

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	8168	7	37

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	8168	7	37

INDEX OF SHEETS

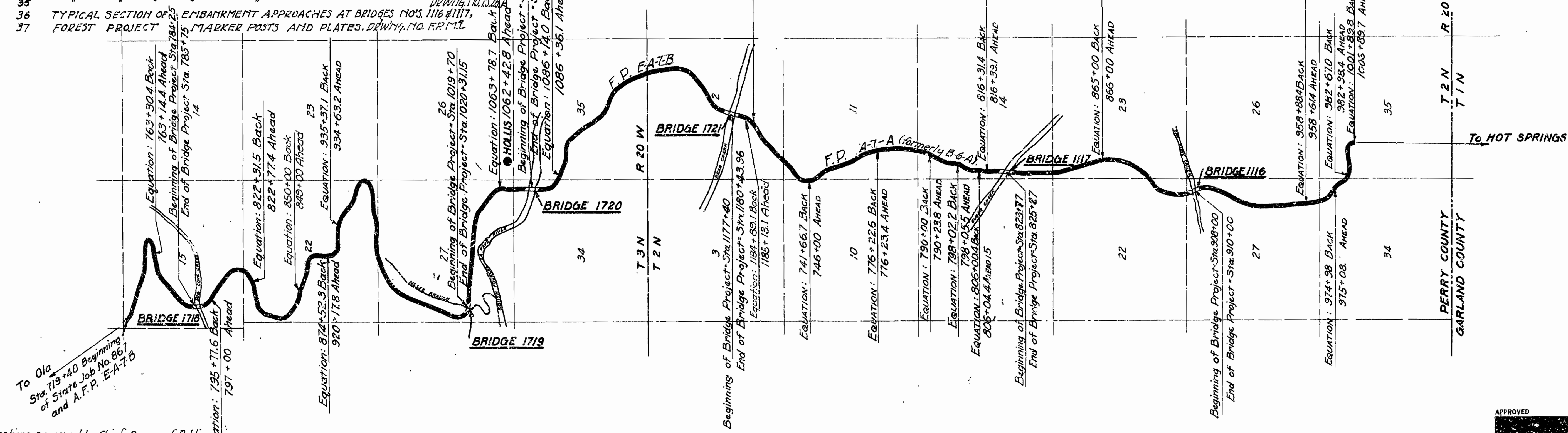
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- 25 " " " " " " " " " " "
- 26 " " " " " " " " " " "
- 27 " " " " " " " " " " "
- 28 " " " " " " " " " " "
- 29 " " " " " " " " " " "
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- 31 DETAILS OF 90'-0" LOW STEEL TRUSS, 20'-0" RDWY - STANDARD
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PLAN OF PROPOSED BRIDGES  
OLA - HOT SPRINGS  
PERRY COUNTY  
ARKANSAS FOREST PROJECT NO E-A-7-C  
ROUTE 7 SEC. 8  
JOB NO 8168

**QUANTITIES**

Item	Quantity	Unit
SP&12 Unclassified Excavation	860	Cu.Yds.
" " 13 Dry Excavation for Structures	1917	Cu.Yds.
" " 13 Wet Excavation for Structures	1091	Cu.Yds.
" " 13 Solid Rock Excavation for Structures	764	Cu.Yds.
" " 91 Class 'A' Concrete	1484.63	Cu.Yds.
" " 91 Class 'S' Concrete	1108.43	Cu.Yds.
" " 92 Reinforcing Steel	442,075	Lbs.
" " 96 Structural Steel (Trusses)	335,450	Lbs.
" " 95 Rip Rap (10" thick)	686	Cu.Yds.
" " SP&38 Special Handrail	1609	Lin.Ft.

Two project marker plates of approved design to be placed on each bridge, except Bridge No. 1116 where a marker will be placed on a concrete post at Sta. 908+00 and at Sta. 910+00, and Bridge No. 1117 where markers will be placed at Sta. 823+77 and Sta. 825+27. Bronze marker plates to be furnished by the State.



Specifications approved by Chief, Bureau of Public Roads, September 28, 1925 and adopted by State Highway Commission May 30, 1928, with revisions and special provisions as follows:

REVISIONS

Pamphlet	Revised	Approved
Pamphlet A	March 1, 1931	Approved June, 1931
Pamphlet J	Revised Nov. 1, 1931	
Pamphlet L	Revised Nov. 4, 1931	
Pamphlet M	Revised March, 1931	
Pamphlet N	Revised Sept. 1, 1932	
Pamphlet O	Revised Sept. 1, 1932	

**SPECIAL PROVISIONS**

Item	No. of Sheets
Measured in Embankment	2
Special Handrail	1
Forest Fires	1
Engineer's Field Office (9-7-32)	1
Relating to All Types of Work	4
Relating to Control of Labor	3
Relating to Classification of Labor	3
Revision and Amendment to Article 9.7 of Specifications	1
Subletting or assigning of contract	1
Preference for domestic articles or materials	1

**LAYOUT**  
Scale: 1" = 2000'

LENGTH OF JOB NO. 8168 =	1950.11 FT. = 0.235 MI.
LENGTH OF PROJECT =	1350.11 FT. = 0.235 "
LENGTH OF EMBANKMENT =	180.0 FT. = 0.034 "

APPROVED  
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHAIRMAN - STATE HIGHWAY COMMISSION

APPROVED  
STATE HIGHWAY ENGINEER

M.A. Lewis  
BRIDGE ENGINEER

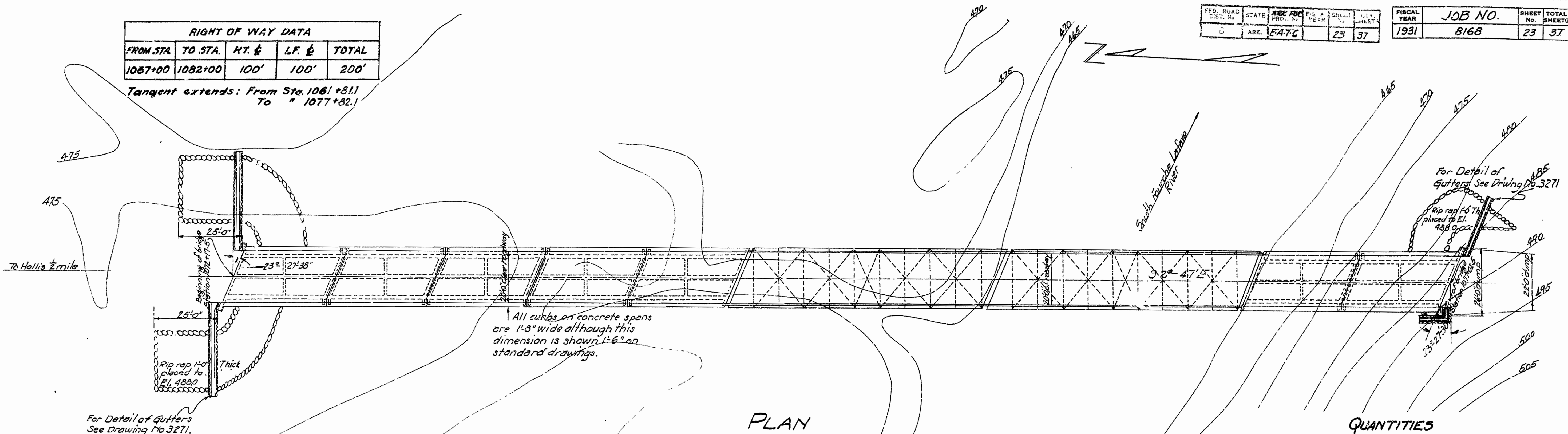
BRIDGES NO. 1116, 1117, 1718, 1719, 1720, 1721. DRAWING NO. 3268



FED. ROAD DIST. No.	STATE	FISC. YEAR	PROJ. No.	SHEET No.	TOTAL SHEETS	FISCAL YEAR	JOB NO.	SHEET No.	TOTAL SHEETS
0	ARK.	1931	EATC	23	37	1931	8168	23	37

RIGHT OF WAY DATA				
FROM STA.	TO STA.	RT. E.	LF. E.	TOTAL
1087+00	1082+00	100'	100'	200'

Tangent extends: From Sta. 1061+81.1 To " 1077+82.1

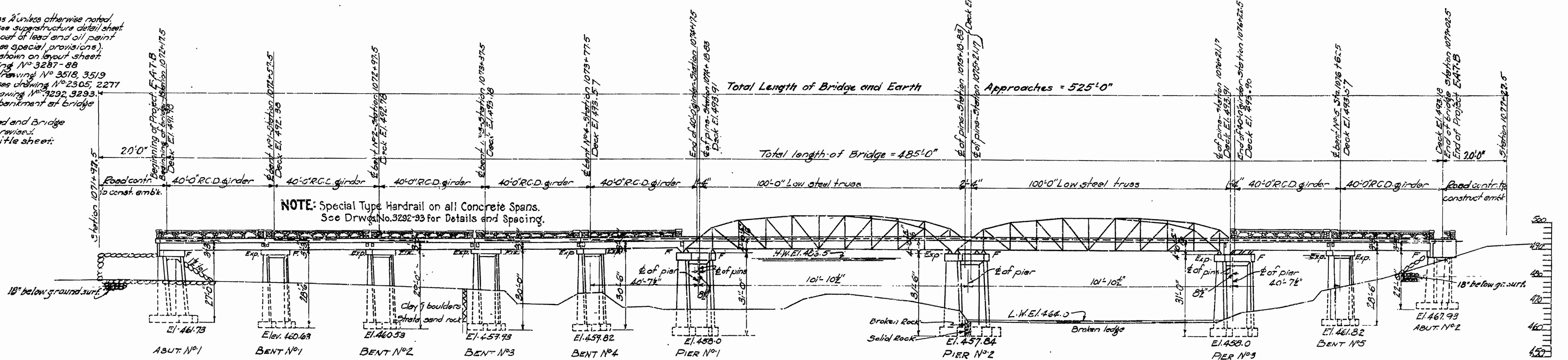


PLAN

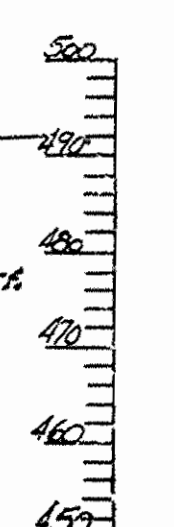
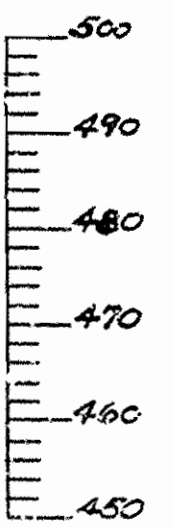
QUANTITIES

13	Dry Excavation for Structures	560	Cu. Yds.
13	Wet " "	245	" "
13	Solid Rock " "	200	" "
91	Class "A" Concrete	522.38	" "
91	" " "S"	423.87	" "
92	Reinforcing Steel	149,560	lbs.
96	Structural Steel (Truss Bridge)	174,140	" "
95	Rip Rap, 1 ft. thick	183	cu. yds.
S.P. & S.B.	Special Handrail	568	lin. ft.

**General Notes**  
 All concrete to be placed in the dry.  
 All concrete in substructure to be Class A unless otherwise noted.  
 For general notes on concrete and steel see superstructure detail sheet.  
 Structural steel to be given one field coat of lead and oil paint and one field coat of aluminum paint (See special provisions).  
 Expansion joints to be constructed as shown on layout sheet.  
 For details of substructure see drawing No. 3287-88.  
 For details of 100'-0" steel truss see drawing No. 3518, 3519.  
 For details of 40'-0" RC D girder span see drawing No. 2305, 2277.  
 For details of Special Handrail see drawing No. 3292, 3293.  
 Lead contractor to construct embankment at bridge ends.  
 Specifications: Arkansas Standard Road and Bridge Specifications adopted May 30, 1925 and revised.  
 For other specification data see title sheet.



ELEVATION



All dimensions shown, (unless otherwise noted) from grade to bridge seats are given to top of bottom bearing plate. Bottom of girders to be finished the thickness of the bottom plate above bridge seats. On fixed ends the depth of girders shall be increased by the thickness of one plate to within 2" of front vertical face of bridge seats.

Drainage area  
 12.5 sq. miles - Mountainous  
 B.M. El. 476.97  
 On 32" Oak 85' left of  
 Station 1076+60  
 B.M. El. 475.34  
 On 36" Oak 150' right  
 of Station 1074+50

LAYOUT OF BRIDGE  
 OVER SOUTH FOURCHE LAFLORE RIVER  
 OLD HOT SPRAWLS ROAD  
 DERRY COUNTY  
 ROUTE 7 SEC. 8  
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.  
 Drawn By: *AD* Date: 7-23-31  
 Traced By: *AD* Date: 7-15-31  
 Checked By: *AD* Date: 8-11-31  
**BRIDGE NO. 1720**  
 Scale: 1" = 20'  
**DRAWING NO. 3286**

