

Revised Plan Sheet No. 1
IN A.C. 112
R 2 8/1/33

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS	FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1931	3161	1	9	6	ARK.	E-274-B	1931	1	9

Revised 8-9-33

INDEX OF SHEETS

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1	3207	Title Sheet
2	3208	Layout of Bridge No. 1029
3	3209	Details of Piers for Bridge No. 1029
4	2273	Details of Std 30'-0" R.C.D. Gir. Span, 4 Girder Type, 4 Pile Bent, 20'-0" Clear Roadway.
5	2419	Details of Std 110'-0" Low Truss Span, 20'-0" Clear Roadway.
6	3210	Partial Layout of Bridge No. 1623
7	3211	Partial Layout of Bridge No. 1623 and Layout of Bridge No. 1622
8	E.S.1	Typical Section of Earth Approaches
9	F.P. 2	Federal Aid Project Markers

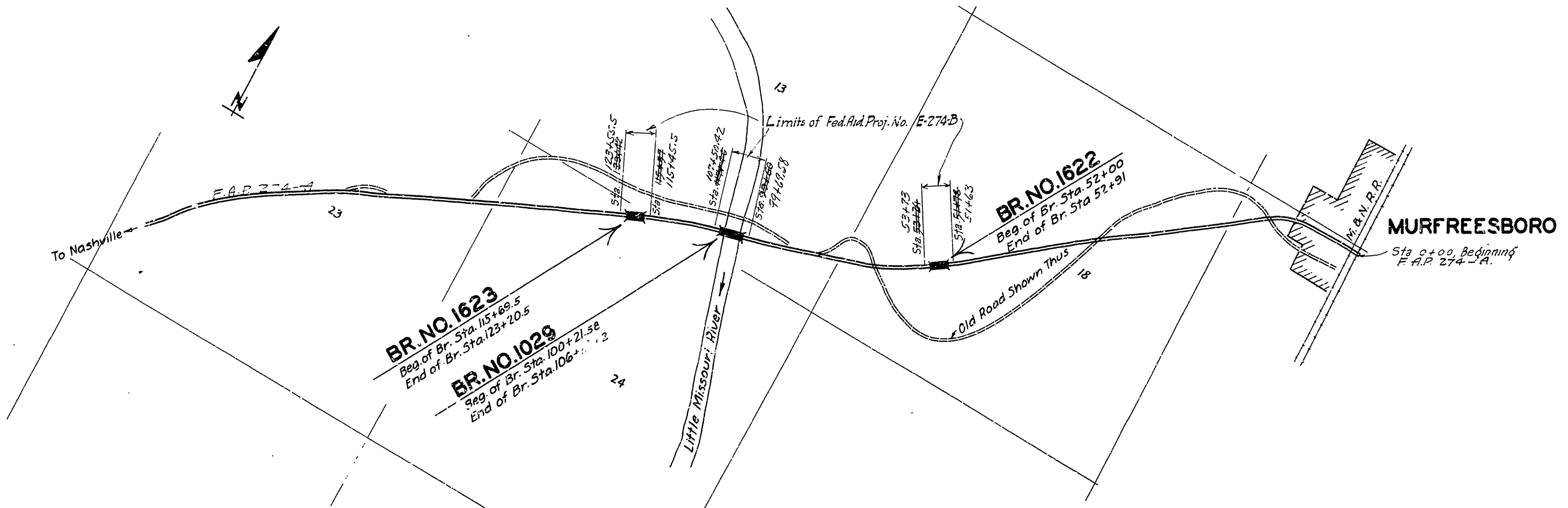
STATE OF ARKANSAS
STATE HIGHWAY COMMISSION
PLAN OF PROPOSED BRIDGES
ON
MURFREESBORO-NASHVILLE ROAD
PIKE COUNTY

ROUTE 27 SEC. 4
JOB No 3161
FEDERAL AID PROJECT No E-274-B

QUANTITIES

Item No.	SP	1/2	Earth Excavation	5400	Cu. Yds.
"	"	13	Dry Excavation for Structures	457	Cu. Yds.
"	"	13	Wet Excavation for Structures	816	Cu. Yds.
"	"	13	Solid Rock Excavation for Structures	100	Cu. Yds.
"	"	54	Class "A" Concrete	42671	Cu. Yds.
"	"	54	Class "B" Concrete	153760	Cu. Yds.
"	"	55	Reinforcing Steel	420996	Lbs.
"	"	56	Structural Steel (Truss Bridges)	315100	Lbs.
"	"	SR 68	Precast Concrete Piling	4016	Lin. ft.
"	"	SR 69	Rip Rap 1 foot thick	450	Cu. Yds.
"	"	74	Concrete Paving for Structures	2420	Lin. ft.
"	"	SP	Removal of Existing Structures	Lump Sum	

Fed. Aid bronze markers of approved design are to be furnished by the State. One project marker will be placed by the contractor at each of the following stations: to wit: ~~51+46, 53+24, 92+60, 107+40, 115+55, 123+42~~ 51+63, 53+73, 99+69.58, 107+50.4, 115+55, 123+55.5



LAYOUT
Scale: 1" = 1000'

LENGTH OF F.A.P. 274-B	=	1800.84	
LENGTH OF BRIDGES	=	1711.0' = 0.324 Miles	0.341 Miles
LENGTH OF EMBANKMENT	=	1508'-10" = 0.285 "	0.285 "
LENGTH OF JOB	=	2021'-3" = 0.468 "	0.468 "

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	
Pamphlet A	Issued Sept. 1st, 1928 Approved June 1st, 1929
" B	Issued Nov. 1st, 1929
" C	July 1st, 1930
" D	Revised July 1st, 1928 Approved Nov. 24th, 1928
" E	Revised Jan. 1st, 1930
" F	Revised Aug. 1st, 1929
" G	Revised June 1st, 1929
" H	Revised Jan. 1st, 1930
" I	May 30th, 1925
" J	Revised Jan. 1st, 1929 Approved June 1st, 1925
" K	May 30th, 1925
" L	Revised Jan. 1st, 1929 Approved June 1st, 1929
" M	May 1st, 1931

SPECIAL PROVISIONS	
Item	No. of Sheets
Rip Rap	1
Pamphlet M	51
Earth Excavation	3
Concrete Aggregate	2
Precast Concrete Piling	3
Field Engineers Office	1
Aluminum Paint	1
Section 82	1
Structural Steel	1
Contractor Furnish All Material	1
Removal of Existing Structures	1
Relating to all types of work	4
" " Control of labor	3
" " Classification of labor	3
Revision-amendment to art. 2.7 of spec.	1

