

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES		12 X 53 EL PILES	PILE REDRIVES
	LUMP SUM	LUMP SUM	EA.	LUMP SUM	CU. YDS.	LUMP SUM	LBS.		No.	LIN.FT.	EA.
SUPERSTRUCTURE											
END BENT No.1					12.5		1835	5	5	375	3
END BENT No. 2					12.5		1835	5	5	350	3
TOTAL	LUMP SUM	LUMP SUM	1	LUMP SUM	25.0	LUMP SUM	3670	10	10	725	6

	VERTICAL CONCRETE BARRIER RAIL	RIP RAP GEOTEXTILE CLASS II FOR (2'-0") THICK DRAINAGE		ELASTOMERIC BEARINGS	3'-0" X 2-0" PRESTRESSED CONCRETE CORED SLAB		FIBER OPTIC CONDUIT SYSTEM	
	LIN. FT.	TONS.	SQ. YDS.	LUMP SUM	No.	LIN.FT.	LIN.FT.	
SUPERSTRUCTURE	140.3			LUMP SUM	9	630	136	
END BENT No.1		125	139					
END BENT No.2		119	132					
TOTAL	140.3	244	271	LUMP SUM	9	630	136	

HYDRAULIC DATA

DESIGN DISCHARGE 700 CFS 25 YRS. FREQUENCY OF DESIGN FLOOD DESIGN HIGH WATER ELEVATION 22.3′ DRAINAGE AREA 5.6 SQ.MI. BASE DISCHARGE (Q100) 1293 CFS BASE HIGH WATER ELEVATION 24.1′

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE 1225 CFS FREQUENCY OF OVERTOPPING FLOOD 50+ YRS. OVERTOPPING FLOOD ELEVATION 23.90′

SAG STA. 15+63.6 -L- GENERAL 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 IN SEISMIC ZONE 1.
- FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE "STANDARD NOTES" SHEET.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 EVALUATING SCOUR AT BRIDGES".
- THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED TO THE LIMITS SHOWN ON SHEET S-1 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.

THE EXISTING STRUCTURE CONSISTING OF ONE THIRTHY-FIVE FOOT SPAN, WITH A CLEAR ROADWAY WIDTH OF NINETEEN FEET, HAVING A TIMBER DECK ON STEEL BEAMS AND TIMBER CAPS ON TIMBER PILES SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

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.

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. EXISTING AND REMNANT PILES SHALL BE REMOVED BY PULLING THE PILES OUT OF THE GROUND COMPLETELY, IF POSSIBLE. ALTERNATIVELY. EXISTING AND REMNANT PILES SHALL BE REMOVED/CUT TO THE MUDLINE.

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 TEH BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 13+56.00".

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 SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPLICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE

IMPERVIOUS DIKE MAY BE REQUIRED FOR THE RIPRAP PLACEMENT. SEE EROSION CONTROL PLANS FOR IMPERVIOUS DIKE DETAILS AND SPECIAL PROVISIONS.

CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

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

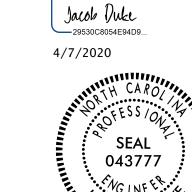
- FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.
- FOR EROSION CONTROL MEASURES. SEE EROSION CONTROL PLANS.
- FOR FIBER OPTIC CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

FOUNDATION NOTES:

- 1. FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
- 2. PILES AT END BENTS No.1 AND 2 ARE DESIGNED FOR FACTORED RESISTANCE OF 95 TONS PER PILE.
- DRIVE PILES AT END BENTS No.1 AND 2 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.
- TESTING PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS. BR-0120 PROJECT NO. _

SAM REPL		
IZE	LENGTH	
#3	6'-2"	
#4	7'-4"	
#5	8'-6"	
#6	9'-8"	
#7	10'-10"	
#8	12'-0"	
#9	13'-2"	
#10	14'-6"	
#11	15′-10″	

SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30"(SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND $f_y = 60$ ksi.



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STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

STATION: 13+56.30 -L-

SHEET 2 OF 2

COUNTY

GENERAL DRAWING FOR BRIDGE ON SR 1552 OVER MEADOW BRANCH BETWEEN SR 1550 (SHEPPARD MILL RD. AND SR 1551 (BEARGRASS RD.)

REVISIONS SHEET NO S-2 DATE: DATE: BY: NO. BY: TOTAL SHEETS S-13

_ DATE : <u>10/10/19</u>

DATE : <u>12/5/19</u>

<u>DIEGO A.A</u>GUIRRE

JACOB H.DUKE

DESIGN ENGINEER OF RECORD: _____JACOB H.DUKE ___DATE : _12/5/19

DRAWN BY : ___

CHECKED BY : _