

DATE REVISED	DATE REVISED	DATE REVISED	DATE REVISED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3-3-82	6-3-82			6	ARK.	F-044-1(i)		
						JOB NO.	60233	8 48
				① 2967W QUANTITIES 25042				

SCHEDULE OF BRIDGE QUANTITIES - JOB 60233

BRIDGE NO. 2967W	CODE NO. X020	NAME SCOTT	PLATE BAYOU	TITLE	UNIT OF BRIDGE	ITEM NO.	801	802	** 802	804	SP* & 805	812	SP JOB 60233
						ITEM	COMMON EXCAVATION FOR STRUCTURES - BRIDGE	CLASS S CONCRETE	CLASS S(AE) CONCRETE	REINFORCING STEEL (GRADE 60)	PRECAST CONCRETE PILING (16" OCT.)	BRIDGE NAME PLATES (TYPE C)	REMODELING EXISTING BRIDGE
						UNIT	CU. YD.	CU. YD.	CU. YD.	LB.	LIN. FT.	EACH	LUMP SUM
						BENT 1	32	5.94		848	112		
						BENT 2		5.08		787	112		
						BENT 3		5.08		805	112		
						BENT 4		5.08		787	112		
						BENT 5		5.08		787	112		
						BENT 6	27	5.94		848	112		
						(2) 25'-0" R.C. SLAB END SPANS			55.84	9461		1	
						(3) 25'-0" R.C. SLAB INT. SPANS			82.66	13,977			
						TOTALS FOR JOB 60233	59	32.20	138.50	28,300	672	1	1.0

* Refers to SP 802-5
 ** Refers to SP 807-10

SCHEDULE OF BRIDGE QUANTITIES
 ENGLAND - SCOTT BR. WIDENING (HWY 165)
 PULASKI COUNTY
 ROUTE 165 SEC. 1
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: T.M.C. DATE: 1-26-82
 CHECKED BY: D.H.P. DATE: 2-2-82
 OBSERVED BY: DATE: SCALE: 1"=40'
 BRIDGE NO. 2967W DRAWING NO. 25042

DATE REVISED	DATE FILED	DATE REVISED	DATE FILED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	F-044-1(1)		
						JOB NO.	60233	18
							2967W LAYOUT	25043

GENERAL NOTES

BENCH MARK: STANDARD DISK "FAD 1934" 228" RT. STA. 438+49, ELEV. 249.025.

ALL CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

ALL PILING SHALL BE 16" OCTAGONAL PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE. ORDER LENGTH SHOWN; CUT-OFF OR BUILD-UP WILL BE PAID FOR ACCORDING TO THE STANDARD SPECIFICATIONS. **PILE LENGTHS BASED ON PILING DRIVEN IN EXISTING BRIDGE.**

PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE. THE WORK CONTEMPLATED CONSISTS OF WIDENING THE EXISTING BRIDGE ON BOTH SIDES OF THE ROADWAY. FOR REQUIREMENTS IN CONDUCTING THE WORK, SEE JOB SPECIAL PROVISION, "REMODELING EXISTING BRIDGE."

ALL DIMENSIONS RELATING TO EXISTING BRIDGE ARE TO BE VERIFIED IN THE FIELD AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING WIDENING TO EXISTING STRUCTURE. PLANS OF THE EXISTING STRUCTURE WILL BE MADE AVAILABLE TO THE CONTRACTOR UPON REQUEST. FOR SOIL INFORMATION, SEE EXISTING STRUCTURE LAYOUT.

FOR DETAILS OF WIDENING BENTS, SEE DWG. NO. 25044
FOR DETAILS OF WIDENING SPANS, SEE DWG. NO. 25045, 25046

EXCAVATION FOR STRUCTURE - DRAWING NO. 1891F

EMBANKMENT CONSTRUCTION - DRAWING NO. 1888A

GUARDRAIL CONNECTION - DRAWING NO. GR-8A

TYPE C BRIDGE NAME PLATES - DRAWING NO. 2389A

TEMPORARY PRECAST BARRIERS - 1896B

PRECAST CONCRETE PILING - DRAWING NO. 2383

APPROACH GUTTERS - DRAWING NO. 1898J

EXISTING STRUCTURE - DRAWINGS 8789, 5472, 5475

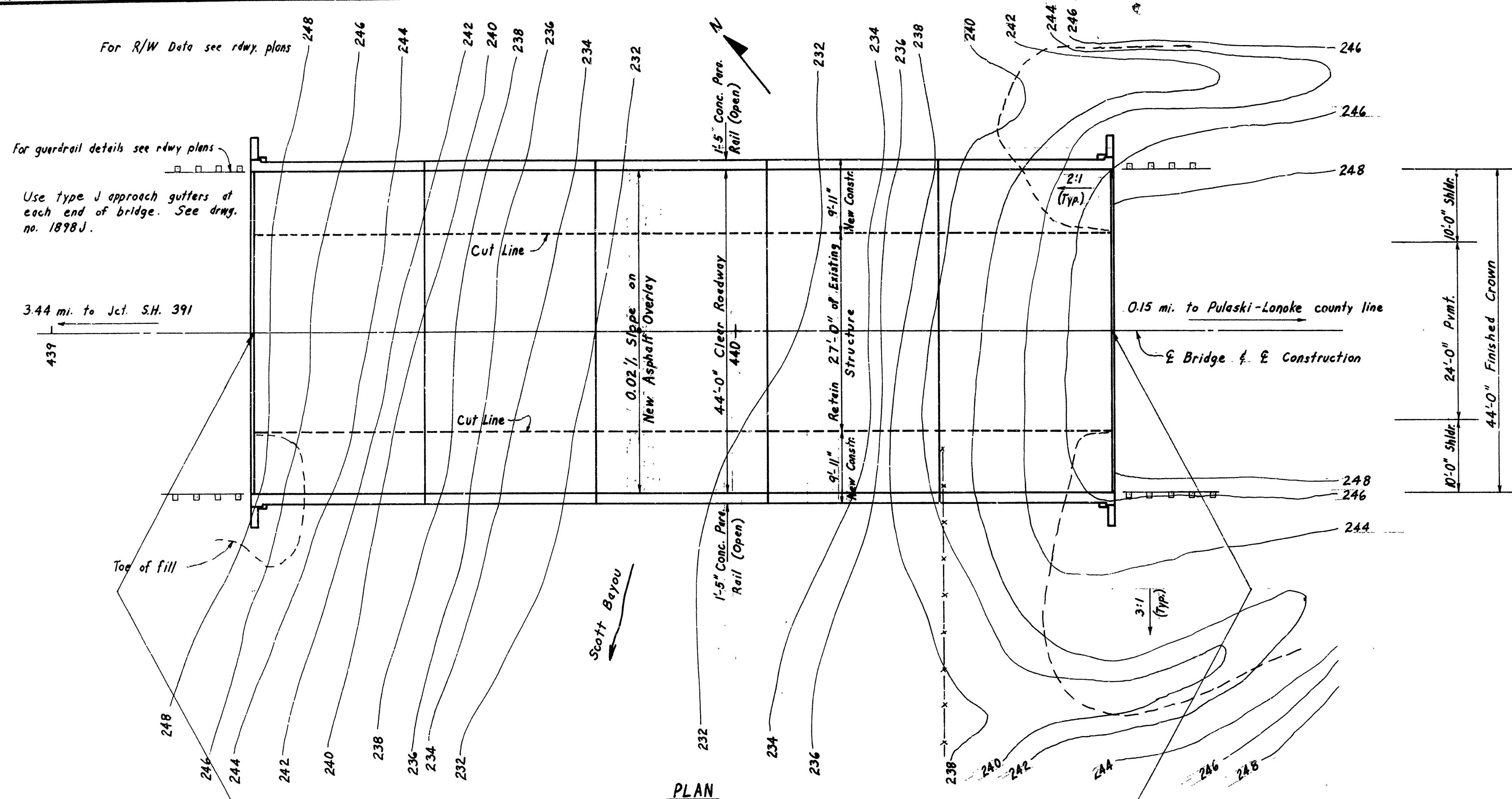
SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 WITH INTERIM SPECIFICATIONS.

LIVE LOAD: HS20 (NEW CONSTRUCTION)

METHOD OF DESIGN: (NEW CONSTRUCTION) LOAD FACTOR

3.44 mi. to Jct. S.H. 391



PLAN

Total Length of Bridge = 125'-0"

New Construction To Be 5 - 25'-0" R.C. Slab Spans

Beg. Br. Sta. 439+29.60

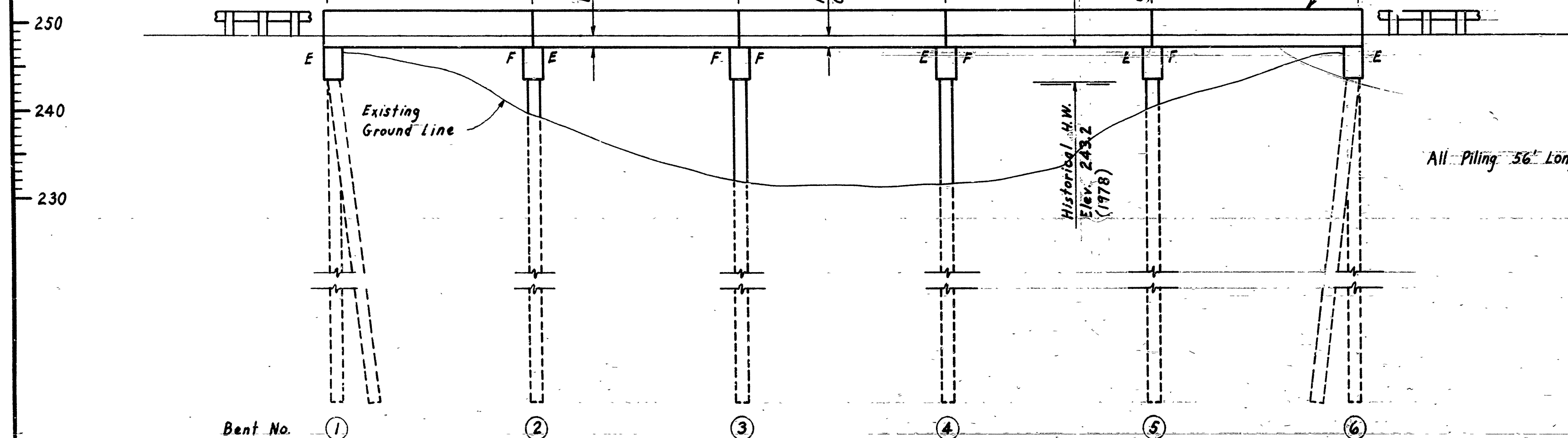
End Br. Sta. 440+54.60

Level Grade

Elev. 248.80 New Concrete Gutter

Elev. 249.37 E Deck on New Asphalt Overlay

Concrete Parapet Rail



ELEVATION

Drainage Area = 25 sq. mi.

LAYOUT OF BRIDGE OVER SCOTT BAYOU
ENGLAND - SCOTT BR. WIDENING (HWY. 165)
PULASKI COUNTY

ROUTE 165 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DESIGNED BY: M.E.C. DATE: 12-30-81

CHECKED BY: D.H.P. DATE: 1-28-82

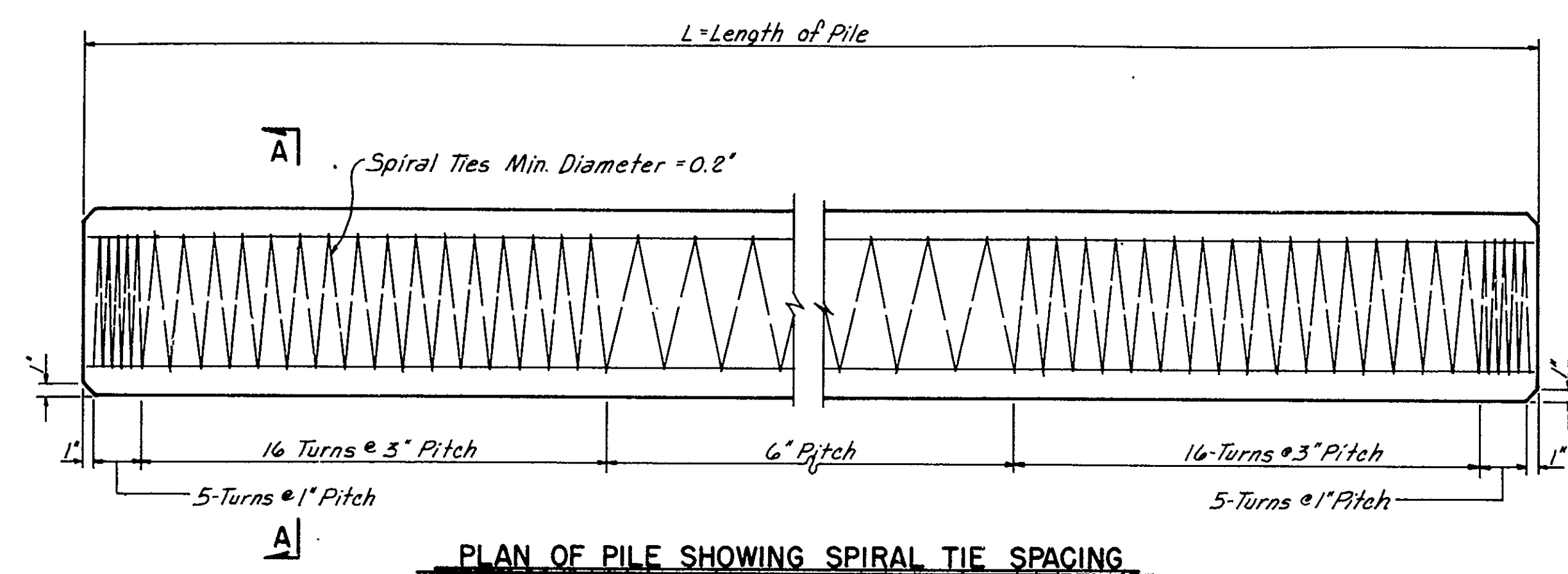
CREATED BY: M.E.C. DATE: 12-28-81

SCALE: 1" = 10'-0"

