

REFERENCE: SF-810003

PROJECT: BP3.R003

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<u>SHEET NO.</u>	<u>DESCRIPTION</u>
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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 GEOTECHNICAL ENGINEERING UNIT

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY SAMPSON
 PROJECT DESCRIPTION BRIDGE NO. 3 ON -L- (SR 1933)
OVER ROWAN BRANCH AT STA. 14 + 88

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	SF-810003	1	7

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

S.N. ZIMARINO

R.E. SMITH

C.M. WALKER

INVESTIGATED BY T.C. BOTTOMS

DRAWN BY T.C. BOTTOMS

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE MARCH 2022



DocuSigned by:

Tyler C. Bottoms

04/04/2022

48A2D3BD08CF446 SIGNATURE

DATE

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION
SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with multiple columns and rows containing detailed technical information: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, TERMS AND DEFINITIONS, SOIL LEGEND AND AASHTO CLASSIFICATION, MINERALOGICAL COMPOSITION, COMPRESSIBILITY, PERCENTAGE OF MATERIAL, GROUND WATER, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, EQUIPMENT USED ON SUBJECT PROJECT, PLASTICITY, COLOR, FRACTURE SPACING, BEDDING, INDURATION, and NOTES.

PROJECT REFERENCE NO.	SHEET NO.
SF-810003	3
SITE PLAN	
 0 30 60 FEET	



SKEW: 90°

13

14

15

16

17

EB1 BENT LINE

BIBENT LINE

EB2 BENT LINE

← TO HWY 421

BEAMAN WOODS RD -L-

BRIDGE NO. 3

BI-A

EB2-A

→ TO ROWAN RD.

