

TOTAL BILL OF MATERIAL																								
REMOVAL OF EXISTING STRUCTURE	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS AA CONCRETE	BRIDGE APPROACH SLABS	EPOXY COATED REINFORCING STEEL	36" PRESTRESSED CONCRETE GIRDERS	PILE DRIVING EQUIPMENT SETUP FOR 16" PRESTRESSED CONCRETE PILES	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 GALVANIZED STEEL PILES	16" PRESTRESSED CONCRETE PILES	HP 12X53 GALVANIZED STEEL PILES	STEEL PILE POINTS	PILE REDRIVES	TWO BAR METAL RAIL	1'-2" X 2'-6" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	ASBESTOS ASSESSMENT				
LUMP SUM	EACH	LUMP SUM	SO.FT.	SO.FT.	CU. YDS.	LUMP SUM	LBS.	NO.	LIN. FT.	EACH	EACH	NO.	LIN. FT.	NO.	LIN. FT.	EACH	EACH	LIN. FT.	LIN. FT.	TONS	SO. YDS.	LUMP SUM	LUMP SUM	
SUPERSTRUCTURE			4,329	4,350				12	469.7						221.67	236.67								
END BENT 1		LUMP SUM			25.3		3,518			5		5	375	5	3					45	50			
BENT 1					9.9		1,992		7		7	385		4										
BENT 2					9.9		1,992		7		7	385		4										
END BENT 2		LUMP SUM			25.3		3,518			5		5	325	5	3					45	50			
TOTAL	LUMP SUM	2	LUMP SUM	4,329	4,350	70.4	LUMP SUM	11,020	12	469.7	14	10	14	770	10	700	10	14	221.67	236.67	90	100	LUMP SUM	LUMP SUM

NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

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

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

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

THE EXISTING STRUCTURE CONSISTING OF 3 SPANS: 1 @ 30'-8", 1 @ 30'-0" AND 1 @ 30'-8", WITH A CLEAR ROADWAY WIDTH OF 29'-3/2" AND PRESTRESSED CONCRETE CHANNELS WITH 2 1/2" AWS; ON END BENTS AND BENTS CONSISTING OF PRECAST PRESTRESSED CONCRETE CAPS ON TIMBER PILES AND STEEL CRUTCH BENTS SHALL BE REMOVED.

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 CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.

ALL METALIZED SURFACES SHALL RECEIVE A SEAL COATING AS SPECIFIED IN THE SPECIAL PROVISION FOR THERMAL SPRAYED COATINGS (METALLIZATION).

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR END BENTS #1 & #2, ONLY PARTIAL GALVANIZING OF THE PILES IS REQUIRED. SEE END BENT SHEETS FOR REQUIRED GALVANIZED LENGTHS. PAYMENT FOR PARTIALLY GALVANIZED PILES WILL BE MADE UNDER THE CONTRACT UNIT PRICE FOR GALVANIZED STEEL PILES.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE GIRDERS, PRECAST DECK PANELS, AND PRESTRESSED CONCRETE PILES SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR.

CLASS AA CONCRETE SHALL BE USED IN ALL CAST-IN-PLACE END BENT AND BENT CAPS AND SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR.

