

REFERENCE: I-5880

PROJECT: 53080

CONTENTS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3	SITE PLAN
4 - 7	CROSS SECTIONS
8 - 9	PROFILES
10 - 21	BORE LOGS
22	SITE PHOTOGRAPHS

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY FORSYTH
PROJECT DESCRIPTION I-40/US-311 AT NC-109
(THOMASVILLE ROAD) / CLEMMONSVILLE ROAD
SPLIT DIAMOND INTERCHANGE
SITE DESCRIPTION BRIDGE NO. 340 ON -L- (I-40/US-311)
OVER -Y2A- (CLEMMONSVILLE ROAD)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5880	1	

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N.C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO PERFORM INDEPENDENT SUBSURFACE INVESTIGATIONS AND MAKE INTERPRETATIONS AS NECESSARY TO CONFIRM CONDITIONS ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL

M. FOSTER

TRIGON EXPLORATION

NCDOT PERSONNEL

INVESTIGATED BY KLEINFELDER, INC

DRAWN BY B. FARMER

CHECKED BY D. KUBINSKI

SUBMITTED BY KLEINFELDER, INC

DATE JUNE 2024

Prepared in the Office of:



KLEINFELDER
Bright People. Right Solutions.
422 GALLIMORE DARY ROAD, SUITE B
GREENSBORO, NC 27409
NC ENGINEERING FIRM LICENSE NO. F-1312



DocuSigned by:

Joshua D. Fregosi 06/26/2024

DA0130C3FB4C4F1 SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

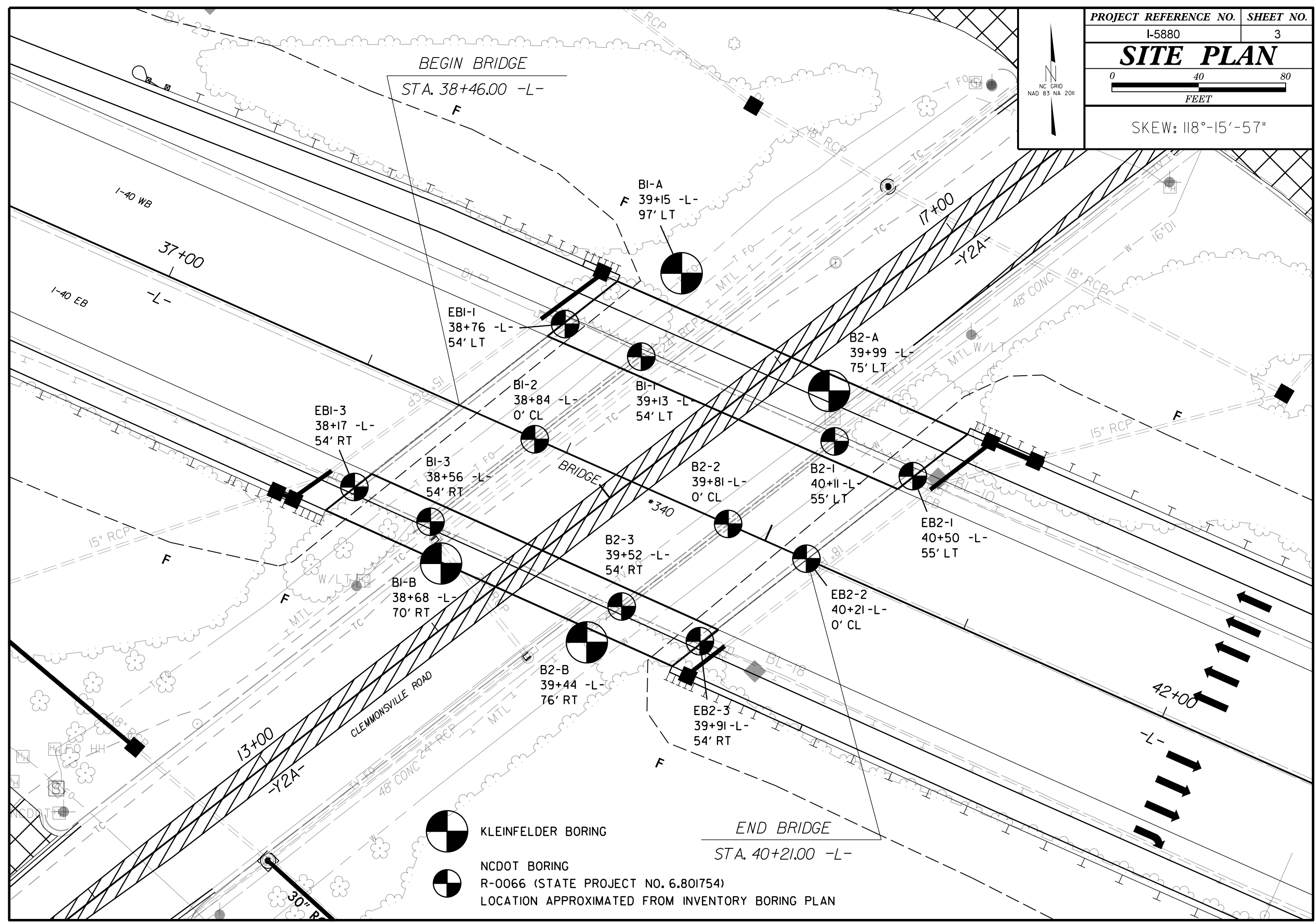
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION												GRADATION												ROCK DESCRIPTION												TERMS AND DEFINITIONS											
SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, <i>VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6</i>												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.												HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL. THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:												ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER. AQUIFER - A WATER BEARING FORMATION OR STRATA. ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND. 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 WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE. CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE. COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE. 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. DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL. DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH. FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE. FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES. FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOGGED FROM 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 FIELD. JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED. LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT. 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. PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM. RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK. ROCK QUALITY DESIGNATION (ROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS 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 ROCK. SILL - 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. SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE. 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 DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS. STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE. STRATA ROCK QUALITY DESIGNATION (SROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE. TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.											
SOIL LEGEND AND AASHTO CLASSIFICATION												MINERALOGICAL COMPOSITION												WEATHERING																							
GENERAL CLASS.												MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.												FRESH																							
GROUP CLASS.												CRISTALLINE ROCK (CR)												VERY SLIGHT (V SL.)																							
SYMBOL												COMPRESSIBILITY												SLIGHT (SL.)																							
%												PERCENTAGE OF MATERIAL												MODERATE (MOD.)																							
MATERIAL PASSING #40 #200												GROUND WATER												MODERATELY SEVERE (MOD. SEV.)																							
GROUP INDEX												MISCELLANEOUS SYMBOLS												SEVERE (SEV.)																							
USUAL TYPES OF MAJOR MATERIALS												RECOMMENDATION SYMBOLS												VERY HARD																							
GEN. RATING AS SUBGRADE												ABBREVIATIONS												HARD																							
PI OF A-7-5 SUBGROUP IS ≤ LL - 30; PI OF A-7-6 SUBGROUP IS > LL - 30												EQUIPMENT USED ON SUBJECT PROJECT												MODERATELY HARD																							
CONSISTENCY OR DENSENESS												DRILL UNITS:												MEDIUM HARD																							
PRIMARY SOIL TYPE												ADVANCING TOOLS:												SOFT																							
COMPACTNESS OR CONSISTENCY												HAMMER TYPE:												VERY SOFT																							
RANGE OF STANDARD PENETRATION RESISTANCE (N-VALUE)												CORE SIZE:												COMPLETE																							
RANGE OF UNCONFINED COMPRESSIVE STRENGTH (TONS/FT ²)												HAND TOOLS:												ROCK HARDNESS																							
GENERAL												FRAC. - FRACTURED, FRACTURES												VERY HARD																							
GENERAL												HI. - HIGHLY												HARD																							
TEXTURE OR GRAIN SIZE																								MODERATELY HARD																							
U.S. STD. SIEVE SIZE OPENING (MM)																								HARD																							
BOULDER (BLDR.)																								MODERATELY HARD																							
COBBLE (COB.)																								HARD																							
GRAVEL (GR.)																								MODERATELY HARD																							
COARSE SAND (CSE. SD.)																								HARD																							
FINE SAND (F SD.)																								MODERATELY HARD																							
SILT (SL.)																								HARD																							
CLAY (CL.)																								MODERATELY HARD																							
GRAIN SIZE																								HARD																							
SOIL MOISTURE - CORRELATION OF TERMS																								MODERATELY HARD																							
SOIL MOISTURE SCALE (ATTERBERG LIMITS)																								HARD																							
FIELD MOISTURE DESCRIPTION																								MODERATELY HARD																							
GUIDE FOR FIELD MOISTURE DESCRIPTION																								HARD																							
LL - LIQUID LIMIT																								MODERATELY HARD																							
PL - PLASTIC LIMIT																								HARD																							
OM - OPTIMUM MOISTURE SHRINKAGE LIMIT																								MODERATELY HARD																							
SL - SHRINKAGE LIMIT																								HARD																							
PLASTICITY																								MODERATELY HARD																							
NON PLASTIC																								HARD																							
SLIGHTLY PLASTIC																								MODERATELY HARD																							
MODERATELY PLASTIC																								HARD																							
HIGHLY PLASTIC																								MODERATELY HARD																							
COLOR																								HARD																							
DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY). MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.																								HARD																							

PROJECT REFERENCE NO.	SHEET NO.
I-5880	3
SITE PLAN	
0 40 80 FEET	
SKEW: 118°-15'-57"	

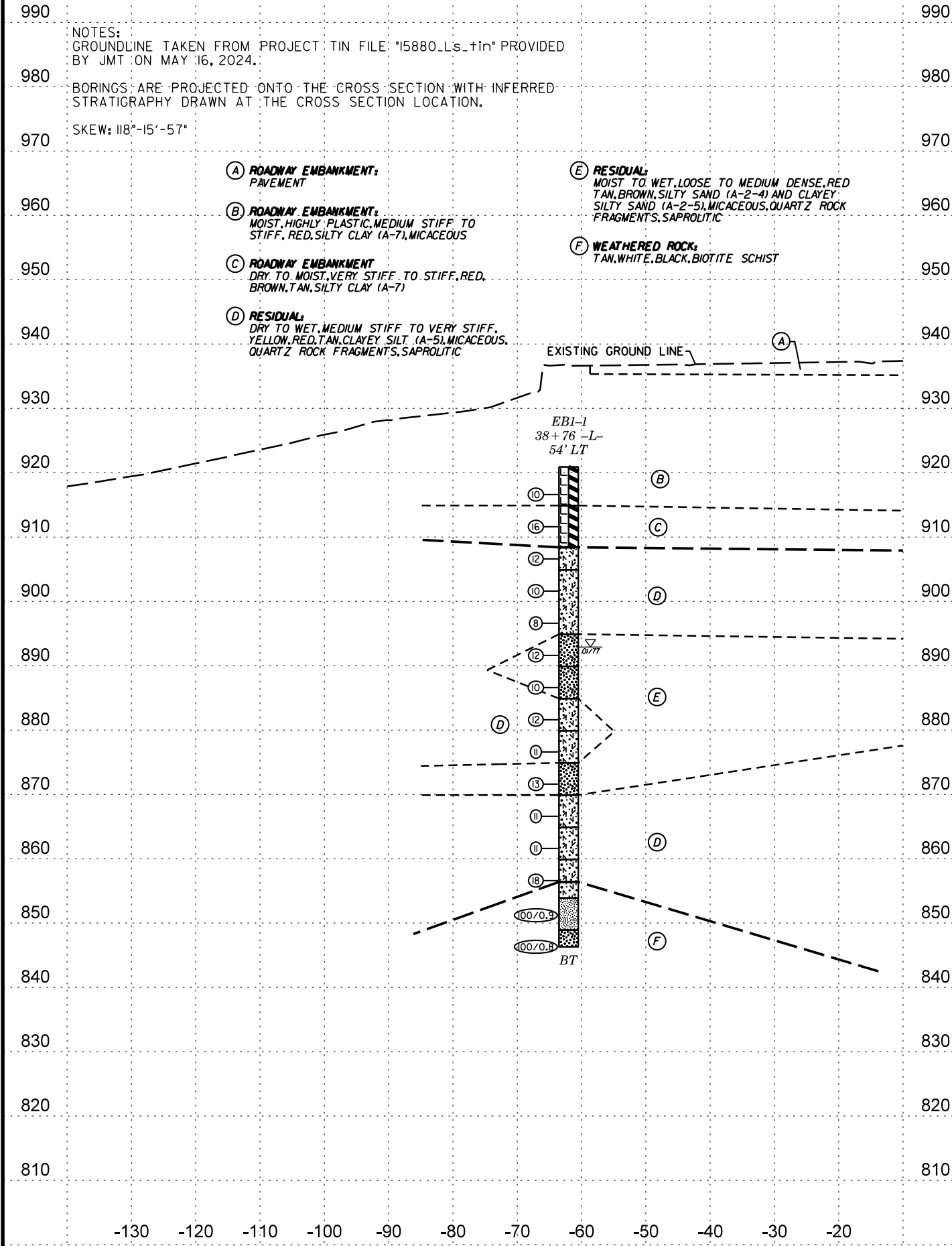


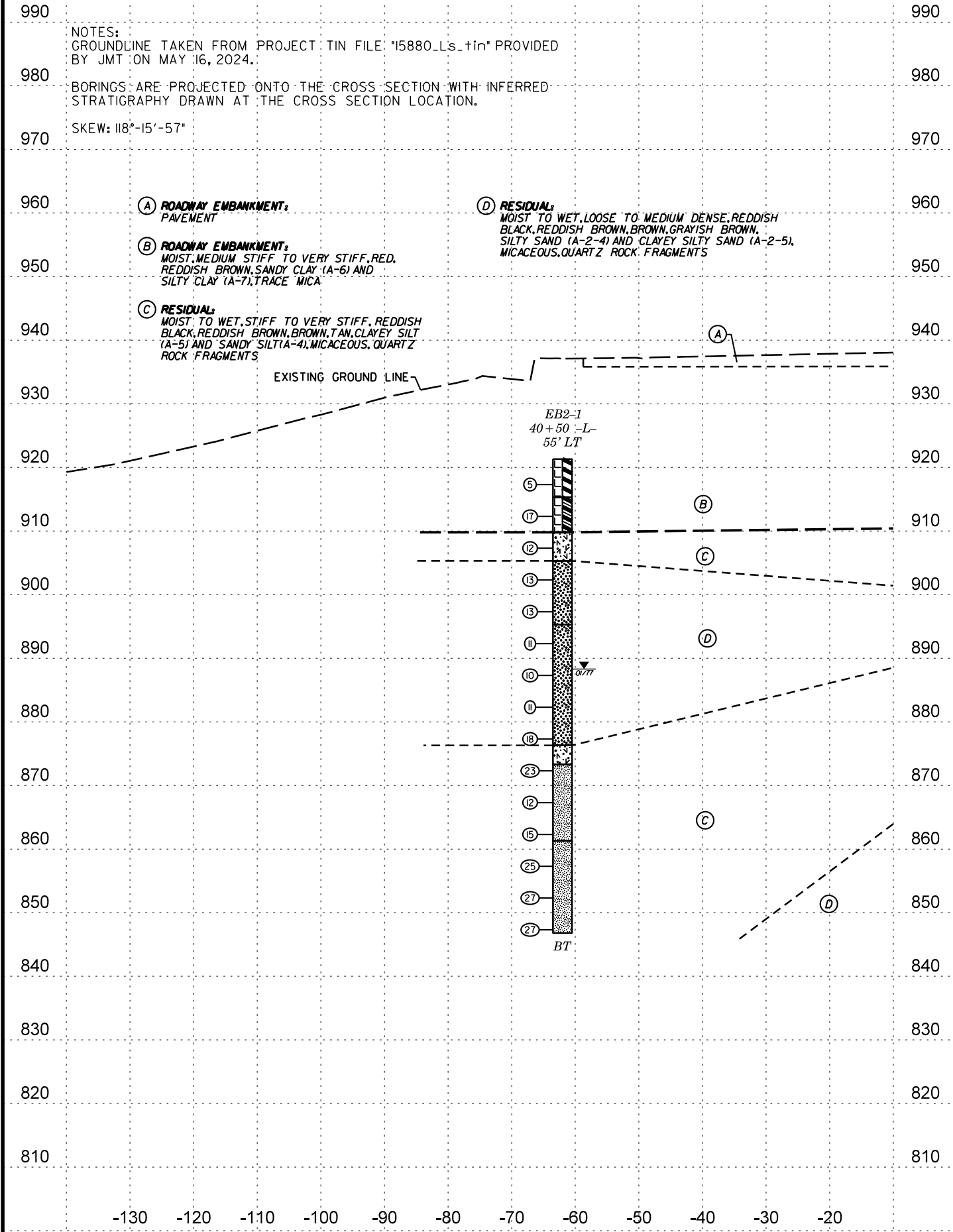
 KLEINFELDER BORING

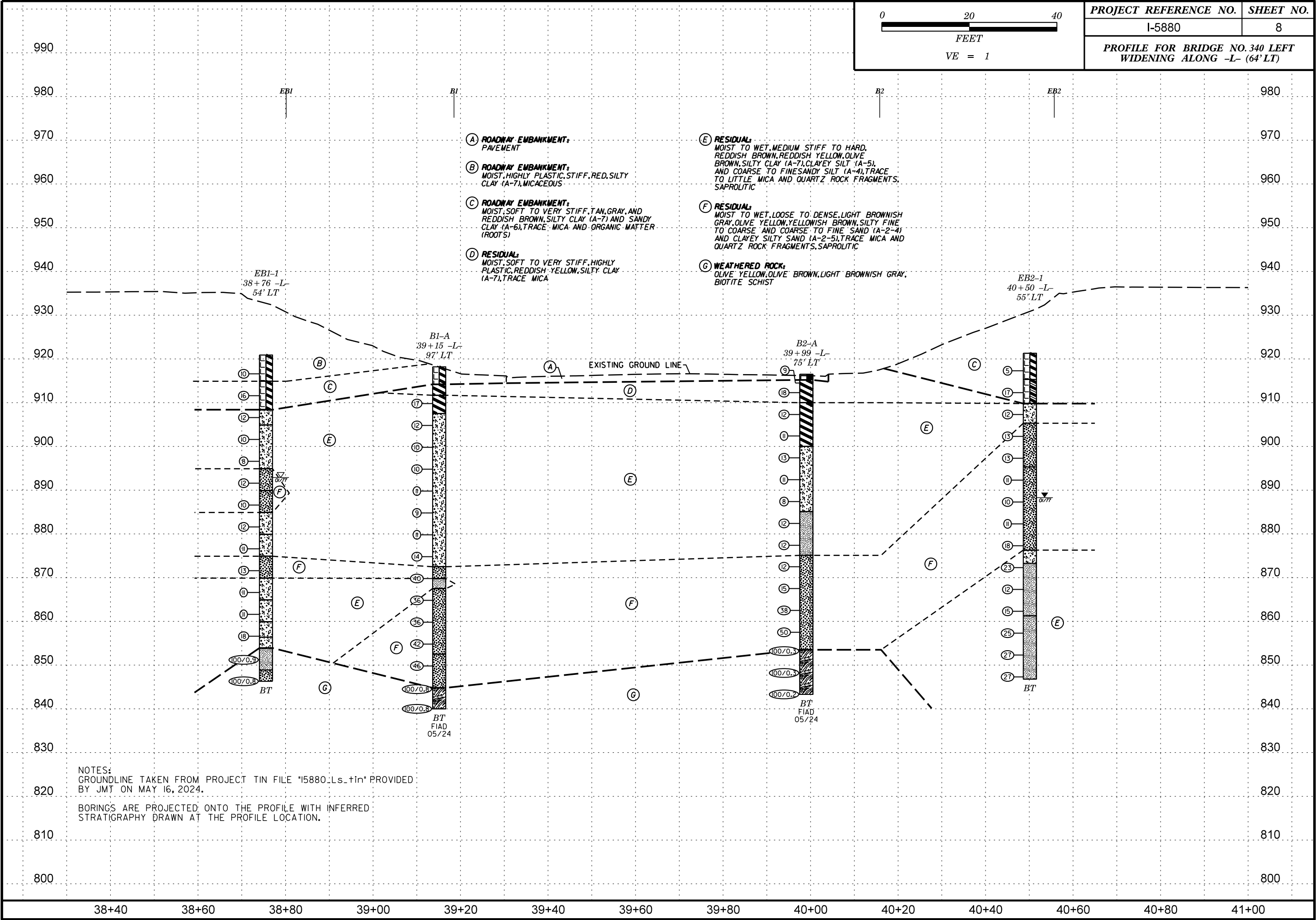
 NCDOT BORING

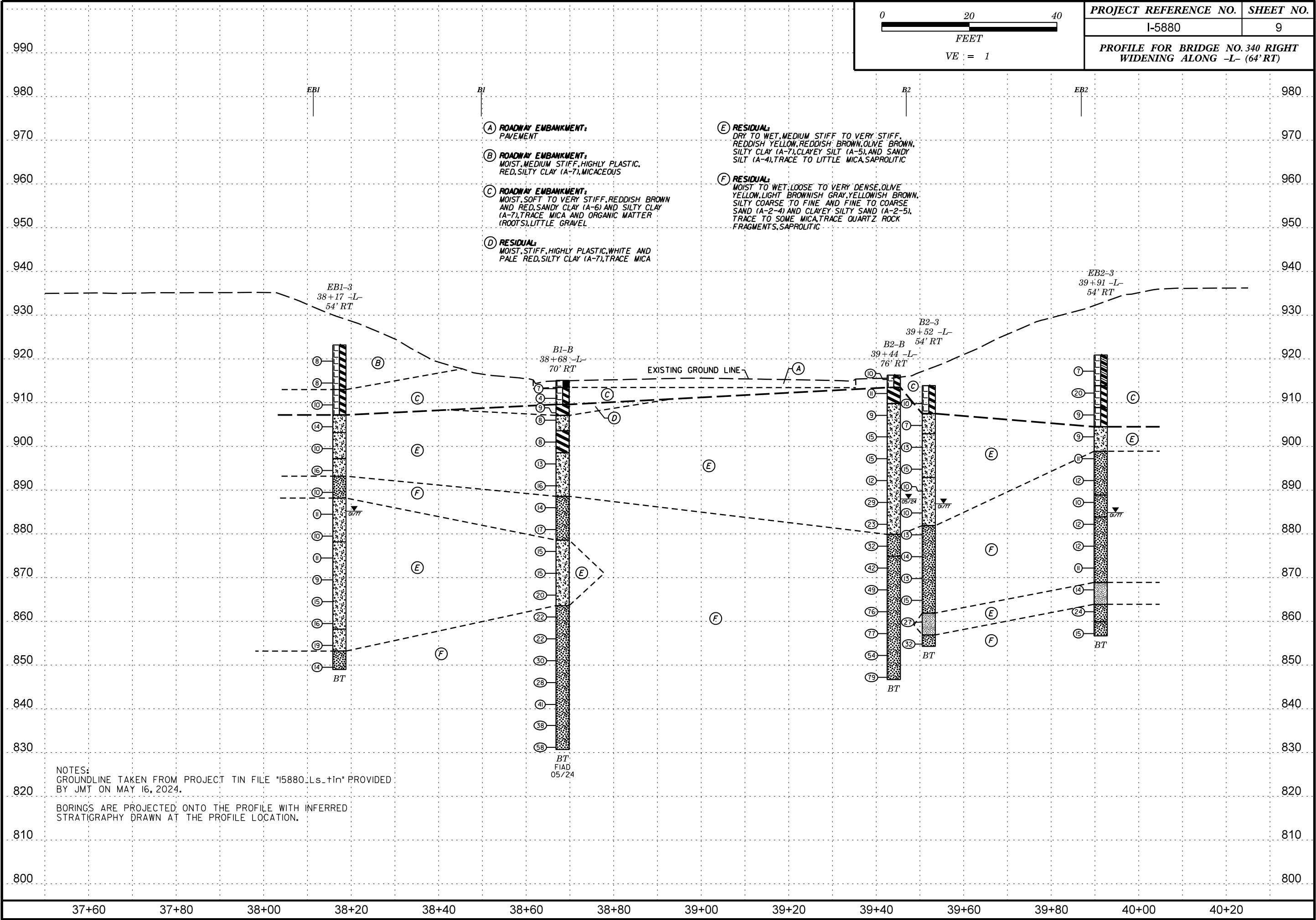
R-0066 (STATE PROJECT NO. 6.801754)

LOCATION APPROXIMATED FROM INVENTORY BORING PLAN









NOTES:
GROUNDLINE TAKEN FROM PROJECT TIN FILE "I5880.Ls.tin" PROVIDED
BY JMT ON MAY 16, 2024.

