

NO.	STATE	FILE NO.	PROJECT NO.	NO.	SHEETS
6	ARK.	HES-B025-	A49(1)	23	55
JOB NO. 1459					
15910 - LAYOUT - 24345					

GENERAL NOTES:

BENCHMARK: N.I.S. COMBINATION POLE, 35 FT. LT. CENTERLINE STA. 106+91, ELEV. 1123.46.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1977 EDITION, WITH CURRENT INTERIMS.

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

LIVE LOADING: HS20-44

METHOD OF DESIGN: LOAD FACTOR

ALL CONCRETE IN THE SUBSTRUCTURE SHALL BE CLASS S. ALL CONCRETE IN THE SUPERSTRUCTURE TO BE CLASS SA. CLASS S AND CLASS SA CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH f'_c = 3500 PSI. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED. ALL CONCRETE TO BE POURED IN THE DRY.

ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR ASTM A617, GRADE 60.

TOP OF FOOTINGS SHALL HAVE A MINIMUM COVER OF 1'-0". FOOTINGS SHALL BE SET A MINIMUM OF 1'-0" INTO MATERIAL DESIGNATED AS ROCK (LIMESTONE) ON THE BORING LOGS. FOUNDATIONS FOR FOOTINGS SHALL BE PREPARED IN ACCORDANCE WITH SECTION 801.04 OF THE STANDARD SPECIFICATIONS.

FOUNDATION PRESSURES: MAXIMUM CALCULATED = 9.6 KSF (GROUP II).

ALL PILING SHALL BE HP10X42 AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE AND INTO THE MATERIAL DESIGNATED AS LIMESTONE ON THE BORING LOGS. LENGTHS OF PILING SHOWN ARE FOR ESTIMATING QUANTITIES ONLY. ORDER LENGTHS SHOWN; CUT-OFF OR BUILD-UP, IF NECESSARY, TO BE PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE. THE ROADWAY SURFACE OF THE BRIDGE SHALL BE GIVEN A FINE FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.23 FOR CLASS 6 ROADWAY SURFACE FINISH.

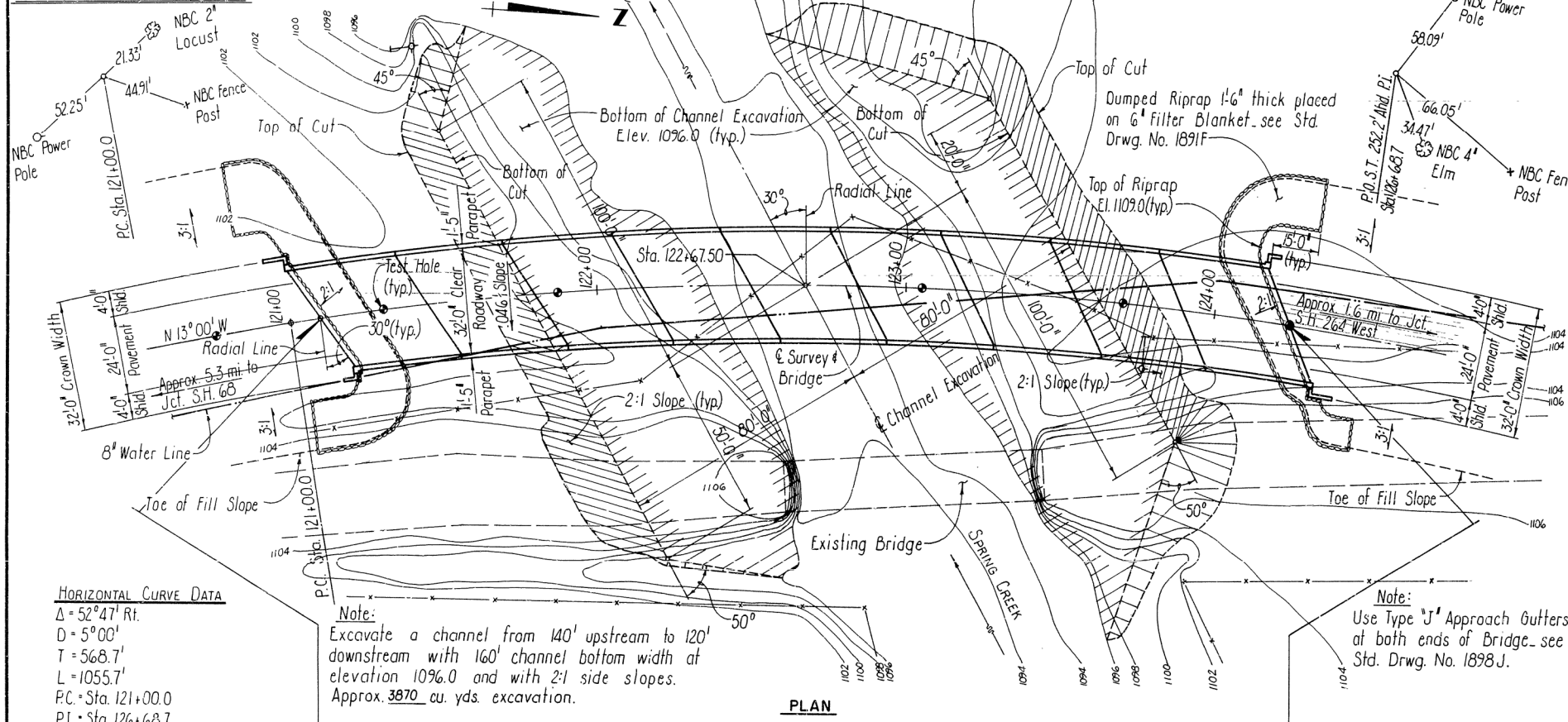
FOR DETAILS OF END BENTS, SEE DWG. NO. 24346
FOR DETAILS OF INT. BENTS, SEE DWG. NO. 24347
FOR DETAILS OF SPANS, SEE DWG. NOS. 24348 & 24349
FOR DETAILS OF APPROACH GUTTERS, SEE DWG. NO. 1898J

REMOVAL OF EXISTING BRIDGE: AFTER THE NEW BRIDGE IS OPENED TO TRAFFIC, THE CONTRACTOR SHALL REMOVE EXISTING BRIDGE NO. M1783. THE EXISTING BRIDGE CONSISTS OF ONE 82 FT. PONY TRUSS SUPPORTED BY CONCRETE ABUTMENTS. SEE SECTION 205 OF THE STANDARD SPECIFICATIONS.