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

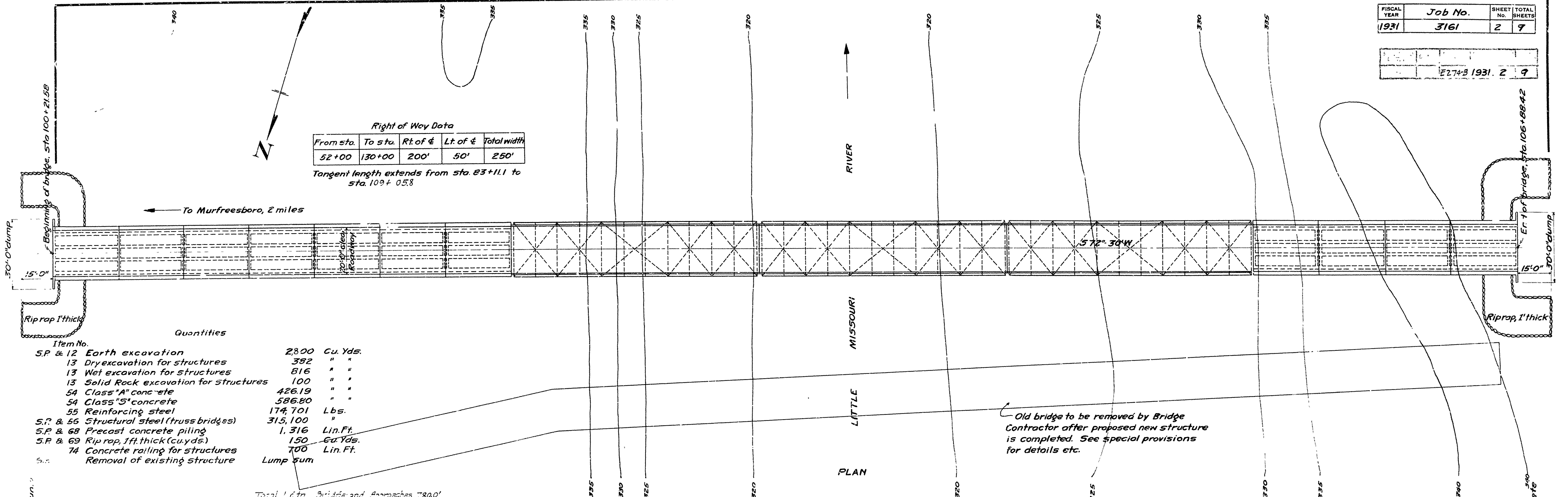
N.B. Laver
BRIDGE ENGINEER

BRIDGES No. 1622, 1623
& 1029

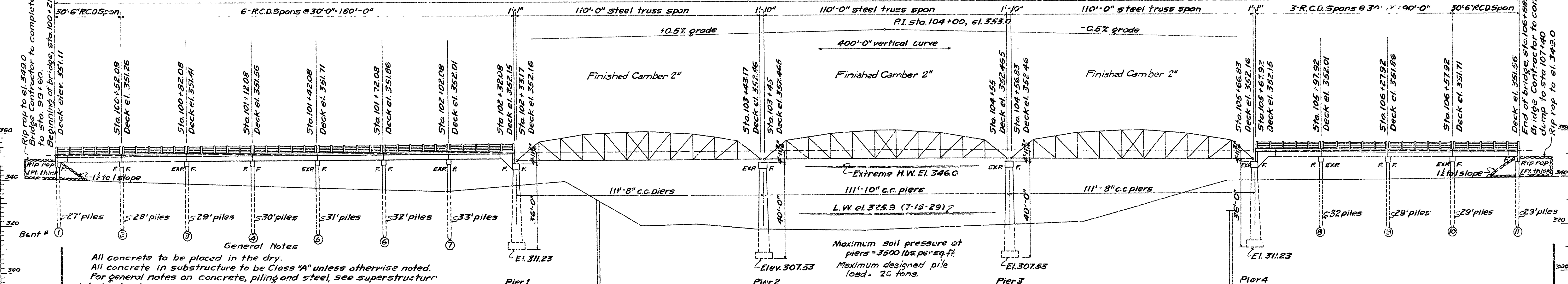
DRAWING NO. 3207

From sta.	To sta.	Rt. of C	Lt. of C	Total width
52+00	130+00	200'	50'	250'

Tangent length extends from Sta. 83+11.1 to Sta. 109+05.8



Total length of bridge = 666'-10"



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, piling and steel, see superstructure detail sheets.
 Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field.
 Structural steel to be given two field coats of aluminum paint (see special provisions).
 Expansion joints to be constructed as shown on layout sheet.
 Volume occupied by embedded pile heads to be included in pay quantities of concrete in caps.
 For details of substructure, see Drwg. No. 3209.
 For details of superstructure, see Drwg. Nos. 2273 & 2419.
 Specifications: Arkansas Standard Road and Bridge Specifications, adopted May 30, 1925 and revised.

Test Hole 1
 160' downstream from E of bridge
 Surface el. = 331.88
 Sand and silt to el. 322.88
 Coarse packed gravel to el. 320.38
 Hard clay or soap stone to el. 299.88
 Soft rock to el. 294.88

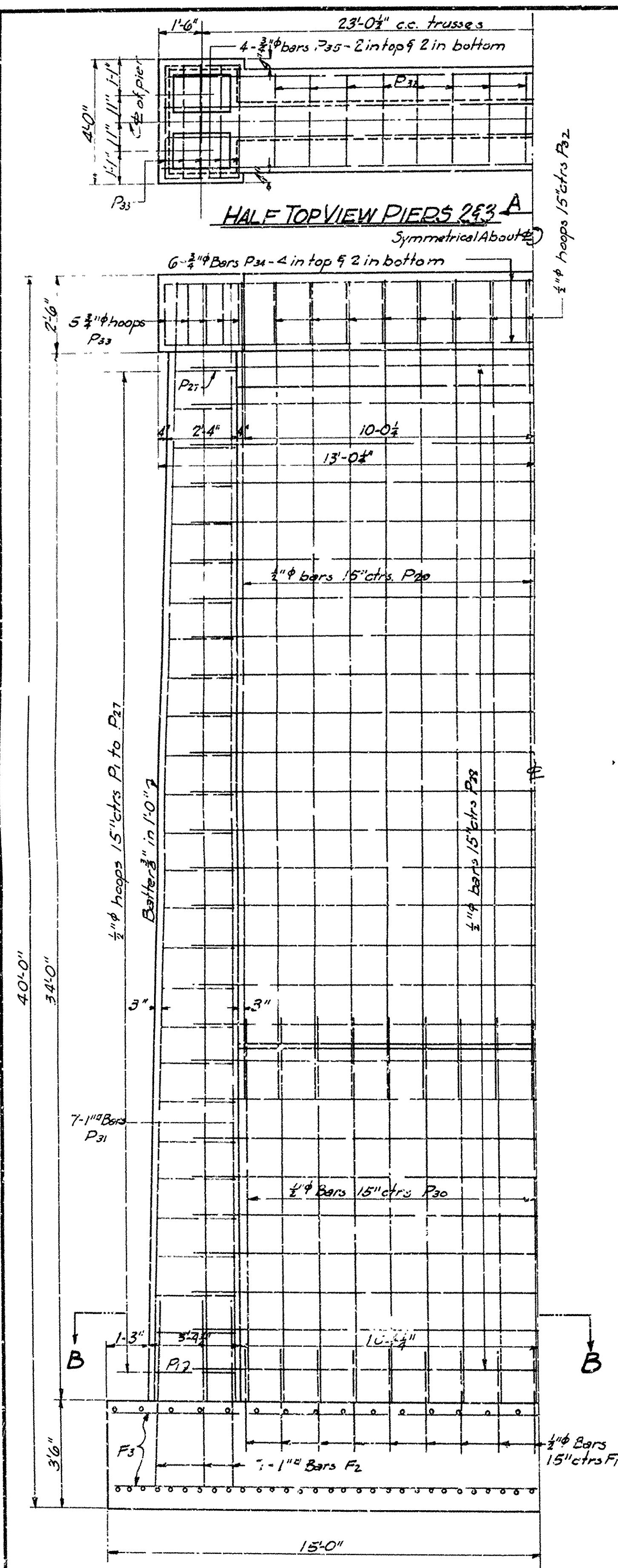
Test Hole 2
 160' downstream from E of bridge
 Surface elev. 326.58
 Coarse packed gravel to el. 316.58
 Hard clay or soap stone to el. 292.58
 Solid rock el. 292.58

Nearest bench mark elev. = 343.51 Top of anchor bolt downstream caisson - north end main span - Little Mo. River Br.
 Drainage area for bridges 1029, 1622 & 1623 = 400 sq. mi., mins.

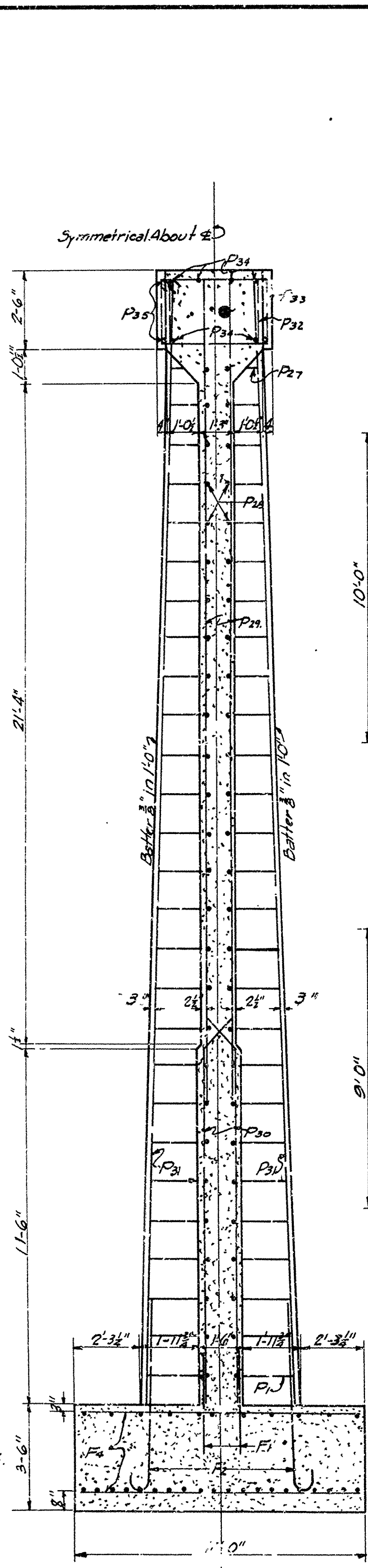
LAYOUT
 BR. OVER LITTLE MISSOURI RIVER
 MURFREESBORO-NASHVILLE ROAD
 PIKE CO.
 ROUTE 27 SEC. 4
ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: *W.B. Gower* Date: 5-3-31
 Traced By: *H.M.H.* Date: 5-7-31
 Checked By: _____ Date: _____
 BRIDGE NO. 1029 DRAWING NO. 3208