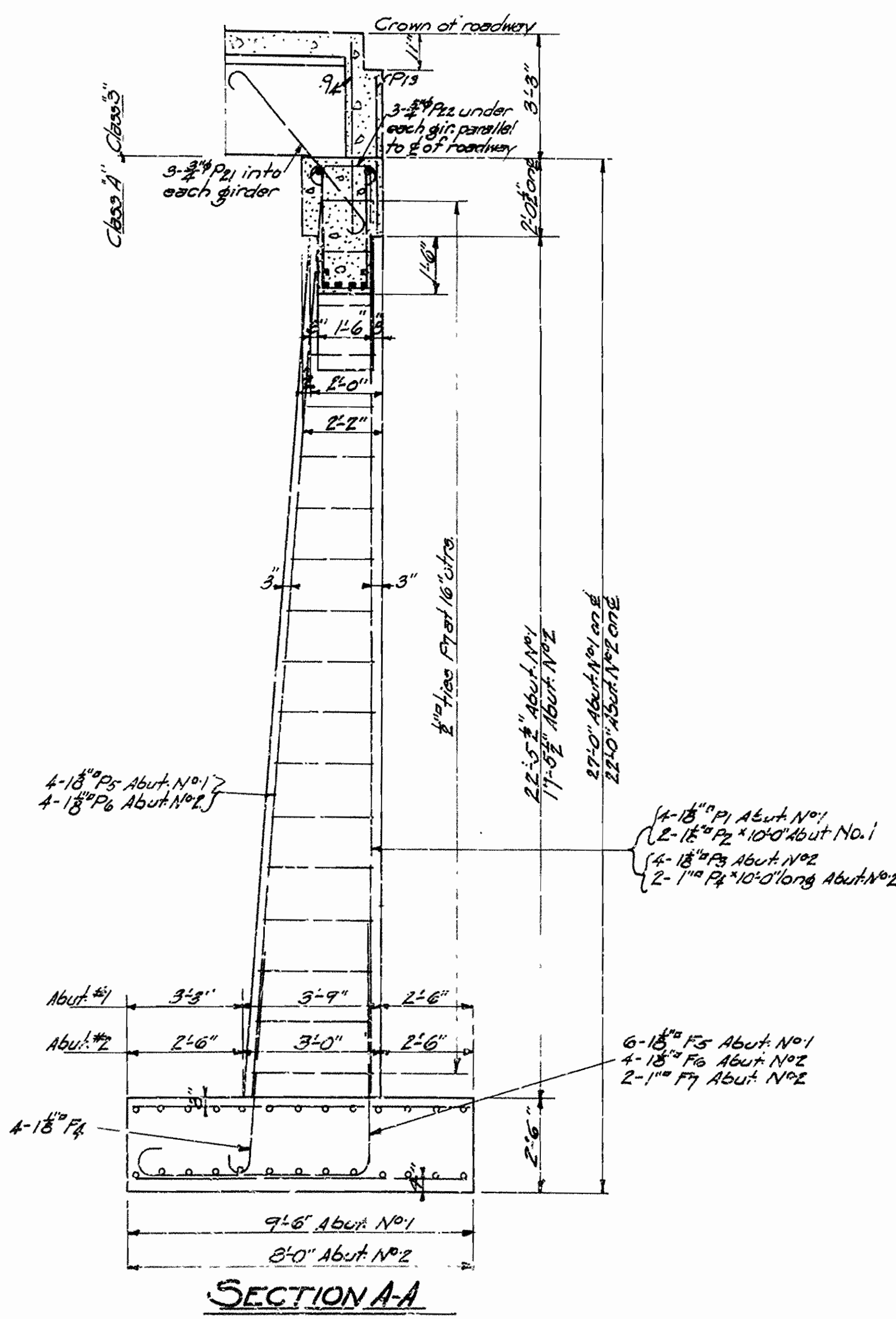
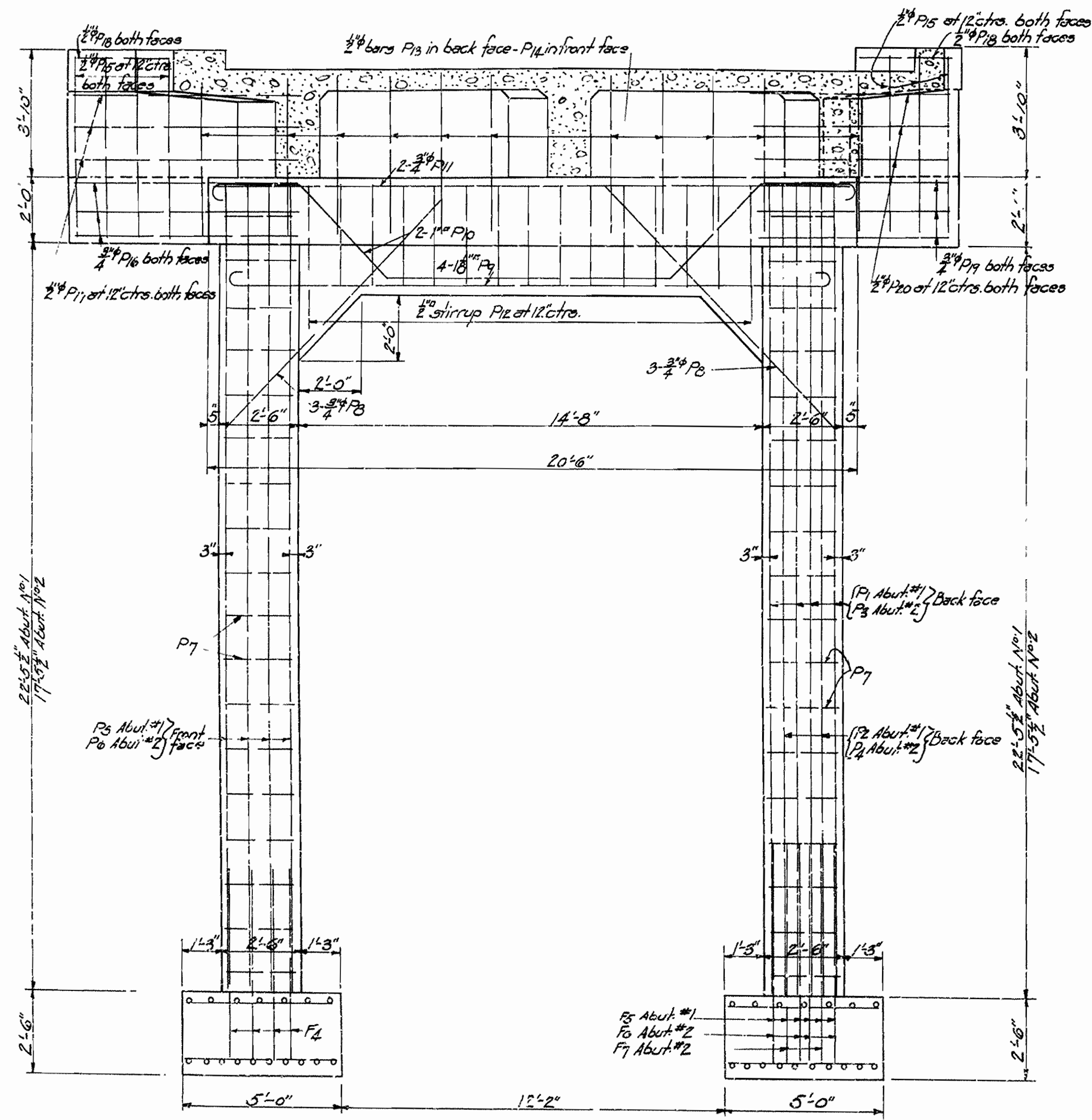
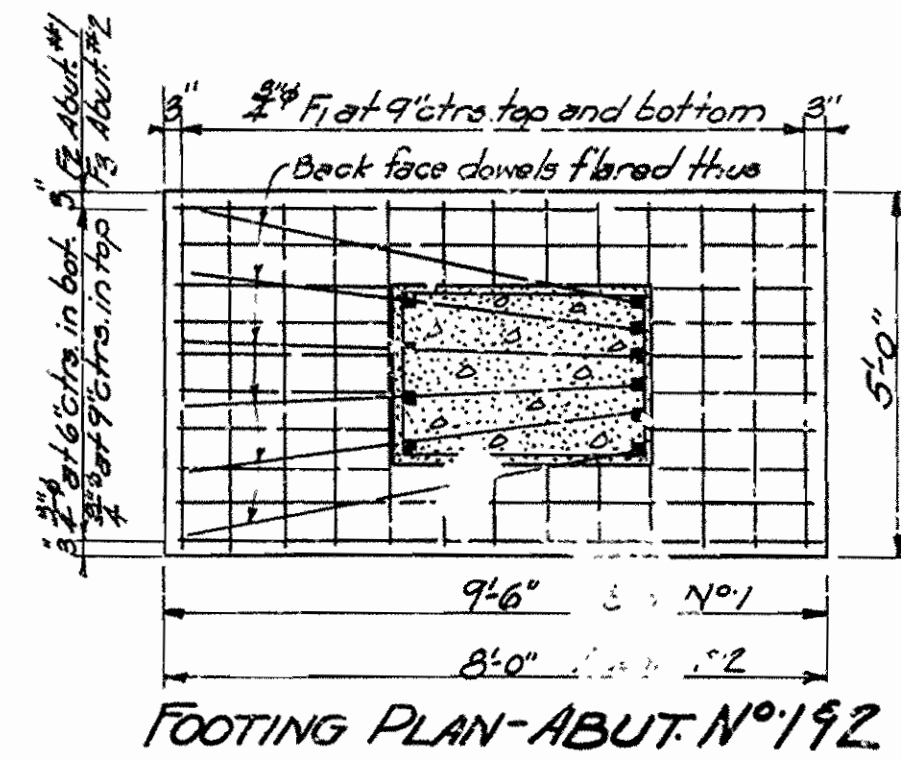
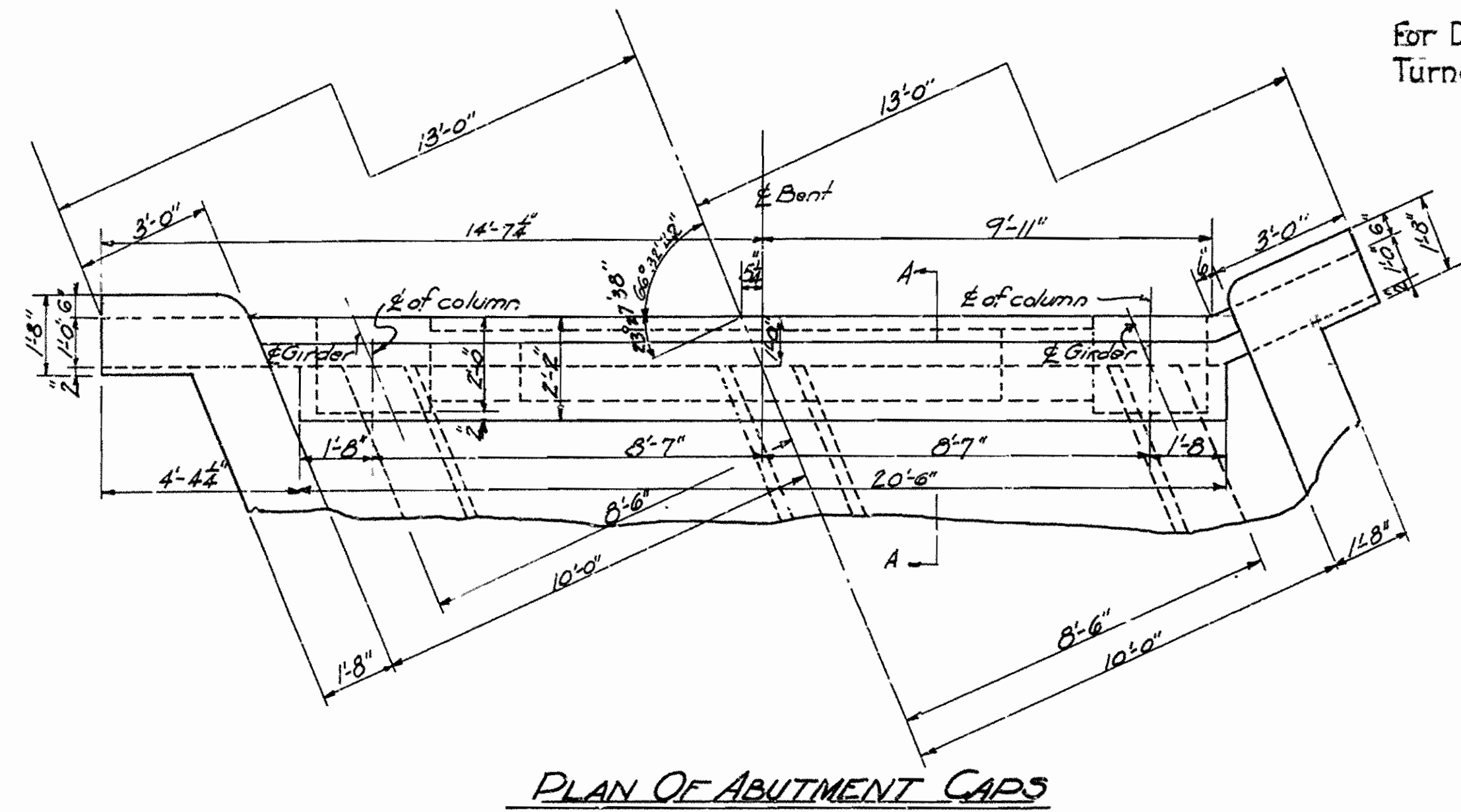
*W.B. Lawrence*  
 BRIDGE ENGINEER



For Details of Handrail on Turnouts See Drawg. No. 3.2.92, 3293.

FED. ROAD DIST. No.	STATE	ARK. PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	Ark.	EATC	28	37	

FISCAL YEAR	JOB NO.	SHEET No.	TOTAL SHEETS
1931	8168	28	37



Mark	Size	Length	Bending diagram	
F4	1 1/2"	7'-0"		
F5	1 1/2"	14'-0"	A	B
F6	1 1/2"	12'-6"	5'-0"	6'-3"
F7	1"	12'-0"	5'-0"	6'-2"
P7	1/2"	Varies		
P9	1 1/2"	21'-2"	19'-2"	6"
P21	3/4"	7'-6"	6'-0"	6"
P22	3/4"	3'-6"	2'-0"	6"
P10	1"	24'-4"		
P12	1/2"	8'-2"		
P14	3/4"	5'-10"	2'-6"	1'-0"
P20	1/2"	5'-4"	2'-0"	9 1/2"

DETAILS OF ABUTMENTS FOR BRIDGE OVER FOURCHE LA PEAU RIVER OLD-HOT SPRINGS ROAD PERRY COUNTY SEC. 8

ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

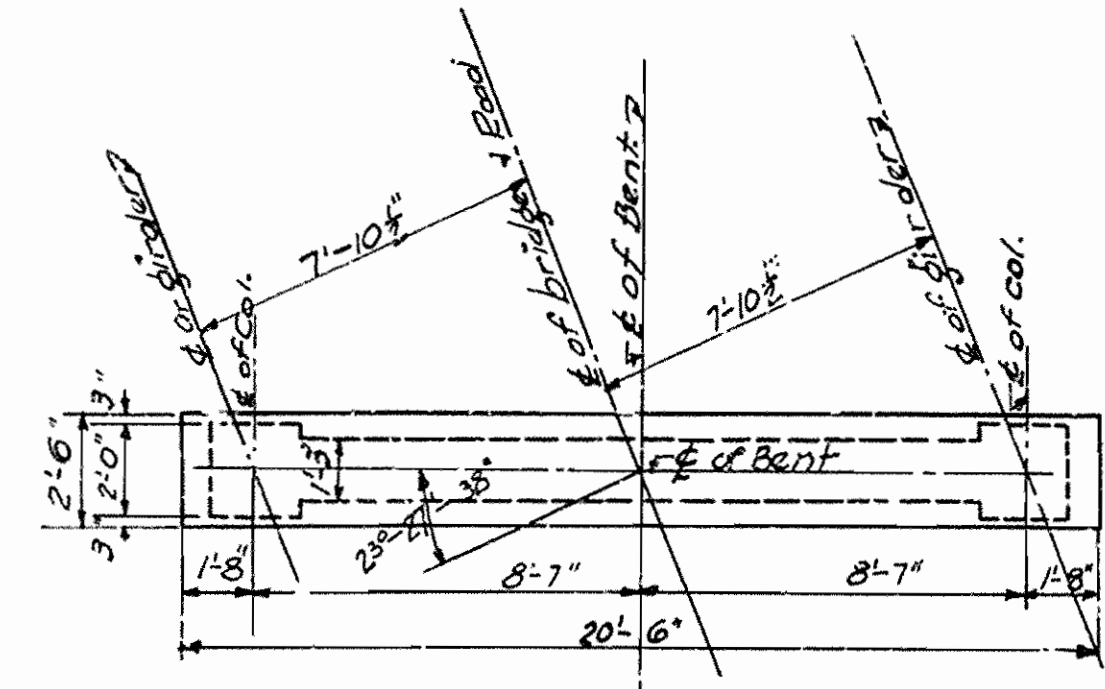
Drawn By: LD Date: 7-12-31  
Traced By: LD Date: 7-12-31  
Checked By: LD Date: 8-12-31  
BRIDGE NO. 1720 DRAWING NO. 3287

*M.B. Jones*  
BRIDGE ENGINEER

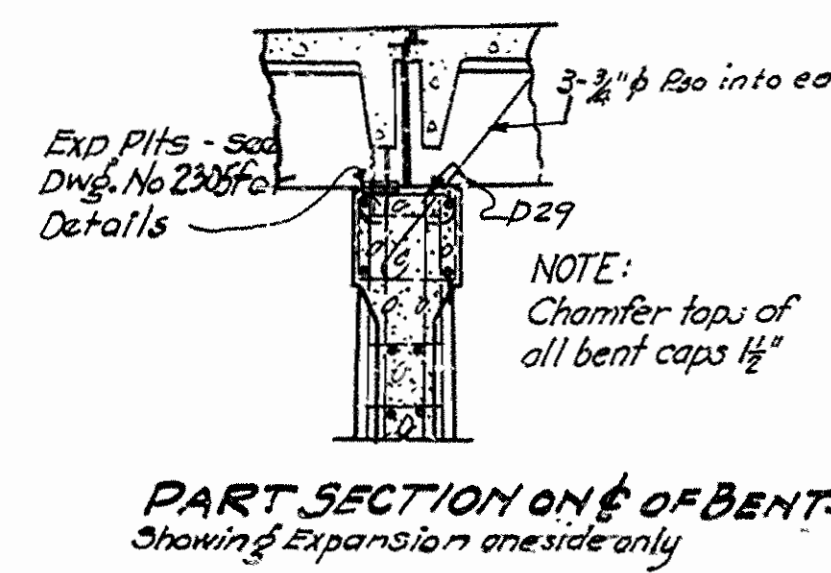


For Details of 20'-0" R.C.D. Girder See Dwg. Nos. 2305, 2277.  
For Details of 100'-0" Low Truss See Dwg. Nos. 3518, 3519.

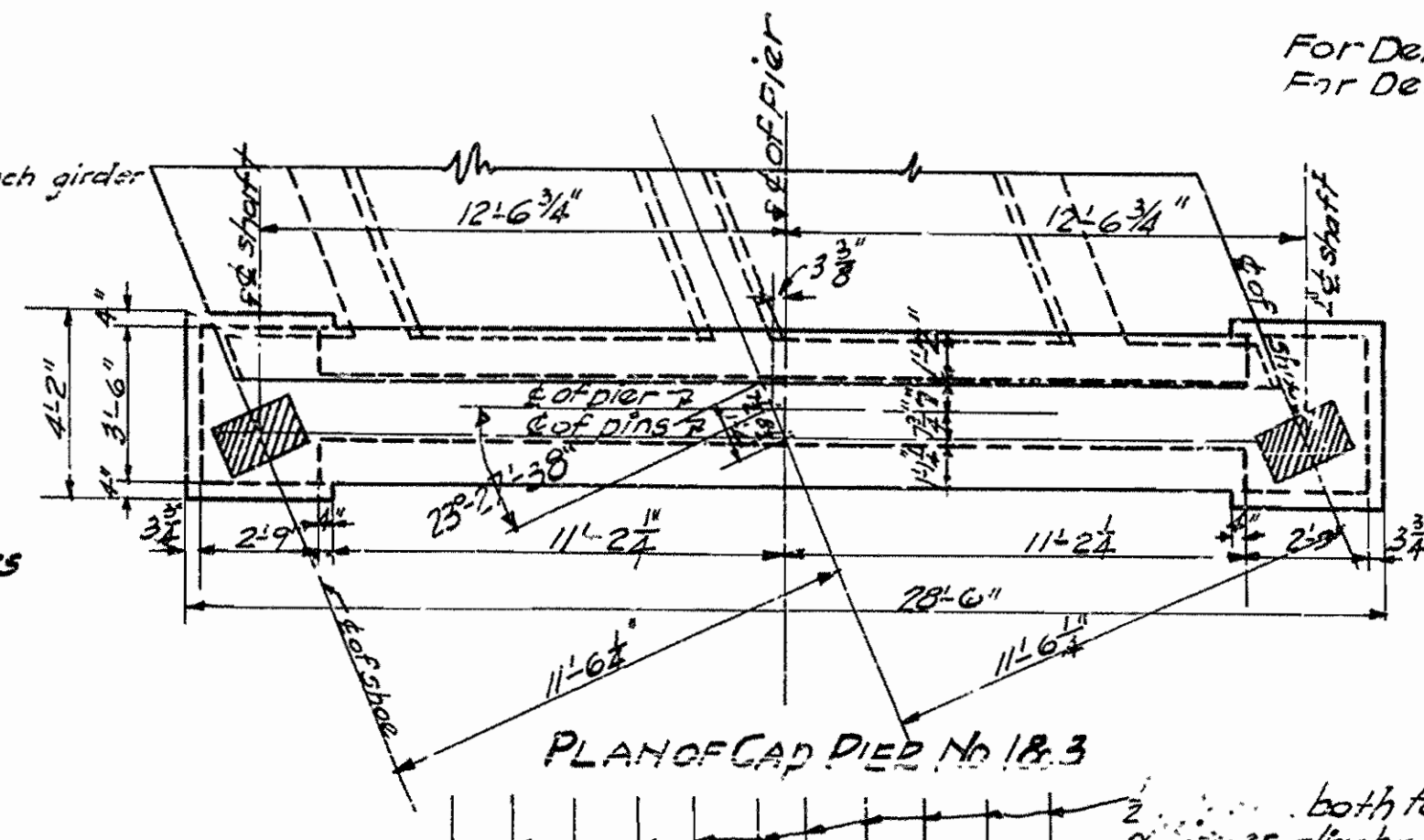
FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
1931	8168	29	37



