

REFERENCE: R-5719

PROJECT: 50473

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY WAYNE
 PROJECT DESCRIPTION DIVISION 4 - US 117 AND
SR 1135 (COUNTRY CLUB ROAD) INTERCHANGE
 SITE DESCRIPTION DUAL BRIDGES ON -L- (US 117)
AT STA. 39+11 OVER -YI- (COUNTRY CLUB
ROAD) AT STA. 20+00

CONTENTS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND
3	SITE PLAN
4	PROFILE
5-8	BORE LOGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5719	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 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:
1. 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.
 2. 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

E. H. SMITH

M. A. EKLUND

R. T. ASHLEY

INVESTIGATED BY TERRACON CONSULTANTS

DRAWN BY W. D. FIELDS

CHECKED BY M. J. ALEXANDER

SUBMITTED BY TERRACON CONSULTANTS

DATE APRIL 2016



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 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. Includes sub-sections like SOIL LEGEND AND AASHTO CLASSIFICATION, CONSISTENCY OR DENSENESS, TEXTURE OR GRAIN SIZE, SOIL MOISTURE - CORRELATION OF TERMS, PLASTICITY, COLOR, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, EQUIPMENT USED ON SUBJECT PROJECT, FRACTURE SPACING, BEDDING, and INDURATION.

PROJECT REFERENCE NO.	SHEET NO.
50473.1.FD1 (R-5719)	3
SITE PLAN	



BRIDGE SKEW ANGLE 72°

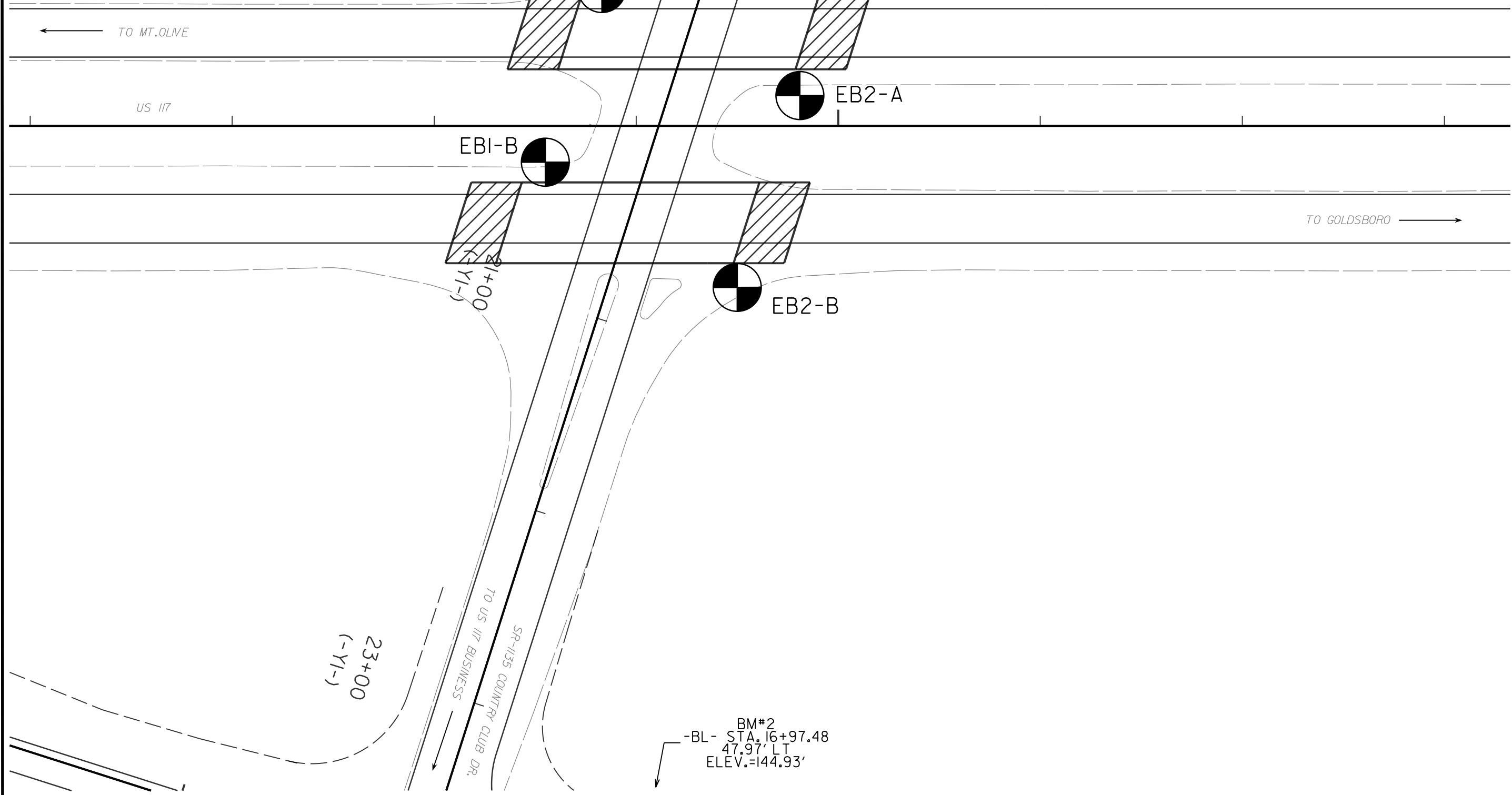
36+00
(-L-)