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

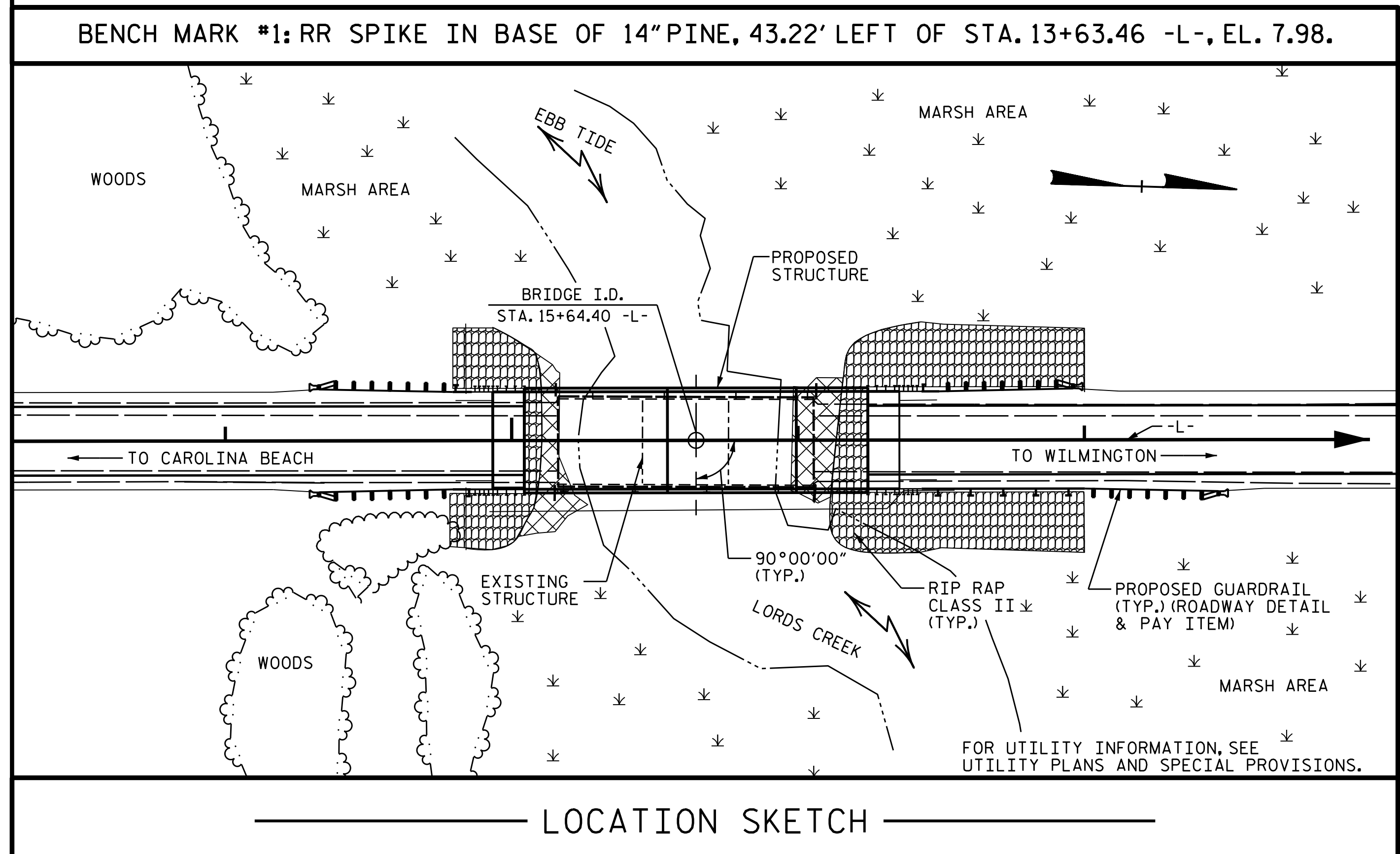
THE CONCRETE IN THE END BENT AND BENT CAPS, AND PRESTRESSED CONCRETE PILES OF BENTS 1 & 2 SHALL CONTAIN SILICA FUME. SILICA FUME SHALL BE SUBSTITUTED FOR 5% OF THE PORTLAND CEMENT BY WEIGHT. IF THE OPTION OF ARTICLE 1024-1 OF THE STANDARD SPECIFICATIONS TO PARTIALLY SUBSTITUTE CLASS F FLY ASH FOR PORTLAND 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.

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

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN A MANNER THAT PREVENTS DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE 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 34 FT. EACH SIDE OF CENTERLINE ROADWAY AT END BENT 1 AND 22 FT. EACH SIDE OF CENTERLINE ROADWAY AT END BENT 2 AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

FOR PLACING LOAD ON STRUCTURE MEMBERS, SEE SPECIAL PROVISIONS.



LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE	= N/A
FREQUENCY OF DESIGN DISCHARGE	= N/A
DESIGN HIGH WATER ELEVATION	= N/A
DRAINAGE AREA	= 1.5 SQ. MI.
BASE DISCHARGE (Q100)	= N/A
BASE HIGH WATER ELEVATION	= 9.0

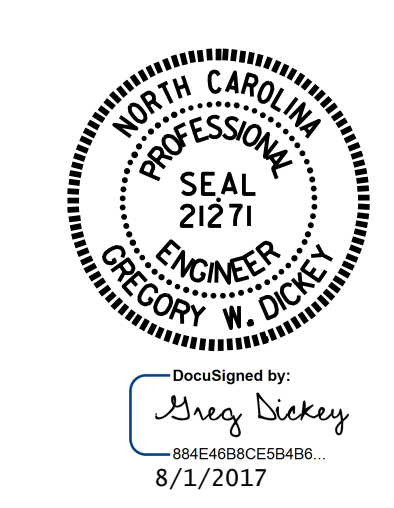
OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 1100 CFS
FREQUENCY OF OVERTOPPING FLOOD	= N/A
OVERTOPPING FLOOD ELEVATION	= 5.64

OVERTOPPING OCCURS AT SAG STA. 21+08.00 -L-

PROJECT NO. B-5236
NEW HANOVER COUNTY
 STATION: 15+64.40 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

GENERAL DRAWING
 BRIDGE OVER LORDS CREEK
 ON SR 1100 BETWEEN
 RIVER OAKS DRIVE &
 WATAUGA ROAD

DRAWN BY: H. B. DESAI DATE: 03/17
 CHECKED BY: M. K. BEARD DATE: 03/17
 DESIGN ENGINEER OF RECORD: A. K. PATEL DATE: 06/17

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			35