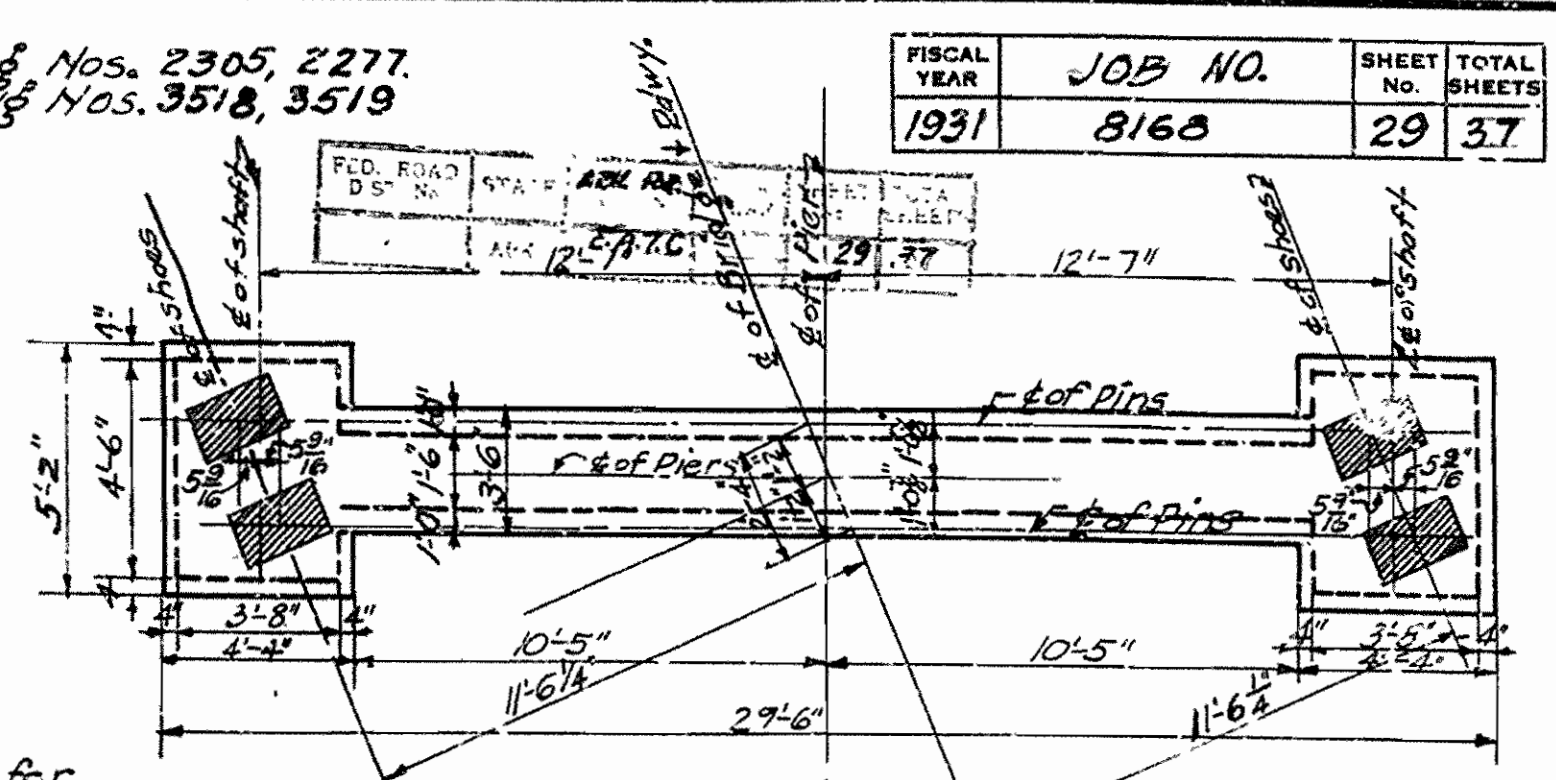
PLAN OF BENT CAPS



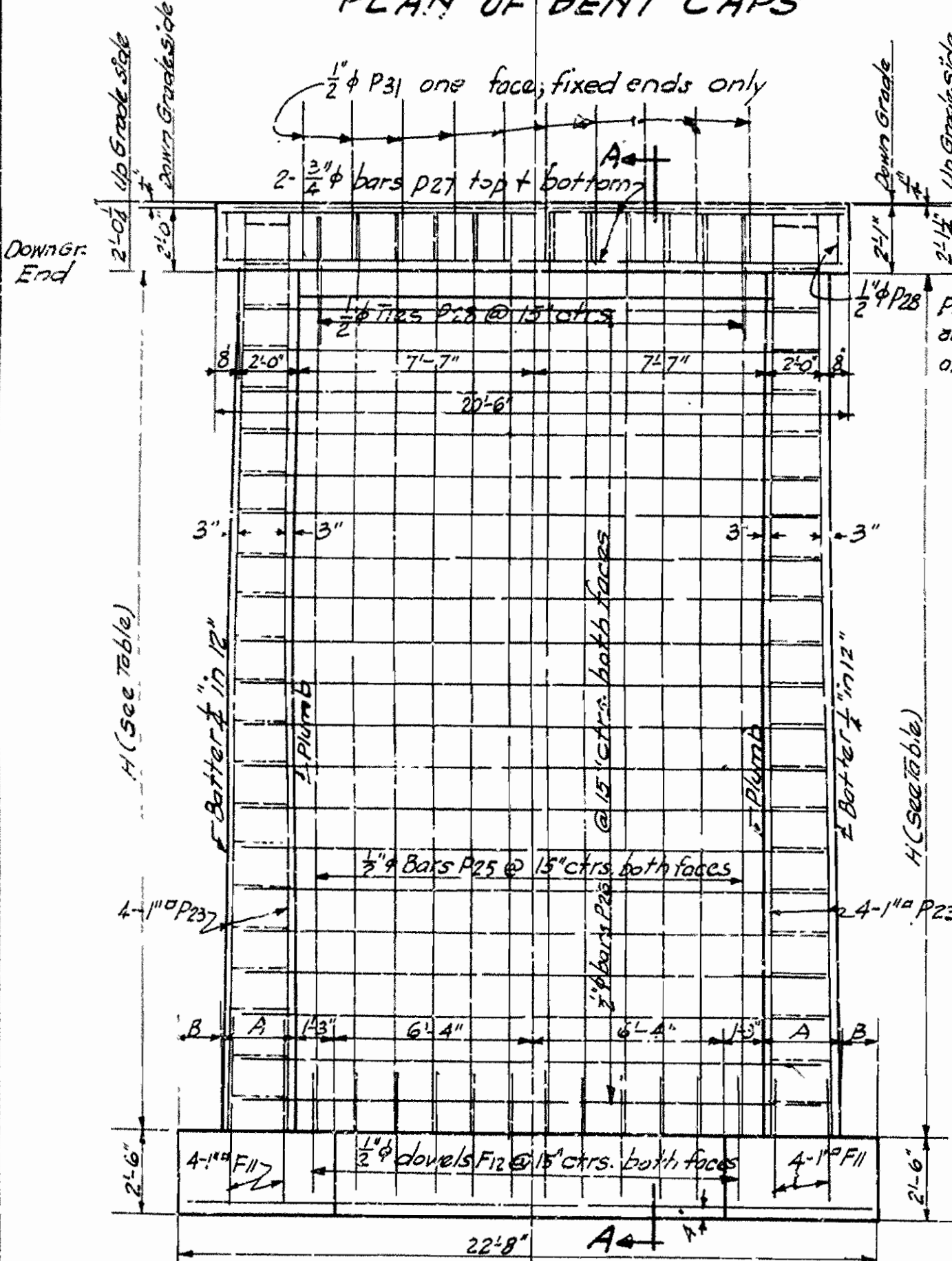
PART SECTION OF BENTS  
Showing Expansion on one side only



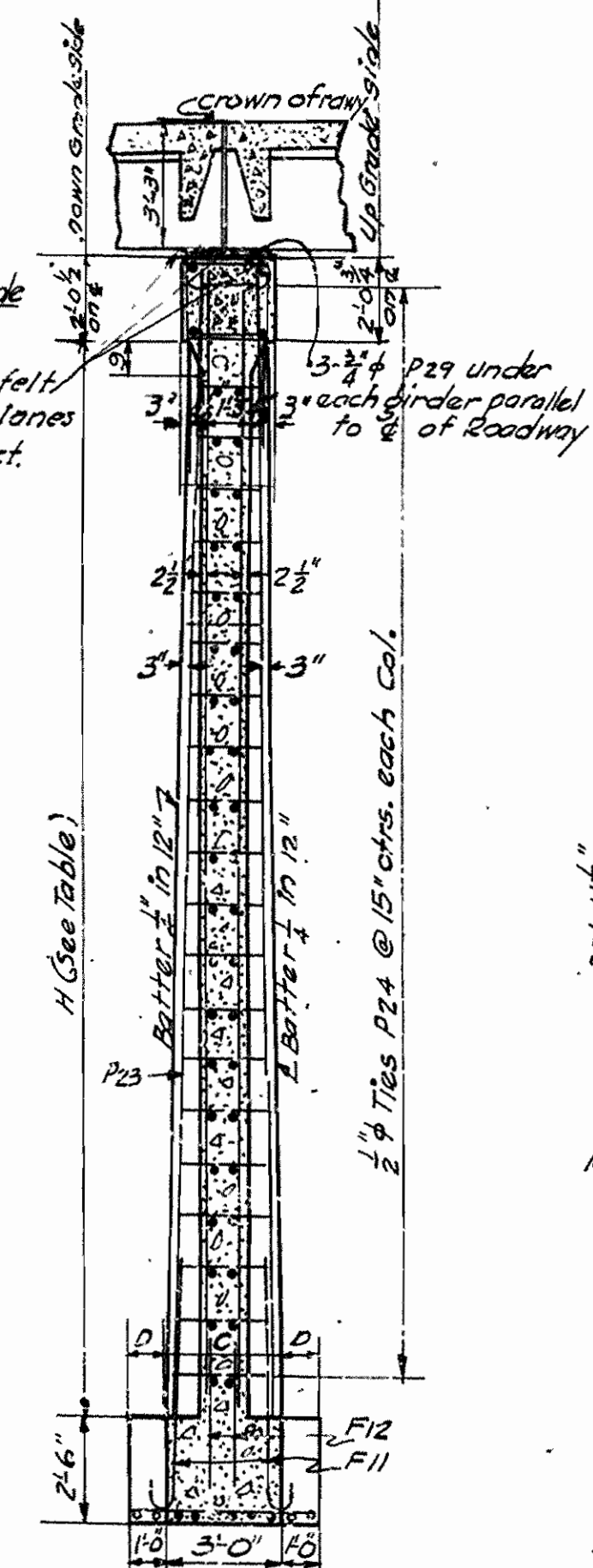
PLAN OF CAP PIER No. 1 & 3



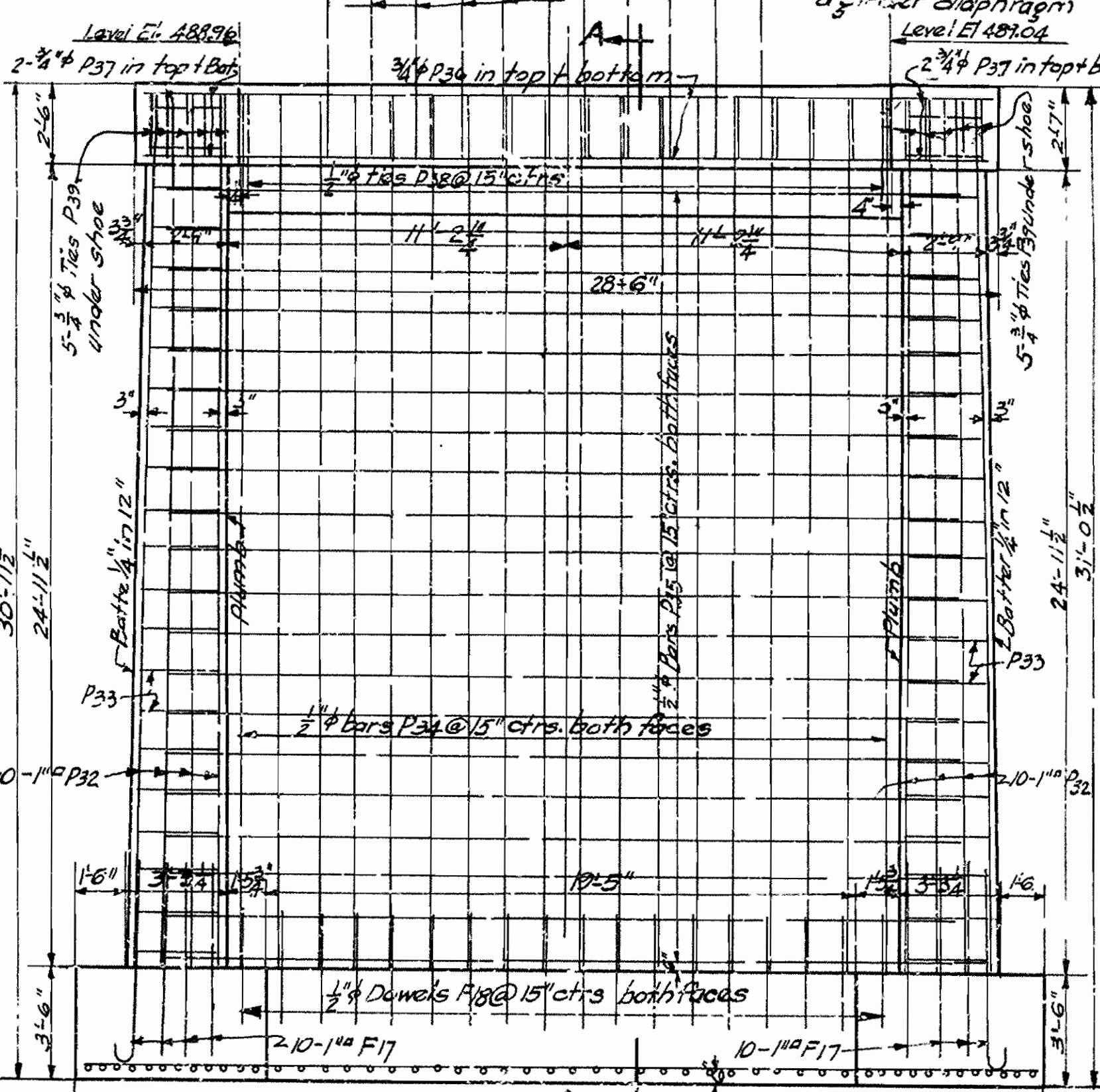
PLAN OF CAP PIER No. 2



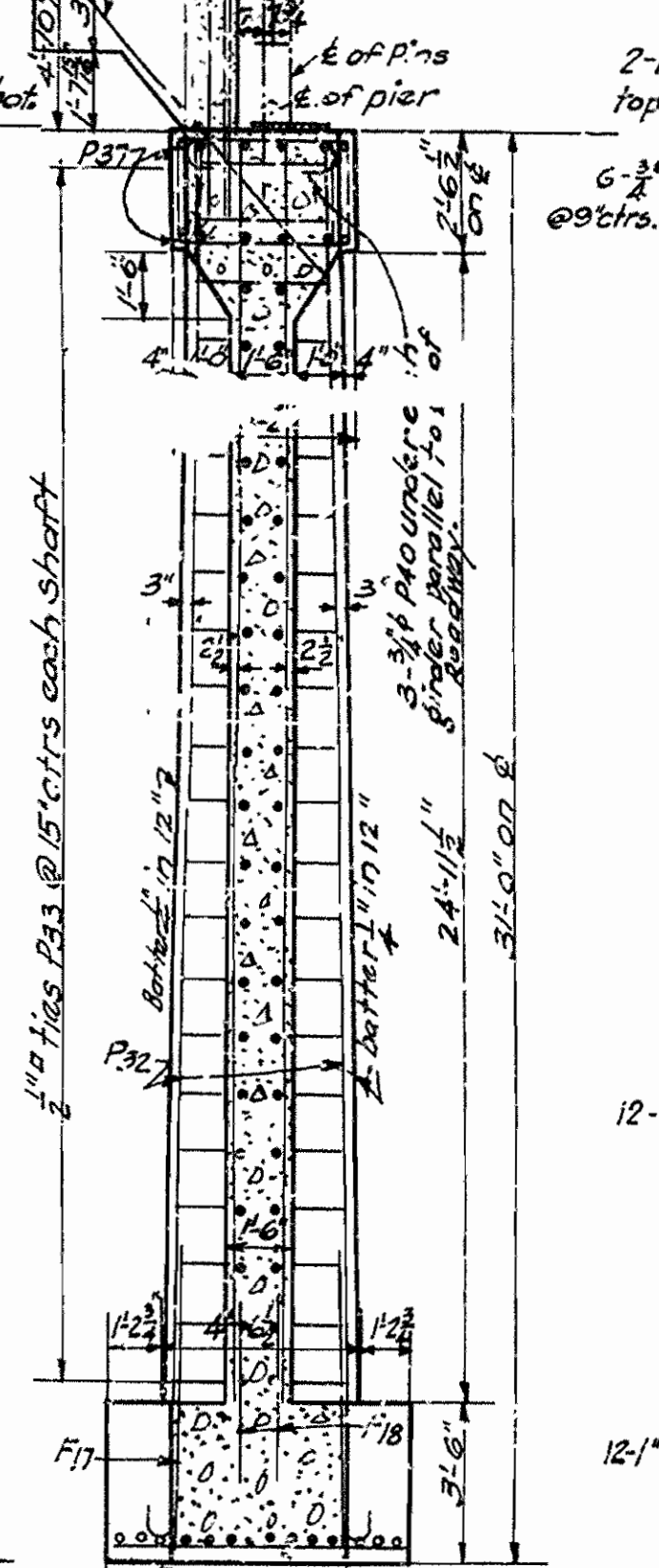
ELEVATION OF BENTS



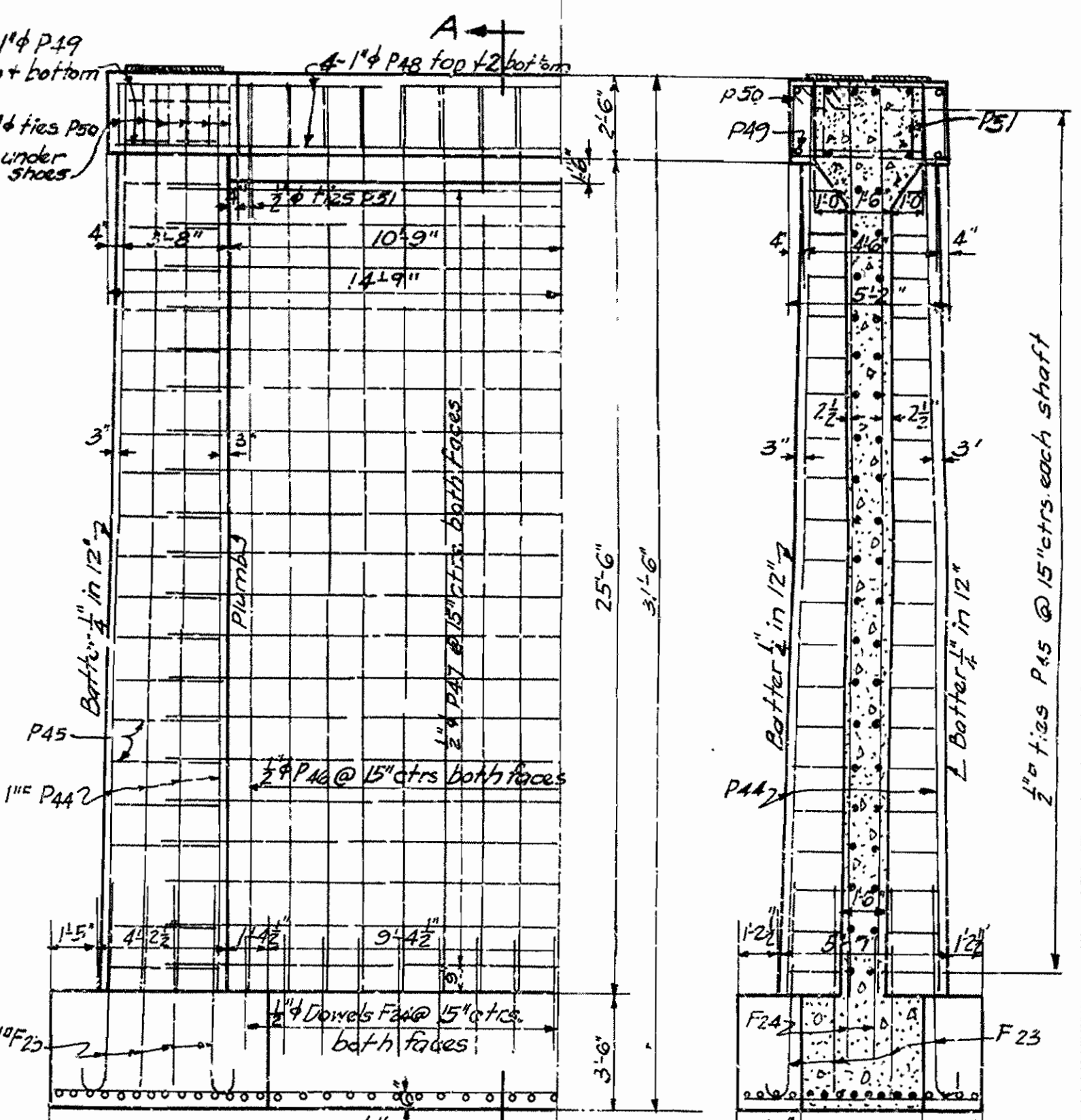
SECTION A-A OF BENTS  
Showing expansion both sides.



