

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	2997	8	24	

① 6101- LAYOUT 26996

### HORIZONTAL CURVE DATA

$\Delta = 15^{\circ} 22' 20''$  Lt.  
 $D = 1^{\circ} 00' 00''$   
 $T = 773.26'$   
 $L = 1537.22'$   
 P.C. Sta. 4 + 51.42  
 P.I. Sta. 12 + 24.68  
 P.T. Sta. 19 + 88.64

## NOTES

USE TYPE 1A APPROACH GUTTERS AT BOTH ENDS OF BRIDGE - SEE  
DRAWING NOS. 1898U-1 AND 1898U-2.

FOR R/W DATA AND GUARD RAIL - SEE ROADWAY PLANS.

EXCAVATE CHANNEL AS SHOWN TO ELEV. 238.0.

THE CONTRACTOR SHALL CONSTRUCT A CHANNEL FROM APPROX. 110'  
UPSTREAM FROM E BRIDGE TO 60' DOWNSTREAM. EXCAVATE  
AS SHOWN WITH 2:1 SLOPES. APPROX. 1050 CUBIC  
YARDS OF CHANNEL EXCAVATION.

1'-6" DUMPED RIPRAP PLACED ON FILTER BLANKET (SEE SP 816-  
AND DRWG. NO. 1891F). TOP OF RIPRAP TO BE ELEV. 248.5.

TOP OF TOE TO BE A MINIMUM OF 1'-6" BELOW THE GROUND. (TYPE

## "N" VALUES

STA. 13+55.00 - 14' LEFT OF C SURVEY

5.5'-6.5' N=10	35.5'-36.5' N=24
10.5'-11.5' N=12	45.5'-46.5' N=OVER 60
25.5'-26.5' N=18	47.5'-48.5' N=41

STA. 14+45.00- 14' LEFT OF C SURVEY

5.5'-6.5' N=17	35.5'-36.5' N=26
15.5'-16.5' N=40	45.5'-46.5' N=34
25.5'-26.5' N=21	50.5'-51.5' N=40

## HYDRAULIC DATA

	DESIGN FLOOD (Q 50)	BASIC FLOOD (Q 100)
DISCHARGE (CFS)	2,100	2,300
NORMAL WATER SURFACE ELEV.	247.1	247.2
NORMAL WATER SURFACE BACKWATER ELEV.	247.4	247.5

DRAINAGE AREA = 2.57 SQUARE MILES  
HIGH WATER MARK - ELEVATION 249.5 (12-27-82)

GENERAL NOTES

BENCH MARK: " □ " CUT HEADWALL 23' RT. STA. 14+09, ELEV. 249.71.

ALL CONCRETE IN THE SUPERSTRUCTURE SHALL BE CLASS S(AE). ALL CONCRETE IN THE SUBSTRUCTURE SHALL BE CLASS "S" AND SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

PILING SHALL BE 16" OCTAGONAL OR 16" SQUARE PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE, AND TO A MINIMUM PENETRATION OF 20 FT. BELOW THE GROUND LINE. LENGTHS OF PILING SHOWN ARE ASSUMED OR ESTIMATED QUANTITIES ONLY. ACTUAL LENGTHS ARE TO BE DETERMINED IN THE FIELD. DRIVE 100 TO 120 FT. IN BENT NO. 1 AND ONE 40 FT. TEST PILE IN BENT NO. 3. PILES IN END BENTS SHALL BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF BENT CAP IS IN PLACE. 14" SQ. PILES MAY BE SUBSTITUTED FOR THE 16" PILING SHOWN FOR END BENTS.

FOR DETAILS OF BENTS, SEE DWG. NO. 26997  
FOR DETAILS OF 25'-0" R.C. SLAB SPANS, SEE DWG. NO. 26998  
FOR DETAILS OF STANDARD CONCRETE PILES, SEE DWG. NO. 2383

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1983.

