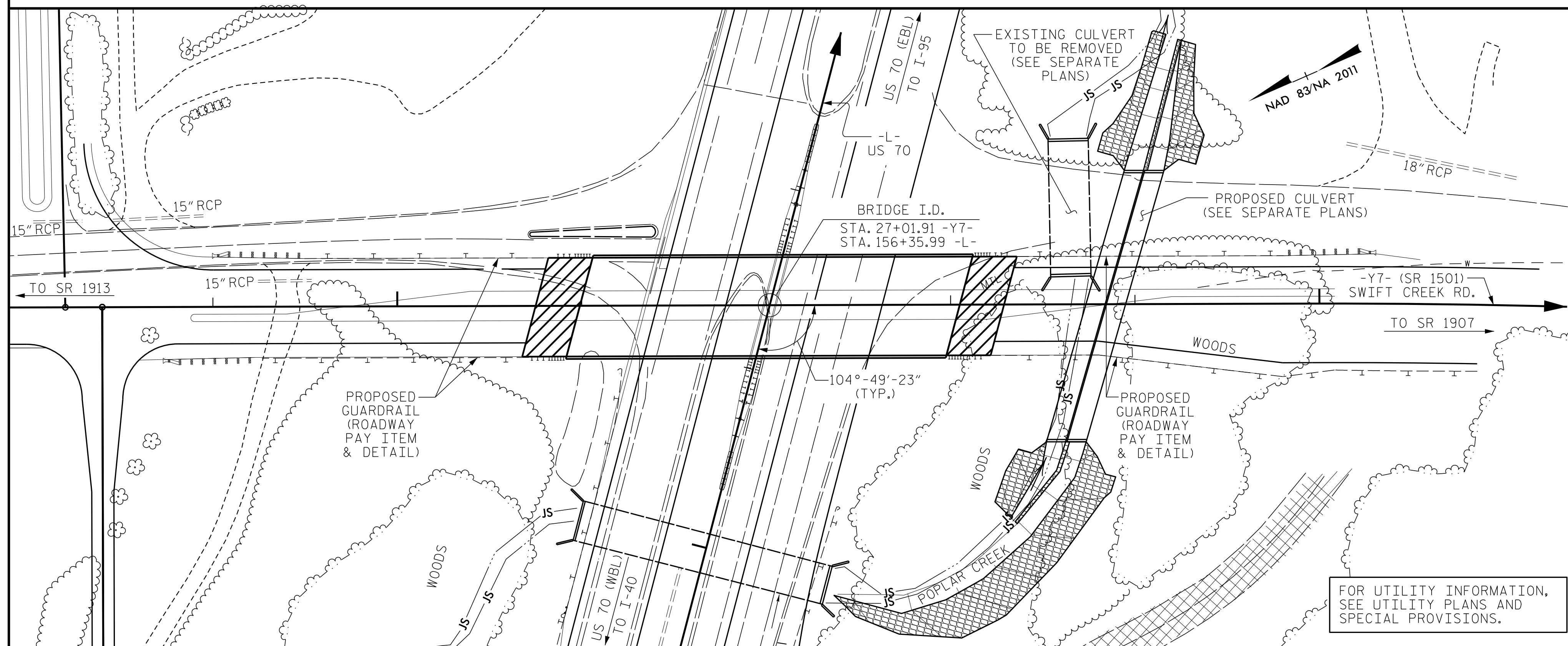


BM #11 - BENCH TIE NAIL SET IN 18" PINE, 134.85' RT OF -Y7- STA. 39+10.93, ELEV 223.89



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.
- FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.
- PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.
- THE EXISTING PAVEMENT WITHIN THE AREA OF THE END BENT PIERS SHALL BE REMOVED AND THE ROADBED SCARIFIED TO A MINIMUM DEPTH OF 2'-0".
- NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
- THE LOCATION OF THE CONSTRUCTION JOINT IN THE DRILLED PIERS IS BASED ON AN APPROXIMATE GROUND LINE ELEVATION. IF THE CONSTRUCTION JOINT IS ABOVE THE ACTUAL GROUND ELEVATION, THE CONTRACTOR SHALL PLACE THE CONSTRUCTION JOINT 1 FT. BELOW THE GROUND LINE.

**TOTAL BILL OF MATERIAL**

	PILE EXCAVATION IN SOIL	PILE EXCAVATION NOT IN SOIL	3'-6" Ø DRILLED PIERS IN SOIL	3'-6" Ø DRILLED PIERS NOT IN SOIL	SID INSPECTIONS	SPT TESTING	CSL TESTING	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL
	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	SQ.FT.	SQ.FT.	CU.YDS.	LUMP SUM	LBS.	LBS.
SUPERSTRUCTURE								10,908	11,180				
END BENT 1										47.8		5,962	
BENT 1			45.00	51.00	1	1	1			52.1		11,590	2,958
END BENT 2	201	31								47.6		5,930	
TOTAL	201	31	45.00	51.00	1	1	1	10,908	11,180	147.5	LUMP SUM	23,482	2,958

**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  $f_y = 60\text{ksi}$ .

**TOTAL BILL OF MATERIAL**

	54" PRESTRESSED CONCRETE GIRDERS		PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES		PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 STEEL PILES		HP 12 X 53 STEEL PILES		HP 14 X 73 STEEL PILES		STEEL PILE POINTS	TWO BAR METAL RAIL	1'-2" X 3'-3" CONCRETE PARAPET	4" SLOPE PROTECTION	ELASTOMERIC BEARINGS
	No.	LIN.FT.	EA.	EA.	No.	LIN.FT.	No.	LIN.FT.	EA.	LIN.FT.	LIN.FT.	SQ. YDS.	LUMP SUM		
SUPERSTRUCTURE	12	1,147.75									369.44	385.55	LUMP SUM		
END BENT 1				11			11	632					350		
BENT 1															
END BENT 2			11		11	492			11				350		
TOTAL	12	1,147.75	11	11	11	492	11	632	11	369.44	385.55	700	LUMP SUM		

PROJECT NO. W-5600  
JOHNSTON COUNTY  
 STATION: 27+01.91 -Y7-

SHEET 3 OF 3

ENGINEER OF RECORD:  
 4/25/2019  
  
 Gregory M. Gulland  
 WETHERILL ENGINEERING

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**GENERAL DRAWING**  
 FOR BRIDGE ON SWIFT CREEK RD. (SR 1501) OVER US 70 BETWEEN SR 1913 AND SR 1907

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S3-3
1			3			TOTAL SHEETS
2			4			32

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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DRAWN BY: D. HODGE DATE: 12/17  
 CHECKED BY: B.C. HUNT DATE: 1/19