

HYDRAULIC DATA

OVERTOPPING FLOOD DATA

DESIGN DISCHARGE ---- = N/A FREQUENCY OF DESIGN FLOOD ---- 50 YRS. DESIGN HIGH WATER ELEVATION --- = 6.000 DRAINAGE AREA----- = N/A BASIC DISCHARGE (Q100) ----= N/A BASIC HIGH WATER ELEVATION ----= 6.300

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 EXCEPT THAT THE EXISTING METAL BULKHEADS SHALL REMAIN AS BICYCLES. SHOWN ON THE PLANS. THE EXISTING STRUCTURE CONSISTS OF A VARYING NUMBER OF LINES OF ROLLED BEAMS IN 4 SPANS: 1 @ 20'-0" AND 3 @ 25'-0". THE CLEAR ROADWAY WIDTH IS 22'-0". THE SPANS ARE SUPPORTED BY TIMBER BENTS AND END BENTS. THE BENTS HAVE BEEN STRENGTHENED WITH STEEL CRUTCH BENTS. 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. SEE 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, 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 CONTRACTOR MUST OBSERVE A ONE MONTH WAITING PERIOD AFTER CONSTRUCTING THE EMBANKMENT AND BEFORE BEGINNING ANY APPROACH SLAB CONSTRUCTION AT EACH END BENT.

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

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.

THE EXISTING METAL BULKHEADS AND END BENT BULKHEADS SHALL REMAIN IN PLACE EXCEPT THAT PORTION OF THE BULKHEADS THAT INTERFERE WITH THE PROPOSED STRUCTURE MAY BE REMOVED AS NECESSARY.

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

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.

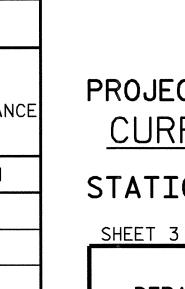
FOR EPOXY SAND SURFACE, SEE SPECIAL PROVISIONS.

SEE SHEET 2 OF 3 FOR ADDITIONAL FOUNDATION NOTES. (** INCLUDES QUANTITY UNDER SCOUR PROTECTION STONE.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR SCOUR PROTECTION STONE, SEE SPECIAL PROVISIONS.

FOR SECURING OF VESSELS, SEE SPECIAL PROVISIONS.



PROJECT NO. B-3445CURRITUCK COUNTY STATION: 24+18.00 -L-

SHEET 3 OF 3 REPLACES BRIDGE NO. 7

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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

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	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS AA CONCRETE	BRIDGE APPROACH SLABS	EPOXY COATED REINFORCINO STEEL	PP	24 × 0.625 STEEL PILES	PIPE PILE PLATES	PILE REDRIVE	HP STE	14 X 73 EL PILES	TWO BAR METAL RAIL	1'-2"× 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	SCOUR PROTECTION STONE	PDA TESTING	PDA ASSISTANCE
	LUMP SUM	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	NO.	LIN.FT.	EACH	EACH	NO.	LIN.FT.	LIN.FT.	LIN.FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.	LUMP SUM	LUMP SUM	TONS	EACH	EACH
SUPERSTRUCTURE				LUMP SUM								339.33	355.22			LUMP SUM	72	3189.58	LUMP SUM	LUMP SUM			
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END BENT NO. 1			21.1		3209					11	825			95	**110						10		
BENT NO. 1			24.5		3510	9	855	9															
BENT NO. 2			24.5		3510	9	855	9															
BENT NO. 3			24.5		3510	9	855	9				_											
END BENT NO. 2			21.0		3143					9	630			90	**105						10		
TOTAL	LUMP SUM	LUMP SUM	115.6	LUMP SUM	16,882	27	2,565	27	25	20	1,455	339.33	355 . 22	185	215	LUMP SUM	72	3189.58	LUMP SUM	LUMP SUM	20	3	3

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