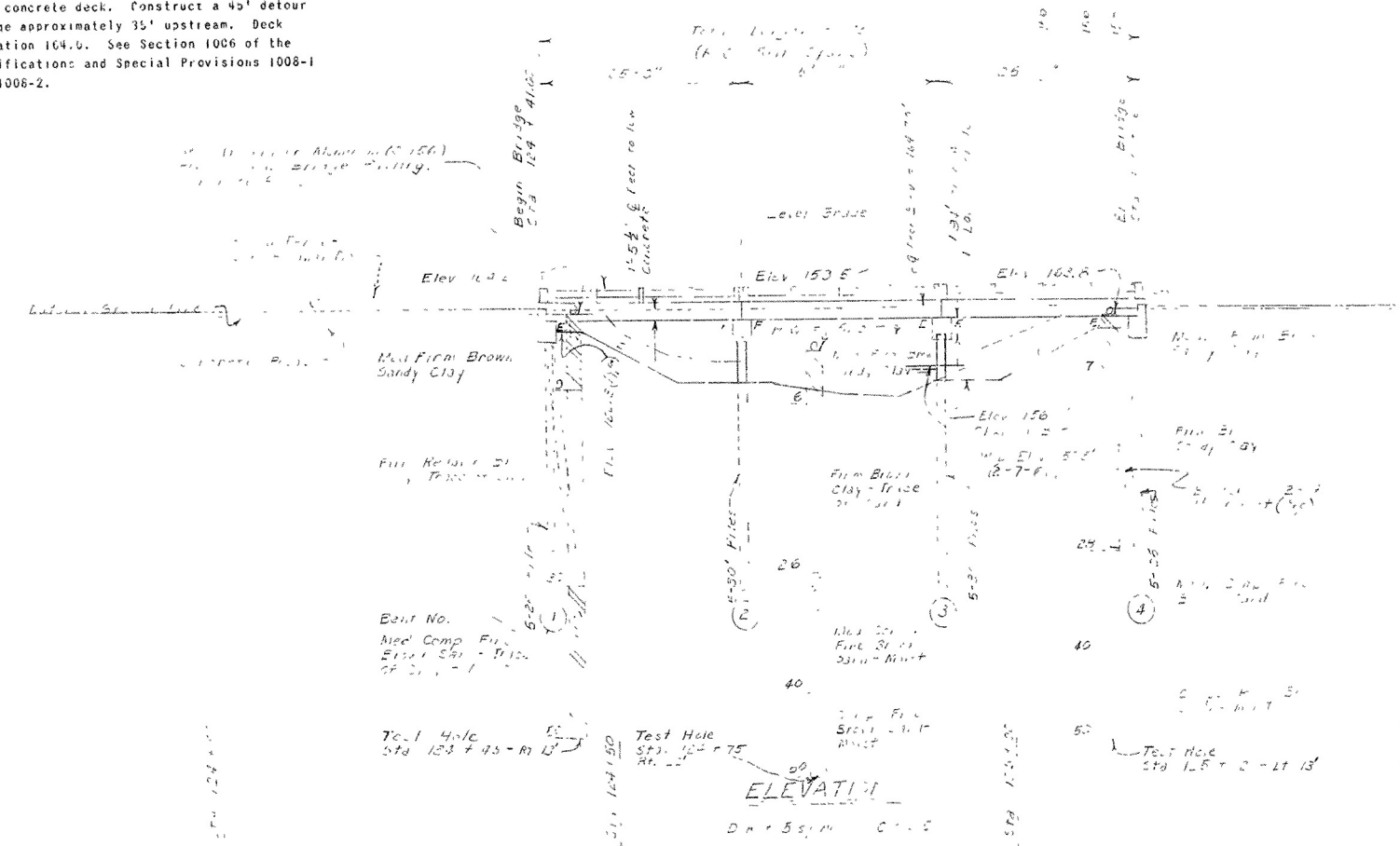


NOTE: Remove existing 58.7' Timber Bridge with concrete deck. Construct a 45' detour bridge approximately 35' upstream. Deck Elevation 164.0. See Section 1006 of the Specifications and Special Provisions 1008-1 and 1008-2.



