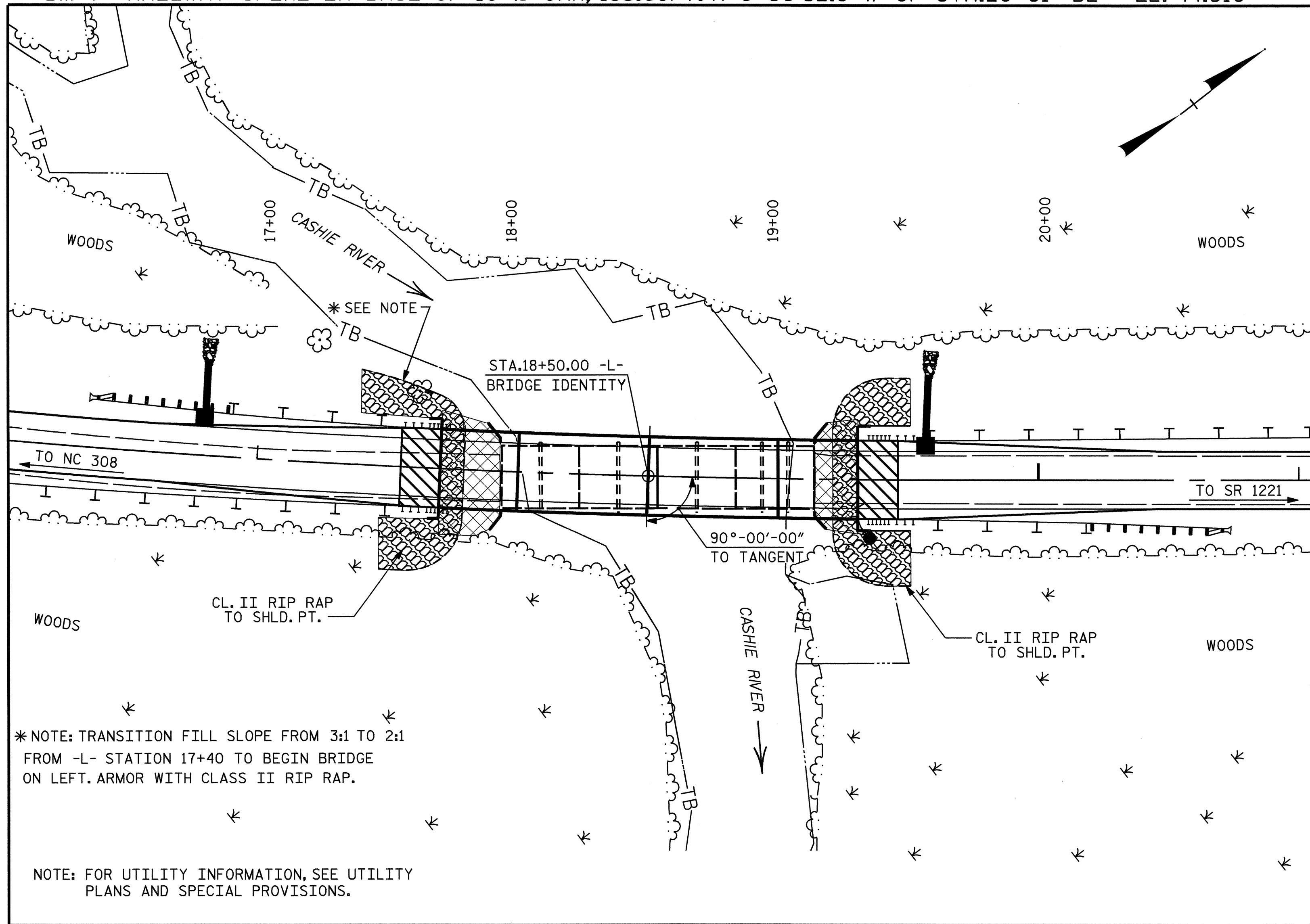


BM#7 RAILWAY SPIKE IN BASE OF 10" Ø OAK, 133.69FT. N 6°56'32.9" W OF STA.20+81 -BL- EL. 44.310



LOCATION SKETCH

**HYDROGRAPHIC DATA**

DESIGN DISCHARGE \_\_\_\_\_ 2,400 CFS  
 FREQUENCY OF DESIGN FLOOD \_\_\_\_\_ 25 YRS  
 DESIGN HIGH WATER ELEVATION \_\_\_\_\_ 45.000  
 DRAINAGE AREA \_\_\_\_\_ 36.1 SQ.MI.  
 BASIC DISCHARGE (Q100) \_\_\_\_\_ 3,600 CFS  
 BASIC HIGH WATER ELEVATION \_\_\_\_\_ 46.600

**OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE \_\_\_\_\_ 5,300 CFS  
 FREQUENCY OF OVERTOPPING FLOOD \_\_\_\_\_ 500 YRS  
 OVERTOPPING FLOOD ELEVATION \_\_\_\_\_ 47.700

**NOTES**

ASSUMED LIVE LOAD = HS20 OR ALTERNATE LOADING, EXCEPT THAT CORED SLAB UNITS HAVE BEEN DESIGNED FOR HS25.

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

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.

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.

THE EXISTING STRUCTURE, 120 FT. TOTAL LENGTH, CONSISTING OF 4 SPANS OF PRESTRESSED CONCRETE CHANNELS AND ASPHALT WEARING SURFACE WITH A 24.1 FT. CLEAR ROADWAY WIDTH ON PRECAST PRESTRESSED CAPS AND TIMBER PILES AT END BENTS AND INTERIOR BENTS AND CRUTCH BENTS ADDED MIDDLE SPAN OF EACH SPAN CONSISTING OF 4 STEEL BEAMS AND PILES SHALL BE REMOVED. FOR REMOVAL OF EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

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 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. THE ESTIMATED QUANTITY IS LESS THAN 500 CU. YDS. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

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.

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

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 SAMPLES 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.

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

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR "CONSTRUCTION OF SUPERSTRUCTURE" SEE SPECIAL PROVISIONS.

FOR "CONSTRUCTION OF SUBSTRUCTURE" SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

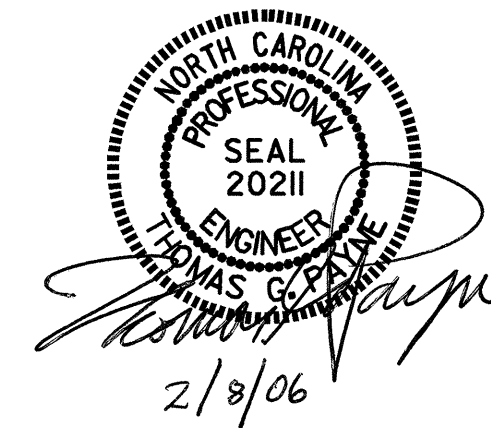
TOTAL BILL OF MATERIAL											
	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	BRIDGE APPROACH SLABS	HP 12 x 53 STEEL PILES		HP 14 x 73 STEEL PILES		GALVANIZING STEEL PILES	PLAIN RIP RAP CLASS II (2'-0" THICK)	CONSTRUCTION OF SUBSTRUCTURE	CONSTRUCTION OF SUPERSTRUCTURE
				NO.	LIN. FT.	NO.	LIN. FT.				
	LUMP SUM	LUMP SUM	LUMP SUM							LUMP SUM	LUMP SUM
SUPERSTRUCTURE											LUMP SUM
END BENT NO. 1		LUMP SUM		6	390				233	LUMP SUM	
BENT NO. 1						6	450	LUMP SUM		LUMP SUM	
BENT NO. 2						7	525	LUMP SUM		LUMP SUM	
BENT NO. 3						6	450	LUMP SUM		LUMP SUM	
END BENT NO. 2		LUMP SUM		6	360				215	LUMP SUM	
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	12	750	19	1,425	LUMP SUM	448	LUMP SUM	LUMP SUM

PROJECT NO. B-4027  
BERTIE COUNTY  
 STATION: 18+50.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

GENERAL DRAWING  
 FOR BRIDGE OVER  
 CASHIE RIVER ON  
 SR 1219 BETWEEN  
 NC 308 & SR 1221



DRAWN BY: KEITH D. LAYNE DATE: 1-11-05  
 CHECKED BY: DOUG V. JOYNER DATE: 2-08-05

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