



### FOUNDATION LAYOUT

#### NOTES

- ALL PILES ARE HP 14 X 73.
- DIMENSIONS LOCATING PILES ARE SHOWN TO THE PILE CENTERLINE AT THE BOTTOM OF THE CAP.
- FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- PILES AT END BENT NO.1 AND END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 135 TONS PER PILE.
- DRIVE PILES AT END BENT NO.1 AND END BENT NO.2 TO A REQUIRED DRIVING RESISTANCE OF 225 TONS PER PILE.
- FOR DRILLED PIERS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.
- DRILLED PIERS AT BENT NO.1 AND BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 289 TONS PER PIER
- CHECK FIELD CONDITIONS FOR THE REQUIRED TIP RESISTANCE OF 10 TSF.
- PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO.1 DO NOT EXTEND PERMANENT CASINGS BELOW 2590.0 FT. WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PERMANENT STEEL CASINGS ARE REQUIRED FOR DRILLED PIERS AT BENT NO.2 DO NOT EXTEND PERMANENT CASINGS BELOW 2580.0 FT. WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- INSTALL DRILLED PIERS AT BENT NO.1 TO A TIP ELEVATION NO HIGHER THAN 2581.0 FT. WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 11 FT. INTO WEATHERED ROCK AND ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.

- INSTALL DRILLED PIERS AT BENT NO.2 TO A TIP ELEVATION NO HIGHER THAN 2572.0 FT. WITH THE REQUIRED TIP RESISTANCE AND A PENETRATION OF AT LEAST 11 FT. INTO WEATHERED ROCK AND ROCK AS DEFINED BY ARTICLE 411-1 OF THE STANDARD SPECIFICATIONS.
- THE SCOUR CRITICAL ELEVATION FOR BENT NO.1 AND BENT NO.2 IS ELEVATION 2595.5 FT. 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.
- SID INSPECTIONS MAY BE REQUIRED FOR DRILLED PIERS. THE ENGINEER WILL DETERMINE THE NEED FOR SID INSPECTIONS, SEE SECTION 411 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. U-5839  
HAYWOOD COUNTY  
 STATION: 31+45.00 -L- POT

SHEET 2 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE ON -L- US 276  
 (RUSS AVE.) OVER RICHLAND  
 CREEK BETWEEN US 23  
 (N. MAIN ST.) AND SR 1247  
 (DELLWOOD RD.)

PLANS PREPARED BY:

**NV5**

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DocuSigned by:

*Robert C. Larson*

PROFESSIONAL SEAL  
 ENGINEER  
 ROBERT C. LARSON  
 14114

5/19/2023

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**

DRAWN BY: W. B. ALLEN DATE: 10/19  
 CHECKED BY: Z. H. BROWN DATE: 11/19  
 DESIGN ENGINEER OF RECORD: R. C. LARSON DATE: 2/23

DocuSigned by:  
*Robert C. Larson*  
 PROFESSIONAL SEAL  
 ENGINEER  
 ROBERT C. LARSON  
 14114

REVISIONS				SHEET NO.		
NO.	BY:	DATE:	NO.	BY:	DATE:	TOTAL SHEETS
1			3			49
2			4			

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