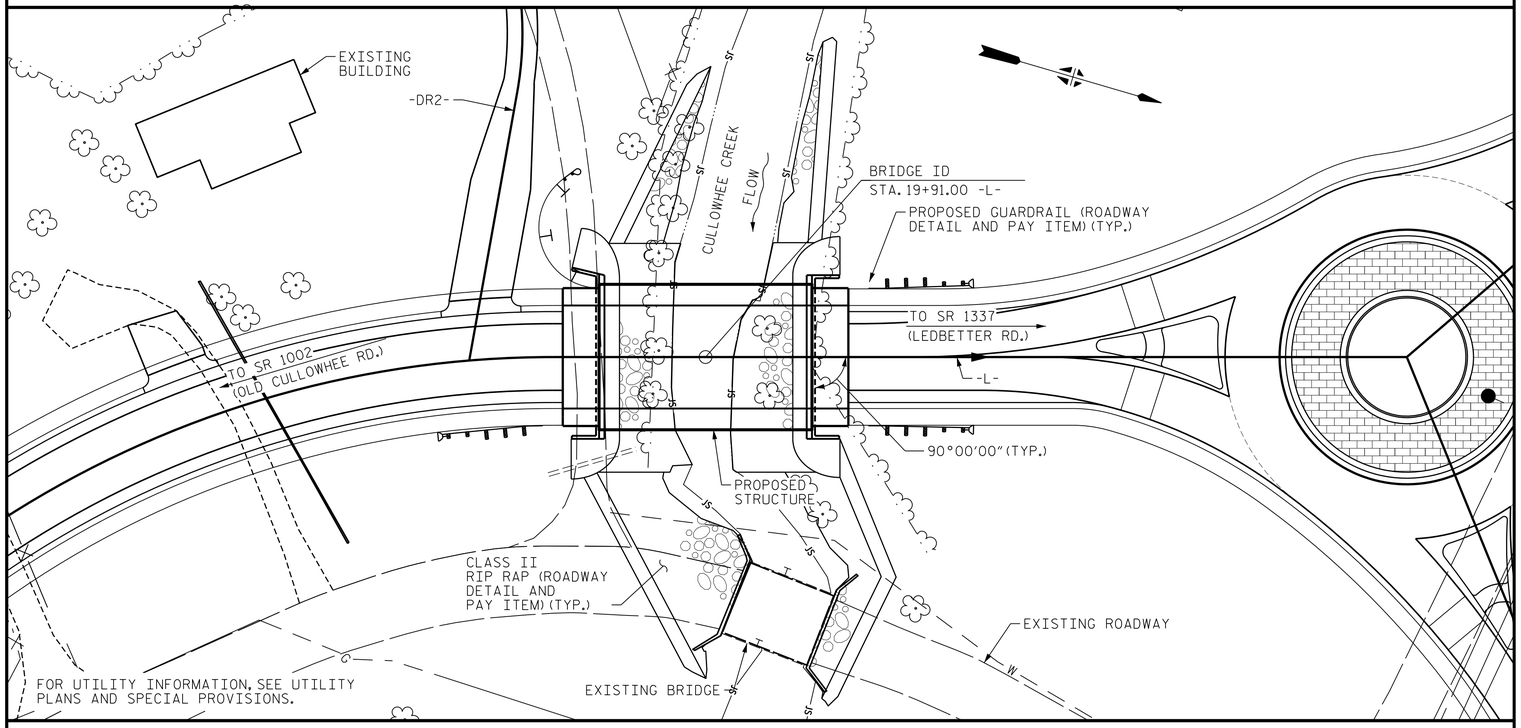
BENCHMARK BM2: POWER POLE 117.4894' RT OF STA. 19+56.68 -L-; N 3910390, E 301801; EL. 2062.68; (DATUM: NAVD 88)



LOCATION SKETCH

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE @ STA. 19+91.00 -L-	ASBESTOS ASSESMENT	PILE EXCAVATION		UNCLASSIFIED STRUCTURE EXCAVATION @ STA. 19+91.00 -L-	CLASS AA CONCRETE	CLASS A CONCRETE	BRIDGE APPROACH SLABS @ STA. 19+91.00 -L-	REINFORCING STEEL	EPOXY COATED REINFORCING STEEL
			IN SOIL	NOT IN SOIL						
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LUMP SUM	CU. YDS.	CU. YDS.	LUMP SUM	LBS.	LBS.
SUPERSTRUCTURE						33.5				1439
END BENT NO. 1							29.0		3378	
END BENT NO. 2			98	10			28.7		3376	
TOTAL	LUMP SUM	LUMP SUM	98	10	LUMP SUM	33.5	57.7	LUMP SUM	6754	1439

TOTAL BILL OF MATERIAL

	PILE DRIVING EQUIPMENT SETUP FOR HP 12X53 STEEL PILES	HP 12X53 STEEL PILES		TWO BAR METAL RAIL	1'-2" X 3'-4 7/8" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" x 2'-0" PRESTRESSED CONCRETE CORED SLABS	
	EA.	NO.	LIN. FT.	LIN. FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.
SUPERSTRUCTURE				125.0	140.0				16	1120
END BENT NO. 1	9	9	225			69	76			
END BENT NO. 2	9	9	180			64	71			
TOTAL	18	18	405	125.0	140.0	133	147	LUMP SUM	16	1120

HYDRAULIC DATA

DESIGN DISCHARGE	= 2610	CFS
FREQUENCY OF DESIGN DISCHARGE	= 10	YR.
DESIGN HIGH WATER ELEVATION	= 2061.1	FT.
DRAINAGE AREA	= 23.5	SQ. MI.
BASE DISCHARGE (Q100)	= 5220	CFS
BASE HIGH WATER ELEVATION	= 2063.9	FT.

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 3100	CFS
FREQUENCY OF OVERTOPPING	= 10+	YR.
OVERTOPPING ELEVATION	= 2061.8	FT.

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.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE "STANDARD NOTES" SHEET.

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.

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS AND SHALL PROVIDE FOR BICYCLES.

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 19+91.00 -L-."

THE MATERIAL SHOWN IN THE HATCHED AREA ON SHEET S-1 SHALL BE EXCAVATED FOR A DISTANCE OF 50FT EACH SIDE OF 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 EXISTING STRUCTURE CONSISTING OF A SINGLE 32'-8" STEEL I-BEAM SPAN WITH TIMBER DECKING ON MASONRY ABUTMENTS AND LOCATED DOWNSTREAM OF THE PROPOSED STRUCTURE 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.

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 CONITRACTOR 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.

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

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.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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

PROJECT NO. 17BP.14.R.212

JACKSON COUNTY

STATION: 19+91.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON SR 1336 (MONTEITH GAP RD.) OVER CULLOWHEE CREEK BETWEEN SR 1002 (OLD CULLOWHEE RD.) AND SR 1337 (LEDBETTER RD.)

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-3
1	--	--	3	--	--	TOTAL SHEETS
2	--	--	4	--	--	20

NORTH CAROLINA PROFESSIONAL SEAL 040757 ENGINEER KENT DICKENS
1/25/2022

HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DES BY: K. DICKENS DATE: 08/19
DES CHK: J. ROBERTS DATE: 09/19
DWG BY: B. PETERSON DATE: 08/19
CHK BY: J. ROBERTS DATE: 09/19

PLOT DRIVER: NCDOT STRUCTURES DEFAULT PLOTTER.plt PENTABLE: NCDOT STRUCTURES DEFAULT PEN.tbl
USER: DCARTER DATE: 3/31/2021 TIME: 12:15:13 PM
FILE: ...\GENERAL DRAWING LOCATION SKETCH