

FOUNDATION LAYOUT

NOTES

1 ALL END BENT PILES ARE VERTICAL HP 14 x 89 STEEL PILES. DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINES AT THE BOTTOM OF THE END BENT CAPS.

FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 110 TONS PER PILE.

1 DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 270 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWN DRAG.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 310 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWN DRAG.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 45,000 TO 60,000 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT 1 AND END 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.

PILES AT END BENT 1 AND END BENT 2 ARE TO BE DRIVEN AFTER CONSTRUCTION AND RELEASE OF THE MSE WALLS PENDING THE SETTLEMENT MONITORING PROGRAM.

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.

CORRUGATED METAL CANS AT END BENT 1 AND END BENT 2 ARE TO BE PLACED DURING CONSTRUCTION IN THE REINFORCED BACKFILL OF THE MSE WALLS. SEE MSE WALL PLANS.

INSTALLATION OF CORRUGATED METAL CANS FROM THE BOTTOM OF THE PILE CAP TO THE LEVELING PAD ELEVATION IS REQUIRED FOR PILES AT END BENT 1 AND END BENT 2. THE CANS SHALL BE DESIGNED TO WITHSTAND THE PRESSURES FROM COMPACTION OPERATIONS ON ADJACENT FILLS WITHOUT DISTORTION. AT A MINIMUM, CORRUGATED METAL CANS SHALL BE 16-GAUGE WITH A WALL THICKNESS OF 0.064".

LOOSELY BACKFILL CORRUGATED METAL CANS USING SAME MATERIAL AS MSE REINFORCEMENT ZONE PRIOR TO CONSTRUCTION OF THE END BENT PILE CAP. DO NOT COMPACT MATERIAL WITHIN THE CAN.

1 OBSERVE A ONE MONTH WAITING PERIOD AFTER CONSTRUCTING THE MSE WALLS AND END BENTS BEFORE BEGINNING APPROACH SLAB CONSTRUCTION AT END BENT 1 AND END BENT 2. FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

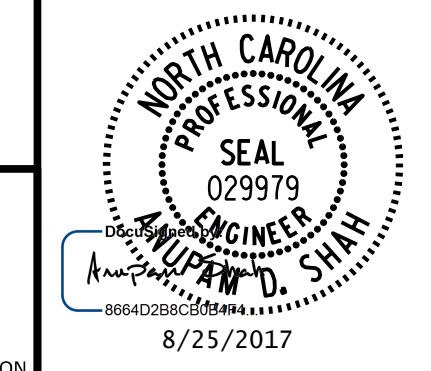
FOR SURCHARGES AND WAITING PERIODS, SEE SECTION 235 OF THE STANDARD SPECIFICATIONS AND THE SURCHARGES AND WAITING PERIODS PROVISION.

1 REVISED PILE SIZE AND NOTES.

DRAWN BY : K. E. LOFTON DATE : 5-17
 CHECKED BY : A. D. SHAH DATE : 7-17
 DESIGN ENGINEER : A. D. SHAH DATE : 8-17

PLANS PREPARED BY :
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 FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED



PROJECT NO. I-4729A
POLK COUNTY
 STATION: 22+87.20 -RP_E-

SHEET 2 OF 4

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING					
BRIDGE OVER					
RAMP (-E_CONN_REV-) ON					
RAMP (-RP_E-) BETWEEN					
I-26 AND US 74					
REVISIONS					SHEET No.
No.	BY:	DATE:	No.	BY:	DATE:
1	LOFTON	8-25-17	3		
2			4		
TOTAL SHEETS					24