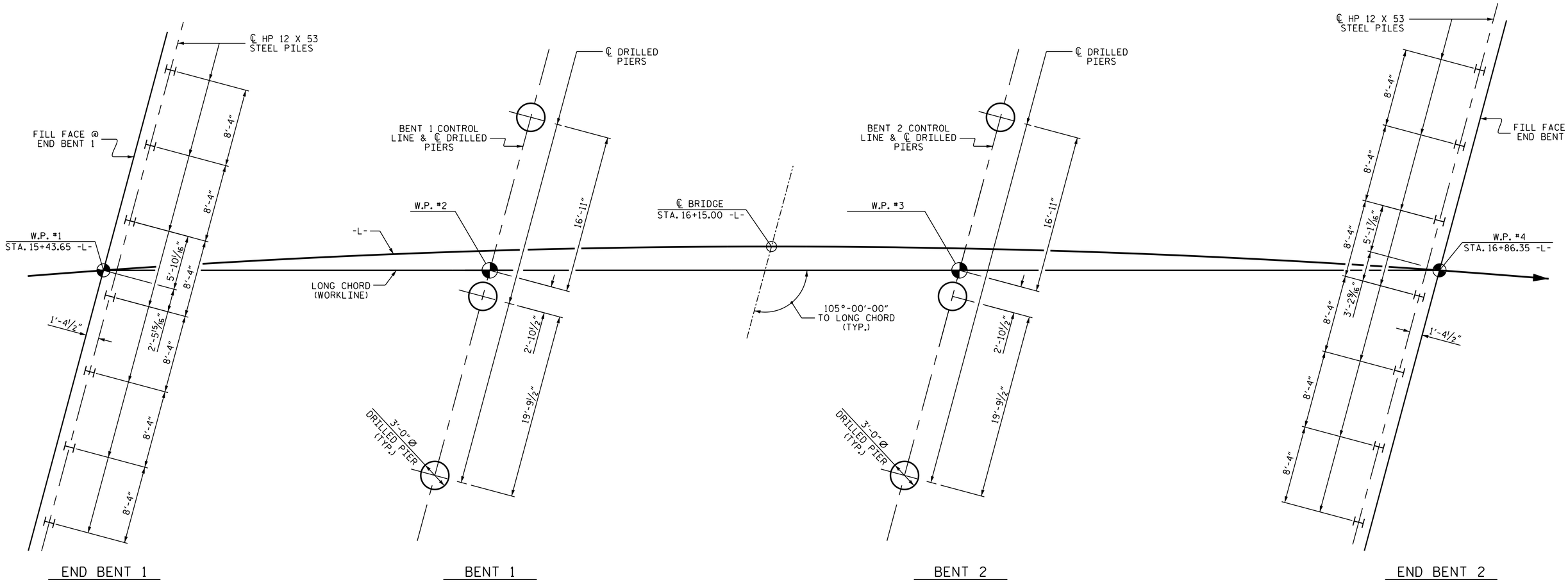

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO THE CENTERLINE OF PILES & DRILLED PIERS.

NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 70 TONS AND 80 TONS PER PILES, RESPECTIVELY.

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 120 TONS AND 135 TONS PER PILE, RESPECTIVELY.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT BENT 1 AND END BENT 2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

DRILLED PIERS AT BENT 1 AND BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 370 TONS AND 395 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 120 TSF FOR BENT 1 AND 130 TSF FOR BENT 2, RESPECTIVELY.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 1 AND BENT 2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 303 FT (LT) AND 299 FT (CTR & RT), RESPECTIVELY, FOR BENT 1 AND ELEVATION 299 FT FOR BENT 2, WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN 297 FT (LT) AND 293 FT (CTR & RT), RESPECTIVELY, WITH THE REQUIRED TIP RESISTANCE AND PENETRATION OF AT LEAST 6 FT INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT 2 TO A TIP ELEVATION NO HIGHER THAN 292 FT WITH THE REQUIRED TIP RESISTANCE AND PENETRATION OF AT LEAST 6 FT INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 AND BENT 2 ARE ELEVATION 300 FT (LT) AND 298 FT (CTR & RT), RESPECTIVELY, FOR BENT 1 AND ELEVATION 297 FT FOR BENT 2. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS. FOR SID INSPECTIONS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

NORTH CAROLINA PROFESSIONAL SEAL 14855 ENGINEER DOUGLAS R. CALHOUN

DocuSigned by:
Douglas R. Calhoun
43019BF9D5ED429...
1/20/2015

PROJECT NO. B-4659
WAKE COUNTY
STATION: 16+15.00 -L-

SHEET 2 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON
SR 1393 (BASS LAKE RD.)
OVER BASAL CREEK
BETWEEN SR 4028 AND SR 4046

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			32

DRAWN BY : A. S./A. K. PATEL DATE : 3/2014
CHECKED BY : D. R. CALHOUN DATE : 12/2014

20-JAN-2015 15:46
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pknewton