BORINGS ARE PROJECTED ONTO THE PROFILE WITH INFERRED
STRATIGRAPHY DRAWN AT THE PROFILE LOCATION.

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 53080.1.1						TIP I-5880				COUNTY FORSYTH				GEOLOGIST N/A			
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)														GROUND WTR (ft)			
BORING NO. EB1-1				STATION 38+76				OFFSET 54 ft LT				ALIGNMENT -L-				0 HR. 28.0	
COLLAR ELEV. 920.9 ft				TOTAL DEPTH 74.6 ft				NORTHING 843,072				EASTING 1,639,486				24 HR. N/A	
DRILL RIG/HAMMER EFF./DATE N/A										DRILL METHOD H.S. Augurs				HAMMER TYPE N/A			
DRILLER N/A						START DATE N/A				COMP. DATE 01/26/77				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)		
930																	
925																	
920														920.9 GROUND SURFACE 0.0			
	917.6	3.3		2	5	5									ROADWAY EMBANKMENT		
915															Highly Plastic, Red, Fine Sandy Silty CLAY		
	912.6	8.3		5	8	8									914.9 Tan-Gray, Fine to Medium Sandy Silty CLAY 6.0		
910																	
	907.6	13.3		4	6	6									908.4 RESIDUAL 12.5		
905															Yellow-Red, Micaceous Fine Sandy SILT		
	902.6	18.3		3	5	5									904.9 Red-Tan, Micaceous Fine Sandy SILT, Saprolitic 16.0		
900																	
	897.6	23.3		3	3	5											
895															894.9 with Medium to Coarse Sandy Quartz Veins 26.0		
	892.6	28.3		3	5	7											
890															889.9 Tan-Pink, Fine to Coarse Sandy Micaceous SILT 31.0		
	887.6	33.3		2	4	6											
885															884.9 36.0		
	882.6	38.3		2	4	8											
880															879.9 Black-Tan, Micaceous Fine to Coarse Sandy SILT 41.0		
	877.6	43.3		1	4	7											
875															874.9 Tan-Pink, Micaceous Fine to Medium Silty SAND 46.0		
	872.6	48.3		2	5	8											
870															869.9 51.0		
	867.6	53.3		2	4	7											
865															864.9 White-Tan, Micaceous Fine to Medium Sandy SILT 56.0		
	862.6	58.3		2	4	7											
860															859.9 Tan-White to Tan-Black, Micaceous Fine Sandy SILT 61.0		
	857.6	63.3		3	5	13											
855															856.4 64.5		
	852.6	68.3		12	28	50/0.4									853.9 67.0		
850																	
															100/0.9		

WBS 53080.1.1						TIP I-5880			COUNTY FORSYTH				GEOLOGIST N/A			
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)													GROUND WTR (ft)			
BORING NO. EB1-1				STATION 38+76				OFFSET 54 ft LT				ALIGNMENT -L-			0 HR. 28.0	
COLLAR ELEV. 920.9 ft				TOTAL DEPTH 74.6 ft				NORTHING 843,072				EASTING 1,639,486			24 HR. N/A	
DRILL RIG/HAMMER EFF./DATE N/A								DRILL METHOD H.S. Augers				HAMMER TYPE N/A				
DRILLER N/A				START DATE N/A				COMP. DATE 01/26/77				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						
850						Match Line										
	847.6	73.3				<										

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST N/A						
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmonsville Road)									GROUND WTR (ft)						
BORING NO. EB1-3			STATION 38+17			OFFSET 54 ft RT			ALIGNMENT -L-			0 HR. N/A			
COLLAR ELEV. 923.2 ft			TOTAL DEPTH 74.2 ft			NORTHING 842,997			EASTING 1,639,389			24 HR. 38.0			
DRILL RIG/HAMMER EFF./DATE N/A						DRILL METHOD H.S. Augers			HAMMER TYPE N/A						
DRILLER N/A			START DATE N/A			COMP. DATE 01/26/77			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)
925															
														923.2	0.0
														GROUND SURFACE	
														ROADWAY EMBANKMENT	
														Red, Micaceous, Fine Sandy Silty CLAY	
920	920.5	2.7	2	3	5								M		
915	915.5	7.7	2	3	5								M		
910	910.5	12.7	3	5	5								D		
														913.0	10.2
														Red-Brown, Micaceous, Silty Sandy CLAY and Clayey Coarse SAND	
905	905.5	17.7	5	6	8								D		
														907.2	16.0
														RESIDUAL	
														Red-Brown, Micaceous Fine Sandy Clayey SILT	
														903.2	20.0
														with Weathered Pegmatite Vein	
900	900.5	22.7	3	4	6								D		
														897.2	26.0
895	895.5	27.7	5	7	9								D		
														Red-Brown, Micaceous Clayey Silty Fine SAND	
														893.2	30.0
														Tan, Micaceous Silty Fine SAND (Weathered Pegmatite)	
890	890.5	32.7	3	4	6								M		
														888.2	35.0
														White-Yellow-Tan, Micaceous Silty CLAY	
885	885.5	37.7	2	5	6								▼		
													M		
880	880.5	42.7	2	4	6								W		
														878.2	45.0
875	875.5	47.7	2	4	7								W		
														Tan, Micaceous Silty Fine SAND	
													W		
870	870.5	52.7	2	3	6								W		
865	865.5	57.7	3	6	9								W		
860	860.5	62.7	3	7	9								W		
														858.2	65.0
855	855.5	67.7	8	9	10								W		
														White, Silty CLAY with Quartz Seam and Micaceous Pegmatite	
														853.2	70.0
														Brown, Micaceous Clayey Silty Fine SAND	
850	850.5	72.7	2	5	9								W		
														849.0	74.2
														Boring Terminated at Elevation 849.0 ft in RESIDUAL (Clayey Silty SAND)	

WBS 53080.1.1						TIP I-5880			COUNTY FORSYTH			GEOLOGIST N/A			
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)												GROUND WTR (ft)			
BORING NO. EB1-3				STATION 38+17				OFFSET 54 ft RT				ALIGNMENT -L-		0 HR. N/A	
COLLAR ELEV. 923.2 ft				TOTAL DEPTH 74.2 ft				NORTHING 842,997				EASTING 1,639,389		24 HR. 38.0	
DRILL RIG/HAMMER EFF./DATE N/A								DRILL METHOD H.S. Augers				HAMMER TYPE N/A			
DRILLER N/A				START DATE N/A				COMP. DATE 01/26/77				SURFACE WATER DEPTH N/A			
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	L O G	SOIL AND ROCK DESCRIPTION		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100	MOI				
845						Match Line									
														NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.	

NC DOT BORE DOUBLE I5880 GEO BRDG0340 GINT.GPJ NC DOT.GDT 6/11/24

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)					
BORING NO. B1-A			STATION 39+15			OFFSET 97 ft LT			ALIGNMENT -L-					
COLLAR ELEV. 918.2 ft			TOTAL DEPTH 78.2 ft			NORTHING 843,095			EASTING 1,639,540					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD Mud Rotary			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 05/16/24			COMP. DATE 05/17/24			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				
845						Match Line								
	840.8	77.4								100/0.8				
840			41	59/0.3						100/0.8				
WEATHERED ROCK Olive Yellow, Olive Brown, and Light Brownish Gray, BIOTITE SCHIST														
Boring Terminated at Elevation 840.0 ft in WEATHERED ROCK (BIOTITE SCHIST)														
NOTE: Topsoil (0.3 Foot)														
Hand auger from 0.0 - 5.3 Feet due to underground utility conflicts														

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1		TIP I-5880		COUNTY FORSYTH		GEOLOGIST N/A								
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)								GROUND WTR (ft)						
BORING NO. B1-1		STATION 39+13		OFFSET 54 ft LT		ALIGNMENT -L-		0 HR.	25.0					
COLLAR ELEV. 914.0 ft		TOTAL DEPTH 53.7 ft		NORTHING 843,057		EASTING 1,639,521		24 HR.	N/A					
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD H.S. Augers			HAMMER TYPE N/A							
DRILLER N/A			START DATE N/A		COMP. DATE 01/26/77		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)
915														
													914.0	0.0
													GROUND SURFACE	
910	911.0	3.0	4	6	7								ROADWAY EMBANKMENT	
													Red, Silty Sandy CLAY	
													908.5	5.5
													RESIDUAL	
905	906.0	8.0	2	5	5								Red-Purple, Silty Very Micaceous Sandy CLAY	
													904.0	10.0
													Red-Purple-Brown, Silty Very Micaceous Coarse Sandy CLAY	
900	901.0	13.0	2	4	6									
													898.0	16.0
													Red-Purple-Brown, Mottled, Coarse Sandy CLAY	
895	896.0	18.0	2	3	5									
													893.0	21.0
													Red-Purple-Brown, Mottled, Very Micaceous Sandy CLAY and Clayey SAND	
890	891.0	23.0	3	3	5									
													888.0	26.0
													Red-Purple-Brown, Silty Very Micaceous Sandy CLAY with Coarse Sand Veins	
885	886.0	28.0	2	4	5									
880	881.0	33.0	2	3	6									
875	876.0	38.0	3	6	6									
870	871.0	43.0	2	8	5									
865	866.0	48.0	3	6	14									
														</

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST N/A				
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)				
BORING NO. B1-2			STATION 38+84			OFFSET CL			ALIGNMENT -L-			0 HR.	N/A
COLLAR ELEV. 914.5 ft			TOTAL DEPTH 49.5 ft			NORTHING 843,019			EASTING 1,639,472			24 HR.	28.0
DRILL RIG/HAMMER EFF./DATE N/A						DRILL METHOD H.S. Augers			HAMMER TYPE N/A				
DRILLER N/A			START DATE N/A			COMP. DATE 01/26/77			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	MOI		
915													914.5 GROUND SURFACE 0.0
910	911.5	3.0	9	11	10								
905	906.5	8.0	6	6	10								904.5 with Coarse Quartz Grains 10.0
900	901.5	13.0	6	7	8								898.5 RESIDUAL 16.0
895	896.5	18.0	3	5	6								893.5 Red, Fine Silty CLAY with Fine Mica 21.0
890	891.5	23.0	4	6	9								888.5 Red-Brown, Fine to Coarse SAND with Clay Seams, Saprolitic 26.0
885	886.5	28.0	4	6	9								883.5 Brown-Red, Fine Silty SAND with Black-Brown Mica 31.0
880	881.5	33.0	2	4	10								878.5 Brown, Fine to Coarse SAND with Clay Seams and Mica, Saprolitic 36.0
875	876.5	38.0	3	5	6								873.5 Red-Brown, Fine to Coarse SAND, Saprolitic 41.0
870	871.5	43.0	2	4	8								868.5 Light Tan, Fine to Medium SAND 46.0
865	866.5	48.0	3	7	9								865.0 Red-Brown, Silty SAND 49.5
													865.0 Red-Yellow-Tan, Fine to Coarse Sandy Clayey SILT, Saprolitic 49.5
													Boring Terminated at Elevation 865.0 ft in RESIDUAL (Sandy Clayey SILT)
													NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST N/A						
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons Road)									GROUND WTR (ft)						
BORING NO. B1-3			STATION 38+56			OFFSET 54 ft RT			ALIGNMENT -L-			0 HR.	33.0		
COLLAR ELEV. 913.9 ft			TOTAL DEPTH 69.1 ft			NORTHING 842,981			EASTING 1,639,424			24 HR.	28.0		
DRILL RIG/HAMMER EFF./DATE N/A						DRILL METHOD H.S. Augers				HAMMER TYPE N/A					
DRILLER N/A			START DATE N/A			COMP. DATE 01/26/77			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)	
915															
910	911.1	2.8	1	1	1									913.9	0.0
905	906.1	7.8	2	4	4									907.9	6.0
900	901.1	12.8	2	4	5									903.5	10.4
895	896.1	17.8	3	5	7										
890	891.1	22.8	3	5	6									892.9	21.0
885	886.1	27.8	4	5	5									887.9	26.0
880	881.1	32.8	3	5	10									882.9	31.0
875	876.1	37.8	2	4	8									877.9	36.0
870	871.1	42.8	3	6	11									871.9	42.0
865	866.1	47.8	3	8	10									866.9	47.0
860	861.1	52.8	3	7	12										
855	856.1	57.8	4	7	11										
850	851.1	62.8	10	9	12										
845	846.1	67.8	21	59	40/0.3									846.1	67.8
														844.8	69.1
		</													

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 53080.1.1						TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster			
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)														GROUND WTR (ft)			
BORING NO. B1-B				STATION 38+68				OFFSET 70 ft RT				ALIGNMENT -L-				0 HR. N/A	
COLLAR ELEV. 915.1 ft				TOTAL DEPTH 84.4 ft				NORTHING 842,962				EASTING 1,639,429				24 HR. FIAD	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 83% 05/09/2022										DRILL METHOD Mud Rotary				HAMMER TYPE Automatic			
DRILLER R. Toothman				START DATE 05/05/24				COMP. DATE 05/08/24				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)		
920																	
915																	
910	914.2	0.9	9	3	4							M		915.1	GROUND SURFACE	0.0	
	912.0	3.1	4	2	2							M		913.5	ROADWAY EMBANKMENT	1.6	
															Asphalt (0.0 - 0.9 Foot) ABC Stone (0.9 - 1.6 Feet)		
905	908.7	6.4	2	4	5							M		909.6	Medium Stiff to Soft, Reddish Brown, Silty CLAY (A-7), Trace Mica, Little Gravel	5.5	
	907.0	8.1	2	4	4							M		907.1	RESIDUAL	8.0	
900												M			Stiff, Highly Plastic, White and Pale Red, Silty CLAY (A-7), Trace Mica		
	902.0	13.1	3	4	4							M		903.6	Medium Stiff, Pale Red, Clayey SILT (A-5), Trace Mica	11.5	
895												M			Medium Stiff, White and Reddish Brown, Silty CLAY (A-7)		
	897.0	18.1	2	6	7							M		898.6	Stiff to Very Stiff, Red and Olive Brown, Clayey SILT (A-5), Trace Mica, Saprolitic	16.5	
890												M					
	892.0	23.1	5	8	8							M					
885												M					
	887.0	28.1	3	7	7							M		888.6	Medium Dense, Dark Reddish Brown, Silty Coarse to Fine SAND (A-2-4), Little to Some Mica, Saprolitic	26.5	
880												M					
	882.0	33.1	5	7	10							M					
875												M					
	877.0	38.1	4	6	9							M		878.6	Stiff to Very Stiff, Olive Yellow, Light Brownish Gray, and Olive Brown, Clayey SILT (A-5), Trace to Little Mica, Saprolitic	36.5	
870												M					
	872.0	43.1	5	7	8							M					
865												M					
	867.0	48.1	5	9	11							M					
860												M					
	862.0	53.1	8	10	12							M		863.6	Medium Dense to Very Dense, Olive Yellow, Light Brownish Gray, and Yellowish Brown, Silty Coarse to Fine SAND (A-2-4), Trace Quartz Rock Fragments, Little Mica, Saprolitic	51.5	
855												M					
	857.0	58.1	15	11	11							M					
850												M					
	852.0	63.1	8	15	15							M					
845												M					
	847.0	68.1	8	12	16							M					
840												M					
	842.0	73.1	12	18	23							M					

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster				
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)				
BORING NO. B1-B			STATION 38+68			OFFSET 70 ft RT			ALIGNMENT -L-			0 HR. N/A	
COLLAR ELEV. 915.1 ft			TOTAL DEPTH 84.4 ft			NORTHING 842,962			EASTING 1,639,429			24 HR. FIAD	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 83% 05/09/2022						DRILL METHOD Mud Rotary			HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 05/05/24			COMP. DATE 05/08/24			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			
840						Match Line							
	837.2	77.9											

NCDOT BORE DOUBLE I5880 GEO BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster						
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)						
BORING NO. B2-A			STATION 39+99			OFFSET 75 ft LT			ALIGNMENT -L-			0 HR. N/A			
COLLAR ELEV. 916.5 ft			TOTAL DEPTH 73.2 ft			NORTHING 843,041			EASTING 1,639,607			24 HR. FIAD			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 83% 05/09/2022						DRILL METHOD Mud Rotary			HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 05/08/24			COMP. DATE 05/10/24			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)
920															
915	915.5	1.0	2	4	5									916.5	0.0
	913.3	3.2	4	8	10									915.2	1.3
910															
	908.3	8.2	3	6	6									910.0	6.5
905															
	903.4	13.1	3	5	6									900.0	16.5
900															
	898.4	18.1	3	6	7										
895															
	893.4	23.1	4	4	7										
890															
	888.4	28.1	2	3	5										
885															
	883.4	33.1	3	4	8									885.1	31.4
880															
	878.4	38.1	5	6	6										
875															
	873.5	43.0	3	5	7									875.1	41.4
870															
	868.5	48.0	5	6	9										
865															
	863.5	53.0	7	16	22										
860															
	858.5	58.0	4	10	40										
855															
	853.5	63.0	100/0.3											853.5	63.0
850															
	848.5	68.0	100/0.3												
845															
	843.5	73.0	100/0.2											843.3	73.2

</

WBS 53080.1.1		TIP I-5880		COUNTY FORSYTH		GEOLOGIST N/A										
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)							GROUND WTR (ft)									
BORING NO. B2-1		STATION 40+11		OFFSET 55 ft LT		ALIGNMENT -L-		0 HR.	N/A							
COLLAR ELEV. 914.8 ft		TOTAL DEPTH 64.5 ft		NORTHING 843,018		EASTING 1,639,610		24 HR.	26.0							
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD H.S. Augers			HAMMER TYPE N/A									
DRILLER N/A		START DATE N/A		COMP. DATE 01/26/77		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	MOI					
915													914.8	GROUND SURFACE	0.0	
	911.8	3.0										M		ROADWAY EMBANKMENT Red, Fine Sandy Micaceous Clayey SILT		
910			4	8	9											
	906.8	8.0										M		907.8	RESIDUAL	7.0
905			2	4	5									Pink, Very Micaceous Fine Sandy SILT, Saprolitic		
	901.8	13.0										M		903.8	Pink-Brown, Micaceous Fine Sandy SILT, Saprolitic	11.0
900			3	3	5											
	896.8	18.0										M		898.8	Pink-Brown to Brown, Micaceous, Fine to Coarse Sandy SILT, Saprolitic	16.0
895			2	4	4									893.8		21.0
	891.8	23.0										M				
890			2	4	5											
	886.8	28.0										W				
885			1	2	5											
	881.8	33.0										W				
880			2	3	7											
	876.8	38.0										W				
875			1	3	4											
	871.8	43.0										W				
870			2	4	7											
	866.8	48.0										W		868.8	Tan-Brown, Micaceous Silty Fine to Coarse SAND to Fine Sandy SILT	46.0
865			2	4	10											
	861.8	53.0										W				
860			3	6	10											
	856.8	58.0										M				
855			4	13	16											
	851.8	63.0										M		853.8	Brown, Micaceous Fine to Coarse Sandy SILT, Saprolitic	61.0
			2	7	12									850.3	Boring Terminated at Elevation 850.3 ft in RESIDUAL (Sandy SILT)	64.5
														NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.		

