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## STATE OF ARKANSAS STATE HIGHWAY COMMISSION

### PLAN AND PROFILE OF PROPOSED STATE HIGHWAY

#### LOUISE - LEHI

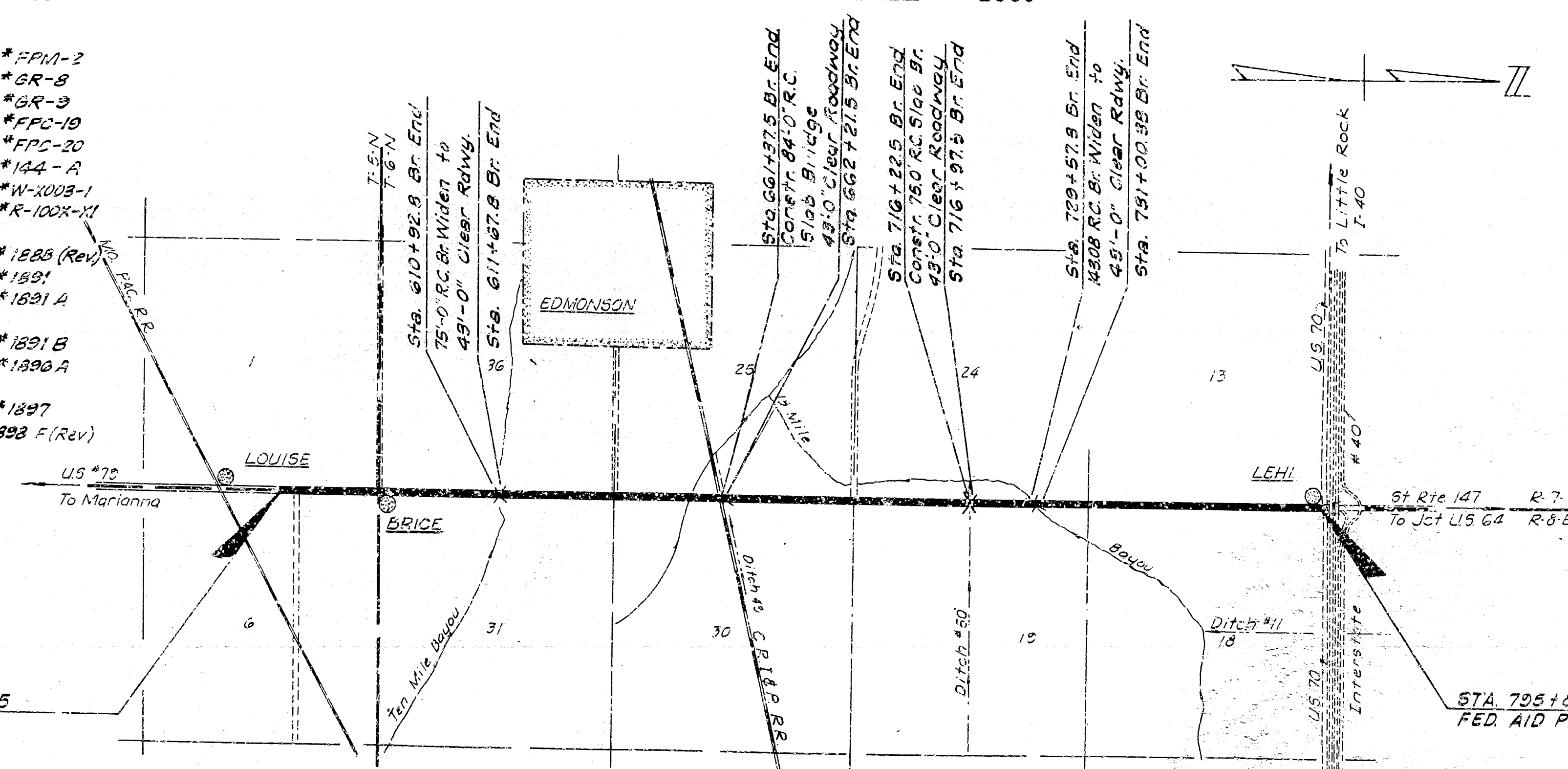
#### CRITTENDEN COUNTY

ROUTE 79 SECTION 18

FEDERAL AID PROJECT F-015-3(11)

JOB 11705

LAYOUT SCALE 1" = 2000'



NOTE: This Standard Not Normally Included In Plans Sold To Prospective Bidders, But May Be Had On Request.

STA. 562+000 BEGIN JOB 11705  
FED. AID PROJ. F-015-3(11)

STA. 795+000 END JOB 11705  
FED. AID PROJ. F-015-3(11)

#### CONVENTIONAL SIGNS

STATE LINE	RETAINING WALL
COUNTY LINE	BASE OR SURVEY LINE
CITY OR VILLAGE	LEVEE
TOWNSHIP LINE	CULVERTS
SECTION LINE	DROP INLET
GRANT LINE	TROLLEY POLE
FENCE LINE	POWER POLE
UNFENCED PROPERTY	TELEPHONE OR TELEGRAPH
RIGHT OF WAY LINE	MARSH
TRAVELED WAY	HEDGE
RAILROADS	BUILDINGS

SCALES: PLAN 1" = 100'  
PROFILE HORIZ. 1" = 100' VERTICAL 1" = 10'

GROSS LENGTH OF PROJECT 23380.60 FEET OR 4.428 MILES  
NET " " ROADWAY 23003.62 " " 4.357 " "  
NET " " BRIDGES 377.03 " " 0.071 " "  
NET " " PROJECTS 23380.60 " " 4.428 " "

FED. AID DIST. NO.	STATE	FED. AID PROJ. NO.	SECTION	SHEET NO.
6	ARK.	F-015-3(11)		1
JOB NO. 105				

ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1966 THE 1966 SUPPLEMENTAL SPECIFICATIONS THERE TO AND THE FOLLOWING SPECIAL PROVISIONS:

