

FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	NRH-170D	1934	1	19

State Job No. 8-173

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

QUANTITIES

INDEX OF SHEETS

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4	3340	Details of Abutments Nos. 1 & 2 Bridge 1487.
5	3341	Details of Bents Nos. 1 & 2 Bridge 1487.
6	3342	Details of Piers Nos. 1, 2, 3, & 4 Bridge 1487.
7	2449	Details of 100' Steel Truss 24' Roadway Bridge 1487.
8	2314	Details of 35' R.C.D.G. Span 24' Roadway Bridge 1487.
9	3343	Plan and Profile of Earth Approaches.
10	F326A	Typical Roadway Sections
11	WS3	Superelevation and Widening Curve Chart.
12	G5.6	Featheredge Gravel Surface Course 18' Roadway.
13 to 18 incl.		Cross Sections.
19	2386	Details of Standard F.A.P. Markers & R/W Markers
11 A	WS 3 A	Superelevation and Widening
11 B	WS 3 B	Superelevation and Widening
10 A	1885	Embankment Constructed at Bridge Ends

PLAN OF PROPOSED BRIDGE

OVER
ILLINOIS BAYOU

POPE COUNTY

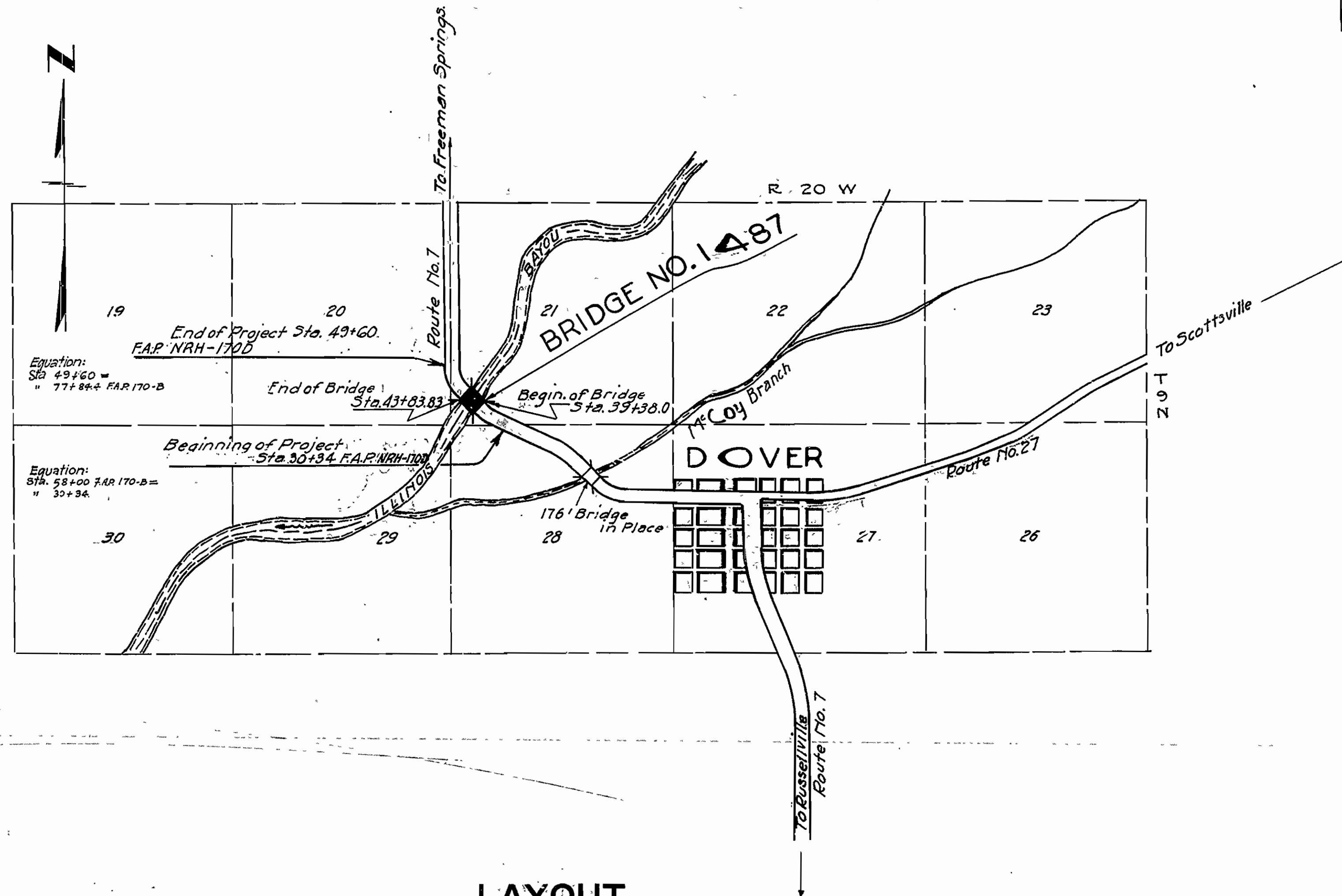
ROUTE 7 SEC. 1 2

JOB No 8-173

FEDERAL AID PROJECT NO. NRH-170D

Item No.	Item	Quantity	Unit
11	Clearing	2.33	Acres
11	Grubbing	2.33	Acres
S.P. 8.12	Common Excavation	14177.	Cu. Yds.
13	Dry Excavation for Structures	958	Cu. Yds.
13	Wet Excavation for Structures	511	Cu. Yds.
13	Solid Rock Excavation for Structures	385	Cu. Yds.
91	Class 3/4 Concrete for Bridges	604	Cu. Yds.
91	Class 5 Concrete " "	386.9	Cu. Yds.
92	Reinforcing Steel " "	144,141	Lbs.
94	Concrete Railing for Bridges	287	Lin. Ft.
95	Rip Rap	325	Cu. Yds.
S.P. 8.96	Structural Steel	330,320	Lbs.
S.P. 34.37	Gravel Surface Course	406 *	Cu. Yds.
S.P. 92.896	Cast Steel & Cast Iron	6,055	Lbs.
S.P. 92.896	Bronze Expansion Devices	1,131	Lbs.
S.P.	Removal of Existing Structure	Lump Sum	
S.P.	Bronze Project Marker Plates	2	Each
S.P.	Bronze State Bridge Name Plates	2	Each

* Surfacing Material to be Furnished by Contractor



LAYOUT

Scale: 1" = 2000 FT.

LENGTH OF PROJECT	=	1926'-0"	=	0.364 Mi.
LENGTH OF BRIDGES	=	445'-10"	=	0.084 Mi.
LENGTH OF EMBANKMENT	=	1480'-2"	=	0.280 Mi.
LENGTH OF JOB	=	1926'-0"	=	0.364 Mi.

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

REVISIONS	Approved
Pamphlet A Revised March 1st, 1931	Approved June 13, 1931
B Revised May 1st, 1931	
C Revised June 1st, 1931	
D Revised Jan 1st, 1932	
E Revised Feb 1st, 1932	
F Revised March 1st, 1932	
G Revised April 1st, 1932	
H Revised May 1st, 1932	
I Revised June 1st, 1932	
J Revised July 1st, 1932	
K Revised August 1st, 1932	
L Revised Feb. 10th, 1933	
M Revised Mar. 1st, 1931	Approved June 13, 1931
N Revised Sept. 1st, 1932	
O Revised Sept. 1st, 1932	

SPECIAL PROVISIONS

Item	No. of Sheets	of Sheets	
Gravel Surface Course	1	1	(7-28-33)
Removal of Existing Structure	1	1	(7-28-33)
Bronze Expansion Devices	1	1	(8-15-33)
Cast Steel & Cast Iron	1	1	(7-17-33)
N.R.A. Labor	12	12	
Common Exc. to include sodding	1	1	(7-28-33)
Engineers Field Office	1	1	(8-23-33)
Bronze Project Marker Plates & Bronze State Bridge Name Plates	1	1	(8-10-33)
Lamp Black	1	1	(9-15-33)
Mixed Lots of Reinf. Steel	1	1	(12-30-32)

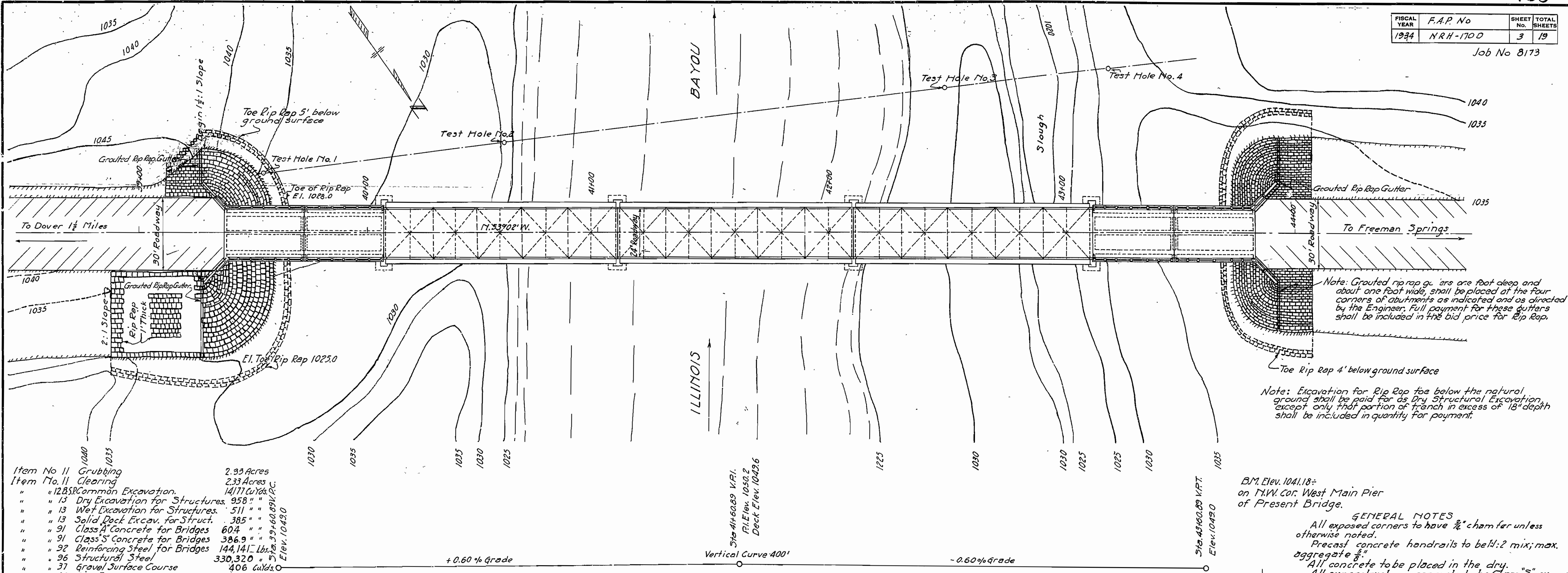
APPROVED
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS
APPROVED
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS
APPROVED
CHIEF - U. S. BUREAU OF PUBLIC ROADS
APPROVED
CHAIRMAN - STATE HIGHWAY COMMISSION
APPROVED
BRIDGE ENGINEER
STATE HIGHWAY ENGINEER

BRIDGES No. 1487

DRAWING No. 3338

FISCAL YEAR	F.A.P. No	SHEET No.	TOTAL SHEETS
1934	NRH-1700	3	19

Job No 8173

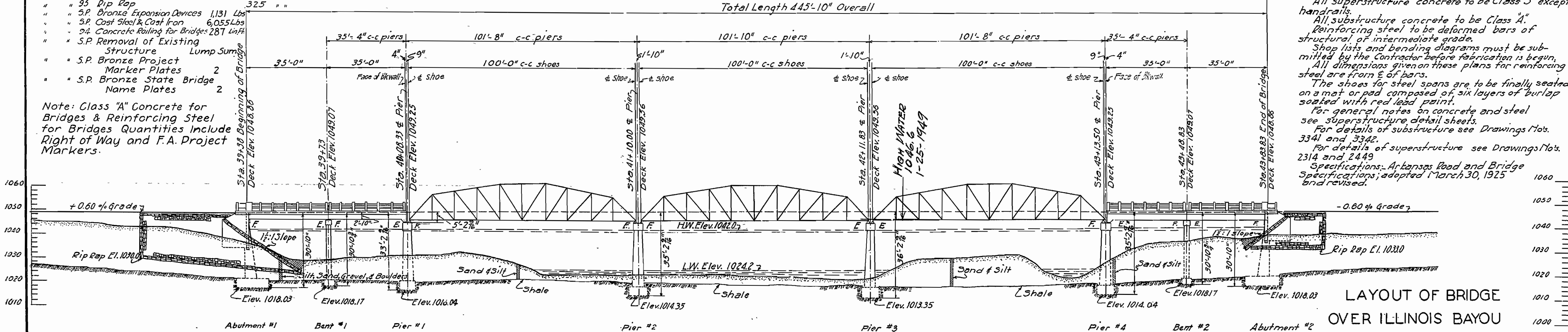


- Item No 11 Grubbing 2.33 Acres
- Item No 11 Clearing 2.33 Acres
- " " 12.85 Common Excavation 14,171 Cu Yds. P.C.
- " " 13 Dry Excavation for Structures 958 "
- " " 13 Wet Excavation for Structures 511 "
- " " 13 Solid Deck Excav. for Struct. 385 "
- " " 91 Class A Concrete for Bridges 604 "
- " " 91 Class S Concrete for Bridges 386.9 "
- " " 92 Reinforcing Steel for Bridges 144,141 Lbs.
- " " 96 Structural Steel 330,320 "
- " " 37 Gravel Surface Course 406 Cu Yds.
- " " 95 Rip Rap 325 "
- " " S.P. Bronze Expansion Devices 1,131 Lbs.
- " " S.P. Cast Steel & Cast Iron 6,055 Lbs.
- " " S.P. Concrete Railing for Bridges 287 Lbs.
- " " S.P. Removal of Existing Structure Lump Sum
- " " S.P. Bronze Project Marker Plates 2
- " " S.P. Bronze State Bridge Name Plates 2

Note: Class "A" Concrete for Bridges & Reinforcing Steel for Bridges Quantities include Right of Way and F.A. Project Markers.

+0.60% Grade Vertical Curve 400' -0.60% Grade

Total Length 445'-10" Overall



B.M. Elev. 1041.18+ on H.W. Cor. West Main Pier of Present Bridge.

