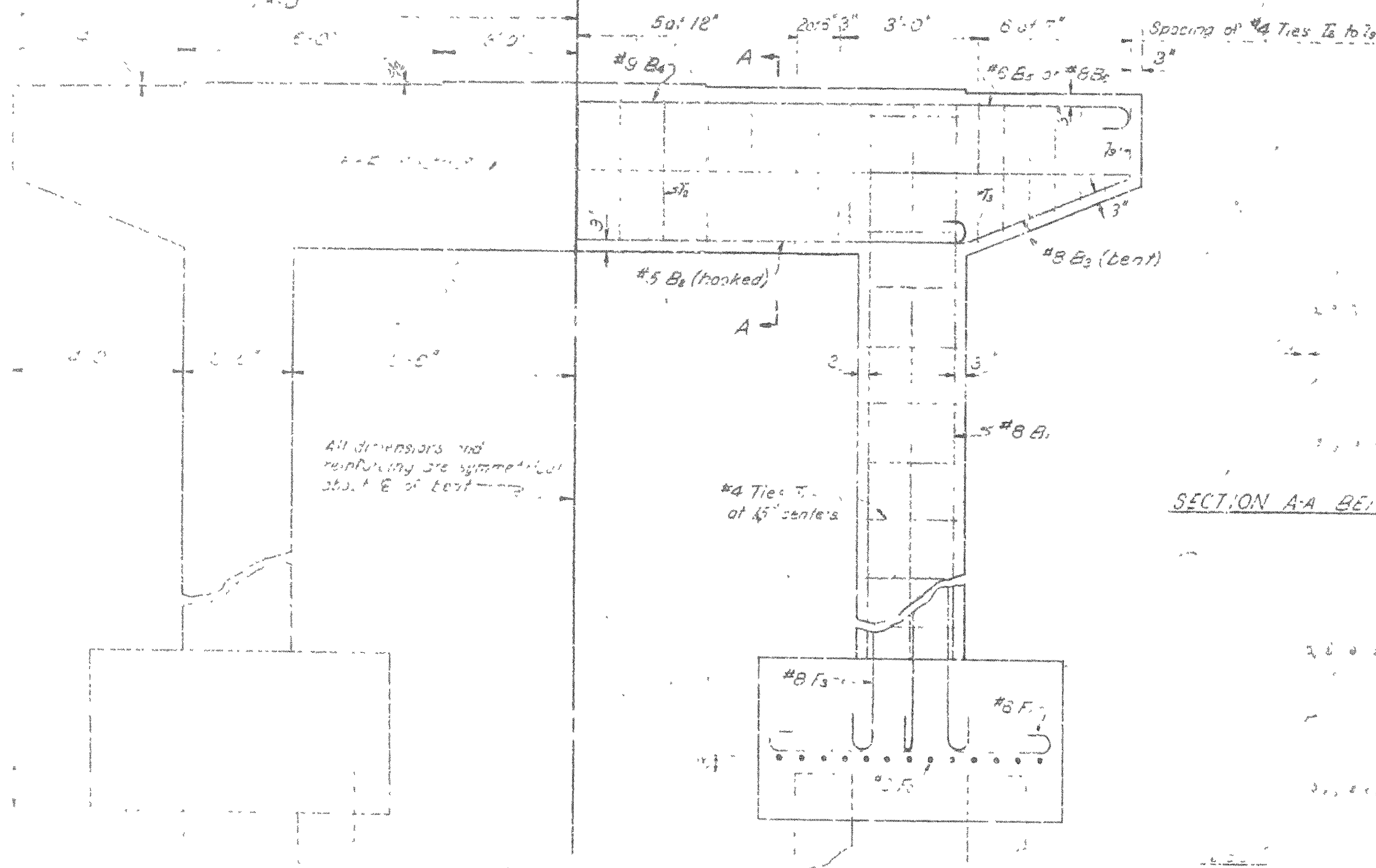


PLAN OF CAP



SECTION A-A BENT 2 OR 4