**GENERAL NOTES**

Bench Mark - Nail in side Power Pole 35' Rt. Station 124+20, Elev. 128.54.

For Details of Substructure see Drawing No. 5421A.

For Details of Superstructure see Drawing No. 5423.

All concrete removed from the existing bridge shall be placed carefully by hand methods along the slopes at bridge ends as directed by the Engineer.

All piling shall be 16" octagonal precast concrete piles driven to a minimum bearing of 35 tons per pile. Lengths of piling shown are for estimating purposes only. Actual lengths are to be determined in the field. Drive one 35' test pile in Bent No. 2. All piling shall be driven to a minimum penetration of 20 feet.

Loading: H20-S16 AASHO 1957

Stresses: Class S Concrete (n=10) 1,200 psi

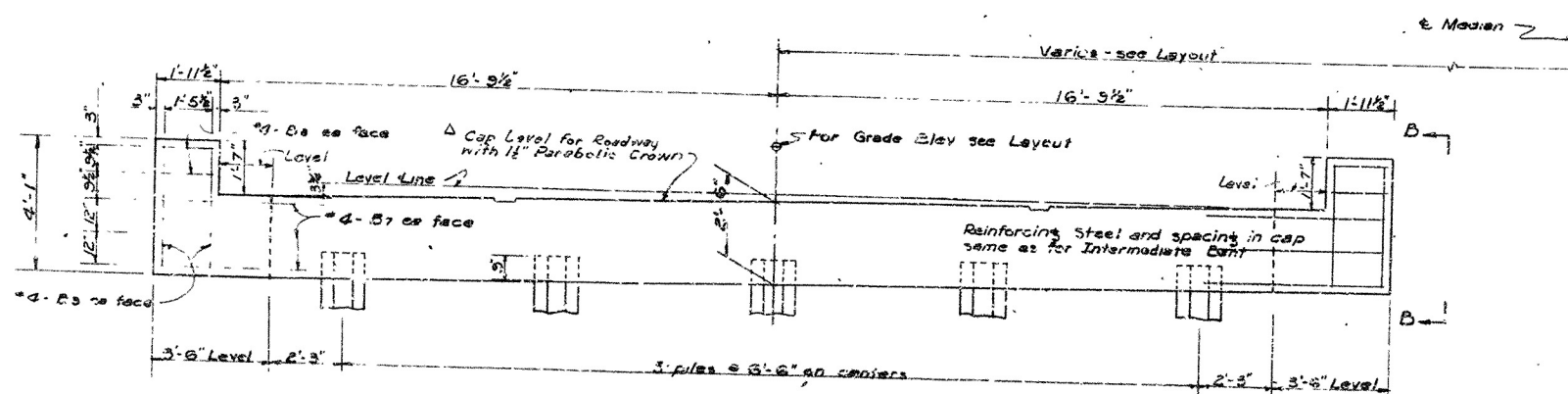
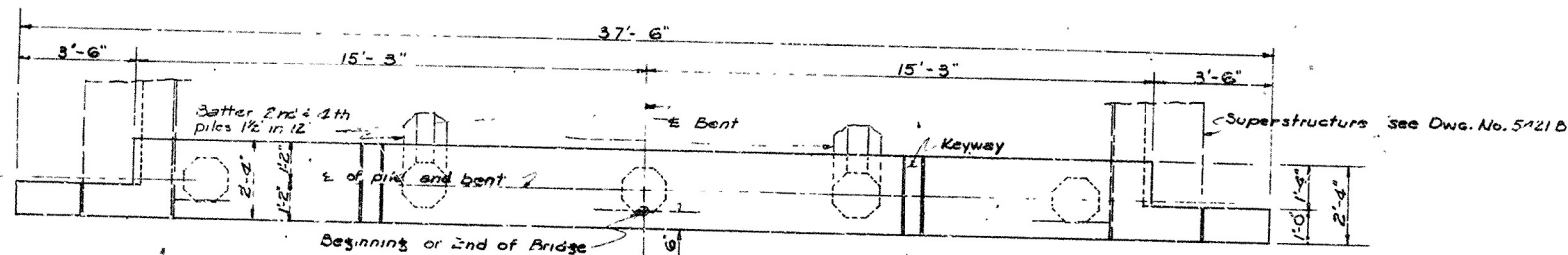
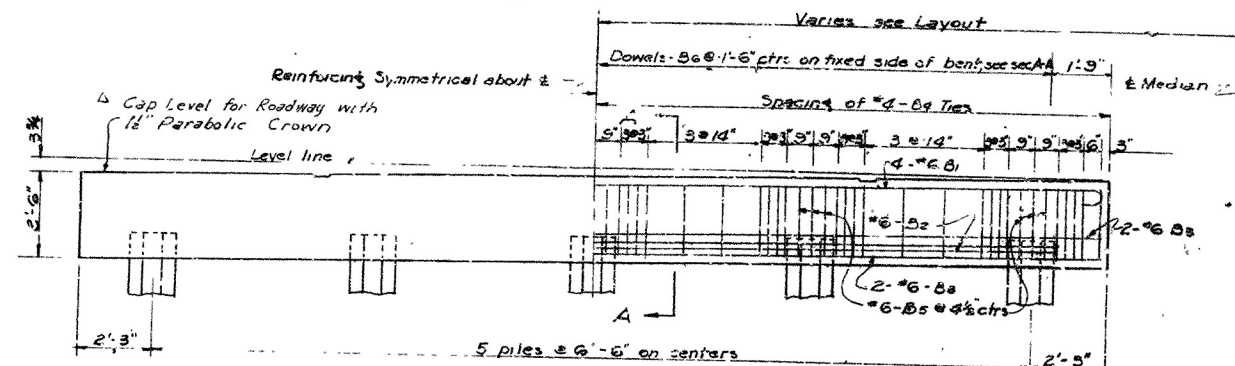
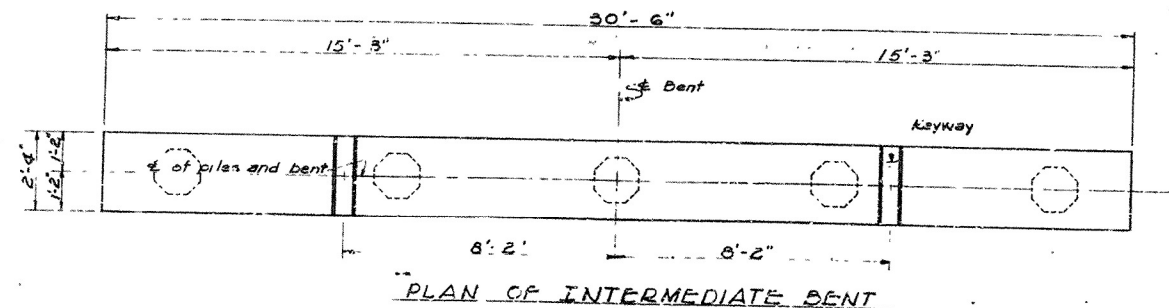
Reinforcing Steel 20,000 psi

