

REFERENCE: U-4015A

PROJECT: 35013

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4015A	1	18

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STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY GUILFORD
PROJECT DESCRIPTION GALLIMORE DAIRY RD.
WIDENING FROM NC 68 (LYNWOOD SMITH
EXPY.) TO AIRPARK RD IN GREENSBORO

SITE DESCRIPTION
WALL NO. 1: -L- STA. 27+25 TO -L- STA. 29+50 (LT)
WALL NO. 2: -L- STA. 44+00 TO -L- STA. 45+00 (LT)
WALL NO. 3: -L- STA. 48+00 TO -L- STA. 53+00 (LT)

INVENTORY

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 (ON-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

B. GOODE

S. KABRA

F&R PERSONNEL

INVESTIGATED BY RK&K, LLP

DRAWN BY B. GOODE

CHECKED BY A. ASOUDEH

SUBMITTED BY RK&K, LLP

DATE APRIL 2022

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DocuSigned by:
Atefeh Asoudeh
46293DE2849B4C...

SEAL
043747
ENGINEER
ATEFEH ASOUDEH
04/2024

SIGNATURE

DATE

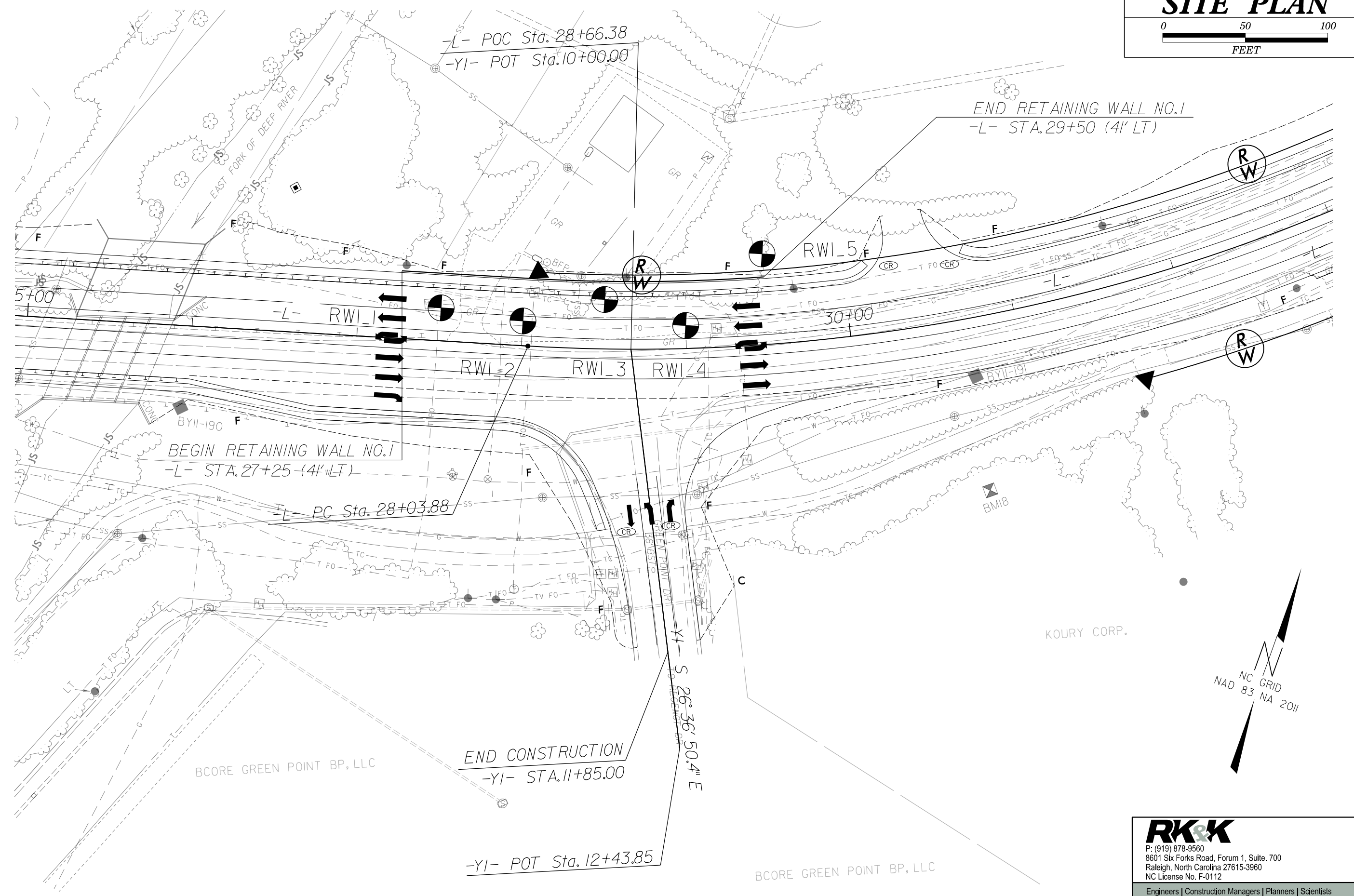
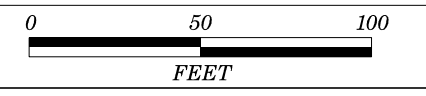
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GEOTECHNICAL ENGINEERING UNIT
SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

Table with 4 main columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, and TERMS AND DEFINITIONS. It contains detailed technical specifications, symbols, and abbreviations for geotechnical engineering.

