CONTENTS SHEET NO

-4015/

REFERENCE

<u>SHEET NO.</u>	DESCRIPTION
I	TITLE SHEET
2	LEGEND
3	WALL NO.ISITE PLAN
4	WALL NO.IPROFILE
5-7	WALL NO.IBORING LOGS
8	WALL NO.2 SITE PLAN
9	WALL NO.2 PROFILE
10-11	WALL NO.2 BORING LOGS
12	WALL NO.3 SITE PLAN
13	WALL NO. 3 PROFILE
4- 8	WALL NO.3 BORING LOGS

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** GEOTECHNICAL ENGINEERING UNIT

STRUCTURE SUBSURFACE INVESTIGATION

COUNTY **GUILFORD**

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

SITE DESCRIPTION

<i>WALL NO. 1: -L- STA. 27+25 TO</i>	-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)

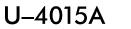
INVENTORY

$\boldsymbol{\gamma}$ 501. Ś **PROJECT**

STATE N.C

STATE PROJECT REFERENCE NO.

SHEET NO.



1

TOTAL SHEETS 18

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 SOL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N.C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (99) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARRES 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 UNPLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOLI MOISTURE CONDITIONS INCLATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOLI MOISTURE CONDITIONS MAY YARY 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 UBSURFACE 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 WARANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPNION OF THE DEPARTMENT AS TO THE TYPE TO MATERIAL AND CONTRECT ON THE INVESTIGATION AS HE DEEMS NECESSARY TO SATISFY HIMSELF AS TO 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 OF FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS OF CONTANT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES: I. 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

В.	GOODE
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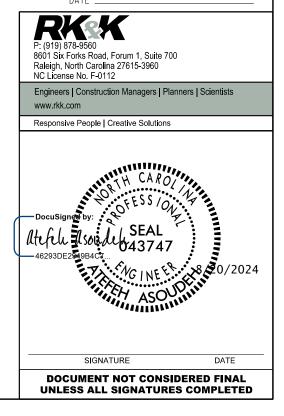
S. KABRA

F&R PERSONNEL

INVESTIGATED BY _**RK&K, LLP** DRAWN BY . B. GOODE

CHECKED BY A. ASOUDEH

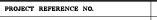
DATE ______ **APRIL 2022**



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS GEOTECHNICAL ENGINEERING UNIT SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

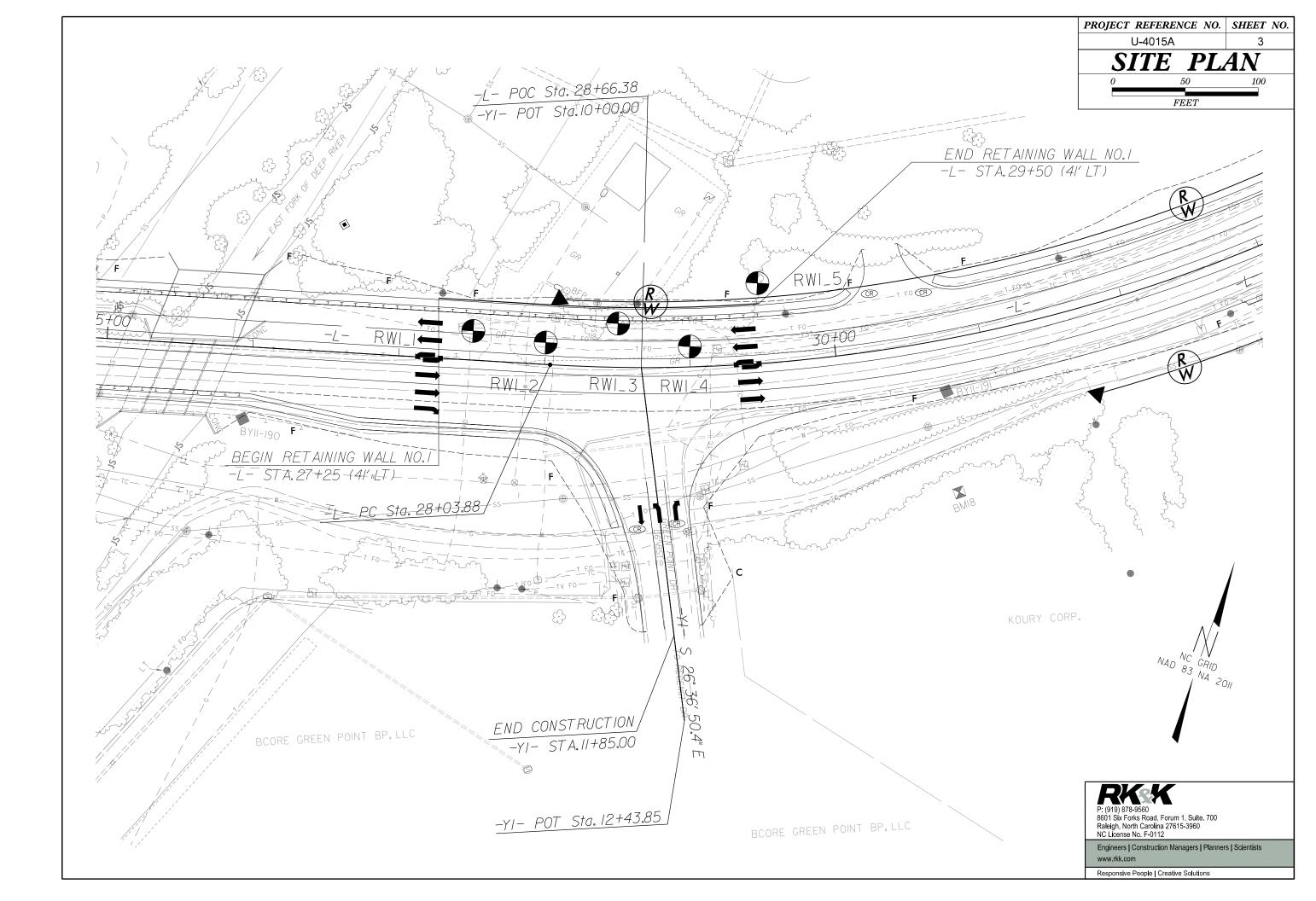
SOIL DESCRIPTION		GRADATION	ROCK DESCRIPTION
SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THA BE PENETRATED WITH A CONTINUOUS FLICHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PET ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 200, ASTM DISBÓA, SOIL CLASSIFIC IS BASED ON THE AASHTO SYSTEM, BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWIN CONSISTENCY, COLOR, TEXTURE, MOUSISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS	R FOOT CATION NG: S SUCH	WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES. ANGULARITY OF GRAINS	HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TEST ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0. BLOWS IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK REPRESENTED BY A ZONE OF WEATHERED ROCK.
AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, VERY STIFF.GRAY.SULTY CLA.MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6		THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.	ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS: WEATHERED NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SP
SOIL LEGEND AND AASHTO CLASSIFICATION GENERAL GRANULAR MATERIALS SILT-CLAY MATERIALS		MINERALOGICAL COMPOSITION	ROCK (WR) 100 BLOWS PER FOOT IF TESTED.
CLASS. (≤ 35% PASSING *200) (> 35% PASSING *200) UNGANIC MATERIA	ALS	MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.	CRYSTALLINE ROCK (CR) WOULD VIELD SPT REFUSAL IF TESTED. ROCK TYPE IN GNEISS, GABBRO, SCHIST, ETC.
CLASS. A-1-a A-1-b A-2-4 A-2-5 A-2-6 A-2-7 A-7-6 A-3 A-6 A-7		COMPRESSIBILITY	NON-CRYSTALLINE FINE TO COARSE GRAIN METAMORPHIC AND NON-COAST ROCK (NCR) FINE TO COARSE GRAIN METAMORPHIC AND NON-COAST ROCK (NCR)
SYMBOL			COASTAL PLAIN COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT
7. PASSING 10 50 MX GRANULAR SILT-	MUCK,	HIGHLY COMPRESSIBLE LL > 50 PERCENTAGE OF MATERIAL	SEDIMENTARY ROCK SPT REFUSAL, ROCK TYPE INCLUDES LIMESTONE, SAND
•40 30 MX 50 MX 51 MN •200 15 MX 25 MX 10 MX 35 MX 35 MX 35 MX 35 MX 36 MN 36 MN 36 MN 36 MN 56 MN	PEAT	GRANULAR SILT - CLAY ORGANIC MATERIAL SOILS OTHER MATERIAL	WEATHERING FRESH ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING, ROCK
MATERIAL PASSING *40 LL 40 MX 41 MN 40 MX 41 MN 40 MX 41 MN 40 MX 41 MN 50ILS WITH LT WP 10 MY 10 MY 11 MN 11 MN 10 MY 10 MY 11 MN 11 MN LITTLE OR	HIGHLY	TRACE OF ORGANIC MATTER 2 - 3% 3 - 5% TRACE 1 - 10% LITTLE ORGANIC MATTER 3 - 5% 5% LITTLE 10 - 20% MODERATELY ORGANIC 5 - 10% 12 - 20% SOME 2 0 - 35% HIGHLY ORGANIC 5 - 10% 12 - 20% SOME 20 - 35%	HAMMET IF CRYSTALLINE. VERY SLIGHT ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY C (V SLI) CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY, ROCK RINGS UNDER H OF A CRYSTALLINE NATURE.
GROUP INDEX 0 0 0 4 MX 8 MX 12 MX 14	ORGANIC SOILS	GROUND WATER V water level in bore hole immediately after drilling	SLIGHT ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO R (SLI.) I INCH, OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASION/ CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMME
GEN. RATING SAND SAND GRAVEL AND SAND SOILS SOILS GEN. RATING AS SUBGRADE EXCELLENT TO GOOD FAIR TO POOR FAIR TO POOR POOR	UNSUITABLE	▼ STATIC WATER LEVEL AFTER 24 HOURS ▼Pw PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	MODERATE SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECT (MOD.) GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CL/ DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGT WITH FRESH ROCK.
PI OF A-7-5 SUBGROUP IS < LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30			MODERATELY ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL
CONSISTENCY OR DENSENESS PRIMARY SOIL TYPE COMPACTNESS OR CONSISTENCY RANGE OF STANDARD PENETRATION RESISTENCE (N-VALUE) RANGE OF UNCC	TRENGTH	MISCELLANEOUS SYMBOLS	SEVERE AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE L (MOD. SEV.) AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES 'CLUNK' SOUND IF TESTED, WOULD YIELD SPT REFUSAL
GENERALLY VERY LOOSE < 4 GRANULAR LOOSE 4 TO 10 GRANULAR MEDIUM DEVEC 10 TO 20		SOLDE SYMBOL	SEVERE ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND I (SEV.) REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. IF TESTED, WOULD SPT N VALUES > 100 BPF
Image: Marken delta constraints DENSE delta constraints 30 TO 50 (NON-COHESIVE) VERY DENSE > 50 VERY SOFT < 2		ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT AUGER BORING CONE PENETROMETER TEST INFERRED SOIL BOUNDARY CORE BORING SOUNDING ROD	VERY ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS AI SEVERE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRADMENTS C (V SEV.) REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. <u>IF TESTED MOULD YIELD SPT</u> N
GENERALLY SOFT 2 TO 4 0.25 TO 0 SILT-CLAY MEDIUM STIFF 4 TO 8 0.5 TO 1. MATERIAL STIFF 8 TO 15 1 TO 2 (COHESIVE) VERY STIFF 15 TO 30 2 TO 4	.0	INFERRED ROCK LINE MU MONITORING WELL TEST BORING WITH CORE TTTTTTT<	COMPLETE ROCK REDUCED TO SOIL, ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY SCATTERED CONCENTRATIONS, QUARTZ MAY BE PRESENT AS DIKES OR STRINGER ALSO AN EXAMPLE.
HARD > 30 > 4 TEXTURE OR GRAIN SIZE		RECOMMENDATION SYMBOLS	ROCK HARDNESS
U.S. STD. SIEVE SIZE 4 10 40 60 200 270		X UNDERCUT Z UNCLASSIFIED EXCAVATION - TA UNCLASSIFIED EXCAVATION -	VERY HARD CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMEN SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
OPENING (MM) 4.76 2.00 0.42 0.25 0.075 0.053 DOW DED COARSE FINE COARSE FINE CUT		UNCLASSIFIED EXCAVATION - USED IN THE TOP 3 FEET OF SHALLOW UNCLASSIFIED EXCAVATION - USED IN THE TOP 3 FEET OF ACCEPTABLE DEGRADABLE ROCK EMBANKMENT OR BACKFILL	HARD CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER E TO DETACH HAND SPECIMEN.
BOULDER (BLDR,) COBBLE (COB,) GRAVEL (GR,) COBMOL (GR,) SAND (CSE, SD,) SAND (F SD,) SILT (SL,) GRAIN MM 305 75 2.0 0.25 0.05 0.005	CLAY (CL.)	ABBREVIATIONS AR - AUGER REFUSAL MED MEDIUM VST - VANE SHEAR TEST	MODERATELY CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES D HARD EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE D BY MODERATE BLOWS.
SIZE IN. 12 3 SOIL MOISTURE - CORRELATION OF TERMS		BT - BORING TERMINATED MICA MICACEOUS WEA WEATHERED CL CLAY MOD MODERATELY γ - UNIT WEIGHT CPT - CONE PENETRATION TEST NP - NON PLASTIC γ_A - DRY UNIT WEIGHT	MEDIUM CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE (HARD CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD POINT OF A GEOLOGIST'S PICK.
SOIL MOISTURE SCALE FIELD MOISTURE GUIDE FOR FIELD MOISTURE DESC (ATTERBERG LIMITS) DESCRIPTION GUIDE FOR FIELD MOISTURE DESC		CSE COARSE ORG ORGANIC DMT - DILATOMETER TEST PMT - PRESSURMETER TEST SAMPLE ABBREVIATIONS DPT - DYNAMIC PENETRATION TEST SAP SAPROLITIC S - BULK	SOFT CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK, CAN BE EXCAVATED IN FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODENATE BLOWS OF A PICK POIN PIECES CAN BE BROKEN BY FINCER PRESSURE.
- SATURATED - USUALLY LIDUID; VERY WET, USUA (SAT.) FROM BELOW THE GROUND WATER		e - VOID RATIO SD SAND, SANDY SS - SPLIT SPOON F - FINE SL SLIT, SLITY ST - SHELBY TUBE FOSS FOSSILIFEROUS SLI SLICHTLY RS - ROCK	VERY CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READLLY WITH POINT OF PICK. SOFT OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCH FINGERWALL.
RANGE - WET - (W) ATTAIN OPTIMUM MOISTURE		FRAC FRACTURED, FRACTURES TCR - TRICONE REFUSAL RT - RECOMPACTED TRIAXIAL FRAGS FRAGMENTS W - MDISTURE CONTENT CBR - CALIFORNIA BEARING	FRACTURE SPACING BEDDING
PLL _ PLASTIC LIMIT OM _ OPTIMUM MOISTURE - MOIST - (M) SOLID; AT OR NEAR OPTIMUM MOI SL _ SHRINKAGE LIMIT	ISTURE	HI HIGHLY V - VERY RATIO EQUIPMENT USED ON SUBJECT PROJECT ORILL UNITS: ADVANCING TOOLS: HAMMER TYPE:	TERM SPACING TERM VERY WIDE MORE THAN 10 FEET VERY THICKLY BEDDED WIDE 3 TO 10 FEET THICKLY BEDDED MODERATELY CLOSE 1 TO 3 FEET THINLY BEDDED
- DRY - (D) REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE)	CME-45C CLAY BITS X AUTOMATIC MANUAL X CME-55 CONTINUOUS FLIGHT AUGER CORE SIZE:	CLOSE 0.16 TO I FOOT VERY THINLY BEDDED 0.0 VERY CLOSE LESS THAN 0.16 FEET THICKLY LAMINATED 0.0 THINLY LAMINATED 0.0
PLASTICITY			INDURATION FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HE
PLASTICITY_INDEX (PI) DRY_STRENGT NON_PLASTIC 0-5 VERY_LOW \$LIGHTLY_PLASTIC 6-15 \$LIGHT			FRIABLE CENTLE BLOW BY HAMMER DISITIONERS SAMPLE.
MODERATELY PLASTIC 16-25 MEDIUM HIGHLY PLASTIC 26 OR MORE HIGH		CASING W ADVANCER POST HOLE DIGGER TRICONE STEEL TEETH HAND AUGER	MODERATELY INDURATED GRAINS CAN BE SEPARATED FROM SAMPLE WITH S BREAKS EASILY WHEN HIT WITH HAMMER.
COLOR		TUNG,-CARB, SOUNDING ROD	INDURATED GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL DIFFICULT TO BREAK WITH HAMMER.
DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.		CORE BIT VANE SHEAR TEST SOWERS DCP X	EXTREMELY INDURATED SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPL SAMPLE BREAKS ACROSS GRAINS.