LIVE LOADING: HS20

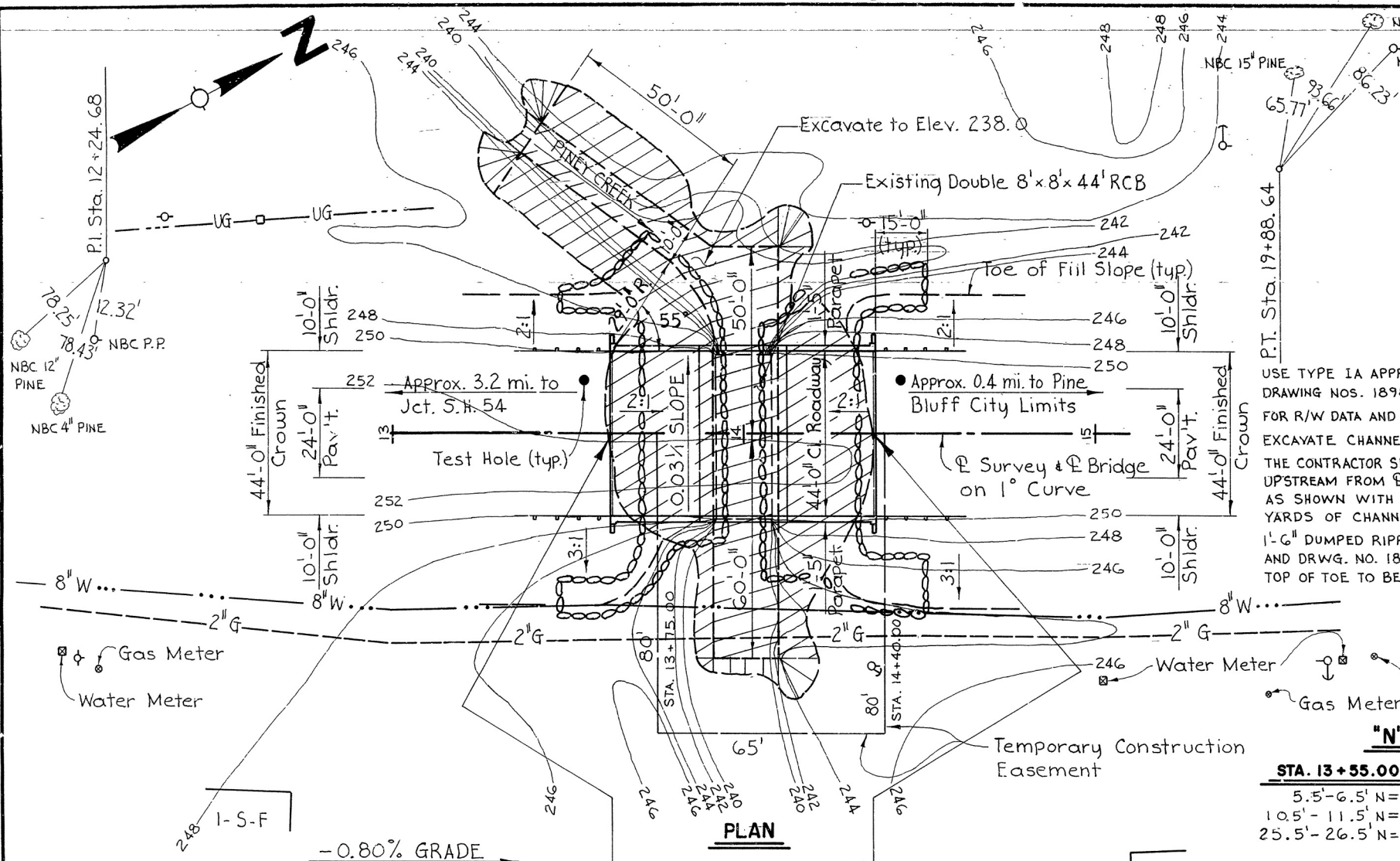
METHOD OF DESIGN: LOAD FACTOR

UNIT STRESSES:  $f'_c$  = COMPRESSIVE STRENGTH OF CLASS S OR S(AE) CONCRETE = 3500 PSI  
 $f_y$  = YIELD STRENGTH OF REINFORCING STEEL = 60,000 PSI

THE CONCRETE DECK SHALL BE GIVEN A TINE FINISH AS SPECIFIED IN SUBSECTION 802.23 FOR CLASS 6 ROADWAY SURFACE FINISH.