SITE PLAN

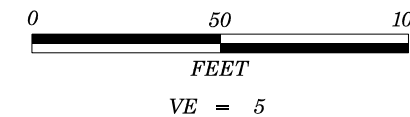


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RETAINING WALL NO. 1

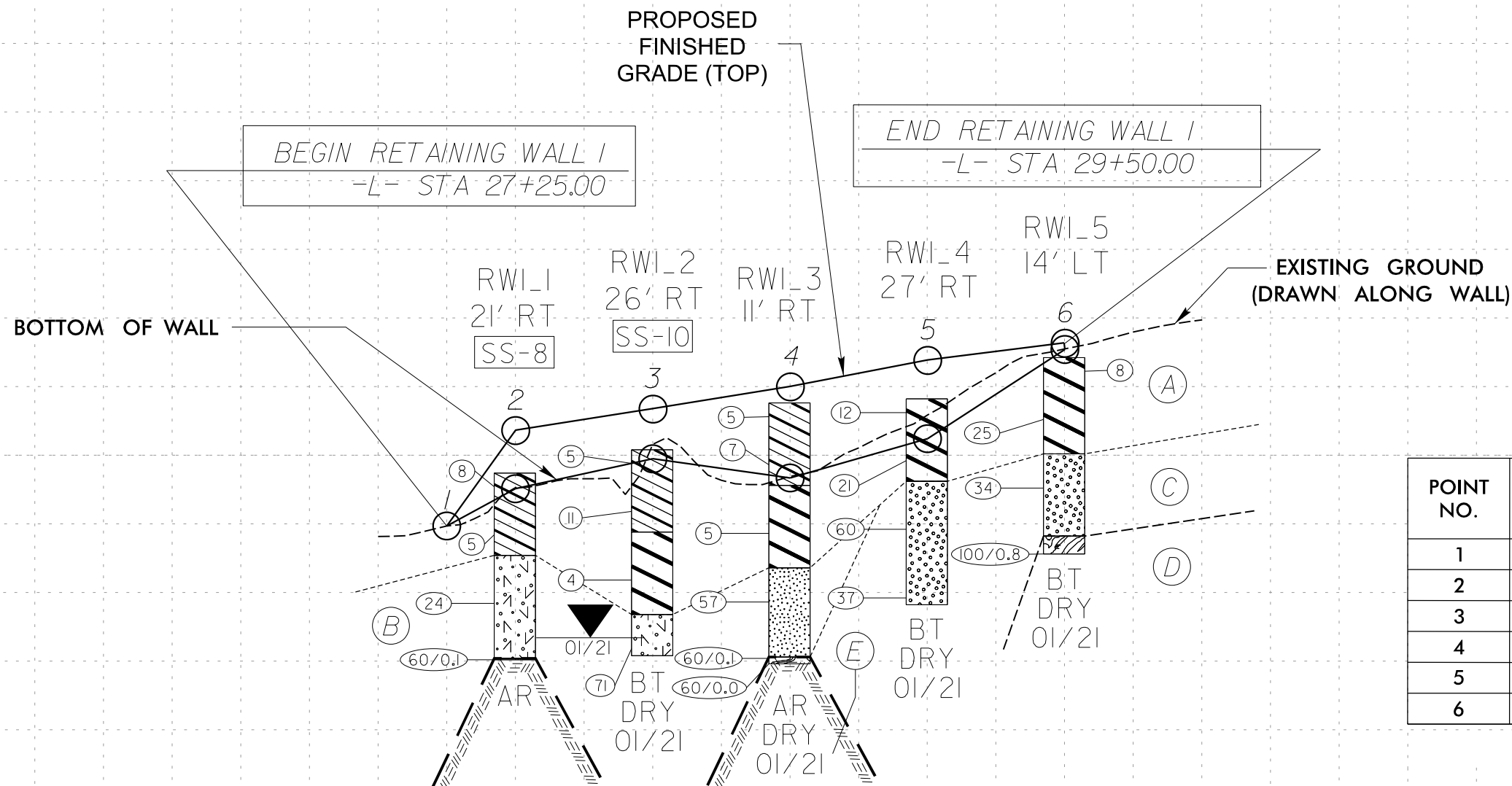


PROJECT REFERENCE NO. SHEET NO.

U-4015A 4

PROFILE ALONG -L-

SOIL TEST RESULTS															
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-8	27+50	20' LT	3.5-5.0'	A-6	37	17	23	23	17	38	99	84	59	23	ND
SS-10	28+00	15' LT	0.0-1.5'	A-6	32	14	ND	ND	ND	ND	44	0	56	18	ND



POINT NO.	-L- STATION	PROPOSED FINISHED GRADE (TOP)	BOTTOM OF WALL
1	27+25.00	804.85'	804.85'
2	27+50.00	811.84'	807.57'
3	28+00.00	813.41'	809.76'
4	28+50.00	815.04'	808.37'
5	29+00.00	816.98'	811.24'
6	29+50.00	818.24'	817.75'

- (A) RESIDUAL Brown to brown-orange to tan-brown, medium stiff to very stiff, sandy slightly to moderately plastic CLAY and silty CLAY (A-6, A-7-5, A-7-6), trace rock fragments, trace of organic matter, saprolitic, moist
- (B) Brown and gray-green to dark gray, very stiff to hard, sandy and clayey SILT (A-4, A-5), trace mica, trace rock fragments, saprolitic, moist
- (C) Brown-white-gray-black to brown-gray to brown, dense to very dense, silty fine to coarse SAND (A-2-4), trace rock fragments, moist
- (D) WEATHERED ROCK METAGRANITE
- (E) CRYSTALLINE ROCK METAGRANITE