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

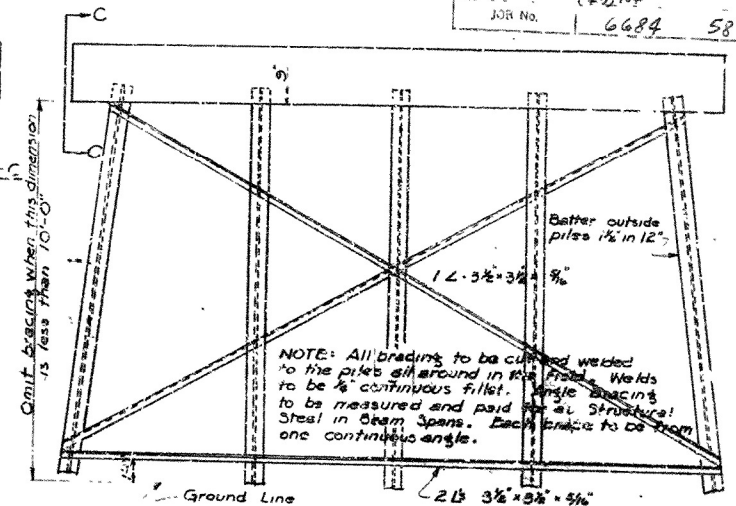
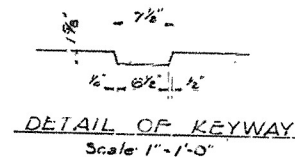
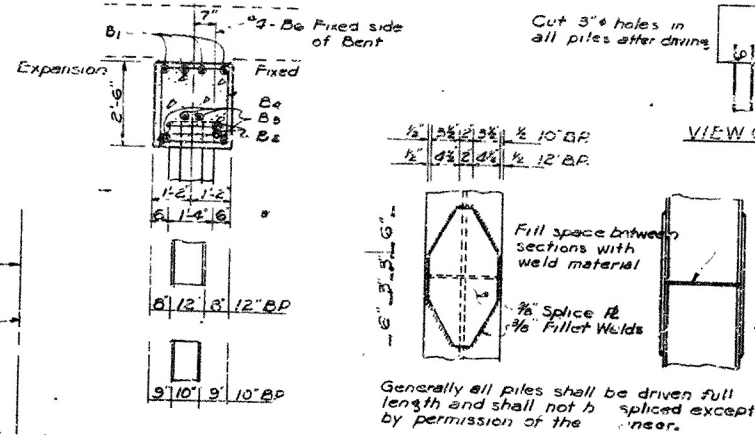
LAYOUT OF  
BRIDGE OVER CHEMIN-A-HAUT CREEK  
HAMBURG-DREW COUNTY LINE  
ASHLEY COUNTY

ROUTE 81 SEC. 2  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

BRIDGE NO. 3551 DRAWING NO. 11597



NOTE: Reverse crown when the median is on the left.



GENERAL NOTES

All concrete to be Class S and shall be poured in the dry. All exposed corners to be chamfered 1/4" unless otherwise noted. Reinforcing steel to be deformed bars of intermediate grade unless otherwise noted by Special Provisions. Shop lists and bending diagrams are to be submitted for approval before fabrication is begun. All piling shall be driven to a minimum capacity of 55 tons per pile. Piling shall be either 10" H&B, 12" H&B, steel bearing piles or 16" octagonal precast concrete piles as shown on the layout. Volume occupied by embedded pile heads will not be included in the pay quantities of concrete caps. For Details of Standard 30'-0" R.C. Slab Spans see Drawing No. 5421B. SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

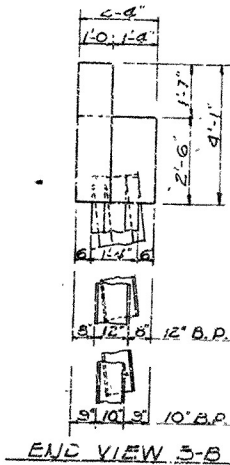
BAR LIST PER BENT

MARK	SIZE	NO. PER BENT	END	INT	LENGTH	BENDING DIAGRAM
B1	#6	4	4	4	3'-6"	
B2	#6	4	4	4	3'-6"	
B3	#6	4	4	4	30'-1"	
B4	#4	50	50	50	6'-11"	
B5	#6	15	15	15	6'-5"	
B6	#4	12	12	12	2'-6"	
B7	#4	8	8	8	1'-8"	
B8	#4	6	6	6	3'-9"	

