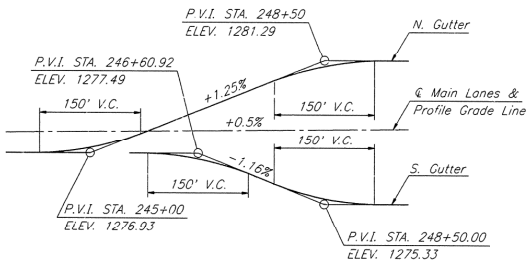


DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
						JOB NO. 009997	37	126
						LAYOUT		36913

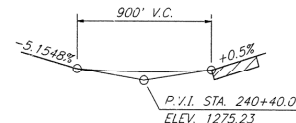
HYDRAULIC DATA				
	FREQUENCY YR.	DISCHARGE C.F.S.	NORMAL WATER SURFACE ELEVATION +	WATER SURFACE WITH BACKWATER ++
Design Flood	50	13,200	1253.4	1254.9
Basic Flood	100	16,100	1254.6	1256.2
Extreme Flood	500	21,600	1257.4	1258.9
Overtopping Flood (Hwy. 23)	400	20,000	—	—
Overtopping Flood (Hwy. 412)	>500	—	—	—

Drainage area = 22.8 Sq. Mi.
+ at proposed bridge site.
++ at location 400' upstream from proposed bridge site.

PROFILE GRADE HOLMAN CREEK RELOCATION



SUPERELEVATION TRANSITION DIAGRAM



PROFILE GRADE U.S. HWY. 412 (@ Main Lanes)

- Notes:
1. Stationing is along @ U.S. Hwy. 412 and does not measure true bridge length. Actual lengths of spans and bridge are shown along @ Main Lanes.
 2. Elevations shown are at @ Main Lanes & Profile Grade Line.
 3. Use Type C Approach Gutters at both ends of Bridge, see Std. Dwg. 2016C.
 4. All Bents are Parallel.
 5. For R/W data, see Roadway Plans.
 6. The near-surface soil conditions encountered during geotechnical investigation did not permit sampling with a split-spoon or Shelby tube sampler.
 7. The recommended riprap size for the west abutment has a D_{50} of 24".



LAYOUT OF BRIDGE OVER
HWY. 23 AND HOLMAN CREEK
HUNTSVILLE BYPASS
MADISON COUNTY
ROUTE 412 SEC. 1
ARKANSAS STATE HIGHWAY COMMISSION

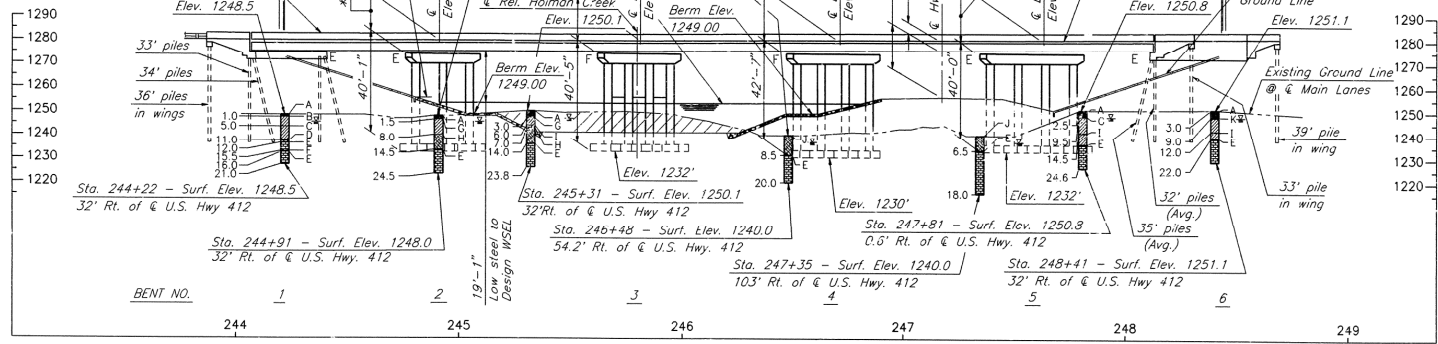
LITTLE ROCK, ARK.
DRAWN BY: NCA DATE: AUG. 95
CHECKED BY: BBD DATE: AUG. 95
DESIGNED BY: BBD DATE: AUG. 95
BRIDGE NO. 6639 DRAWING NO. 36913

CURVE 15 DATA
P.T. STA. = 260+64.63
 $\Delta = 59^\circ 17' 23.0''$ Rt.
 $D = 2^\circ 30' 00.0''$
 $R = 2291.83'$
 $L = 2371.59'$
 $T = 1304.32'$

CURVE 9 DATA
P.T. STA. = 244+20.31
 $\Delta = 5^\circ 42' 30.0''$ Rt.
 $D = 3^\circ 00' 00.0''$
 $R = 1909.86'$
 $L = 190.28'$
 $T = 95.22'$

BORING LEGEND

- A - Topsoil (OH)
- B - Stiff Brown Silty Sandy Clay with Sandstone Gravel (CL)
- C - Stiff Brown Silty Clay with Weathered Sandstone (CL)
- D - Weathered Chert (LS)
- E - Hard Gray Limestone with Chert Seams
- F - Chert Limestone
- G - Firm Brown Silty Sandy Clay (CL)
- H - Firm Brown Silty Sandy Clay with Sandstone and Chert Gravel (GC)
- I - Firm Brown Silty Sandy Clay with Gravel (CL)
- J - Firm Brown Silty Sandy Gravel (GC)
- K - Firm Brown Silty Sandy Clay with some Organics (CL)



ELEVATION Scale: 1"=30'-0"

K:\B20766\T4 10/03/95 17:33



