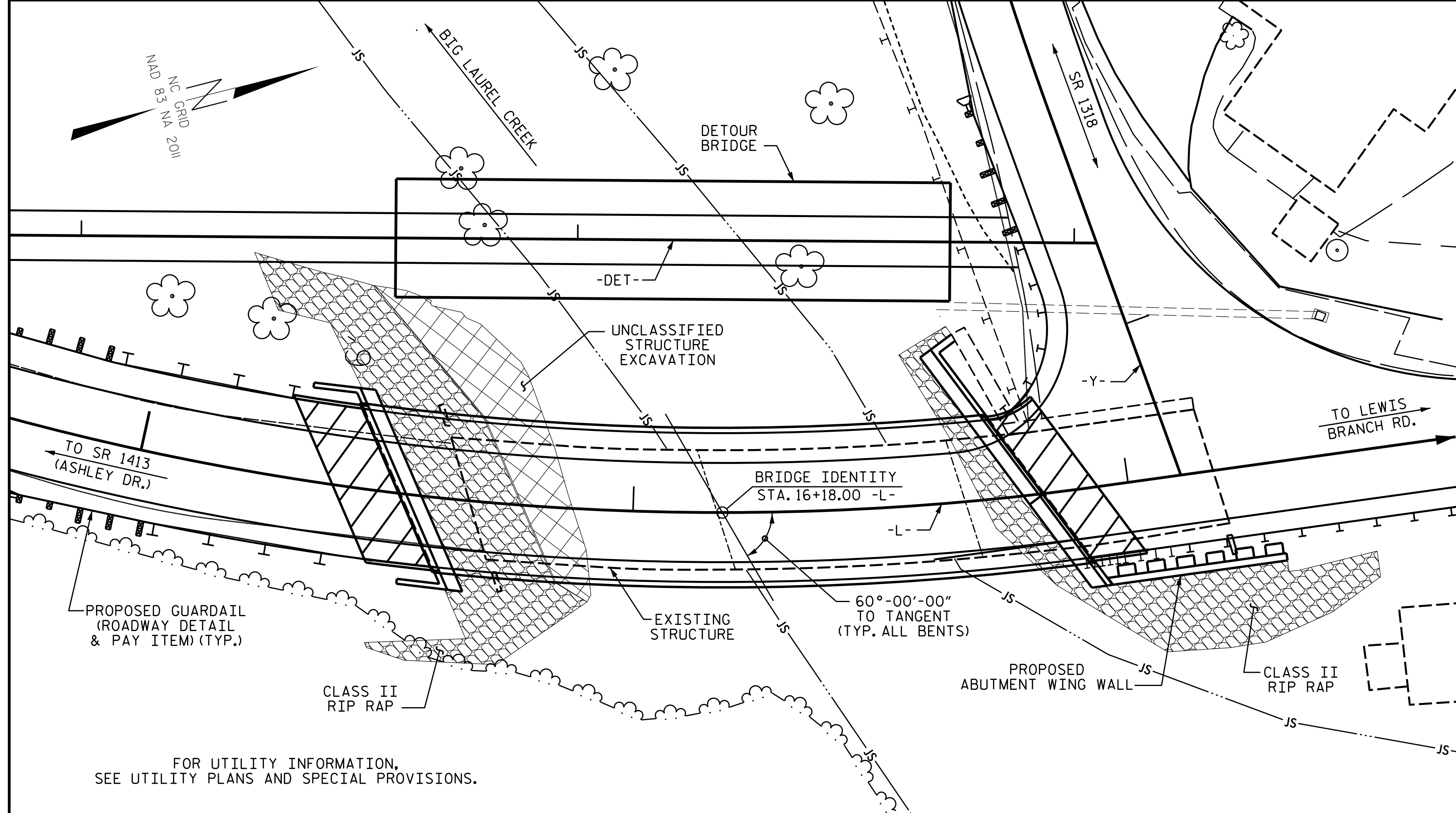


BM #1 CHISELED "X" IN THE SOUTHWEST WINGWALL OF EXISTING BRIDGE, 16.54' LT. OF STA. 15+59.81 -L- EL. 2049.58



LOCATION SKETCH

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 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.
 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 CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.
 REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
 NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.
 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 AT STATION 16+18.00 -L-."
 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.
 THE MATERIAL SHOWN IN THE CROSS HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 40 FT LEFT AND 19 FT RIGHT OF CENTERLINE ROADWAY 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 CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARDS REMOVE A TEMPORARY STRUCTURE AT STATION 14+03.00 -DET- FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY STRUCTURE, SEE SPECIAL PROVISIONS.
 THE EXISTING STRUCTURE CONSISTING OF 3 SPANS (49.8125', 50.0', 49.8125') OF 4.5" ASPHALT WEARING SURFACE AND 7" REINFORCED CONCRETE ON 4 LINES 33" I-BEAMS @ 7.25' CTS. WITH A THE CLEAR ROADWAY WIDTH OF 24.0 FT. THE SUBSTRUCTURE CONSISTS REINFORCED CONCRETE CAP ON H-PILES AT END BENTS AND REINFORCED CONCRETE CAP ON REINFORCED CONCRETE PILES AT BENTS. THE STRUCTURE IS LOCATED AT PROPOSED SITE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT.
 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.
 FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS AT STATION 16+18.00 -L-, SEE SPECIAL PROVISIONS.
 THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18-EVALUATING SCOUR AT BRIDGES."
 FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
 FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE	5800 CFS.
FREQUENCY OF DESIGN FLOOD	25 YEARS
DESIGN HIGH WATER ELEVATION	2041.7 FT.
DRAINAGE AREA	40.7 SQ. MI.
BASIC DISCHARGE(Q100)	8100 CFS.
BASIC HIGH WATER ELEVATION	2044.2 FT.

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	14000 CFS
