

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	DANR-I-UNIT 4		1	2
STATE JOB NO. 7305					

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

INDEX OF SHEETS

SHEET No	DRWG. No	DESCRIPTION
1	6634	Title Sheet Job No. 7305
2	6635	Summary Sheet and Details of Pavement
3	6636	General Plan
4	6637	Layout of Bridge
5	6638	Details of Piers 1 & 4
6	6639	" " " 2 & 3
7	6640	" " " 21' I-Beam Span
8 & 9	6641-6642	" " " Truss Span
10	6643	" " " Bent No. 16
11	6644	" " " 46' I-Beam Span
12	6645	" " " Sidewalks for Existing Beam Spans
13	6647	Cross Section
14	1888	Embankment Construction at Bridge Ends and Backfill for Structures
15	1891	Excavation for Structures
16	3477-A	Details of Existing Construction
17-18	3478-3479	Layout of South Approach
19-20	3481-3482-A	Special Details of Spans
21	3483	Details of Swing Span and North Approach
22	2164	" " " Bents
23-26	6645-6648	" " " 40' I-Beam Spans
		" " " Detour Bridge

PLAN OF PROPOSED BRIDGE
OVER OUACHITA RIVER
AT CAMDEN, OUACHITA COUNTY

ROUTE 79 SEC. 4
JOB No 7305
DANR-I-(UNIT 4)

ITEM NO	ITEM	QUANTITY	UNIT
102	Common Excavation	273	Cu. Yd.
103	Dry Excavation for Structures	452	Cu. Yd.
103	Wet Excavation for Structures	1,026	Cu. Yd.
SP & 701	Portland Cement Concrete Pavement (9" Uniform)	337.5	Sq. Yd.
702	Reinforcing Steel for Pavement (Bars Bridge End)	1,000	Lb.
SP & 802	Class "A" Concrete for Bridges	885.00	Cu. Yd.
SP & 802	Class "B" Concrete for Bridges	358.00	Cu. Yd.
SP & 802	Seal Concrete for Bridges	359.00	Cu. Yd.
SP & 803	Reinforcing Steel	119,000	Lb.
804	Concrete Piling (14 inch square)	1,776	Lin. Ft.
804	Concrete Piling (16 inch octagonal)	162	Lin. Ft.
SP & 807	Structural Steel in Beam Spans	112,700	Lb.
SP & 807	Structural Steel in Truss Spans	576,500	Lb.
810	Untreated Timber Piling	5,320	Lin. Ft.
1002	Removal and Disposal of Concrete Pavement	335	Sq. Yd.
3P	Removal of Existing Bridge	100% Complete	Item
SP & 805	Concrete Railing	52	Lin. Ft.
SP 925-2	Guard Fence Moved and Reconstructed	220	Lin. Ft.
3P 925-2	Guard Fence Posts	10	Each

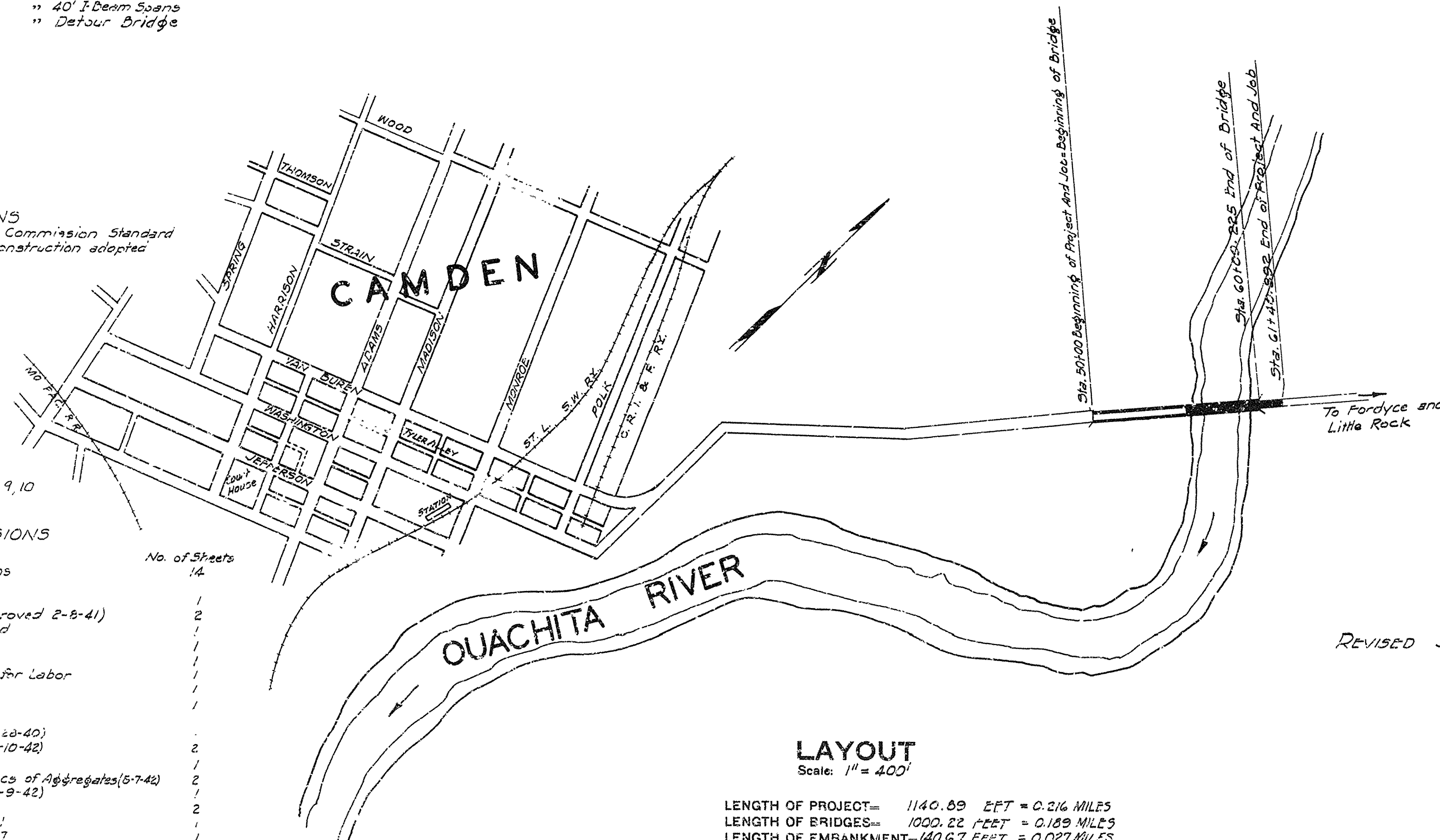
SPECIFICATIONS
Arkansas State Highway Commission Standard
Specifications for Road and Bridge Construction adopted
March 1st, 1940

PAMPHLETS

- Div. I
- Div. II Parts 1, 7, 8a, 8b, 8c, 9, 10
- Div. III
- Div. IV

SPECIAL PROVISIONS

No	Item	No. of Sheets
	Required Special Provisions	14
2-1	Wages of Labor	1
2-2	Rev. of Article 2.11 (Approved 2-8-41)	2
3-2	Equipment List Required	1
4-1	Award of Contract	1
4-1	Rev. of Art. 4.9	1
8-3	Employment Centers for Labor	1
9-5	Partial Payments	1
9-6	Common Carrier Rates	1
	Rev. of Section 701 (8-20-40)	
	" " " 701 (3-10-42)	2
752-1	Curing of Concrete	1
754-1	Physical Characteristics of Aggregates (5-7-42)	1
757-2	Central Mixing Plant (3-9-42)	2
759-1	Memoranda Curing	2
803-1	Rev. of Article 803.21	1
807-3	" " " 807.37	1
850-1	Engineers Field Office	1
853-1	Machine Mixing	1
Job 7305	Removal of Existing Bridge	1
Job 7305	Structural Steel in Beam Spans	1
952-2	Guard Fence Moved and Reconstructed	1
507-4	Rev. of Article 507.29	1
Job 7305	Concrete Railing	1



LAYOUT
Scale: 1" = 400'

LENGTH OF PROJECT= 1140.89 EFT = 0.216 MILES
LENGTH OF BRIDGES= 1000.22 FEET = 0.189 MILES
LENGTH OF EMBANKMENT= 140.67 FEET = 0.027 MILES
LENGTH OF JOB= 1140.89 FEET = 0.216 MILES

REVISED 3-12-45

RECOMMENDED FOR APPROVAL
DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED
COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED
CHIEF OF STATE HIGHWAY COMMISSION

APPROVED
STATE HIGHWAY ENGINEER

W. O. Garver
PRINCIPAL HIGHWAY ENGINEER (BRIDGES)

BRIDGE No. 2466

DRAWING No. 6634

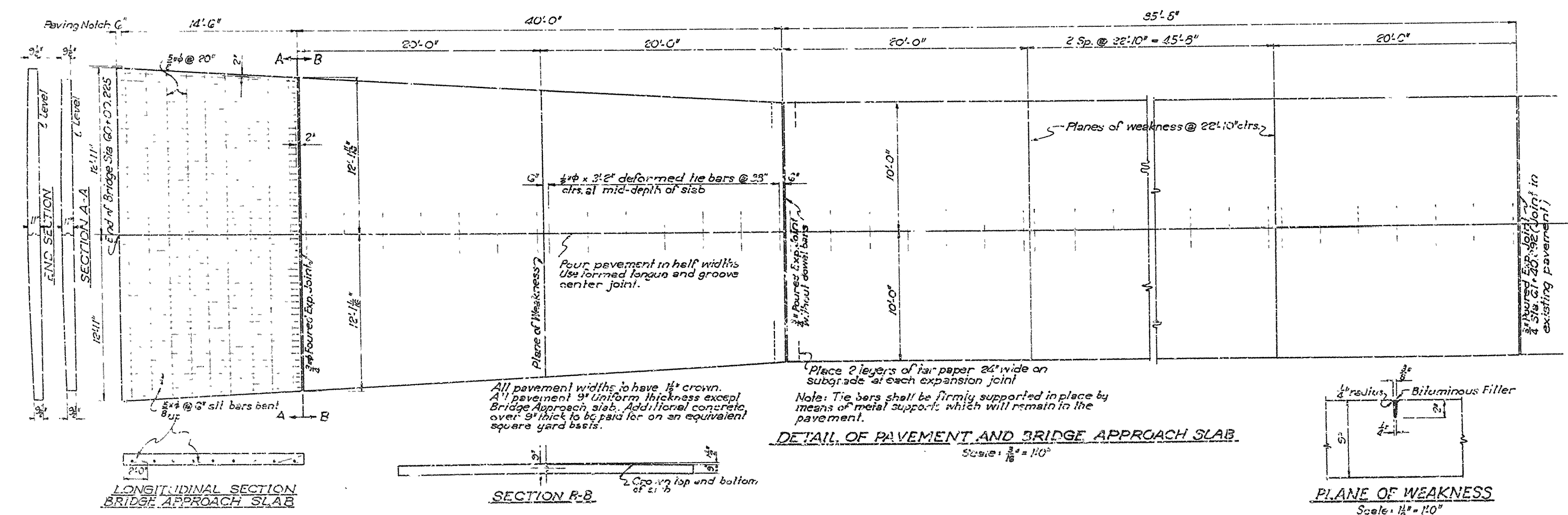
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.	DAVIS Unit 1		2	25
STATE JOB NO. 7305					25

SUMMARY OF BRIDGE QUANTITIES (CODE NO. 970)

ITEM NO.	ITEM	UNIT	Pier No. 1	Piers No. 2 & 3	Pier No. 4	Benl No. 16	Span No. 1	Spans No. 2 to 13 Incl.	Span No. 14	Span No. 15	Spans No. 16 & 18	Span No. 17	Span No. 19	TOTAL
103	Dry Excavation for Structures	Cu. Yd.	250		160	42								452
103	Wet Excavation for Structures	Cu. Yd.		1,026										1,026
SP&802	Class 'A' Concrete for Bridges	Cu. Yd.	103.45	702.13	79.42									885.00
SP&802	Class 'S' Concrete for Bridges	Cu. Yd.				14.22	3.76	38.28	1.66	15.05	165.29	84.20	35.54	358.00
SP&802	Seal Concrete for Bridges	Cu. Yd.		559.00										559.00
SP&803	Reinforcing Steel	Lb.	7,870	36,058	6,367	1,505	490	5,004	243	2,833	33,570	17,020	8,040	119,000
804	Concrete Piling (14" Square)	Lin. Ft.	768		1,008									1,776
804	Concrete Piling (16" Octagonal)	Lin. Ft.				168								168
SP&807	Structural Steel in Beam Spans	Lb.				560	5,043	51,420	2,642	11,797			41,238	112,700
SP&807	Structural Steel in Truss Spans	Lb.									382,800	193,700		576,500
810	Untreated Timber Piling	Lin. Ft.		5,320										5,320
SP&805	Concrete Railing	Lin. Ft.						52						52
SP	Removal of Existing Bridge	Complete Item												100%

ROADWAY ITEMS (20' CONCRETE PAVEMENT)
Sta. 60+00.225 Sta. 61+40.892

ITEM NO.	ITEM	UNIT	QUANTITY
102	Common Excavation	Cu. Yd.	270
SP&701	Portland Cement Concrete Pavement (9" Uniform)	Sq. Yd.	33,750
702	Reinforcing Steel for Pavement (Bars Bridge Ends)	Lb.	1000
1002	Removal and Disposal of Concrete Pavement	Sq. Yd.	335
SP925-2	Guard Fence Moved and Reconstructed	Lin. Ft.	220
SP925-2	Guard Fence Posts	Each	10



REVISED 3-12-45

SUMMARY SHEET & PAVEMENT DETAILS
BRIDGE OVER OUACHITA RIVER
CAMDEN, ARKANSAS
OUACHITA COUNTY
ROUTE 79 SEC. 4

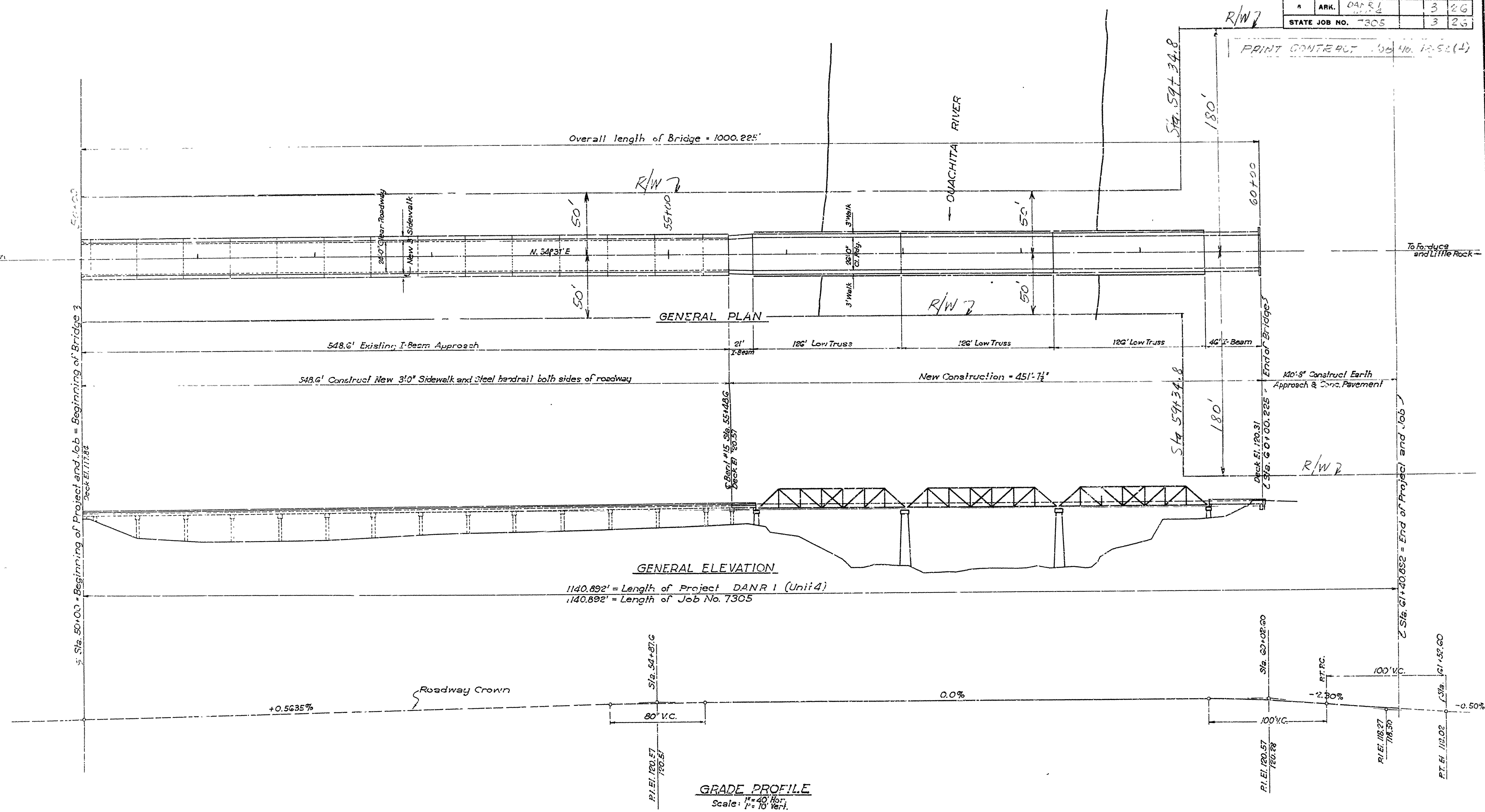
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.P.C. Date: 1-22-45
Traced By: E.A.W. Date: 2-3-45
Checked By: _____ Date: _____
BRIDGE NO. 2466 DRAWING NO. 6635

M.B. Jones
PRINCIPAL HIGHWAY ENGINEER (BRIDGES)

104

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
ARK.	ARK.	DANR 1	1945	3	26
STATE JOB NO. 7305				3	26

PRINT CONTRACT No. 12-52(4)



BM Elev. 118.50
X on S. end of concrete curb South
approach to Ouachita River bridge
L.H. of Sta. 50+00.

