

DESCRIPTION	REVISIONS	DATE

**DESIGN DATA**

CONCRETE CLASS A  $f'_c = 3$  K.S.I.  
 CONCRETE CLASS AA  $f'_c = 4$  K.S.I.  
 REINFORCING STEEL (GRADE 60)  $f_y = 60$  K.S.I.  
 STRUCTURAL STEEL M 270 (GRADE 50W)  $F_y = 50$  K.S.I.  
 STAINLESS STEEL A240 (TYPE 316)  $F_y = 30$  K.S.I.

LOADING:  
 HL-93 OR OKLAHOMA OVERLOAD TRUCK  
 20 P.S.F. FUTURE WEARING SURFACE

DESIGN:  
 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION.  
 ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE  
 ANSI/AASHTO/AWS D1.6 STRUCTURAL WELDING CODE - STAINLESS STEEL

LFD OPERATING RATING: HS 47.2

**HYDRAULIC DATA**

TOTAL DRAINAGE AREA =	18,973 SQ. MI.		
CONTROLLED DRAINAGE AREA =	4,075 SQ. MI.		
EFFECTIVE DRAINAGE AREA =	14,898 SQ. MI.		
Q2 =	41,400 CFS	Q5 =	76,000 CFS
CHW2 =	735.60 FT	CHW5 =	739.94 FT
V2 =	9.03 FPS	V5 =	12.75 FPS
Q10 =	102,000 CFS	Q25 =	135,000 CFS
CHW10 =	742.94 FT	CHW25 =	746.38 FT
V10 =	14.15 FPS	V25 =	15.55 FPS
Q50 =	161,000 CFS	Q100 =	186,000 CFS
CHW50 =	748.87 FT	CHW100 =	751.11 FT
V50 =	16.49 FPS	V100 =	17.34 FPS
Q500 =	247,000 CFS		
CHW500 =	755.30 FT		
V500 =	22.59 FPS		

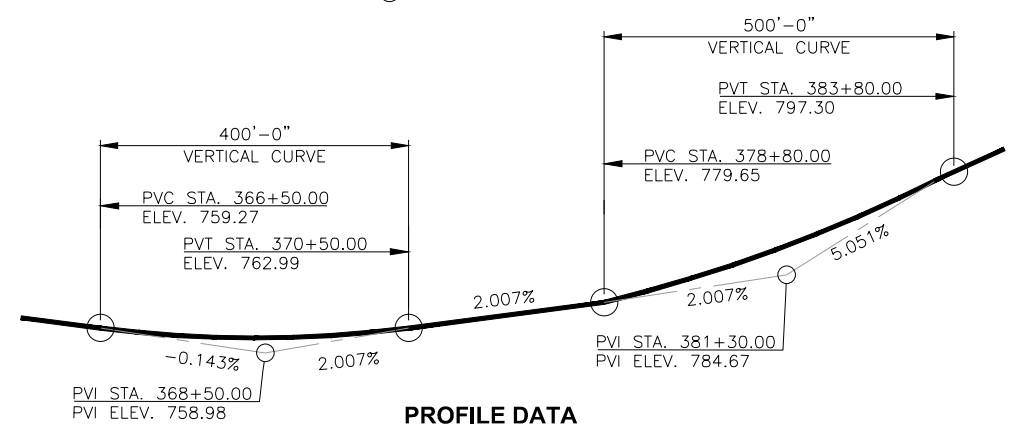
SCOUR (100YR)		SCOUR (500YR)	
① CONTRACTION =	36.68'	① CONTRACTION =	45.39'
PIER =	9.60'	PIER =	9.60'
TOTAL =	46.28'	TOTAL =	54.99'

QOT > Q500

NOTE:  
 FOR SHEET INDEX AND LIST OF STANDARDS SEE SHEET 27.

