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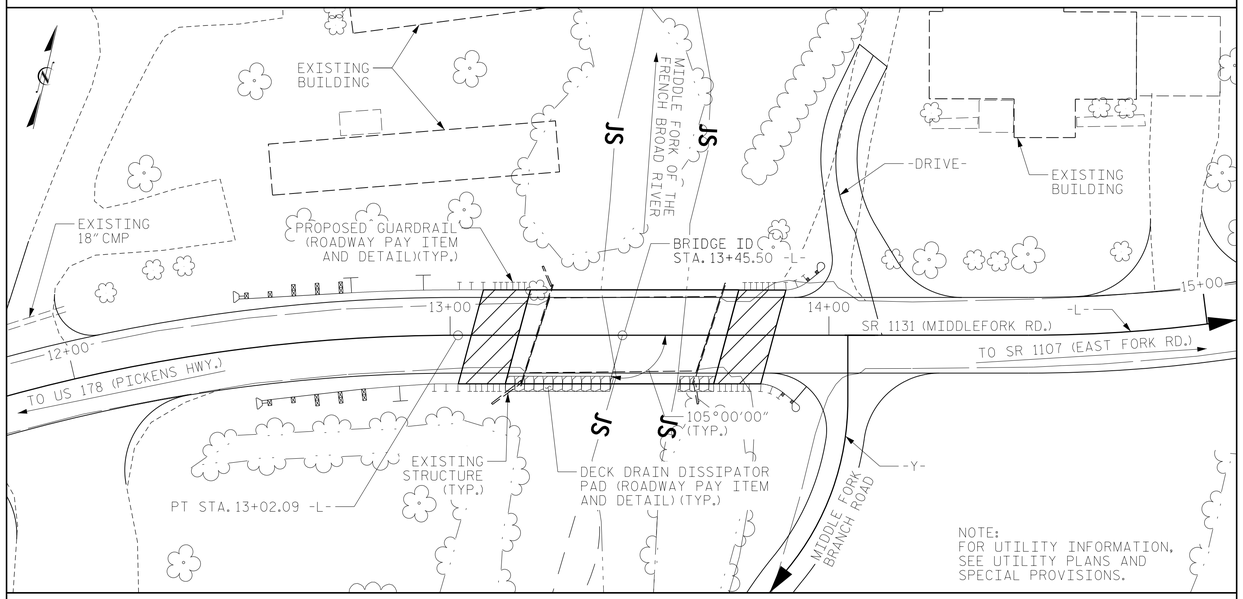
BENCHMARK #2 - RAILROAD SPIKE IN BASE OF 52" POPLAR 30.4' RIGHT OF -L- STA. 15+96.05, EL. 2,238.88



LOCATION SKETCH

NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET 1 OF 3 SHALL BE EXCAVATED FOR A DISTANCE OF 18 FT. ± LEFT AND 19 FT. ± RIGHT OF THE ROADWAY CENTERLINE 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 SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. 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.

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 13+45.50 -L-".

AT THE CONTRACTOR'S OPTION, PRESTRESSED CONCRETE END BENT CAPS MAY BE SUBSTITUTED IN PLACE OF THE CAST-IN-PLACE CAPS. THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER TO RECEIVE REVISED PLANS AND DETAILS FROM THE STRUCTURES MANAGEMENT UNIT. THE REDESIGN AND ANY ADDITIONAL MATERIALS NEEDED WILL BE AT NO ADDITIONAL COST TO THE CONTRACTOR.

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

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

SHEET PILES SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SHALL HAVE A MINIMUM SECTION MODULUS OF 30.2 IN^3/FT. FOR STEEL SHEET PILES, SEE STANDARD SPECIFICATIONS.

FOR ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

HYDRAULIC DATA

DESIGN DISCHARGE	= 1,300 CFS
FREQUENCY OF DESIGN DISCHARGE	= 25 YRS
DESIGN HIGH WATER ELEVATION	= 2,233.0'
DRAINAGE AREA	= 4.92 SQ MI
BASE DISCHARGE (Q100)	= 1,800 CFS
BASE HIGH WATER ELEVATION	= 2,233.8'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 2,875 CFS
FREQUENCY OF OVERTOPPING	= 500+ YRS
OVERTOPPING ELEVATION	= 2,236.70'

TOTAL BILL OF MATERIALS

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	UNCLASSIFIED STRUCTURE EXCAVATION	GEOTEXTILE FOR SOIL STABILIZATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12X53 STEEL PILES	HP 12X53 STEEL PILES		STEEL PILE POINTS	GALVANIZED SHEET PILE RETAINING WALLS	VERTICAL CONCRETE BARRIER RAIL	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS	
	LUMP SUM	LUMP SUM	LUMP SUM	SQ. YDS.	CU. YDS.	LUMP SUM	LBS.	EACH	NO.	LIN. FT.	EACH	SQ. FT	LIN. FT.	LUMP SUM	NO.	LIN. FT.
SUPERSTRUCTURE	LUMP SUM	LUMP SUM	LUMP SUM	---	---	LUMP SUM	---	---	---	---	---	---	110.0	LUMP SUM	9	495.0
END BENT NO. 1	---	---	---	17	17.3	---	2,466	5	5	75	5	760	---	---	---	---
END BENT NO. 2	---	---	---	17	17.3	---	2,466	5	5	75	5	700	---	---	---	---
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	34	34.6	LUMP SUM	4,932	10	10	150	10	1,460	110.0	LUMP SUM	9	495.0

PROJECT NO. 17BP.14.R.182

TRANSYLVANIA COUNTY

STATION: 13+45.50 -L-

SHEET 3 OF 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL SEAL 18442 ENGINEER RICHARD LEON BOLLINGER JR.

8/10/2021

RS&H

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
BRIDGE OVER MIDDLE FORK OF THE FRENCH BROAD RIVER ON SR 1131 (MIDDLEFORK RD.) BETWEEN US 178 (PICKENS HWY.) AND SR 1107 (EAST FORK RD.)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1			3			TOTAL SHEETS
2			4			14

DRAWN BY :	PDS	DATE :	03/2017
CHECKED BY :	TLC	DATE :	05/2017
DESIGN ENGINEER OF RECORD:	PDS	DATE :	03/2017

7/1/2021
\\rsandh.com\files\Transportation\P\1030014001_Div 14 Bridges_2016\1030014007_R.182 870108\Design\Structures\Working DGN\108_005_17BP.14.R.182_SMU_GD03_S-3.dgn
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