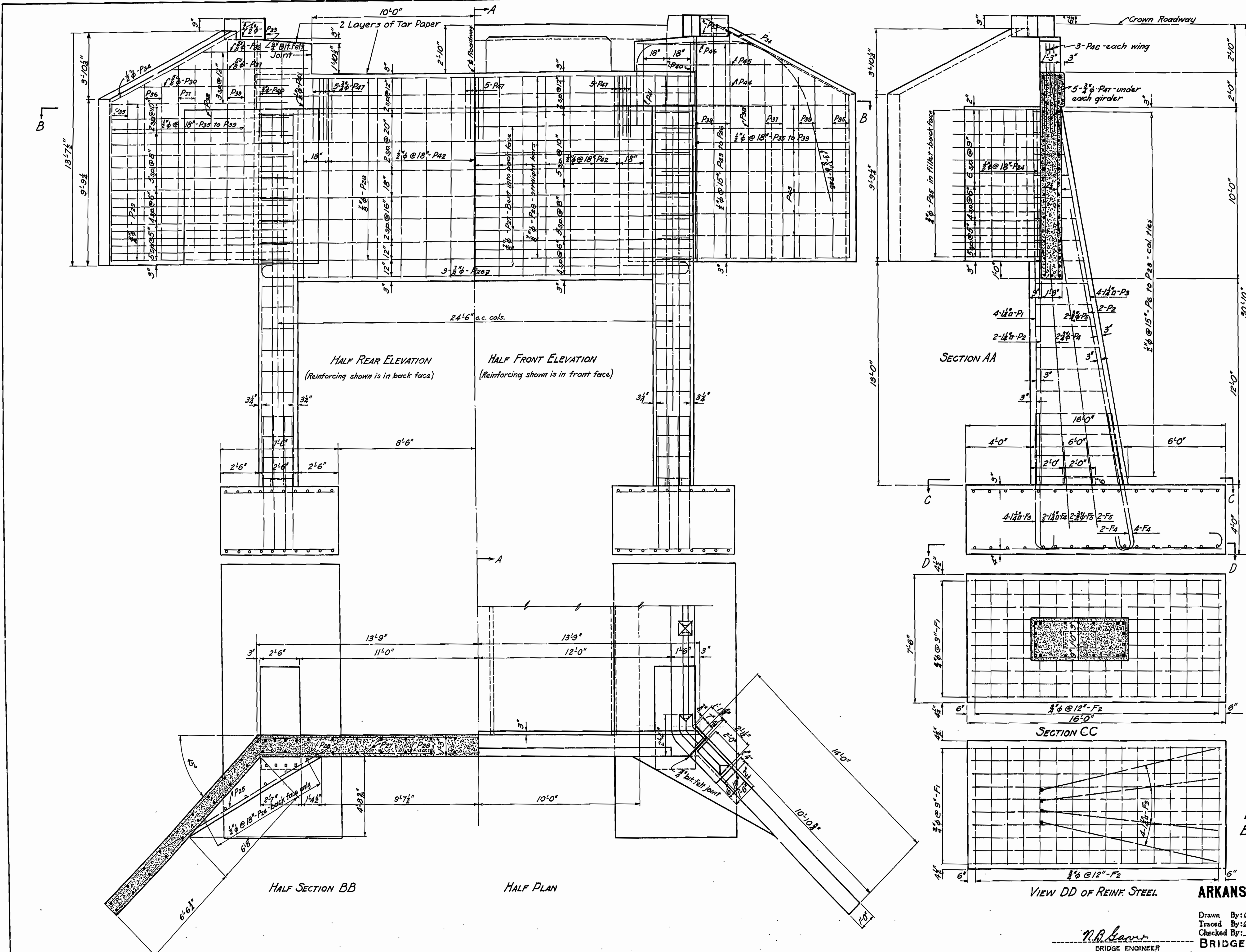
GENERAL NOTES
 All exposed corners to have 3/4" chamfer unless otherwise noted.
 Precast concrete handrails to be 1:2 mix; max. aggregate 3/4".
 All concrete to be placed in the dry.
 All superstructure concrete to be Class "S" except handrails.
 All substructure concrete to be Class "A".
 Reinforcing steel to be deformed bars of structural or intermediate grade.
 Shop lists and bending diagrams must be submitted by the Contractor before fabrication is begun.
 All dimensions given on these plans for reinforcing steel are from E of bars.
 The shoes for steel spans are to be finally seated on a mat or pad composed of six layers of burlap soaked with red lead paint.
 For general notes on concrete and steel see superstructure detail sheets.
 For details of substructure see Drawings Nos. 3341 and 3342.
 For details of superstructure see Drawings Nos. 2314 and 2449.
 Specifications: Arkansas Road and Bridge Specifications; adopted March 30, 1925 and revised.

LAYOUT OF BRIDGE
 OVER ILLINOIS BAYOU
 POPE COUNTY
 ROUTE 7 SEC. 12
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: W.A.P. Date: 9-19-32
 Traced By: Mike Date: 9-23-32
 Checked By: Date: _____
 BRIDGE No. 1487 DRAWING No. 3339
 Scale: 1 in. = 20 ft.

M.R. Burns
 BRIDGE ENGINEER

FED. ROAD DIST. NO.	STATE	N.R.H. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	170-D	1934	4	19

Job No. B-173



Mark	Size	Length	Bending Diagram
F3	1 1/4" x	20'-2"	
F4	1 1/2" x	9'-1"	
P6 to P8	3/8" phi	12'-2" max	
P26	3/8" phi	28'-7"	
P27	3/8" phi	27'-8"	
P29	3/8" phi	15'-2"	
P30	"	12'-4"	
P31	"	11'-1"	
P32	"	8'-5"	
P43	3/8" phi	15'-7"	
P44	"	13'-9"	
P45	"	11'-9"	
P46	"	8'-5"	
P47	3/8" phi	6'-1"	
P48	3/8" phi	17'-4"	

DETAILS OF ABUTMENTS 1 AND 2
BRIDGE OVER ILLINOIS BAYOU
DOPE COUNTY

ROUTE 7 SEC. 12

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

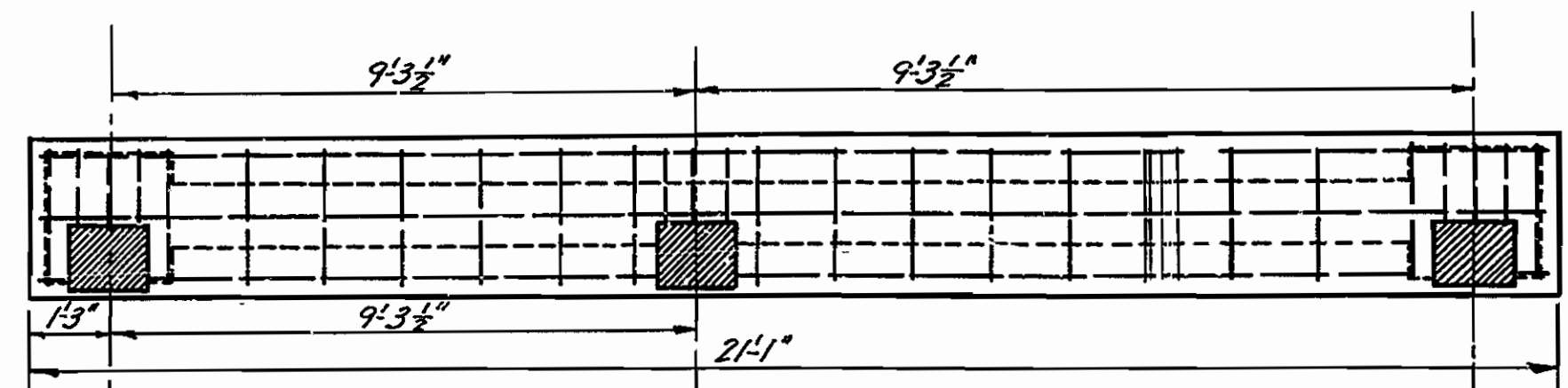
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Checked By: *[Signature]* Date: _____

Scale: 1/8" = 1 ft.
BRIDGE No. 1487 DRAWING No. 3340

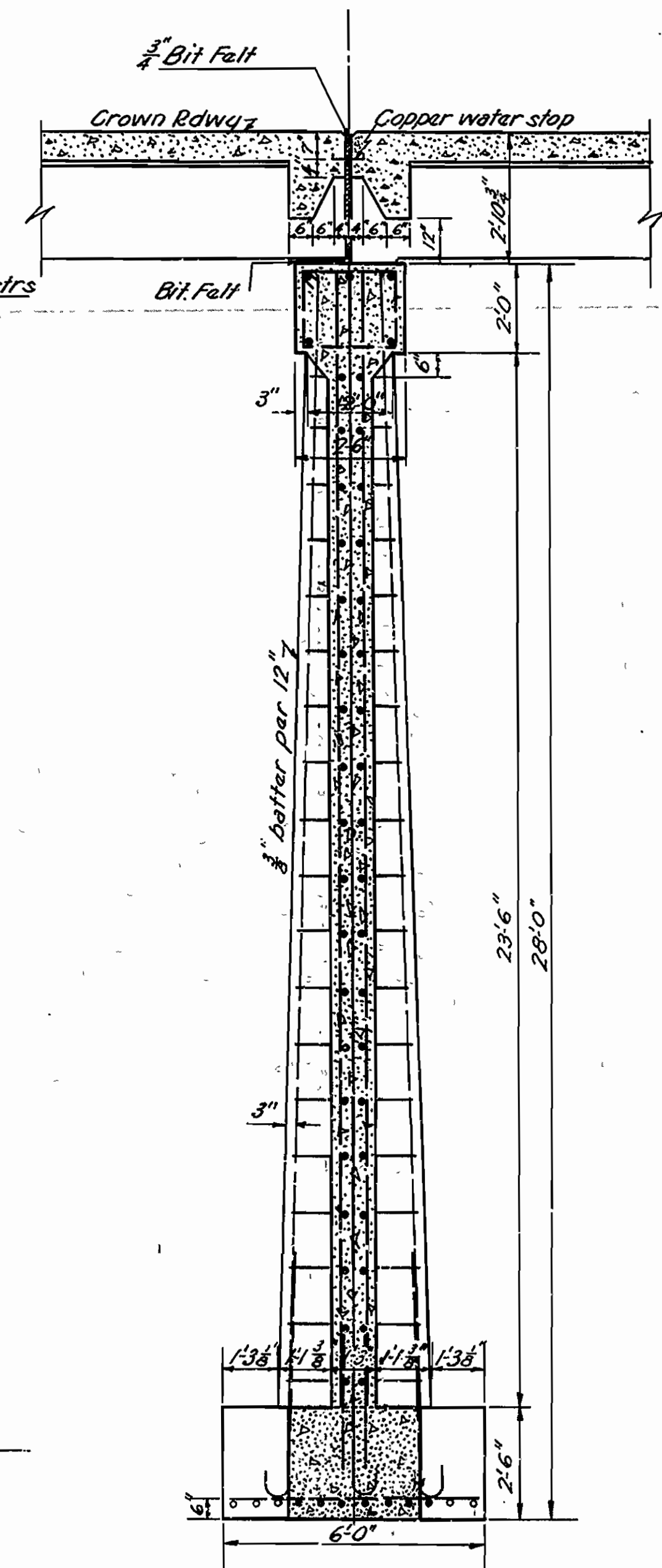
N.B. Lewis
BRIDGE ENGINEER

FISCAL YEAR	F.A.P. No.	SHEET No.	TOTAL SHEETS
1934	N.R.H. 170 D	5	19

Job No. E-173

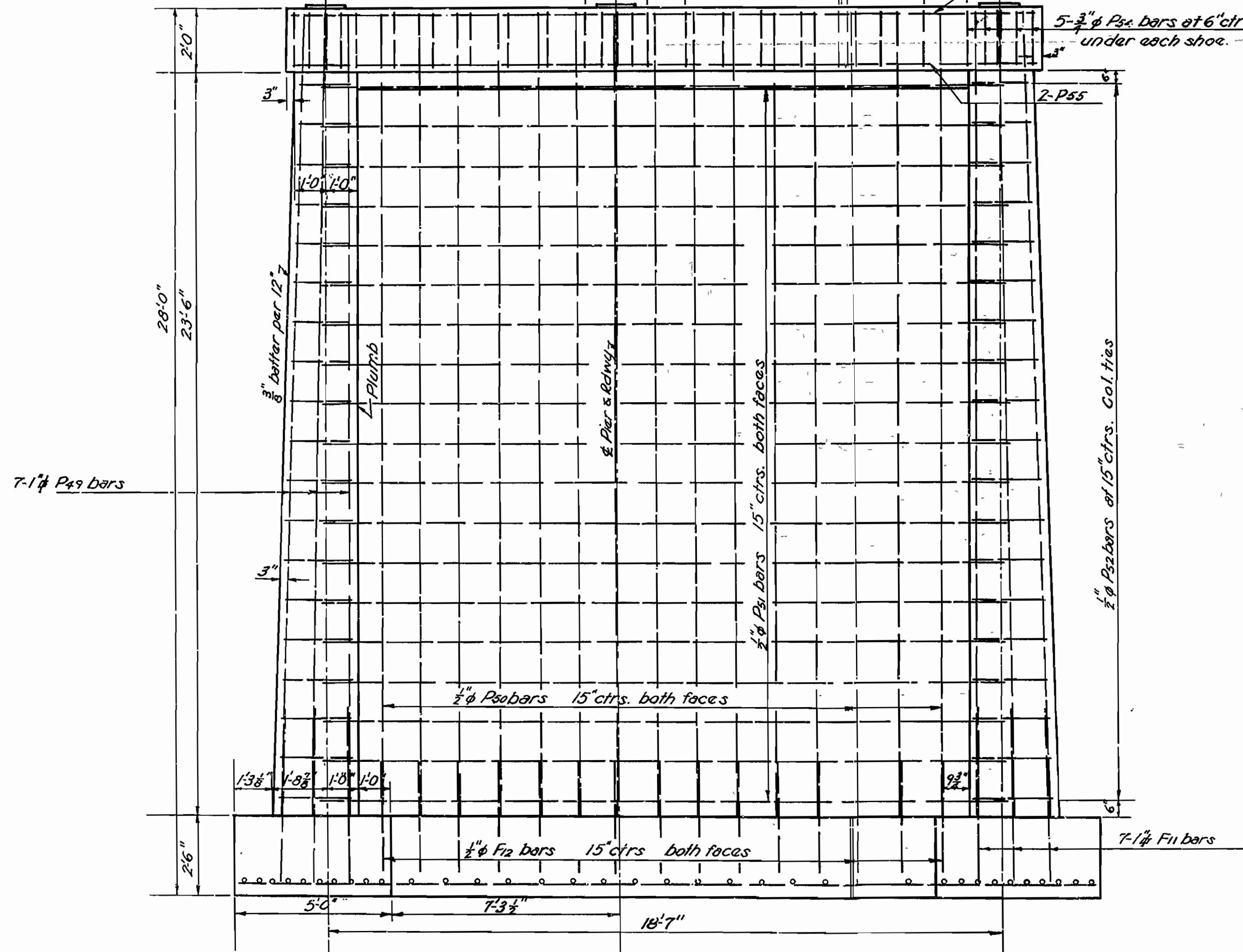


PLAN OF GAP-BENTS 1&2

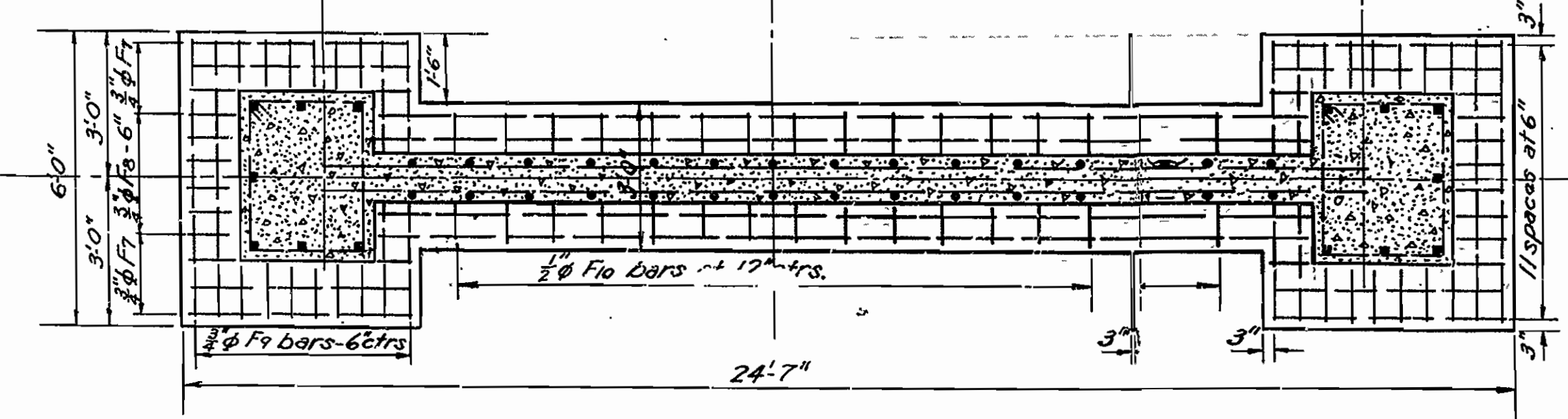


SECTION 'AA'