BM Elev. 154.84 MSL
In front of E. wall of SW station
South of door to White waiting room.
Sta. 12+12-1932.

For details of Structure See Drawgs. GG37-GG45 Incl.
For Quantity Summary and Pavement Details See Drawg. GG35

Rev. 4-28-45 R/W Lines

**GENERAL PLAN, ELEVATION
AND GRADE PROFILE
BRIDGE OVER OUACHITA RIVER
CAMDEN, ARKANSAS
OUACHITA COUNTY
ROUTE 79 SEC. 4**

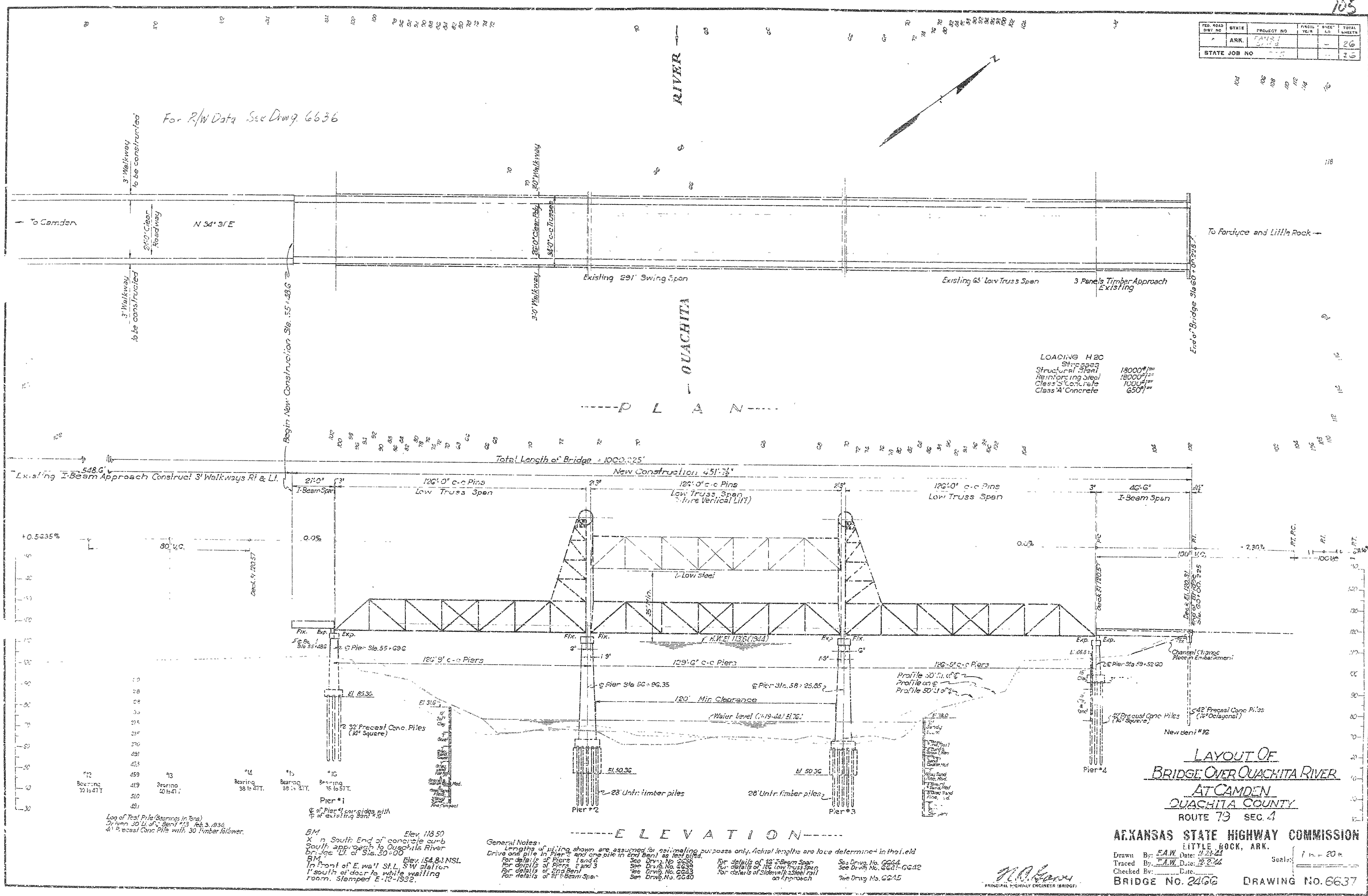
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: E.A.W. Date: 1-23-45
Traced By: E.A.W. Date: 2-1-45
Checked By: _____ Date: _____

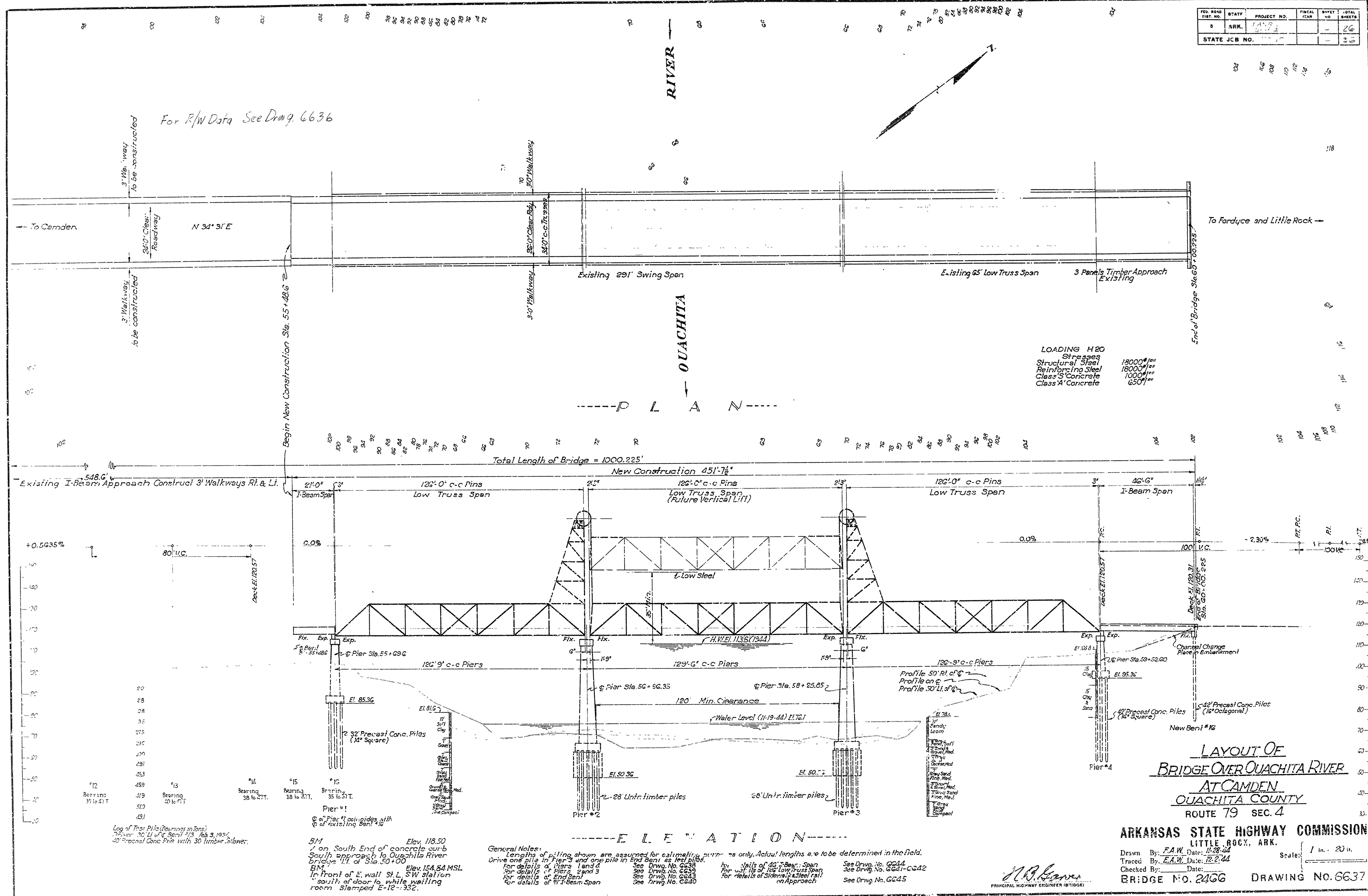
Scale: 1 in. = 20 ft. and as noted

BRIDGE NO. 2466 DRAWING NO. G-36

E.A.W.
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

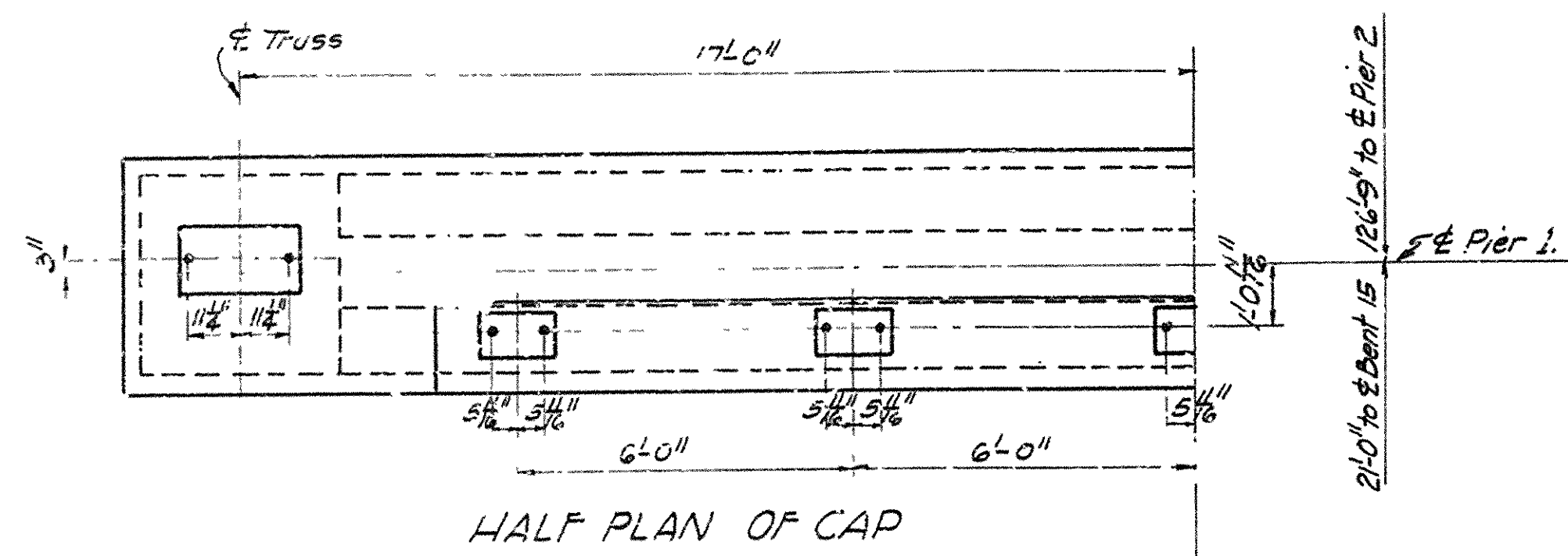


FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	ARK.	1A-73		26	26
STATE JOB NO.					26

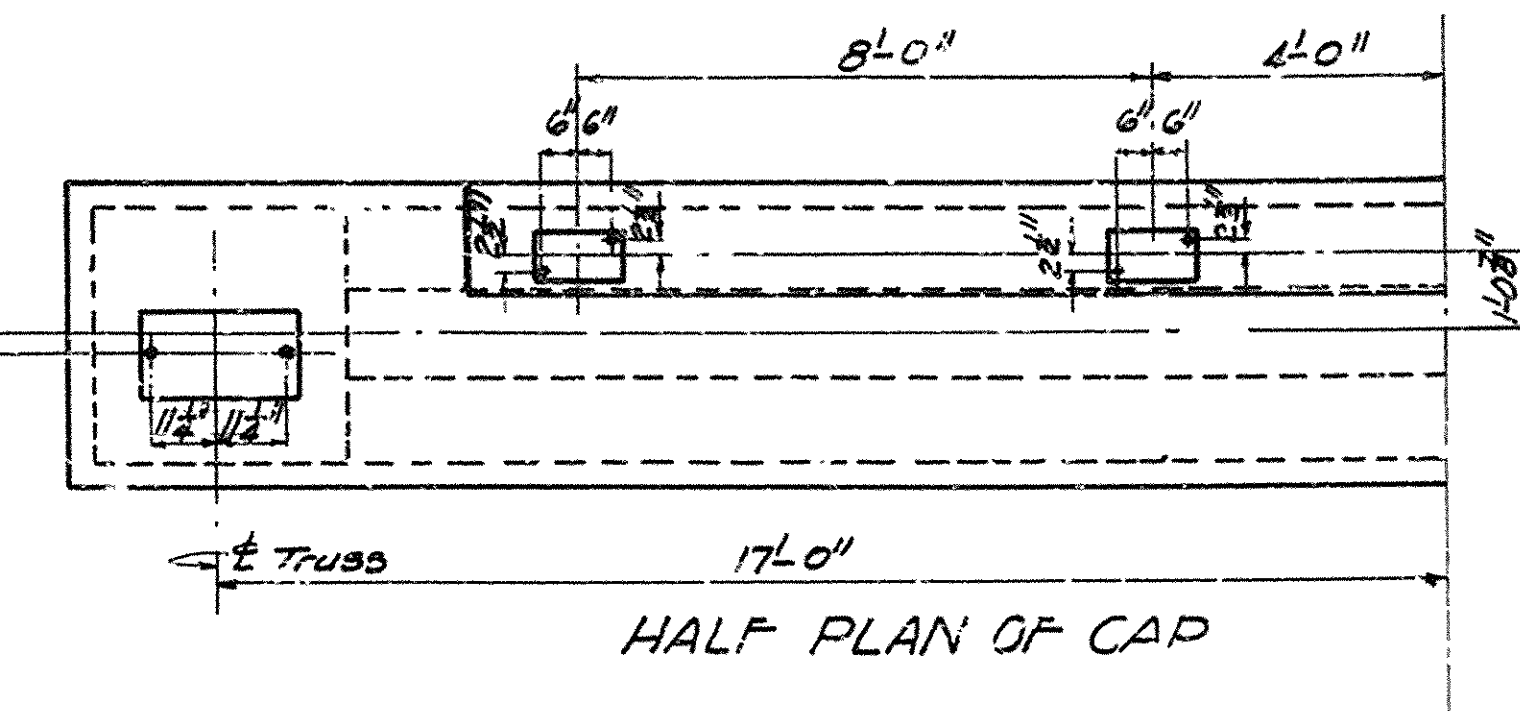


FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	ARK.	DANR-1 (Unit 4)		5	26
STATE JOB NO. 7305					5

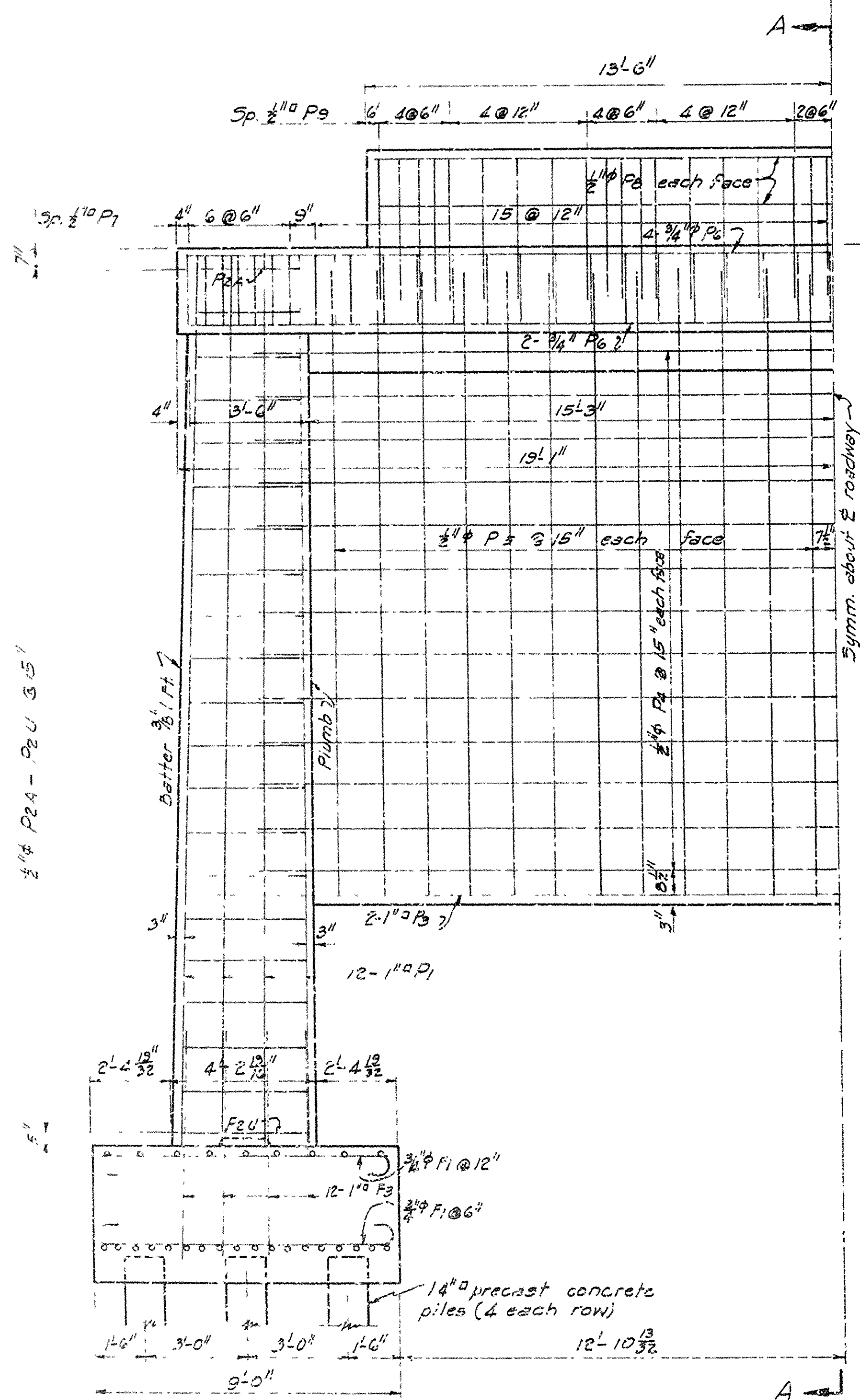
LIST OF BENT BARS					
Mark	Size	Length	A	B	Bending Diagram
P1	3/4" φ	10'-2"	8'-8"	6"	
P2	3/4" φ	13'-2"	11'-8"	6"	
P2A to P2U	1/2" φ	Ave 15'-2"	7'-0"	7'-0"	
P7	1/2" φ	12'-7"	9'-9"	2'-1 1/2"	
P3	1/2" φ	9'-10"	4'-4"	1'-2"	
P3A	1/2" φ	6'-0"	2'-5"	1'-2"	