-L-



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26+00

27+00

28+00

29+00

30+00

31+00

32+00

8/17/99

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GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.										
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 1							GROUND WTR (ft)									
BORING NO. RW1_3		STATION 28+50		OFFSET 30 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 813.8 ft		TOTAL DEPTH 19.0 ft		NORTHING 844,344		EASTING 1,717,887										
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER Tignor, D.		START DATE 01/06/21		COMP. DATE 01/06/21		SURFACE WATER DEPTH N/A										
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						
815	813.8	0.0	1	3	2									813.8	0.0	GROUND SURFACE
810	810.3	3.5	4	3	4									807.8	6.0	RESIDUAL Brown, medium stiff, sandy CLAY (A-6), trace rock fragments
805	805.3	8.5	1	3	2									801.8	12.0	Brown, medium stiff, sandy silty CLAY (A-7-5), trace rock fragments
800	800.3	13.5	47	27	30									801.8	12.0	Dark gray, hard, sandy SILT (A-4), trace rock fragments
795	795.3	18.5												795.3	18.5	CRYSTALLINE ROCK METAGRANITE Boring Terminated with Standard Penetration Test Refusal at Elevation 794.8 ft In Crystalline Rock Metagranite
	794.8	19.0	60/0.1											794.8	19.0	

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.										
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 1							GROUND WTR (ft)									
BORING NO. RW1_4		STATION 29+00		OFFSET 14 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 814.1 ft		TOTAL DEPTH 15.0 ft		NORTHING 844,346		EASTING 1,717,938										
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER Tignor, D.		START DATE 01/07/21		COMP. DATE 01/07/21		SURFACE WATER DEPTH N/A										
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						
815	814.1	0.0	4	5	7									814.1	0.0	GROUND SURFACE
810	810.6	3.5	12	12	9									808.1	6.0	RESIDUAL Brown, stiff to very stiff, sandy silty CLAY (A-7-5), trace rock fragments
805	805.6	8.5	16	29	31									808.1	6.0	Brown-white-gray-black to brown-gray, dense to very dense, silty fine to coarse SAND (A-2-4), trace rock fragments
800	800.6	13.5	18	22	15									799.1	15.0	Boring Terminated at Elevation 799.1 ft In Residual silty SAND (A-2-4)

NCDOT BORE DOUBLE U-4015A_RKK GPFJ NC_DOT.GDT 3/25/22

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.										
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 1							GROUND WTR (ft)									
BORING NO. RW1_5		STATION 29+50		OFFSET 55 ft LT		ALIGNMENT -L-										
COLLAR ELEV. 817.1 ft		TOTAL DEPTH 14.3 ft		NORTHING 844,402		EASTING 1,717,968										
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Tignor, D.		START DATE 01/06/21		COMP. DATE 01/06/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV. (ft)	DEPTH (ft)		
820																
	817.1	0.0	2	2	6									817.1	0.0	GROUND SURFACE
815	813.6	3.5	7	10	15											RESIDUAL Orange-brown to tan-brown, stiff to very stiff, silty CLAY (A-7-6), trace rock fragments
810	808.6	8.5	9	17	17									810.1	7.0	Brown, dense, silty fine to coarse SAND (A-2-4), trace rock fragments
805	803.6	13.5	25	75/0.3										804.1	13.0	WEATHERED ROCK METAGRANITE
														802.8	14.3	Boring Terminated at Elevation 802.8 ft in Weathered Rock Metagranite