MARK	SIZE	LENGTH	A	B	BENDING DIAGRAM
F11	1" ϕ	6'5"			
P52	1" ϕ	AVE. 9'4 1/2"	1'0"	1'7 1/2"	
			3'1"	2'4"	
P53	1" ϕ	8'2"	2'1 1/2"	1'7 1/2"	
P54	3/4" ϕ	8'2"	2'1 1/2"	1'7 1/2"	



ELEVATION-BENTS 1&2



PLAN OF FOOTING-BENTS 1&2

DETAILS OF BENTS 1 & 2
 BRIDGE OVER ILLINOIS BAYOU
 POPE COUNTY
 RUSSEVILLE-JASPER ROAD
 ROUTE 7 SEC.12

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARKANSAS

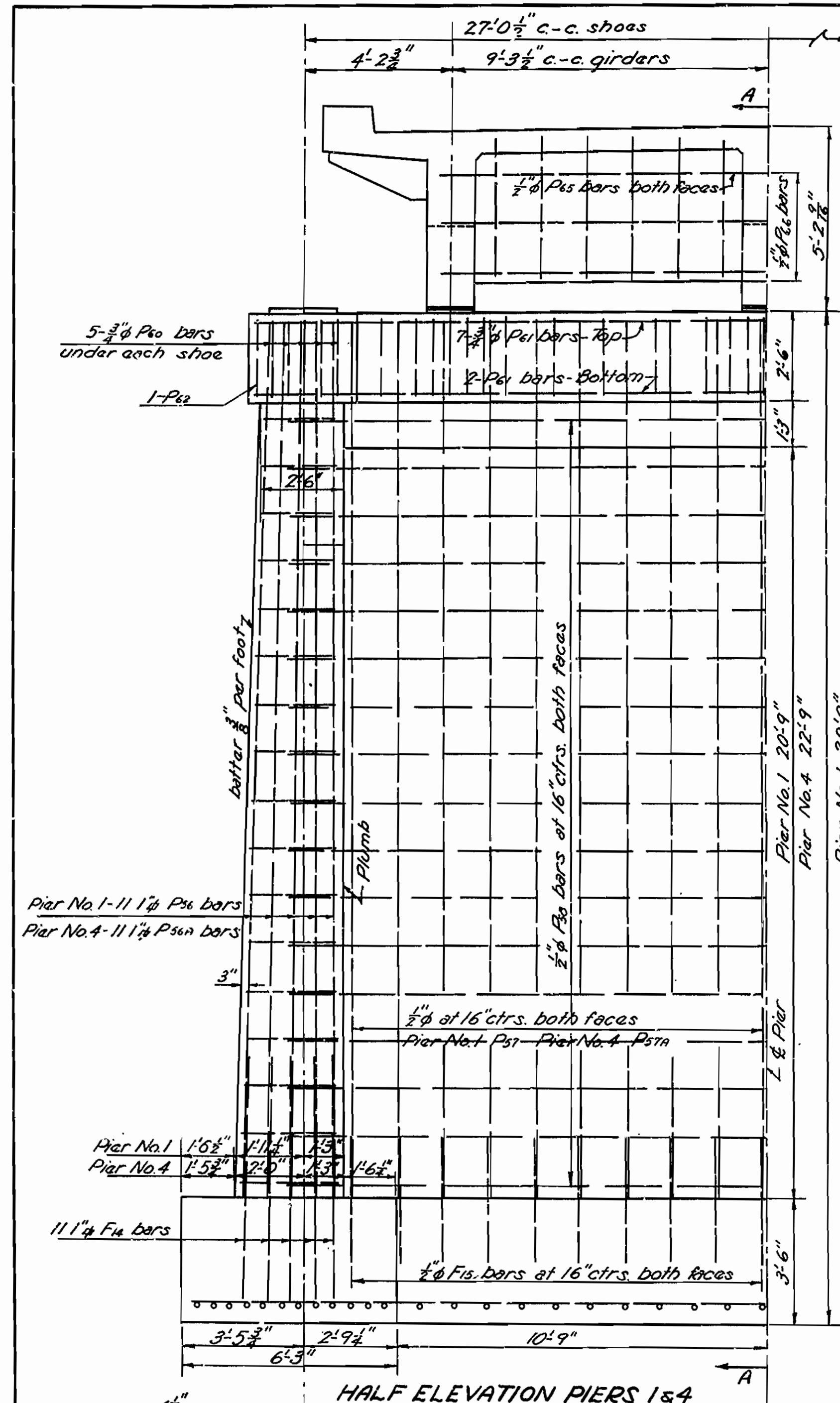
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 Traced by: EBS. Date: Sept. 22, 1933. Scale: 3/8" = 1'-0"
 Checked by: Date:

M.B. Lavin
 BRIDGE ENGINEER

BRIDGE NO. 1487 DRAWING NO. 3341

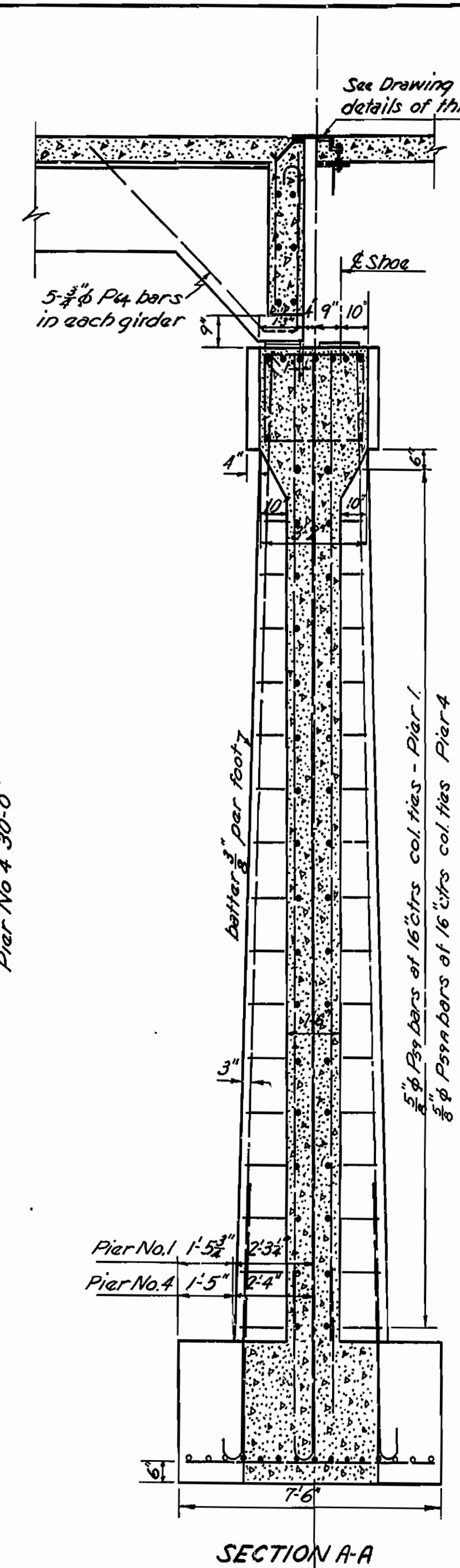
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1934	N.R.H. No. 170 D	6	19

