

PROJECT: 17BP.2.R.84

REFERENCE: SF-530049

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STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

STRUCTURE

SUBSURFACE INVESTIGATION

COUNTY LENOIR

PROJECT DESCRIPTION BRIDGE NO. 49 ON -L- (SR 1311)

OVER BEAR CREEK

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SF-530049	1	6

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N.C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO MAKE SUCH INDEPENDENT SUBSURFACE INVESTIGATIONS AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO CONDITIONS TO BE ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

C.J. CORNETTE

S.N. ZIMARINO

R.E. SMITH

J.M. EDMONDSON

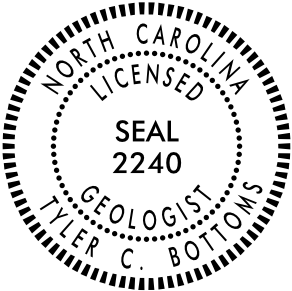
INVESTIGATED BY T.C. BOTTOMS

DRAWN BY C.J. CORNETTE

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE NOVEMBER 2017



DocuSigned by:

Tyler C. Bottoms

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SIGNATURE

12/13/2017

DATE

DOCUMENT NOT CONSIDERED FINAL
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

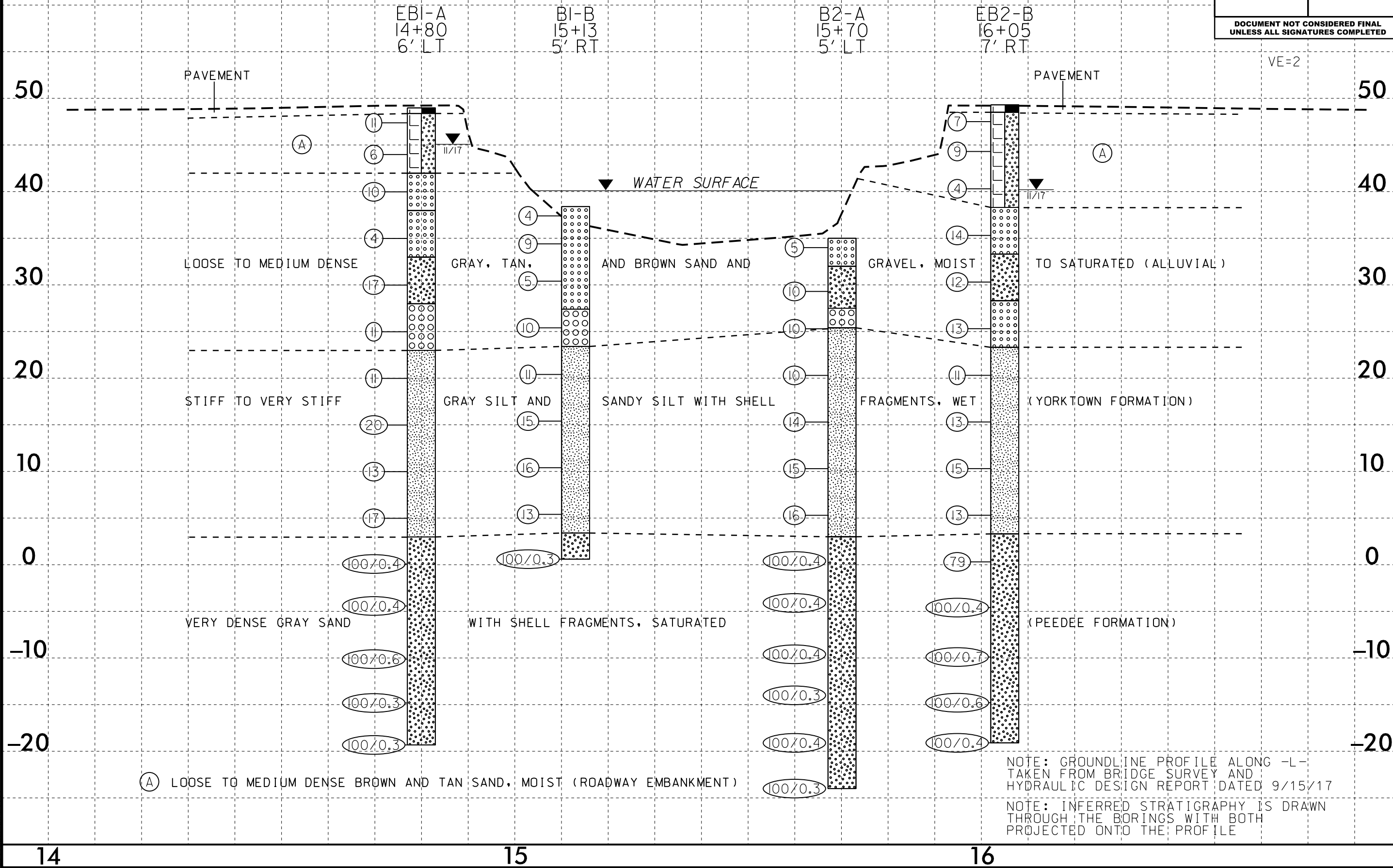
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PROFILE THROUGH BORINGS PROJECTED ALONG -L-

PROJECT REFERENCE NO.	SHEET NO.
SF-530049	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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NCDOT BORE DOUBLE SF530049.GPJ NC DOT.GDT 11/29/17

WBS 17BP.2.R.84			TIP SF-530049			COUNTY LENOIR			GEOLOGIST Zimarino, S. N.					
SITE DESCRIPTION BRIDGE NUMBER 49 ON -L- (SR 1311) OVER BEAR CREEK									GROUND WTR (ft)					
BORING NO. EB2-B			STATION 16+05			OFFSET 7 ft RT			ALIGNMENT -L-			0 HR. N/A		
COLLAR ELEV. 49.3 ft			TOTAL DEPTH 68.4 ft			NORTHING 547,717			EASTING 2,362,927			24 HR. 9.1		
DRILL RIG/HAMMER EFF./DATE GFO0075 CME-45C 84% 08/21/2017						DRILL METHOD Mud Rotary			HAMMER TYPE Automatic					
DRILLER Smith, R. E.			START DATE 11/21/17			COMP. DATE 11/21/17			SURFACE WATER DEPTH N/A					
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
50														
	48.5	0.8	5	4	3	7								49.3 GROUND SURFACE 0.0
														48.5 PAVEMENT 0.8
45	45.3	4.0	5	5	4	9								ROADWAY EMBANKMENT
														BROWN AND TAN SAND, MOIST TO SATURATED
40	41.3	8.0	1	2	2	4								
35	36.3	13.0	4	7	7	14								38.3 ALLUVIAL 11.0
														GRAY SAND WITH GRAVEL, SATURATED
30	31.3	18.0	4	5	7	12								33.3 16.0
25	26.3	23.0	4	6	7	13								28.3 21.0
20	21.3	28.0	4	5	6	11								23.3 COASTAL PLAIN 26.0
														GRAY SILT WITH SHELL FRAGMENTS, WET (YORKTOWN FORMATION)
15	16.3	33.0	4	6	7	13								
10	11.3	38.0	3	7	8	15								
5	6.3	43.0	4	6	7	13								
0	1.3	48.0	10	9	70									3.3 COASTAL PLAIN 46.0
														GRAY SAND WITH SHELL FRAGMENTS, SATURATED (PEEDEE FORMATION)
-5	-3.7	53.0	56	100/0.4							79			
-10	-8.7	58.0	20	62	48/0.2									
-15	-13.7	63.0	42	70	30/0.1									
	-18.7	68.0	100/0.4											