



FOUNDATION LAYOUT PLAN

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO PILE AND DRILLED PIER CENTERLINE.

FOUNDATION NOTES

- FOR PILES, SEE GEOTECHNICAL SPECIAL PROVSIONS AND SECTION 450 OF STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.
- DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.
- FOR DRILLED PIERS, SEE SECTION 411 OF STANDARD SPECIFICATIONS.
- INSTALL DRILLED PIERS AT BENT NO.1 AND BENT NO.2 TO A TIP ELEVATION NO HIGHER THAN 670.6 FEET AND A PENETRATION OF 9 FEET INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.
- DRILLED PIERS AT BENT NO.1 AND BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 635 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30 TSF.
- THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 AND BENT NO.2 IS 679 FEET. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.
- PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO.1 AND BENT NO.2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 690 FT WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL NEED TO DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.
- DRIVE PILES AT END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.
- DRILLED-IN PILES ARE REQUIRED FOR INTEGRAL END BENT NO.2. EXCAVATE HOLES AT PILE LOCATIONS TO ELEVATION 713 FT. FILL THE BOTTOM 3 FT OF HOLES FOR PILE EXCAVATION WITH CONCRETE AND THE REST OF THE HOLES WITH CLASS II OR CLASS III SELECT MATERIAL THAT MEETS SECTION 1016 OF THE STANDARD SPECIFICATIONS FOR PILE EXCAVATION, SEE SECTION 450 OF THE SPECIFICATIONS.
- STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT NO.1 AND END BENT NO.2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- DRILLED-IN PILES AT END BENT NO.2 THAT DO NOT HAVE A MINIMUM PENETRATION OF 3 FEET INTO ROCK AS DEFINED BY ARTICLE 411 OF THE STANDARD SPECIFICATIONS WILL BE DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.

PROJECT NO. R-2707C
CLEVELAND COUNTY
 STATION: 384+50.00 -L-

SHEET 2 OF 4



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
GENERAL DRAWING RIGHT LANE BRIDGE OVER FIRST BROAD RIVER ON US 74 SHELBY BYPASS BETWEEN NC 226 AND SR 1850					
REVISIONS					SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					TOTAL SHEETS
					36
8601 Six Forks Road, Suite 260 Raleigh, NC 27615 919-926-4100 FAX 919-846-9080 www.rsandh.com North Carolina License Nos. 50073-F-5403-C-28					

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY :	PDS	DATE :	11/2016
CHECKED BY :	TLC	DATE :	01/2017
DESIGN ENGINEER OF RECORD:	MAL	DATE :	11/2016