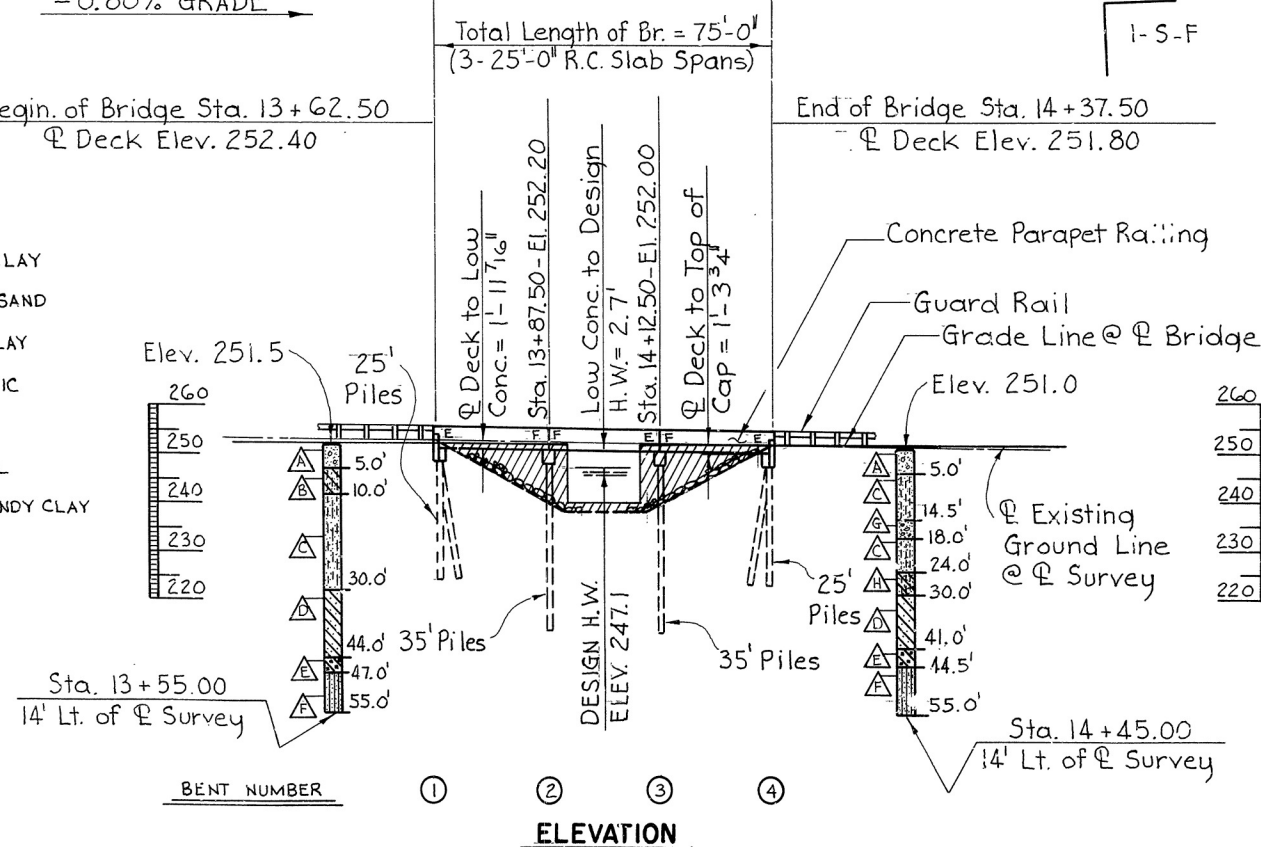
DETOUR CONSTRUCTION: SEE ROADWAY PLANS.

SEE ROADWAY PLANS FOR REMOVAL OF CULVERT.



### BORING LEGEND

- A**-FILL MATERIAL  
**B**-MOIST, STIFF, SILTY, SANDY CLAY  
**C**-WET, MEDIUM DENSE, SILTY SAND  
**D**-MOIST, VERY STIFF, SANDY CLAY  
**E**-MOIST, VERY HARD, BLACK LIGNITIC  
**F**-MOIST, DENSE, SANDY SILT  
**G**-WET, DENSE, SAND AND GRAVEL  
**H**-MOIST, VERY STIFF, SILTY, SANDY CLAY