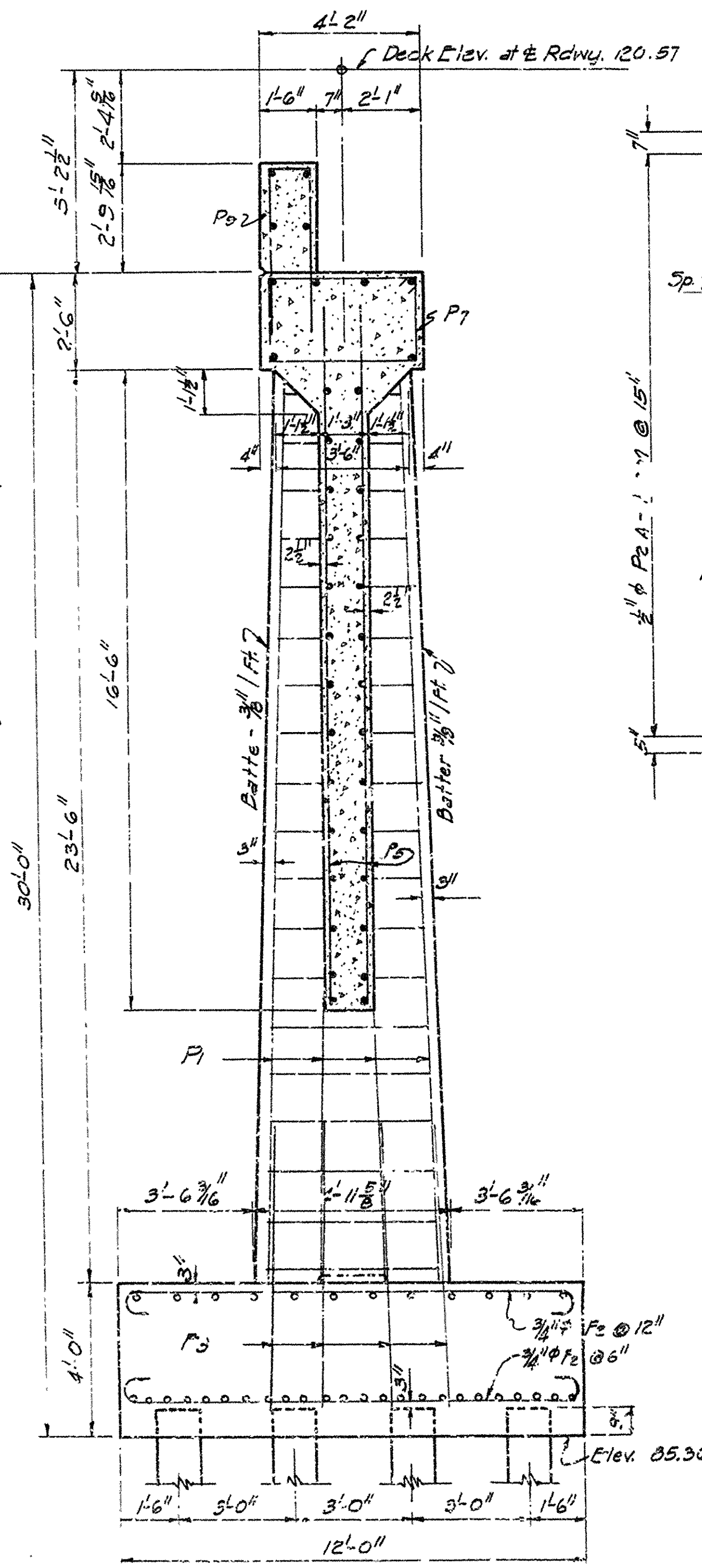
HALF PLAN OF CAP



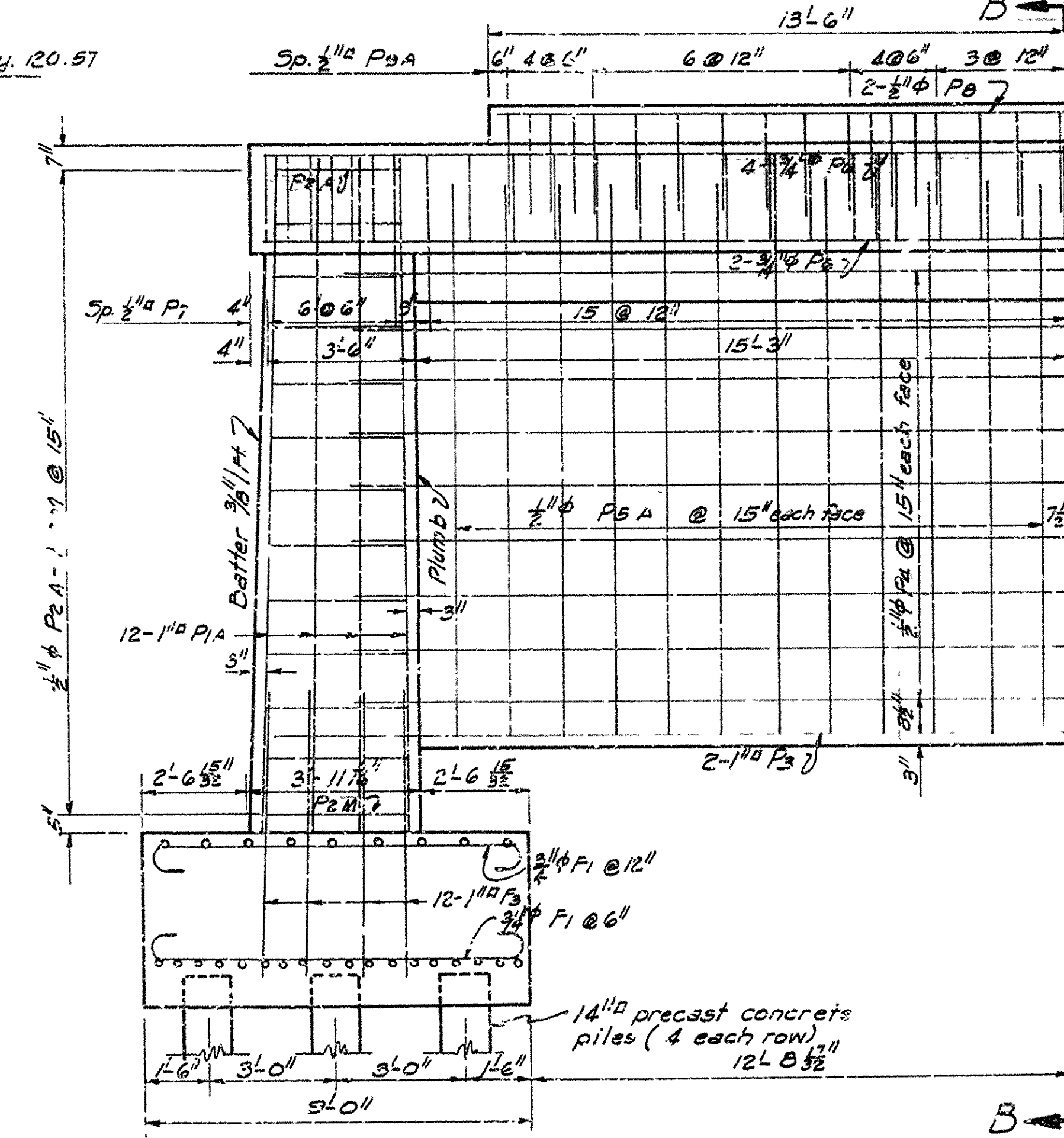
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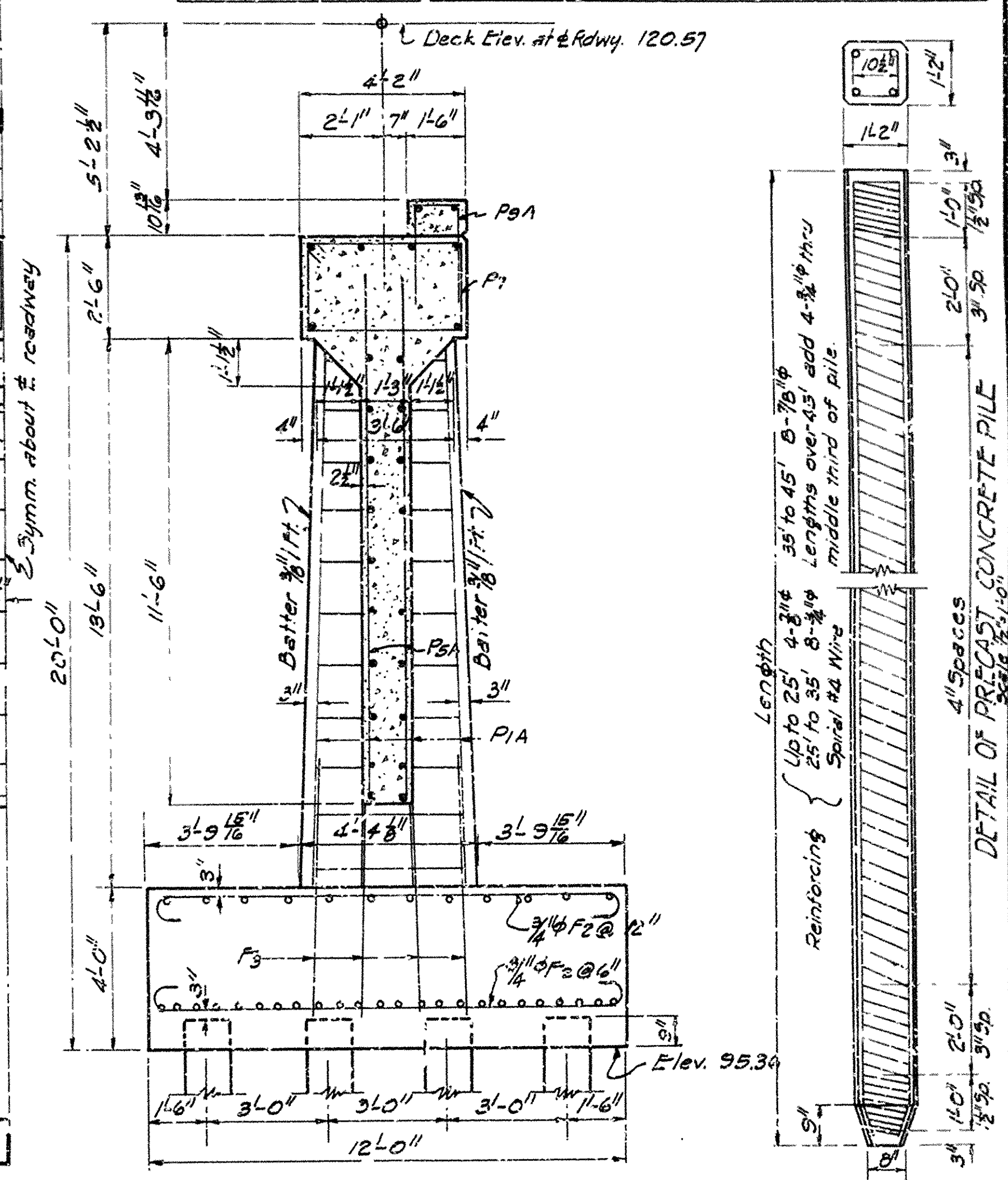
HALF ELEV. PIER NO. 1



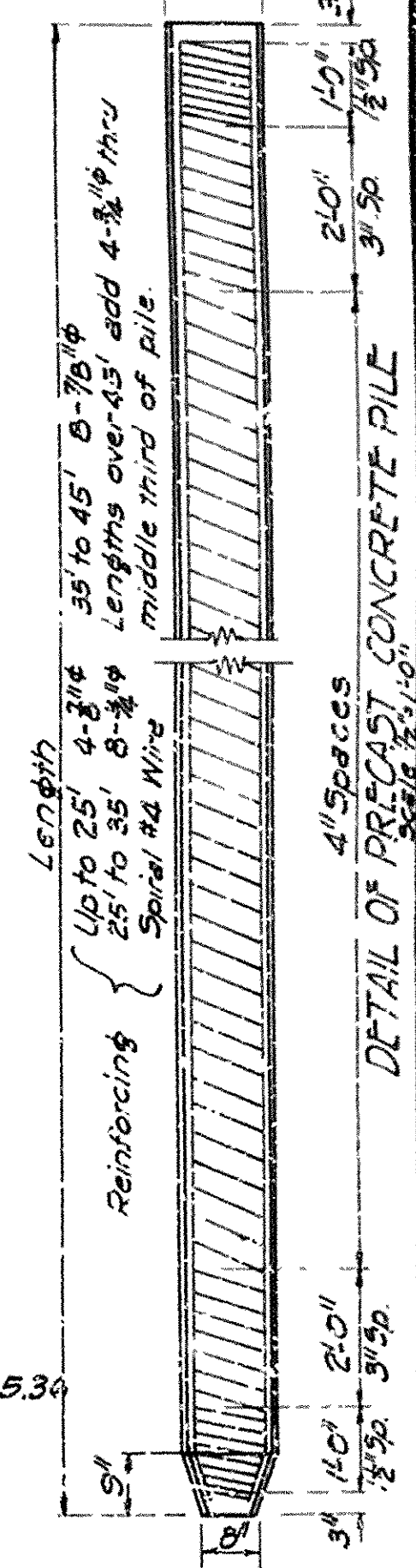
SECTION A-A



HALF ELEVATION PIER NO. 4



SECTION B-B



DETAIL OF PRECAST CONCRETE PILE

GENERAL NOTES:-
All concrete to be Class 'A'. All exposed corners to have 3/4" chamfer. All concrete to be poured in the dry. Construction joints where permitted shall be horizontal and be provided with 3" keys. Keys in walls to be continuous and occupy the middle third of the width. Keys in columns to occupy the middle third of each dimension.
Reinforcing steel to be deformed bars of structural or intermediate grade. Shop lists and bending diagrams shall be submitted by contractor, and approval secured before fabrication is begun. Dimensions relating to reinforcing steel are to centers of bars.
Specifications:- Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, Adopted March 1, 1940.
Maximum bearing on foundation piling:
Without wind load 25 Tons per pile
Including " " 25 Tons per pile

