

HYDRAULIC DATA

DESIGN DISCHARGE = 2800 c.f.s.

FREQUENCY OF DESIGN FLOOD = 25 YRS.

DESIGN HIGH WATER ELEVATION = 2061.44

DRAINAGE AREA = 15.3 SQ.MI.

BASIC DISCHARGE (Q100) = 4100 c.f.s.

BASIC HIGH WATER ELEVATION = 2063.03

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = $6000 \pm \text{ c.f.s.}$ FREQUENCY OF OVERTOPPING FLOOD = $500 \pm \text{ YR.}$ OVERTOPPING FLOOD ELEVATION = 2064.17

TOTAL BILL OF MATERIAL												
	REMOVAL OF EXISTING STRUCTURE	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	HP STEE	12 X 53 L PILES	ONE BAR METAL RAIL	1'-0"X 2'-0" CONCRETE PARAPET	PLAIN RIP RAP CLASS II (2'-0" THICK)	FILTER FABRIC FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0"X 2'-9" PRESTRESSED CONCRETE BOX BEAMS
	LUMP SUM	CU. YARDS	LUMP SUM	LBS.	NO.	LIN.FT.	LIN. FEET	LIN. FEET	TONS	SQ. YARDS	LUMP SUM	LIN. FEET
SUPERSTRUCTURE			LUMP SUM				160.50	175.50			LUMP SUM	1316.25
END BENT NO. 1		18.8		3188	12	240			247	275		
END BENT NO. 2		18.4		3162	12	240			247	274		
TOTAL	LUMP SUM	37.2	LUMP SUM	6350	24	480	160.50	175.50	494	549	LUMP SUM	1316.25

DRAWN BY: QT NGUYEN/CRY DATE: 8-04
CHECKED BY: MG CHEEK DATE: 8-04

NOTES

ASSUMED LIVE LOAD = HS 20 OR ALTERNATE LOADING.

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

FOR EROSION CONTROL MEASURES SEE EROSION CONTROL PLANS.

THIS BRIDGE HAS BEEN DESIGNED BY THE STRENGTH DESIGN METHOD AS SPECIFIED IN AASHTO STANDARD SPECIFICATIONS.

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.

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

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", NOVEMBER, 1995.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC PERFORMANCE CATEGORY B.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS.

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."

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

AFTER SERVING AS A TEMPORARY STRUCTURE, THE EXISTING 1 SPAN STRUCTURE (1 @ 42') WITH A CLEAR ROADWAY WIDTH OF 20.4' AND A 31/2" ASPHALT WEARING SURFACE ON A STEEL PLANK FLOOR ON A GIRDER FLOORBEAM SYSTEM ON A SUBSTRUCTURE CONSISTING OF YOUNT MASONRY ABUTMENTS AND LOCATED APPROXIMATELY 30 FEET UPSTREAM FROM THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE, THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

FOR STEEL H PILES, SEE SPECIAL PROVISIONS.

PROJECT NO. B-3857

HENDERSON COUNTY

STATION: 16+59.00 -L-

SHEET 3 OF 3

DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE NO. 8 ON SR 1314

OVER BOYLSTON CREEK BETWEEN

SR 1426 AND SR 1331

	311 142	0 /	AND	311	100	Τ
	SHEET NO.					
BY:	DATE:	NO.	BY:	DA ⁻	TE:	S-3
		3				TOTAL SHEETS
		4				20