W.B. Gower
 BRIDGE ENGINEER

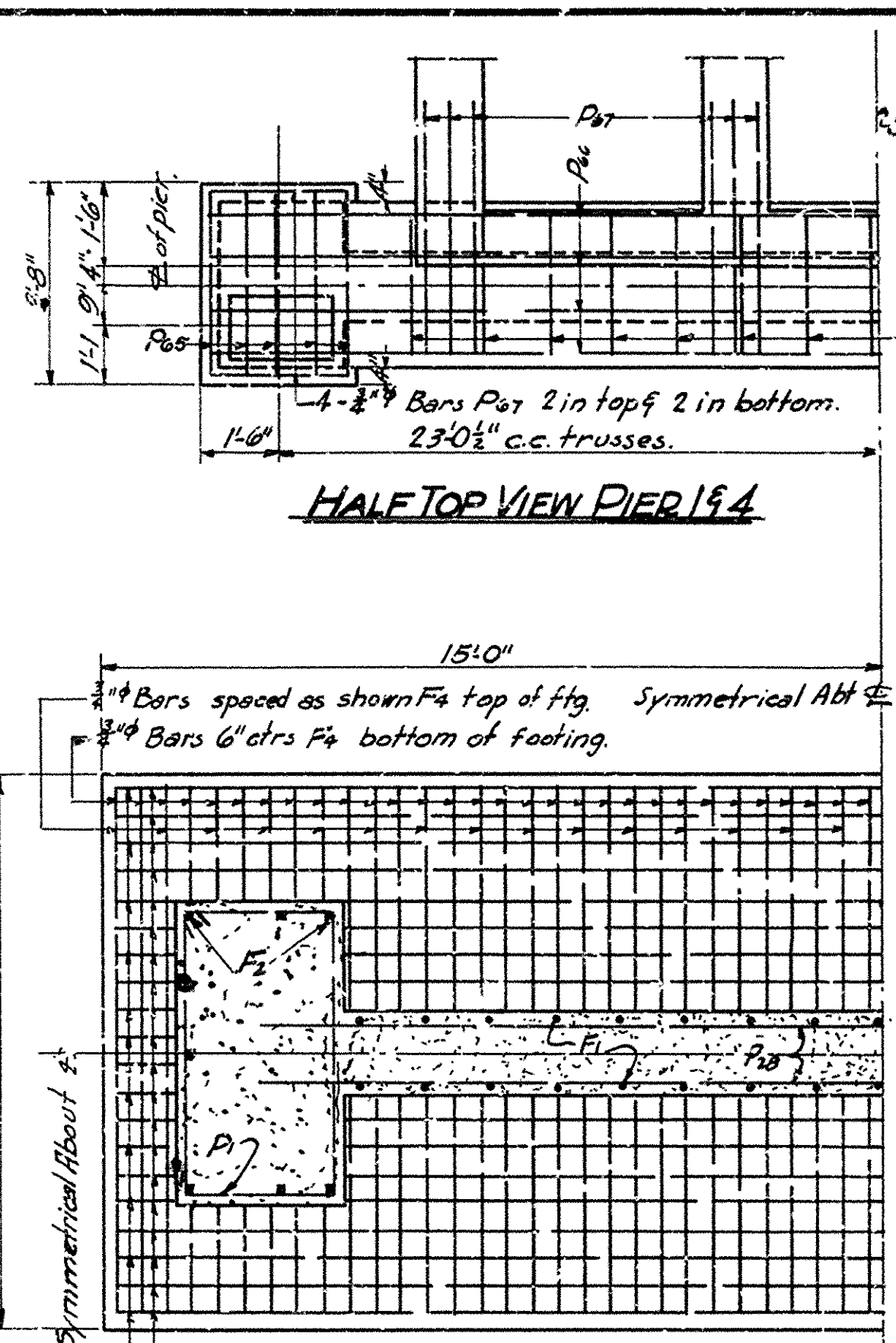
FISCAL YEAR	Jcb No.	SHEET TOTAL
F-274B 1931 3 7	3161	3 9



