

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	S-220(3)			
JOB No.		3627		3	25

SCHEDULE OF BRIDGE QUANTITIES

BRIDGE NO.	CODE NO.	NAME PLATE TITLE	ITEM NO.	801	SP & 802	803	SP & 804	SP-804-6	805 (Alt. "1") SP-805-7 (Alt. "2")	SP & 806	812	1006
			ITEM	Common Excavation for Structures	Class S Concrete	Reinforcing Steel	Precast Concrete Piling (16" Oct)	Providing Equipment for Driving Test Piles	STEEL PLATE GUARD BRIDGE RAILING (Alt. "1") ALUMINUM PLATE GUARD BRIDGE RAILING (Alt. "2")	Structural Steel in Beam Spans	Bridge Name Plates (Type C)	Removal of Existing Bridge Structures
				UNIT	CU. YD.	CU. YD.	LB.	LIN. FT.	COMP. ITEM	LIN. FT.	LBS	PLATE
3749	X071	BODCAW CREEK	Bent Nos. 1 & 11	50	23.56	3,110	360		-	1,200	1	
			Bent Nos. 2 thru 10		49.37	7,956	1,495		-	-	-	
			Span Nos. 1 & 10		61.00	12,578	-		212	51,980	-	
			Span Nos. 2 thru 3		244.00	50,316	-		843	210,320	-	
											-	
											-	
Totals for Job No. 3627				50	377.93	73,960	1,855	100%	1060	263,500	1	60%*

* Remainder of this item included in Roadway Plans.

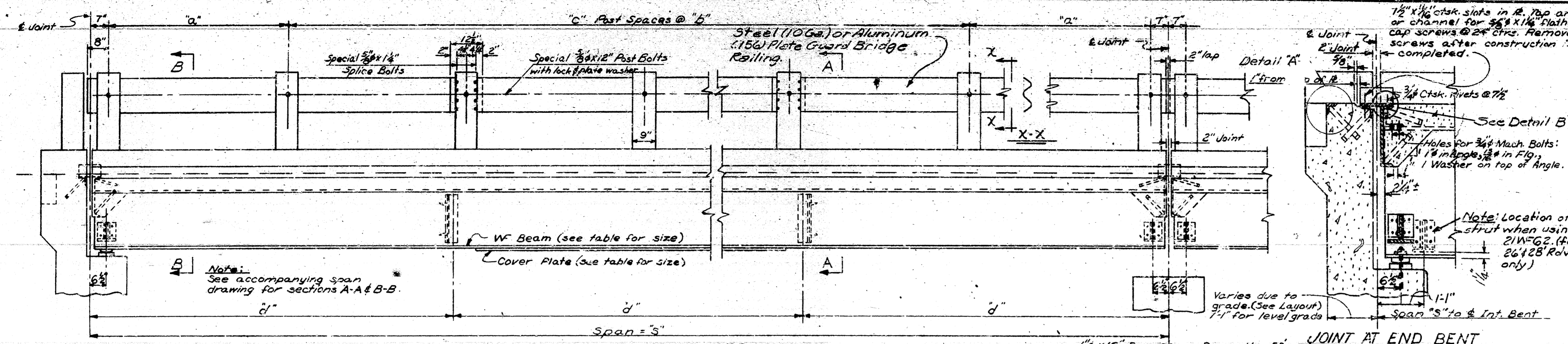
SCHEDULE OF BRIDGE QUANTITIES
BODCAW CREEK
BRIDGE & APPROACHES
LAFAYETTE COUNTY
ROUTE 160 SEC. 2
ARKANSAS STATE HIGHWAY COMMISSION

DRAWN BY: CFM DATE: 10-30-62
TRACED BY: DATE: SCALE: No Scale
CHECKED BY: DATE: 11-2-62

L. P. Carlson
BRIDGE ENGINEER

BRIDGE NO. 3749 DRAWING NO. 12249

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



GENERAL NOTES

All concrete to be Class S. All exposed corners to be chamfered $\frac{3}{4}$ " unless otherwise noted.

Field connections to be riveted or bolted with high strength bolts. Rivets: $\frac{3}{4}$ " diam. $\frac{3}{4}$ " except where noted otherwise.

Structural shapes of steel or greater strength may be substituted for shapes shown, but payment will be made on the basis of shapes shown or those actually used, whichever is less.

All welded connections to be $\frac{3}{16}$ " fillet shop welds except as noted.

All welding shall conform to the American Welding Society Standard Specifications for Welded Highway and Railway Bridges, current edition.

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: First coat - red lead tinted with lamp black. Second coat - aluminum paint.

All metal bearing and roadway expansion devices to be paid for as Structural Steel in Beam Spans. Bearings shall be finally seated in accordance with Sec. 806.34, including alternate of the 10' span. This work and material are to be considered as separate items. Item "Structural Steel in Beam Spans" and will not be paid for directly for direct.

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.

All steel shall be ASTM A-36 unless otherwise noted.

Anchor bolts shall be galvanized to conform to ASTM Specification, Designation A153.

Reinforcing steel to be deformed bars of intermediate or hard grade. The reinforcing steel is to be accurately located in the forms and firmly held in place by steel wire supports, sufficient in number and size to prevent displacement during the course of construction. 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.

All chamfers on concrete riser for rail are to be $\frac{1}{2}$ ".

Shop drawings showing details of railing shall be submitted and approval secured before fabrication is begun.

The aluminum bridge railing, including details of railing, shall be paid for at the unit price bid per linear foot for Metal (Aluminum) Bridge Railing.

A rail connection utilizing self screws is an acceptable alternate and may be supplied at the Contractor's option.

