

END BENT No. 1

BENT No. 1

### FOUNDATION LAYOUT

BENT No. 2

END BENT No. 2

(DIMENSIONS LOCATING PILES ARE TO THE CENTERLINE OF THE PILE AT THE BOTTOM OF THE CAP)  
 PERMANENT SHEET PILING WILL BE REQUIRED AT END BENT No. 2, FOR LOCATION AND DETAILS, SEE END BENT No. 2 SHEETS.

#### NOTES:

PILES FOR END BENT No. 1 AND END BENT No. 2 SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 50 TONS EACH.

PILES AT BENT No. 1 AND BENT No. 2 SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN -50 FT. AND SATISFY THE BEARING CAPACITY OF 50 TONS EACH.

▲ STAGE 2 BENT PILES MAY BE DRIVEN THROUGH THE DECK OF THE EXISTING BRIDGE DURING STAGE 1 CONSTRUCTION. SEE TRAFFIC CONTROL PLANS FOR TIME RESTRICTIONS AND TIME OF DAY TO DRIVE THESE PILES THAT CONFLICT WITH TRAFFIC.

HOLES CUT IN THE EXISTING BRIDGE DECK IN ORDER TO DRIVE STAGE 2 PILES DURING STAGE 1 CONSTRUCTION SHALL BE COVERED WITH A TRAFFIC BEARING STEEL PLATE OR REPAIRED TO SAFELY MAINTAIN TRAFFIC. SUBMIT TRAFFIC PROTECTION DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL. THE COST FOR CUTTING THE HOLES IN THE EXISTING DECK AND FOR TRAFFIC PROTECTION SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR "REMOVAL OF EXISTING STRUCTURE".

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1 AND BENT No. 2 IS -15 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

WHEN DRIVING PILES, THE MAXIMUM BLOW COUNT SHALL NOT BE EXCEEDED.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH A EQUIVALENT RATED ENERGY IN THE RANGE OF 28,000 TO 45,000 FT-POUNDS PER BLOW WILL BE REQUIRED TO DRIVE THE 16-INCH PRESTRESSED CONCRETE PILES. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM THE PROVISIONS OUTLINED IN ARTICLE 450-6 OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST PRODUCTION PILE WITH THE PILE DRIVING ANALYZER (PDA) DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT BENT No. 1 OR BENT No. 2. SEE PILE DRIVING ANALYZER SPECIAL PROVISION.

STEEL SHEET PILING REQUIRED FOR END BENT No. 2 SHALL CONFORM TO THE REQUIREMENTS OF ASTM A690 MARINE STEEL AND SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

COST FOR GALVANIZING 18" STEEL SHEET PILES SHALL BE INCLUDED IN THE SQUARE FOOT COST FOR 18" STEEL SHEET PILES.

IF DOMESTIC A690 MARINE STEEL IS NOT AVAILABLE, FOREIGN A690 MARINE STEEL WILL BE ALLOWED.

STEEL SHEET PILING REQUIRED SHALL NOT BE HOT ROLLED.

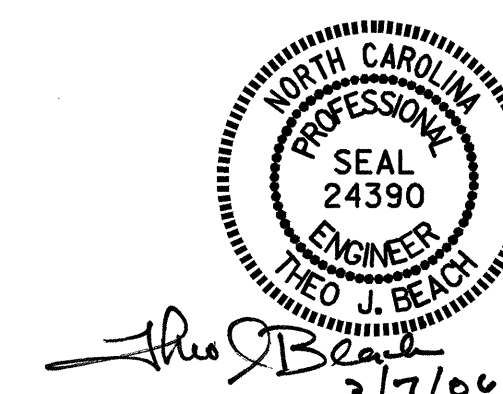
INSTALL SHEET PILING TO AN ELEVATION NO HIGHER THAN -32.0 FT.

THE SCOUR CRITICAL ELEVATION FOR THE SHEET PILE WALL IS -11.0 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

CONTINUED ON SHEET 4 OF 4.

DRAWN BY : P.C. BREWER DATE : 2/05  
 CHECKED BY : T. BEACH DATE : 2/05

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PROJECT NO. B-3349  
 HYDE COUNTY  
 STATION: 15+69.00 -L-

SHEET 2 OF 4

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH						SHEET NO. S-2
GENERAL DRAWING						TOTAL SHEETS 44
BRIDGE OVER ROSE BAY CREEK ON US 264 BETWEEN SR 1139 AND SR 1304						
REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			