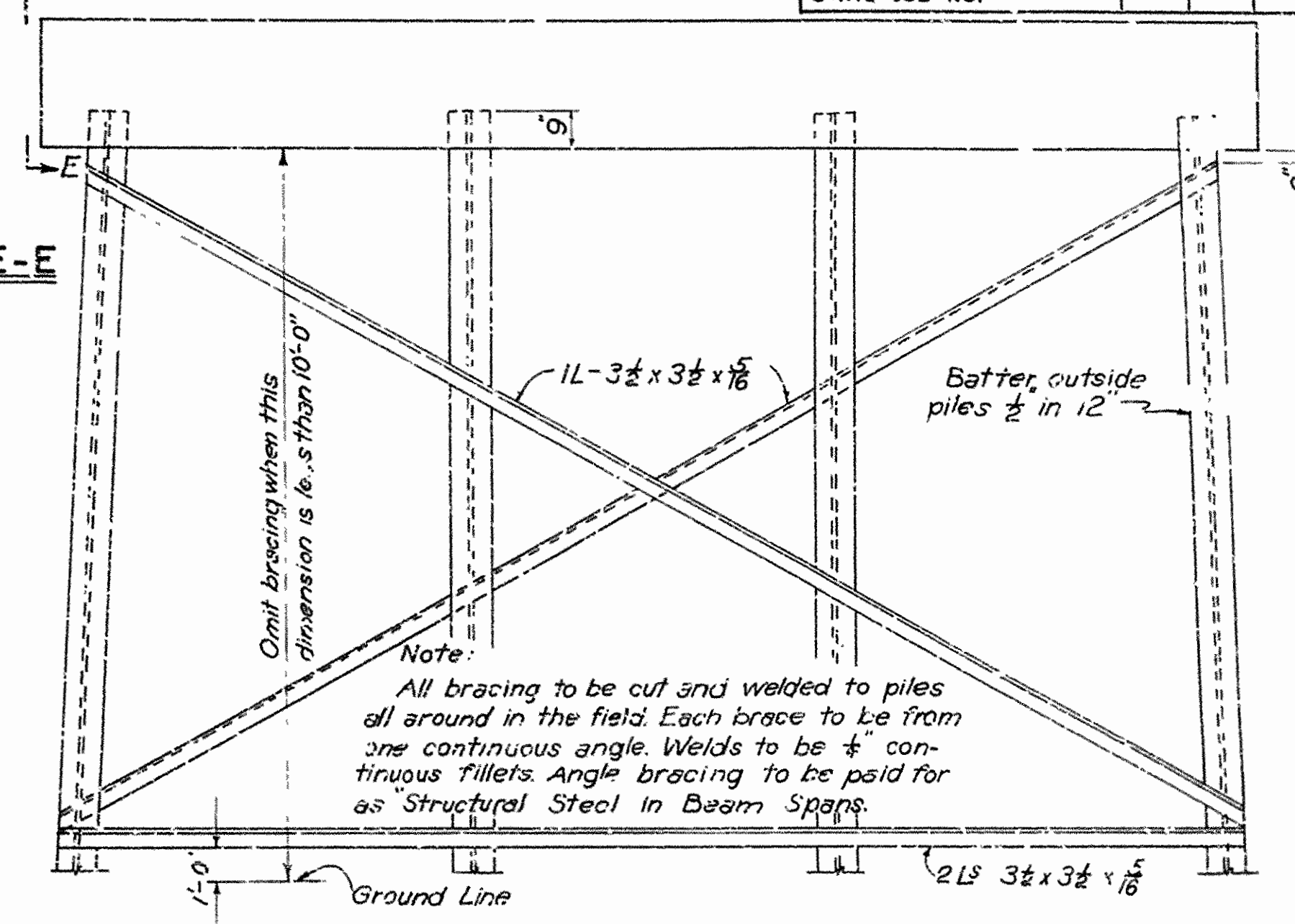
Span	Vert. Dimensions "a"	"b"
30'	2'-5 3/8"	5'-7 3/8"
31'	2'-5 1/8"	5'-7 1/8"
32'	"	"
33'	2'-5 1/8"	5'-7 1/8"
34'	"	"
35'	2'-8 1/8"	5'-10 1/8"
36'	"	"
37'	"	"
38'	2'-8 1/8"	5'-10 1/8"
39'	"	"



STEEL PILE SPLICE DETAILS

Generally all piles shall be driven full length and shall not be spliced except by permission of the Engineer.