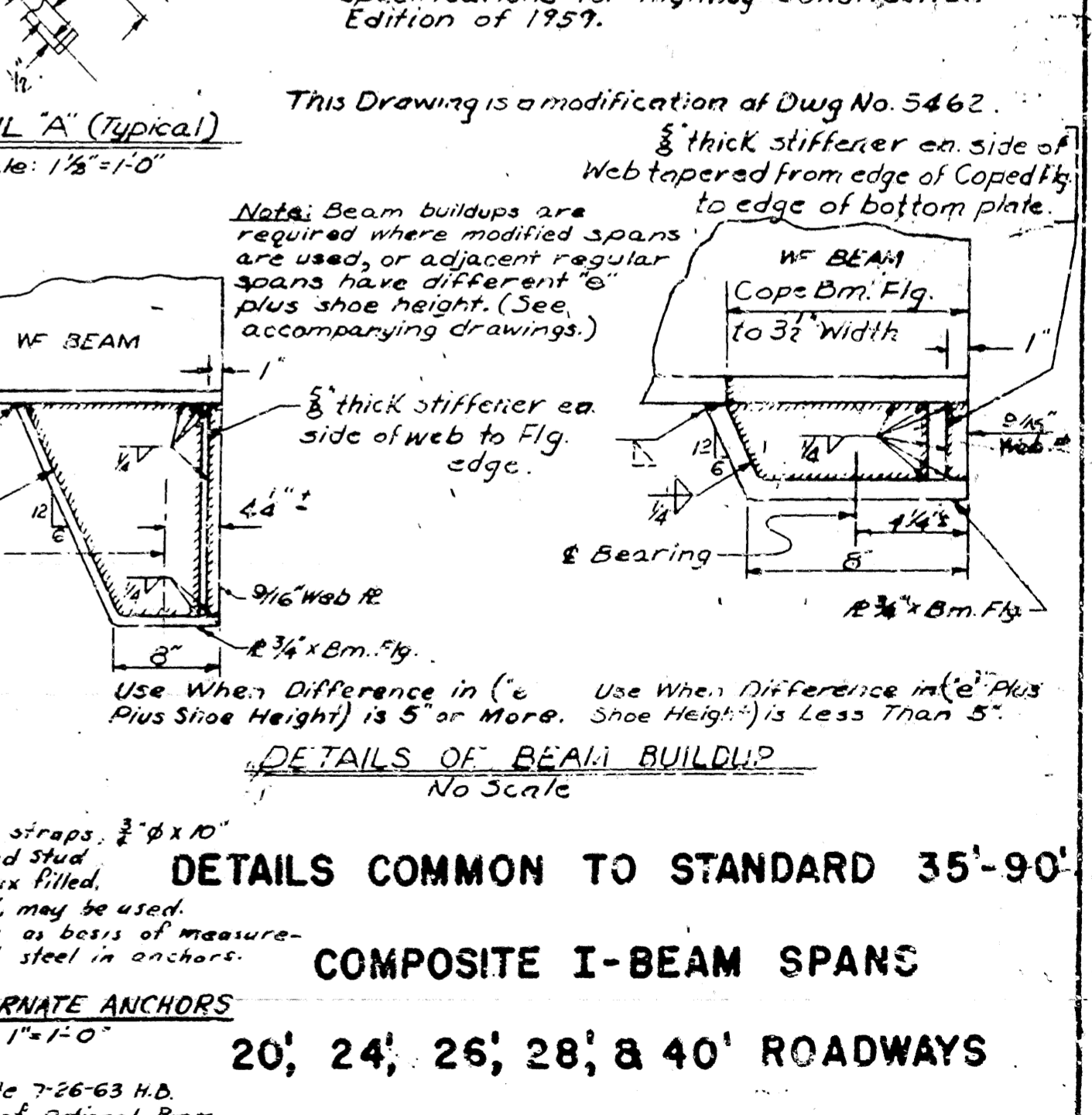
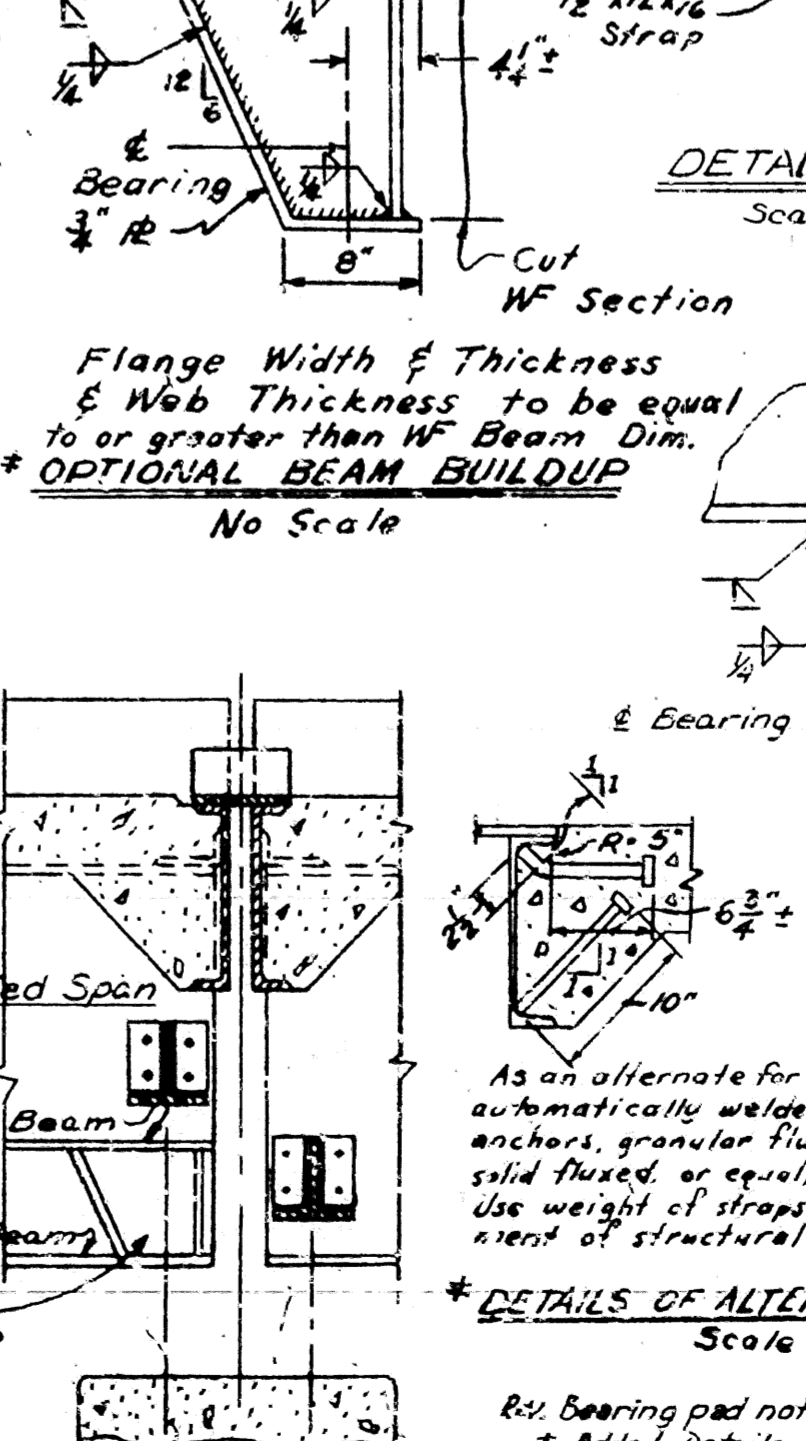
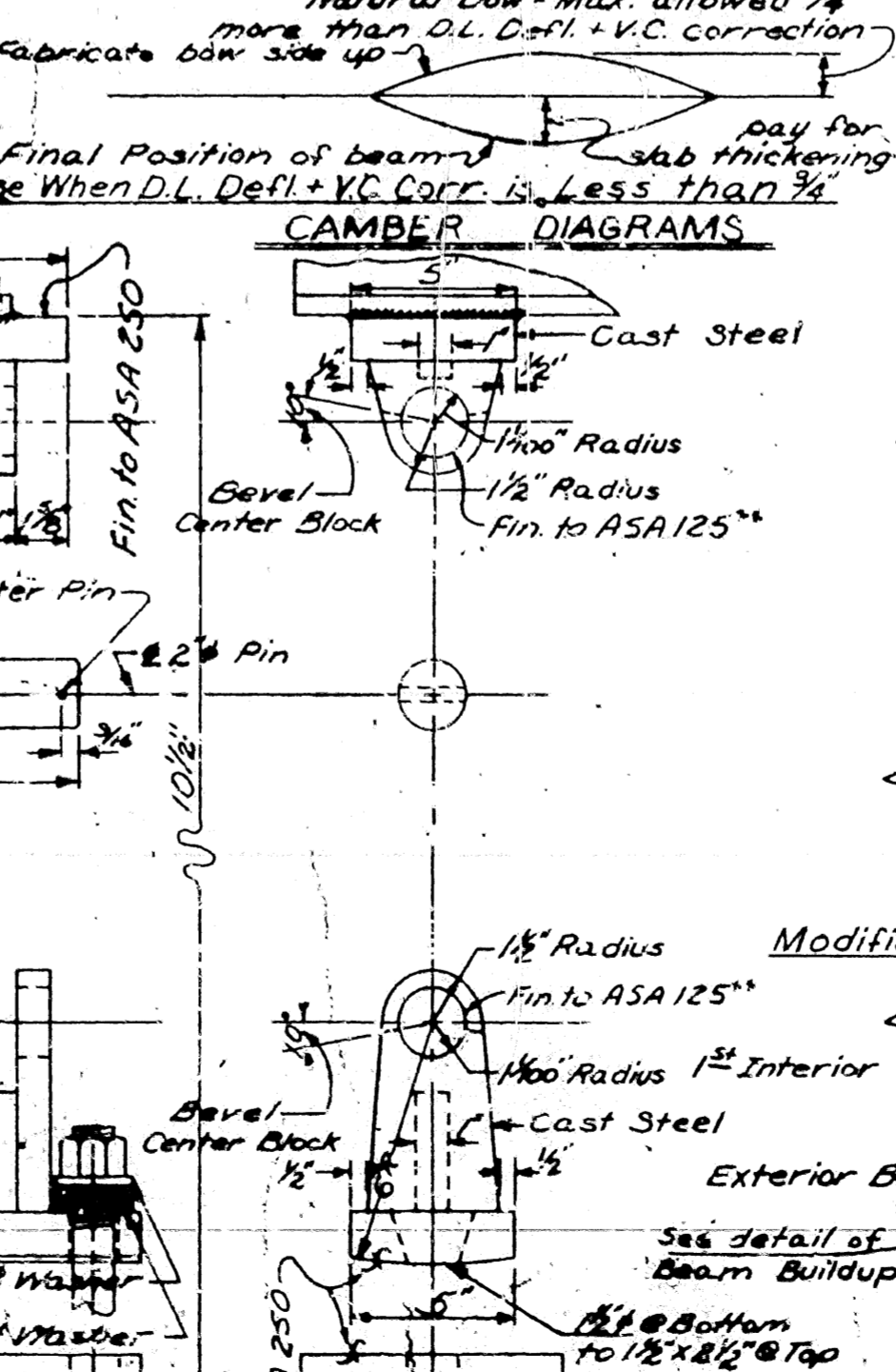
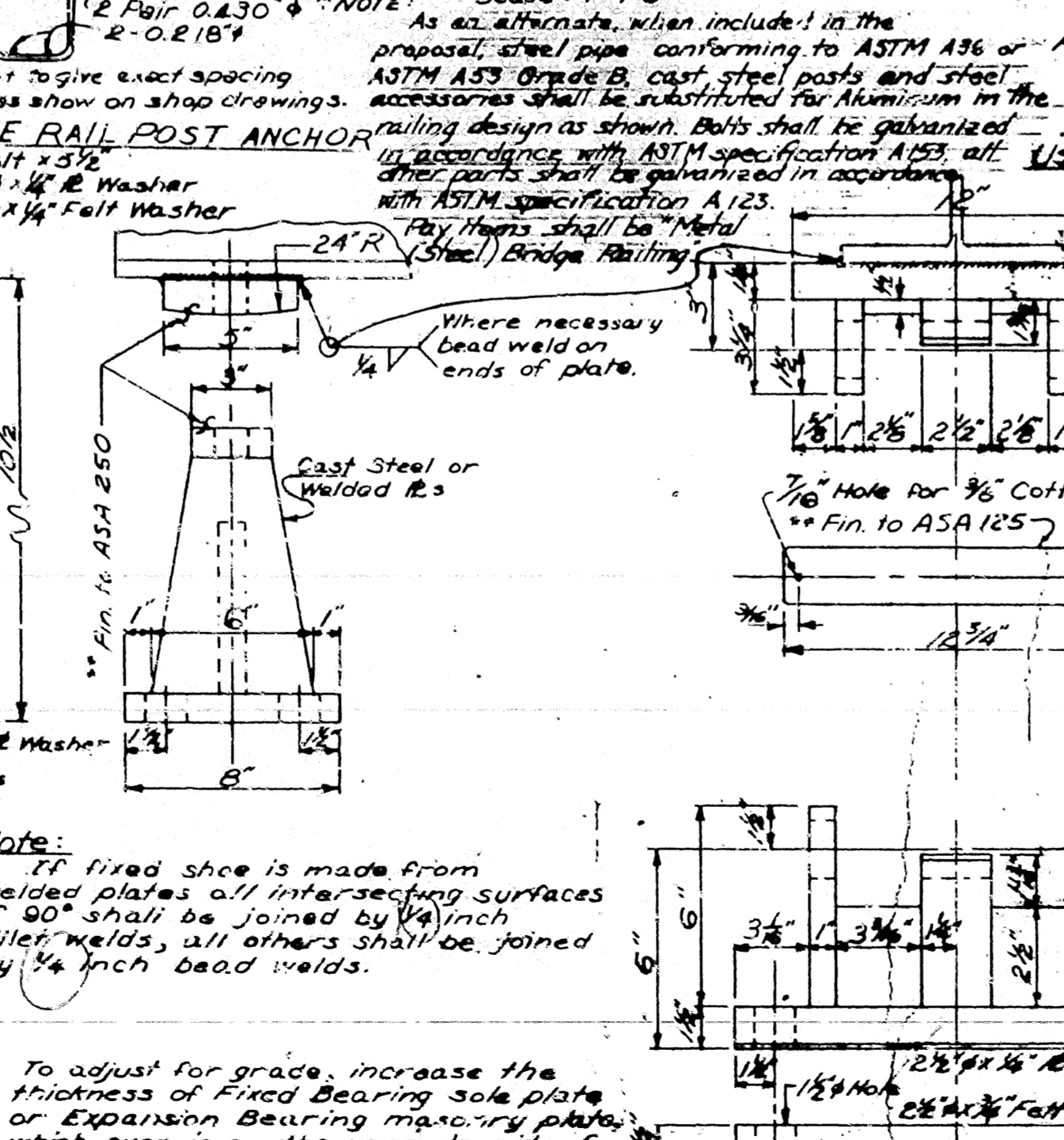
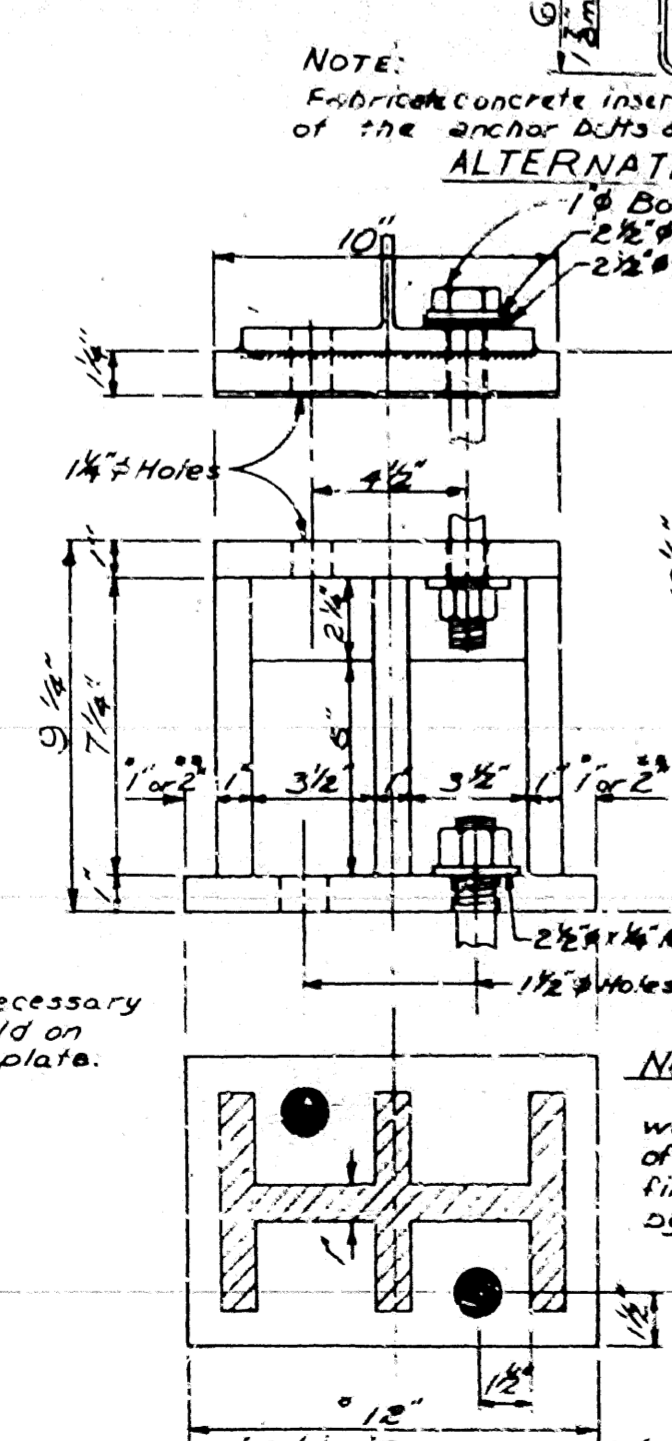
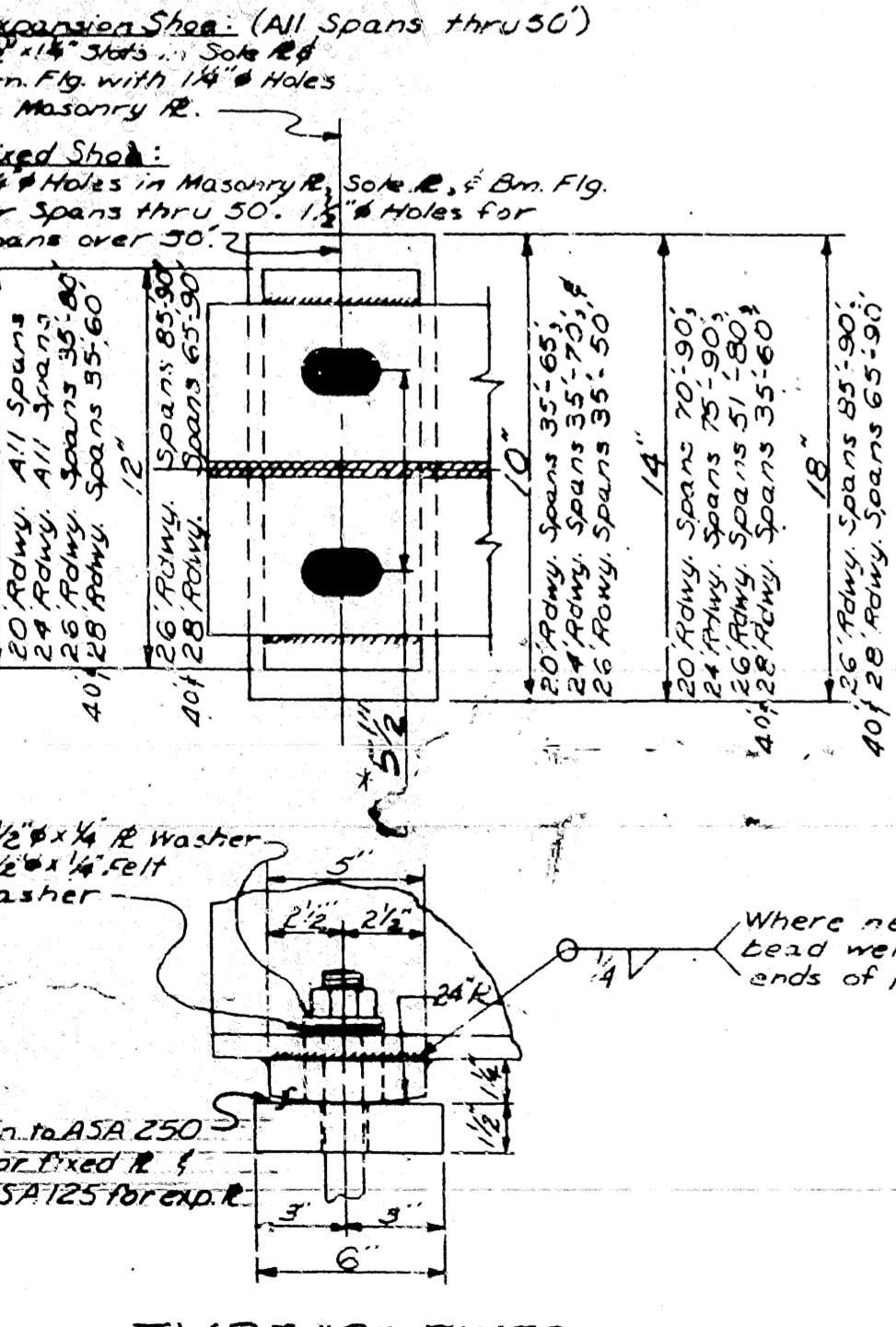
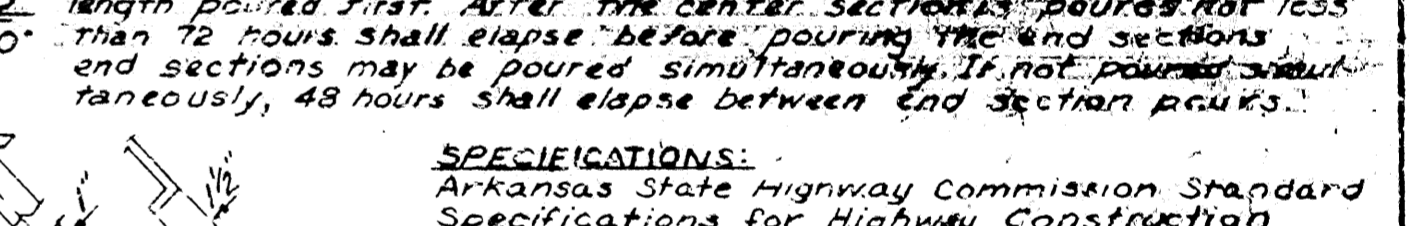
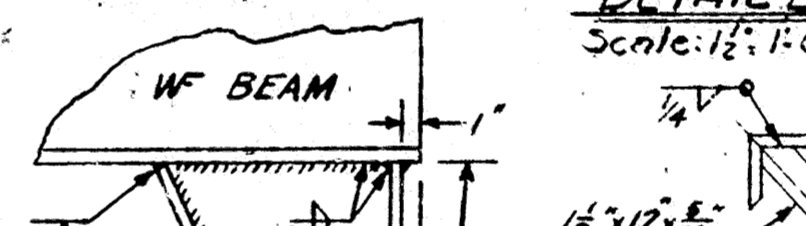
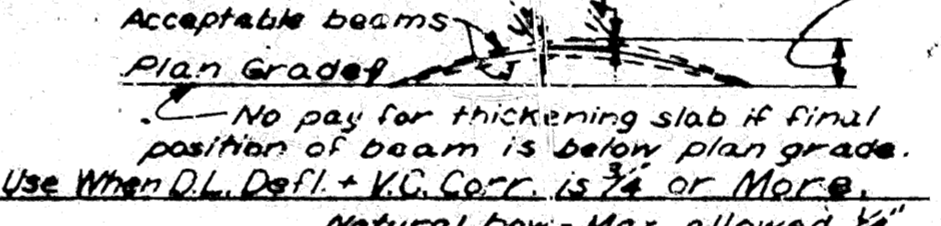
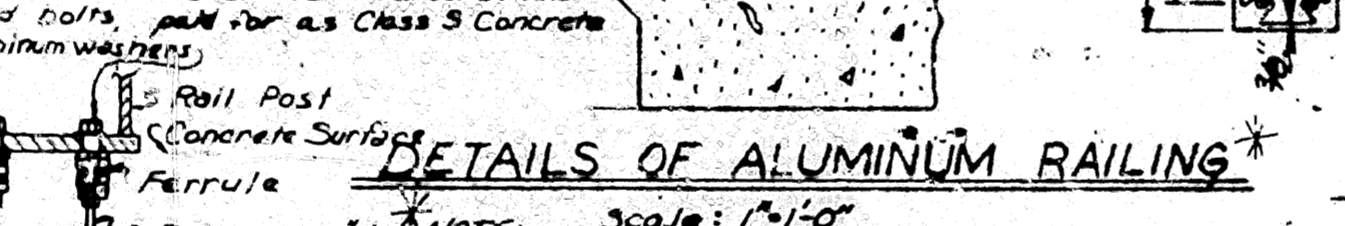