DETAILS OF PIERS 1 & 4
BRIDGE OVER OUACHITA RIVER
AT CAMDEN-OUACHITA COUNTY

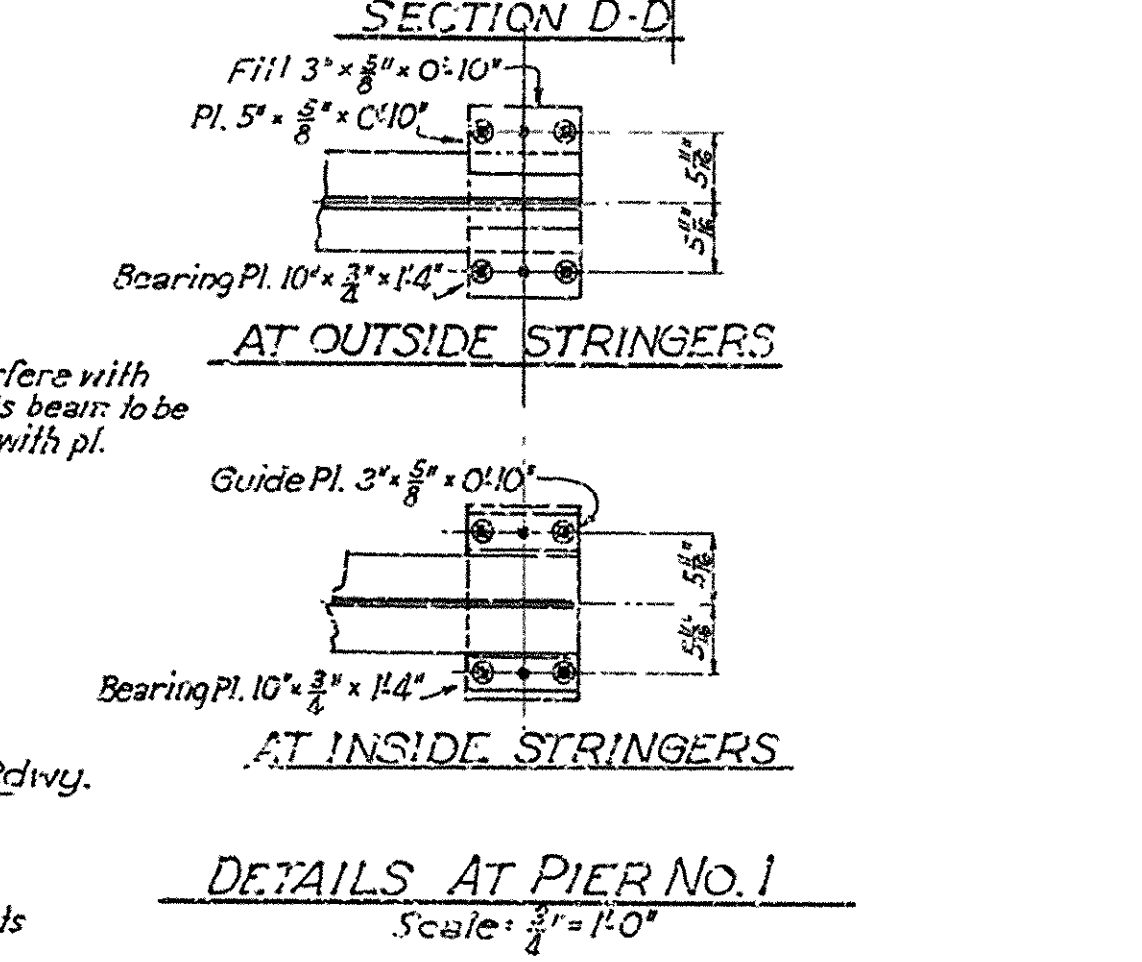
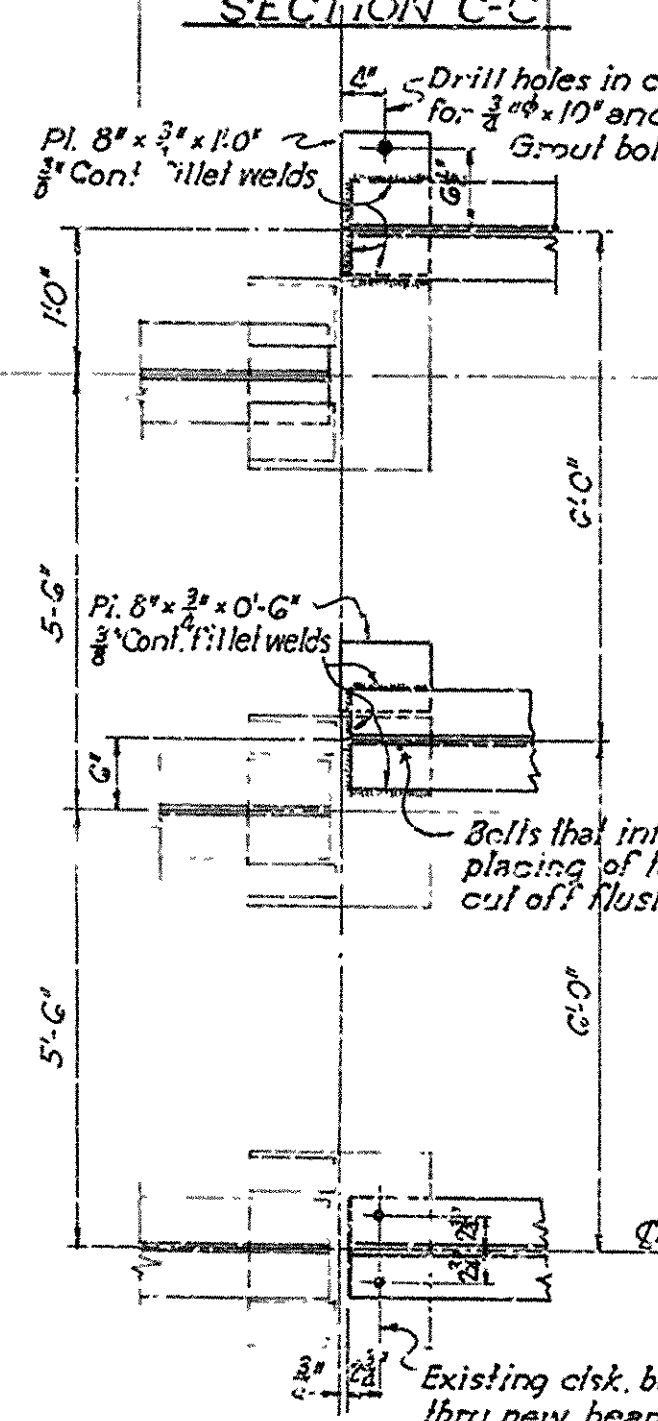
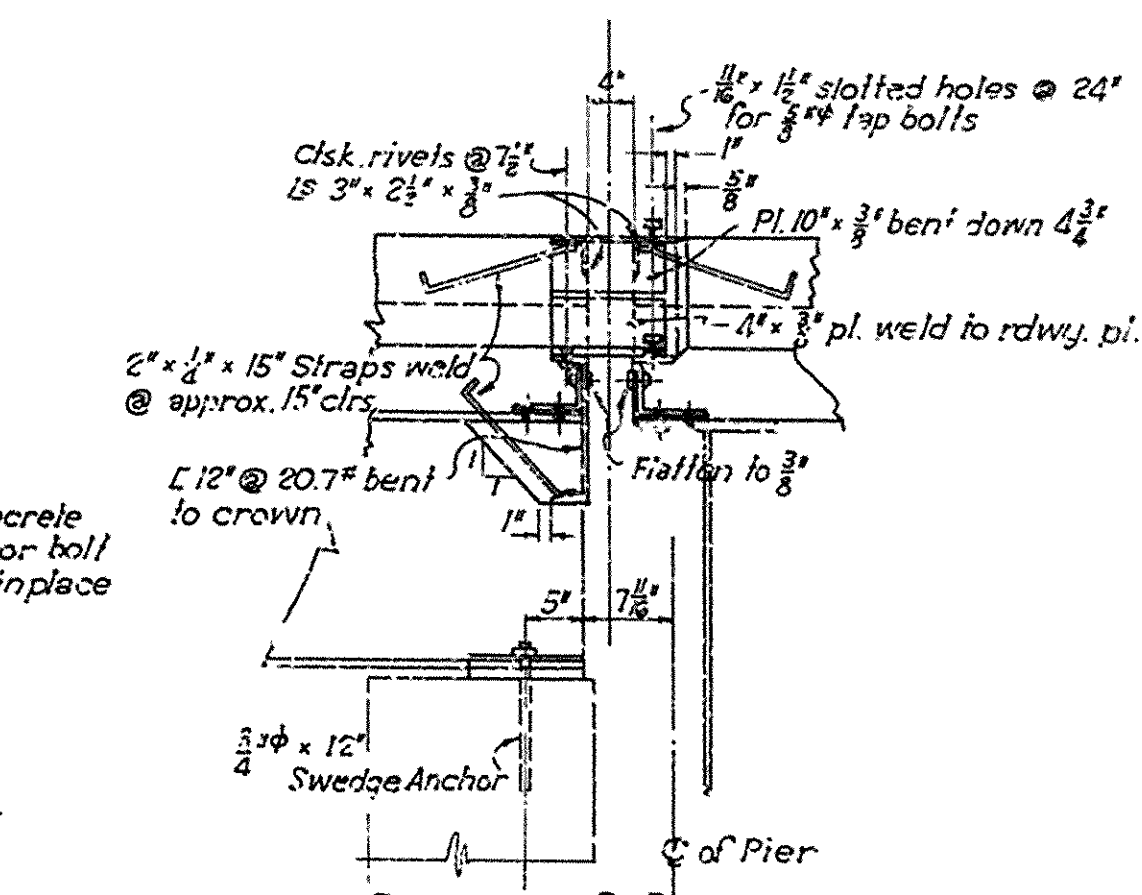
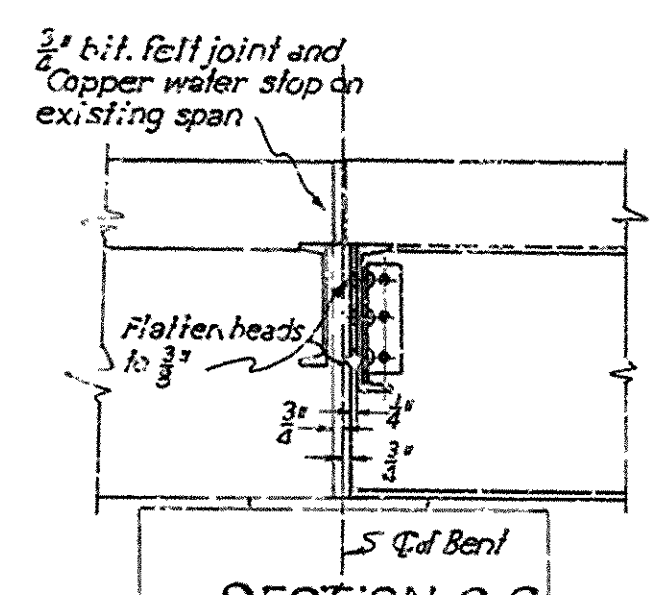
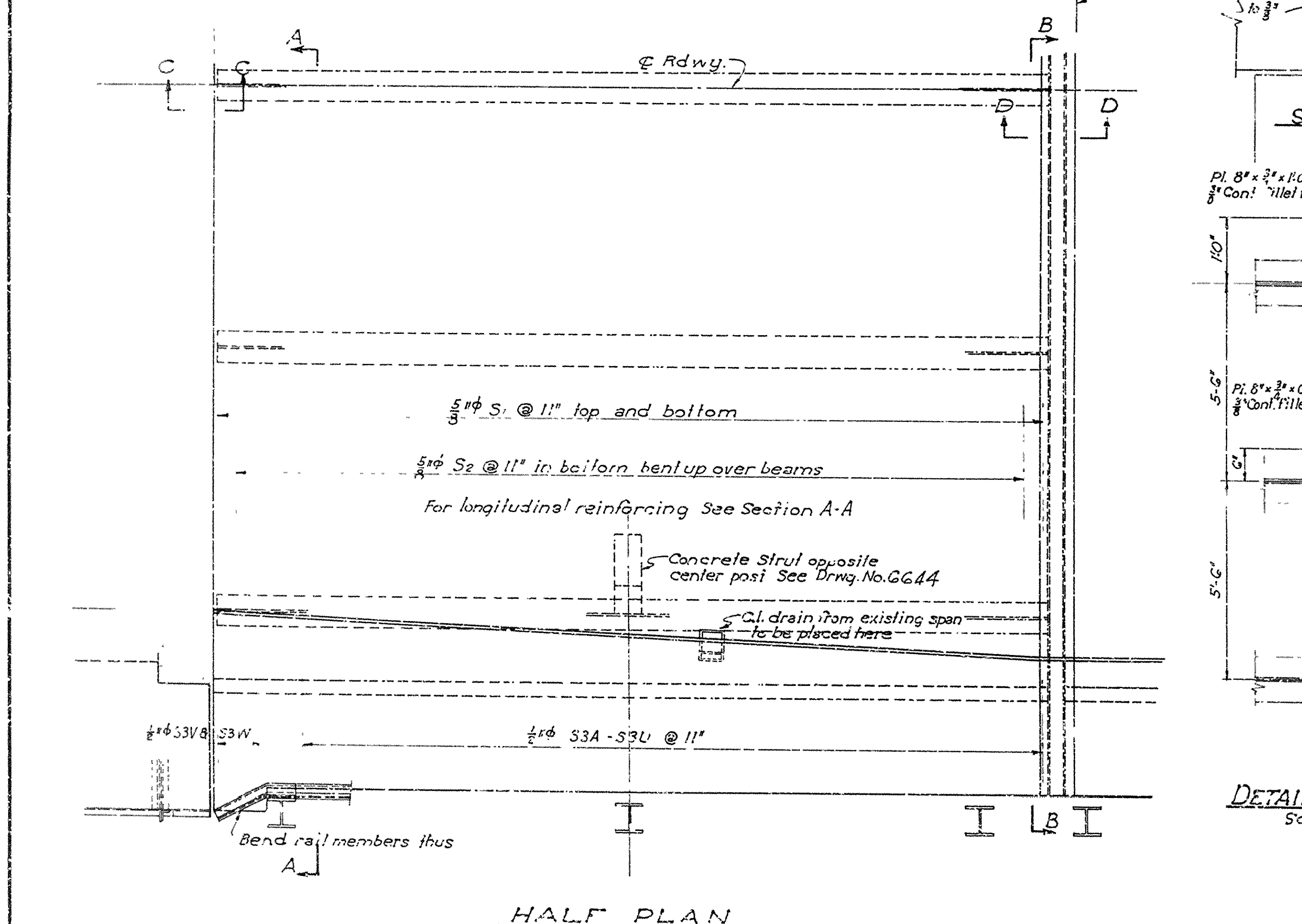
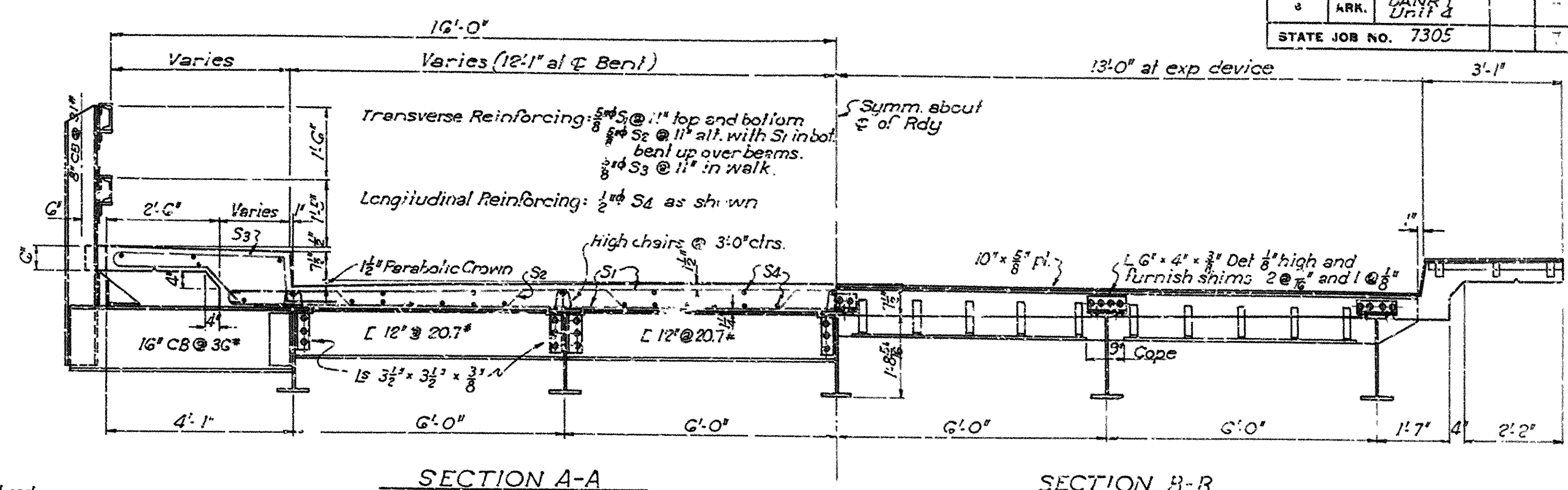
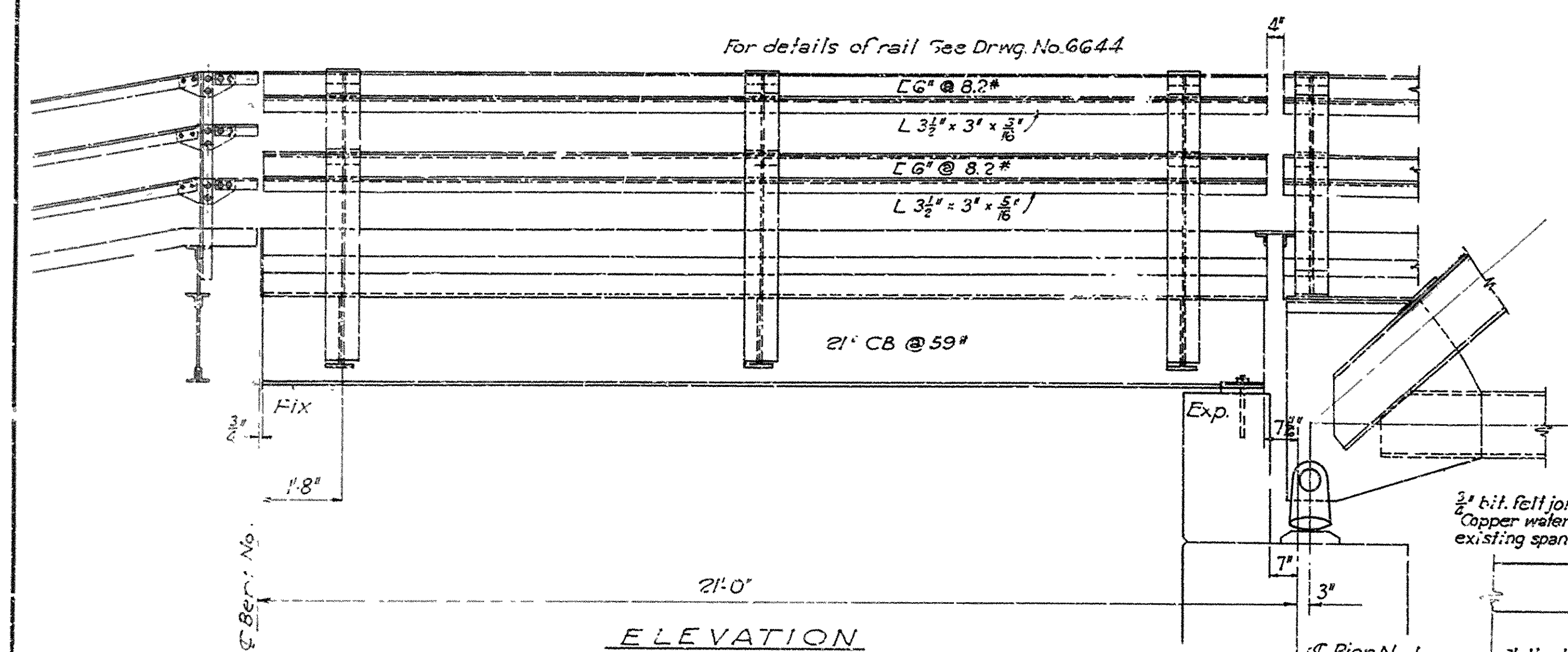
ROUTE 79 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