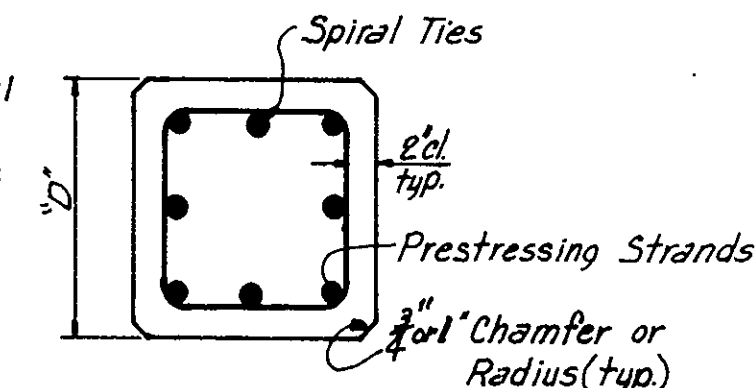
BRIDGE NO. 2967W

DRAWING NO. 25043

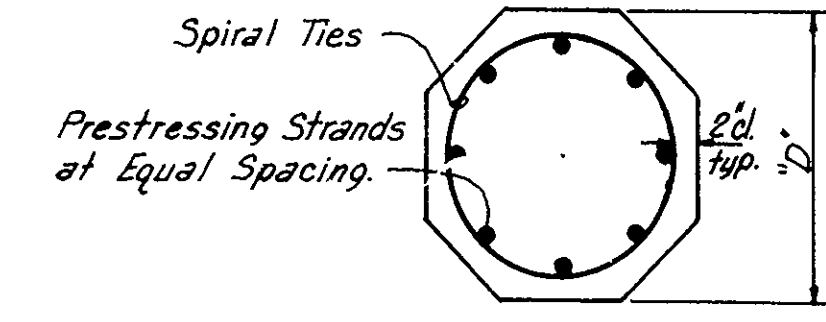
Neal Pinkerton
ENGINEER



NOTE: Strand location shall be symmetrical about the Axis of the pile with no more than one strand difference between any two adjacent sides.



SECTION A-A
SQUARE PILE



SECTION A-A
OCTAGONAL PILE

PRESTRESSED CONCRETE PILES

GRADE	STRAND DIAMETER	*NUMBER OF STRANDS PER PILE SIZE "D"						MINIMUM ULTIMATE TENSILE STRENGTH PER STRAND (LBS)	INITIAL PRESTRESSING FORCE PER STRAND (LBS)
		16" OCT.	18" OCT.	14" SQ.	16" SQ.	18" SQ.			
250	3/8"	14	18	14	16	22		20,000	14,000
	7/16"	11	13	10	12	16		27,000	18,900
	1/2"	8	10	8	10	12		36,000	25,200
270	3/8"	12	15	12	14	18		23,000	16,100
	7/16"	9	11	8	12	14		31,000	21,700
	1/2"	7	9	6	8	10		41,300	28,900

*Number Based on initial Prestress Force of 0.7 x Ultimate Tensile Stress, Prestress Losses, and Min. 700 psi Unit Prestress on concrete after Losses.

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978, AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1977 WITH 1978 INTERIMS

CONCRETE: CONCRETE IN THE PRECAST PRESTRESSED PILES SHALL BE CLASS (S)(AE) AND SHALL HAVE A MINIMUM COMPRESSIVE CYLINDER STRENGTH (f_c) OF 5000 PSI AT 28 DAYS. COMPRESSIVE CYLINDER STRENGTH AT TRANSFER OF THE PRESTRESSING FORCE SHALL BE NOT LESS THAN 4000 PSI.

CONCRETE IN BUILD-UPS SHALL HAVE A MINIMUM COMPRESSIVE CYLINDER STRENGTH (f_c) OF 3500 PSI.

PRESTRESSING REINFORCEMENT: SEVEN WIRE STRESS RELIEVED STRAND SHALL CONFORM TO THE GENERAL REQUIREMENTS OF ASTM A416. BROKEN WIRES WITHIN INDIVIDUAL STRANDS WILL BE PERMITTED UP TO 2% OF THE TOTAL NUMBER OF WIRES IN EACH PILE, PROVIDING THAT THERE IS NOT MORE THAN ONE BROKEN WIRE PER STRAND. TWO OR MORE BROKEN WIRES PER STRAND WILL BE CAUSE FOR REPLACEMENT OF THE STRAND, EVEN THOUGH THE TWO BROKEN WIRES ARE WITHIN THE 2% LIMITATION.

BUILD-UPS: TO PROVIDE FOR BUILD-UPS OF PILES WHERE AUTHORIZED BY THE ENGINEER, CONCRETE SHALL BE CUT BACK TO EXPOSE THE STRANDS FOR A DISTANCE SUFFICIENT TO PROVIDE A LAP OF 40 DIAMETERS OF THE REINFORCING BARS REQUIRED FOR BUILD-UP. REINFORCING FOR BUILD-UPS SHALL HAVE A MINIMUM AREA EQUAL TO 1-1/2% OF THE GROSS SECTION OF PILE. PLACEMENT OF BARS SHALL BE IN A SYMMETRICAL PATTERN OF NOT LESS THAN FOUR BARS. SEE SECTION 805.14 OF THE STANDARD SPECIFICATIONS.

FORMS: FOR FORMING EXTERIOR OF PILES, THE USE OF STEEL FORMS ON CONCRETE FOUNDED CASTING BEDS IS REQUIRED, UNLESS OTHERWISE APPROVED BY THE ENGINEER. SIDE FORMS MAY HAVE A MAXIMUM DRAFT ON EACH SIDE NOT EXCEEDING 1/4" PER FOOT.

TOLERANCES: PILE ENDS SHALL BE PLANE SURFACES AND PERPENDICULAR TO AXIS OF PILE WITH A MAXIMUM TOLERANCE OF 1/8" PER FOOT TRANSVERSELY.

THE MAXIMUM SWEEP DEVIATION FROM STRAIGHTNESS MEASURED ALONG TWO PERPENDICULAR FACES OF THE PILE, WHILE NOT SUBJECT TO BENDING FORCES) SHALL NOT EXCEED 1/8" IN 10' OF ITS LENGTH.

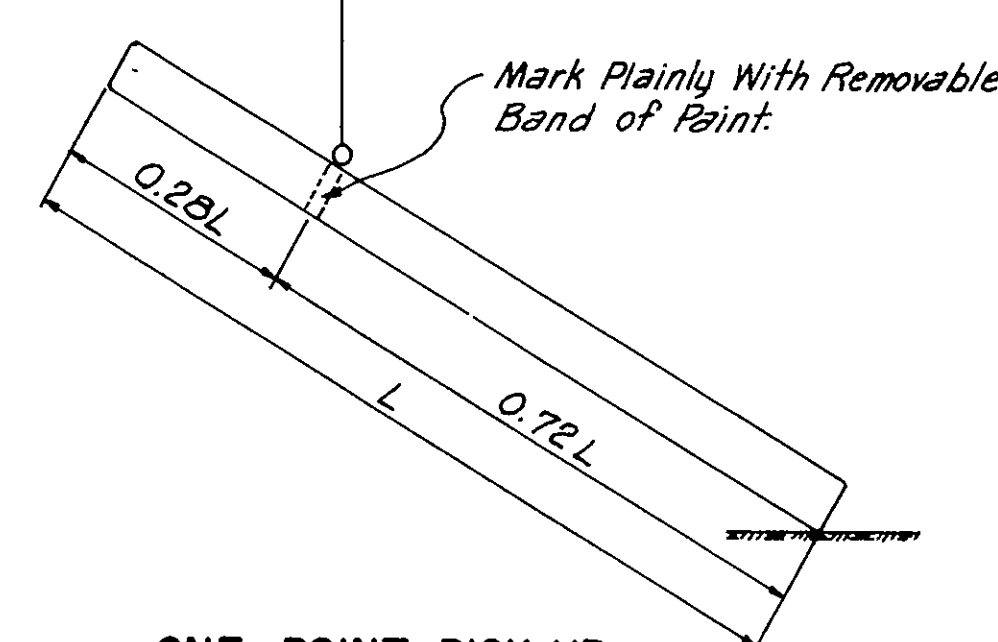
GENERAL: SHIPMENT OF PILES FROM THE PLANT SITE OR PILE DRIVING WILL NOT BE PERMITTED UNTIL THE REQUIRED MINIMUM CYLINDER STRENGTH IS REACHED, AND IN NO CASE LESS THAN 10 DAYS AFTER POURING THE CONCRETE. PILES MAY BE REMOVED FROM CASTING BED TO A NEARBY STORAGE ANY TIME AFTER TRANSFER OF STRESS.

SPIRAL REINFORCING: SPIRAL REINFORCING SHALL BE STEEL WIRE MEETING THE REQUIREMENTS OF ASTM A82 WITH A MINIMUM DIAMETER OF 0.2" OR SHALL BE PLAIN ROUND STEEL BARS MEETING THE REQUIREMENTS OF ASTM A615, WITH A MINIMUM DIAMETER OF 0.25".

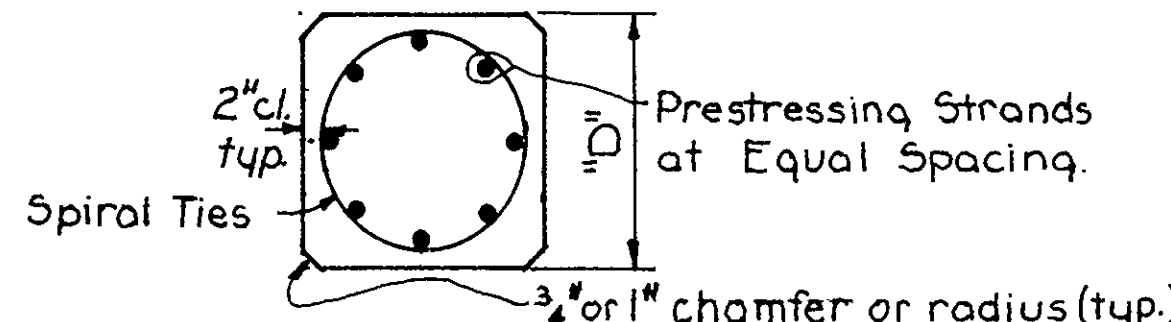
MANUFACTURE, TRANSPORTATION AND STORAGE: SEE SECTION 802 "CONCRETE FOR STRUCTURES" OF THE STANDARD SPECIFICATIONS.

INSTALLATION, MEASUREMENT AND PAYMENT: SEE SECTION 805 "BEARING PILING" OF THE STANDARD SPECIFICATIONS. PRECAST PRESTRESSED CONCRETE PILING WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER LINEAR FOOT BID FOR "PRECAST CONCRETE PILING".

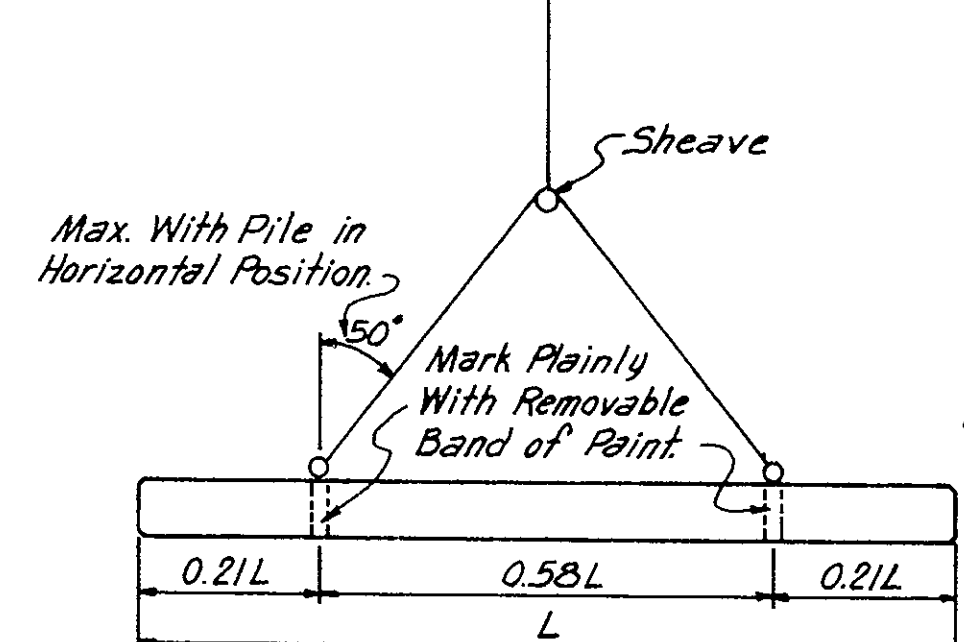
TYPE OF PICK-UP	MAXIMUM PICKUP LENGTHS L									
	PRESTRESSED		PRECAST		PRESTRESSED		PRECAST			
	16" OCT.	18" OCT.	16" or 18" OCT.	14" SQ.	16" SQ.	18" SQ.	14" SQ.	16" SQ.	18" SQ.	
ONE-POINT	52'	55'	46'	55'	59'	63'	52'	51'	55'	
TWO-POINT	75'	80'	67'	79'	84'	90'	75'	74'	79'	
THREE-POINT	105'	112'	93'	110'	117'	126'	104'	103'	111'	



