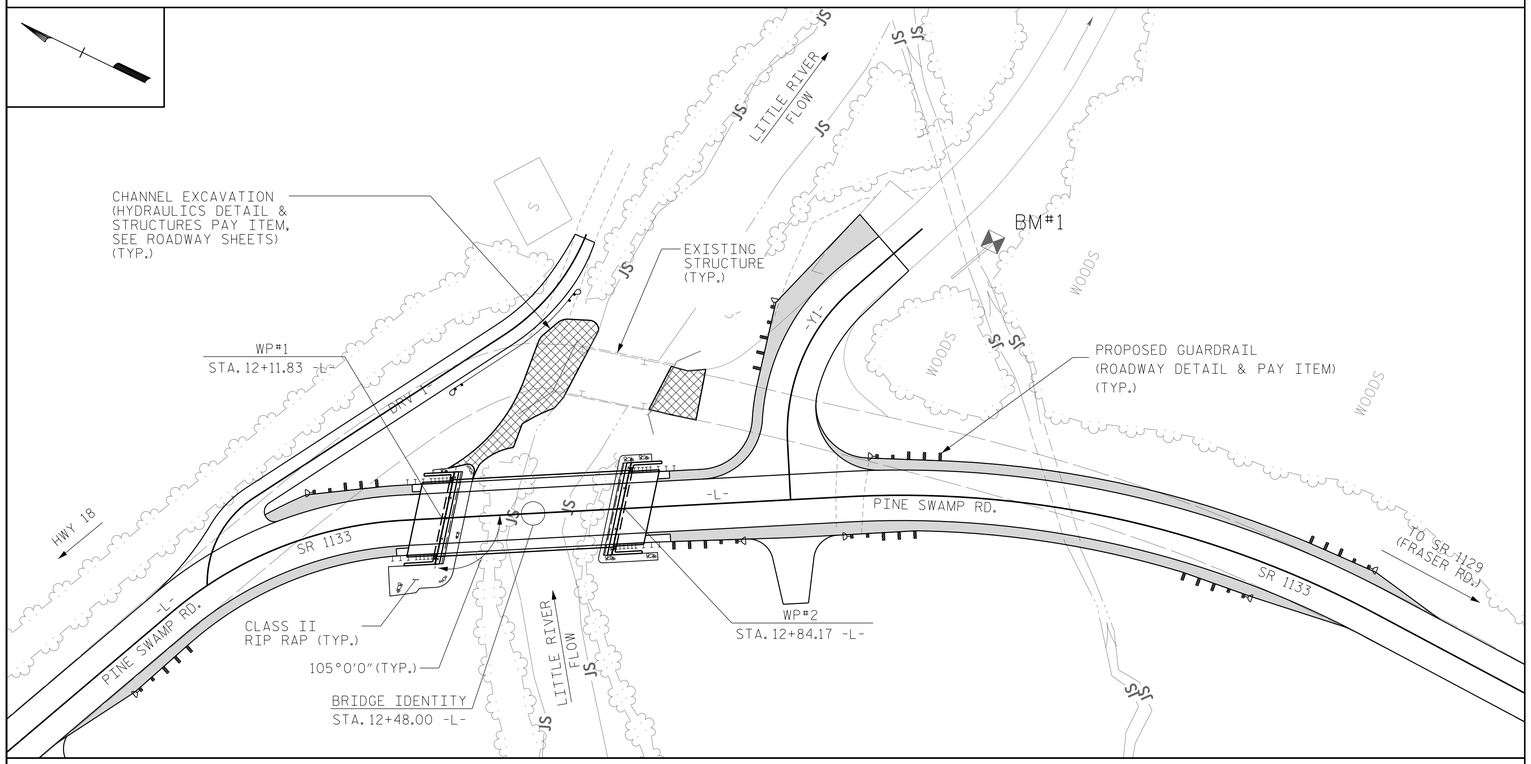
DocuSign Envelope ID: B179081B-4F76-4CCB-BD45-3561FCC5B52E

BM#1: CHISELED SQ. IN NE CORNER OF HW SOUTH SIDE OF HAROLD RD., -L- STA. 14+22.95 101.68' LT; EL. 2915.65



LOCATION SKETCH

FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

GENERAL 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 IN SEISMIC ZONE 1.