ELEVATION OF PIERS Nos. 1 & 3

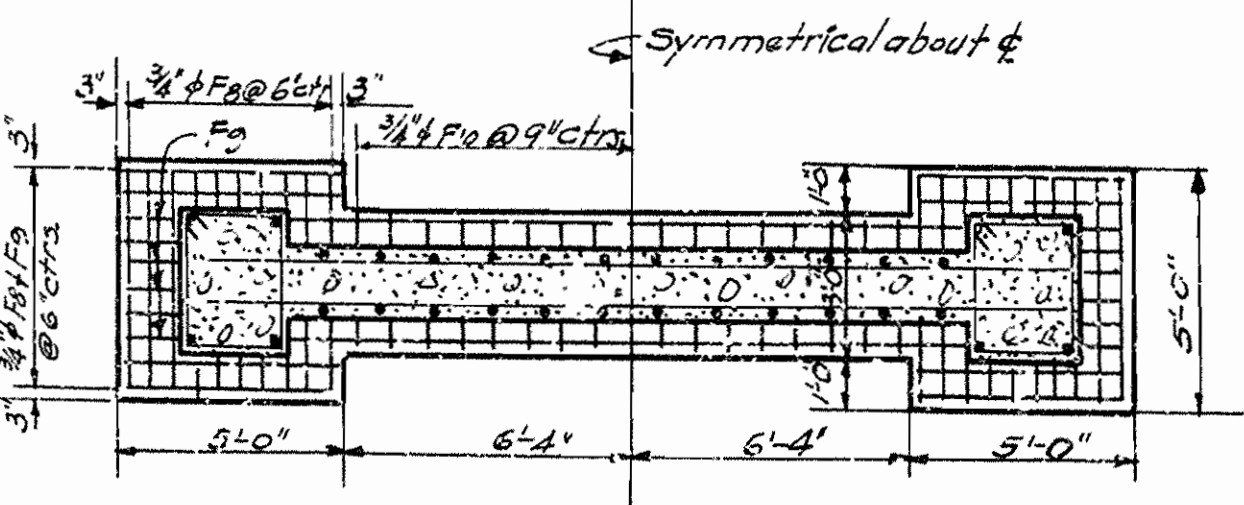


SECTION A-A PIERS Nos. 1 & 3

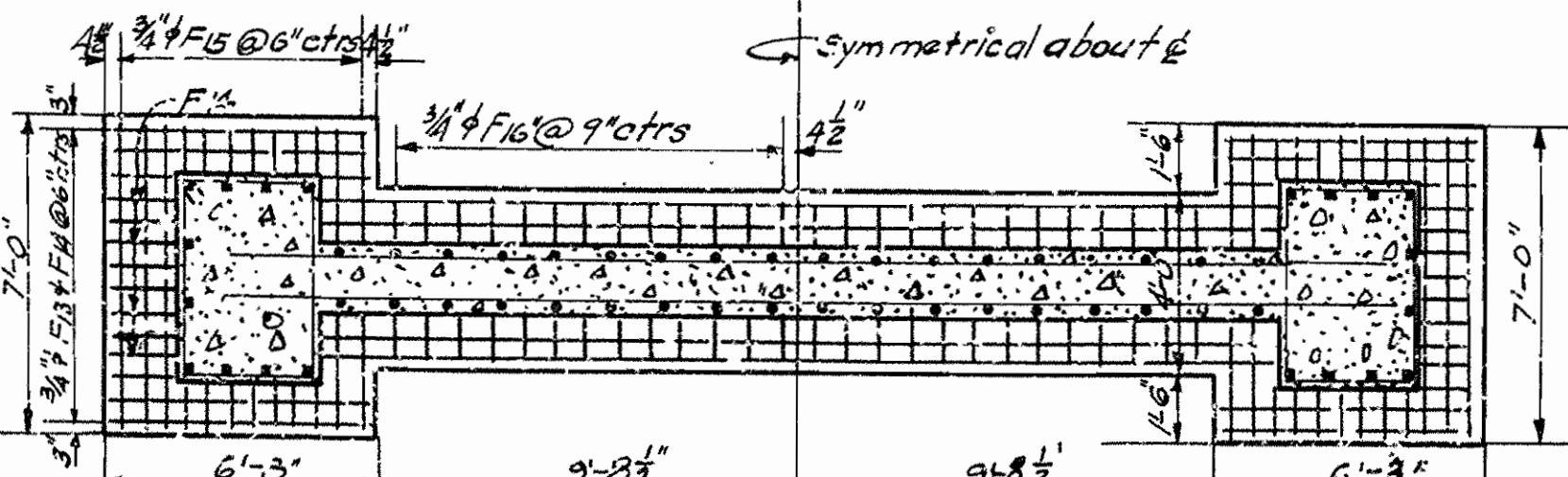


HALF ELEVATION PIER No. 2

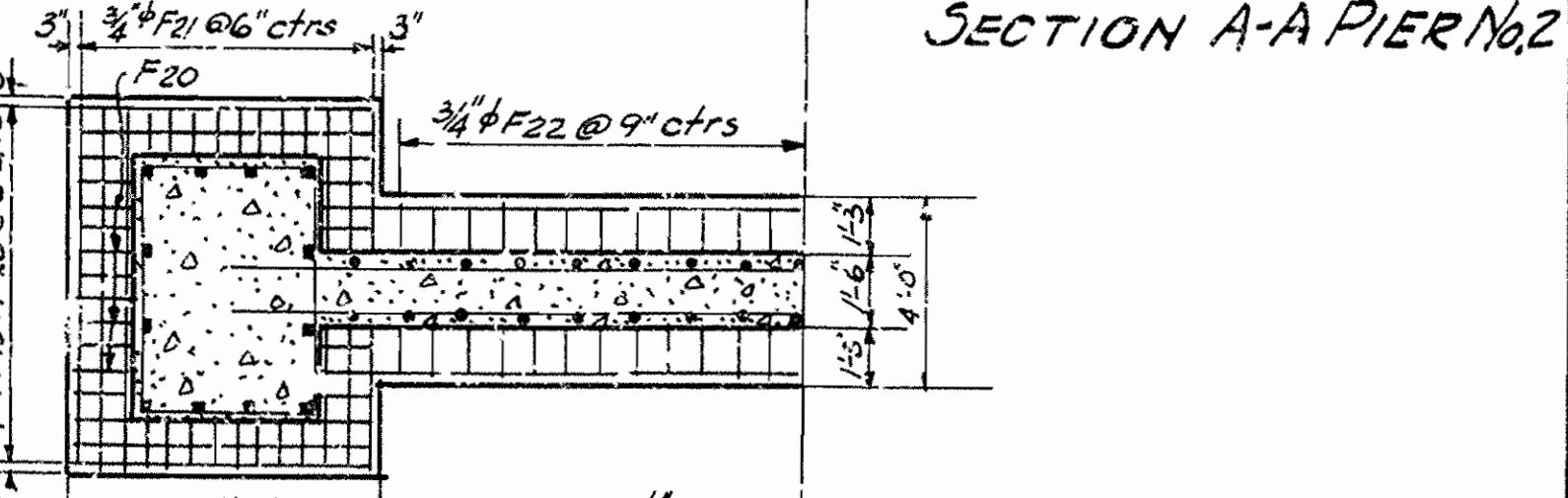
SECTION A-A PIER No. 2



FOOTING PLAN OF BENTS



FOOTING PLAN PIERS Nos. 1 & 3



HALF FOOTING PLAN PIER No. 2

BENT NO.	H	A	B	C	D	WIDTH AT TOP OR BOTTOM
1	23'-11 3/4"	2'-6"	1'-3"	3'-0"	1'-0"	28'-6"
2	22'-5 3/8"	2'-6 3/8"	1'-2 1/8"	3'-0 1/2"	1'-1 3/8"	29'-0"
3	25'-5 3/8"	2'-6 3/8"	1'-2 1/8"	3'-0 1/2"	1'-1 3/8"	30'-0"
4	25'-11 3/8"	2'-6 3/8"	1'-2 1/8"	3'-0 1/2"	1'-1 3/8"	30'-6"
5	23'-11 3/8"	2'-6"	1'-3"	3'-0"	1'-0"	28'-6"

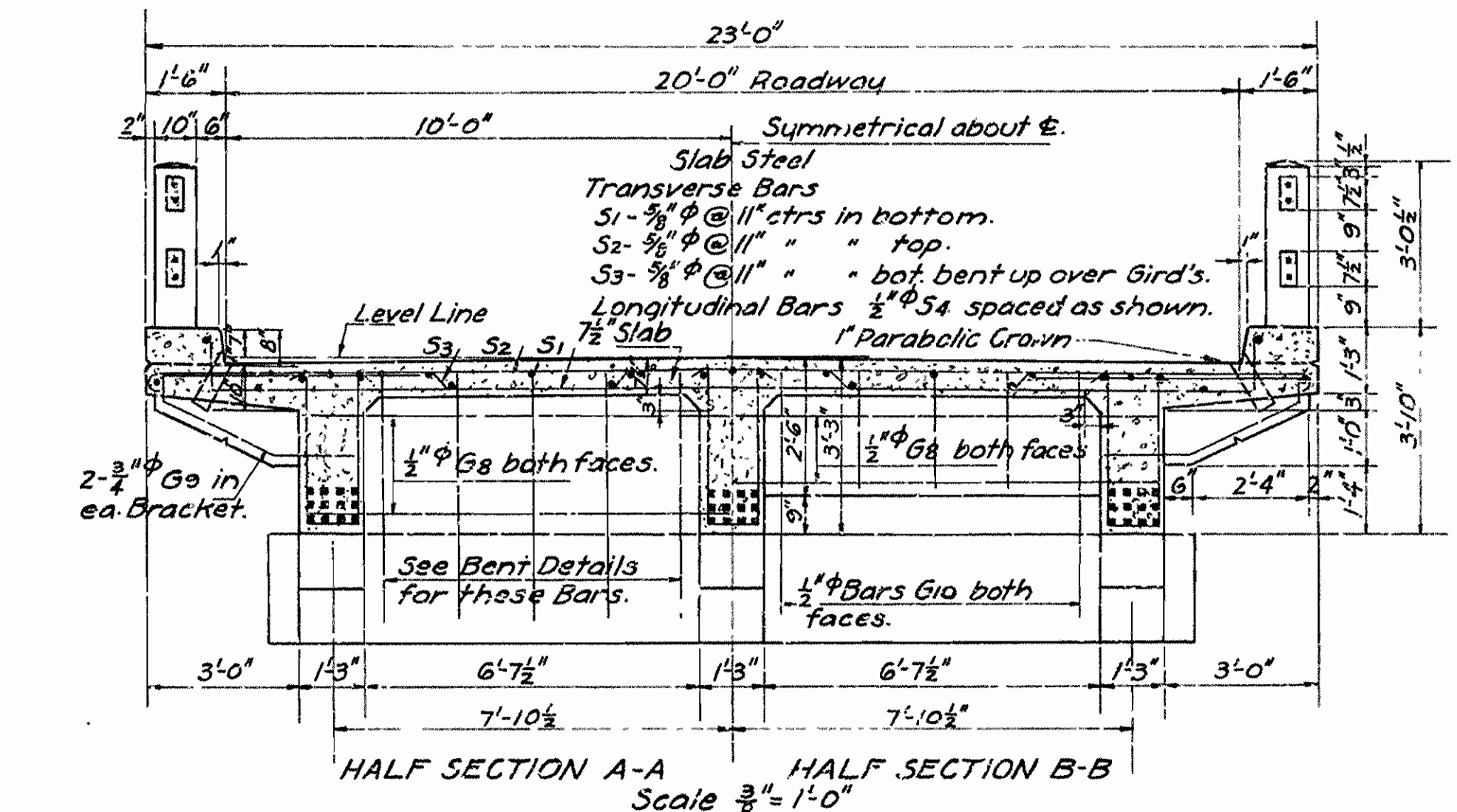
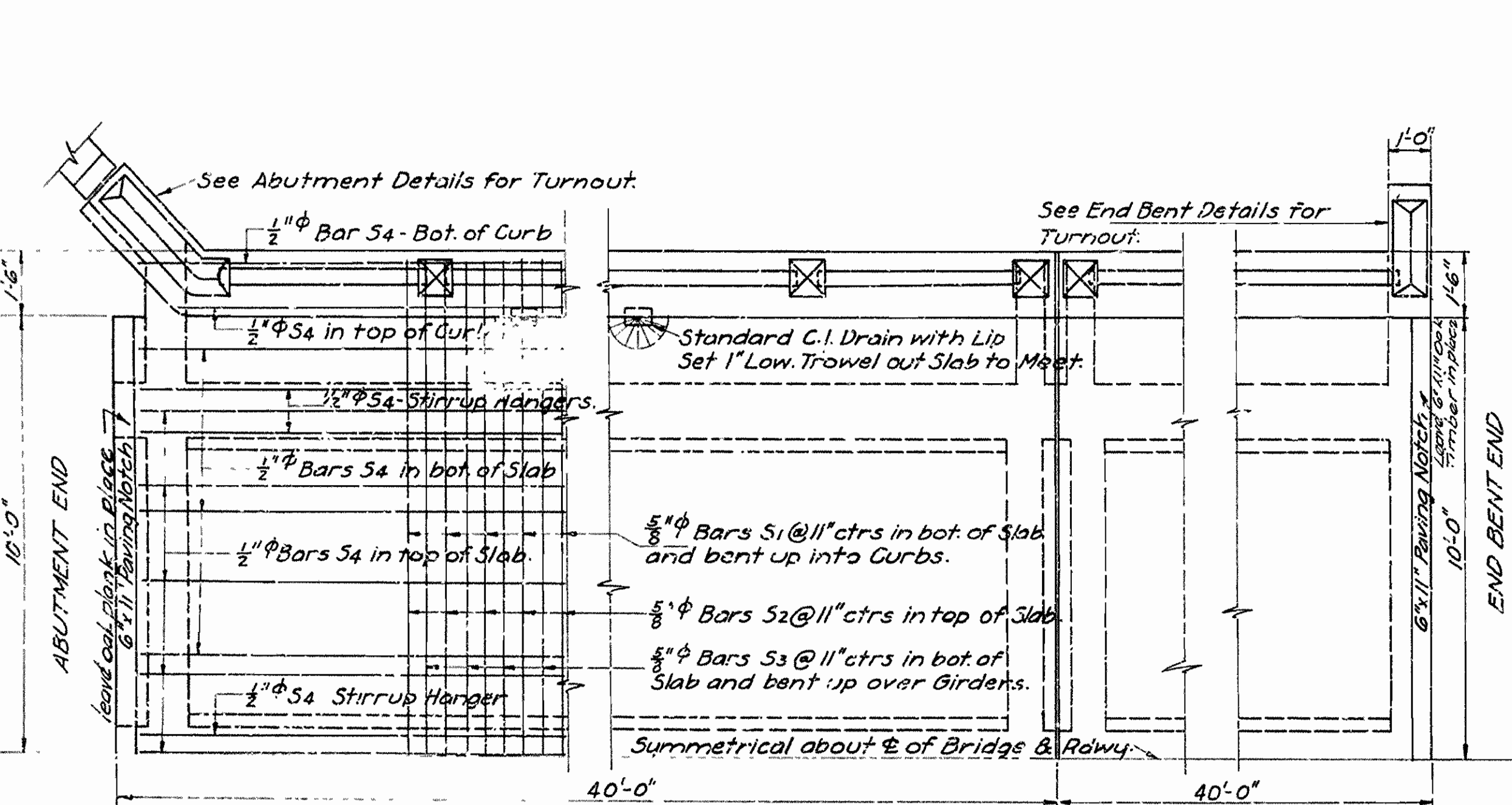
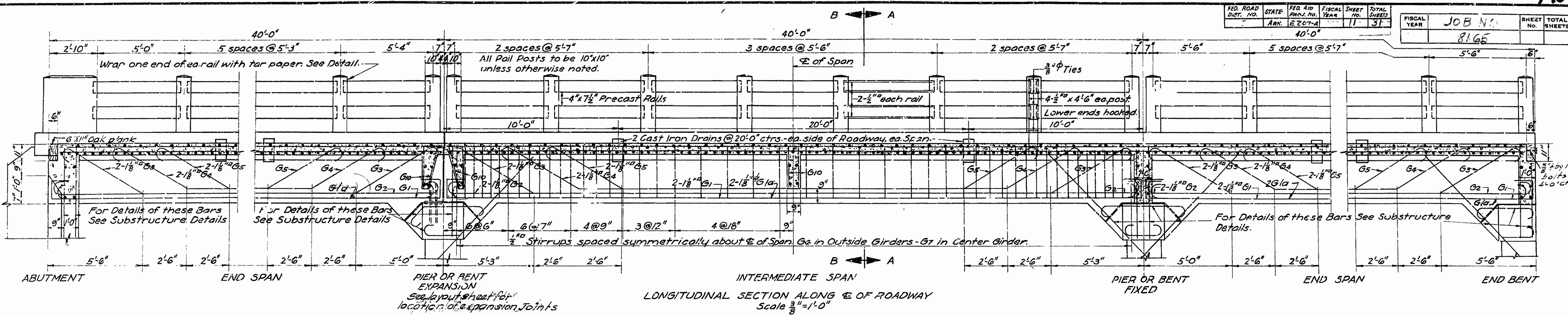
MARK	SIZE	LENGTH	A	B	BENDING DIAGRAM	MARK	SIZE	LENGTH	A	B	BENDING DIAGRAM
F11	1"φ	6'-6"	5'-6"			P45	1"φ	VARIES	10'-7 1/2"	10'-7 1/2"	
F17	1"φ	7'-4"	6'-4"			P51	1/2"φ	17'-2"	3'-1 1/2"	2'-1 1/2"	
F23	1"φ	7'-6"	6'-4"			D29	3/4"φ	5'-7"	2'-1 1/2"		
P24	1/2"φ	VARIES	14'-8"	4'-10 1/2"	2'-1 1/2"	P20	3/4"φ	7'-6"	2'-0"		
D28	1/2"φ	8'-0"	2'-0 1/2"	1'-7 1/2"		P40	3/4"φ	4'-10"	3'-4"		
P33	1"φ	VARIES	3'-0 1/2"	2'-4 1/2"		P42	3/4"φ	11'-0"			
P39	1"φ	11'-4"	3'-2 1/2"	2'-1 1/2"							
P39	3/4"φ	12'-8"	3'-10 1/2"	2'-1 1/2"							

