

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	Ark.	S5014	1953		
JOB No.	10326	3	102		

SCHEDULE OF BRIDGE QUANTITIES

BRIDGE NO.	CODE NO.	ITEM NO.	103	SP& 802	S. 803	SP& 804	SP-805-3	807	929	S.P.	
		ITEM UNIT OF BRIDGE	DRY EXCAVATION FOR STRUCTURES	CLASS "S" CONCRETE FOR BRIDGES	REINFORCING STEEL	CONCRETE PILING 16" OCTAGONAL	STEEL PLATE GUARD RAIL (10 GA.)	STRUCTURAL STEEL IN BEAM SPANS	BRIDGE NAME PLATES TYPE "C"	REMOVAL OF EXISTING BRIDGE STRUCTURES	
			UNIT	CU. YD.	CU. YD.	LB.	LIN. FT.	LIN. FT.	LB.	EACH	COMPLETE ITEM
2884	X031	End Bent No. 1	38	9.98	1353	180	7.82	389	1		
		Intermediate Bents No. 2-5		20.68	3380	565					
		End Bent No. 6	38	9.98	1353	180	7.82	389			
		Five 30'-0" I-Beam Spans		88.48	15165		300.00	59825			
		Totals for Bridge No. 2884	76	129.12	21251	925	315.64	60633	1	6%	
2885	X031	End Bent No. 1	48	11.92	1440	280	9.06	442	1		
		Intermediate Bents No. 2-7		35.28	5436	1399					
		End Bent No. 8	48	11.92	1440	280	9.06	442			
		Seven 40'-0" I-Beam Spans		164.04	28452		560.00	153100			
		Totals for Bridge No. 2885	96	223.16	36768	1959	578.12	153984	1	30%	
2886	X031	End Bent No. 1	40	10.53	1356	252	9.42	414	1		
		Intermediate Bents No. 2-5		22.56	3264	805					
		End Bent No. 6	38	10.53	1356	252	9.42	414			
		Five 30'-0" I-Beam Spans		88.60	15225		300.00	60275			
		Totals for Bridge No. 2886	78	132.22	21201	1309	319.84	61103	1	64%	
Totals for Job No. 10326			250	484.50	77220	4193	1212.60	275720	3	100%	

SCHEDULE OF
BRIDGE QUANTITIES
BEASLEY - LEPANTO
POINSETT COUNTY
ROUTE 143 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: J.E.H. Date: 8-25-53
Traced By: _____ Date: _____
Checked By: _____ Date: _____
Scale: _____
BRIDGE NO. 2884, 2885 DRAWING NO. 8768
2886

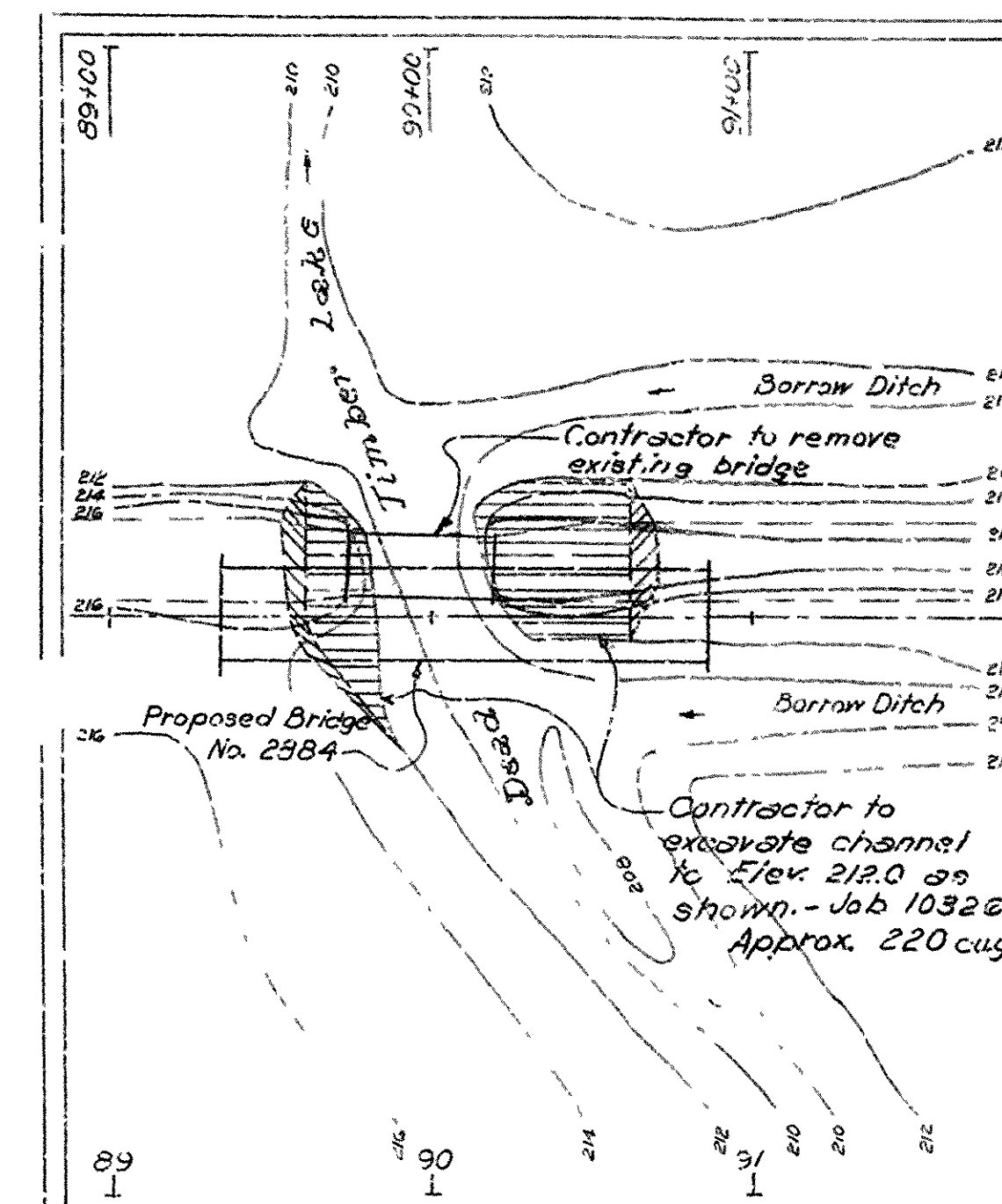
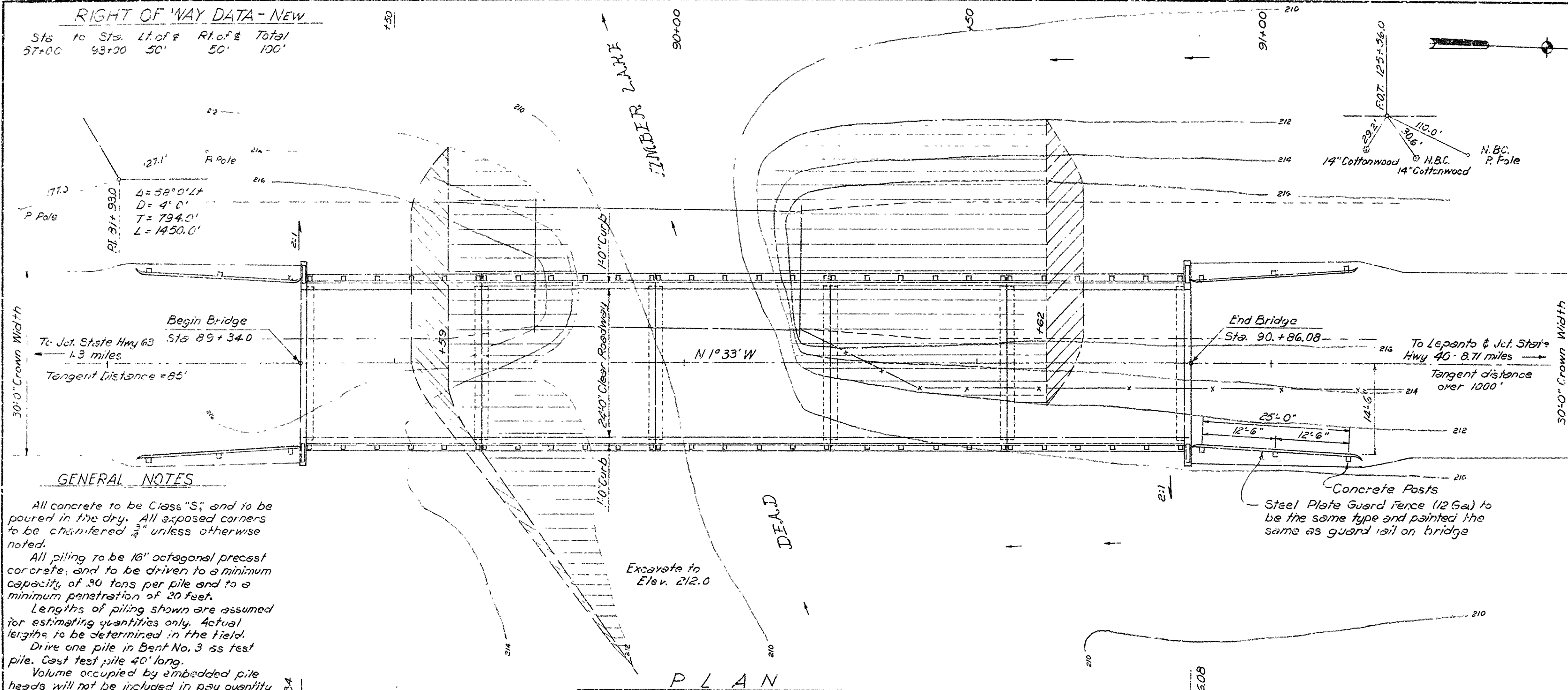
Revised
9-1-53 - H.B. Br. 2884.

