

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				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
					MIN. PILE TIP (TIP NO HIGHER THAN) ELEV FT	REQUIRED DRIVING RESISTANCE (RDR)** PER PILE TONS	TOTAL PILE REDRIVES QUANTITY EACH						
END BENT 1, PILES 1-7	110	893.25	50										
BENT 1, PILES 1-15	120	873.49	30										
END BENT 2, PILES 1-7	110	892.72	50										

* PREDRILLING FOR PILES IS REQUIRED FOR END BENTS/ BENT WITH A PREDRILLING LENGTH AND AT THE CONTRACTOR'S OPTION FOR END BENTS/ BENTS WITH PREDRILLING INFORMATION BUT NO PREDRILLING LENGTH.

** RDR = $\frac{\text{FACTORED RESISTANCE} + \text{FACTORED DOWNDRAW LOAD} + \text{FACTORED DEAD LOAD}}{\text{DYNAMIC RESISTANCE FACTOR}} + \frac{\text{NORMAL DOWNDRAW RESISTANCE} + \text{NORMAL SCOUR RESISTANCE}}{\text{SCOUR RESISTANCE FACTOR}}$

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	MAYBE	55	1		
BENT 1	MAYBE	35			
END BENT 2	MAYBE	55			

* 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.

FOUNDATION NOTES:

FOR PILES, SEE PILES PROVISION AND SECTION 450 OF THE STANDARD SPECIFICATIONS.

OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 2 FT. OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT 1. FOR BRIDGE WAITING PERIODS, FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

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

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 AXIAL LOAD PER PILE TONS	FACTORED DOWNDRAW LOAD PER PILE FT	FACTORED DEAD LOAD* PER PILE TONS	DRYAMIC RESISTANCE FACTOR	NOMINAL DOWNDRAW RESISTANCE PER PILE TONS	NOMINAL SCOUR RESISTANCE PER PILE TONS	SCOUR RESISTANCE FACTOR (DEFAULT=1.00)
END BENT 1, PILES 1-7	110			0.60			
BENT 1, PILES 1-15	120			0.60			
END BENT 2, PILES 1-7	110			0.60			

* FACTORED DEAD LOAD IS FACTORED WEIGHT OF PILE ABOVE THE GROUND LINE.

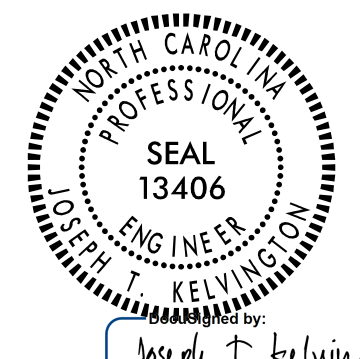
SUMMARY OF PILE ACCESSORIES

(BLANK ENTRIES INDICATE ITEM IS NOT APPLICABLE TO STRUCTURE)

END BENT/ BENT NO. PILE (S) *-# (e.g., BENT 1, PILES 1-5')	PIPE PILE PLATES REQUIRED YES OR MAYBE	STEEL PILE POINTS			STEEL PILE TIPS REQUIRED? YES
		PIPE PILE CUTTING SHOES REQUIRED? YES	PIPE PILE CONICAL POINTS REQUIRED? YES	H-PILE POINTS REQUIRED? YES	
END BENT 1, PILES 1-7					
BENT 1, PILES 1-15					
END BENT 2, PILES 1-7				YES	
TOTAL QTY.				7	

PROJECT NO. R-2707D
CLEVELAND COUNTY
 STATION: 19+82.46 -Y1-

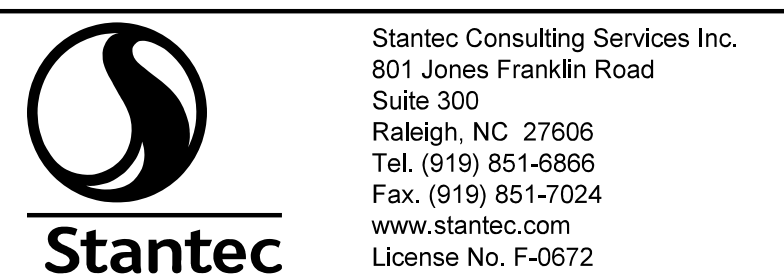
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 PILE FOUNDATION TABLES



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	REVISIONS						SHEET NO.
	NO.	BY:	DATE:	NO.	BY:	DATE:	S1-03
	1			3			TOTAL SHEETS
	2			4			32

NOTES:

- THE PILE FOUNDATION TABLES ARE BASED ON THE BRIDGE SUBSTRUCTURE DESIGN AND FOUNDATION RECOMMENDATIONS SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER (STEPHEN C. CROCKETT, 048207) ON 06-14-2022.
- 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.



DRAWN BY : J.E.HAGENBUSH DATE : 05/17/22 DESIGN ENGINEER OF RECORD : J. KELVINGTON DATE : 04/27/23
 CHECKED BY : J. KELVINGTON DATE : 11/09/22

4/27/2023 10:49:20 AM jHagenbush 4:\pvt\wvking\dms55345\R2707D_SML_FT_1-220488.dgn