NCDOT BORE DOUBLE U-4015A_RKK.GPJ NC_DOT.GDT 3/25/22

SITE PLAN

0 50 100

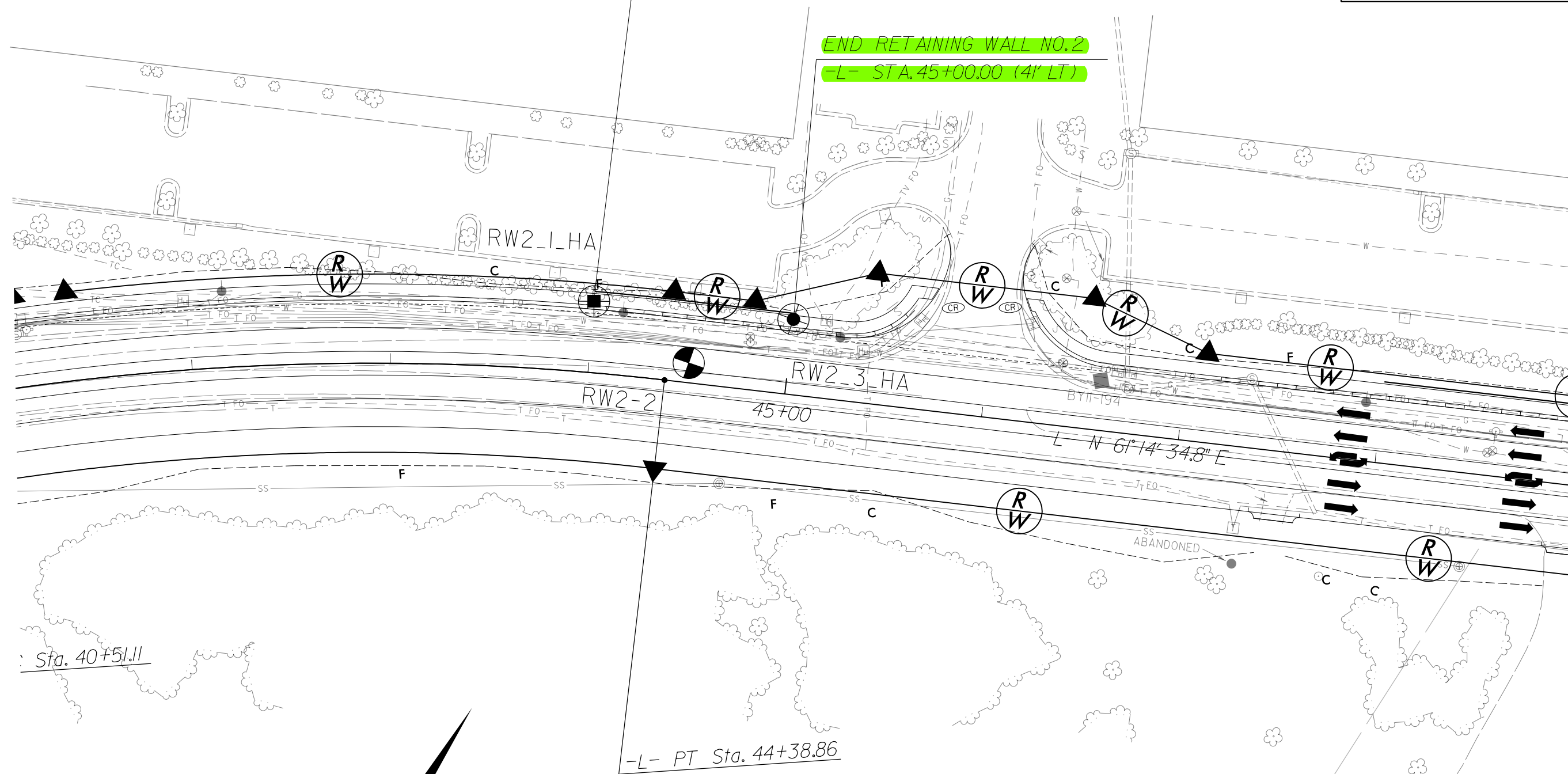
FEET

BEGIN RETAINING WALL NO.2

-L- STA. 44+00.00 (4' LT)

END RETAINING WALL NO.2

-L- STA. 45+00.00 (4' LT)



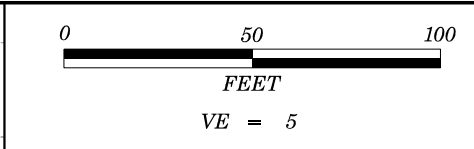
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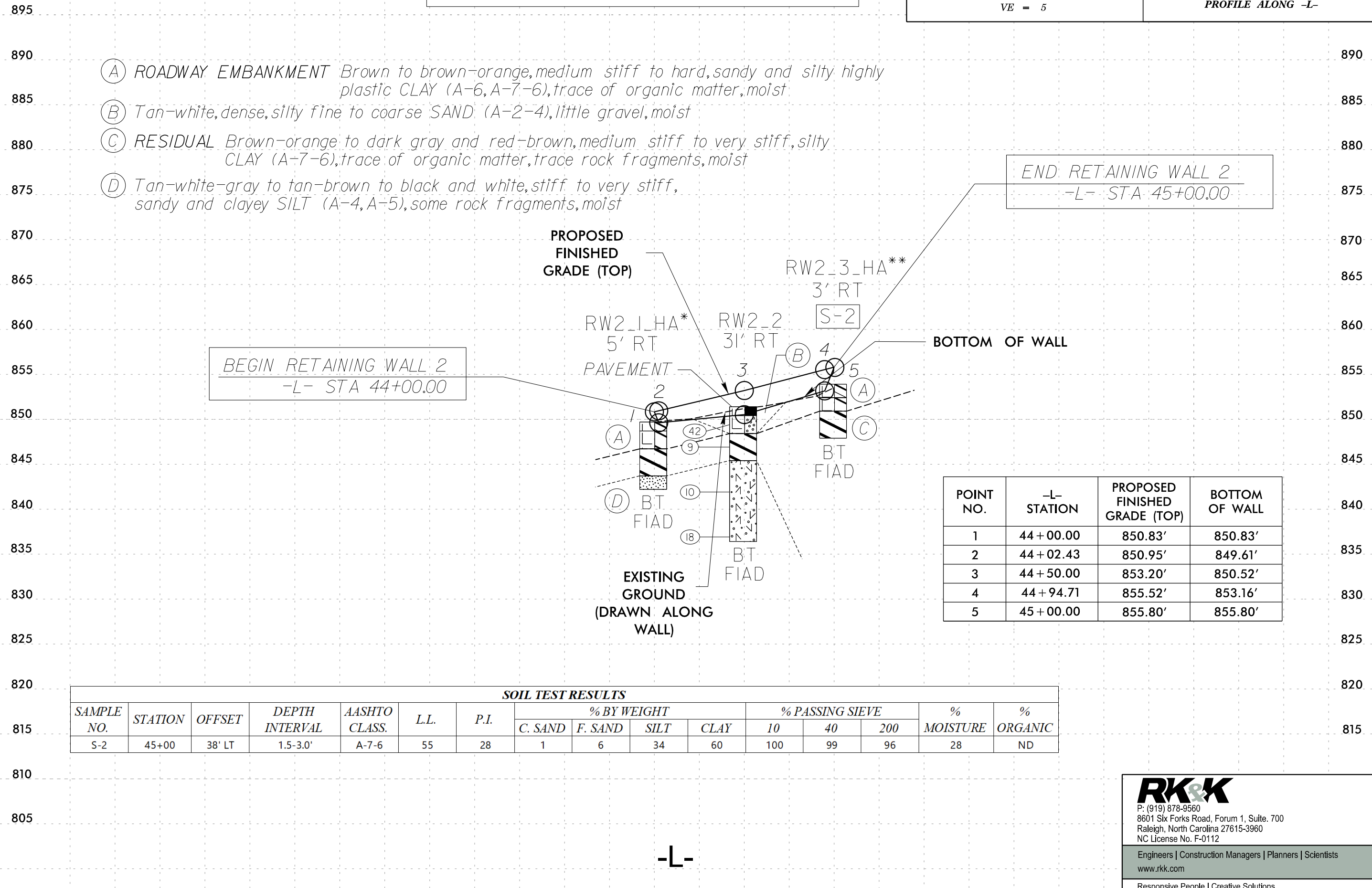
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RETAINING WALL NO. 2