→ ROWAN BRANCH

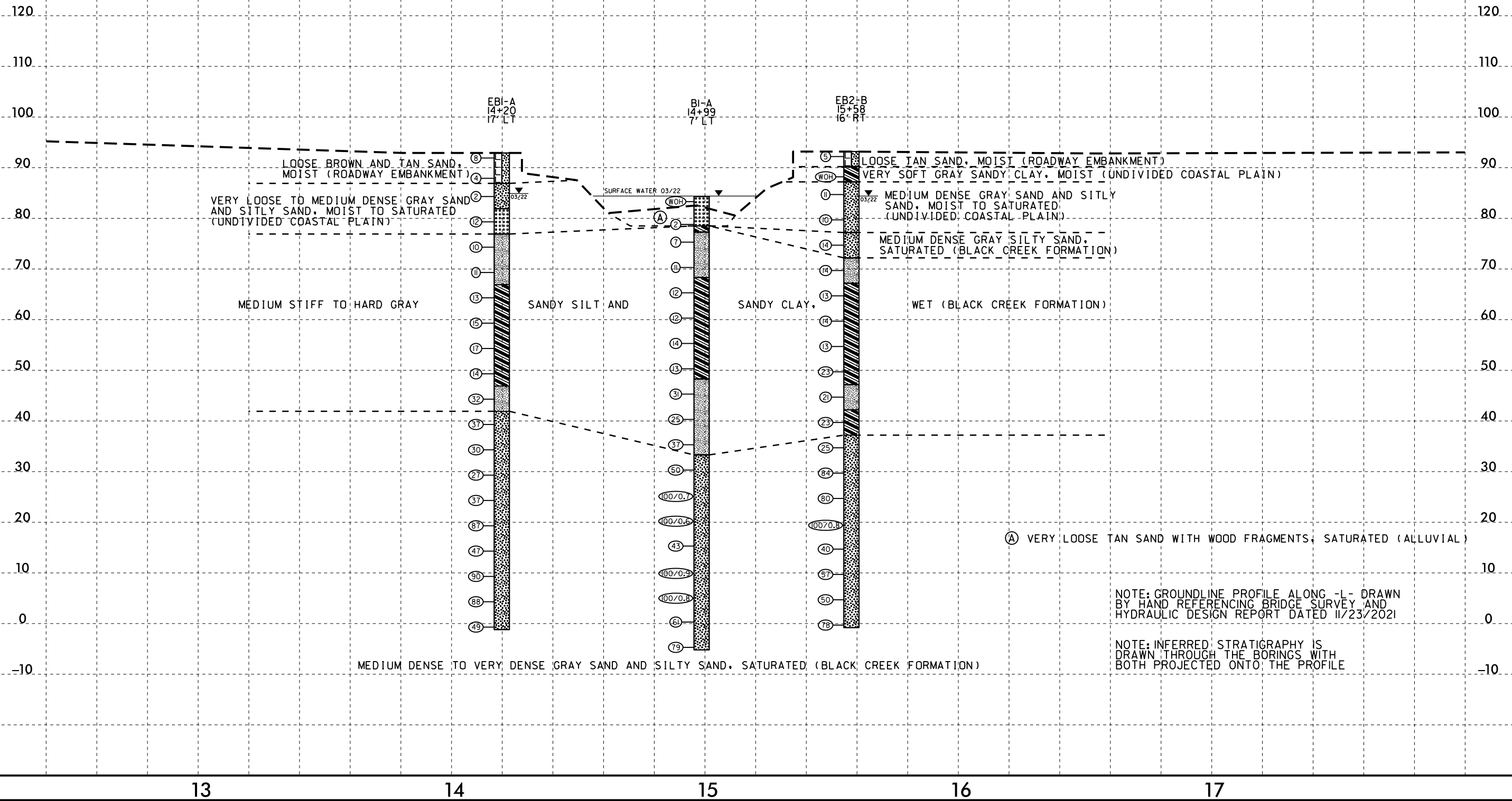


5/14/99

PROJECT REFERENCE NO. <i>SF-810003</i>	SHEET NO. 4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PROFILE THROUGH BORINGS PROJECTED ALONG -L-

V.E. = 2



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GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP3.R003.1	TIP SF-810003	COUNTY SAMPSON	GEOLOGIST Zimarino, S. N.
SITE DESCRIPTION BRIDGE NO. 3 ON -L- (SR 1933) OVER ROWAN BRANCH			GROUND WTR (ft)
BORING NO. B1-A	STATION 14+99	OFFSET 7 ft LT	ALIGNMENT -L-
COLLAR ELEV. 84.3 ft	TOTAL DEPTH 89.5 ft	NORTHING 443,585	EASTING 2,225,799
DRILL RIGHAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		DRILL METHOD Mud Rotary	HAMMER TYPE Automatic
DRILLER Walker, C. M.	START DATE 03/09/22	COMP. DATE 03/09/22	SURFACE WATER DEPTH 0.1ft

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
85	84.3	0.0											WATER SURFACE (03/09/22)	0.0
			WOH	WOH	WOH								ALLUVIAL TAN SAND WITH WOOD FRAGMENTS, SATURATED	
80	79.8	4.5	1	1	1									5.8
													COASTAL PLAIN GRAY SANDY SILT AND SANDY CLAY, WET (BLACK CREEK FORMATION)	7.0
75	76.3	8.0	2	3	4									
70	71.3	13.0	4	5	6									
65	66.3	18.0	4	5	7									
60	61.3	23.0	4	5	7									
55	56.3	28.0	4	6	8									
50	51.3	33.0	4	5	8									
45	46.3	38.0	8	15	16									
40	41.3	43.0	9	11	14									
35	36.3	48.0	10	14	23									
30	31.3	53.0	20	21	29									
25	26.3	58.0	33	59	41/0.2									100/0.7
20	21.3	63.0	50	78	22/0.1									100/0.6
15	16.3	68.0	10	18	25									
10	11.3	73.0	25	44	56/0.4									100/0.9
5	6.3	78.0	40	65	35/0.3									100/0.8