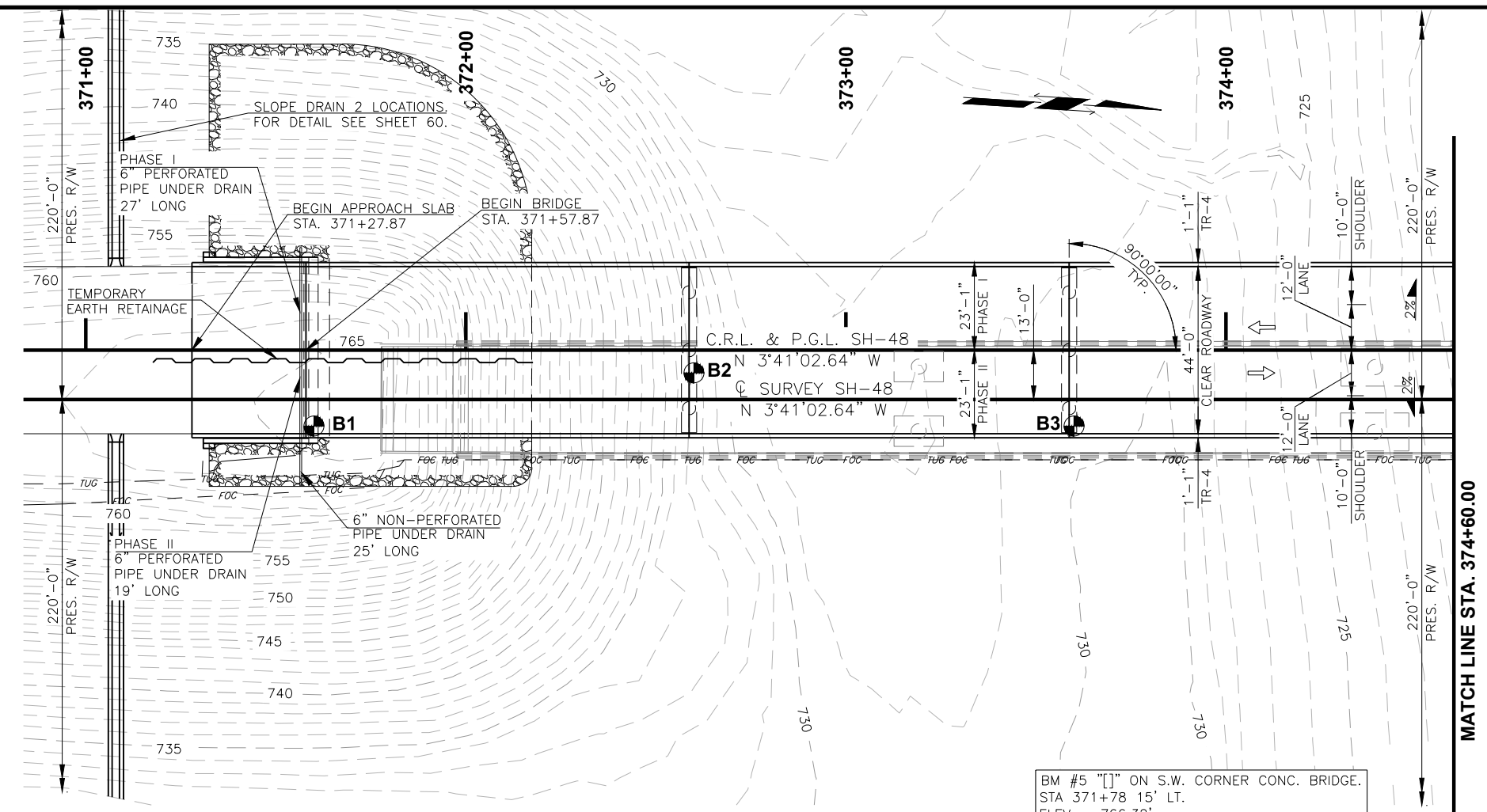
NOTE:  
 FOR FOUNDATION DATA AND SUMMARY OF BRIDGE QUANTITIES SEE SHEET 27.

SCOUR NOT APPLICABLE FOR FOUNDATION DESIGN DUE TO ROCK ELEVATION.