ONE POINT PICK-UP



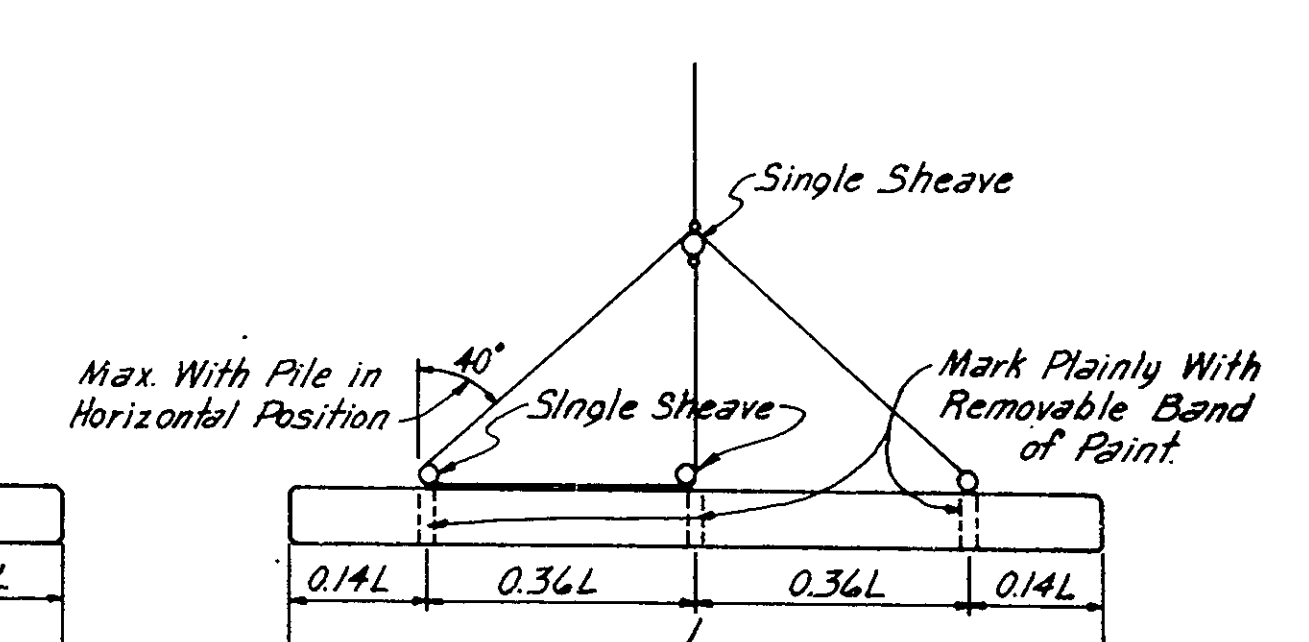
SECTION A-A
SQUARE PILE



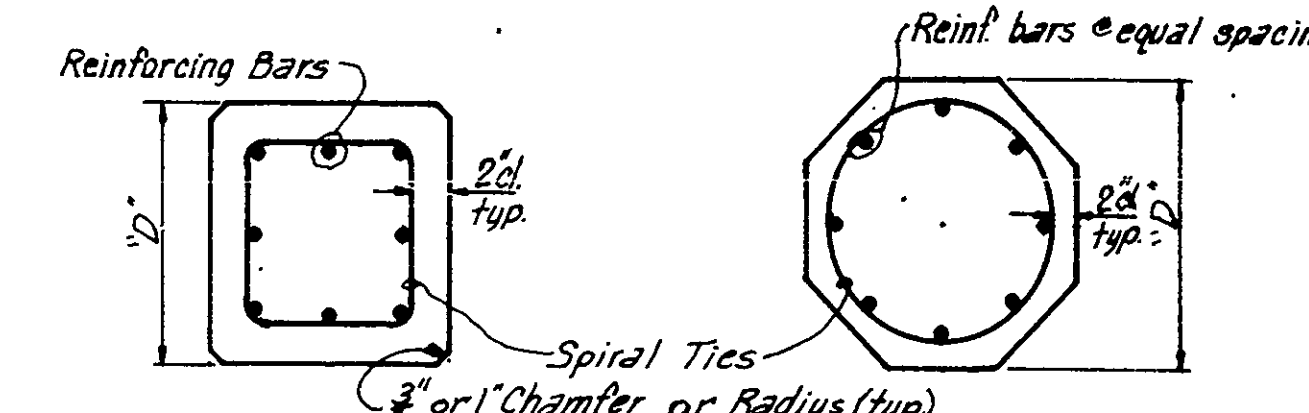
TWO POINT PICK-UP

PRECAST PILE REINFORCING

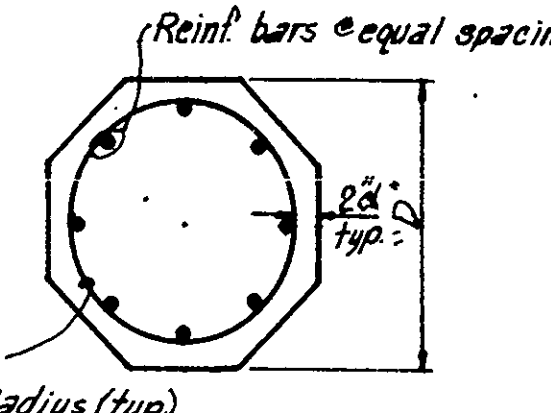
PILE SIZE	NO. REQ'D.	BAR SIZE
16" OCT.	8	#7
18" OCT.	8	#7
14" SQ.	8	#7
16" SQ.	8	#7
18" SQ.	8	#8



THREE POINT PICK-UP



SECTION A-A
SQUARE PILE



SECTION A-A
OCTAGONAL PILE

PRECAST CONCRETE PILES

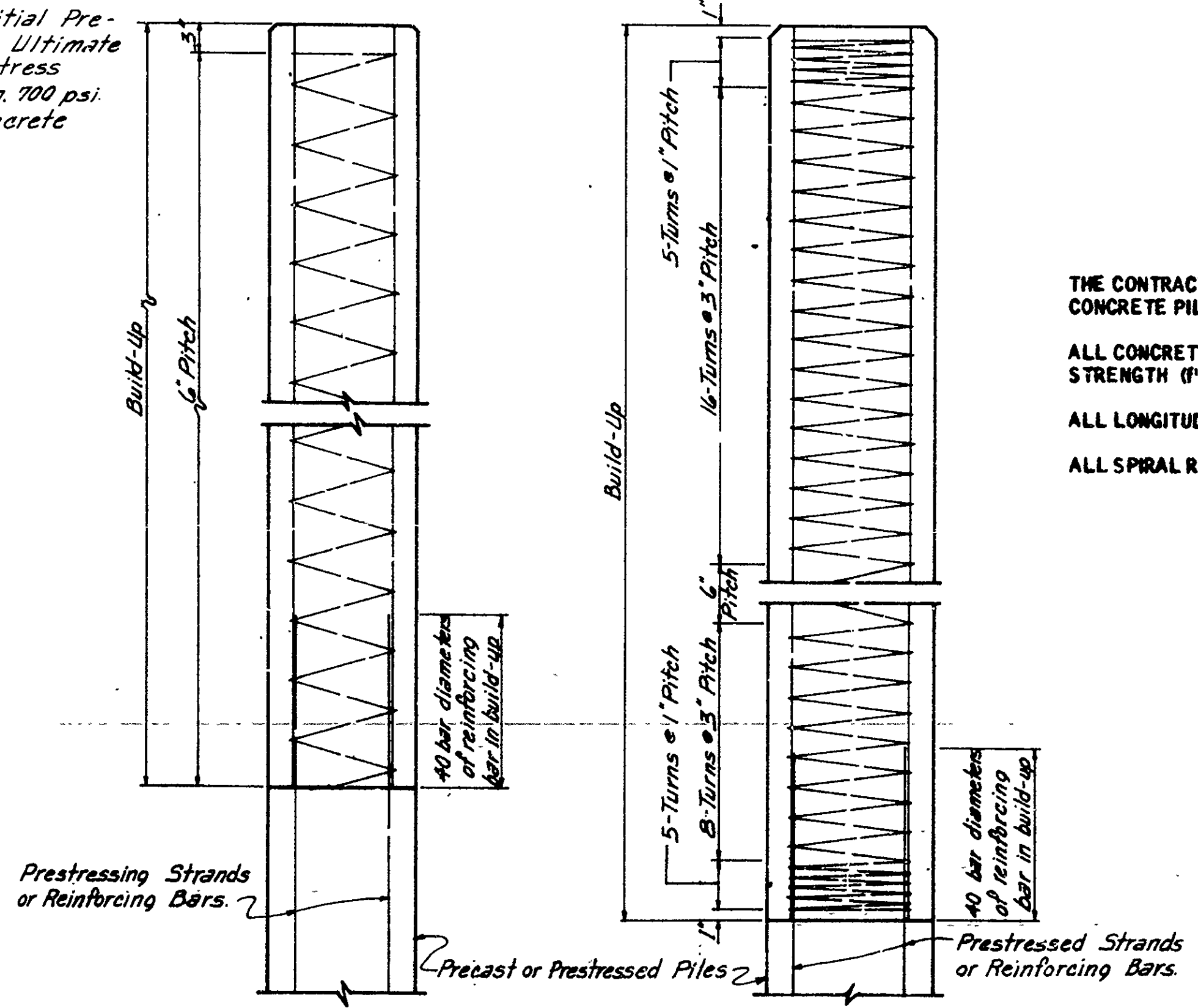
ALTERNATE PRECAST CONCRETE PILES

THE CONTRACTOR MAY ELECT TO USE A PRECAST CONCRETE PILE IN LIEU OF THE PRESTRESSED CONCRETE PILE. THE FOLLOWING NOTES APPLY TO PRECAST CONCRETE PILES.

ALL CONCRETE SHALL BE CLASS (S)(AE) AND SHALL HAVE A MINIMUM COMPRESSIVE CYLINDER STRENGTH (f_c) OF 3500 PSI AT 28 DAYS.

ALL LONGITUDINAL REINFORCING BARS SHALL BE DEFORMED BARS OF ASTM A615 OR A617.

ALL SPIRAL REINFORCING SHALL BE THE SAME AS THAT SHOWN FOR PRESTRESSED CONCRETE.



BUILD-UP
WITHOUT DRIVING

BUILD-UP
WITH DRIVING

Revised 12-2-77, Added 3/4" chamfer. Removed time before prestressing.

Revised 7-24-75, Redrawn to include Square Piles.

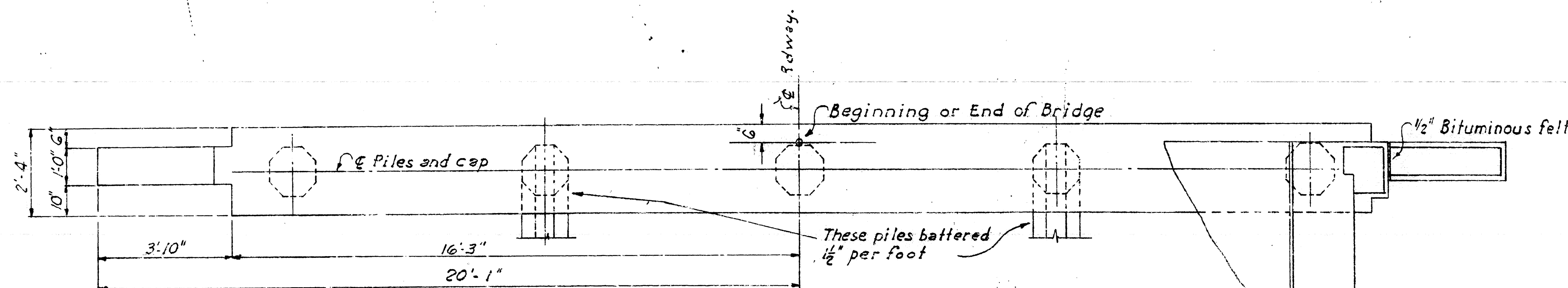
Revised for 1978 Specs. 9-15-78 K.D.N.

DETAILS OF STANDARD
CONCRETE PILES
ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: W.W.W. DATE: 7-24-75
CHECKED BY: J.E.L. DATE: 7-31-75
DESIGNED BY: J.E.L. DATE: 7-24-75

BRIDGE NO. DRAWING NO. 2383

FED ROAD No.	STATE	FED AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
G	ARK.				
STATE JOB NO.					



