FISCAL YEAR	SHEET NO.	JOB No.	TOTAL SHEETS
1930	1	3127	30

FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	265-D	1930	1	30

STATE OF ARKANSAS

STATE HIGHWAY COMMISSION

PLAN OF PROPOSED BRIDGES ON GURDON-ARKADELPHIA ROAD CLARK COUNTY

ROUTE 51 SEC. 1

JOB № 3127

FEDERAL AID PROJECT NO. 265-D

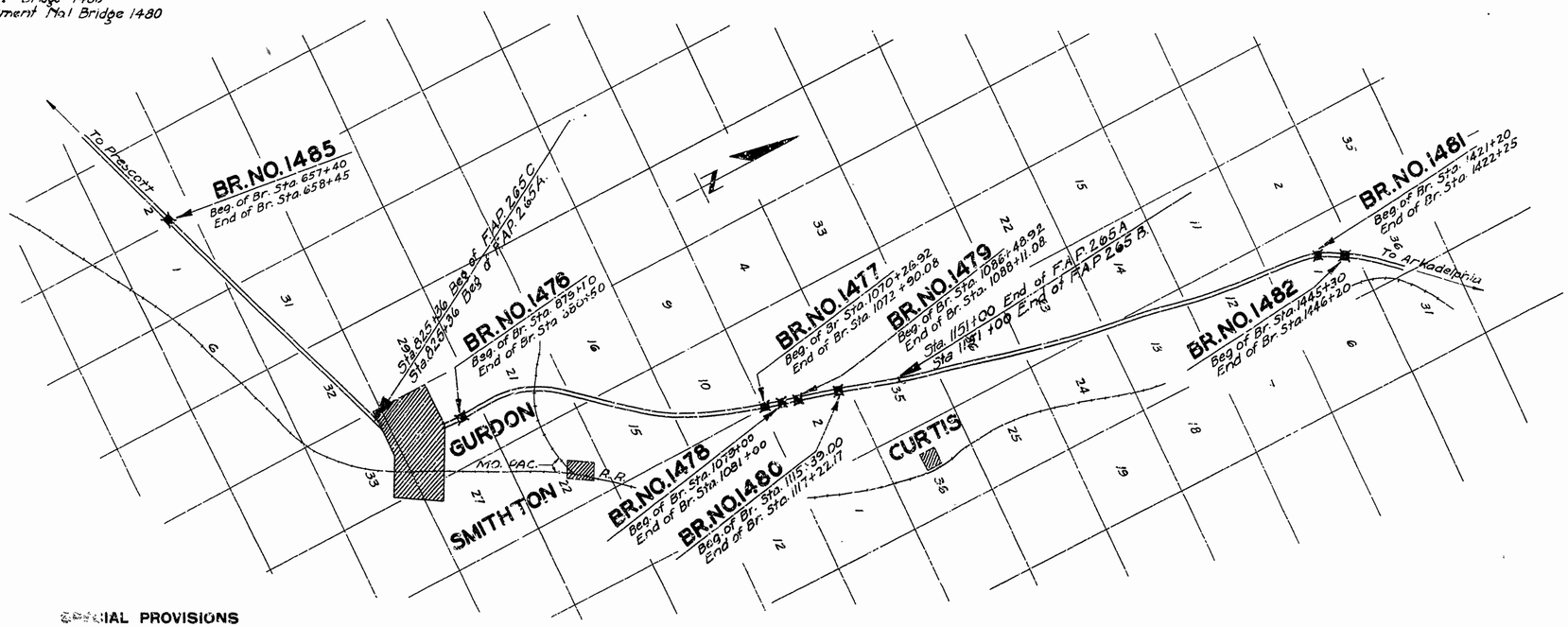
INDEX OF SHEETS

QUANTITIES

*	Item No. 5	Earth Excavation	5,798 Cu. Yds.
	" " 13	Dry Excavation for Structures	4,276 " "
	" " 13	Wet " " "	3,916 " "
	" " 54	Class "A" Concrete	2,185.11 " "
	" " 54	" "S" "	1,343.95 " "
	" " 55	Reinforcing Steel	580,975 Lbs.
	" " 56	Structural Steel (Trusses)	307,510 "
*	" 52	Untreated Timber Piling	10,946 Lin. Ft.
	" " 74	Concrete Railing for Structures	1,948 " "

* Non Participating In Federal Aid

Federal Aid Markers of Approved Design Furnished By the State to be placed at each End of the Bridge.



LAYOUT

Scale: 1"=4000'

GROSS & NET LENGTH OF PROJECT = 1248'-6" - 0.236 Mi.
LENGTH OF BRIDGES = 1248'-6"
LENGTH OF EMBANKMENT = 400'-8
LENGTH OF JOB = 1648'-6"

Specifications approved by Chief, Bureau of Public Roads, September 26, 1925, and adopted by State Highway Commission May 30, 1925 with revisions and Special Provisions as follows:

REVISIONS

Pamphlet	A	Revised Sept. 1st, 1928	Approved June 1st, 1929
"	B	Revised Nov. 1st, 1929	
"	C		
"	D	Revised July 1st, 1925	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	Revised Mch. 1st, 1930	
"	J	Revised Jan. 1st, 1929	Approved June 1st, 1929
"	K		
"	L	Revised Jan. 1st 1929	Approved June 1st, 1929

SPECIAL PROVISIONS

Item	No. of Sheets
Pamphlet I	
Earth Excavation	3
Untr'd Timber Piling	12
Engineer's Office	1

APPROVED
[redacted]
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED
[redacted]
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED
[redacted]
CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED
[redacted]
CHAIRMAN - STATE HIGHWAY COMMISSION

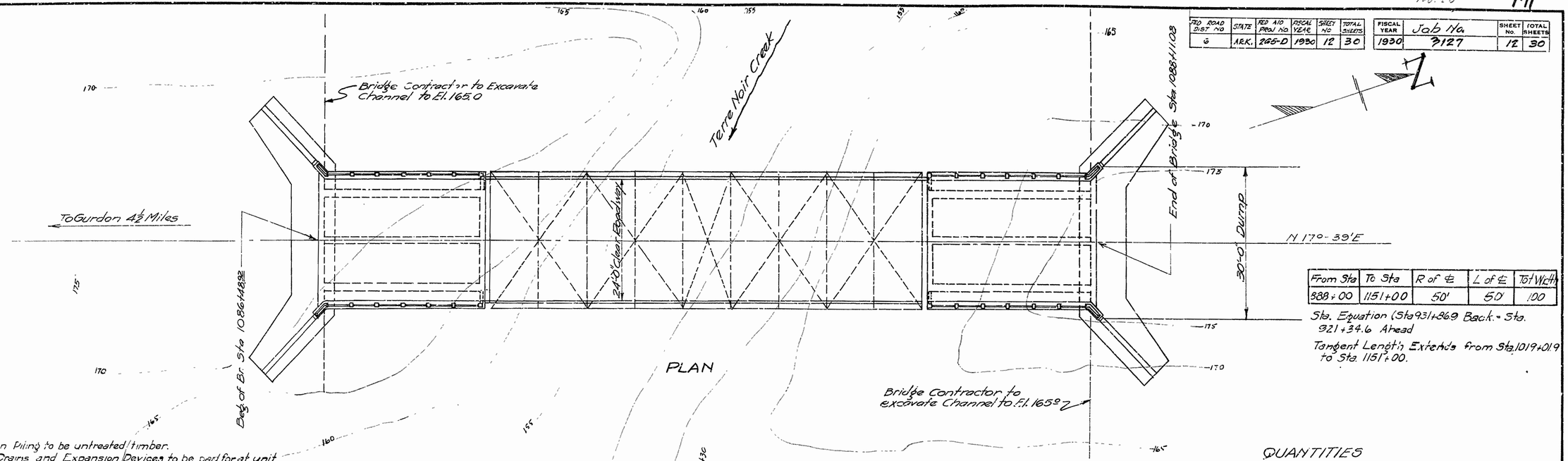
APPROVED
[redacted]
STATE HIGHWAY ENGINEER