LAYOUT OF BRIDGE OVER  
PINEY CREEK  
PINEY CREEK BRIDGE & APPRS.  
JEFFERSON COUNTY

ROUTE 79 SEC. 9  
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

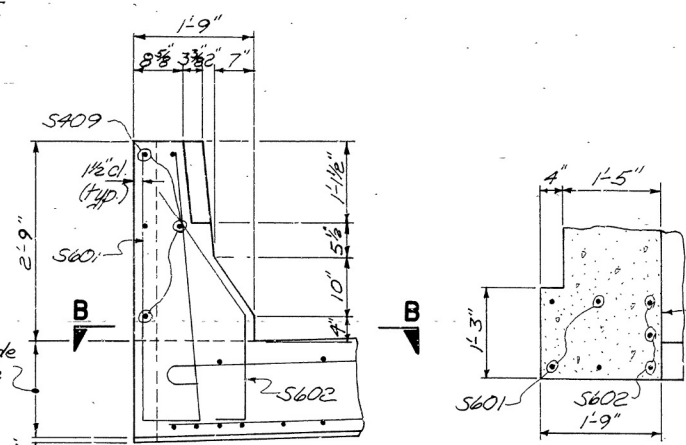
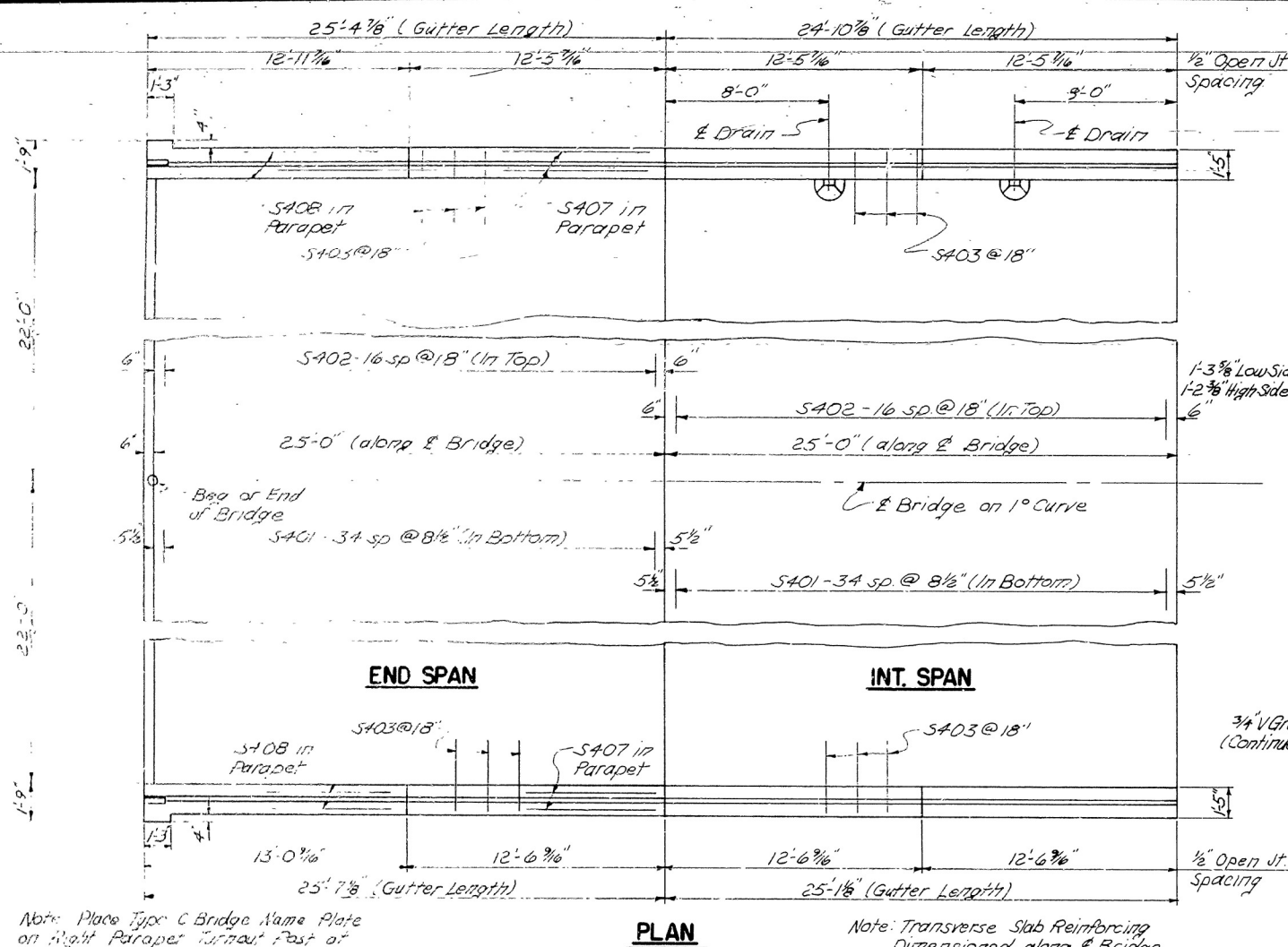
DRAWN BY: TEB DATE: 12-3-84 SCALE: 1" = 20'-0"

