

STATE OF ARKANSAS
STATE HIGHWAY COMMISSION

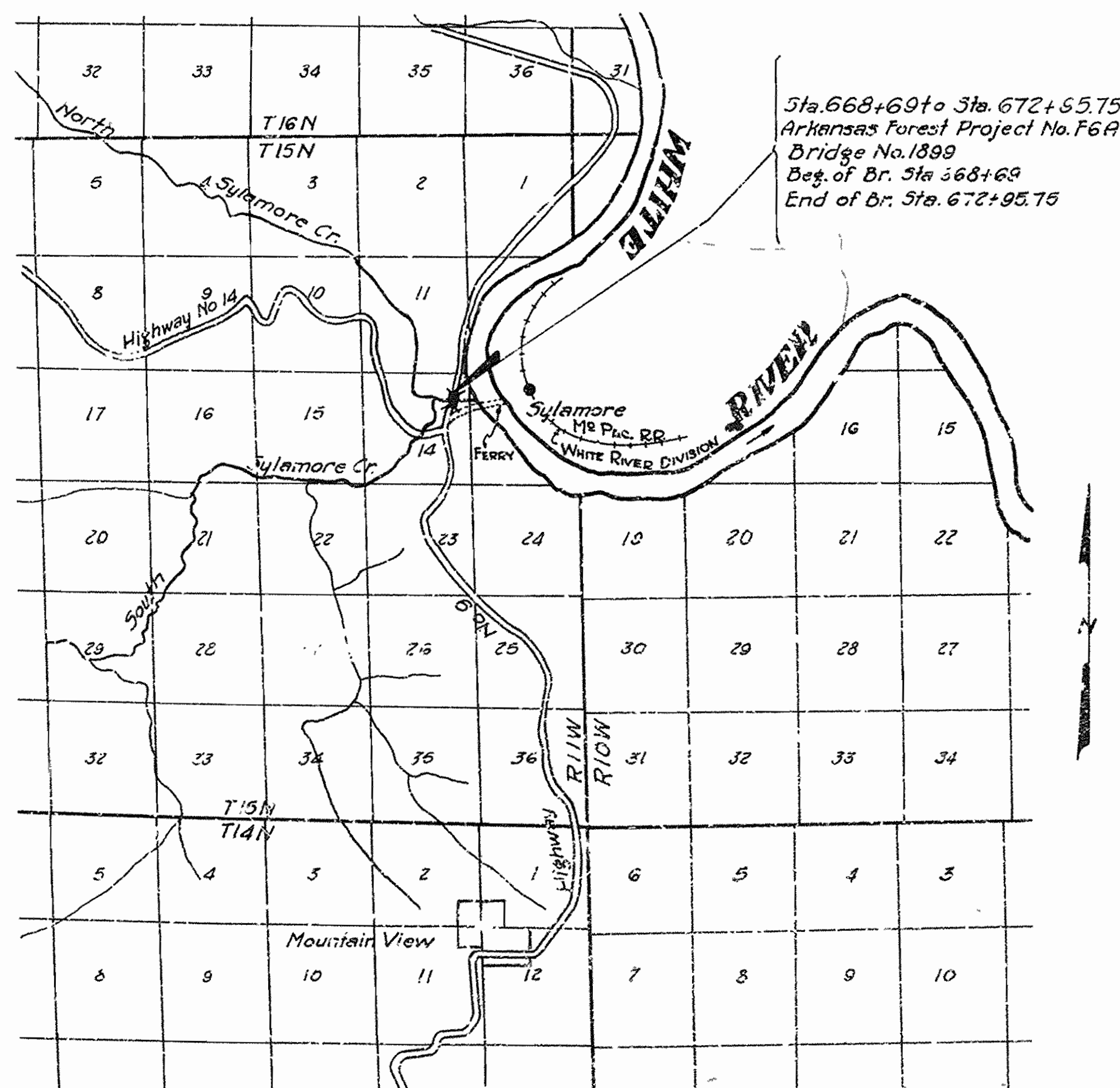
FED DIST. NO.	STATE	APPROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	F6A	1937	1	10
JOB NO. 5207					

INDEX OF SHEETS

SHEET NO.	DRWG. NO.	DESCRIPTION
1	4734	Title
2	4735	Schedule of Quantities
3	4736	Layout of Bridge Over Sylamore Creek
4	5201	Details of Standard 46'-0" I-Beam Span
5	5211	Details of Standard 73'-7 1/2" - 92'-0" - 73'-7 1/2" Continuous I-Beam Span
6	5212	Details of Standard 73'-7 1/2" - 92'-0" - 73'-7 1/2" Continuous I-Beam Span
7	4737	Details of Piers No. 1&6 and End Bents 1&2
8	4738	Details of Piers No. 2,3,4&5
9	1891	Basis for Computing Excavation
10	2337	Project Markers, R/W Markers, and State Bridge Name Plates

**PLAN OF PROPOSED BRIDGE
OVER SYLAMORE CREEK
MOUNTAIN VIEW-CALICO ROCK ROAD
STONE COUNTY
ROUTE SEC.
JOB NO. 5207
ARKANSAS FOREST PROJECT NO. F6A**

ITEM NO.	ITEM	QUANTITY	UNIT
101	Clearing	2	Acres
101	Grubbing	2	Acres
103	Dry Excavation for Structures	310	Cu. Yds.
103	Wet Excavation for Structures	573	Cu. Yds.
103	Solid Rock Excavation for Structures	166	Cu. Yds.
115	Fence Moved & Reconstructed	43	Rod
SP&802	Class "A" Concrete for Bridges	570.42	Cu. Yd.
SP&802	Class "B" Concrete for Bridges	309.34	Cu. Yd.
803	Reinforcing Steel	124,760	Lb.
804	Concrete Piling	898	Lin. Ft.
805	Concrete Railings	869	Lin. Ft.
907	Structural Steel in Beam Spans	247,070	Lb.
SP&950-2	State Bridge Name Plates (Type A)	2	Each
SP&950-2	Project Marker Plates (Type AL-2)	2	Each



LAYOUT
Scale: 1" = 1 Mile

LENGTH OF PROJECT = 426'-9" = .081 Miles
 LENGTH OF BRIDGES = 426'-9" = .081 Miles
 LENGTH OF EMBANKMENT = 0'-0" = .000 Miles
 LENGTH OF JOB = 426'-9" = .081 Miles

Arkansas State Highway Commission
Standard Specifications for Road and
Bridge Construction Adopted June 30,
1936.

SPECIAL PROVISIONS

Item	No. of Sheets	Approved
Required Special Provisions	12	approved 9-30-36
Employment Centers for Labor	1	10-19-36
Partial Payments	1	9-15-36
Wages of Labor	1	4-10-36
7-2 Unemployment Compensation or Insurance	1	1-4-37
9-2 Special Freight Rates	1	9-13-37
850-1 Engineers Field Office	1	8-22-36
950-2 Project Marker Plates and State Bridge Name Plates	1	9-9-36
863-1 Machine Mixing	1	9-9-36
1053-1 Forest Fires	1	10-2-36

- Pamphlets
- Division I
- Division II Part I
- Division II Part 8a
- Division II Part 8b
- Division III
- Division IV

APPROVED
 Chief Engineer - U.S. Bureau of Public Roads
 APPROVED
 District Engineer
 APPROVED
 Chief
 APPROVED
 CHAIRMAN - STATE HIGHWAY COMMISSION
 APPROVED
 STATE HIGHWAY ENGINEER

N.B. Lewis
BRIDGE ENGINEER

BRIDGES No. 1899

DRAWING No 4734

ALTERNATE 'A'

