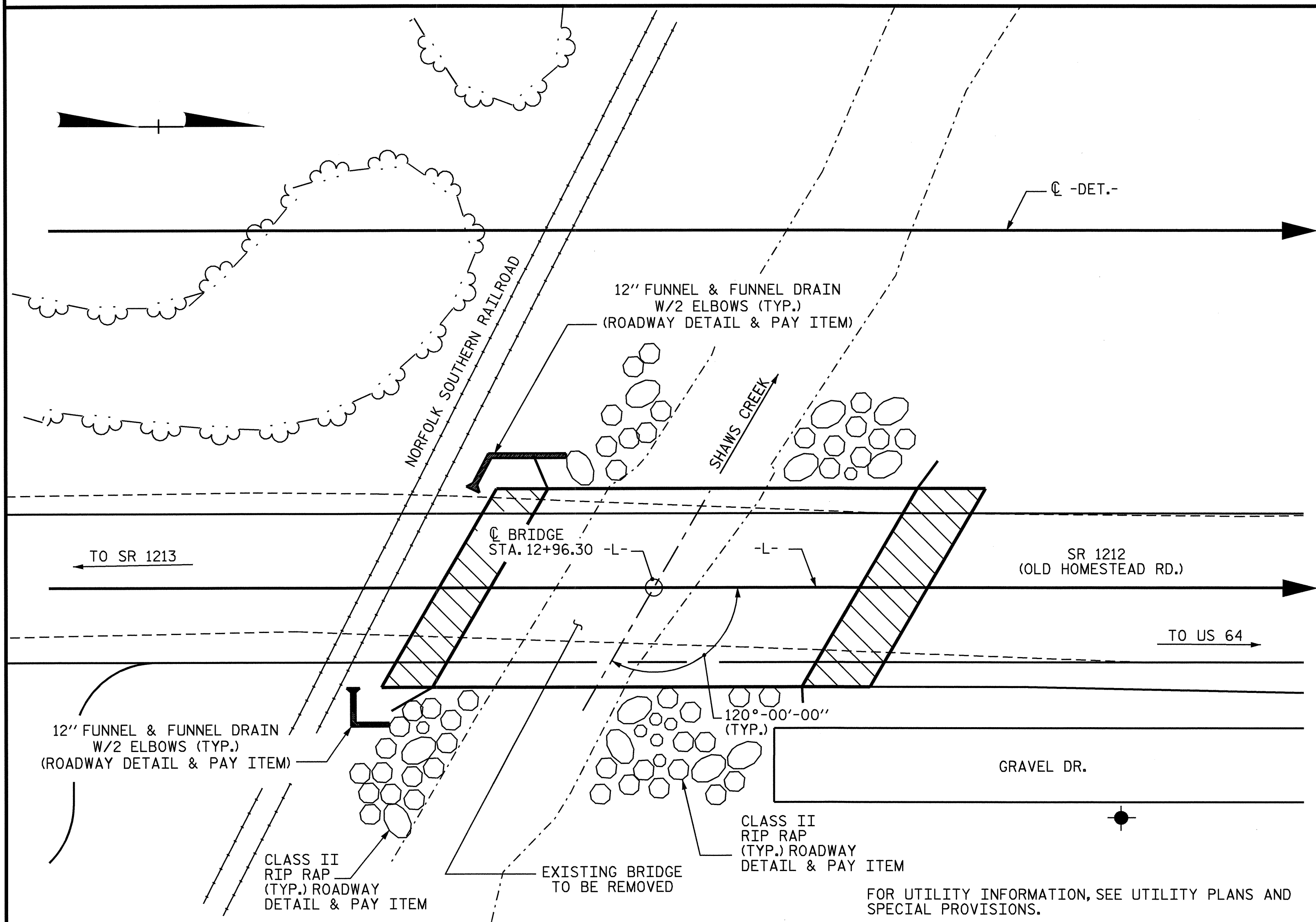


B.M. #2 : STA. 13+63.21 -L-, 92.70 FT. LEFT, 8 IN. NAIL SET IN ROOT OF 12 IN. WILD CHERRY TREE, ELEV. 2087.09, NGVD 29



LOCATION SKETCH

NOTES

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING. FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.  
 THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.  
 FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.  
 FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

