

bgonfa 7/6/2026 R:\Structures\Drawings\BP1.R021.1.SMU_FL1.570025.dgn

SUMMARY OF PILE INFORMATION/INSTALLATION														
(BLANK ENTRIES INDICATE ITEM IS NOT APPLICABLE TO STRUCTURE)														
END BENT/BENT NO. PILE(S) *(#)	NUMBER OF PILES PER LINE	FACTORED RESISTANCE PER PILE	PILE CUT-OFF (TOP OF PILE) ELEVATION	ESTIMATED PILE LENGTH PER PILE	SCOUR CRITICAL ELEVATION	DRIVEN PILES			PREDRILLING FOR PILES *			DRILLED-IN PILES		
						MIN. PILE TIP (TIP NO HIGHER THAN) ELEV.	REQUIRED DRIVING RESISTANCE (RDR) ** PER PILE	PILE REDRIVES QUANTITY	PREDRILLING LENGTH PER PILE	PREDRILLING ELEVATION (ELEV. NOT TO PREDRILL BELOW)	MAXIMUM PREDRILLING DIAMETER	PILE EXCAVATION BOTTOM OF HOLE) ELEV.	PILE EXCAVATION NOT IN SOIL PER PILE	PILE EXCAVATION IN SOIL PER PILE
		KIPS	FT.	FT.	FT.	FT.	KIPS	EA.	LIN. FT.	FT.	INCHES	FT.	LIN. FT.	LIN. FT.
END BENT 1, PILES 1-5	5	170	SEE SHEET S-9	100			245							
END BENT 2, PILES 1-5	5	170	SEE SHEET S-12	100			245							
TOTAL QUANTITY								5						

* 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 = $\frac{\text{FACTORED RESISTANCE} + \text{FACTORED DRAG LOAD} + \text{FACTORED DEAD LOAD}}{\text{DYNAMIC RESISTANCE FACTOR}}$ + NOMINAL DRAG LOAD RESISTANCE + NOMINAL RESISTANCE FROM SCOURABLE MATERIAL

PILE DESIGN INFORMATION						
(BLANK ENTRIES INDICATE ITEM IS NOT APPLICABLE TO STRUCTURE)						
END BENT/BENT NO. PILE(S) *(#)	FACTORED AXIAL LOAD PER PILE	FACTORED DOWNDRA G LOAD PER PILE	FACTORED DEAD LOAD * PER PILE	DYNAMIC RESISTANCE FACTOR	NOMINAL DOWNDRA G RESISTANCE PER PILE	NOMINAL SCOUR RESISTANCE PER PILE
	KIPS	KIPS	KIPS		KIPS	KIPS
END BENT 1, PILES 1-5	170			0.7		
END BENT 2, PILES 1-5	170			0.7		

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

SUMMARY OF DPT/PILE ORDER LENGTHS		
(BLANK ENTRIES INDICATE ITEM IS NOT APPLICABLE TO STRUCTURE)		
DYNAMIC PILE TESTING (DPT)		
END BENT/BENT NO.	DPT TEST PILE LENGTH	TOTAL DPT TESTING QUANTITY
	FT.	EA.
END BENT 1	105	1
END BENT 2	105	1
TOTAL QUANTITY		2

FOUNDATION RECOMMENDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 22,000-45,000 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.

NOTES:

THE PILE FOUNDATION TABLES ARE BASED ON THE BRIDGE SUBSTRUCTURE DESIGN AND FOUNDATION RECOMMENDATIONS SEALED BY A NORTH CAROLINA PROFESSIONAL ENGINEER (KENNETH BUSSEY JR., PE #038206) ON 04/17/2026.

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 MAY ADJUST THE QUANTITY FOR DPT TESTING WHEN NECESSARY.

PROJECT NO. BP1.R021.1
MARTIN COUNTY
STATION: 13+33.50 -L-

SHEET 2 OF 4

DRAWN BY : <u>B. H. GONFA</u>	DATE : <u>MAR 2026</u>
CHECKED BY : <u>M. SHARMA</u>	DATE : <u>MAR 2026</u>
DESIGN ENGINEER OF RECORD : <u>M. SHARMA</u>	DATE : <u>MAR 2026</u>

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BRIDGE NO. 570025

STATE OF NORTH CAROLINA
PROFESSIONAL
SEAL
050844
ENGINEER
MAYUR SHARMA

7/6/2026

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
GENERAL DRAWING
FOUNDATION TABLES
AND NOTES

REVISIONS						SHEET NO. S-2
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 16
2			4			