38+00
(-L-)

39+00
(-Y1-)

40+00
(-L-)

42+00
(-L-)



← TO MT. OLIVE

US 117

TO GOLDSBORO →

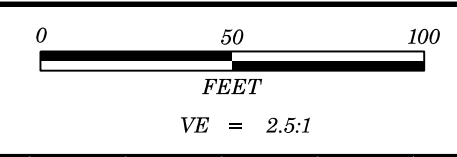
TO SOUTHERN WAYNE
COUNTRY CLUB

TO US 117 BUSINESS
DR.
SR-1135 COUNTRY CLUB DR.

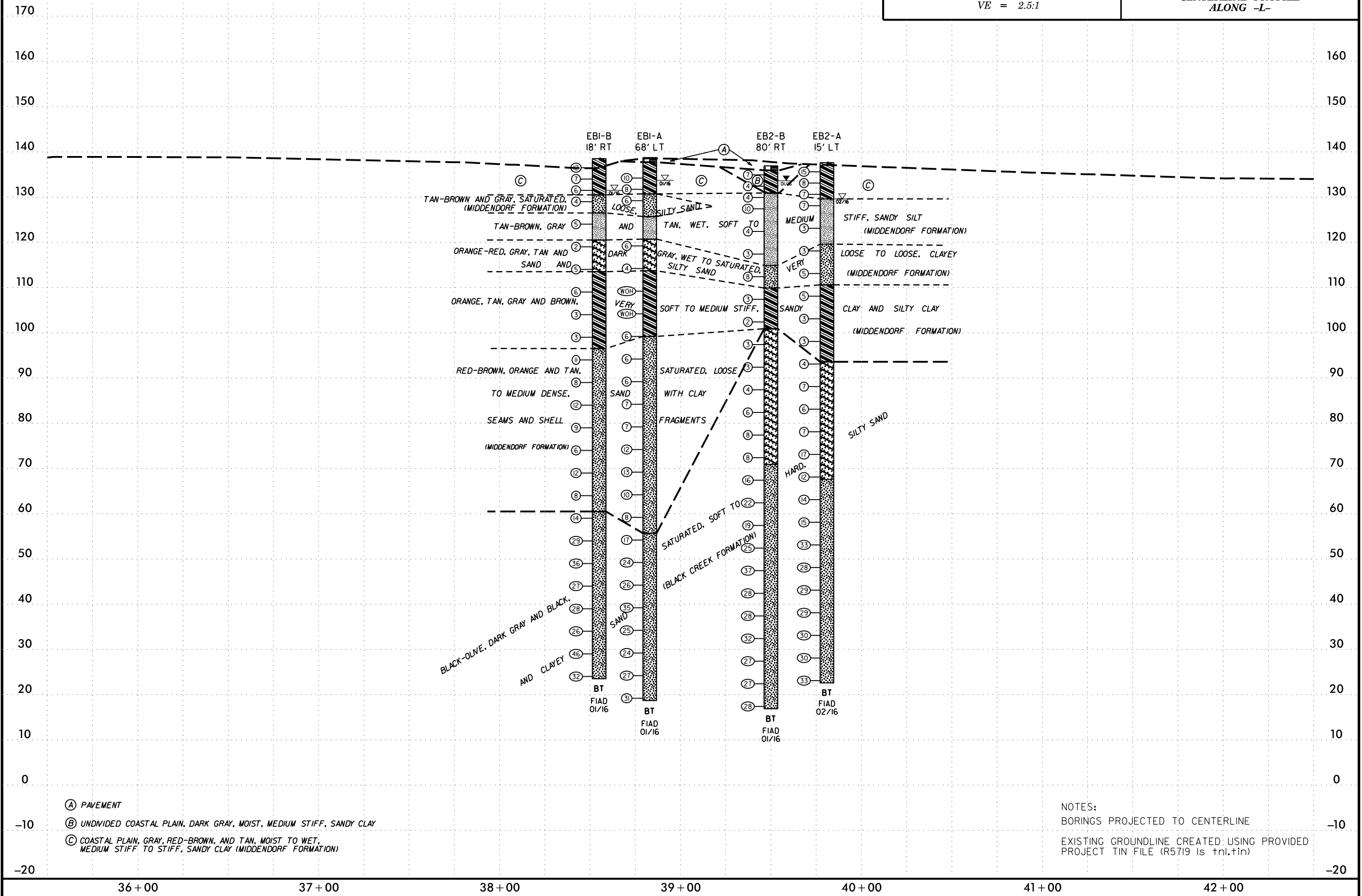
23+00
(-Y1-)