SCHEDULE OF BRIDGE QUANTITIES

ITEM NO.	ITEM	103	103	103	SP#802	SP#802	803	804	805	807	SP#950-2
		Dry Excavation for Structures	Wet Excavation for Structures	Solid Rock Excavation for Structures	Class 'A' Concrete	Class 'S' Concrete	Reinforcing Steel	Concrete Piling	Concrete Railing	Struct. Steel in Beam Spans	State Bridge Name Plates Type 'A'
UNIT OF BRIDGE	UNIT	Cu.Yd.	Cu.Yd.	Cu.Yd.	Cu.Yd.	Cu.Yd.	Lb.	Lin.Ft.	Lin.Ft.	Lb.	Each
4-40'-0" I-Beam Spans						121.40	28,160		368	82,900	
3-Cont'l Beam Spans 73'-7 1/2" 92'-0" 73'-7 1/2"						157.42	36,780		481	163,750	
End Bent No.1						15.26	2,200	258	10	210	1
Pier No.1		156				38.94	5,270	180			
Pier No.2			174	31		117.04	11,110				
Pier No.3			131	44		130.70	11,420				
Pier No.4			105	46		130.70	11,420				
Pier No.5		89	163	45		113.50	10,900				
Pier No.6		75				38.94	5,270	180			
End Bent No.2						15.26	2,200	280	10	210	1
Total		310	573	166	570.42	309.34	124,730	898	869	247,070	2

FED. ROAD DIST. NO.	STATE	Ark. Forest PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	ALL
3	ARK.	PGA Unit-1	1937	2	8	A
STATE JOB NO.5207						

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
101	Clearing	2	Acre
101	Grubbing	2	Acre
103	Dry Excavation for Structures	310	Cu.Yd.
103	Wet Excavation for Structures	573	Cu.Yd.
103	Solid Rock Excavation for Structures	166	Cu.Yd.
115	Fence Moved & Reconstructed	48	Rod
SP#802	Class 'A' Concrete for Bridges	570.42	Cu.Yd.
SP#802	Class 'S' Concrete for Bridges	309.34	Cu.Yd.
803	Reinforcing Steel	124,730	Lb.
804	Concrete Piling	898	Lin.Ft.
805	Concrete Railing	869	Lin.Ft.
807	Structural Steel in Beam Spans	247,070	Lb.
SP#950-2	State Bridge Name Plates (Type 'A')	2	Each
SP#950-2	Project Marker Plates (Type AL-2)	2	Each

PROJECT MARKER PLATES

Station	Type AL-2	
Right	Left	Each
GG3+G9		1
	G72+95.75	1
Total		2

FENCE MOVED & RECONSTRUCTED

Station to Station	Rods	
GG8+G9	GG9+30	22
G71+30	G72+95.75	26
Total		48

CLEARING & GRUBBING

Station	Station	Clearing Acres	Grubbing Acres
GG8+G9	G72+95.75	2	2
Total		2	2

ALTERNATE 'B'

SCHEDULE OF BRIDGE QUANTITIES

ITEM NO.	ITEM	103	103	103	SP#802	SP#802	803	805	SP#852-2	SP#950-2
		Dry Excavation for Structures	Wet Excavation for Structures	Solid Rock Excavation for Structures	Class 'A' Concrete	Class 'S' Concrete	Reinforcing Steel	Concrete Railing	Metal Bearing & Rdwy. Exp. Devices	State Bridge Name Plates Type 'A'
UNIT OF BRIDGE	UNIT	Cu.Yd.	Cu.Yd.	Cu.Yd.	Cu.Yd.	Cu.Yd.	Lb.	Lin.Ft.	Lb.	Each
4-90'-0" Arch Span						17.6	572.6	132,000	7,346.7	6891
Abutment No.1		408	193	23		265.0	12.7	16,200	25.0	154
Pier No.1		0	128	51		191.2	3.1	12,410	6.33	307
Pier No.2		0	113	51		191.2	3.1	12,410	6.33	307
Pier No.3		43	241	51		191.2	3.1	12,410	6.33	307
Abutment No.2		339	245	4.1		277.5	12.7	16,600	23.0	154
Total		790	920	271	1113.7	607.3	202,030	823.67	8120	2

*Use 804

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
101	Clearing	2	Acre
101	Grubbing	2	Acre
103	Dry Excavation for Structures	790	Cu.Yd.
103	Wet Excavation for Structures	920	Cu.Yd.
103	Solid Rock Excavation for Structures	220	Cu.Yd.
115	Fence Moved and Reconstructed	48	Rod
SP#802	Class 'A' Concrete for Bridges	1113.7	Cu.Yd.
SP#802	Class 'S' Concrete for Bridges	607.3	Cu.Yd.
803	Reinforcing Steel	202,030	Lb.
805	Concrete Railing	801	Lin.Ft.
SP#852-2	Metal Bearing & Rdwy. Expansion Devices	8120	Lb.
SP#950-2	State Bridge Name Plates (Type 'A')	2	Each
SP#950-2	Project Marker Plates (Type AL-2)	2	Each

PROJECT MARKER PLATES

Station	Type AL-2	
Right	Left	Each
GG8+82.34		1
	G72+72.67	1
Total		2

FENCE MOVED & RECONSTRUCTED

Station to Station	Rods	
GG8+82.34	GG9+30	22
G71+30	G72+72.67	26
Total		48

CLEARING & GRUBBING

Station	Station	Clearing Acres	Grubbing Acres
GG8+82.34	G72+72.67	2	2
Total		2	2

SCHEDULE OF QUANTITIES
 BRIDGE OVER SYLAMORE CREEK
 MOUNTAIN VIEW-CALICO ROCK ROAD
 STONE COUNTY
 ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

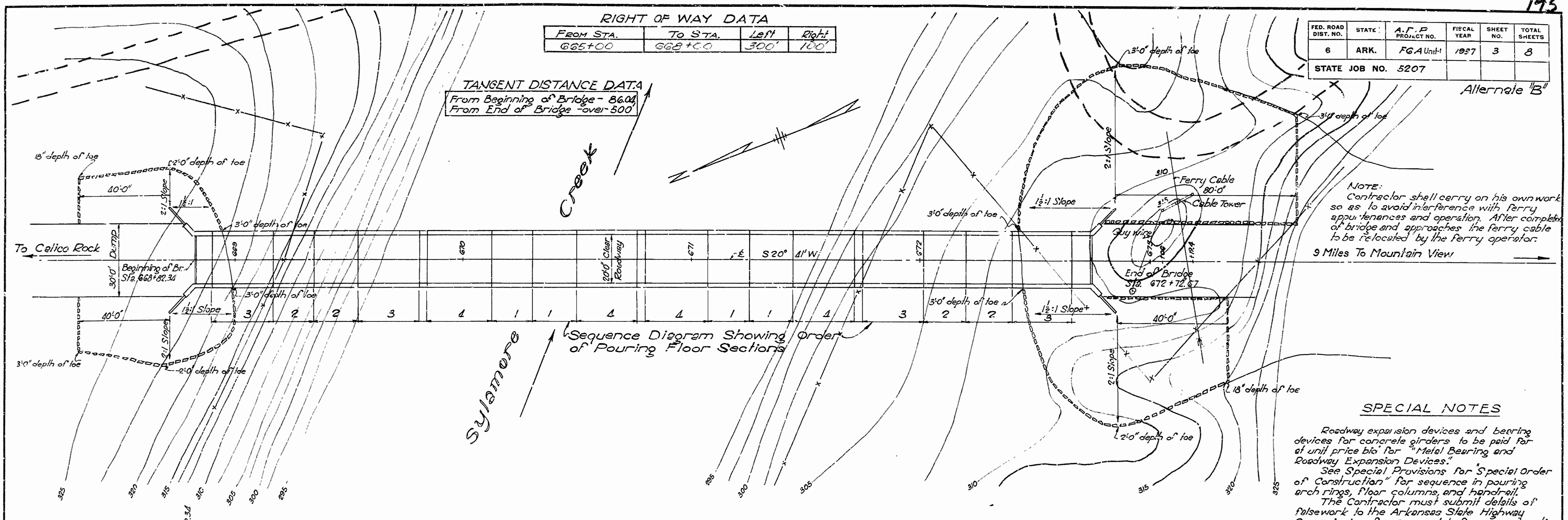
Drawn By: CBY Date: 11-4-37
 Traced By: CBY Date: 11-4-37
 Checked By: Date: _____
 BRIDGE NO. 1820 DRAWING NO. 4735