[redacted]
BRIDGE ENGINEER

BRIDGES No. 1485, 1476, 1477, 1478, 1479, 1480, 1481 & 1482 DRAWING No. 2720

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	265-D	1930	12	30

FISCAL YEAR	Job No.	SHEET No.	TOTAL SHEETS
1930	3127	12	30



From Sta	To Sta	R of ℄	L of ℄	Tot Width
888+00	1151+00	50'	50'	100

Sta. Equation (Sta 931+36.9 Back. = Sta. 921+34.6 Ahead

Tangent Length Extends from Sta. 1019+01.9 to Sta. 1151+00.

Foundation Piling to be untreated timber.
Roadway Drains and Expansion Devices to be paid for at unit price bid for reinforcing steel
Rail Posts to be Class "S" Concrete
Precast Concrete Handrails to be 1:1:2 Mix. Max. Aggregate ⅝"

GENERAL NOTES

All exposed corners to have ¾" chamfer unless otherwise noted.
All concrete in substructure to be Class "A"; in superstructure Class "S" except handrail.
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 concrete in substructure to be poured in the dry.
Specifications: Arkansas Standard Road & Bridge Specifications adopted May 30, 1925 and revised
Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field.
Volume occupied by embedded pile heads not included in pay quantity of concrete in footings.
Bridge contractor to construct Embankment at "Bridge ends."
Bridge Contractor to construct Channel as indicated.
For Details of 35' R.C.D. Girder Spans See Dwg. No. 2314
For Details of 30' Low Truss Spans See Dwg. No. 2447
For Details of Abutments See Dwg. No. 2732
For Details of piers, See Dwg. No. 2733.

Drainage area = 23.39 miles; c = 0.6
Elev. B.M. = 167.46 on 14" water oak. 125' left Sta. 1078+00.

QUANTITIES

Item No.	S.P.#			
"	"	13	Dry Excavation for Structures	822 " "
"	"	13	Wet " " "	314 " "
"	"	54	Class "A" Concrete	380.45 " "
"	"	54	" "S" "	1.5551 " "
"	"	55	Reinforcing Steel	70486 Lbs.
"	"	56	Structural Steel	90370 "
"	SP# 52		Untreated Timber Piling	2718 Lin. Ft.
"	"	74	Concrete Railing	145 " "

Test Hole Data
Surface Elevation = 181.99
9'-0" Fine Sand
6'-0" Fine Gravel.
11'-0" Hard Blue Clay.

Revised 11-12-30 by J.E. Clyde
B.M. and drainage area.

LAYOUT
OF BRIDGE OVER TERRE NOIR CREEK
GURDON-ARKADELPHIA ROAD
CLARK CO.

ROUTE 51 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: [illegible] Date: 5-8-30
Traced By: [illegible] Date: 5-22-30
Checked By: [illegible] Date: 5-23-30
Scale: 1 in. = 10'-0"