- NUMBER
- PR. 1274 Required Contract Provisions Federal Aid Contracts
- 6-3 Sources of Materials
- 7-22 Construction Identification Signs
- 7-26 Plant Pest Control
- 8-2 Employment of Labor
- 9-11 Revision of Article 9-7 - Partial Payments
- 100-1 Furnishing Field Offices and Laboratories
- 607-1 Electronic Speed Control
- 808-10 Aluminum Coated Steel Products
- 909-7 Corrugated Metal Pipe Culvert (Aluminum Alloy)
- 917-1 Revision of Section 917 - Guard Fence
- 922-1 Sod Mulch
- 951-2 Removing and Resetting Right-of-Way Markers
- 1008-1 Detour Construction
- 1008-2 Maintenance of Traffic
- 1065-2 Removal and Disposal of Guard Fence
- Job 11705 Sand Asphalt (Hot Mixed-Hot Laid)
- 4-1 Plant Sites and Equipment Storage Areas
- 6-6 Furnishing Materials from Biers, Pits or Quarries
- 7-29 Protection of Streams, Lakes and Reservoirs
- 802-9 Linseed Oil Treatment of Concrete
- Job 11705 Remodeling Existing Bridge Structures
- 806-12 High Strength Steel Bolts
- 806-13 Revision of American Welding Society Bridge Specifications
- 8-9 Legal Holidays
- 8-8 Computation of Contract Time for Completion
- Job 11705 Utility Adjustments
- Job 11705 Highway-Railway Agreement
- Job 11705 Insurance and Construction on Railroad Property
- Job 11705 Delay in Right-of-Way Occupancy
- TRAFFIC DATA
- 1967 ADT 4100
- 1987 ADT 7850
- 1987 DHV 364
- V 60 MPH

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

RECOMMENDED FOR APPROVAL

APPROVED

J. P. Ingram JUN 30 1987

U. S. DEPARTMENT OF TRANSPORTATION  
BUREAU OF PUBLIC ROADS

RECOMMENDED FOR APPROVAL

APPROVED

DIVISION ENGINEER

R 45 11705  
F-015-3(11)



7

# SUMMARY OF BRIDGE QUANTITIES - JOB 11705

BRIDGE NO.	CODE NO.	NAME	PLATE TITLE	UNIT OF BRIDGE	ITEM NO.	801	802	803	804	804	SP-1005 (A11.1) 805 (A11.2)	812	1006	SP-1005-1	SP-802-9	SP-806	SP-1005-1
					ITEM	COMMON EXCAVATION FOR STRUCTURES	CLASS S CONCRETE	REINFORCING STEEL	PRECAST CONCRETE PILING (16" DIA.)	PROVIDING EQUIPMENT FOR DRIVING TEST PILES	(A11.1) METAL (ALUMINUM) BRIDGE RAILING (TYPE C)	BRIDGE NAME PLATES (TYPE C)	REMOVAL OF EXISTING BRIDGE STRUCTURES	CEMENT CONSTRUCTION	Boiled Linseed Oil	Structural Steel in Beam Spans	Remodeling Existing Bridge Structures
					UNIT	Cu. Yd.	Cu. Yd.	Lb.	Lin. Ft.	COMP. ITEM	Lin. Ft.	PLATE	COMP. ITEM	COMP. ITEM	Gal.	Lb.	Comp. Item
5154	X020	DITCH 49		END BENTS 1 & 4	86	21.44	2895	430									
				INT. BENT 2		10.02	1485	245									
				INT. BENT 3		10.02	1433	240									
				END SPANS 1 & 3		119.33	24,860				113	1			6.2		
				INT. SPAN 2		58.94	12,384				56				3.1		
5155	X020	DITCH 50		TOTALS FOR Bridge	88	219.80	43,060	905	0.25	169	1	0.5	0.4	9.3			
				END BENTS 1 & 4	66	20.80	2907	350									
				INT. BENT 2		9.63	1466	205									
				INT. BENT 3		9.63	1416	200									
				END SPANS 1 & 3		100.90	20,578				101.5	1			5.6		
3490A	X020	DITCH 50		INT. SPAN 2		49.64	10,233				50				2.8		
				TOTALS FOR Bridge	66	190.60	36,600	755	0.25	151.5	1	0.4	0.4	8.4			
				End Bents 1 & 4	32	8.48	1,382	140									
				Int. Bents 2 & 3		6.78	1,218	165									
				End Spans 1 & 3		47.57	8,780				101.5	1					
25634	X071	H. Jeanette Bayou Ten Mile Paved		Int. Span 2		23.57	4,390				50						
				TOTALS FOR Bridge	32	86.40	15,770	305	0.25	151.5	1						0.4
				Abut. 1 & 2	182	67.80	10,422	280		6'	1					110	
				Int. Bents 1, 2 & 3		29.30	2,520	485									
				Spans 1, 2, 3 & 4		69.60	17,588				280				63,950		
25634	X071	H. Jeanette Bayou Ten Mile Paved		TOTALS FOR Bridge	182	166.70	30,530	765	0.25	347	1					63,950	0.6
				TOTALS FOR Job	368	663.50	125,960	2,730	1.0	819	4	1.0	1.0	17.7	63,950		1.0

\*See SP-806-10

## SUMMARY OF BRIDGE QUANTITIES

LOUISE - LEHI

CRITTENDEN COUNTY

ROUTE 79 SEC. 18

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

Revised 6-29-67. FMH  
Added Bridge No. 3490A & 25634.

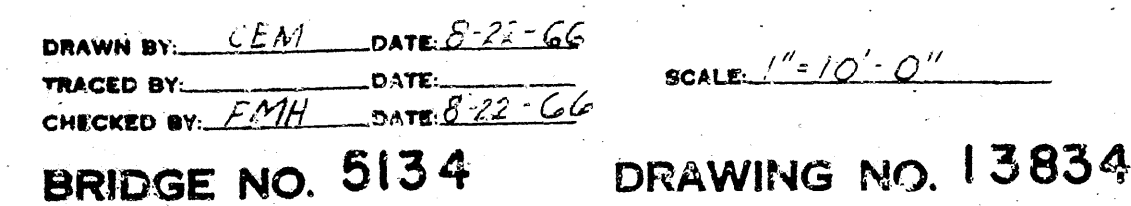
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TRACED BY: DATE: SCALE: 1" = 40'

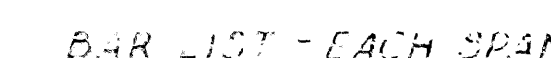
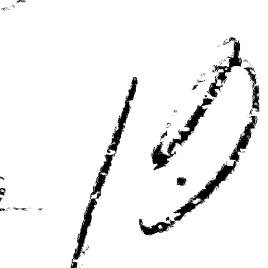
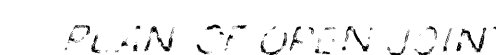
CHECKED BY: FMH DATE: 2-29-66

L. P. Pearson  
BRIDGE ENGINEER

BRIDGE NO. 5134, 5135  
3490A, 2563A DRAWING NO. 13833







\* Non-pay Items:



All concrete to be Class S. All exposed corners to be chamfered 3/4" unless otherwise noted.

