



FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE

FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT INTEGRAL END BENT 1 AND INTEGRAL END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 75 TONS PER PILE.

DRIVE PILES AT INTEGRAL END BENT 1 AND INTEGRAL END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 125 TONS PER PILE.

PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 190 TONS PER PILE.

DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 275 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAW OR SCOUR.

PILES AT BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 195 TONS PER PILE.

DRIVE PILES AT BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 260 TONS PER PILE.

INSTALL PILES AT BENT 1 AND BENT 2 TO A TIP ELEVATION NO HIGHER THAN -8.0 FEET AND -6.0 FEET, RESPECTIVELY.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION 14.0 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

TESTING THE FIRST PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT 1 OR BENT 2. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 65-120 FT-KIPS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT 1 AND BENT 2. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

REMOVE EXISTING RIP RAP BEFORE DRIVING PILES AT INTEGRAL END BENT 1 AND INTEGRAL END BENT 2.

PROJECT NO. R-2514D
 JONES & CRAVEN COUNTY
 STATION: 625+23.28 -L-

SHEET 2 OF 3



DocuSigned by:
 Tim Coggins
 DEFD48D48FA47B
 3/26/2015

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR WIDENING OF
 BRIDGE OVER DEEP GULLY
 ON US 17
 BETWEEN SR 1330 AND SR 1224

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S18-002
1			3			TOTAL SHEETS
2			4			39

DRAWN BY: D. G. ELY DATE: 1/27/15
 CHECKED BY: B. N. BAROADAWALA DATE: 1/27/15
 DESIGN ENGINEER OF RECORD: K. P. SEDA DATE: 02/2015