Job No. 8-173



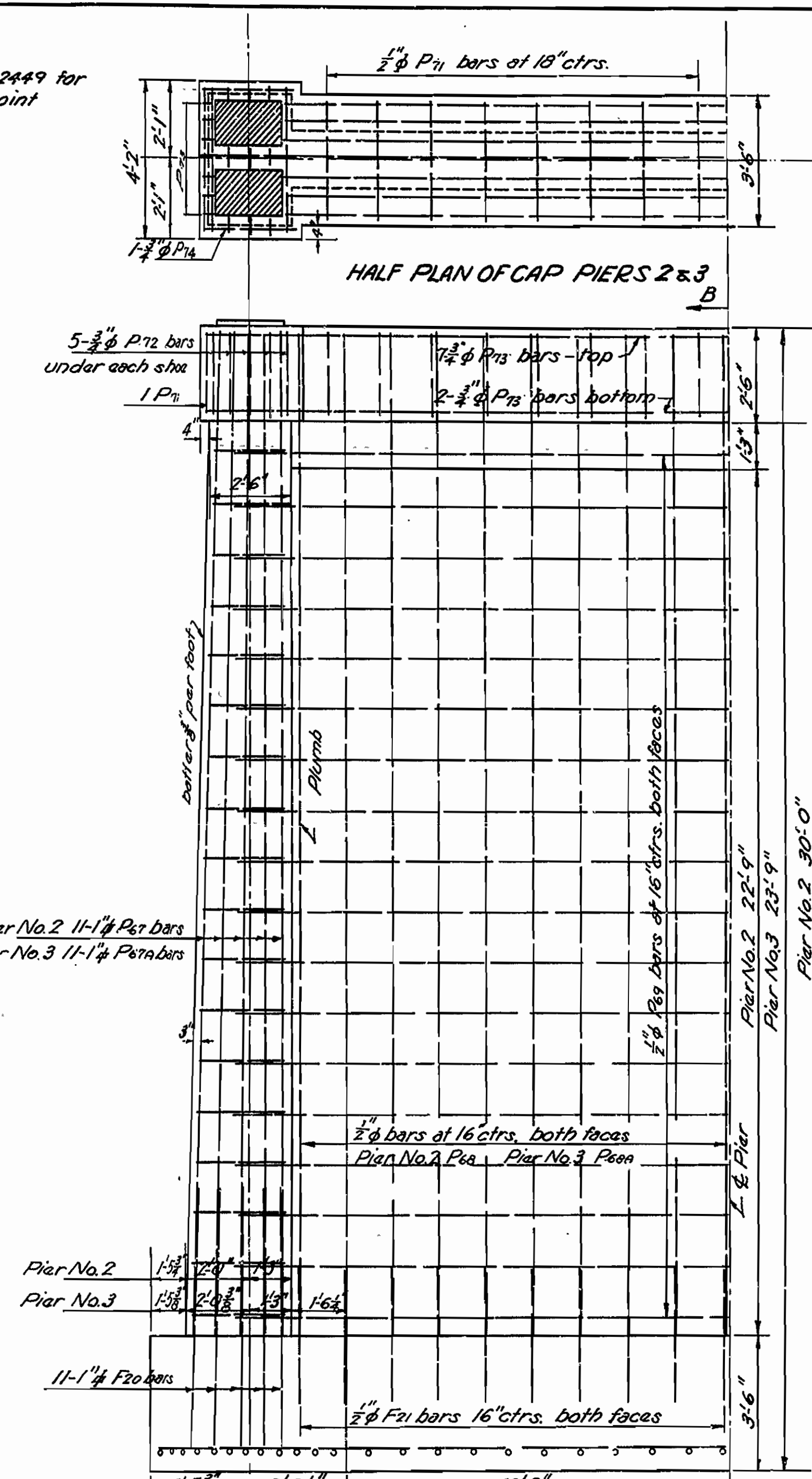
HALF ELEVATION PIERS 1 & 4

HALF PLAN OF FOOTING PIERS 1 & 4



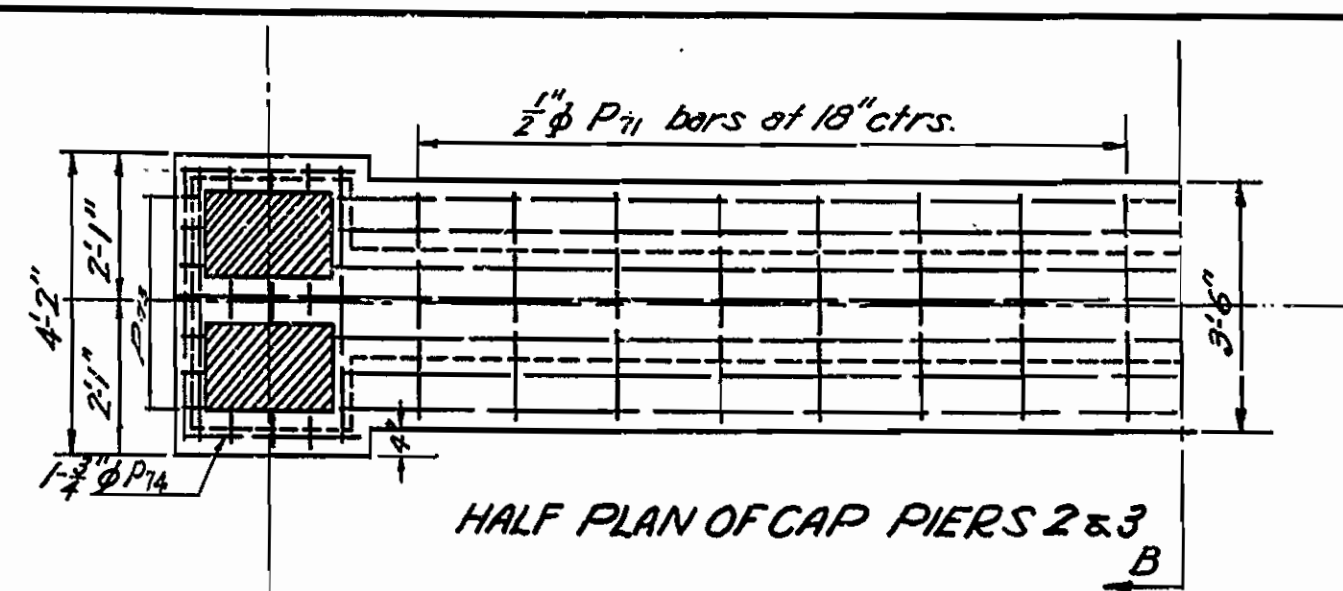
SECTION A-A

HALF PLAN OF C.F.P. PIERS 1 & 4

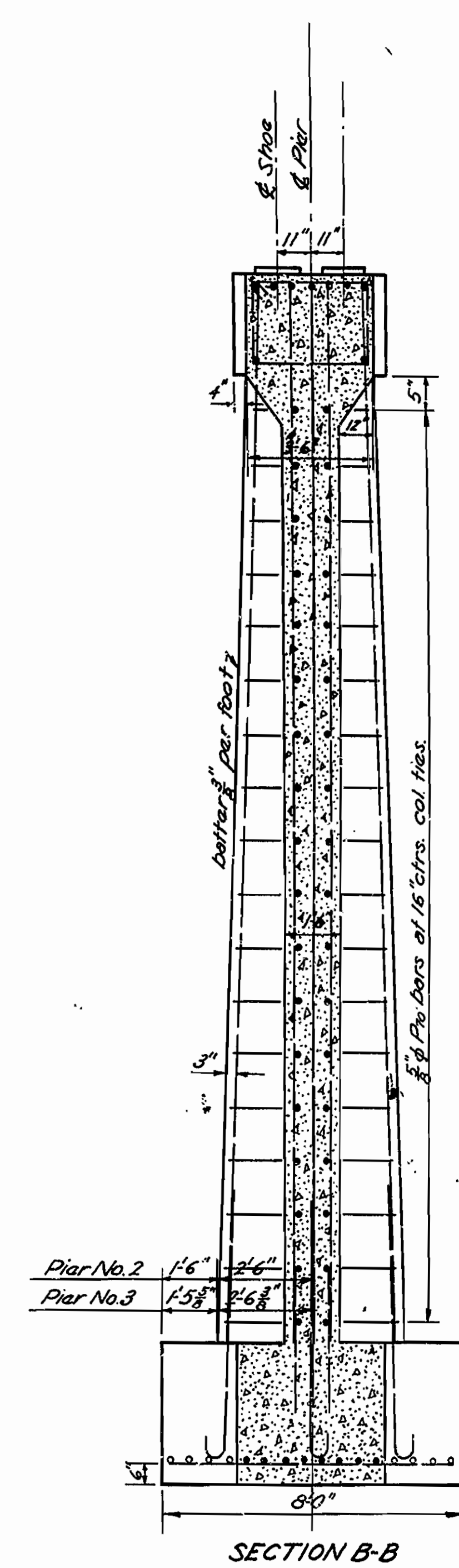


HALF ELEVATION PIERS 2 & 3

HALF PLAN OF FOOTING PIERS 2 & 3



HALF PLAN OF CAP PIERS 2 & 3



SECTION B-B

MARK	SIZE	LENGTH	A	B	BENDING DIAGRAM
F20	1 1/4"	7'-4"	6'-4"		
F14	1 1/4"	7'-4"	6'-4"		
P59	5/8"	12'-7"	2'-10"	2'-1/2"	
P62	1/2"	10'-6"	2'-9 1/2"	2'-1 1/2"	
P60	3/4"	11'-10"	3'-5 1/2"	2'-1 1/2"	
P71	1/2"	11'-2"	3'-1 1/2"	2'-1 1/2"	
P72	3/8"	12'-6"	3'-9 1/2"	2'-1 1/2"	
P70	5/8"	13'-4 1/2"	3'-2"	2'-1 1/2"	
P64	3/4"	11'-10"			
P59A	5/8"	AVE. 12'-8 1/2"	2'-10"	2'-1 1/2"	

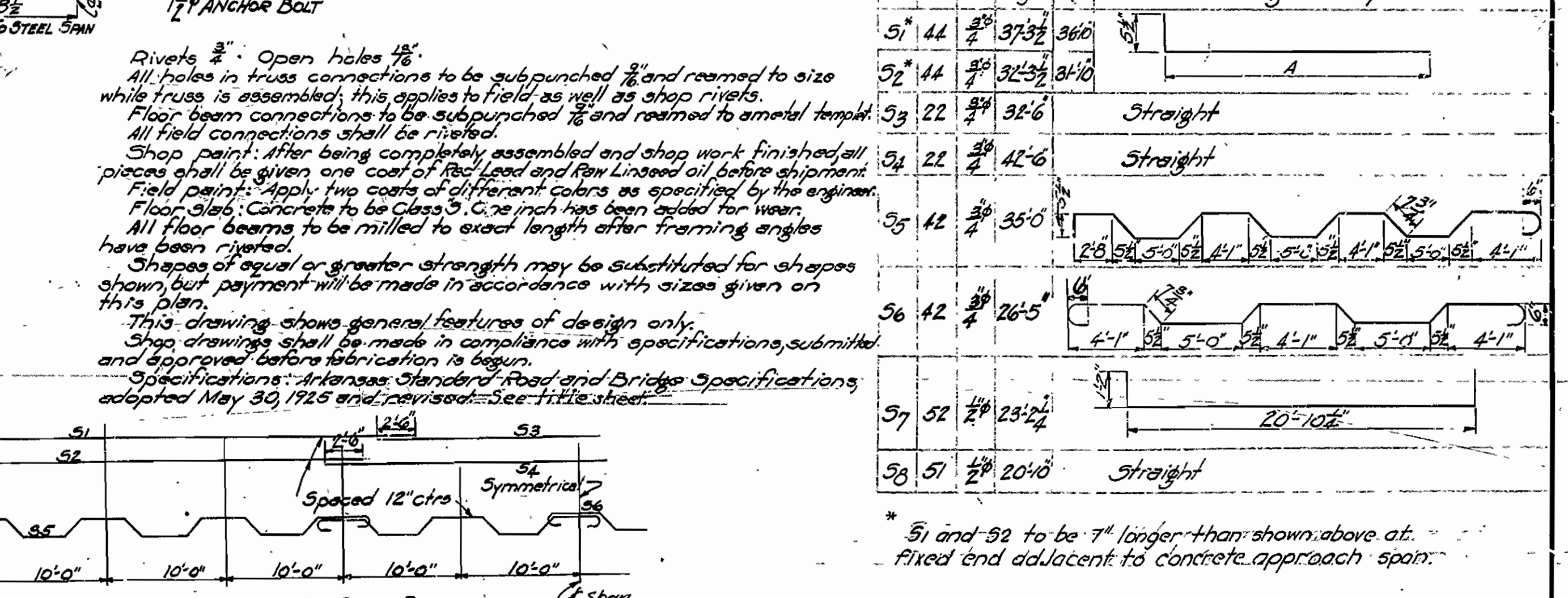
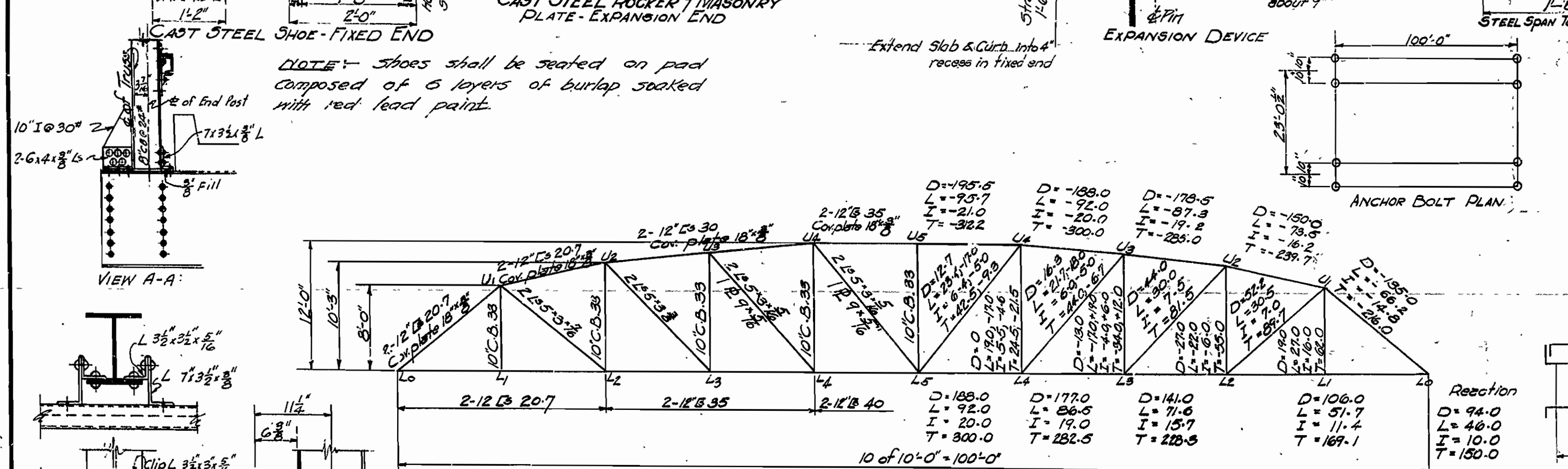
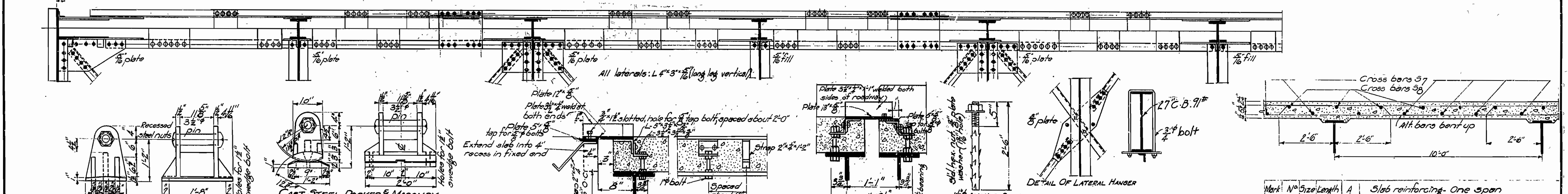
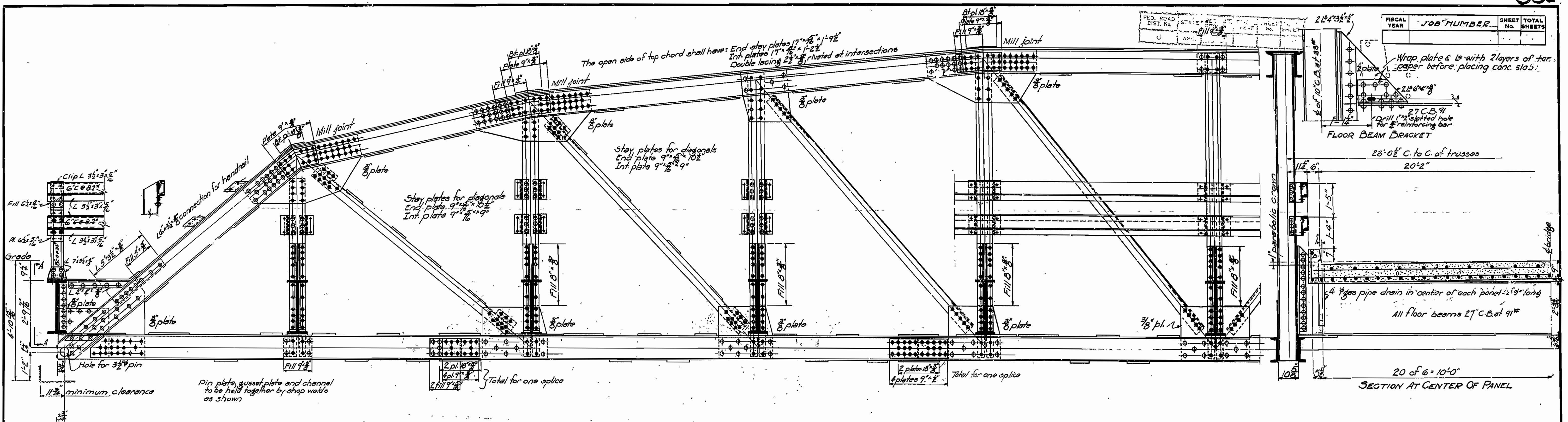
DETAILS OF PIERS NOS. 1, 2, 3 & 4
 BRIDGE OVER ILLINOIS BAYOU
 POPE COUNTY
 RUSSELLVILLE-JASPER ROAD
 ROUTE 7 SECTION 12
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARKANSAS

MADE BY: E.B.S. DATE: 9-20-33
 TRACED BY: DATE: 9-27-33
 CHECKED BY: DATE:

SCALE: 3/8" = 1'-0"

M.B. Barber
 BRIDGE ENGINEER

BRIDGE NO. 1487 DRAWING NO. 3342



Estimated quantities

- Structural steel 88,900 Lbs.
- Cast steel 1,670 Lbs.
- Reinforcing steel 12,480 Lbs.
- Concrete Class 5 62.4 Cu yds.