Reinforcing steel to be deformed bars of intermediate or hard grade. Shop lists and bending diagrams must be submitted and approved before fabrication is begun.

All exterior pipes used to form molds shall be moisture protected, laminated type construction, minimum thickness 3/16" for 10" tubes and shall be furnished complete with end closures.

All reinforcing and fiber tubes shall be accurately located in the forms and firmly held in place by means of steel wire supports and spacers for tubes of sufficient size and number to prevent displacement during the course of construction, but in no case of lesser fastenings than that shown.

Wire supports for reinforcing bars will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel.

Tubes for forming voids and wire supports and spacers for tubes will not be paid for directly but will be considered subsidiary to the item of Glass & Concrete.

Shop lists and details of wire supports and spacers for wires shall be submitted for approval before fabrication is begun.

Roofing felt, attractive felt and poured asphalt joints shall be measured and paid for as Glass's Concrete.

Bridge railing, including and post, rail posts & fastenings shall be paid for at the price per foot of Metal Bridge Rail, Model 15A-100, Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1984, and 1985 Standard Specifications and Addendum to said Specifications.

DESIGN SPECIFICATIONS: = AASHTO 198

Design Live Loading: HS20 and Special Interstate Loading of 2-24,000 axles 4'0" on centers.

Load Distribution to Slab: Dead Load - 188 psf

Live load - 0.184 wheel/s/ft width plus 30% impact

Unit Stresses: Class S Concrete ( $n=10$ ) 1,200 psi

Reinforcing Steel 20,000 psi

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK

DRAWN BY: RWM DATE: 9-26-66

TRACKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

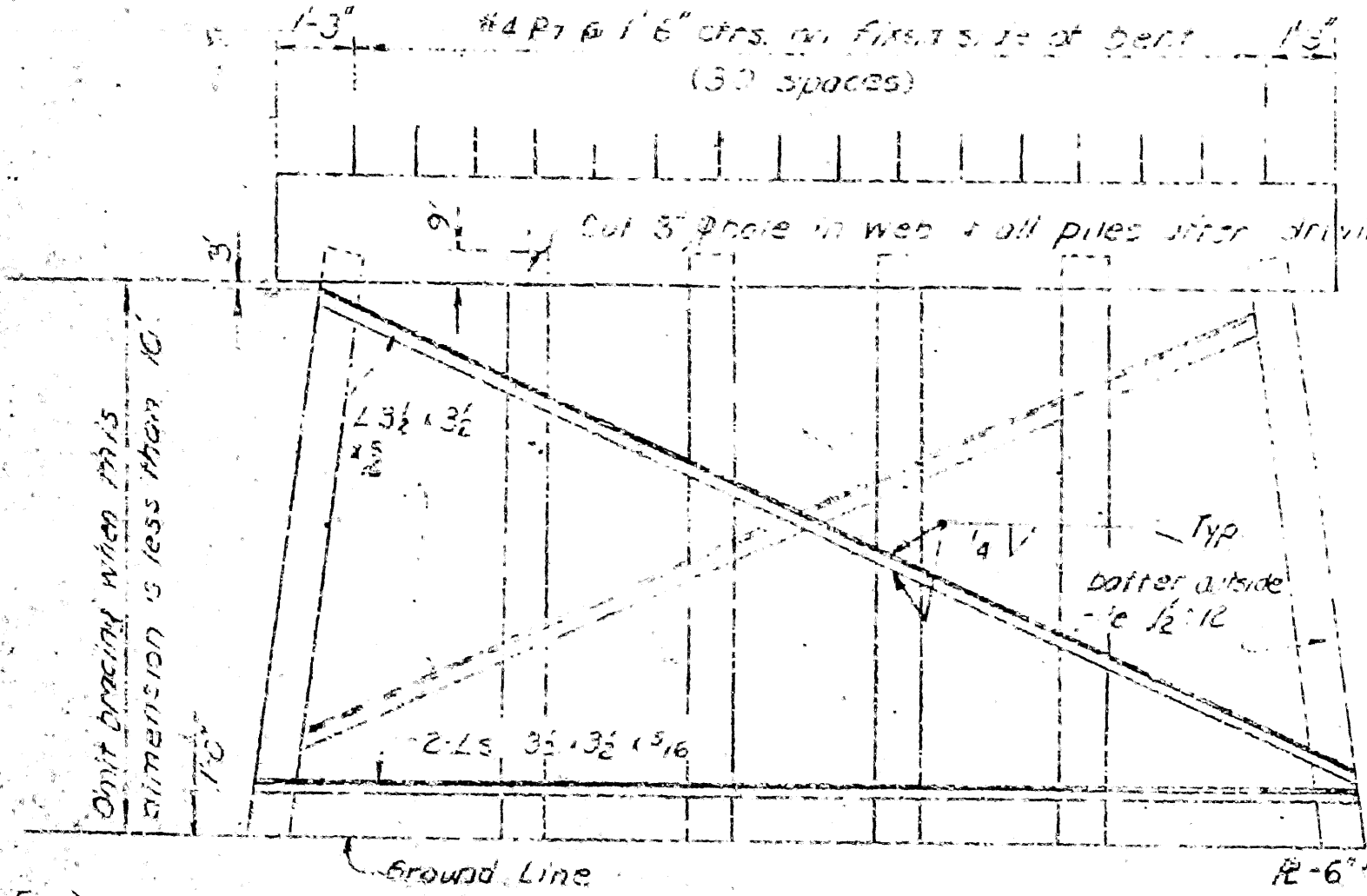
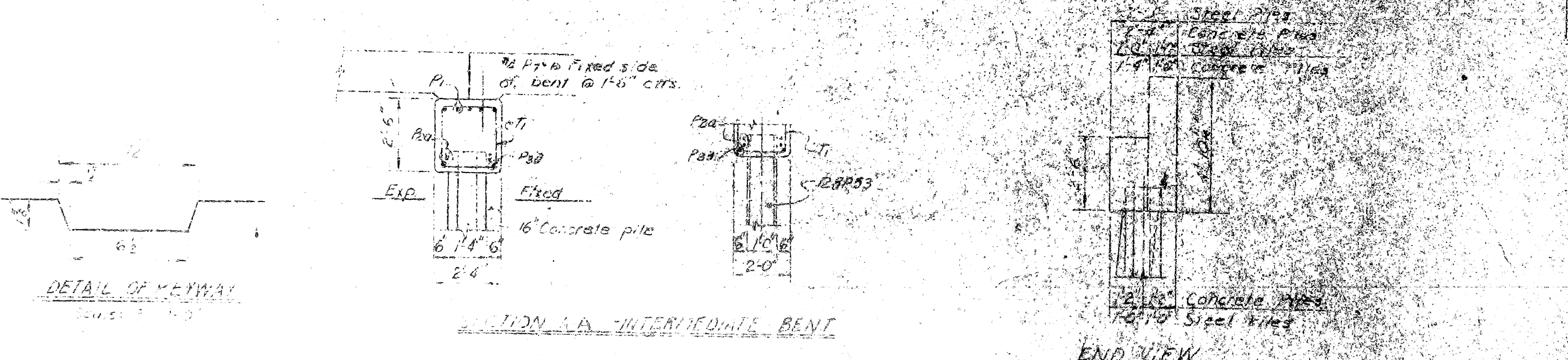
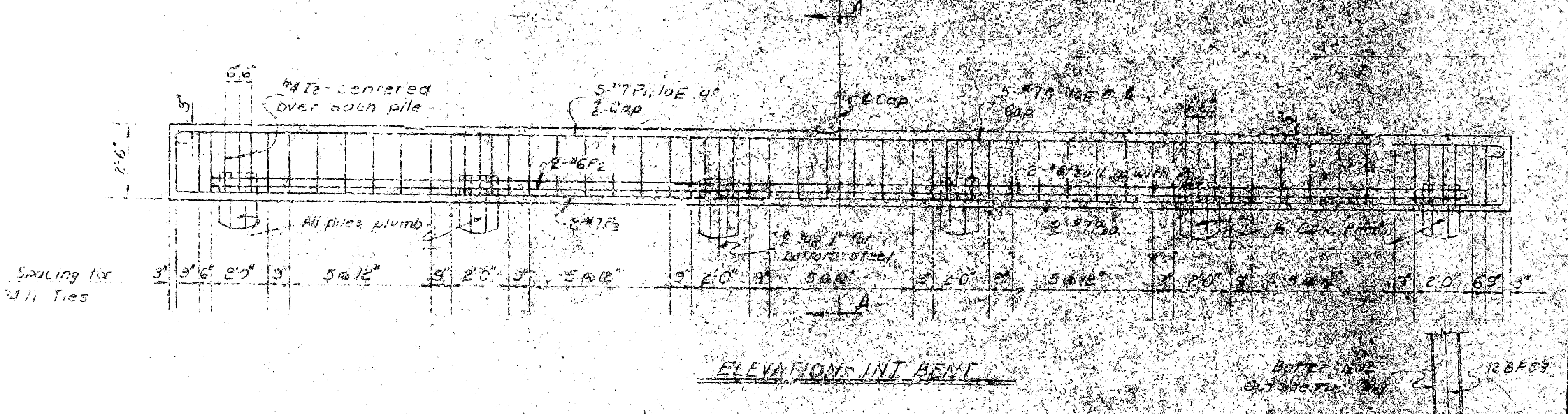
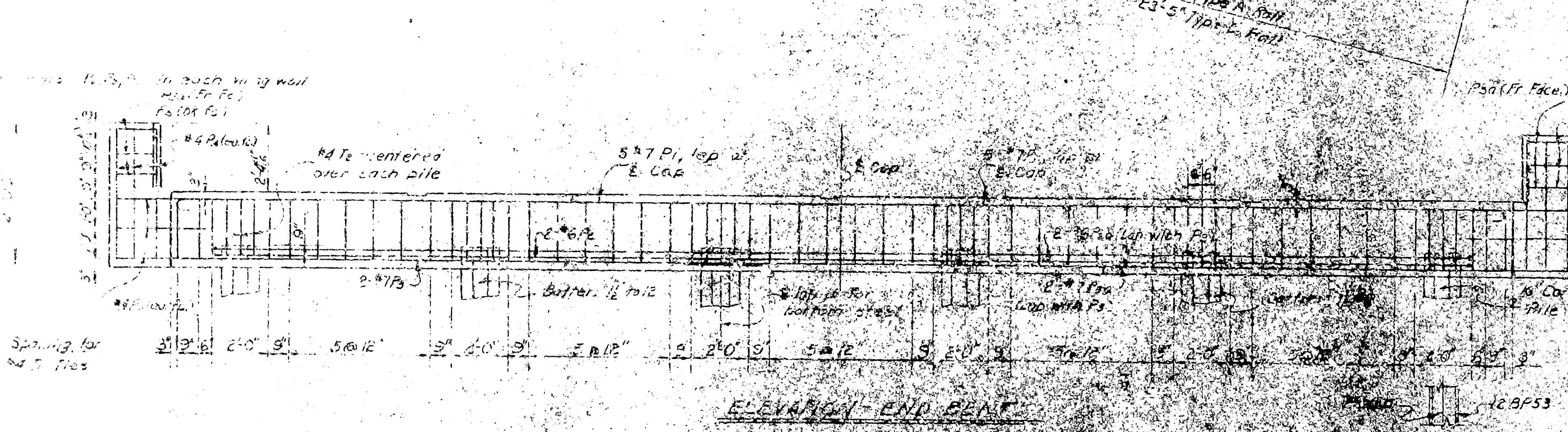
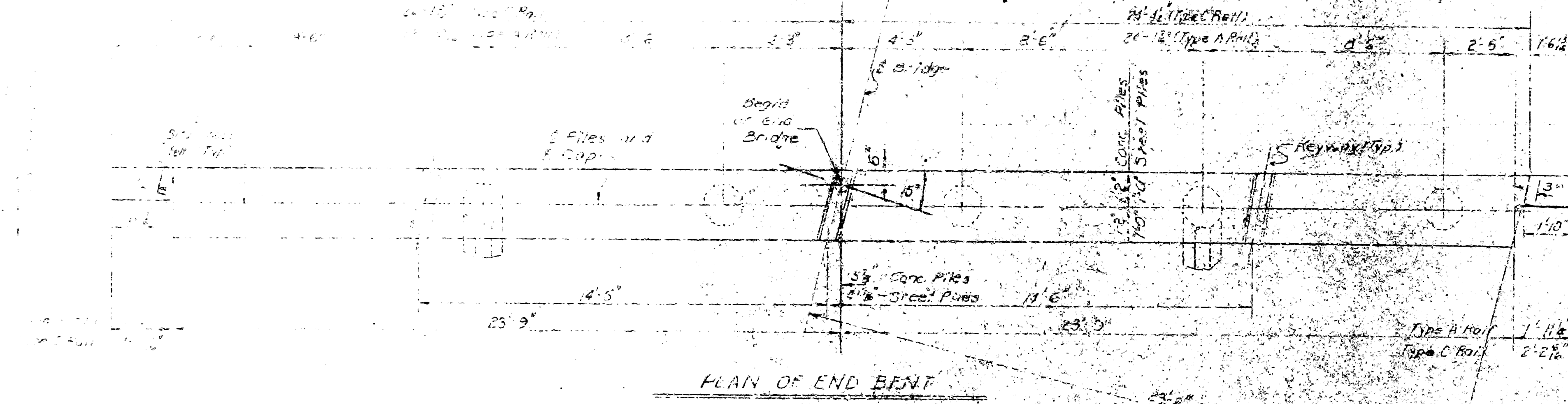
BRIDGE NO. 5/34 DRAWING NO. 5101 B