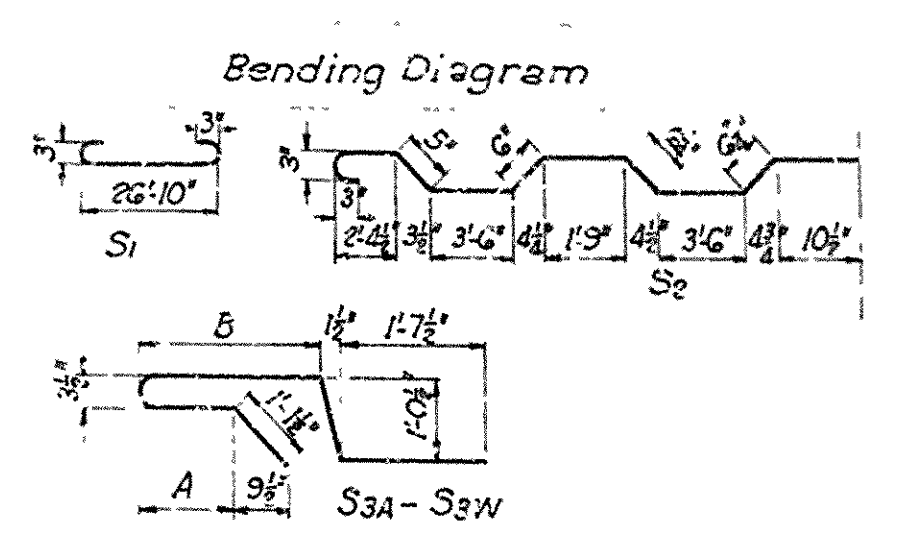
Drawn By: L.R.C. Date: 12-22-44
Traced By: L.A.H. Date: 2-1-45
Checked By: Date:
BRIDGE NO. 2466 DRAWING NO. 6638

M. Garver
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	2466	1944	26	26
STATE JOB NO. 7305					



Mark	Size	Length	A	B
S ₁	$\frac{5}{8}$ "	27'7"		
S ₂	$\frac{5}{8}$ "	28'9"		
S ₃ A	$\frac{1}{2}$ "	Ave. 8'11"	2'0"	2'3"
S ₃ U	$\frac{1}{2}$ "	8'11"	3'0"	3'9"
S ₃ V	$\frac{1}{2}$ "	10'5"	2'6"	4'3"
S ₃ W	$\frac{1}{2}$ "	10'6"	2'6"	4'3"



Note: For general notes and for typical details not shown on this sheet See Drwg. No. 6644

	Dead Load	Roadway Live Load	Sidewalk Live Load
INTERIOR BEAMS	750*	1.2 Wheels or 0.6 Lane	
OUTSIDE BEAMS	1030*	0.75 Wheels or 0.35 Lane	300*

Design Live Load H 20

UNIT STRESSSES

Class 'S' Concrete = 1000 #/sq. in. $f_c = 10$

Reinforcing Steel = 18000 #/sq. in. $f_s = 18$

Structural Steel = 18000 #/sq. in. $f_s = 18$

DETAILS OF
21' I-BEAM SPAN
BRIDGE OVER OUACHITA RIVER
CAMDEN, ARKANSAS
OUACHITA COUNTY
ROUTE 79 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.P.C. Date: 12-27-44

Traced By: R.A.M. Date: 1-22-45

Checked By: _____ Date: _____

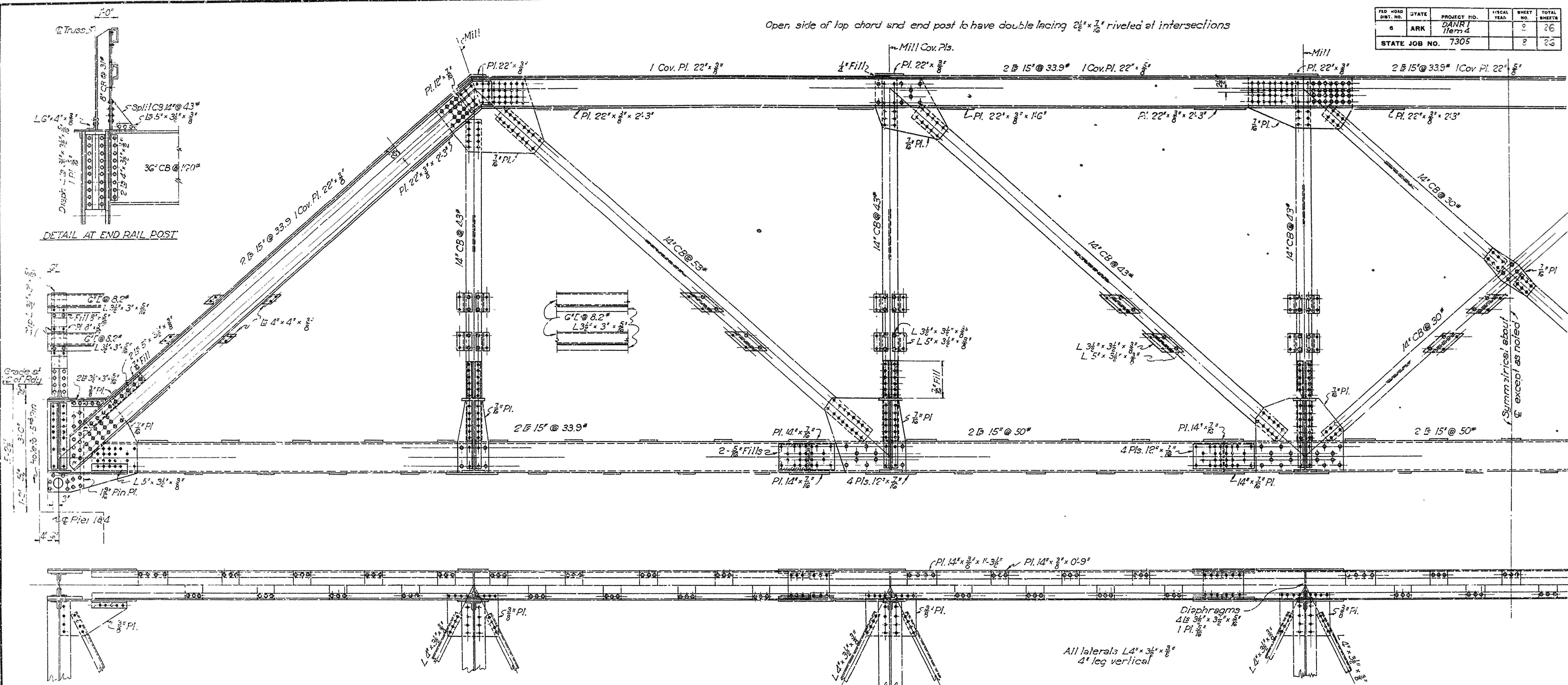
BRIDGE NO. 2466 DRAWING NO. 6640

Scale: $\frac{1}{2}$ " = 1' and as noted

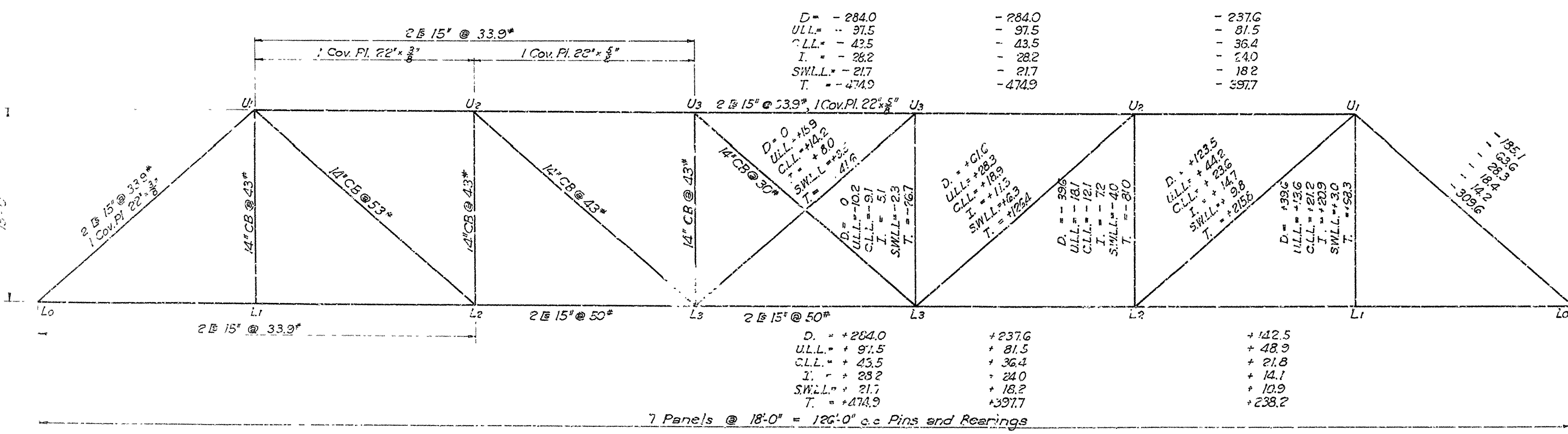
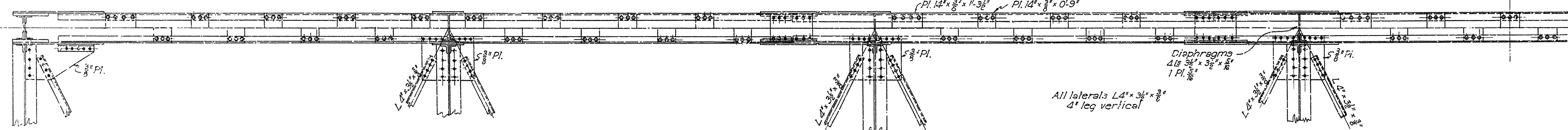
N.B. Gann
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

FED. ROAD DIST. NO.	STATE	PROJECT NO.	SCALE	SHEET NO.	TOTAL SHEETS
6	ARK	DANR 11774		9	26
STATE JOB NO. 7305					

Open side of top chord and end post to have double lacing $2\frac{1}{2}" \times \frac{7}{8}"$ riveted at intersections



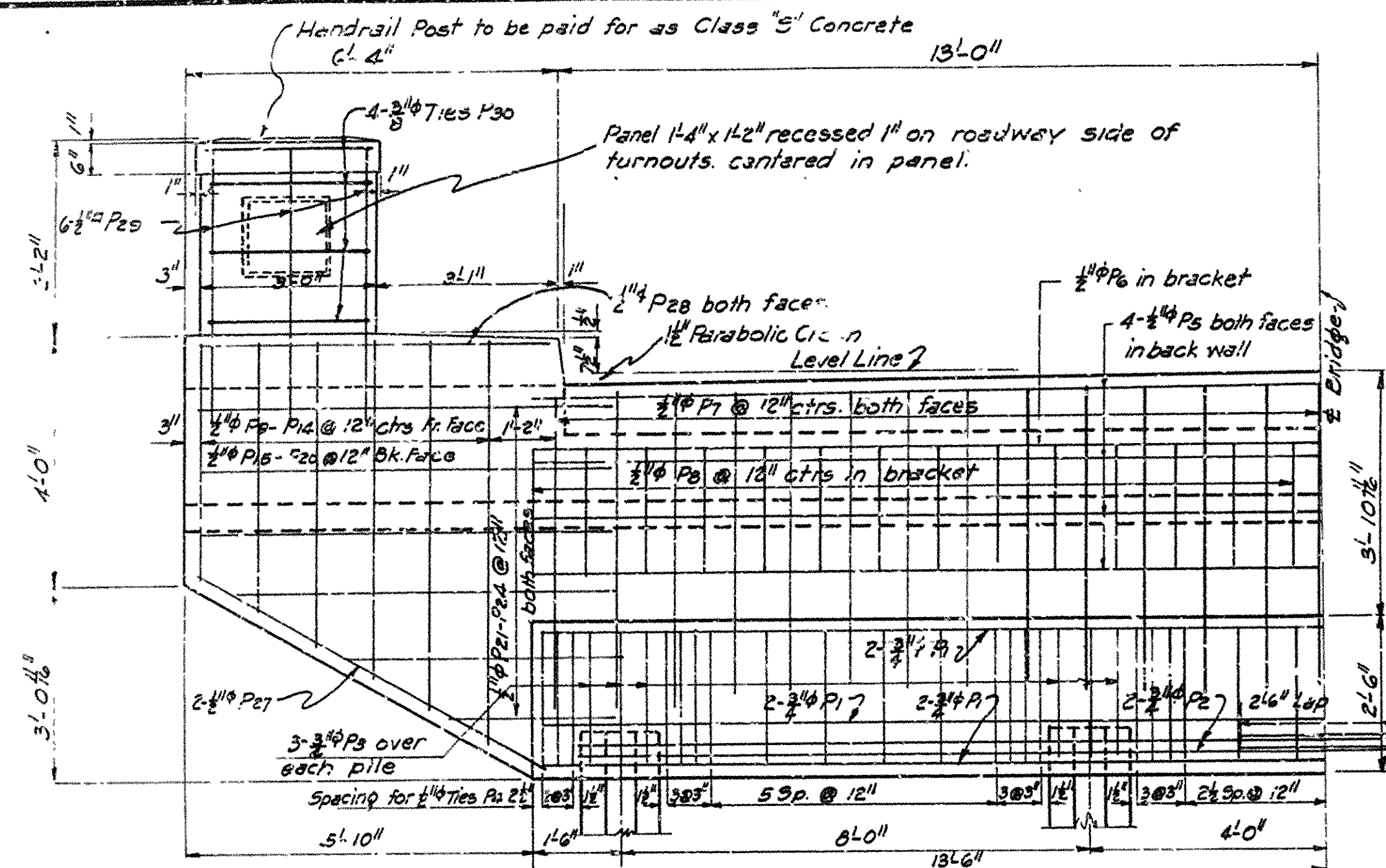
DETAIL AT END RAIL POST



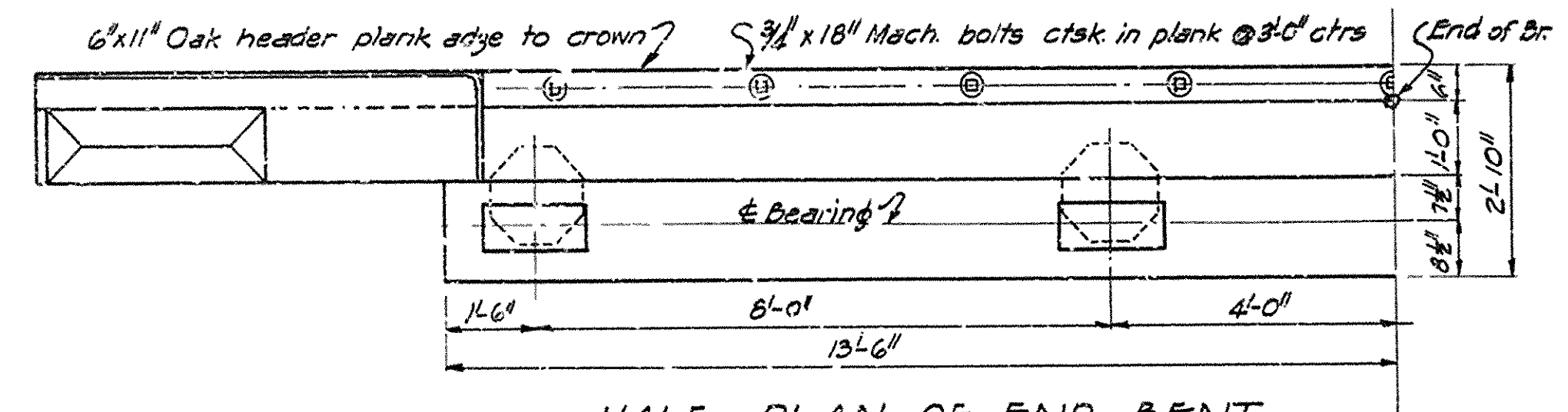
SHEET 1 OF 2
TRUSS DETAILS
BRIDGE OVER OUACHITA RIVER
CAMDEN, ARKANSAS
OUACHITA COUNTY
ROUTE 79 SEC. 4
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.P.C. Date: 12-14-44
Traced By: E.A.W. Date: 1-11-45
Checked By: Date:
BRIDGE NO 2466 DRAWING NO. 6641