Unit stresses

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

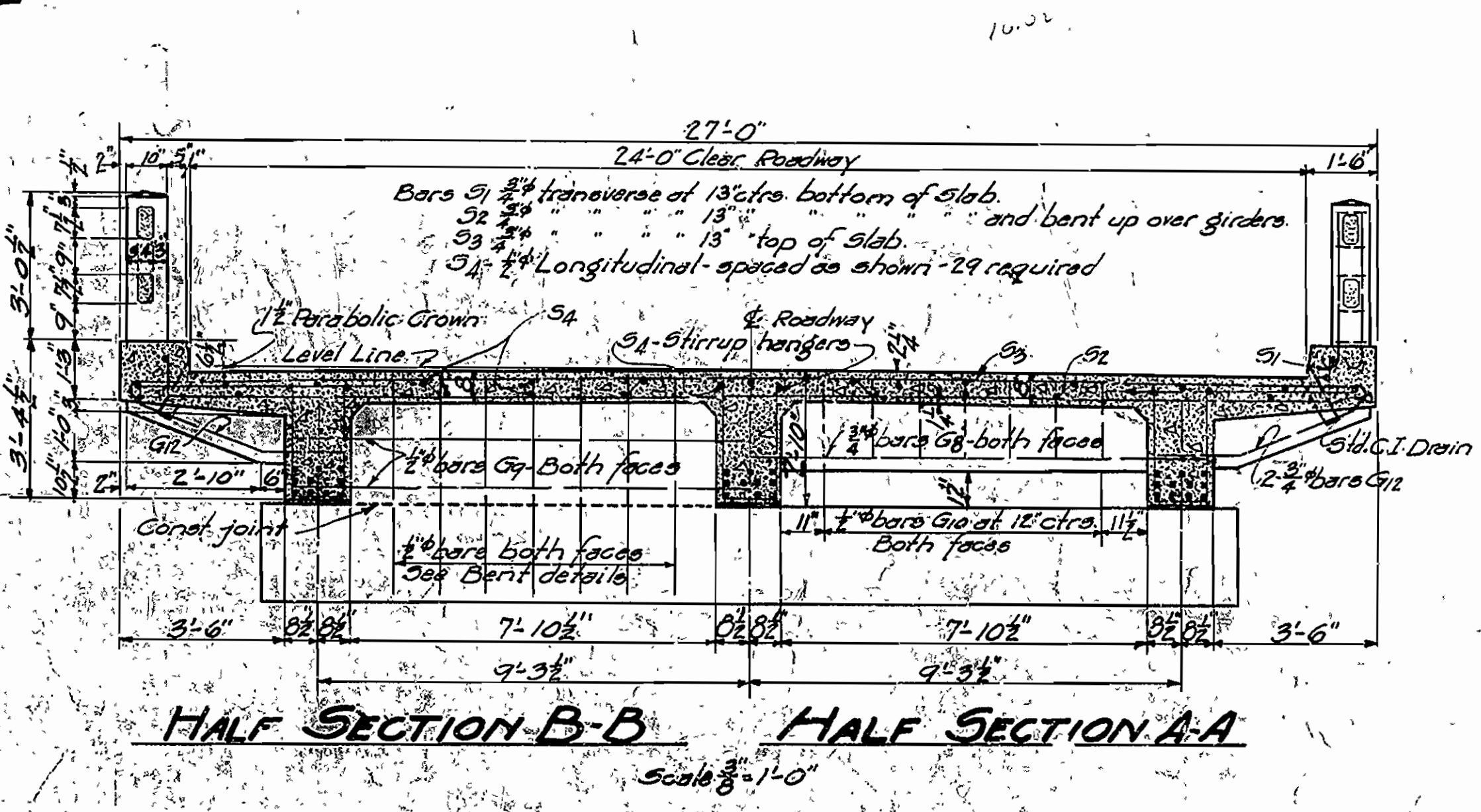
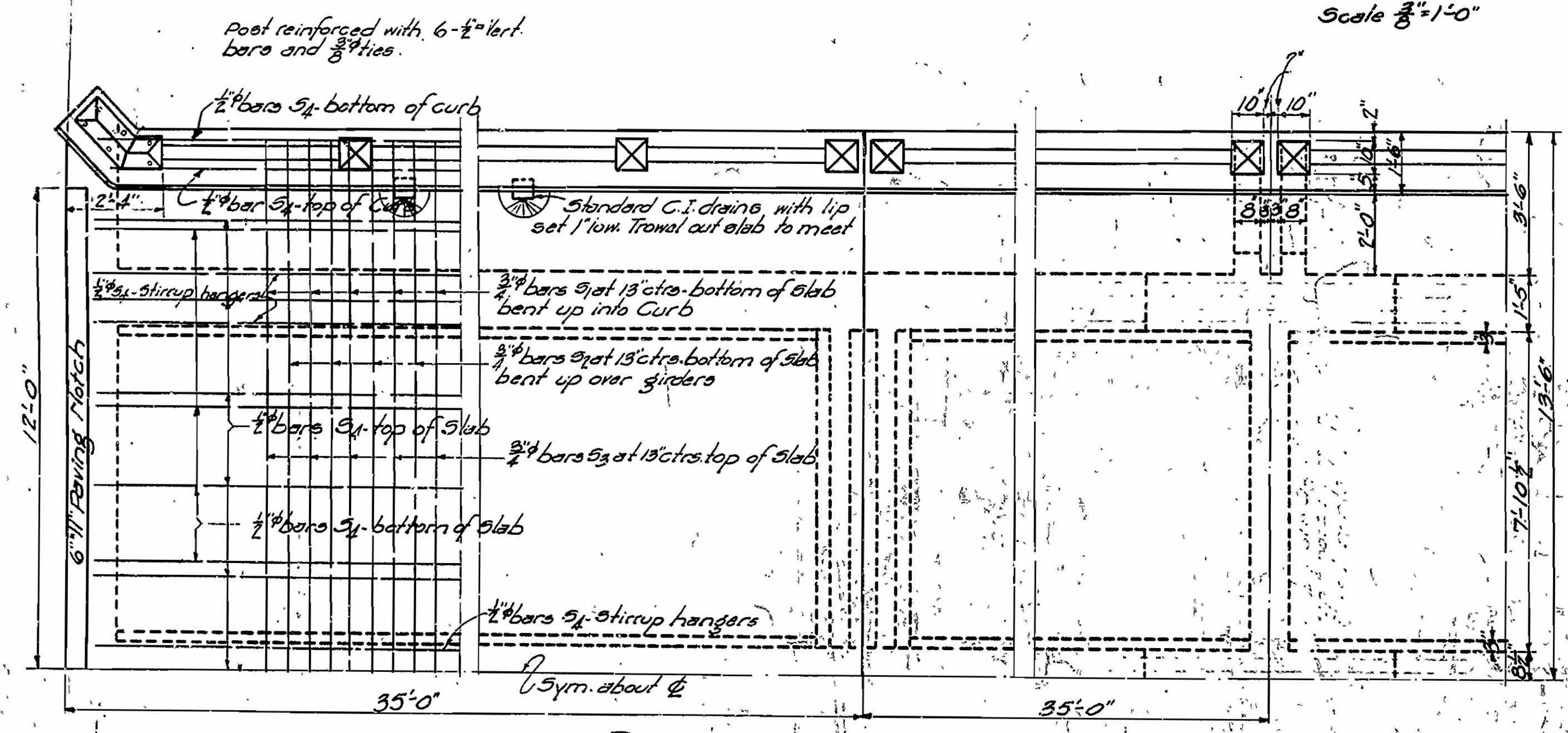
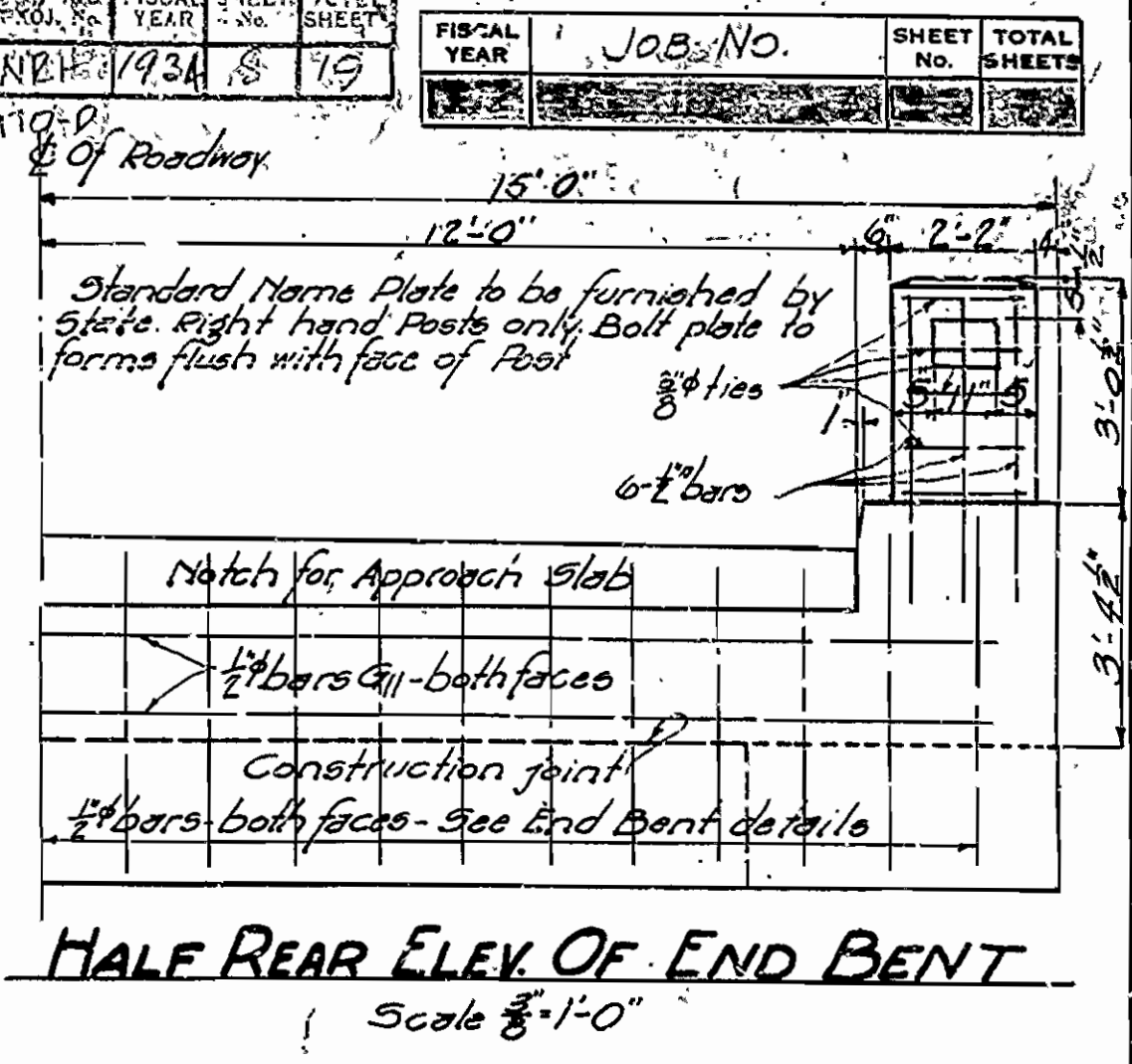
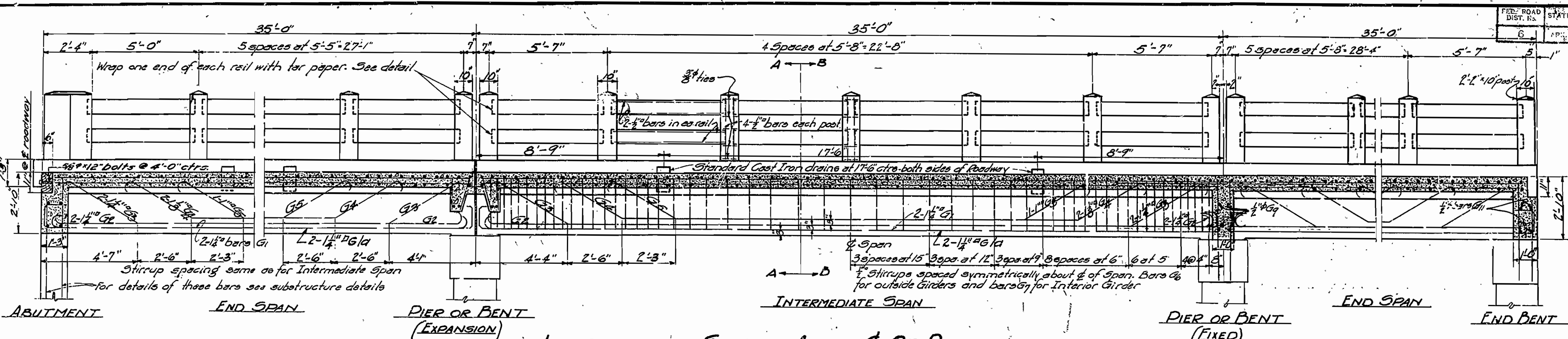
Revised Handrail, Drains - 7-26-35-108

Scale: 1" = 6'-0"

