

REFERENCE: U-3609B

PROJECT: 39026

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY WAYNE
PROJECT DESCRIPTION US 13 (BERKELEY BLVD) FROM
SR 1003 (NEW HOPE RD) TO NORTH OF SR 1705
(HOOD SWAMP RD)
SITE DESCRIPTION CULVERT NO. E2060 ON -L- (US-13)
OVER MILLS CREEK AT STA. 55 +17

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3609B	1	8

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 PERFORM INDEPENDENT SUBSURFACE INVESTIGATIONS AND MAKE INTERPRETATIONS AS NECESSARY TO CONFIRM CONDITIONS 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
D.N. ARGENBRIGHT
S.N. ZIMARINO
T.W. MILLER
C.M. WALKER
J.M. EDMONDSON

INVESTIGATED BY T.C. BOTTOMS
DRAWN BY T.W. MILLER
CHECKED BY D.N. ARGENBRIGHT
SUBMITTED BY D.N. ARGENBRIGHT
DATE NOVEMBER 2023



DocuSigned by:
Tyler Bottoms 12/07/2023
48A2D3BD08CF4A6...
SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

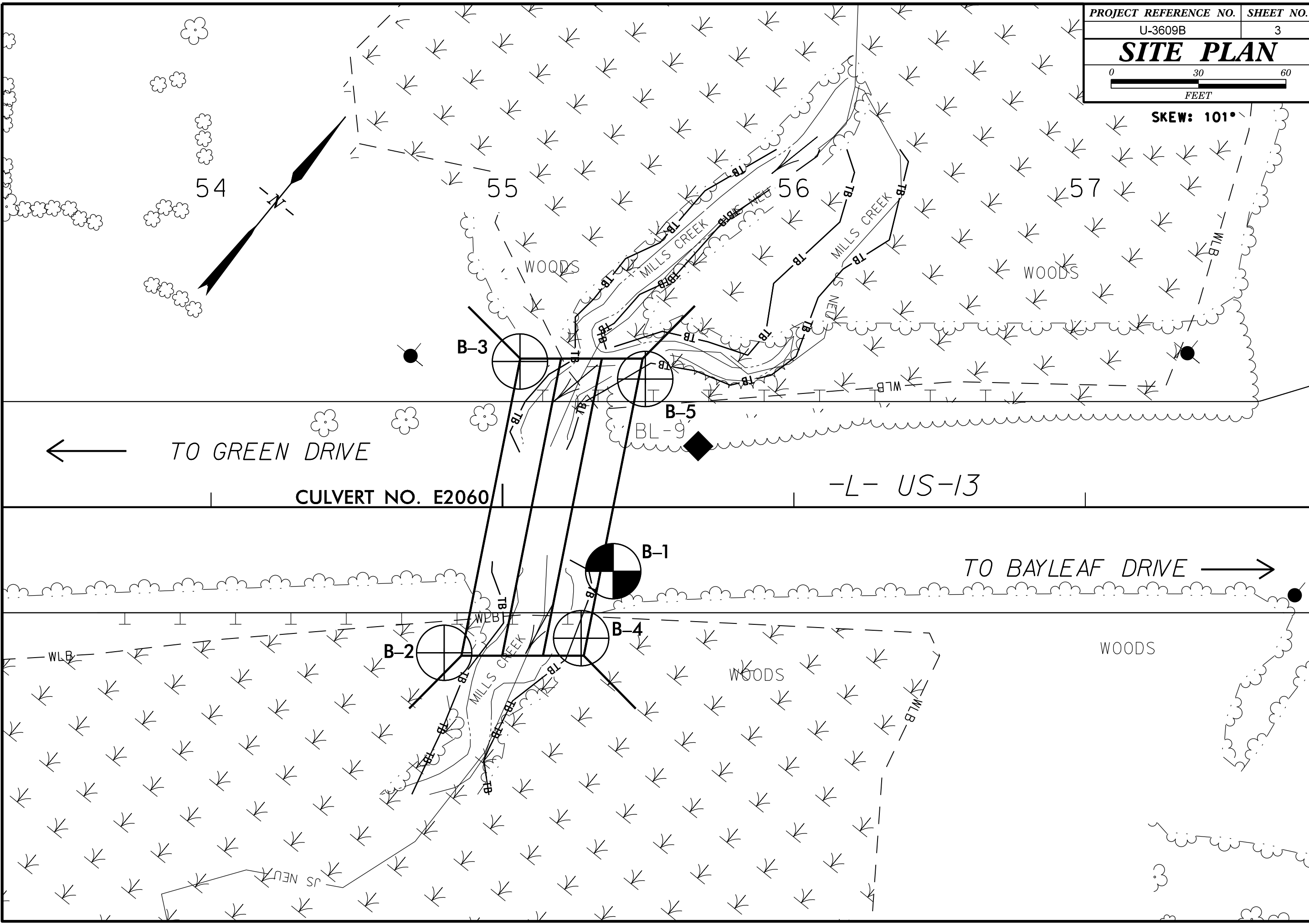
GEOTECHNICAL ENGINEERING UNIT

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

DATE: 8-15-14

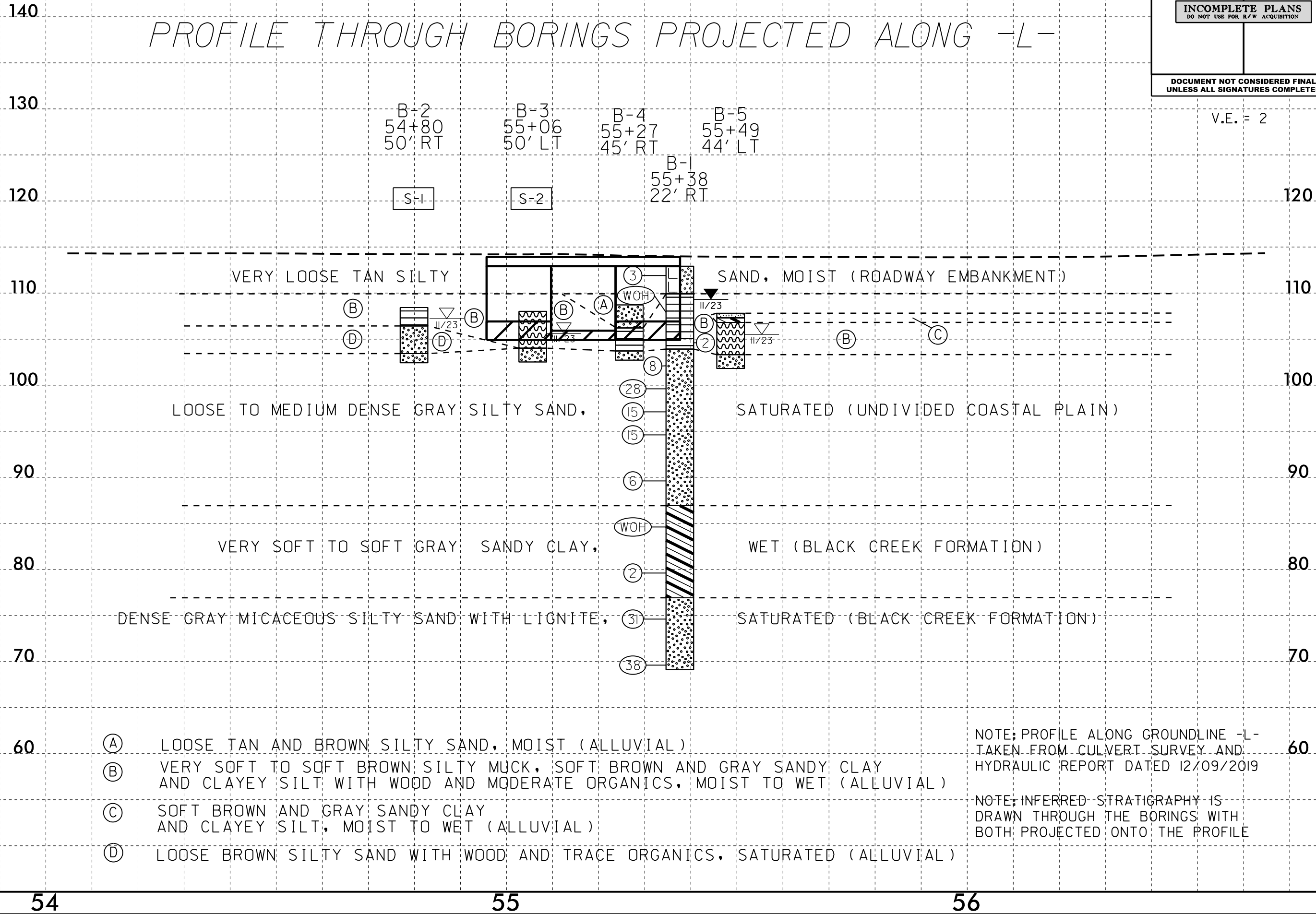
PROJECT REFERENCE NO.	SHEET NO.
U-3609B	3
SITE PLAN	
0 30 60 FEET	