FREQUENCY OF OVERTOPPING FLOOD	500+ YR
OVERTOPPING FLOOD ELEVATION	2049.9 FT.
OVERTOPPING @ STA. 17+84 -L-	

TOTAL BILL OF MATERIAL

	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMPORARY STRUCTURE	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	3'-0" Ø DRILLED PIERS	3'-6" Ø DRILLED PIERS	PERMANENT STEEL CASING FOR 3'-0" Ø DRILLED PIERS	SID INSPECTIONS	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS
	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	LUMP SUM	SQ. FT.	SQ. FT.
SUPERSTRUCTURE											4107	3977
END BENT NO. 1					33							
BENT NO. 1						63	24					
END BENT NO. 2						332						
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	LUMP SUM	33	395	24	5	5	LUMP SUM	4107	3977
	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	45" PRESTRESSED CONCRETE GIRDERS	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	FOAM JOINT SEALS		
	CU. YDS.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM		
SUPERSTRUCTURE		LUMP SUM			8	499.42	254.71		LUMP SUM	LUMP SUM		
END BENT NO. 1	42.0		7538	635			190	210				
BENT NO. 1	29.1		11023	1927								
END BENT NO. 2	156.7		59158	11268			110	120				
TOTAL	227.8	LUMP SUM	77719	13830	8	499.42	300	330	LUMP SUM	LUMP SUM		

SAMPLE BAR REPLACEMENT

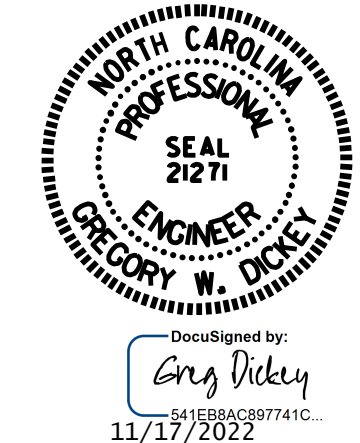
SIZE	LENGTH
#3	6'-2"
#4	7'-4"
#5	8'-6"
#6	9'-8"
#7	10'-10"
#8	12'-0"
#9	13'-2"
#10	14'-6"
#11	15'-10"

NOTE: SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30" (SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND fy = 60ksi.

Prepared in the Office of:

 NC FIRM LICENSE No: P-0339
 1110 Navaho Drive, Suite 600
 Raleigh, NC 27609
 Ph: 919-322-0115 Fax: 919-322-0116
 www.summitde.com

PROJECT NO. B-5989
MADISON COUNTY
 STATION: 16+18.00 -L-
 SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
GENERAL DRAWING
 FOR BRIDGE ON SR 1395
 OVER BIG LAUREL CREEK
 BETWEEN SR 1413 & SR 1318

DRAWN BY : KEITH D. LAYNE DATE : 12/19
 CHECKED BY : G. DICKEY DATE : 10/22
 DESIGN ENGINEER OF RECORD: G. DICKEY DATE : 10/22

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

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