



FOUNDATION LAYOUT PLAN

ALL END BENT PILES ARE HP 12x53 STEEL PILES. DIMENSIONS LOCATING PILES ARE SHOWN TO THE CENTERLINE OF PILES. ORIENT PILES AS SHOWN. ALL BENT PILES ARE 16" PRESTRESSED CONCRETE PILES. BENT PILES SHALL BE BATTERED AT 1 1/2:12.

FOUNDATION RECOMMENDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
 PILES AT END BENT NO.1 AND END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 80 TONS PER PILE.
 DRIVE PILES AT END BENT NO.1 AND END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 135 TONS PER PILE.
 STEEL PILE POINTS ARE REQUIRED FOR STEEL PILES AT END BENT NO.1 AND NO.2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
 IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 45 TO 110 FT-KIPS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT NO.1 AND BENT NO.2. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(DX2) OF THE STANDARD SPECIFICATIONS.
 PILES AT BENT NO.1 AND BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 140 TONS AND 145 TONS PER PILE, RESPECTIVELY.
 DRIVE PILES AT BENT NO.1 AND BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 235 TONS AND 245 TONS PER PILE, RESPECTIVELY. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR SCOUR.
 THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 AND BENT NO.2 ARE -16 FT AND -24 FT, RESPECTIVELY. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. B-4414
BEAUFORT COUNTY
 STATION: 24+78.90 -L-
 SHEET 2 OF 3

DRAWN BY : STM DATE : 11/19
 CHECKED BY : MGC DATE : 12/19
 DESIGN ENGINEER OF RECORD: MGC DATE : 03/20

10/5/2020
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 User:smassinople

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING

FOR BRIDGE OVER
 PUNGO CREEK ON US 264
 BETWEEN SR 1718 AND SR 1609

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			33

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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