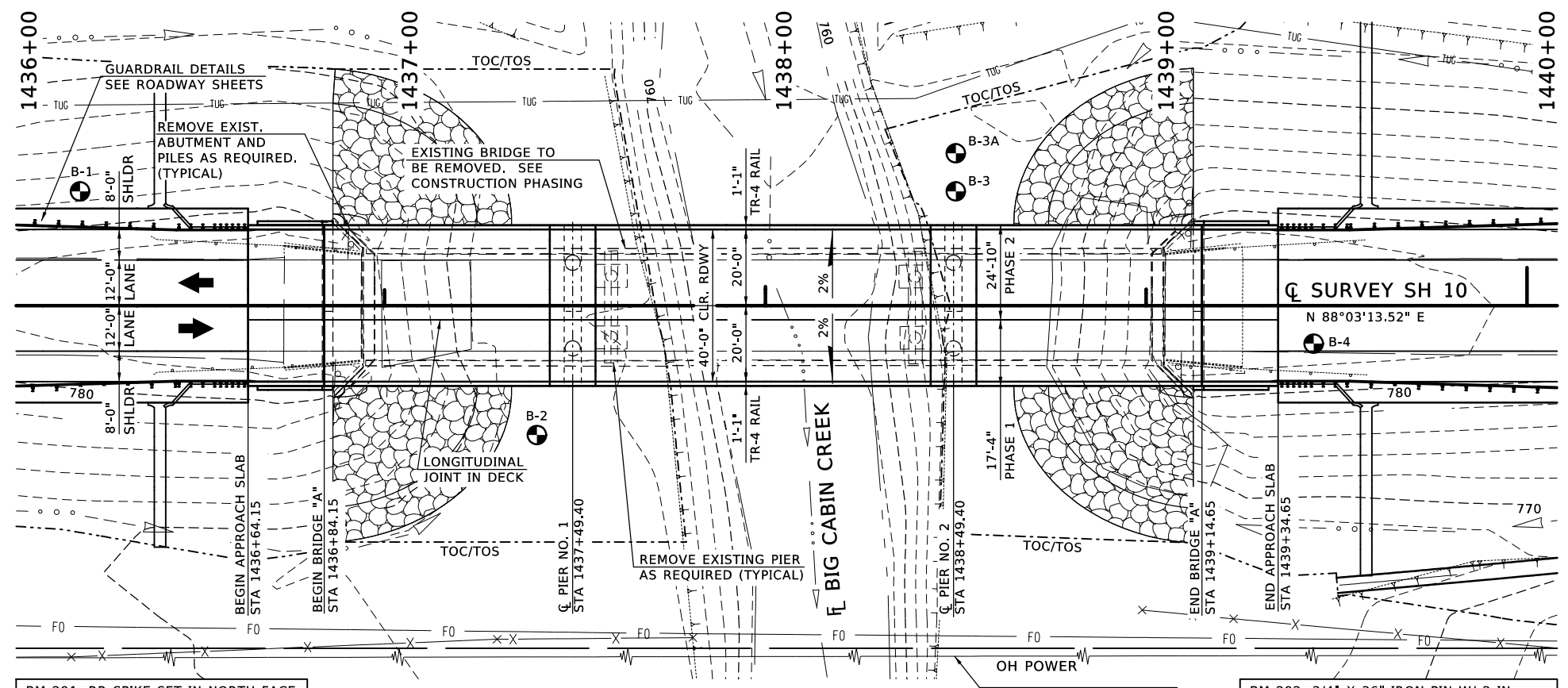


7/31/2017
12:18:30 PM
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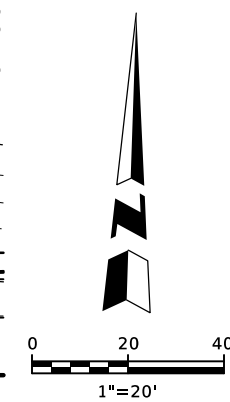
DESIGN DATA

LOADING
HL-93 OR OKLAHOMA OVERLOAD TRUCK
20 PSF FUTURE WEARING SURFACE.
LRFR OPERATING RATING 1.84 (PHASE)
LFD OPERATING RATING HS-59 (PHASE)
LRFR OPERATING RATING 1.90 (FINAL)
LFD OPERATING RATING HS-50 (FINAL)

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

MATERIAL
CONCRETE
CLASS AA
CLASS A
REINFORCING STEEL:
STRUCTURAL STEEL M270 (GRADE 50W):
STAINLESS STEEL A240 (TYPE 316):
STAINLESS STEEL A320, CLASS 2 (GRADE B8M):

