

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES AND DRILLED PIERS ARE SHOWN TO THE CENTERLINE.
BRACE PILES AT END BENTS ARE BATTERED 3:12

FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 200 TONS PER PILE.

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

INSTALL DRILLED PIERS AT BENT 1 TO A TIP ELEVATION NO HIGHER THAN 459.2 (LT.), 462.4 (CT.) & 465.5 (RT.) TO SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT 2 TO A TIP ELEVATION NO HIGHER THAN 457.6 (LT.), 458.8 (CT.) & 460.0 (RT.) TO SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 10 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

INSTALL DRILLED PIERS AT BENT 3 TO A TIP ELEVATION NO HIGHER THAN 461.7 (LT.), 462.8 (CT.) & 463.8 (RT.) TO SATISFY THE REQUIRED TIP RESISTANCE AND HAVE A PENETRATION OF AT LEAST 8 FT. INTO ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

DRILLED PIERS AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 565 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 105 TSF.

DRILLED PIERS AT BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 545 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 105 TSF.

DRILLED PIERS AT BENT 3 ARE DESIGNED FOR A FACTORED RESISTANCE OF 520 TONS PER PIER. CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 105 TSF.

PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT 1. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 469.2 (LT.), 472.4 (CT.) & 475.5 (RT.) WITHOUT PRIOR APPROVAL FROM THE ENGINEER. INSTALL PERMANENT STEEL CASING AT BENT 1 BY VIBRATING, SCREWING, OR DRIVING PERMANENT CASINGS BEFORE EXCAVATING OR DISTURBING ANY MATERIAL BELOW ELEVATION 471.0 (LT.), 473.8 (CT.), & 476.5 (RT.).

PERMANENT STEEL CASINGS MAY BE REQUIRED FOR DRILLED PIERS AT BENT 2. DO NOT EXTEND PERMANENT CASINGS BELOW ELEVATION 472.00 WITHOUT PRIOR APPROVAL FROM THE ENGINEER. INSTALL PERMANENT STEEL CASING AT BENT 2 BY VIBRATING, SCREWING, OR DRIVING PERMANENT CASINGS BEFORE EXCAVATING OR DISTURBING ANY MATERIAL BELOW ELEVATION 484.0.

THE SCOUR CRITICAL ELEVATIONS FOR BENT 1 ARE 470.0 (LT.), 472.8 (CT.) & 475.5 (RT.). THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR BENT 2 IS 483.0. THE SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE SCOUR CRITICAL ELEVATION FOR BENT 3 IS 484.0. 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 THE DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR CSL TESTING. FOR CSL TESTING SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

ROCK PLATED REINFORCED SOIL SLOPE IS REQUIRED BELOW CAP AT END BENT 1. SEE PROJECT SPECIAL PROVISIONS AND REINFORCED SOIL SLOPE DRAWINGS IN ROADWAY PLANS.

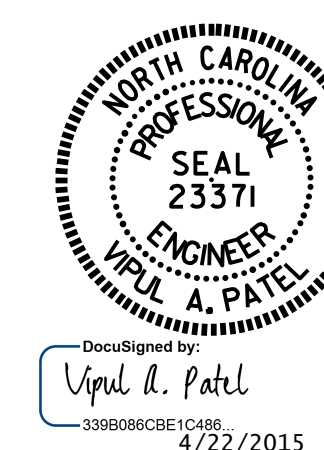
DRIVE PILES AT END BENT 1 AFTER REINFORCED SOIL SLOPE IS CONSTRUCTED. TOP LAYER OF GEOGRID WILL HAVE A MINIMUM COVER OF 2 FEET PRIOR TO DRIVING PILES.

PROJECT NO. B-4972
CABARRUS COUNTY
STATION: 22+55.00 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER ROCKY
RIVER ON SR 1006
(MT. PLEASANT RD.) BETWEEN
SR 1105 AND NC 200



DRAWN BY : N.D'AIUTO DATE : 11/18/14
CHECKED BY : T.H.CARROLL DATE : 12/19/14
DESIGN ENGINEER OF RECORD : J.P.MCCARTHA DATE : 12/19/14

21-APR-2015 09:25
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lsutton

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			31