### 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 Lenth 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 1-4	75		30			125		14.0	276.0	12			
End Bent 1, Piles 5-7	75	See Structure	25			125							
End Bent 2, Piles 1-3	81	Drawings	25			135							
End Bent 2, Piles 4-7	81		30			135	]						

\*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.

Factored Resistance + Factored Downdrag Load + Factored Dead Load + Nominal Downdrag Resistance + Nominal Scour Resistance Factor Nominal Scour Resistance

#### 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 1-7	74						
End Bent 2, Piles 1-7	81						

<sup>\*</sup>Factored Dead Load is factored weight of pile above the ground line.

### SUMMARY OF DRILLED PIER INFORMATION/INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pier(s) #-# (e.g., "Bent 1, Piers 1-3")	Factored Resistance per Pier TONS	Minimum Pier Tip (Tip No Higher Than) Elevation FT	Required Tip Resistance per Pier TSF	Scour Critical Elevation FT	Minimum Drilled Pier Penetration Into Rock per Pier Lin FT	Drilled Pier Length per Pier Lin FT	Drilled Pier Length Not In Soil per Pier Lin FT	Drilled Pier Length In Soil per Pier Lin FT	Permanent Steel Casing Required? YES or MAYBE	Permanent Steel Casing Tip Elevation (Elev Not To Extend Casing Below) FT	Permanent Steel Casing Length* per Pier Lin FT
Bent 1, Piers 1-3	425	254.0	140	263	11.0	16.0			YES	264.0	6.0
Bent 2, Piers 1-3	425	254.0	140	263	11.0	16.0			YES	265.0	5.0
Bent 3, Piers 1-3	425	254.0	140	263	11.0	24.0			MAYBE	265.0	13.0

<sup>\*</sup>Permanent Steel Casing Length equals the difference between the ground line or top of drilled pier elevation, whichever is higher, and the permanent casing tip elevation.

# Foundation Notes

- 1. FOR PILES, SEE PILES PROVISION AND SECTION 450 OF THE STANDARD SPECIFICATIONS.
- 2. FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

## SUMMARY OF DRILLED PIER TESTING

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pier(s) #-# (e.g., "Bent 1, Piers 1-3")	Standard Penetration Test (SPT) Required? YES or MAYBE	Crosshole Sonic Logging (CSL) Required?* YES or MAYBE	Total CSL Tube Length (For All Tubes) per Pier Lin FT	Shaft Inspection Device (SID) Required? YES or MAYBE	Pile Integrity Test (PIT) Required? MAYBE	
Bent 1, Piers 1-3		MAYBE	70			
Bent 2, Piers 1-3		MAYBE	70			
Bent 3, Piers 1-3		MAYBE	102			
TOTAL QTY:		2	726			

\*CSL Tubes are required if CSL Testing is or may be required. The number of CSL Tubes per drilled pier is equal to one tube per foot of design pier diameter with at least 4 tubes per pier. The length of each CSL Tube is equal to the drilled pier length plus 1.5 ft.

> PROJECT NO. B-6046 STANLY COUNTY STATION: 17+66.00 -L-

SHEET 3 OF 4

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

GENERAL DRAWING

FOR BRIDGE OVER LONG CREEK ON SR 1917 (BETHLEHEM CHURCH RD) BETWEEN SR 1953 (BARBEES GROVE

ICE of CAROLINAS, PLLC

S E AL 45237

ICE of Carolinas, PLLC 4505 Falls of Neuse Road, Suite 11 Raleigh, North Carolina 27609 Phone: 803-822-0333 License #: P-0999

RD) AND SR 1954 (OLD AQUADALE RD) REVISIONS SHEET NO. S-03 DATE: DATE: NO. BY: TOTAL SHEETS

## NOTES:

- 1. The Pile and Drilled Pier Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer Shiping Yang, P.E., License No. 031361 on 06/03/2022.
- 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. The Engineer will determine the need for PDA Testing, Pipe Pile Plates, Permanent Steel Casing, SPTs, CSL Testing, SID Inspections and PITs when these items may be required.