CHECKED BY: PTK DATE: 12-5-84

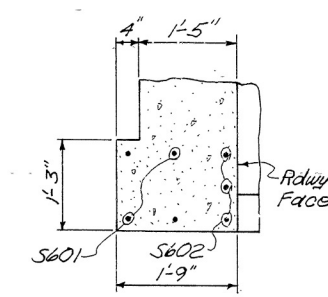
DESIGNED BY: ARW DATE: Nov. 84

**BRIDGE NO. 6101** **DRAWING NO. 26396**

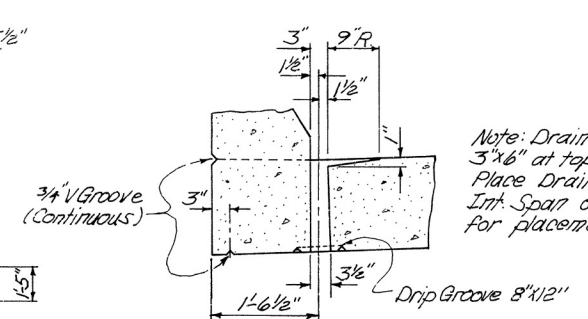




**VIEW A-A**  
Scale:  $\frac{3}{4}" = 1'-0"$



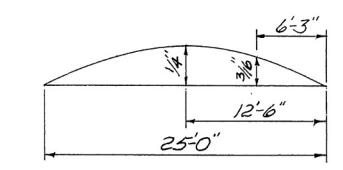
**SECTION R-B**  
Scale:  $\frac{3}{4}" = 1'-0"$



**DRAIN DETAIL**  
Scale:  $\frac{3}{4}" = 1'-0"$

Note: Drain Opening to taper from 3'x6" at top to 3 1/2' x 7" at bottom.  
Place Drains on Low Side of Rally.  
Int. Span only. Spread Reinforcing for placement of Drains.

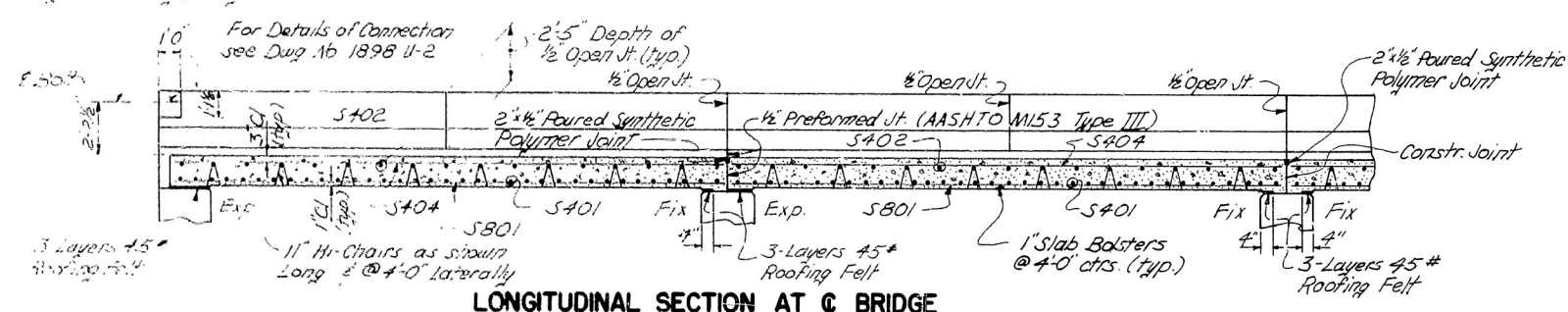
BAR LIST PER SPAN

[illegible]