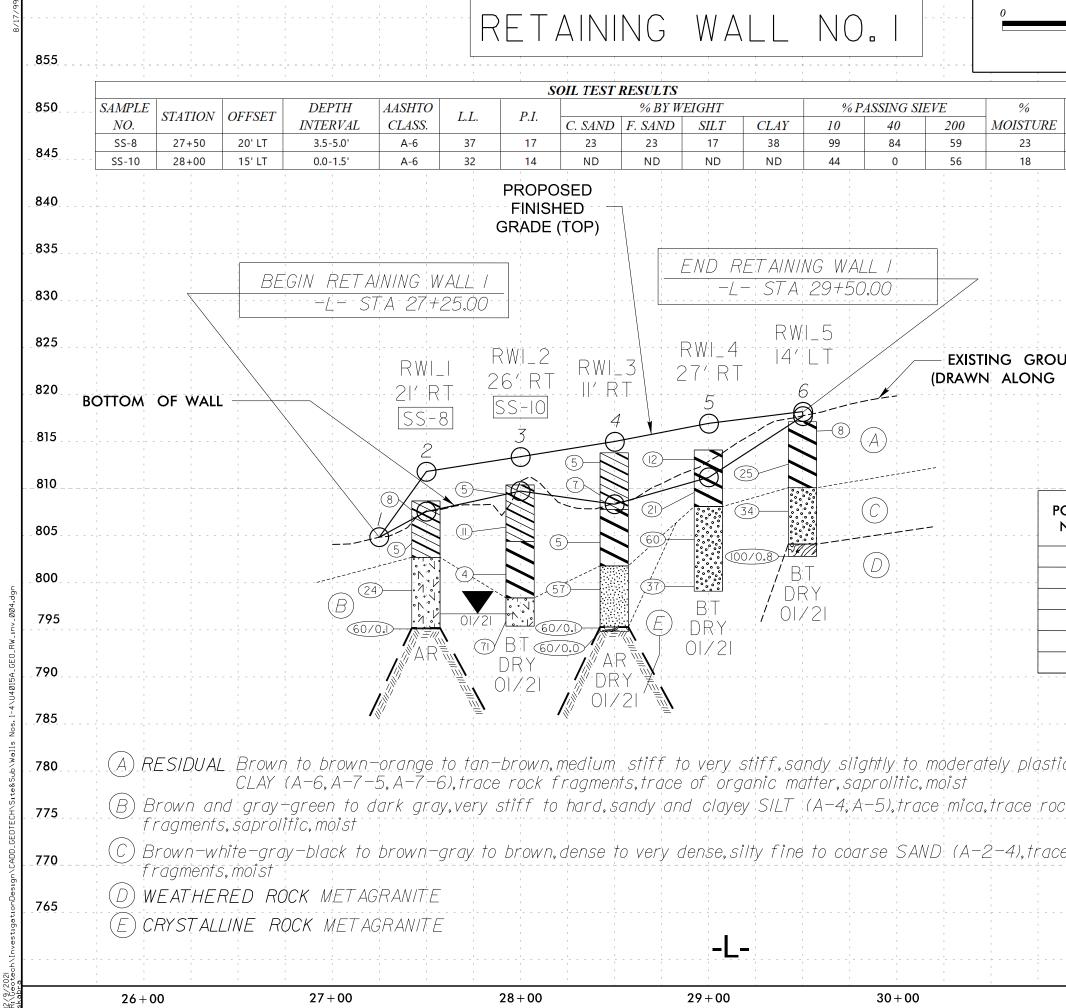




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	TERMS AND DEFINITIONS
ED. AN INFERRED SPT REFUSAL.	ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.
IFOOT PER 60	AQUIFER - A WATER BEARING FORMATION OR STRATA.
IS OFTEN	ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
「 N VALUES >	ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.
	ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT
CK THAT CLUDES GRANITE,	WHICH IT IS ENCOUNTERED,BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.
AL PLAIN	CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
IF TESTED. C.	$\underline{\text{COLLUVIUM}}$ - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.
MAY NOT YIELD STONE, CEMENTED	$\underline{\text{CORE}}$ Recovery (ReC.) - Total length of all material recovered in the CORE barrel divided by total length of CORE run and expressed as a percentage.
	DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.
RINGS UNDER	$\underline{\text{DIP}}$ - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
OATINGS IF OPEN, AMMER BLOWS IF	DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
ICK UP TO L FELDSPAR	FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
R BLOWS. S. IN	FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM
AY. ROCK HAS H AS COMPARED	PARENT MATERIAL.
	FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM. FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE
ELDSPARS DULL OSS OF STRENGTH	FIELD.
WHEN STRUCK.	JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
VIDENT BUT	LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
ARE KAOLINIZED	LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
	MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
RE DISCERNIBLE F STRONG ROCK	PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE
ONLY MINOR ALUES < 100 BPF	OF AN INTERVENING IMPERVIOUS STRATUM. RESIDUAL (RES.)SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
IN SMALL AND 5. SAPROLITE IS	ROCK QUALITY DESIGNATION (ROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SECHENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
	SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT
S REQUIRES LOWS REQUIRED	ROCK. <u>SILL</u> - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
EEP CAN BE ETACHED	<u>SLICKENSIDE</u> - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
DR PICK POINT. BLOWS OF THE	STANDARD PENETRATION TEST (PENETRATION RESISTANCE)(SPT) - NUMBER OF BLOWS (N OR BPF)OF A 140 LB.HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER, SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.
FRAGMENTS IT. SMALL, THIN	<u>STRATA CORE RECOVERY (SREC.)</u> - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
PIECES 1 INCH HED READILY BY	STRATA ROCK QUALITY DESIGNATION (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR OREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.
	TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.
THICKNESS	BENCH MARK:
4 FEET .5 - 4 FEET	ELEVATION: FEET
16 - 1.5 FEET 13 - Ø.16 FEET	NOTES:
08 - 0.03 FEET 0.008 FEET 0.008 FEET	BOREHOLE ELEVATIONS DETERMINED FROM PROVIDED .TIN FILE TIN FILE: u4015a_ls_tin.tin DATE: 1/7/2019
	ABBREVIATIONS:
AT, PRESSURE, ETC.	FIAD - FILLED IMMEDIATELY AFTER DRILLING
	ND - NOT DETERMINED SR - SOUNDING ROD
EEL PROBE:	* - SOWERS DCP PERFORMED TO DETERMINE RELATIVE DENSITY
PROBE;	**- SOUNDING ROD PERFORMED TO DETERMINE RELATIVE DENSITY
	+ HAND AUGER WITH SOUNDING ROD
:	HAND AUGER WITH SOWERS DCP DATE: 10-10-19





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OINT	-L-	PROPOSED	BOTTON	۸ I
NO.	STATION	FINISHED GRADE (TOP)	OF WAL	L 805
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′	700
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		RKK	•	
		P: (919) 878-9560 8601 Six Forks Road Foru	m 1 Suito 700	
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1		Responsive People Creati 32 + 00	ive Solutions	
31 + 00		57 + 111		

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-	3501					I P U-401			ry guilfo	RD			GEOL	OGIST Goode, B.			3 35013					P U-4015		COUNT	
				limore		Rd. Wide	-	ining Wal	-						GROUND WTR (ft)					limore		Rd. Widen	-	ning Wall	
BOR	ING NO	. RW	1_1		S	TATION	27+50		OFFSET	20 ft LT			ALIG	IMENT -L-	0 HR. Dry	BOR	RING NO.	RW1	_2		S	TATION 2	8+00		OF
COLI	LAR EL	EV. 8	08.7 ft		Т	OTAL DEF	PTH 13.6	ft	NORTHING	3 844,3	306		EAST	NG 1,717,795	24 HR. 12.0	COL	LAR ELE	EV. 81	0.4 ft		Т	OTAL DEP	TH 15.0 f	t	NO
DRILL	RIG/HA	MMER E	EFF./DA	TE F8	&R2245	CME-55 92	% 04/30/202	!1		DRILL I	METHO	DD H	I.S. Augers	НАММ	ER TYPE Automatic	DRIL	L RIG/HAI	MMER E	FF./DA	TE F8	&R2245	CME-55 92%	04/30/2021		
DRIL	LER T	ignor, l	D.		S	TART DAT	FE 01/06	/21	COMP. DA	TE 01/	/06/21		SURF	ACE WATER DEPTH N/	/Α	DRIL	LER T	ignor, E).		S	FART DATI	E 01/06/2	21	со
ELEV	DRIVE ELEV	DEPTH	BLC	ow co	UNT		BLOWS	6 PER FOO	T	SAMP.		L				ELEV	DRIVE ELEV	DEPTH	BLC	ow cou	UNT		BLOWS	PER FOOT	
(ft)	ELEV (ft)	(ft)		0.5ft	0.5ft	0	25	50	75 100	NO.	мо	O I G	ELEV. (ft)	SOIL AND ROCK DESC	DEPTH (ft)	(ft)	ELEV (ft)	(ft)		0.5ft	0.5ft	0	25	50	75
810																815									
	808.7	- 0.0			4								808.7	GROUND SURFA			-	F							
		ŧ	4	4	4	 .† 8	· · · · ·	 			M		F	RESIDUAL Brown, medium stiff to stif	ff, silty sandy		-	ŧ							
805	805.2	3.5	1	2	3		· · · ·	· · · ·	· · · · ·				-	moderately plastic CLAY (A fragments	A-6), trace rock	810	810.4	0.0	1	2	3	- 1		+	—
		t	'	2		•5 ·				SS-8	23%		802.7	Ū.	6.0			Ł		_		9 ⁵			
		+				. \.	.	.				~ ~		Brown, very stiff, clayey SIL mica	LT (A-5), trace		806.9	3.5	4	5	6	. `			.
800	800.2	8.5	3	12	12		24				м	N N N	F	mica		805		F				•••••••••••••			+-
		‡					. 24		· · · · · ·			N V N	+ -					÷				. <i> </i> . <i> </i>			
	705.0	+					· · · · ·	·				- 1 V	795.2		13.5		801.9	8.5	2	2	2		· · · · ·		
	795.2	<u>† 13.5</u> L	60/0.1	<u> </u>					60/0.1			•	795.1	CRYSTALLINE R	OCK /13.6/	800		Ł					<u> </u>	<u> </u>	+:
		Ŧ											F	METAGRANIT Boring Terminated with			796.9	 13.5							
		Ŧ											F	Penetration Test Refusal at I ft In Crystalline Rock M	Elevation 795.1			- 10.0	5	24	47				71 ·
	-	ŧ											F	IT IT CLYSTAIIILE ROCK IN	letagranite		-	F							
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SHEET 5 OF 18