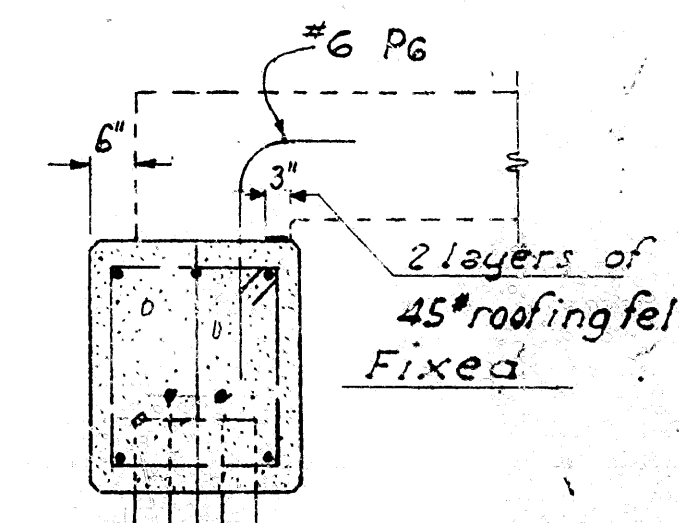
BAR LIST

NO. IN END BENT	NO. IN INTERM. BENT	MARK	SIZE #	LGTH.	A'	B	PAV DIA.
4	4	P ₂	G	34'-3	16'-6	1'-5	28
52	52	P ₄	4	8'-9	2'-4	1'-1 1/2	16
15	15	P ₅	G	6'-0	2'-4	1'-1 1/2	28
6		T ₀₂	3	6'-9	2'-8	0'-6	1 1/2
6	16	P ₆	G	3'-6	2'-5 1/2	1'-3 1/2	
4	4	P ₁	G	32'-2			
3	3	P ₃	B	32'-2			
16		P ₇	4	4'-7			
12		P ₈	4	6'-0			
8		P ₉	4	3'-0			
4		P ₁₀	4	5'-0			
12		T ₀₁	5	4'-3			

BENDING DIAGRAM

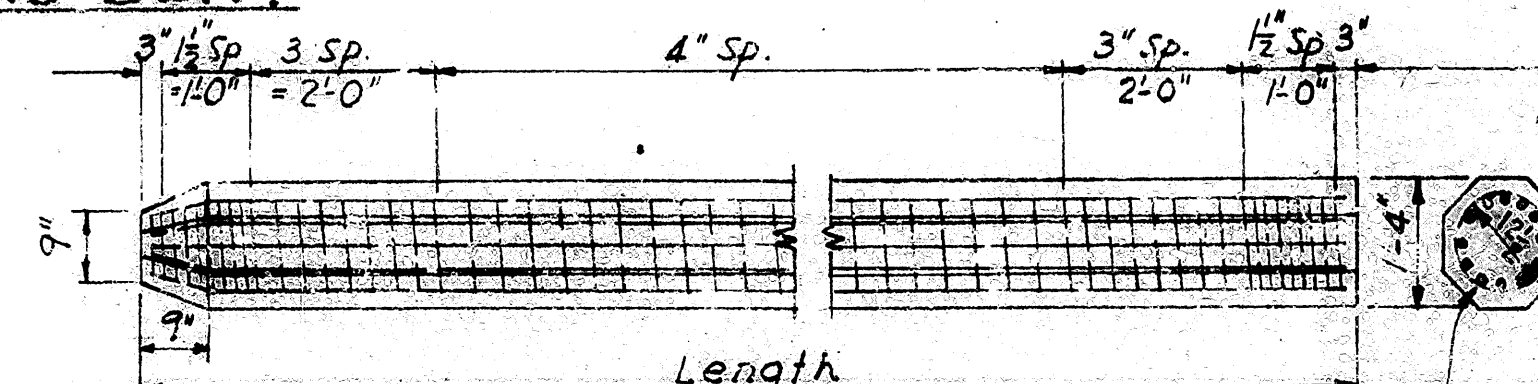
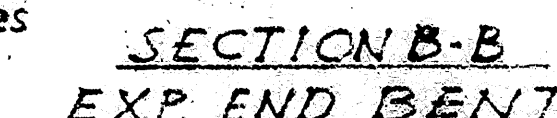
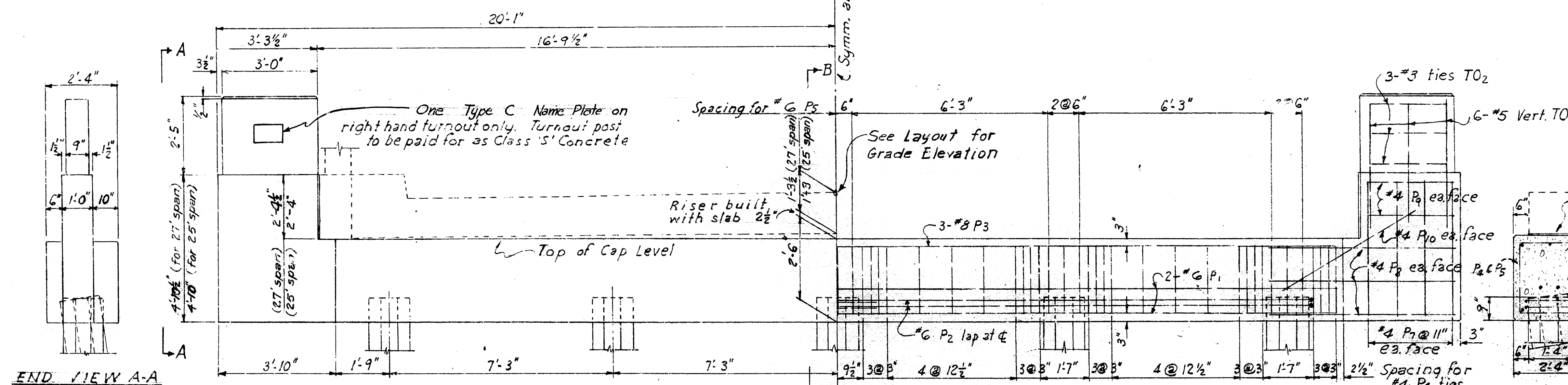
Dimensions to ctrs of bars

*** At Fixed-Exp. bent *** At Fixed-Fixed bent
 Lay out for location of
 Fixed ends
 ** At Fixed end
 * At Exp. end



SECTION B-6
FIXED END BENT

NOTE:
All concrete to be Class 'S'.
For additional General Notes and details
of slab spans. See Dwg. 5471 for 27' span
and Dwg. 5475 for 25' span.



Reinf. Vertical Bars $\begin{cases} 8\text{-}\#6\text{ lengths to }35' \\ 8\text{-}\#7\text{ lengths }35'\text{ to }45' \end{cases}$ Spiral #4 Wire
For lengths over 45' add 4-#6 bars in middle third of length.

DETAILS OF 16" PRECAST CONCRETE PILES

Drive piles to a min. bearing of 34 Tons Int. Ben.
34 Tons End Ben.
E: See Dwg No. 2382 & Layout for Pile Details & Notes.

NOTE: See Dwg No. 2382 & Layout for Pile Details & Notes

Revised 9-15-53 WWM
to include 25' span

Rev. for Superlevation 3-7-55 F.R.B.

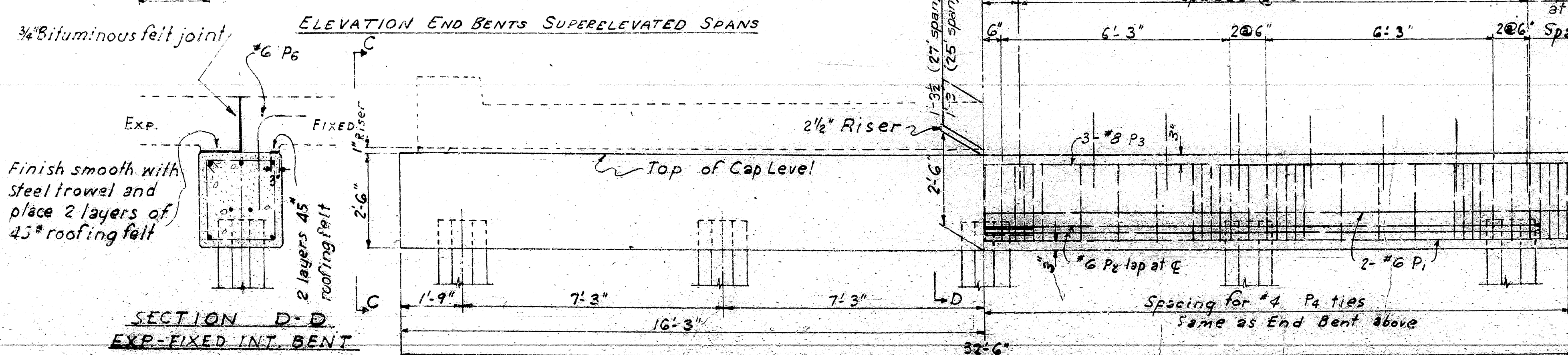
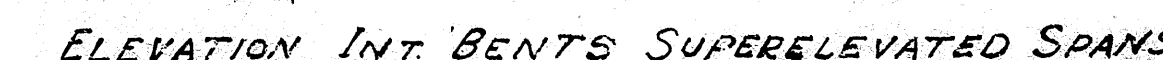
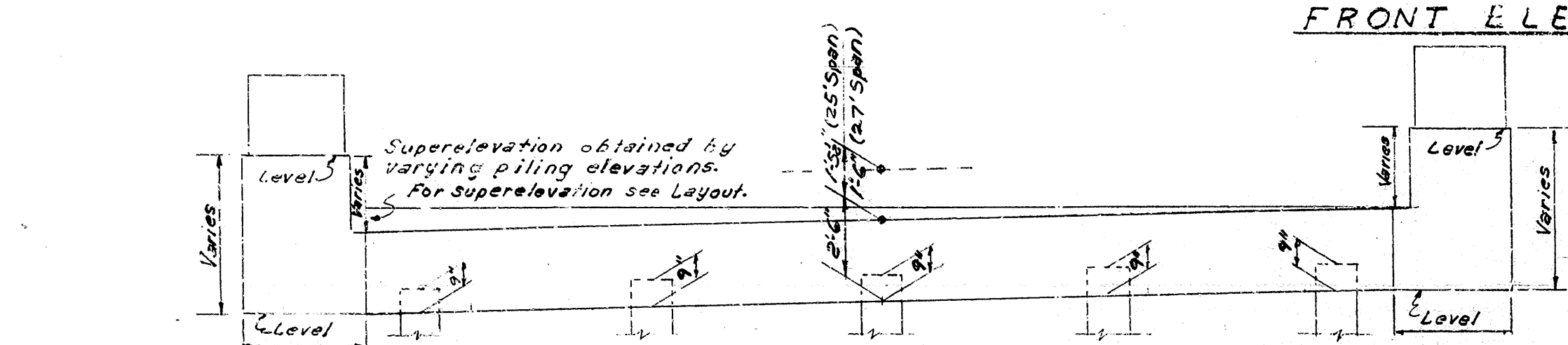
Revised Reinf. bar numbers and lengths. 12-3-58 FDI
Revised Mile Notes 6 Jun 60 B.M.

STANDARD DETAILS OF

REINF. CONC. PILE BENTS

FOR 25'-0" & 27'-0" REINF CONC SLAB SPANS
28'-0" CLEAR ROADWAY 2 CURBS @ 1'-6"

ARKANSAS STATE HIGHWAY COMMISSION



SECTION D-D
FIX-FIX INT. BEN

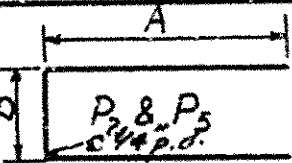

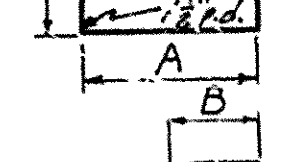
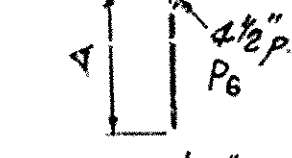
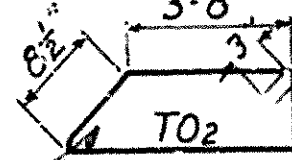
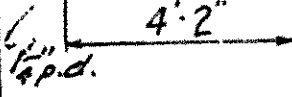
APPROVED B

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CONFIDENTIAL

DRAWING NO. 5

[illegible]

BAR LIST							Bending Diagram	
No./N END BENT	No./N INT. BENT	Mark	Size #	Length	A	B		
4	4	P ₂	G	46"7	22-7½"	1'-5"		
70	70	P ₄	G	8'-9"	2'-1½"	1'-11½"		
18	18	P ₅	G	6'-1"	2'-1½"	1'-11½"		
23# ^{23#} or 46#		P ₆	G	3'-8"	2'-5½"	1'-3½"		
6		TO ₂	3	9'5"	See Diagram			
4	4	P ₁	G	46'-11"				
3	3	P ₂	E	46'-11"				
22		P ₇	4	4'-7"				
12		P ₈	4	6'-6"				
2		P ₉	4	4'-3"				
2		P ₁₀	4	4'-11"				
2		P ₁₁	4	4'-7"				
2		P ₁₂	4	4'-0"				
15		TO ₁	5	4'-3"				

* Omit at Exp. Ends of Spans
Dimensions are to centers of bars

Hand-drawn structural drawing of a bridge cap and piles. The drawing shows a cross-section of a bridge cap with various dimensions and reinforcement details. Key features include:

- Cap Dimensions:** Total width 4'-6 $\frac{1}{8}$ "", depth 4'-0".
- Reinforcement:**
 - 2-#4 P₁₁ (Fr. face)
 - 2-#4 P₁₂ (Bk. face)
 - #4 P₈ (Each face)
 - 5-#4 P₁₃ @ 12"
 - 6-#4 P₁₇ @ 11"
 - 3-#8 P₃
 - 2-#6 P₆
 - 2-#6 P₁
 - 5-#4 P₇ @ 12"
 - 6-#4 P₁ @ 12"
- Piles:** 4-1 $\frac{1}{2}$ " diameter piles, 8'-3" spacing, 4'-1 $\frac{1}{2}$ " from cap centerline.
- Notes:**
 - "Place Type C Standard Bridge Name Plate on right-hand turnout. Turnouts to be paid for as Cl. 5" Concrete"
 - "Cap only Symm. about & Bent"
 - "See Layout for Grade Elevation"
 - "Sp. for #4 ties P₄"
- Dimensions along centerline:** 5'-0", 3'-0", 8'-3", 8'-3", 4'-1 $\frac{1}{2}$ ", 7'-2 $\frac{1}{2}$ ", 20'-6", 7'-3", 20'-6", 3 $\frac{1}{2}$ " Sp. for #4 ties P₄.

