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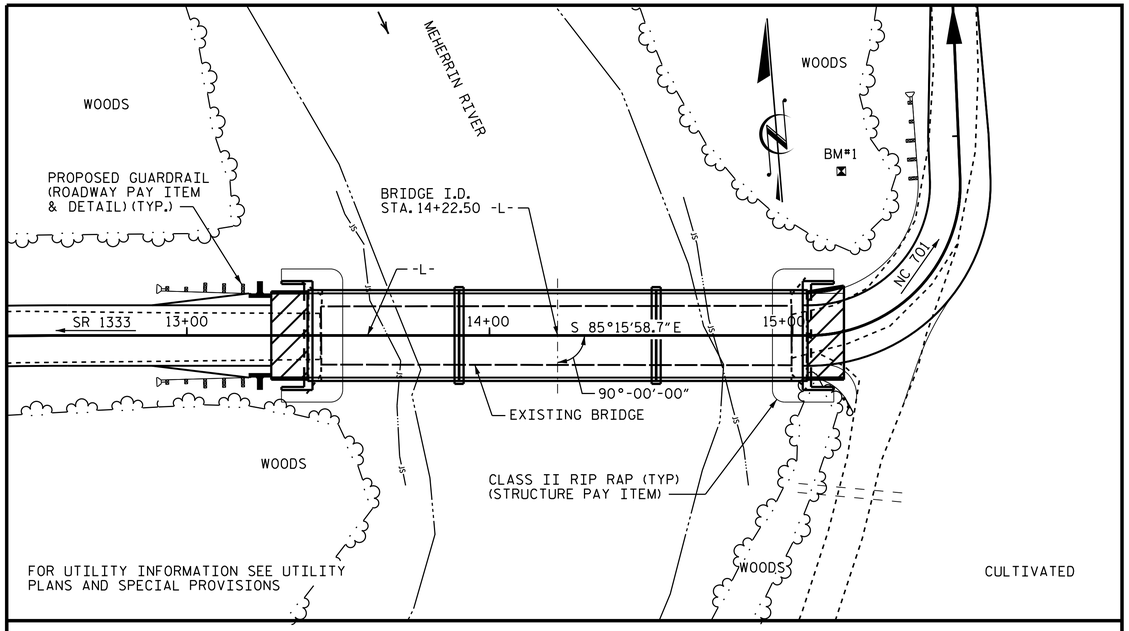
BM#1 - RR SPIKE IN BASE 23" SYCAMORE
39.12' LT. OF STA. 15+90.04 -L-
ELEV. = 32.59



LOCATION SKETCH

HYDRAULIC DATA

DESIGN DISCHARGE	= 2,500 CFS
FREQUENCY OF DESIGN FLOOD	= <2 YR.
DESIGN HIGH WATER ELEVATION	= 27.1 FT
DRAINAGE AREA	= 1,100 SQ MI
BASE DISCHARGE (Q_{100})	= 42,300 CFS
BASE HIGH WATER ELEVATION	= 40.3 FT

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	= 2,500 CFS
FREQUENCY OF OVERTOPPING FLOOD	= <2 YR.
OVERTOPPING FLOOD ELEVATION	= 27.1 FT.
OCCURS @ STA. 10+55 -L-	

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.

THIS BRIDGE SHALL BE CONSTRUCTED USING TOP-DOWN CONSTRUCTION METHODS. THE USE OF A TEMPORARY CAUSEWAY OR WORK BRIDGE IS NOT PERMITTED. NO CRANES ARE ALLOWED ON SPAN B.

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.

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 14+22.50".

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 20 FT 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 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.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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

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

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE AT STA. 14+22.50	ASBESTOS ASSESMENT	PDA TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR GALV. STEEL PIPE PILES
	LUMP SUM	LUMP SUM	EA.	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	EA.	EA.
SUPERSTRUCTURE						LUMP SUM			
END BENT 1					21.7		2579	5	
BENT 1					11.0		1992		7
BENT 2					11.0		1992		7
END BENT 2					20.2		2449	5	
TOTAL	LUMP SUM	LUMP SUM	3	LUMP SUM	63.9	LUMP SUM	9012	10	14

TOTAL BILL OF MATERIAL

	HP 12x53 STEEL PILES		PP20x0.5 GALVANIZED STEEL PIPE PILES		PIPE PILE PLATES	PILE REDRIVES	VERTICAL CONCRETE BARRIER RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 2'-0" PRESTRESSED CONCRETE CORED SLABS	
	NO.	LIN. FT.	NO.	LIN. FT.	EA.	EA.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.
SUPERSTRUCTURE							330.50				30	1650
END BENT 1	5	310				3		95	105			
BENT 1			7	427	7	4						
BENT 2			7	427	7	4						
END BENT 2	5	310				3		61	68			
TOTAL	10	620	14	854	14	14	330.50	156	173	LUMP SUM	30	1650

PROJECT NO. 17BP.1.R.92
NORTHAMPTON COUNTY
STATION: 14+22.50 -L-

SHEET 3 OF 3 REPLACES BRIDGE NO. 650013

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER
MEHERRIN RIVER ON
SR 1339 (BRANCHES BRIDGE ROAD)
BETWEEN SR 1333 AND NC 701

NORTH CAROLINA PROFESSIONAL SEAL 036548 ENGINEER DANIEL R. BURGUNDY

DocuSigned by: Daniel R. Burgundy
5/4/2021

PREPARED IN THE OFFICE OF:
ATKINS
1616 EAST MILLBROOK ROAD, SUITE 160
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

DRAWN BY :	CB	DATE :	4/19
CHECKED BY :	MHR	DATE :	6/19
DESIGN ENGINEER OF RECORD:	DRB	DATE :	6/19

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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