

LOCATION SKETCH

NOTES: (CONTINUED FROM SHEET 2 OF 3)

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.

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

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

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 EXISTING STRUCTURE CONSISTING OF 3 SPANS, 1 AT 17'-5", 1 AT 16'-5", AND 1 AT 17'-4", WITH A CLEAR ROADWAY WIDTH OF 19'-3", SUPERSTRUCTURE WITH ASPHALT WEARING SURFACE AND TIMBER FLOOR ON TIMBER JOIST AND SUBSTRUCTURE CONSISTING OF TIMBER CAPS AND TIMBER PILES AT END BENTS AND TIMBER CAPS ON TIMBER POST AND SILLS AT INTERIOR BENT, 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 27 FT. LEFT AND 25'-0" RIGHT 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.

THE EXISTING PAVEMENT WITHIN THE AREA OF THE END BENT PILES SHALL BE REMOVED AND THE ROADBED SCARIFIED TO A MINIMUM DEPTH OF 2'-0".

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.

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.

FOR CONSTRUCTION OF SUPERSTRUCTURE, SEE SPECIAL PROVISIONS.

FOR CONSTRUCTION OF SUBSTRUCTURE, SEE SPECIAL PROVISIONS.

TEMPORARY WORKPAD WILL BE REQUIRED IN THE AREA INDICATED IN THE PLAN VIEW ON SHEET 1 OF 3. AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE WORKPAD, THE CLASS II RIP RAP USED IN THE WORKPAD MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS.

HYDRAULIC DATA

DESIGN DISCHARGE = 1300 CFS  
 FREQUENCY OF DESIGN FLOOD = 25 YEARS  
 DESIGN HIGH WATER ELEVATION = 527.8  
 DRAINAGE AREA = 5.00 SQ. MI.  
 BASIC DISCHARGE (Q100) = 2000 CFS  
 BASIC HIGH WATER ELEVATION = 528.9

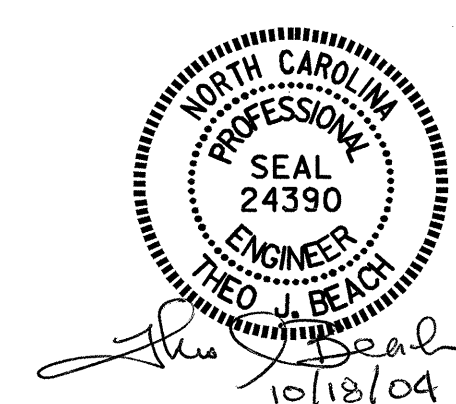
OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 3100+ CFS  
 FREQUENCY OF OVERTOPPING FLOOD = 500 YRS +  
 OVERTOPPING FLOOD ELEVATION = 531.6

TOTAL BILL OF MATERIAL

	CONSTRUCTION, MAINTENANCE, AND REMOVAL OF TEMPORARY ACCESS	REMOVAL OF EXISTING STRUCTURE	3'-6" Ø DRILLED PIERS IN SOIL	3'-6" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIER	SID INSPECTION	CROSSHOLE SONIC LOGGING	CSL TUBES	UNCLASSIFIED STRUCTURE EXCAVATION	HP 12 X 53 STEEL PILES		PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUBSTRUCTURE	CONSTRUCTION OF SUPERSTRUCTURE
										No.	LIN. FT.			
SUPERSTRUCTURE	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	LIN. FT.	LUMP SUM	No.	LIN. FT.	SQ. YDS.	LUMP SUM	LUMP SUM
END BENT No. 1										6	180.0	175		LUMP SUM
BENT No. 1			73.1	13.0	69.0	1	1	364.3						
BENT No. 2			68.7	13.0	59.6			347.0						
END BENT No. 2										7	175.0	176		
TOTAL	LUMP SUM	LUMP SUM	141.8	26.0	128.6	1	1	711.3	LUMP SUM	13	355.0	351	LUMP SUM	LUMP SUM

DRAWN BY : P.C. BREWER DATE : 6/14/04  
 CHECKED BY : S.B. WILLIAMS DATE : 7/22/04



PROJECT NO. B-4058  
 CASWELL COUNTY  
 STATION: 16+75.55 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

GENERAL DRAWING  
 BRIDGE OVER NORTH HYCO  
 CREEK ON SR 1767  
 (GUN POOLE ROAD)  
 BETWEEN NC 119 AND SR 1765

REVISIONS						SHEET NO. S-3 TOTAL SHEETS 25
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			