FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	S-50(4)	1953		
JOB No.	10326			3	102

SCHEDULE OF BRIDGE QUANTITIES

BRIDGE NO.	CODE NO.	ITEM NO.	103	SP & 802	S[illegible]03	SP & 804	SP-805-3	807	929	S.P.	
		ITEM / UNIT OF BRIDGE	DRY EXCAVATION FOR STRUCTURES	CLASS "S" CONCRETE FOR BRIDGES	REINFORCING STEEL	CONCRETE PILING 16" OCTAGONAL	STEEL PLATE GUARD RAIL (10 GA.)	STRUCTURAL STEEL IN BEAM SPANS	BRIDGE NAME PLATES TYPE "C"	REMOVAL OF EXISTING BRIDGE STRUCTURES	
		UNIT	CU. YD.	CU. YD.	LB.	LIN. FT.	LIN. FT.	LB.	EACH	COMPLETE ITEM	
2884	X031	End Bent No. 1	38	9.98	1353	180	7.82	389	1		
		Intermediate Bents No. 2-5		20.68	3380	565					
		End Bent No. 6	38	9.98	1353	180	7.82	389			
		Five 30'-0" I-Beam Spans		88.48	15165		300.00	59835			
		Totals for Bridge No. 2884	76	129.12	21251	925	315.64	60633	1	6%	
2885	X031	End Bent No. 1	48	11.92	1440	280	9.06	442	1		
		Intermediate Bents No. 2-7		35.28	5436	1399					
		End Bent No. 8	48	11.92	1440	280	9.06	442			
		Seven 40'-0" I-Beam Spans		164.04	28452		560.00	153100			
		Totals for Bridge No. 2885	96	223.16	36768	1959	578.12	153984	1	30 %	
2886	X031	End Bent No. 1	40	10.53	1356	252	9.42	414	1		
		Intermediate Bents No. 2-5		22.56	3264	805					
		End Bent No. 6	38	10.53	1356	252	9.42	414			
		Five 30'-0" I-Beam Spans		88.60	15225		300.00	60275			
		Totals for Bridge No. 2886	78	132.22	21201	1309	319.84	61103	1	64 %	
		Totals for Job No. 10326	250	484.50	7[illegible]220	4193	1212.60	275720	3	100 %	

Revised
9-1-53 - W.B. By: 2884

SCHEDULE OF
BRIDGE QUANTITIES
BEASLEY - LEPANTO
POINSETT COUNTY
ROUTE 143 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: J.E.H. Date: 8-26-53
Traced By: ____ Date: ____
Checked By: ____ Date: ____
Scale: ____