M.B. Barry
PRINCIPAL HIGHWAY ENGINEER (E.M.D. 1940)

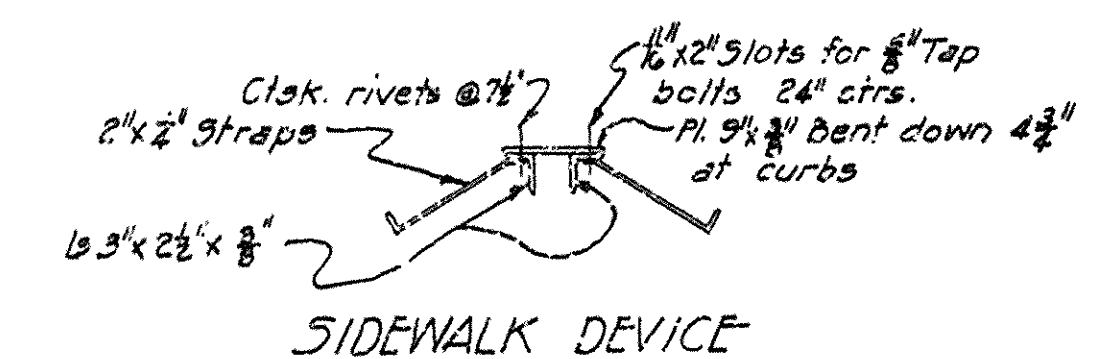
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.	DANR-1 (Unit 4)		10	26
STATE JOB NO. 7305					10 26



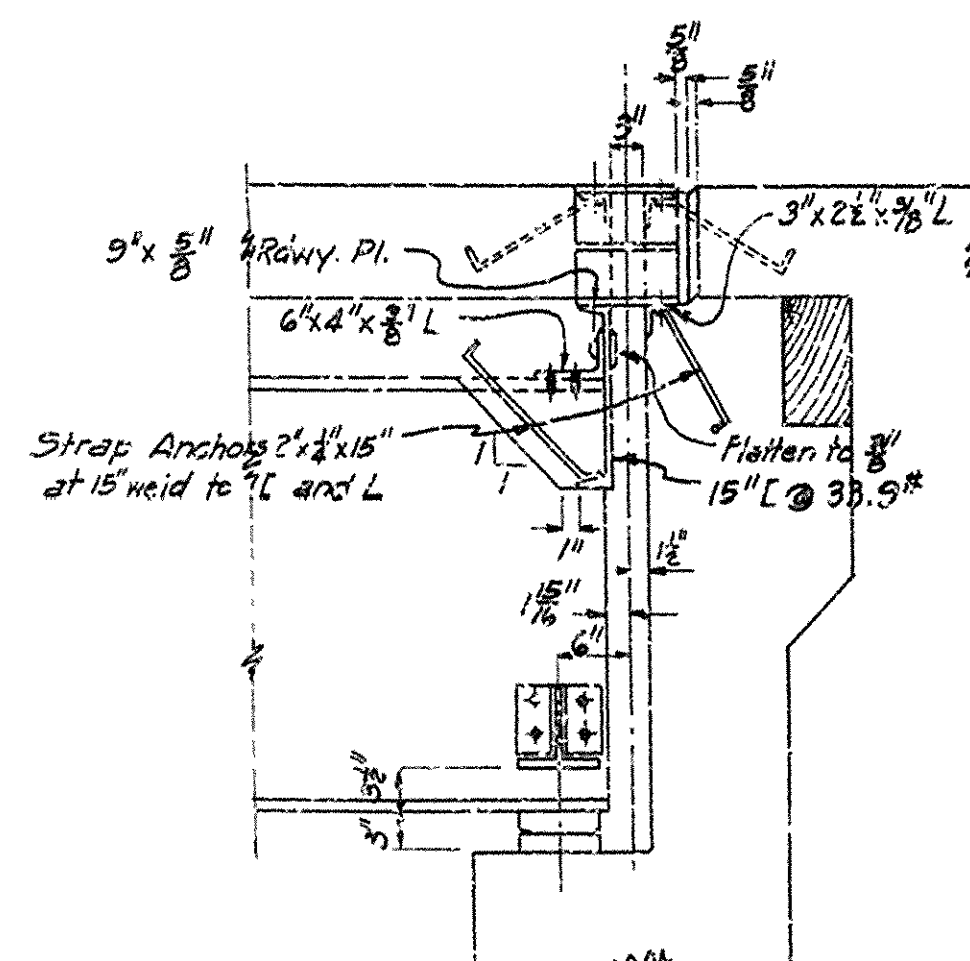
HALF FRONT ELEVATION END BENT
Scale 1/2" = 1'-0"



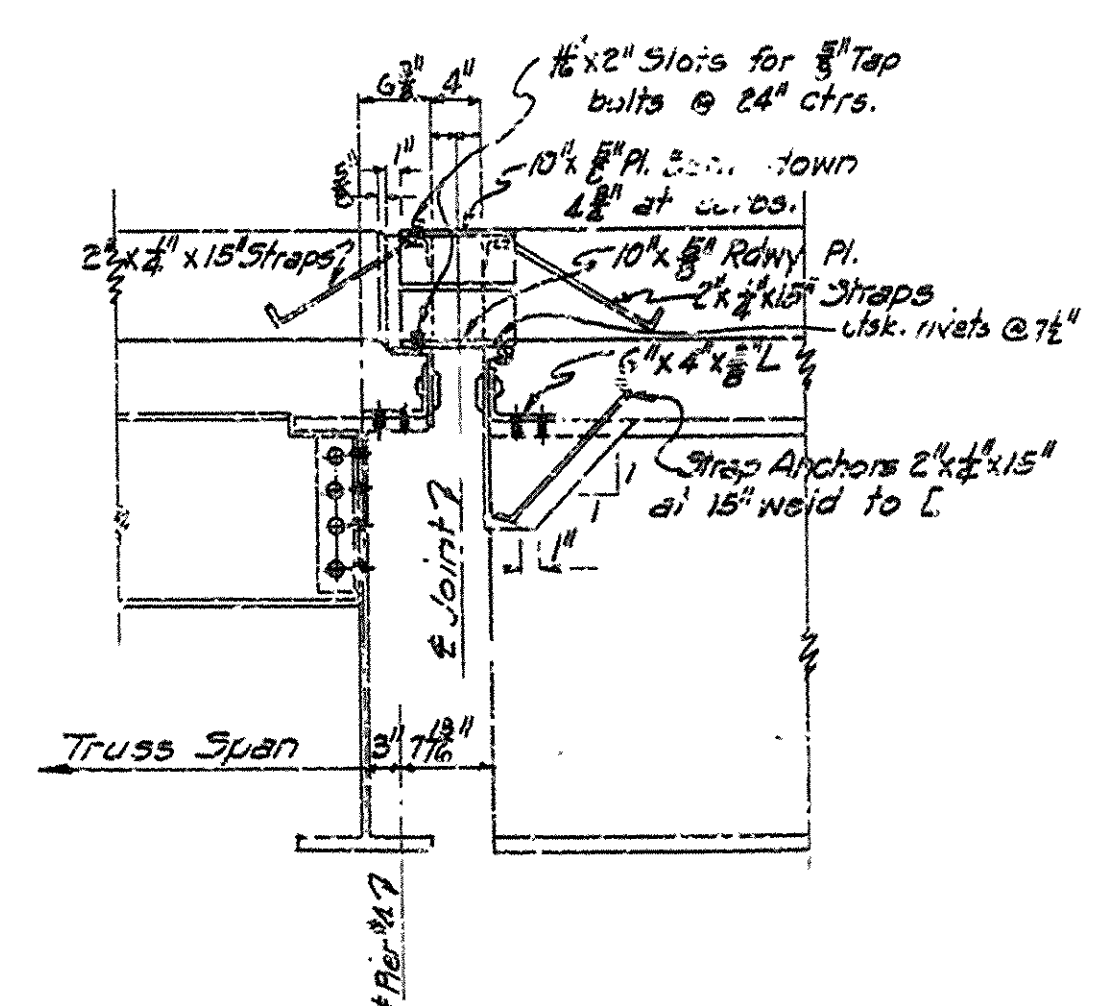
HALF PLAN OF END BENT



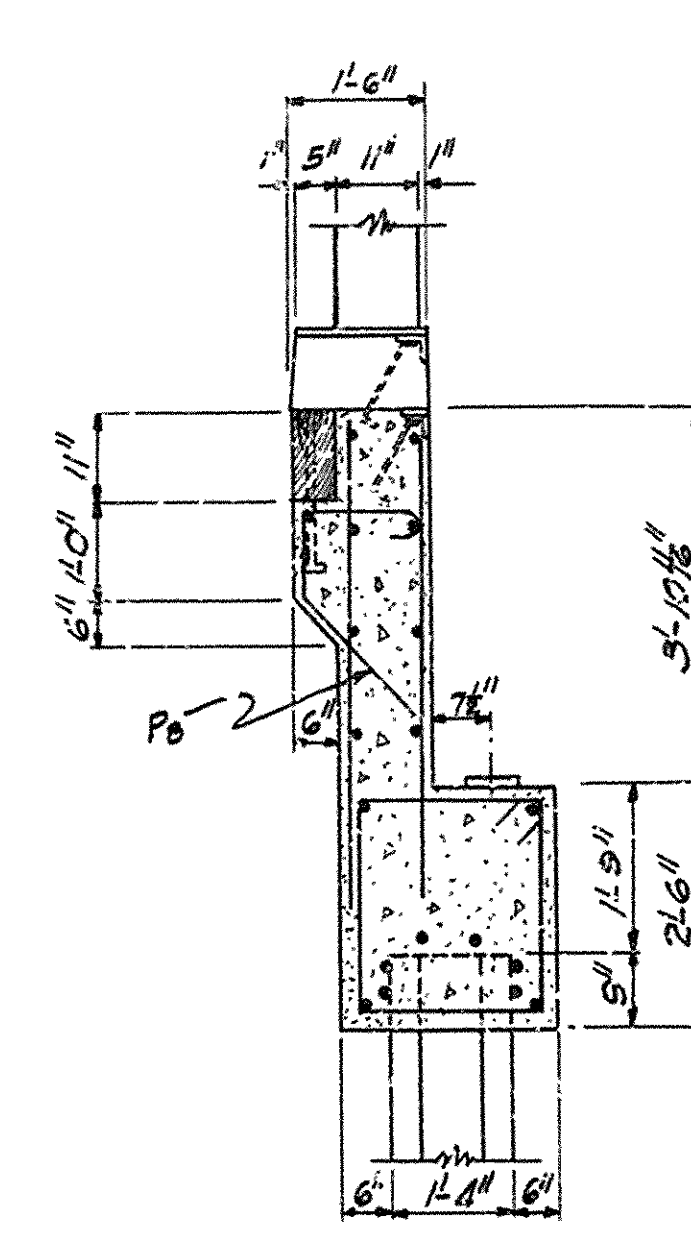
SIDEWALK DEVICE



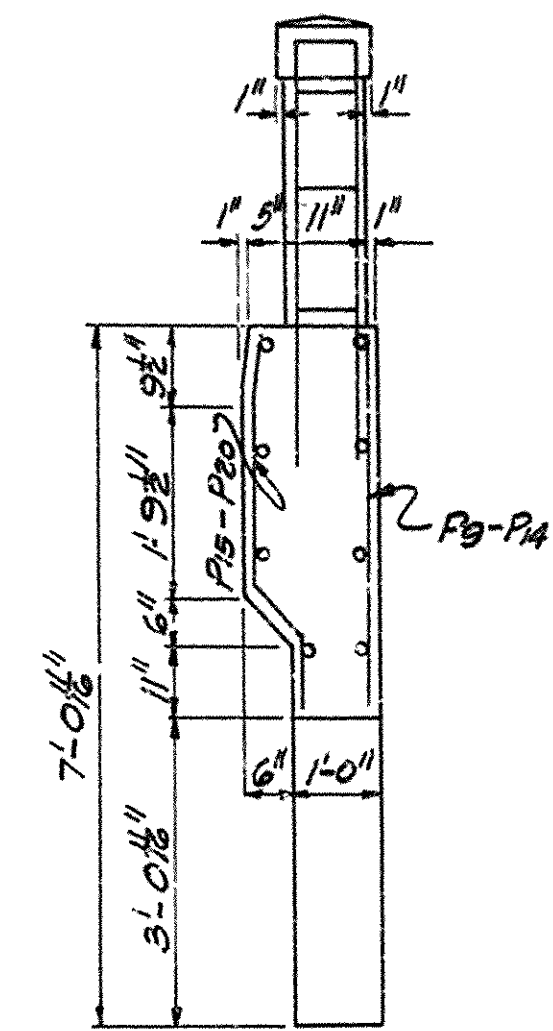
SECTION C-C
Scale 3/4" = 1'-0"



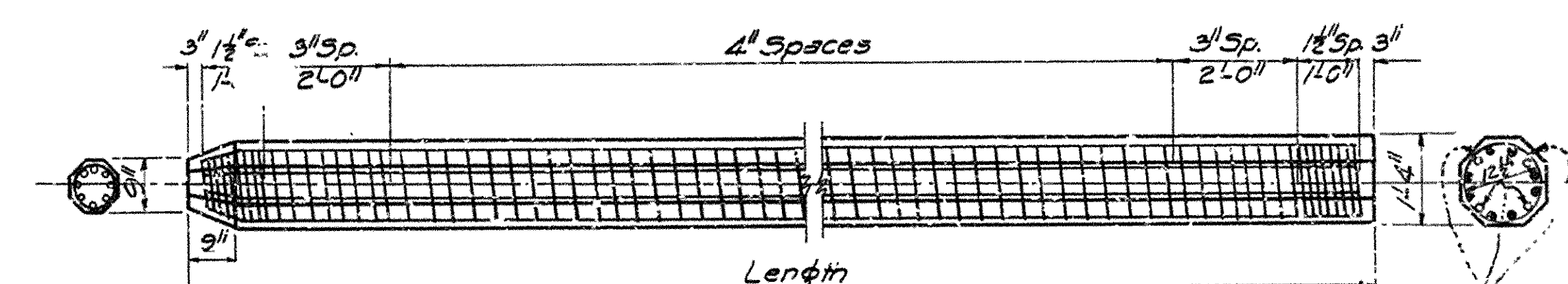
EXPANSION DEVICE AT PIER NO. 4
Scale 3/4" = 1'-0"



SECTION NEAR E



END VIEW



DETAILS OF 16" PRECAST CONCRETE PILE
Reinforcing: Vertical bars { 8-3/4" Lengths to 35' } Spiral #4 Wire
For lengths over 45' Add 4-3/4" thru middle third of pile

GENERAL NOTES

Volume occupied by Oak header plank is included in quantity of Class "S" Concrete. Bolts for Oak headers to be paid for at unit price bid for "Reinforcing Steel".
Piles to be driven to a minimum capacity of 32 Tons.
For additional general notes See Drawg. No. 6644.