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1		TIP I-5880		COUNTY FORSYTH		GEOLOGIST N/A									
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)							GROUND WTR (ft)								
BORING NO. B2-2		STATION 39+81		OFFSET CL		ALIGNMENT -L-		0 HR.	N/A						
COLLAR ELEV. 914.4 ft		TOTAL DEPTH 64.6 ft		NORTHING 842,980		EASTING 1,639,561		24 HR.	25.0						
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD H.S. Augers			HAMMER TYPE N/A								
DRILLER N/A		START DATE N/A		COMP. DATE 01/26/77		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)
915															
														914.4	0.0
														ROADWAY EMBANKMENT	
														Red, Fine to Coarse Sandy Clayey SILT	
910	911.3	3.1		3	4	6							M		
														908.4	6.0
														Red, Micaceous Fine to Coarse Sandy Clayey SILT	
905	906.3	8.1		3	5	6							M		
														903.5	10.9
														RESIDUAL	
														Brown-White-Pink to Red-Brown-White, Micaceous Fine to Coarse Sandy SILT with Quartz, Saprolitic	
900	901.3	13.1		3	4	5							M		
895	896.3	18.1		1	4	6							M		
890	891.3	23.1		2	3	6									
885	886.3	28.1		2	3	6							W		
														888.4	26.0
														Brown, Micaceous Fine to Coarse Sandy Clayey SILT, Saprolitic	
880	881.3	33.1		2	3	6							W		
875	876.3	38.1		1	4	5							W		
870	871.3	43.1		1	4	7							W		
														873.4	41.0
														Brown, Micaceous Fine to Coarse Sandy SILT, Saprolitic	
865	866.3	48.1		1	2	7							W		
														868.4	46.0
														White, Micaceous Silty Fine to Coarse SAND, Saprolitic	
860	861.3	53.1		2	5	8							W		
														863.4	51.0
														Brown, Micaceous, Fine to Coarse Sandy SILT, Saprolitic	
855	856.3	58.1		8	8	13							W		
														858.4	56.0
														White to White-Brown, Micaceous Silty Fine to Coarse SAND with Pea Gravel, Saprolitic	
850	851.3	63.1		16	18	14							W		
														849.8	64.6
														with Quartz	
														Boring Terminated at Elevation 849.8 ft in RESIDUAL (Silty SAND)	
														NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.	

WBS 53080.1.1		TIP I-5880		COUNTY FORSYTH		GEOLOGIST N/A										
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons Road)							GROUND WTR (ft)									
BORING NO. B2-3		STATION 39+52		OFFSET 54 ft RT		ALIGNMENT -L-		0 HR.	N/A							
COLLAR ELEV. 913.9 ft		TOTAL DEPTH 59.6 ft		NORTHING 842,942		EASTING 1,639,512		24 HR.	27.0							
DRILL RIG/HAMMER EFF./DATE N/A				DRILL METHOD H.S. Augers			HAMMER TYPE N/A									
DRILLER N/A			START DATE N/A		COMP. DATE 01/26/77		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						
915																
910	910.8	3.1		2	4	6								913.9	GROUND SURFACE	0.0
															ROADWAY EMBANKMENT	
															Red, Fine Sandy Clayey SILT	
905	905.8	8.1		2	3	4								907.5		6.4
															RESIDUAL	
															Pink-White, Fine to Coarse Sandy Micaceous SILT to Fine to Coarse SAND with Quartz, Saprolitic	
900	900.8	13.1		3	5	8								902.9		11.0
															Brown, Fine to Coarse Sandy Micaceous SILT, Saprolitic	
895	895.8	18.1		3	6	9										
890	890.8	23.1		1	4	6								892.9		21.0
															Brown to Brown-Green-Black to Brown, Fine to Coarse Sandy Micaceous Clayey SILT	
885	885.8	28.1		2	4	6										
880	880.8	33.1		1	5	8								881.9		32.0
875	875.8	38.1		2	6	8										
															with Quartz Gravel	
870	870.8	43.1		3	5	8										
															Saprolitic	
865	865.8	48.1		3	6	9										
860	860.8	53.1		5	10	17								861.9		52.0
															Brown-Pink-White, Fine to Coarse Sandy Micaceous SILT, Saprolitic	
855	855.8	58.1		6	14	18								856.9		57.0
															Brown, Micaceous Fine to Coarse Sandy SILT, Saprolitic	
														854.3		59.6
															Boring Terminated at Elevation 854.3 ft in RESIDUAL (Sandy SILT)	
															NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.	

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)					
BORING NO. B2-B			STATION 39+44			OFFSET 76 ft RT			ALIGNMENT -L-			0 HR. N/A		
COLLAR ELEV. 916.3 ft			TOTAL DEPTH 69.6 ft			NORTHING 842,925			EASTING 1,639,496			24 HR. 28.3		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD Mud Rotary			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 05/16/24			COMP. DATE 05/16/24			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		MOI	ELEV. (ft)	DEPTH (ft)
920														
915	916.3	0.0	1	5	5	10						M	916.3	GROUND SURFACE 0.0
	913.1	3.2	3	5	6	11						M	913.5	ROADWAY EMBANKMENT Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica and Organic Matter (Roots) 2.8
910													909.8	RESIDUAL Stiff, Reddish Yellow, Silty CLAY (A-7), Trace Mica 6.5
	908.1	8.2	3	4	5	9						M		Stiff to Very Stiff, Pale Red and Pink and Reddish Brown, Clayey SILT (A-5), Trace Mica, Saprolitic
905														
	903.2	13.1	4	7	8	15						M		
900														
	898.2	18.1	4	7	8	15						M		
895														
	893.2	23.1	4	5	7	12						M		
890														
	888.2	28.1	13	14	15	29						M		
885														
	883.2	33.1	9	9	14	23						M		
880														
	878.2	38.1	12	15	17	32						M	879.9	Dense, Olive Brown, Silty Coarse to Fine SAND (A-2-4), Trace Mica, Saprolitic 36.4
875														
	873.2	43.1	12	20	22	42						M	874.9	Dense to Very Dense, Olive Yellow and Brown, Silty Fine to Coarse SAND (A-2-4), Trace to Little Mica, Trace Quartz Rock Fragments, Saprolitic 41.4
870														
	868.2	48.1	13	23	26	49						M		
865														
	863.2	53.1	15	38	38	76						M		
860														
	858.2	58.1	13	27	50	77						M		
855														
	853.2	63.1	15	25	29	54						M		
850														
	848.2	68.1	29	36	43	79						M	846.7	Boring Terminated at Elevation 846.7 ft in RESIDUAL (Silty SAND) 69.6
														NOTE: Topsoil (0.1 Foot)

NCDOT BORE DOUBLE I5880 GEO BRDG0340 GINT.GPJ NC_DOT.GDT 6/11/24

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 53080.1.1						TIP I-5880				COUNTY FORSYTH				GEOLOGIST N/A			
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons Road)														GROUND WTR (ft)			
BORING NO. EB2-1				STATION 40+50				OFFSET 55 ft LT				ALIGNMENT -L-				0 HR. N/A	
COLLAR ELEV. 921.3 ft				TOTAL DEPTH 74.5 ft				NORTHING 843,002				EASTING 1,639,646				24 HR. 33.0	
DRILL RIG/HAMMER EFF./DATE N/A										DRILL METHOD H.S. Augers				HAMMER TYPE N/A			
DRILLER N/A				START DATE N/A				COMP. DATE 01/26/77				SURFACE WATER DEPTH N/A					
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION		DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100							
930																	
925																	
920																	
	918.3	3.0		2	2	3										921.3 GROUND SURFACE 0.0	
915																	
	913.3	8.0		5	7	10										915.3 Red, Very Micaceous Silty Sandy CLAY 6.0	
910																	
	908.3	13.0		3	5	7										909.8 Red, Silty Micaceous Sandy CLAY 11.5	
905																	
	903.3	18.0		4	5	8										905.3 RESIDUAL Red-Black, Silty Very Micaceous Sandy CLAY 16.0	
900																	
	898.3	23.0		4	5	8										905.3 Red-Black, Very Micaceous Silty Clayey SAND 16.0	
895																	
	893.3	28.0		3	4	7										895.3 with Coarse Quartz Veins 26.0	
890																	
	888.3	33.0		3	4	6										895.3 Red-Black to Red-Brown, Silty Very Micaceous Clayey Coarse SAND 26.0	
885																	
	883.3	38.0		4	4	7										885.3 with Coarse Quartz Veins 26.0	
880																	
	878.3	43.0		4	7	11										885.3 with Coarse Quartz Veins 26.0	
875																	
	873.3	48.0		4	9	14										876.3 Red-Black, Silty Very Micaceous Sandy CLAY 45.0	
870																	
	868.3	53.0		2	4	8										873.3 Brown, Micaceous Clayey Fine Sandy SILT 48.0	
865																	
	863.3	58.0		2	6	9										861.3 Tan, Micaceous Silty Fine SAND 60.0	
860																	
	858.3	63.0		7	10	15											
855																	
	853.3	68.0		8	10	17											
850																	

[illegible]

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

NCDOT BORE DOUBLE I5880_GEO_BRDG0340_GINT.GPJ NC_DOT.GDT 6/11/24

WBS 53080.1.1						TIP I-5880				COUNTY FORSYTH				GEOLOGIST N/A					
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)														GROUND WTR (ft)					
BORING NO. EB2-2						STATION 40+21				OFFSET CL				ALIGNMENT -L-				0 HR. N/A	
COLLAR ELEV. 921.7 ft						TOTAL DEPTH 74.4 ft				NORTHING 842,964				EASTING 1,639,597				24 HR. 34.0	
DRILL RIG/HAMMER EFF./DATE N/A										DRILL METHOD H.S. Augers						HAMMER TYPE N/A			
DRILLER N/A						START DATE N/A				COMP. DATE 01/26/77				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									
845						Match Line													
														NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.					

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST N/A						
SITE DESCRIPTION Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons ville Road)									GROUND WTR (ft)						
BORING NO. EB2-3			STATION 39+91			OFFSET 54 ft RT			ALIGNMENT -L-			0 HR.	N/A		
COLLAR ELEV. 920.9 ft			TOTAL DEPTH 64.2 ft			NORTHING 842,926			EASTING 1,639,548			24 HR.	36.0		
DRILL RIG/HAMMER EFF./DATE N/A						DRILL METHOD H.S. Augers			HAMMER TYPE N/A						
DRILLER N/A			START DATE N/A			COMP. DATE 01/26/77			SURFACE WATER DEPTH N/A						
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	L O G	SOIL AND ROCK DESCRIPTION	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				ELEV. (ft)	DEPTH (ft)
925															
920														920.9	0.0
	918.2	2.7	2	4	3							M			GROUND SURFACE
915															ROADWAY EMBANKMENT
	913.2	7.7	3	8	12							M		913.9	7.0
910															Red, Fine Sandy Micaceous SILT with Quartz Sand
	908.2	12.7	2	4	5							M		908.9	12.0
905															Red-Brown, Micaceous, Silty SAND
	903.2	17.7	2	4	5							M		904.5	16.4
900															RESIDUAL
	898.2	22.7	3	4	7							M		898.9	22.0
895															Red-Brown, Micaceous Silty SAND with Quartz
	893.2	27.7	3	5	7							M			Red-Brown, Micaceous Sandy SILT
890															with Quartz Sand
	888.2	32.7	5	5	5							M		888.9	32.0
885															Brown-Pink, Micaceous Silty Fine SAND
	883.2	37.7	3	5	7							M		883.9	37.0
880															Red-Brown to Brown to Dark Brown, Micaceous Fine Sandy SILT
	878.2	42.7	2	5	7							M			
875															
	873.2	47.7	2	4	7							W			
870															
	868.2	52.7	2	6	8							W		868.9	52.0
865															Tan-Brown, Micaceous Silty SAND
	863.2	57.7	3	9	15							W		863.9	57.0
860															Tan-Brown, Micaceous SILT
	858.2	62.7	3	6	9							W		859.9	61.0
														856.7	64.2
															Boring Terminated at Elevation 856.7 ft in RESIDUAL (Sandy SILT)
															NOTE: Boring location approximated from NCDOT R-0066 inventory boring plan. Soil lithology descriptions based on NCDOT R-0066 inventory.

NCDOT BORE DOUBLE I5880 GEO BRDG0340 GINT.GPJ NC_DOT.GDT 6/11/24

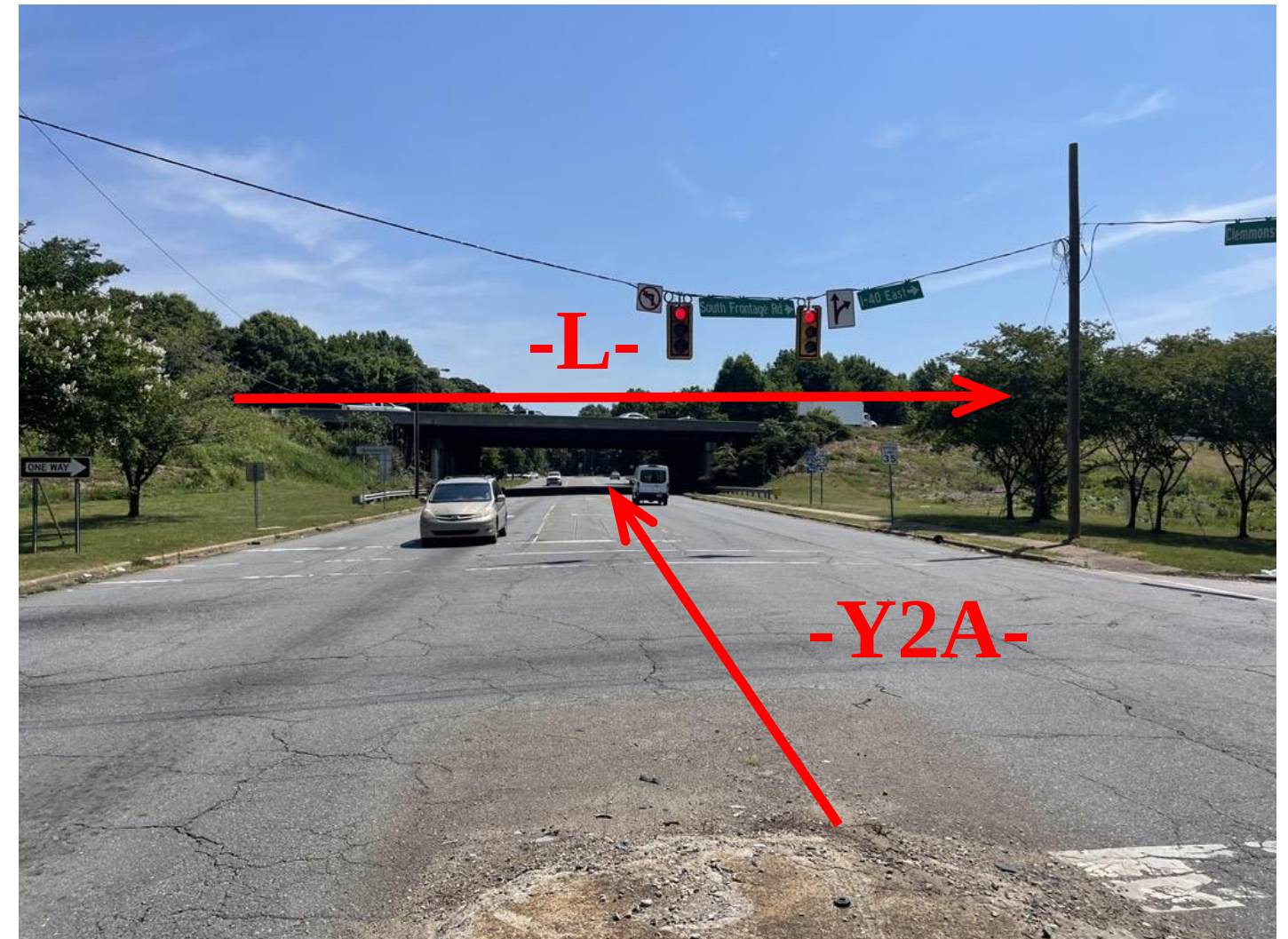
SITE PHOTOGRAPH

I-5880 (53080.1.1)

Bridge No. 340 on -L- (I-40/US-311) over -Y2A- (Clemmons Road)



Looking Southwest on Clemmons Road (-Y2A-) towards Bridge No. 340 left widening on I-40 (-L-)



Looking Northeast on Clemmons Road (-Y2A-) towards Bridge No. 340 right widening on I-40 (-L-)

REFERENCE: I-5880

PROJECT: 53080

CONTENTS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3 - 15	SITE PLAN
16 - 25	PROFILES
26 - 61	BORE LOGS

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY FORSYTH
PROJECT DESCRIPTION I-40 / US-311 AT NC-109
(THOMASVILLE ROAD) / CLEMMONSVILLE ROAD
SPLIT DIAMOND INTERCHANGE

SITE DESCRIPTION
NOISE WALL 1
(STA. 10+00.00 -NW1- TO 32+65.00 -NW1-)
NOISE WALL 4
(STA. 10+00.00 -NW4- TO 20+05.00 -NW4-)
NOISE WALL 5
(STA. 10+00.00 -NW5- TO 21+10.00 -NW5-)
NOISE WALL 6/7
(STA. 10+00.00 -NW6/7- TO 33+10.00 -NW6/7-)

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5880	1	

CAUTION NOTICE

THE SUBSURFACE INFORMATION AND THE SUBSURFACE INVESTIGATION ON WHICH IT IS BASED WERE MADE FOR THE PURPOSE OF STUDY, PLANNING AND DESIGN, AND NOT FOR CONSTRUCTION OR PAY PURPOSES. THE VARIOUS FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA AVAILABLE MAY BE REVIEWED OR INSPECTED IN RALEIGH BY CONTACTING THE N.C. DEPARTMENT OF TRANSPORTATION, GEOTECHNICAL ENGINEERING UNIT, AT (919) 707-6850. THE SUBSURFACE PLANS AND REPORTS, FIELD BORING LOGS, ROCK CORES AND SOIL TEST DATA ARE NOT PART OF THE CONTRACT.

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (IN-PLACE) TEST DATA CAN BE RELIED ON ONLY TO THE DEGREE OF RELIABILITY INHERENT IN THE STANDARD TEST METHOD. THE OBSERVED WATER LEVELS OR SOIL MOISTURE CONDITIONS INDICATED IN THE SUBSURFACE INVESTIGATIONS ARE AS RECORDED AT THE TIME OF THE INVESTIGATION. THESE WATER LEVELS OR SOIL MOISTURE CONDITIONS MAY VARY CONSIDERABLY WITH TIME ACCORDING TO CLIMATIC CONDITIONS INCLUDING TEMPERATURES, PRECIPITATION AND WIND, AS WELL AS OTHER NON-CLIMATIC FACTORS.

THE BIDDER OR CONTRACTOR IS CAUTIONED THAT DETAILS SHOWN ON THE SUBSURFACE PLANS ARE PRELIMINARY ONLY AND IN MANY CASES THE FINAL DESIGN DETAILS ARE DIFFERENT. FOR BIDDING AND CONSTRUCTION PURPOSES, REFER TO THE CONSTRUCTION PLANS AND DOCUMENTS FOR FINAL DESIGN INFORMATION ON THIS PROJECT. THE DEPARTMENT DOES NOT WARRANT OR GUARANTEE THE SUFFICIENCY OR ACCURACY OF THE INVESTIGATION MADE, NOR THE INTERPRETATIONS MADE, OR OPINION OF THE DEPARTMENT AS TO THE TYPE OF MATERIALS AND CONDITIONS TO BE ENCOUNTERED. THE BIDDER OR CONTRACTOR IS CAUTIONED TO PERFORM INDEPENDENT SUBSURFACE INVESTIGATIONS AND MAKE INTERPRETATIONS AS NECESSARY TO CONFIRM CONDITIONS ENCOUNTERED ON THE PROJECT. THE CONTRACTOR SHALL HAVE NO CLAIM FOR ADDITIONAL COMPENSATION OR FOR AN EXTENSION OF TIME FOR ANY REASON RESULTING FROM THE ACTUAL CONDITIONS ENCOUNTERED AT THE SITE DIFFERING FROM THOSE INDICATED IN THE SUBSURFACE INFORMATION.