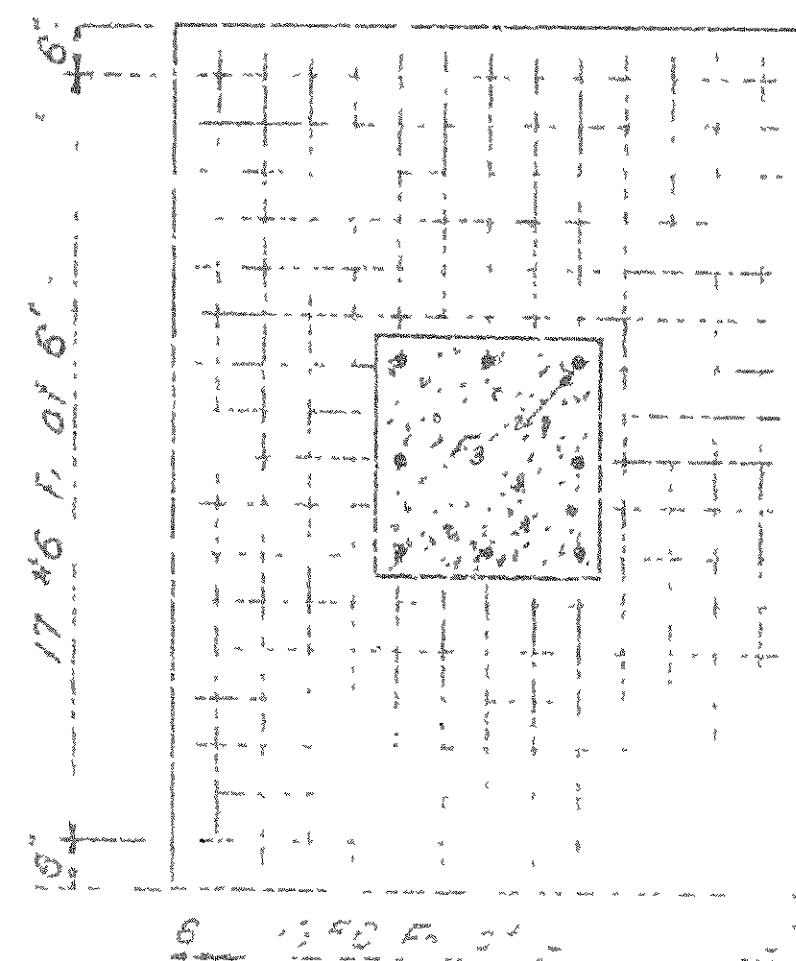
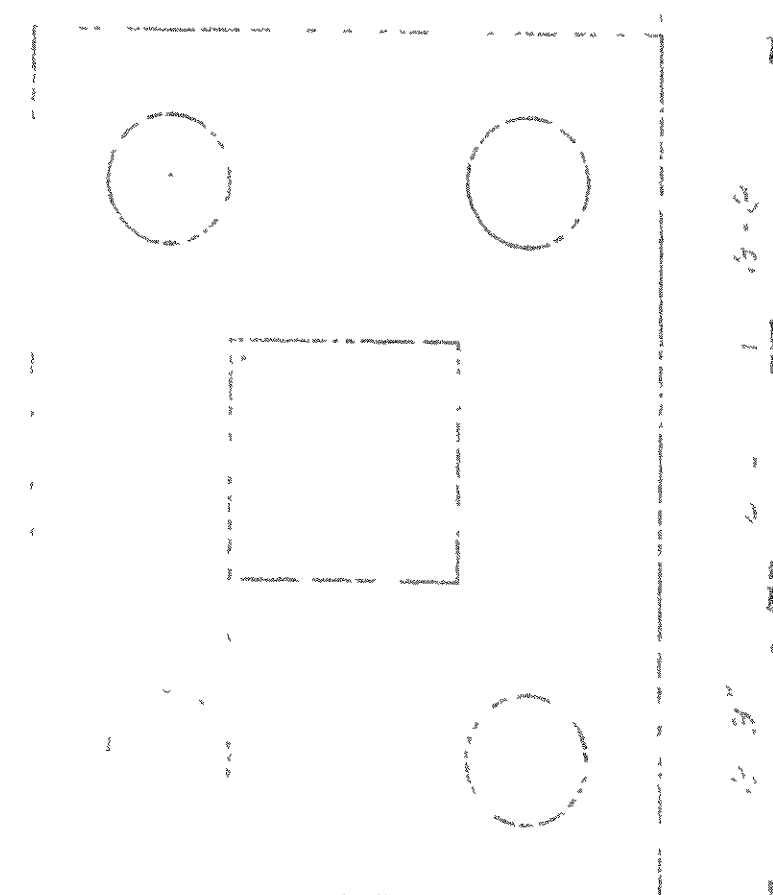