END VIEW E-E

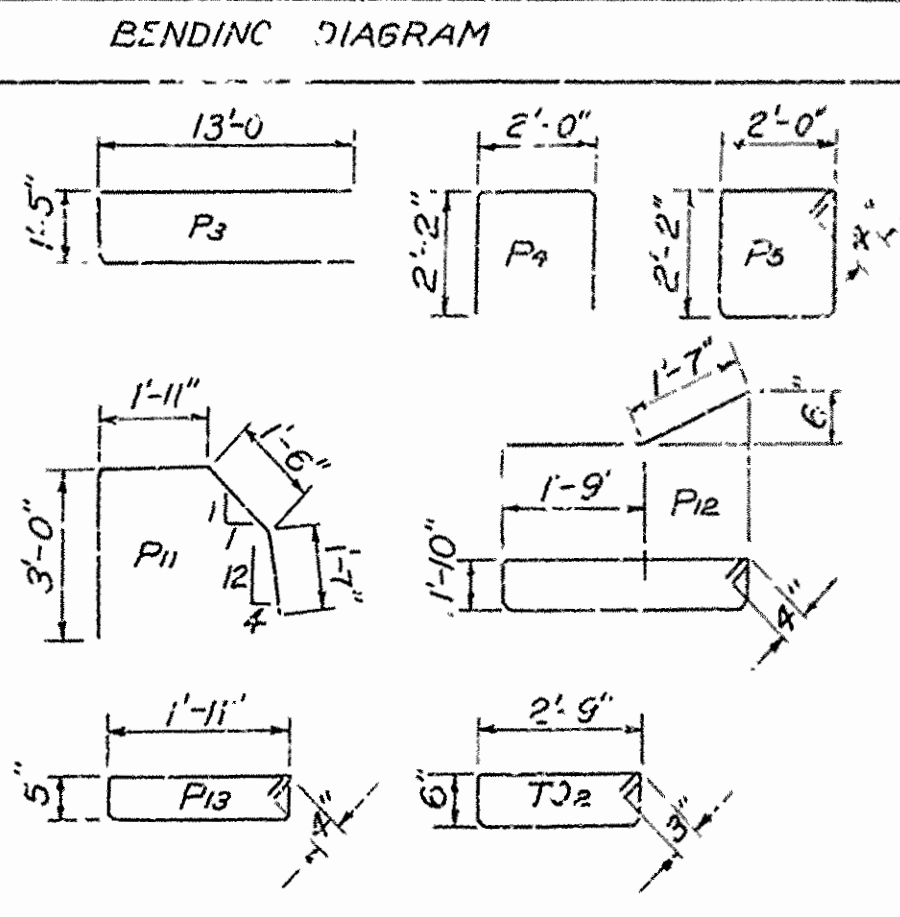


TYPICAL BRACING INTERMEDIATE BENT

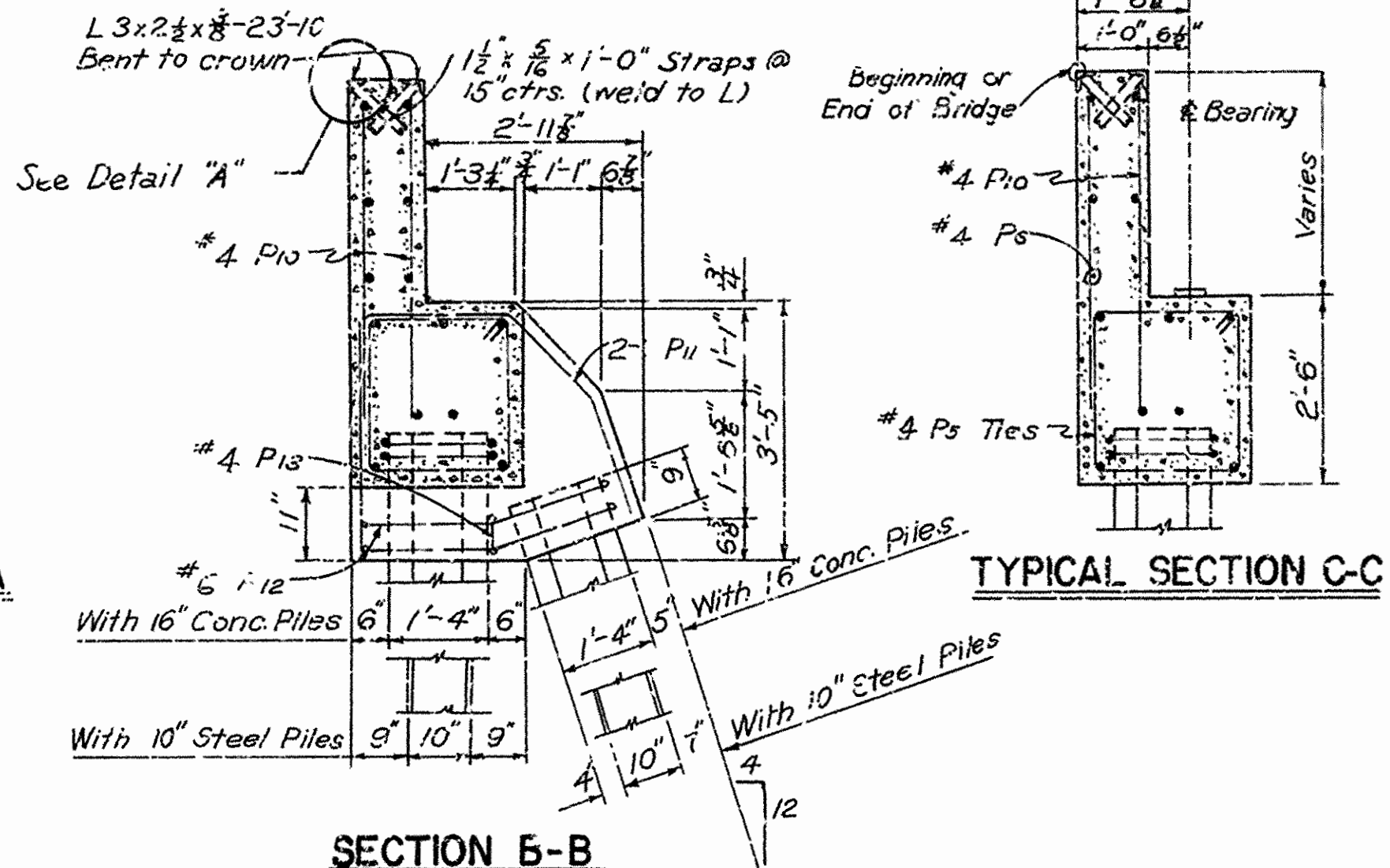
Scale 3/8"=1'-0"