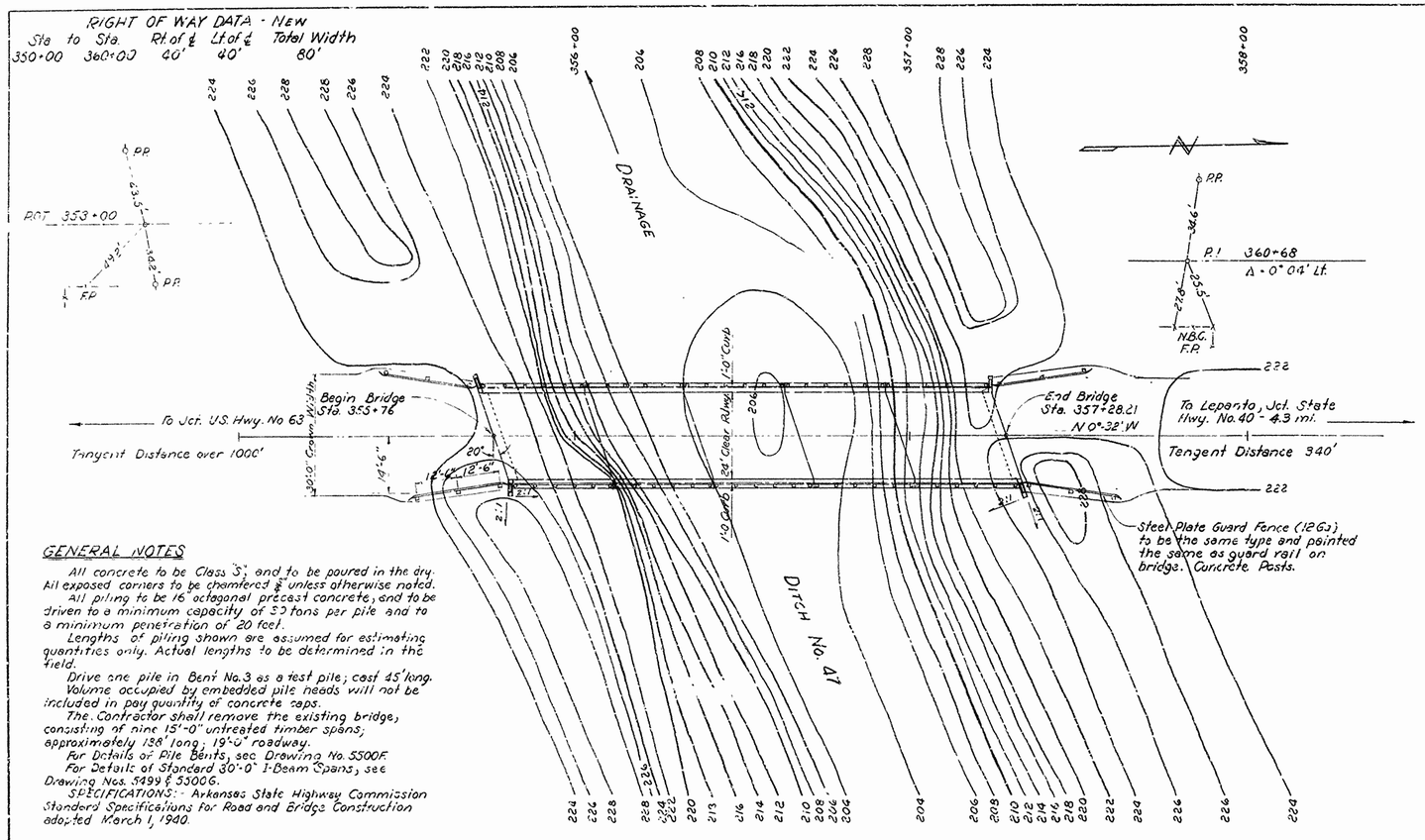
Bridge Design Engineer

BRIDGE No. 2884, 2885 2886 DRAWING NO. 8768

FED. ROAD No.	STATE	FED. AID PROJECT	FISCAL YEAR	SHEET No.	TOTAL SHEETS
6	ARK.	S-50(4)	1953		
JOB No.		10326		25	102

RIGHT OF WAY DATA - NEW

Sta to Sta	Rt of ℄	Lt of ℄	Total Width
350+00 360+00	40'	40'	80'



GENERAL NOTES

All concrete to be Class 'S' and to be poured in the dry. All exposed corners to be chamfered ¾" unless otherwise noted.

All piling to be 16" octagonal precast concrete, and to be driven to a minimum capacity of 50 tons per pile and to a minimum penetration of 20 feet.

Lengths of piling shown are assumed for estimating quantities only. Actual lengths to be determined in the field.

Drive one pile in Bent No.3 as a test pile; cast 45' long.

Volume occupied by embedded pile heads will not be included in pay quantity of concrete caps.

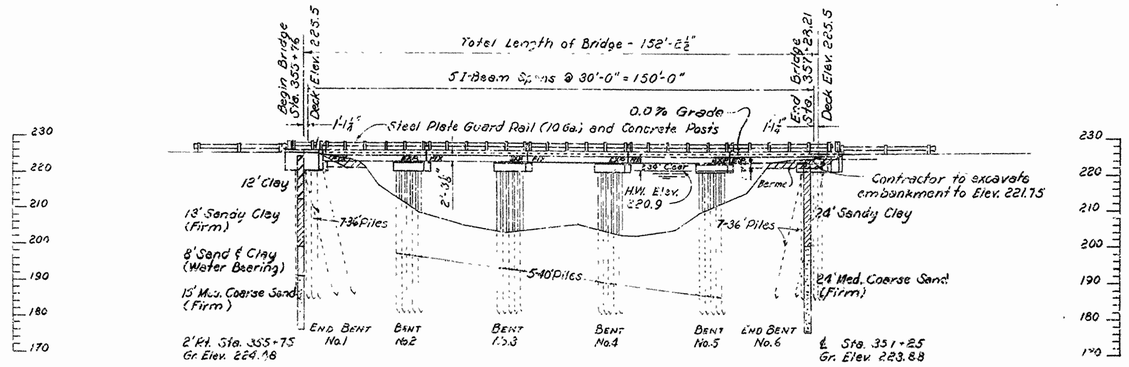
The Contractor shall remove the existing bridge, consisting of nine 15'-0" untreated timber spans; approximately 138' long; 19'-0" roadway.

For Details of Pile Bents, see Drawing No. 5500F.

For Details of Standard 30'-0" I-Beam Spans, see Drawing Nos. 5499 & 5500G.

SPECIFICATIONS: - Arkansas State Highway Commission Standard Specifications for Road and Bridge Construction adopted March 1, 1940.