PROJECT REFERENCE NO.	SHEET NO.
U-4015A	9
PROFILE ALONG -L-	



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41+00 42+00 43+00 44+00 45+00 46+00 47+00

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 2							GROUND WTR (ft)								
BORING NO. RW2_1_HA		STATION 44+00		OFFSET 36 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 849.7 ft		TOTAL DEPTH 7.5 ft		NORTHING 845,328		EASTING 1,719,059									
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE Manual									
DRILLER Kabra, S.		START DATE 01/19/21		COMP. DATE 01/19/21		SURFACE WATER DEPTH N/A									
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					
850														849.7 GROUND SURFACE 0.0	
														849.2 ROADWAY EMBANKMENT 0.5	
														848.7 Brown, very stiff, sandy CLAY (A-6) 1.0	
														848.2 DCP blows - 3, 9, and 11 1.5	
														847.2 DCP blows - 5, 9, and 10 2.5	
														846.7 Brown, very stiff, silty CLAY (A-7-6) 3.0	
														846.2 DCP blows - 6, 10, and 10 3.5	
														845.2 DCP blows - 13, 11, and 12 4.5	
														843.7 RESIDUAL 6.0	
														842.2 Brown-orange, very stiff, silty CLAY (A-7-6) 7.5	
														DCP values converted to equivalent SPT blows/ft. Boring Terminated at Elevation 842.2 ft In Residual clayey sandy SILT (A-4)	

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 2							GROUND WTR (ft)								
BORING NO. RW2_2		STATION 44+50		OFFSET 10 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 851.4 ft		TOTAL DEPTH 15.0 ft		NORTHING 845,330		EASTING 1,719,116									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Tignor, D.		START DATE 01/12/21		COMP. DATE 01/12/21		SURFACE WATER DEPTH N/A									
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					
855														851.4 GROUND SURFACE 0.0	
														850.4 ROADWAY EMBANKMENT 1.0	
														850.4 0.6' Asphalt, 0.4' ABC 1.0	
														848.4 Tan-white, dense, silty fine to coarse SAND (A-2-4), little gravel 3.0	
														845.4 RESIDUAL 6.0	
														842.9 Dark gray and red-brown, stiff, silty CLAY (A-7-6), trace rock fragments 8.5	
														840 Black and white to tan-brown, stiff to very stiff, clayey SILT (A-5), some rock fragments 10.0	
														837.9 Boring Terminated at Elevation 836.4 ft In Residual clayey SILT (A-5) 13.5	
														836.4 15.0	