TABLE 1.57 - REINFORCEMENT

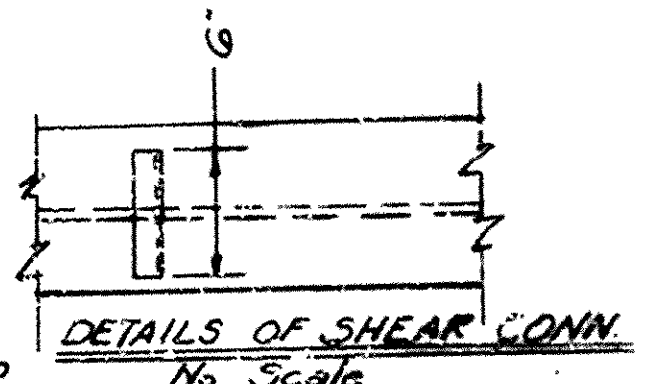
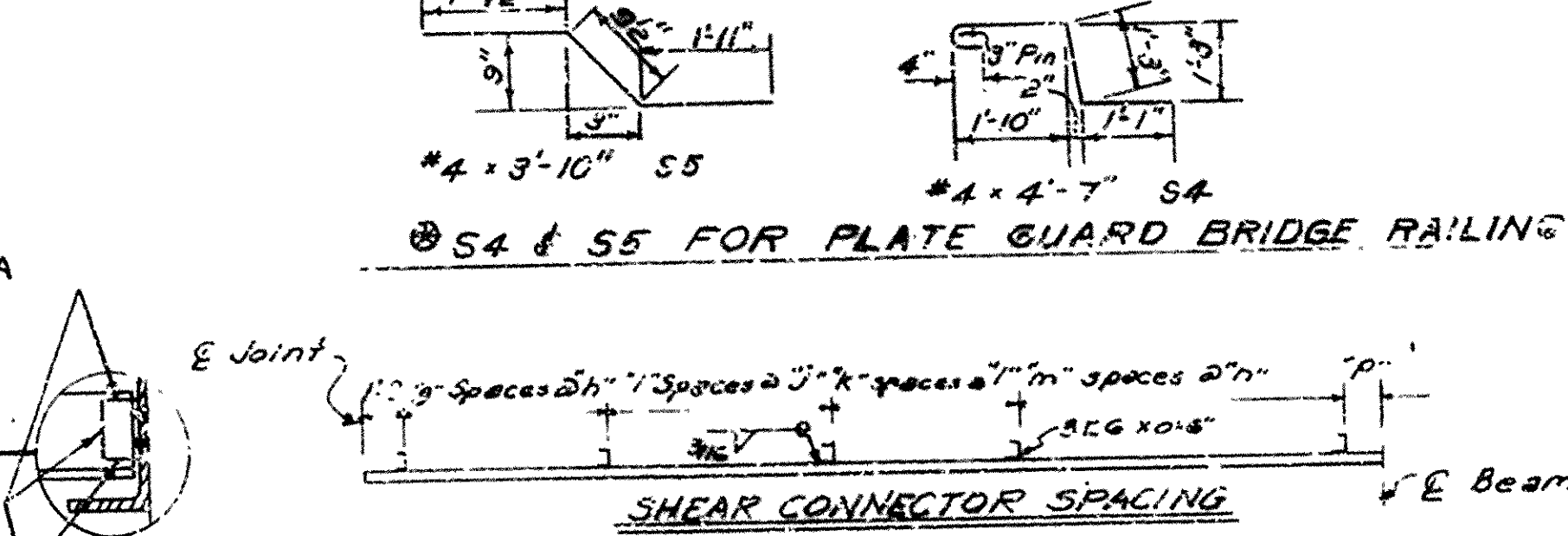
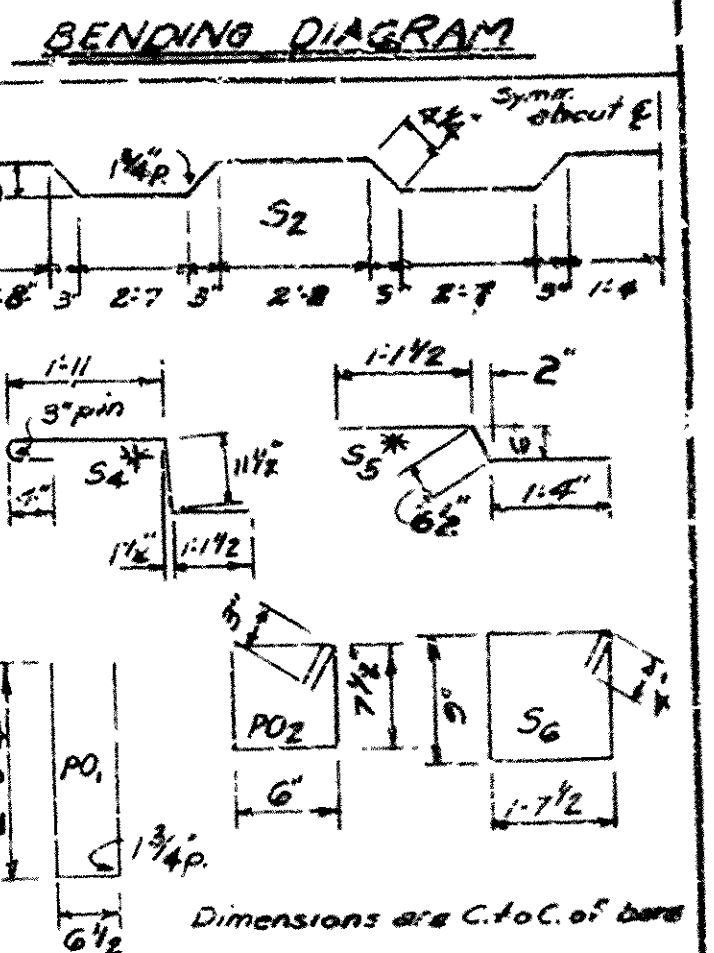
Item	Size	No.	Length	A	B	D	Diagram
F1	#6	34	34	11"	6'-6"	6"	4.1
F2	#6	26	26	11"	6'-6"	6"	4.2
F3	#6	16	16	6'-1"	5'-0"	9"	8"
B1	#5	15	15	8'-0"	18'-0"	3"	3.1
B2	#5	2	2	17'-11"	4'-1"	8"	3.2
B3	#5	3	3	28'-0"	25'-6"	10"	9"
B4	#5	1	1	11'-8"	11'-0"	6"	4.1
B5	#5	1	1	12'-1"	11'-0"	5"	8"
B6	#5	1	1	25'-6"	25'-6"	5"	5"
B7	#5	32	32	11"	25'	2"	1.1
B8	#4	17	17	11'-0"	3'-1/2"	2'-1/2"	1.2
B9	#4	200	200	9'-7"	11'-0"	2'-1/2"	1.3

1. All reinforcement shall be placed in concrete in accordance with the specifications for concrete in place.

DETAILS OF INTERMEDIATE BENTS
ANDERSON ROAD UNDERPASS &
STATE HWY. 249 UNDERPASS
LONOKE CO. LINE - HAZEN
PRAIRIE COUNTY
INT. ROUTE 40 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION

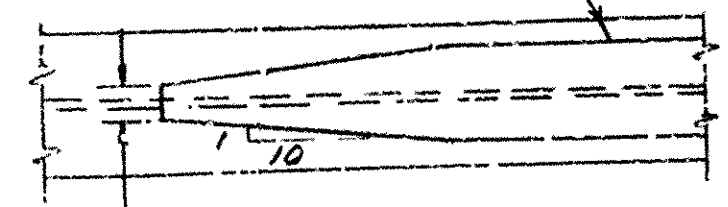
DRAWN BY: [Signature]
CHECKED BY: [Signature]
BRIDGE NO. 1015 3-12 DRAWING NO. 1015



Note: $f_c = 1"$ for Regular all beams $\frac{1}{4} \times 1 \frac{1}{2}$
Span.
HALF SECTION B-B FOR MODIFIED OR REG. SPANS

[illegible]

Note: Stud shear connectors, granular flux filled, solid flux, or equal may be used in place of
shown at the following ratios: $3/4"$ diameter stud in place of 1.82 inches of channel, $1/2"$ diameter
stud in place of 2.52 inches of channel. The studs shall be 4" long and automatically and
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.