PLAN



ELEVATION

Drainage Area 100 sq. mi.
C = 0.3

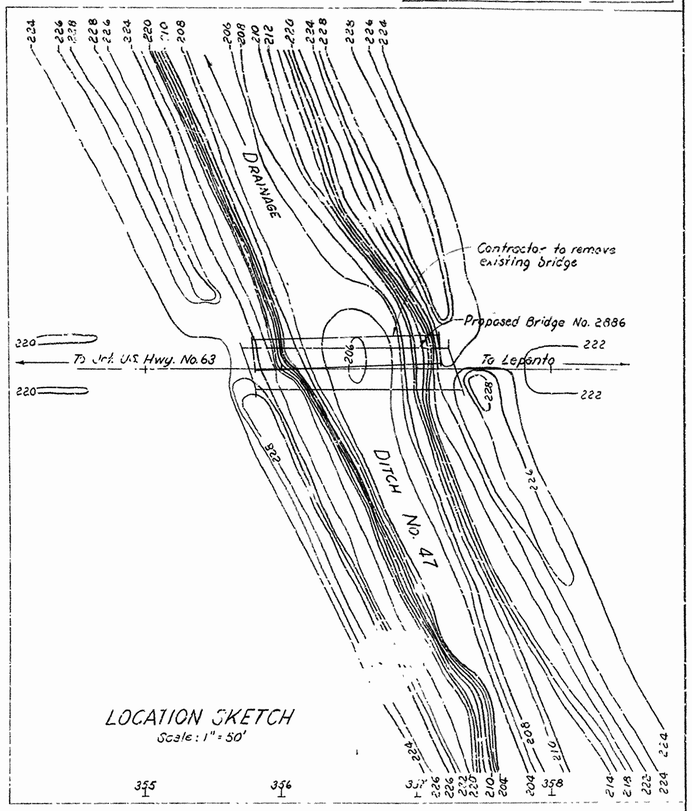
B.M. Elev. 225.46
M.I.T. Fellor Guard
3' Lt. Sta. 355+81

DESIGN SPECIFICATIONS AASHO. 1953

LIVE LOAD: 15 Loading

UNIT STRESSES:

Class 'S' Concrete (n=10)	1200 #/□"
Reinforcing Steel (Int. Gr.)	20000 #/□"
Structural Steel	18,000 #/□"



LOCATION SKETCH

Scale: 1" = 50'

QUANTITIES

ITEM NO.	ITEM	QUANTITY	UNIT
103	Dry Excavation for Structures	78	Cu. Yd.
SP § 802	Class 'S' Concrete for Bridges	132.22	Cu. Yd.
SP § 803	Reinforcing Steel	21201	Lb.
SP § 804	Concrete Piling - 16" Octagonal	1309	Lin. Ft.
SP - 805-3	Steel Plate Guard Rail (10 Ga.)	318.64	Lin. Ft.
807	Structural Steel in Beam Spans	61103	Lb.
915	Bridge Name Plates (Type 'C')	1	Each
SP	Removal of Existing Bridge Structures	64%	Complete Item

LAYOUT OF BRIDGE OVER DRAINAGE DITCH NUMBER 47 BEASLEY - LEPANTO POINSETT COUNTY

ROUTE 143 SEC. 0

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: B.S. Date: 5-12-53
Traced By: ____ Date: ____
Checked By: GWE Date: 10-2-53

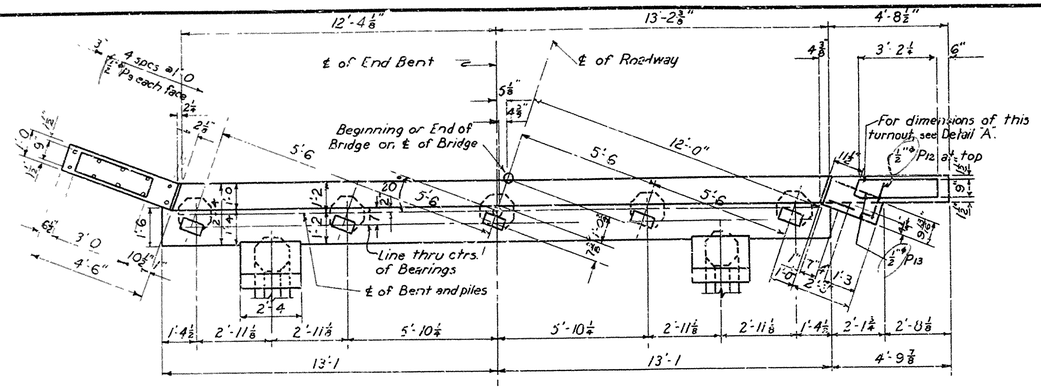
Scale: 1" = 20'