11	GUI	LFO	R	D				GEOL	OGIST Goode,	В.			
11 1	No. 1		_								GROUN	D WTR (ft)
	OFFS	ET	1	5 ft LT				ALIGN	MENT -L-		0 HR.	Dry	/
	NORT	HINC	3	844,3	15			EASTI	NG 1,717,845		24 HR.	Dry	/
				DRILL N	IETHO	DH	I.S.	. Augers		НАММ	ER TYPE	Automatic	
	COMP	. DA	T	E 01/0	06/21			SURFA	ACE WATER DE	PTH N/	A		
T				SAMP.		L O			SOIL AND RO	OCK DESC	RIPTION		
	75	100		NO.	моі	G							_
				SS-10	18%			810.4	R	ND SURFA			0.0
•		 					E		Brown to brown-o slightly plastic (CLAY (A-6)	, trace roc	k	
•					М		E	904 4	fr	agments		6	
•	· · · · · · · · · · · · · · · · · · ·	 			М			804.4	Brown-orange, s	oft, silty C aprolitic	LAY (A-7-6	5),	. <u>0</u>
						7.7	F	798.4	Brown and gray-g	reen, hard	, sandy cla	yey <u>12</u>	.0
•	· · 71 <u>· ·</u>	· · · ·	Ц		М	7 V V	E	795.4				15.	.0
									Boring Terminate Residual san			t In	

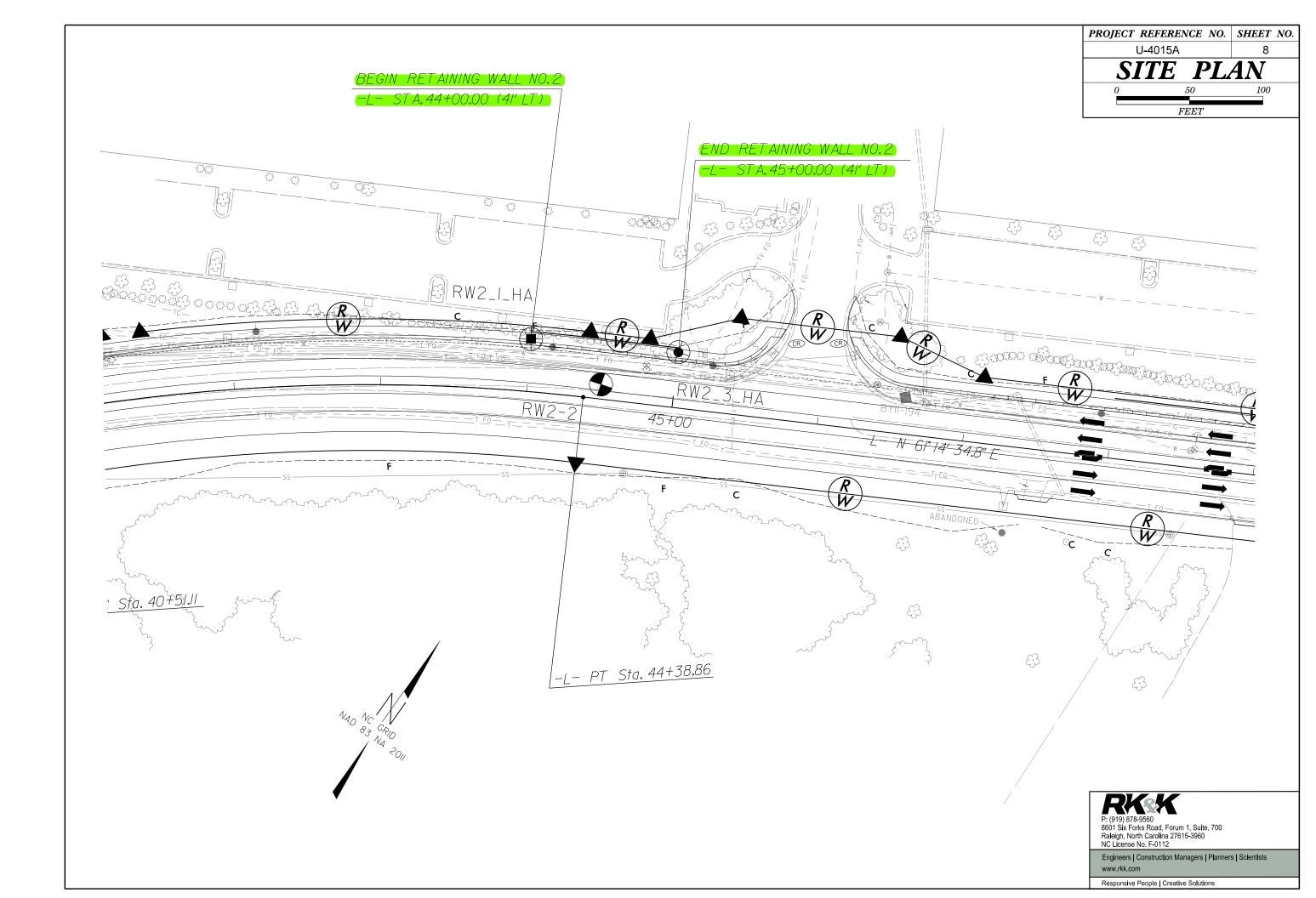
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WBS							I P U-40				Y GUILFC	RD			GEOL	.OGIST Goode	, B.			3S 350					P U-4015		COUNTY
SITE	DES	CRIP	TION	Gal	imore		Rd. Wide	-		ing Wall									t) SI	TE DES	CRIPTIC	N Ga	llimore	Dairy	Rd. Widen	ing: Retair	ning Wall N
BOR	ING I	NO.	RW1	_3		S	TATION	28+5	50		OFFSET	30 ft LT			ALIG	MENT -L-		0 HR. D	y BC	DRING N	IO . RV	/1_4		ST	TATION 2	9+00	
COL	LAR	ELEV	. 81	3.8 ft		Т	OTAL DE	PTH	19.0 ft		NORTHIN	G 844,3	344		EAST	ING 1,717,887		24 HR. D	y CC	OLLAR E	ELEV. 8	314.1 f	t	т	DTAL DEP	FH 15.0 f	ft
DRIL	_ RIG/	HAMN	IER E	FF./DA	TE F&	R2245	CME-55 9	2% 04/	30/2021			DRILL	METHO	DD H	I.S. Augers		HAMN	MER TYPE Automatic	DR	ILL RIG/I	HAMMER	EFF./D/	ATE F	&R2245	CME-55 92%	04/30/2021	
DRIL	LER	Tigr	nor, D).		S	TART DA	TE (01/06/2	1	COMP. DA	ATE 01/	/06/21		SURF	ACE WATER D	E PTH N	I/A	DF	RILLER		D.		ST		E 01/07/2	21
ELEV	DRI		EPTH		w co	-		E	BLOWS F	PER FOOT		SAMP.		L		SOIL AND F	OCK DES	CRIPTION	ELE			· · ·	ow co	-		BLOWS	PER FOOT
(ft)	(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	25	Ę	50	75 100	NO.	Имо		ELEV. (ff			DEPTH	(ft)(ft)	• (ft)	0.5ft	0.5ft	0.5ft	0	25	50 7
815															L				81	5	_						
	813	.8 +	0.0	1	3	2	↓ ₅						M		813.8		IND SURF		0.0	814.	1 0.0	4	5	7			
		<u>_</u>					¶°	· ·							-	Brown, medium trace	stiff, sand rock fragm	ly CLAY (A-6), pents		0 810.	6 + 3.5						
810	810 	.3 +	3.5	4	3	4				<u></u>	+		м		-	1000	look nagin		81	0 010.	<u> </u>	12	12	9	 	 21	<u> </u>
		Ŧ													<u>807.8</u>	Brown, mediu	n stiff san		. <u>0</u>		Ŧ						
805	805	.3 +	8.5												F	(A-7-5), tr	ace rock fr	agments	80	5 805.	6 - 8.5	- 10		- 24			
		Ŧ		1	3	2	•5, .					1	M		F						Ŧ	16	29	31			60
		ŧ													801.8				<u>o</u>		ŧ						
800	800	.3 +	13.5	47	27	30		· ·					м		<u> </u>	Dark gray, hard, s	ragments	(A-4), trace rock	80	<u>0 800.</u>	<u>6 + 13.5</u> +	18	22	15	· · · ·	37	
		‡								• • • • • • • • • • • • • • • • • • •					F						+						
705	705	<u>,</u>	10 5						•••	 					- 795.3			1	.5		‡						
795	794	<u>18</u>	19.0	60/0.1 60/0.0							60/0.1 60/0.0	₽		Ż	794.8	CRYS	TALLINE F	ROCK	LO.		+						
		ŧ		00/0.0											F	Boring Tern	inated wit	h Standard			ţ						
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SHEET 6 OF 18

TY GUILF	=OR	D			GEOL	.OGIS	Goode,	В.		
ll No. 1									GROUN	ID WTR (ft)
OFFSET	Γ 14	4 ft LT			ALIGN	MEN	IT -L-		0 HR.	Dry
NORTH	ING	844,3	46		EAST	ING	1,717,938		24 HR.	Dry
1		DRILL N	IETHO	DН	.S. Augers			HAMM	ER TYPE	Automatic
COMP.	DAT	E 01/0)7/21				WATER DE	PTH N/	A	
T T		SAMP.	/	L						
75 1	00	NO.	моі	0 G			SOIL AND RO	JCK DESU	RIPTION	
							0001			
	•		М		814.1			ND SURFA	(CE	0.0
				\square	-	Bro	wn, stiff to ver (A-7-5), trac	y stiff, san ce rock fra	dy silty CL aments	AY
	-		М		_		(5	
	:				808.1	Brown	n-white-gray-b	lack to bro	wn-gray c	
· · · ·	•				-	to	very dense, sil (A-2-4), trad	ty fine to c	oarse SAN	ND
			М		-		(A-2-4), ilai		ginenis	
· · · · ·	:				-					
	•		М		-					45.0
			141		799.1	Bor	ng Terminateo	d at Elevat	ion 799.1 1	15.0 ft In
					-		Residual si	Ity SAND	(A-2-4)	
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WBS	3501	3.1.1			Т	IP U	-4015/	A	Τ	COU	NTY	GU	ILFOR	RD			GEOLOGI	ST Goode,	В.		
SITE	DESCR	RIPTION	Gal	llimore	Dairy	Rd. V	Videni	ng: Re	etaini	ing Wa	all N	o. 1								GROUND	WTR (ft
		. RW					DN 29	-					ET (55 ft LT			ALIGNME	NT -L-		0 HR.	Dr
		EV. 8	_				DEPT		1 3 ft		_			8 44,4	102			1,717,968		24 HR.	Dr
		MMERE									<u> </u>					н п	S. Augers	.,,	НАМА	IER TYPE A	
										1		COM	D D A	TE 01/							atomatic
		⊺ignor, I T	1	0.00			DATE					COIVIE	DA	-	-	1-1	SURFACE	WATER DE		/A	
ELEV (ft) 820	DRIVE ELEV (ft)	DEPTH (ft)	0.5ft	OW CO 0.5ft	0.5ft	0	2	BLO 25	WS P 5	ER FO	0T 7	5	100	SAMP. NO.	мо	0	ELEV. (ft)	SOIL AND RO	DCK DES	CRIPTION	DEPTH (
315	817.1	+ - - - - -	2	2	6		••••								M		- 817.1		ND SURF		(
<u>115</u>	813.6	+ <u>- 3.5</u> -	7	10	15			25 .	 	 	 	 	 		м		Orari silt	ty CLAY (A-7-6	6), trace r	ock fragments	un, S
310	808.6	+ - 8.5 - 7	9	17	17		· · · ·	\. .\. .` ● 3	4	· · · · /	· ·	· · ·	· · · · · ·		м		<u>810.1</u> Br	own, dense, si (A-2-4), trad			<u> </u>
805	803.6	- - 13.5	25	75/0.3			· · · ·		· · · ·		• • • 	· · · · · · · · ·	00/0.8	•		<i>972</i>	804.1		IERED R AGRANI		<u>1</u>
	-	Ŧ															Boi	ing Terminate Weathered	d at Eleva Rock Me	ation 802.8 ft i tagranite	n
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SHEET 7 OF 18