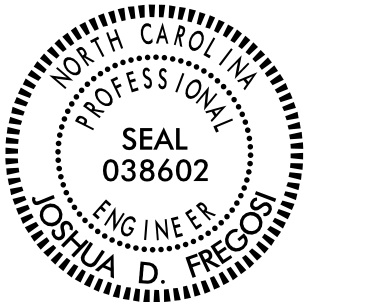
- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
 - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON THE DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

PERSONNEL
B. LASSETER
M. FOSTER
D. CADE
TRIGON EXPLORATION

INVESTIGATED BY KLEINFELDER, INC
DRAWN BY B. FARMER
CHECKED BY D. KUBINSKI
SUBMITTED BY KLEINFELDER, INC
DATE AUGUST 2024

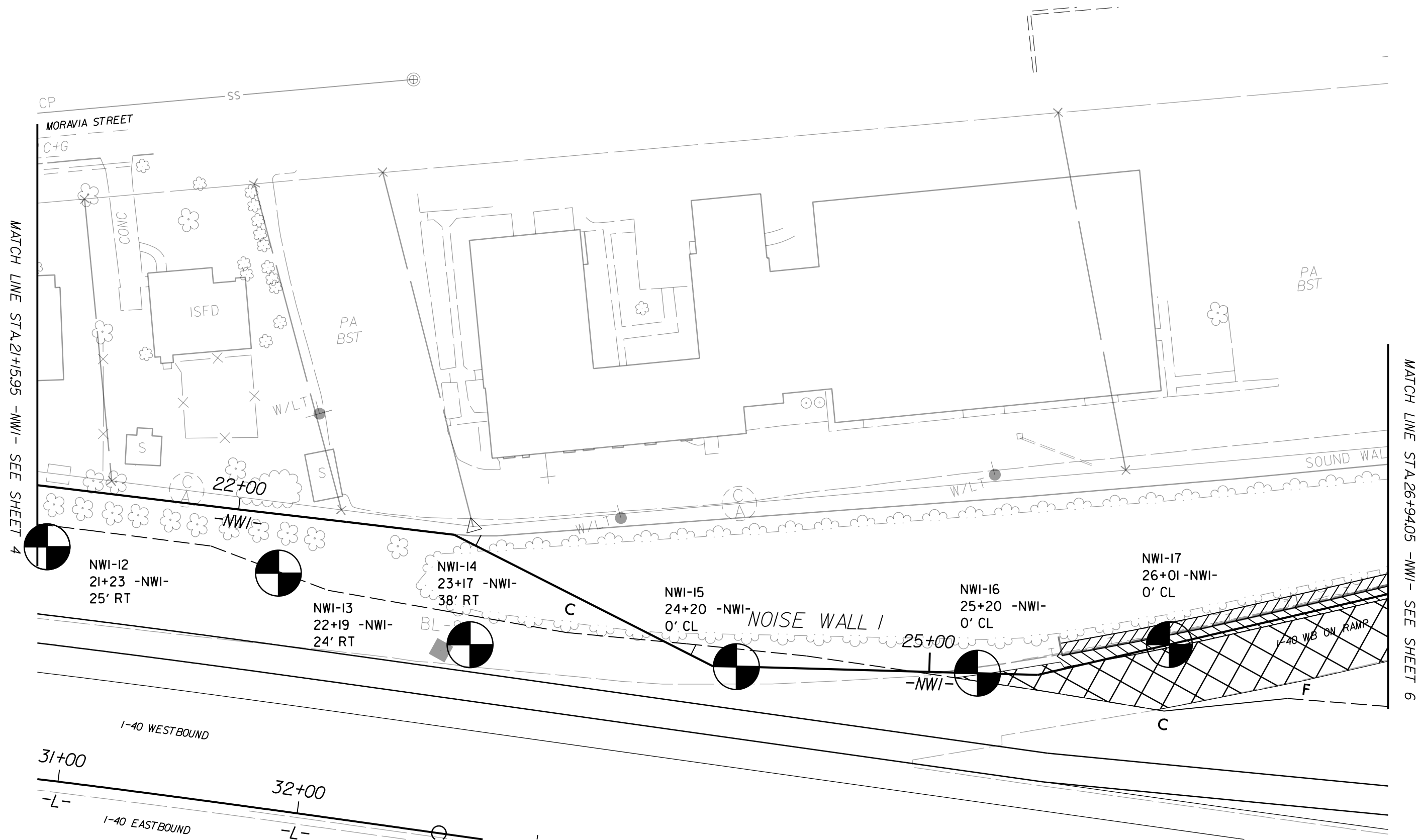
Prepared in the Office of:

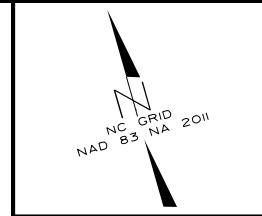
KLEINFELDER
Bright People. Right Solutions.
422 GALLIMORE DARY ROAD, SUITE B
GREENSBORO, NC 27409
NC ENGINEERING FIRM LICENSE NO. F-1312



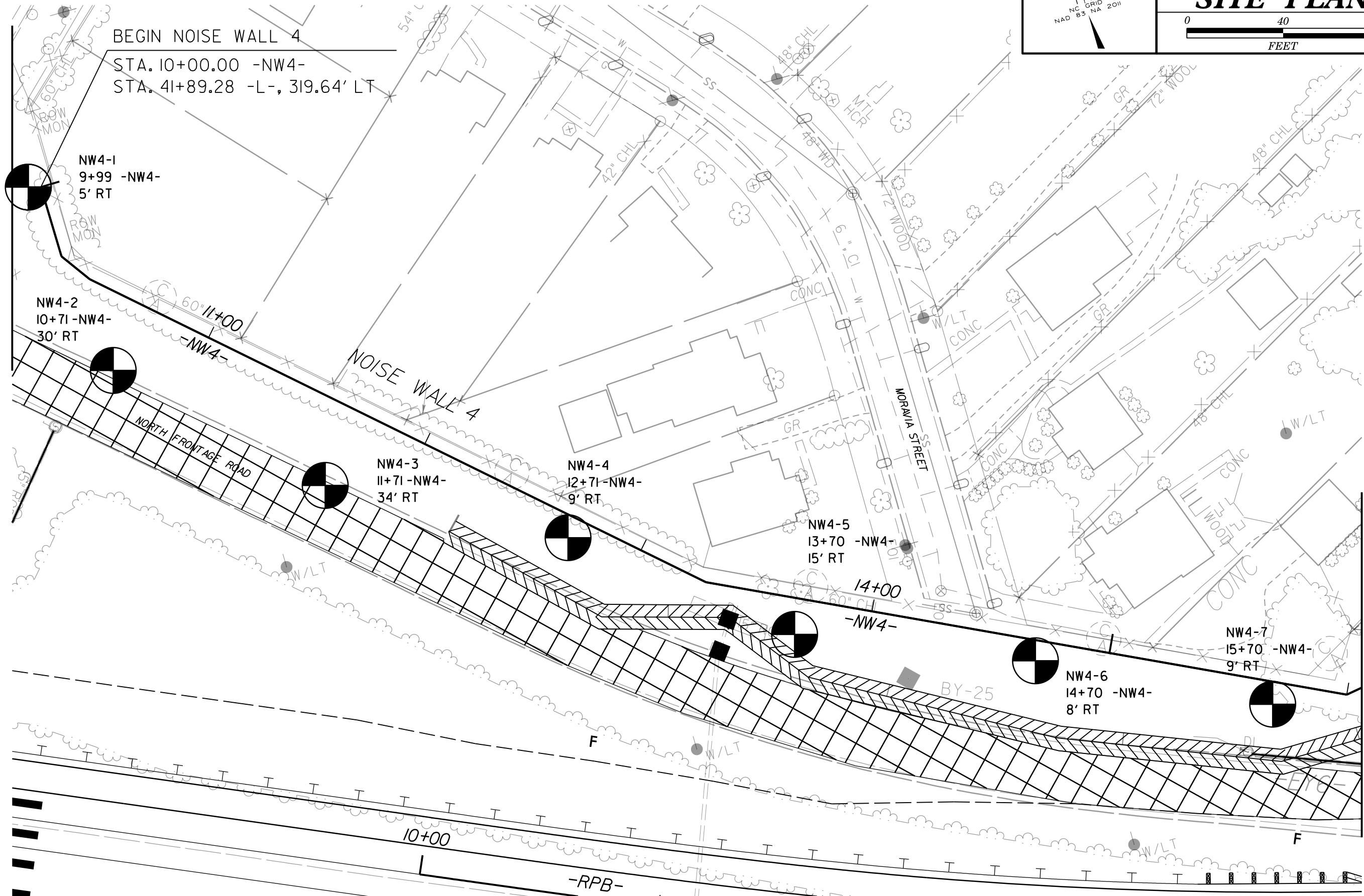
Signed by: Joshua D. Fregosi 08/21/2024
SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

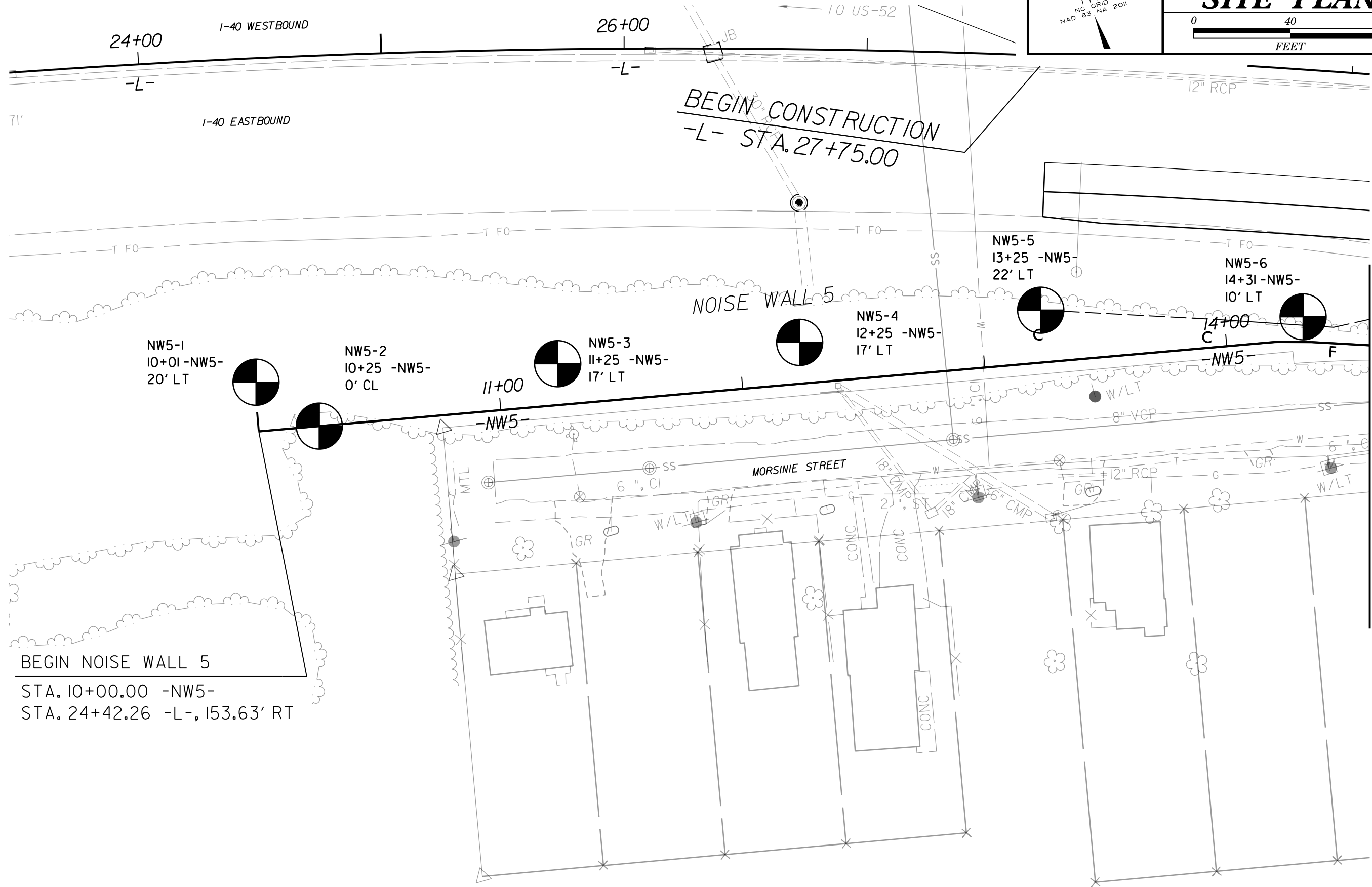




MATCH LINE, SEE SHEET 6

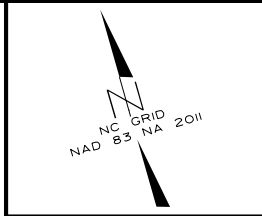


MATCH LINE STA. 16+06.87 -NW4- SEE SHEET 8

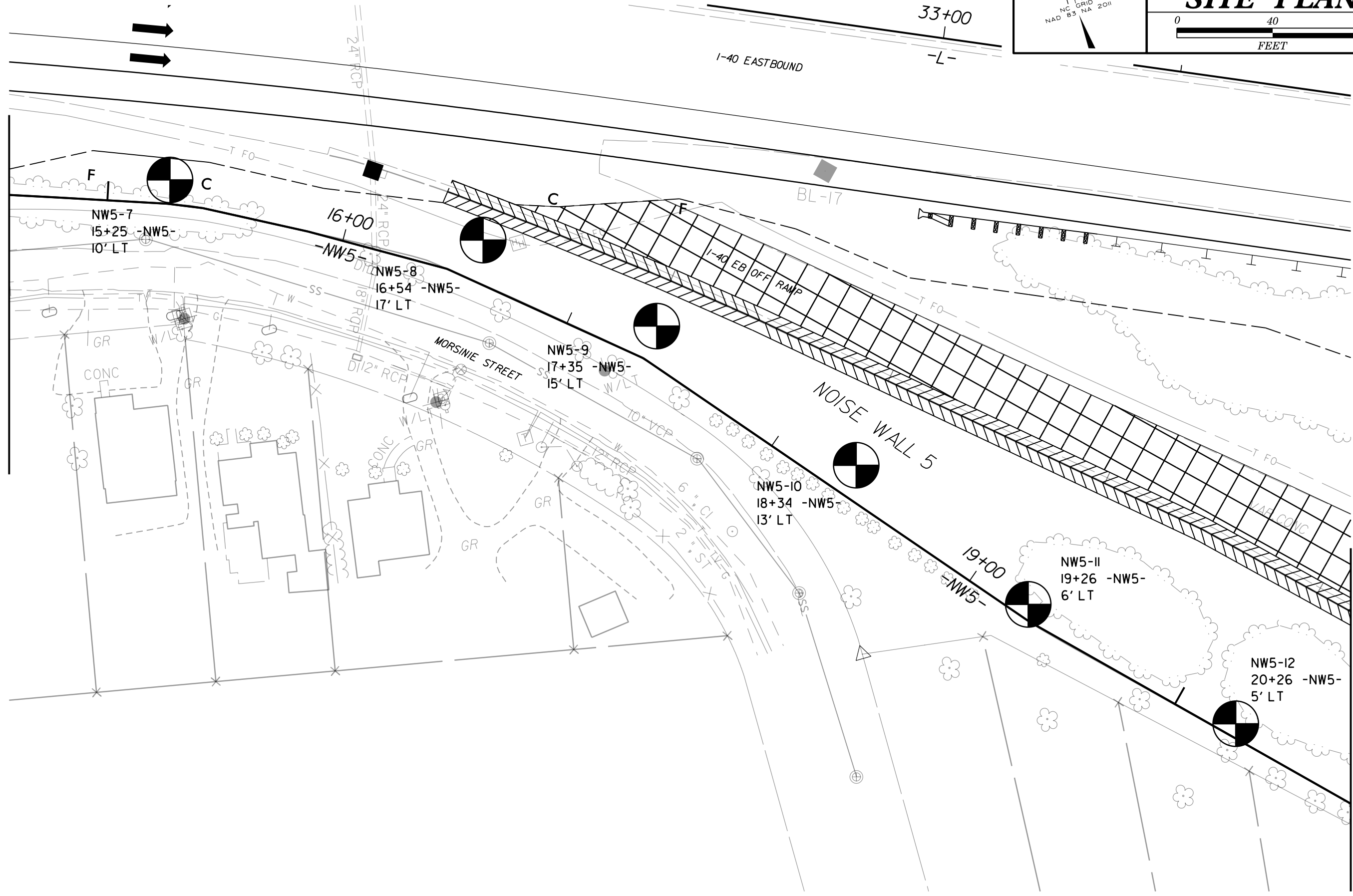


BEGIN NOISE WALL 5
STA. 10+00.00 -NW5-
STA. 24+42.26 -L-, 153.63' RT

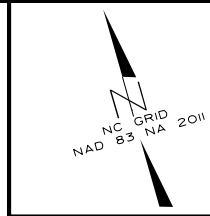
MATCH LINE STA. 14+58.94 -NW5- SEE SHEET 10



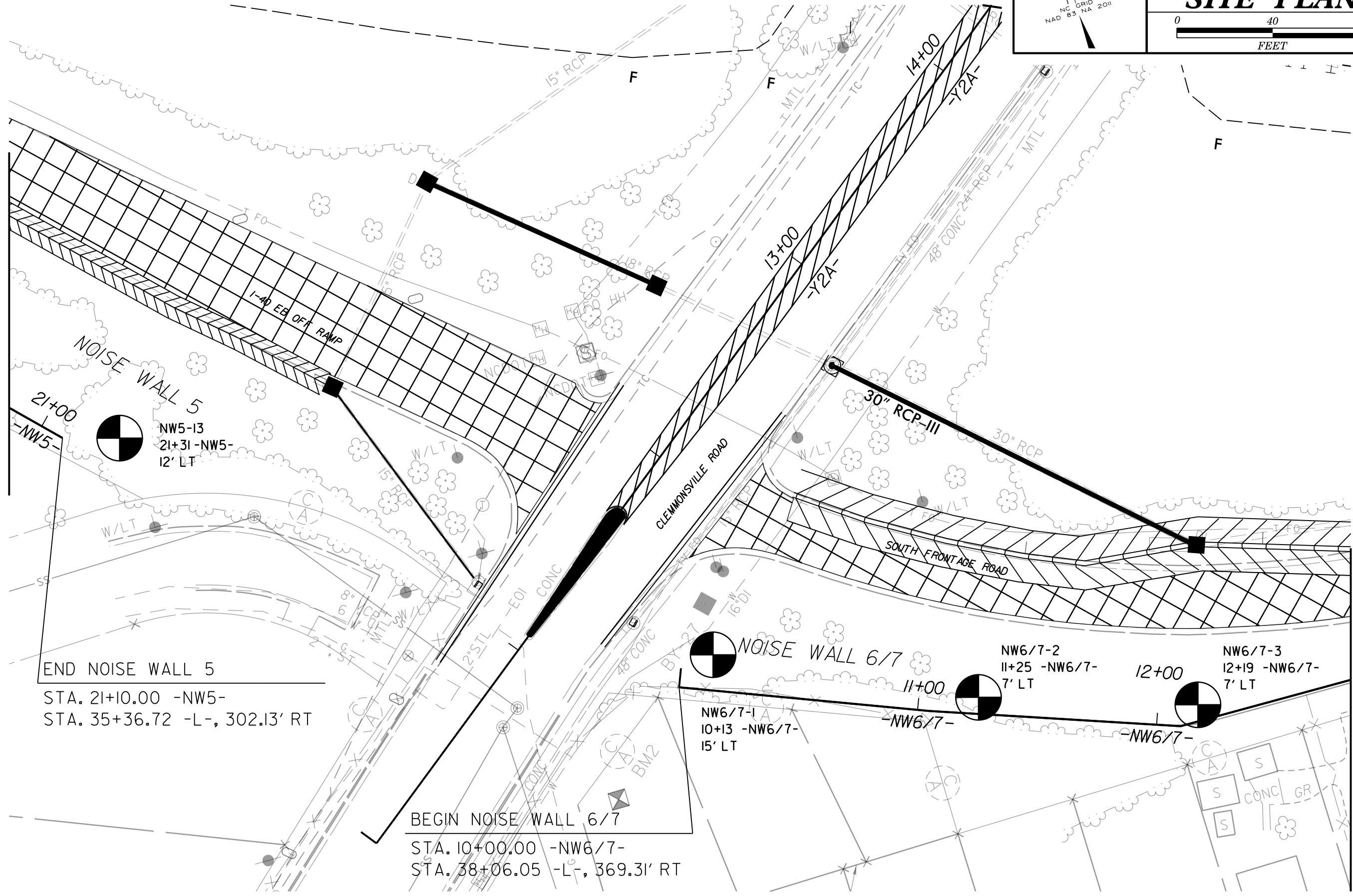
MATCH LINE STA.14+58.94 -NW5- SEE SHEET 9