Bridge Design Engineer

RIGHT OF WAY DATA - New

Sta to Sta. L.O.F. R.O.F. Total
57+00 93+00 50' 50' 100'

STATE	PROJECT	YEAR	SHEET NO.	TOTAL SHEETS
6	ARK. S-50(14)	1953		
JOB No.	10326	23	102	



LOCATION MAP
SHOWING CHANNEL IMPROVEMENT
Scale: 1" = 50'

GENERAL NOTES

All concrete to be Class "S" and to be poured in the dry. All exposed corners to be chamfered $\frac{3}{8}$ " 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 to a minimum penetration of 20 feet.

Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field.

Drive one pile in Bent No. 3 as test pile. Cast test pile 40' long.

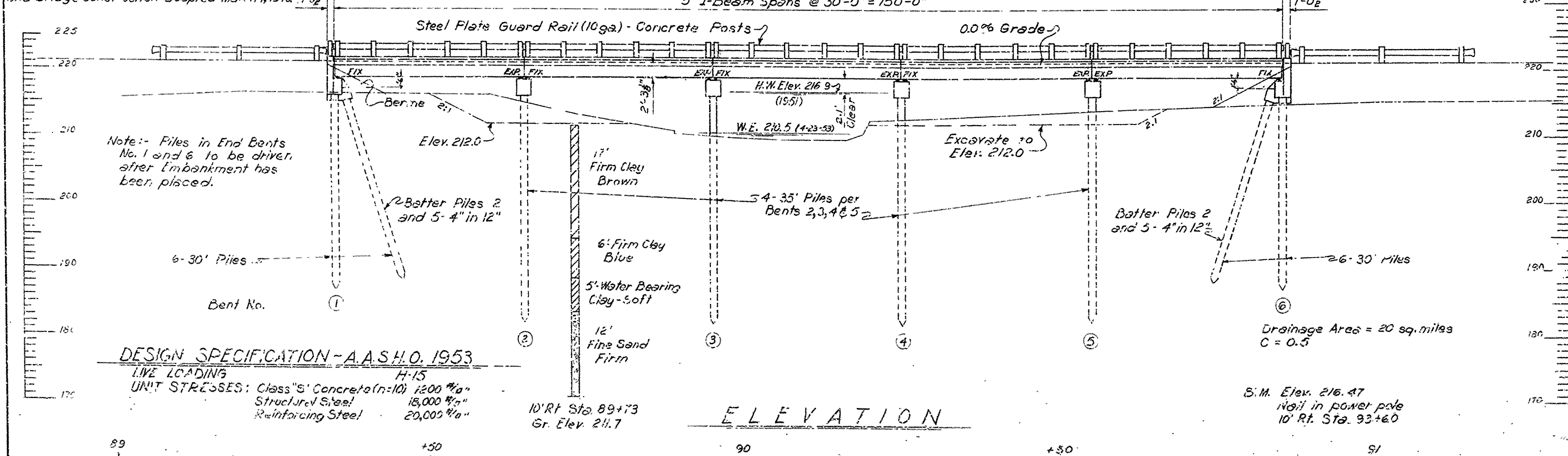
Volume occupied by embedded pile heads will not be included in pay quantity of concrete caps.

The Contractor shall remove the existing bridge, approximately 45' long consisting of three 15'-0" timber spans on mud sills; 19'-0" clear roadway; 3" oak deck.

For Details of Standard Pile Bents, see Drawing No. 5500 A.

For Details of Standard 30'-0" I-Beam Span, see Drawing No. 5499.

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 4, 1944.



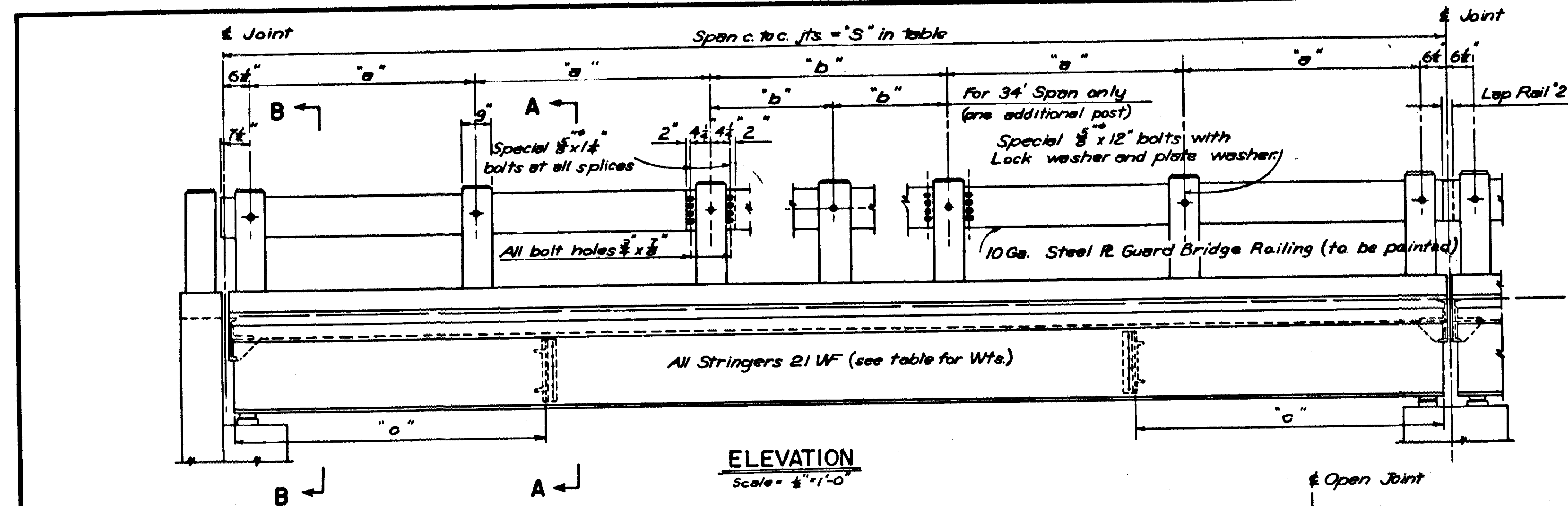
QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
103	Dry Excavation for Structures	76	Cu. Yd.
SP & 802	Class "S" Concrete for Bridges	129.12	Cu. Yd.
SP & 803	Reinforcing Steel	2125.1	Lb.
SP & 804	Concrete Piling - 16" Octagonal	925	Lin. Ft.
SP - 805-3	Steel Plate Guard Rail (10 Ga)	315.64	Lin. Ft.
807	Structural Steel in Beam Spans	506.33	Lb.
929	Bridge Name Plates (Type "C")	1	Each
SF	Removal of Existing Bridge Structures	6%	Complete item

LAYOUT OF BRIDGE
OVER DEAD TIMBER LAKE
BEASLEY - LEPANTO
PINSETT COUNTY
ROUTE 123 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: J.E.H. Date: 3-1-53
Traced By: J.E.H. Date: 10-9-53
Checked By: J.E.H. Date: 10-9-53
BRIDGE No. 2884 DRAWING No. 8389
Scale: 1 in. = 10 ft.