SALVAGE: THE FOLLOWING MATERIAL SHALL BE SALVAGED FROM BRIDGE NO. M1783 AND SHALL BECOME THE PROPERTY OF THE STATE:

I-BEAMS - 30 @ 4" X 9" X 16'-0"
I-BEAMS - 4 @ 6" X 18" X 16'-0"
CHANNELS - 10 @ 2" X 9" X 16'-0"

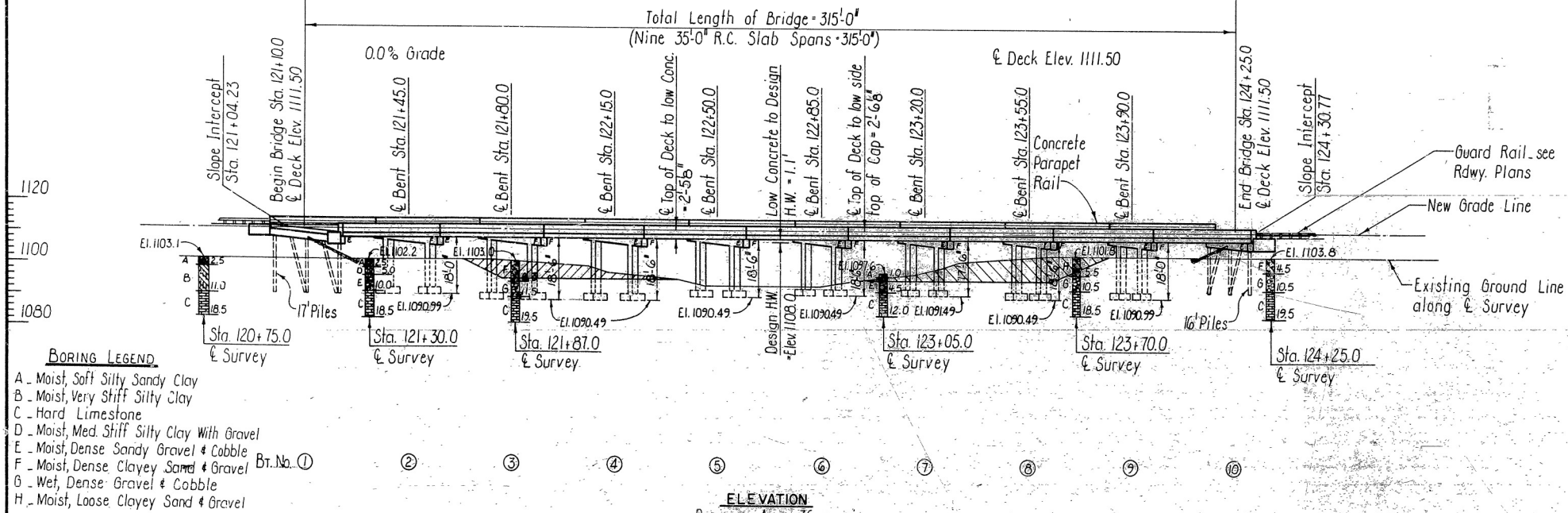
ALL OTHER MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR.



HORIZONTAL CURVE DATA
 $\Delta = 52^\circ 47' \text{ Rt.}$
 $D = 5^\circ 00'$
 $T = 568.7'$
 $L = 1055.7'$
 $P.C. = \text{Sta. } 121+00.0$
 $P.T. = \text{Sta. } 126+62.7$

Note:
 Excavate a channel from 140' upstream to 120' downstream with 160' channel bottom width at elevation 1096.0 and with 2:1 side slopes. Approx. 3870 cu. yds. excavation.

PLAN



BORING LEGEND
 A - Moist, Soft Silty Sandy Clay
 B - Moist, Very Stiff Silty Clay
 C - Hard Limestone
 D - Moist, Med. Stiff Silty Clay with Gravel
 E - Moist, Dense Sandy Gravel & Cobble
 F - Moist, Dense Clayey Sand & Gravel
 G - Wet, Dense Gravel & Cobble
 H - Moist, Loose Clayey Sand & Gravel

DESIGN FLOOD
 $Q_{50} = 18,900 \text{ cfs}$
 Normal W.S. = Elev. 1108.0
 W.S. with Backwater = Elev. 1110.0

ELEVATION
 Drainage Area = 36 sq. mi.
 Historical H.W. = Elev. 1103.6

BASIC FLOOD
 $Q_{100} = 22,700 \text{ cfs}$
 Normal W.S. = Elev. 1108.7

LAYOUT OF
 BRIDGE OVER SPRING CREEK
 TONTOWN-NORTHWEST BR. & APPRS.
 BENTON & WASHINGTON COUNTIES

ROUTE 112 SEC. 18-2
 ARKANSAS STATE HIGHWAY COMMISSION
 LITTLE ROCK, ARK.

DRAWN BY: KMG DATE: 15 OCT. 80
 CHECKED BY: C.P.B. DATE: 2/2/81
 SCALE: 1" = 20'