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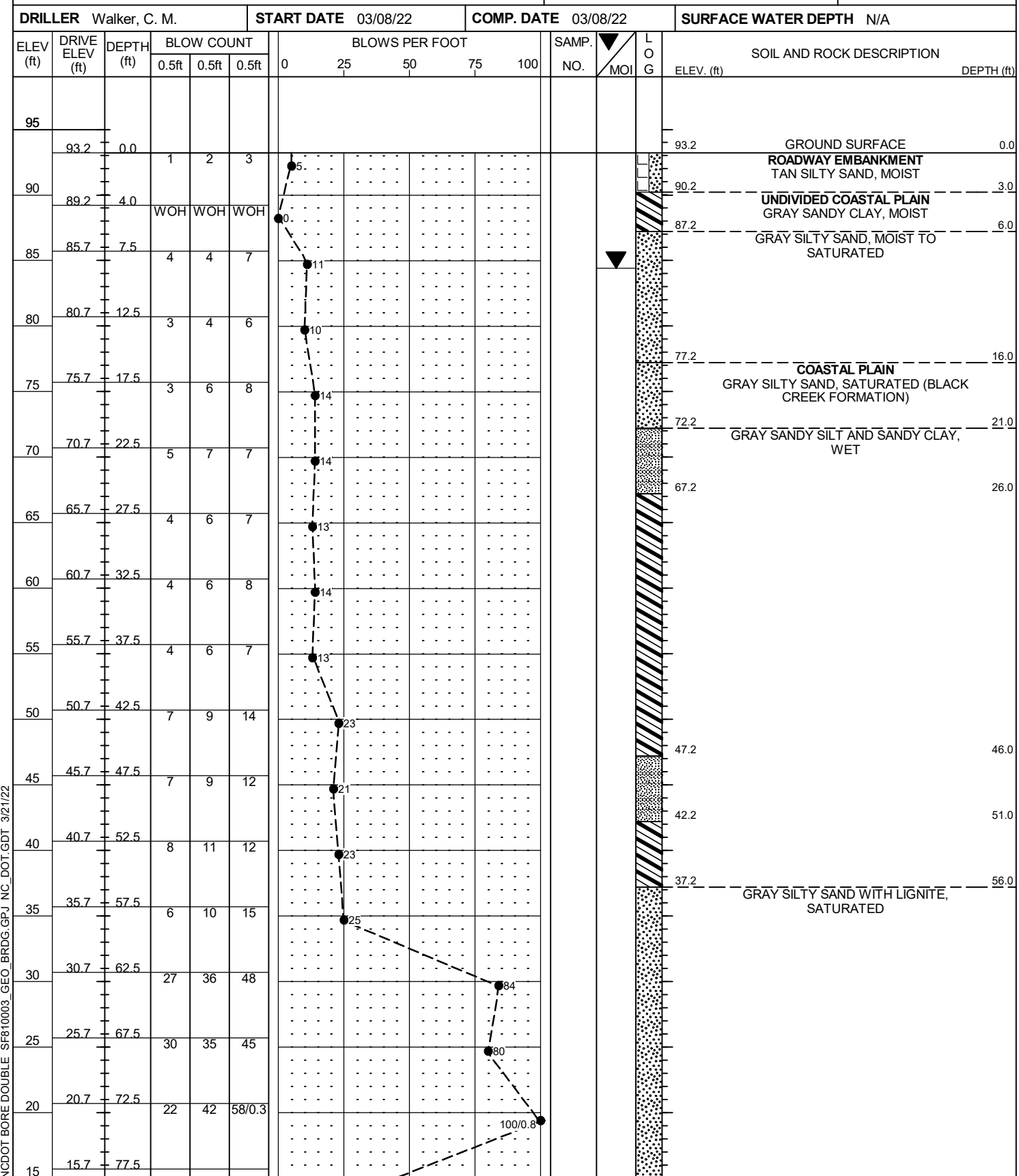
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
5													Match Line	
0	83.0	1.3	16	25	36								GRAY SAND WITH LIGNITE, SATURATED (continued)	
-5	88.0	-3.7	18	31	48									89.5
													Boring Terminated at Elevation -5.2 ft in Very Dense Sand	