File as DWG 13834 A



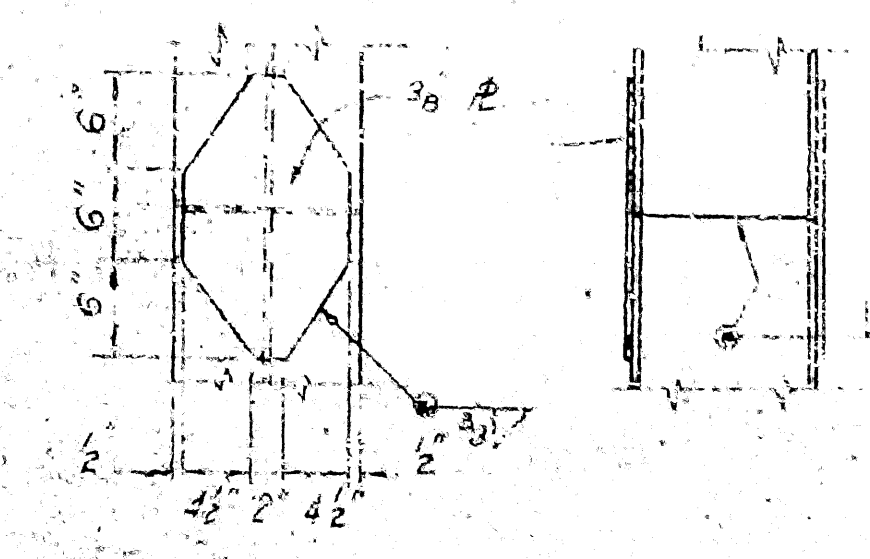
NOTE: Steel pile tip reinforcing will not be paid for directly but shall be considered subsidiary to the item of "Steel Bearing Piling."

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	F-015-2(11)		20	83
JOB NO.		11205			



NOTE: The length of bracing members shall be determined in the field. Each member shall be one continuous angle and shall be welded to steel bearing piles as shown. Angle bracing shall be measured and paid for as "Structural Steel" in Beam Spans.

20



Scale 1" = 1'-0"

BAR LIST

Bar	Size	No. per Bent	End	Int.	Length	Pile Dia.	Bending Diagram
P1	7	10	10	25'-9"	54"	24"-11"	
P2	6	4	4	20'-1"	24"		
P3	6	4	4	29'-1"	24"		
P4	7	2	2	20'-0"	54"	2'-12"	
P5	7	2	2	29'-3"	54"		
P6	4	13	-	4'-0"	54"	4"	
P7	4	6	-	14'-3"	54"		
P8	4	6	-	1'-2"	54"		
P9	4	12	-	2'-9"	54"		
P10	4	-	-	2'-6"	54"		
T1	4	46	46	3'-9"	12"		
T2	4	18	18	8'-1"	12"		
T3	4	18	18	6'-7"	12"		

\* 31 P1 for P11-Exp. JT.  
 \* 62 P1 for P11-Exp. JT.  
 \* Use with Conc. Piles Only

All dimensions are to bar ends.

NOTE: The contractor may for his convenience and at his own expense provide as many as three splices per pile for steel bearing piling. Minimum spacing between splices shall be 5 feet.

GENERAL NOTES

All concrete to be Class S and shall be placed in the dry. All exposed corners to be chamfered 5/8" unless otherwise noted.

Reinforcing steel to be deformed bars of intermediate or hard grade. Shop lists and bending diagrams are to be submitted for approval before fabrication.

All piling shall be driven to minimum capacity of 24 tons per pile. Piling shall be either 12 BP53 steel bearing piles, or 16" octagonal precast concrete piles as shown on the layout.

For details of Standard 24" RC Slab Span 15' Rt. Fed. See Drawing No. 15101-B

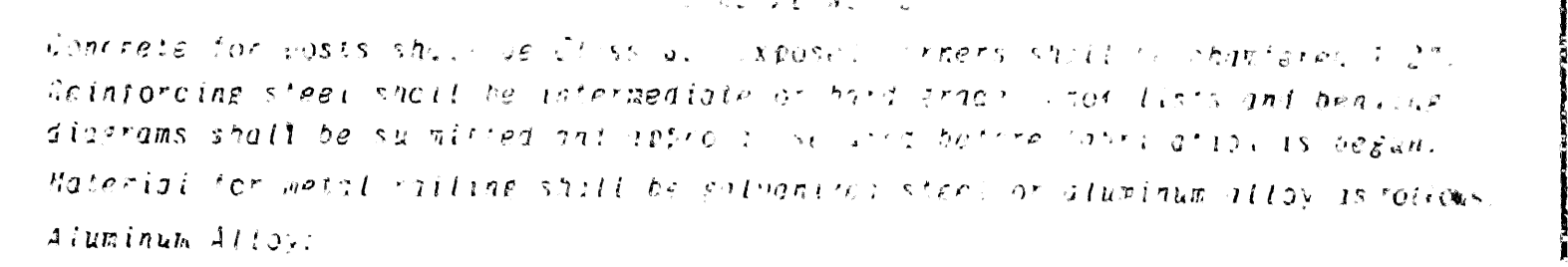
SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959, the 1966 Supplemental Specifications thereto, and applicable Special Provisions.