DETAILS OF COVER PLATE
Scale: $3/4" = 1'-0"$

LOADING - H-15		A.A.S.H.O. 1961	
<u>Dead Load</u>		<u>Interior Bm.</u>	<u>Exterior Bm.</u>
to WF Beam		432% + 1/4 (Wt of WF)	577% + 1/4 (Wt of WF)
to Comp. Beam			
(1) Steel Rail -		80% 1/4	80% 1/4
(2) Alum. Rail -		132% 1/4	132% 1/4

Live Load
to each composite beam 1.045 wheels + impact or

Unit Stresses

Concrete (f _c)	1200 psi
Structural Steel (A-36)	20,000 psi
Reinforcing Steel	20,000 psi

Note: This drawing to be used with Dwg. No. 14888A

Notes Adapted from Drawing 5460.

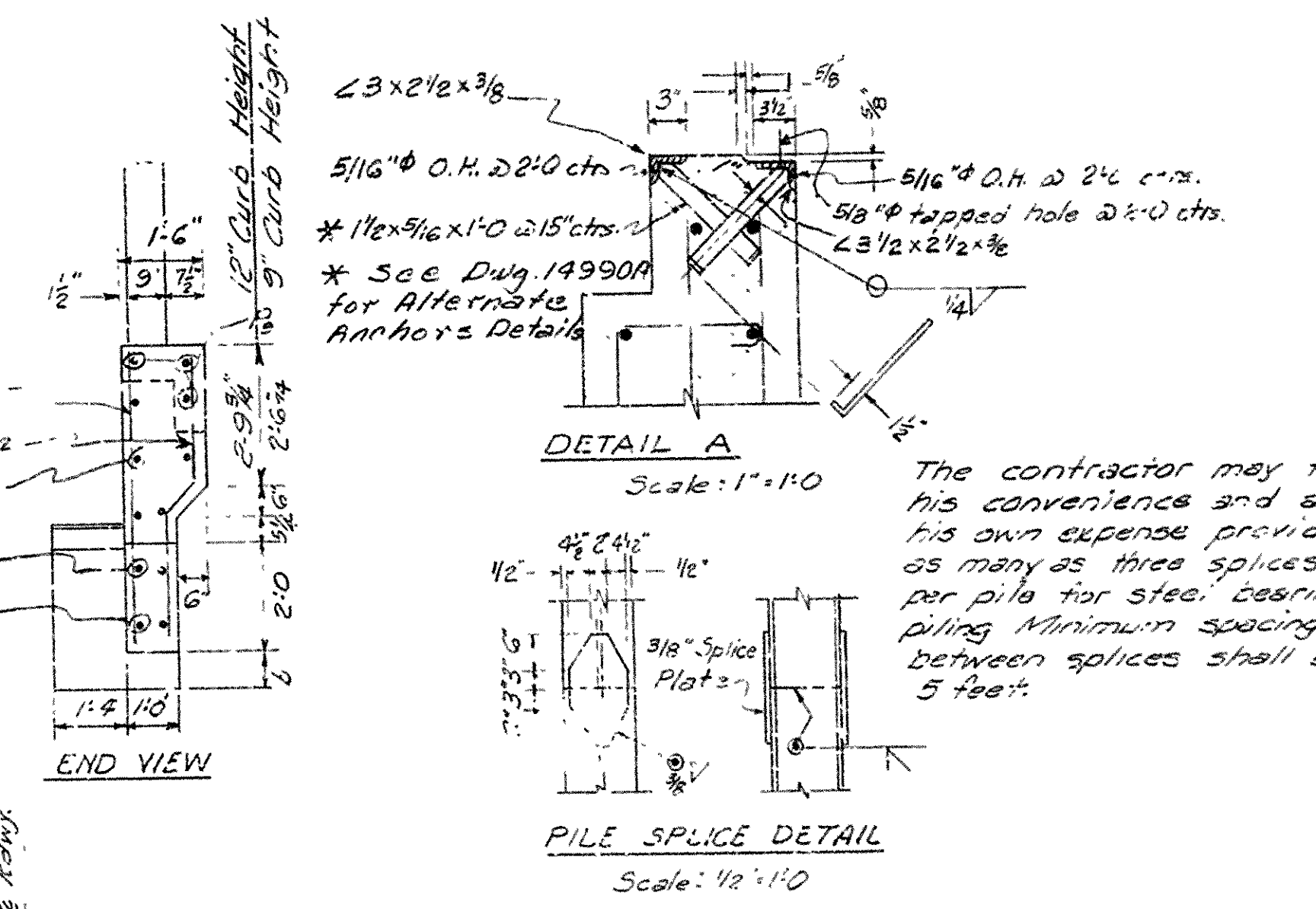
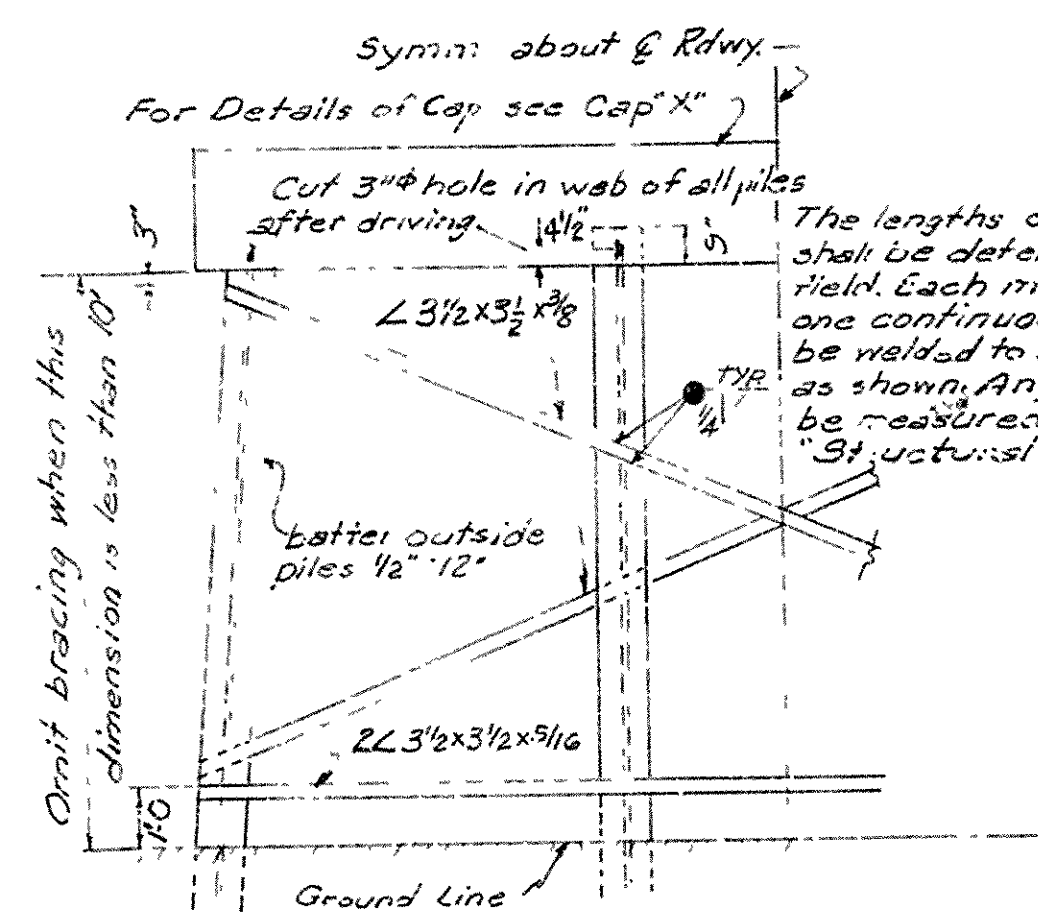
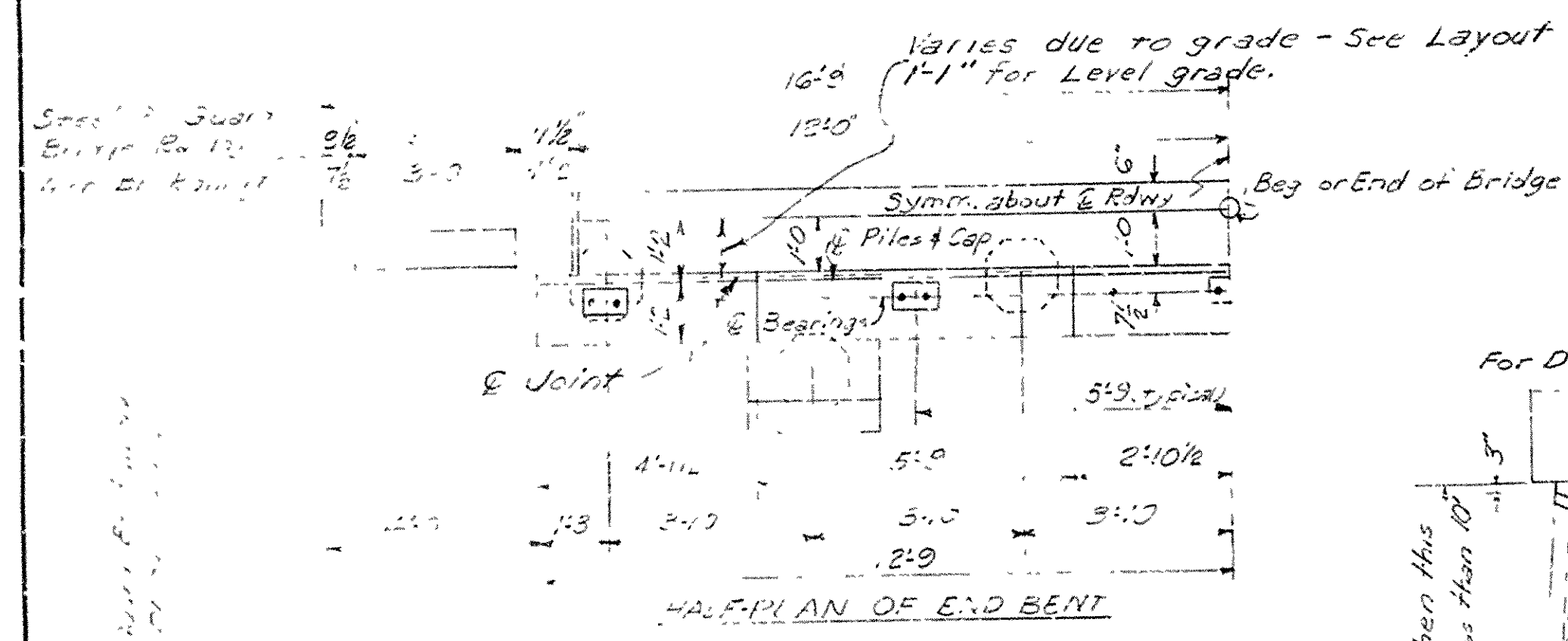
Revised: 12-25-65
Revised: Added Optional Const. Joint
in Curb (10-10-63) JAS / FEB, WHO-63)