M.B. Banner
 BRIDGE ENGINEER

RIGHT OF WAY DATA			
FROM STA.	TO STA.	Left	Right
665+00	668+00	300'	100'

FED. ROAD DIST. NO.	STATE	A.P.P. PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	FGA Unit-1	1937	3	8

STATE JOB NO. 5207

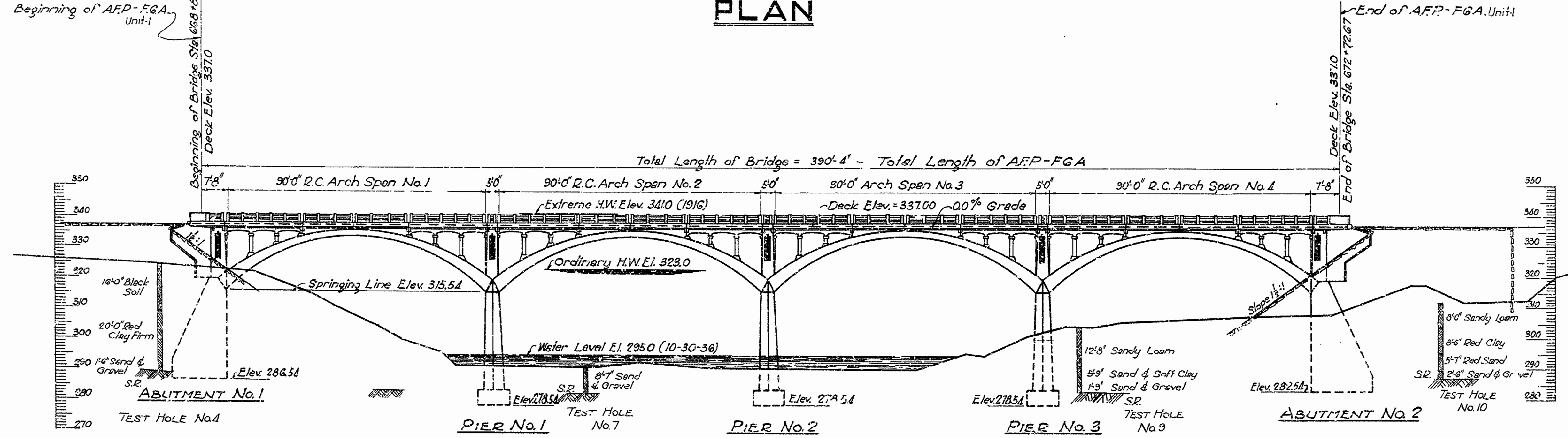


PLAN

NOTE:
Contractor shall carry on his own work so as to avoid interference with ferry appurtenances and operation. After completion of bridge and approaches the ferry cable to be relocated by the ferry operator.
3 Miles To Mountain View

SPECIAL NOTES

Roadway expansion devices and bearing devices for concrete girders to be paid for at unit price bid for "Metal Bearing and Roadway Expansion Devices."
See Special Provisions for "Special Order of Construction" for sequence in pouring arch rings, floor columns, and hand-rail.
The Contractor must submit details of falsework to the Arkansas State Highway Commission for approval before construction is started.
Rock excavation shall be done to neat lines of concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting.
Embankment and Rip Rap at Bridge ends to be placed under another contract.
To allow for a single excavation for each abutment, the volume of wet and dry excavation between the shafts of the abutments will be included for payment at the contract unit price bid for these items.
Payment for any work necessary to protect or adjust ferry appurtenances during construction to be included in the unit price bid for "Dry Excavation for Structures."



ELEVATION

GENERAL NOTES:
All concrete to be poured in the dry. All exposed corners to have 3" chamfers unless otherwise noted.
Concrete in hand-rail to be Class S, except maximum size of aggregate 3".
Concrete in arch ribs and struts and all concrete above top of column caps to be Class S.
Concrete in piers, abutments, pilasters and columns to be Class A, unless otherwise noted.
Reinforcing steel to be deformed bars of Structural or Intermediate grade. All dimensions relating to reinforcing steel are to centers of bars.
Shop lists and bending diagrams must be submitted and approved before fabrication is begun.

GENERAL NOTES:
(Continued)
In general all construction joints in piers and abutments shall be horizontal and shall be provided with keys six inches deep covering the middle third of both dimensions, unless otherwise shown.
Specifications: Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted June 30, 1936.
For Details of 90' Arch Spans, See Drawing No. 4737A.
For Details of Abutments, See Drawing No. 4738A.
For Details of Piers, See Drawing No. 4738B.

LAYOUT

**BRIDGE OVER SYLAMORE CREEK
MOUNTAIN VIEW-CALICO ROCK ROAD
STONE COUNTY
ROUTE SEC.**

**ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.**
Scale: 1 in. = 20 ft.
Drawn By: MCH&D, Date: 10-28-37
Traced By: B.D., Date: 10-30-37
Checked By: _____ Date: _____
BRIDGE NO. 1899 DRAWING NO. 4738A
Code No. 951