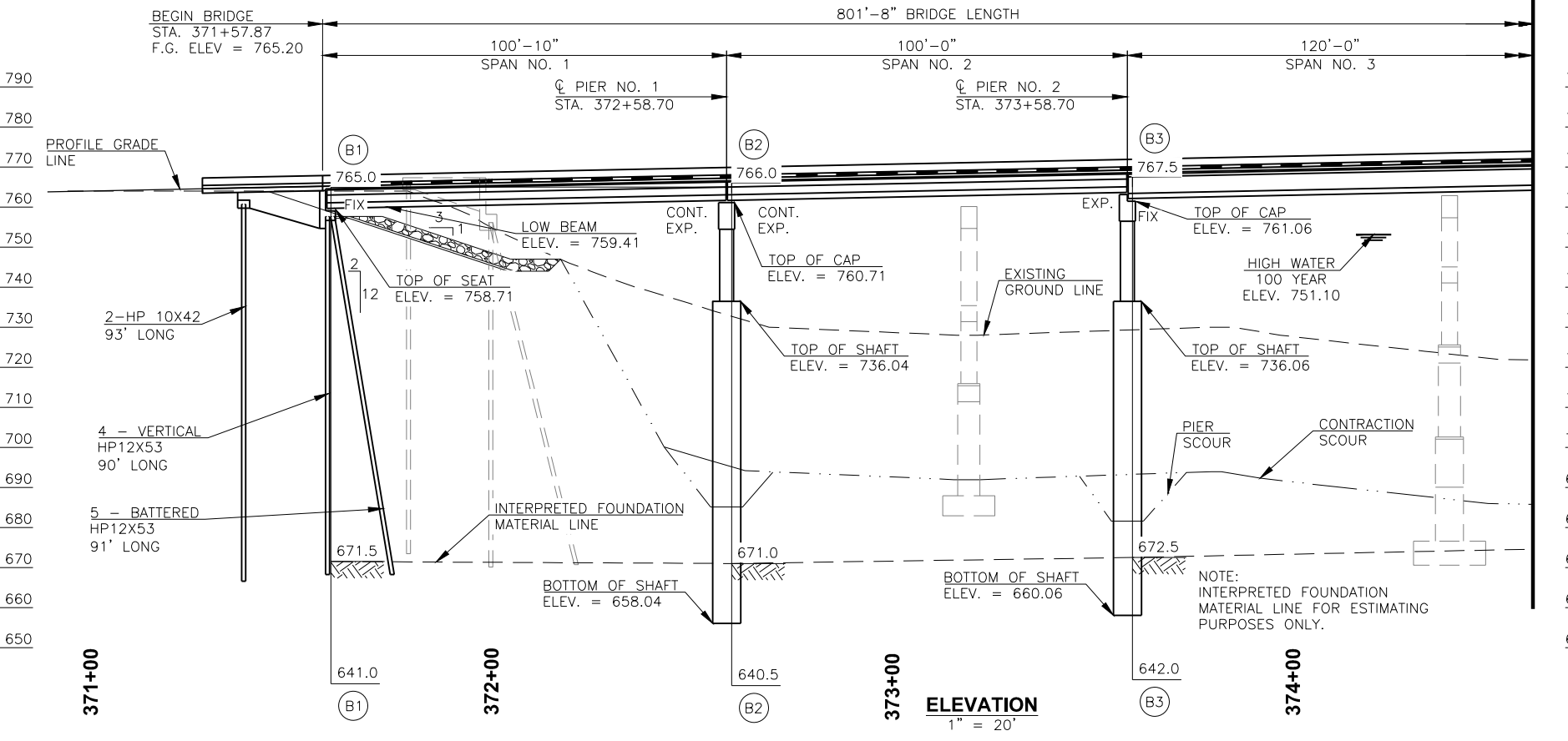
**PROFILE DATA**  
 P.G.L. SH-48

NOTE:  
 PROFILE DATA IS 1/2" BELOW TOP OF BRIDGE DECK.  
 BEGIN AND END BRIDGE FINISHED GRADE  
 ELEVATIONS SHOWN ARE 1/2" ABOVE THE PROFILE  
 GRADE LINE TO ALLOW FOR GRINDING SMOOTH  
 BRIDGE DECK PHASE LINE AS APPROVED BY THE  
 ENGINEER.



**PLAN**  
 1" = 20'

BM #5 "[]" ON S.W. CORNER CONC. BRIDGE.  
 STA 371+78 15' LT.  
 ELEV = 766.32'



**ELEVATION**  
 1" = 20'

DESIGN	B.J.K.	SH-48 OVER CIMARRON RIVER	CREEK COUNTY
DRAWN	R.A.P.	<b>GENERAL PLAN &amp; ELEVATION</b> <b>(SHEET 1 OF 2)</b>	
CHECKED	B.J.K.		
APPROV.	B.J.K.	2 X 100' TYPE IV AND 5 X 120' TYPE J SPANS, 0' SKEW 44' CLR. RDWY. WITH TR-4 PARAPETS @ STA. 375+58.71	
SQUAD	CEC	JOB PIECE NO.	27925(04) SHEET NO. 25