DETAILS OF STANDARD
35'-90" COMPOSITE I-BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" & 1'-1 1/2" CURBS

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION

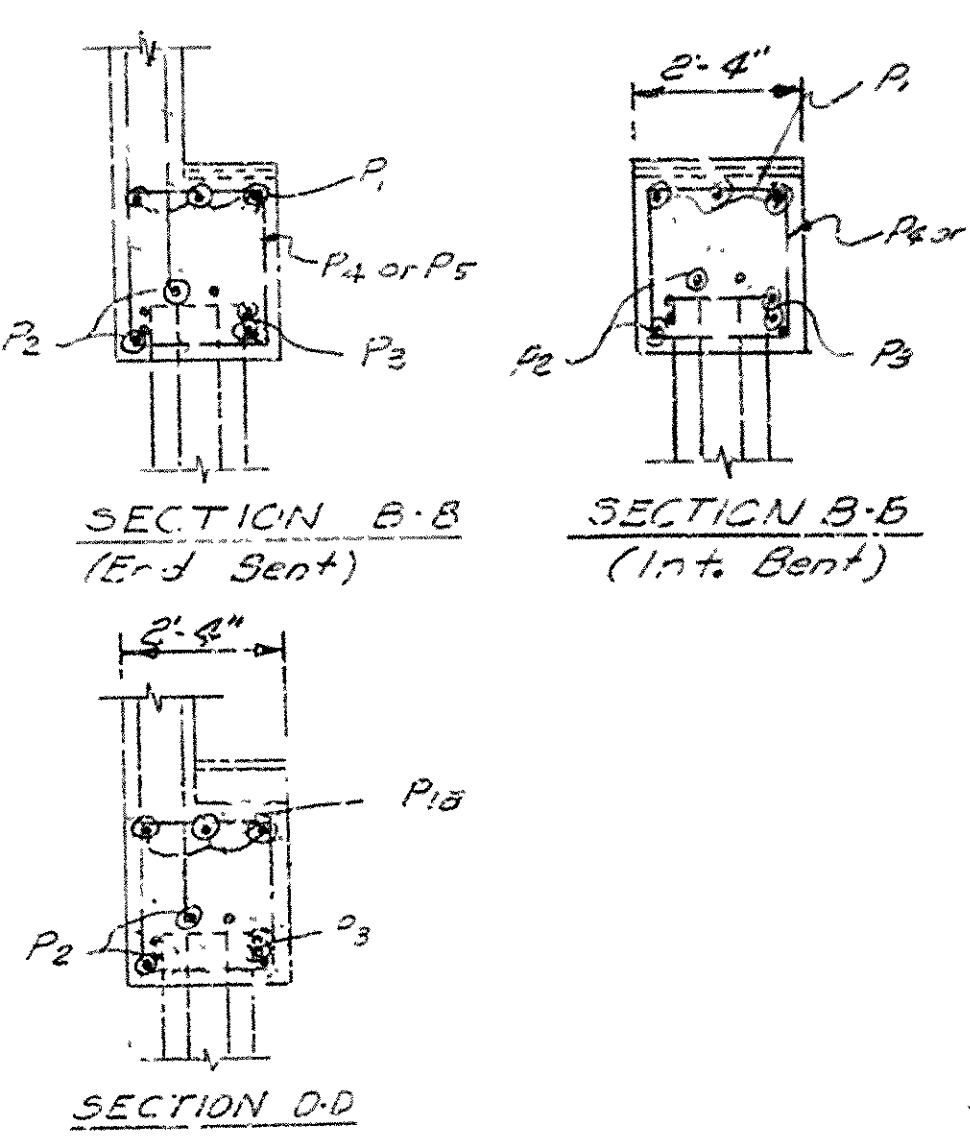