BRIDGE No. 2886

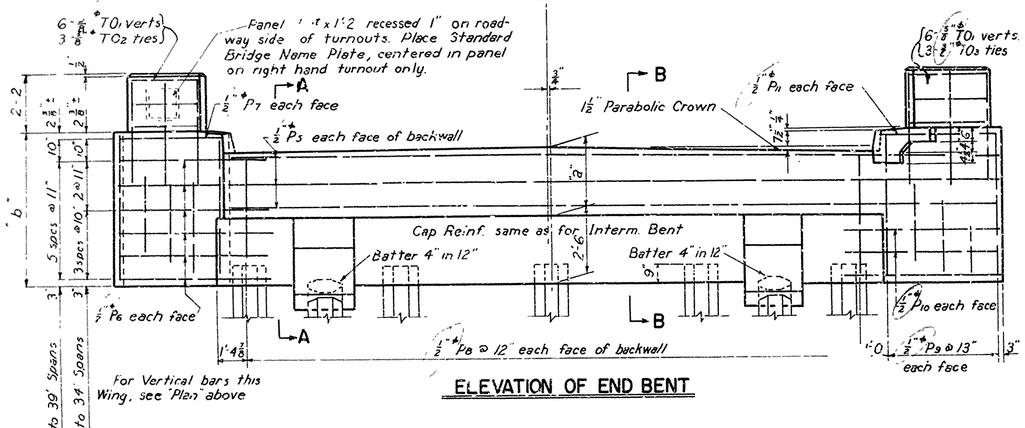
DRAWING NO. 8371

Bridge Design Engineer

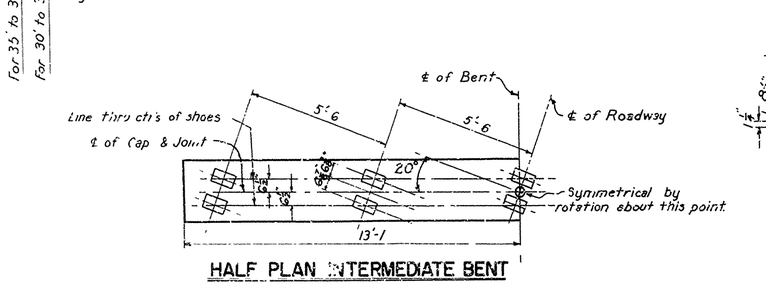
FED. ROAD LIST NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
8	ARK.				
STATE JOB NO.					



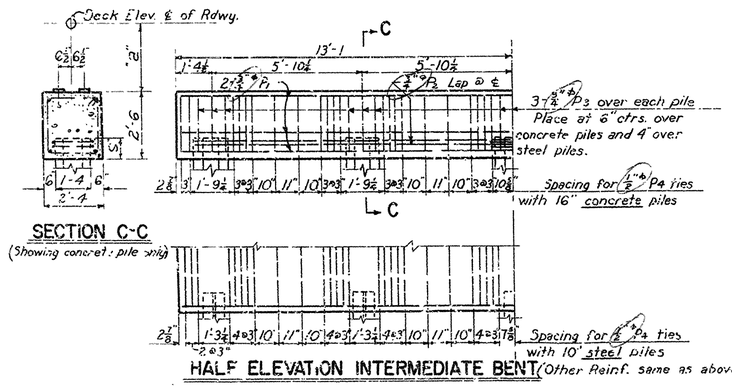
PLAN OF END BENT



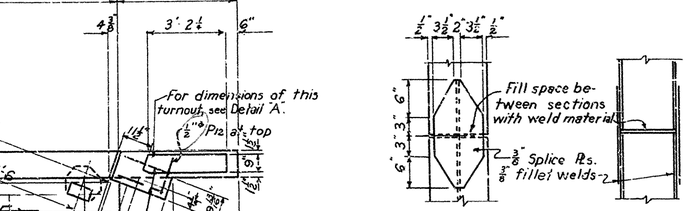
ELEVATION OF END BENT



HALF PLAN INTERMEDIATE BENT



HALF ELEVATION INTERMEDIATE BENT (Other Reinf. same as above)



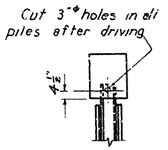
DETAILS OF 16" PRECAST CONCRETE PILE

No Scale

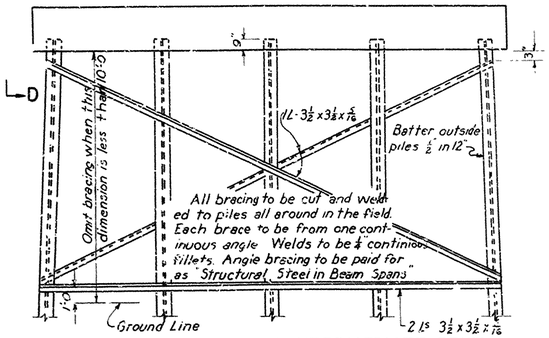
STEEL PILE SPLICE DETAILS

Scale: 1" = 1'-0

Generally all piles shall be driven full length and shall not be spliced except by permission of the Engineer.