	41+00	42+00	43+00	44+00	45+00	46
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805						
810	· · · · · · · · · · · · · · · · · · ·					
815	SAMPLE NO. STATION S-2 45+00	OFFSET DEPTH INTERVAL 38' LT 1.5-3.0'	AASHTO L.L. P.I. CLASS. A-7-6 55 28	% BY WEIGHT C. SAND F. SAND SILT 1 6 34	% PASSING SIEVE CLAY 10 40 200 60 100 99 96	9% MOISTURE 0. 28
820				SOIL TEST RESULTS		· · ·
000						
825				(DRAWN ALON WALL)	J	5
830			· · · · · · · · · · · · · · · · · · ·	GROUND		4
835				EXISTING	FIAD	2 3
				FIAD (18)		NO.
840					FIAD	POINT
845					BT	
850	· · · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · · · · · · ·
855		BEGIN RETAI	NING WALL 2 TA 44+00.00	$PAVEMENT$ \sim 2	3 (9)5 (A)	· · · · · · · · · · · · · · · · · · ·
		DEPINI DETA		5' RT	3I'RT	— воттом (
860				RW2 LHA*	RW2_2 S-2	
865				GRADE (TOP)	RW2_3_HA** 3′RT	
870				PROPOSED FINISHED		
875			-4,A-5),some rock f	ite,stiff to very stiff, ragments,moist		
		CLAY (A-7-6)	trace of organic mat	ter,trace rock fragments		
880				-2-4),1ittle gravel,moist d-brown,medium stiff to	o verv. stiff.siltv	
885			plastic CLAY (A-6,A-	-7-6),trace of organic m		
890	(A) ROADW	VAY EMBANKMENT	Brown to brown-oral	nge, medium stiff to hard	l,sandy and silty hiahly	
895						
005				AINING WAL		V
	1. I. I.			A = A = A = A = A = A = A = A = A = A =		

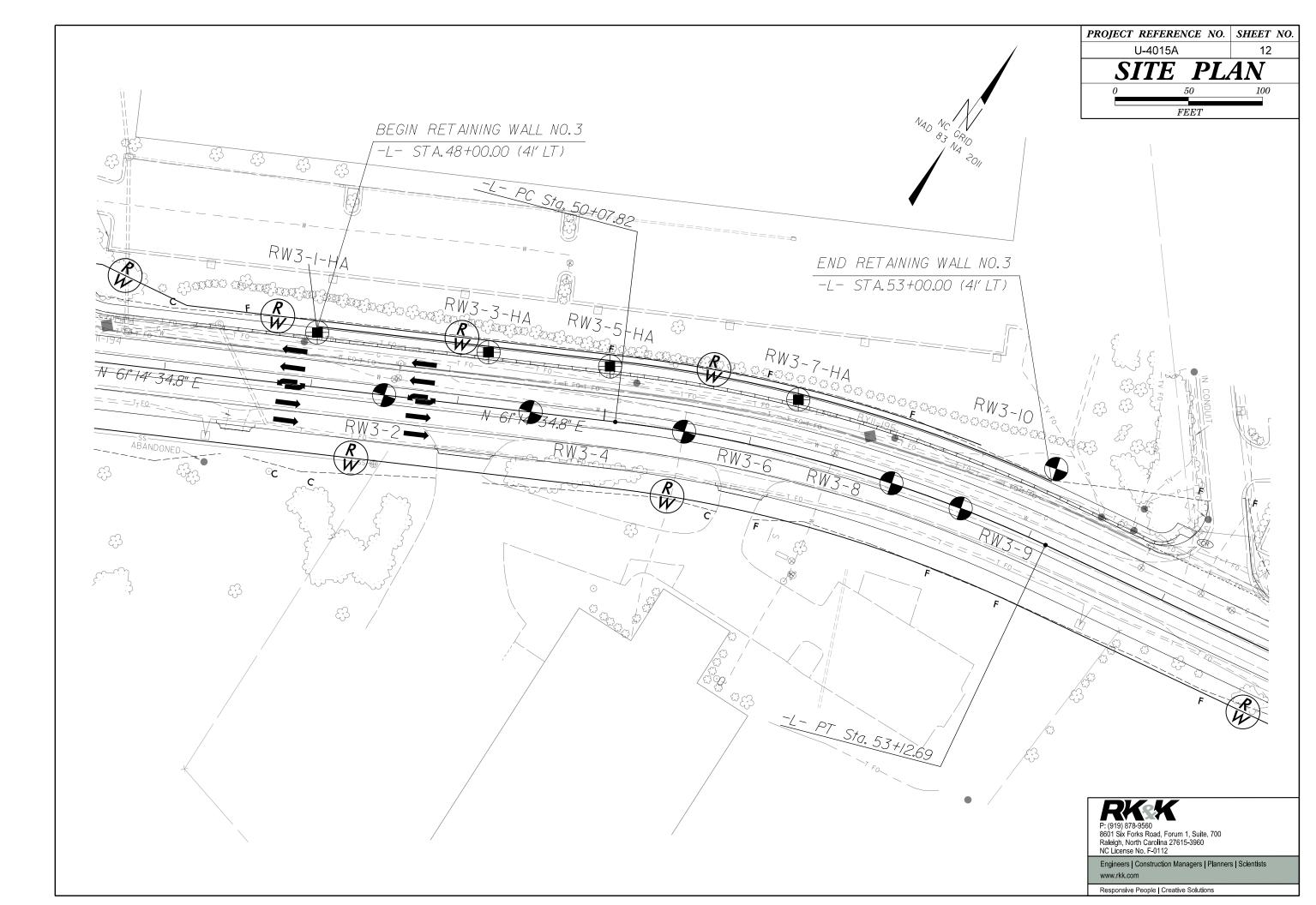
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	STATI	ON	GRADE	(TOP)	OF V			
	44+00	0.00	850	.83′	850	1		005
	44+02		850	.95′	849	.61′		. 835
	44 + 50		853	.20′	850	.52′	1	
	44+9		855	.52′	853			830
	45+00	0.00	855	.80′	855	.80′		
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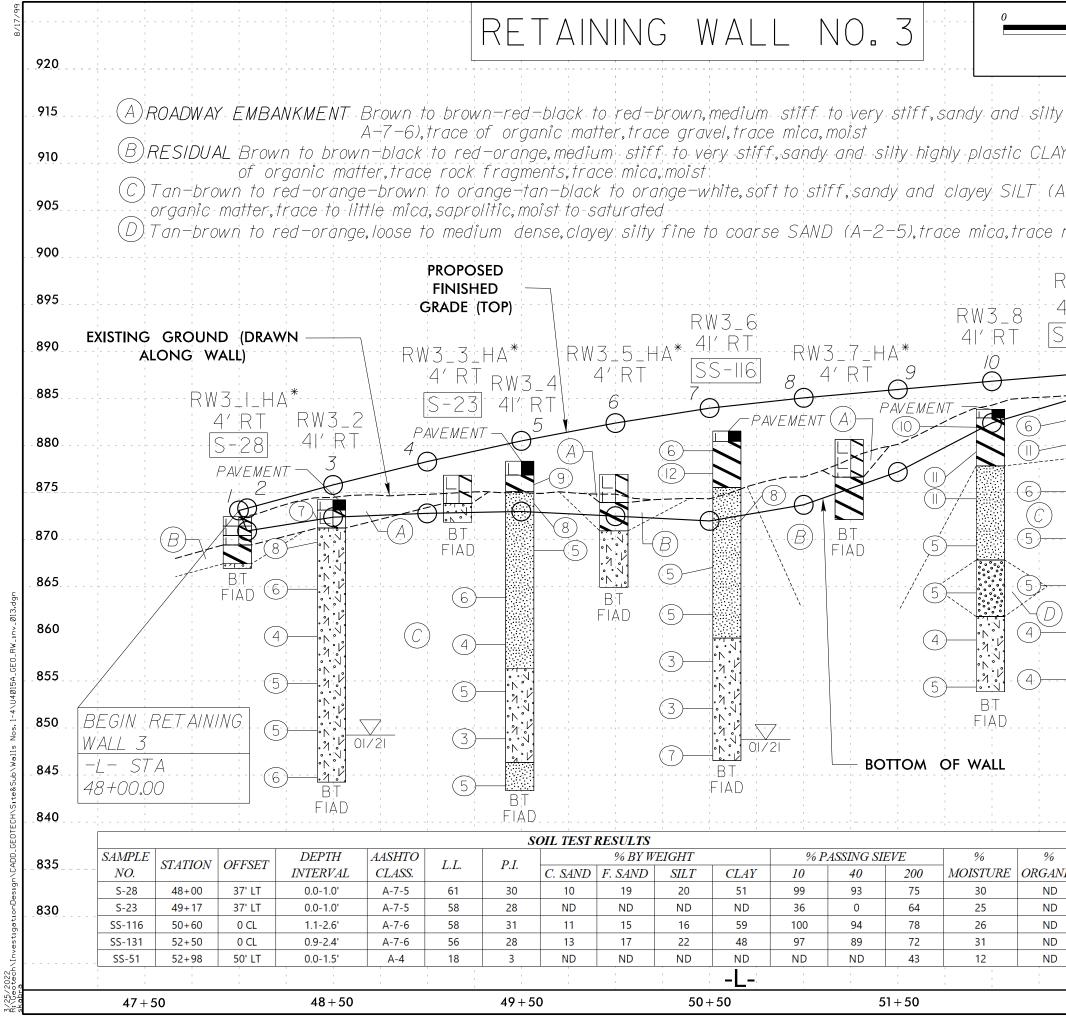
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		RIPTION						-	ining V									. ,	-				limore		Rd. Widen	-	ning Wall	-
) . RW2			_	TATION				0	OFFSET	36 ft LT			_	NMENT -L-	4	Dry		ING NO.		_			ATION 4			OF
		. EV . 84				DTAL D	DEPTH	H 7.5 f	ft	N	IORTHING							IAD		LAR ELI					DTAL DEP			NC
		MMER E		TE N/A						,					and Auge		IER TYPE Manual						TE Fa		CME-55 92%			
DRIL		Kabra, S					DATE	01/19/			OMP. DA				SURF	ACE WATER DEPTH N/	/A		DRIL	LER T	-	-						cc
ELEV	DRIVE ELEV	DEPTH	BLC	DW COL					S PER F			SAMP.				SOIL AND ROCK DESC	CRIPTION		ELEV	DRIVE ELEV	DEPTH	· — —					PER FOO	
(ft)	(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	25)	50	75	5 100	NO.	Имо	I G	ELEV. (f)	DEP	TH (ft)	(ft)	(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	25 I	50	75
850		<u> </u>													849.7	GROUND SURFA		0.0	855		Ļ							
		‡					- i			::	· · · · ·		M		849.2 848.7 848.2 848.2 847.2 846.7	ROADWAY EMBAN Brown, very stiff, sandy (CLAY (A-6) 🛛 🖊 🖊	0.5 1_0/ 1.5		-	ŧ							
0.45		‡								· ·	· · · ·		M M	H	847.2 846.7	DCP blows - 3, 9, a DCP blows - 5, 9, a	and 11	2.5	050	- 850.4 ⁻	+				· · · · ·	· · · ·	1	• • •
845		ŧ					-+						M	N	- 846.2	Brown, very stiff, silty CL	AY (A-7-6)	2.5 3_0 3.5 3.5 4.5	850	1 -	İ	24	26	16	<u> </u>	4	2	
		ł						• • • •					м		843.7 842.2	DCF DIOWS = 13, 11,	and 10	<u> </u>		847.9	3.5	4	4	5				
		Ŧ													-	RESIDUAL Brown-orange, very stiff, silty			845	-	Ŧ				· • • · ·			
		Ŧ													-	Brown-orange, very stiff, silty DCP blows - 12, 9,	and 8			842.9	8.5							
		Ŧ													-	Tan-white-gray, very stiff, cla SILT (A-4)					+ 0.0	3	5	5	· • 10 ·			
	.	Ŧ													-	DCP blows - 16 an Boring Terminated at Elevat			840		ŧ				<u> </u>			• •
		ŧ													-	Residual clayey sandy S	SILT (A-4)			837.9	13.5	3	5	13				
		‡													-	DCP values converted to ec blows/ft.	quivalent SPT				<u>†</u>		5	10	••••••	3		• •
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_				RE				GEOLO	GIST Goode, E			
	No.	2									GROUN	ID WTR (ft)
	OF	FSE	т	10	ft LT			ALIGN	IENT -L-		0 HR.	Dry
	NO	RT	HINC	3	845,3	30		EASTIN	G 1,719,116		24 HR.	FIAD
							DН	.S. Augers		HAMM	ER TYPE	Automatic
	со	MP	. DA	_	01/				CE WATER DEP	TH N/	A	
Т					SAMP.	/	L					
_	75		100		NO.	моі	O G				RIPTION	
						MOI M M		- _ - <u>845.4</u> - L. - st - st 	GROUNI ROADWAY 0.6' Asph an-white, dense, si (A-2-4), CA-7-6), trace Black and white to iff, clayey SILT (A-4) Boring Terminated Residual cla	D SURFA EMBANI alt, 0.4' / lity fine to little grav SIDUAL brown, sta e rock fra tan-brow 5), some	CE (MENT ABC coarse S, rel iff, silty CL gments n, stiff to rock fragn	J AY / <u>6.5</u> J ery nents 15.0
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	В	ORE LOG		
WBS 35013.1.1	TIP U-4015A COUNT	f GUILFORD	GEOLOGIST Goode, B.	
SITE DESCRIPTION Gallimore Dai	iry Rd. Widening: Retaining Wall	No. 2		GROUND WTR (ft)
BORING NO. RW2_3_HA	STATION 45+00	OFFSET 38 ft LT	ALIGNMENT -L-	0 HR. Dry
COLLAR ELEV. 853.9 ft	TOTAL DEPTH 6.0 ft	NORTHING 845,379	EASTING 1,719,147	24 HR. FIAD
DRILL RIG/HAMMER EFF./DATE N/A		DRILL METHOD Ha	and Auger HAMN	IER TYPE Manual
DRILLER Kabra, S.	START DATE 01/19/21	COMP. DATE 01/19/21	SURFACE WATER DEPTH N	/A
ELEV (ft) (ft) DRIVE ELEV (ft) DEPTH (ft) BLOW COUNT (ft) 0.5ft 0.		75 100 NO. MOI G	SOIL AND ROCK DES	
		S-2 M N 28% M M M M	853.9 GROUND SURF 852.4 Brown-orange, very stiff, sa 850.9 SR blows - 1, 6, a Brown, hard, sandy silty higi (A-7-6) 847.9 SR blows - 4, 10, a Brown-orange, very stiff, silt SR blows - 3, 4, a SR blows - 3, 4, a SR blows - 3, 4, a SR blows - 3, 4, a SR blows - 3, 4, a Sounding Rod blows/ft value Residual silty CLAY Sounding Rod blows/ft value equivalent SPT blay	IKMENT 1 ndy CLAY (A-6) /3 and 8 3 hy plastic CLAY I 6 and 11 1 6 ty CLAY (A-7-6) 6 and 5 6 and 10 6 tition 847.9 ft In (A-7-6) es converted to