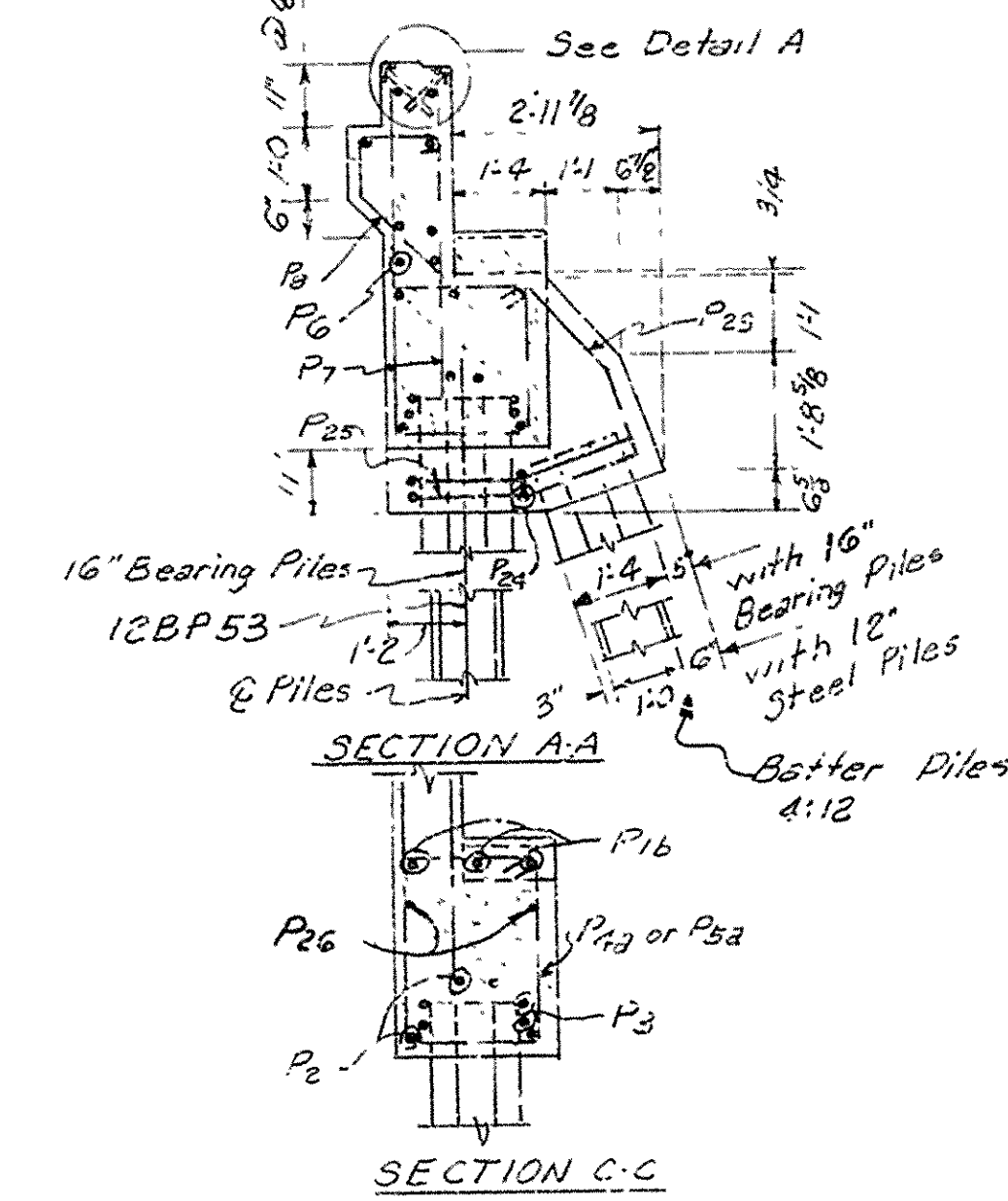
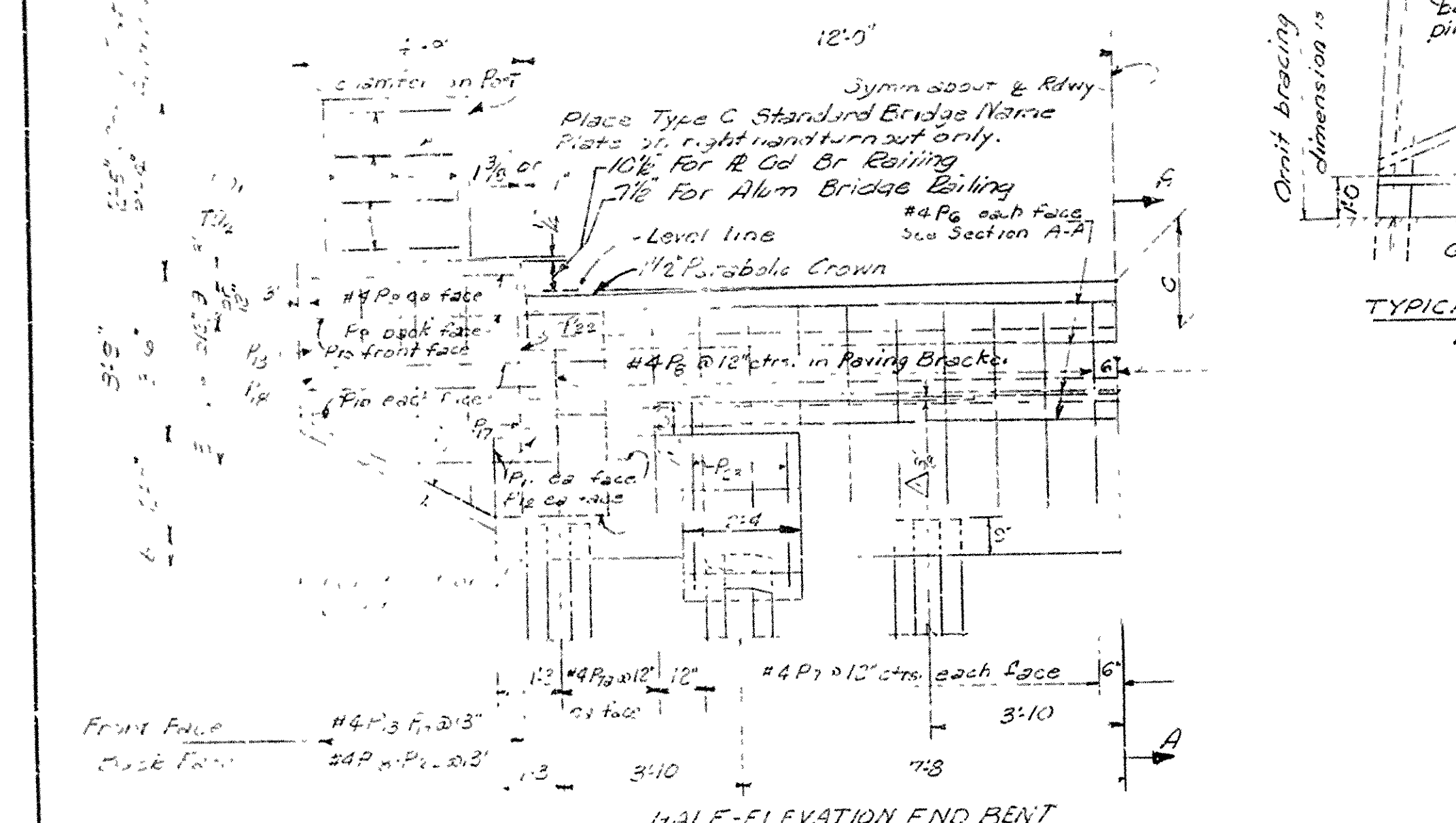
DRAWN BY: WAS DATE: 4-16-62
 CHECKED BY: WAS DATE: 4-16-62
 COUNCILING BY: FMH DATE: 4-17-62
 SCALE: 1/2" = 1'-0"
 BRIDGE NO. 15010 DRAWING NO. 15010