BM#2
-BL- STA. 16+97.48
47.97' LT
ELEV.=144.93'

5/14/99



PROJECT REFERENCE NO.	SHEET NO.
R-5719	4
CENTERLINE PROFILE ALONG -L-	

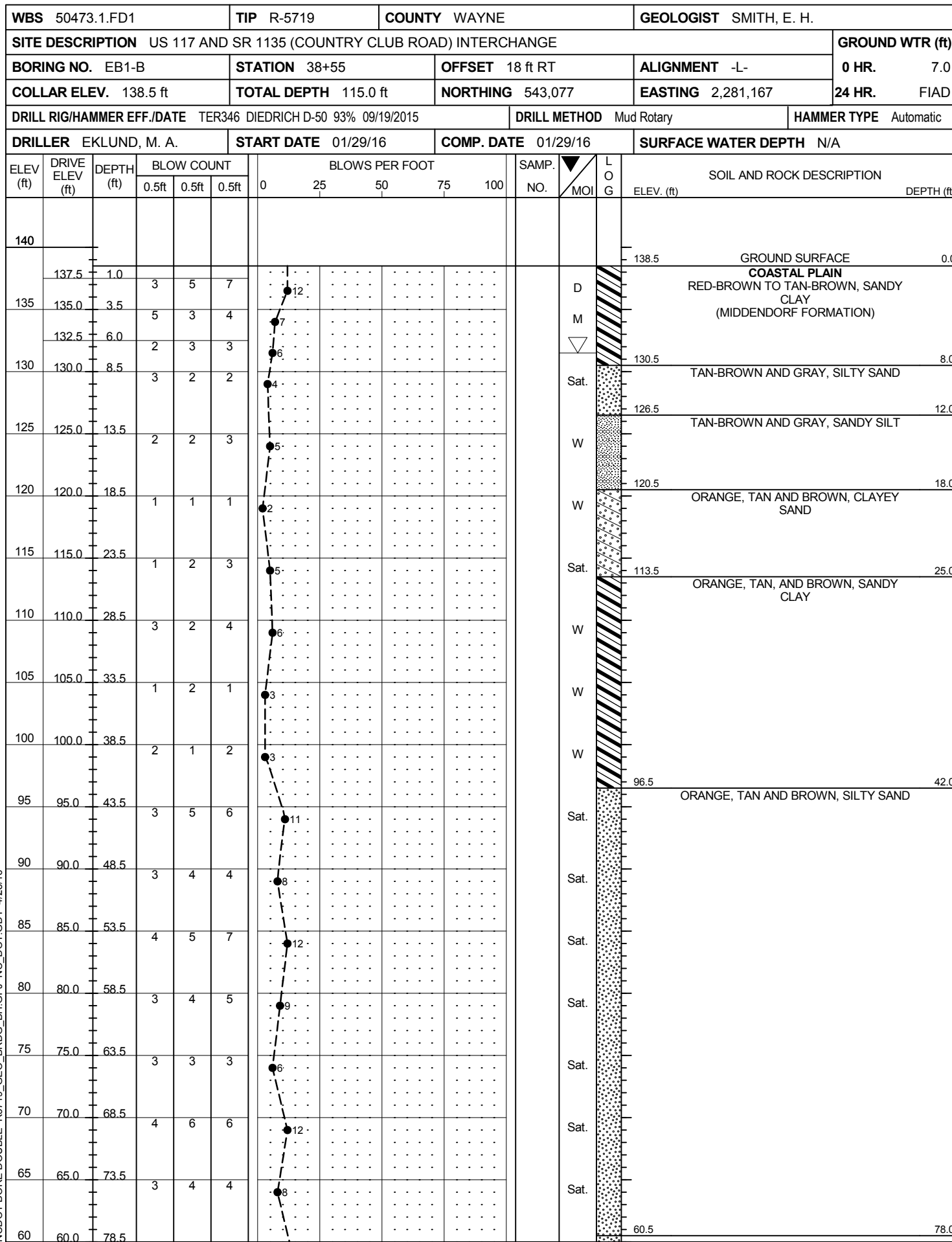


- (A) PAVEMENT
- (B) UNDIVIDED COASTAL PLAIN, DARK GRAY, MOIST, MEDIUM STIFF, SANDY CLAY