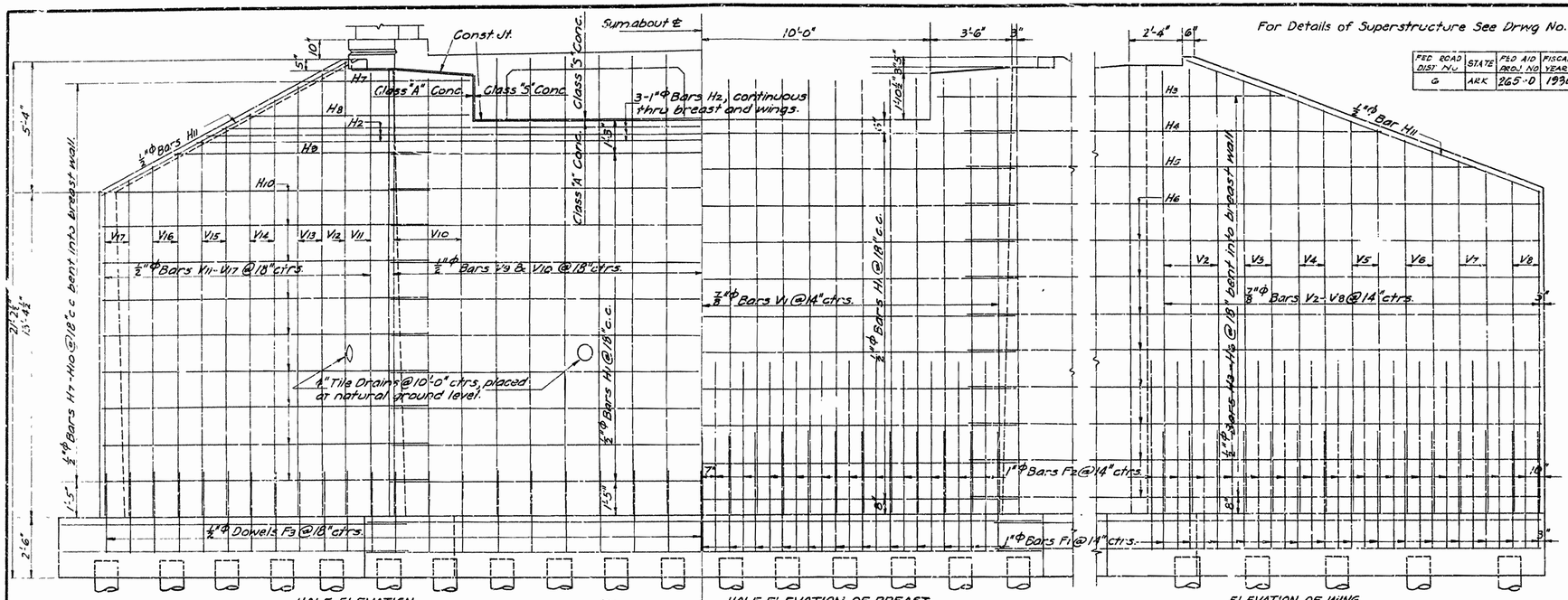
BRIDGE NO. 1479 DRAWING NO. 2731

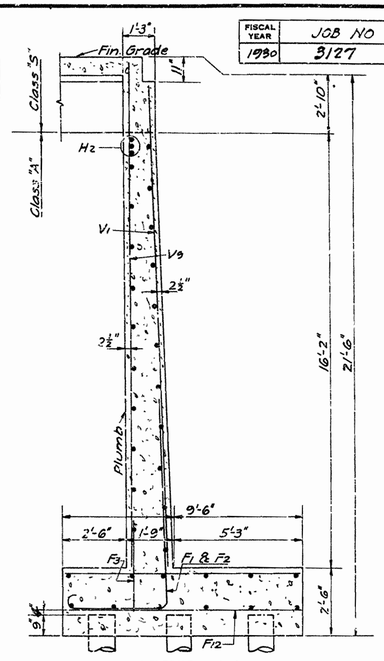
H.H. Grant
BRIDGE ENGINEER

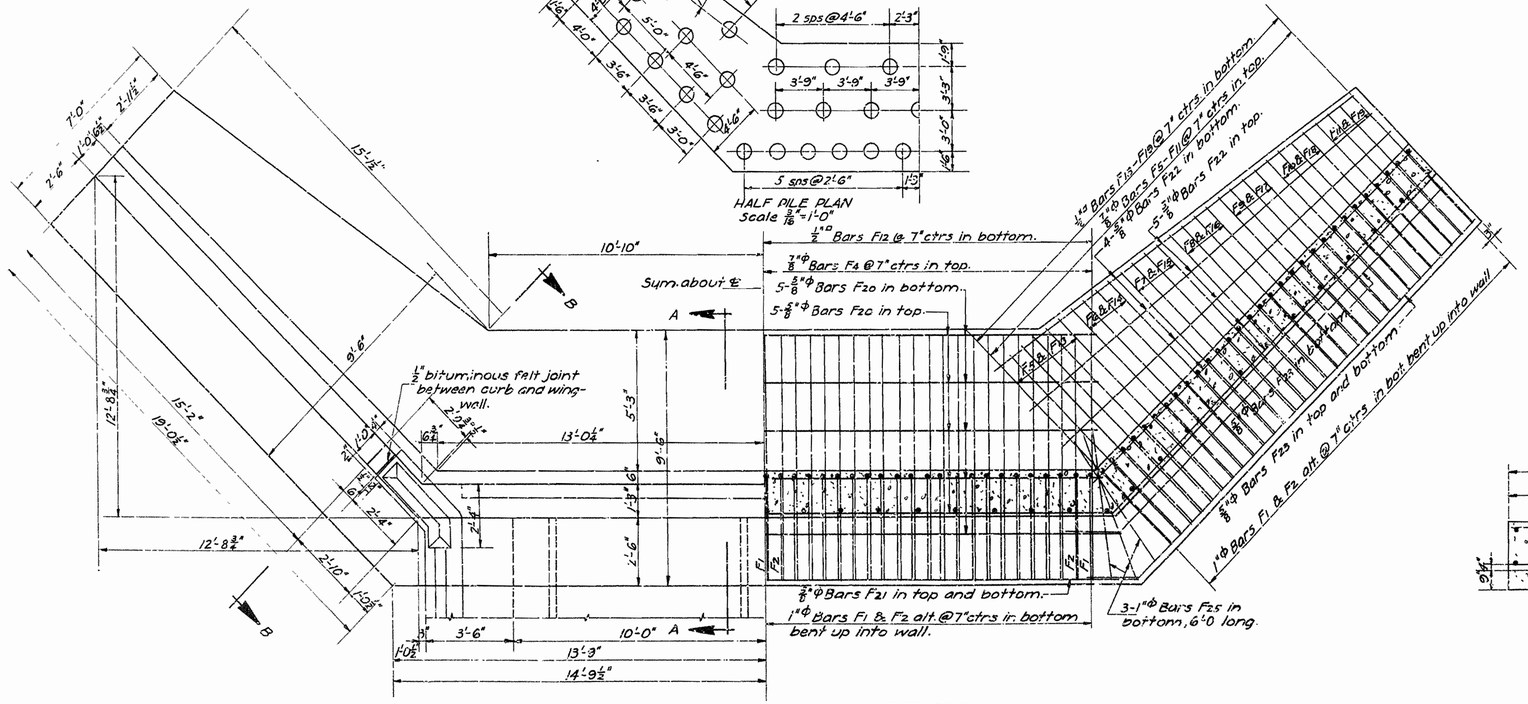
FISCAL YEAR	JOB NO	SHEET No.	TOTAL SHEETS
1930	3127	13	30

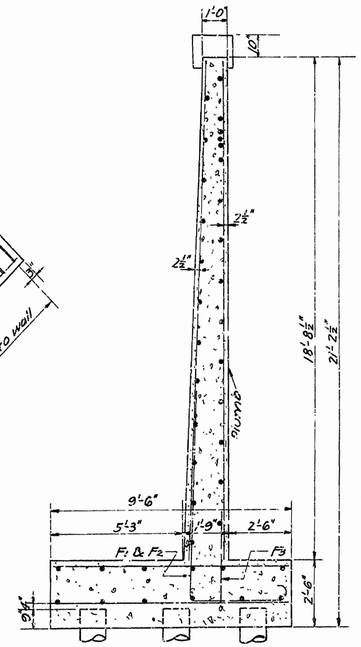
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	265-D	1930	13	30

For Details of Superstructure See Drwg No.

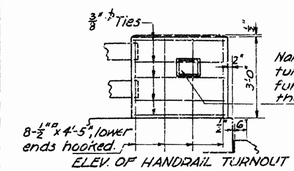








Mark	Size	Length	Bending Diagram A	Bending Diagram B
F1	1"Φ	9'-4"	4'-10"	2¼"
F2	1"Φ	12'-3"	7'-9"	3¾"
F23	5/8"Φ	20'-0"	18'-0"	2'-0"
F24	5/8"Φ	20'-9"	18'-9"	2'-0"
H3	1/2"Φ	9'-3"	6'-0"	3'-3"
H4	"	12'-3"	10'-3"	2'-0"
H5	"	16'-3"	14'-3"	2'-0"
H6	"	19'-0"	17'-0"	2'-0"
H7	"	7'-9"	4'-6"	3'-3"
H8	"	11'-9"	8'-6"	3'-3"
H9	"	15'-0"	13'-0"	2'-0"
H10	1/2"Φ	19'-8"	17'-8"	2'-0"
H2	1"Φ	47'-3"	10'-0" 27'-3" 10'-0"	



Name plates on right hand turnouts only. To be furnished Contractor by the State.

