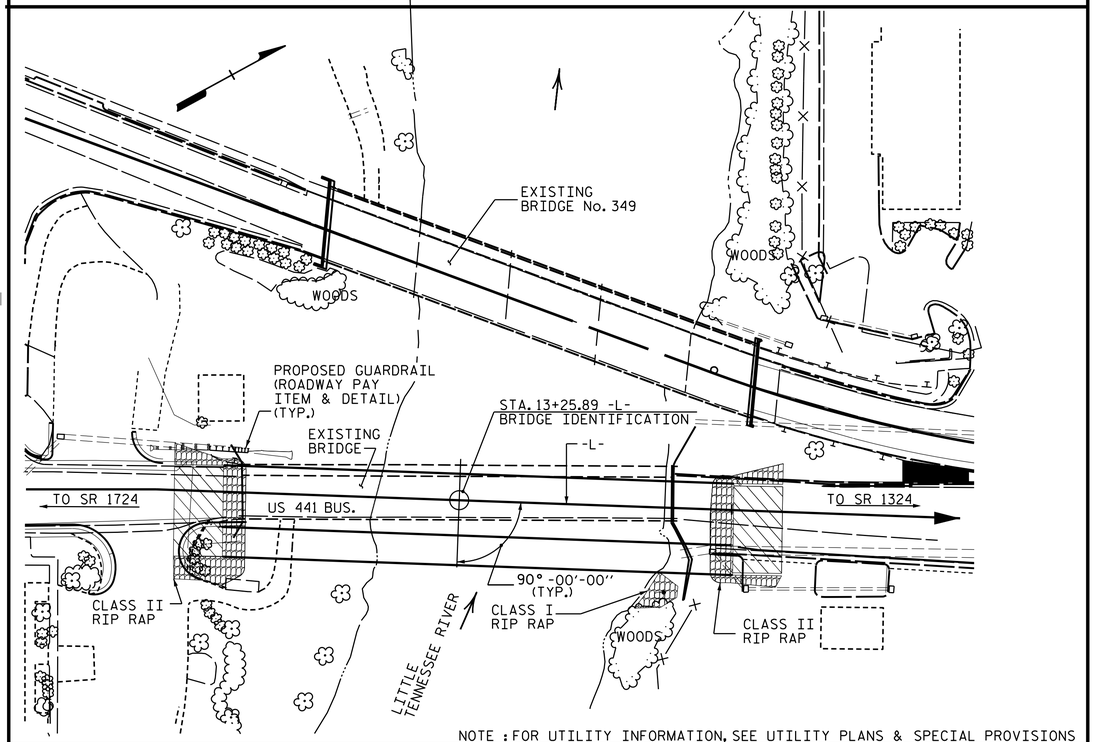
B.M. #3 : 15' LT. OF STA. 17+52.00 -BL- NCGS MONUMENT "G47" ON SE CORNER OF BRIDGE No. 22, EL. 2013.82



NOTE : FOR UTILITY INFORMATION, SEE UTILITY PLANS & SPECIAL PROVISIONS

LOCATION SKETCH

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.

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 45 FT LEFT OF -L- AND 45 FT RIGHT OF -L- 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. 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.

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 SECURING OF VESSELS, SEE SPECIAL PROVISIONS.

THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A SAFE WORKING DISTANCE FROM THE HIGH VOLTAGE TRANSMISSION LINES AND COORDINATING WITH DUKE ENERGY TRANSMISSION THE TIME FRAME NEEDED TO DE-ENERGIZE THE LINES. SEE UTILITY SPECIAL PROVISIONS.

THE EXISTING 5 SPAN STRUCTURE (1 @ 41'-9", 3 @ 42'-6", 1 @ 41'-9") WITH A SUPERSTRUCTURE CONSISTING OF REINFORCED CONCRETE DECK GIRDERS AND WITH A 5" ASPHALT OVERLAY ON A SUBSTRUCTURE CONSISTING OF MASS CONCRETE ABUTMENTS AND REINFORCED CONCRETE POST AND WEB BENTS / PILE FOOTINGS AND LOCATED AT THE SITE OF THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS NOT CURRENTLY POSTED FOR LOAD LIMIT.

THE EXISTING ABUTMENT AND WINGWALLS AT ABUTMENT No. 2 SHALL BE REMOVED TO ELEVATION 2008.3 OR AS DIRECTED BY THE ENGINEER.

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

ARCHITECTURAL CONCRETE SURFACE TREATMENT SHALL BE APPLIED TO BOTH FACES OF THE VERTICAL CONCRETE BARRIER RAIL, THE 1'-4" X 2'-11½" CONCRETE PARAPET AND THE 1'-4" X 3'-3½" CONCRETE PARAPET INCLUDING THE END POSTS AND LAMP PEDESTALS. FOR ARCHITECTURAL CONCRETE SURFACE TREATMENT, SEE SPECIAL PROVISIONS.