THE EXISTING STRUCTURE CONSISTING OF 1 - SPAN @ 40'-10" WITH TIMBER FLOOR ON STEEL I-BEAMS SUPERSTRUCTURE AND A CLEAR ROADWAY WIDTH OF 19'-1" ON A SUBSTRUCTURE CONSISTING OF TIMBER CAP ON TIMBER PILES END BENTS AND LOCATED AT THE PROPOSED STRUCTURE LOCATION SHALL BE REMOVED. SEE SPECIAL PROVISIONS FOR REMOVAL OF EXISTING STRUCTURE.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

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.

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

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.

THE SCOUR CRITICAL ELEVATION FOR END BENT NO. 1 AND END BENT NO. 2 IS 2070 FT. THE SCOUR CRITICAL ELEVATIONS ARE FOR USE BY MAINTENANCE FORCES TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY B.

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.

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 12+96.30 -L-."

HYDRAULIC DATA

DESIGN DISCHARGE.....1240 CFS.  
 FREQUENCY OF DESIGN FLOOD.....25 YEARS  
 DESIGN HIGH WATER ELEVATION..... 2088.2  
 DRAINAGE AREA.....4.4 SQ. MI.  
 BASIC DISCHARGE(Q100).....1900 CFS.  
 BASIC HIGH WATER ELEVATION.....2090.0

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE.....1460 CFS.  
 FREQUENCY OF OVERTOPPING FLOOD.....50 YRS.  
 OVERTOPPING FLOOD ELEVATION.....2089.0

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	3'-0" Ø DRILLED PIERS IN SOIL	3'-0" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-0" Ø DRILLED PIERS	SID INSPECTION	CROSSHOLE SONIC LOGGING	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	12" STEEL SHEET PILES	TWO BAR METAL RAIL	1'-2" X 2'-8 3/8" CONCRETE PARAPET	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS
	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	CU. YDS.	LUMP SUM	LBS.	LBS.	SQ. FT.	LIN. FT.	LIN. FT.	LUMP SUM	NO. LIN. FT.
SUPERSTRUCTURE								LUMP SUM				68.46	84.80	LUMP SUM	9 381.61
END BENT NO. 1		45.0	22.0	36.80	1	1	17.6		6370	1258	709				
END BENT NO. 2		62.0	22.0		1	1	17.7		7064	1587	722				
TOTAL	LUMP SUM	107.0	44.0	36.80	2	2	35.3	LUMP SUM	13434	2845	1431	68.46	84.80	LUMP SUM	9 381.61

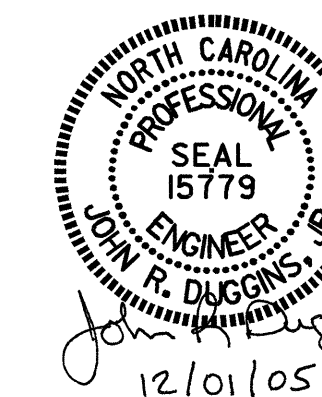
PROJECT NO. B-3663  
 HENDERSON COUNTY  
 STATION: 12+96.30 -L-

SHEET 3 OF 3 REPLACES BRIDGE NO. 320

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

GENERAL DRAWING

FOR BRIDGE ON SR 1212 (OLD HOMESTEAD RD.) OVER SHAWS CREEK BETWEEN SR 1213 AND US 64



DRAWN BY: M. POOLE DATE: 06/04  
 CHECKED BY: J. R. DUGGINS DATE: 02/05

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS 22
2			4			