The drawings show the roof structure from two perspectives:

- END VIEW:** A side elevation showing the roof's profile. The total width is 2'-4". The roof height is 2'-5". The roof slope is 1/2". The roof is supported by 1 1/2" in 12" Batter Piles 285. The roof is fixed at the base.
- EXP. END BENT:** A cross-section view showing the roof's internal structure. The roof is 2'-6" high. The roof is supported by 1 1/2" in 12" Batter Piles 285. The roof is fixed at the base. The roof is labeled "2 layers 45° roofing felt".

Diagram illustrating a roof joint construction. The joint is labeled $\frac{1}{4}"$ Bituminous Felt joint. The construction shows 2 layers 45° roofing felt. The diagram includes labels for EXP, FIXED, and dowels P. Dimensions shown are 2' 6" and 2' 4".

A schematic diagram of a fixed-fixed internal bent section. It shows a vertical column with a horizontal beam attached. The column is fixed at both ends, indicated by the word "FIXED" on either side. The beam is bent at a 90-degree angle. Labels include "dowels" pointing to the top of the column, "Pg Const. Joint" pointing to the joint between the column and the beam, and "2 layers rooin" (likely roof) pointing to the top of the beam. The diagram is labeled "SECTION D-D" and "FIXED-FIXED INT. BENT".

The drawing shows the elevation of an intermediate bent. Key dimensions and features include:

- Top of cap level:** Indicated by a horizontal line across the top of the bent.
- Reinforcement:** Vertical bars are shown within the bent. A note states: "Reinf. steel and spacing same as in End Bent above".
- Dimensions:**
 - Horizontal dimensions from left to right: 3'-0", 8'-3", 8'-3", 4'-1 1/2".
 - Vertical dimensions on the right side: 1'-6" (21' span), 1'-5 1/2" (25' span), and 2'-6".
 - Overall horizontal dimension at the bottom: 47'-3".
- Notes:**
 - "Symm. about C of Bent" (Center of Bent).
 - "Spacing for #6 dowels P_c at Fixed Ends only".
 - "11 spaces @ 2'-0"
 - "See Layout for Grade Elevation"

ELEVATION INTERMEDIATE BENT

GENERAL NOTES:
 4" concrete to be Class 'S'.
 Drive piles to a minimum bearing of 34T per pile Interm.bents
 34T per pile End bents
 For additional Notes and Details of Slab spans see
 drawings No. 5472 & No. 5473 & No. 5475.
 For details of precast concrete piles see Dwg. No. 132
 Revised 2-18-54 WWM
 to include 25'-0" span

Revised for 12" high curbs
on spans R45. 12-15-60
Revised: removed panels on end
benches, changed bar designation
and lengths, eliminated pile detail
E.R.B. 12-29-60

STANDARD DETAILS OF
SIX R.C. PILE BENTS 45° SKEW
FOR 25'-0" & 27'-0" R.C. SLAB SPANS
28'-0" CLEAR ROADWAY
2'-6" CURBS 12" HIGH

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

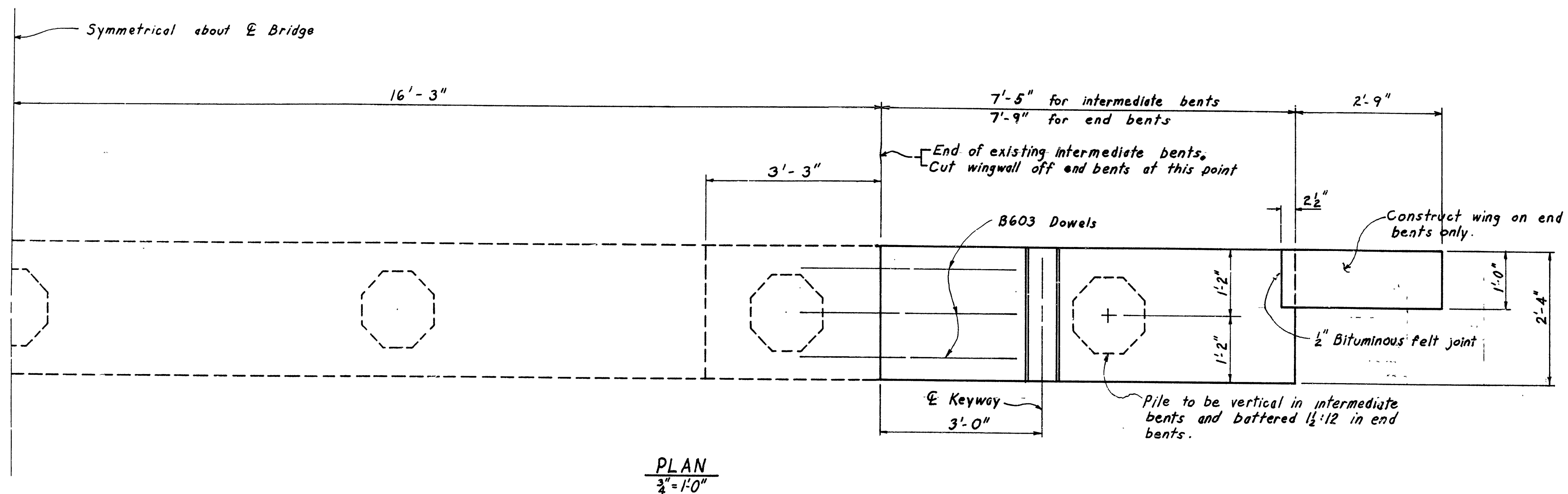
Drawn By: FAW Date: 4-8-52
 Traced By: KFC Date: 7-7-55 Chkd. R.S.: 7-7-55
 Checked By: JH Date: 4-16-52

Scale: $\frac{1}{4}'' = 1'$
and as noted

DRAWING NO. 5474

DRAWING NO. 5474

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	F-044-1(1)		
				JOB NO.		60233	19	48
						2967W BENTS		25044



BAR LIST PER BENT

Mark	No. Req'd.	Length		Pin Dia.	Bending Diagrams
		Int. Bent	End Bent		
B601	12	7'-1"	7'-5"	Str.	
B602	24	10'-4"	10'-8"	Str.	
B603	6	4'-0"	4'-0"	Str.	
B401	10	7'-2"	7'-2"	2"	
B402	18	11'-2"	11'-2"	2"	
B403	4	7'-1"	7'-5"	Str.	
B404	6	8'-2"	8'-2"	2"	
B405	*	2'-7"		Str.	
B406	8		2'-7"	Str.	
B407	12		2'-8"	Str.	
B408	8		4'-5"	Str.	

Bending Diagrams

2'-0" 2'-0" 2'-0"

1'-2" 3'-2" 3'-2"

7/8" (Typ) 7/8" (Typ)

B401 B402 B404

Dimensions are out to out of bars.

* 10 for bents 2, 4, & 5; 20 for bent 3

GENERAL NOTES:

ALL CONCRETE TO BE CLASS S AND SHALL BE FOURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED $\frac{3}{4}"$ UNLESS OTHERWISE NOTED.CONCRETE STRENGTH: MINIMUM 28 DAY COMPRESSIVE STRENGTH $f'_c = 3500$ PSI.REINFORCING STEEL TO BE ASTM A615 OR A617, GRADE 60 (YIELD STRENGTH, $f_y = 60,000$ PSI).

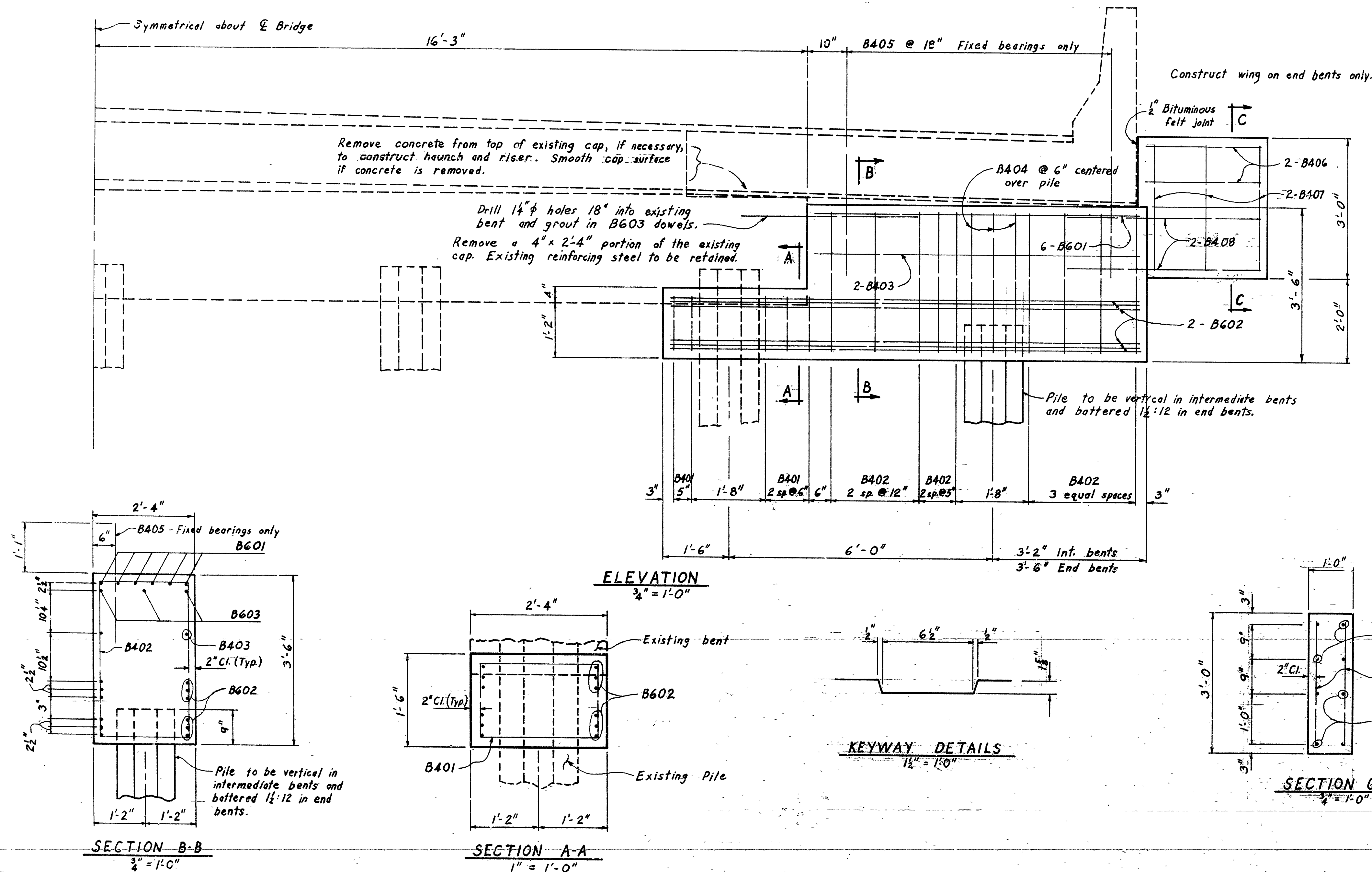
SHOP LISTS AND BENDING DIAGRAM MAY BE SUBMITTED FOR APPROVAL BEFORE FABRICATION IS BEGUN.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1977 SPECIFICATIONS FOR HIGHWAY BRIDGES, WITH INTERIM SPECIFICATIONS.

