

### SUMMARY OF PILE INFORMATION/ INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) # (e.g., "Bent 1, Piles 1-5")	Factored Resistance per Pile TONS	Pile Cut-Off (Top of Pile) Elevation FT	Estimated Pile Length per Pile FT	Scour Critical Elevation FT	Driven Piles			Predrilling for Piles*			Drilled-In Piles		
					Min Pile Tip (Tip No Higher Than) Elev FT	Required Driving Resistance (RDR)** per Pile TONS	Total Pile Redrives Quantity EACH	Predrilling Length per Pile Lin FT	Predrilling Elevation (Elev Not To Predrill Below) FT	Maximum Predrilling Dia INCHES	Pile Excavation (Bottom of Hole) Elev FT	Pile Exc Not In Soil per Pile Lin FT	Pile Exc In Soil per Pile Lin FT
END BENT 1, Piles 1-6	120	166.22	100		160	3							
BENT 1, Piles 1-18	150	144.98	65		200	9							
END BENT 2, Piles 1-6	120	163.73	85		160	3							

\*Predrilling for Piles is required for end bents/bents with a predrilling length and at the Contractor's option for end bents/bents with predrilling information but no predrilling length.

$$**RDR = \frac{\text{Factored Resistance} + \text{Factored Downdrag Load} + \text{Factored Dead Load}}{\text{Dynamic Resistance Factor}} + \frac{\text{Nominal Downdrag Resistance} + \text{Nominal Scour Resistance}}{\text{Scour Resistance Factor}}$$

### SUMMARY OF PDA/ PILE ORDER LENGTHS

(Blank entries indicate item is not applicable to structure)

Pile Driving Analyzer (PDA)				Pile Order Lengths	
End Bent/ Bent No	PDA Testing Required? YES or MAYBE	PDA Test Pile Length FT	Total PDA Testing Quantity EACH	End Bent/ Bent No(s)	Pile Order Length Basis* EST or PDA
END BENT 1, Piles 1-6	YES	105	2		
BENT 1, Piles 1-18	YES	70			
END BENT 2, Piles 1-6	MAYBE	90			

\*EST = Pile order lengths from estimated pile lengths; PDA = Pile order lengths based on PDA testing. For groups of end bents/bents with pile order lengths based on PDA testing, the first end bent/bent no. listed for each group is the representative end bent/bent with the PDA.

### PILE DESIGN INFORMATION

(Blank entries indicate item is not applicable to structure)

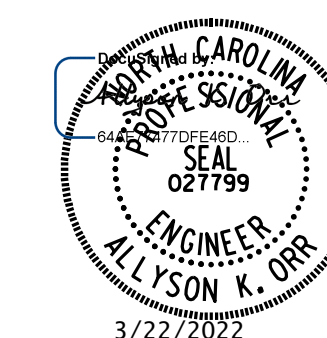
End Bent/ Bent No, Pile(s) # (e.g., "Bent 1, Piles 1-5")	Factored Axial Load per Pile TONS	Factored Downdrag Load per Pile TONS	Factored Dead Load* per Pile TONS	Dynamic Resistance Factor	Nominal Downdrag Resistance per Pile TONS	Nominal Scour Resistance per Pile TONS	Scour Resistance Factor (Default = 1.00)
END BENT 1, Piles 1-6	120			0.75			1.00
BENT 1, Piles 1-18	150			0.75			1.00
END BENT 2, Piles 1-6	120			0.75			1.00

\*Factored Dead Load is factored weight of pile above the ground line.

#### NOTES:

1. THE PILE FOUNDATION TABLES ARE BASED ON THE BRIDGE SUBSTRUCTURE DESIGN AND FOUNDATION RECOMMENDATIONS SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER (ABNER F. RIGGS 014155) ON 11-04-2021.
2. TOTAL PILE DRIVING EQUIPMENT SETUP QUANTITY (NOT SHOWN IN PILE FOUNDATION TABLES) EQUALS THE NUMBER OF DRIVEN PILES, I.E., THE NUMBER OF PILES WITH A REQUIRED DRIVING RESISTANCE.
3. FOR PILES, SEE PILES PROVISION AND SECTION 450 OF THE STANDARD SPECIFICATIONS.
4. SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS FOR THE SETTLEMENT GAUGES REQUIRED AT END BENT 1 AND END BENT 2.
5. INSTALL PILE SLEEVES BEFORE CONSTRUCTING THE MECHANICALLY STABILIZED EARTH (MSE) ABUTMENT WALL AT END BENT 1 AND END BENT 2. OBSERVE A 4 MONTH WAITING PERIOD AFTER CONSTRUCTING THE MSE ABUTMENT WALL AND THE REINFORCED BRIDGE APPROACH FILL TO WITHIN 1 FT OF THE FINAL GRADE ELEVATION. THEN, INSTALL PILES THROUGH THE CORRUGATED STEEL PIPES AND FILL PIPES WITH LOOSE UNCOMPACTED SAND BEFORE CONSTRUCTING END BENT CAPS. FOR PILE SLEEVES, SEE MSE RETAINING WALL PLANS AND PROVISION. FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.
6. FOR REINFORCED BRIDGE APPROACH FILL, SEE APPROACH FILL FOR INTEGRAL ABUTMENT AT MSE WALLS (SPECIAL) PROVISION.

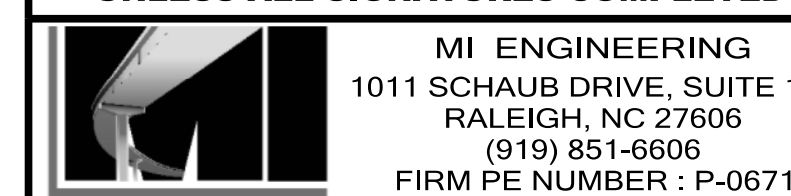
PROJECT NO. I-5987A  
ROBESON COUNTY  
 STATION: 29+75.79 -Y2-



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

### PILE FOUNDATION TABLES

DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			S1-4
2			4			TOTAL SHEETS 36

DRAWN BY : B.E. LANNING	DATE : 11/2021
CHECKED BY : A.K. ORR	DATE : 11/2021
DESIGN ENGINEER OF RECORD : A.K. ORR	DATE : 03/2022

3/22/2022 1:15:02 PM User: blanning  
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