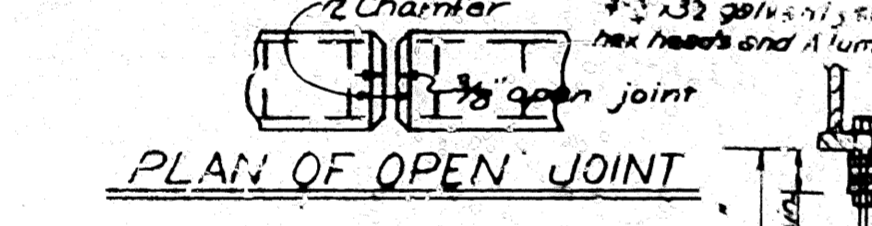
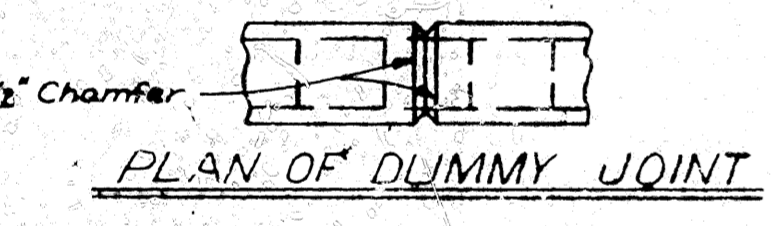
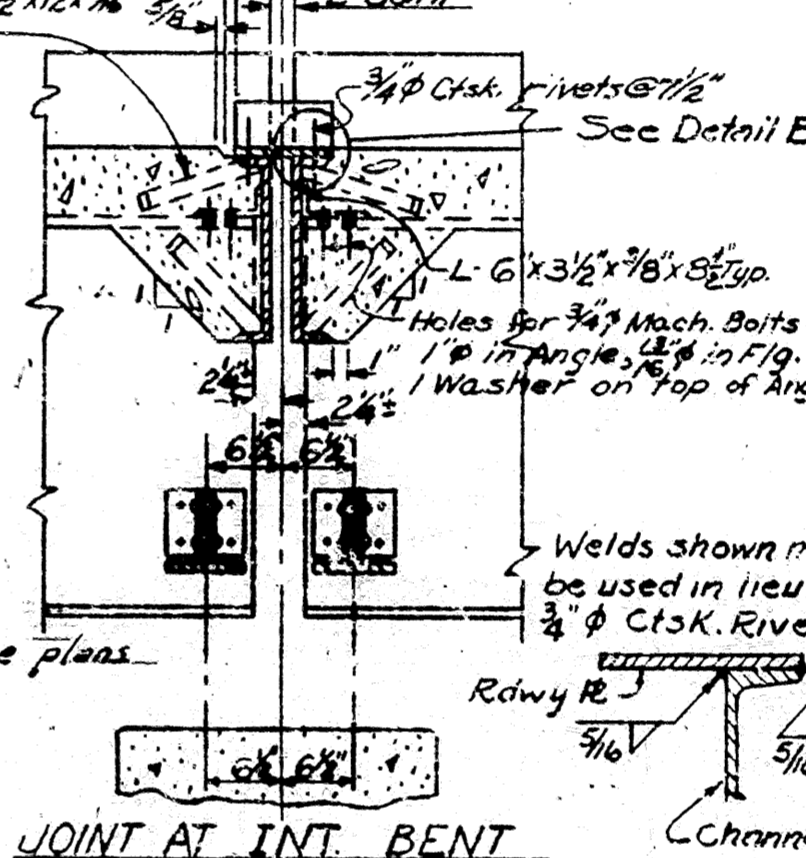
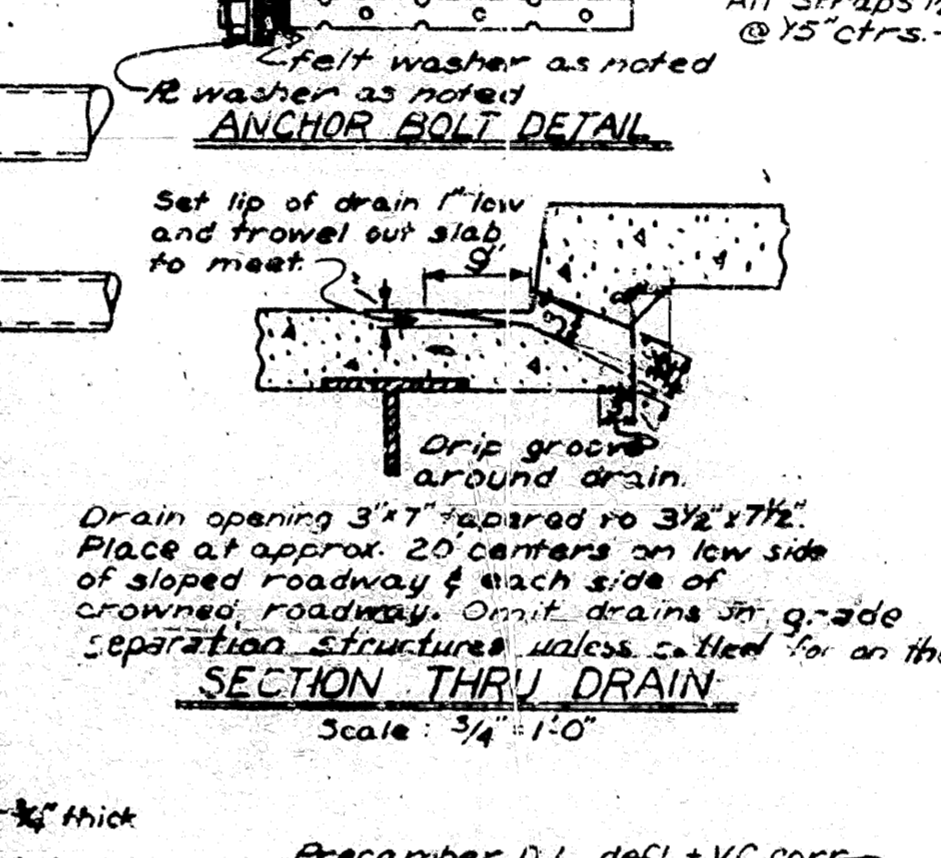
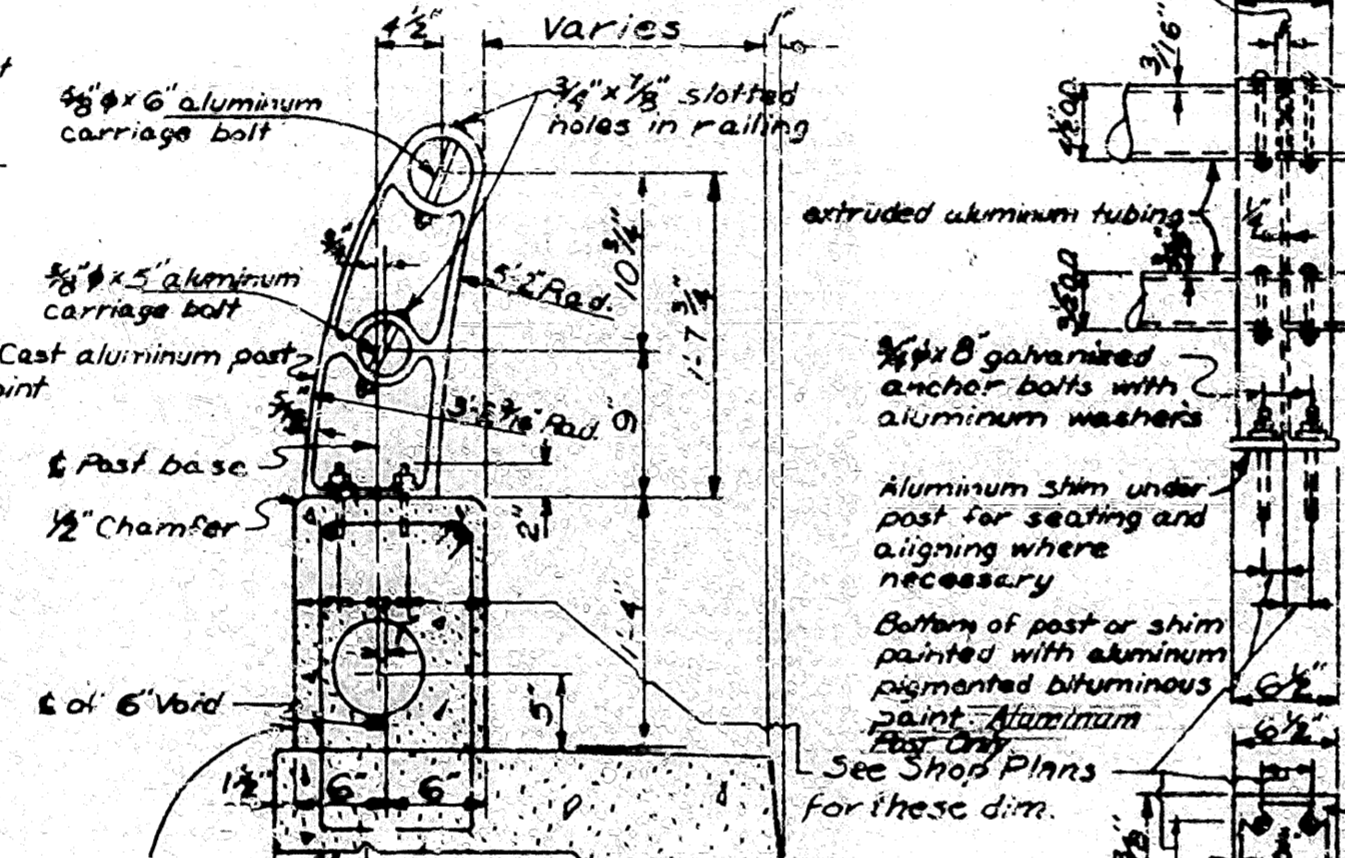
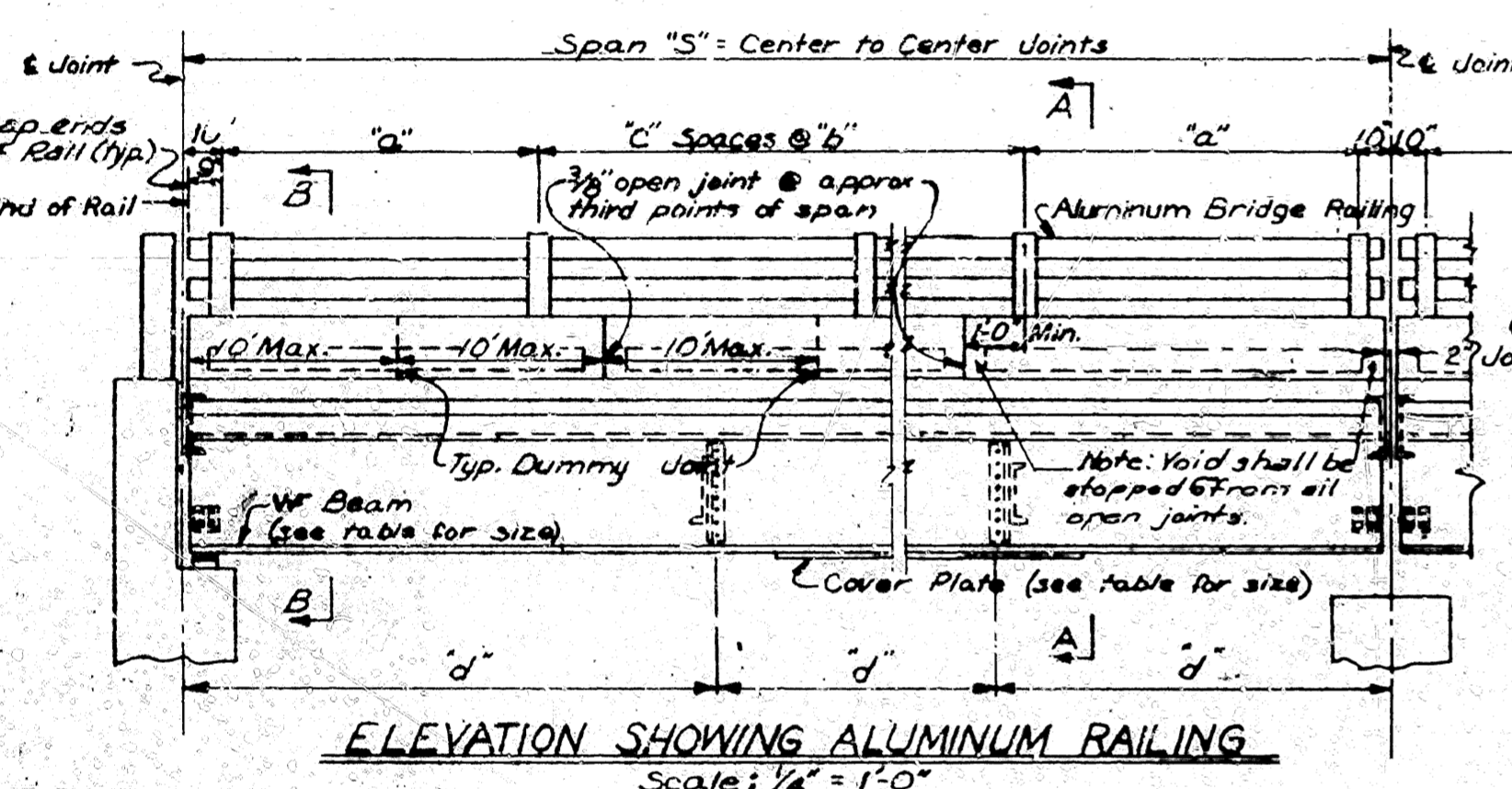
Outside surfaces of flanges of cast aluminum posts shall be given a $\frac{1}{2}$ " grit buff finish after which all exposed surfaces of posts shall receive one coat of clear lacquer.