- (C) COASTAL PLAIN, GRAY, RED-BROWN, AND TAN, MOIST TO WET, MEDIUM STIFF TO STIFF, SANDY CLAY (MIDDENDORF FORMATION)

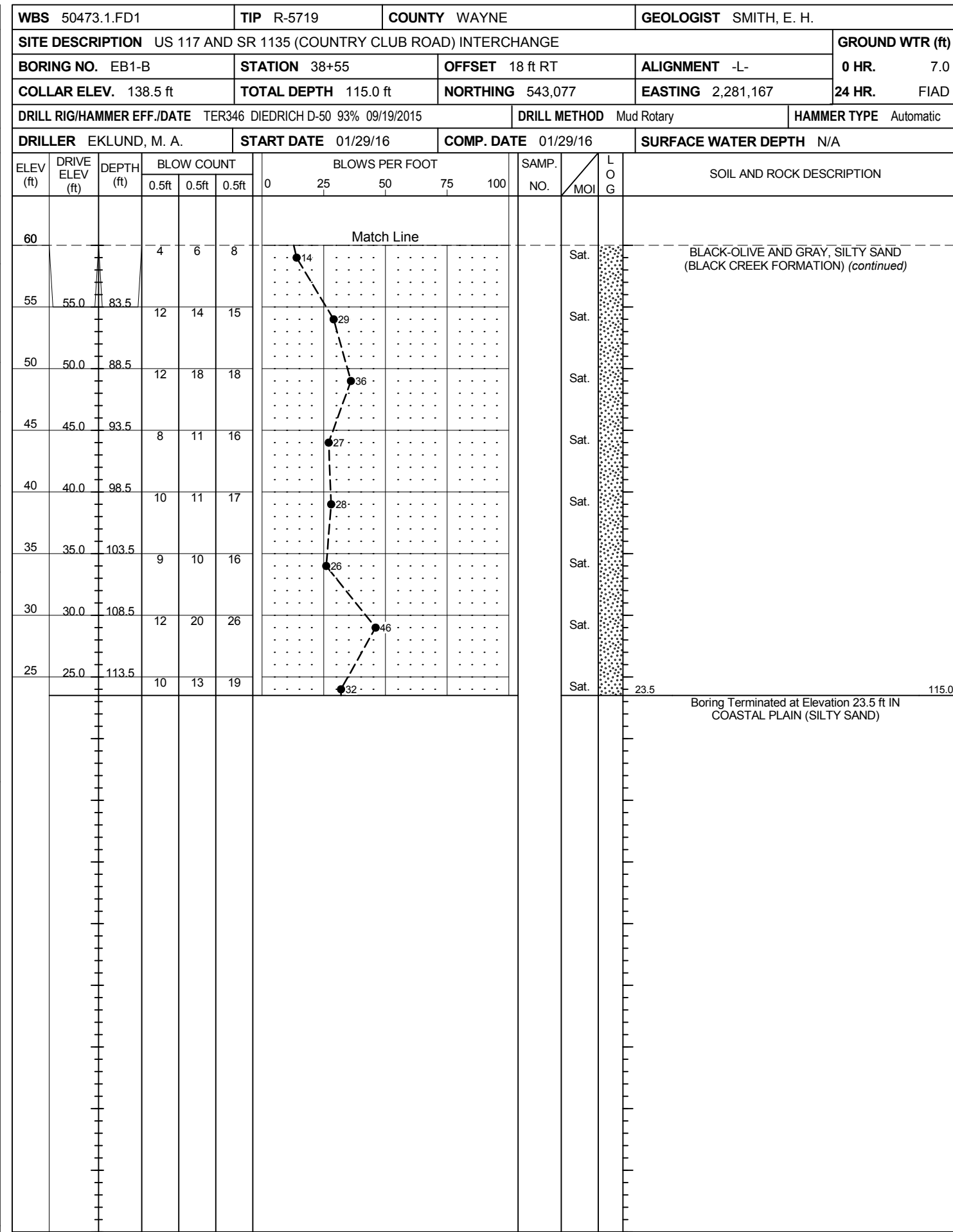
NOTES:
 BORINGS PROJECTED TO CENTERLINE
 EXISTING GROUNDLINE CREATED USING PROVIDED PROJECT TIN FILE (R5719 Is tnl.tin)