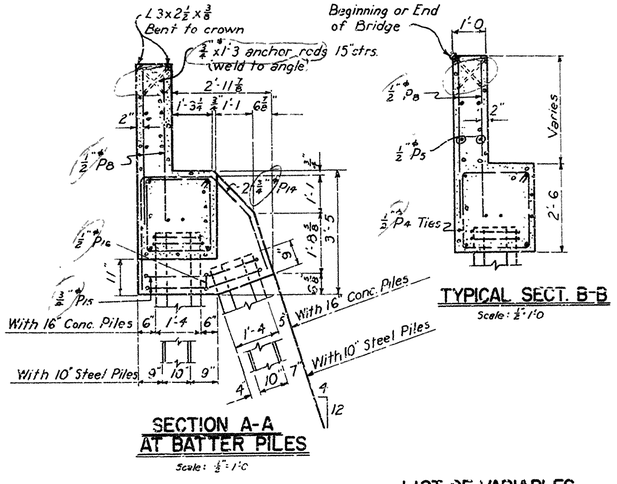


END VIEW D-D



TYPICAL BRACING INTERMEDIATE BENT

Scale: 1/4" = 1'-0

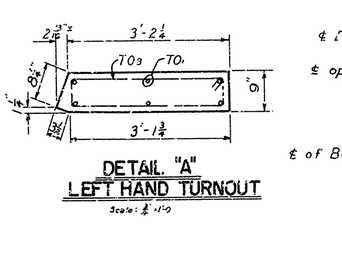


SECTION A-A AT BATTER PILES

Scale: 1/2" = 1'-0

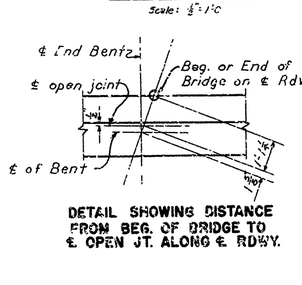
TYPICAL SECT. B-B

Scale: 1/2" = 1'-0



DETAIL "A" LEFT HAND TURNOUT

Scale: 1/2" = 1'-0



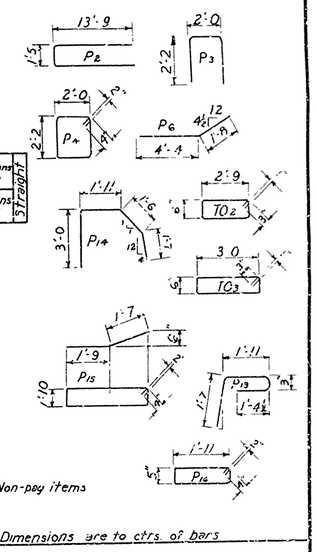
DETAIL SHOWING DISTANCE FROM BEG. OF BRIDGE TO ℄ OPEN JT. ALONG ℄ RDWY.

LIST OF VARIABLES

Span	Vert. Dimensions "a"	Vert. Dimensions "b"
30'	2'-5 3/8	5'-7 3/8
31'	2'-5 11/16	5'-7 7/16
32'	"	"
33'	2'-5 3/4	5'-7 1/2
34'	"	"
35'	2'-6 1/16	5'-10 3/16
36'	"	"
37'	"	"
38'	2'-8 3/8	5'-10 1/8
39'	"	"

LIST OF REINFORCING STEEL

Mk	Size	No. in End	No. in Int	Length	Bending Diagram
P1	#5 ϕ	6	6	25'-10	Str.
P2	"	4	4	28'-11	
P3	"	15	15	6'-4	
P4	#4 ϕ	44*	44*	9'-1	
P5	"	6		30'-4	Str.
P6	"	12		6'-0	
P7	"	2		4'-2	Str.
P8	"	50		4'-0 for 30'-34' Spans; 4'-3 " 35'-39' "	Straight
P9	"	20		5'-3 for 30'-34' spans; 5'-6 " 35'-39' "	
P10	"	6		6'-3	
P11	"	2		4'-6	Straight
P12	"	1		1'-6	
P13	"	2		5'-0	
P14	3/4" ϕ	4		8'-0	
P15	"	4		11'-1	
P16	1/2" ϕ	2		5'-5	
TO1	6/8" ϕ	12		4'-0	Str.
TO2	3/8" ϕ	3		7'-0	Non-pay items
TO3	3/8" ϕ	3		7'-6	



Dimensions are to ctrs. of bars

* 54 Ties if steel piles are used

NOTES

Steel Piles are to be driven to refusal. Concrete Piles to be driven to a minimum capacity of 28 tons.

For details of Superstructure and for General Notes, see Dwg. 5499 for 30' to 34' spans and Dwg. 5500 for 35' to 39' spans.

Use type of Pile called for on Bridge Layout.