DETAILS OF BENTS & PIERS  
FOR BRIDGE OVER FOURCHE LAFAVE RIVER  
OLA - HOT SPRINGS ROAD  
PERRY COUNTY  
ROUTE 7 SEC. 3  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
Drawn By: *Easton* Date: 7-22-31  
Traced By: *MKW* Date: 7-22-31  
Checked By: *EAH* Date: 8-4-31  
Scale: 1/4" = 1'-0"  
BRIDGE ENGINEER  
BRIDGE NO. 1720 DRAWING NO. 3288

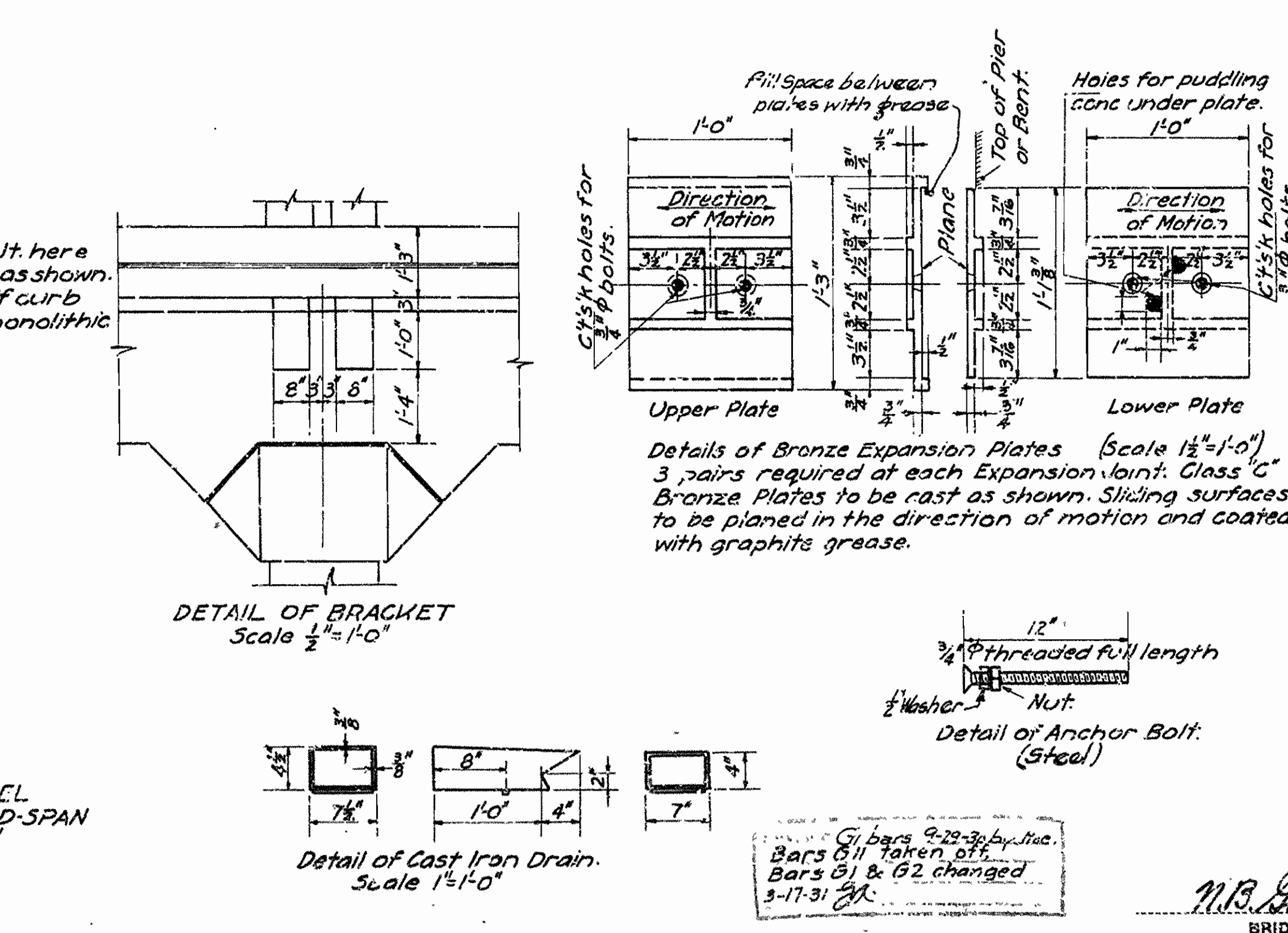
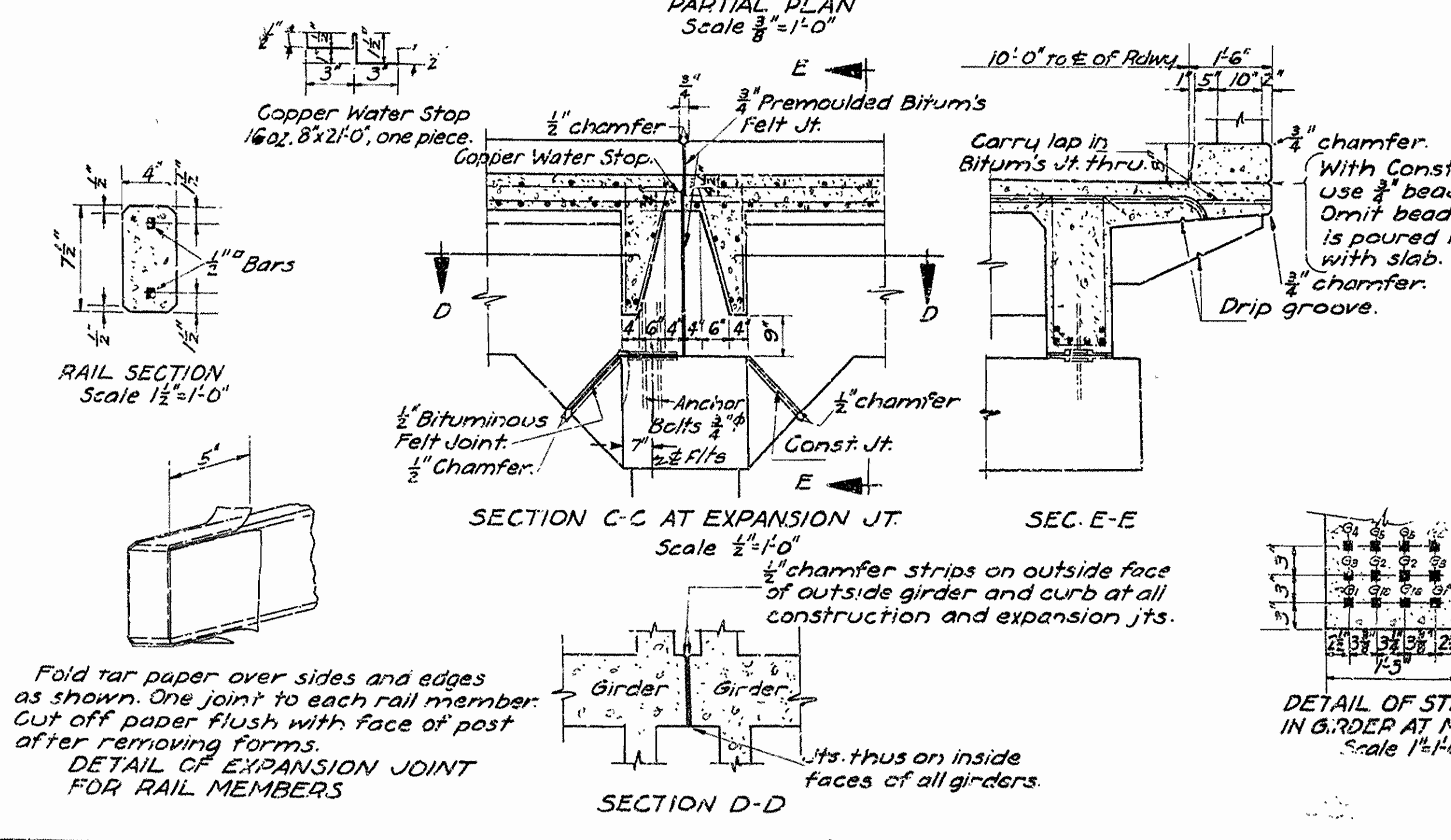
Maurice Williams



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
ARK.	AR.	E207-A	11	31	



MARK	SIZE	LENGTH	BENDING DIAGRAM			
			A	B	C	D
SLAB	S1	5/8" φ	22'-6"			
	S2	5/8" φ	23'-6"			
	S3	5/8" φ	24'-0"			
GIRDER	G1	1/2" φ	43'-8"			
	G1a	1/2" φ	41'-2"			
	G2	1/2" φ	40'-8"			
	G3	1/2" φ	42'-0"	29'-6"	4'-9"	5'-3"
	G4	1/2" φ	36'-0"	24'-6"	4'-4"	4'-9"
	G5	1/2" φ	31'-0"	19'-6"	4'-4"	4'-9"
	G6	1/2" φ	41'-6"	29'-0"	4'-9"	5'-3"
	G7	1/2" φ	35'-6"	24'-0"	4'-4"	4'-9"
	G8	3/4" φ	30'-6"	19'-0"	4'-4"	4'-9"



**General Notes**  
 All exposed corners to have 3/4" chamfer unless otherwise noted.  
 Precast concrete handrails to be 1:1:2 mix. Max aggregate 1/2".  
 All concrete above top of bent caps, except handrail, to be Class "S".  
 Reinforcing steel to be deformed bars of structural or intermediate grade. Shop lists and bending diagrams must be submitted by Contractor before fabrication is begun.  
 Roadway drains and expansion devices to be paid for at unit price bid for reinforcing steel.  
 Specifications: Arkansas Standard Road & Bridge Specifications, adopted May 30, 1925 & Revised.  
 Unit Stresses:  $f_s = 16,000 \text{ psi}$ ;  $f_c = 750 \text{ psi}$ ;  $n = 15$ . Loading His  
 All dimensions are center to center of bars.

**DETAILS OF STANDARD 40'-0" R.C.D. GIRDER SPAN 3 GIRDER TYPE - 20'-0" CLEAR RDWY**

ROUTE SEC.  
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.  
 Drawn By: MB Date: 3-7-30  
 Traced By: MB Date: 3-20-30  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Scale: as shown  
 BRIDGE NO. \_\_\_\_\_ DRAWING NO. 2271

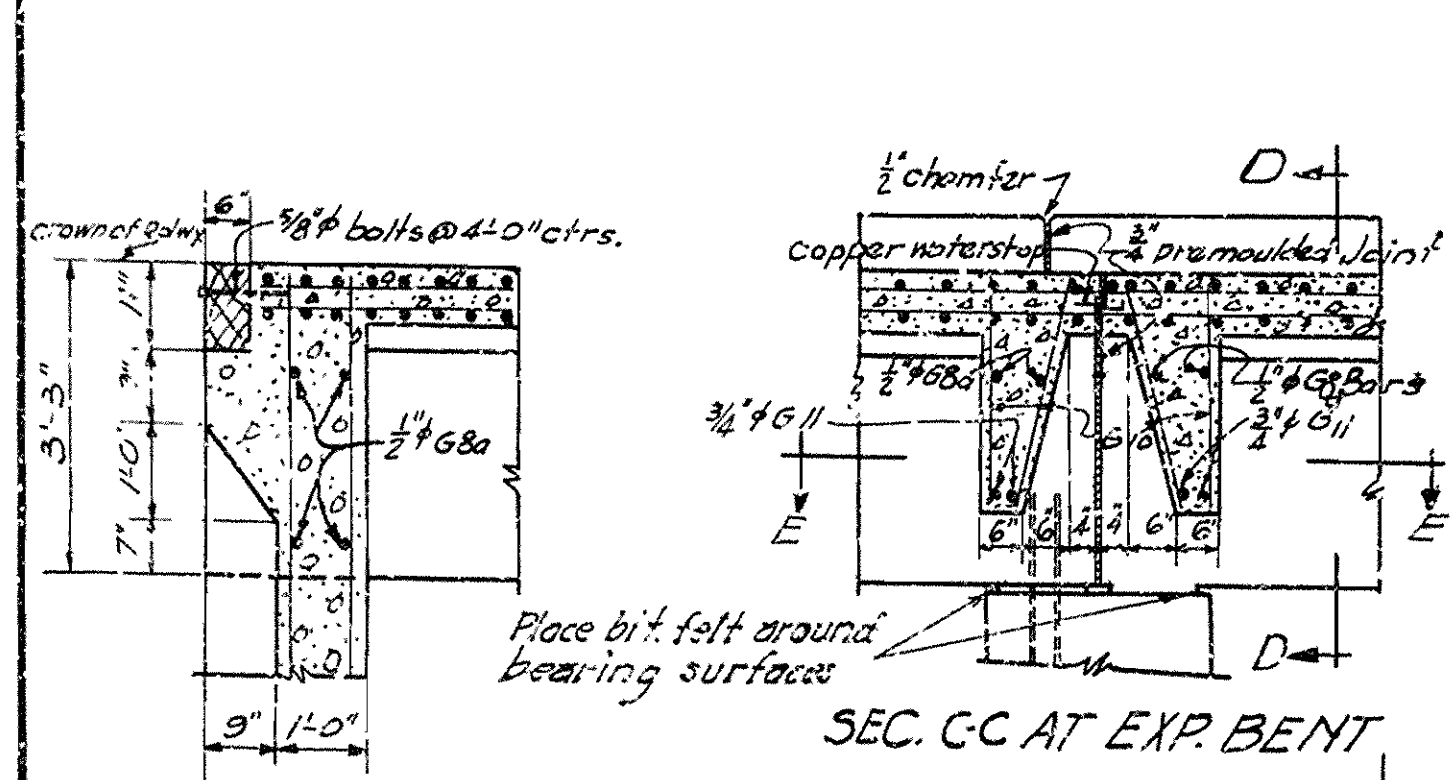
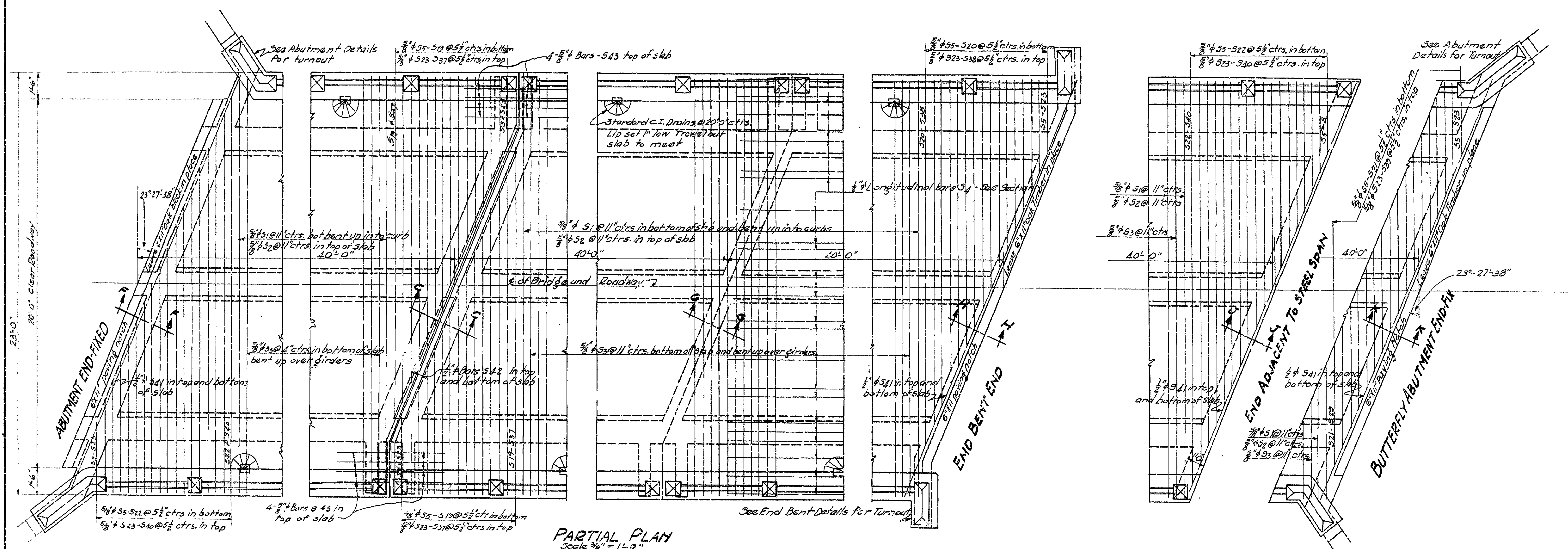
*MB*  
 BRIDGE ENGINEER