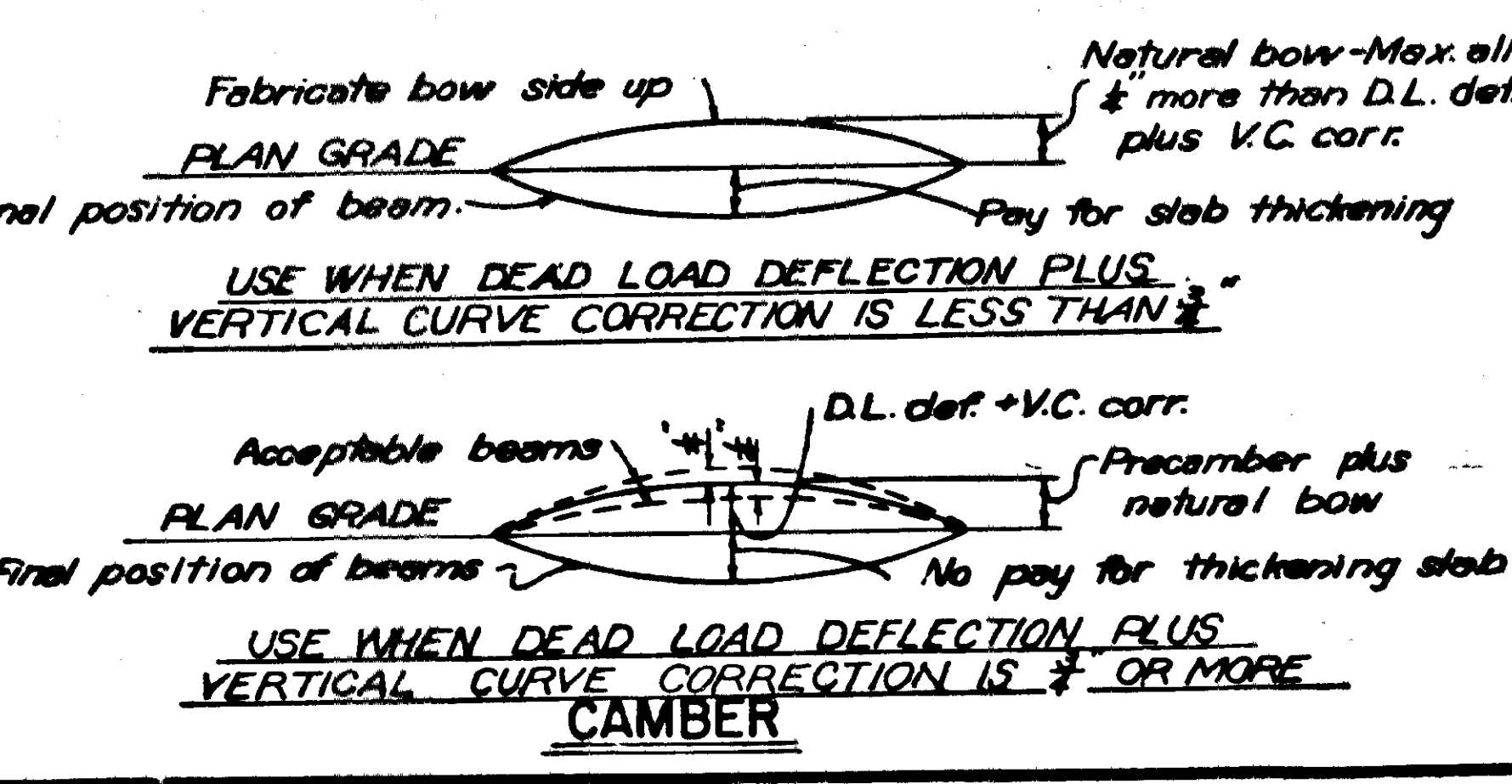
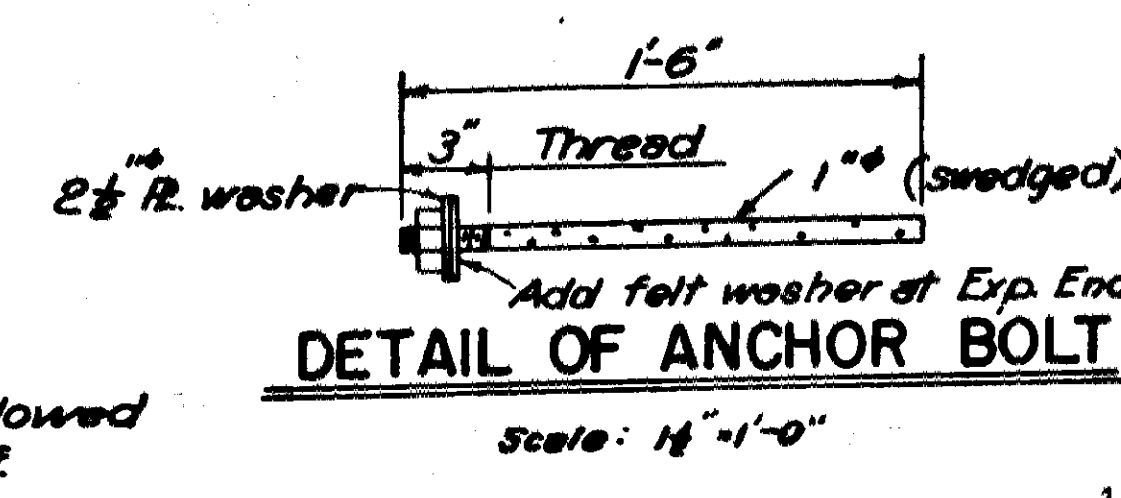
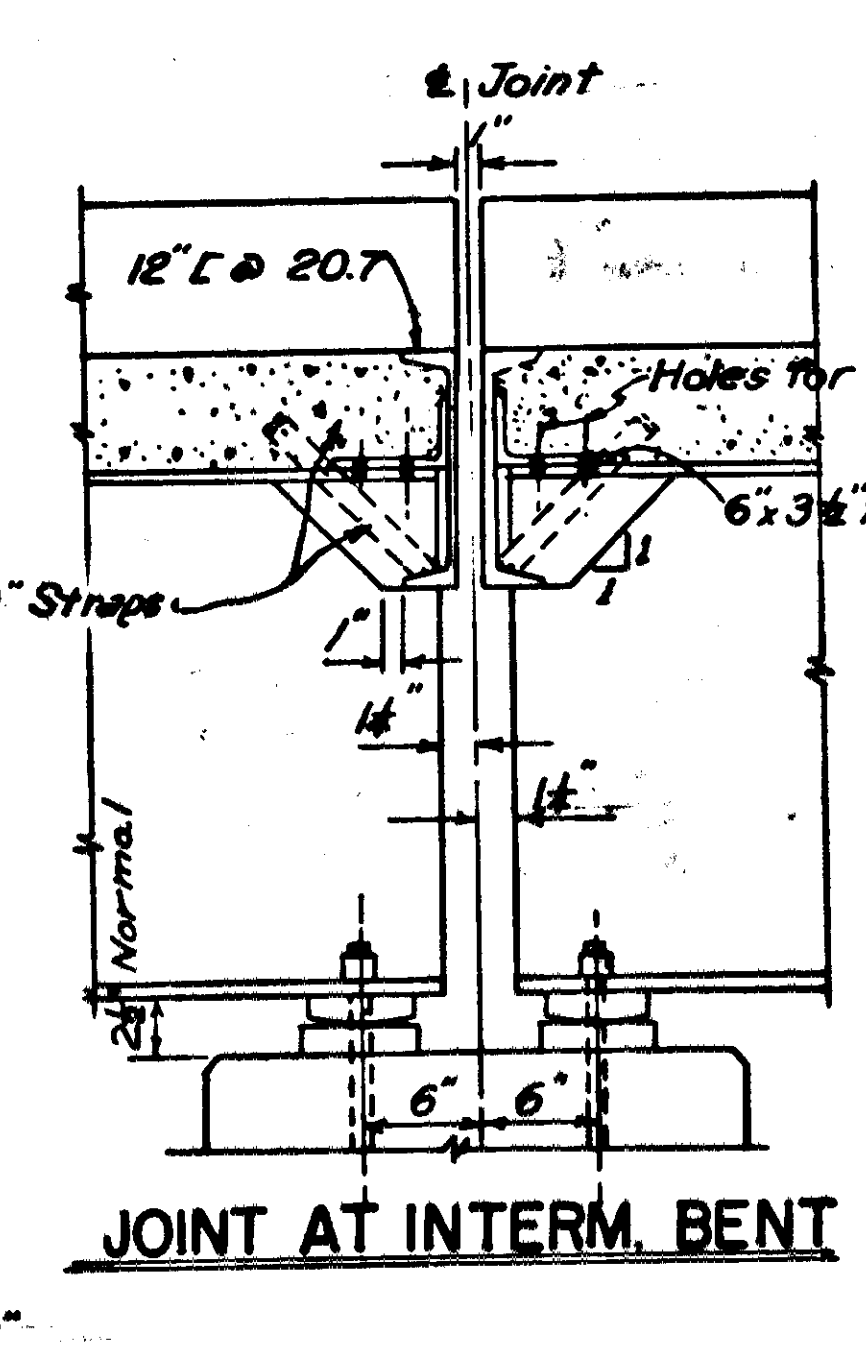