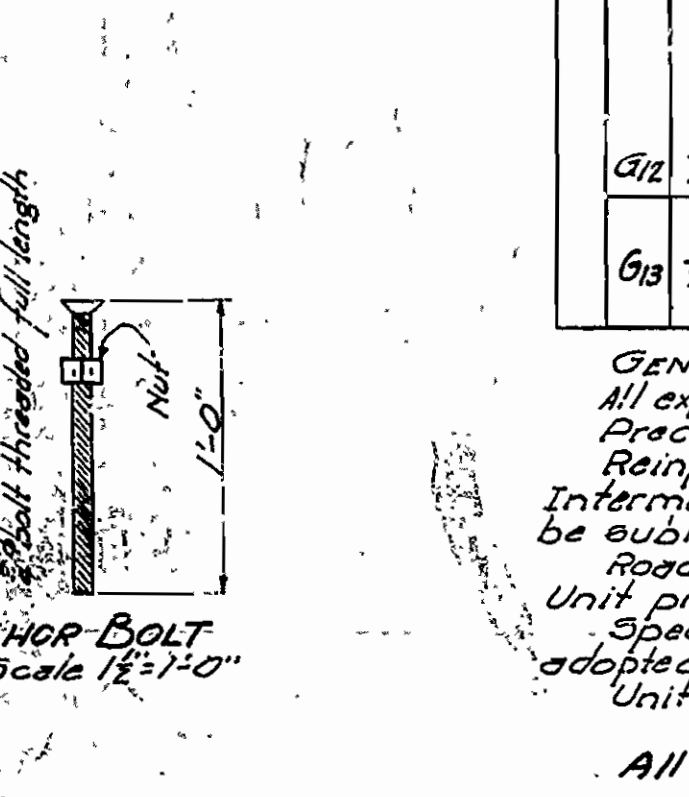
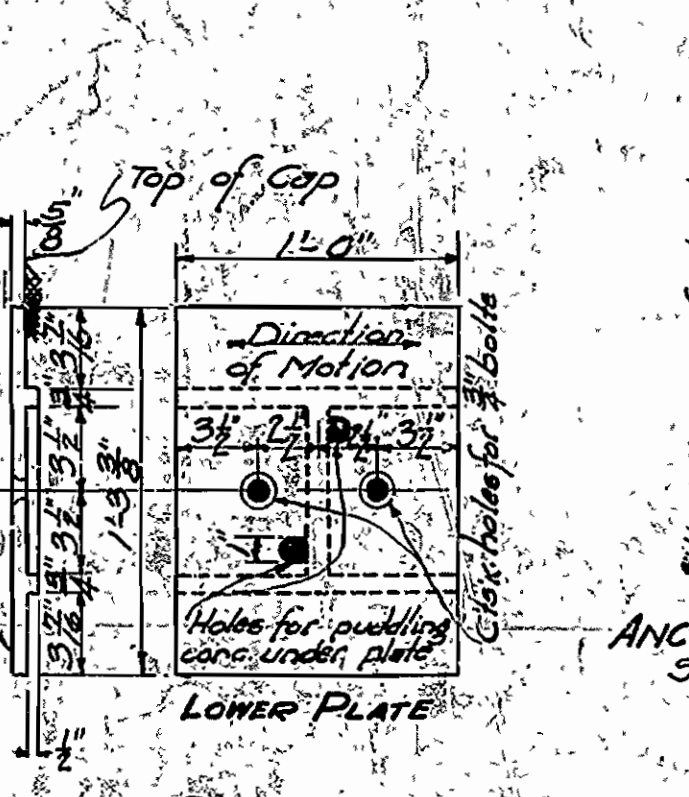
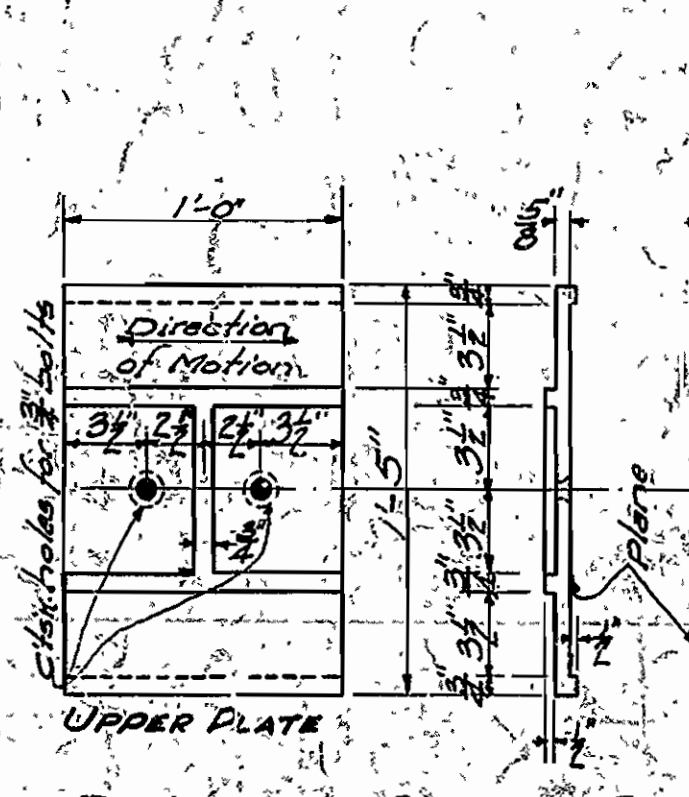
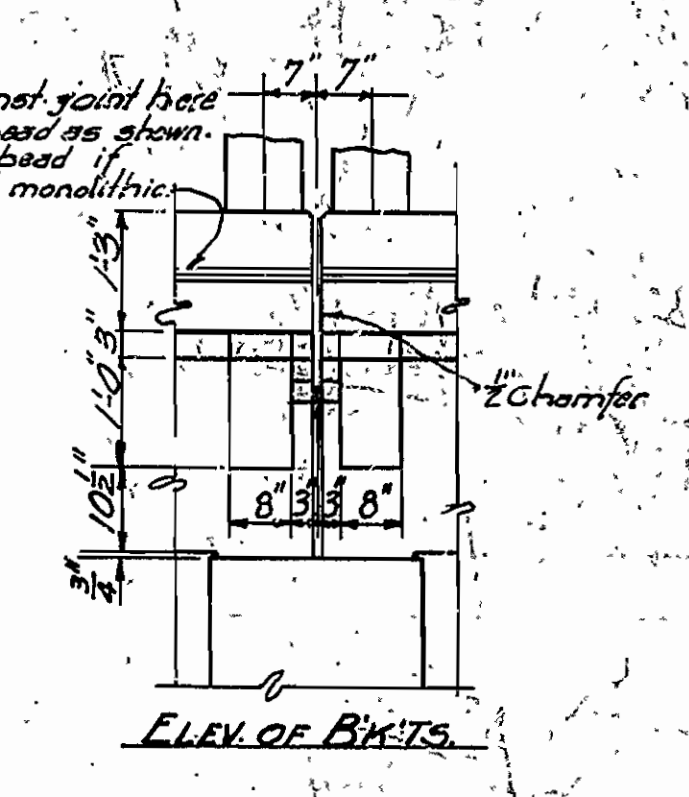
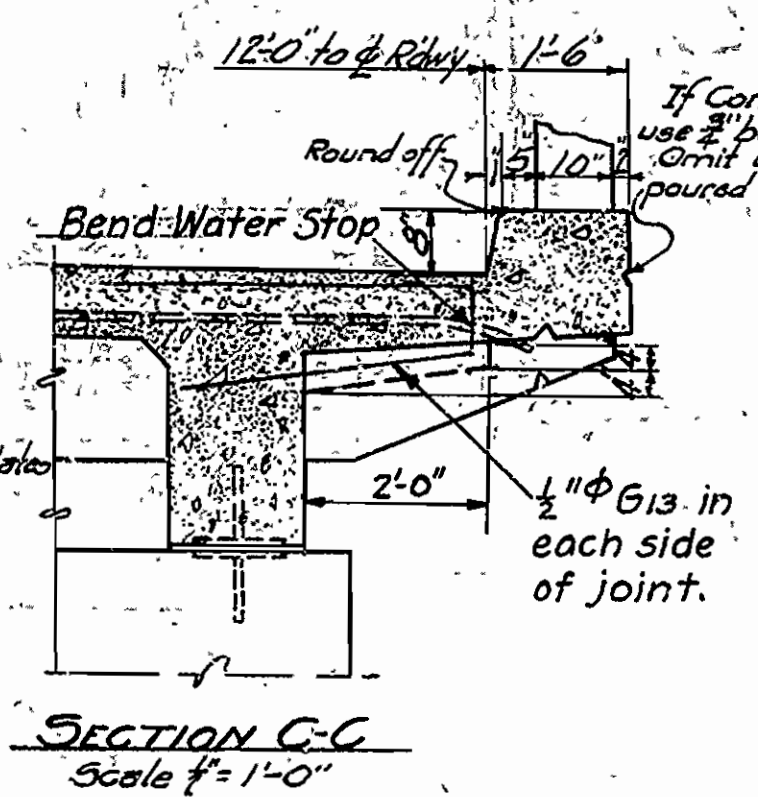
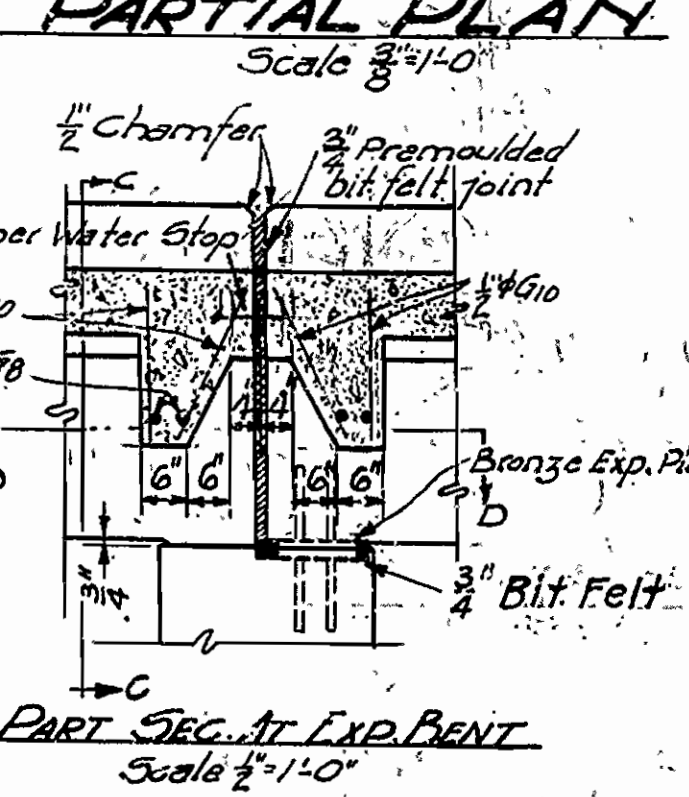
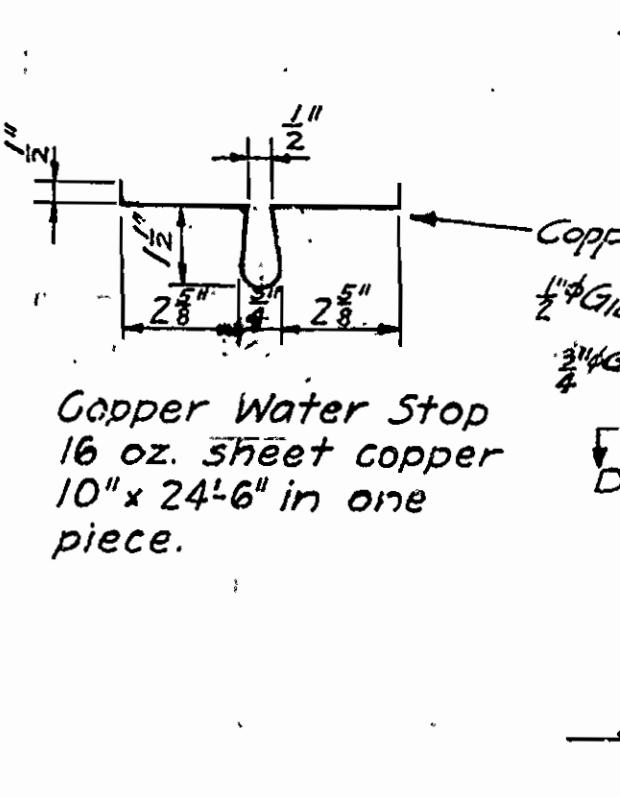
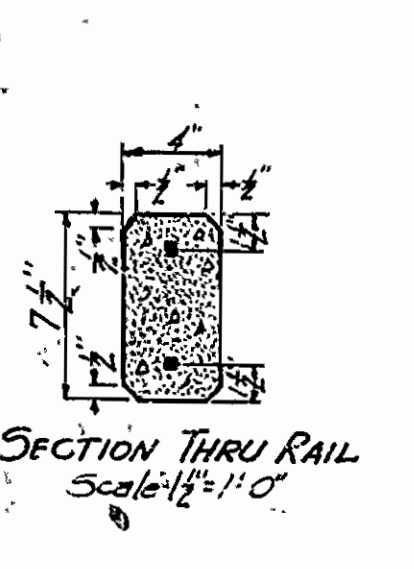
BRIDGE ENGINEER

BRIDGE NO. 1178 DRAWING NO. 3518

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	1934	1934	19	



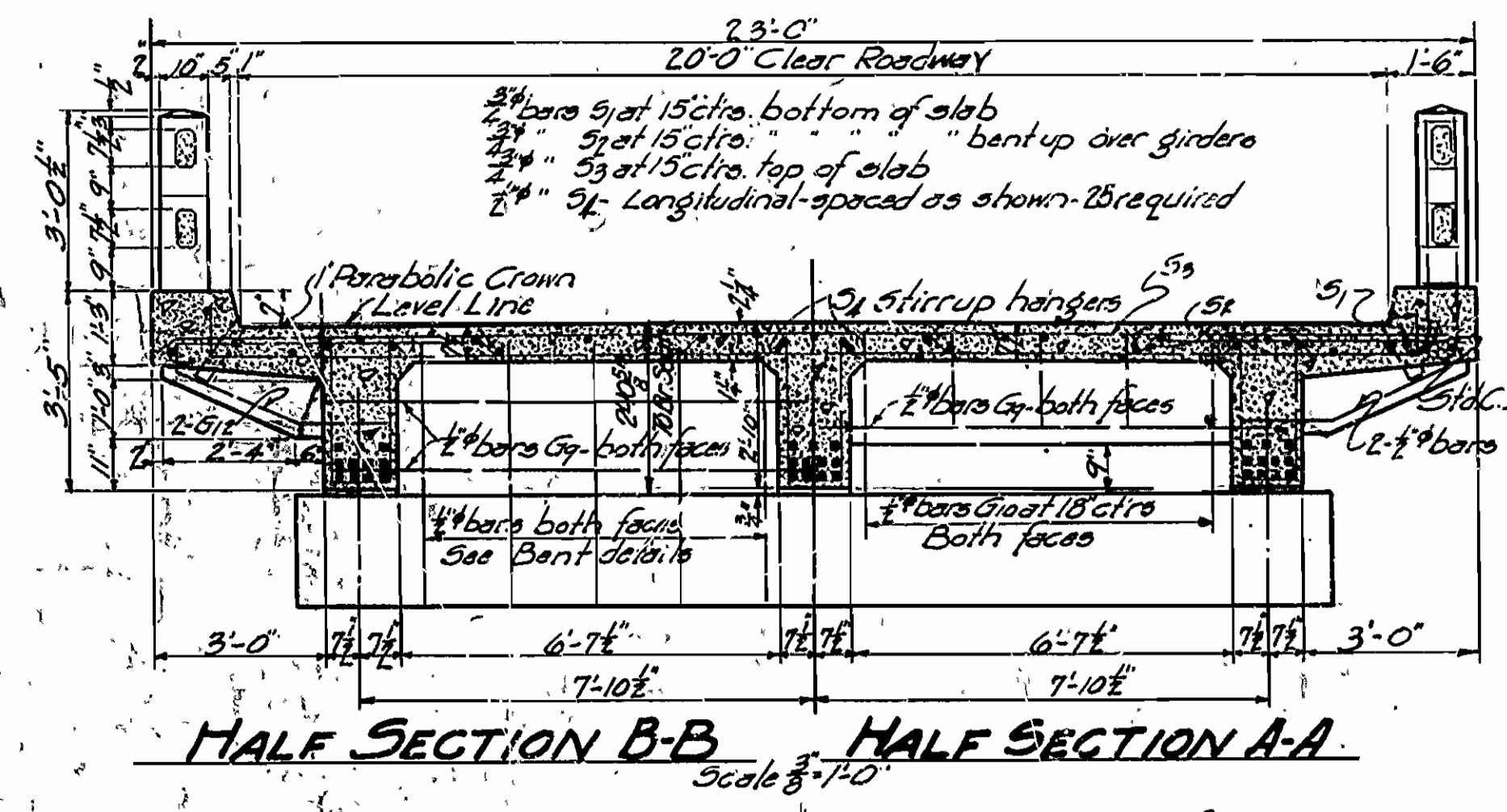
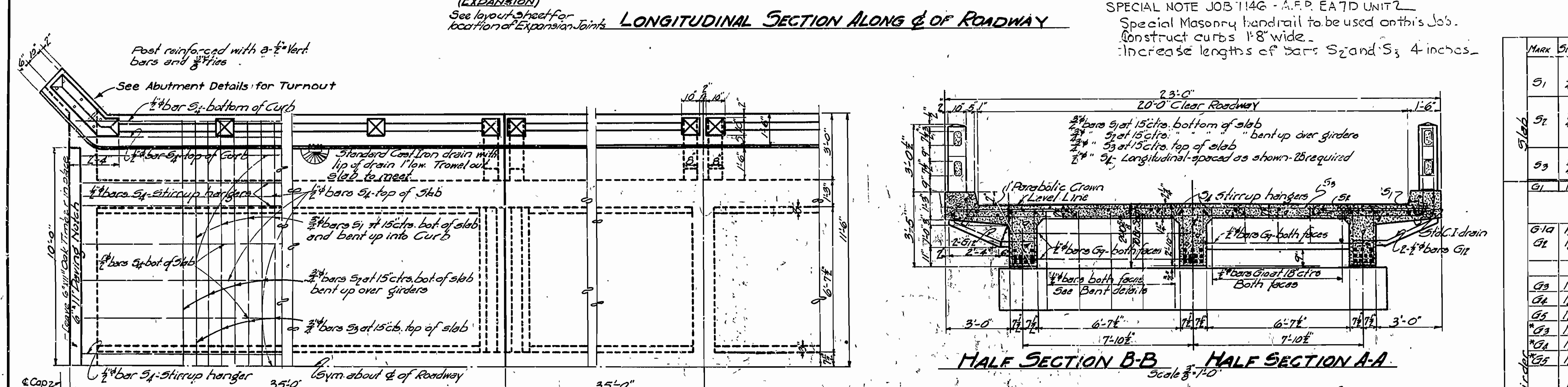
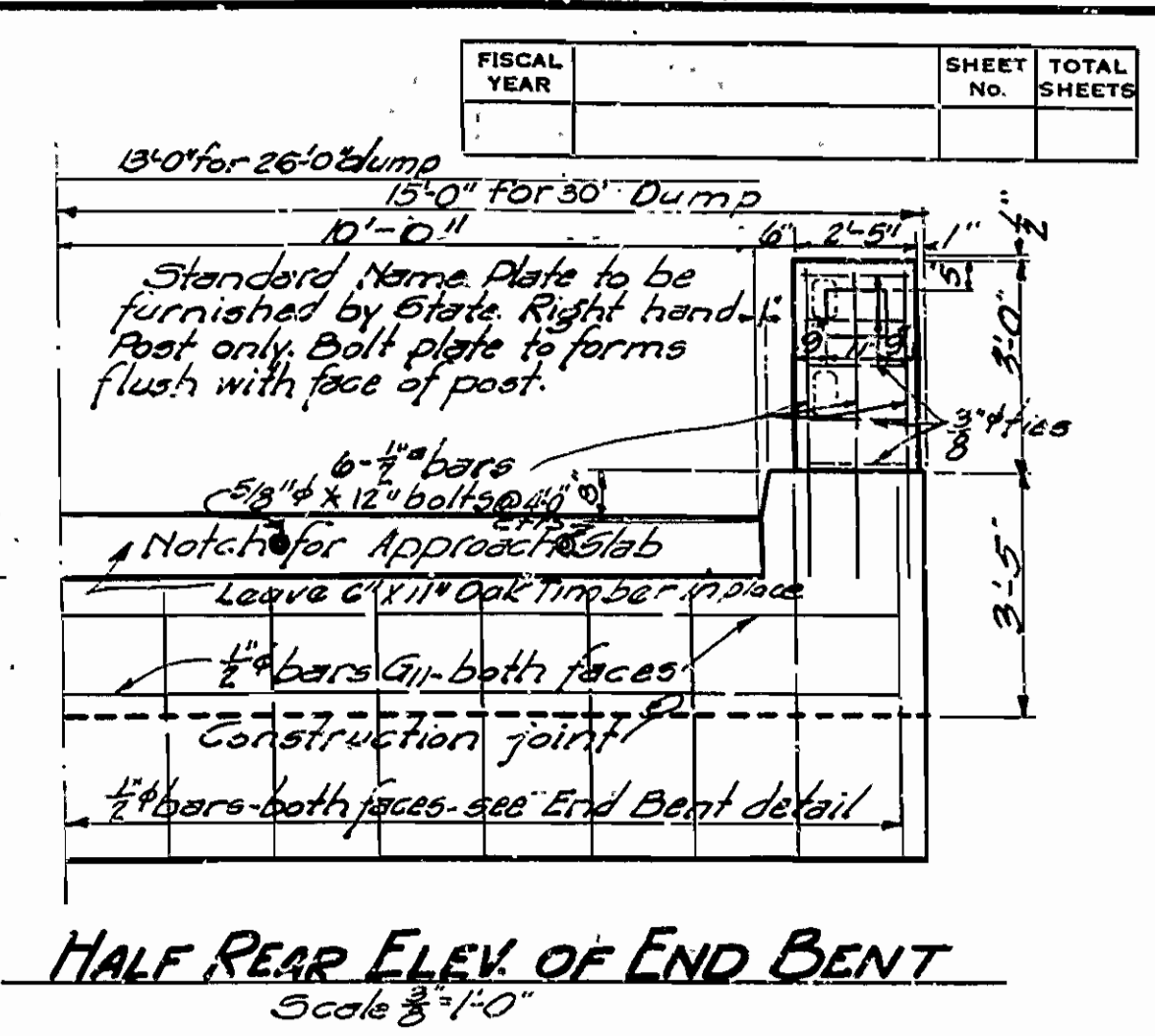
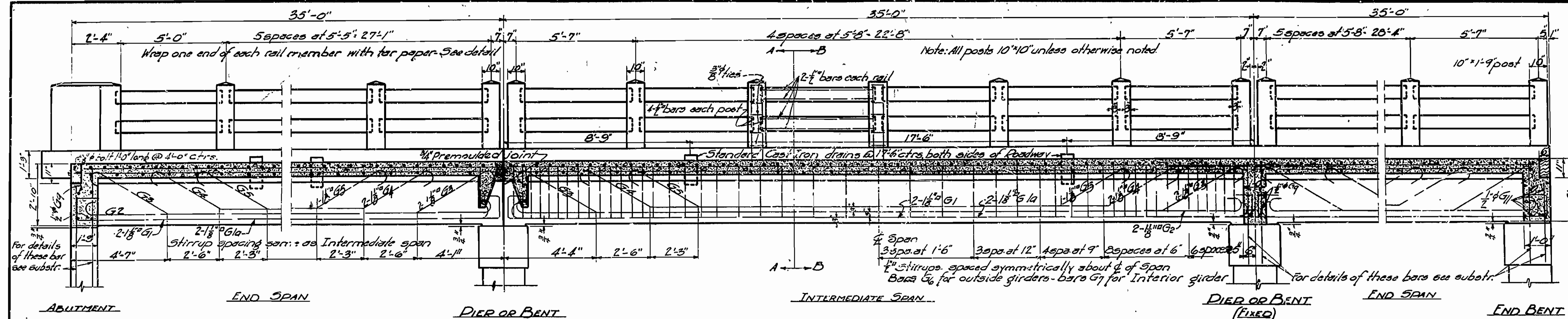
BAR NO.	SIZE	LENGTH	BENDING DIAGRAM
S1	3/4"	27'-0"	25'-0"
S2	3/4"	25'-2"	6'-3" 4'-2" 4'-2" 4'-2" 6'-3"
S3	3/4"	27'-6"	26'-6"
G1	1 1/2"	38'-8"	34'-2" G1/n
G2	1 1/2"	36'-8"	33'-8" G2
G3	1 1/2"	36'-8"	24' 3'-0" 4'-2" 26'-4"
G4	1 1/2"	30'-2"	14' 3'-4" 3'-5" 21'-4"
G5	1"	25'-8"	14' 3'-7" 3'-5" 16'-0"
G6	1 1/2"	36'-2"	2'-0" 3'-0" 4'-2" 25'-0"
G7	1 1/2"	29'-8"	14' 3'-7" 3'-5" 20'-0"
G8	1"	25'-2"	14' 3'-7" 3'-5" 16'-4"
G9	1/2"	6'-7"	1'-2" 2'-4" 2'-5" 1'-2"
G10	1/2"	6'-9"	1'-2" 2'-4" 2'-5" 1'-2"
G11	3/4"	10'-6"	5'-7" 3'-1"
G12	1 1/2"	66'-11"	2'-8" 1'-8"
G13	1 1/2"	66'-11"	2'-8" 1'-8"