SHEET 11 OF 18





PFEET U-4015A 13 VE = -5 PROFILE ALONG -L- highly plastic CLAY (A-6, A-7 -5, Y (A-6, A-7 -6), trace 915 Y (A-6, A-7 -6), trace 910 A-4, A-5), trace of 905 rock fragments, saprolitic, moist 900 RW3_9 RW3_10 AI' RT 9' LT SS-131 SS-51 I2 B I3 BT IA BT	50	10	0 PROJ	ECT REFEREN	CE NO.	SHEET NO.
VE = 5 PROFILE ALONG -L- highly plastic CLAY (A=6, A=7-5, 915. 910. A=4, A=5), trace of 905. rock fragments, saprolitic, moist 900. RW3_9 RW3_10 AI' RT 9' LT S=51 890. I/ RT 9' LT S=51 890. I/ RT 9' LT S=51 890. I/ RT 9' LT S=51 890. I/ RT 9' LT S=731 875. BT END RETAINING WALL 3 OI/21 -L - STA 53+00.00 RT 845. BT RABE 00.00 BT 1 48+00.00 S 49+50.00 880.50' S 49+50.00 880.50' S 49+50.00 885.07' BT 1 52+50.00 S 49+50.00 885.07' S 49+50.00 885.07' S 49+50.00 885.07' S 110 52+90.00 S 51400 885.37' <tr< th=""><th></th><th>10</th><th>-</th><th>U-4015A</th><th></th><th>13</th></tr<>		10	-	U-4015A		13
Y (A-6, A-7-6), trace 910. A-4, A-5), trace of 905 rock fragments, saprolitic, moist 900 RW3_9 RW3_10 A1' RT 9' L-T SS-131 SS-51 I2 I3 A4EMEN 0 I2 I3 BT END RETAINING BT BT I4 BT BT IA I4 BT BT IA IA BT BT IA				PROFILE	ALONG -	-L-
A-4, A-5), trace of rock fragments, saprolitic, moist 900 RW3_9 RW3_10 AI'RT 9'LT SS+131 SS+51 12 12 14 BT BT BT BT C BT C BT C BT C BT C BT C BT C BT C BT C BT C BT C BT C C B C C B C C C C C C C C C C C C C	- hi-ghly j	plastic -C	CLAY (A	-6, A-7-5,	4	915
905. rock fragments, saprolitic, moist 900 RW3_9 RW3_10 Al' RT 9' LT SS-51 12 12 12 12 13 SS-51 10 AVEMEN 6 6 8 8 8 8 900 12 14 8 8 8 8 8 8 8 8 8 8 8 8 8	Y (A-6,,	4-7-6),	trace			910
RW3_9 RW3_10 AI' RT 9' LT S=131 SS-51 I/2 I PAVEMEN I I S-51 I/2 I I/4 II BT END RETAINING GRADE (TOP) I/1 II I/2 III I/2 IIII I/2 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	,−4, A−5),trace c	of			905
NV S_J 9' LT 895 SI'RT SS-51 890 I/2 I/2 890 I/2 I/3 885 I/4 I/4 875 BT END RETAINING 875 I/4 I/2 I/4 I/2 I/4 875 I/4 I/2 I/4 I/2 I/4 I/4 I/2 I/	rock fro	igment's,	saproliti	ic, moist		900
Image: Second second		- I	1			895
AVEMEN 885 6 0 22 0 BT END RETAINING DRY WALL 3 01/21 -L- STA 53 +00.00 865 N 6 N 6 N 865 N 860 1 48+00.00 873.35' 870.94 860 855 851 850 6 50+00.00 885.96' 851+00.00 885.07' 851+00.00 885.07' 851+00.00 885.07' 851+00.00 885.07' 845 840 12 52+94.27 888.16' 888.22' 888.22'		1				890
BT END 880 BT END 875 DRY WALL 3 870 OI/21 -L- STA 53 +00.00 N FINISHED BOTTOM N GRADE (TOP) FWALL 3 N STATION GRADE (TOP) N STATION STATION BT 48+00.00 873.11' 3 48+50.00 875.82' BT 4 49+00.00 878.30' STATION STATION BT 4 49+00.00 5 49+50.00 850 872.80' 851+00.00 883.98' 852.00 872.00' 845 9 9 51+50.00 885.07' 9 51+50.00 885.38' 10 52+00.00 886.83' 11 52+50.00 887.68' 8601 Sk: Forks Road, Forum 1, Suite. 700 Rategin, North Carolina 27615-3960 NC P: (919) 878-9560 8601 Sk: Forks Road, Forum 1, Suite. 700 Rategin, North Carolina 27615-3960 NC En			\overline{C}			
14 BT DRY 01/21 END RETAINING WALL 3 -L- STA 53+00.00 875 NO. -L- STA 53+00.00 865 NO. STATION 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' 855 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+90.00 886.83' 882.40' 11 52+50.00 886.83' 882.40' 11 52+50.00 886.83' 882.40' 11 52+94.27 888.16' 885.35' 13 53+00.00 888.22' 884.2' 840 801 Six Forks Road, Forum 1, Suite.700 Raleigh, North Carolina 27615-3960 NC License No. F-0112 Regensive People Creative Solutions Responsive People Creative Solutions Responsive People Cre						880
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www.rkk.com Responsive People Creative Solutions			P: (919) 870 8601 Six Fo Raleigh, No	3-9560 prks Road, Forum 1, Su rth Carolina 27615-396	ite. 700	l
	 		www.rkk.co	m		Scientists
EQ : EQ	52 + 50			People Creative Solu	Itions	