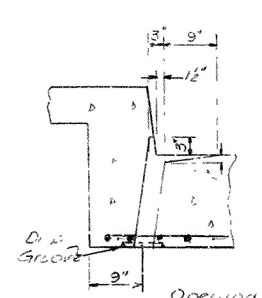
Dimensions are to centers of bars

DETAILS OF STANDARD PILE BENTS FOR STD. 30'-0" R.C. SLAB SPANS

28'-0" CLEAR ROADWAY 2 CURBS @ 1'-6"  
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: [Signature] DATE: 7-16-57  
CHECKED BY: [Signature] DATE: 8-1-57  
BRIDGE NO. DRAWING NO. 5421A  
FILED AS Dwg. No. 100-23-A



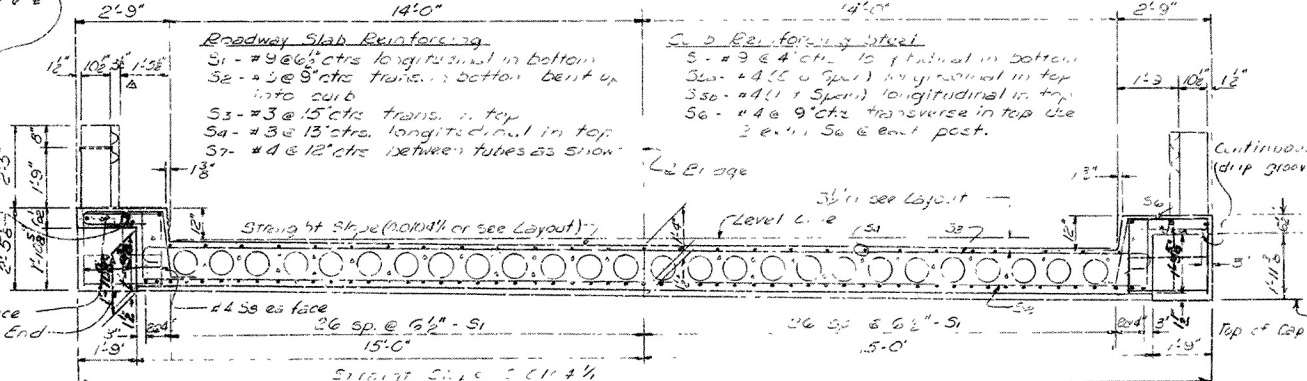
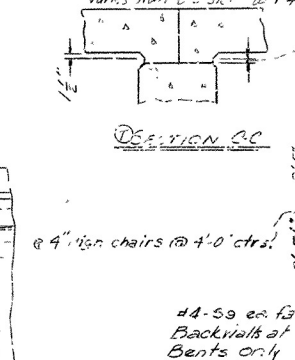
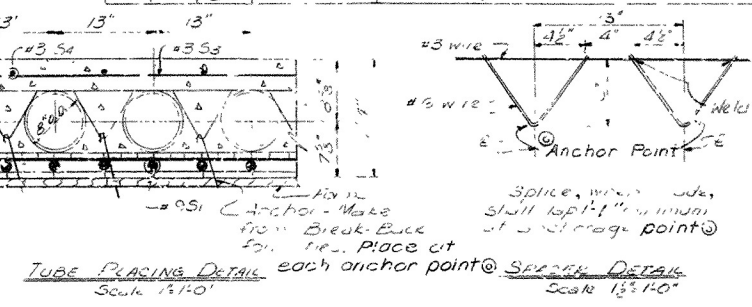
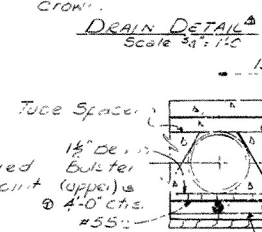
Parabolic Crown Note Added 3-25-60 F.R.B. Std Specification title 6-1-60 H.B.



