



LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE.....= 3,300 CFS.  
 FREQUENCY OF DESIGN FLOOD.....= 25 YEARS  
 DESIGN HIGH WATER ELEVATION.....= 83.6'  
 DRAINAGE AREA.....= 124 SQ. MI.  
 BASIC DISCHARGE(Q100).....= 4,900 CFS.  
 BASIC HIGH WATER ELEVATION.....= 84.4'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE.....= 4,100 CFS.  
 FREQUENCY OF OVERTOPPING FLOOD.....= 50 YRS  
 OVERTOPPING FLOOD ELEVATION.....= 83.4'

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	HP 12 X 53 STEEL PILES		GALVANIZING STEEL PILES	PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUBSTRUCTURE	CONSTRUCTION OF SUPERSTRUCTURE
			No.	LIN. FT.				
SUPERSTRUCTURE								LUMP SUM
SUBSTRUCTURE							LUMP SUM	
END BENT No. 1		LUMP SUM	6	180		120		
BENT No. 1			8	240	LUMP SUM			
BENT No. 2			8	240	LUMP SUM			
BENT No. 3			8	240	LUMP SUM			
END BENT No. 2		LUMP SUM	6	180		80		
TOTAL	LUMP SUM	LUMP SUM	36	1,080	LUMP SUM	200	LUMP SUM	LUMP SUM

NOTES: (CONTINUED FROM SHEET 2 OF 3)

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING, EXCEPT THAT CORED SLAB UNITS HAVE BEEN DESIGNED FOR HS25.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

THIS BRIDGE SHALL BE CONSTRUCTED USING TOP DOWN CONSTRUCTION METHODS. THE USE OF A TEMPORARY CAUSEWAY OR A WORK BRIDGE WILL NOT BE PERMITTED.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

THE EXISTING STRUCTURE CONSISTING OF 9 SPANS OF 17.0± FT. WITH A TOTAL LENGTH OF 155.0 FT. AND A CLEAR ROADWAY WIDTH OF 24.0 FT. CONSISTING OF A REINFORCED CONCRETE DECK ON TIMBER JOISTS AND SUBSTRUCTURE CONSISTING OF TIMBER CAPS ON TIMBER PILES AT END BENTS AND BENTS AND LOCATED AT THE SITE OF THE PROPOSED STRUCTURE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE, THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25 FT. EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLE OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

PILES AT 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 SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN 61.0 FT. AND SATISFY THE BEARING CAPACITY OF 50 TONS EACH.

PILES AT BENT No. 2 AND BENT No. 3 SHALL BE DRIVEN TO AN ELEVATION NO HIGHER THAN 65.0 FT. AND SATISFY THE BEARING CAPACITY OF 50 TONS EACH.

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

THE STEEL PILES AT BENT No. 1, 2, & 3 SHALL BE GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS.

FOR GALVANIZING STEEL PILES, SEE SPECIAL PROVISIONS.

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1 IS ELEVATION 66.0 FT. THE SCOUR CRITICAL ELEVATION FOR BENT No. 2 AND BENT No. 3 IS ELEVATION 70.0 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

FOR CONSTRUCTION OF SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.

FOR CONSTRUCTION OF SUBSTRUCTURE, SEE SPECIAL PROVISIONS.

PROJECT NO. B-4270  
SAMPSON COUNTY  
 STATION: 14+60.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

GENERAL DRAWING

BRIDGE OVER LITTLE  
 COHARIE CREEK  
 ON SR 1240 BETWEEN  
 SR 1216 AND SR 1217



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			23

DRAWN BY : P.C. BREWER DATE : 7/21/04  
 CHECKED BY : M. BRITT DATE : 9/1/04