Girders 29-30 by 31  
 Bars G1 & G2 changed  
 3-17-31 *MB*

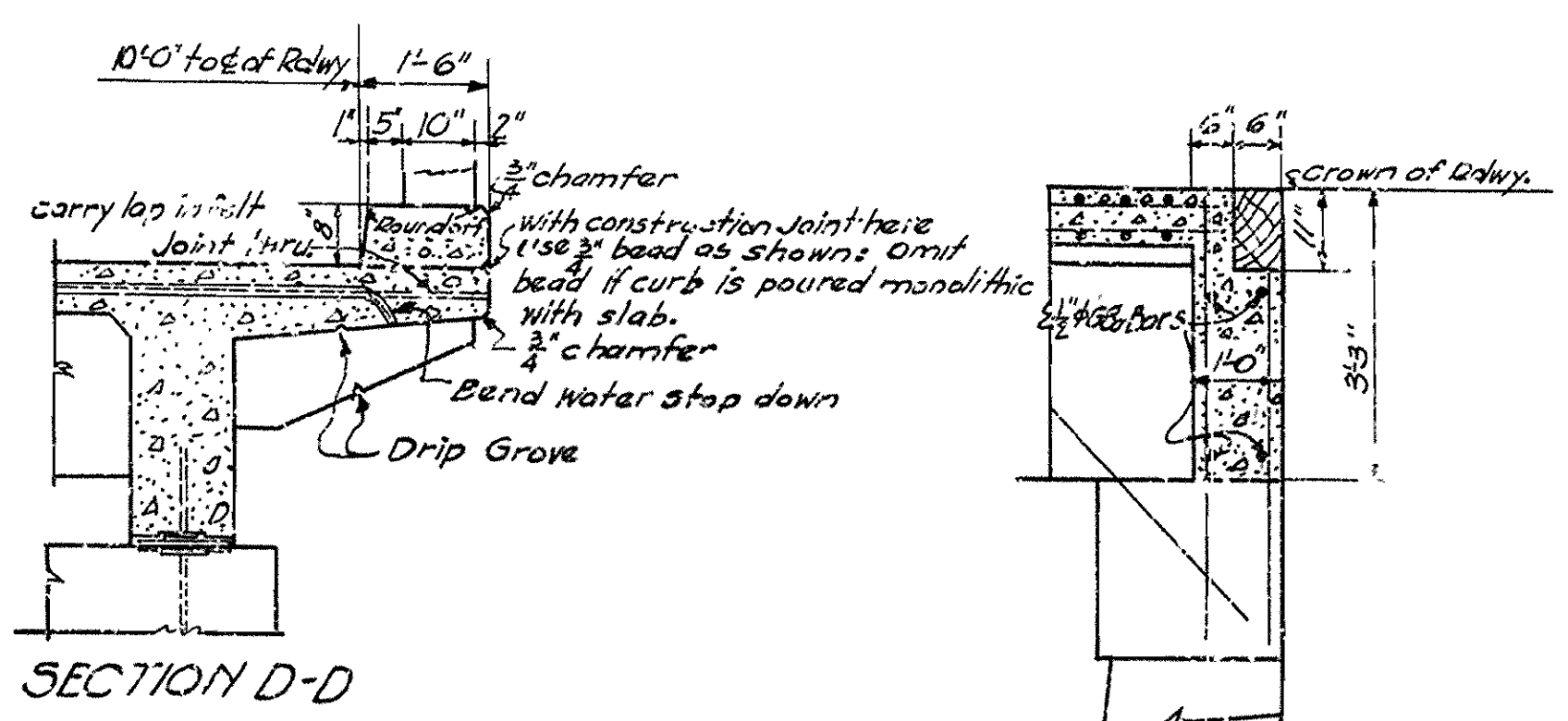


Note: For General Notes and details not shown here see Drawg. No. 2277

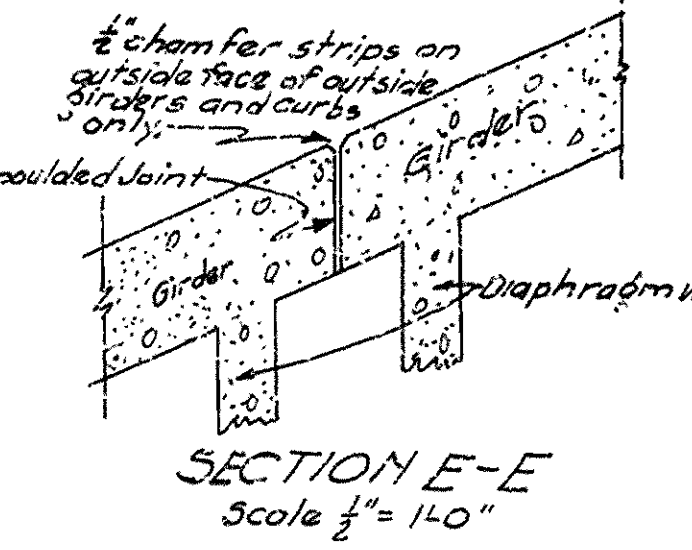
FED. ROAD DIST. NO.	STATE	ARK. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	JOB NO.	SHEET NO.	TOTAL SHEETS
0	ARK.	E.A.T.C.	24	37		8168		



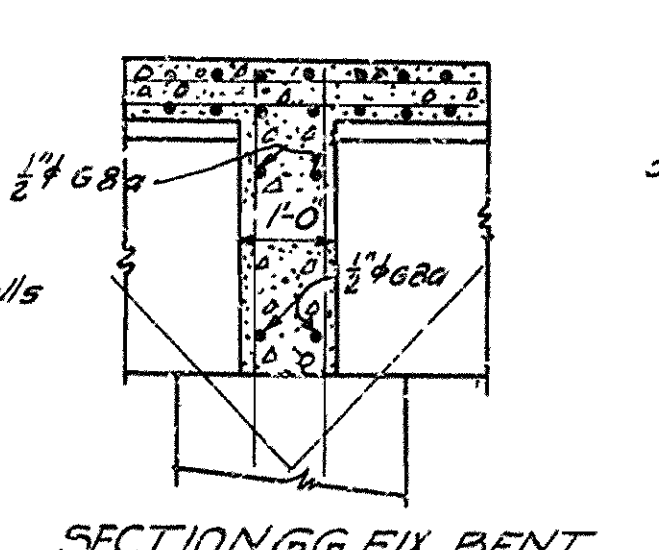
SECTION F-F FIX ABUT. Scale 1/2" = 1'-0"



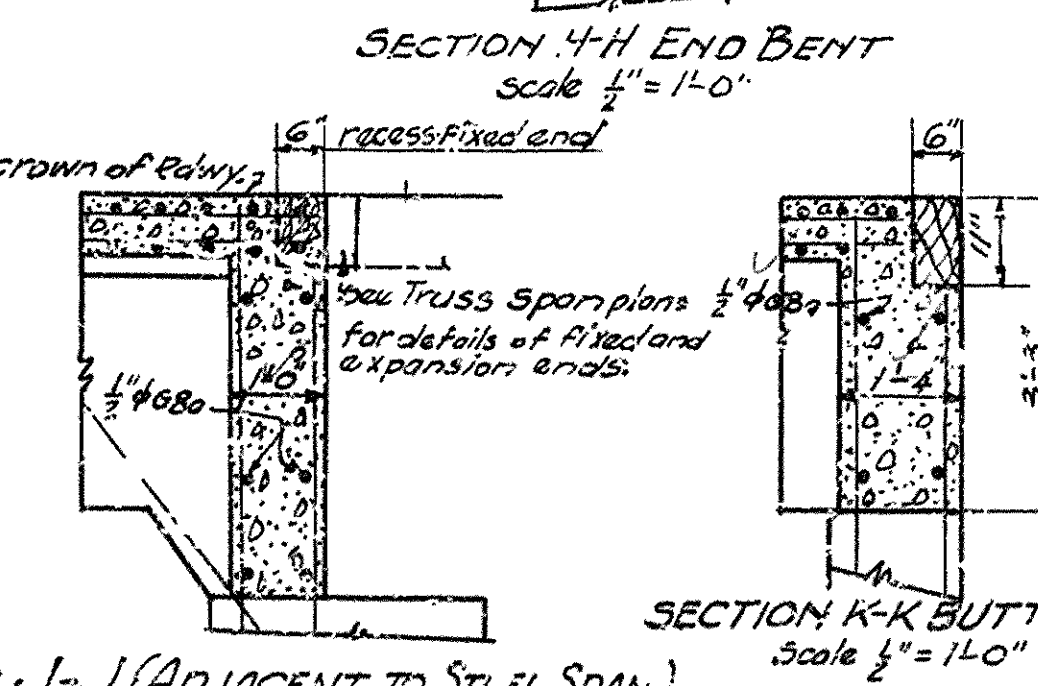
SECTION D-D



SECTION E-E Scale 1/2" = 1'-0"



SECTION G-G FIX. BENT Scale 1/2" = 1'-0"

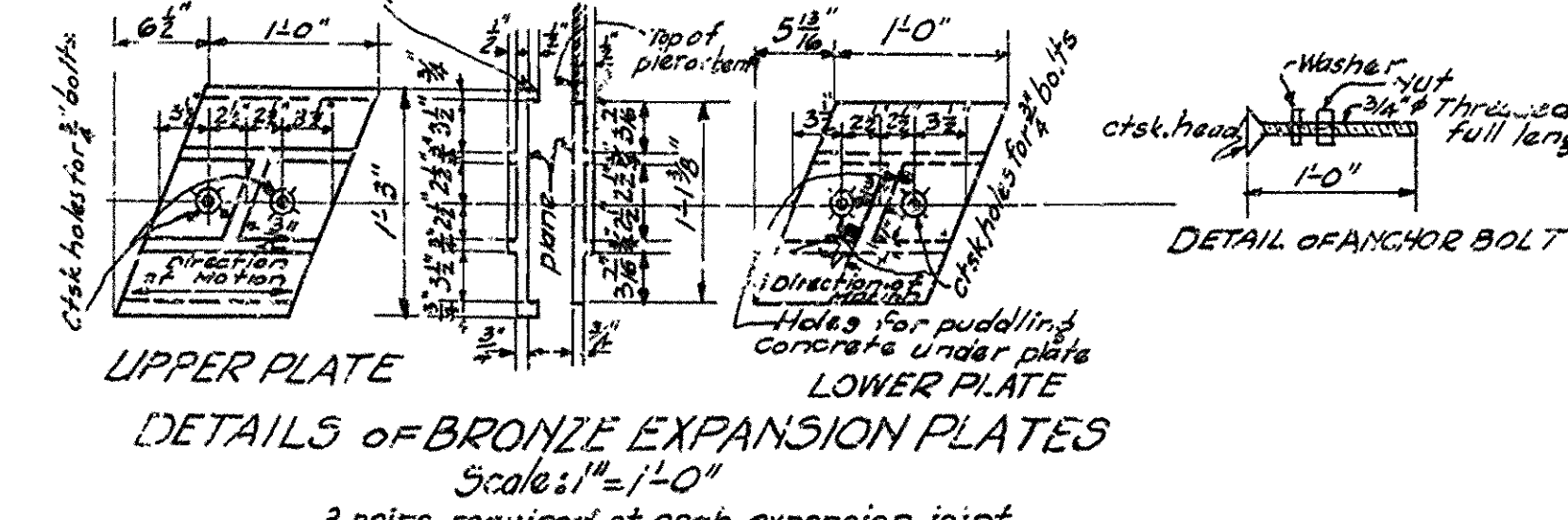


SECTION H-H END BENT Scale 1/2" = 1'-0"



SECTION K-K BUTTERFLY ABUT. Scale 1/2" = 1'-0"

MARK	SIZE	LENGTH	BENDING DIAGRAM
S1	5/8" φ	22'-6"	
S5-S22	3/4" φ	Varies	
S2	5/8" φ	23'-6"	
S23-S40	3/4" φ	Varies	
S43	3/8" φ	3'-0"	
S2	5/8" φ	24'-0"	
S42	5/8" φ	24'-0"	



3 pairs required at each expansion joint. Bronze Plates to be Class C bronze cast as shown. Sliding surfaces to be planed in direction of motion and coated with graphite grease.