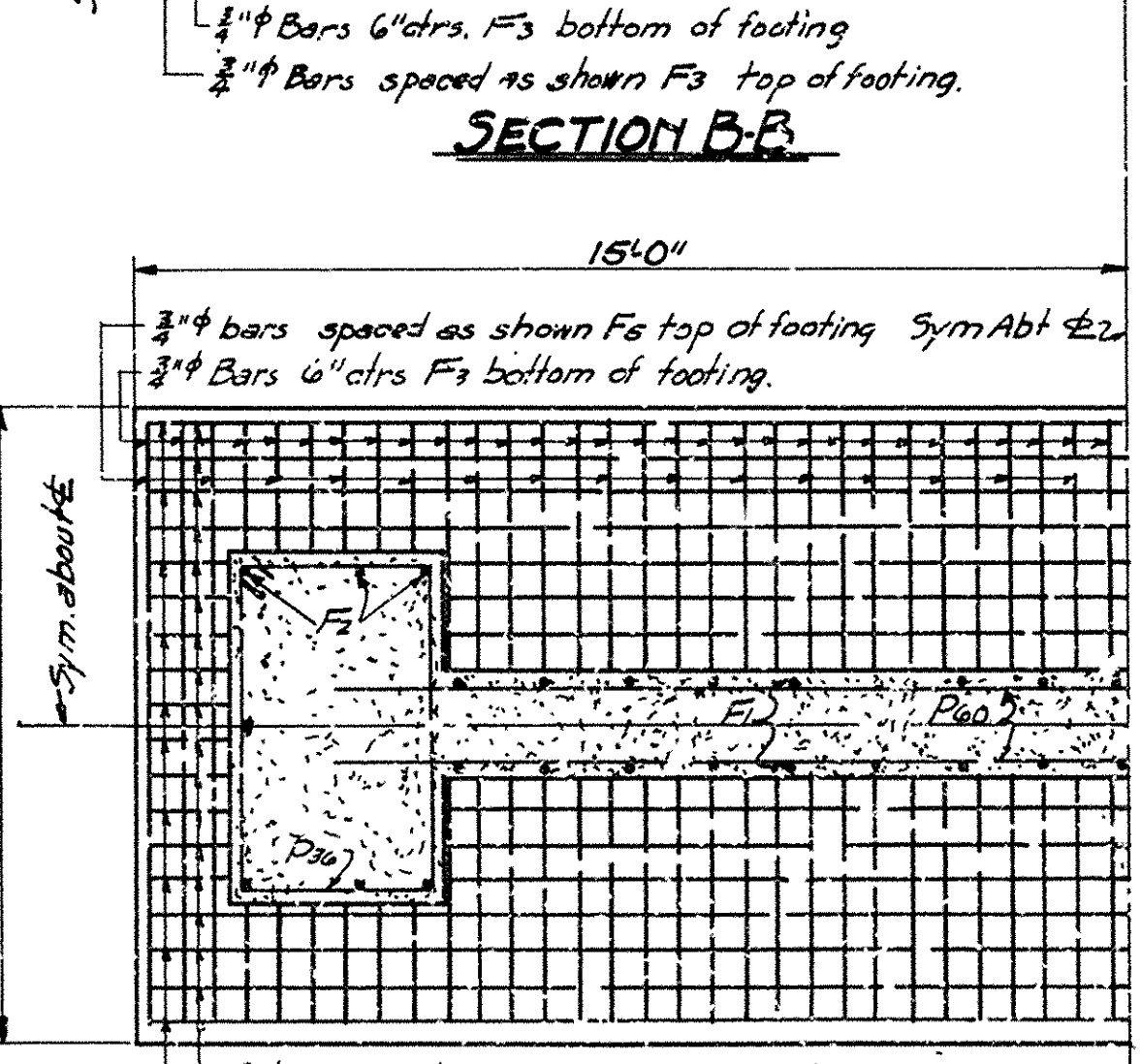
HALF TOP VIEW PIERS 263 A



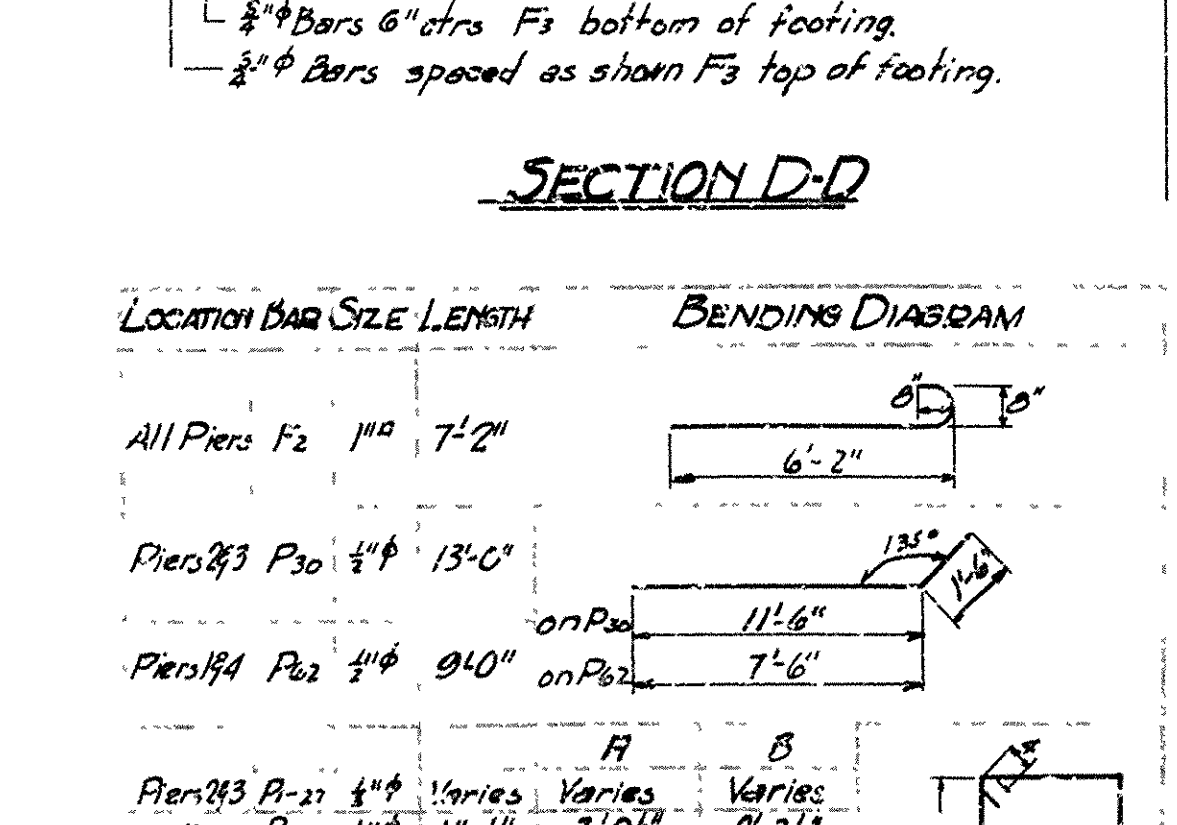
SECTION A-A



HALF TOP VIEW PIER 194

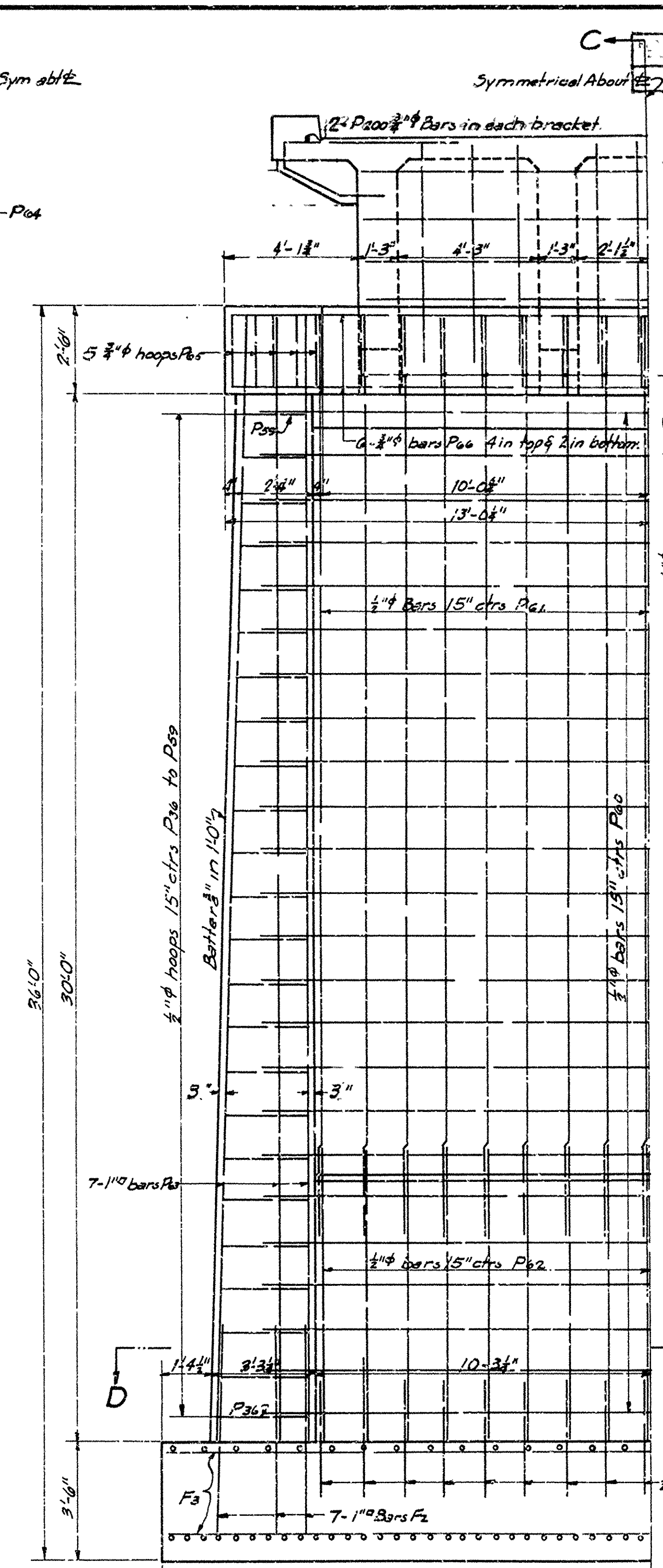


SECTION B-B

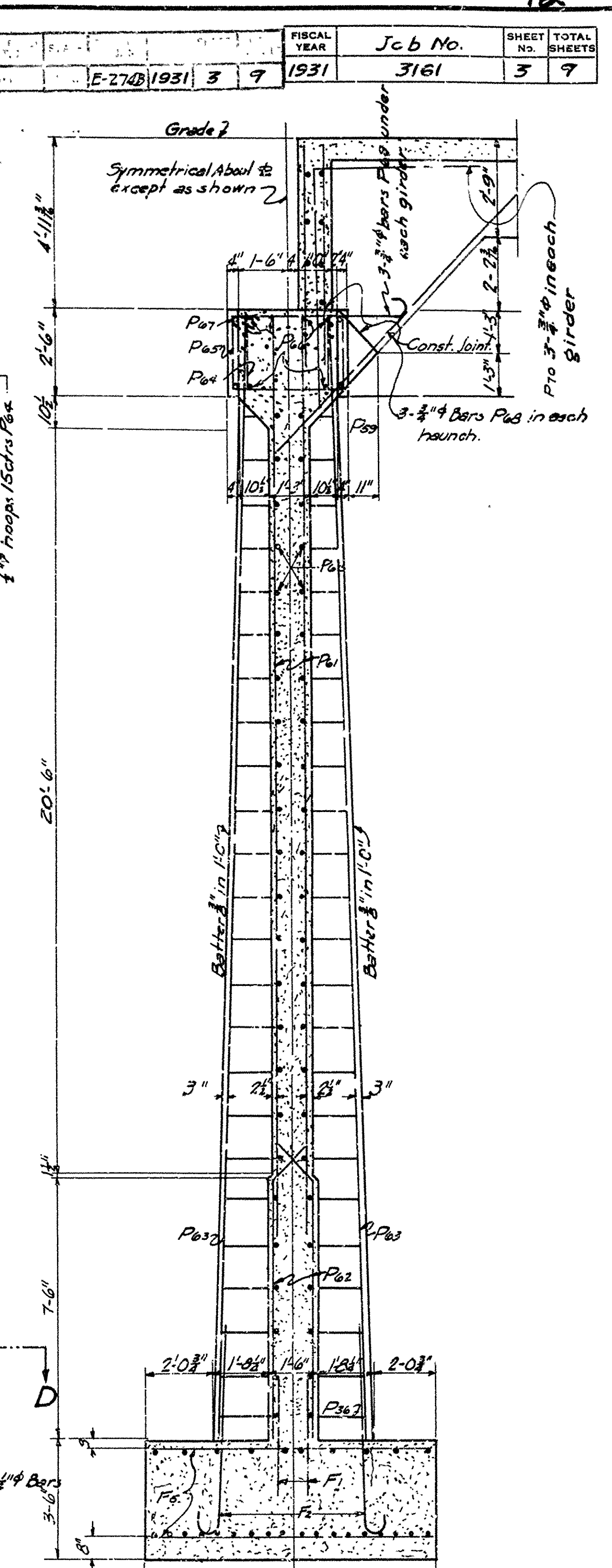


SECTION D-D

LOCATION	BAR SIZE	LENGTH	BENDING DIAGRAM
All Piers F ₂	1"Ø	7'-2"	
Pier 263 P ₃₀	3/4"	13'-0"	
Pier 194 P ₂₀	3/4"	9'-0"	
Pier 263 P ₂₁	3/4"	11'-0"	
Pier 263 P ₂₂	3/4"	11'-0"	
Pier 263 P ₂₃	3/4"	11'-0"	
Pier 263 P ₂₄	3/4"	11'-0"	
Pier 263 P ₂₅	3/4"	11'-0"	
Pier 263 P ₂₆	3/4"	11'-0"	
Pier 263 P ₂₇	3/4"	11'-0"	
Pier 263 P ₂₈	3/4"	11'-0"	
Pier 263 P ₂₉	3/4"	11'-0"	
Pier 263 P ₃₀	3/4"	11'-0"	
Pier 263 P ₃₁	3/4"	11'-0"	
Pier 263 P ₃₂	3/4"	11'-0"	
Pier 263 P ₃₃	3/4"	11'-0"	
Pier 263 P ₃₄	3/4"	11'-0"	
Pier 263 P ₃₅	3/4"	11'-0"	
Pier 263 P ₃₆	3/4"	11'-0"	
Pier 263 P ₃₇	3/4"	11'-0"	
Pier 263 P ₃₈	3/4"	11'-0"	
Pier 263 P ₃₉	3/4"	11'-0"	
Pier 263 P ₄₀	3/4"	11'-0"	
Pier 263 P ₄₁	3/4"	11'-0"	
Pier 263 P ₄₂	3/4"	11'-0"	
Pier 263 P ₄₃	3/4"	11'-0"	
Pier 263 P ₄₄	3/4"	11'-0"	
Pier 263 P ₄₅	3/4"	11'-0"	
Pier 263 P ₄₆	3/4"	11'-0"	
Pier 263 P ₄₇	3/4"	11'-0"	
Pier 263 P ₄₈	3/4"	11'-0"	
Pier 263 P ₄₉	3/4"	11'-0"	
Pier 263 P ₅₀	3/4"	11'-0"	