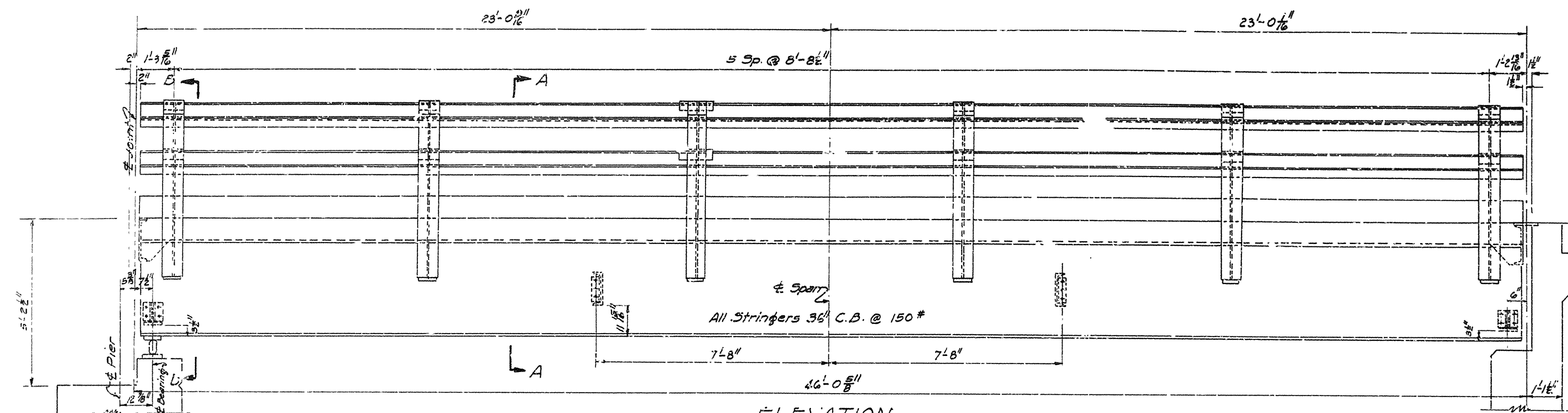
Mark	Size	Length	A	B	C	Bending Diagram
P2	3/4"	29'-5"	1'-5"	14'-0"		
P3	3/4"	6'-1"	1'-11"	2'-11"		
P4	3/4"	6'-9"	1'-11"	2'-11"		
P5	3/4"	9'-9"	1'-0"	0'-5"	1'-6"	
P15	1/2"	3'-11"	0'-11"			
P16	1/2"	4'-6"	1'-6"			
P17	1/2"	5'-0"	2'-0"			
P18	1/2"	5'-6"	2'-6"			
P19	1/2"	6'-0"	3'-0"			
P20	1/2"	6'-6"	3'-6"			
P30	3/8"	7'-3"	7"	2'-8"		

DETAILS OF BENT NO. 16
BRIDGE OVER OUACHITA RIVER
AT CAMDEN OUACHITA COUNTY
ROUTE 79 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.A.M. Date: 1-5-45
Traced By: L.A.M. Date: 1-10-45
Checked By: _____ Date: _____
BRIDGE NO. 2466 DRAWING NO. 6643

W.B. Carver
PRINCIPAL HIGHWAY ENGINEER (BRIDGE)

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	DANR-1 (Unit 4)		11	25
STATE JOB NO. 7305					11 26

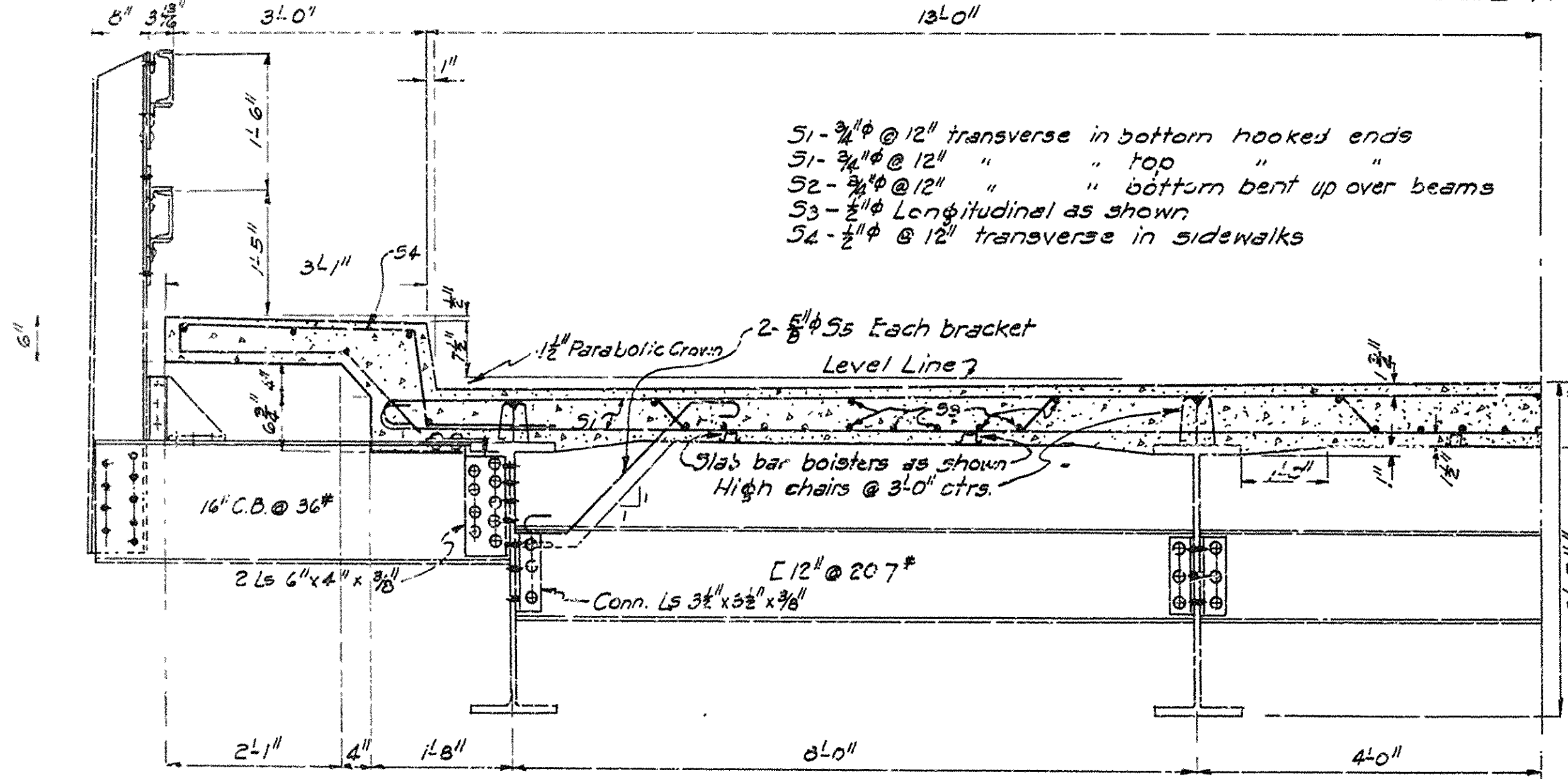


Loading 4 20
 Load Distribution Outside Girders
 Dead Load Per Ft. = 12.50*
 Roadway Live Load Per Ft. = 32.4*
 Conc. Live Load { 9100 Mom.
 13200 Shear
 Truck Live Load = 1.6
 Side Walk Live Load = 230*
 Load Distribution Inside Girders
 Dead Load Per Ft. = 10.80*
 Roadway Live Load Per Ft. = 512*
 Conc. Live Load { 14,400* Mom.
 20,800* Shear
 Truck Live Load = 1.60 Wheel

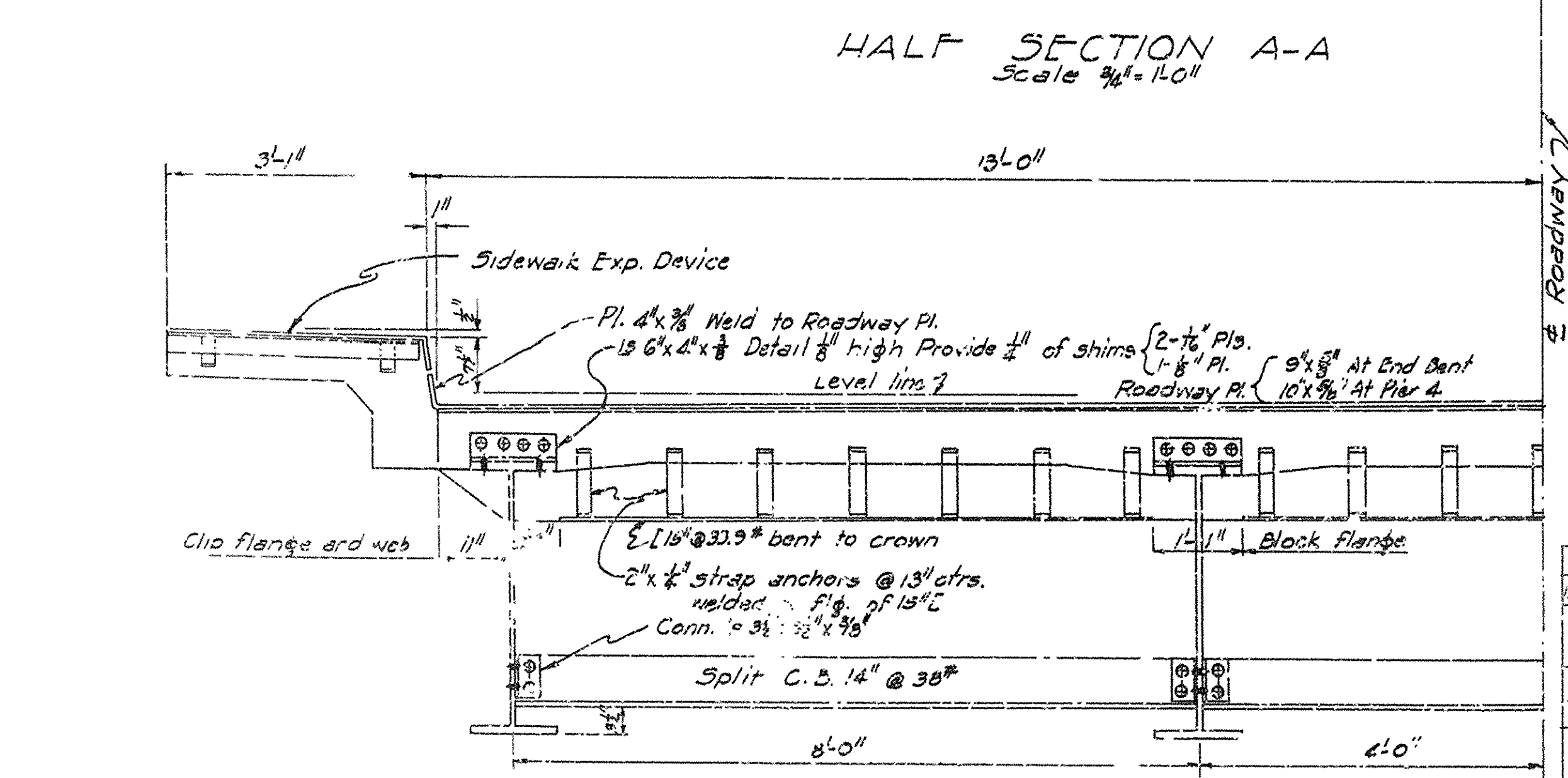
STRESSES
 Structural Steel = 18,000 #/sq in
 Reinforcing Steel = 18,000 #/sq in
 Concrete = 1000 #/sq in n=10

GENERAL NOTES

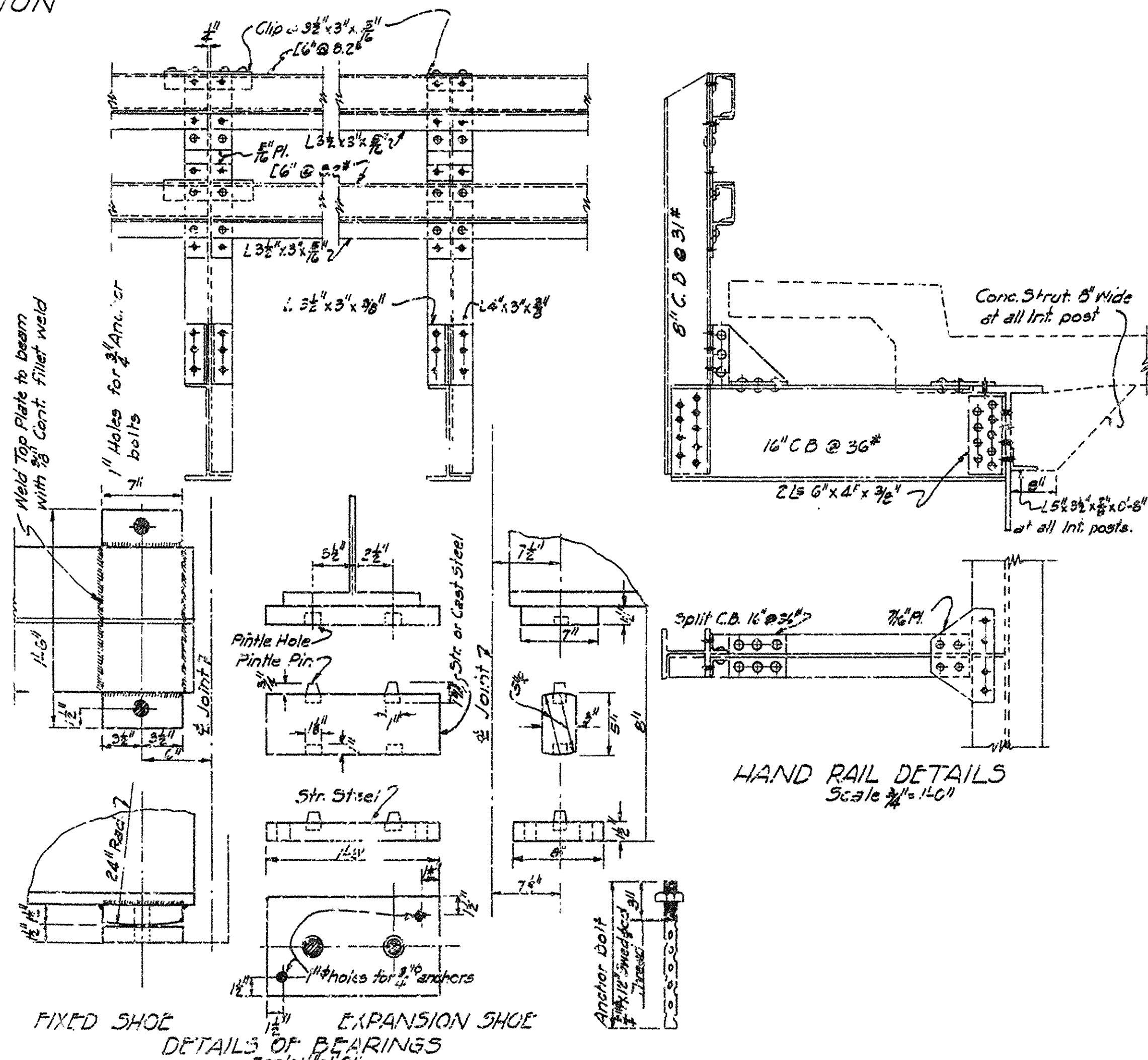
All Concrete to be Class "S". All exposed corners to have 3/4" chamfer unless otherwise noted.
 Rivets 3/4". Open holes 1 1/2". Where bolts are indicated use machine bolts.
 Structural shapes of equal or greater strength may be substituted for shapes shown but payment will be made on basis of shapes shown or those actually used whichever is the lesser.
 All welded connections to be 3/8" fillet shop welds except as noted.
 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 White Lead lined with Lamp Black, Second Coat Aluminum.
 All bearing and roadway expansion devices to be paid for as "Structural Steel in Beam Spans".
 Care shall be exercised to obtain 90° in the angle between flange and web of beams at bearing points.
 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 slab be struck off from curb to curb with a half span length longitudinal strike off. The strike off shall be sufficiently stiff so as to have no appreciable vertical deflection.
 Specifications - Arkansas State Highway Commission Standard Specification for Road and Bridge Construction Adopted March 1, 1940.



HALF SECTION A-A
Scale 3/4" = 1'-0"



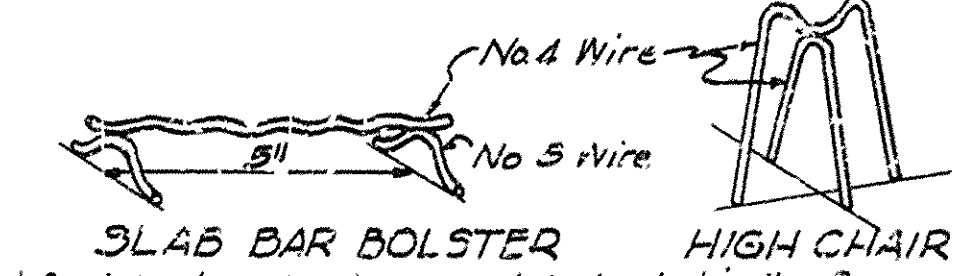
HALF SECTION B-B
Scale 3/4" = 1'-0"



HAND RAIL DETAILS
Scale 3/4" = 1'-0"

LIST OF BENT BARS

Mark	Size	Length	A	B	C
S2	3/4"	28'-0"	3'-2"	4'-0"	3'-3"
S1	3/4"	26'-0"	27'-0"		
S4	1/2"	3'-2"			
S5	3/4"	3'-2"			