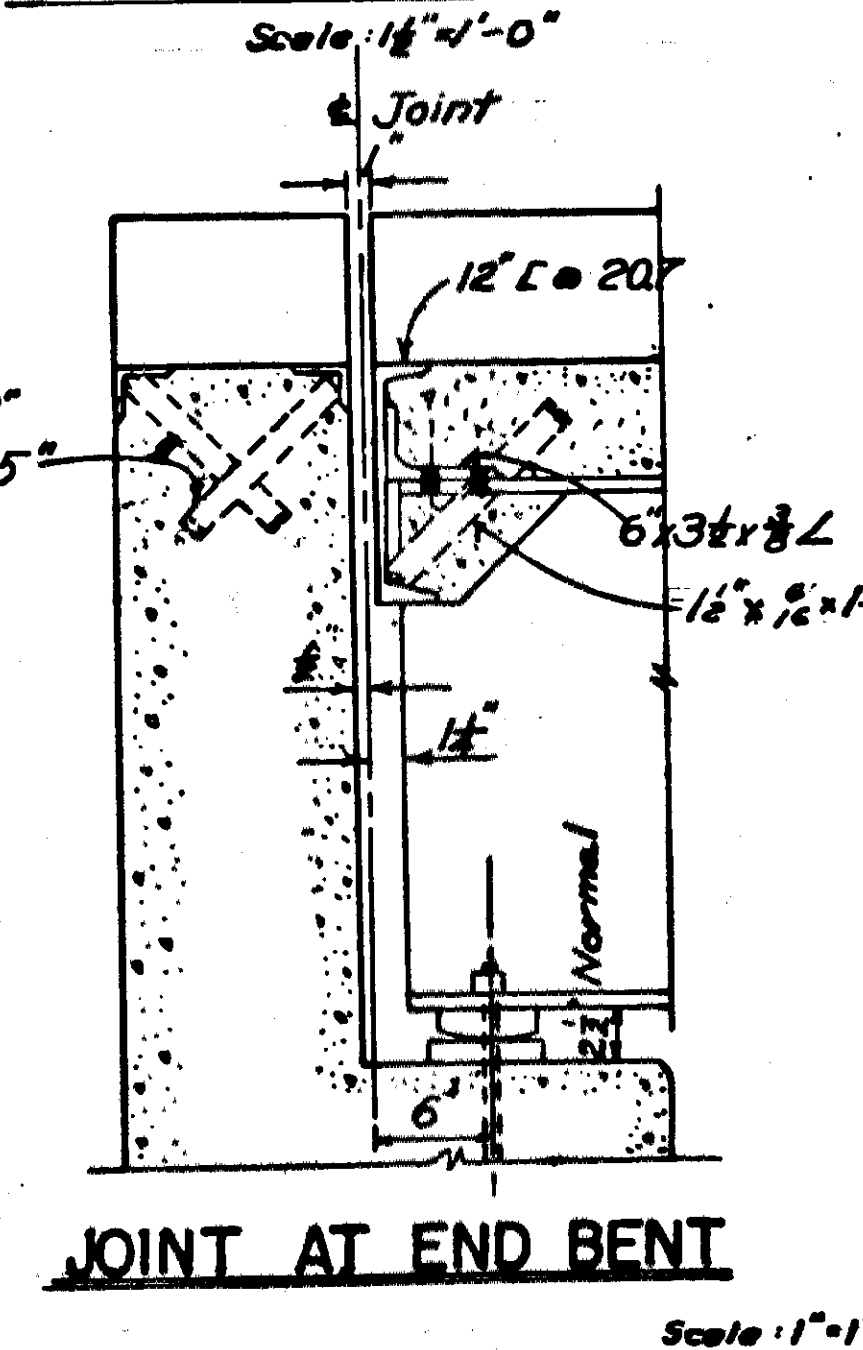
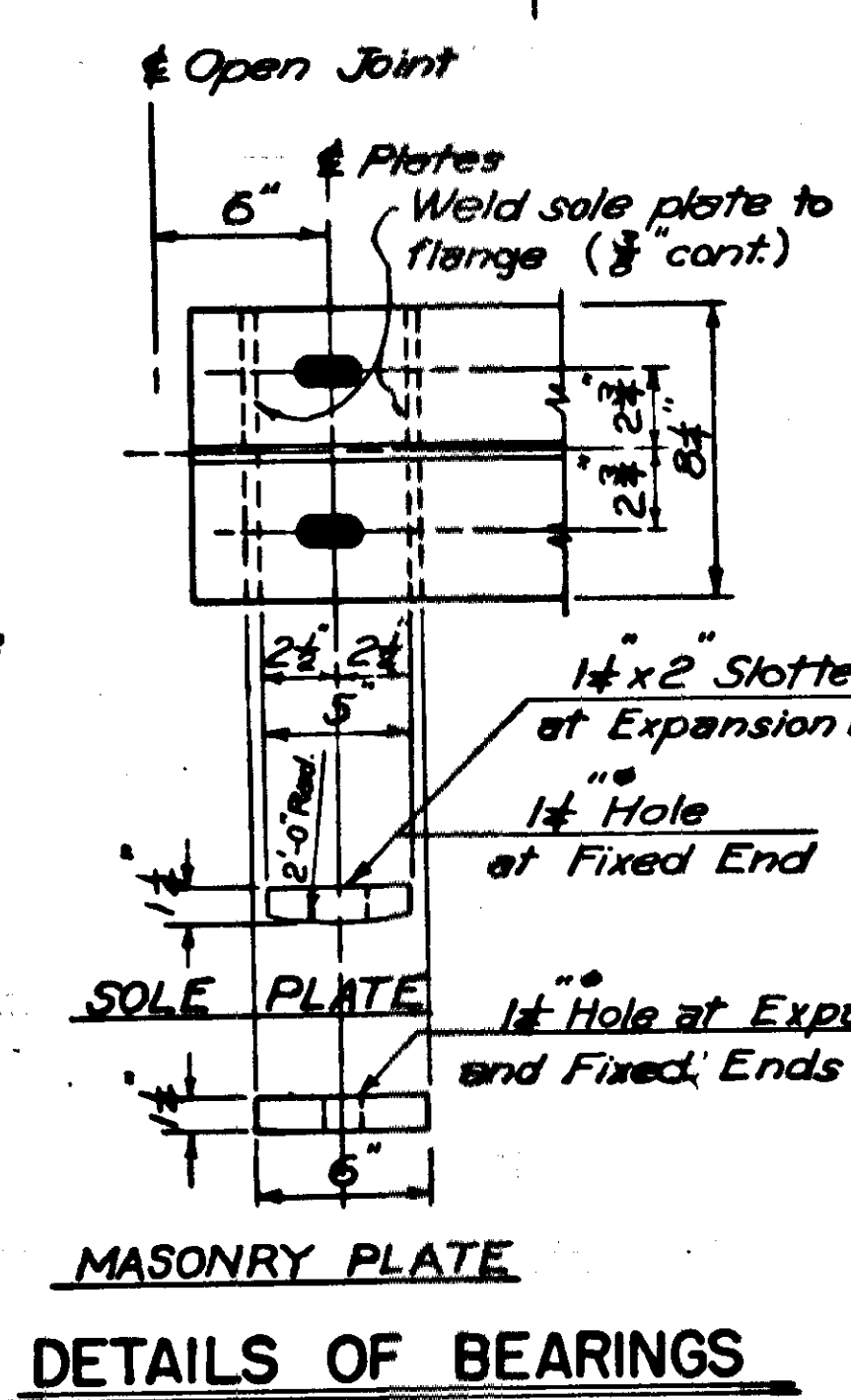