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Pier 263 P ₅₂	3/4"	11'-0"	
Pier 263 P ₅₃	3/4"	11'-0"	
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Pier 263 P ₆₁	3/4"	11'-0"	
Pier 263 P ₆₂	3/4"	11'-0"	
Pier 263 P ₆₃	3/4"	11'-0"	
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Pier 263 P ₆₇	3/4"	11'-0"	
Pier 263 P ₆₈	3/4"	11'-0"	
Pier 263 P ₆₉	3/4"	11'-0"	
Pier 263 P ₇₀	3/4"	11'-0"	
Pier 263 P ₇₁	3/4"	11'-0"	
Pier 263 P ₇₂	3/4"	11'-0"	
Pier 263 P ₇₃	3/4"	11'-0"	
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Pier 263 P ₇₇	3/4"	11'-0"	
Pier 263 P ₇₈	3/4"	11'-0"	
Pier 263 P ₇₉	3/4"	11'-0"	
Pier 263 P ₈₀	3/4"	11'-0"	
Pier 263 P ₈₁	3/4"	11'-0"	
Pier 263 P ₈₂	3/4"	11'-0"	
Pier 263 P ₈₃	3/4"	11'-0"	
Pier 263 P ₈₄	3/4"	11'-0"	
Pier 263 P ₈₅	3/4"	11'-0"	
Pier 263 P ₈₆	3/4"	11'-0"	
Pier 263 P ₈₇	3/4"	11'-0"	
Pier 263 P ₈₈	3/4"	11'-0"	
Pier 263 P ₈₉	3/4"	11'-0"	
Pier 263 P ₉₀	3/4"	11'-0"	
Pier 263 P ₉₁	3/4"	11'-0"	
Pier 263 P ₉₂	3/4"	11'-0"	
Pier 263 P ₉₃	3/4"	11'-0"	
Pier 263 P ₉₄	3/4"	11'-0"	
Pier 263 P ₉₅	3/4"	11'-0"	
Pier 263 P ₉₆	3/4"	11'-0"	
Pier 263 P ₉₇	3/4"	11'-0"	
Pier 263 P ₉₈	3/4"	11'-0"	
Pier 263 P ₉₉	3/4"	11'-0"	
Pier 263 P ₁₀₀	3/4"	11'-0"	