LIVE LOAD: HS20

METHOD OF DESIGN: LOAD FACTOR

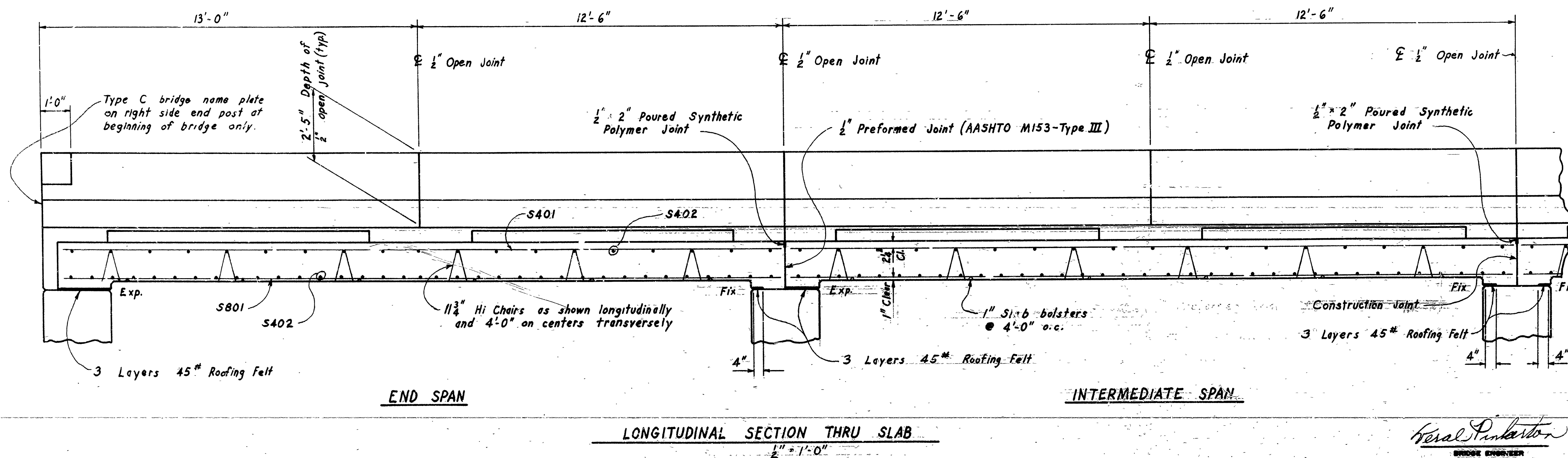
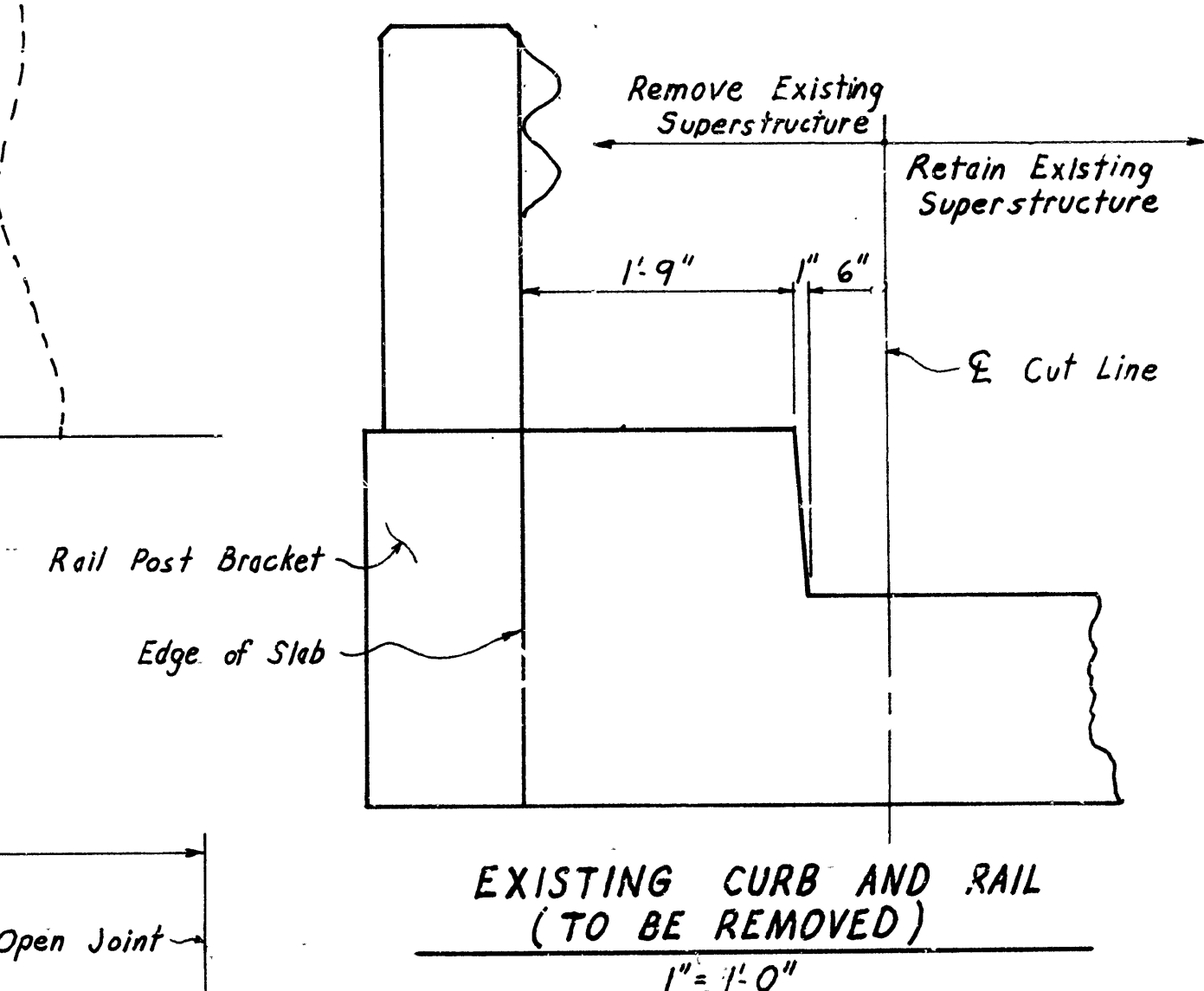
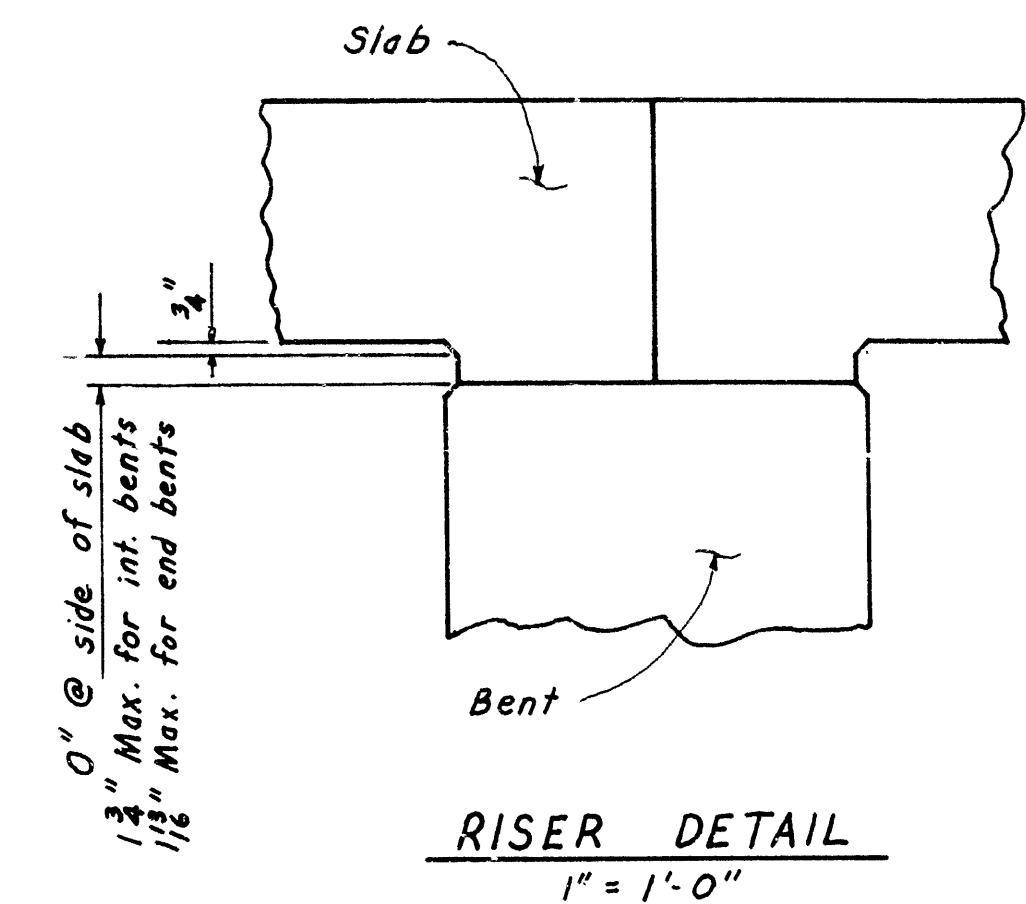
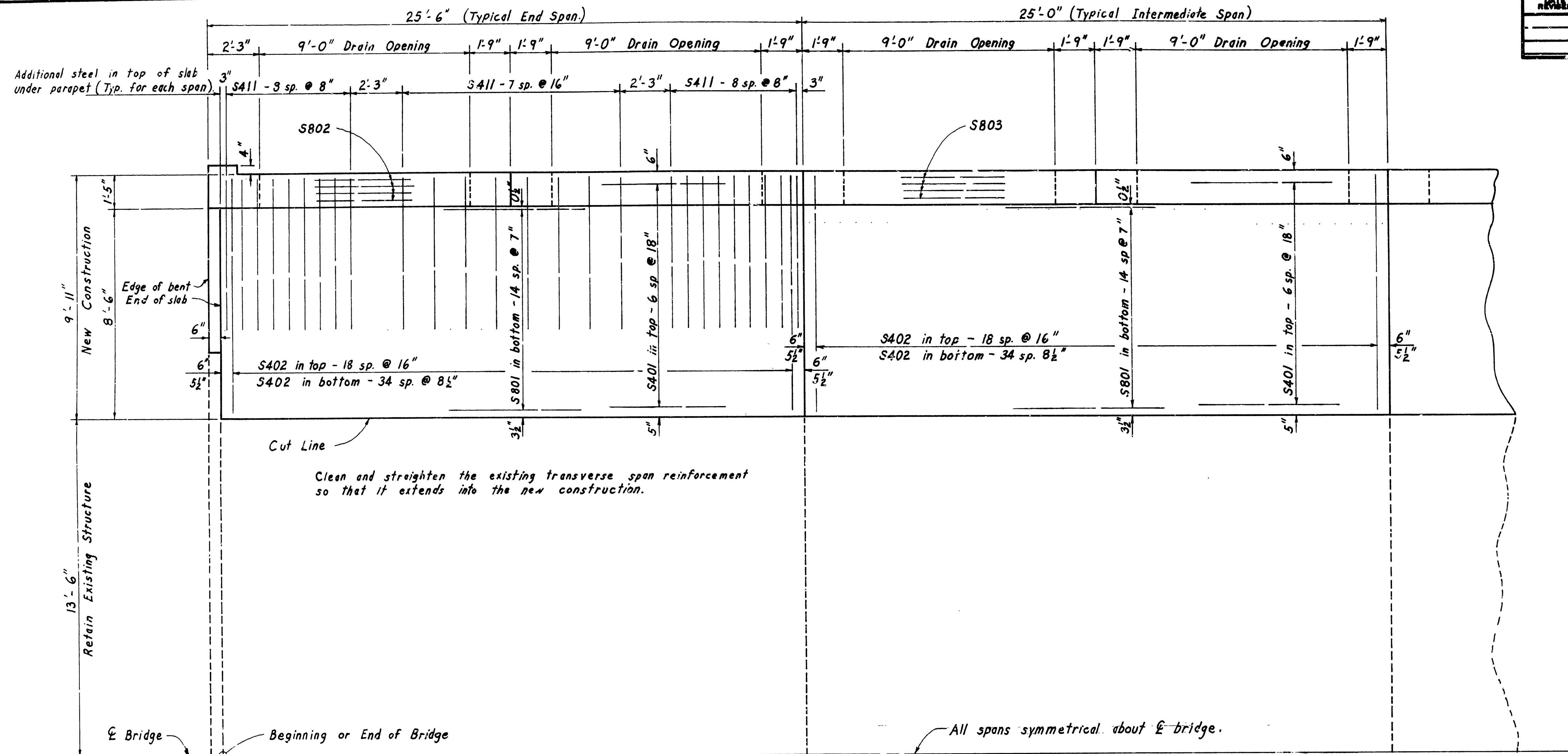


DETAILS OF WIDENING BENTS
ENGLAND-SCOTT BR. WIDENING (HWY 165)
PULASKI COUNTY
ROUTE 165 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MEC DATE: 1-22-82
CHECKED BY: D.H.P. DATE: 1-28-82
DESIGNED BY: MEC DATE: 1-6-82

BRIDGE NO. 2967W DRAWING NO. 25044

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	F-044-1(1)		
				JOB NO.		60233	20	48
				2967W		SPAN	25045	



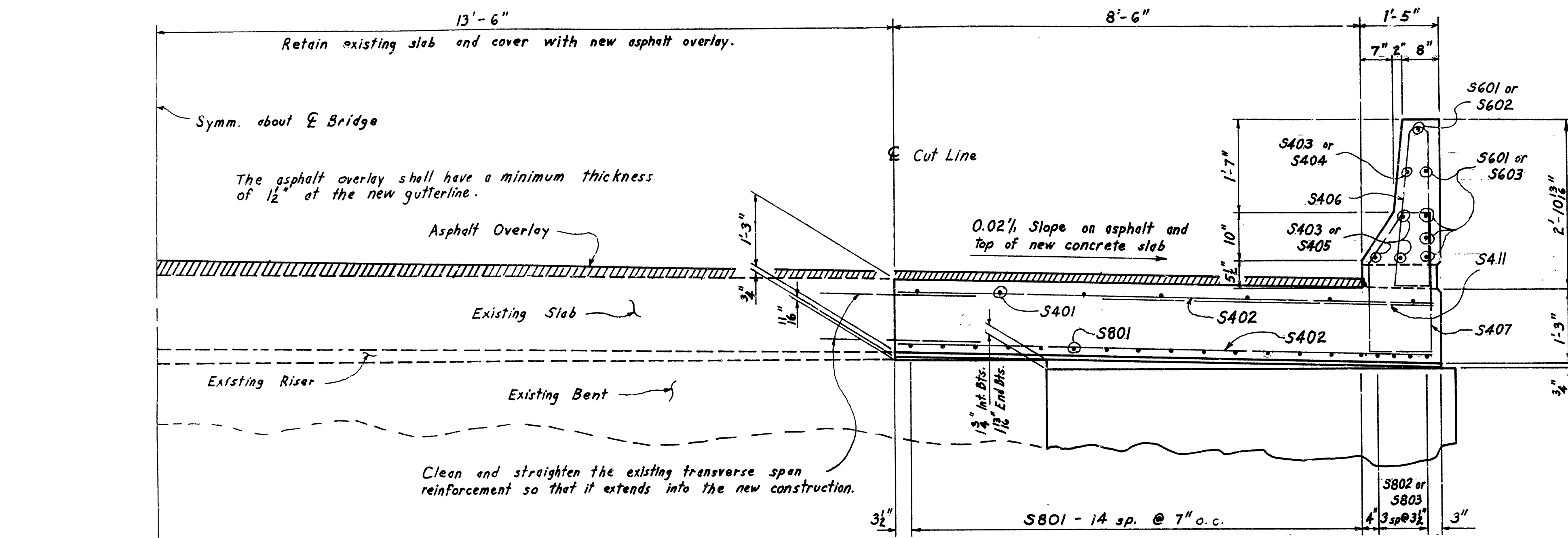
ix

SHEET 1 OF 2
DETAILS OF WIDENING 25'-0" SPANS
PULASKI COUNTY
ROUTE 165 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