Revisions:
1. Added notes re ferry cable. 1B 2-17-38
N.B. Sawyer
BRIDGE ENGINEER

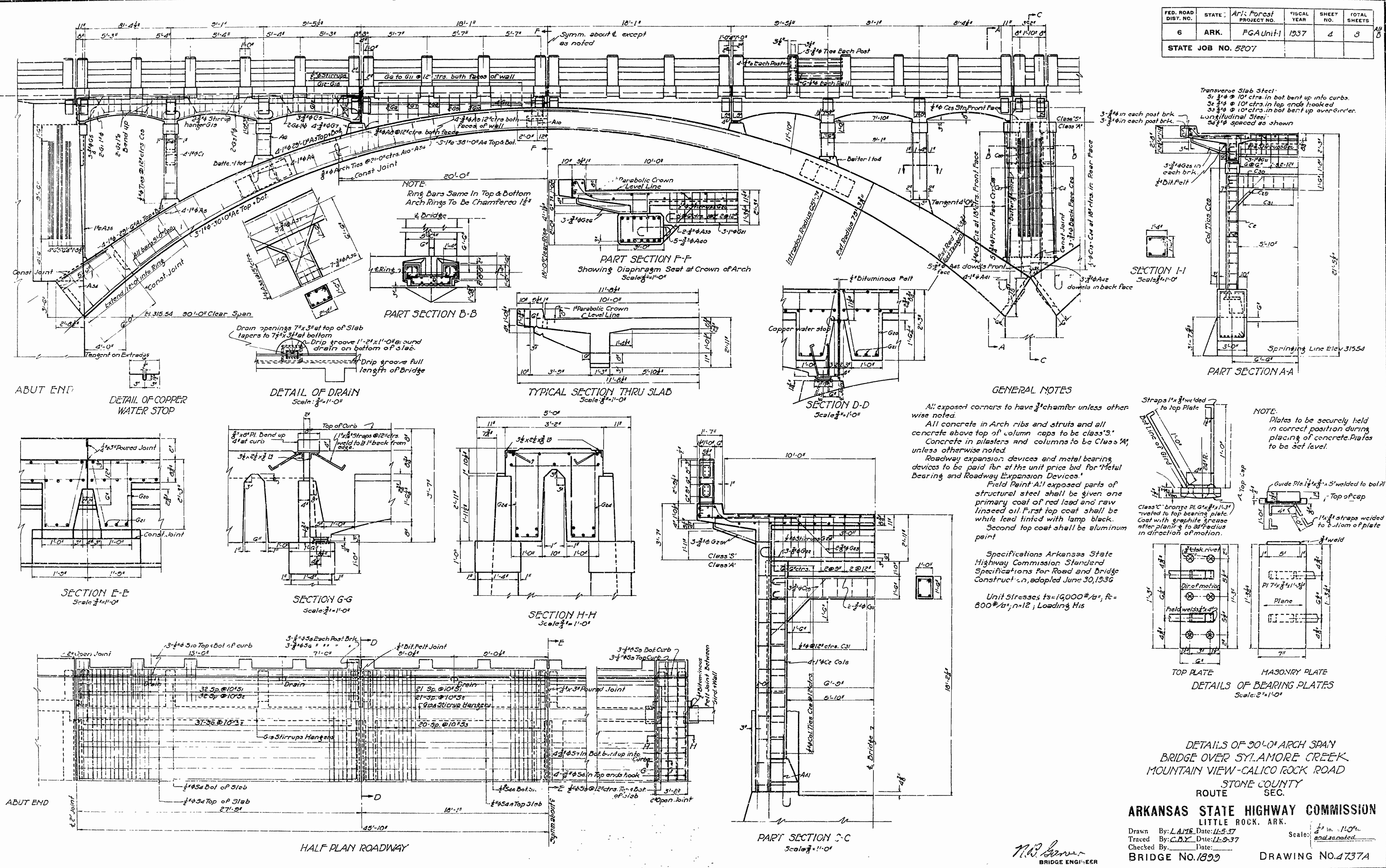
669

670

671

672

FED. ROAD DIST. NO.	STATE	Proj. Forest PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	FGA Unit-1	1937	4	5
STATE JOB NO. 5207					

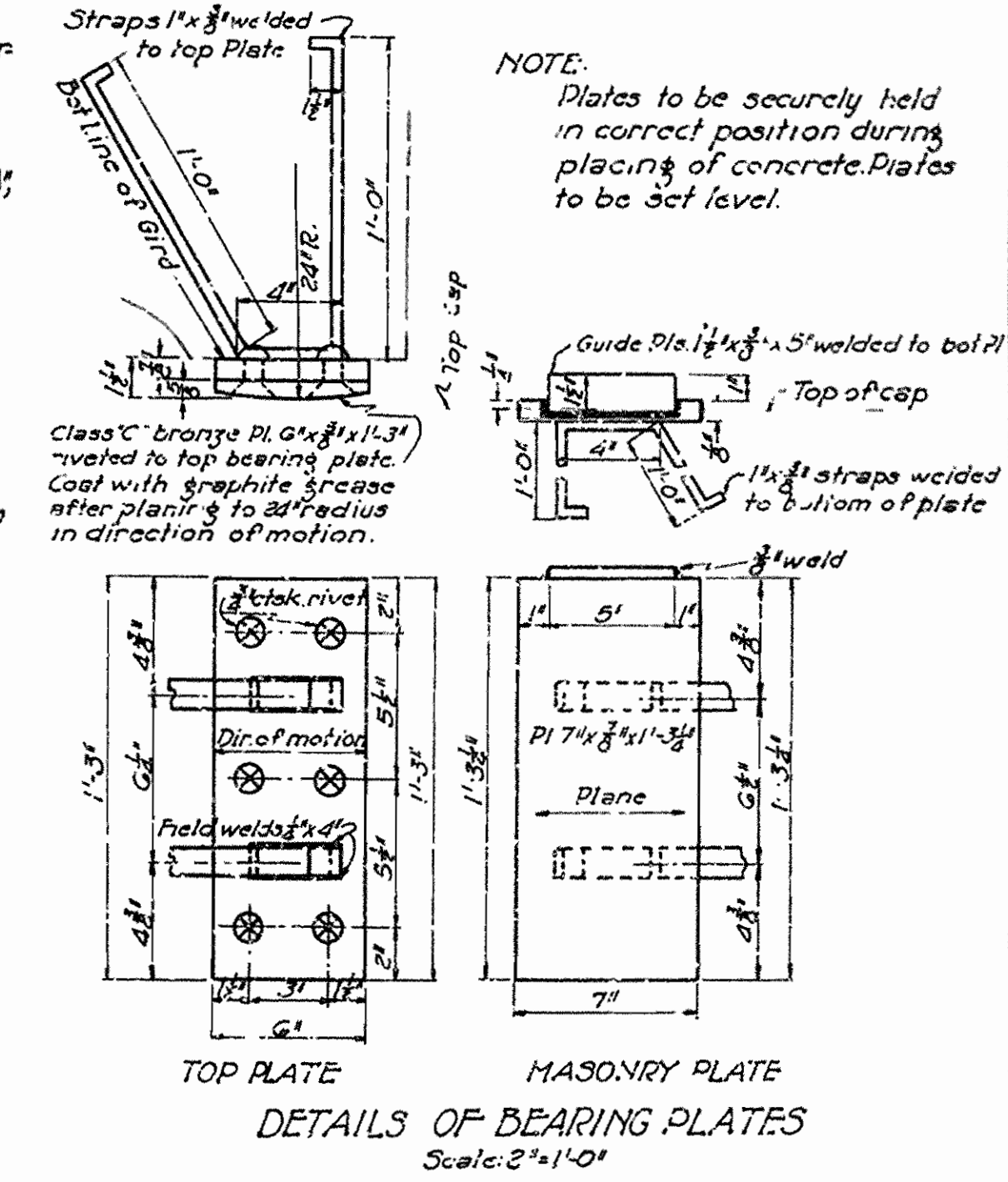


NOTE:
Ring Bars Same In Top & Bottom Arch Rings To Be Chamfered 1/2" & Drilled

GENERAL NOTES
All exposed corners to have 3/4" chamfer unless otherwise noted.
All concrete in Arch ribs and struts and all concrete above top of column caps to be class 'S'.
Concrete in pilasters and columns to be Class 'A', unless otherwise noted.
Roadway expansion devices and metal bearing devices to be paid for at the unit price bid for 'Metal Bearing and Roadway Expansion Devices'.
Field Paint All exposed parts of structural steel shall be given one primary coat of red lead and raw linseed oil. First top coat shall be white lead tinted with lamp black.
Second top coat shall be aluminum paint.

Specifications Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction, adopted June 30, 1936
Unit Stresses $f_s = 16,000 \text{ lb/in}^2$, $f_c = 800 \text{ lb/in}^2$, $n = 12$, Loading H_{15}

NOTE:
Plates to be securely held in correct position during placing of concrete. Plates to be set level.