SITE DESCRIPTION Gallimore Dairy Rd. Widening: Retaining Wall No. 3 GROUND WTR (th) BORING NO. RW3 1 HA STATION 48+00 OFFSET 37 ft LT ALIGNMENT -L- 0 HR. Dry COLLAR ELEV. 872.5 ft TOTAL DEPTH 5.5 ft NORTHING 845.522 EASTING 1,719,410 24 HR. FIAD DGRING NO. RW3_2 STATION 48+50 COLLAR ELEV. 872.5 ft TOTAL DEPTH 5.5 ft NORTHING 845.522 EASTING 1,719,410 24 HR. FIAD COLLAR ELEV. 874.3 ft TOTAL DEPTH 30.0 ft DRILL RICHAMMER EFF.JOATE NO. MARP VILL METHOD Hand Auger HAMMER EFF.JOATE FAX255 START DATE 01/19/21 DRILL RICHAMMER EFF.JOATE BLOWS PER FOOT BLOWS PER FOOT SOIL AND ROCK DESCRIPTION DEEPTH MIA BLOW COUNT BLOWS PER FOOT 875 BLOW COUNT BLOWS PER FOOT NO. NO. SOIL AND ROCK DESCRIPTION BEDW BLOW COUNT BLOWS PER FOOT 875 MARE STATE DATE FIAD SUBMERAL STATE DATE FIAD SUBMERAL FIAD SU	i		ORE LUG		1						
BORNNON DN. RV3_1_HA STATION 48-00 OPERSET 37 ft.1 ALCONNET 1.710-410 94 R. DAR DAL DAR DERUK 0000 RD. RV3_2_1 STATION 48-00 COLLAR LELV: 572.5 ft. TOTAL DEPTH 5.5 ft. NORTHING 845522 EASTING 1.710-410 94 R. DAR DRUL ROMAGE FF.DATE NA DRUL NETTOOL HAR 4/ger HAMMER TYPE. Maral DRUL ADDET 1.00.0 ft. DRUL ROMAGE FF.DATE NA DRUL ROMAGE FF.DATE NA DRUL NETTOOL HAR 4/ger SURFACE WATER DEPTH N/A SURFACE WATER DEPTH N/A DRUL ROMAGE FF.DATE NA DRUL ROM 1000 ft. 0 581 0.81 0 25 91 75 100 NO NO V/O 0 SURFACE WATER DEPTH N/A 873 TOTAL DEPTH 55.5 SURFACE WATER DEPTH N/A SURFACE WATER DEPTH N				GEOLOGIST Goode, B.							COUNTY
COLLAR ELEV. 872.5 II TOTAL DEPTH 5.5 II NORTHING 845.522 EASTING 1.719.410 24.HR FAD DBRLER MAMMER EF7.DATE NA DRLL BEHOD 1400.01 DRLL BRANCE START DATE 01/1921 COMP. DATE 01/1921 COMP. DATE 01/1921 DRLL BRANCE START DATE 01/1921 COMP. DATE 01/1921 START DATE 01/1921 COMP. DATE 01/1921 DATE 01/1921 DATE 01/1921 START DATE 01/1921 START DATE 01/1921 START DATE 01/1921 DATE 01/1921 <td< th=""><th></th><th></th><th></th><th></th><th>- ``I</th><th></th><th></th><th></th><th></th><th>-</th><th><u> </u></th></td<>					- ``I					-	<u> </u>
DBILL BORNAMMER EFF.DATE NA ISTART DATE 01/11/2012 DBILL METHOD HAMMER TYPE HAMMER					- 1			_			0
DRULER START DATE 0/1/92/1 SURFACE WATER DEPTH N/A DRULER DEPL BLOWS PER FOOT BLOWS PER FOT BLOWS PER FOT		TOTAL DEPTH 5.5 ft	l								N
LLU DUM LLU DECM DUM ELONG FER FOOT BLONG FER FOOT BLONG FER FOOT BLONG FER FOOT 100 100 100 20 90 75 100 0 220 90 75 100 0 220 90 75 100 0 220 90 75 100 0 220 90 75 100 0 220 90 75 100 100 220 90 75 100 220 90 75 70 <			I								
Chine ELEV Chine O.S.R. 0.5R 0.5R </th <th></th> <th></th> <th></th> <th></th> <th>/A</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>					/A						
Image: Note of the second se				SOIL AND ROCK DES	CRIPTION	(ff) El	EV C				
870 S-28 30% S-28 30% S-28 30% ROADWAY EMBANKMENT CAT (LS, 2013) Brown-red, stiff, sandy silv highly plastic CAT (H-7-5), trace gravel DCP blows - 6, 5, and 6 Brown-red, stiff, sandy silv highly plastic CAT (H-7-5), trace gravel DCP blows - 6, 5, and 6 Brown-red, stiff, sandy silv highly plastic CAT (H-7-5), trace gravel DCP blows - 6, 5, and 6 Brown-red, stiff, sandy silv highly not silv CAT (A-7-6), trace gravel DCP blows - 6, 5, and 9 Brown-red, stiff, sandy silv highly to silv CAT (A-7-6), trace gravel DCP blows - 6, 5, and 9 Brown-red, stiff, sandy silv to silv CAT (A-7-6), trace gravel DCP blows - 6, 5, and 9 Brown-red, stiff, sandy silv to silv CAT (A-7-6), trace gravel DCP blows - 6, 5, and 9 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP blows - 6, 8, and 12 Brown-red, stiff, sandy silv to silv CAT (A-6), trace gravel DCP values converted to equivalent SPT blows/ft. 860 BCB BCB 23.5 BCB 23.5 BCB BCB 23.5 B	0.5ft 0.5ft 0.5ft	5tt 0 25 50	75 100 NO. / MOI G	ELEV. (ft)	DEPTH (ft)	(11) (ft) (⁽¹¹⁾	0.5ft 0.5ft	0.5ft	0 25 5	50 75
870 872 GROUND SURFACE 00 ROADWAY EMBANKMENT 872 11 3 3 4 870											
870 S-28 30% S-28 30% S-28 ROADWAY EMBANKMENT 10 870 870.8 3 3 4<				-		875	<u> </u>				
870 S-20 M 627.5 Brown-red. stiff, sandy stift highly plastic CLAY (A,7-5), trace gravel Brown-red. stiff, sandy stift highly plastic CLAY (A,7-5), trace gravel Brown-red. stiff, sandy CLAY (A,7-6), trace Brown-red. stiff, sandy Stift to stilty CLAY (A,7-6), DCP blows - 5, 9, and 9 Brown-red. stiff, sandy Stift to stilty CLAY (A,7-6), Brown-red. stiff, sandy Stift to stilty CLAY (A,7-6), Brown-red. stiff, sandy Stift, clayey Stift, CAS) Brown-red. stift, sandy Stift, clayey Stift, CAS) Brown-red. stiff, sandy Stift, clayey Stift, CAS) Brown-red. stift, sandy Stift, clayey Stift, claye, Stif							3.2 1.1	3 3	4		
Brown-red, very stiff, sandy CLAY (A-6), trace gravel 860.8 13.5 2 2 2 DCP blows - 5, 9, and 9 860.8 13.5 2 2 2 Brown, very stiff, sandy silty to silty CLAY (A-76) 855.8 18.5 2 2 3 DCP blows - 8, 8, and 12 855.8 18.5 2 2 3 4 Brown red, very stiff, sandy silty to silty CLAY (A-76) 855.8 18.5 2 2 3 Brown red, very stiff, sandy silty to silty CLAY (A-76) 855.8 18.5 2 2 3 Brown red, very stiff, clayey SiLT (A-5) 855.8 18.5 2 2 3 Brown red, very stiff, clayey SiLT (A-5) 855.8 18.5 2 2 3 DCP values converted to equivalent SPT blows/ft. 850.8 23.5 2 2 3			· · · · · · <u>S-28</u> 30%	ROADWAY EMBAN	IKMENT	870 87	0.8 - 3.5				
Brown-red, very stiff, sandy CLAY (A-6), trace gravel 860.8 13.5 2 2 2 DCP blows - 5, 9, and 9 860.8 13.5 2 2 2 Brown, very stiff, sandy silty to silty CLAY (A-76) 855.8 18.5 2 2 4 DCP blows - 8, 8, and 12 855.8 18.5 2 2 3 4 Brown red, very stiff, sandy silty to silty CLAY (A-76) 855.8 18.5 2 2 3 Brown red, very stiff, clayey SILT (A-5) 855.8 18.5 2 2 3 Brown red, very stiff, clayey SILT (A-5) 855.8 18.5 2 2 3 Brown red, very stiff, clayey SILT (A-5) 855.8 18.5 2 2 3 DCP values converted to equivalent SPT blows/ft. 850.8 23.5 2 2 3				CLAY (A-7-5), trace	e gravel 120	070	ŧ	2 3	5		
Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), DCP blows - 8, 9, and 9 860.8 13.5 2 2 2 Brown, very stiff, clayey SlLT (A-7-6) DCP blows - 8, 8, and 12 855 855.8 18.5 2 2 3 Boring Terminated at Elevation (Residual clayey SlLT (A-5) Boring Terminated at Elevation (A-5) 850.8 2.3 2 3 5 DCP values converted to equivalent SPT blows/ft. Boos (R - 2) 2 3 5 5 5 5 Brown, very stiff, clayey SlLT (A-5) Boring Terminated at Elevation (A-5) 850.8 2.3 2 3 5 Brown/ stiff, clayey SlLT (A-5) Boring Terminated at Elevation (A-5) 850.8 2.3 5 5 5 5 DCP values converted to equivalent SPT blows/ft. 850.8 2.3.5 2 2 3 5			· · · · · M 🏊	DCP blows - 6, 5,	and 51 $- \frac{3.0}{3.5}$		ţ				
Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy CLAY (A-6), trace gravel Brown-red, very stiff, sandy SLA				868.0 Brown-red, stiff, silty CLAN	(A-7-6), trace 4.5	865 86	5.8 - 8.5	1 3	3		
trace gravel					, and 8 5.5		t				
Image: constraint of the second se				trace gravel		86	0.8 1 13 5				
(A-7-6)					1	860	+	2 2	2	4	
Image: DCP blows - 8, 8, and 12				Brown, very stiff, sandy silt (A-7-6)	y to silty CLAY		Ŧ				
Boring Terminated at Elevation 867.0 ft In Residual clayey SILT (A-5) 850 850.8 23.5 1						855 85	5.8 - 18.5		3		
DCP values converted to equivalent SPT blows/ft. 850.8 + 23.5 2 2 3				 Boring Terminated at Eleva 	ation 867.0 ft In		Ŧ			•5	
blows/ft.				-			. ‡				
					equivalent SPT	850 85	0.8 <u>+ 23.5</u> +	2 2	3	1 · · · · · · · · · · · · · · · · · · ·	
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IT	GUILFO	RD			GEOLOGIST Goo	de, B.		
	No. 3						GROUN	D WTR (ft)
	OFFSET	CL			ALIGNMENT -L-		0 HR.	25.0
	NORTHING	3 845,5	14		EASTING 1,719,4	72	24 HR.	FIAD
				DН	S. Augers		ER TYPE	Automatic
	COMP. DA		12/21					
Т	JONIF. DA	SAMP.	· <i>∠</i> / ∠	L	JUNFAUE WATER		~	
	75 100	NO.		0	SOIL AND	D ROCK DESC	CRIPTION	
	- 100	110.	/моі	G				
						OUND SURFA		0.0
:			м			Asphalt, 0.4'		1.1
•					Brown-red-bla	ack, medium s	tiff, sandy s	silty , <u>3.0</u>
	<u> </u>		м	N N V		(Á-7-5), trace RESIDUAL		
•				<u>р</u>	- Red-orang	e-brown to ora	ange-tan to	andv
•	· · · ·		м	Γ, ν / ν	brown-tan-oran clayey	SILT (A-5), tra	ce mica	
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					Residual	sandy clayey \$	SILT (A-5)	
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							-		ing Wall							GROUND WTR (ft)					limore			ning: Ret	aining Wa	
BOR	NG NO	. RW	3_3_H	A	S	TATION	49+	17		OFFSET	37 ft LT			ALIGN	IMENT -L-	0 HR. Dry	BOR	RING NO	. RW3	3_4		S	TATION	49+50		OF
COL	AR EL	EV. 8	76.9 ft		Т	OTAL D	EPTH	5.0 ft		NORTHIN	3 845,5	578		EAST	ING 1,719,513	24 HR. FIAD	COL	LAR EL	EV. 87	78.4 ft		T	OTAL DE	PTH 35.0	O ft	NC
DRILL	RIG/HA	MMER E	EFF./DA	TE N	/A						DRILL	METHO	DD H	and Auger	НАММ	ER TYPE Manual	DRIL	L RIG/HA	MMER E	FF./DA	TE F&	&R2245	CME-55 92	% 04/30/20	21	
DRIL	LER (Goode,	В.		S	TART D	ATE	01/19/2	1	COMP. DA	TE 01/	19/21		SURF	ACE WATER DEPTH N/	/A	DRIL	LER T	ignor, [D.		S	TART DA	TE 01/14	1/21	CC
ELEV	DRIVE	DEPTH	BLO	ow co	UNT		E	BLOWS F	PER FOO	T	SAMP.		L				ELEV	DRIVE ELEV	DEPTH	BLC	ow co	UNT		BLOW	S PER FO	от
(ft)	ELEV (ft)	(ft)		0.5ft	0.5ft	0	25	5	50	75 100	NO.	Имс	O JI G	ELEV. (ft)	SOIL AND ROCK DESC	DEPTH (ft)	(ft)	ELEV (ft)	(ft)		0.5ft	0.5ft	o	25	50	75
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		ŧ												876.9 876.4	GROUND SURFA	ACE g.g		876.9	1.5							
875		Ŧ					~~~				S-23	T25% M	Ě	- 875.4	ROADWAY EMBANI Brown, stiff to very stiff, san		875	874.9	1	3	4	5	$ \cdot \bullet_9 \cdot$			
	-	Ŧ		1				<u> </u>				M		- 874.4 - <u>873.9</u> -	plastic CLAY (A-7-5) tra	ace gravel3.0		014.9-	+ 0.0	2	4	4	· ∳ 8 ·			
		‡		1			· · · · ·	 	· · · ·	· · · · · ·	Ц	M	· N · V	873.9 873.4 872.4 871.9	DCP blows - 4, 6, a DCP blows - 12, 14,	and 11 4.5			‡				: : :			::
	-	‡		1										/	DCP blows - 8, 11, a DCP blows - 9, 11, a	anu 20	870	869.9	8.5							· ·
		t		1										_	RESIDUAL				±	2	2	3	∮ 5: :			
		Ŧ		1										_	Brown-tan, stiff, clayey SIL mica				Ŧ							
	-	‡		1										-	DCP blows - 9, 13, a Boring Terminated at Elevat		865	864.9	13.5	2	3	3			· · · ·	· ·
		‡												-	Residual clayey SIL				‡		3	3	∮ ⁶ :			
		ŧ												-	DCP values converted to e	quivalent SPT			t							
	-	ł													blows/ft.		860	859.9	18.5	2	2	2				
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		Ŧ												-			855	054.0	‡				(:::	· · · · ·		
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T١	GUI	LFO	RD)			GE	OLOGI	ST Goode,	В.		
	No. 3										GROUN	ID WTR (ft)
	OFFS	ET (CL				AL	GNME	NT -L-		0 HR.	Dry
┫	NORT	HING	}	845,5	62		EA	STING	1,719,560		24 HR.	FIAD
	-		-		IETHO	р н	I.S. Aug		, ,,-,	НАММ	ER TYPE	Automatic
Τ	COMF	^ ח							WATER DE			
T	JOINT		_	SAMP.	· ¬/ ∠ I	L	130	NFAUE		ICTICT IN/	~	
	75	100		NO.		0			SOIL AND R	OCK DESC	CRIPTION	
	1		+	110.	/моі	G						
							_					
•	· ·		+				- 878.4		GROUI	ND SURFA		0.0
•		· · ·			м		876.9		0.6' Asp	ohalt, 0.9' A	ABC	1.5
	+				м		875.2	ר א	d-orange, stiff,	mica	(A-7-6), ti	ace <u>2.</u> /
•							-		Red-orange-bla	ESIDUAL	— — — — -	
•							-	med	tium stiff to stif	f, sandy Sl	LT (A-4), t	race
	1				М		-		mica	a, saprolitio	0	
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							<u>856.4</u>					22.0
	· ·					×	-	Orar	ige-tan-black, s SILT (A-5), ti	soft to med race mica,	lium stiff, c saprolitic	layey
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•		· · ·				<u>г</u> . У	- <u>846.4</u> -	— <u>—</u> Tar	-brown, mediu	m stiff. sar	ndv SILT (<u>A-4).</u> <u>32.0</u>
	+				w		- 843.4			nica, sapro		35.0
						57467A	_		ring Terminate	d at Elevat	ion 843.4	
							-		Residuals	sandy SIL1	(A-4)	
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DRILL RIG/HAMMER EFF./DATE N/A DRILL RIG/HAMMER EFF./DATE N/A DRILL R Goode, B. START DATE 01/19/21 COMP. DATE 01/19/21 SURFACE WATER DEPTH BLOW COUNT BLOW SPER FOOT SAMP. (ft) DEFTH BLOW COUNT 0 SOIL AND ROCK DESCRIPTION	Dry FIAD Jal	SITE D BORIN COLLA DRILL F DRILLI ELEV (ft) 885 880 880 880	35013.1.1 DESCRIPTIC IG NO. RW AR ELEV. & RIG/HAMMER ER Tignor, DRIVE (ft) DEPT (ft) 880.4 1.1 878.0 3.5	V3_6 881.5 ft EFF./DAT , D. TH BLOV 0.5ft		iairy F ST TO 2245 (ST	TATION	ening: Retain 50+55 PTH 35.0 f 2% 04/30/2021 NTE 01/14/2 BLOWS	I
BORING NO. RW3_5_HA STATION 50+00 OFFSET 37 ft LT ALIGNMENT -L- 0 HR. COLLAR ELEV. 877.0 ft TOTAL DEPTH 12.0 ft NORTHING 845,618 EASTING 1,719,586 24 HR. 24 HR. DRILL RIG/HAMMER EFF./DATE N/A DRILL METHOD Hand Auger HAMMER TYPE Manu DRILLER Goode, B. START DATE 01/19/21 COMP. DATE 01/19/21 SURFACE WATER DEPTH N/A ELEV DRIVE DEPTH BLOW COUNT BLOWS PER FOOT SAMP. NO. NO. SOIL AND ROCK DESCRIPTION 880 0 25 50 75 100 NO. MOI BZZ 0 GROUND SURFACE 875 875.5 ROADWAY EMBANKMENT SAMP. NO. NO. CLAY (A-7-6), trace gravel 870 - - - - - - - - - - - - - - - - - - -	Dry FIAD Ial 	BORIN COLLA DRILLI ELEV (ft) 8885 8880 8880 8880	IG NO. RW AR ELEV. & RIG/HAMMER ER Tignor, DRIVE ELEV DEPT (ft) (ft) 880.4 1.1	V3_6 881.5 ft EFF./DAT , D. TH BLOV 0.5ft	TE F&R	ST TO 2245 (ST IT	TATION	50+55 PTH 35.0 1 2% 04/30/2021 TE 01/14/2 BLOWS	ft No 21 Co PER FOOT
COLLAR ELEV. 877.0 ft TOTAL DEPTH 12.0 ft NORTHING 845,618 EASTING 1,719,586 24 HR. DRILL RIG/HAMMER EFF./DATE N/A DRILL METHOD Hand Auger HAMMER TYPE Manual DRILL RIG/HAMMER EFF./DATE N/A DRILL METHOD Hand Auger HAMMER TYPE Manual DRILL RIG/HAMMER EFF./DATE N/A START DATE 01/19/21 COMP. DATE 01/19/21 SURFACE WATER DEPTH N/A ELEV DRIVE DEPTH BLOW COUNT BLOWS PER FOOT SAMP. NO. NO. MOI G ELEV. (ft) SOIL AND ROCK DESCRIPTION 880 If (ft) 0.5ft 0.5ft <td< th=""><th>FIAD ial <u>PTH (ft)</u> <u>0.0</u> <u>1.5</u> 2.5 1.5 2.5 4.5 4.5 4.5 - <u>3.0</u> <u>3.5</u> 4.5 - <u>7.5</u></th><th>COLLA DRILLI ELEV (ft) 885 880 880</th><th>AR ELEV. 8 RIG/HAMMER ER Tignor, DRIVE ELEV (ft) DEPT (ft) 880.4 1.1</th><th>881.5 ft EFF./DAT , D. TH BLOV 0.5ft</th><th>W COUN</th><th>2245 (ST</th><th>CME-55 9</th><th>EPTH 35.0 1 2% 04/30/2021 TE 01/14/2 BLOWS</th><th>ft No 21 Co PER FOOT</th></td<>	FIAD ial <u>PTH (ft)</u> <u>0.0</u> <u>1.5</u> 2.5 1.5 2.5 4.5 4.5 4.5 - <u>3.0</u> <u>3.5</u> 4.5 - <u>7.5</u>	COLLA DRILLI ELEV (ft) 885 880 880	AR ELEV. 8 RIG/HAMMER ER Tignor, DRIVE ELEV (ft) DEPT (ft) 880.4 1.1	881.5 ft EFF./DAT , D. TH BLOV 0.5ft	W COUN	2245 (ST	CME-55 9	EPTH 35.0 1 2% 04/30/2021 TE 01/14/2 BLOWS	ft No 21 Co PER FOOT
DRILL RIG/HAMMER EFF./DATE N/A DRILL RIG/HAMMER EFF./DATE N/A DRILL RG Goode, B. START DATE 01/19/21 COMP. DATE 01/19/21 SURFACE WATER DEPTH N/A ELEV (ft) DEPTH (ft) BLOW COUNT (ft) BLOWS PER FOOT SAMP. NO. Loo SOIL AND ROCK DESCRIPTION 880 BLOW SPER FOOT SAMP. NO. MOI G ELEV. (ft) COMP. DATE CLAY (A7-6), trace gravel 875 Red-brown, stiff, stift V.A7-6), trace gravel CLAY (A7-76), trace rock / 1 CLAY (A7-76), trace rock / 1	00 0.0 1.5 2.5 3.0 3.5 4.5 4.5 7.5	DRILL F DRILLI ELEV (ft) 8885 8880 8880 8875	RIG/HAMMER ER Tignor, DRIVE ELEV DEPT (ft) 880.4 1.1	EFF./DAT	W COUN	2245 (ST	CME-55 9	2% 04/30/2021 TE 01/14/2 BLOWS	21 CO
DRILLER Goode, B. START DATE 01/19/21 COMP. DATE 01/19/21 SURFACE WATER DEPTH N/A ELEV (ft) DEPTH (ft) BLOW COUNT (ft) BLOW COUNT 0.5ft 0.25 50 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION ELEV. (ft) SOIL AND ROCK DESCRIPTION ELEV. (ft) DEPTH 0.5ft 0.5ft 0.5ft<	<u>0.0</u> 0.0 0.5 1.5 2.5 3.5 4.5 4.5 - .5 .5 .5 .5 .5 .5 .5 .5 .5 .5	DRILLI ELEV (ft) 885 885 880 880 8875	ER Tignor, DRIVE ELEV DEPT (ft) 880.4 1.1	, D. TH BLOV 0.5ft	W COUN	ST I⊺		TE 01/14/2 BLOWS	21 CO
ELEV (ft) DEPTH (ft) BLOW COUNT BLOWS PER FOOT SAMP. NO. No. Soil AND ROCK DESCRIPTION 880 0 25 50 75 100 NO. MOI ELEV. (ft) SOIL AND ROCK DESCRIPTION 880 0 0 25 50 75 100 NO. MOI ELEV. (ft) SOIL AND ROCK DESCRIPTION 880 0 0 25 50 75 100 NO. MOI ELEV. (ft) SOIL AND ROCK DESCRIPTION 880 0 0 25 50 75 100 NO. MOI ELEV. (ft) DE 880 0 0 0 25 50 75 100 NO. MOI ELEV. (ft) DE 875 0	0.0 0.5 1.5 2.5 	ELEV [(ft)] 885	DRIVE ELEV (ft) DEPT (ft) 880.4 1.1	TH BLOV 0.5ft		ιт		BLOWS	PER FOOT
CLEV ELEV DL1 minor Solit AND ROCK DESCRIPTION (ft) 0.5ft 0.5f	<u>0.0</u> 0.0 0.5 1.5 2.5 3.5 4.5 6.0 7.5	885 880 875	ELEV (ft) (ft) 880.4 1.1	0.5ft			0		
(II) (II) 0.5ft 0.5ft 0.5ft 0 25 50 75 100 NO. MOI G ELEV. (ft) DE 880	0.0 1.5 2.5 3.0 3.5 4.5 - 6.0 7.5	885 880	(ft) (lt)		0.5ft 0	0.5ft	0	25	50 75
875 GROUND SURFACE 875 877.9 GROUND SURFACE 876 877.5 ROADWAY EMBANKMENT 877 874.5 Red-brown, stiff to very stiff, sandy silty 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td< th=""><th>4.5 <u>6.0</u> 7.5</th><th>880</th><th>+</th><th></th><th></th><th></th><th></th><th></th><th></th></td<>	4.5 <u>6.0</u> 7.5	880	+						
875 M 877.9 GROUND SURFACE 875 RoAdWay EMBANKMENT 877.5 RoAdWay EMBANKMENT 876 874.5 Red-brown, stiff to very stiff, sandy silty 870 1 1 1 870 1 1 1 870 1 1 1 870 1 1 1 870 869.5 DCP blows - 9, 9, and 9 1 870 869.5 DCP blows - 5, 5, and 5 1 870 1 1 1 1 1 1 1 870 1 <td>4.5 <u>6.0</u> 7.5</td> <td>880</td> <td>+</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	4.5 <u>6.0</u> 7.5	880	+						
875 M 875.5 ROADWAY EMBANKMENT 875 M 875.5 Red-brown, stiff, sandy sitty 870 M 874.5 CLAY (A-7-6), trace gravel 870 M 87.5 DCP blows - 9, 9, and 9 870 M 87.5 DCP blows - 9, 8, and 8 870 M 87.0 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 Brown, stiff, silty CLAY (A-7-6), trace rock	4.5 <u>6.0</u> 7.5	875	+	3					
875 M 875.5 ROADWAY EMBANKMENT 875 M 875.5 Red-brown, stiff, sandy sitty 870 M 874.5 CLAY (A-7-6), trace gravel 870 M 87.5 DCP blows - 9, 9, and 9 870 M 87.5 DCP blows - 9, 8, and 8 870 M 87.0 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 5, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 DCP blows - 6, 5, and 5 870 M 88.5 Brown, stiff, silty CLAY (A-7-6), trace rock	4.5 <u>6.0</u> 7.5	875	+	3					
870	4.5 <u>6.0</u> 7.5	875	+	3			.		<u> </u>
870 M 873.5 DCP blows - 9, 9, and 9 I 870 I <t< td=""><td>4.5 <u>6.0</u> 7.5</td><td>875</td><td>878.0 3.5</td><td>1 1</td><td>3</td><td>3</td><td>6</td><td></td><td>+</td></t<>	4.5 <u>6.0</u> 7.5	875	878.0 3.5	1 1	3	3	6		+
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M N Bogs Image: Constraint of the second			<u>+</u>					<u> </u>	· · · ·
	12.0		873.0 8.5				. .		
	12.0		+	3	4	4	· • 8 ·		
865 0.000 min 0.000 m	12.0	870	+					· · · · ·	
DCP blows - 4, 5, and 7			868.0 13.5	5 2	2	3	:::		
Boring Terminated at Elevation 865.0 ft In Residual clayey SILT (A-5)		865	‡		-	Ĩ	●5· ·	· · · · · ·	
			+ 863.0 1 18.5	_ _			1		
blows/ft.			863.0 1 18.5 +	2	2	3	↓ ↓ 5	· · · · · ·	
		860	1				· · ·		
			858.0 23.5	5			<u> </u>	· · · · · ·	
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		850	Ŧ				\mathbf{P}_{1}^{3}	· · · · · ·	
			848.0 33.5				1		
			<u>040.0 _ 33.5</u> +	2	3	4			· · · · ·