BRIDGE ENGINEER

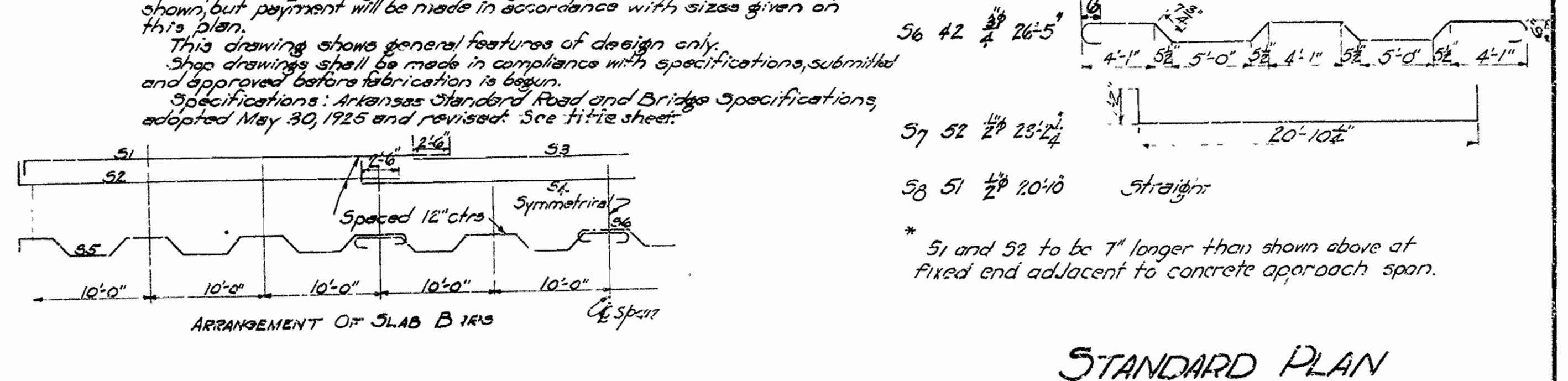
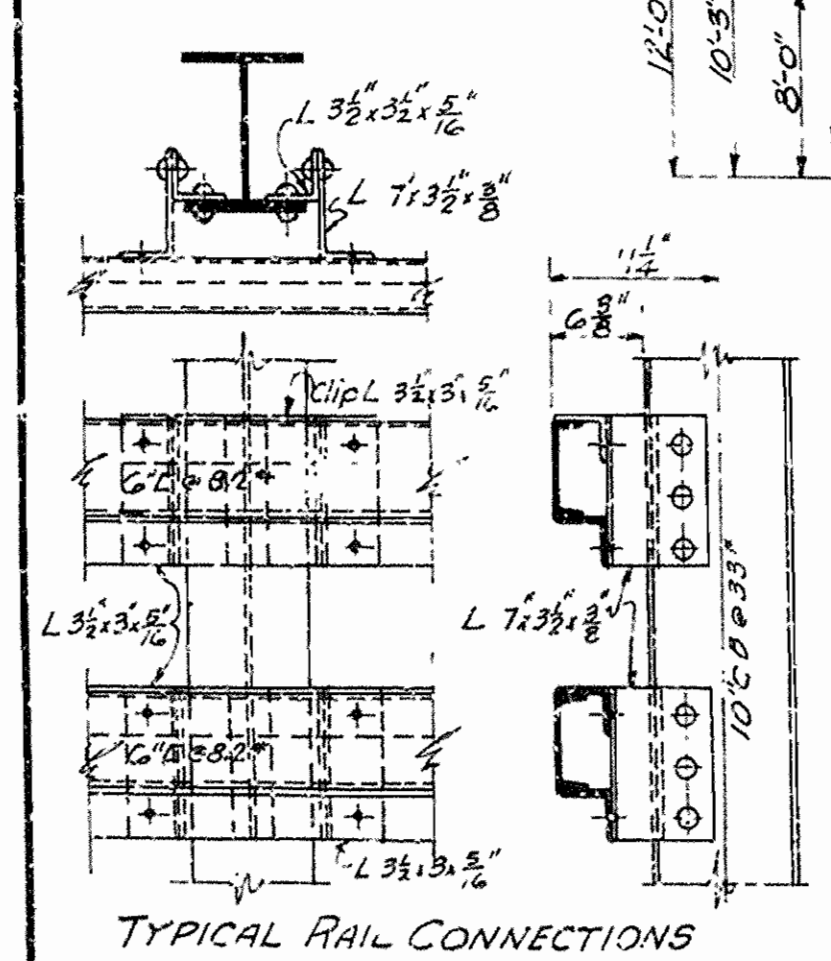
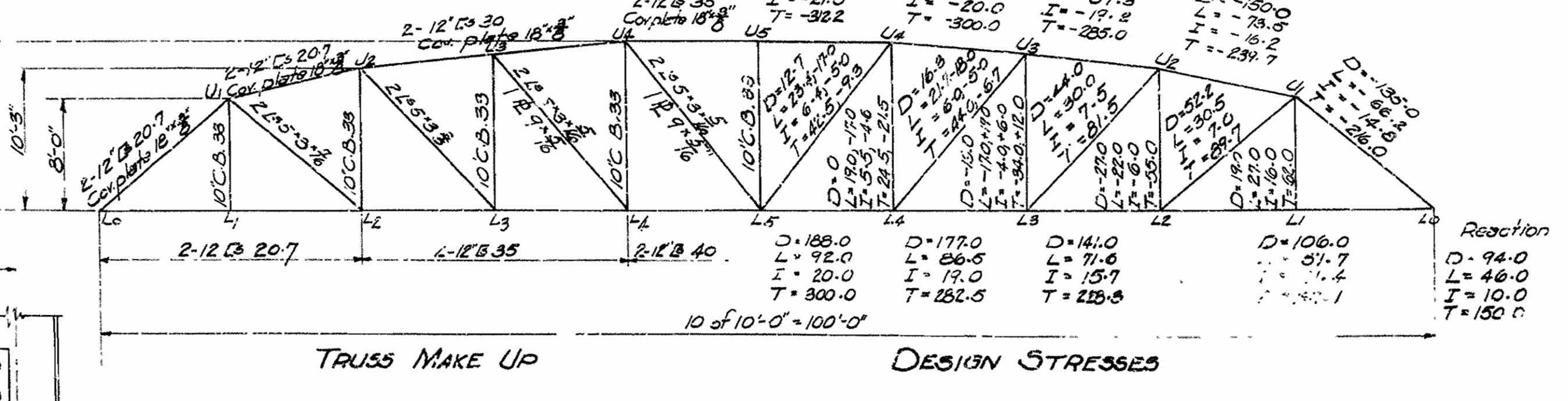
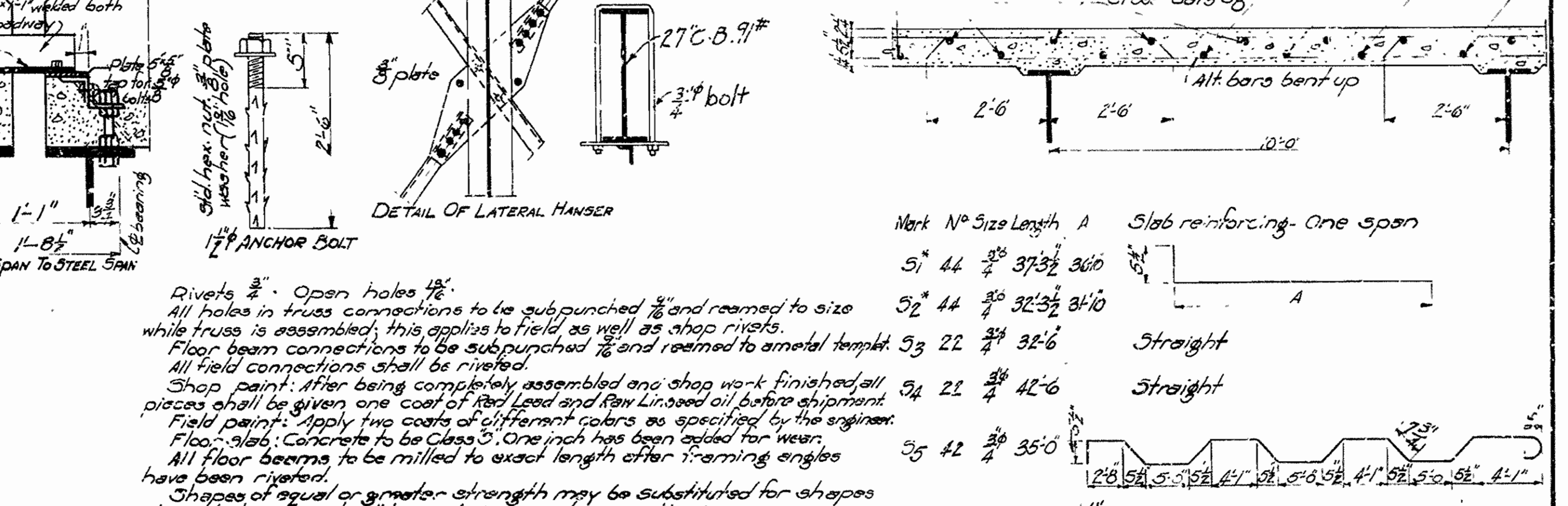
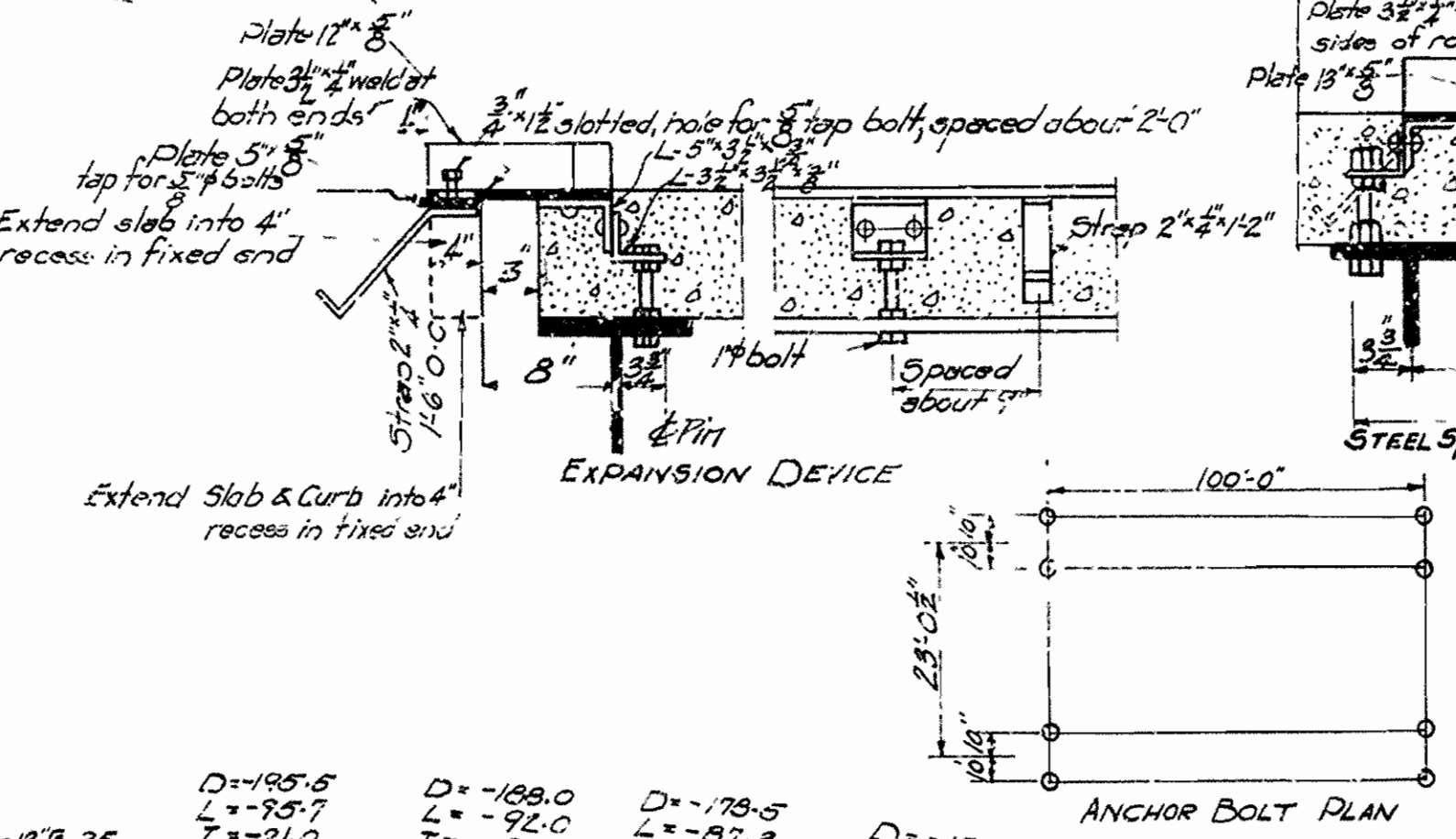
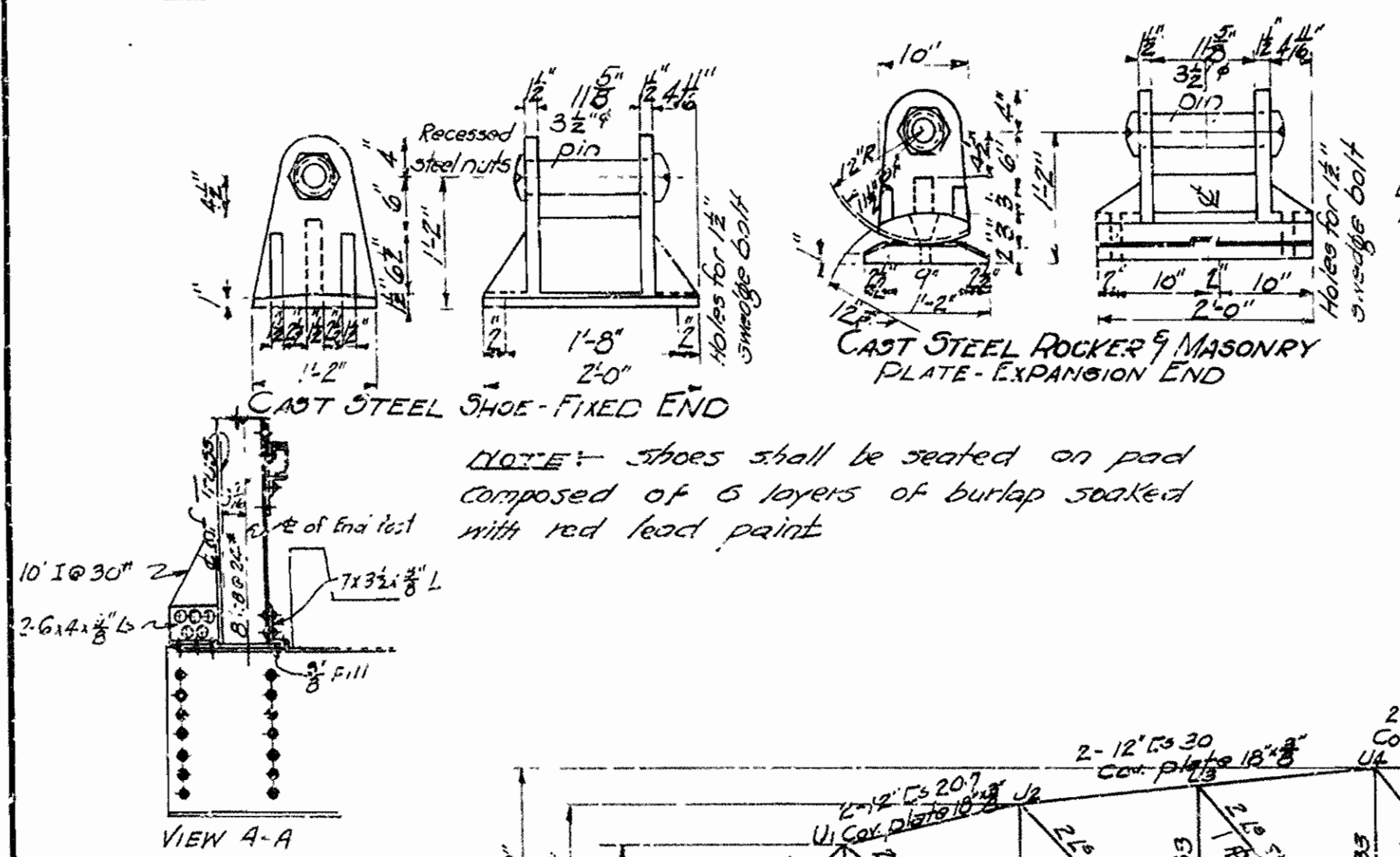
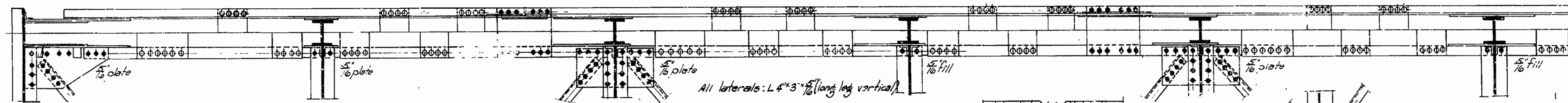
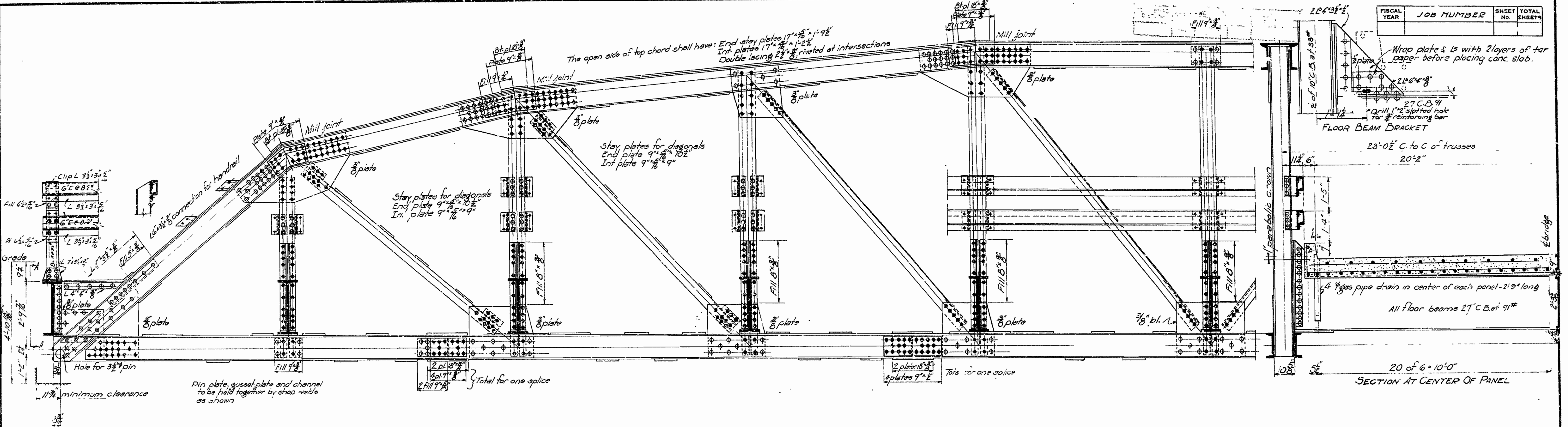
MARK	SIZE	LENGTH	BENDING DIAGRAM
G1	1/8" x 1/2"	43'-6"	
G2	1/8" x 1/2"	41'-7"	
G3	1/8" x 1/2"	42'-0"	
G4	1/8" x 1/2"	36'-0"	
G5	1/8" x 1/2"	31'-0"	
G3*	1/8" x 1/2"	41'-6"	
G1*	1/8" x 1/2"	35'-6"	
G5*	1/8" x 1/2"	30'-6"	
G6	1/8" x 1/2"	7'-2"	
G7	1/8" x 1/2"	7'-4"	
G9	3/4" φ	9'-9"	

DETAILS OF STANDARD 40" R.C.D. GIRDER SPAN 3 GIRDER TYPE 20'-0" CLEAR ROADWAY 23'-27'-38" SKEW RIGHT ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION LITTLE ROCK, ARK.  
 Drawn By: H.B. Date: 7-31  
 Traced By: L.W. Date: 7-31  
 Checked By: L.W. Date: 8-1-31  
 BRIDGE NO. [REDACTED] DRAWING NO. 2305



FISCAL YEAR	JOB NUMBER	SHEET No.	TOTAL SHEETS



Estimated quantities  
 Structural steel 88,900 Lbs.  
 Cast steel 1,670 Lbs.  
 Reinforcing steel 12,480 Lbs.  
 Concrete Class "5" 62.4 Cuyds.

Unit stresses  
 Concrete 750 Lbs per sq. in.  
 Reinforcing steel 16,000 " " "  
 Structural steel 16,000 " " "

**STANDARD PLAN**  
 100'-0" LOW TRUSS SPAN  
 20'-0" CLEAR ROADWAY

**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.

Drawn By: LB Date: 6-29-31  
 Traced By: W.P. Johnson Date: 6-29-31  
 Checked By: W.P. Johnson Date: 6-29-31