MATCH LINE STA.20+84.37 -NW5- SEE SHEET 11



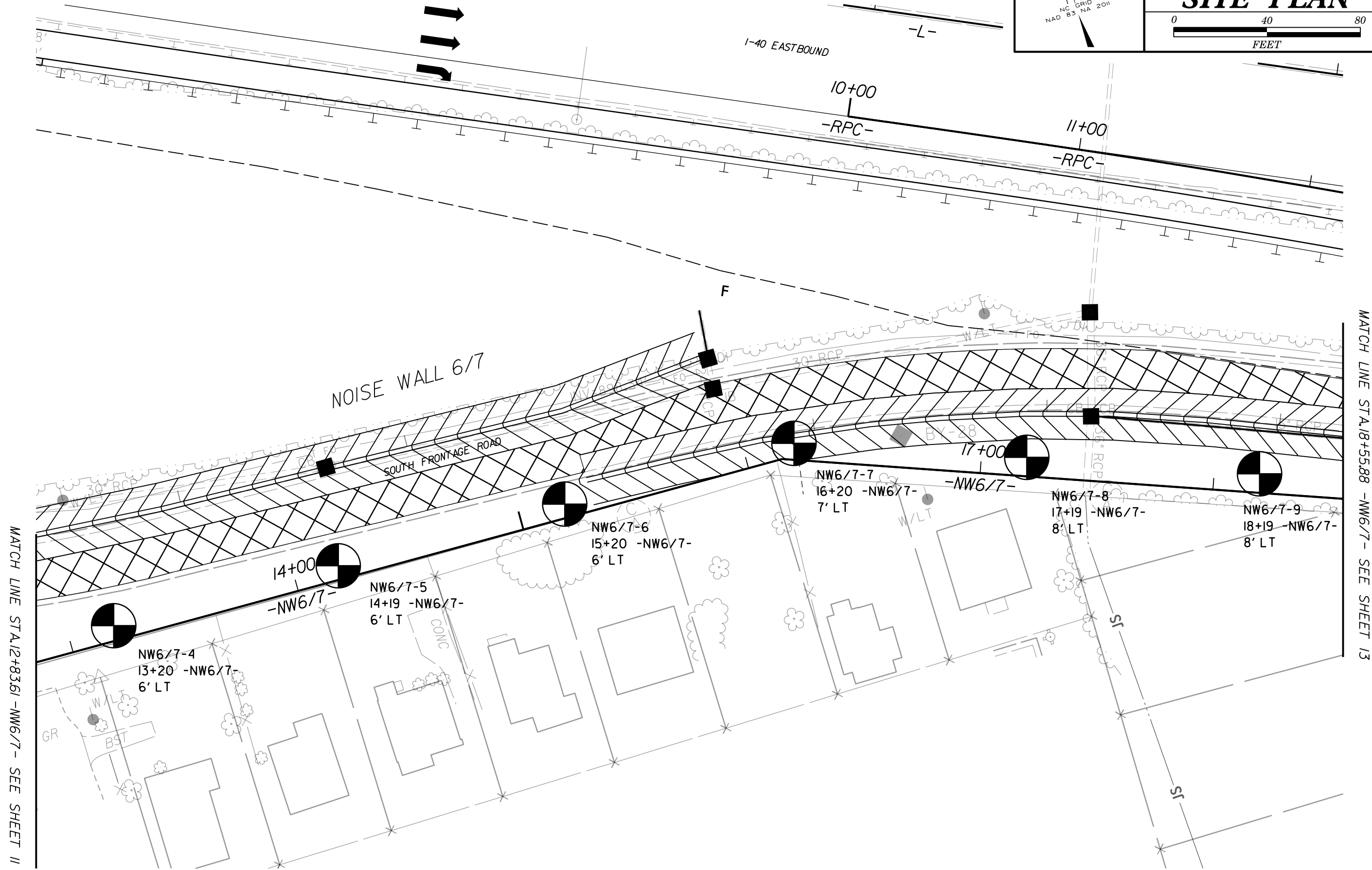
MATCH LINE STA.20+84.37 -NW5- SEE SHEET 10

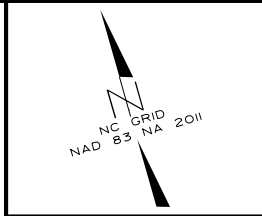


END NOISE WALL 5
STA. 21+10.00 -NW5-
STA. 35+36.72 -L-, 302.13' RT

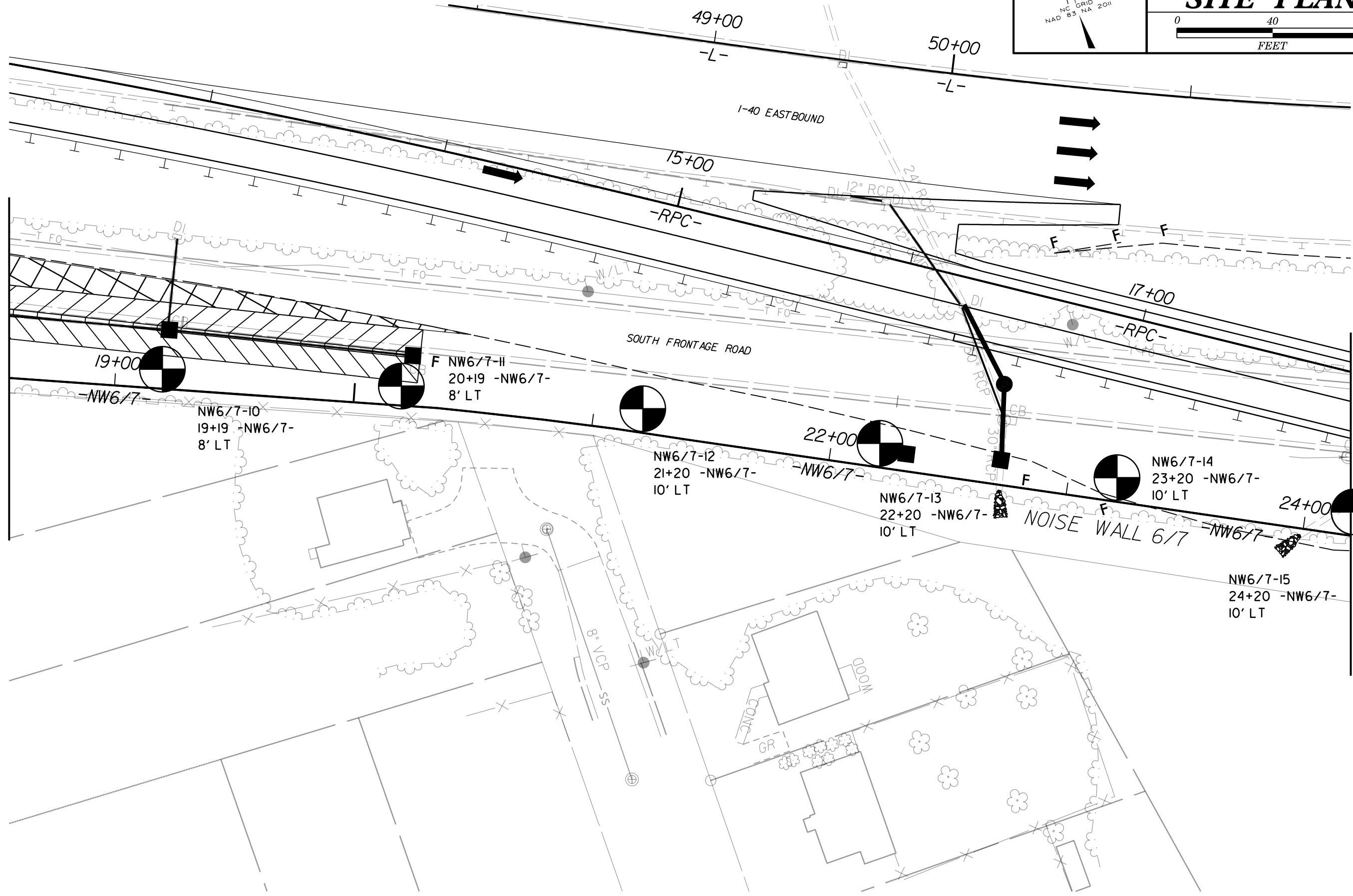
BEGIN NOISE WALL 6/7
STA. 10+00.00 -NW6/7-
STA. 38+06.05 -L-, 369.31' RT

MATCH LINE STA.12+83.61 -NW6/7- SEE SHEET 12

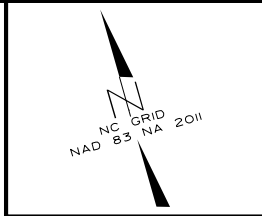




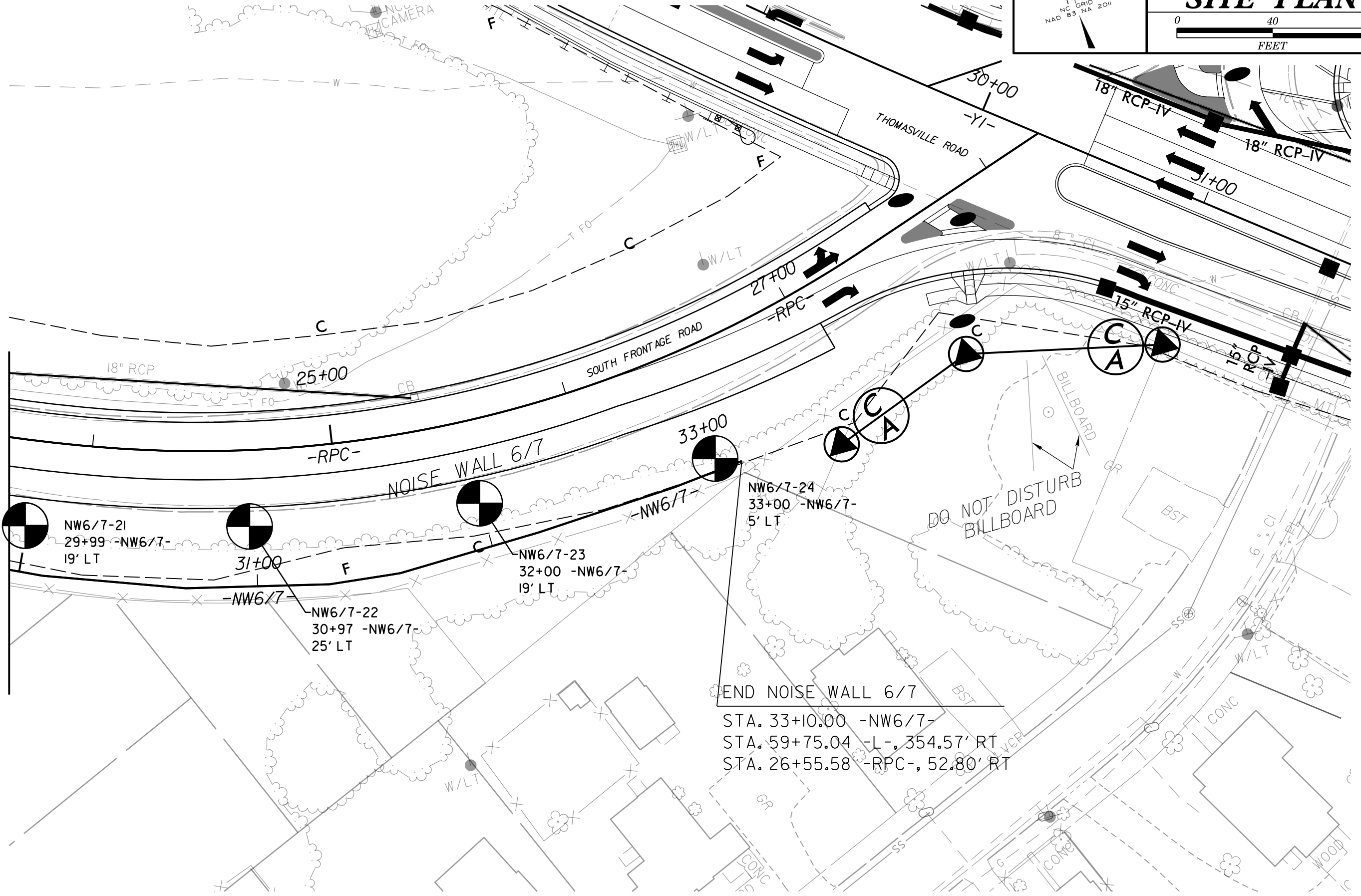
MATCH LINE STA.18+55.88 -NW6/7- SEE SHEET 12



MATCH LINE STA.24+20.05 -NW6/7- SEE SHEET 14



MATCH LINE STA. 29+95.79 - NW6/7 - SEE SHEET 14



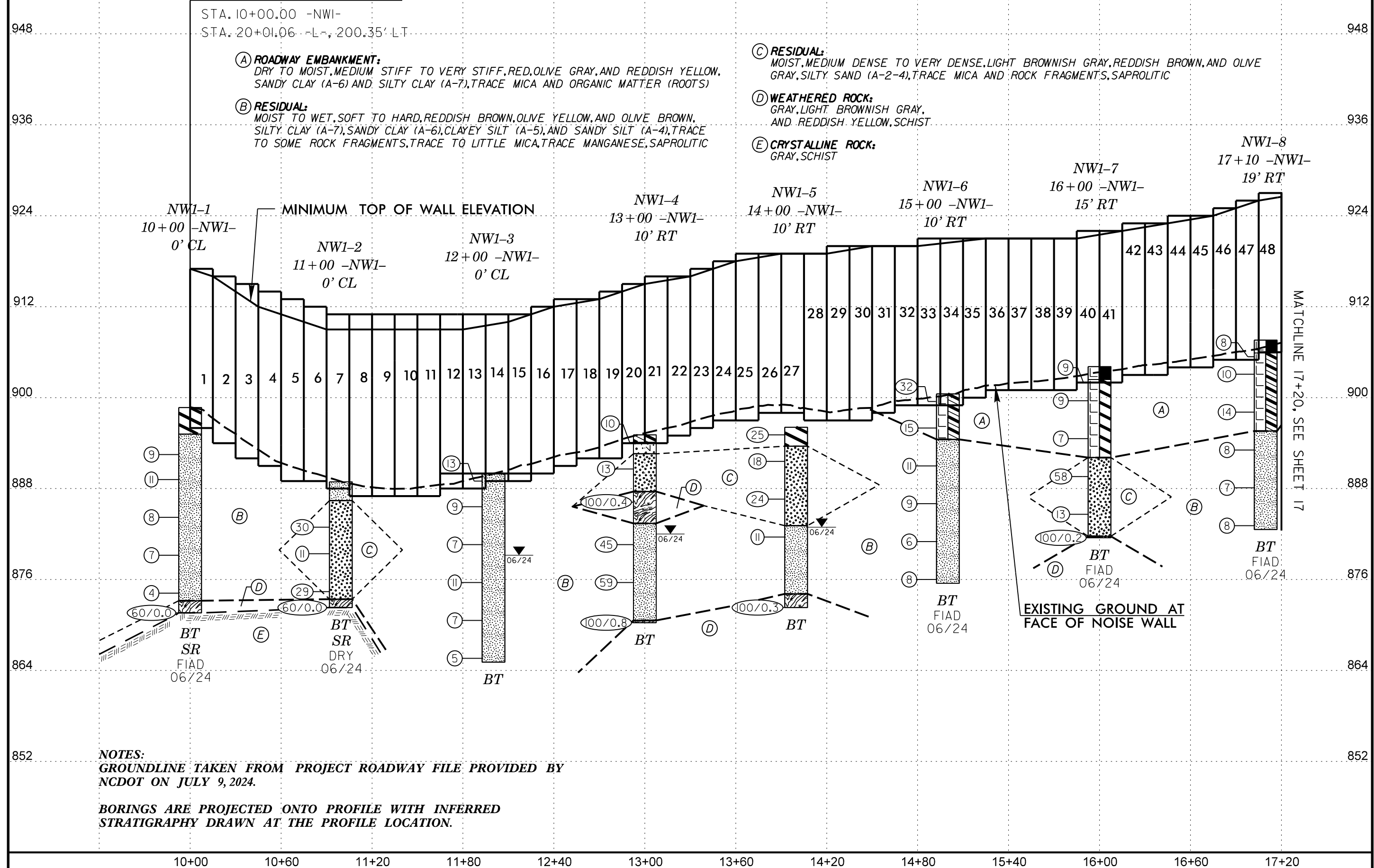
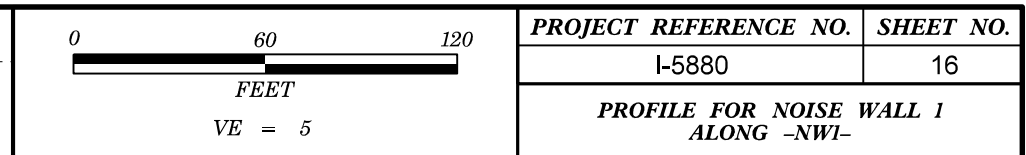
NW6/7-21
29+99 -NW6/7-
19' LT

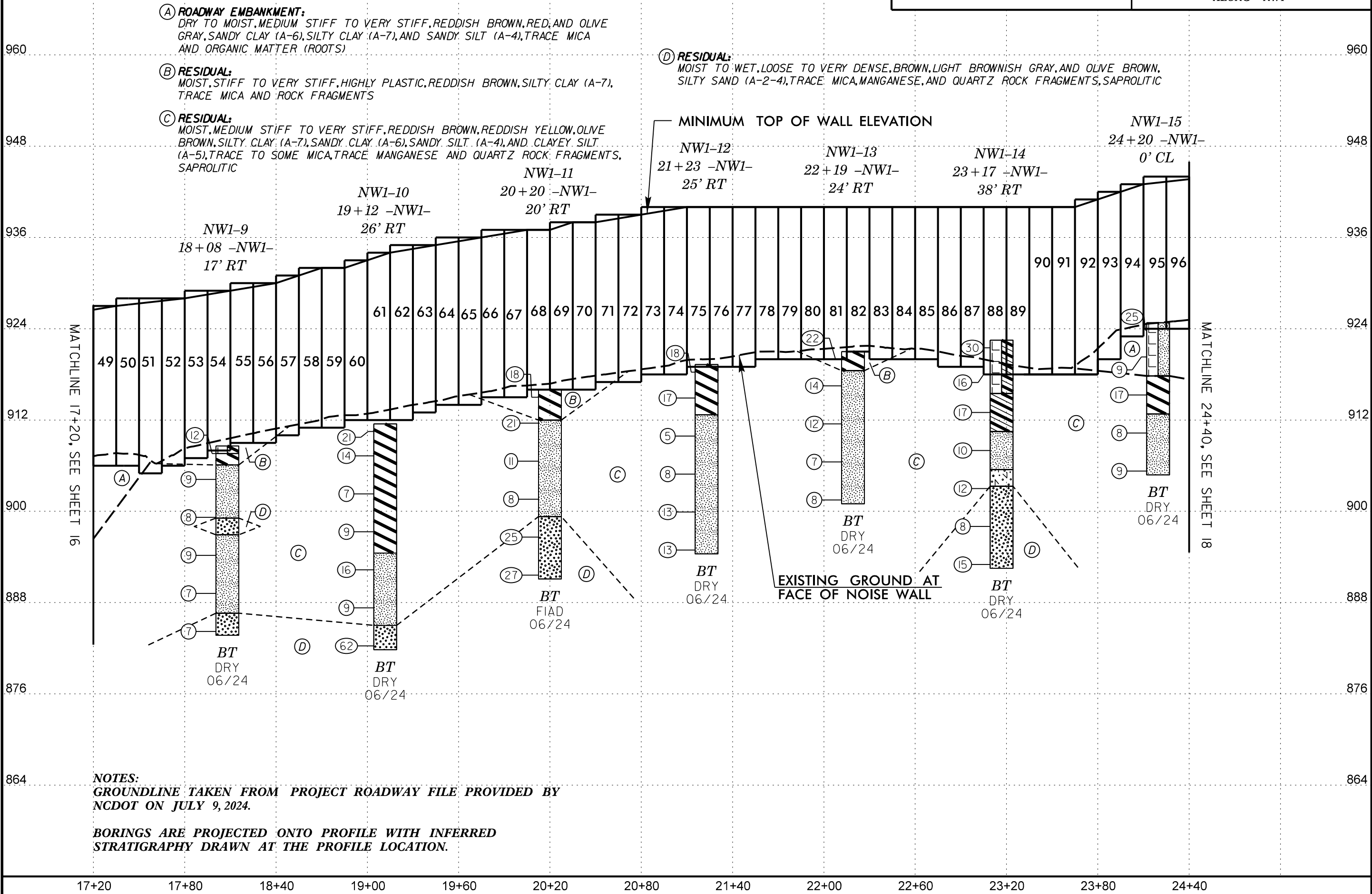
NW6/7-22
30+97 -NW6/7-
25' LT

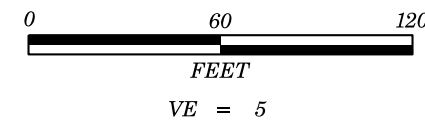
NW6/7-23
32+00 -NW6/7-
19' LT

NW6/7-24
33+00 -NW6/7-
5' LT

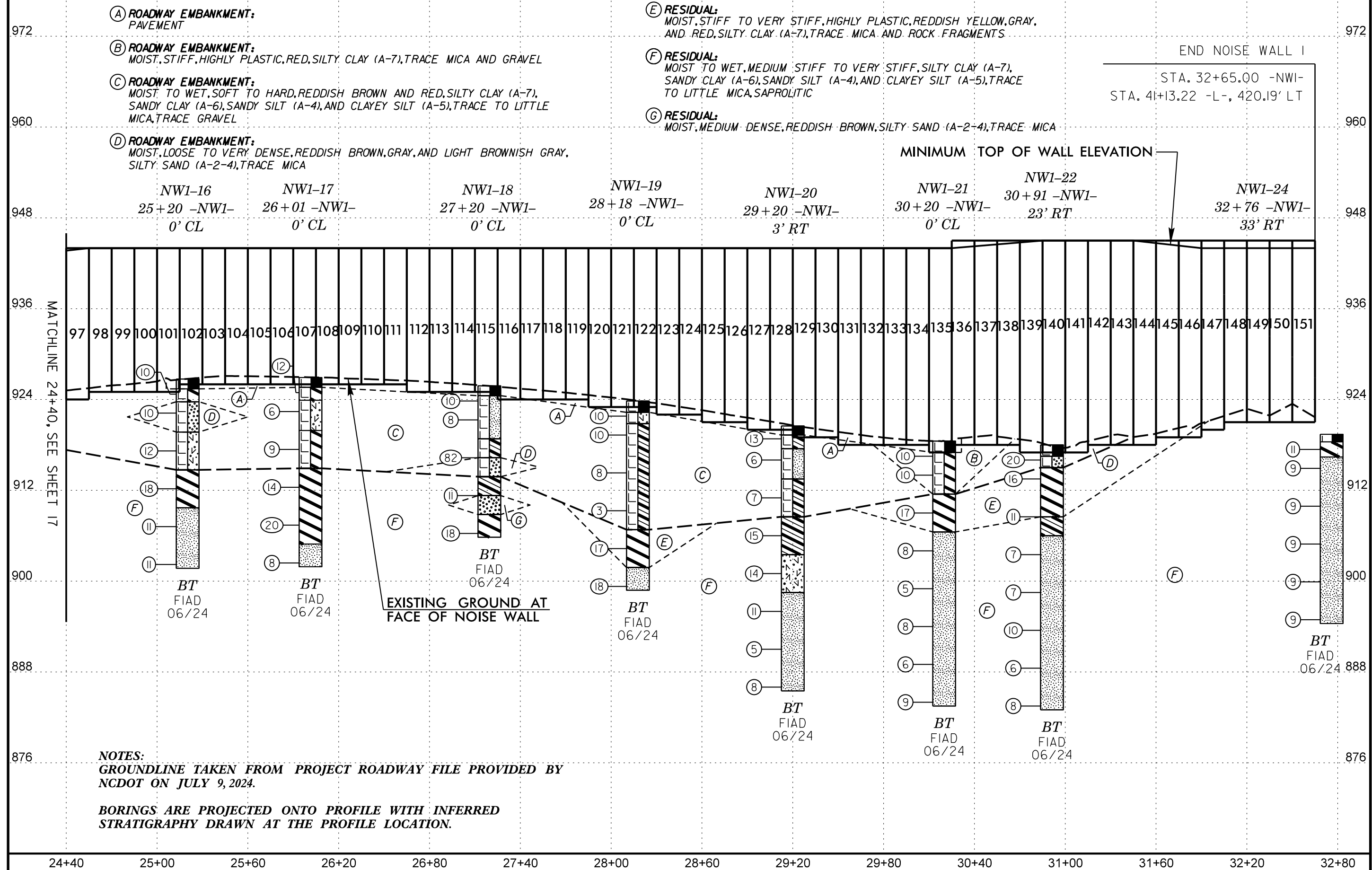
END NOISE WALL 6/7
STA. 33+10.00 -NW6/7-
STA. 59+75.04 -L-, 354.57' RT
STA. 26+55.58 -RPC-, 52.80' RT

