

HYDRAULIC DATA

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE----= N/A
FREQUENCY OF OVERTOPPING FLOOD--= 10 YRS.
OVERTOPPING FLOOD ELEVATION---= 3.030

NOTE: THE ABOVE ELEVATIONS ARE STILLWATER ELEVATIONS BASED ON STORM SURGE IN THE CURRITUCK SOUND AS TAKEN FROM THE CURRITUCK COUNTY FEMA FIS.

NOTES

ASSUMED LIVE LOAD = HS 20 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.

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 LOCATED AT THE PROPOSED STRUCTURE SITE SHALL BE REMOVED IN STAGES AS SHOWN ON THE PLANS THE PAVEN EXCEPT THAT THE EXISTING METAL BULKHEADS SHALL REMAIN AS SHOWN ON THE PLANS. THE EXISTING STRUCTURE CONSISTS OF A VARYING NUMBER OF LINES OF ROLLED BEAMS IN 4 SPANS: 1 @ THE CONCESSOR THE CLEAR ROADWAY WIDTH IS 22'-0". THE STADLED BY TIMBER BENTS AND END BENTS. THE SUBSTITUTE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE STANDARD CLASS FOUND NECESSARY DURING THE LIFE OF THE PROJECT. SEE THEN THE SPECIAL PROVISION "REMOVAL OF EXISTING STRUCTURE".

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 ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 30.0' 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. FOR UNCLASSIFIED STRUCTURE EXCAVATION. FOR UNCLASSIFIED STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS.

THE CONTRACTOR IS MADE AWARE THAT THERE ARE OBSTRUCTIONS IN THE WATER AT THE BRIDGE SITE. THESE OBSTRUCTION INCLUDE, BUT ARE NOT LIMITED TO PILES AND POSSIBLY APPLIANCES, ie., REFRIGERATORS AND SHALL BE REMOVED FROM WITHIN THE PROJECT LIMITS AND DISPOSED OF BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER. NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR THIS WORK AS THE COST SHALL BE INCLUDED IN THE "REMOVAL OF EXISTING STRUCTURE" PAY ITEM.

THE SCOUR CRITICAL ELEVATION FOR BENT No. 1, 2, AND 3 IS ELEVATION -31.000, -31.000, AND -23.000 RESPECTIVELY. THESE ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THE WAITING PERIOD FOR APPROACH SLAB CONSTRUCTION SHALL BE ONE MONTH AFTER COMPLETION OF THE EMBANKMENT AT EACH END BENT.

FOR SECURING OF VESSELS. SEE SPECIAL PROVISIONS.

ALL BAR SUPPORTS USED IN THE PARAPET AND PILE CAPS AND ALL INCIDENTAL REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

FOR SCOUR PROTECTION STONE, SEE SPECIAL PROVISIONS.

FILTER FABRIC SHALL BE PLACED UNDER THE SCOUR
PROTECTION STONE. THE COST OF THIS FILTER FABRIC
AND ITS PLACEMENT SHALL BE PAID FOR IN THE
"FILTER FABRIC FOR DRAINAGE" PAY ITEM.

FOR CRANE SAFETY, 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 THE ROADWAY PLANS.

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS AND SHALL PROVIDE FOR BICYCLES

THE CONCRETE IN THE PILES OF BENT No.1, 2, AND 3 SHALL CONTAIN SILICA FUME. SILICA FUME SHALL BE SUBSTITUTED FOR 5% OF THE PORTLAND CEMENT BY WEIGHT. IF THE OPTION OF ARTICLE 1024-1 OF THE STANDARD SPECIFICATIONS TO PARTIALLY SUBSTITUTE CLASS F FLY ASH FOR PORTLAND CEMENT IS EXERCISED, THEN THE RATE OF FLY ASH SUBSTITUTION SHALL BE REDUCED TO 1.0 LB OF FLY ASH PER 1.0 LB OF CEMENT. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE VARIOUS PAY ITEMS.

CLASS AA CONCRETE SHALL BE USED IN ALL CAST-IN-PLACE BENT CAPS AND END BENTS AND SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR. FOR CALCIUM NITRITE CORROSION INHIBITOR, SEE SPECIAL PROVSIONS.

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 STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY A.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1, OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE".

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

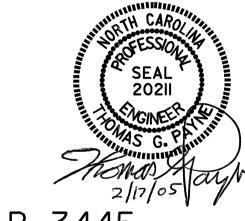
THIS STRUCTURE CONTAINS THE NECESSARY CORROSION PROTECTION REQUIRED FOR A CORROSIVE SITE.

FOR RAILING SYSTEM, SEE SPECIAL PROVISIONS.

FOR EPOXY SAND SURFACE, SEE SPECIAL PROVISIONS.

SEE SHEET 2 OF 3 FOR ADDITIONAL FOUNDATION NOTES.

** INCLUDES QUANTITY UNDER SCOUR PROTECTION STONE.



PROJECT NO. B-3445
CURRITUCK

STATION: 24+18.00 -L-

SHEET 3 OF 3 REPLACES BRIDGE NO. 7

DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON NC 615
OVER COREYS DITCH BETWEEN
SR 1255 AND VIRGINIA
STATE LINE

	SHEET NO.				
BY:	DATE:	NO.	BY:	DATE:	S-3
		3			TOTAL SHEETS
		4			43

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS AA CONCRETE	BRIDGE APPROACH SLABS	EPOXY COATED REINFORCING STEEL	PRE C(16″ STRESSED ONCRETE PILES	PRES CO	24" STRESSED NCRETE PILES	STEEL PILE TIPS	TWO BAR METAL RAIL	1'-2"X 2'- 8 ¹ / ₂ " CONCRETE PARAPET	PLAIN RIP RAP CLASS II (2'-0" THICK)	FILTER FABRIC FOR DRAINAGE	ELASTOMERIC BEARINGS	3'- PRI C COI	O" X 1'-9" ESTRESSED ONCRETE RED SLABS	EPOXY SAND SURFACE	RAILING SYSTEM	DYNAMIC LOAD TEST	SCOUR PROTECTION STONE
	LUMP SUM	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	NO.	LIN. FT.	NO.	LIN.FT.	EACH	LIN.FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.	LUMP SUM	LUMP SUM	EACH	TONS
SUPERSTRUCTURE				LUMP SUM							339.33	355.22			LUMP SUM	68	3012.38	LUMP SUM	LUMP SUM		
END BENT NO. 1			20.5		3221	11	550						95	**110							10
BENT NO. 1			23.5		3705			9	765	9		***************************************								1	
BENT NO. 2			23.5		3705			9	765	9										1	
BENT NO. 3			18.9		3606	9	585													1	
END BENT NO. 2			20.7		3155	9	450						90	**105							10
TOTAL	LUMP CUM	LUMP CUM	107.1	LIMP CIM	17.700		1.505	1.0	4.570			755.00									
TOTAL	LUMP SUM	LUMP SUM	107.1	LUMP SUM	17,392	29	1 , 585	18	1,530	18	339.33	355.22	185	215	LUMP SUM	68	3012.38	LUMP SUM	LUMP SUM	3	20

DRAWN BY: W.R. BRILEY/TGP DATE: 1-22-02 CHECKED BY: K.D. LAYNE DATE: 5-14-02