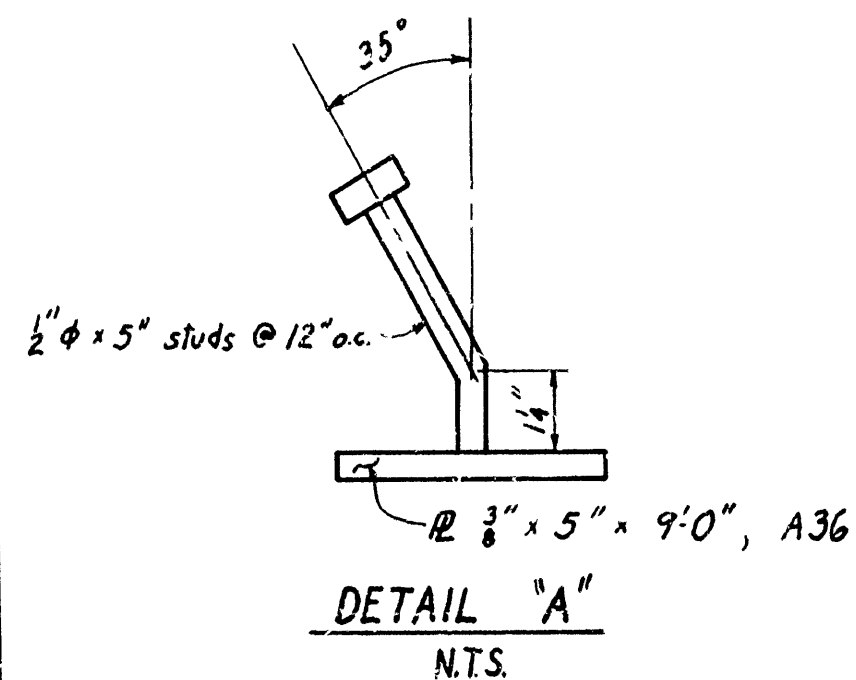
DRAWN BY: MEC DATE: 1-8-82
CHECKED BY: D.H.P DATE: 1-28-82 SCALE: As Noted
DESIGNED BY: MEC DATE: 1-6-82

BRIDGE NO. 2967W DRAWING NO. 25045

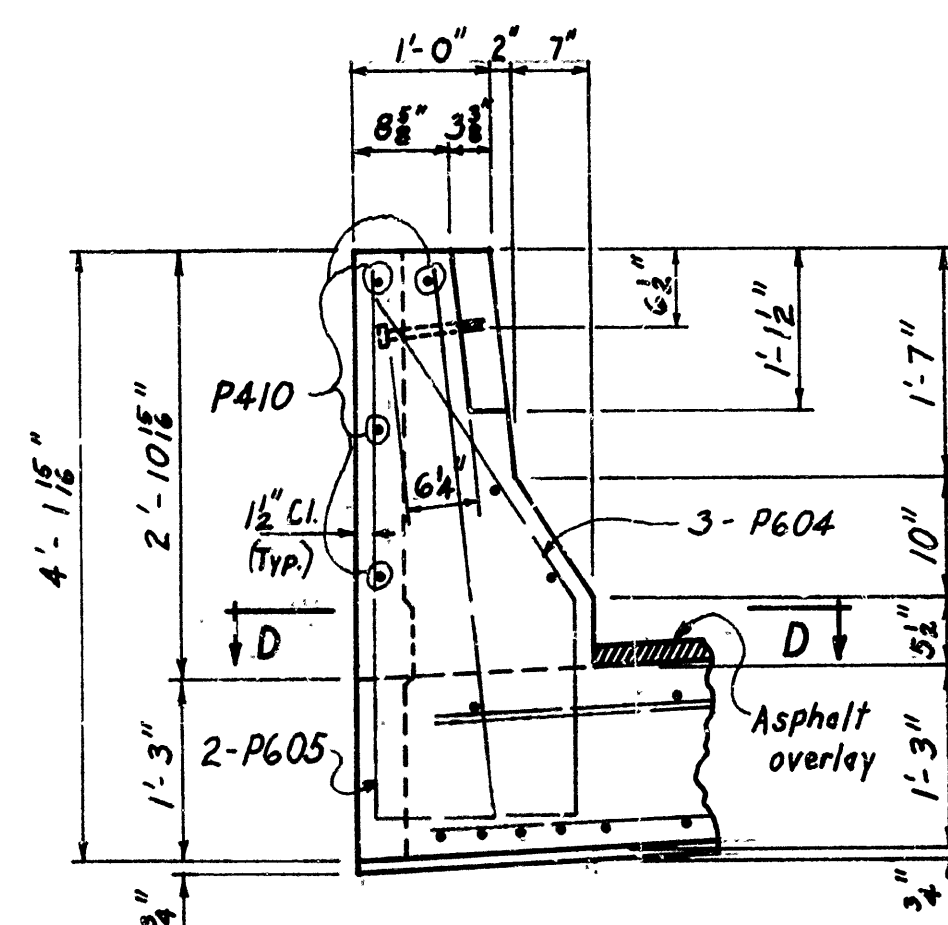
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	F-044-1(1)		
				JOB NO.		60233	21	48
				2967W	SPAN	25046		



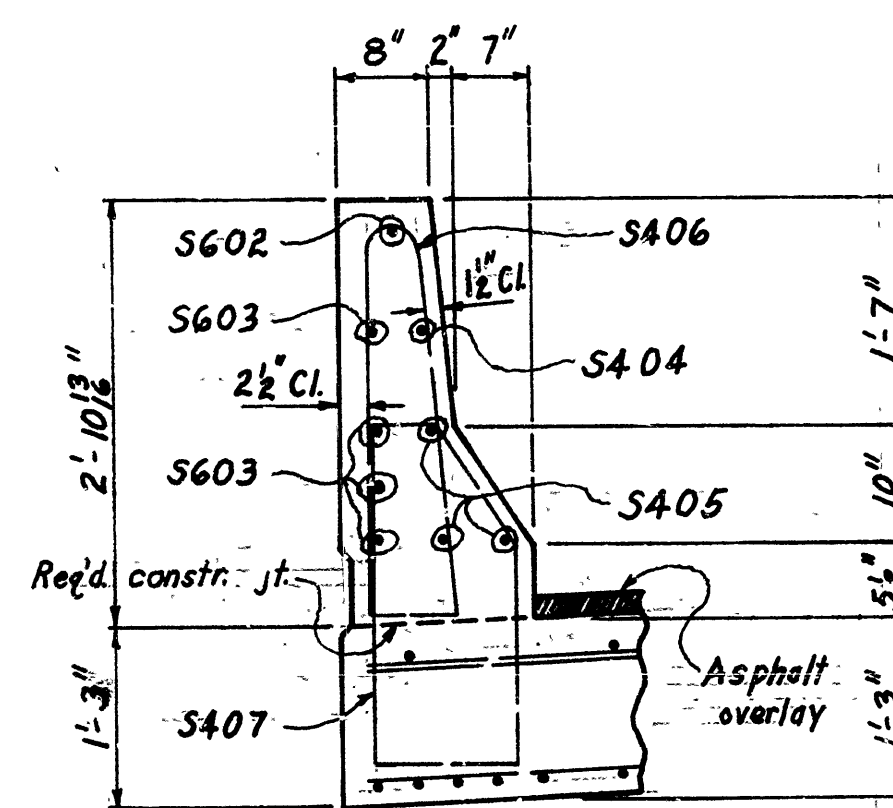
HALF SECTION THRU ROADWAY

 $\frac{3}{4}'' = 1'-0''$ 

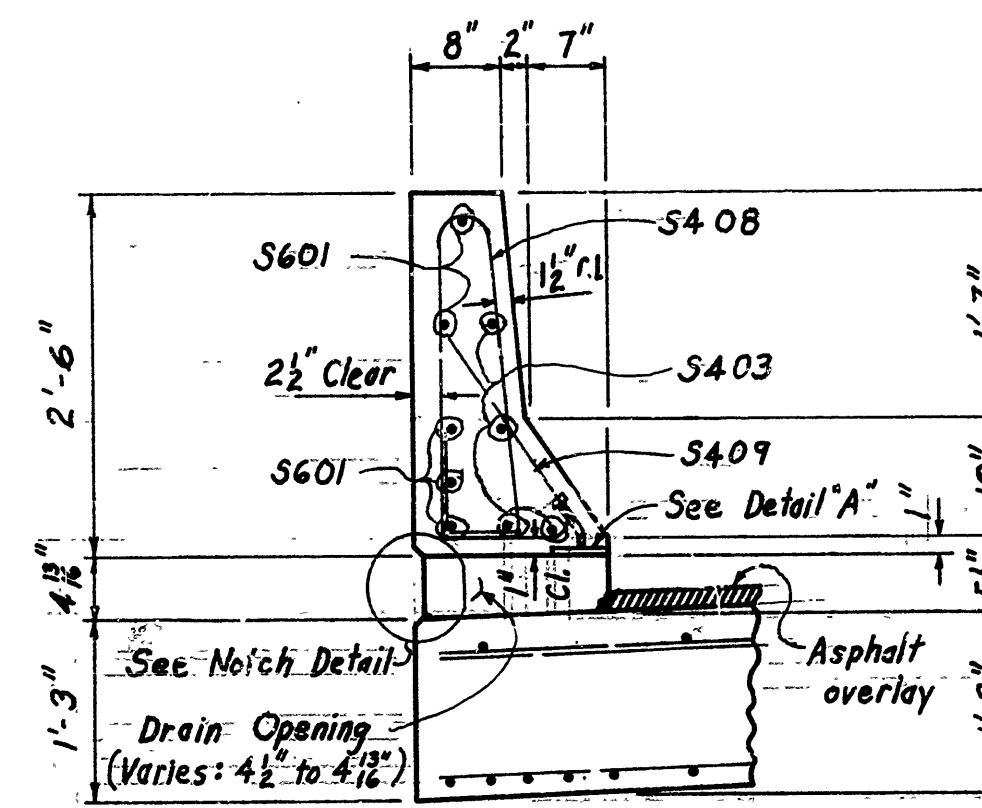
The surfaces of the $\frac{3}{8}''$ plates which will not be in contact with concrete shall receive two coats of paint in the shop. The coats shall be those specified as first Shop Coat and Second Field Coat in sub-sections 807.59 (a) & 807.59 (c). For alternate point system see Special Provision 807-10. Studs shall be 5" long, granular flux filled, solid fluxed, or equal and automatically end welded to plate. Studs and plates to be measured and paid for as Class S(AE) Concrete. Structural steel shall meet the requirements of section 807 except as noted.