HALF ELEVATION PIER 194



SECTION C-C

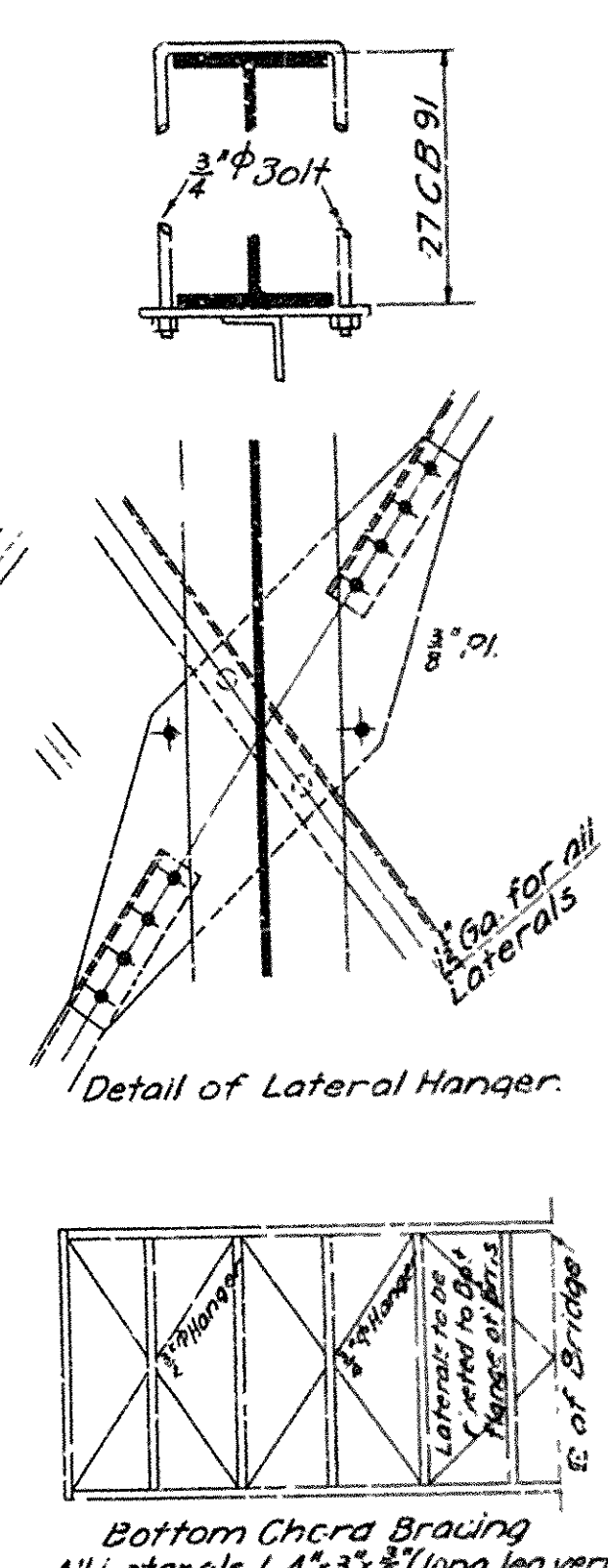
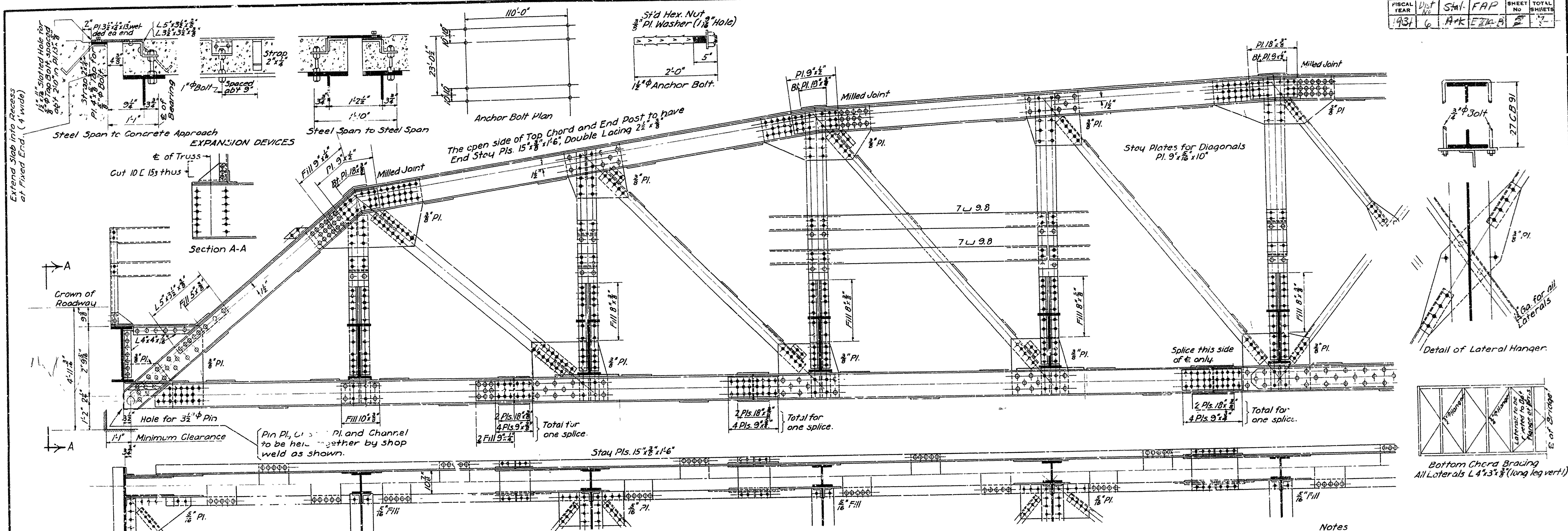
DETAILS OF PIERS
FOR BRIDGE OVER LITTLE MISSOURI RIVER
ON MURFREESBORO-NASHVILLE ROAD
PIKE COUNTY
ROUTE 27 SEC. 4

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: *Not* Date: 2-6-31