DETAILS OF ABUTMENTS
BRIDGE OVER TERRE NOIR CREEK
GURDON-ARKADELPHIA ROAD

ROUTE 51 SEC. 1

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

Drawn By: HB. Date: 5-21-30
Traced By: JA. Date: 5-22-30
Checked By: W.G.D. Date: 5-23-30

Scale: 3/8 in. = 1 ft. except as noted.

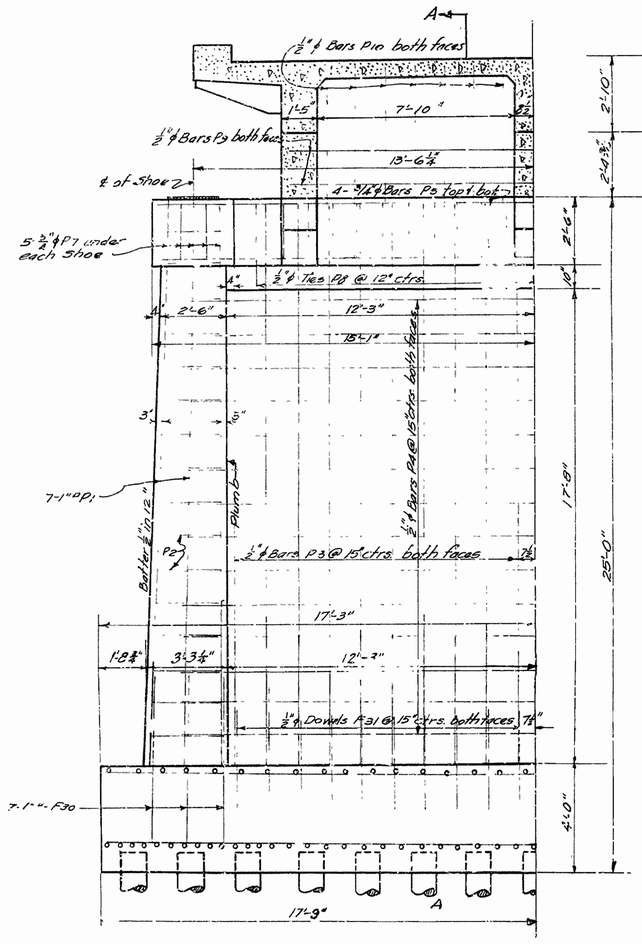
BRIDGE NO. 1479

DRAWING NO. 2752

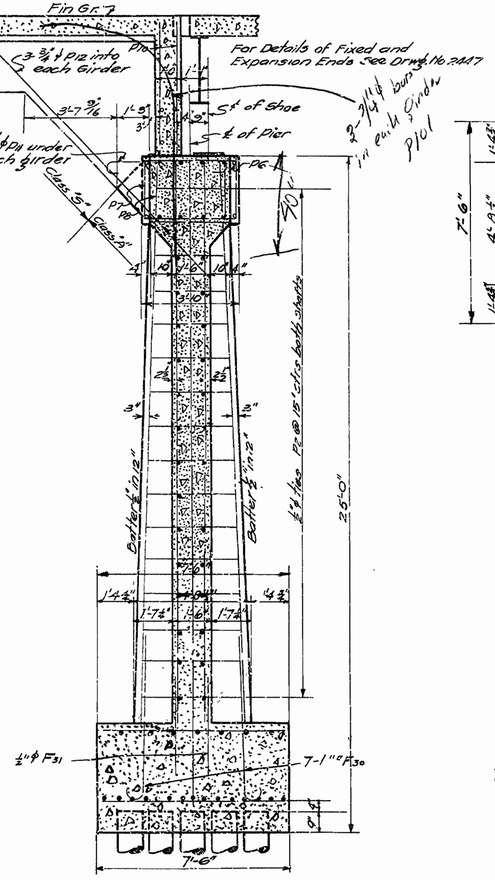
W. G. Dunn
BRIDGE ENGINEER

FISCAL YEAR	Job No		SHEET No	TOTAL SHEETS
1930	3127		14	30
FED ROAD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
6	ARK.	265-D	1930	14	30

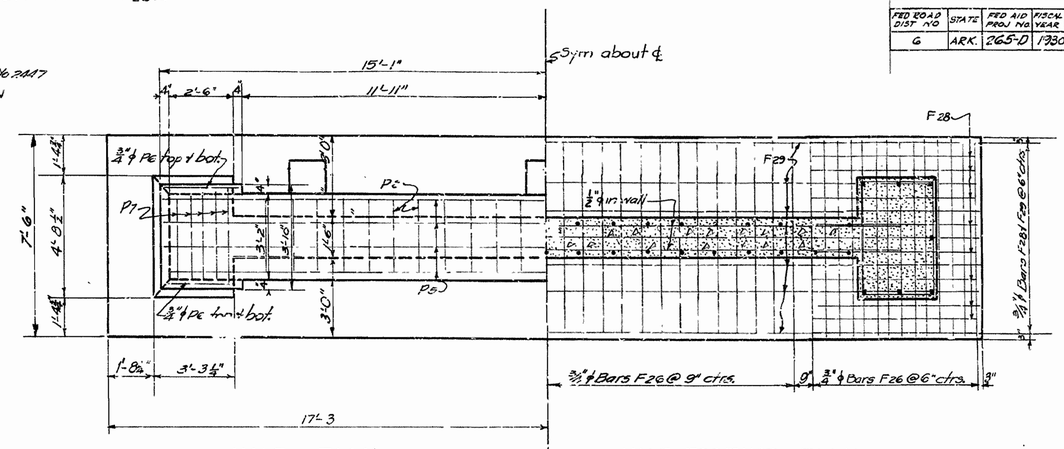
For Details of 30' Low Truss Span see Drwg. No. 2447
" " " 35' R.C.D Girder " " " 2314



HALF ELEVATION

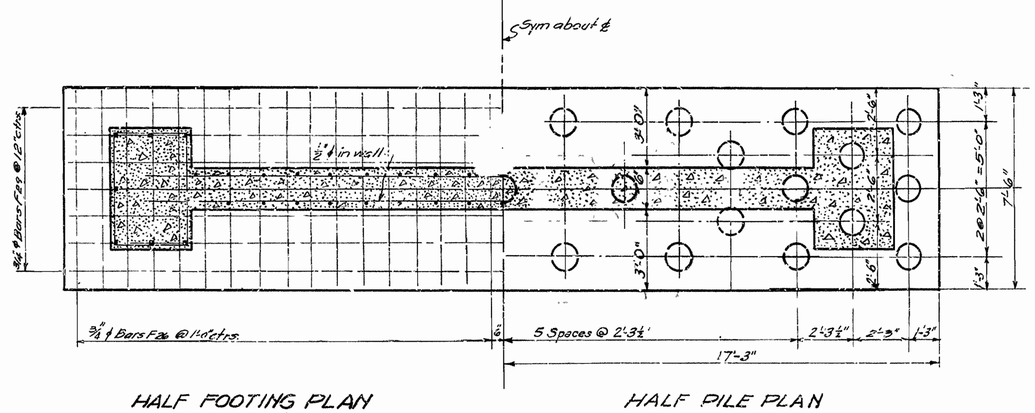


SECTION A-A



HALF PLAN

HALF FOOTING PLAN
Showing steel in bottom



HALF FOOTING PLAN
Showing Steel in top

HALF PILE PLAN

Mark	Size	Length	Bending Diagram
F30	1" ϕ	7'-3"	6'-3"
			A / B
P2	⅜" ϕ	Varies 4'-6" / 12'-8"	Varies by 1½" from 2'-4½" to 2'-6½" / Varies by 3" from 2'-4½" to 2'-6½"
P7	⅜" ϕ	12'-1"	3'-7" / 2'-1½"
P8	½" ϕ	10'-9"	2'-1" / 2'-1½"
P11	¾" ϕ	5'-6"	4'-6"