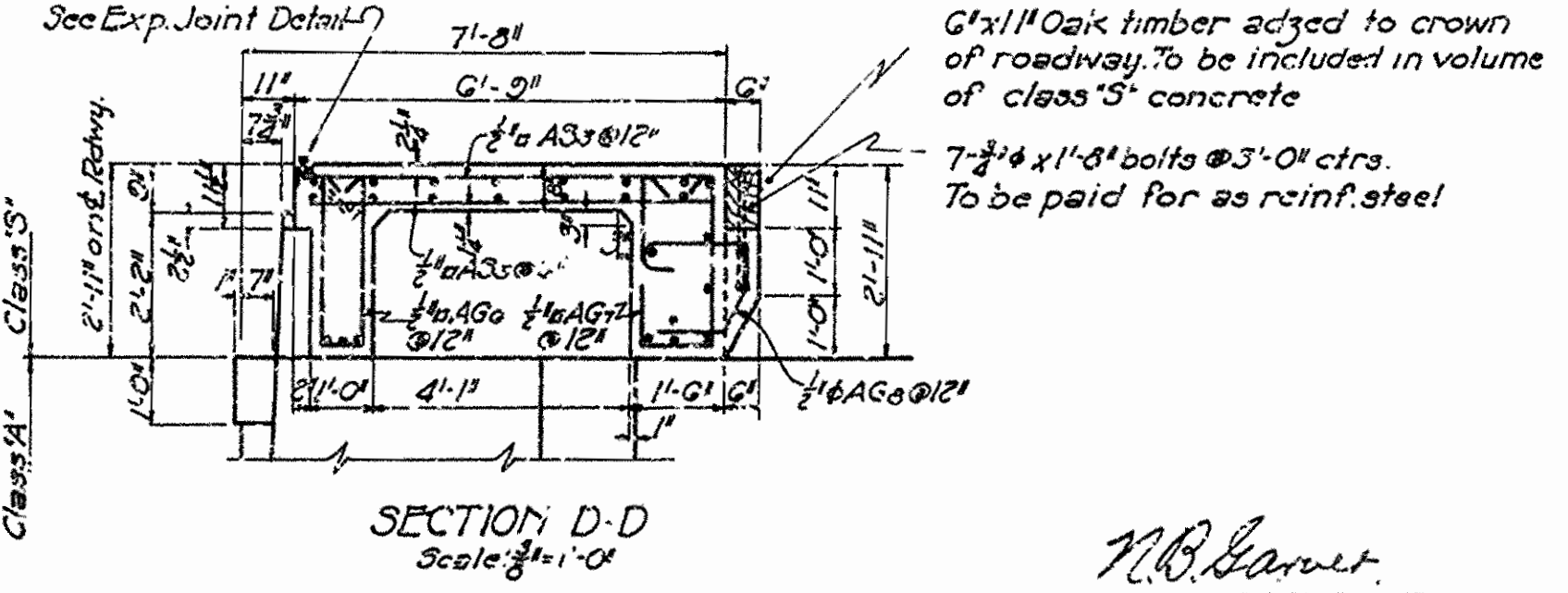
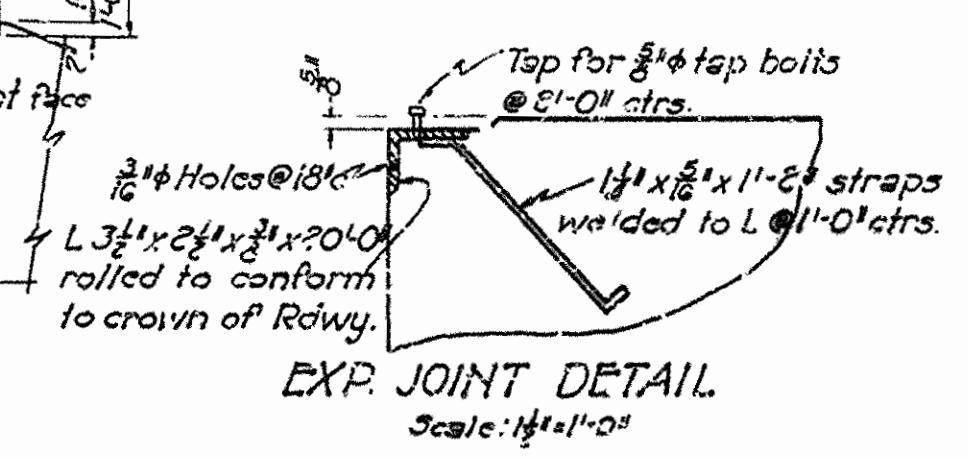
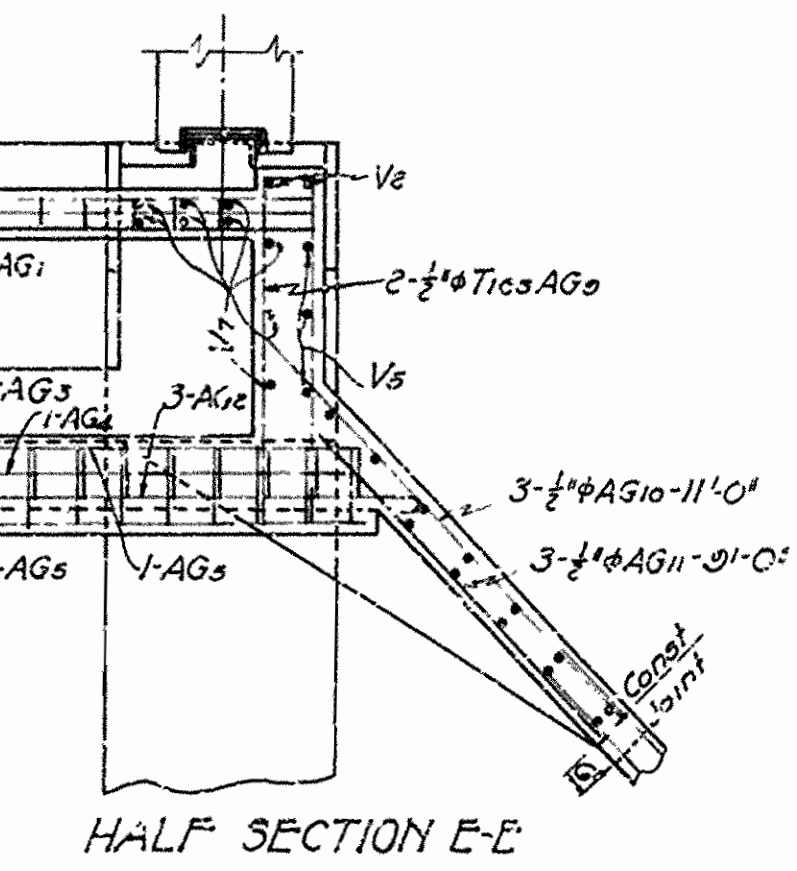
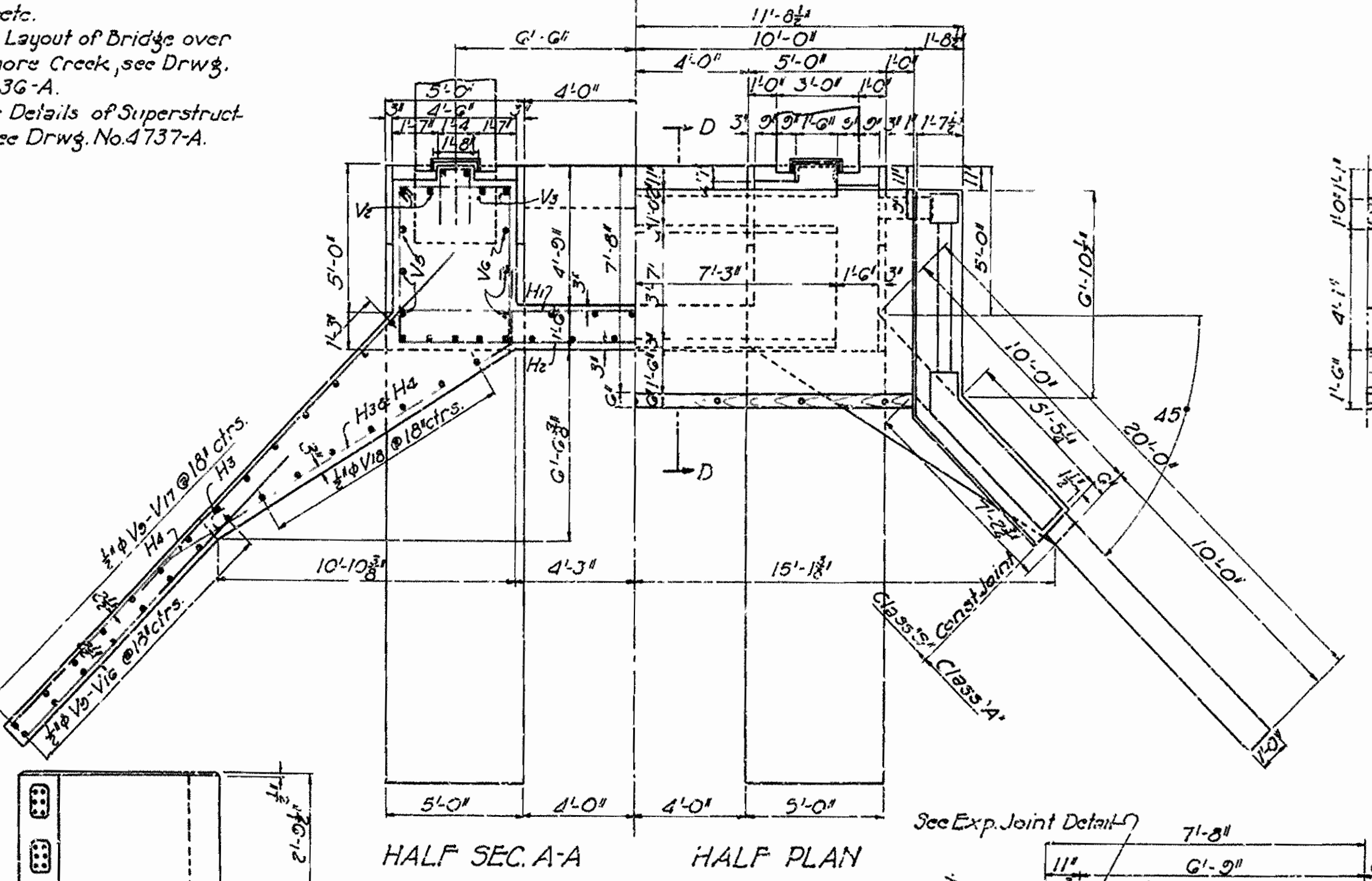
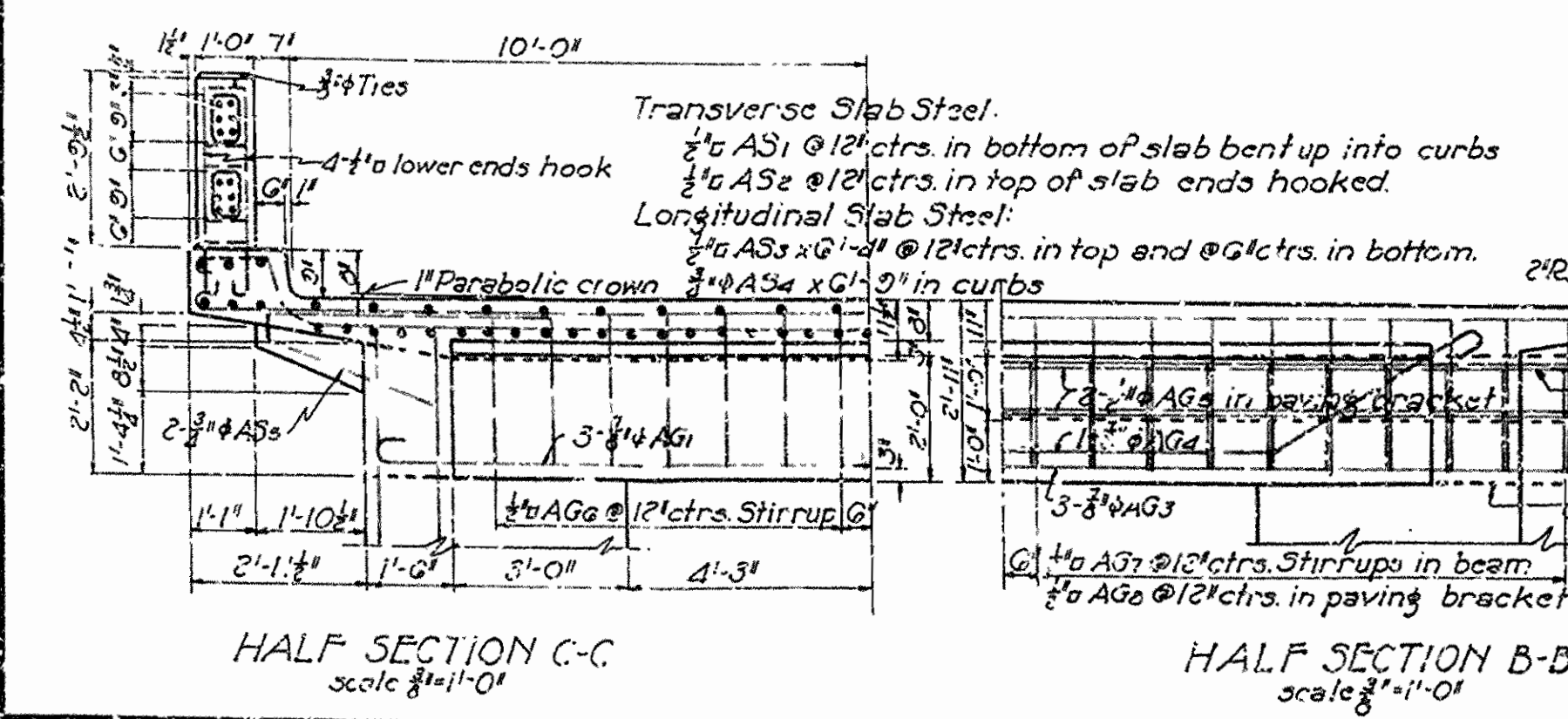
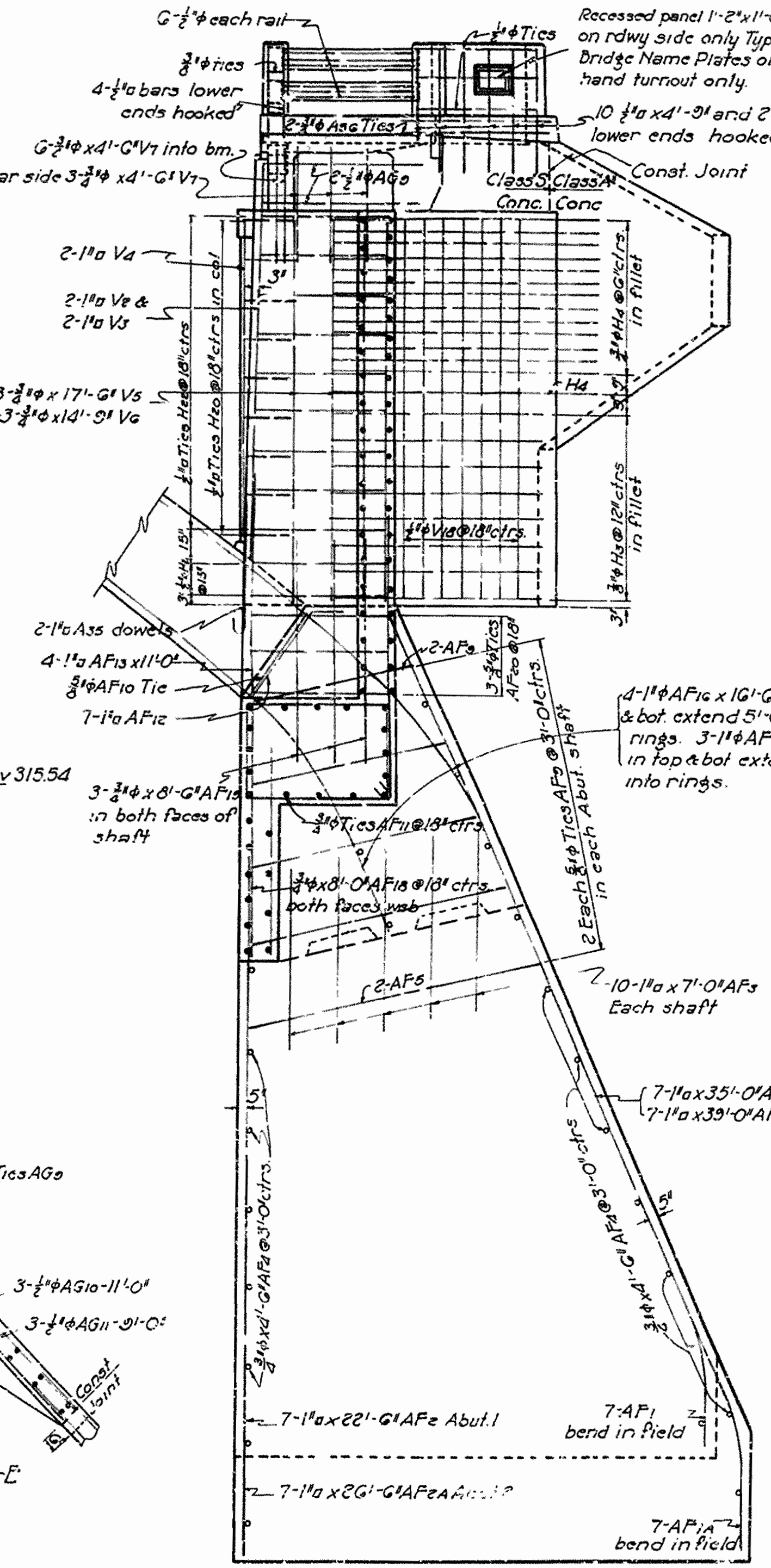
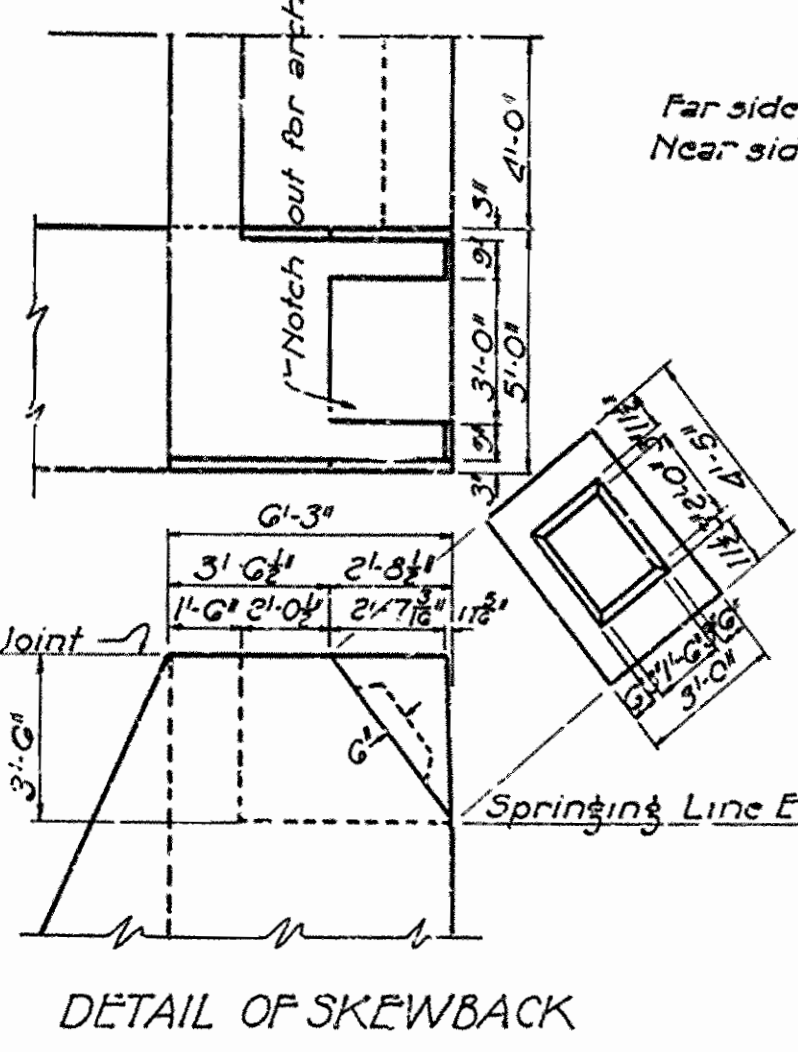