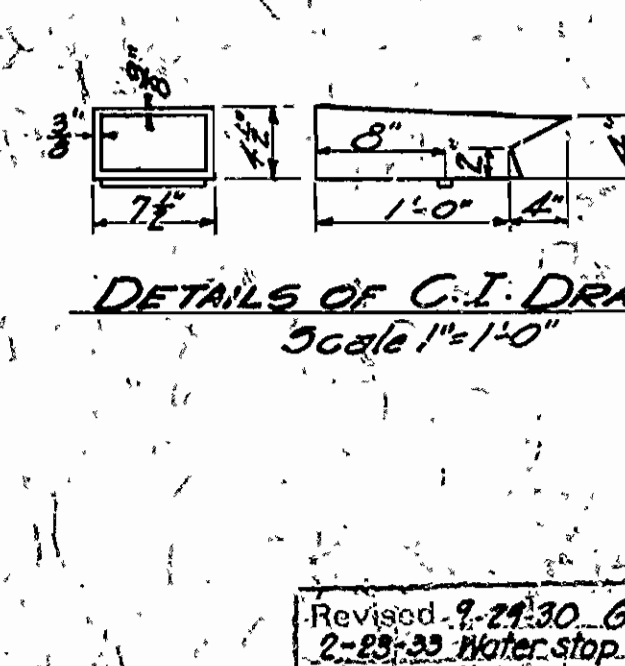
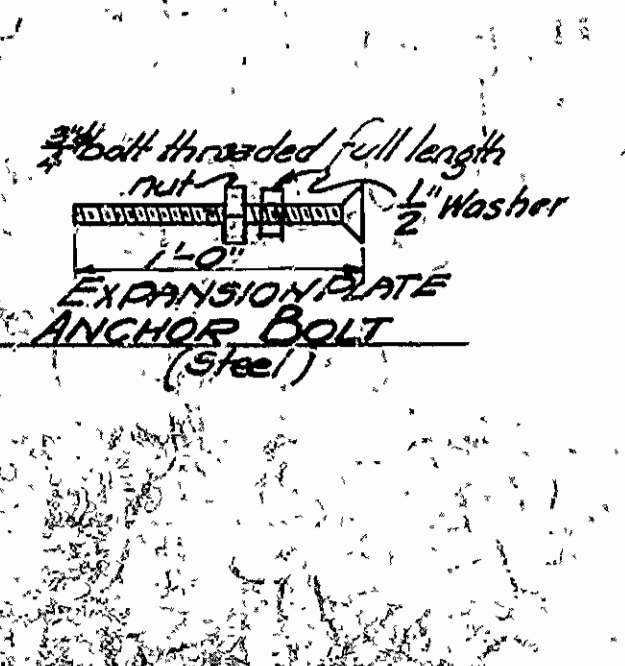
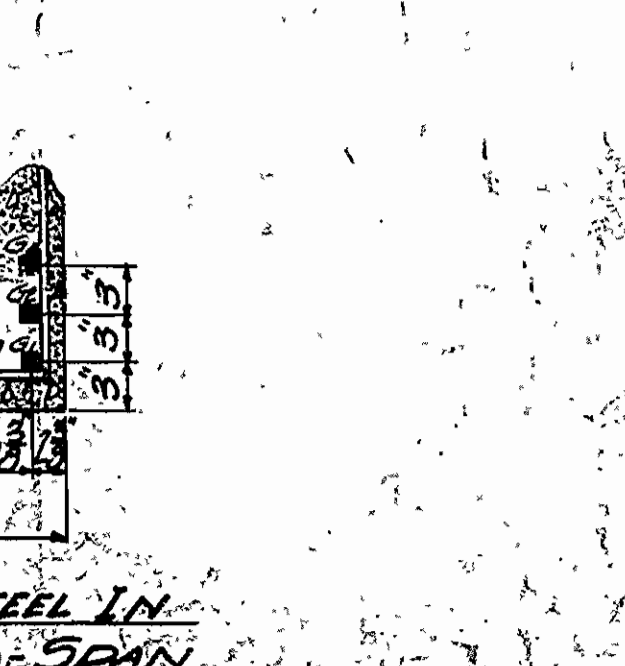
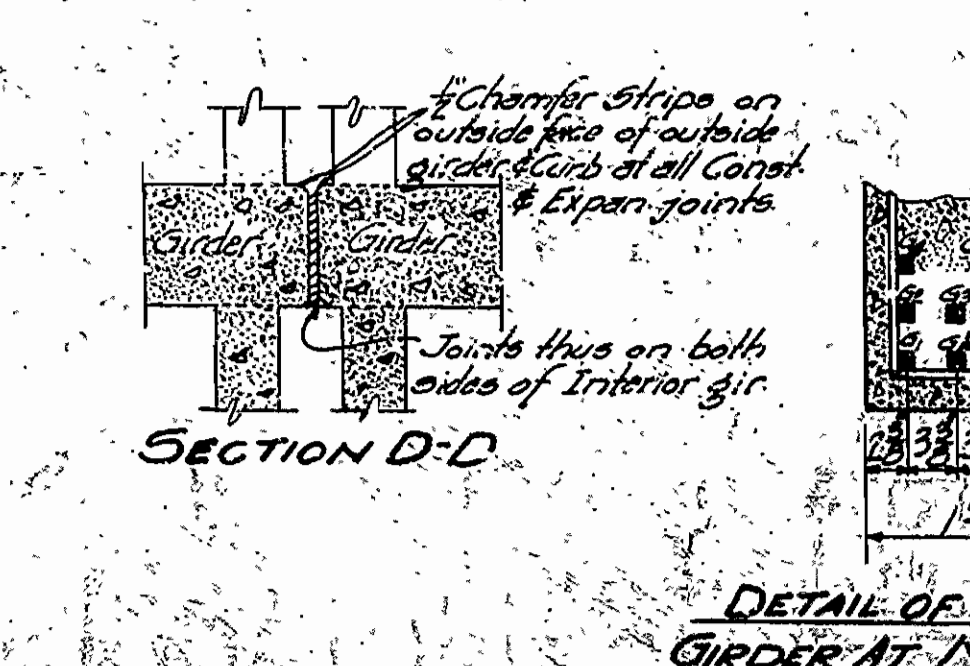
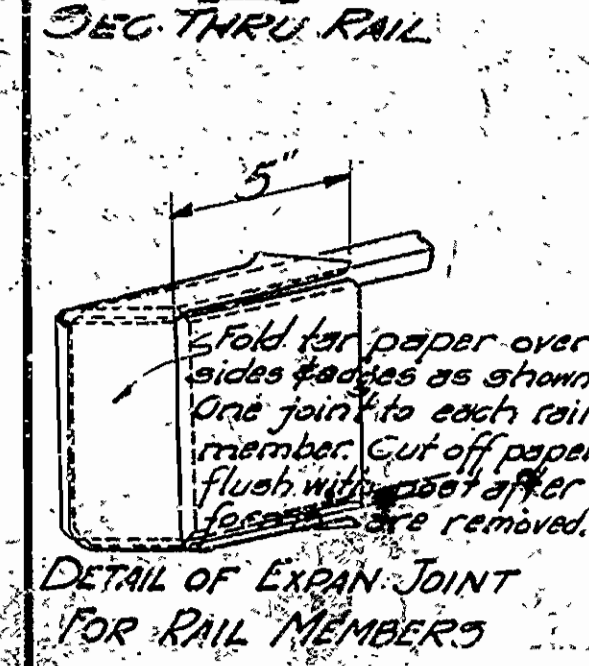
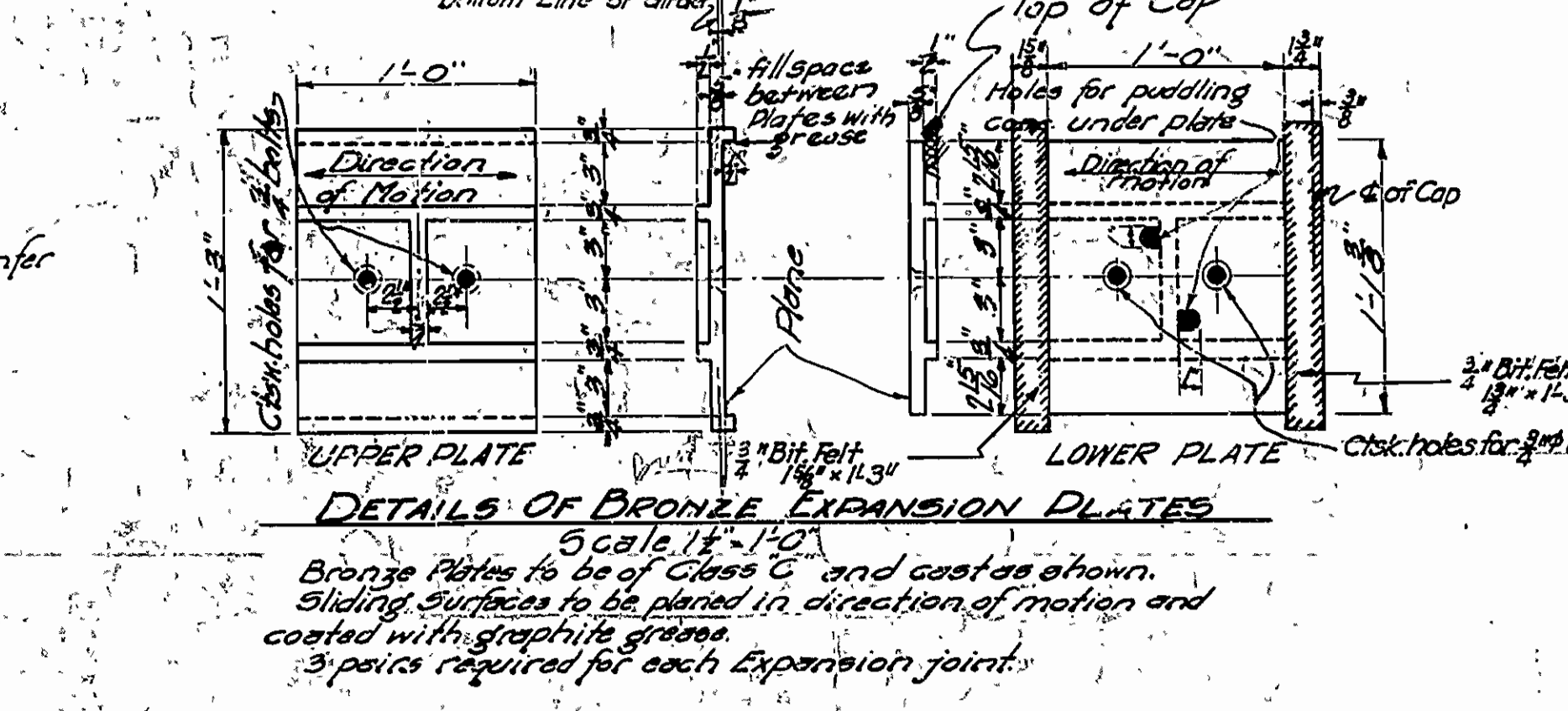
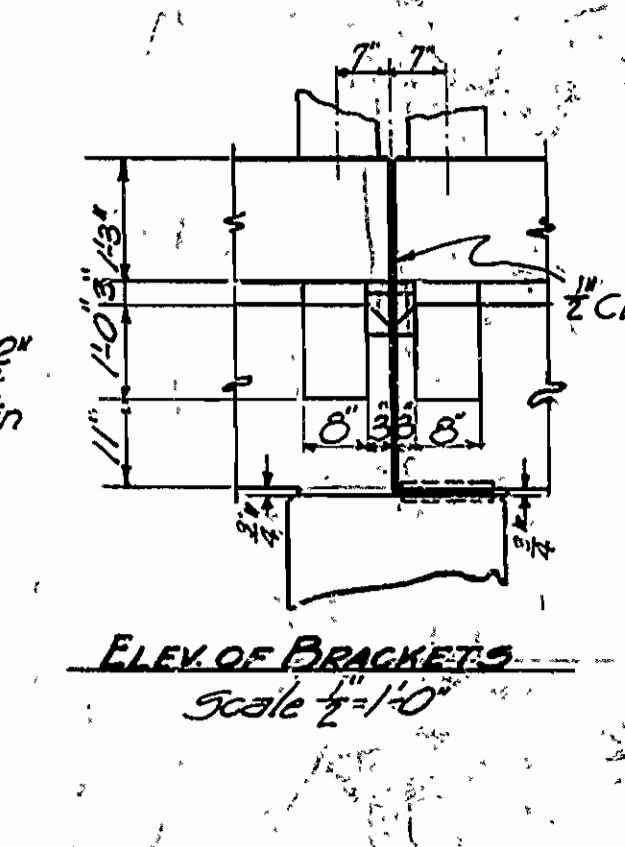
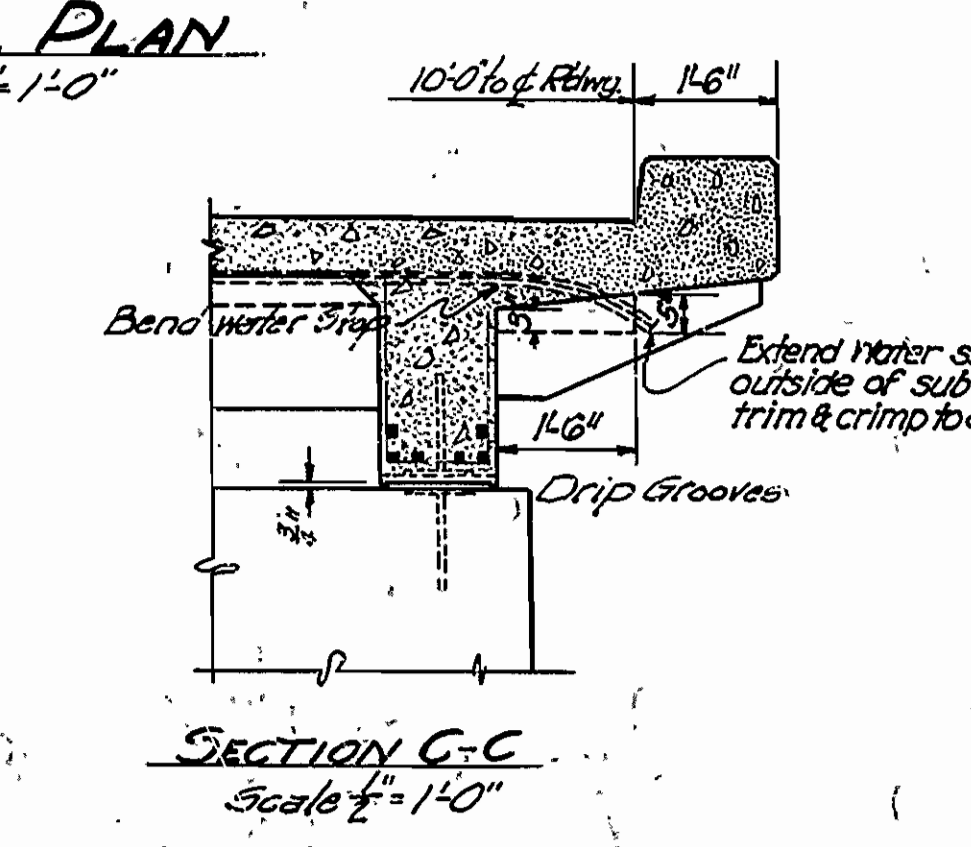
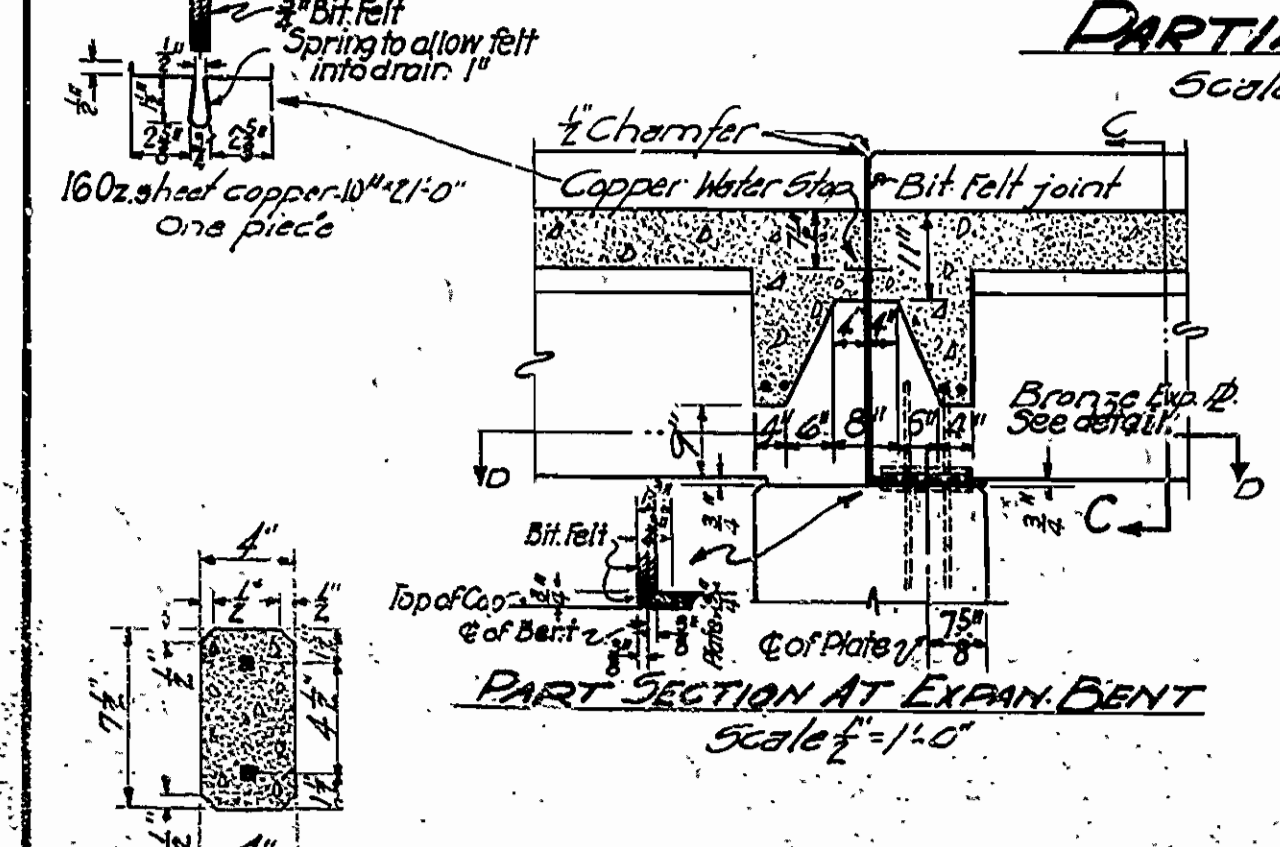
GENERAL NOTES:
 All exposed corners to have 1/2" chamfer unless otherwise noted.
 Precast concrete handrail, to be 1:1:2 mix. Max. agg. 3/4".
 Reinforcing steel to be deformed bars of structural or intermediate grade. Shop, List and Bending Diagrams must be submitted by the Contractor before fabrication is begun.
 Roadway Drains and Expansion Devices to be paid for at unit price bid for reinforcing steel.
 Specifications Arkansas Road and Bridge Specifications adopted May 30, 1925 and revised.
 Unit Stresses: 16,000 lb./sq. in. for steel; 16,750 lb./sq. in. for concrete.
 All dimensions shown are center to center of bars.