See Drwg # 2726 for diagram

DETAILS OF PIERS
FOR BRIDGE OVER TERRE NOIR CREEK
GURDON ARKADELPHIA ROAD
CLARK CO.
ROUTE SEC.

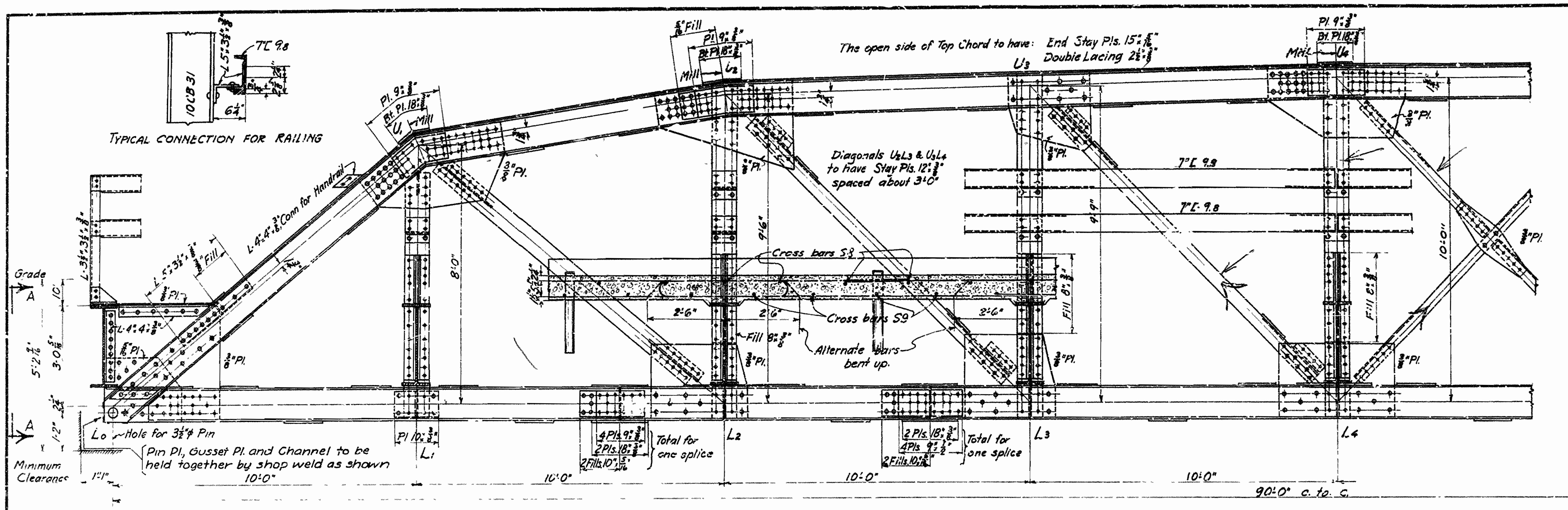
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

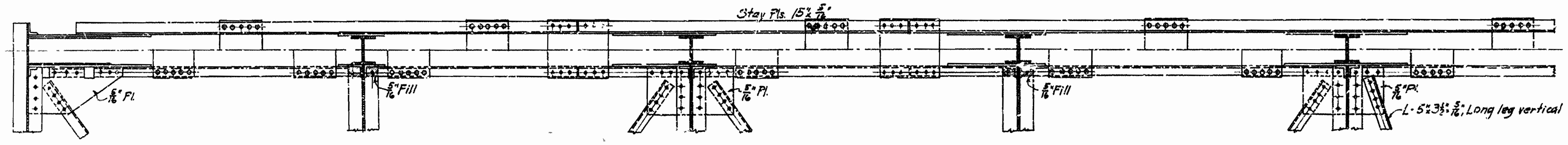
Drawn By: Austin Date: 5-22-30
Traced By: A.L.W. Date: 5-23-30
Checked By: W.O.D. Date: 5-27-30

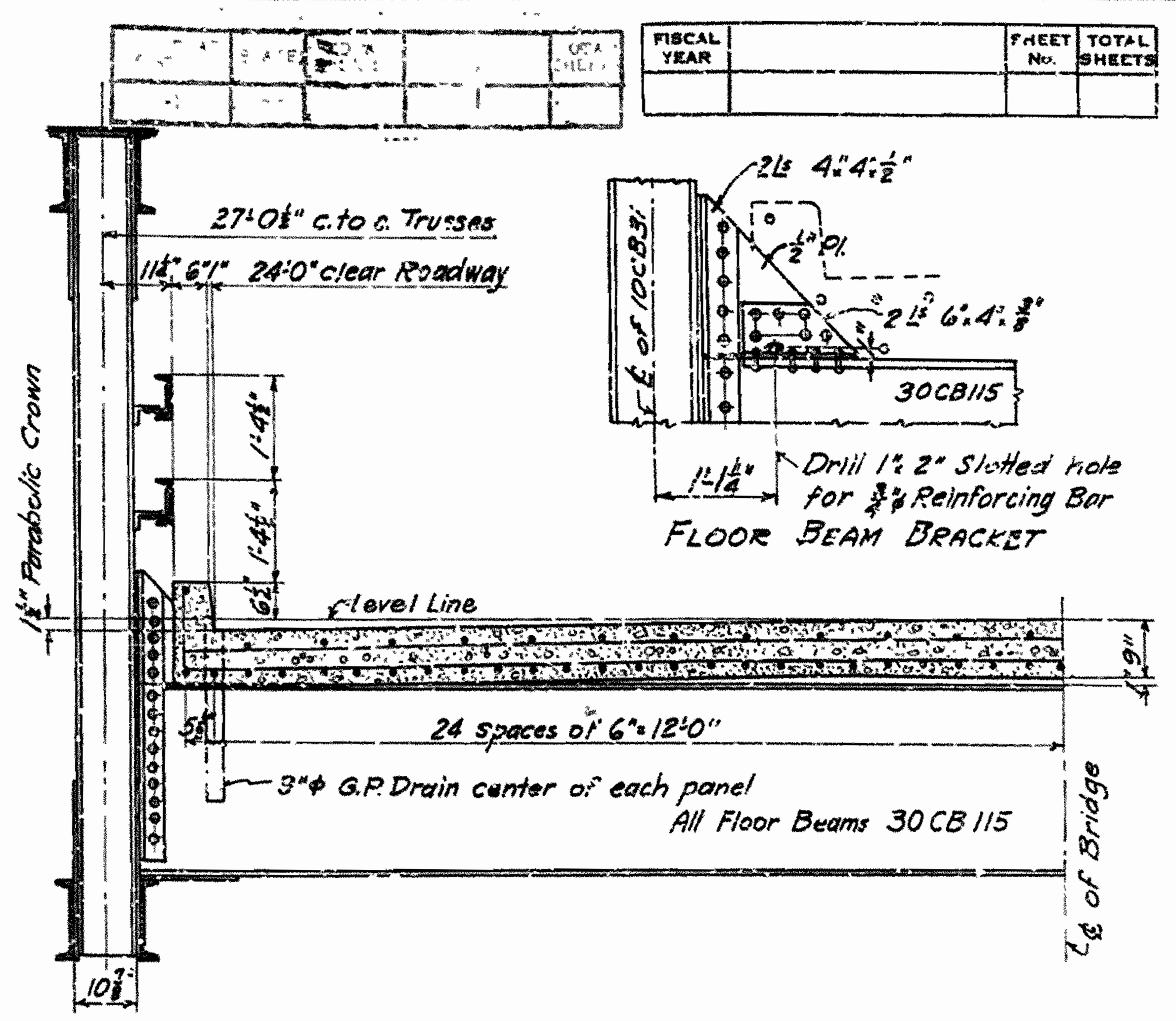
Scale: ⅜ in. = 1'-0"

