

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 Exc Not In Soil per Pile Lin FT	Pile Exc In Soil per Pile Lin FT	
End bent 1 (Piles 1-7)	85	1.98	30			120							
Bent 1 (Piles 1-8)	140	0.91	20 (PSC) & 50 (HP)	-13	-13 (PSC) & -35 (HP)	235	11		-13.0	24			
End bent 2 (Piles 1-7)	90	1.87	30			125							

*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 DPT/PILE ORDER LENGTHS

(Blank entries indicate item is not applicable to structure)

Dynamic Pile Testing (DPT)				Pile Order Lengths	
End Bent/ Bent No	DPT Testing Required? YES or MAYBE	DPT Test Pile Length FT	Total DPT Testing Quantity EACH	End Bent/ Bent No(s)	Pile Order Length Basis* EST or DPT
End Bent 1	MAYBE	30	3	End Bent 1	EST
Bent 1	YES	25' (PSC) & 50' (HP)		Bent 1	EST
End Bent 2	MAYBE	30		End Bent 2	EST

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

PILE DESIGN INFORMATION

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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 1-7)	83			0.60			
Bent 1 (Piles 1-8)	137		2	0.60		3	1.00
End bent 2 (Piles 1-7)	88			0.60			

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


PROJECT NO. B-5610 (45565.1.1)

DARE COUNTY

STATION: 15+42.50 -L-

NOTES:

- The Pile Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer (Thein Tun Zan, PE #030943) on 01-05-2023.
- 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.
- The Engineer will determine the need for DPT Testing when DPTs may be required.

	STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH				PILE FOUNDATION TABLES	SHEET NO. S-3			
	DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED						REVISIONS	TOTAL SHEETS 29	
DocuSigned by: Thein Tun Zan 887CD9168A884AB	4/8/2024	SIGNATURE	DATE	NO.	BY:	DATE:	NO.		BY:
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