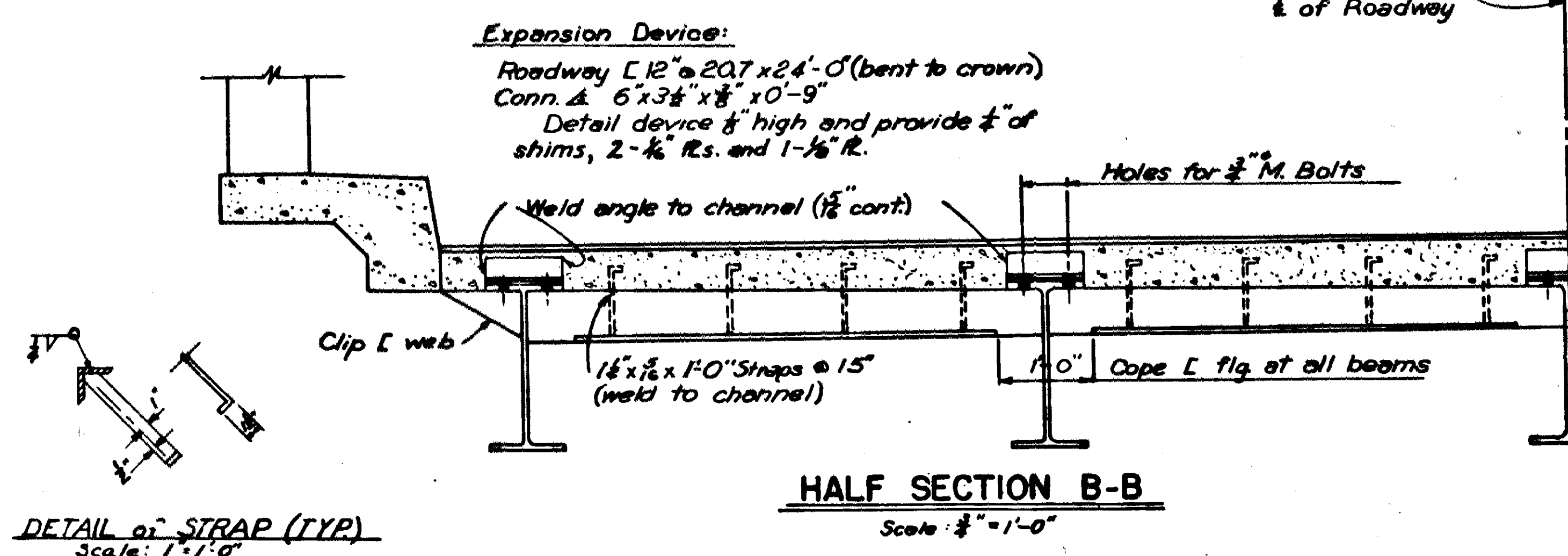
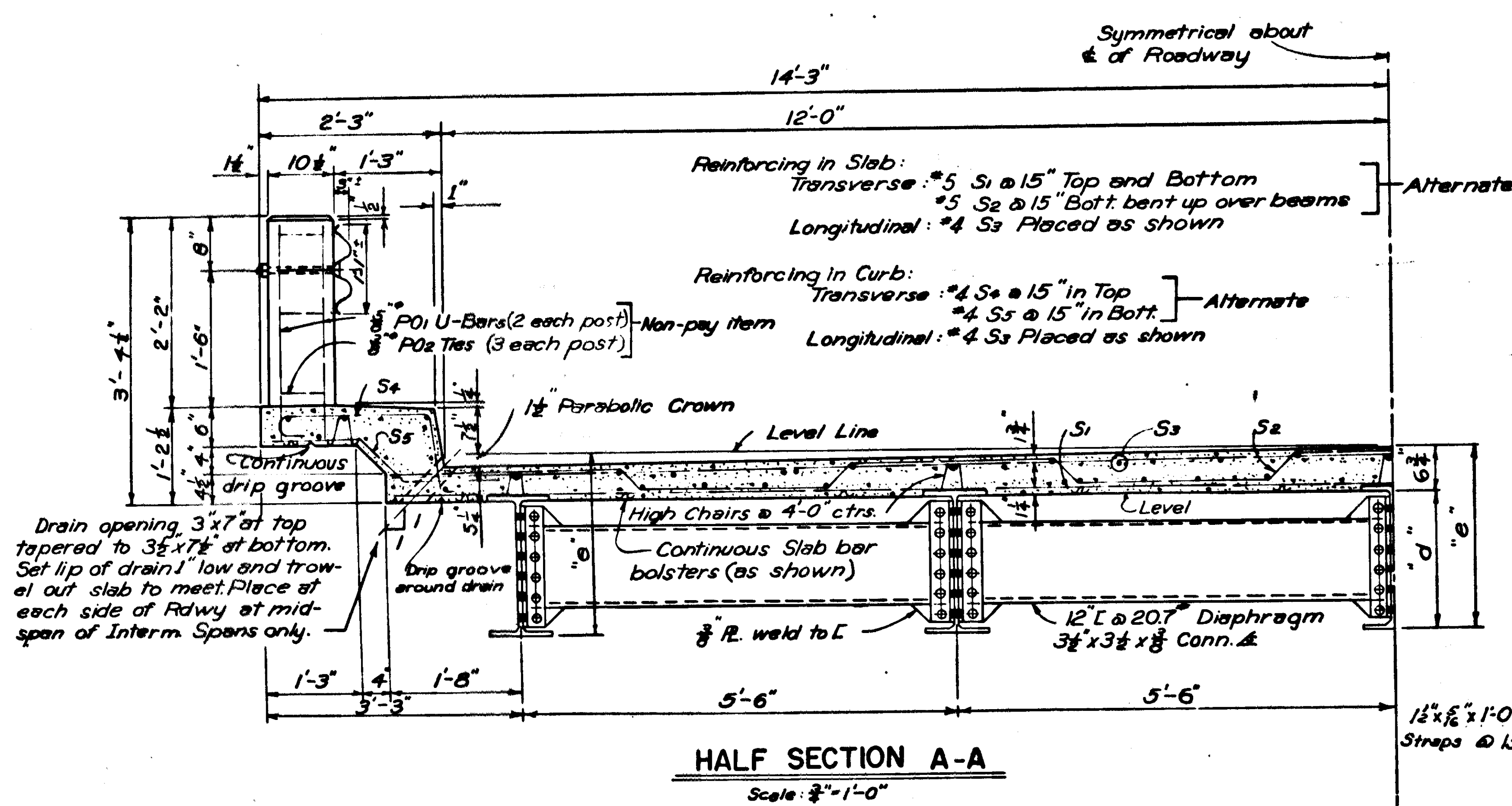
LIST OF VARIABLES 30'-34' SPANS