Revised Roadway & Curb Widths. FDN 4-28-55

DETAILS OF STANDARD PILE BENTS 30' TO 39' I-BEAM SPANS 24'-0 CLEAR RDWY. 1'-0 CURBS 20° SKEW RT. FORWARD

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

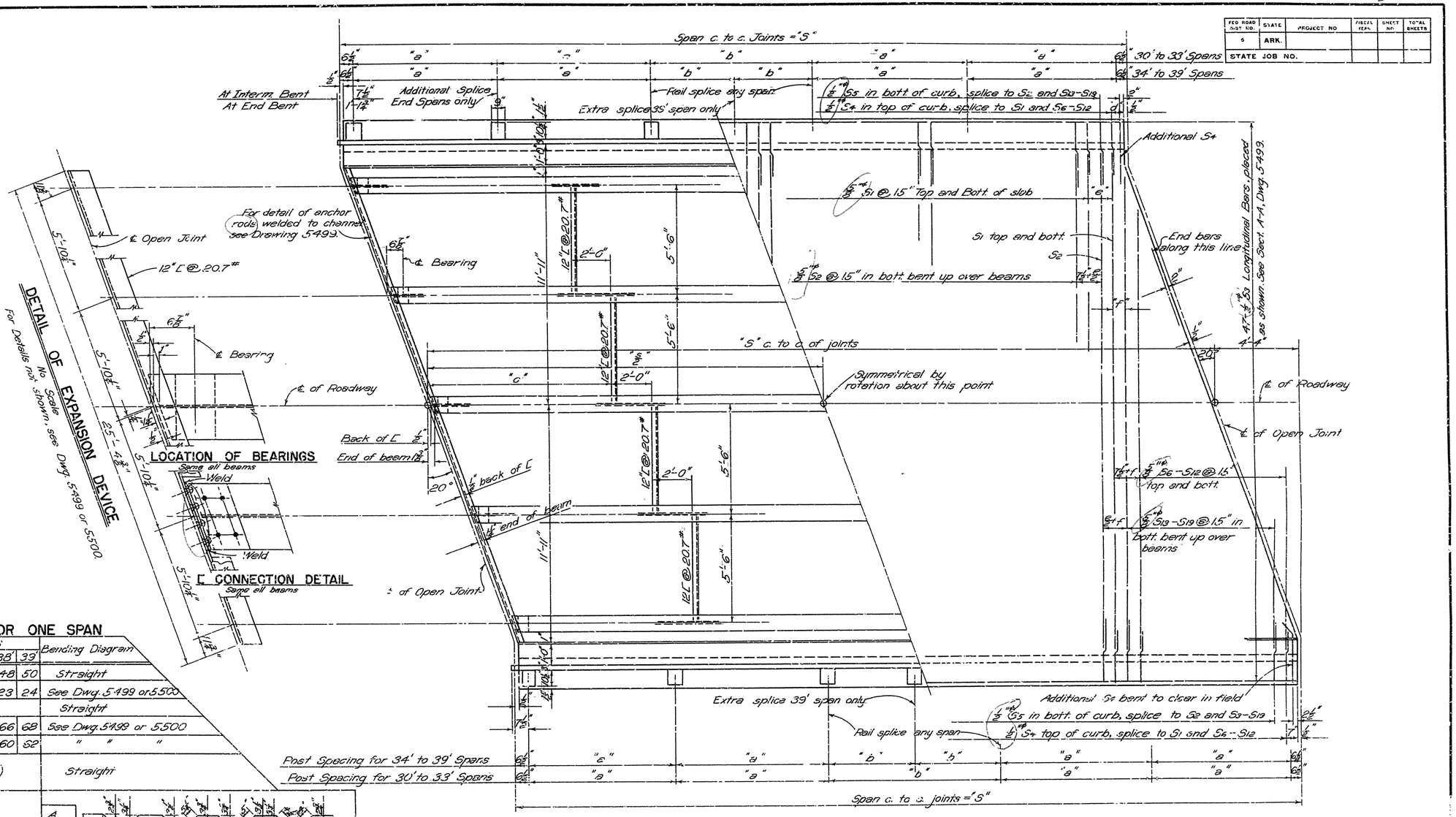
Drawn By: WWM Date: 2-9-53
Traced By: KEC Date: 8-5-55 W.E.W. 8-18-55
Checked By: JHH Date: 2-25-53

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

DRAWING NO. 5500F

Ward Gordman
BRIDGE DESIGN ENGINEER

FED ROAD DIST NO.	STATE	PROJECT NO	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO.					



LIST OF REINFORCING STEEL FOR ONE SPAN

Mark	Size	Length	NO. REQUIRED WHEN "S" IS 30'	31'	32'	33'	34'	35'	36'	37'	38'	39'	Bending Diagram
S1	⅝"	25'-0"	34	36	38	40	42	44	44	46	48	50	Straight
S2	"	25'-11"	16	17	18	19	20	21	21	22	23	24	See Dwg. 5499 or 5500
S3	½"	3'-6"	47										Straight
S4	"	4'-4"	52	54	56	58	60	62	62	64	66	68	See Dwg. 5498 or 5500
S5	"	3'-0"	46	48	50	52	54	56	56	58	60	62	" " "
S6 to S12	⅝"	22'-3" to 1'-9"	28 (4 each length) (Varies by 3'-5")										Straight
S13	⅝"	24'-1"	2										A 1'-9⅝"
S14	"	21'-4"	2										10½"
S16	"	17'-9"	2										4"
S16	"	14'-1"	2										2'-4½"
S17	"	10'-7"	2										1'-8"
S18	"	7'-0"	2										1'-2"
S19	"	3'-6"	2										4½"

Mark	Size	Length	30' to 33' spans	34' to 39' spans
P01	⅝"	5'-5"	24	28
PC2	⅝"	2'-9"	36	42

See Dwg. 5499 or 5500 (Not a pay item).

Dimensions are to ctrs. of bars.

