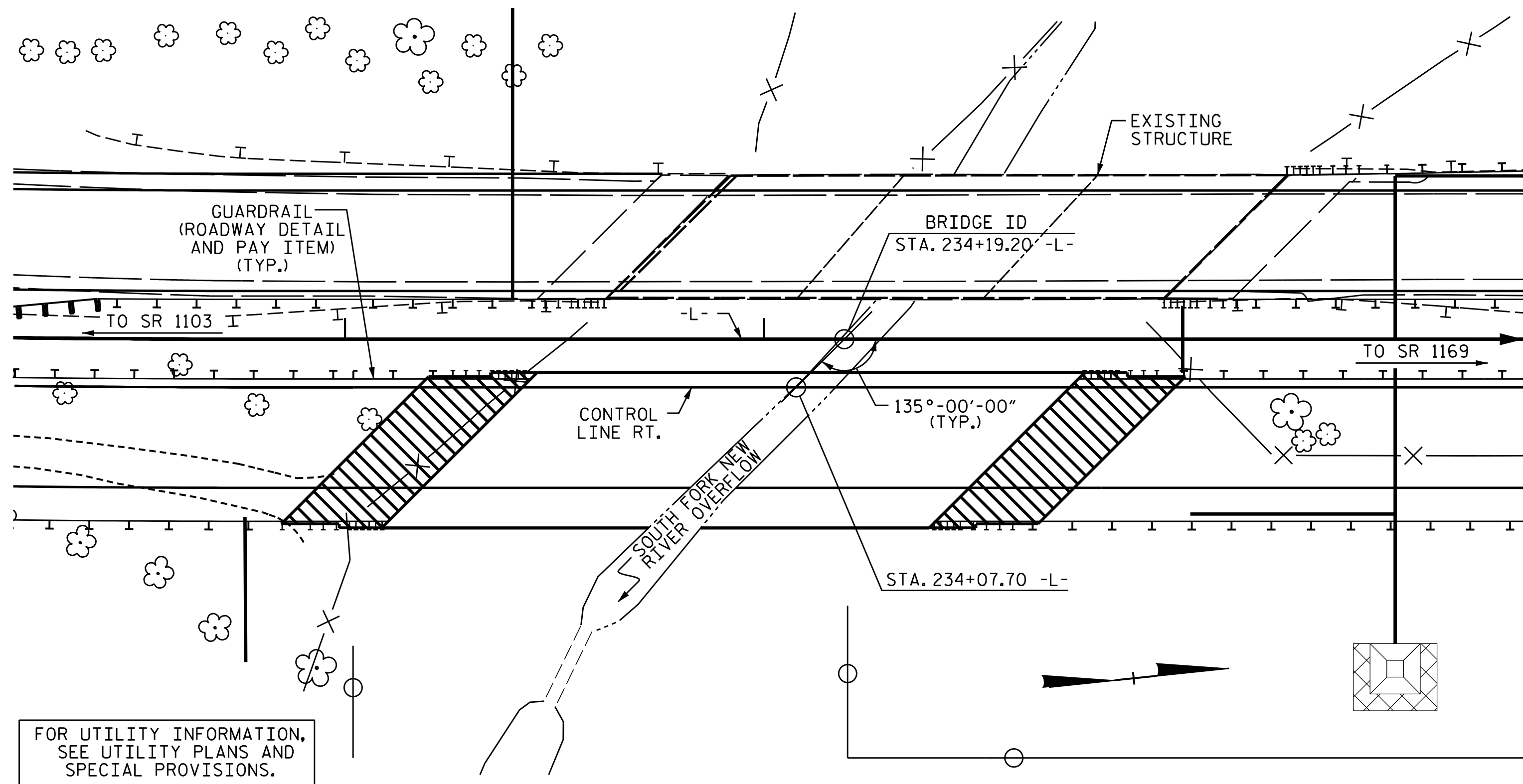


BM #9 : RR SPIKE IN ROOT OF 24" FORKED CHERRY TREE, N932968, E1262584, 130' LT., -L- STA. 215+49.00, EL. 2871.28



LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE	= 16,000 C.F.S.
FREQUENCY OF DESIGN FLOOD	= 50 YRS.
DESIGN HIGH WATER ELEVATION	= 2862.2
DRAINAGE AREA	= 130 SQ. MI.
BASE DISCHARGE (Q100)	= 19,000 C.F.S.
BASE HIGH WATER ELEVATION	= 2863.0

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 24,000+ C.F.S.
FREQUENCY OF OVERTOPPING FLOOD	= 500 YRS.+
OVERTOPPING FLOOD ELEVATION	= 2869.2

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 BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF 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.
- 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 1024-5 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 21 FT. LEFT AND 9 FT. RIGHT OF BRIDGE WORK LINE AT END BENT 1 AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.
- THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18 EVALUATING SCOUR AT BRIDGES".
- FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

TOTAL BILL OF MATERIAL

	3'-0" Ø DRILLED PIERS IN SOIL	3'-0" Ø DRILLED PIERS NOT IN SOIL	SID INSPECTIONS	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS
	LIN. FT.	LIN. FT.	EACH	EACH	LUMP SUM	SQ. FT.	SQ. FT.	CU. YDS.	LUMP SUM
SUPERSTRUCTURE						4,862	5,563		LUMP SUM
END BENT NO.1					LUMP SUM			48.0	
BENT NO.1	49.9	41.0	1					30.9	
BENT NO.2	32.7	36.0	1					30.8	
END BENT NO.2								48.0	
TOTAL	82.6	77.0	2	1	LUMP SUM	4,862	5,563	157.7	LUMP SUM

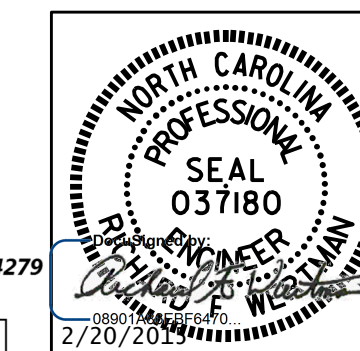
TOTAL BILL OF MATERIAL

	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	36" PRESTRESSED CONCRETE GIRDERS	HP 12 X 53 STEEL PILES	CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	EXPANSION JOINT SEALS
	LBS.	LBS.	NO. LIN.FT.	NO. LIN.FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	LUMP SUM
SUPERSTRUCTURE			12	506.9		303.6		LUMP SUM	LUMP SUM
END BENT NO.1	6,712				7	189			
BENT NO.1	9,203	1,970							
BENT NO.2	8,245	1,596							
END BENT NO.2	6,714				7	154			
TOTAL	30,874	3,566	12	506.9	14	343	303.6	405	445

PROJECT NO. R-2915B  
ASHE COUNTY  
 STATION: 234+19.20 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 GENERAL DRAWING  
 BRIDGE OVER SOUTH FORK NEW RIVER OVERFLOW ON US 221 BETWEEN SR 1103 AND SR 1169  
 NBL



DRAWN BY : T.J. KIRSCHBAUM DATE : 4/21/14  
 CHECKED BY : R.F. WERTMAN DATE : 4/23/14  
 DESIGN ENGINEER OF RECORD : R.F. WERTMAN DATE : 4/23/14

PLANS PREPARED BY:  
**Gannett Fleming**  
 Excellence Delivered As Promised  
 1121 Situs Court  
 Suite 170  
 Raleigh NC 27606-4279  
 (919) 859-4880  
 N.C. Lic. No. F-0270

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S03-3
1			3			TOTAL SHEETS
2			4			30

STR. NO. 3