Span	Req'd. Stringers	Post. Spacing	Strut	Vert. Dist. B. & D.	D.L. Def.
30'	21WF62	5'-9"	5'-11"	7'-6"	1'-0 1/2" 2'-3 1/2"
31'	21WF68	5'-11"	6'-3"	7'-9"	1'-0 1/2" 2'-3 1/2"
32'	21WF68	6'-2"	6'-3"	8'-0"	1'-0 1/2" 2'-3 1/2"
33'	21WF73	6'-2"	7'-1"	8'-3"	1'-0 1/2" 2'-3 1/2"
34'	21WF73	5'-5"	5'-7"	8'-6"	1'-0 1/2" 2'-3 1/2"

LIST OF REINFORCING STEEL

Mark	Size	No. in Each Span					Length	Fin. Dia.	Banding Diagram
		30'	31'	32'	33'	34'			
S ₁	#5	48	50	52	54	56	25'-0"	5/8"	
S ₂	#5	23	24	25	26	27	25'-9"	1/2"	
S ₃	#4	47	47	47	47	47	5'-5"	5/8"	
S ₄	#4	48	50	52	54	56	4'-5"	1/2"	
S ₅	#4	46	48	50	52	54	3'-0"	1/2"	
P0 ₁	#5	24	24	24	24	24	5'-4"	1/2"	
P0 ₂	#3	36	36	36	36	42	2'-8"	1/2"	