If Steel or Aluminum Plate Guard Bridge Railing is used it shall be the same shown or an equivalent rigid type as approved by the Engineer. The rail including posts and fasteners shall be paid for at the unit price bid per linear foot for "Steel or Aluminum Plate Guard Bridge Railing".

State Building Note: May be poured in one continuous operation with a strike off extending over the whole span length, or may be poured in increments with the center one third to one half span length poured first. After the center section is poured not less than 12 hours shall elapse before pouring the end sections and sections may be poured simultaneously. If not poured simultaneously, 48 hours shall elapse between end section pours.

SPECIFICATIONS:
Arkansas State Highway Commission Standard Specifications for Highway Construction Edition of 1957.

This Drawing is a modification of Dwg No. 5462.



TYPE 'B' FIXED or EXPANSION SHOE

Use for end bents - all spans.

Use for int. bents - 35'-50' spans, unless otherwise shown.

TYPE 'A' FIXED SHOE

Revised Railing Note, 2-12-63, DFL

Revised Railing, 10-29-62, CFM

Revised: Fin for bearing plates and shoes, 11-1-62, KWM

DETAILS OF BEAM BUILDUP

As an alternate for straps, $\frac{3}{8}$ " x 10" automatically welded stud anchors, granular flux filled, solid fluxed, or equal, may be used. Use weight of straps as basis of measurement of structural steel in anchors.

DETAILS OF ALTERNATE ANCHORS

Scale: 1" = 1'-0"

Rd. Bearing pad note 7-26-63, H.D.

* Added details of optional Beam Buildup and Alternate Anchors 1-28-64, DV

CAMBER DIAGRAMS

Use When D.L. Defl. + V.C. Corr. is 2" or More.

Natural bow - Max. allowed $\frac{1}{4}$ " more than D.L. Defl. + V.C. correction.

Use When D.L. Defl. + V.C. Corr. is Less than 2".

Final Position of beams - slab thickening.

Use When D.L. Defl. + V.C. Corr. is Less than 2".

JOINT AT INT. BENT

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

Revised Anchor Bolt Spacing, E.R.S. 10-62

Rev. Added 40' Rdwy. 8-10-62, M.G.

Rev. Draw Notes - 8-3-62, DFL

Rev. Anchor Bolts - 5-22-62, M.G.

DETAILS OF BEAM BUILDUP

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

As an alternate for straps, $\frac{3}{8}$ " x 10" automatically welded stud anchors, granular flux filled, solid fluxed, or equal, may be used. Use weight of straps as basis of measurement of structural steel in anchors.

DETAILS OF ALTERNATE ANCHORS

Scale: 1" = 1'-0"

Rd. Bearing pad note 7-26-63, H.D.

* Added details of optional Beam Buildup and Alternate Anchors 1-28-64, DV

RE-DRAWN BY: *ETM* DATE: 8-10-62

TRACED BY: *ETM* DATE: 8-10-62

RE-CHECKED BY: *L.K.* DATE: 3-8-62

BRIDGE NO. *14990*

DRAWING NO. *14990*

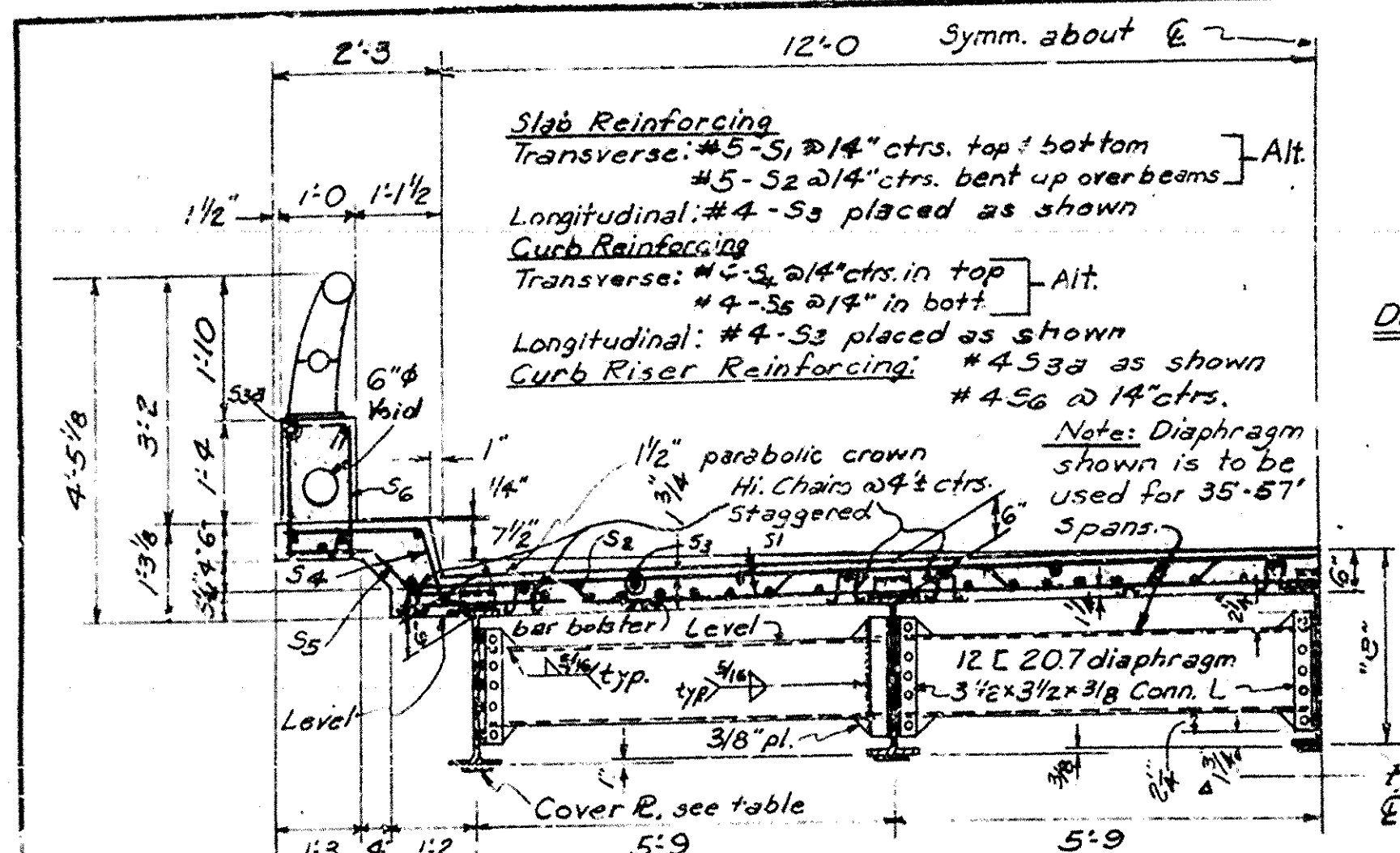
SCALE: As Shown

LITTLE ROCK, ARK.