NCDOT BORE DOUBLE SF810003_GEO_BRDG.GPJ_NC_DOT.GDT 3/21/22

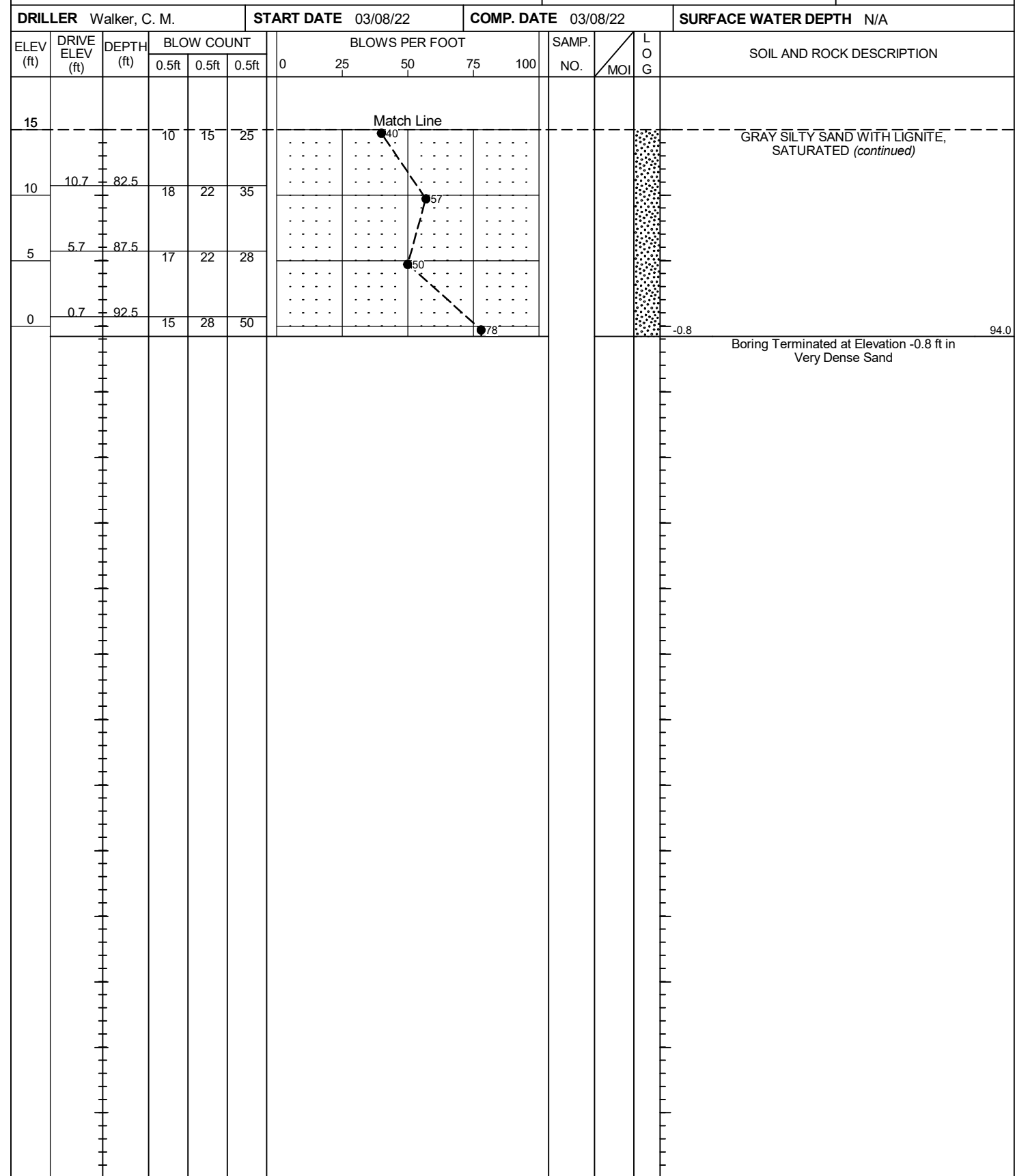
GEOTECHNICAL BORING REPORT

BORE LOG

WBS BP3.R003.1		TIP SF-810003		COUNTY SAMPSON		GEOLOGIST Zimarino, S. N.	
SITE DESCRIPTION BRIDGE NO. 3 ON -L- (SR 1933) OVER ROWAN BRANCH						GROUND WTR (ft)	
BORING NO. EB2-B		STATION 15+58		OFFSET 16 ft RT		ALIGNMENT -L-	
COLLAR ELEV. 93.2 ft		TOTAL DEPTH 94.0 ft		NORTHING 443,644		EASTING 2,225,822	
DRILL RIG/HAMMER EFF./DATE GFC0075 CME-45C 87% 11/23/2021		DRILL METHOD Mud Rotary			HAMMER TYPE Automatic		
DRILLER Walker, C. M.		START DATE 03/08/22		COMP. DATE 03/08/22		SURFACE WATER DEPTH N/A	



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NCDOT BORE DOUBLE SF810003_GEO_BRDG.GPJ_NC_DOT.GDT 3/21/22