TABLE OF VARIABLE DIMENSIONS

Span c. to c. jts "S"	Reqd W"	Post Spacing "a"	Post Spacing "b"	Strut Spacing "c"	Reinforcing Spacing "d"	Reinforcing Spacing "e"	Reinforcing Spacing "f"	Camber "x"
30'	21WF62	5'-9"	5'-11"	6'-6"	7½"	1'-3"	7"	⅜"
31	21WF62	5'-11"	6'-3"	6'-9"	7"	1'-2"	6½"	⅜"
32'	"	6'-2"	6'-3"	7'-0"	6½"	1'-1"	6"	7/16"
33'	21WF73	6'-2½"	7'-1"	7'-3"	5"	1'-1"	4½"	7/16"
34'	"	5'-5"	5'-7½"	7'-6"	5"	11½"	4½"	½"
35'	24WF76	5'-7"	5'-9½"	7'-9"	5"	10"	4½"	7/16"
36'	"	5'-9"	5'-11½"	8'-0"	7"	1'-2"	6½"	7/16"
37'	"	5'-11"	6'-1½"	8'-3"	6½"	1'-1"	6"	½"
38'	24WF84	6'-2"	6'-1½"	8'-6"	5"	1'-1"	4½"	½"
39'	"	6'-2½"	6'-6½"	8'-9	5"	11½"	4½"	9/16"

PLAN FOR 30' TO 39' SPANS

Scale ⅜"=1'-0"

li. sur. P.O.
curb for reinf. bar to
curbs. 1 g. sl. p. dei.,
remove ex. curb
repair casing

NOTES

For details not shown and General Notes, see Drawing No. 5499 for 30' to 34' spans and Dwg. 5500 for 35 to 39 spans.

For details of bents, see Drawing 5500F.

DETAILS OF STANDARD
30' TO 39' I BEAM SPANS
24'-0" CLEAR RDWY. 1'-0" CURBS
20° SKEW RT. FORWARD

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: W.W.M. Date: 2-2-53
Traced By: L.W.H. Date: 8-3-55 Chk'd W.F.W. 8-18-55
Checked By: J.H.K. Date: 2-20-53
Scale: As noted

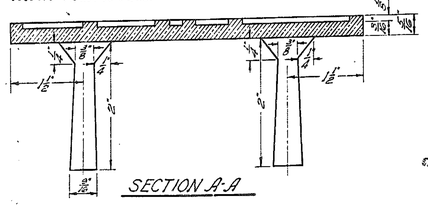
Ward Gordon
BRIDGE DESIGN ENGINEER

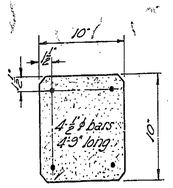
DRAWING No. 5500G

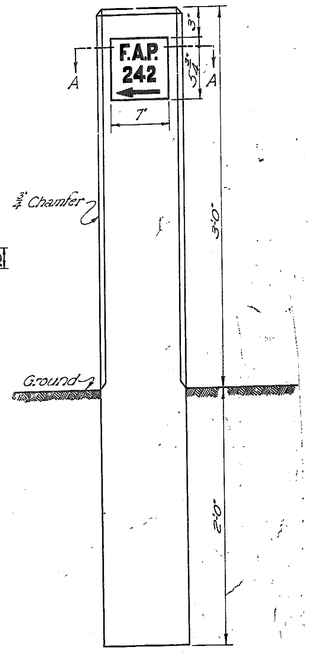
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.				
STATE JOB NO.					

DETAIL OF MARKER PLATE TYPE AL-1
FOR FEDERAL AID PROJECTS - PRIMARY

Type AP-1 plate to conform in every respect to type AL-1 except that directional arrow shall be reversed.
For Federal Aid Secondary Projects, change letters F.A.P. to F.S.







Note:
Concrete to be Class "A" (1:2:4 Mix)
Numerals shown are to be the number of the project on which the marker is placed.

QUANTITIES PER MARKER	
Class "A" Concrete	Reinforcing Steel
0.13 Cu. Yds.	13 Lbs.

DETAIL OF MARKER PLATE - TYPE AL-2
FOR FOREST HIGHWAY PROJECTS

Type AP-2 plate to conform in every respect to type AL-2 except that directional arrow shall be reversed.
Note: Dimensions to be same as for Federal Aid Marker Plates.

SPECIFICATIONS FOR MARKER PLATES

Plates to be either Bronze or Aluminum.
Body ⅛" thick. Two tapering cone lugs ⅜" to ⅝", 2" long.
Weight One Bronze Plate = 3.5 Lbs. approx.
Weight One Aluminum Plate = 1.1 Lbs. approx.
Bronze: U.S. Government Specifications for Statuary Bronze.
Aluminum: A.S.T.M. Specifications, Serial designation B26-47 T.

INSTRUCTIONS FOR PLACING MARKERS
ON FEDERAL AID & FOREST HIGHWAY PROJECTS

One marker shall be placed at each end of each Federal Aid or Forest Highway Project or section thereof, except bridge projects without graded approaches. Markers will be placed on the right hand side of the road with respect to the direction of travel and with the arrow on the marker plate indicating in which direction the project or section lies. Where two projects adjoin, the marker plates for both may be placed on the same post.

For projects ending with an excavation section, the marker shall be placed between the top of the back slope and the R/W line.

For projects ending with an embankment section, the marker shall be placed between the toe of the embankment slope and the R/W line.