GEOTECHNICAL BORING REPORT

BORE LOG



NCDOT BORE DOUBLE R5719_GEO_BRDG_BH.GPJ_NC_DOT.GDT 4/28/16



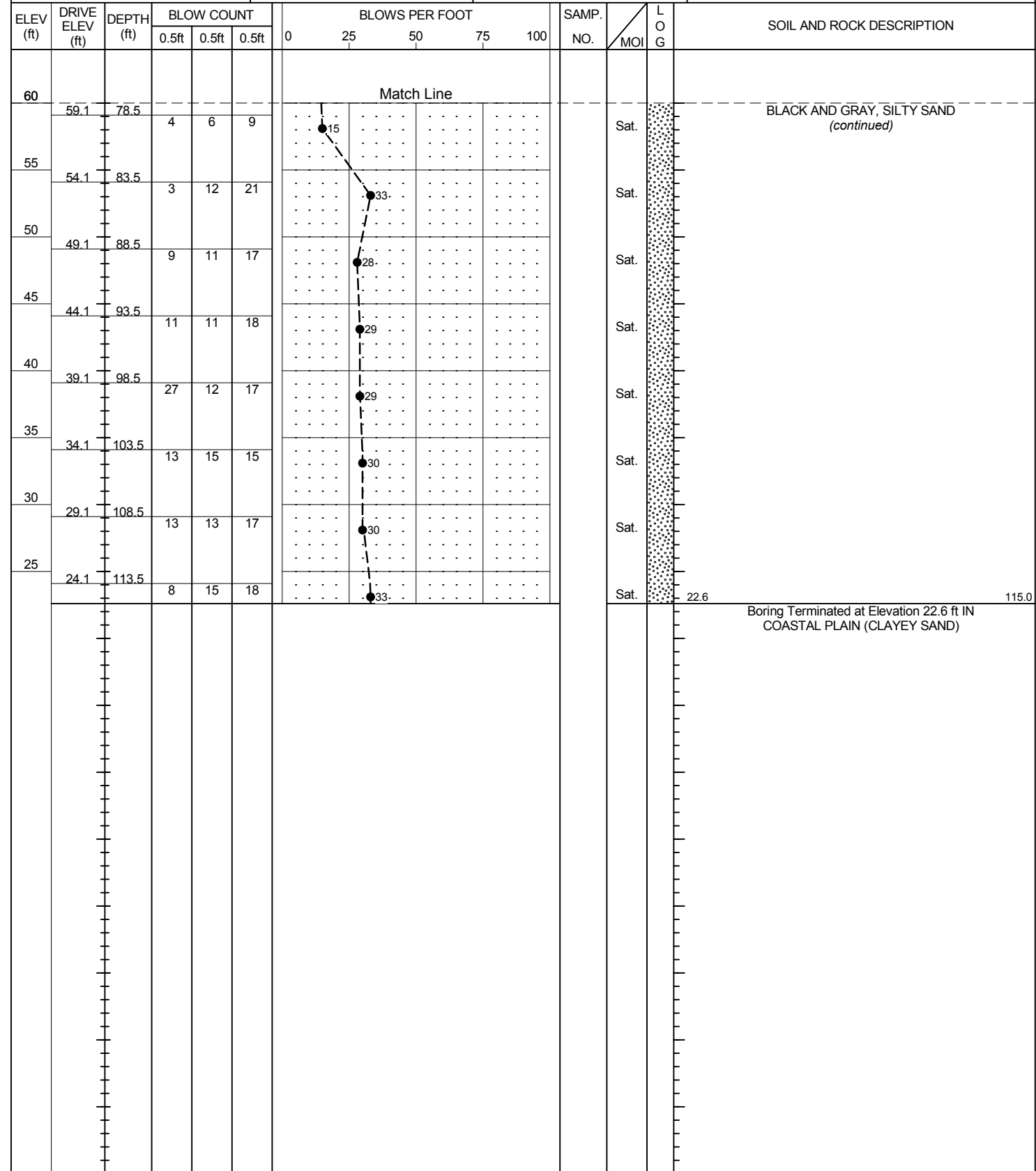