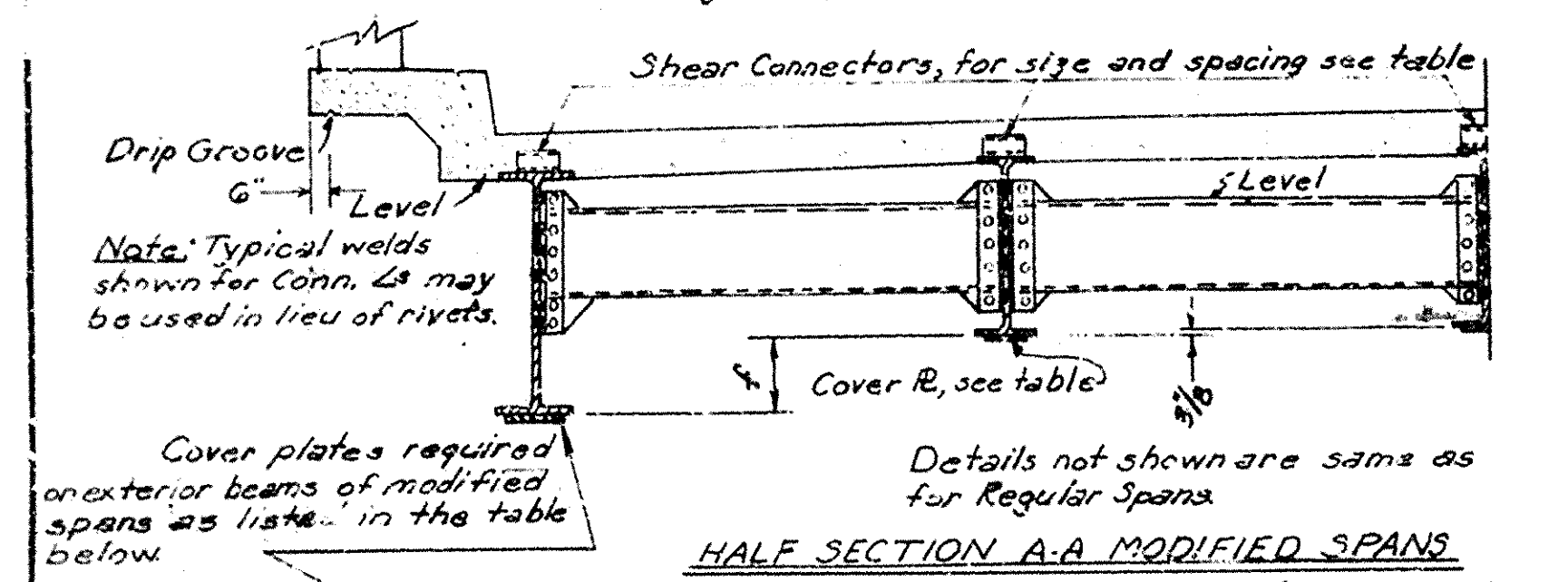
DATE: 8-10-62

DO NOT USE 10-25-67

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	AR	5-220(3)	7	25
3627				

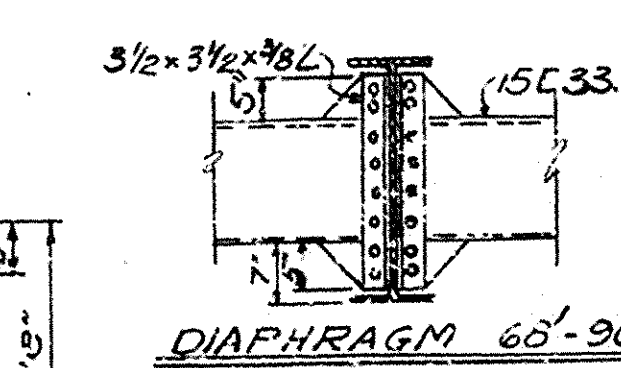
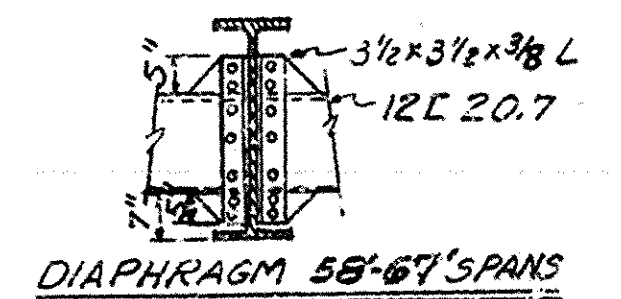


HALF SECTION A-A OF REGULAR SPAN
(Regular spans have all beams of equal depth)



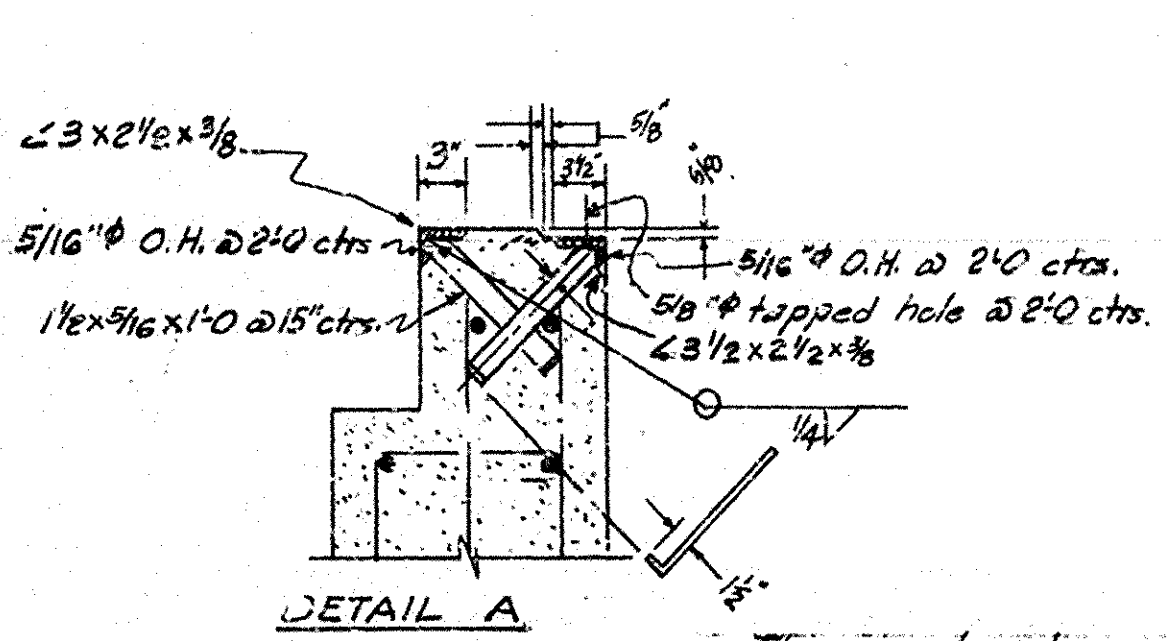
HALF SECTION A-A OF MODIFIED SPANS
Interior beams are same as in Regular Spans. Exterior beams are the lightest section of same nominal depth as beams for longest span shown on Bridge Layout.

Note: For location of section A-A and variables see Dwg. No. 14990



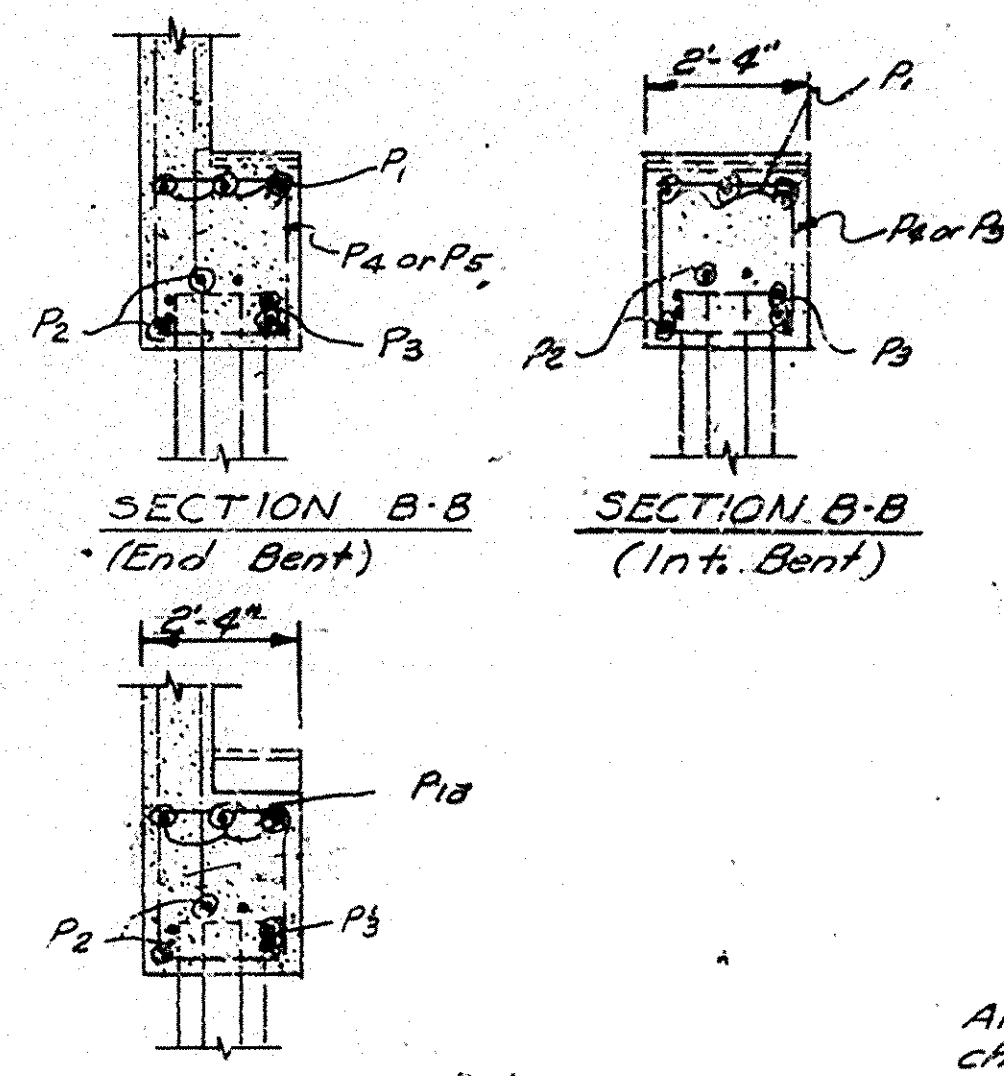
Parapet Type Railing
Plate Guard Br. Railing
Non-pay Items

		BAR LIST - ONE SPAN																																									
		Number Required Each Span																																									
PK	SIZE	LENGTH	PIN DIA.	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	65	70	75	80	85	90								
S ₁	5	25'-0	5/8"	62	62	64	66	68	70	72	74	74	76	78	80	82	84	86	88	90	92	94	96	98	98	100	102	104	112	120	130	138	146	154									
S ₂	5	25'-8	1 3/4"	30	30	31	32	33	34	35	36	36	37	38	39	40	41	42	42	43	44	45	46	47	48	48	49	50	51	55	59	64	68	72	76								
S ₃	4	3'-6"	5/8"	60																																							
S ₅	4	5'-2+7"	5/8"	120																																							
S ₃	4	5'-3+1'-0	5/8"	180																																							
* S ₄	4	4'-6	1 1/2"	62	62	64	66	68	70	72	74	74	76	78	80	82	84	86	86	88	90	92	94	96	96	98	100	102	104	112	120	130	138	146	154								
* S ₅	4	3'-0	1 1/2"	60	60	62	64	66	68	70	72	72	74	76	78	80	82	84	84	86	88	90	92	94	96	96	98	100	102	110	118	128	136	144	152								
S ₆	4	5'-4	1 1/2"	62	62	64	66	68	70	72	74	74	76	78	80	82	84	86	86	88	90	92	94	96	96	98	100	102	104	112	120	130	138	146	154								
S _{3A}	4	5'-0(118")	5/8"	12																																							
P ₀₁	5	5'-10	1 3/4"	28				32				36				40				44				48				52				56				60				64			
P ₀₂	3	2'-8	1 1/4"	56				64				72				80				88				96				104				112				120				128			



PILE SPLICE DETAIL

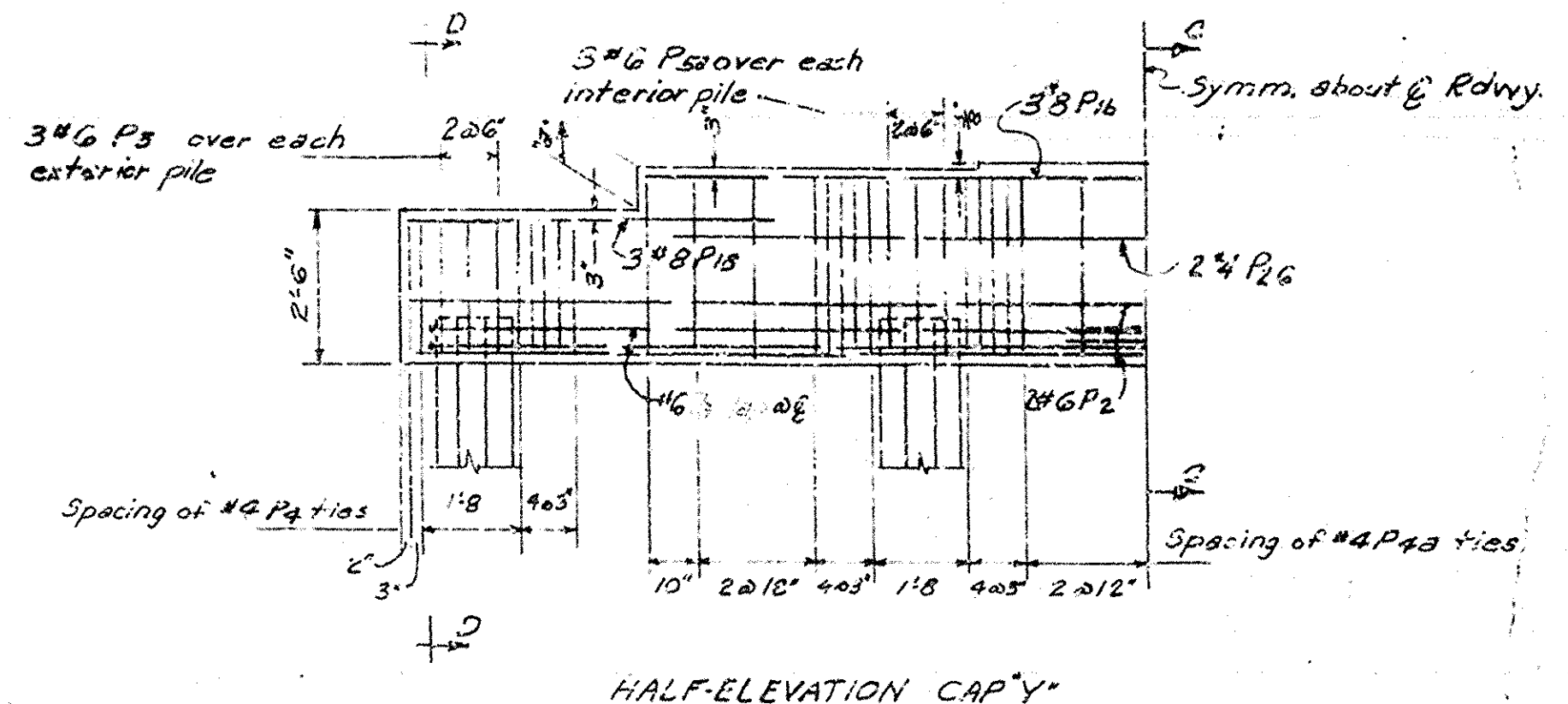
SECTION B-B
(Int. Bent)