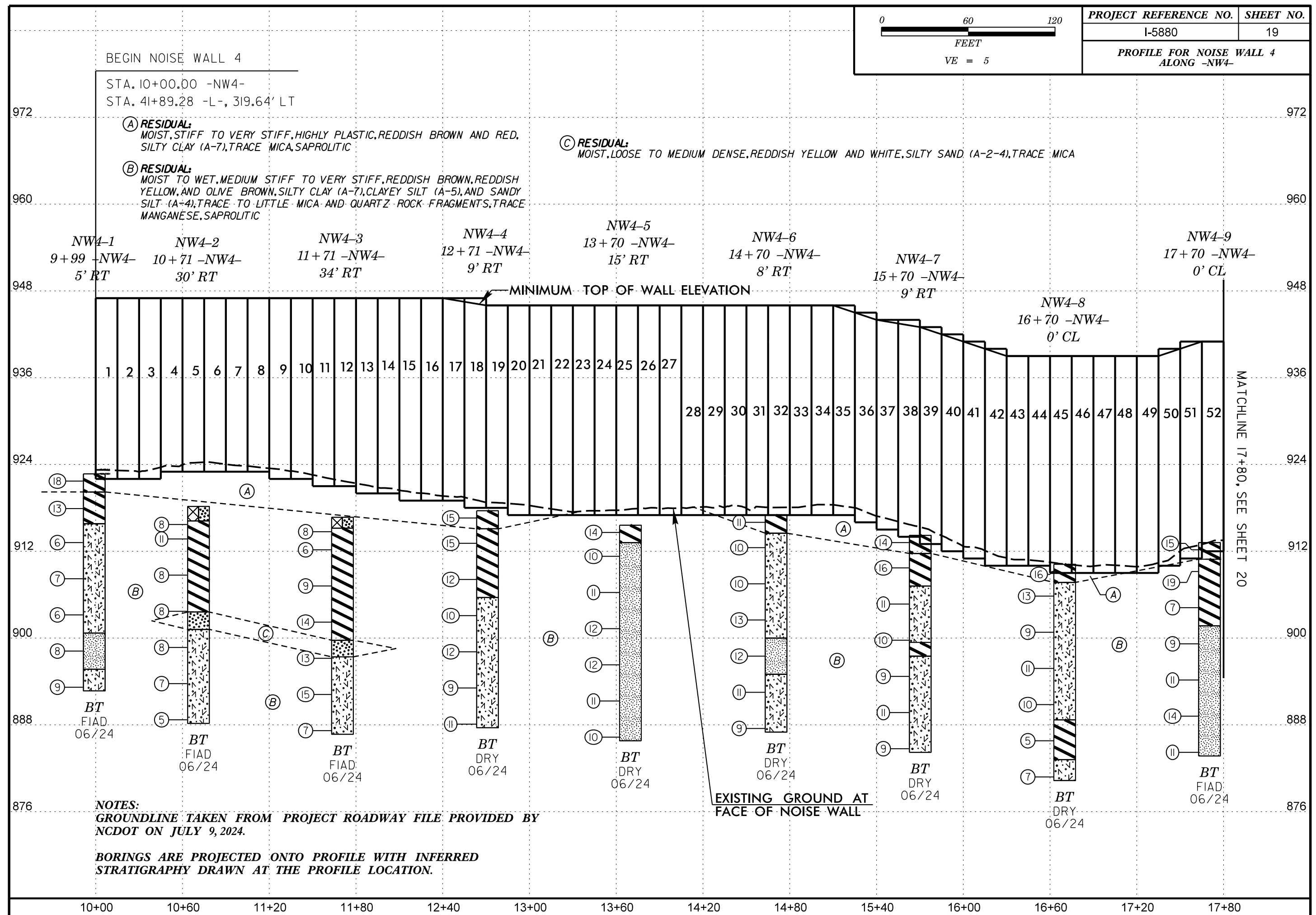


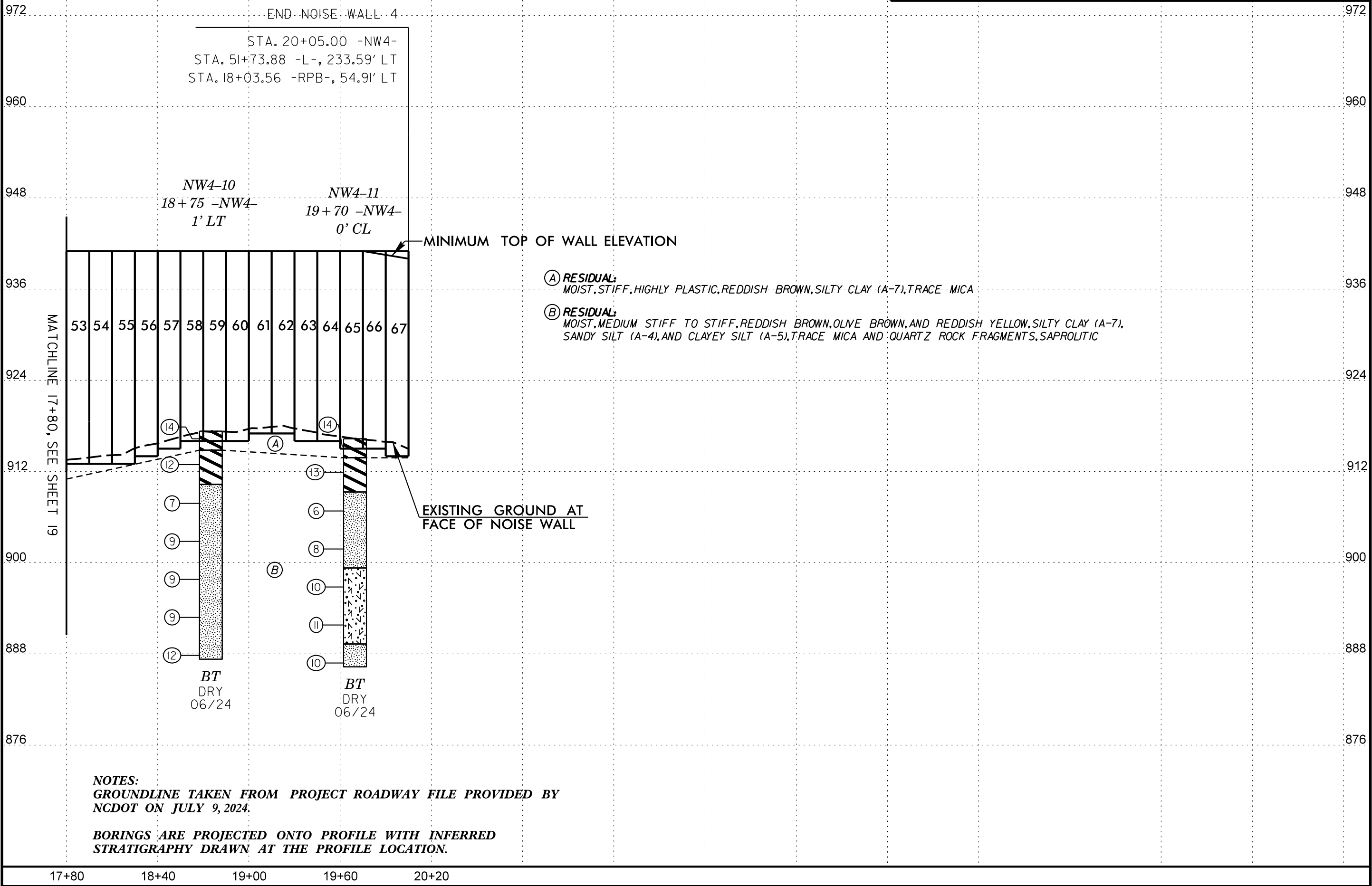


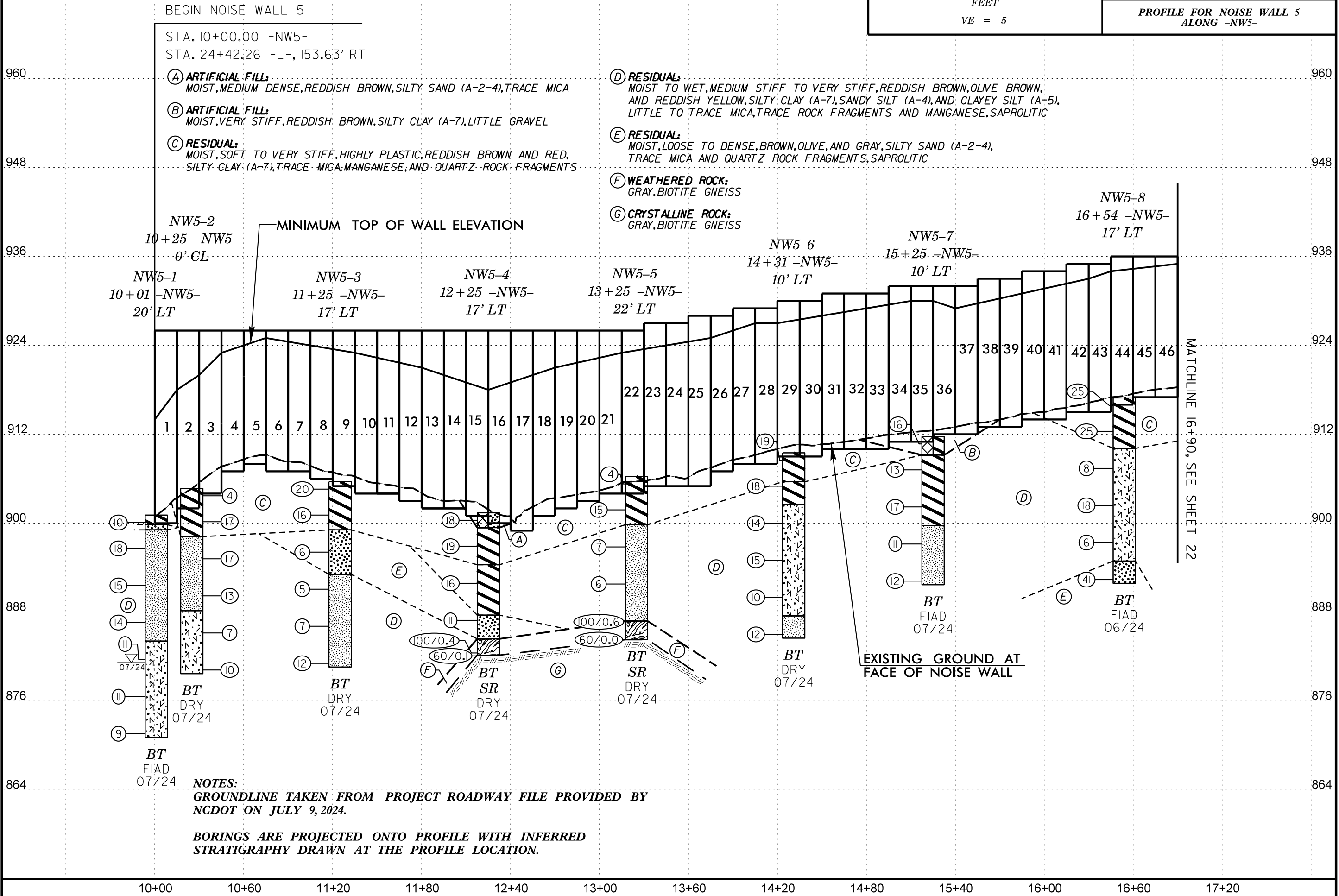


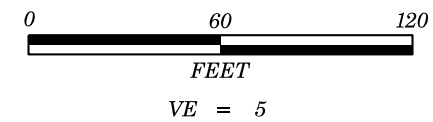
PROJECT REFERENCE NO.	SHEET NO.
I-5880	18
PROFILE FOR NOISE WALL 1 ALONG -NW1-	