NCDOT BORE DOUBLE U-4015A_RKK.GPJ NC_DOT.GDT 3/29/22

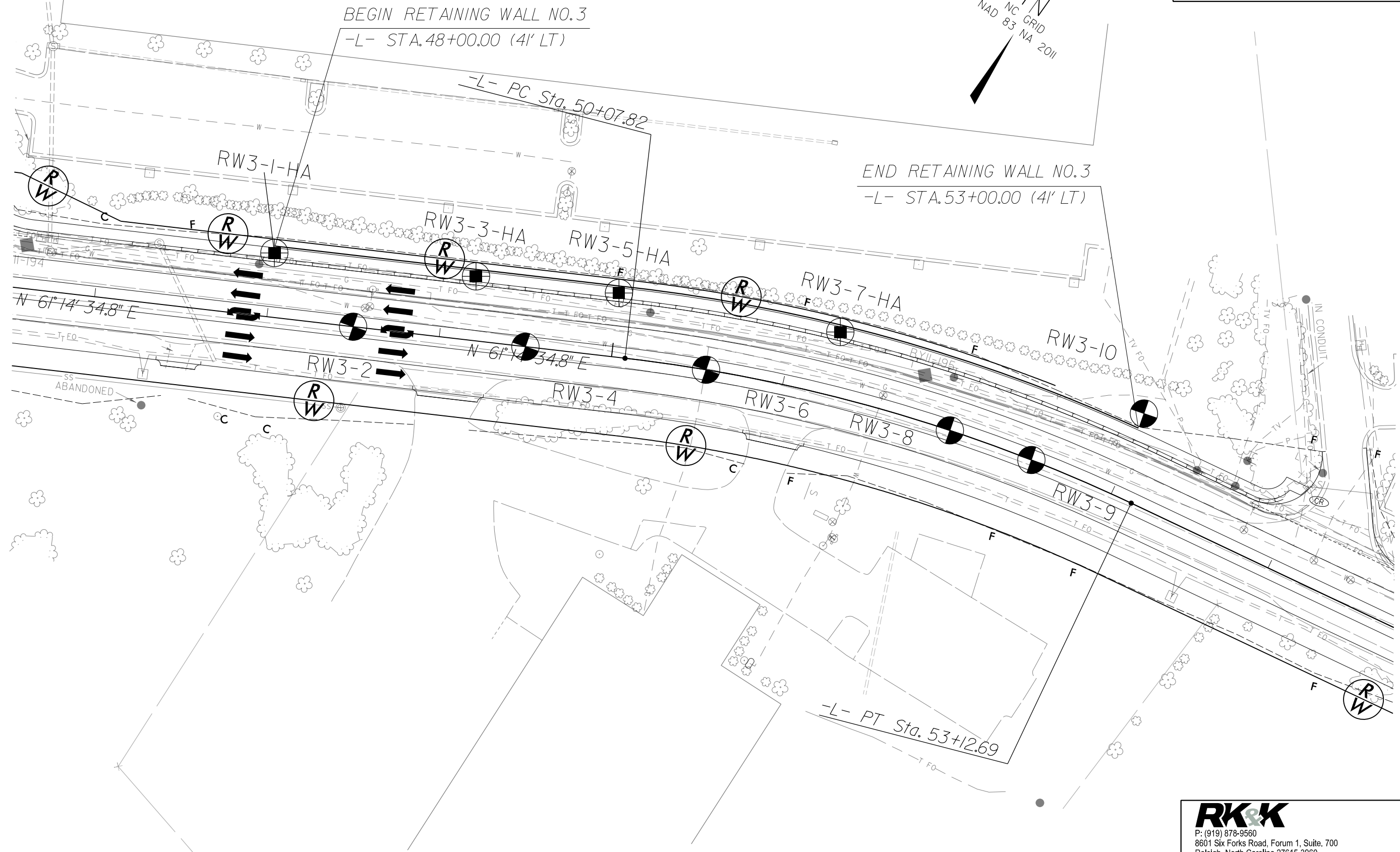
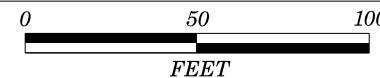
GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.											
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 2							GROUND WTR (ft)										
BORING NO. RW2_3_HA		STATION 45+00		OFFSET 38 ft LT		ALIGNMENT -L-											
COLLAR ELEV. 853.9 ft		TOTAL DEPTH 6.0 ft		NORTHING 845,379		EASTING 1,719,147											
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD Hand Auger		HAMMER TYPE Manual											
DRILLER Kabra, S.		START DATE 01/19/21		COMP. DATE 01/19/21		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				ELEV. (ft)	DEPTH (ft)		
855															853.9	GROUND SURFACE	0.0
															852.4	ROADWAY EMBANKMENT	1.5
															850.9	Brown-orange, very stiff, sandy CLAY (A-6) SR blows - 1, 6, and 8	3.0
850																Brown, hard, sandy silty highly plastic CLAY (A-7-6) SR blows - 4, 10, and 11	6.0
																RESIDUAL Brown-orange, very stiff, silty CLAY (A-7-6) SR blows - 3, 4, and 5 SR blows - 10, 7, and 10	
																Boring Terminated at Elevation 847.9 ft In Residual silty CLAY (A-7-6)	
																Sounding Rod blows/ft values converted to equivalent SPT blows/ft	