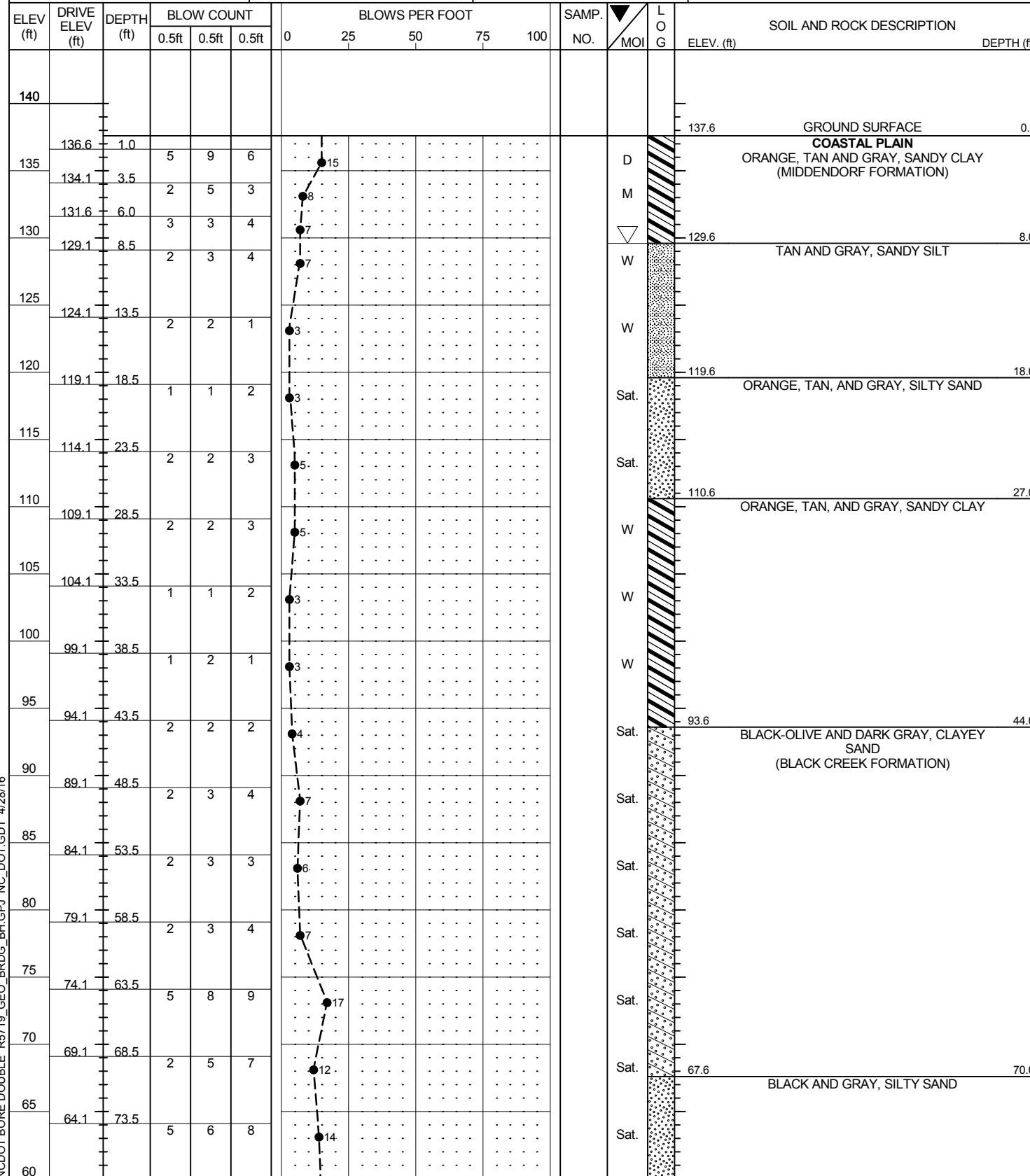
Boring Terminated at Elevation 23.5 ft IN
COASTAL PLAIN (SILTY SAND)