OFFSET CL ALIGNMENT -L- 0 HR. 32.8 NORTHING 845,611 EASTING 1,719,652 24 HR. FIAD DRILL METHOD H.S. Augers HAMMER TYPE Automatic COMP. DATE 01/14/21 SURFACE WATER DEPTH N/A 75 100 NO. MOI G 881.5 GROUND SURFACE 0.0 881.5 GROUND SURFACE 0.0 880.4 0.7' Asphalt, 0.4' ABC 1.1	GUIL	FOF	RD			GEOLOGIST Goode, B.		
NORTHING 845,611 EASTING 1,719,652 24 HR. FIAD DRILL METHOD H.S. Augers HAMMER TYPE Automatic COMP. DATE 01/14/21 SURFACE WATER DEPTH N/A 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. G SOIL AND ROCK DESCRIPTION	lo. 3	_					GROUN	D WTR (ft)
DRILL METHOD H.S. Augers HAMMER TYPE Automatic COMP. DATE 01/14/21 SURFACE WATER DEPTH N/A 75 100 NO. Image: Comparison of the second secon	OFFSE	τ	CL			ALIGNMENT -L-	0 HR.	32.8
COMP. DATE 01/14/21 SURFACE WATER DEPTH N/A 75 100 NO. 0 SOIL AND ROCK DESCRIPTION 75 100 NO. MOI 6 SOIL AND ROCK DESCRIPTION 75 100 NO. MOI 6 SOIL AND ROCK DESCRIPTION 75 100 NO. MOI 6 SOIL AND ROCK DESCRIPTION 75 100 NO. MOI 6 SOIL AND ROCK DESCRIPTION 75 100 NO. MOI 6 SOIL AND ROCK DESCRIPTION 75 100 NO. 678.5 GROUND SURFACE 0.0 75 SS-116 26% 678.5 Red-brown, medium stiff, silty highly plastic CLAY - 75 N 875.5 Red-brown, orange, medium stiff to stiff, sandy SILT (A-4), saprolitic, trace mica 6.0 75 M 859.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 22.0 75 Sat. N 846.5 35.0 75 Sat. N 846.5 35.0	NORTH	ING	845,6	11		EASTING 1,719,652	24 HR.	FIAD
COMP. DATE 01/14/21 SURFACE WATER DEPTH N/A 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 100 NO. MOI G SOIL AND ROCK DESCRIPTION 0.0 100 NO. MOI G SOIL AND ROCK DESCRIPTION 0.0 101 SS-116 26% Red-brown, medium stiff, silty highly plastic 3.0 100 M GT8.5 Red-brown, medium stiff, silty highly plastic CLAY 6.0 100 M GT5.5 Red-brown, otomorange, medium stiff to stiff, sandy SILT (A-4), saprolitic, trace mica 6.0 100 M GT8.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 22.0 100 M GT9.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 101 M GT9.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 101 M GT9.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 101 M GT9.5 </td <td></td> <td></td> <td>DRILL N</td> <td>IETHO</td> <td>DН</td> <td>S. Augers HAMN</td> <td></td> <td>Automatic</td>			DRILL N	IETHO	DН	S. Augers HAMN		Automatic
SAMP. NO. MOI G SOIL AND ROCK DESCRIPTION 75 100 NO. MOI G SOIL AND ROCK DESCRIPTION 1 1 1 6 0.0 1 1 1 1.1 0.7 Asphalt, 0.4' ABC 0.0 1 1 1.1 0.7 Asphalt, 0.4' ABC 3.0 1 1 1.1 1.1 1.1 1.1 1 1 1 1.1 1.1 1.1 1 1 1.1 1.1	COMP.	DA					/A	
75 100 NO. MOI G 881.5 GROUND SURFACE 0.0 880.4 ROADWAY EMBANKMENT 1.1 SS-116 26% 478.5 Red-brown, medium stiff, sitly highly plastic 3.0 M 475.5 Red-brown, stiff, sitly highly plastic 3.0 M 475.5 Red-brown, stiff, sitly highly plastic 6.0 M 875.5 Red-brown to brown-orange, medium stiff to stiff, sandy SILT (A-4), saprolitic, trace mica 6.0 M 859.5 Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-4), saprolitic, trace to little mica M 846.5 35.0 Sat. 846.5 35.0						1		
881.5 GROUND SURFACE 0.0 880.4 ROADWAY EMBANKMENT 1.1 878.5 Red-brown, medium stiff, silty highly plastic CLAY M 878.5 Red-brown, stiff, silty highly plastic CLAY 6.0 M 878.5 Red-brown stiff, silty highly plastic CLAY 6.0 M 878.5 Red-brown to brown-orange, medium stiff to stiff, sandy SILT (A-4), saprolitic, trace mica 6.0 M 859.5 22.0 M 859.5 22.0 M M M M M <td< td=""><td>75 ⁻</td><td>100</td><td>NO.</td><td>мо</td><td></td><td>SOIL AND ROCK DES</td><td>CRIPTION</td><td></td></td<>	75 ⁻	100	NO.	мо		SOIL AND ROCK DES	CRIPTION	
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Image: Second state of the second s		·				880.4 ROADWAY EMBAN	IKMENT	
M AT5.5 Red-brown, stiff, silty highly plastic CLAY 6.0 Red-brown to brown-orange, medium stiff to Red-brown to brown-orange, medium stiff to 6.0 Red-brown to brown-orange, medium stiff to M 6.0 Red-brown to brown-orange, medium stiff to 859.5 859.5 Red-brown to brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica 22.0 M Attribute Attribute M Attribute 846.5 Satt Attribute 846.5 Boring Terminated at Elevation 846.5 ft In 35.0			SS-116	26%		- 878.5 - Red-brown, medium stiff, si	ABC Ity highly pla	
Image: Construction of the second		:		М		<u>CLAY (A-7-6</u>)	
M Red-brown to brown-orange, medium stiff to stiff, sandy SILT (A-4), saprolitic, trace mica M M		·				Red-brown, stiff, silty highl		ΑΥ <u>[^{-6.0}</u>
M - stiff, sandy SILT (A-4), saprolitic, trace mica · M - · M - · M - · M - · M - · M - · M - · M - · M - · · Brown-orange-tan, soft to medium stiff, sandy clayey SILT (A-5), trace to little mica · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N · N N		:					. medium sti	J
· · · · · M · · · · M · · · · · · · ·		:		М		stiff, sandy SILT (A-4), sapr	olitic, trace n	nica
· · · · · M · · · · M · · · · · · · ·		-				_		
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· · · · · · · · · 859.5				IVI		•		
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Brown-orange-tan, soft to medium stiff, Brown-orange-tan, soft to medium stiff, Sandy clayey SILT (A-5), trace to little mica Brown-orange-tan, soft to medium stiff, Brown-orange-tan, soft to medium stiff, <td></td> <td>:</td> <td></td> <td>М</td> <td></td> <td></td> <td></td> <td></td>		:		М				
Brown-orange-tan, soft to medium stiff, Brown-orange-tan, soft to medium stiff, Sandy clayey SILT (A-5), trace to little mica Brown-orange-tan, soft to medium stiff, Brown-orange-tan, soft to medium stiff, <td></td> <td>·</td> <td></td> <td></td> <td></td> <td>- </td> <td></td> <td>22.0</td>		·				- 		22.0
Image: Non-state Image: Non-state Ima		:			л Л Л	Brown-orange-tan, soft to	medium stif	f,
···· ···· ···· ···· ···· ···· ···· Sat. ···· Boring Terminated at Elevation 846.5 ft In		•		М	7 V V	sandy clayey SILT (A-5), tra		lica
···· ···· ···· ···· ···· ···· ···· Sat. ···· Boring Terminated at Elevation 846.5 ft In	· · ·				7 V V	_		
···· ···· ···· ···· ···· ···· ···· Sat. ···· Boring Terminated at Elevation 846.5 ft In		:			7 V 7 7			
Boring Terminated at Elevation 846.5 ft In		:		VV	л V Л Л			
Boring Terminated at Elevation 846.5 ft In				\bigtriangledown	л 7 Л 7	-		
Boring Terminated at Elevation 846.5 ft In		:		Sat.	N V V	- 846.5		35.0
Residual sandy clayey SiL1 (A-S)	1					Boring Terminated at Eleva		
							SILT (A-5)	
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	35013					P U-4				OUNT		IILFOF	RD			GE	LOGIST Goode, B.				35013					P U-40 ⁻			COUNT	
	DESCR							-	taining	g Wall	1								. ,					limore		Rd. Wide	-		ng Wall	-
BORI	NG NO.	RW3	_7_HA	۹	SI	INTATIO	N 51	+25			OFF	SET 3	37 ft LT			ALI	SNMENT -L-	0 HR.	Dry	BOR	ING NO	. RW3	8_8		S	TATION	52+00)		OFI
COLL	AR ELE	IV. 88	80.7 ft		ТС	DTAL I	DEPTI	H 8.5	5 ft		NOR	THING	i 845,6	674		EAS	TING 1,719,703	24 HR.	FIAD	COL	LAR EL	EV. 88	33.9 ft		T (OTAL DE	ртн 🗧	30.0 ft		NO
DRILL	RIG/HAI	MMER E	FF./DA	re n/A	۹								DRILL	METHO	DD I	Hand Aug	er HAMN	IER TYPE Ma	anual	DRILL	RIG/HA	MMER E	FF./DA	TE Få	&R2245	CME-55 92	2% 04/30	0/2021		
DRILL	ER K	abra, S				FART I	DATE	01/1	9/21		сом	P. DA	FE 01/			SUF	FACE WATER DEPTH N	I/A		DRIL	LER T	-				TART DA	TE 01	1/18/21		co
ELEV	DRIVE ELEV	DEPTH		W COU						R FOOT			SAMP.	1.7			SOIL AND ROCK DES	CRIPTION		ELEV	DRIVE ELEV	DEPTH	·	ow co					ER FOOT	
(ft)	(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	2	5	50		75	100	NO.	Имо) G	ELEV.			DEPTH (ft)	(ft)	(ft)	(ft)	0.5ft	0.5ft	0.5ft	0	25	50	0	75 I
885		-														L				885		Ļ								
	-	-														Ę					883.0	0.9		_		<u> </u>				
	-	-														888:7	GROUND SURF	ACE	Q.Q		000.4	1 25	4	5	5			· · ·		
880	_	-					(M M		880:2 879.2 878.2 877.2 876.7 876.2	ROADWAY EMBAN Red-brown to brown, stiff to	IKMENT	0.0 0.5 1.5 2.5 3.5 4.0 4.5	880	880.4	3.5 	3	5	6		<u>. .</u>			+
	-	_					<u>}</u>		.			· · ·		M		877.2	CLAY (A-7-6), trace DCP blows - 4, 5,	e gravel	2.5 3.5 4.0			ŧ						· · ·		. .
875	-	-					Å.					• •		м	X	876.2	DCP blows - 4, 3, DCP blows - 4, 4,	and 7	4.5	875	875.4	8.5							• • •	
	-	-					· · · ·							м		873.2	DCP blows - 4, 6, DCP blows - 9, 8, a	and 10	7.5] -	Ŧ	3	5	6	- P ¹¹				
	-	-				• •	• •		.			• •	-			872.2	DCP blows - 5, 7, RESIDUAL		<u> </u>			Ŧ				:/::		· · · ·	••••	. .
	_	-														F	Brown-black to brown-red, CLAY (A-7-6	verv stiff, siltv		870	870.4	† 13.5 †	1	2	3		· ·			
	-	-														Ę	DCP blows - 8, 11,	and 10				ŧ								. .
	-	-														È.	Boring Terminated at Eleva Residual silty CLAY	ation 872.2 ft In ' (A-7-6)		865	865.4	+ 18.5				[::]		· · ·	••••	
	_	-														F	DCP values converted to e	equivalent SPT		005		‡	1	2	3	• 5				
	-															Ę	blows/ft.					‡						· · ·	•••	
	-	_														Ł				860	860.4	23.5	1	1	3	<u> </u>	· ·			· ·
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	_	_														F				855	855.4	28.5	1	2	3	• <u></u> 5.				-