NCDOT BORE DOUBLE U-4015A_RKK.GPJ NC_DOT.GDT 3/29/22

SITE PLAN

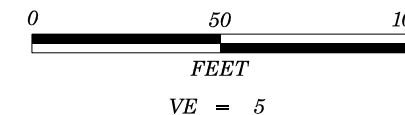


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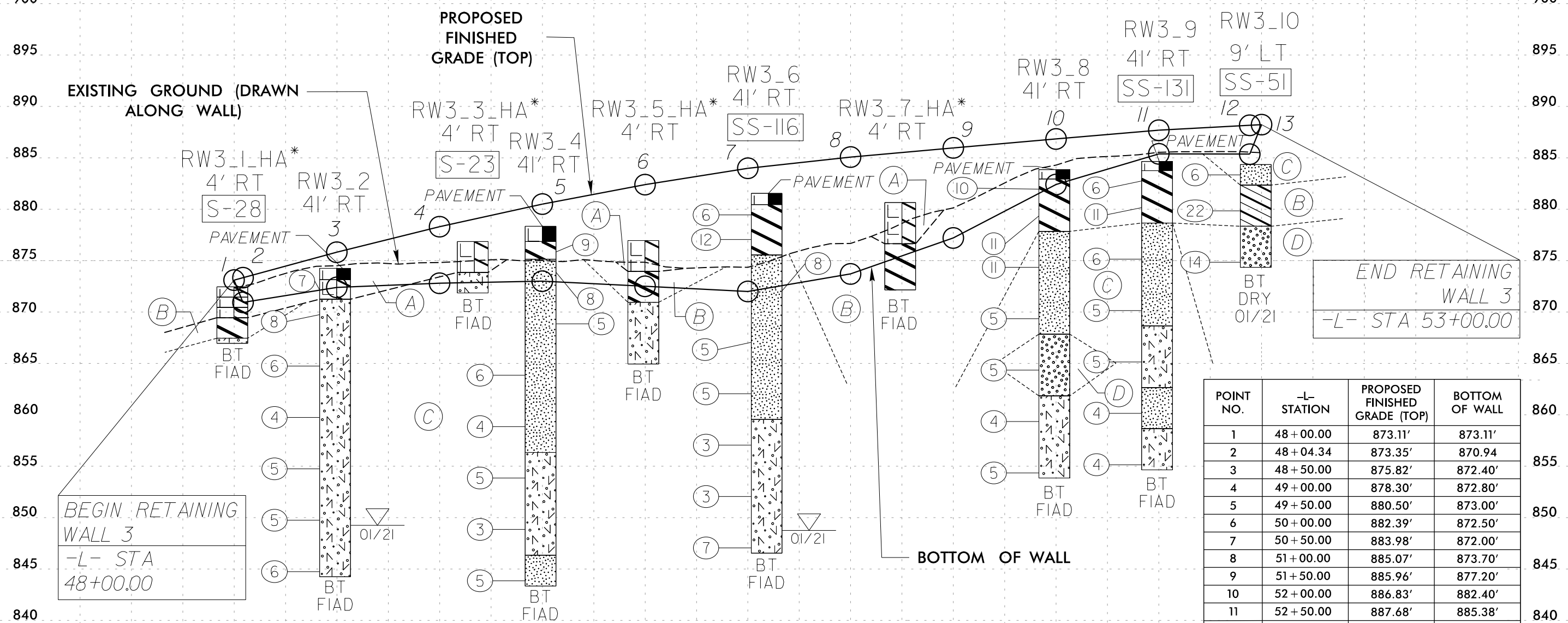
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RETAINING WALL NO. 3



PROJECT REFERENCE NO.	SHEET NO.
U-4015A	13
PROFILE ALONG -L-	

- (A) ROADWAY EMBANKMENT Brown to brown-red-black to red-brown, medium stiff to very stiff, sandy and silty highly plastic CLAY (A-6, A-7-5, A-7-6), trace of organic matter, trace gravel, trace mica, moist
- (B) RESIDUAL Brown to brown-black to red-orange, medium stiff to very stiff, sandy and silty highly plastic CLAY (A-6, A-7-6), trace of organic matter, trace rock fragments, trace mica, moist
- (C) Tan-brown to red-orange-brown to orange-tan-black to orange-white, soft to stiff, sandy and clayey SILT (A-4, A-5), trace of organic matter, trace to little mica, saprolitic, moist to saturated
- (D) Tan-brown to red-orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-5), trace mica, trace rock fragments, saprolitic, moist



END RETAINING WALL 3
-L- STA 53+00.00

POINT NO.	-L- STATION	PROPOSED FINISHED GRADE (TOP)	BOTTOM OF WALL
1	48+00.00	873.11'	873.11'
2	48+04.34	873.35'	870.94
3	48+50.00	875.82'	872.40'
4	49+00.00	878.30'	872.80'
5	49+50.00	880.50'	873.00'
6	50+00.00	882.39'	872.50'
7	50+50.00	883.98'	872.00'
8	51+00.00	885.07'	873.70'
9	51+50.00	885.96'	877.20'
10	52+00.00	886.83'	882.40'
11	52+50.00	887.68'	885.38'
12	52+94.27	888.16'	885.35'
13	53+00.00	888.22'	888.22'

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
S-28	48+00	37' LT	0.0-1.0'	A-7-5	61	30	10	19	20	51	99	93	75	30	ND
S-23	49+17	37' LT	0.0-1.0'	A-7-5	58	28	ND	ND	ND	ND	36	0	64	25	ND
SS-116	50+60	0 CL	1.1-2.6'	A-7-6	58	31	11	15	16	59	100	94	78	26	ND
SS-131	52+50	0 CL	0.9-2.4'	A-7-6	56	28	13	17	22	48	97	89	72	31	ND
SS-51	52+98	50' LT	0.0-1.5'	A-4	18	3	ND	ND	ND	ND	ND	ND	43	12	ND

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GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_1_HA		STATION 48+00		OFFSET 37 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 872.5 ft		TOTAL DEPTH 5.5 ft		NORTHING 845,522		EASTING 1,719,410									
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE Manual									
DRILLER Kabra, S.		START DATE 01/19/21		COMP. DATE 01/19/21		SURFACE WATER DEPTH N/A									
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					
875															
870															

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_2		STATION 48+50		OFFSET CL		ALIGNMENT -L-									
COLLAR ELEV. 874.3 ft		TOTAL DEPTH 30.0 ft		NORTHING 845,514		EASTING 1,719,472									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Tignor, D.		START DATE 01/12/21		COMP. DATE 01/12/21		SURFACE WATER DEPTH N/A									
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					
875															
	873.2	1.1		3	3	4									
	870.8	3.5		2	3	5									
870															
	865.8	8.5		1	3	3									
865															
	860.8	13.5		2	2	2									
860															
	855.8	18.5		2	2	3									
855															
	850.8	23.5		2	2	3									
850															
	845.8	28.5		2	2	4									
845															