C.C. SE
BAR LIST-PER SENT

SPAN LENGTH	END SPAN BEAM'S INTERIOR	EXTERIOR	VARIABLES				CAP USED
			a	b	c	d	
35'-44"	21WF55	21WF55	1"	2 1/4"	2'-5 1/8"	-	X
		24WF68	3 1/8"	5 1/8"		4"	Y
		27WF84	6 1/8"	8 1/8"		7"	Y
		30WF99	9 1/8"	10 1/8"		10"	Y
		33WF118	12 1/8"	14 1/8"		13"	Y
		36WF135	15 1/8"	16 1/8"	2'-5 1/8"	15"	Y
45'-48"	21WF62	21WF62	1"	2 3/8"	2'-5 1/8"	-	X
		24WF68	3 1/8"	5 1/8"		4"	Y
		27WF84	6 1/8"	8 1/8"		7"	Y
		30WF99	9 1/8"	10 1/8"		10"	Y
		33WF118	12 1/8"	14 1/8"		13"	Y
		36WF135	15 1/8"	16 1/8"	2'-5 1/8"	15"	Y
49'-53"	24WF68	24WF68	1"	5 1/8"	2'-8 1/8"	-	X
		27WF84	3 1/8"	8 1/8"		4"	Y
		30WF99	6 1/8"	10 1/8"		7"	Y
		33WF118	9 1/8"	14 1/8"		10"	Y
		36WF135	12 1/8"	16 1/8"		12"	Y
54'-57"	24WF76	24WF76	1"	5 1/8"		-	X
		27WF84	3 1/8"	8 1/8"		4"	Y
		30WF99	6 1/8"	10 1/8"		7"	Y
		33WF118	9 1/8"	14 1/8"		10"	Y
		36WF135	12 1/8"	16 1/8"	2'-8 1/8"	12"	Y
58'-60"	27WF84	27WF84	1"	8 1/8"	2'-11"	-	X
		30WF99	3 1/8"	10 1/8"		4"	Y
		33WF118	7"	14 1/8"		7"	Y
		36WF135	9 1/8"	16 1/8"		10"	Y
65'	27WF99	27WF99	1"	8 1/8"		-	X
		30WF99	3 1/8"	12 1/8"		8"	Y
		33WF118	7"	14 1/8"		7"	Y
		36WF135	9 1/8"	16 1/8"	2'-11"	10"	Y
70'	30WF99	30WF99	1"	10 1/8"	3'-1 1/8"	-	X
		33WF118	4 1/8"	14 1/8"		4"	Y
		36WF135	6 1/8"	16 1/8"	3'-1 1/8"	7"	Y
75'	33WF118	33WF118	1"	14 1/8"	3'-5"	-	X
		36WF135	3 1/8"	16 1/8"	3'-5"	4"	Y

NOTE
All Concrete to be Class 5. All exposed corners to have 3" chamfer unless otherwise noted.
All piling shall be driven to a minimum capacity of 36 tons per pile. Piling shall be either 12 BP33, 16" Octagonal 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 5460A.



HALF-ELEVATION CAP"Y"

* For Plate Guard Bridge Railing add 3" to lengths of P18-P22 increasing dimension A & P18-P22.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

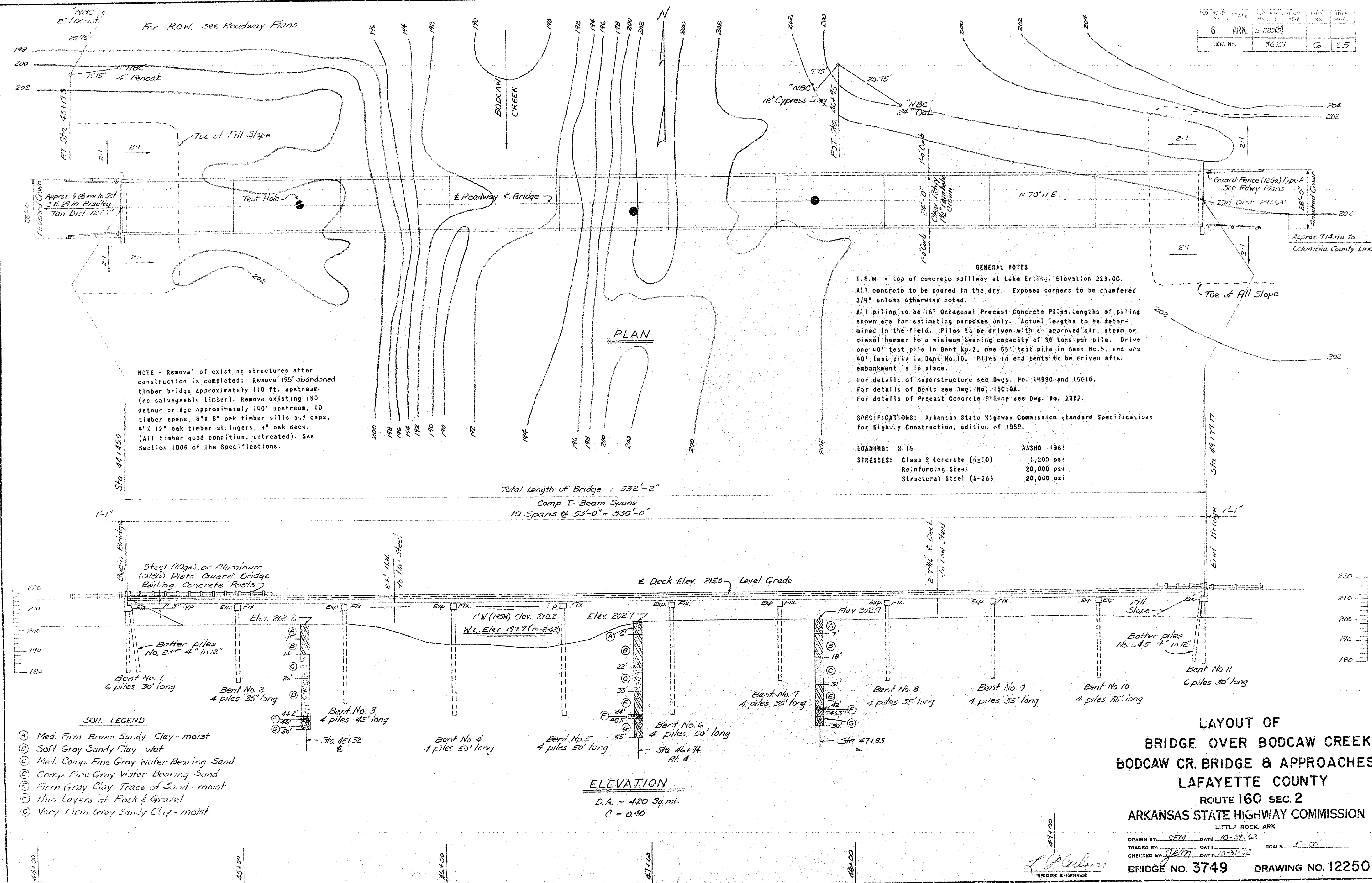
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 CHECKED BY: VAS DATE: 4-13-62
 SCALE: 3/8" = 1'-0" and not so
 BRIDGE NO. _____ DRAWING NO. 15010A

L. D. Carlson
BRIDGE ENGINEER

BRIDGE NO.

DRAWING NO. 15010A

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	5-220(5)			
JOB No.		3627		6	25



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		030197	1	11
						03095, 03749, 03752, 03788, 03789		39177

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
CONSTRUCTION PLANS FOR STATE HIGHWAY

DISTRICT THREE BRIDGES
(SCOUR REPAIR) (S)

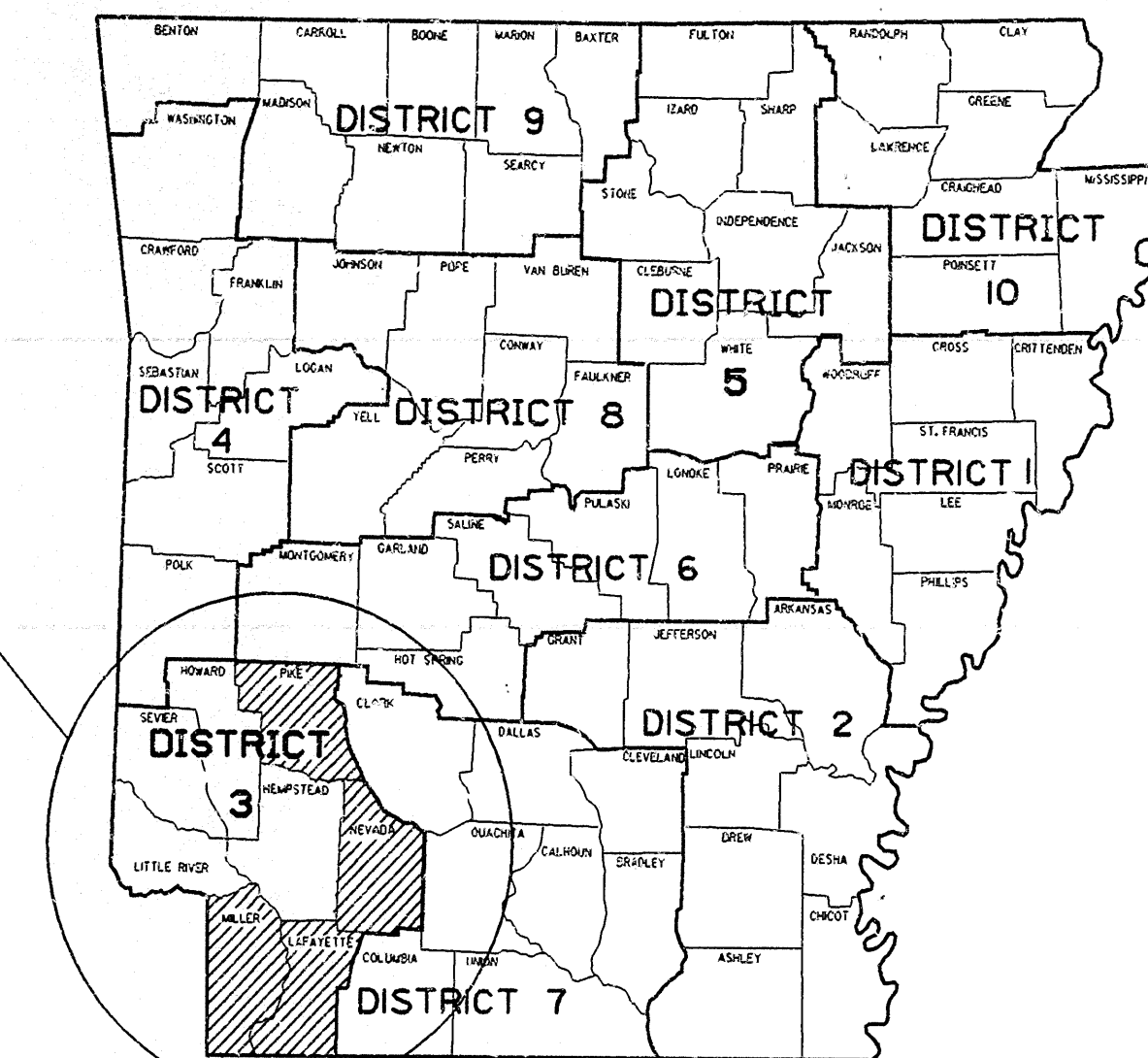
LAFAYETTE COUNTY
MILLER COUNTY
NEVADA COUNTY
PIKE COUNTY

ROUTE 237 SECTION 1
ROUTE 160 SECTION 2
ROUTE 19 SECTION 5

FED. AID PROJECT BRN-0076(20)