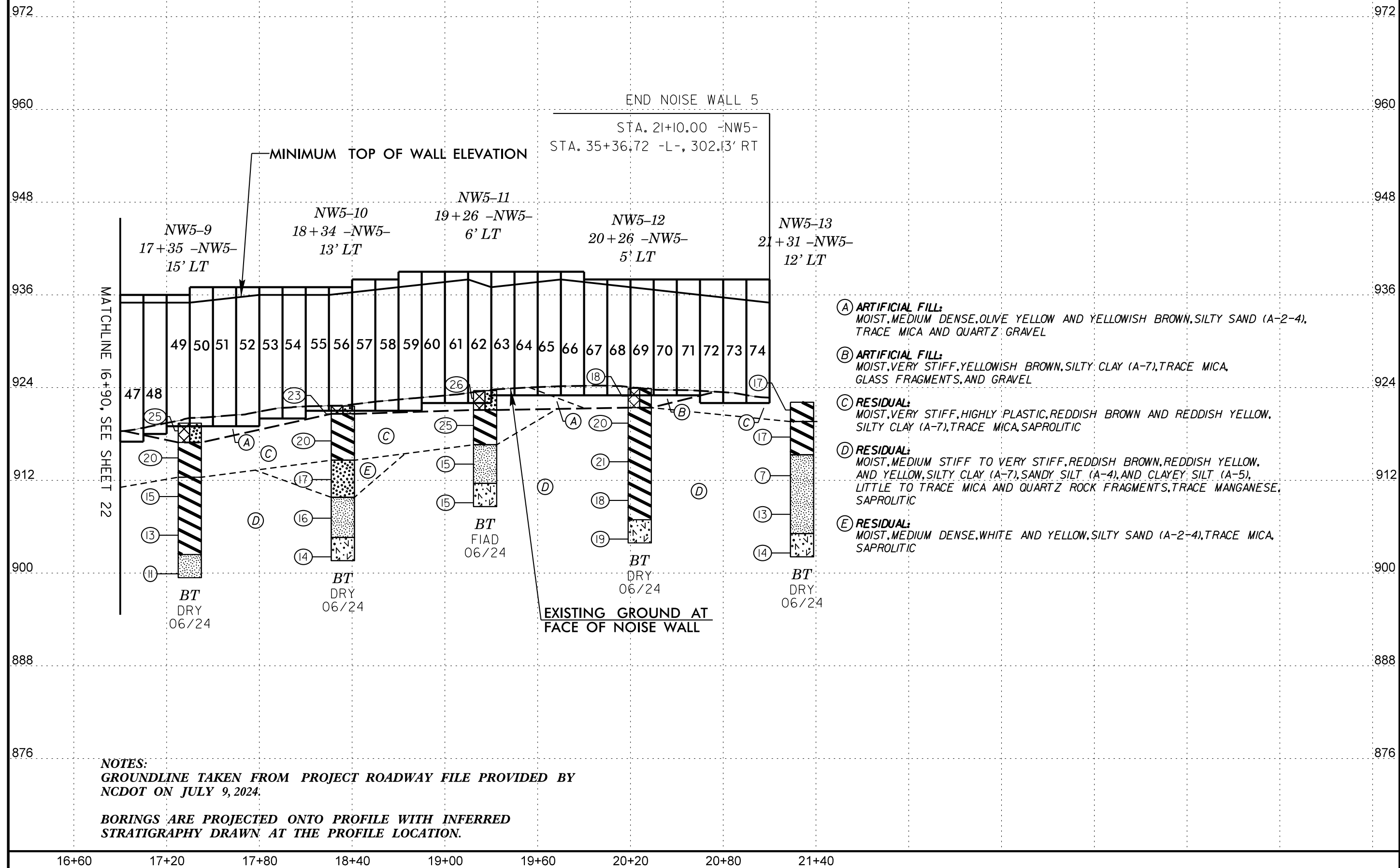


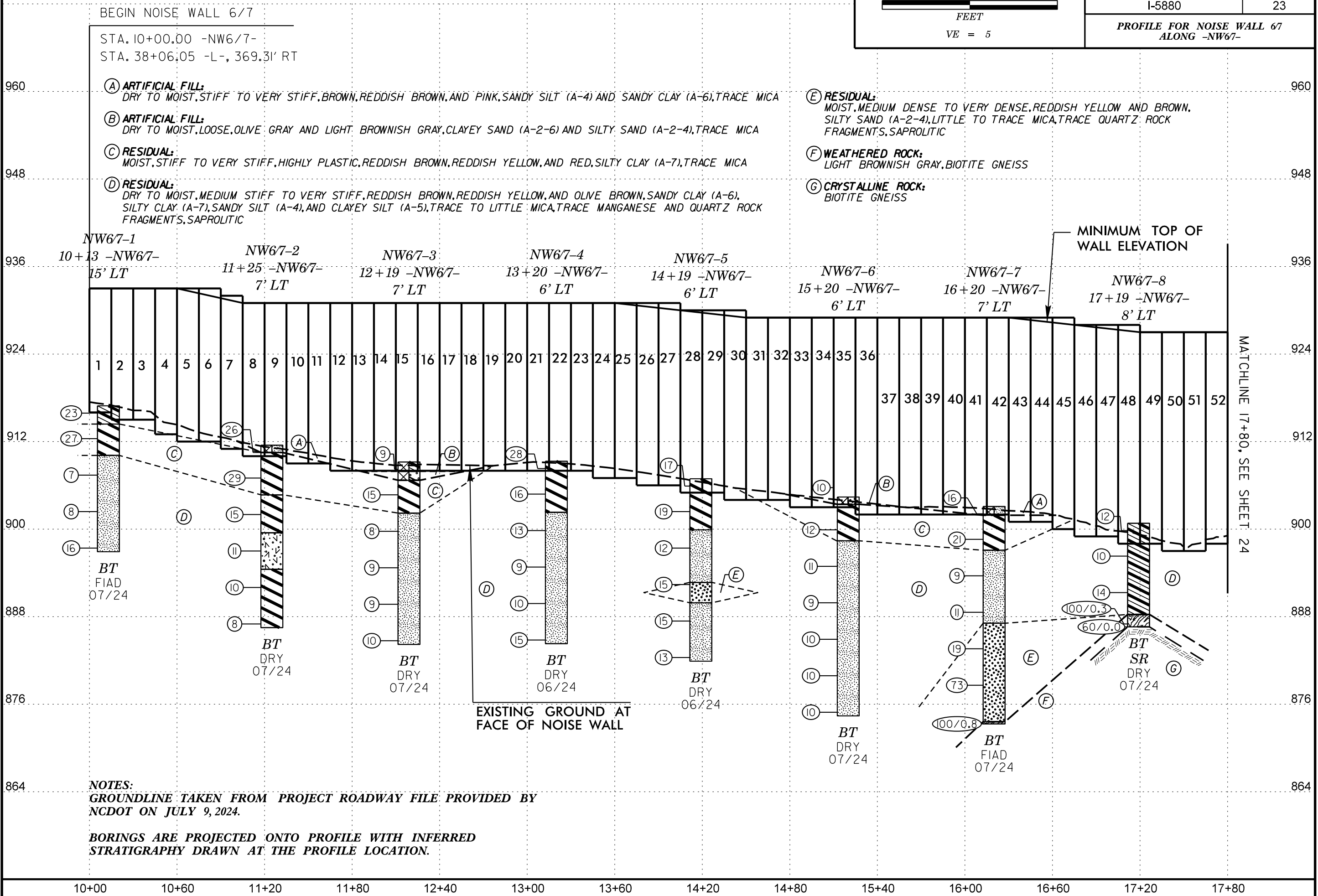


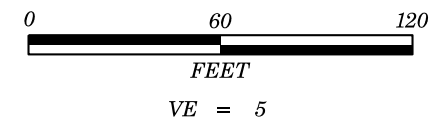




PROJECT REFERENCE NO.	SHEET NO.
I-5880	22
PROFILE FOR NOISE WALL 5 ALONG -NW5-	



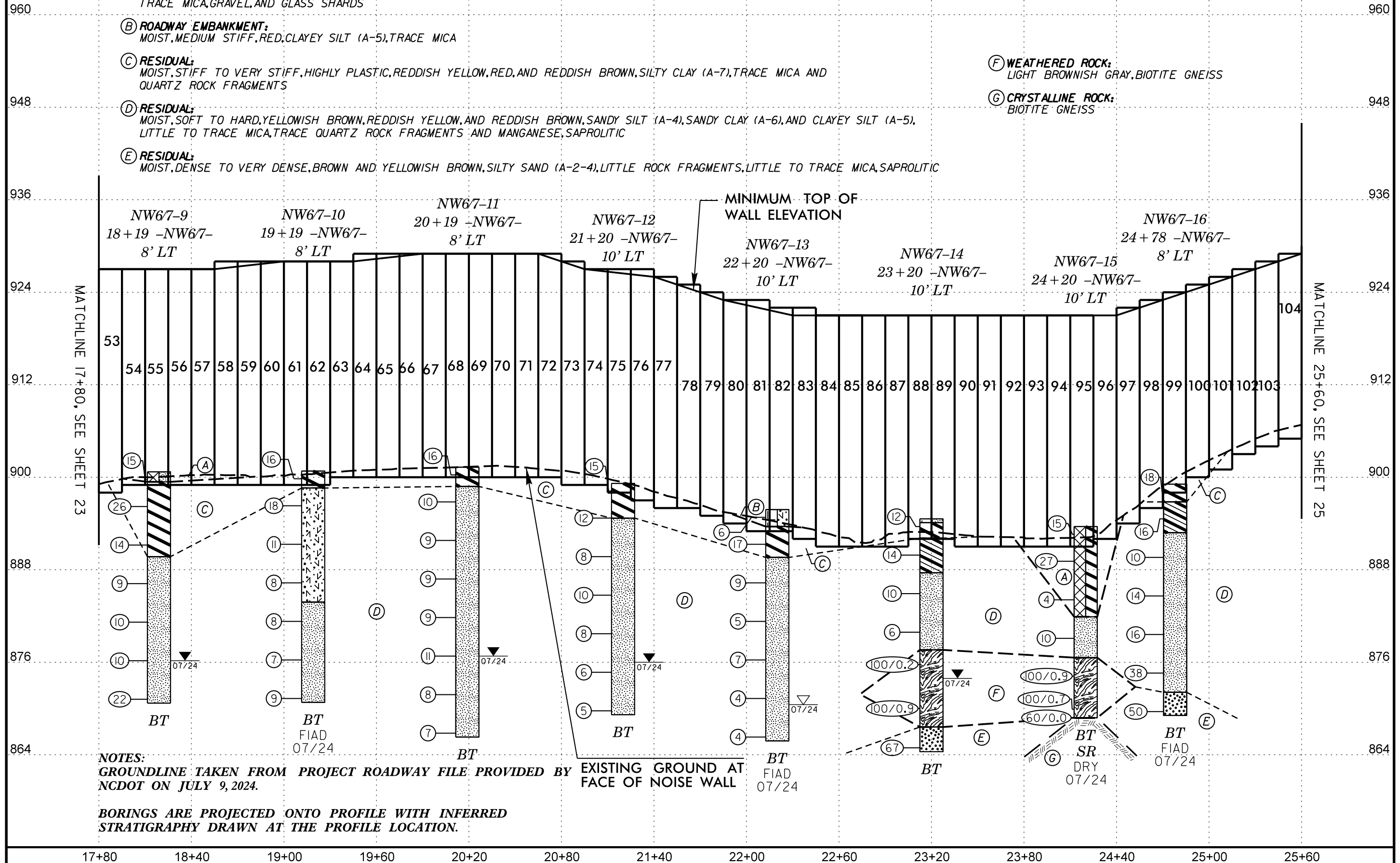


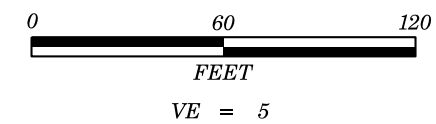


PROJECT REFERENCE NO.	SHEET NO.
I-5880	24
PROFILE FOR NOISE WALL 67 ALONG -NW67-	

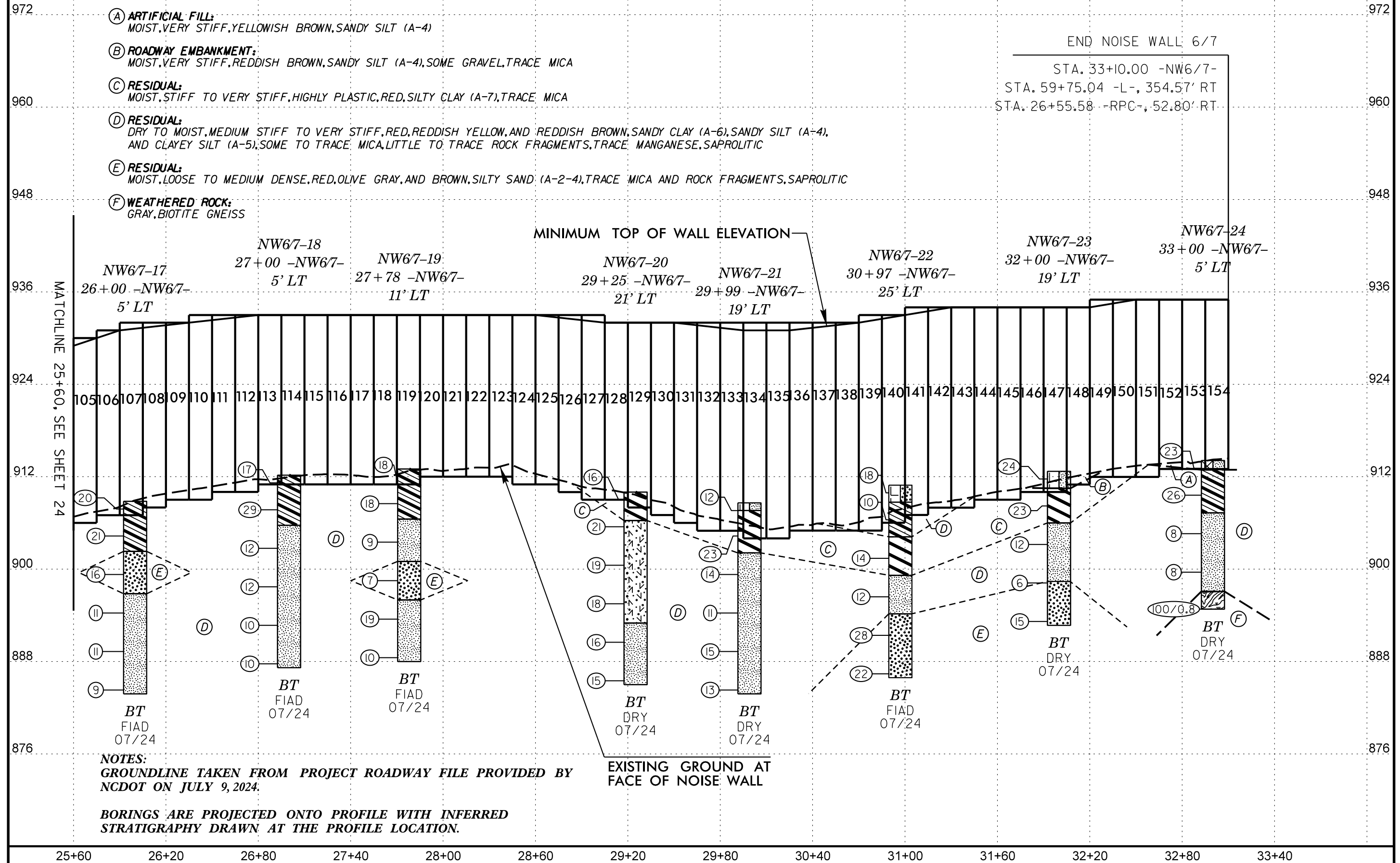
- (A) **ARTIFICIAL FILL:**
MOIST, SOFT TO VERY STIFF, REDDISH YELLOW, REDDISH BROWN, AND BLACK, SANDY SILT (A-4) AND SILTY CLAY (A-7), LITTLE DEBRIS, TRACE MICA, GRAVEL, AND GLASS SHARDS
- (B) **ROADWAY EMBANKMENT:**
MOIST, MEDIUM STIFF, RED, CLAYEY SILT (A-5), TRACE MICA
- (C) **RESIDUAL:**
MOIST, STIFF TO VERY STIFF, HIGHLY PLASTIC, REDDISH YELLOW, RED, AND REDDISH BROWN, SILTY CLAY (A-7), TRACE MICA AND QUARTZ ROCK FRAGMENTS
- (D) **RESIDUAL:**
MOIST, SOFT TO HARD, YELLOWISH BROWN, REDDISH YELLOW, AND REDDISH BROWN, SANDY SILT (A-4), SANDY CLAY (A-6), AND CLAYEY SILT (A-5), LITTLE TO TRACE MICA, TRACE QUARTZ ROCK FRAGMENTS AND MANGANESE, SAPROLITIC
- (E) **RESIDUAL:**
MOIST, DENSE TO VERY DENSE, BROWN AND YELLOWISH BROWN, SILTY SAND (A-2-4), LITTLE ROCK FRAGMENTS, LITTLE TO TRACE MICA, SAPROLITIC

- (F) **WEATHERED ROCK:**
LIGHT BROWNISH GRAY, BIOTITE GNEISS
- (G) **CRYSTALLINE ROCK:**
BIOTITE GNEISS





PROJECT REFERENCE NO.	SHEET NO.
I-5880	25
PROFILE FOR NOISE WALL 67 ALONG -NW67-	



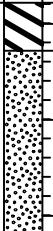
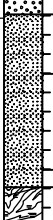
NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster				
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)				
BORING NO. NW1-2			STATION 11+00			OFFSET CL			ALIGNMENT -NW1-				
COLLAR ELEV. 888.9 ft			TOTAL DEPTH 16.6 ft			NORTHING 843,783			EASTING 1,637,827				
0 HR. Dry			24 HR. Dry										
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 06/20/24			COMP. DATE 06/20/24			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			
890													
885	883.9	5.0	16	18	12								
880	880.4	8.5	7	6	5								
875	875.4	13.5	5	3	26								
	872.3	16.6	60/0.0			60/0.0							
GROUND SURFACE 888.9 0.0 RESIDUAL 886.4 2.5 Medium Stiff, Reddish Brown, Fine Sandy SILT (A-4), Trace Mica, Saprolitic 880.4 8.5 Medium Dense, Reddish Brown and Light Brownish Gray, Silty Fine to Coarse SAND (A-2-4), Trace Mica, Saprolitic 875.4 13.5 WEATHERED ROCK 873.4 15.5 Gray, SCHIST 872.3 16.6 Boring Terminated with Standard Penetration Test Refusal at Elevation 872.3 ft on CRYSTALLINE ROCK (SCHIST) NOTE: Topsoil (0.2 Foot) Hand auger from 0.0 to 5.0 feet due to underground utility conflicts. Auger refusal at 16.6 feet.													

NCDOT BORE DOUBLE I5880 GEO_SWAL1,4,5,6-7 GINT.GPJ NC_DOT.GDT 8/3/24

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-												GROUND WTR (ft)					
BORING NO. NW1-4				STATION 13+00				OFFSET 10 ft RT				ALIGNMENT -NW1-				0 HR. 14.0	
COLLAR ELEV. 895.1 ft				TOTAL DEPTH 24.8 ft				NORTHING 843,668				EASTING 1,638,004				24 HR. 13.1	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 06/19/24				COMP. DATE 06/19/24				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							
900																	
895	895.1	0.0	5	5	5											895.1 GROUND SURFACE 0.0	
																894.1 RESIDUAL 1.0	
	891.6	3.5	8	6	7											892.6 Stiff, Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica 2.5	
890																Stiff, Reddish Brown, Clayey SILT (A-5), Trace Mica, Saprolitic	
	886.6	8.5	100/0.4													887.6 Medium Dense, Light Brownish Gray, Silty Fine to Coarse SAND (A-2-4), Saprolitic 7.5	
885																WEATHERED ROCK Gray, SCHIST	
	881.6	13.5	20	27	18											883.4 RESIDUAL 11.7	
880																Hard, Olive Gray and Dark Gray, Fine to Coarse Sandy SILT (A-4), Trace Quartz Rock Fragments, Saprolitic	
	876.6	18.5	19	30	29												
875																	
	871.6	23.5	21	59	41/0.3											870.6 WEATHERED ROCK 24.5	
																870.3 Light Brownish Gray and Reddish Yellow, SCHIST 24.8	
																Boring Terminated at Elevation 870.3 ft in WEATHERED ROCK (SCHIST)	
																NOTE: Topsoil (0.3 Foot)	

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-												GROUND WTR (ft)					
BORING NO. NW1-5				STATION 14+00				OFFSET 10 ft RT				ALIGNMENT -NW1-				0 HR. 14.0	
COLLAR ELEV. 896.1 ft				TOTAL DEPTH 23.8 ft				NORTHING 843,645				EASTING 1,638,094				24 HR. 13.2	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 06/19/24				COMP. DATE 06/19/24				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)		
900																	
895	896.1	0.0	8	12	13									896.1	GROUND SURFACE 0.0		
890	892.6	3.5	7	13	5							M		893.6	-2.5		
	887.6	8.5	25	16	8							M		Very Stiff, Reddish Brown, Silty CLAY (A-7), Some Rock Fragments, Trace Mica			
885	882.6	13.5	5	5	6							M		883.1	13.0		
880												M		Stiff, Light Brownish Gray and Olive Brown, Fine to Coarse Sandy SILT (A-4), Trace Mica, Saprolitic			
875														874.1	22.0		
	872.6	23.5	100/0.3											872.3	23.8		
												WEATHERED ROCK					
												Gray and Reddish Yellow, SCHIST					
												Boring Terminated at Elevation 872.3 ft in WEATHERED ROCK (SCHIST)					
												NOTE: Topsoil (0.2 Foot)					
												Standard Penetration Test at 18.5 feet prematurely terminated. Incomplete blow counts removed from log.					

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-										GROUND WTR (ft)			
BORING NO. NW1-6				STATION 15+00		OFFSET 10 ft RT		ALIGNMENT -NW1-		0 HR.	Dry		
COLLAR ELEV. 900.5 ft				TOTAL DEPTH 25.0 ft		NORTHING 843,602		EASTING 1,638,184		24 HR.	FIAD		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic				
DRILLER R. Toothman				START DATE 06/27/24		COMP. DATE 06/27/24		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			
905													
900	900.5	0.0											900.5 GROUND SURFACE 0.0
895	897.0	3.5	6	12	20								ROADWAY EMBANKMENT Very Stiff to Stiff, Red, Fine Sandy CLAY (A-6), Trace Mica
	892.0	8.5	6	7	8								
890	889.0	11.5	4	5	6								RESIDUAL Stiff to Medium Stiff, Reddish Brown, Olive Brown, and Olive Yellow, Fine Sandy SILT (A-4), Trace to Little Mica, Manganese Lenses, Saprolitic
	887.0	13.5	4	5	6								
885	884.0	16.5	3	4	5								Boring Terminated at Elevation 875.5 ft in RESIDUAL (Sandy SILT) NOTE: Topsoil (0.3 Foot)
	882.0	18.5	3	4	5								
880	877.0	23.5	2	2	4								
			2	3	5								

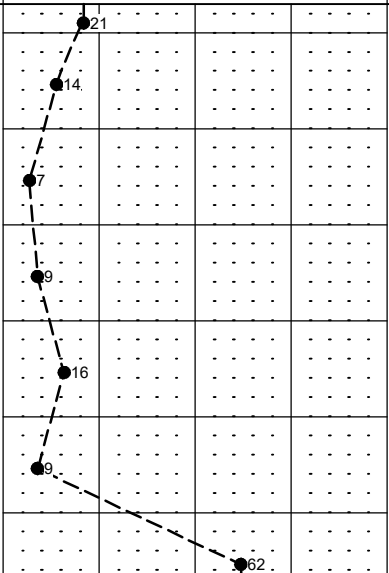
NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

NCDOT BORE DOUBLE | 5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

[illegible]

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)					
BORING NO. NW1-9			STATION 18+08			OFFSET 17 ft RT			ALIGNMENT -NW1-			0 HR. Dry		
COLLAR ELEV. 908.6 ft			TOTAL DEPTH 24.9 ft			NORTHING 843,531			EASTING 1,638,484			24 HR. Dry		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/19/24			COMP. DATE 06/19/24			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)
910														
	908.6	0.0	6	5	7	12						M	908.6	GROUND SURFACE 0.0
													907.6	ROADWAY EMBANKMENT 1.0
905	905.2	3.4	4	4	5	9						M	906.1	Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica 2.5
														RESIDUAL
														Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica
900	900.2	8.4	3	4	4							M		Stiff, Reddish Brown, Fine Sandy SILT (A-4), Trace Mica, Saprolitic
													899.1	9.5
														Loose, Brown and Yellowish Brown, Silty Fine to Coarse SAND (A-2-4), Trace Mica, Saprolitic
895	895.2	13.4	2	4	5	9						M	896.9	11.7
														Stiff to Medium Stiff, Olive Brown, Fine Sandy SILT (A-4), Some Mica, Saprolitic
890	890.2	18.4	2	3	4	7						M		
885	885.2	23.4	2	3	4	7						M	886.6	22.0
														Loose, Light Brownish Gray and Olive Brown, Silty Fine to Coarse SAND (A-2-4)
													883.7	24.9
														Boring Terminated at Elevation 883.7 ft in RESIDUAL (Silty SAND)
														NOTE: Topsoil (0.2 Foot)

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster				
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)				
BORING NO. NW1-10			STATION 19+12			OFFSET 26 ft RT			ALIGNMENT -NW1-			0 HR. Dry	
COLLAR ELEV. 911.5 ft			TOTAL DEPTH 29.7 ft			NORTHING 843,500			EASTING 1,638,579			24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 06/19/24			COMP. DATE 06/19/24			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	MOI		
915													
910	911.5	0.0	6	9	12								911.5 GROUND SURFACE 0.0
	908.3	3.2	4	6	8						M		
905	908.3	3.2	4	6	8						M		
	903.3	8.2	3	3	4						M		
900	898.3	13.2	3	4	5						M		
	893.3	18.2	6	8	8						M		894.5 Very Stiff to Stiff, Light Brownish Gray, Olive Brown, and Olive, Fine to Coarse Sandy SILT (A-4), Trace Mica and Manganese, Saprolitic 17.0
895	888.3	23.2	2	4	5						M		
890	883.3	28.2	14	25	37						M		
											W	885.0 Very Dense, Brown and Olive Brown, Silty Fine to Coarse SAND (A-2-4), Trace Mica and Manganese, Saprolitic 26.5	
885													881.8 Boring Terminated at Elevation 881.8 ft in RESIDUAL (Silty SAND) 29.7

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)					
BORING NO. NW1-12			STATION 21+23			OFFSET 25 ft RT			ALIGNMENT -NW1-			0 HR. Dry		
COLLAR ELEV. 919.3 ft			TOTAL DEPTH 24.9 ft			NORTHING 843,431			EASTING 1,638,777			24 HR. Dry		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/19/24			COMP. DATE 06/19/24			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				
920	919.3	0.0												GROUND SURFACE 0.0
	919.3		3	7	11									RESIDUAL Very Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica 912.7 Medium Stiff to Stiff, Reddish Brown, Yellowish Brown, and Pale Red, Fine to Coarse Sandy SILT (A-4), Trace Mica and Quartz Rock Fragments, Saprolitic 6.6
915	915.9	3.4	5	8	9									
910	910.9	8.4	2	2	3									
905	905.9	13.4	3	3	5									
900	900.9	18.4	4	5	8									
895	895.9	23.4	4	5	8									
Boring Terminated at Elevation 894.4 ft in RESIDUAL (Sandy SILT)														
NOTE: Topsoil (0.2 Foot)														

NCDOT BORE DOUBLE | 5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter				
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)				
BORING NO. NW1-14			STATION 23+17			OFFSET 38 ft RT			ALIGNMENT -NW1-			0 HR. Dry	
COLLAR ELEV. 922.5 ft			TOTAL DEPTH 30.0 ft			NORTHING 843,344			EASTING 1,638,935			24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 06/26/24			COMP. DATE 06/26/24			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			
925													
	922.5	0.0	10	18	12								922.5 GROUND SURFACE 0.0
920	919.0	3.5	5	8	8								ROADWAY EMBANKMENT Very Stiff, Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica
915	914.0	8.5	5	8	9								915.5 RESIDUAL 7.0
													Very Stiff, Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica
910	909.0	13.5	3	5	5								910.5 12.0
													Stiff, Reddish Brown, Fine Sandy SILT (A-4), Some Mica
905	904.0	18.5	4	6	6								905.5 17.0
													Stiff, Reddish Brown, Clayey SILT (A-5), Trace Mica
900	899.0	23.5	4	4	4								903.3 19.2
													Medium Dense to Loose, Reddish Brown and Olive Yellow, Silty Fine SAND (A-2-4), Trace Mica, Saprolitic
895	894.0	28.5	6	7	8								892.5 30.0
													Boring Terminated at Elevation 892.5 ft in RESIDUAL (Silty SAND)
													NOTE: Topsoil (0.3 Foot)