Traced By: *Not* Date: 5-2-31
Checked By: *Not* Date: *Not*
BRIDGE NO. 1029 DRAWING NO. 3209

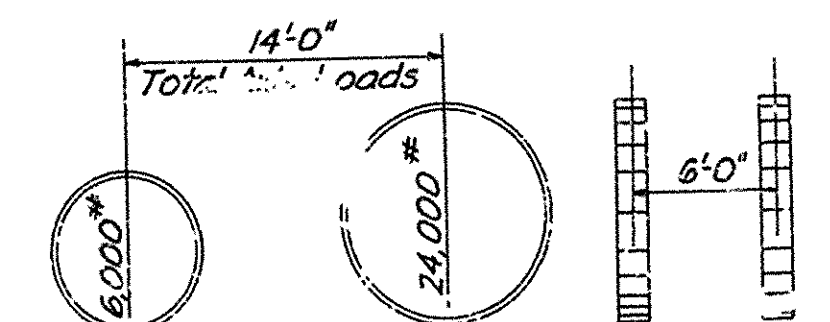
W.B. Hansen
BRIDGE ENGINEER

FISCAL YEAR	Dist No	Stat.	FAP	SHEET NO	TOTAL SHEETS
1934	6	Ark	ETIA-B	2	1

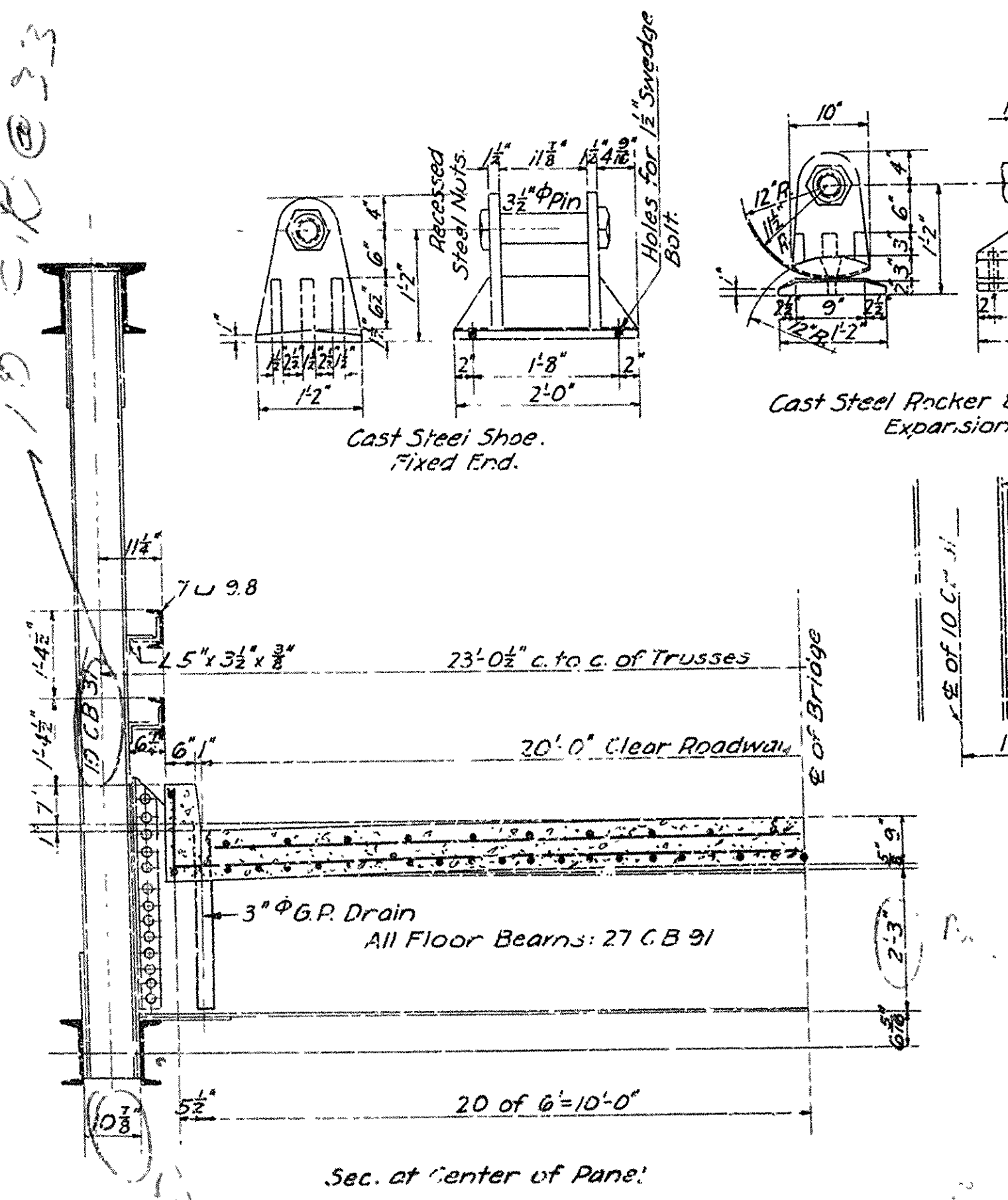
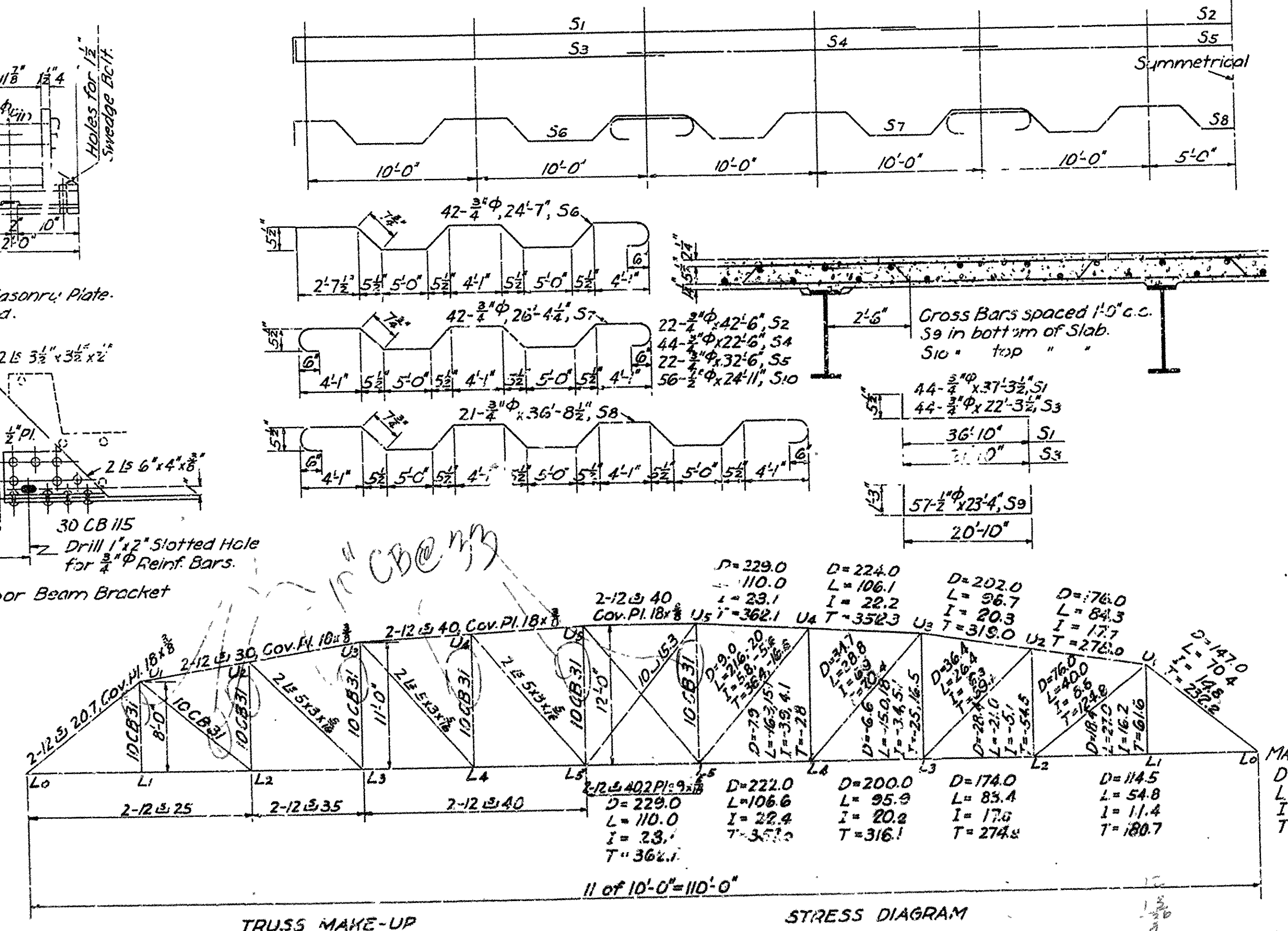


