



**FOUNDATION LAYOUT**  
 DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO THE CENTERLINE  
 BRACE PILES AT END BENT 1 ARE BATTERED 3:12

**FOUNDATION NOTES**

FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS. PILES AT END BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 95 TONS PER PILE. DRIVE PILES AT END BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE. FOR DRILLED PIERS, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 411 OF THE STANDARD SPECIFICATIONS. DRILLED PIERS AT BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 375 TONS PER PILE. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30 TSF. DRILLED PIERS AT BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 390 TONS PER PILE. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 30 TSF. INSTALL DRILLED PIERS AT BENT NO.1 TO A TIP ELEVATION NO HIGHER THAN 931 FT AND WITH THE REQUIRED TIP RESISTANCE. INSTALL DRILL PIERS AT BENT NO. 2 TO A TIP ELEVATION NO HIGHER THAN 948 FT AND WITH THE REQUIRED TIP RESISTANCE. THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 IS ELEVATION 948 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE PROBLEMS DURING THE LIFE OF THE STRUCTURE. THE SCOUR CRITICAL ELEVATION FOR BENT NO.2 IS ELEVATION 954 FT. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE PROBLEMS DURING THE LIFE OF THE STRUCTURE. SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS. FOR SID INSPECTIONS, SEE SECTION 411 OF THE STANDARD SPECIFICATION..

CSL TUBES ARE REQUIRED AND CSL TESTING MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS. DO NOT USE SLURRY CONSTRUCTION FOR DRILLED PIERS AT BENT NO.1 AND BENT NO.2. THE SPREAD FOOTINGS AT END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 10 TSF. CHECK FIELD CONDITIONS FOR THE REQUIRED RESISTANCE OF 25 TSF JUST BEFORE PLACING CONCRETE.

PROJECT NO. B-5398  
BURKE COUNTY  
 STATION: 16+45.00 -L-  
 SHEET 2 OF 3

DocuSigned by:  
 Lisa M. Samples  
 5863D099A9B449C...  
 10/14/2016



**ms consultants, inc.**  
 920 Main Campus Drive  
 Suite 430  
 Raleigh, NC 27606  
 NC License Number : C-3239

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**FOUNDATION LAYOUT**  
 FOR BRIDGE ON SR 1803  
 OVER HENRY FORK RIVER  
 BETWEEN SR 1818 & SR 1808

DRAWN BY :	J.M. KEPICH	DATE :	02/16
CHECKED BY :	L.M. SAMPLES	DATE :	04/16
DESIGN ENGINEER OF RECORD :	L.M. SAMPLES	DATE :	05/16

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SHEET NO. S-02  
TOTAL SHEETS 24