DETAILS OF STANDARD  
 PILE BENTS (15° RT. FWD. SKEW)  
 28'-0" to 30'-0" R.C. SLAB SPANS  
 43'-0" CLEAR ROADWAY, 1'-6" CURBS  
 ROUTE SEC.  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 DRAWN BY: RJM DATE: 22 Sept 66  
 CHECKED BY: DATE: 7/68 SCALE: 3/4" = 1'-0" or as noted  
 BRIDGE NO. 5134 DRAWING NO. 15101-C

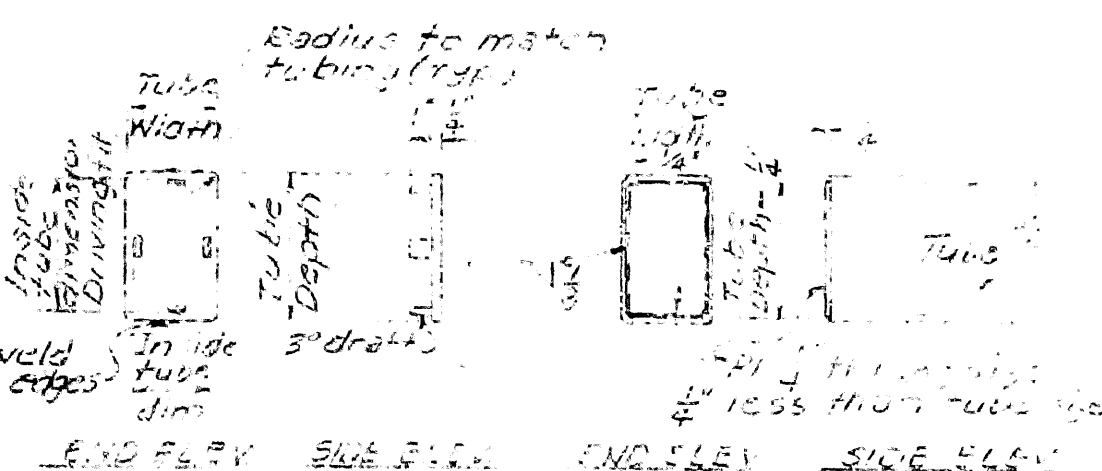
L. Carlson  
 BRIDGE ENGINEER



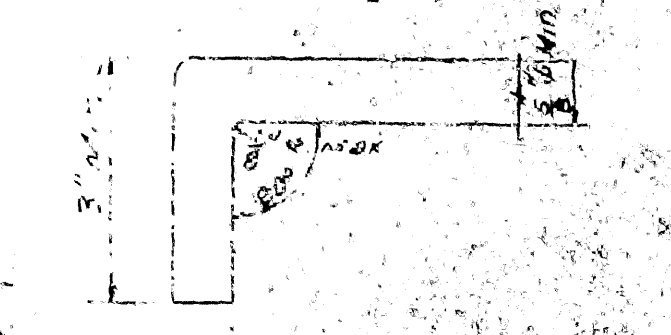
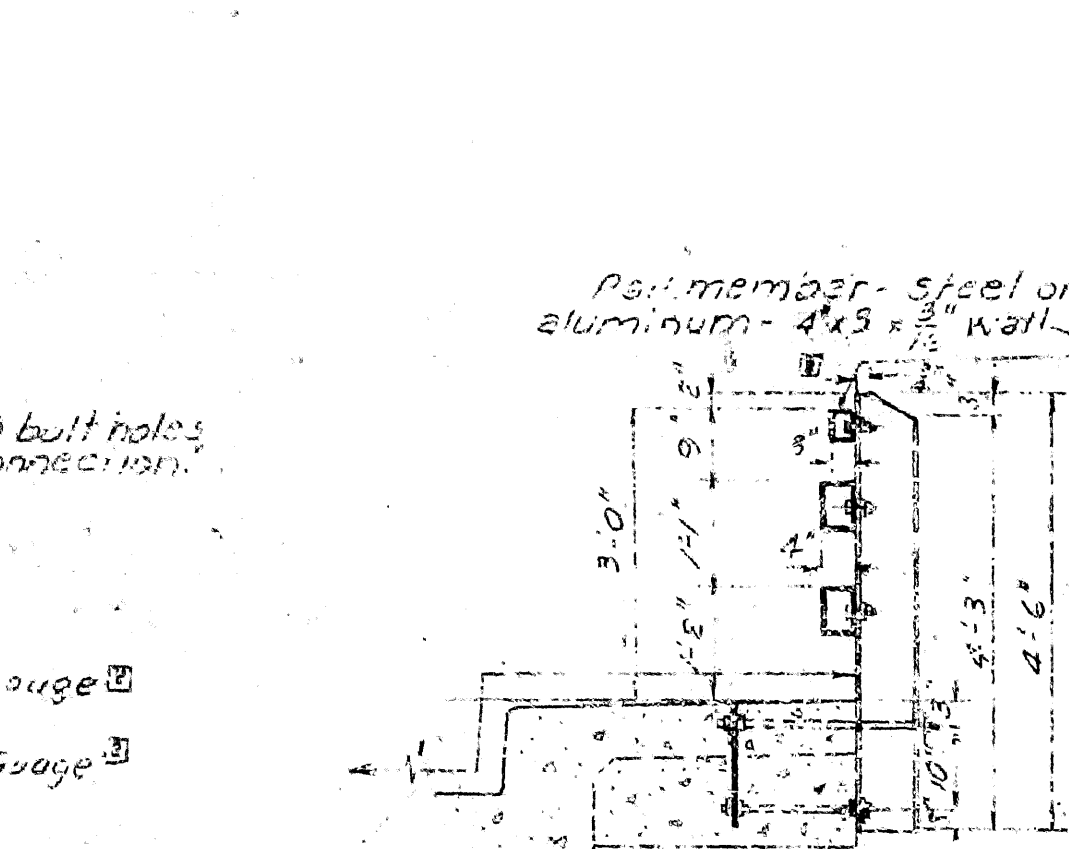
2. Provide spine of ball longitudinal no. 10 to 12 to insure continuous length to 30 maximum. Minimum continuous length shall be such as to provide attachment to at least 2 pages.



