

HYDRAULIC DATA

DESIGN DISCHARGE = 2,400 C.F.S.

FREQUENCY OF DESIGN FLOOD = 25 YRS.

DESIGN HIGH WATER ELEVATION = 890.60

DRAINAGE AREA = 11.9 SQ. MI.

BASE DISCHARGE (Q100) = 4,060 C.F.S.

BASE HIGH WATER ELEVATION = 892.38

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 3,108 C.F.S.

FREQUENCY OF OVERTOPPING FLOOD = 50 YRS.+

OVERTOPPING FLOOD ELEVATION = 891.50

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

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 35 FT.RIGHT AND 40 FT.LEFT AT END BENT #1 AND 30 FT.RIGHT AND 30 FT.LEFT AT END BENT #2 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 3 SPANS 1@34'-5",1@39'-5", AND 1@28'-5" WITH ASPHALT WEARING SURFACE OVER A TIMBER DECK ON SALVAGED I-BEAMS SUPERSTRUCTURE AND A CLEAR ROADWAY WIDTH OF 20'-10" ON A SUBSTRUCTURE CONSISTING OF TIMBER POST AND SILLS WITH INTERIOR BENT CONSISTING OF TIMBER CAPS AND PILES AND LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION 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.

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 TRANSPORTAION 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 RENOVATIONS ACTIVITIES. SEE SPECIAL PROVISIONS.

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

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+52.00 -L-."

TOTAL BILL OF MATERIAL																					
	REMOVAL OF EXISTING STRUCTURE	ASBESTOS ASSESSMENT	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	PILE DRIVING EQUIPMENT SETUP FOR 18 X 0.50 GALVANIZED PIPE PILES	HF ST	P 12 X 53 EEL PILES	PP GAI PI	18 X O.50 LVANZIED PE PILES	TWO BAR METAL RAIL	1'-2" X 2'-9 ¹ / ₂ " CONRETE PARAPET	RIP RAP CLASS II (2'-0"THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'- PRE C COF	O'' X 1'-9'' ESTRESSED ONCRETE RED SLABS	3'-0' PRES COI CORE	"X 2'-0" STRESSED NCRETE ED SLABS
	LUMP SUM	LUMP SUM	LUMP SUM	CU. YDS.	LUMP SUM	LBS.	EACH			. LIN.FT.	NO.	LIN.FT.	LIN.FT.	LIN.FT.	TONS	SQ. YDS.	LUMP SUM	NO.	LIN.FT.	NO.	LIN.FT.
SUPERSTRUCTURE		LUMP SUM											205.25	220.25			LUMP SUM	11	440	11	770
END BENT 1				21.8		2636	7		7	405					260	290					
BENT 1				10.6		2222		7			7	490			160	180					
END BENT 2				21.6		2636	7		7	405					55	65					
TOTAL	LUMP SUM	LUMP SUM	LUMP SUM	54.0	LUMP SUM	7494	14	7	14	810	7	490	205.25	220.25	475	535	LUMP SUM	11	440	11	770

PROJECT NO. _____B-5407 ______POLK _____ county station: 13+52.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

GENERAL DRAWING
FOR BRIDGE OVER
WALNUT CREEK
ON SR 1311 BETWEEN
SR 1310 AND SR 1161

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED 2

DRAWN BY: GHOLAMREZA KOUCHEKI DATE: 12/2017
CHECKED BY: D.V. JOYNER DATE: 12/2017
DESIGN ENGINEER OF RECORD: A. M. LEE DATE: 02/2018

01-MAR-2018 15:13 R:\Structures\Finalplans\401_005_B5407_SMU_ GD3_003_740034.dgn