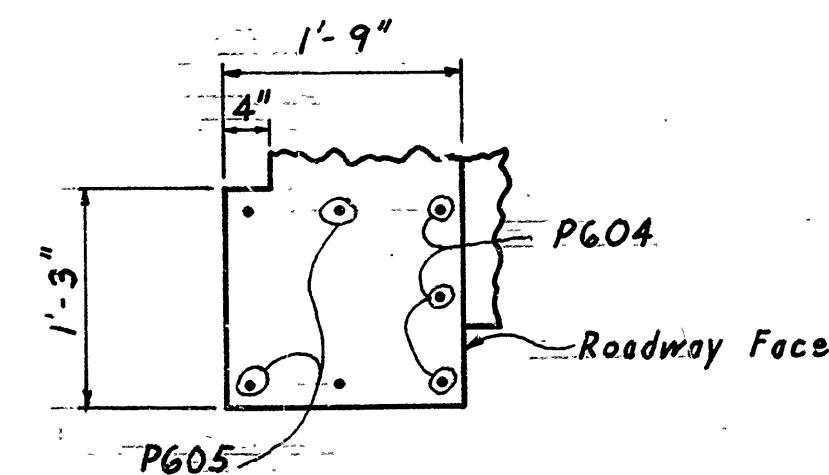
VIEW A-A

 $\frac{3}{4}'' = 1'-0''$ 

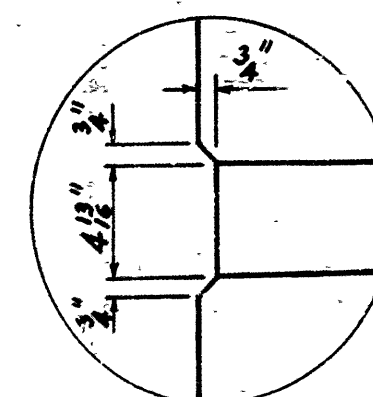
SECTION B-B

 $\frac{3}{4}'' = 1'-0''$ 

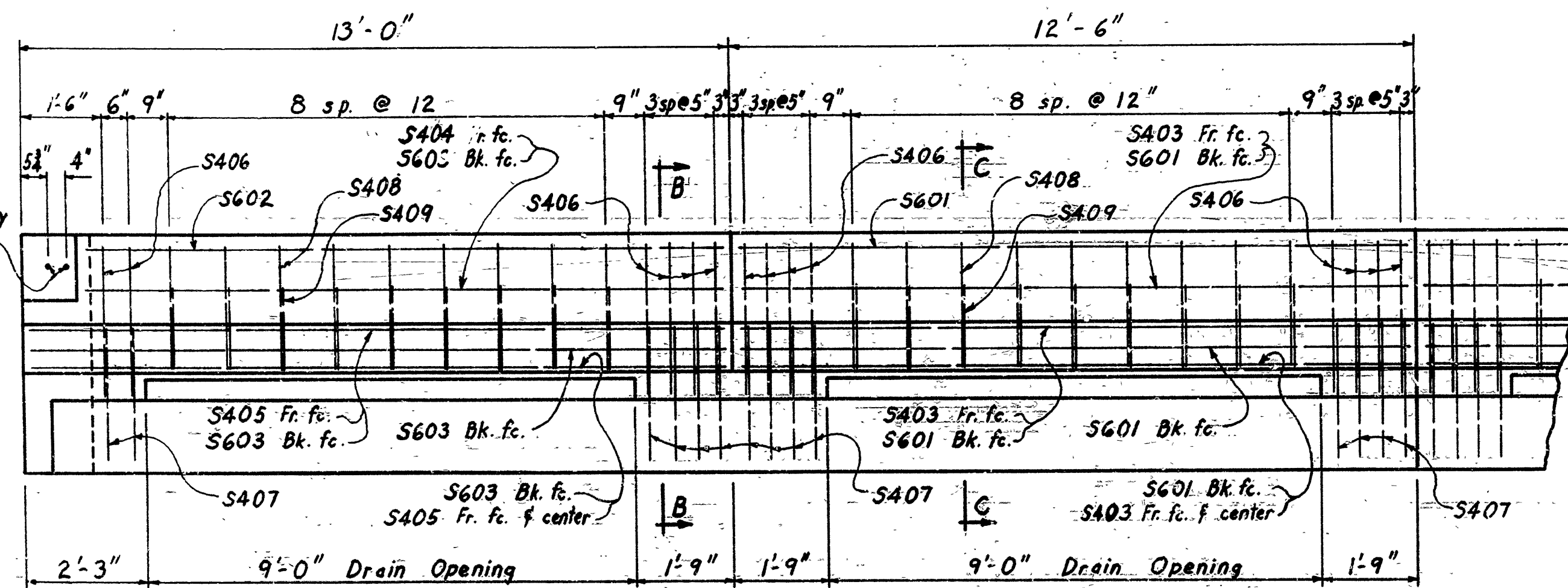
SECTION C-C

 $\frac{3}{4}'' = 1'-0''$ 

SECTION D-D

 $\frac{3}{4}'' = 1'-0''$ 

NOTCH DETAIL

 $\frac{1}{2}'' = 1'-0''$ 

TYPICAL END PANEL

TYPICAL INT. PANEL

LONGITUDINAL SECTION AT GUTTER

 $\frac{1}{2}'' = 1'-0''$

BAR LIST PER SPAN

Mark	No.	Req'd.	Length	Pin Dia.	Bending Diagrams
S401	14	14	24'-7"	Str.	
S402	108	108	9'-8"	Str.	
S403	8	16	12'-1"	Str.	
S404	2	-	11'-7"	Str.	
S405	6	-	12'-7"	Str.	
S406	28	32	7'-1"	2"	
S407	28	32	7'-4"	2"	
S408	36	36	6'-4"	2"	
S409	36	36	3'-2"	2"	
P410	8	-	0'-11"	Str.	
S411	52	52	6'-0"	Str.	
S601	10	20	12'-1"	Str.	
S602	2	-	11'-7"	Str.	
S603	8	-	12'-7"	Str.	
P604	6	-	4'-7"	3 3/4"	
P605	4	-	7'-11"	3 3/4"	
S801	30	30	24'-7"	Str.	
S802	8	-	25'-1"	Str.	
S803	-	8	24'-7"	Str.	

Dimensions are out to out of bars.

GENERAL NOTES

ALL CONCRETE TO BE CLASS S(AE). ALL EXPOSED CORNERS TO BE CHAMFERED $\frac{3}{4}''$ UNLESS OTHERWISE NOTED.

REINFORCING STEEL TO BE ASTM A615 OR A617, GRADE 60. BAR SUPPORTS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL."

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, AND SYNTHETIC POLYMER JOINTS SHALL BE MEASURED AND PAID FOR AS CLASS S(AE) CONCRETE.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1977 AND INTERIMS.
DESIGN LIVE LOADING: HS20

LOAD DISTRIBUTION TO SLAB: DEAD LOAD (SLAB & OVERLAY) = 208 PSF
RAIL DEAD LOAD = 362 LB/FT. LINE LOAD AT CENTER OF SPAN
LIVE LOAD = 0.184 WHEELS/LT. + 30% IMPACT

METHOD OF DESIGN: LOAD FACTOR

MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE, f'_c = 3500 PSI

YIELD STRENGTH OF REINFORCING STEEL, f_y = 60,000 PSI

SHEET 2 OF 2

DETAILS OF WIDENING 25'-0" SPANS

PULASKI COUNTY

ROUTE 165 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: M.C.C. DATE: 1-11-82

CHECKED BY: D.H.P. DATE: 1-28-82

DESIGNED BY: M.C.C. DATE: 1-6-82

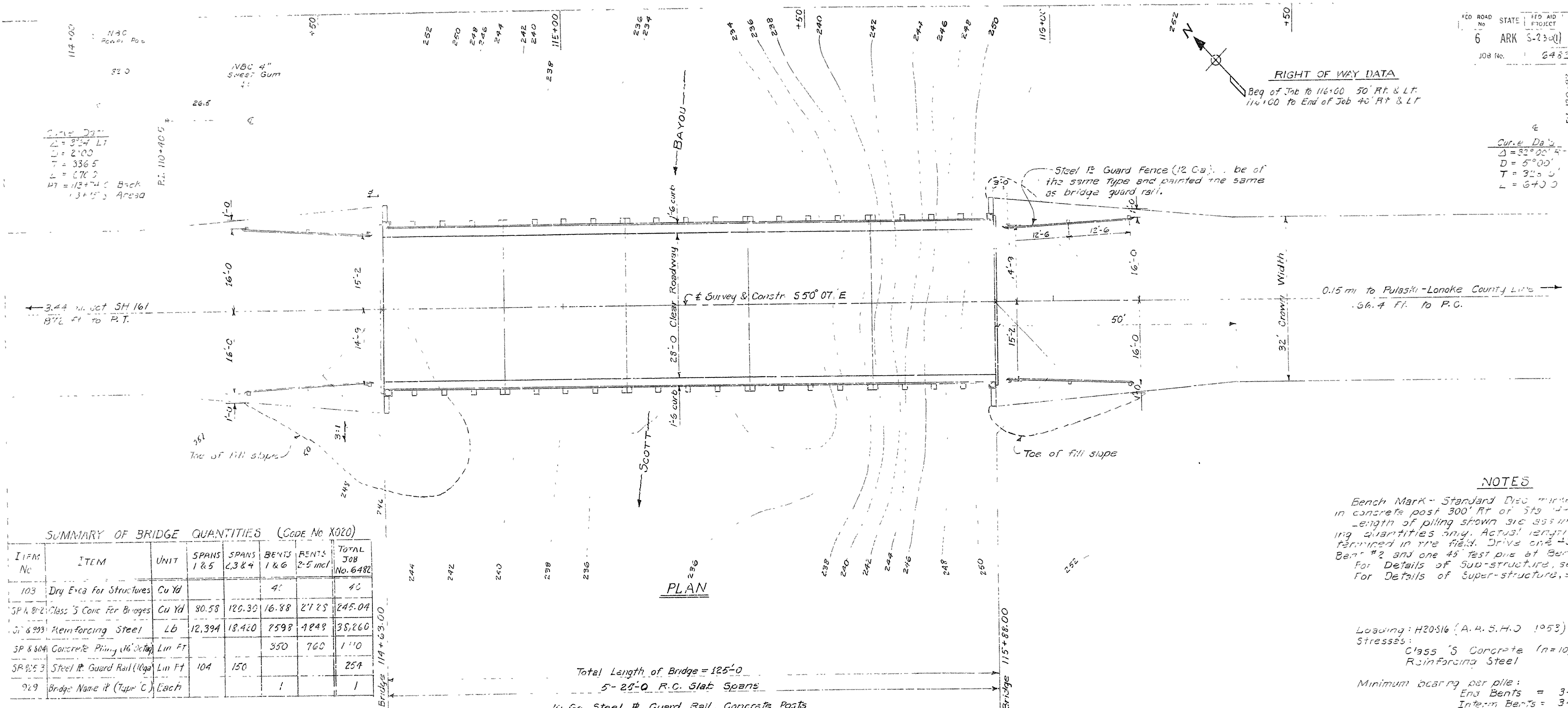
BRIDGE NO. 2967W

DRAWING NO. 25046

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK	S-238(1)		1	35
JOB No.		6482		1	35

RIGHT OF WAY DATA
 Beg of Job to 116+00 50' RT. & LT.
 116+00 to End of Job 40' RT. & LT.

Curve Data
 $\Delta = 82^{\circ}00'55''$
 $D = 5^{\circ}00'$
 $T = 325.0'$
 $L = 670.0'$



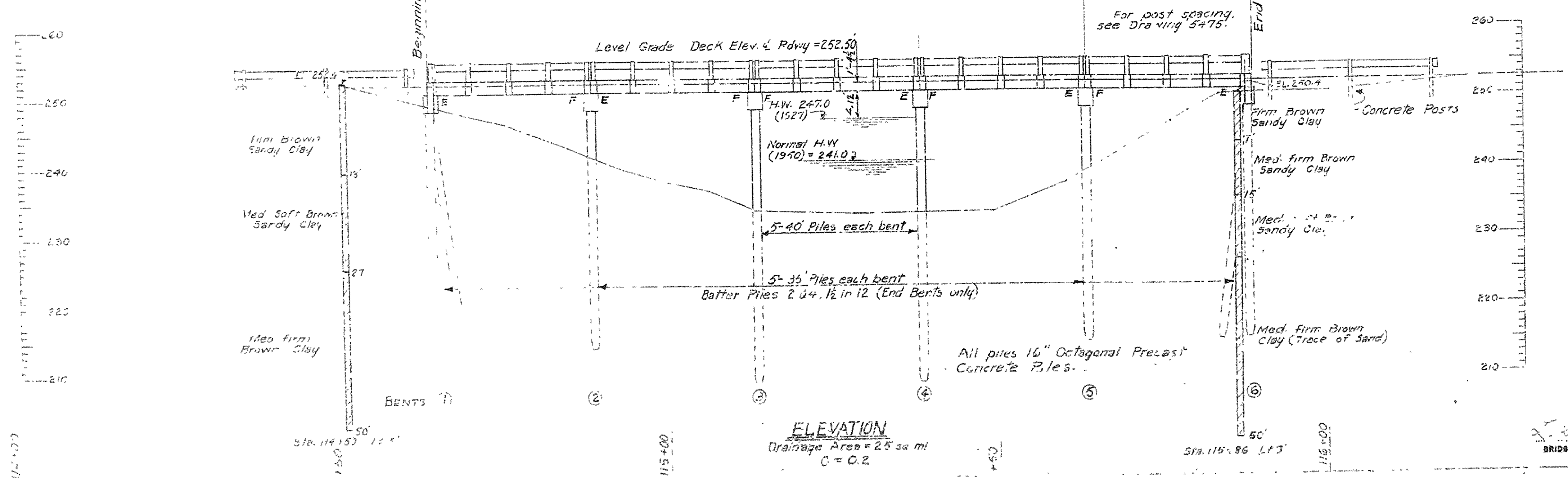
SUMMARY OF BRIDGE QUANTITIES (Code No. X320)

ITEM No.	ITEM	UNIT	SPANS 1 & 5	SPANS 2, 3 & 4	BENTS 1 & 6	BENTS 2-5 incl	TOTAL JOB No. 6482
103	Dry Exca for Structures	Cu Yd			41		41
SP 4.812	Class 'S' Conc for Bridges	Cu Yd	80.58	120.30	16.88	27.25	245.01
SP 6.303	Reinforcing Steel	Lb	12,394	18,420	7,598	12,449	38,861
SP 8.604	Concrete Piling (16' Octag)	Lin Ft			350	760	1,110
SP 9.253	Steel R. Guard Rail (10ga)	Lin Ft	104	150			254
929	Bridge Name it (Type 'C')	Each			1		1

Total Length of Bridge = 125'-0"
 5- 25'-0" R.C. Slab Spans
 10 Ga. Steel R. Guard Rail, Concrete Posts

NOTES
 Bench Mark - Standard Disc marked F.M. 1244 in concrete post 300' RT of Sta 114+00. Elev. 250.59. Length of piling shown is assumed for preliminary quantities only. Actual lengths to be furnished in the field. Drive one 40' test pile at Bent #2 and one 45' test pile at Bent #4. For Details of Sub-structure, see Div. 5472. For Details of Super-structure, see Div. 5471.

Loading: H20S16 (A.A.S.H.O. 1953)
 Stresses: Class 'S' Concrete ($n=10$) 1200 #/sq. in.
 Reinforcing Steel 20,000 #/sq. in.
 Minimum bearing per pile:
 End Bents = 34 Tons
 Interim Bents = 34 Tons



LAYOUT OF BRIDGE OVER SCOTT BAYOU
 BAUCUM-SCOTT
 PULASKI COUNTY
 ROUTE 30 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: WWH Date: 5-9-55 Scale: 1" = 10'
 Traced By: Date: Date: 5-10-55
 Checked By: Date: Date: 5-10-55
 BRIDGE NO. 2967 DRAWING NO. 8789