BRIDGE No. 1479 DRAWING No. 2733

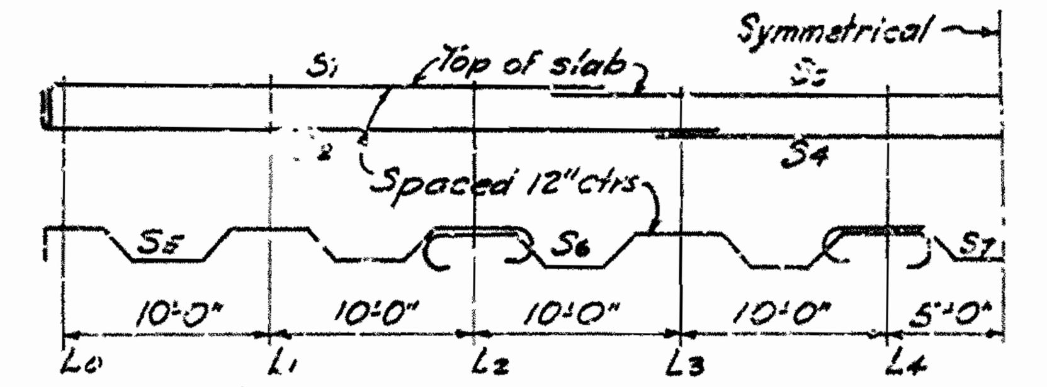
W.B. Glover
BRIDGE ENGINEER



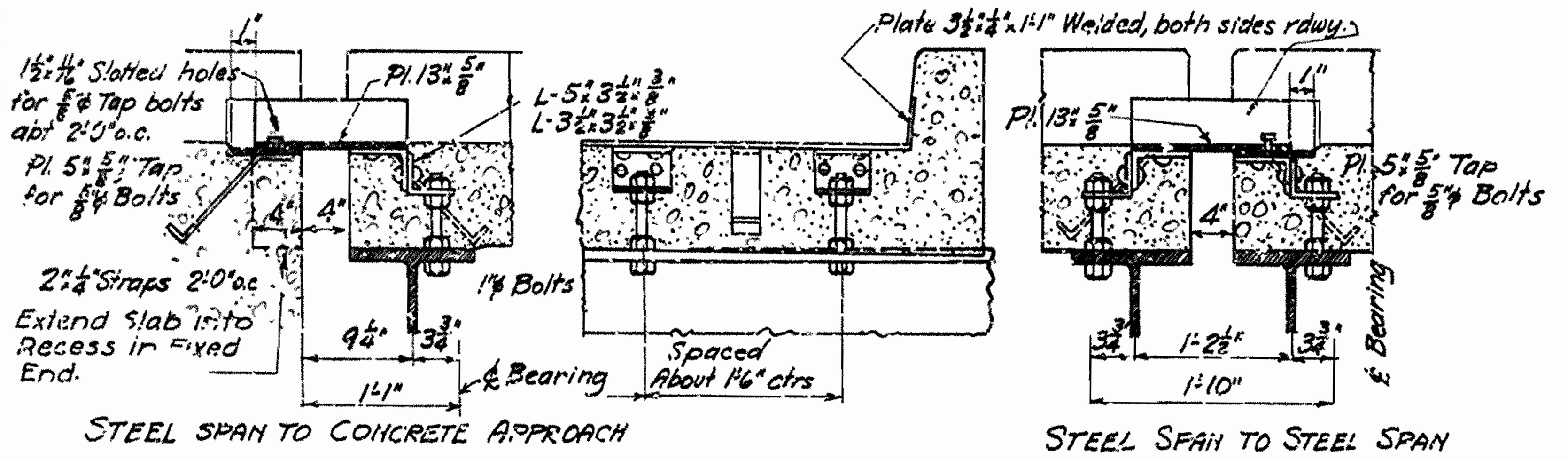




FLOOR BEAM BRACKET

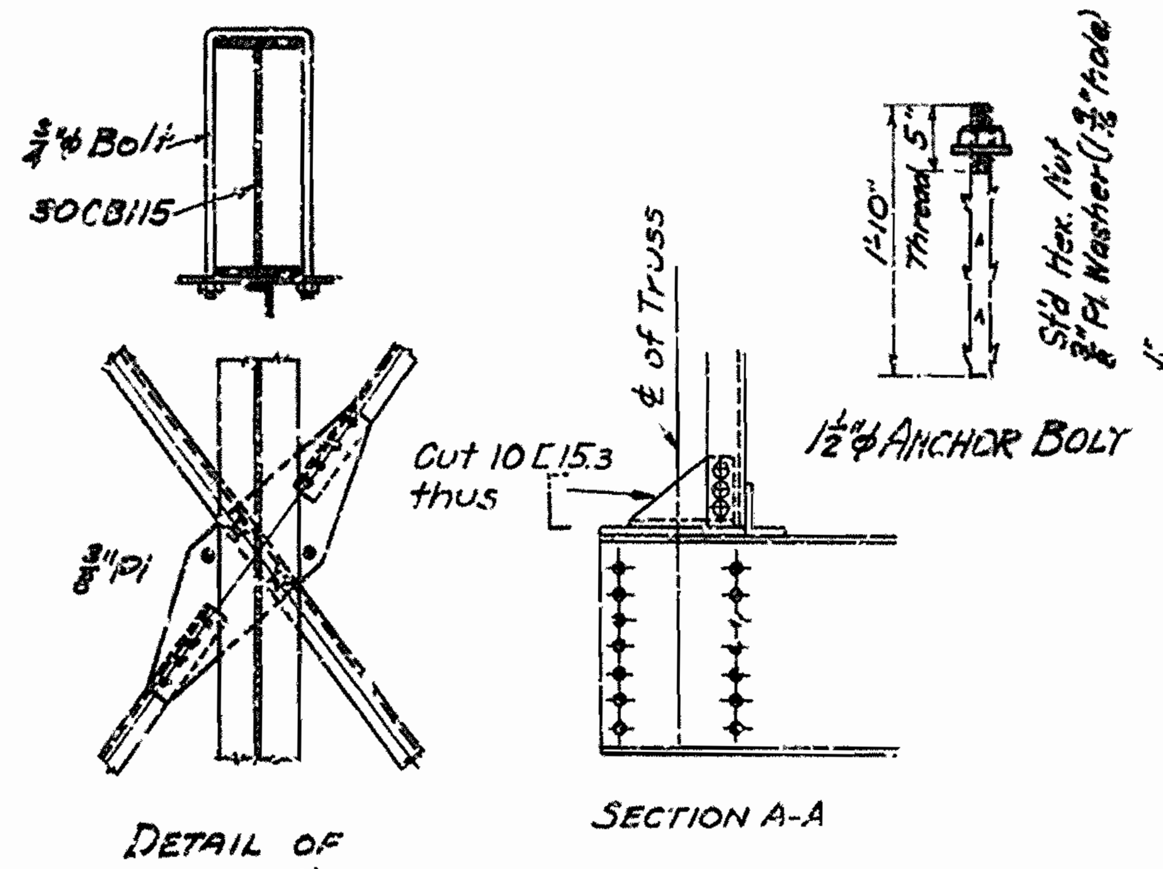


ARRANGEMENT OF SLAB BARS

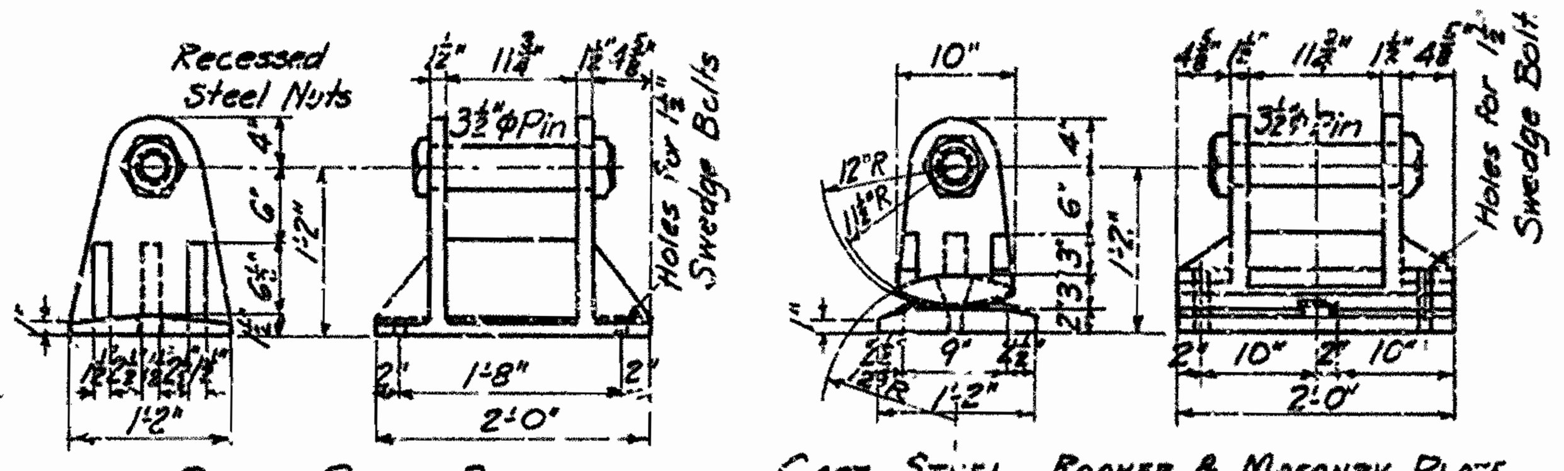


STEEL SPAN TO CONCRETE APPROACH — STEEL SPAN TO STEEL SPAN

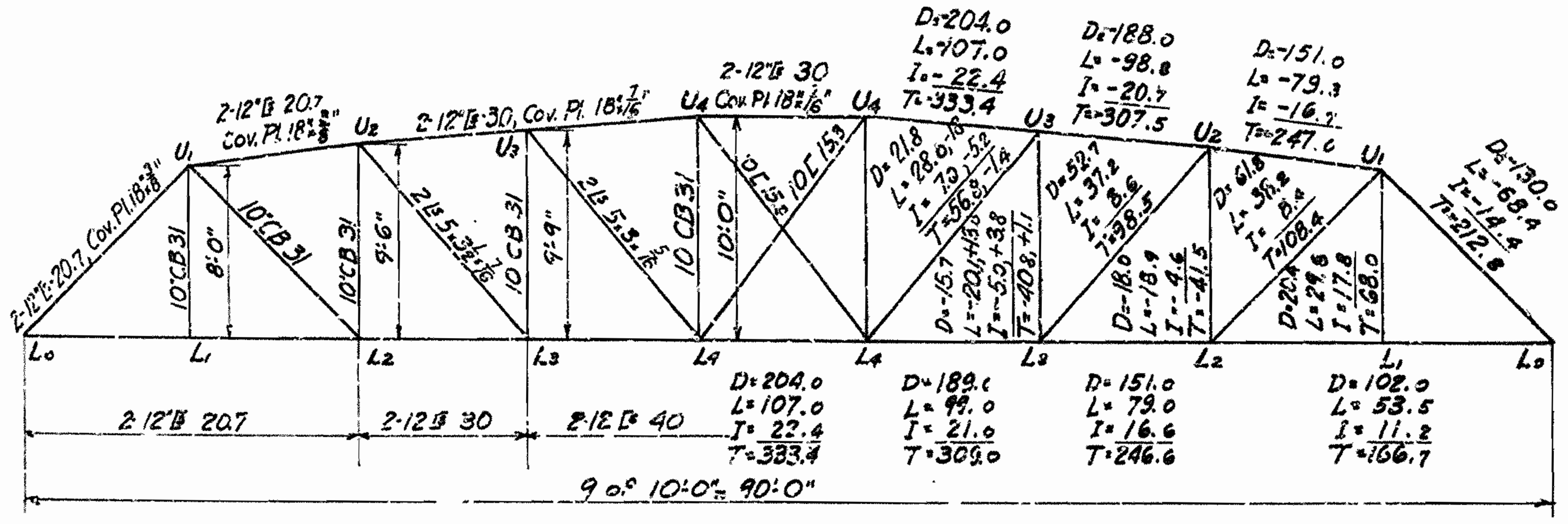
EXPANSION DEVICES



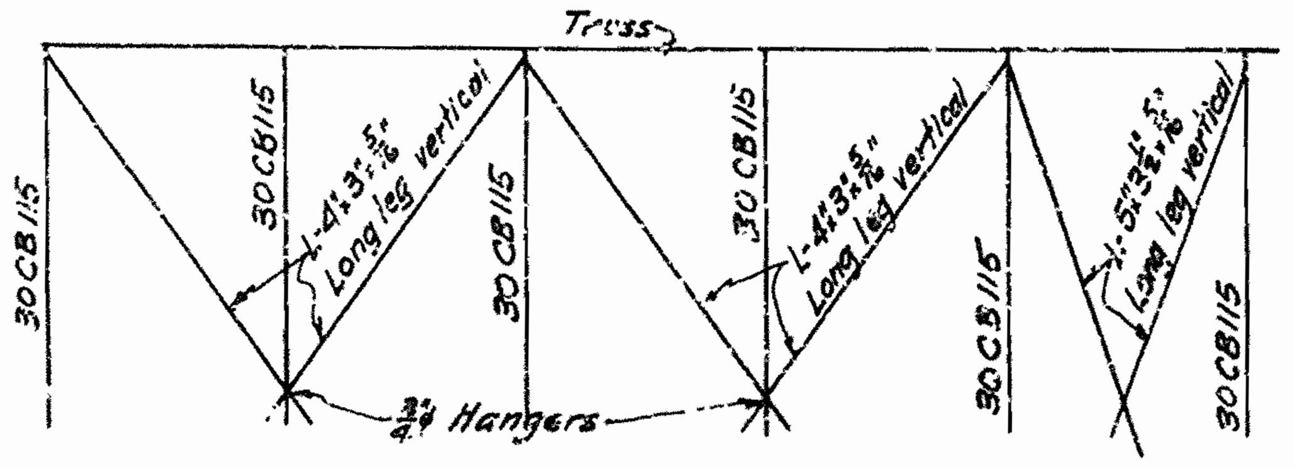
DETAIL OF LATERAL HANGER — SECTION A-A



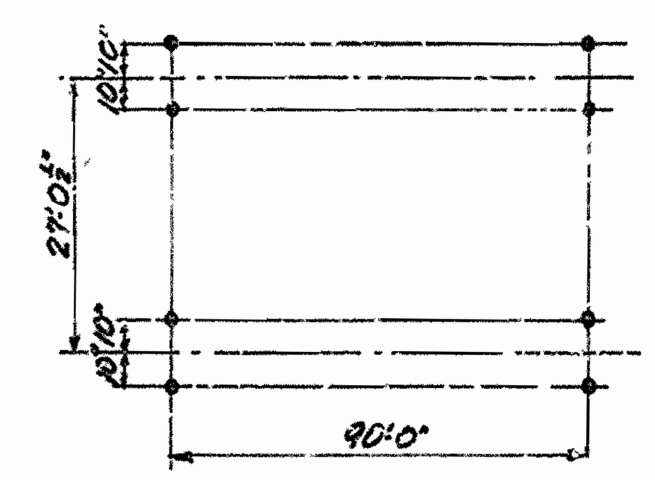
CAST STEEL SHOE FIXED END — CAST STEEL ROCKER & MASONRY PLATE EXPANSION END.



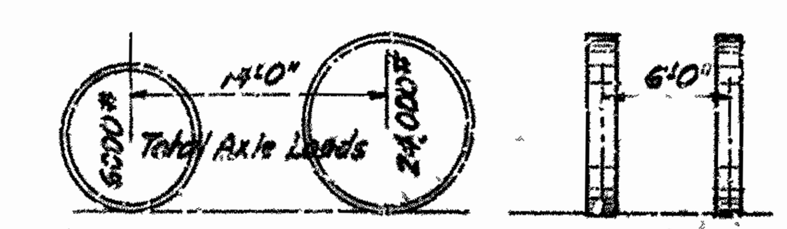
STRUCTURAL MAKE-UP — DESIGN STRESSES



LATERAL SYSTEM



ANCHOR BOLT PLAN



LIVE LOAD - H15 LOADING

FLOOR BEAM DATA

Dead Load Moment	1,391,000 in. lbs.
Live Load Moment	2,556,000 in. lbs.
Impact 30%	767,000 in. lbs.