DETAILS OF
STANDARD 35'-0" RC DECK GIRDER
 3 GIRDER TYPE
24'-0" CLEAR ROADWAY
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: *[Signature]* Date: 2-22-34
 Traced By: *[Signature]* Date: 2-22-34
 Checked By: *[Signature]* Date: 3-26-34
 BRIDGE NO. 1481 DRAWING NO. 2514

Revised 9-29-30
 G. Bars by Mac
 2-29-35 Water stop &
 Brackets by G.A.



MARK	SIZE	LENGTH	BENDING DIAGRAM
S1	3/4"	25'-0"	
S2	3/4"	24'-11"	
S3	3/4"	23'-6"	
G1	1 1/2"	36'-2"	
G2	1 1/2"	35'-8"	
G3	1 1/2"	36'-8"	
G4	1 1/2"	30'-2"	
G5	1 1/2"	25'-8"	
G6	1 1/2"	36'-2"	
G7	1 1/2"	29'-8"	
G8	1 1/2"	25'-2"	
G9	1 1/2"	6'-5"	
G10	1 1/2"	6'-7"	
G11	3/4"	9'-6"	



General Notes
 All exposed corners to have 3/4" chamfer unless otherwise noted.
 Driest Concrete handrails to be 11.2 min. Max. agg. 3".
 All concrete above top of Bent Caps, except handrails to be Class 3.
 Reinforcing steel to be deformed bars of Structural or Intermediate Grade. Shop List of Bending Diagrams must be submitted by the Contractor before fabrication is begun. Volume of Oak headers is included in volume of Class 3 Concrete.
 Specifications: Arkansas Wood & Bridge Specifications adopted May 30, 1925 and revised.
 Unit Stresses: f_c = 1600 psi, f_s = 20000 psi, n = 15, this loading.
 All dimensions in ms relating to reinforcing steel are to centers of bars.
 Cast Iron drains are to be paid for at the unit price bid for "Cast Iron and Cast Steel".
 Bronze Expansion Plates, Anchor bolts and Copper Water Stop are to be paid for at the Unit price bid for Bronze Expansion Devices.
 Bolts for Oak header and Bituminous felt are to be paid for at the unit price bid for Reinforcing Steel.
DETAILS OF
STANDARD 35'-0" RC DECK GIRDER
3 GIRDER TYPE
20'-0" CLEAR ROADWAY
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
 Drawn By: *[Signature]* Date: 2/23/30
 Traced By: *[Signature]* Date: 2/23/30
 Checked By: *[Signature]* Date: 2/23/30
 Bridge No. 1487 DRAWING NO. 2274

Revised 9-24-30, G. P. B. P. Inc.
 2-23-30 Water stop - Expansion
 C.R.W. Notes, Girder
 over Cap. 1/24-7-33

FED. DIST. NO.	STATE	N.R.H. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
6	ARK.	170-D	1934	2	19	1934	8-173	2	19

SCHEDULE OF QUANTITIES - BRIDGE No. 1487, STATE JOB No. 8-173, N.R.H. 170-D

PART OF BRIDGE	11 CLEARING ACRES	11 GRUBBING ACRES	12 & S.P. COMMON EXCAV. (TO INCLUDE SODDING) CU.YD.	13 DRY EXCAVATION FOR STRUCT'S CU.YD.	13 WET EXCAVATION FOR STRUCT'S CU.YD.	13 SOLID ROCK EXCAVATION FOR STRUCT'S CU.YD.	91 GLASS "A" CONCRETE FOR BRIDGES CU.YD.	91 GLASS "S" CONCRETE FOR BRIDGES CU.YD.	92 REINFORCING STEEL FOR BRIDGES LB.	94 CONCRETE RAILING FOR BRIDGES LIN. FT.	95 RIP RAP CU.YD.	96 STRUCTURAL STEEL LB.	S.P. GRAVEL SURFACE COURSE CU.YD.	S.P. CAST STEEL AND CAST IRON LB.	S.P. BRONZE EXPAN. DEVICES & COPPER WATER STOP LB.	S.P. BRONZE PROJ. MARKER PLATES EACH	S.P. BRONZE STATE BRIDGE NAME PLATES EACH	S.P. REMOVAL OF EXISTING STRUCTURES LUMP SUM
TRUSSES								222.0	44,250.			330,320		5,511				
APPROACH SPANS								164.9	46,999.	287				544	1,131		2	
APPROACH DUMPS	2.33	2.33	14,177				* 0.38 + 0.26		* 83.6 + 30.0		325		406			2		LUMP SUM
PIERS 1,2,3,4				92	300	227	350.6		24,964.									
BENTS 1,2				100	88	40	86.2		7,124.									
ABUTMENTS 1,2				563	123	118	166.6		20,690.									
EXCAVATION FOR RIP RAP				203														
TOTALS	2.33	2.33	14,177	958	511	385	604.	386.9	144,141	287	325	330,320	406	6,055	1,131	2	2	LUMP SUM

* Right of Way Markers
+ F.A. Project Markers

SCHEDULE OF QUANTITIES
FOR
BRIDGE OVER ILLINOIS BAYOU
POPE COUNTY
ROUTE 7 SECTION 12
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

M.A. Gannon
BRIDGE ENGINEER

Drawn by: R.E.H. Date: 9-25-33
Traced by: A. Date: 10-2-33 Scale:
Checked by: Date:
BRIDGE NO. 1487 DRWG. NO. 3471