NCDOT BORE DOUBLE U-4015A_RKK.GPJ NC_DOT.GDT 3/29/22

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Kabra, S.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_3_HA		STATION 49+17		OFFSET 37 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 876.9 ft		TOTAL DEPTH 5.0 ft		NORTHING 845,578		EASTING 1,719,513									
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE Manual									
DRILLER Goode, B.		START DATE 01/19/21		COMP. DATE 01/19/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
880															
875															

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_4		STATION 49+50		OFFSET CL		ALIGNMENT -L-									
COLLAR ELEV. 878.4 ft		TOTAL DEPTH 35.0 ft		NORTHING 845,562		EASTING 1,719,560									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Tignor, D.		START DATE 01/14/21		COMP. DATE 01/14/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
880															
875	876.9	1.5	3	4	5										
	874.9	3.5	2	4	4										
870	869.9	8.5	2	2	3										
865	864.9	13.5	2	3	3										
860	859.9	18.5	2	2	2										
855	854.9	23.5	2	2	3										
850	849.9	28.5	1	1	2										
845	844.9	33.5	1	2	3										

NCDOT BORE DOUBLE U-4015A_RKK GPFJ NC_DOT.GDT 3/29/22

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_7_HA		STATION 51+25		OFFSET 37 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 880.7 ft		TOTAL DEPTH 8.5 ft		NORTHING 845,674		EASTING 1,719,703									
DRILL RIG/HAMMER EFF./DATE N/A			DRILL METHOD Hand Auger			HAMMER TYPE Manual									
DRILLER Kabra, S.		START DATE 01/19/21		COMP. DATE 01/19/21		SURFACE WATER DEPTH N/A									
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					
885															
880															
875															

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_8		STATION 52+00		OFFSET CL		ALIGNMENT -L-									
COLLAR ELEV. 883.9 ft		TOTAL DEPTH 30.0 ft		NORTHING 845,664		EASTING 1,719,787									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Tignor, D.		START DATE 01/18/21		COMP. DATE 01/18/21		SURFACE WATER DEPTH N/A									
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					
885															
880	883.0	0.9													
875	880.4	3.5	4	5	5										
870	875.4	8.5	3	5	6										
865	870.4	13.5	1	2	3										
860	865.4	18.5	1	2	3										
855	860.4	23.5	1	1	3										
	855.4	28.5	1	2	3										

NCDOT BORE DOUBLE U-4015A_RKK GPFJ NC_DOT.GDT 3/29/22

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_9		STATION 52+50		OFFSET CL		ALIGNMENT -L-									
COLLAR ELEV. 884.7 ft		TOTAL DEPTH 30.0 ft		NORTHING 845,678		EASTING 1,719,835									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Tignor, D.		START DATE 01/18/21		COMP. DATE 01/18/21		SURFACE WATER DEPTH N/A									
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					
885	883.8	0.9	4	3	3									884.7 GROUND SURFACE 0.0	
	881.2	3.5	3	4	7									883.8 ROADWAY EMBANKMENT 0.9	
880														881.7 Red-orange, medium stiff, silty highly plastic CLAY (A-7-6) 3.0	
	876.2	8.5	2	3	3									878.7 RESIDUAL Red-orange, stiff, silty highly plastic CLAY (A-7-6) 6.0	
875														Orange-red, medium stiff, sandy SILT (A-4), saprolitic	
870	871.2	13.5	1	2	3										
865	866.2	18.5	1	2	3									868.7 Orange-white, medium stiff, clayey SILT (A-5), saprolitic 16.0	
860	861.2	23.5	1	2	2									862.7 Tan-brown-orange, medium stiff, sandy SILT (A-4), saprolitic 22.0	
855	856.2	28.5	1	2	2									858.7 Tan-orange, medium stiff, clayey SILT (A-5), saprolitic 26.0	
														854.7 Boring Terminated at Elevation 854.7 ft In Residual clayey SILT (A-5) 30.0	

WBS 35013.1.1		TIP U-4015A		COUNTY GUILFORD		GEOLOGIST Goode, B.									
SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3							GROUND WTR (ft)								
BORING NO. RW3_10		STATION 52+98		OFFSET 50 ft LT		ALIGNMENT -L-									
COLLAR ELEV. 884.4 ft		TOTAL DEPTH 10.0 ft		NORTHING 845,737		EASTING 1,719,873									
DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/2021			DRILL METHOD H.S. Augers		HAMMER TYPE Automatic										
DRILLER Tignor, D.		START DATE 01/11/21		COMP. DATE 01/11/21		SURFACE WATER DEPTH N/A									
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					
885	884.4	0.0	WOH	3	3									884.4 GROUND SURFACE 0.0	
	880.9	3.5	4	10	12									882.4 ROADWAY EMBANKMENT Brown, medium stiff, sandy SILT (A-4) 2.0	
880														878.4 RESIDUAL Brown, medium stiff, sandy SILT (A-4) Red-orange, very stiff, sandy CLAY (A-6), trace rock fragments 6.0	
875	875.9	8.5	3	6	8									Red-orange, medium dense, clayey silty fine to coarse SAND (A-2-5), trace rock fragments 10.0	
														Boring Terminated at Elevation 874.4 ft In Residual clayey silty SAND (A-2-5)	