SKEW: 101°



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PROJECT REFERENCE NO. U-3609B		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			



NC DOT BORE DOUBLE U3609B_GEO_CULV.GPJ NC_DOT.GDT 11/27/23

WBS 39026.1.2		TIP U-3609B		COUNTY WAYNE		GEOLOGIST Miller, T. W.	
SITE DESCRIPTION CULVERT NO. E2060 ON -L- (US 13) OVER MILLS CREEK						GROUND WTR (ft)	
BORING NO. B-2		STATION 54+80		OFFSET 50 ft RT		ALIGNMENT -L-	
COLLAR ELEV. 108.5 ft		TOTAL DEPTH 6.0 ft		NORTHING 600,613		EASTING 2,324,942	
DRILL RIG/HAMMER EFF./DATE N/A		DRILL METHOD Hand Auger		HAMMER TYPE N/A		0 HR. 1.2	
DRILLER Miller, T. W.		START DATE 11/14/23		COMP. DATE 11/14/23		SURFACE WATER DEPTH N/A	
ELEV (ft)		DRIVE ELEV (ft)		DEPTH (ft)		BLOW COUNT	
						0.5ft 0.5ft 0.5ft	
						0 25 50 75 100	
						SAMP. NO.	
						MOI	
						LOG	
						SOIL AND ROCK DESCRIPTION	
110							
						108.5 GROUND SURFACE 0.0	
						ALLUVIAL	
						106.5 SOFT BROWN CLAYEY SILT WITH MODERATE ORGANICS, MOIST TO WET 2.0	
						103.5 LOOSE BROWN SILTY SAND WITH WOOD AND TRACE ORGANICS, SATURATED 5.0	
						102.5 UNDIVIDED COASTAL PLAIN 6.0	
						LOOSE GRAY SILTY SAND, SATURATED	
						Boring Terminated at Elevation 102.5 ft IN	
						LOOSE SILTY SAND	

NC DOT BORE DOUBLE U3609B GEO_CULV.GPJ NC_DOT.GDT 11/27/23

[illegible]

GEOTECHNICAL BORING REPORT

BORE LOG

[illegible]

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY
MATERIALS & TESTS UNIT
SOILS LABORATORY

T. I. P. No.

U-3609B

REPORT ON SAMPLES OF

SOILS FOR QUALITY & ORGANIC

Project

39026.1.2

County

WAYNE

Owner

Date: Sampled

11/1/23

Received

11/20/23

Reported

11/22/23

Sampled from

ROADWAY

By

T C BOTTOMS

Submitted by

J L PILIPCHUK**2012**

Standard Specifications

818864 TO 818865

11/22/23

TEST RESULTS

Proj. Sample No.		S-1	S-2				
Lab. Sample No.		818864	818865				
Retained #4 Sieve	%	-	1				
Passing #10 Sieve	%	100	98				
Passing #40 Sieve	%	88	85				
Passing #200 Sieve	%	50	62				

MINUS NO. 10 FRACTION

SOIL MORTAR - 100%							
Coarse Sand Ret - #60	%	28.9	24.6				
Fine Sand Ret - #270	%	22.2	13.1				
Silt 0.05 - 0.005 mm	%	32.8	58.2				
Clay < 0.005 mm	%	16.1	4.0				
Passing #40 Sieve	%	-	-				
Passing #200 Sieve	%	-	-				

L. L.		46					
P. I.		9	NP				
AASHTO Classification		A-5(3)	A-4(0)				
Station		54+80	55+06				
Offset		50' RT	50' LT				
Alignment		L	L				
Location							
Depth (Ft)		0.00	0.00				
to		2.00	4.00				
% Moisture		77.3	212.7				
% Organic		12.4	29.1				

cc: T C BOTTOMS

Soils Engineer