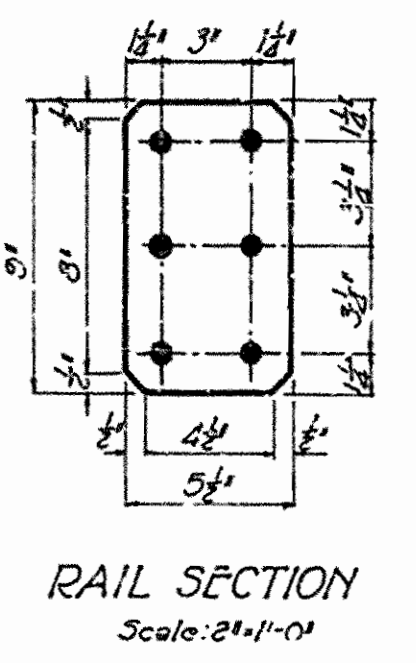
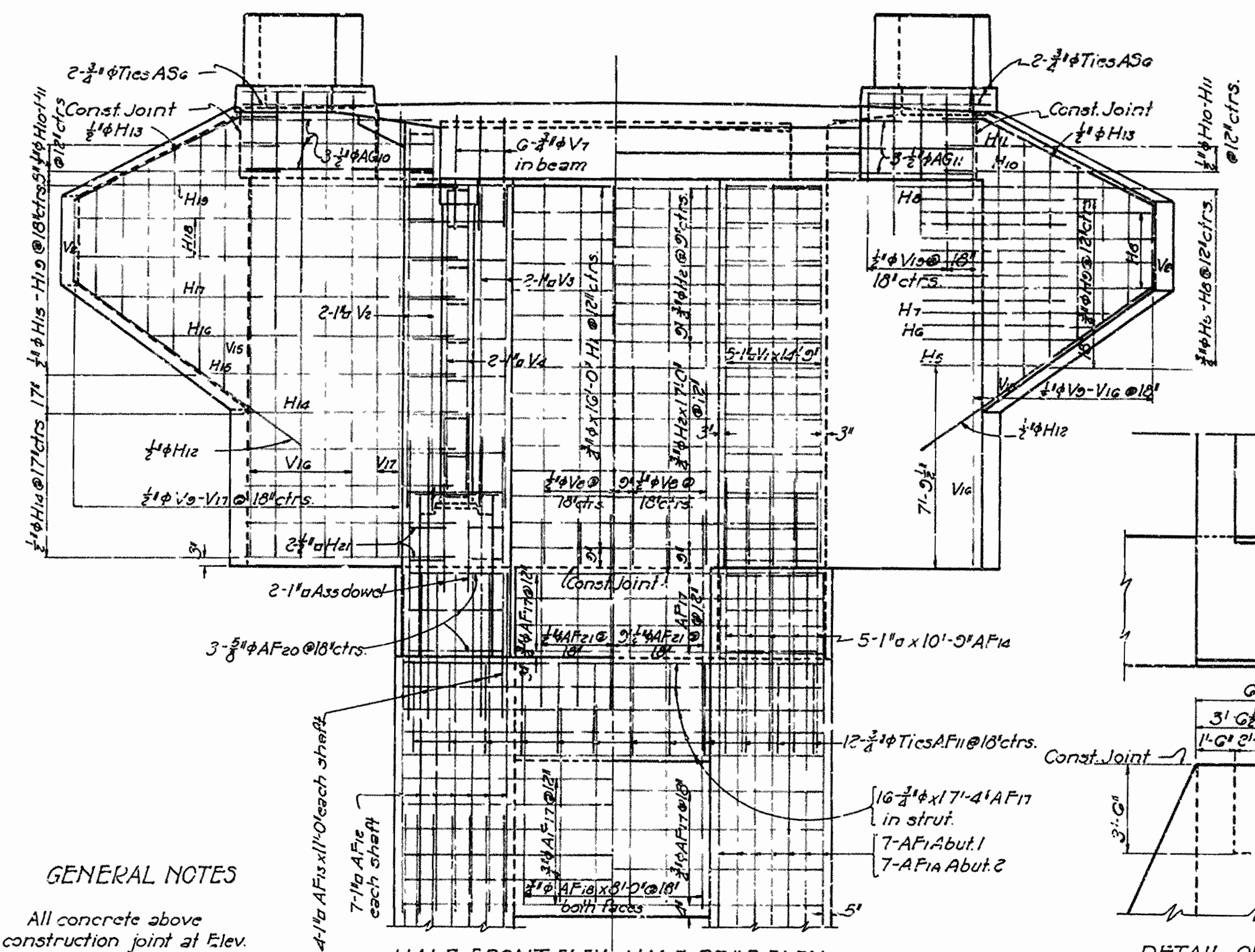
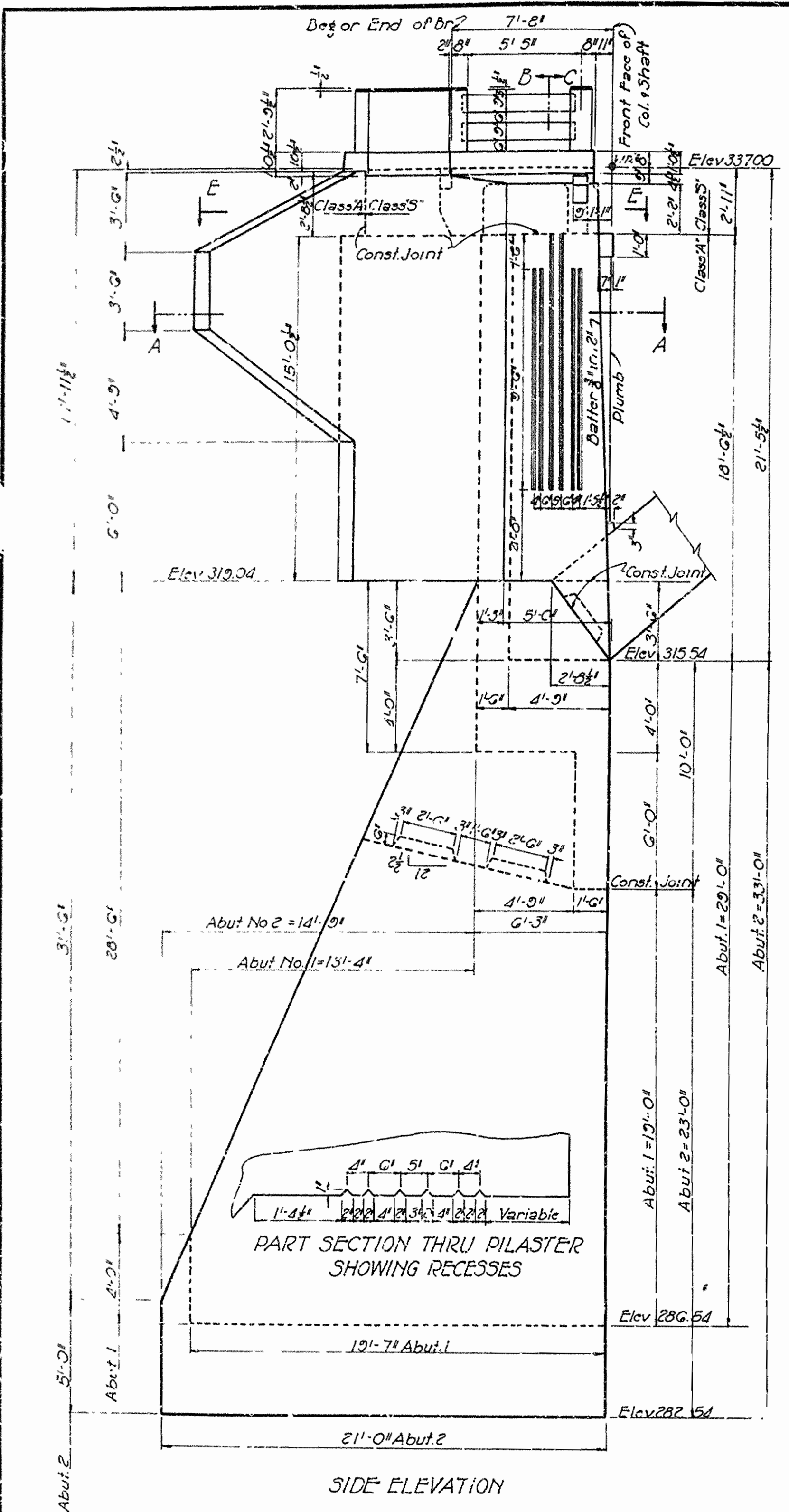


DETAILS OF 90° ARCH SPAN BRIDGE OVER SYLAMORE CREEK MOUNTAIN VIEW-CALICO ROCK ROAD STONE COUNTY ARK. SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.
Drawn By: L.A.M. Date: 11-5-37
Traced By: C.B.Y. Date: 11-9-37
Checked By: _____ Date: _____
Scale: 1/2" = 1'-0"
and so noted
BRIDGE No. 1899 DRAWING No. 1737A

N.W. Sawyer
BRIDGE ENGINEER

FED. ROAD DIST. NO.	STATE	Ark. Forest PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.	FGA Unit-1	1937	5	8
STATE JOB NO. 5207					



DETAIL OF ABUTMENTS NO. 1 & 2
 BRIDGE OVER SYLAMORE CREEK
 MOUNTAIN VIEW-CALICO ROCK ROAD
 STONE COUNTY
 ROUTE SEC.
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.
 Drawn By: WCH. Date: 11-23-37
 Traced By: CBY. Date: 11-15-37
 Checked By: Date:
 Bridge No. 1839
 DRAWING NO. 4738-A

N.B. Barrett
 BRIDGE ENGINEER