Scale: 1 in. = 10 ft

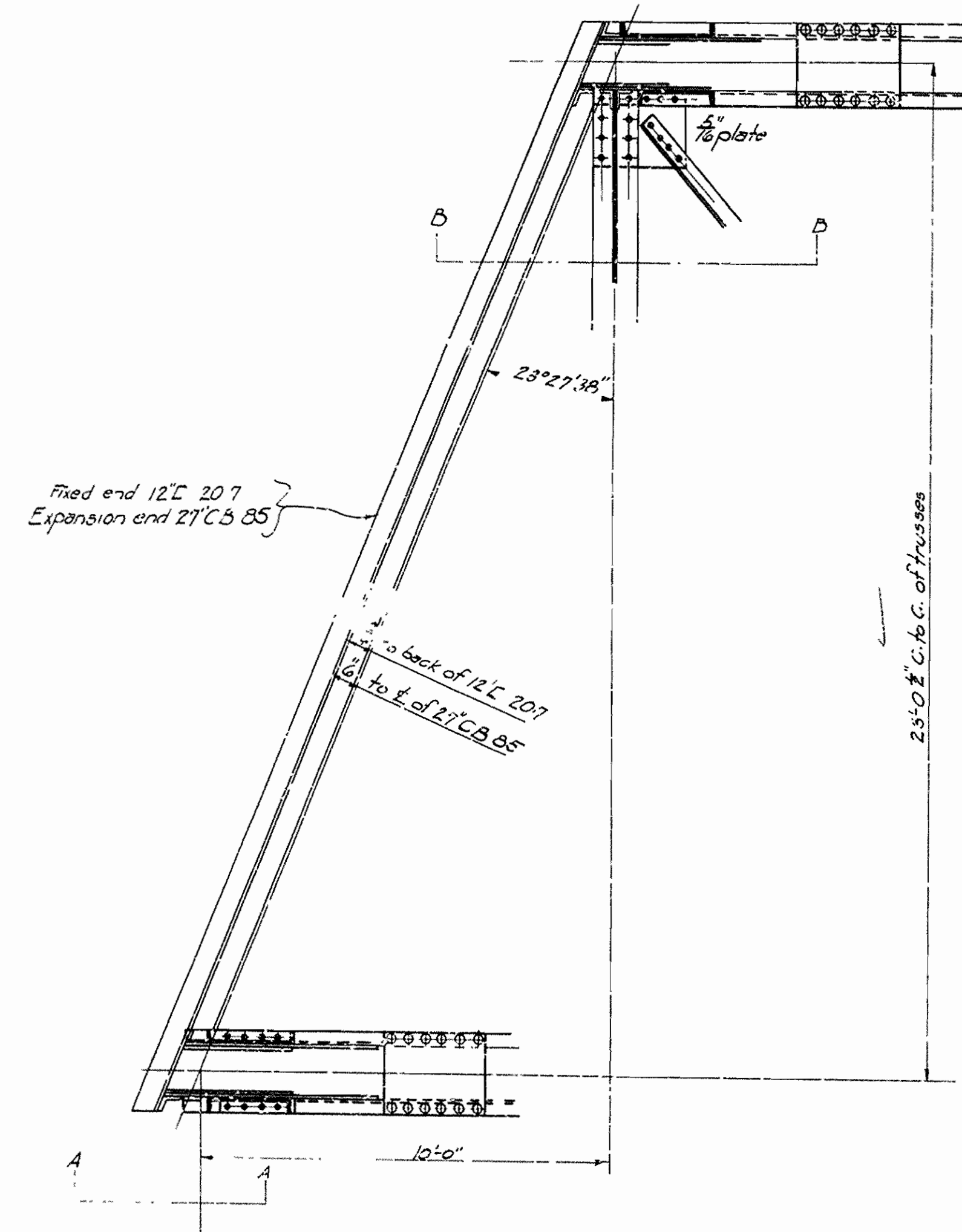
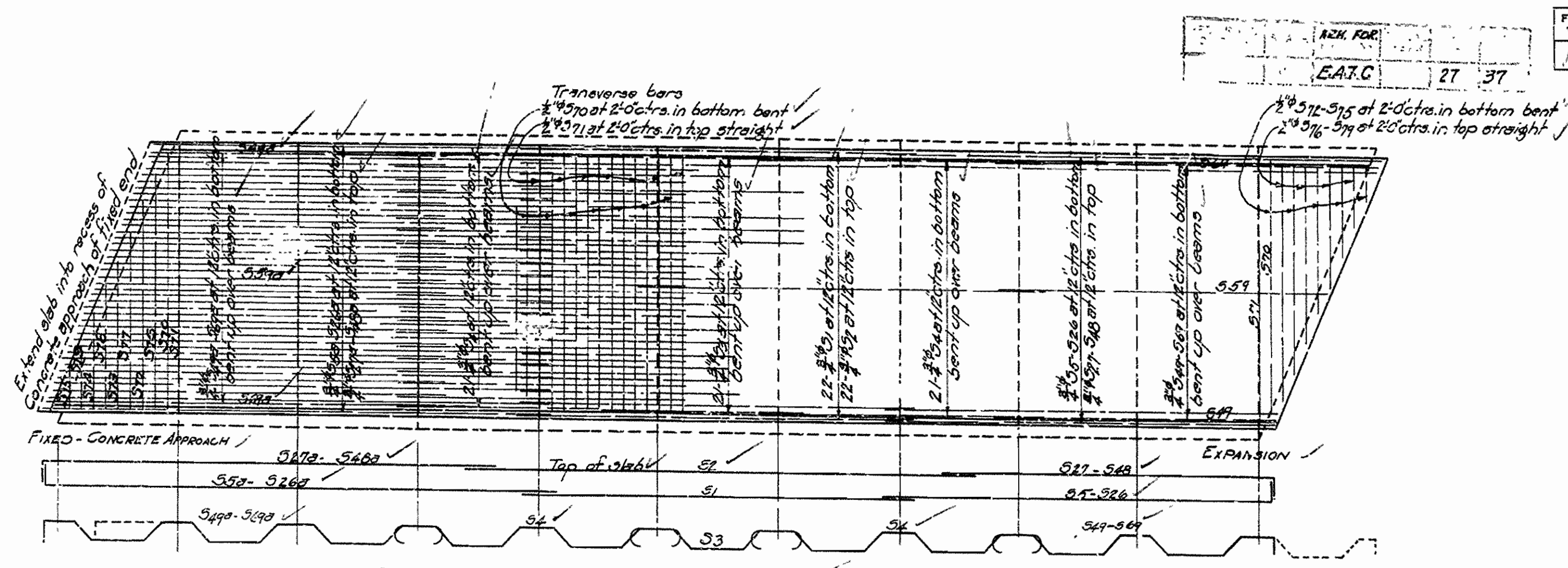
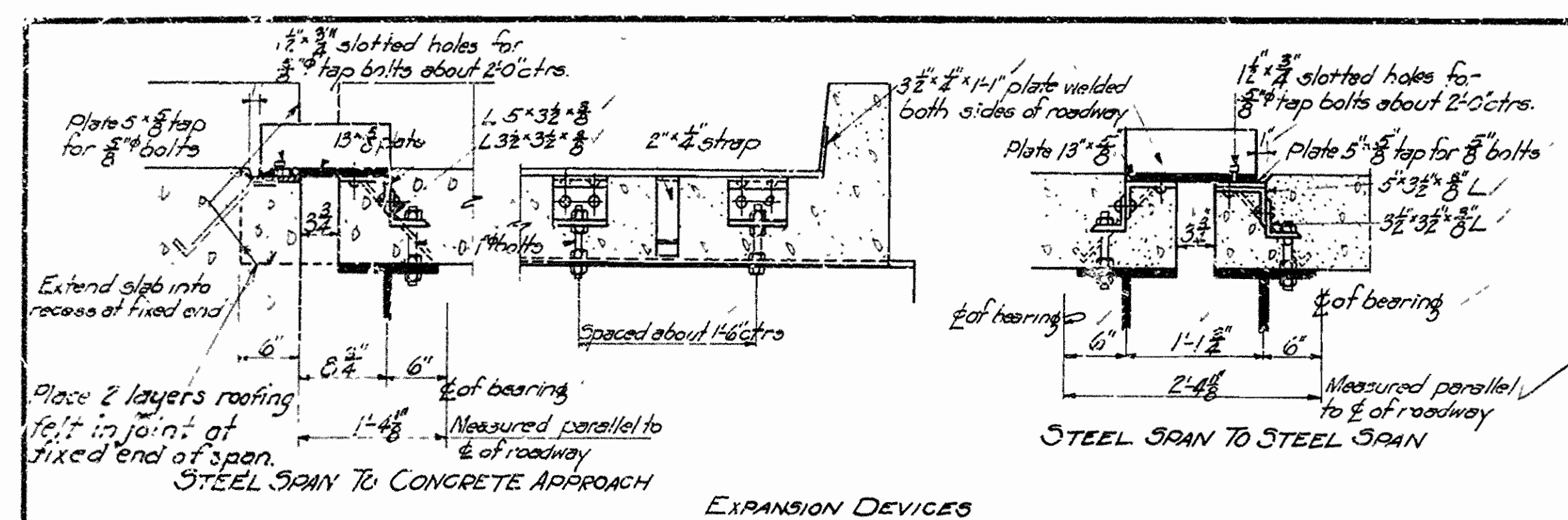
BRIDGE NO. 1103 DRAWING NO. 3518

Revised loadings, winds - 7-26-33-J.C.B.

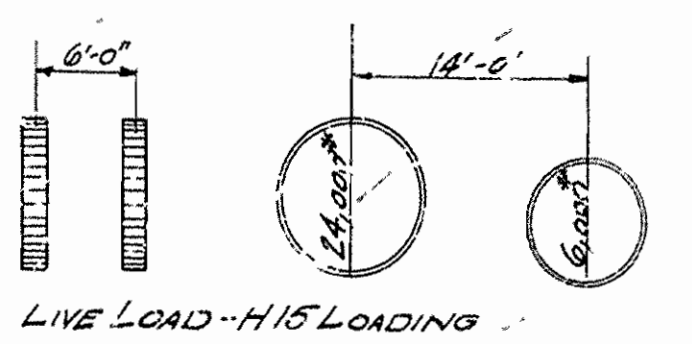
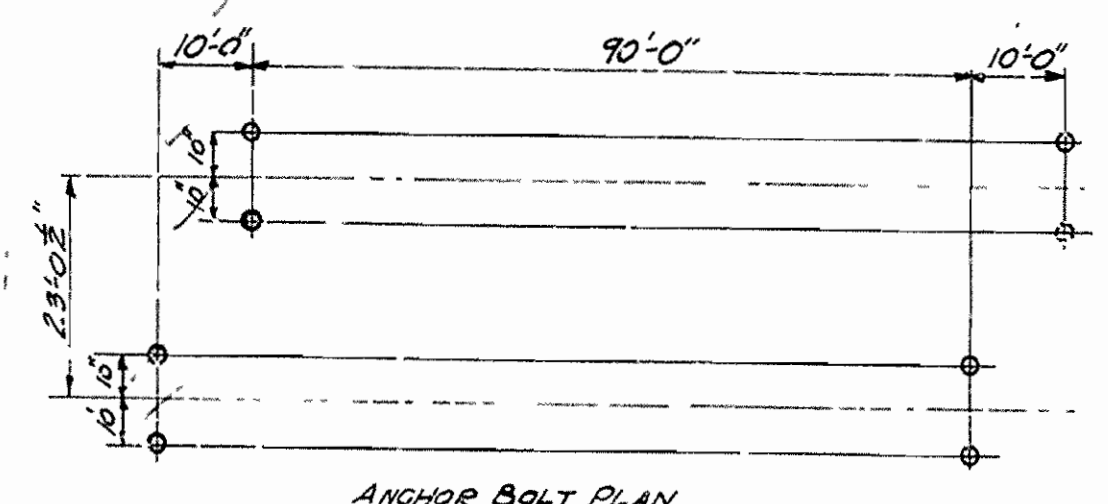
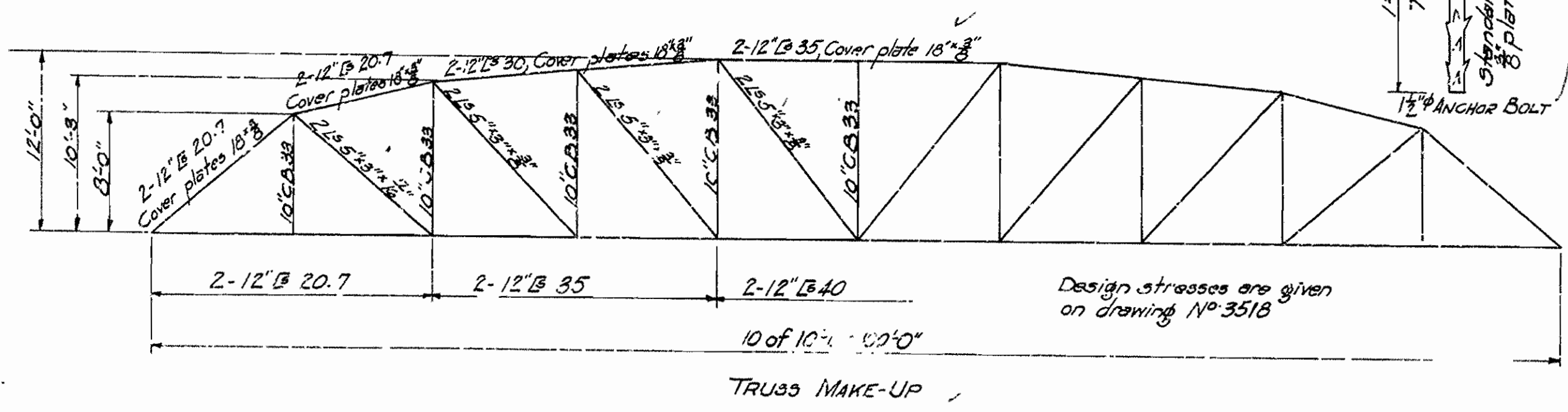
H/S loading  
 N.B. Garrow  
 BRIDGE ENGINEER



FISCAL YEAR	1937	SHEET NO.	27	TOTAL SHEETS	37
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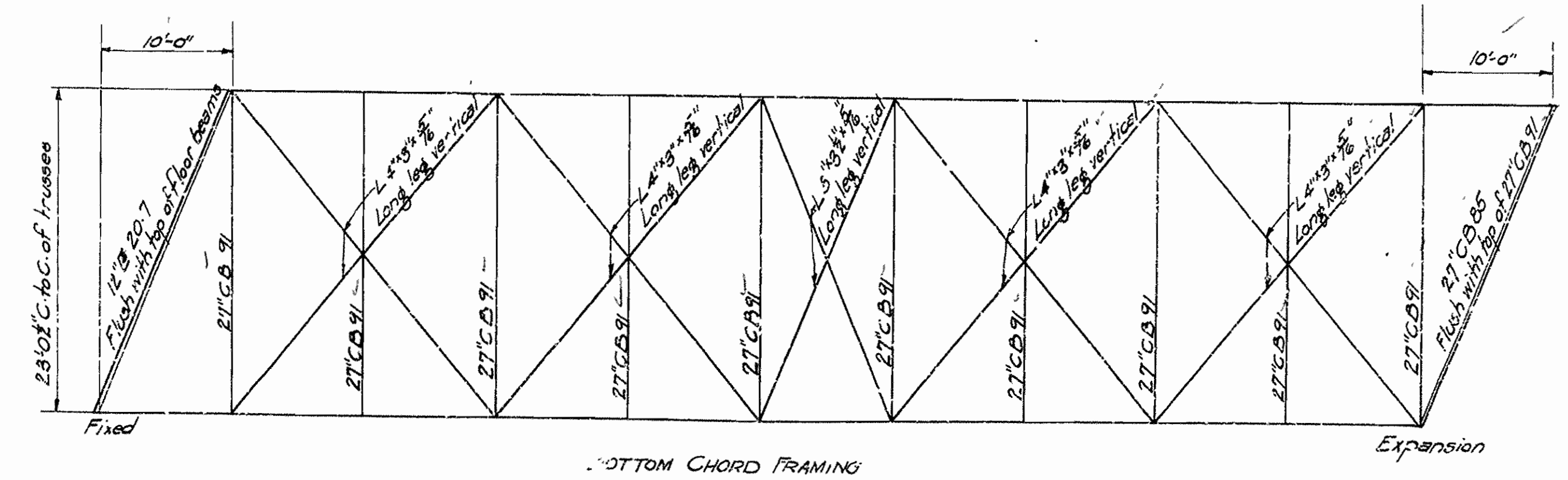
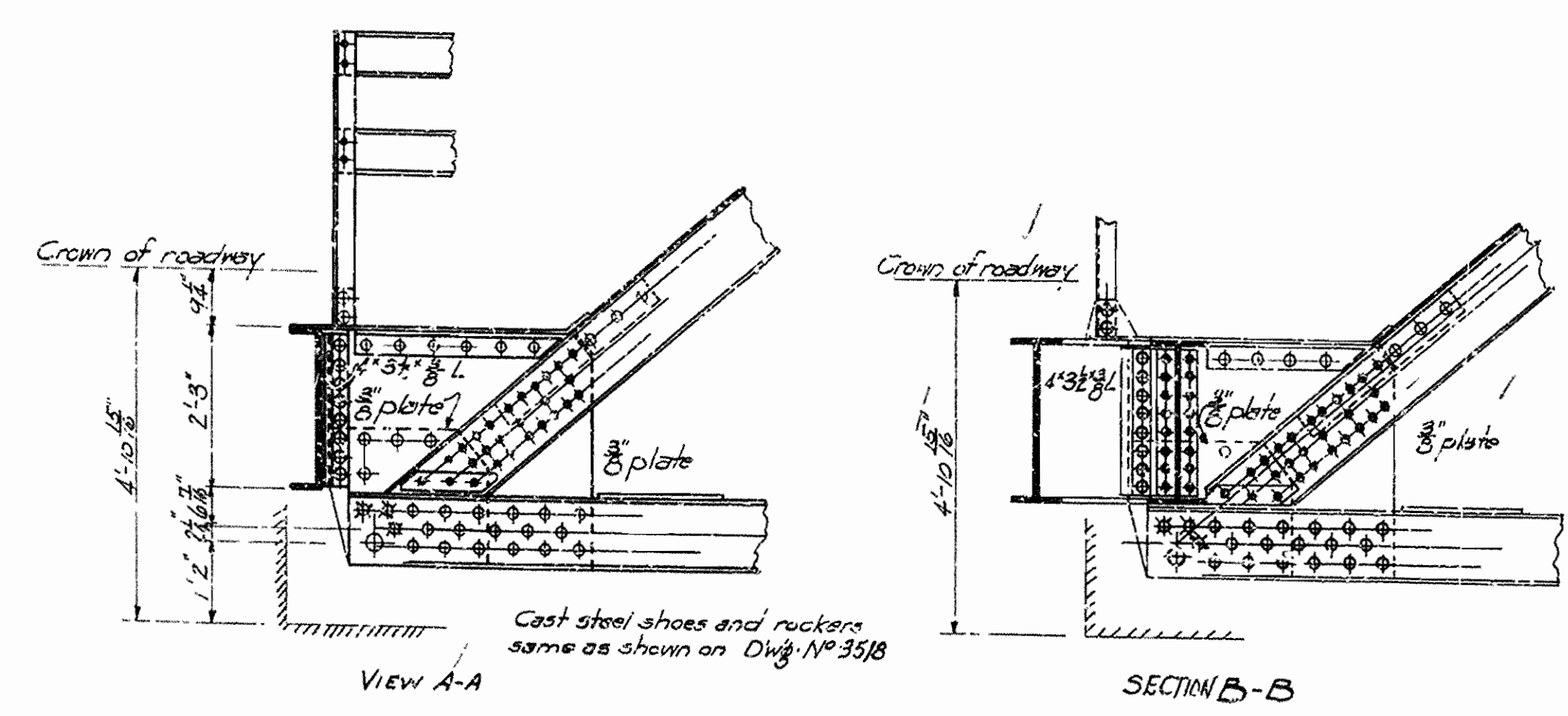


Mark	Size	Length	A	Bending diagram	Mark	Size	Length	A	B	Bending diagram
S1	3/4"	32'-6"		Straight	S4	3/4"	26'-4"			
S2	3/4"	42'-6"		Straight	S4-S5	3/4"	Varies	Varies	3'-5" to 7'-10"	
S5-S6	3/4"	Varies	33'-0" to 42'-2"		S3-S4	3/4"	Varies	26'-5" to 30'-0"	0'-10"	
S3-S4	3/4"	Varies	33'-0" to 42'-2"		S6-S7	3/4"	Varies	30'-8" to 34'-7"	3'-2"	
S7-S8	3/4"	Varies	28'-0" to 37'-2"		S7-S8	3/4"	Varies	14'-0" to 4'-11"		
S8-S9	3/4"	Varies	20'-5" to 30'-7"		S9	3/4"	16'-0"			
S9	3/4"	16'-0"								



UNIT STRESSES

Concrete	750 Lbs. per sq. in.
Reinforcing steel	16,000 Lbs. per sq. in.
Structural steel	16,000 Lbs. per sq. in.



For details not shown and for notes, see drawing No. 3518

**STANDARD PLAN**  
**100'-0" LOW TRUSS SPAN**  
**20'-0" CLEAR ROADWAY**  
**ONE PANEL SKEW RIGHT**

ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

Drawn By: *LD* Date: \_\_\_\_\_  
 Traced By: *Law* Date: *7-23*  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_

Scale:  in. =  ft.

BRIDGE NO. \_\_\_\_\_ DRAWING NO. 3519

*N.B. Lawrence*  
 BRIDGE ENGINEER