Notes

Rivets $\frac{3}{4}$ ". Open holes $\frac{13}{16}$ ".
All holes in truss connections to be sub-punched $\frac{9}{16}$ " and reamed to size while
truss is assembled; this applies to field as well as shop rivets.
Floor beam connections to be sub-punched $\frac{9}{16}$ " and reamed to a metal template.
All field connections shall be riveted.
Shop paint: After being completely assembled and shop work finished, all
pieces shall be given one coat of red lead and raw linseed oil before shipment.
Field paint: Apply two coats of different colors as specified by the engineer.
Floor Slab: Concrete to be Class "S". One inch has been added for wear.
All floor beams to be milled to exact length after riveting framing angles.
Shapes of equal or greater strength may be substituted for shapes shown,
but payment will be made in accordance with sizes shown on this plan.
This drawing shows general features of design only.
Shop drawings shall be made in compliance with specifications, submitted and
approved before fabrication is begun.
Specifications: Ark. Standard Road & Bridge Specifications, adopted May
30th, 1925 & Revised.



ESTIMATED QUANTITIES
Concrete, Class "S" 68.6 Cu. Yd.
Reinforcing Steel 13,950 Lbs.
Structural Steel 103,700 "
Note: Expansion Devices not
included.

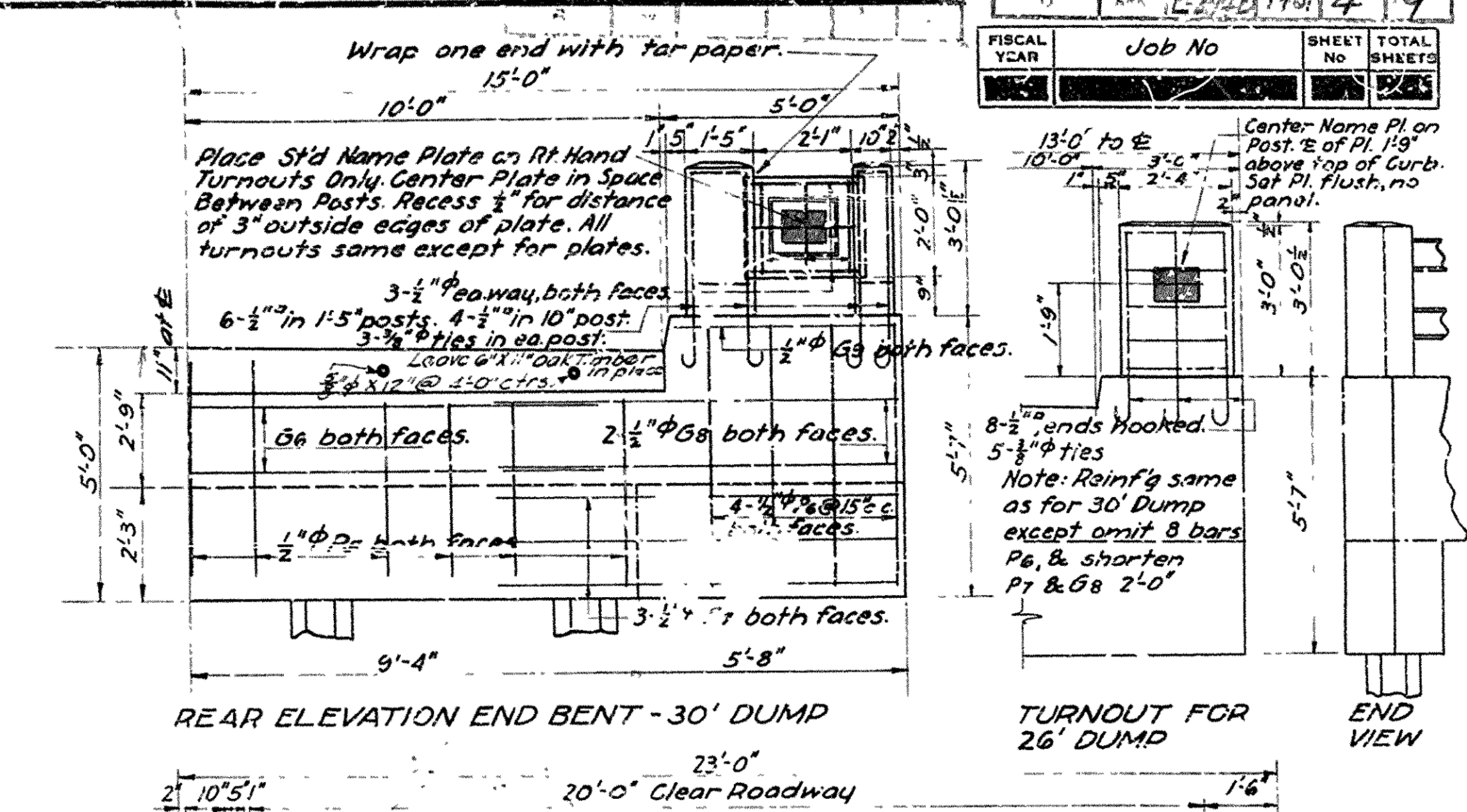


STANDARD PLAN
110' LOW TRUSS SPAN
20' CLEAR ROADWAY

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

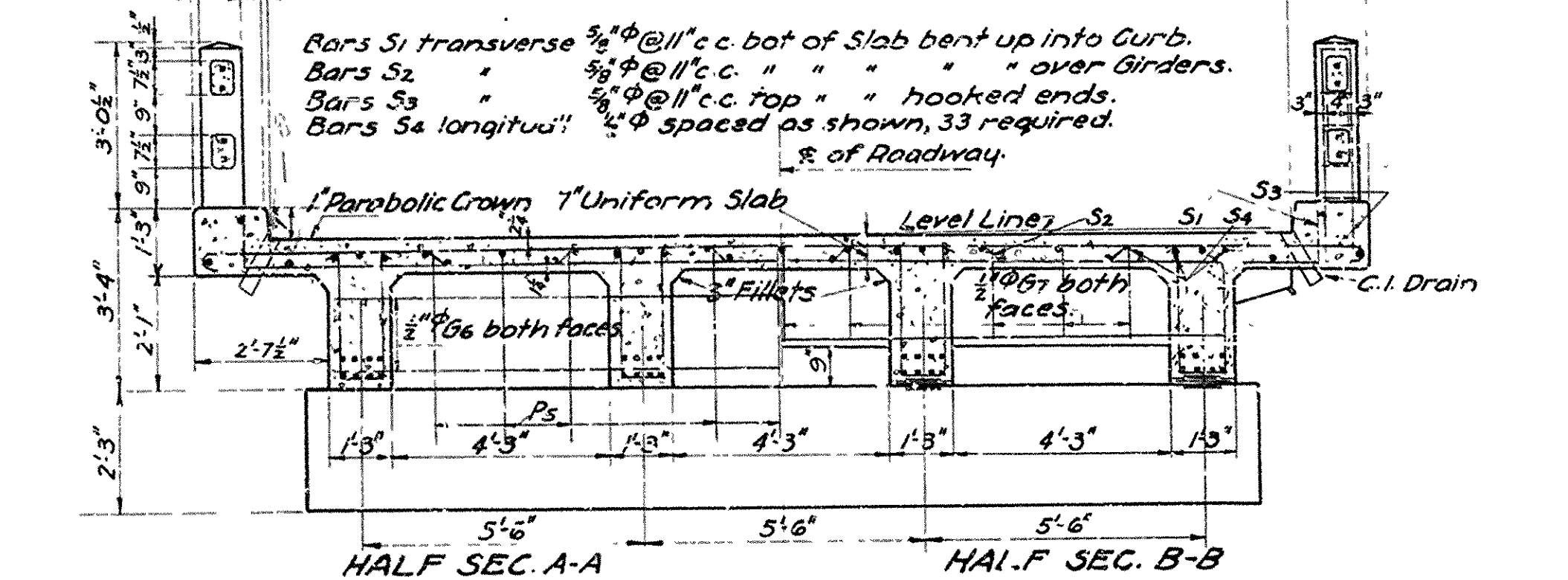
Drawn By: A Date: 4-20-30
Traced By: JA Date: 4-26-30
Checked By: _____ Date: _____
BRIDGE NO. DRAWING NO. 2419

BR No. '67' indexed & reloaded on 8/7/61
No. Russellville is BR 5264 Job 8-584



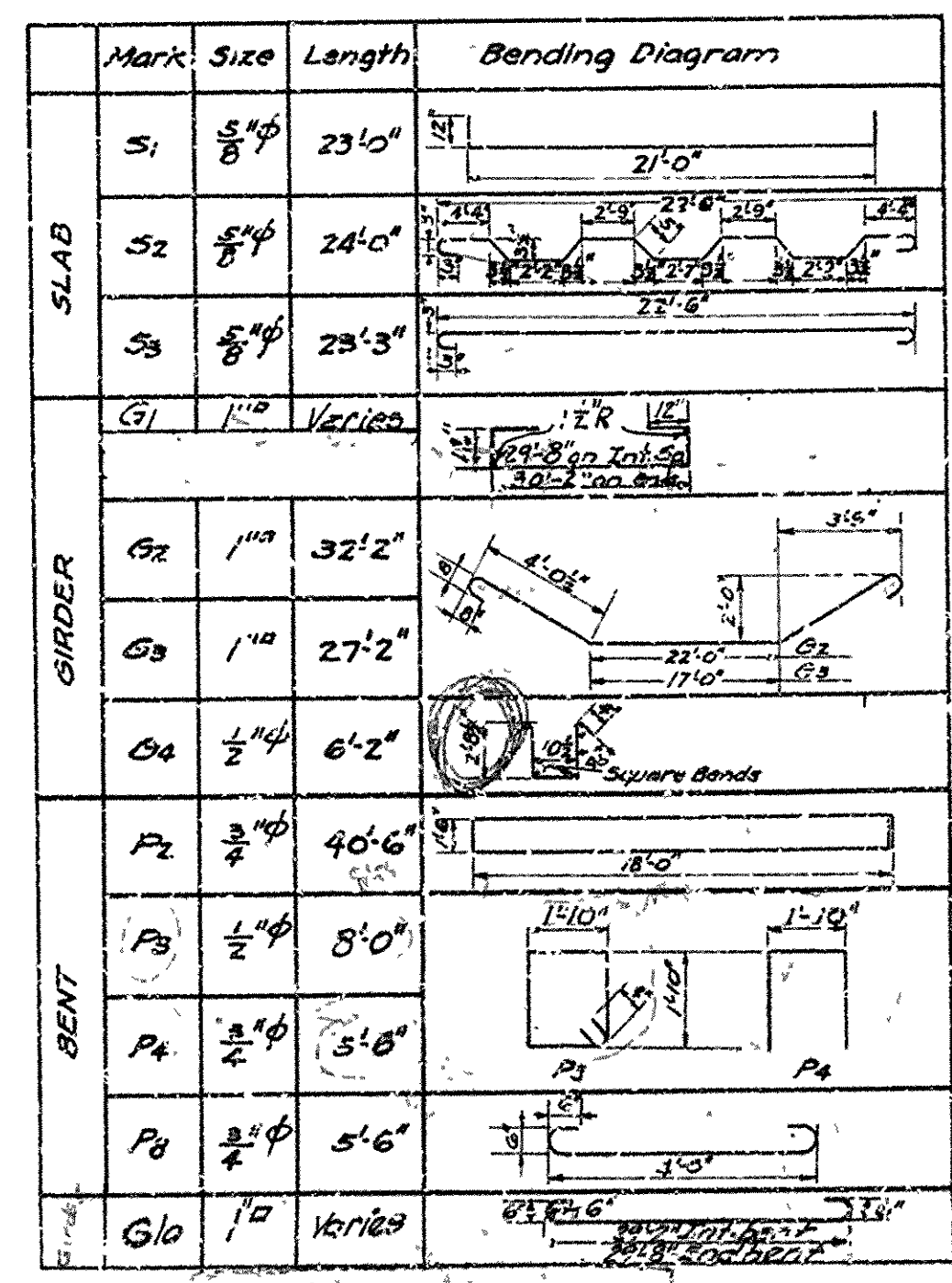
REAR ELEVATION END BENT - 30' DUMP

TURNOUT FOR
26' DUMP



HALF SEC. A-A

SEC. ON E



DETAIL OF CAST IRON DRAIN

SEE DRAWING

HALF ELEVATION FIXED BENT
Countersunk holes

HALF ELEVATION EXP. BENT

General Notes

All exposed corners to have $\frac{3}{4}$ " chamfer unless otherwise noted.

Precast concrete handrail to be 1:1:2 mix. Max aggregate is $\frac{3}{8}$ ".

All concrete, except handrail, to be Class "S".

Reinforcing steel to be deformed bars of structural or intermediate grade.

Shop list 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 and revised.

Unit Stresses: $f_s = 16,000 \frac{lb}{sq. in.}$, $f_c = 750 \frac{lb}{sq. in.}$, $n = 15$

Loading: 1115

Given 4-30-30 by 14e

DETAIL OF
STANDARD 30' R.C.D. GIRDER
4 GIRDER TYPE-4 PILE BENT
20 0 CLEAR ROADWAY

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: ELK Date: 3-7-30
 Traced By: SR Date: 3-12-30
 Checked By: _____ Date: _____
 Scale: As noted.
 BRIDGE NO. _____ DRAWING NO. 2273