

**FOUNDATION LAYOUT**  
 DIMENSIONS LOCATING PILES & DRILLED PIERS ARE SHOWN TO THE CENTERLINE OF PILES & DRILLED PIERS.

**NOTES**

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 141 TONS PER PILE.

DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 235 TONS PER PILE.

OBSERVE A 3 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, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.

FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATION.

DRILLED PIERS AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 640 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 80 TSF.

INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN EL. 483 FT. SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 9 FT. INTO ROCK OR WEATHERED ROCK.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 1. DO NOT EXTEND PERMANENT CASINGS BELOW EL. 493 FT. WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

STANDARD PENETRATION TESTING (SPT) MAY BE REQUIRED FOR DRILLED PIERS AT BENT 1. THE ENGINEER WILL DETERMINE THE NEED FOR SPT. FOR SPT TESTING, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

SID INSPECTIONS ARE REQUIRED FOR DRILLED PIERS AT BENT 1. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS. FOR SID INSPECTION, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT 1 IS ELEVATION 492 FT. THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

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.

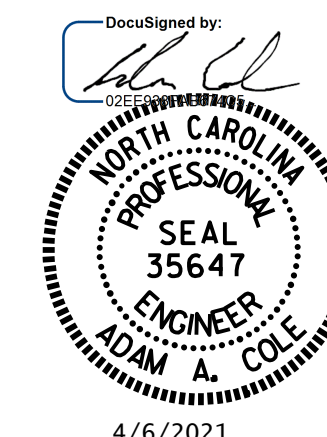
PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 165 TONS PER PILE.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 278 TONS PER PILE.

OBSERVE A 3 MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT TO WITHIN 2 FT. OF FINISHED GRADE BEFORE BEGINNING END BENT CONSTRUCTION AT END BENT 2. FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. B-5813  
CABARRUS COUNTY  
 STATION: 21+85.00 -L-

SHEET 2 OF 3



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

**GENERAL DRAWING**  
 FOR BRIDGE OVER  
 DUTCH BUFFALO CREEK  
 ON NC 73 BETWEEN  
 SR 2609 AND SR 2604

DRAWN BY : M. G. SHAIKH DATE : 07/2019  
 CHECKED BY : H. LOCKLEAR DATE : 06/2019  
 DESIGN ENGINEER OF RECORD: H. LOCKLEAR DATE : 06/2019

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS 29
2			4			