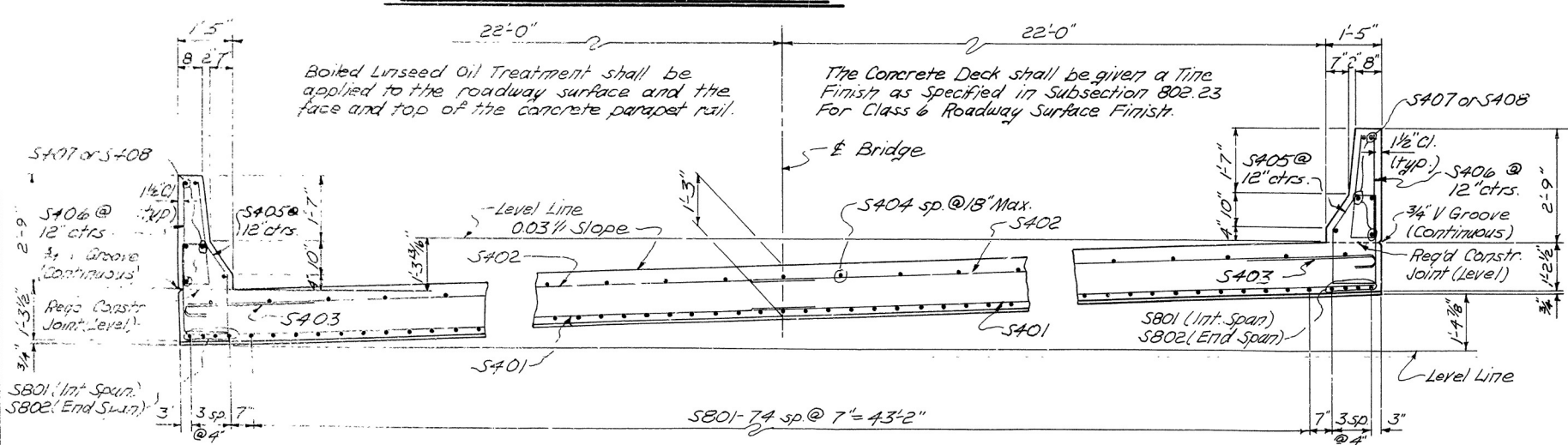
D.L. CAMBER DIAGRAM  
*No Scale*

Note: Place Type C Bridge Name Plate  
on Right Parapet Turnout Post at  
Beg of Bridge only

Note: Transverse Slab Reinforcing Dimensioned along  $\perp$  Bridge



LONGITUDINAL SECTION AT C BRIDGE



**ROADWAY SECTION**  
Scale:  $\frac{1}{2}'' = 1'-0''$

GENERAL NOTES:

ALL CONCRETE TO BE CLASS S(AE). EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A615 OR A617, GRADE 60. BAR SUPPORTS FOR REINFORCING BARS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL." SHOP LISTS AND BENDING DIAGRAMS OF REINFORCING STEEL, INCLUDING WIRE SUBSIDIARY, MAY BE SUBMITTED FOR APPROVAL BEFORE FABRICATION IS BEGUN.

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, AND POURED SYNTHETIC POLYMER JOINTS SHALL BE MEASURED AND PAID FOR AS CLASS S(AE) CONCRETE.

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO 1983 EDITION.

DESIGN LIVE LOADING: HS20

LOAD DISTRIBUTION TO SLAB: DEAD LOAD 228 PSF; LIVE LOAD 0.184 WHEELS/FT. OF WIDTH PLUS 30% IMPACT.

UNIT STRESSES: COMPRESSIVE STRENGTH OF CLASS S(AE) CONCRETE = 3500 PSI  
YIELD STRENGTH OF REINFORCEMENT = 60,000 PSI

LOAD FACTOR USED FOR DESIGN OF SLAB.

DETAILS OF  
25'-0" R.C. SLAB SPANS  
PINEY CREEK  
JEFFERSON COUNTY  
ROUTE 79 SEC. 9  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

DRAWN BY: ARW DATE: 11-19-84  
CHECKED BY: DV DATE: 11-21-84 SCALE: 1/4" = 1'-0" or as noted  
DESIGNED BY: SWJ DATE: \_\_\_\_\_

BRIDGE NO. 6101 DRAWING NO. 26998