$f'_c = 4,000$ PSI
 $f'_c = 3,000$ PSI
 $F_y = 60,000$ PSI
 $F_y = 50,000$ PSI
 $F_y = 30,000$ PSI
 $F_y = 58,000$ PSI



FOUNDATION DATA

ABUTMENTS (HP 10X42 PILING)

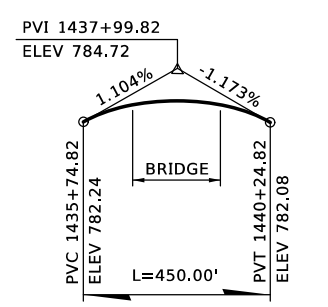
FACTORED PILE REACTION	= 67.17 TONS	ABUTMENT ONE	= 67.17 TONS	ABUTMENT TWO	= 67.17 TONS
PILE LENGTHS	= 25.50 FT		= 25.50 FT		= 31.50 FT

PIERS 1 AND 2 PHASED (60" DIAMETER DRILLED SHAFT)

MINIMUM DEPTH INTO ROCK	= 12.00 FT	PIER 1	= 12.00 FT	PIER 2	= 12.00 FT
DEPTH OF ROCK NEG'D FOR FRICTION	= 5.00 FT		= 5.00 FT		= 5.00 FT
UNIT BEARING RESISTANCE	= 60 TSF		= 60 TSF		= 60 TSF
BEARING RESISTANCE FACTOR	= 0.7		= 0.7		= 0.7
FACTORED BEARING RESISTANCE	= 824.7 T/SHAFT		= 824.7 T/SHAFT		= 824.7 T/SHAFT
UNIT FRICTION RESISTANCE	= 9 TSF		= 9 TSF		= 9 TSF
FRICTION RESISTANCE FACTOR	= 0.45		= 0.45		= 0.45
FACTORED FRICTION RESISTANCE	= 445.3 T/SHAFT		= 445.3 T/SHAFT		= 445.3 T/SHAFT
REDUNDANCY FACTOR	= 0.8		= 0.8		= 0.8
TOTAL FACTORED RESISTANCE	= 1270 T/SHAFT		= 1270 T/SHAFT		= 1270 T/SHAFT
ADJUSTED TOTAL FACTORED RESISTANCE	= 1016 T/SHAFT		= 1016 T/SHAFT		= 1016 T/SHAFT
TOTAL FACTORED REACTION	= 426 T/SHAFT		= 426 T/SHAFT		= 426 T/SHAFT

PIERS 1 AND 2 (60" DIAMETER DRILLED SHAFTS)

MINIMUM DEPTH INTO ROCK	= 12.00 FT	PIER 1	= 12.00 FT	PIER 2	= 12.00 FT
DEPTH OF ROCK NEG'D FOR FRICTION	= 5.00 FT		= 5.00 FT		= 5.00 FT
UNIT BEARING RESISTANCE	= 60 TSF		= 60 TSF		= 60 TSF
BEARING RESISTANCE FACTOR	= 0.7		= 0.7		= 0.7
FACTORED BEARING RESISTANCE	= 824.7 T/SHAFT		= 824.7 T/SHAFT		= 824.7 T/SHAFT
UNIT FRICTION RESISTANCE	= 9 TSF		= 9 TSF		= 9 TSF
FRICTION RESISTANCE FACTOR	= 0.45		= 0.45		= 0.45
FACTORED FRICTION RESISTANCE	= 445.3 T/SHAFT		= 445.3 T/SHAFT		= 445.3 T/SHAFT
TOTAL FACTORED RESISTANCE	= 1270 T/SHAFT		= 1270 T/SHAFT		= 1270 T/SHAFT
TOTAL FACTORED REACTION	= 550 T/SHAFT		= 550 T/SHAFT		= 550 T/SHAFT



VERTICAL CURVE PROFILE DATA

REMOVE EXISTING BRIDGE Q STA. 1437+93.79, 64'-80'-64'
I-BEAM SPANS W/28' CLR. RDY., 2-18" SAFETY CURBS SKEW 0°

Design	KSJ	7/16	SH 10 OVER BIG CABIN CREEK	CRAIG COUNTY
Drawn	JT	7/16	GENERAL PLAN AND ELEVATION	
Checked	KSJ	7/16	Q STA. 1437+99.40 CONSTRUCT INTEGRAL, 65'-100'-65'	
Approved	SAK	9/16	STEEL ROLLED BEAM SPANS, 40'-0" CLR. RDY., SKEW 0°, TR4 TRAFFIC RAIL	
Squad	BENHAM		Job Piece No. 29068(04)	Sheet No. 32