AT THE CONTRACTOR'S OPTION, AND UPON REMOVAL OF THE CAUSEWAY, THE CLASS II RIP RAP USED IN THE CAUSEWAY MAY BE PLACED AS RIP RAP SLOPE PROTECTION. SEE SPECIAL PROVISIONS FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS.

THE CONTRACTOR WILL BE REQUIRED TO CONSTRUCT, MAINTAIN AND AFTERWARDS REMOVE A TEMPORARY ACCESS FOR USE DURING CONSTRUCTION OF THE PROPOSED STRUCTURE. FOR CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

CONCRETE STAIN SHALL BE APPLIED TO THE TOP OF THE VERTICAL CONCRETE BARRIER RAIL, CONCRETE PARAPETS, END POST AND LAMP PEDESTALS. FOR APPLICATION OF BRIDGE COATING, SEE SPECIAL PROVISIONS.

FOR ELECTRICAL CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

FOR DUCT BANK - TYPE 6 WAY, 4", SEE SPECIAL PROVISIONS.

HYDRAULIC DATA

DESIGN DISCHARGE_____ 17800 CFS

FREQUENCY OF DESIGN FLOOD_____ 50 YEARS

DESIGN HIGH WATER ELEVATION_____ 2012.4

DRAINAGE AREA_____295 SQ. MI.

BASE DISCHARGE (Q100)_____ 20800 CFS

BASE HIGH WATER ELEVATION_____2013.79

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE_____ 19050 CFS

FREQUENCY OF OVERTOPPING FLOOD_____ 50+ YRS.

OVERTOPPING FLOOD ELEVATION_____ 2013.0

TOTAL BILL OF MATERIAL

	CONSTRUCTION MAINTENANCE AND REMOVAL OF TEMPORARY ACCESS	REMOVAL OF EXISTING STRUCTURE	3'-6" Ø DRILLED PIERS IN SOIL	3'-6" Ø DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-6" Ø DRILLED PIERS	PDA TESTING	SID INSPECTIONS	SPT TESTING	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION	CONCRETE WEARING SURFACE	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	LUMP SUM	SQ. FT.	SQ. FT.	CU. YDS.	LUMP SUM	LBS.	LBS.
SUPERSTRUCTURE											11017	10515		LUMP SUM		
END BENT NO. 1										LUMP SUM			28.7		3364	
BENT NO. 1			65.83	27.00	66.15								29.9		12363	2397
BENT NO. 2			85.00	32.00	66.39								29.0		13368	2887
BENT NO. 3			152.00	33.00	111.13								29.2		17021	4302
END BENT NO. 2										LUMP SUM			29.1		3514	
TOTAL	LUMP SUM	LUMP SUM	302.83	92.00	243.67	1	1	1	1	LUMP SUM	11017	10515	145.9	LUMP SUM	49630	9586

	HP 12 X 53 STEEL PILES		STEEL PILE POINTS	ANODIZED TWO BAR METAL RAIL	VERTICAL CONCRETE BARRIER RAIL	1'-4" X 2'-11½" CONCRETE PARAPET	1'-4" X 3'-3½" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLABS		3'-0" X 2'-0" PRESTRESSED CONCRETE CORED SLABS		APPLICATION OF BRIDGE COATING	ASBESTOS ASSESSMENT	ELECTRICAL CONDUIT SYSTEM	DUCT BANK - TYPE 6-WAY, 4"	ARCHITECTURAL CONCRETE SURFACE TREATMENT
	NO.	LIN. FT.	EACH	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN. FT.	NO.	LIN. FT.	LUMP SUM	LUMP SUM	LUMP SUM	LIN. FT.	SQ. FT.
SUPERSTRUCTURE				472.75	265.38	250.38	250.38			LUMP SUM	16	640.00	48	3360.00	LUMP SUM	LUMP SUM	LUMP SUM	280.37	4870
								215	240										
END BENT NO. 1	8	200	8																
BENT NO. 1																			
BENT NO. 2																			
BENT NO. 3																			
END BENT NO. 2	8	440						150	165										
TOTAL	16	640	8	472.75	265.38	250.38	250.38	365	405	LUMP SUM	16	640.00	48	3360.00	LUMP SUM	LUMP SUM	LUMP SUM	280.37	4870

PROJECT NO. B-5125

MACON COUNTY

STATION: 13+25.89 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON US 441 BUS. OVER LITTLE TENNESSEE RIVER BETWEEN SR 1724 AND SR 1324

NORTH CAROLINA PROFESSIONAL SEAL 20125 ENGINEER MARSHALL G. CHEEK JR.

Digitally signed by Marshall G. Cheek Jr.
65490D6EBAA3B405...

7/1/2016

DRAWN BY : M. POOLE DATE : 01-16

CHECKED BY : M.G. CHEEK DATE : 5-10-16

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			43