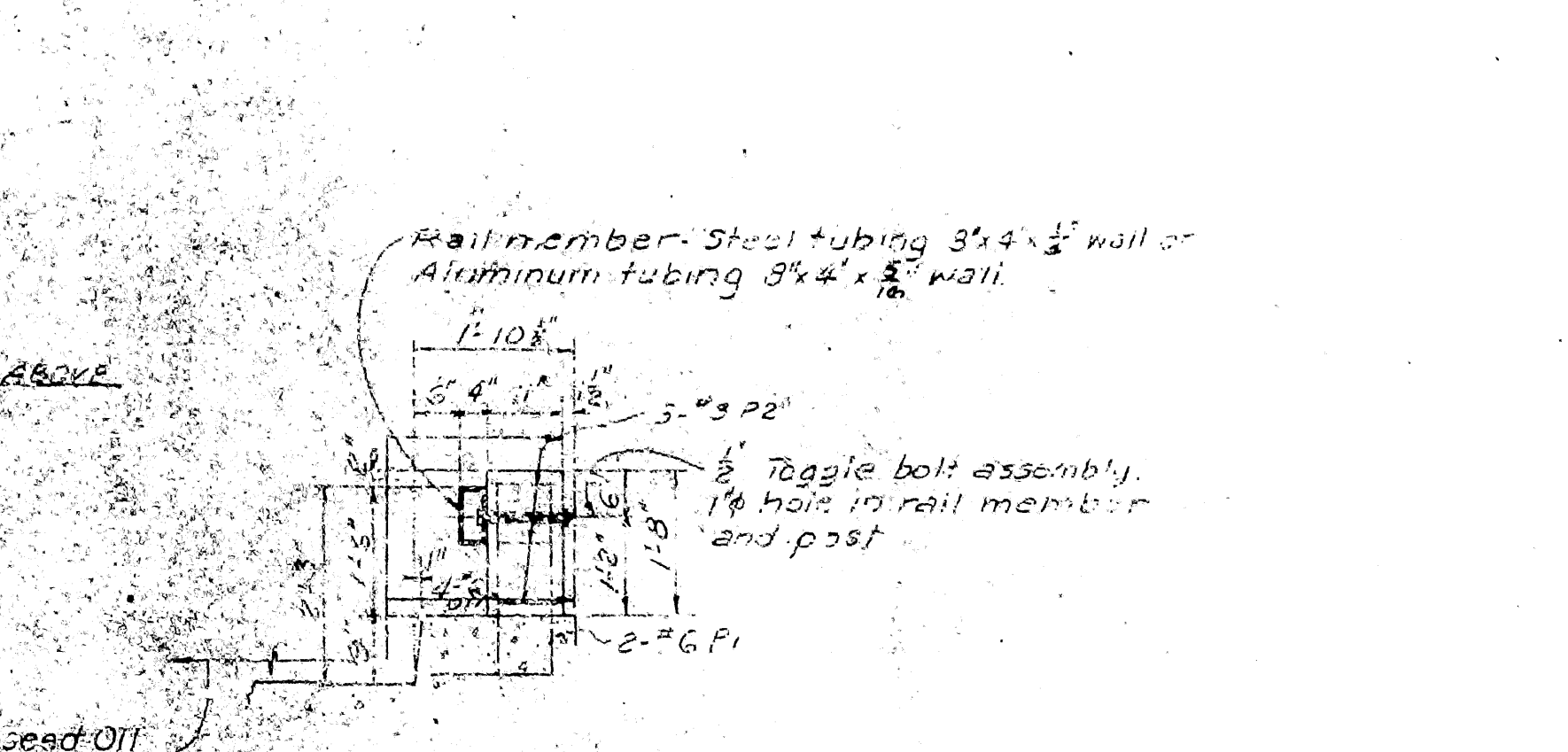
SECTION 4-A  
TYPE A RAIL



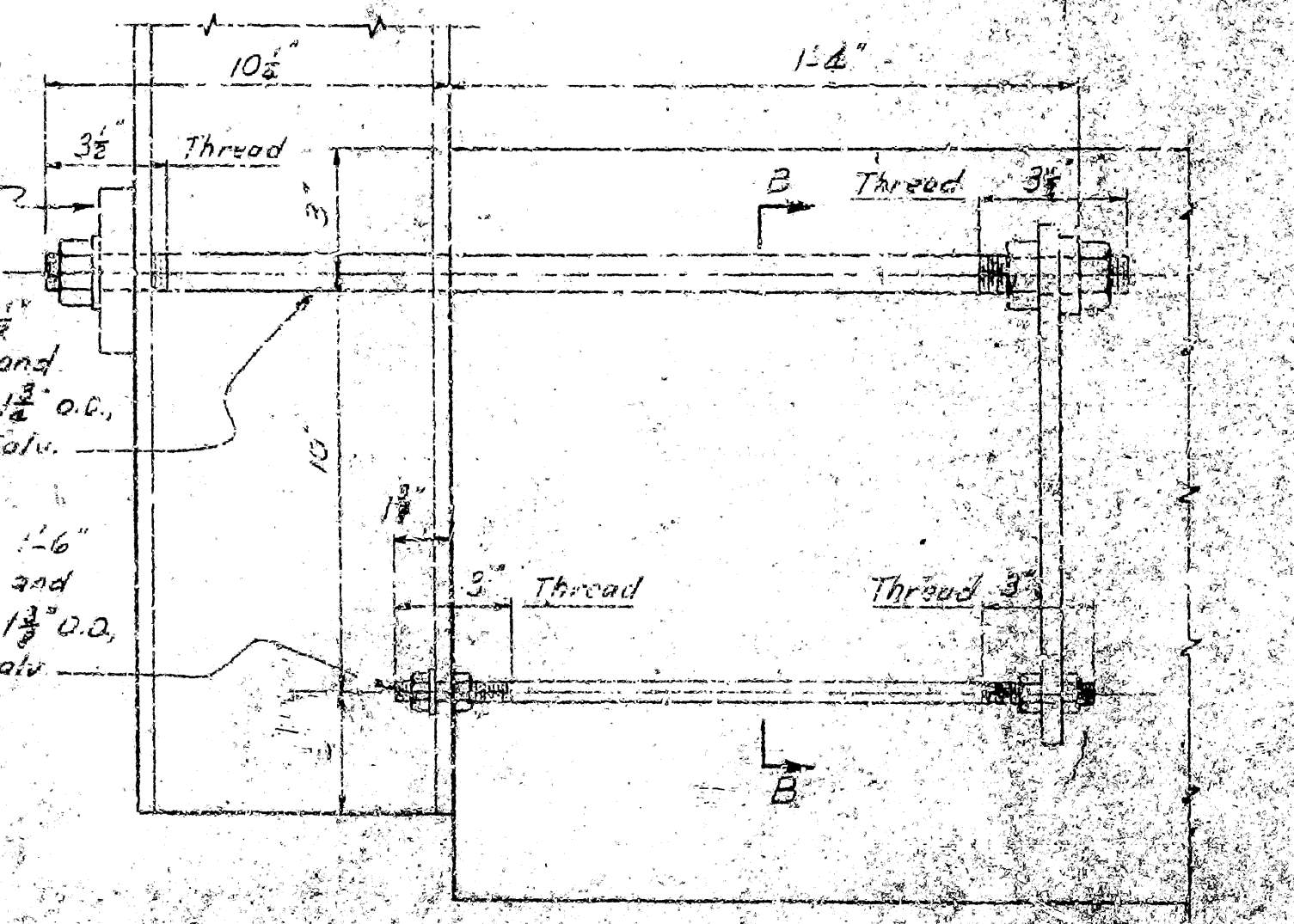
TOGGLE BOLT ASSEMBLY  
Size: 1/2 size



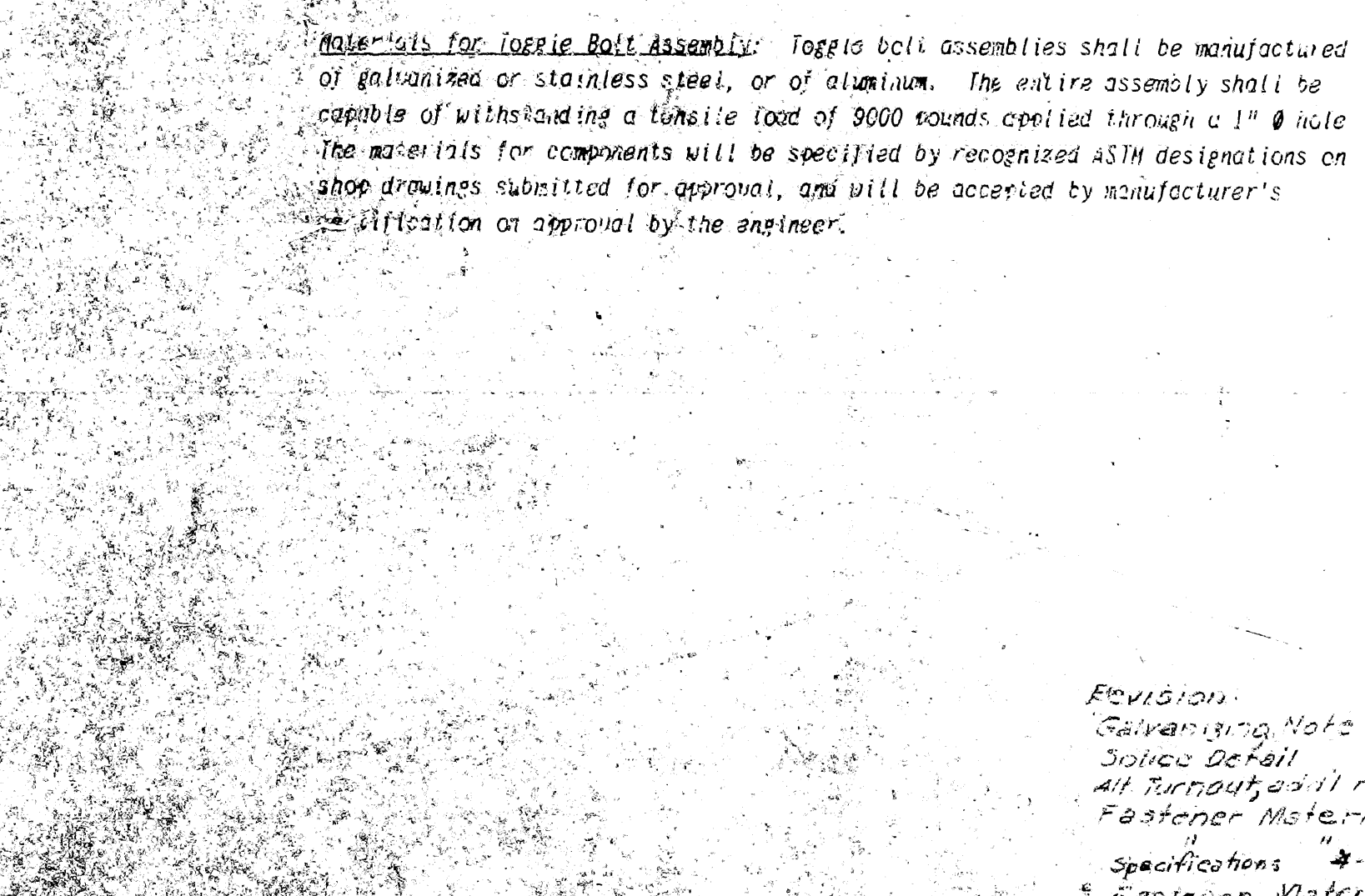
DETAILS OF OPTIONAL TRAILING END CAPS  
Scale: 1/2" = 1'-0"



SECTION A-A  
TYPE "C" RAILING  
FOR SHOULDER WIDTH BRIDGES



Materials for Toggle Bolt Assembly: Toggle bolt assemblies shall be manufactured of galvanized or stainless steel, or of aluminum. The entire assembly shall be capable of withstanding a tensile load of 9000 pounds applied through a 1" Ø hole. The materials for components will be specified by recognized ASTM designations on shop drawings submitted for approval, and will be accepted by manufacturer's certification on approval by the engineer.



ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY *H.B.* DATE *5-1-64*  
 TRACED BY DATE SCALE *1" = 10' 0" 1/2" = 25' 0"*  
 CHECKED BY *gnd* DATE *3-2-64*  
 BRIDGE NO. *5134, 5135* DRAWING NO. *14033*  
*3490A, 2563A*

FILE AS DRWG. 13835C