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 50473.1.FD1		TIP R-5719		COUNTY WAYNE		GEOLOGIST SMITH, E. H.	
SITE DESCRIPTION US 117 AND SR 1135 (COUNTRY CLUB ROAD) INTERCHANGE							GROUND WTR (ft)
BORING NO. EB2-A		STATION 39+81		OFFSET 15 ft LT		ALIGNMENT -L-	
COLLAR ELEV. 137.6 ft		TOTAL DEPTH 115.0 ft		NORTHING 543,207		EASTING 2,281,157	
DRILL RIG/HAMMER EFF./DATE TER346 DIEDRICH D-50 93% 09/19/2015		DRILL METHOD Mud Rotary		HAMMER TYPE Automatic			
DRILLER EKLUND, M. A.		START DATE 02/01/16		COMP. DATE 02/01/16		SURFACE WATER DEPTH N/A	

WBS 50473.1.FD1		TIP R-5719		COUNTY WAYNE		GEOLOGIST SMITH, E. H.	
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DRILLER EKLUND, M. A.		START DATE 02/01/16		COMP. DATE 02/01/16		SURFACE WATER DEPTH N/A	



NCDOT BORE DOUBLE R5719_GEO_BRDG_BH.GPJ_NC_DOT.GDT 4/28/16

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 50473.1.FD1		TIP R-5719		COUNTY WAYNE		GEOLOGIST SMITH, E. H.	
SITE DESCRIPTION US 117 AND SR 1135 (COUNTRY CLUB ROAD) INTERCHANGE							GROUND WTR (ft)
BORING NO. EB2-B		STATION 39+50		OFFSET 80 ft RT		ALIGNMENT -L-	
COLLAR ELEV. 136.9 ft		TOTAL DEPTH 120.0 ft		NORTHING 543,160		EASTING 2,281,245	
DRILL RIG/HAMMER EFF./DATE TER346 DIEDRICH D-50 93% 09/19/2015		DRILL METHOD Mud Rotary		HAMMER TYPE Automatic			
DRILLER EKLUND, M. A.		START DATE 01/27/16		COMP. DATE 01/27/16		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	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
140																
	135.9	1.0														
135	133.4	3.5	4	3	4											
	130.9	6.0	2	2	2											
130	128.4	8.5	1	2	2											
	123.4	13.5	4	5	5											
125	123.4	13.5	2	2	2											
	118.4	18.5	2	2	1											
120	113.4	23.5	3	3	5											
	108.4	28.5	2	2	1											
115	103.4	33.5	1	1	1											
	98.4	38.5	2	2	1											
110	93.4	43.5	2	1	2											
	88.4	48.5	2	2	2											
105	83.4	53.5	2	3	3											
	78.4	58.5	4	4	4											
100	73.4	63.5	3	4	4											
	68.4	68.5	4	7	9											
95	63.4	73.5	7	10	12											

WBS 50473.1.FD1		TIP R-5719		COUNTY WAYNE		GEOLOGIST SMITH, E. H.	
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DRILLER EKLUND, M. A.		START DATE 01/27/16		COMP. DATE 01/27/16		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	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
60																
	58.4	78.5	8	9	10											
55	53.4	83.5	3	6	19											
	48.4	88.5	9	17	20											
50	43.4	93.5	8	13	15											
	38.4	98.5	8	12	16											
45	33.4	103.5	9	14	18											
	28.4	108.5	9	11	16											
40	23.4	113.5	9	9	18											
	18.4	118.5	10	13	15											

NCDOT BORE DOUBLE R5719_GEO_BRDG_BH.GPJ_NC_DOT.GDT 4/28/16

Match Line

BLACK-OLIVE AND DARK GRAY, SILTY SAND WITH SHELL FRAGMENTS AND LIGNITE (continued)

Boring Terminated at Elevation 16.9 ft IN COASTAL PLAIN (SILTY SAND)

Other Samples:
ST-2 (15.0 - 17.4)