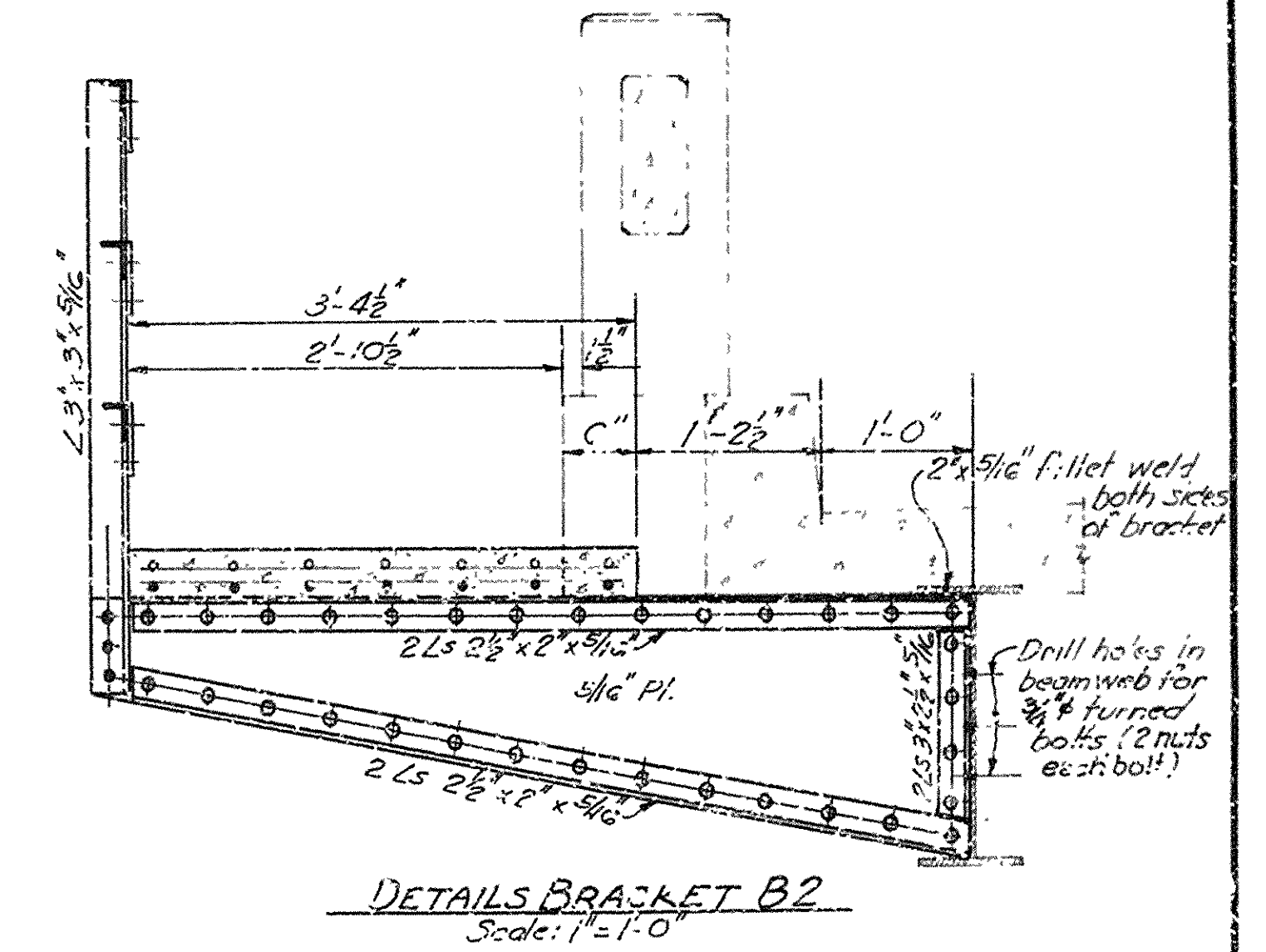
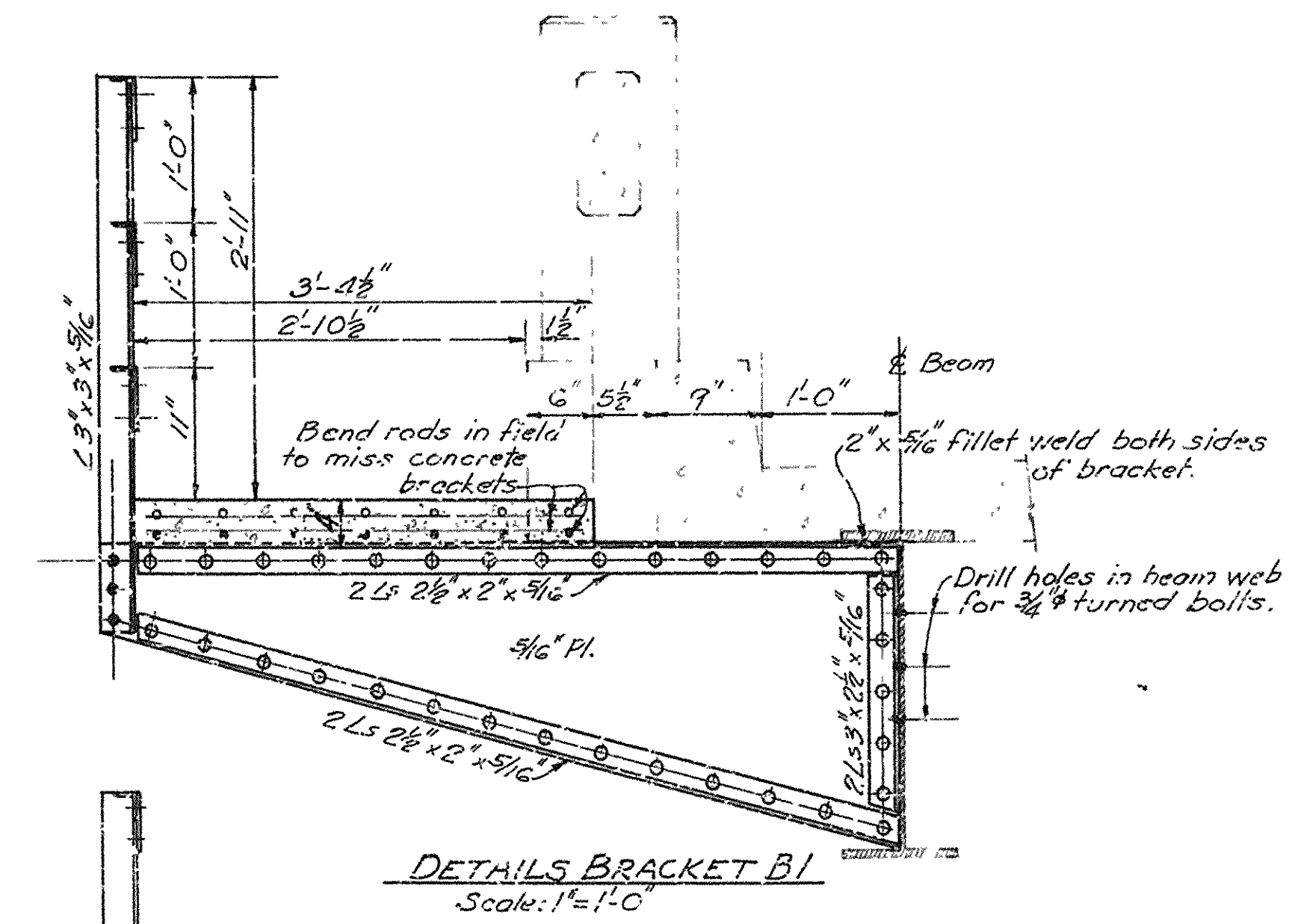
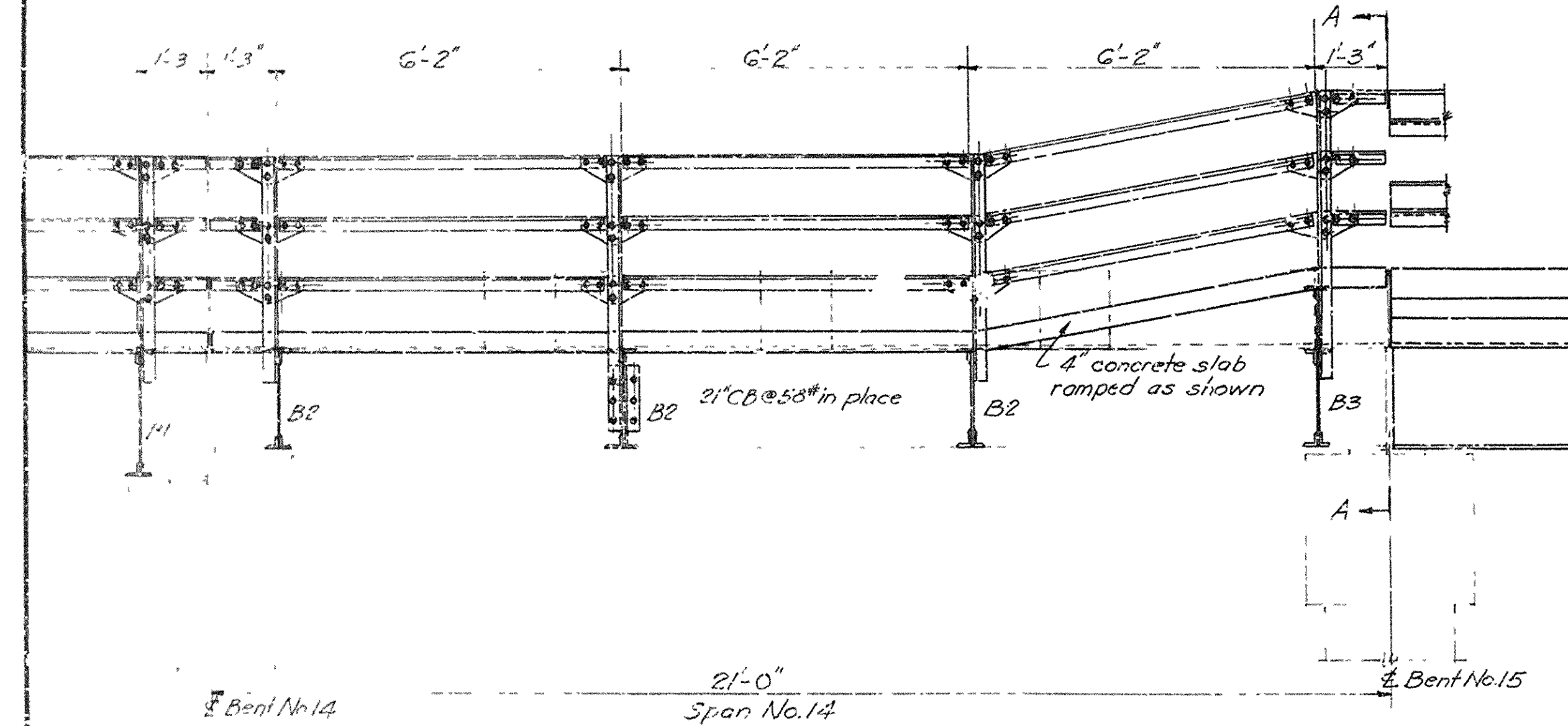
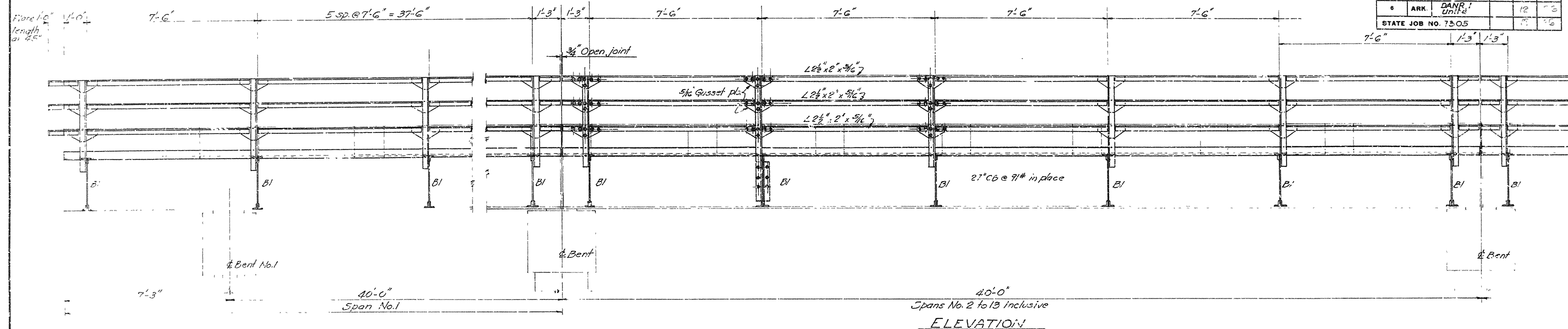
SLAB BAR BOLSTER HIGH CHAIR
 All reinforcing steel shall be accurately located in the forms and firmly held in place by means of steel wire chair supports adequate to prevent displacement during the course of construction and to keep the steel in proper distance from the forms.
 Bar supports are to be sufficient in number and sufficiently heavy to properly carry the steel they support. Wire sizes shall not be less than shown.
 Wire supports will not be paid for directly but will be considered subsidiary to the item of Reinforcing Steel. Shop lists and diagrams must be submitted for approval.

DETAILS OF
 46" I-BEAM SPAN 26'-0" CLEAR ROADWAY
 BRIDGE OVER OUCHITA RIVER
 AT CAMDEN GUACHITA COUNTY
 ROUTE 79 SEC. 4

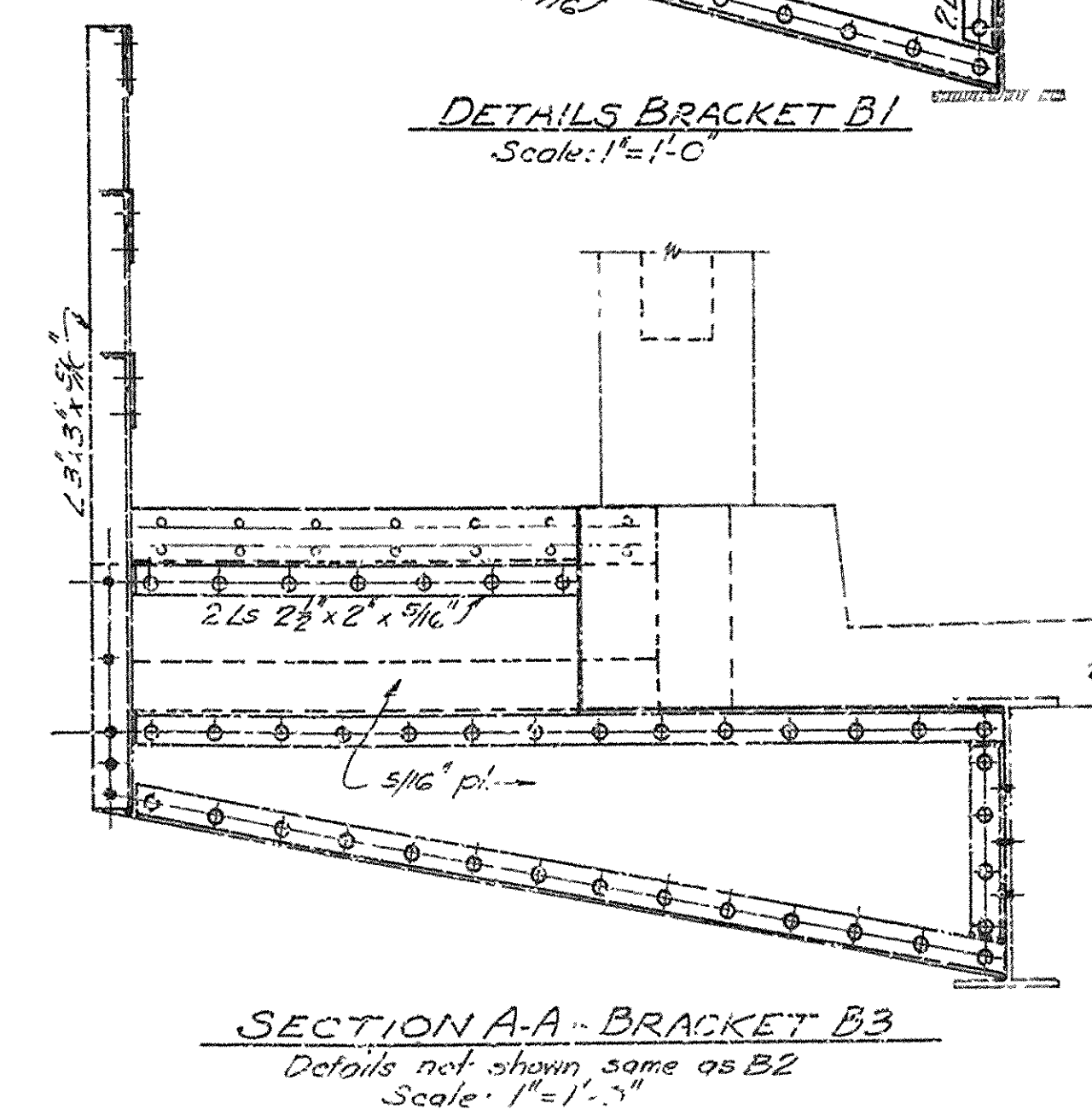
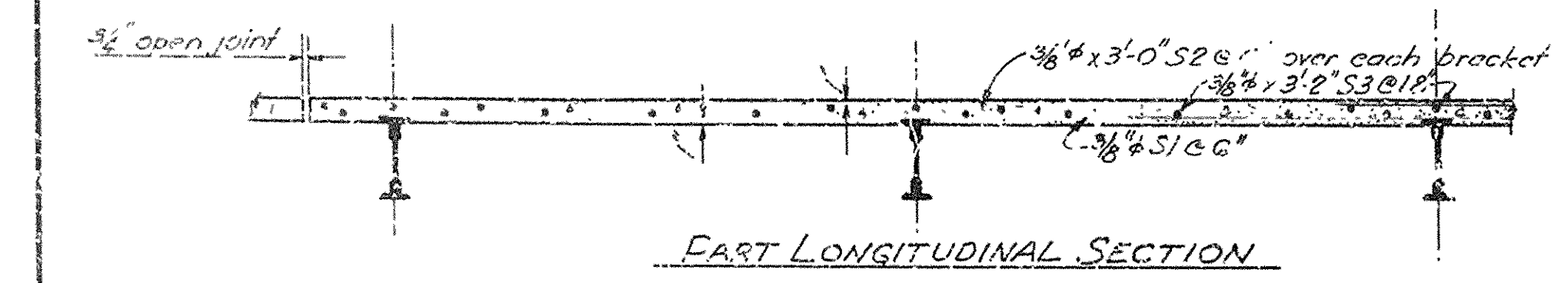
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: L.A.M. Date: 12-28-44
 Traced By: L.A.M. Date: 1-16-45
 Checked By: _____ Date: _____
 BRIDGE NO. 2466 DRAWING NO. 6644

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.	DANR 1 Unit 2		12	5
STATE JOB NO. 7505					



General Notes:
Rivets 5/16". Open holes 1/16" except 1/8" for 3/4" bolts.
Floor slab to be Class S Concrete.
Walks to be installed on both sides of roadway.
Live load 25 k/ft for slab and brackets.
For additional notes see Divg. No. 6642



DETAILS OF SIDEWALKS FOR EXISTING SPANS
BRIDGE OVER OJACHITA RIVER
CAMDEN, ARKANSAS
QUACHITA COUNTY
ROUTE 79 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.P.C. Date: 1-16-45
Traced By: L.P.C. Date: 1-18-45
Checked By: Date:
BRIDGE No. 2466 DRAWING NO. 6645

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
G	ARK.	DANR/ Unit 4		13	26
STATE Job No. 7305				13	26



3R.No. 2466

DRWG.No. 6647