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

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

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 COST 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 STRUCTURES AT STATION 12+48.00".

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF APPROXIMATELY 30FT EACH SIDE OF THE 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 SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. THIS INFORMATION IS SHOWN FOR 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.

AFTER SERVING AS A TEMPORARY STRUCTURE THE EXISTING STRUCTURE CONSISTING OF ONE 40FT SPAN CONSISTING OF TIMBER FLOOR ON STEEL BEAMS WITH A CLEAR ROADWAY WIDTH OF 19'-1" AND LOCATED APPROXIMATELY 30FT DOWNSTREAM SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

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.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

ASPHALT WEARING SURFACE IS INCLUDED IN THE ROADWAY QUANTITIES ON ROADWAY PLANS.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CHANNEL EXCAVATION	CLASS A CONCRETE (BRIDGE)	BRIDGE APPROACH SLABS	REINFORCING STEEL (BRIDGE)
	LUMP SUM	LUMP SUM	EA.	LUMP SUM	CU. YDS.	CU. YDS.	LUMP SUM	LBS.
SUPERSTRUCTURE								
END BENT No. 1					116	20.7		2522
END BENT No. 2					46	20.7		2522
TOTAL	LUMP SUM	LUMP SUM	*	LUMP SUM	162	41.4	LUMP SUM	5044

* SEE "PILE FOUNDATION TABLES" SHEET FOR QUANTITIES

	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	HP 12 X 53 STEEL PILES		STEEL PILE POINTS	PRE-DRILLING FOR PILES	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0") THICK	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 2-0" PRESTRESSED CONCRETE CORES SLAB	
	EA.	No.	LIN. FT.	EA.	LIN. FT.	LIN. FT.	TONS.	SQ. YDS.	LUMP SUM	No.	LIN. FT.
SUPERSTRUCTURE						140.3			LUMP SUM	10	700
END BENT No. 1	5	5	174	2	79		103.2	115			
END BENT No. 2	5	5	135	2	75		40.5	45			
TOTAL	10	10	309	4	154	140.3	143.7	160	LUMP SUM	10	700

HYDRAULIC DATA

DESIGN DISCHARGE	2600 CFS
FREQUENCY OF DESIGN FLOOD	25 YRS.
DESIGN HIGH WATER ELEVATION	2918.0'
DRAINAGE AREA	13.0 SQ.MI.
BASE DISCHARGE (Q100)	3600 CFS
BASE HIGH WATER ELEVATION	2919.7'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	3340 CFS
FREQUENCY OF OVERTOPPING FLOOD	50+ YRS.
OVERTOPPING FLOOD ELEVATION	2918.7'
SAG STA.	13+85 -LT

PROJECT NO. 17BP.11.R.152
ALLEGHANY COUNTY
STATION: 12+48.00 -L-

SHEET 2 OF 2

NORTH CAROLINA PROFESSIONAL SEAL 043777 ENGINEER JACOB H. DUKE

DocuSigned by: Jacob Duke 4/27/2022

KCA KISINGER CAMPO & ASSOCIATES
301 FAYETTEVILLE ST., SUITE 1500
RALEIGH, NC 27601 (919) 882-7839
NC FIRM LICENSE: C-1506

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 1133 (PINE SWAMP RD.) OVER LITTLE RIVER BETWEEN HWY 18 AND SR 1129 (FRASER RD.)

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

DRAWN BY : JACOB H. DUKE DATE : 09/2021
CHECKED BY : DIEGO A. AGUIRRE DATE : 09/2021
DESIGN ENGINEER OF RECORD: JACOB H. DUKE DATE : 09/2021

4/27/2022
17BP.11.R.152_SMU_GD02_020005.dgn
daguirre