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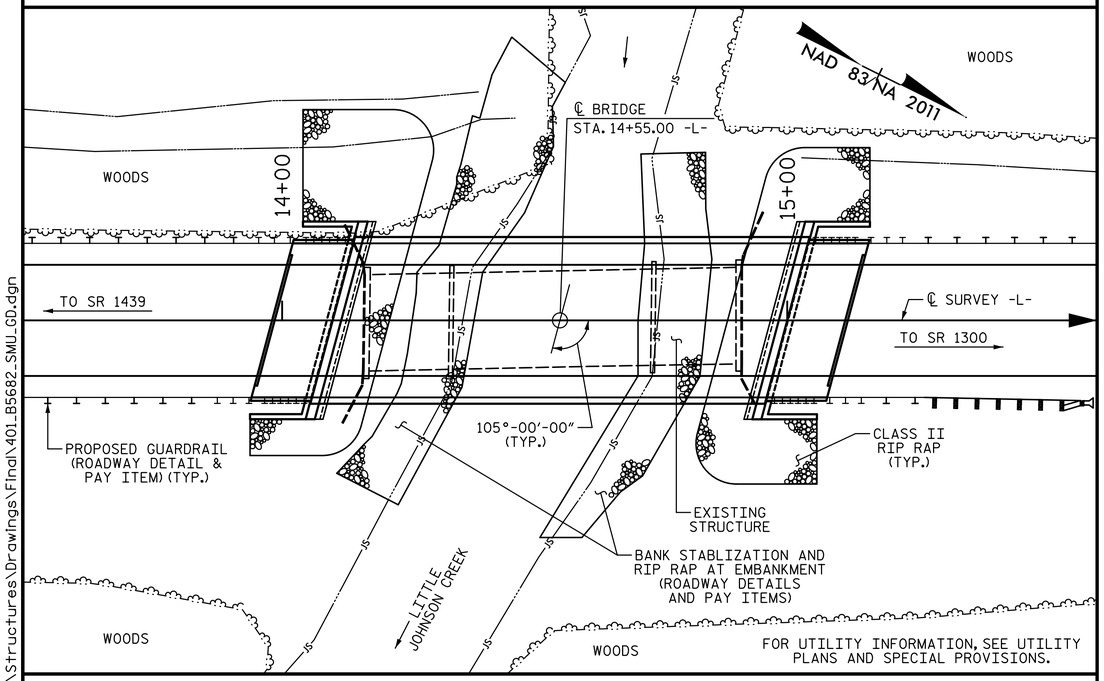
BM. BL-3 24"REBAR WITH CAP, STA. 10+81.00 -L-, 15.80' RT., EL. 331.58



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.

USE IMPERVIOUS DIKE NCDOT STANDARD BMP ALONG STREAM BANKS TO DEWATER AND ISOLATE ADJACENT WORK AREAS TO REMOVE COMPLETELY EXISTING INTERIOR BENTS IN THE DRY. IMPERVIOUS DIKES SHALL BE CONSIDERED INCIDENTAL TO THE LUMP SUM PAY ITEM FOR REMOVAL OF EXISTING STRUCTURE.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA ON SHEET 1 SHALL BE EXCAVATED FOR A DISTANCE OF 40 FT. LEFT AND 35 FT. RIGHT 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 CONSISTS OF 3 SPANS, 1 @ 17'-9", 1 @ 40'-0" AND 1 @ 17'-9". THE SUPERSTRUCTURE HAS A CLEAR ROADWAY WIDTH OF 19.167 FT. AND HAS A TIMBER DECK ON TIMBER JOINTS (SPANS 1 AND 3) AND STEEL I-BEAMS AND STEEL DOUBLE CHANNELS (SPAN 2). THE END BENTS ARE TIMBER CAPS, PILES AND SILLS. THE INTERIOR BENTS ARE TIMBER CAPS ON TIMBER POSTS WITH CONCRETE SILLS. THE EXISTING BRIDGE WHICH IS LOCATED AT THE SITE OF THE PROPOSED BRIDGE INCLUDING CONCRETE SILLS SHALL BE COMPLETELY REMOVED. THE EXISTING BRIDGE IS CLOSED AND IS UNABLE TO SUPPORT ANY LOAD.

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.

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

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.

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 14+55.00 -L-."

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

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE EXISTING BRIDGE IS CLOSED AND IS UNABLE TO SUPPORT ANY TRAFFIC OR LOADS. PLANS FOR DEMOLITION AND REMOVAL OF THE EXISTING STRUCTURE SHALL BE DEVELOPED ACCORDINGLY. FOR REMOVAL OF EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	HP 12 X 53 STEEL PILES		STEEL PILE POINTS	TWO BAR METAL RAIL	1'-2" X 2'-10" CONCRETE PARAPET	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS	3'-0" X 2'-9" PRESTRESSED CONCRETE BOX BEAMS		ASBESTOS ASSESSMENT
	LS	LS	CY	LS	LB	EA	NO.	LF	EA	LF	LF	TON	SY	LS	NO.	LF	LS
SUPERSTRUCTURE										164.38	180.0				11	990.00	
END BENT 1		LS	26.2		3,671	7	7	105	7			130	145				
END BENT 2		LS	26.2		3,671	7	7	125	7			115	130				
TOTAL	LS	LS	52.4	LS	7,342	14	14	230	14	164.38	180.0	245	275	LS	11	990.00	LS

FOUNDATION NOTES:

FOR PILES, SEE GEOTECHNICAL SPECIAL PROVISIONS AND SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.

DRIVE PILES AT END BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 1. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 105 TONS PER PILE.

DRIVE PILES AT END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 175 TONS PER PILE.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 2. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PROJECT NO. B-5682
GRANVILLE COUNTY
STATION: 14+55.00 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 1400
(GRASSY CREEK VIRGILINA RD)
OVER LITTLE JOHNSON CREEK
BETWEEN SR 1439 AND SR 1300

30'-6" CLEAR ROADWAY - 105° SKEW

PLANS PREPARED BY:
SIMPSON ENGINEERS & ASSOCIATES
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(919) 852-0468
(919) 852-0598 (Fax)
www.simpsonengr.com
LICENSURE NO. C-2521

NORTH CAROLINA PROFESSIONAL SEAL 11268 ENGINEER BETSY S. COX
6/12/2018

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			19

DRAWN BY: S.D. COOPER DATE: 4-18
CHECKED BY: B.S. COX DATE: 4-18
DESIGN ENGINEER OF RECORD: B.S. COX DATE: 4-18

6/12/2018 1:01:47 PM G:\Projects\2016\Division 5 (Mott Macdonald)\B-5682 Granville #129 (105 33BBU 2BMR)\Structures\Drawings\Final\401_B5682_SMU_GD.dgn