T١	r GUI	LFOF	۲I)			GEOL	.OGIST Goode, E	5.					
	No. 3									GROUN	ID WTR (ft)			
Τ	OFFS	ET (CI	L			ALIG	NMENT -L-		0 HR. Dry				
┥	NORT		-	845,6	64		EAST			24 HR.	FIAD			
			_	DRILL N		ר ר	I.S. Augers		НАММ		Automatic			
	00145		L_				_				Automatic			
<u> </u>	COMP	DA	-	E 01/	10/21	L	SURF	ACE WATER DEP	TH N/	A				
DT	75	100		SAMP. NO.	моі	L O G		SOIL AND ROO	CK DESC	RIPTION				
	1		_				883.9 883.0	GROUNE ROADWAY			0.0 0.9			
•					М		_	0.6' Asph	alt, 0.3' A	ABC				
•		•••			М		<u>880.9</u>	Red-orange, stiff, si	lty CLAY avel	(A-7-6), tr	ace <u>3.0</u>			
•	· ·	· ·			IVI		877.9		IDUAL		 7 c)6.0			
•		: :					_	Red-orange, stiff, sa	k fragme	nts	/-0), 			
	+				м		L	Orange-red, medium (A-4).	stiff to s	tiff, sandy	SILT			
:							-	(~-+),	Sapionid	•				
:		· ·					-							
	+				м		-							
•		· ·					<u>867.9</u>	Tan-brown, loose, si			AND <u>16.0</u>			
•	· ·	•••					_	(A-2-5), trace						
-		\cdot			М		L							
•							<u>861.9</u>	Tan-orange to tan-ora		v medium	<u>22.0</u>			
•	+ · ·	• •			м	トレ	-	sandy clay	ey SILT	(A-5)	Jun,			
:						ト <i>レ</i>	-							
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	+				М	ママ	853.9				30.0			
			1					Boring Terminated Residual sandy	at Elevat	ion 853.9 1 SILT (A-5)	ft In			
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	35013					P U-40154			Y GUILFO	JRD			GE	OLOGIST Goode, B.			3 3501					P U-401		COUN	
				limore		Rd. Widenii	-	ing wall	1	0										Imore			ning: Retai	ning wa	
				STATION 52+50 OFFSET CL TOTAL DEPTH 30.0 ft NORTHING 845,678								ALIGNMENT -L- 0 HR. Dry				_						~	0		
								l						STING 1,719,835	24 HR. FIAD										NC
				TE F		CME-55 92%			I				H.S. Aug		MMER TYPE Automatic DRILL RIG/HAMMER EFF./DATE F&R2245 CME-55 92% 04/30/20						<u> </u>				
DRILLER Tignor, D. START DATE 01/18/21						COMP. D					RFACE WATER DEPTH N	/A	-		-	1				E 01/11/		C			
ELEV (ft)		DEPTH (ft)				0 2		PER FOOT 50	7 <u>5</u> 10	SAMP	1.7			SOIL AND ROCK DES		ELEV (ft)		DEPTH (ft)	·			0	BLOWS 25	PER FOC	
(,	(ft)	()	0.51	0.511	0.5ft				15 10	NO.	/мс	DI G	ELEV	(ft)	DEPTH (ft)	(,	(ft)	(,	0.5π	0.511	0.5ft	0	25	JU	75
885	883.8 -						1						884.7 883.8	GROUND SURF		885	884.4	+ 0.0							
		- 0.9	4	3	3	● 6 · ·			.	SS-13	1 31%		881.7	0.6' Asphalt. 0.3'	ABC			Ŧ	WOH	3	3	•			
880	881.2	3.5	3	4	7		· · · ·	· · · ·			м			Red-orange, medium stiff, si CLAY (A-7-6))	880	880.9	3.5	4	10	12				
		ŧ											878.7	RESIDUAL Red-orange, stiff, silty highl				Ŧ				,			
	876.2	+ - 85						· · · ·	· · · · · ·				-	(A-7-6)	i		075.0	‡							
875		- 0.0	2	3	3				· · · · ·	_	м		F	Orange-red, medium stiff, sa saprolitic	andy SILT (A-4),	875	875.9	8.5	3	6	8	14		· · ·	·
	-	ŧ						· · · · · ·					-					‡							
070	871.2	13.5	1	2	3		· · · ·	· · · ·	· · · · · ·									‡							
870		ŧ	'	-		• • • • • • • • • • • • • • • • • • •	<u> </u>			11	M		868.7		<u>16.0</u>		-	‡							
		1						· · ·	. .			N V		Orange-white, medium stif (A-5), saproliti	ff, clayey SILT			t							
865	866.2	<u> 18.5 </u>	1	2	3	• · · ·					м	× ×	j_					ŧ							
	-	ŧ				t : : :	· · · ·	· · · ·				/ V / V	862.7		22.0			ŧ							
	861.2	23.5						· · · ·					E	Tan-brown-orange, medium : (A-4), saproliti	stiff, sandy SILT			ŧ							
860	-	Ł		2	2	• 4					м			(717), odprona	<u>26.0</u>		-	ł							
	-	Ŧ										N 1		Tan-orange, medium stiff, cla saprolitic	ayey SILT (A-5),			Ŧ							
855	856.2	28.5	1	2	2						w	N N N V	E 854.7	Sapronic	30.0			Ŧ							
		ŧ				4		· · · ·		-	<u> </u>	<u>, 1</u>	-	Boring Terminated at Eleva	ation 854.7 ft In		-	Ŧ							
	-	ŧ											F	Residual clayey SIL	-1 (A-5)			ŧ							
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T	r gui	LFO	R	D			GEO	DLOG	ST God	ode, B.				
	No. 3											GROUN	ID WTR (ft)	
]	OFFS	ET	5(0 ft LT			ALI	GNME	NT -L-	0 HR. Dry				
	NORT	HING	3	845,7	37		EAS	STING	1,719,8	373		24 HR.	Dry	
			Τ	DRILL N	IETHO	DH	.S. Auge	ers			HAMM	ER TYPE		
	COMP. DATE 01/11/21 SURFACE WATER DEPTH N/A													
)T														
	75	100		NO.	моі	O G			SOIL AN	D ROCI	K DESC	RIPTION		
	1					-								
•	1			SS-51	12%		- 884.4 - 883.9		GR ROAD		SURFA		0.0	
•		 		00-01	1∠70	\sim	<u>- 882.4</u>	__	Brown, med	dium stif	f, sand		4)	
·	· ·	•••			м		-	ĮE	Brown, med	RESII dium stif	f, sand	y <u>SILT (A-</u>	<u>4)_</u>]	
•		•••					<u> 878.4 </u>	_ R∉	d-orange,	very stif	f, sand	y CLAY (A	-6),6.0	
•		•••					_	Rec	l-orange, m	nedium	dense,	clayey silty	 fine	
•	<u> </u>	· ·			М		- 	_		fragn	nents	trace rock	10.0	
							-	Bo	ring Termi	nated at	t Elevat	ion 874.4 f ND (A-2-5)	t In	
							-		i vesiuudi (Gayey S	iity SAI	ND (M-2-3)		
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