* Non Pay Item



LOADING HIS (A.A.S.H.O. 1957)
Load Distribution Outside Stringer:
Dead Load = 760 lb/ft (Wt. per ft. of WF used)
Live Load = 180 lb/ft
Conc. Live Load = 3100" for moment
7300" for shear
Truck Live Load = 0.80 wheels

Load Distribution Inside Stringer
Dead Load = 546 lb/ft (Wt. per ft. of WF used)
Live Load = 265 lb/ft
Conc. Live Load = 7400" for moment
10720" for shear
Truck Live Load = 1.1 wheels

Unit Stresses
Structural Steel
Reinforcing Steel
Class 5 Concrete (n=10)

GENERAL NOTES

All concrete to be Class 5. 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: 3/8" 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 1/2" fillet shop welds except as noted. All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and 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 Plate Guard Bridge Railing.

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

REVISIONS

Changed Camber Diagram WWM 6-25-54
Rdwy. Width, Bar Designations & F.R.B. 3-14-58
Exp. Device Anchors
General Notes, Anchor Strap Detail, & Rail Dimensions B.J.R. 3-24-59

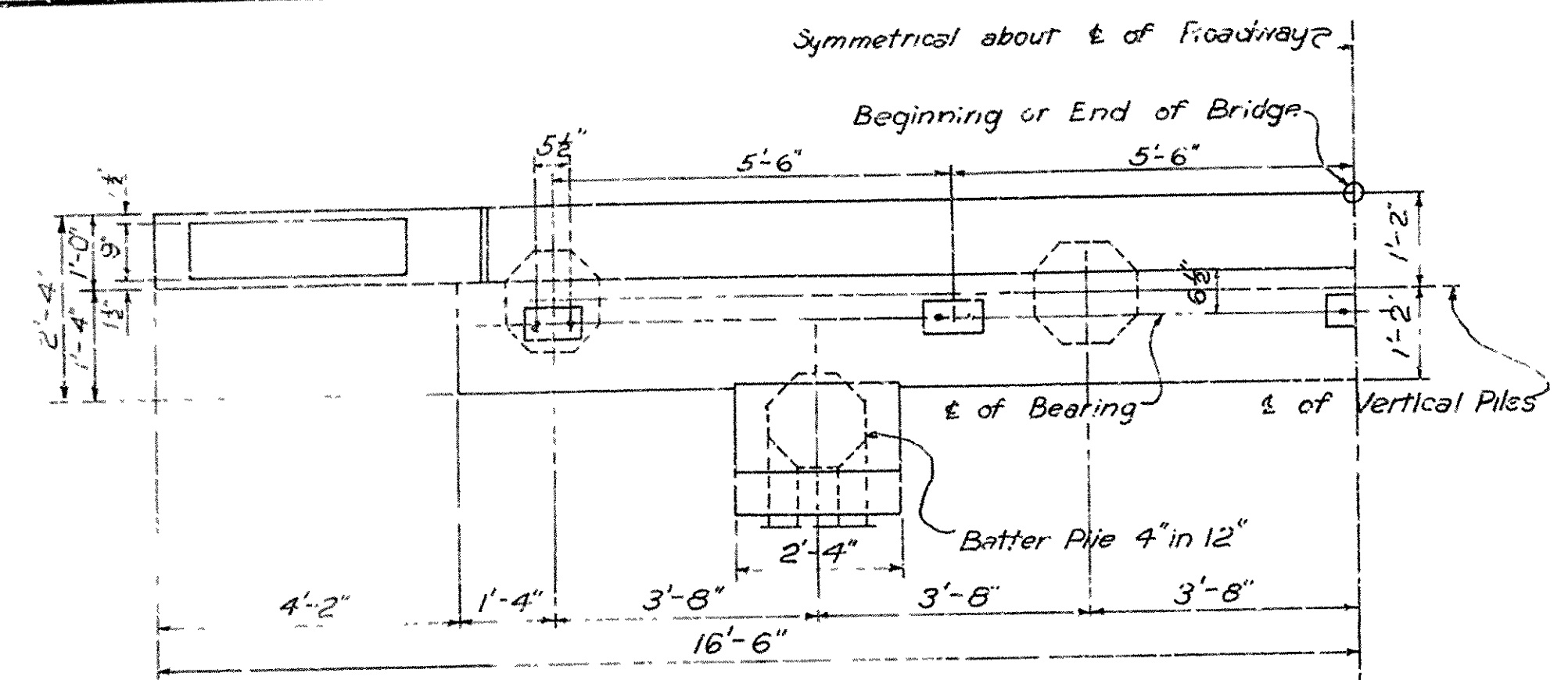
DETAILS OF STANDARD 30' TO 34' I-BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" CURBS

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

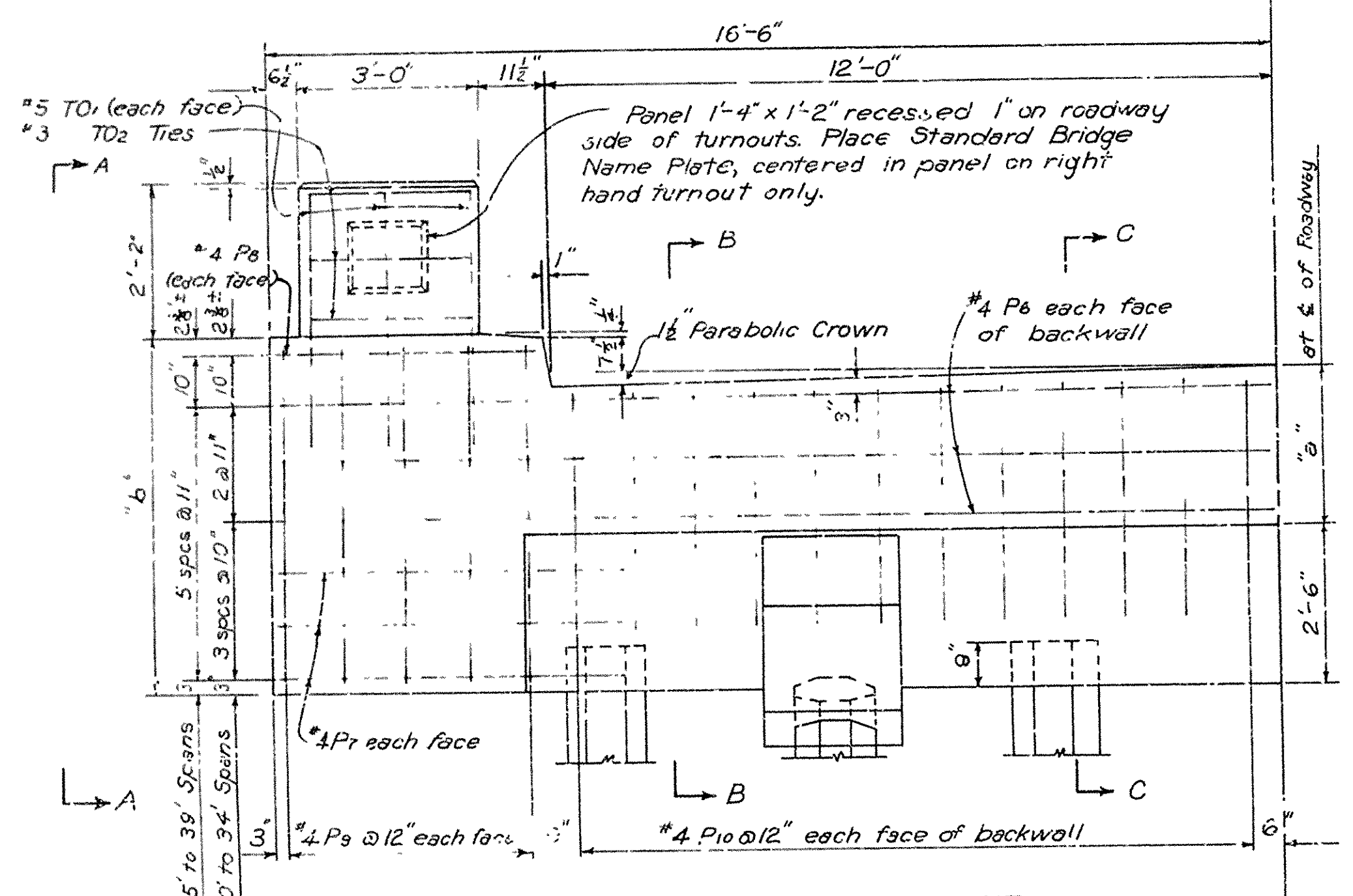
Drawn By: WWM Date: 2-1-52
Traced By: WWM Date: 2-2-54
Checked By: JHE Date: 7-22-54