LIST OF REINFORCING STEEL FOR BENTS

Pile	Size	NO. IN BENTS		LENGTH	PILE DIA.
		END	INT.		
P1	8	3	3	24'-4"	3
P2	6	4	4	24'-4"	2 1/2
P3	"	4	4	27'-4"	2 1/2
P4	"	12	12	6'-3"	2 1/2
P5	4	37	57	8'-11"	1 1/2
P6	"	6		32'-8"	
P7	"	12		5'-8"	
P8	"	4		4'-2"	
P9	"	20		5'-3" for 30'-34' spans 5'-6" 35'-39' "	
P10	"	48		4'-0" for 30'-34' spans 4'-3" 35'-39' "	
P11	6	4		7'-11"	2 1/2
P12	"	4		11'-2"	2 1/2
P13	4	2		5'-3"	1 1/2
T01	5	12		4'-0"	Str.
T02	3	6		6'-11"	1 1/2

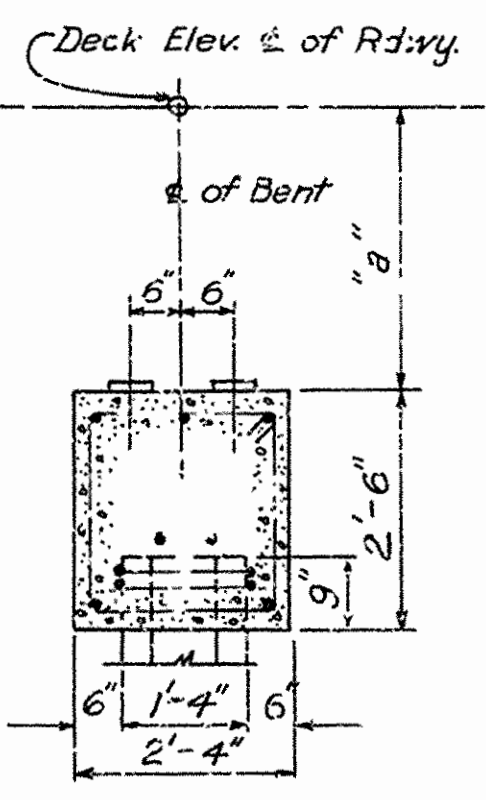


Dimensions are in ctrs. of bents.



TYPICAL SECTION C-C

SECTION B-B AT BATTER PILES



SECTION D-D

Showing concrete pile only

DETAIL "A"

Scale: 3/4"=1'-0"

NOTES

Steel Piles are to be driven to refusal. Concrete Piles are to be driven to a minimum capacity of 30 tons. For details of superstructure and for General Notes, see Dwg. No. 5499 or 5500. Use type of Pile called for on Bridge Layout.

Revised roadway width, bar nos, straps, curb width, and added Detail "A". FDN 4-16-58

DETAILS OF
STANDARD R.C. PILE BENTS
30' TO 39' I-BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" CURBS

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: W.W.H. Date: 12-9-52
Traced By: W.W.H. Date: 7-6-54
Checked By: W.W.H. Date: 7-5-54
BRIDGE NO. DRAWING NO. 5500A

Ward
BRIDGE ENGINEER