**BAR LIST PER SPAN**

MC	Size	No. Bars	End Int	Length	Bending Diagram
S1	9	57	57	7'-7"	
S2	5	34	34	7'-7"	
S3	3	20	20	30'-7"	
S4	3	27	27	24'-7"	
S5a	4	-	-	25'-1"	
S5b	1	-	-	24'-7"	
S6	4	88	88	7'-6"	
S7	4	200	200	2'-9"	
S8	4	12	-	2'-2"	
S9	4	12	-	2'-5"	
PO1	5	18	20	5'-10"	
PO2	5	4	-	6'-1"	
PO3	3	6	-	4'-7"	
PO4	3	24	30	2'-6"	

Dime. signs are to min. of bar.  
\* Non-Play lbs. ns.



SECTION 1

GENERAL NOTES

All concrete to be Class S. All exposed corners to be chamfered 3/4" unless otherwise noted.

Reinforcing steel to be deformed bars of intermediate or hard grade. Shop lists and bending diagrams must be submitted and approval secured before fabrication is begun.

"All cylindrical tubes used to form voids shall be of moisture protected, laminated type construction, minimum thickness 0.200, and shall be furnished complete with end closures.

All reinforcing steel and fiber tubes shall be accurately located in the forms and firmly held in place by means of steel wire supports and spacers for tubes of a sufficient size and number to prevent displacement during the course of construction, but in no case of lesser design than that shown.

Wire supports for reinforcing bars will not be paid for directly, but will be considered subsidiary to the item "Reinforcing Steel".

Tubes for forming voids and wire supports and spacers for tubes will not be paid for directly, but will be considered subsidiary to the item "Class S Concrete".

Shop lists and diagrams of wire supports and spacers for tubes shall be submitted for approval before fabrication is begun.

Roofing felt, bituminous felt, and poured asphalt joints shall be measured and paid for as Class S Concrete.

Steel or Aluminum Plate Guard shall be of the type shown or an equivalent rigid type as approved by the Engineer. The rail, including all concrete posts and fastenings shall be paid for at the unit price below per linear foot for "Steel or Aluminum Plate Guard Bridge Railings".

SPECIFICATIONS: Arkansas State Highway Commission Standard Specifications for Highway Construction, Edition of 1959.

DESIGN SPECIFICATIONS: AASHTO <sup>1961</sup>

Design Live Loading: HS20 & Special for State Loading of two 24,000# axles 4' on ctrs.

Load Distribution to Slab: Dead Load  $\frac{1}{168} W$ ; Live Load  $\frac{1}{168} W$  when/ft. of width plus 30% impact.

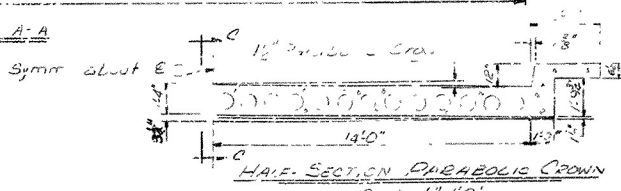
Unit Stresses: Class S Concrete (n=10) 1,200 psi

Reinforcing Steel 20,000 psi

① Rev. Bridge Rail 2-4-63. RWM  
\* Rev. Spacing of St. bars 4-6-65

② Revised End Post 11-2-61 RWM  
③ Revised Design 11-2-62 E.P.B. C.M. J.M.K.  
④ Revised E.P.B. 3-30-62  
C.M. C.V. 6-2-62

BRIDGE ENGINEER



Scale: 1/4"=1'-0"

© Revised 7-30-63 JWC 7-31-63 JAS  
included anchor points, changed  
1/2" Fl Beam to 2x8's to 4-0"x12's

DETAILS OF STANDARD  
25'-0" R.C. SLAB SPANS (WITH VOIDS)

28'-0" CLEAR ROADWAY 2 CURBS at 1'-6"

ROUTE                  SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: C.E.V. DATE: 8-12-61  
 TRACED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHECKED BY: FMH DATE: 8-15-61  
 SCALE: 3/4" = 1'-0" 01.35 noted  
 BRIDGE NO. \_\_\_\_\_ DRAWING NO. 5423