Total Moment	4,714,000 in. lbs.

Required Section modulus 4,714 ÷ 16 = 294 in³

Section Modulus of 30CB115 is 332 in³

NOTES

Rivets ¾". Oper. holes 13/16".

All holes in truss connections to be sub-punched 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 9/16" and reamed to a metal templet.

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 framing angles have been riveted.

Shapes of equal or greater strength may be substituted for the shapes shown, but payment will be made in accordance with sizes given 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: Arkansas Standard Road & Bridge Specifications, adopted May 30, 1925 & Revised

UNIT STRESSES

Concrete	750.# per sq. in
Reinforcing Steel	16,000# per sq. in.
Structural Steel	16,000# per sq. in.

SLAB REINFORCING (ONE SPAN)

Mark	No.	Size	Length	Bending
S1	52	¾"φ	27'-4"	5" hook, 26'-11"
S2	52	¾"φ	32'-4"	5" hook, 31'-11"
S3	26	¾"φ	42'-6"	STRAIGHT
S4	26	¾"φ	32'-6"	STRAIGHT
S5	50	¾"φ	24'-7"	2'-8" 5½ 5'-0" 5½ 4'-1" 5½ 5'-0" 5½ 4'-1"
S6	50	¾"φ	26'-4"	4'-1" 5½ 5'-0" 5½ 4'-1" 5½ 5'-0" 5½ 4'-1"
S7	25	¾"φ	16'-0"	4'-1" 5½ 5'-0" 5½ 4'-1"
S8	46	½"φ	24'-11"	STRAIGHT
S9	47	½"φ	27'-3"	24'-11"

ESTIMATED QUANTITIES

Structural Steel	87500 lbs.
Reinforcing Steel	13,625 "
Class "S" Concrete	66.4 cu.yd.
Cast Steel	1670 lbs.

Note: Structural Steel tonnage does not include weight of expansion device.

Reinforced Concrete Quantities are figured for Slab between outside edges of Floor Beams.

Revised Top Chord Connections at U₃ ... Aug. 26, 1930 by Anderson

N.B. Garver
BRIDGE ENGINEER

STANDARD 90'-0" LOW TRUSS SPAN

24'-0" CLEAR RDWY.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: A Date:
Traced By: Date:
Checked By: Date:

Scale: ½ in. = 1 ft.

BRIDGE NO.

DRAWING NO. 2447