On municipal projects, place marker plate in the face of curb, when and where specified on the plans.

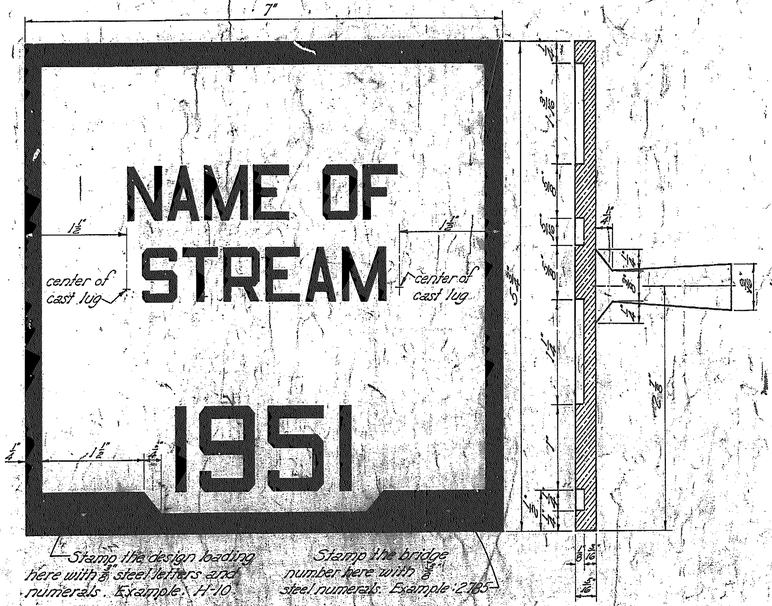
Where a bridge or several bridges, without graded approaches, form a project or section, one marker plate shall be placed on either end of each bridge as follows:

In the end rail post on bridges having concrete railing.

In the face of the abutment near the shoe on bridges not having concrete railing.

Where the continuity of a project or section is broken thru the introduction of an exception, other than a bridge without graded approaches, a marker shall be placed at each point where the project or section is stopped and where resumed.

FEDERAL AID AND FOREST HIGHWAY PROJECT MARKERS

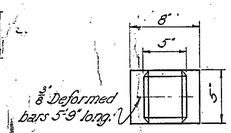


TYPE "C" BRIDGE NAME PLATE STYLE 1 - FULL SIZE

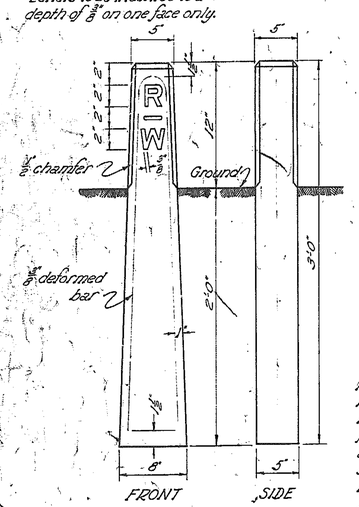
TYPE "C" BRIDGE NAME PLATE STYLE 2 - FULL SIZE

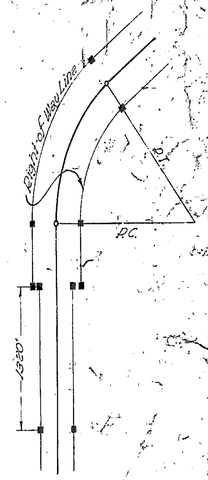
SPECIFICATIONS FOR NAME PLATES

Plates to be either Bronze or Aluminum.
Body ⅛" thick. Two tapering cone lugs ⅜" to ⅝", 2" long.
BRONZE: U.S. Government Specifications for Statuary Bronze.
ALUMINUM: A.S.T.M. Specifications, Serial designation B26-47 T.
The border and all lettering to be raised ⅛" above face of plate. Top surface of raised border and lettering to be polished.
All lettering to be plain Gothic, square cut and not tapered.
The number of plates required, type, and location are to be as shown on Plans.
Name of Stream to be varied to suit each bridge.
Shop drawing of Bridge Name Plates shall be submitted for approval before casting is begun.



QUANTITIES PER MARKER	
Class "A" Concrete	Reinf. Steel
0.025 C.Y.	2.2 Lbs.





Note: Markers shall be placed at 1000 or 1320 foot intervals along the Right-of-Way line where no changes in width or direction occur; at such points as changes in width occur and at the P.C. and P.T. of all curves, as shown on the plans or as directed by the Engineer. Posts to be set so letters face roadway.
Concrete to be Class "A" (1:2:4 Mix).

RIGHT OF WAY MARKERS
Do not scale

FEDERAL AID AND FOREST HIGHWAY
PROJECT MARKERS
RIGHT OF WAY MARKERS
BRIDGE NAME PLATES

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

Drawn By: A.J.J. Date: 10-51
Traced By: K.K. Date: 10-51
Checked By: Date:
Scale: in. = ft.

BRIDGE NO. DRAWING NO. 2389

Wal Ford
BRIDGE DESIGN ENGINEER

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