JOB 030197
NOT TO SCALE

PROJECT LOCATION



BRIDGE DATA

- 502' IBeam Spans
Br. No. 03095
Route 19, Sec. 5
Nevada & Pike Counties
- 532' Comp. IBeam Spans
Br. No. 03749
Route 160, Sec. 2
Lafayette County
- 532' Comp. IBeam Spans
Br. No. 03752
Route 237, Sec. 1
Miller County
- 100' R. C. Slab Spans
Br. Nos. 03788 & 03789
Route 237, Sec. 1
Miller County

RECOMMENDED FOR APPROVAL

BRIDGE ENGINEER

ROADWAY DESIGN ENGINEER

DISTRICT ENGINEER

APPROVED

CHIEF ENGINEER

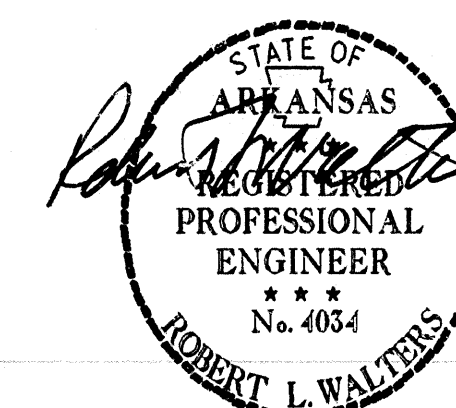
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
RECOMMENDED FOR APPROVAL

DATE

APPROVED

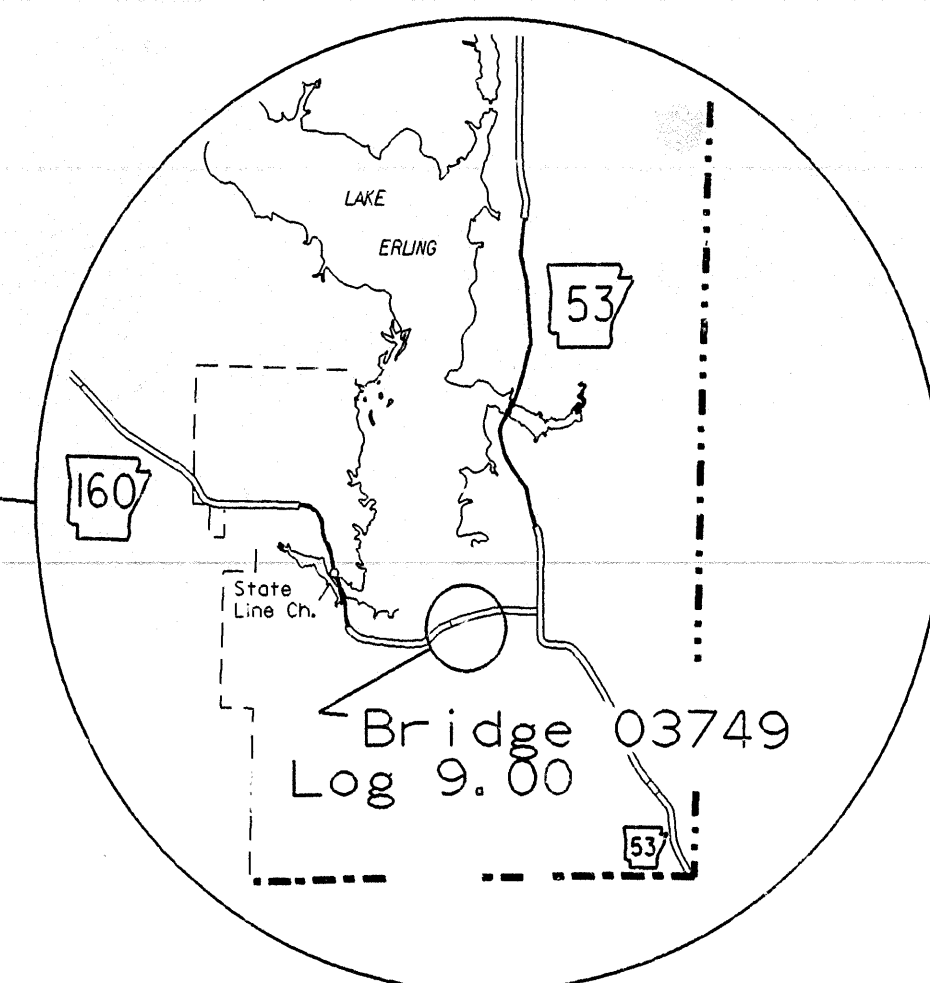
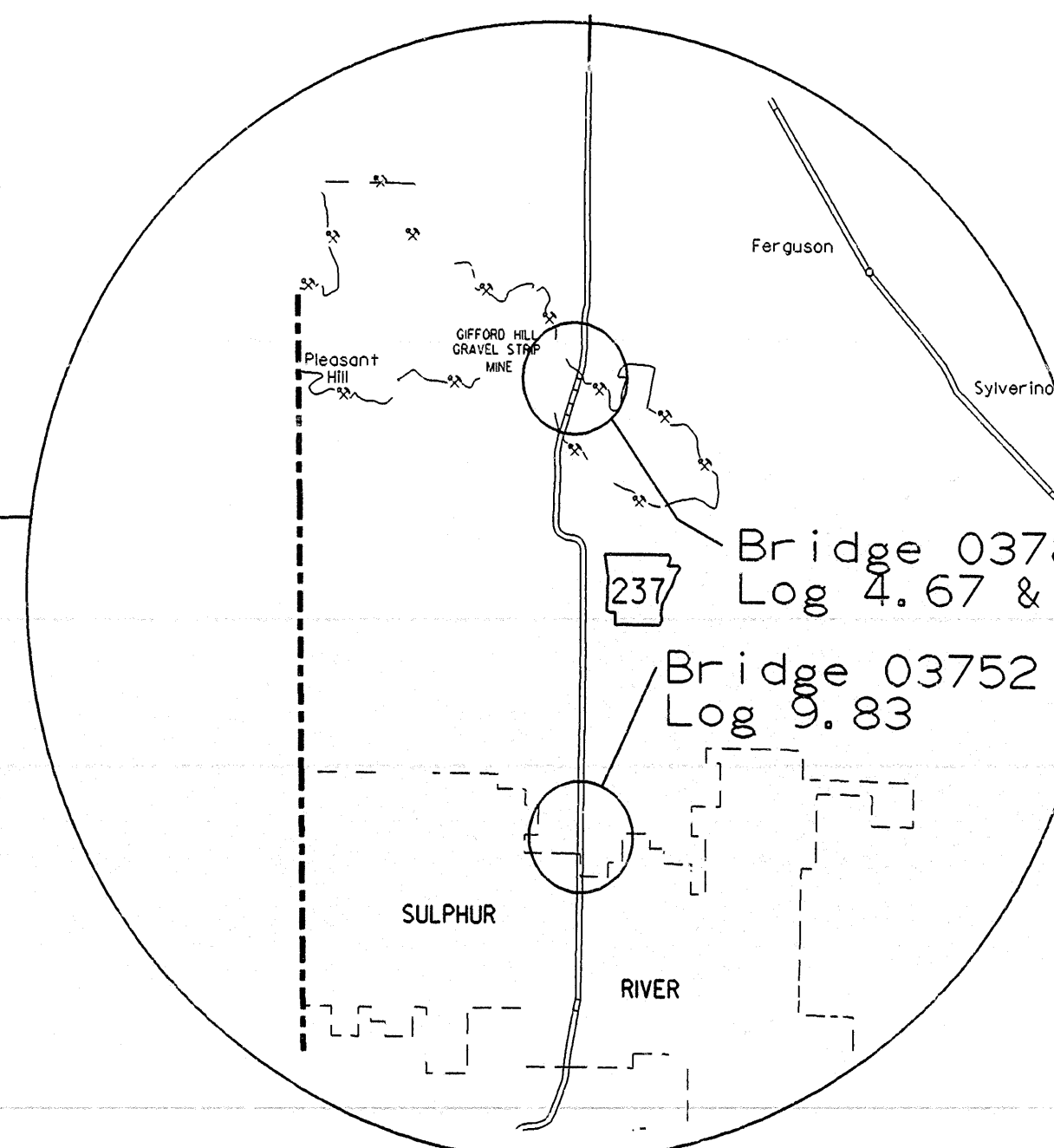
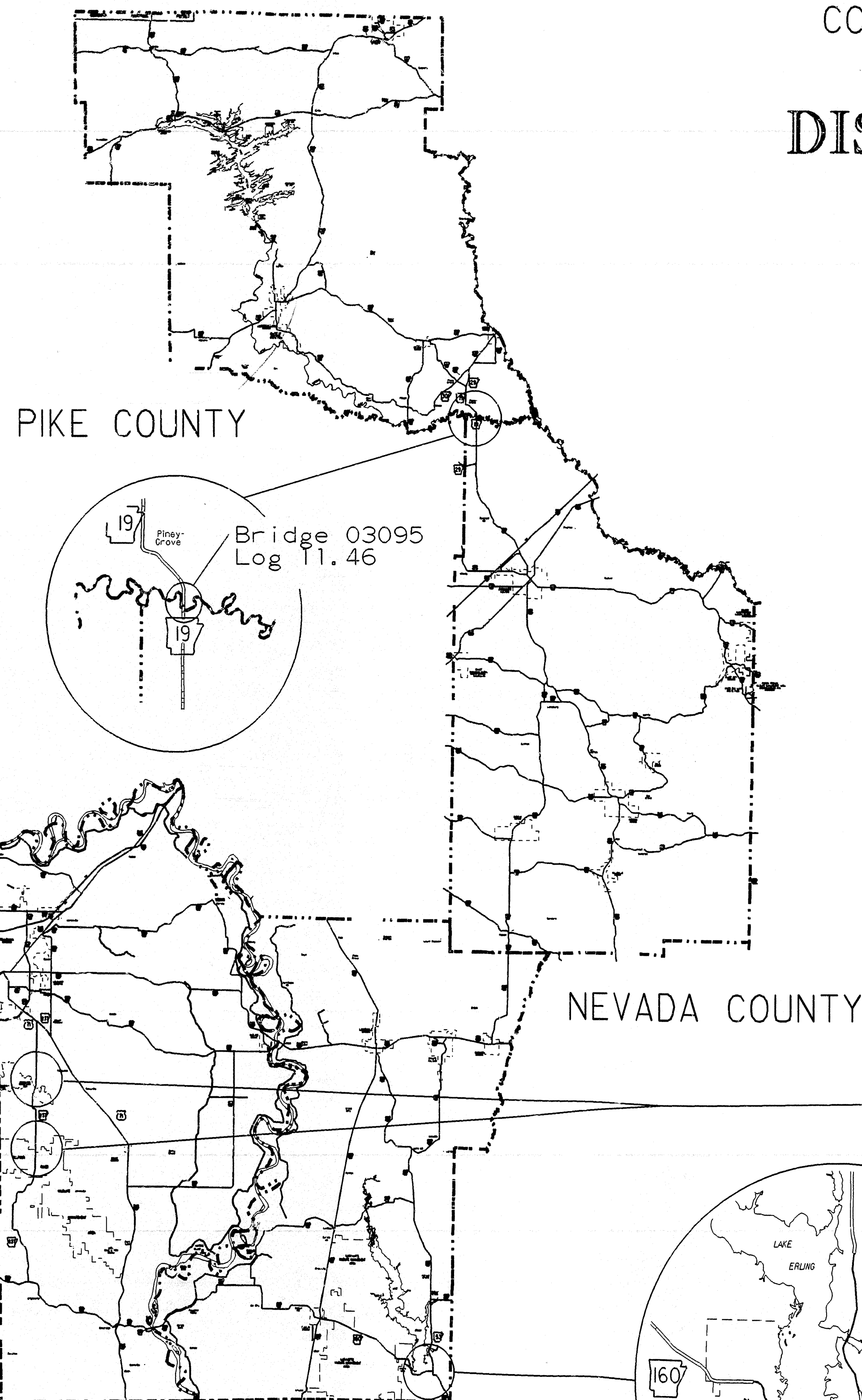
DIVISION ENGINEER