L. F. Carlson



VARIABLE DIMENSIONS FOR END BENTS									
SPAN LENGTH	END SPAN BEAMS	VARIABLES				CAP USED			
		INTERIOR	EXTERIOR	a	b		c	d	e
35'-44'	21WF55	21WF55	1"	2 1/4"	2'-5 3/8"	-	X		
	24WF68	3 3/8"	3 3/8"			4"	Y		
	27WF84	6 3/8"	8 3/8"			7"	Y		
	30WF99	9 3/8"	10 3/8"			10"	Y		
	33WF118	12 3/8"	14 3/8"			13"	Y		
	36WF135	15 3/8"	18 3/8"			15"	Y		
45'-49'	21WF62	21WF62	1"	2 3/8"	2'-5 1/4"	-	X		
	24WF68	3 3/8"	3 3/8"			4"	Y		
	27WF84	6 3/8"	8 3/8"			7"	Y		
	30WF99	9 3/8"	10 3/8"			10"	Y		
	33WF118	12 3/8"	14 3/8"			13"	Y		
	36WF135	15 3/8"	18 3/8"			15"	Y		
49'-53'	24WF68	24WF68	1"	5 3/8"	3'-5 1/8"	-	X		
	27WF84	27WF84	1"	8 3/8"		4"	Y		
	30WF99	30WF99	1"	10 3/8"		7"	Y		
	33WF118	33WF118	1"	12 3/8"		10"	Y		
	36WF135	36WF135	1"	15 3/8"		13"	Y		
54'-57'	24WF76	24WF76	1"	5 3/8"		-	X		
	27WF84	27WF84	1"	8 3/8"		4"	Y		
	30WF99	30WF99	1"	10 3/8"		7"	Y		
	33WF118	33WF118	1"	12 3/8"		10"	Y		
	36WF135	36WF135	1"	15 3/8"		13"	Y		
55'-60'	27WF84	27WF84	1"	8 3/8"	2'-5 1/4"	-	X		
	30WF99	30WF99	1"	10 3/8"		4"	Y		
	33WF118	33WF118	1"	12 3/8"		7"	Y		
	36WF135	36WF135	1"	15 3/8"		10"	Y		
65'	27WF94	27WF94	1"	8 3/8"		-	X		
	30WF99	30WF99	1"	10 3/8"		4"	Y		
	33WF118	33WF118	1"	12 3/8"		7"	Y		
	36WF135	36WF135	1"	15 3/8"		10"	Y		
70'	30WF99	30WF99	1"	10 3/8"	2'-1 1/4"	-	X		
	33WF118	33WF118	1"	12 3/8"		4"	Y		
	36WF135	36WF135	1"	15 3/8"		7"	Y		
75'	33WF118	33WF118	1"	14 3/8"	3'-5"	-	X		
	36WF135	36WF135	1"	16 3/8"	3'-5"	4"	Y		

Use Cap 'X' for all intermediate bents



BAR LIST - PER BENT									
NO.	SIZE (IN.)	NO. REB.	IN CAP	IN CAP	LENGTH	A	B	PIV DIA	BENDING DIAGRAM
P1	8	3	3	-	25'-2"	-	-	Str.	
P1B	8	-	-	6	7'-4"	-	-	Str.	
P1b	8	-	-	3	16'-11"	-	-	Str.	
P2	6	4	4	4	25'-2"	-	-	Str.	
P3	6	4	4	4	22'-4"	13'-6"	1'-5"	2 1/4"	
P4	4	43	43	14	8'-9"	2'-1 1/2"	1'-11 1/2"	1 1/8"	
P4a	4	-	-	29	8'-9 1/2"	2'-1 1/2"	1'-11 1/2"	1 1/8"	
P5	6	12	12	6	6'-1"	2'-1 1/2"	1'-11 1/2"	2 1/4"	
P5a	6	-	-	6	6'-1"	2'-1 1/2"	1'-11 1/2"	2 1/4"	
P6	6	-	-	8	24'-0"	-	-	Str.	
P7	4	-	-	36	4'-0"	-	-	Str.	
P8	4	-	-	24	4'-0"	-	-	Str.	
P9	4	-	-	6	4'-5"	-	-	Str.	
P10	4	-	-	10	6'-3"	-	-	Str.	
P11	4	-	-	4	3'-6"	-	-	Str.	
P12	4	-	-	4	5'-10"	1'-5"	4'-2"	1 1/8"	
P13 to P17	4	-	-	200	Varies 5'-3" to 5'-5"	-	-	Str.	
P18 to P22	4	-	-	200	Varies 3'-5" to 5'-7"	2'-4"	Varies 0'-5" to 2'-7"	1 1/8"	
P23	4	-	-	4	7'-10"	-	-	3 1/4"	
P24	4	-	-	2	4'-11"	1'-3"	0'-5"	1 1/8"	
P25	6	-	-	4	10'-10"	1'-8"	3'-5"	2 1/4"	
P26	4	-	-	12	4'-0"	-	-	Str.	
P27	5	-	-	12	5'-2"	-	-	Str.	
P28	3	-	-	8	6'-1"	2'-9"	0'-6"	1 1/8"	
P29	4	-	-	2	15'-4"	-	-	Str.	

NOTE:
All concrete to be Class 5. All exposed corners to have 3/4" chamfer unless otherwise noted.
All piling shall be driven to a minimum capacity of 36 tons per pile. Piling shall be either 12BP53, 16 Desagoril Precast Concrete Piles, or Concrete Filled Metal Shell Piles as shown on Layout.
All structural steel except steel piles shall be ASTM A-36 steel.
This drawing is a modification of drawing 5340A.

DETAILS OF STANDARD PILE BENTS
FOR COMPOSITE I-BEAM SPANS
INT. SPANS 35'-50'
END SPANS 35'-75'
24' CLEAR ROADWAY 1'-0" OR 1'-1 1/2" CURBS
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
DRAWN BY L. J. F. DATE: 3-13-62
TRACED BY DATE: 4-13-62
CHECKED BY J.A.S. DATE: 4-13-62
BRIDGE NO. DATE: 4-13-62
DRAWING NO. 15010A

For Plate Girder Bridge Bending add 3" to lengths of P13-P22 increasing dimension A of P18-P22.