BRIDGE NO. DRAWING NO. 5499

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

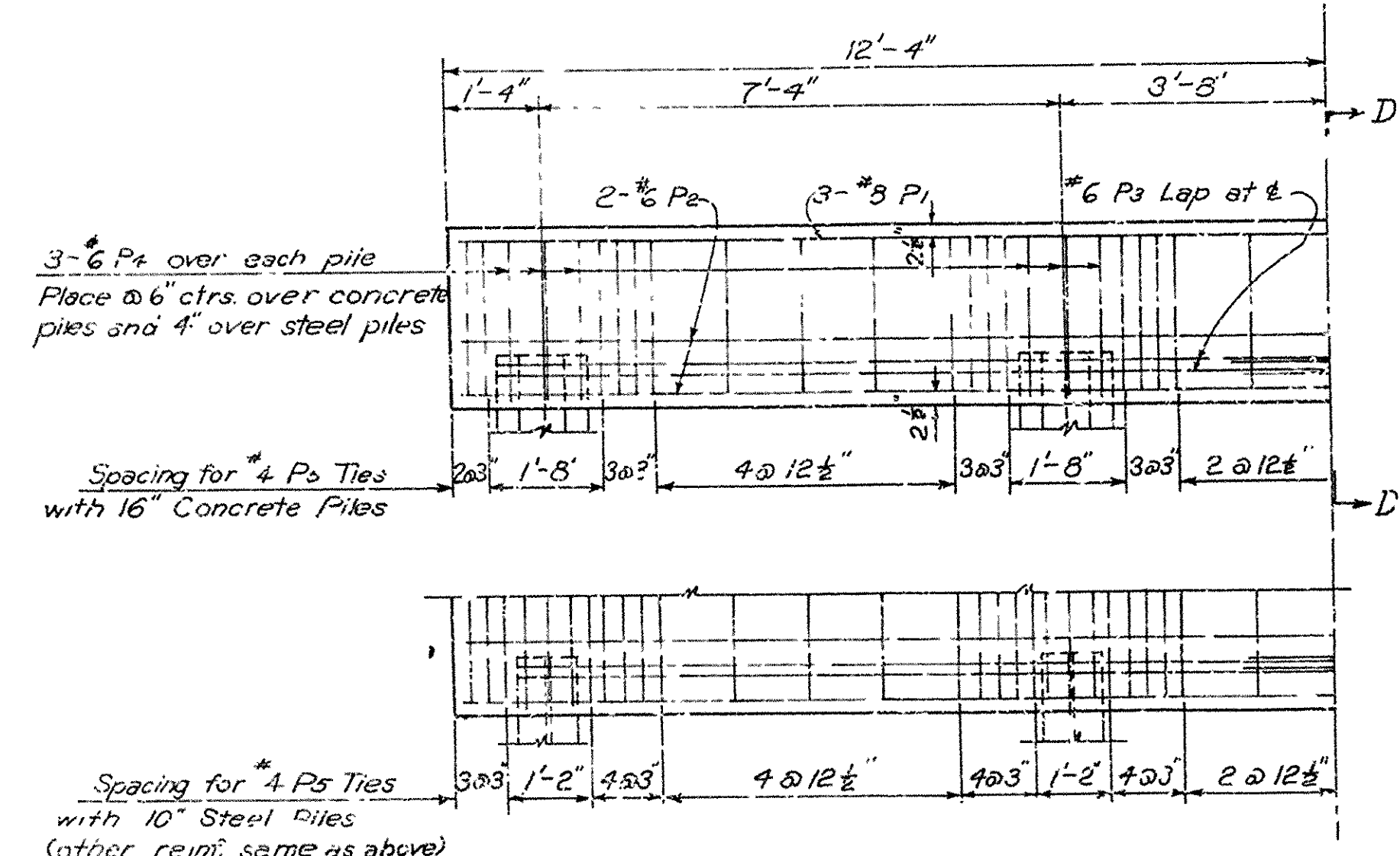


HALF PLAN OF END BENT

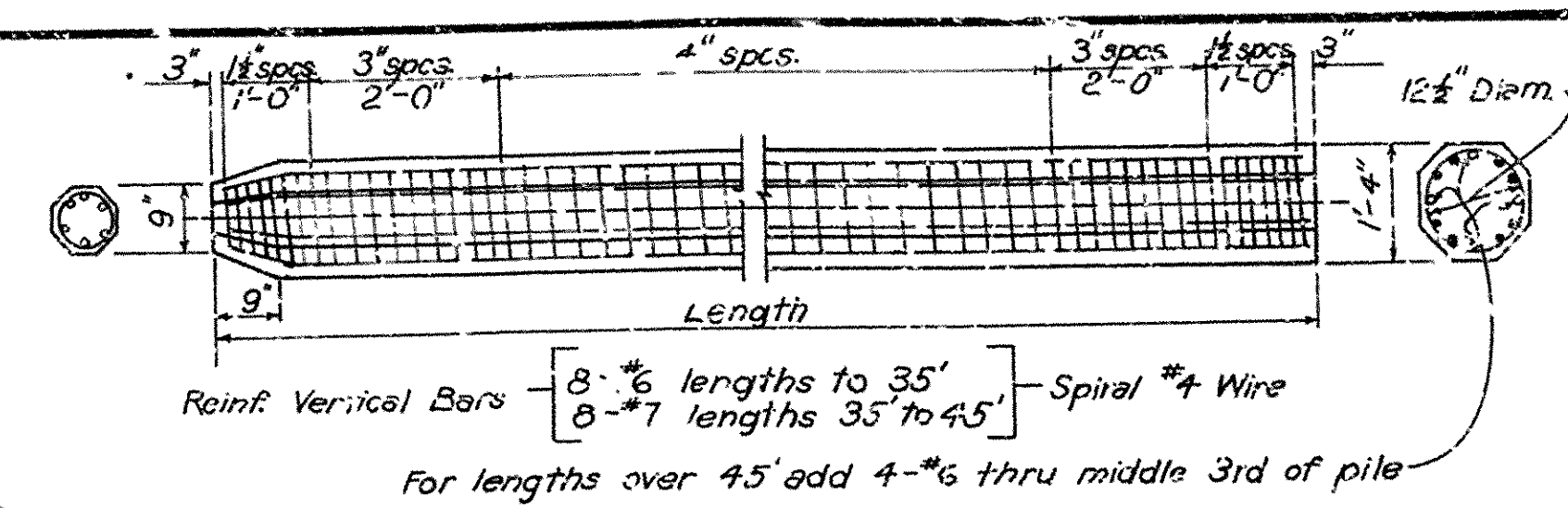


HALF ELEVATION END BENT

Cap Reinforcing same as shown for Intermediate Bent



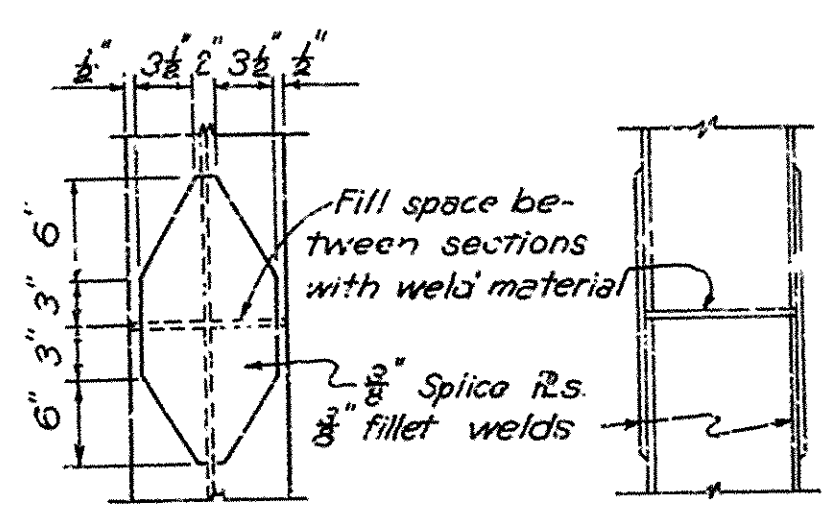
HALF ELEVATION INTERMEDIATE BENT



DETAILS OF 16" PRECAST CONCRETE PILE

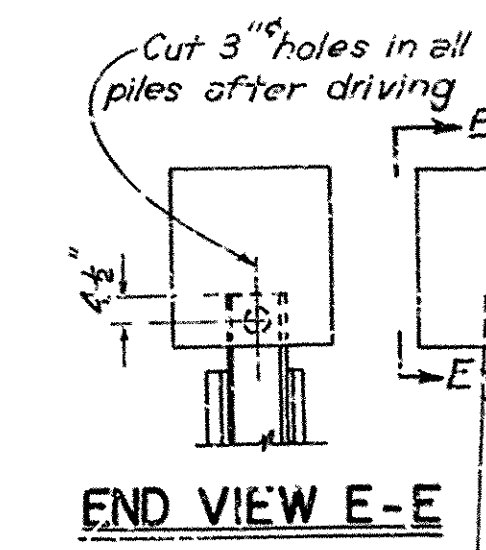
LIST OF VARIABLES

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 1/4"	5'-7 1/4"	
34'	"	"	
35'	2'-8 7/8"	5'-10 7/8"	
36'	"	"	
37'	"	"	
38'	2'-0 5/8"	5'-10 5/8"	
39'	"	"	

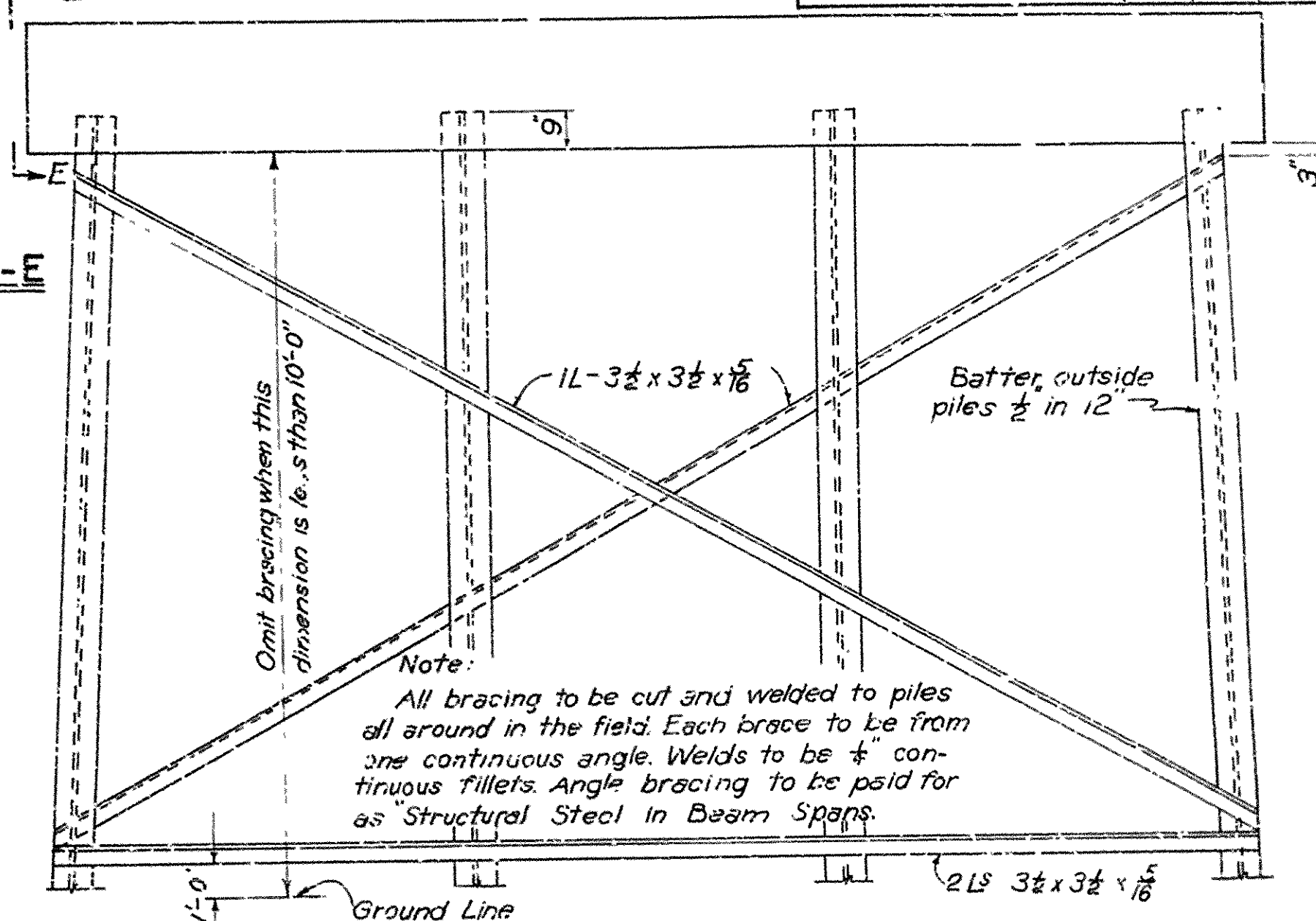


STEEL PILE SPLICE DETAILS

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

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

Dimensions are in ctrs. of bars.

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.M. Date: 2-9-52
Traced By: L.W.H. Date: 7-6-54
Checked By: J.F.R. Date: 7-6-54
BRIDGE NO. DRAWING NO. 5500A

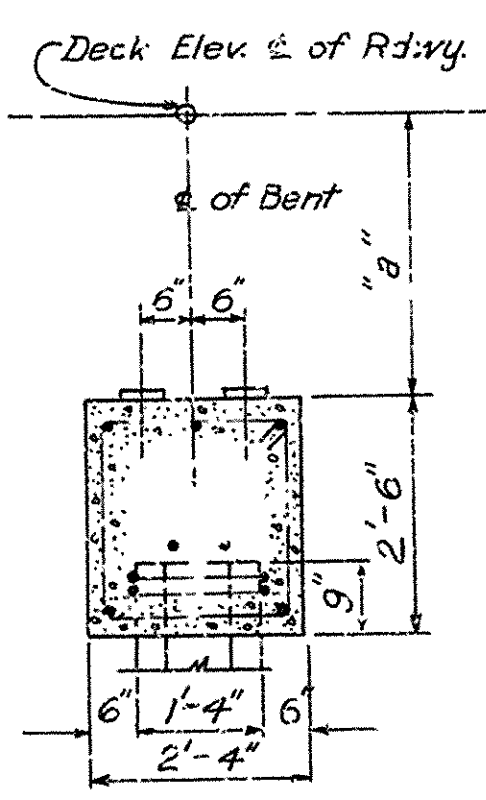
NOTES

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

END VIEW A-A

SECTION B-B AT BATTER PILES



SECTION D-D

Showing concrete pile only

DETAIL "A"

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