DATE



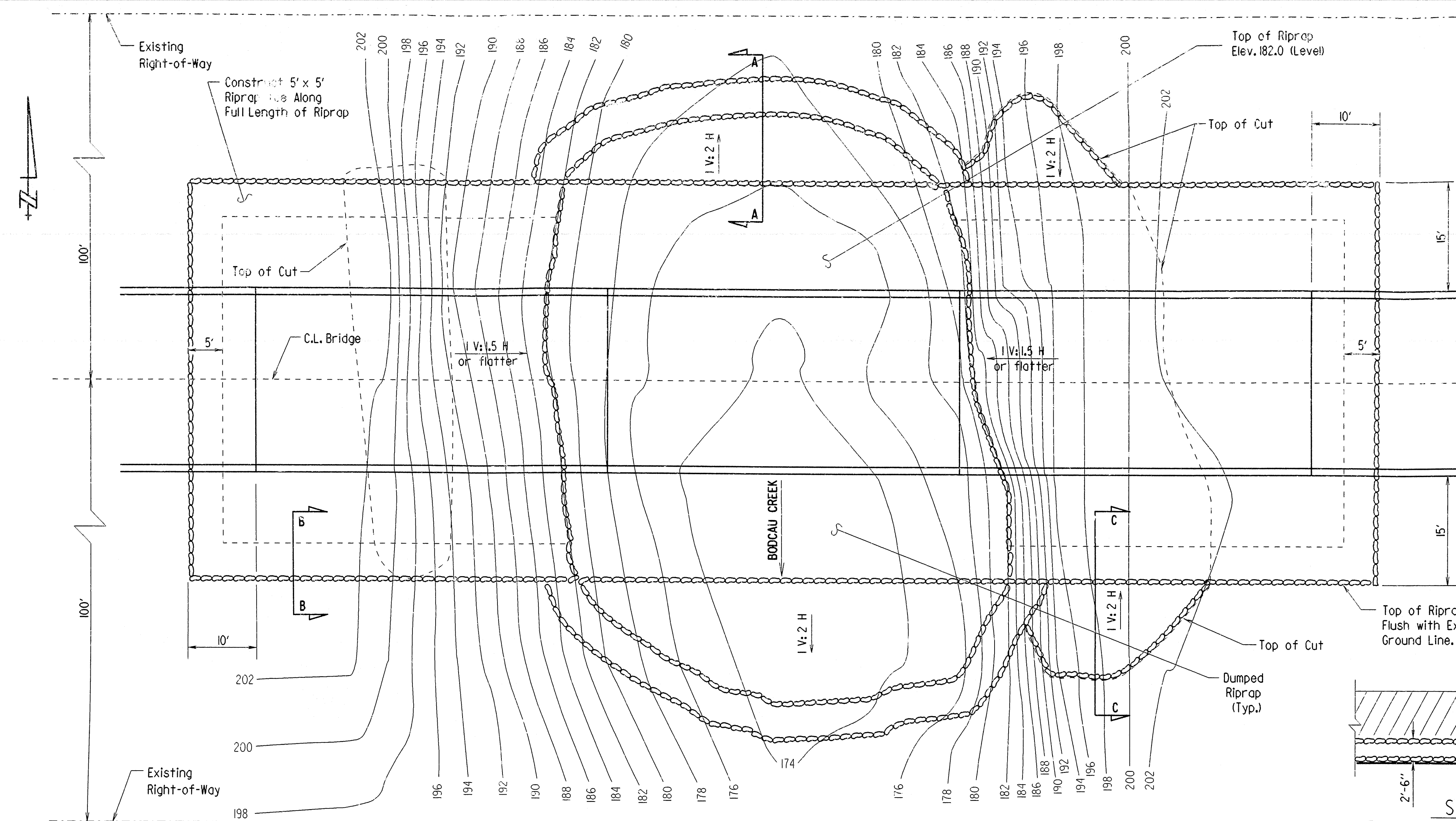
DRAWN BY: CAB DATE: FEB. 26, 1999
CHECKED BY: TMS DATE: SEPT. 8, 1999

BRIDGE NO. 03095, 03749, 03752, 03788, 03789 DRAWING NO. 39177



MILLER COUNTY LAFAYETTE COUNTY

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		03097	5	11
				03749		Scour Repair Layout	3981	



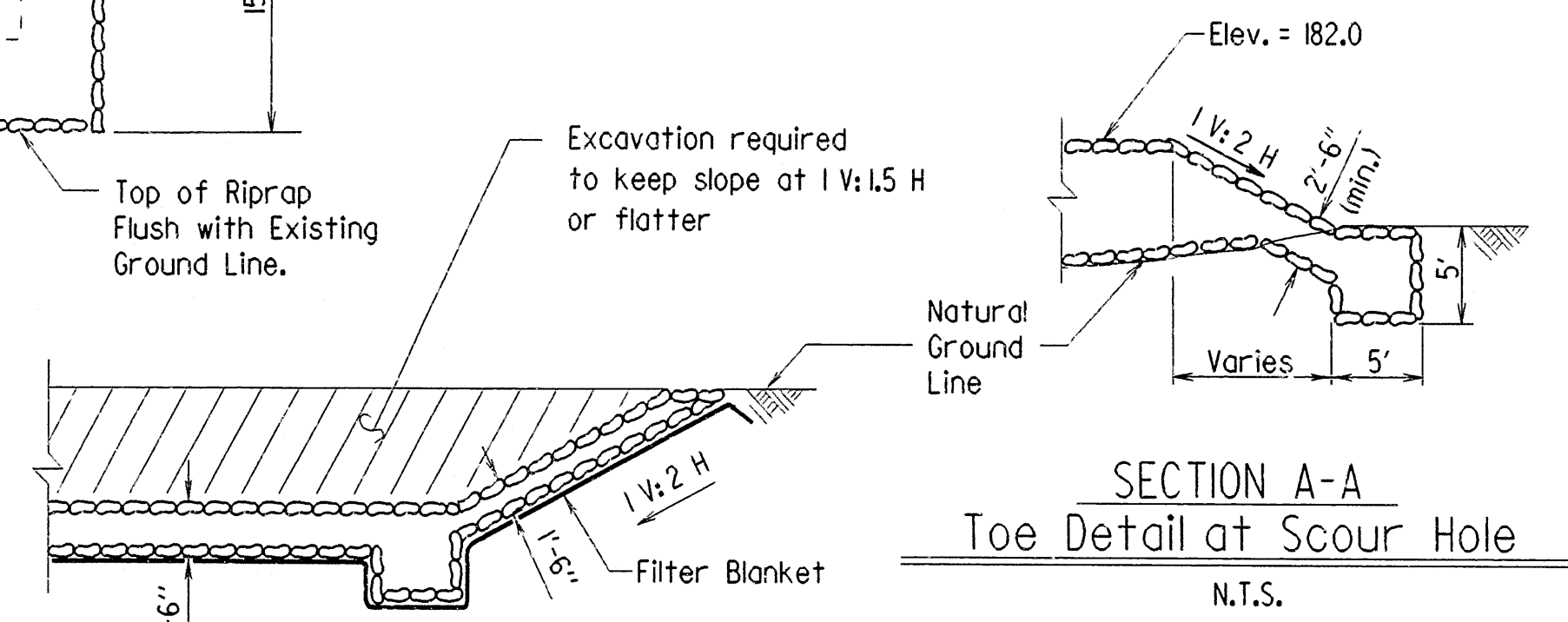
PLAN

GENERAL NOTES

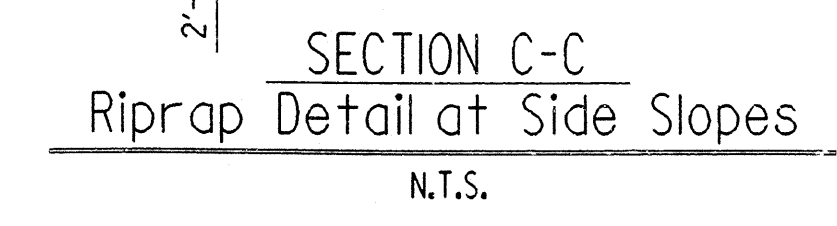
BENCH MARK: Top of deck at C.L. Bridge No. 03749, Sta. 44+45.0, Elev. 215.0

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction (1996 edition) with applicable supplemental specifications and special provisions.

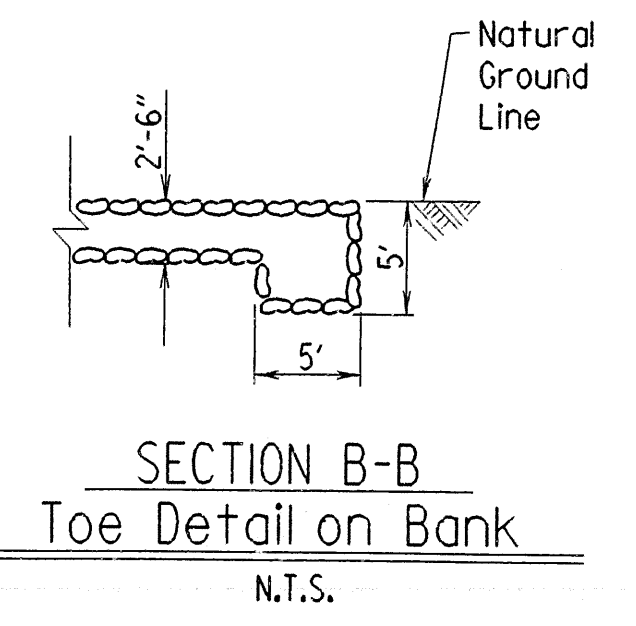
The proposed work consists of placing dumped riprap on the indicated areas of stream banks and channel. Excavation will be required prior to placing riprap on the banks and for the riprap toes in the channel. The finished surface of the riprap shall not be sloped steeper than 1V:1.5 H. Excavate steep banks to meet this requirement. Care shall be exercised to avoid damaging the bridge while placing riprap under the spans and around the piling. Riprap may be placed under water in a manner that maintains the required gradation. The Engineer shall take soundings to determine thickness and extent. Additional erosion of the stream bed and banks may have occurred since ground data was collected. If significant variations exist between the plotted contours and the actual ground, the Engineer shall be notified. Modification of the scour repair details may be required.



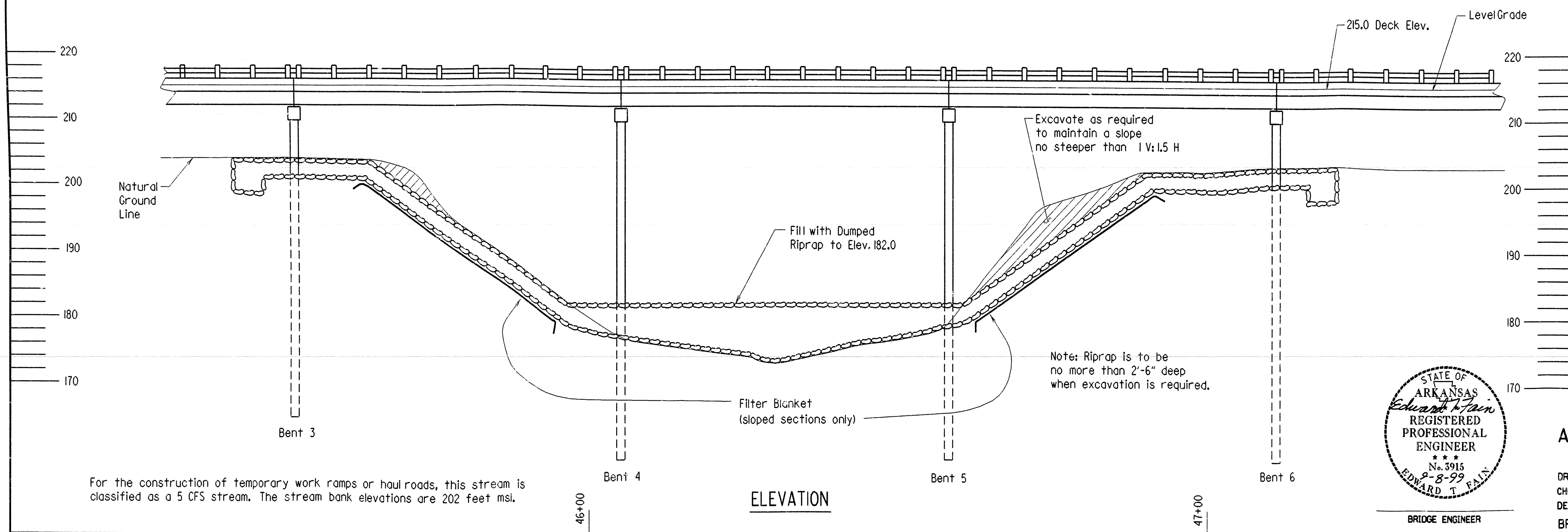
SECTION A-A
Toe Detail at Scour Hole
N.T.S.



SECTION C-C
Riprap Detail at Side Slopes
N.T.S.

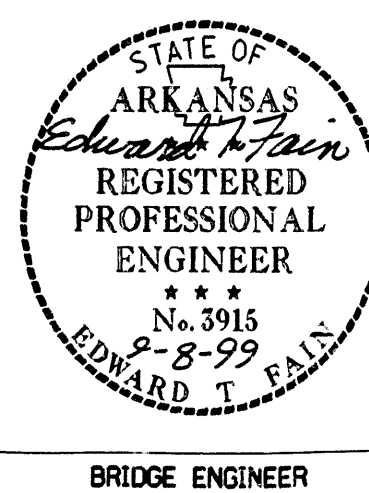


SECTION B-B
Toe Detail on Bank
N.T.S.



ELEVATION

For the construction of temporary work ramps or haulroads, this stream is classified as a 5 CFS stream. The stream bank elevations are 202 feet msl.



LAYOUT OF SCOUR REPAIR
BODCAU CREEK
DISTRICT THREE BRIDGES
(SCOUR REPAIR) (S)
LAFAYETTE COUNTY

ROUTE 160 SEC. 2 L.M. 9.00
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: MAH & MJS DATE: 10-7-97
CHECKED BY: MJS DATE: SEPT. 8, 1999
DESIGNED BY: MJC DATE: 10-7-97

BRIDGE NO. 03749 DRAWING NO. 3981

MICROFILMED
OCT 05 1999