NCDOT BORE DOUBLE I5880 GEO_SWAL1,4,5,6-7 GINT.GPJ NC_DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-									GROUND WTR (ft)					
BORING NO. NW1-16			STATION 25+20			OFFSET CL			ALIGNMENT -NW1-					
COLLAR ELEV. 926.7 ft			TOTAL DEPTH 25.0 ft			NORTHING 843,275			EASTING 1,639,134					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/26/24			COMP. DATE 06/26/24			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				
930														
925	925.7	1.0	5	4	6	10								926.7 GROUND SURFACE 0.0
	923.2	3.5	4	5	5	10								925.4 ROADWAY EMBANKMENT 1.3
920														923.7 Concrete (0.0 - 1.0 Foot) 3.0
														ABC Stone (1.0 - 1.3 Feet)
915	918.2	8.5	6	6	6	12								Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica
														Loose, Reddish Brown, Silty Fine SAND (A-2-4), Trace Mica
910	913.2	13.5	5	8	10	18								919.7 Stiff, Reddish Brown, Clayey SILT (A-5), Trace Mica 7.0
	908.2	18.5	4	5	6	11								Stiff, Reddish Brown, Clayey SILT (A-5), Trace Mica
905	903.2	23.5	4	5	6	11								914.7 RESIDUAL 12.0
														Very Stiff, Reddish Yellow, Silty CLAY (A-7), Trace Mica
														909.7 Stiff, Reddish Yellow, Fine Sandy SILT (A-4), Trace Mica, Saprolitic 17.0
														Stiff, Reddish Yellow, Fine Sandy SILT (A-4), Trace Mica, Saprolitic
														901.7 Boring Terminated at Elevation 901.7 ft in RESIDUAL (Sandy SILT) 25.0

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST B. Lasserter							
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-												GROUND WTR (ft)							
BORING NO. NW1-18				STATION 27+20				OFFSET CL				ALIGNMENT -NW1-				0 HR. Dry			
COLLAR ELEV. 925.8 ft				TOTAL DEPTH 20.0 ft				NORTHING 843,259				EASTING 1,639,332				24 HR. FIAD			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic							
DRILLER R. Toothman				START DATE 06/26/24				COMP. DATE 06/26/24				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									
930																			
925	924.8	1.0	5	5	5											925.8 GROUND SURFACE 0.0			
920	922.3	3.5	3	3	5											924.5 ROADWAY EMBANKMENT 1.3			
																Concrete (0.0 - 1.0 Foot) ABC Stone (1.0 - 1.3 Feet)			
915	917.3	8.5	3	30	52											Stiff to Medium Stiff, Reddish Brown, Fine Sandy SILT (A-4), Little Mica			
																918.8 Hard, Reddish Brown, Fine to Coarse Sandy CLAY (A-6), Trace Mica 7.0			
910	912.3	13.5	6	6	5											916.3 Very Dense, Gray, Silty Fine to Coarse SAND (A-2-4) 9.5			
																913.8 RESIDUAL 12.0			
	907.3	18.5	4	8	10											911.3 Stiff, Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica 14.5			
																908.8 Medium Dense, Reddish Brown, Silty Fine SAND (A-2-4), Trace Mica 17.0			
																905.8 Very Stiff, Reddish Yellow, Silty CLAY (A-7), Trace Mica 20.0			
																Boring Terminated at Elevation 905.8 ft in RESIDUAL (Silty CLAY)			

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter						
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-										GROUND WTR (ft)				
BORING NO. NW1-19		STATION 28+18		OFFSET CL		ALIGNMENT -NW1-		0 HR. Dry						
COLLAR ELEV. 923.8 ft		TOTAL DEPTH 25.0 ft		NORTHING 843,254		EASTING 1,639,430		24 HR. FIAD						
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024					DRILL METHOD H.S. Augers			HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 06/25/24		COMP. DATE 06/25/24		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				
925														
920	922.8	1.0	7	5	5	10	.	.	.	.				923.8 GROUND SURFACE 0.0
	920.3	3.5	7	6	4	10	.	.	.	.				922.3 ROADWAY EMBANKMENT 1.5
915							.	.	.	.				920.8 ABS Stone (1.0 - 1.5 Feet) 3.0
	915.3	8.5	2	4	4	8	.	.	.	.				Stiff, Reddish Brown, Clayey SILT (A-5), Trace Mica and Gravel
910							.	.	.	.				Stiff to Soft, Red, Fine Sandy CLAY (A-6), Trace Mica
	910.3	13.5	2	1	2	3	.	.	.	.				
905							.	.	.	.				906.8 RESIDUAL 17.0
	905.3	18.5	4	8	9	17	.	.	.	.				Very Stiff, Highly Plastic, Reddish Yellow and Gray, Silty CLAY (A-7)
900							.	.	.	.				901.8 Very Stiff, Reddish Yellow, Fine to Coarse Sandy SILT (A-4), Trace Mica 22.0
	900.3	23.5	5	8	10	18	.	.	.	.				898.8 Boring Terminated at Elevation 898.8 ft in RESIDUAL (Sandy SILT) 25.0

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-										GROUND WTR (ft)			
BORING NO. NW1-20		STATION 29+20		OFFSET 3 ft RT		ALIGNMENT -NW1-		0 HR. Dry					
COLLAR ELEV. 920.5 ft		TOTAL DEPTH 35.0 ft		NORTHING 843,246		EASTING 1,639,532		24 HR. FIAD					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024					DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/25/24		COMP. DATE 06/25/24		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	MOI		
925													
920	919.8	0.7											920.5 GROUND SURFACE 0.0
915	917.0	3.5	13	7	6								919.3 ROADWAY EMBANKMENT 1.2
													Concrete (0.0 - 0.7 Foot) 3.0
910	912.0	8.5	3	3	3								917.5 ABC Stone (0.7 - 1.2 Feet) 3.0
													Stiff, Red, Fine to Coarse Sandy CLAY (A-6), Trace Mica
905	907.0	13.5											913.5 Medium Stiff, Red and Reddish Brown, Fine Sandy SILT (A-4), Trace Mica 7.0
													Medium Stiff, Red, Fine to Coarse Sandy CLAY (A-6), Trace Mica
900	902.0	18.5	2	4	3								908.5 RESIDUAL 12.0
													Stiff, Reddish Yellow, Fine to Coarse Sandy CLAY (A-6), Trace Mica
895	897.0	23.5	4	7	8								903.5 Stiff, Reddish Yellow, Clayey SILT (A-5), Little Mica 17.0
890	892.0	28.5	4	7	7								898.5 Stiff to Medium Stiff, Reddish Brown and Olive Brown, Fine Sandy SILT (A-4), Trace to Little Mica, Saprolitic 22.0
	887.0	33.5	3	5	6								
			2	2	3								
			3	4	4								

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

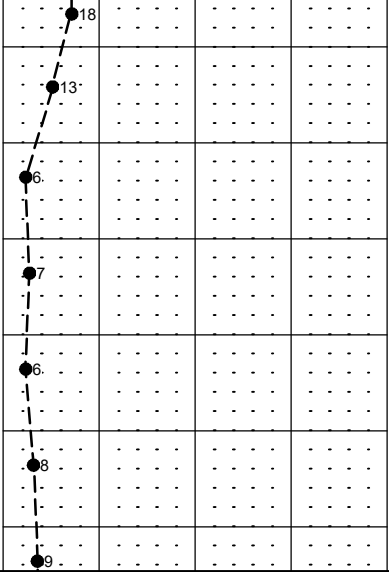
GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter								
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-										GROUND WTR (ft)						
BORING NO. NW1-21		STATION 30+20		OFFSET CL		ALIGNMENT -NW1-		0 HR. Dry								
COLLAR ELEV. 918.5 ft		TOTAL DEPTH 35.0 ft		NORTHING 843,243		EASTING 1,639,632		24 HR. FIAD								
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers		HAMMER TYPE Automatic								
DRILLER R. Toothman			START DATE 06/25/24		COMP. DATE 06/25/24		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 ELEV. (ft) DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
920																
915	917.5	1.0	8	6	4	10	.	.	.	.	.	.	.	.	918.5 GROUND SURFACE 0.0	
	915.0	3.5	3	3	7	10	.	.	.	.	.	.	.	.	917.0 ROADWAY EMBANKMENT 1.5 Concrete (0.0 - 1.0 Foot) ABC Stone (1.0 - 1.5 Feet)	
910	910.0	8.5	6	8	9	17	.	.	.	.	.	.	.	.	911.5 7.0	
905	905.0	13.5	3	4	4	8	.	.	.	.	.	.	.	.	906.5 12.0	
900	900.0	18.5	2	2	3	5	.	.	.	.	.	.	.	.	Medium Stiff to Stiff, Reddish Yellow, Brown, and Olive Yellow, Fine Sandy SILT (A-4), Trace to Little Mica, Saprolitic	
895	895.0	23.5	2	3	5	8	.	.	.	.	.	.	.	.		
890	890.0	28.5	2	2	4	6	.	.	.	.	.	.	.	.	W	
885	885.0	33.5	2	4	5	9	.	.	.	.	.	.	.	.	W	
																Boring Terminated at Elevation 883.5 ft in RESIDUAL (Sandy SILT)

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter						
SITE DESCRIPTION Noise Wall 1: STA. 10+00.00 -NW1- to 32+65.00 -NW1-										GROUND WTR (ft)				
BORING NO. NW1-22		STATION 30+91		OFFSET 23 ft RT		ALIGNMENT -NW1-		0 HR. Dry						
COLLAR ELEV. 918.0 ft		TOTAL DEPTH 35.0 ft		NORTHING 843,217		EASTING 1,639,702		24 HR. FIAD						
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers		HAMMER TYPE Automatic						
DRILLER R. Toothman		START DATE 06/25/24		COMP. DATE 06/25/24		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				
920														
915	917.0	1.0	9	10	10									918.0 GROUND SURFACE 0.0
	914.5	3.5	3	7	9						M			916.5 ROADWAY EMBANKMENT 1.5 Concrete (0.0 - 1.0 Foot)
910	909.5	8.5	3	5	6						M			915.0 ABC Stone (1.0 - 1.5 Feet) 3.0 Medium Dense, Light Brownish Gray, Silty Fine to Coarse SAND (A-2-4)
	904.5	13.5	2	4	3						M			911.5 RESIDUAL 7.0 Very Stiff to Stiff, Highly Plastic, Reddish Yellow and Red, Silty CLAY (A-7)
905	899.5	18.5	3	3	4						M			908.5 Stiff, Red, Coarse Sandy CLAY (A-6) 9.5
	894.5	23.5	5	4	6						M			906.0 Stiff, Red, Coarse Sandy CLAY (A-6) 12.0
890	889.5	28.5	4	2	4						M			906.0 Medium Stiff to Stiff, Reddish Yellow, Red, and Brown, Fine Sandy SILT (A-4), Trace Mica, Saprolitic 12.0
	884.5	33.5	3	4	4						M			
885											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
											M			
</														

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster							
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-												GROUND WTR (ft)							
BORING NO. NW4-1				STATION 9+99				OFFSET 5 ft RT				ALIGNMENT -NW4-				0 HR. Dry			
COLLAR ELEV. 922.7 ft				TOTAL DEPTH 30.0 ft				NORTHING 843,189				EASTING 1,639,876				24 HR. FIAD			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic							
DRILLER R. Toothman				START DATE 06/18/24				COMP. DATE 06/18/24				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									
925																			
	922.7	0.0	5	9	9									922.7	GROUND SURFACE 0.0				
920	918.9	3.8	4	6	7								M		920.2	RESIDUAL Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica, Saprolitic 2.5			
	918.9	3.8	4	6	7								M			Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica, Saprolitic			
915	914.2	8.5	3	3	3								M		915.8	6.9 Medium Stiff, Reddish Brown and Reddish Yellow, Clayey SILT (A-5), Trace Mica, Saprolitic			
	914.2	8.5	3	3	3								M						
910	909.2	13.5	2	3	4								M						
	909.2	13.5	2	3	4								M						
905	904.2	18.5	2	3	3								M						
	904.2	18.5	2	3	3								M						
900	899.2	23.5	2	4	4								M		900.7	22.0			
	899.2	23.5	2	4	4								M			Medium Stiff, Reddish Brown and Olive Brown, Coarse to Fine Sandy SILT (A-4), Trace Mica, Saprolitic			
895	894.2	28.5	2	5	4								M		895.7	27.0			
	894.2	28.5	2	5	4								M			Stiff, Olive Brown, Clayey SILT (A-5)			
															892.7	30.0			
												Boring Terminated at Elevation 892.7 ft in RESIDUAL (Clayey SILT)							
												NOTE: Topsoil (0.6 Foot)							

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter							
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-										GROUND WTR (ft)					
BORING NO. NW4-2			STATION 10+71			OFFSET 30 ft RT			ALIGNMENT -NW4-		0 HR. Dry				
COLLAR ELEV. 918.2 ft			TOTAL DEPTH 30.0 ft			NORTHING 843,106			EASTING 1,639,889		24 HR. FIAD				
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/23/24			COMP. DATE 06/23/24			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)
920															
915	916.7	1.5	4	4	4	8							M	918.2	GROUND SURFACE 0.0
	914.7	3.5	4	5	6	11							M	916.2	ARTIFICIAL FILL Loose, Gray, Silty Fine to Coarse SAND (A-2-4) 2.0
910															
	909.7	8.5	3	4	4	8							M		RESIDUAL Medium Stiff to Stiff, Red, Silty CLAY (A-7), Trace Mica
905															
	904.7	13.5	3	4	4	8							M	903.6	Loose, Reddish Yellow, Silty Coarse to Fine SAND (A-2-4), Trace Mica 14.6
900														901.2	Medium Stiff, Reddish Yellow and Olive, Clayey SILT (A-5), Trace Mica, Saprolitic 17.0
	899.7	18.5	3	4	4	8							M		
895															
890	894.7	23.5	2	3	4	7							W		
	889.7	28.5	2	3	2	5							W	888.2	Boring Terminated at Elevation 888.2 ft in RESIDUAL (Clayey SILT) 30.0

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter						
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-										GROUND WTR (ft)				
BORING NO. NW4-3			STATION 11+71			OFFSET 34 ft RT			ALIGNMENT -NW4-		0 HR. Dry			
COLLAR ELEV. 916.7 ft			TOTAL DEPTH 30.0 ft			NORTHING 843,036			EASTING 1,639,960		24 HR. FIAD			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/23/24			COMP. DATE 06/23/24			SURFACE WATER DEPTH N/A					
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	L O G	SOIL AND ROCK DESCRIPTION
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
920														
915	915.7	1.0												916.7 GROUND SURFACE 0.0
														915.2 ARTIFICIAL FILL 1.5
910	913.2	3.5	9	4	4									Loose, Gray, Silty Fine to Coarse SAND (A-2-4), Little Gravel
905	908.2	8.5	3	3	3									RESIDUAL Medium Stiff to Stiff, Red, Silty CLAY (A-7), Trace Mica
900	903.2	13.5	3	5	4									Medium Dense, White, Silty Fine to Coarse SAND (A-2-4)
895	898.2	18.5	5	6	8									Stiff to Medium Stiff, Red, Silty CLAY (A-7), Trace Mica
890	893.2	23.5	6	7	6									Medium Dense, White, Silty Fine to Coarse SAND (A-2-4)
	888.2	28.5	4	7	8									Stiff to Medium Stiff, Reddish Yellow, Clayey SILT (A-5), Trace Mica, Saprolitic
			2	3	4									Boring Terminated at Elevation 886.7 ft in RESIDUAL (Clayey SILT)

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster						
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-										GROUND WTR (ft)					
BORING NO. NW4-4			STATION 12+71			OFFSET 9 ft RT			ALIGNMENT -NW4-		0 HR. Dry				
COLLAR ELEV. 917.6 ft			TOTAL DEPTH 30.0 ft			NORTHING 842,988			EASTING 1,640,051		24 HR. Dry				
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/18/24			COMP. DATE 06/18/24			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)
920															
915	917.6	0.0	5	8	7									917.6	GROUND SURFACE 0.0
	914.1	3.5	5	7	8									915.1	Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7)
910	909.1	8.5	4	5	7										Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica, Saprolitic
	904.1	13.5	3	5	5									905.6	Stiff, Reddish Brown, Reddish Yellow, and Olive Yellow, Clayey SILT (A-5), Trace Mica, Saprolitic
895	899.1	18.5	3	5	7										
	894.1	23.5	3	4	5										
890	889.1	28.5	3	5	6									887.6	Boring Terminated at Elevation 887.6 ft in RESIDUAL (Clayey SILT)
															NOTE: Topsoil (0.3 Foot)

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster						
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-										GROUND WTR (ft)				
BORING NO. NW4-5			STATION 13+70			OFFSET 15 ft RT			ALIGNMENT -NW4-		0 HR. Dry			
COLLAR ELEV. 915.6 ft			TOTAL DEPTH 29.8 ft			NORTHING 842,923			EASTING 1,640,130		24 HR. Dry			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 06/18/24			COMP. DATE 06/18/24			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				
920														
915	915.6	0.0	5	8	6									915.6 GROUND SURFACE 0.0
910	912.3	3.3	3	6	4	14					M			Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica 2.4
	910	912.3	3.3	3	6	4	10					M		
905	907.3	8.3	4	5	6	11					M			Stiff, Dark Reddish Brown, Pale Red, and Olive Brown, Coarse to Fine Sandy SILT (A-4), Little Quartz Rock Fragments, Trace Mica, Saprolitic
	905	907.3	8.3	4	5	6	11					M		
900	902.3	13.3	4	5	7	12					M			
	900	902.3	13.3	4	5	7	12					M		
895	897.3	18.3	4	5	7	12					M			
	895	897.3	18.3	4	5	7	12					M		
890	892.3	23.3	3	5	6	11					M			
	890	892.3	23.3	3	5	6	11					M		
	887.3	28.3	3	5	5	10					M			885.8 29.8
Boring Terminated at Elevation 885.8 ft in RESIDUAL (Sandy SILT)														
NOTE: Topsoil (0.2 Foot)														

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

NC DOT BORE DOUBLE I5880 GEO_SWAL1,4,5,6-7_GINT.GPJ NC_DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster				
SITE DESCRIPTION Noise Wall 4: STA. 10+00.00 -NW4- to 20+05.00 -NW4-										GROUND WTR (ft)			
BORING NO. NW4-9			STATION 17+70			OFFSET CL			ALIGNMENT -NW4-		0 HR. Dry		
COLLAR ELEV. 913.2 ft			TOTAL DEPTH 29.5 ft			NORTHING 842,798			EASTING 1,640,505		24 HR. FIAD		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic			
DRILLER R. Toothman			START DATE 06/17/24			COMP. DATE 06/17/24			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			
915													
	913.2	0.0	5	8	7								913.2 GROUND SURFACE 0.0
910	910.2	3.0	7	10	9								910.9 RESIDUAL 2.3
													Stiff, Highly Plastic, Reddish Yellow and Olive Yellow, Silty CLAY (A-7)
905	905.2	8.0	3	3	4								Very Stiff to Medium Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica and Quartz Rock Fragments, Saprolitic
900	900.2	13.0	4	4	5								901.7 11.5
													Stiff, Olive Brown, Coarse to Fine Sandy SILT (A-4), Little Mica, Trace Quartz Rock Fragments, Saprolitic
895	895.2	18.0	3	5	6								
890	890.2	23.0	4	6	8								
885	885.2	28.0	4	5	6								
													883.7 29.5
													Boring Terminated at Elevation 883.7 ft in RESIDUAL (Sandy SILT)
													NOTE: Topsoil (0.3 Foot)

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

[illegible]

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-									GROUND WTR (ft)					
BORING NO. NW5-2			STATION 10+25			OFFSET CL			ALIGNMENT -NW5-			0 HR. Dry		
COLLAR ELEV. 904.7 ft			TOTAL DEPTH 25.0 ft			NORTHING 843,386			EASTING 1,638,120			24 HR. Dry		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/15/24			COMP. DATE 07/15/24			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				
905														
	904.7	0.0	2	2	2									904.7 GROUND SURFACE 0.0
900	901.2	3.5	5	7	10									RESIDUAL Soft to Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica
895	896.2	8.5	6	9	8									898.2 Very Stiff to Stiff, Reddish Brown and Olive Brown, Coarse to Fine Sandy SILT (A-4), Trace to Little Mica, Saprolitic 6.5
890	891.2	13.5	4	6	7									888.2 Medium Stiff to Stiff, Olive Brown and Reddish Yellow, Clayey SILT (A-5), Trace Mica and Quartz Rock Fragments, Saprolitic 16.5
885	886.2	18.5	2	3	4									879.7 Boring Terminated at Elevation 879.7 ft in RESIDUAL (Clayey SILT) 25.0
880	881.2	23.5	3	3	7									NOTE: Topsoil (0.2 Foot)
		</												

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

WBS 53080.1.1		TIP I-5880		COUNTY FORSYTH		GEOLOGIST B. Lasseter							
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-							GROUND WTR (ft)						
BORING NO. NW5-4		STATION 12+25		OFFSET 17 ft LT		ALIGNMENT -NW5-		0 HR. Dry					
COLLAR ELEV. 901.4 ft		TOTAL DEPTH 19.3 ft		NORTHING 843,365		EASTING 1,638,320		24 HR. Dry					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic							
DRILLER R. Toothman		START DATE 07/15/24		COMP. DATE 07/15/24		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	MOI		
905													
900	901.4	0.0	7	9	9								901.4 GROUND SURFACE 0.0
	897.9	3.5	5	9	10								899.4 ARTIFICIAL FILL 2.0
895	892.9	8.5	6	9	7								899.4 Medium Dense, Reddish Brown, Silty Coarse to Fine SAND (A-2-4), Trace Mica
	887.9	13.5	4	5	6								894.4 RESIDUAL 7.0
890	882.9	18.5											894.4 Very Stiff, Highly Plastic, Red, Silty CLAY (A-7), Trace Mica and Manganese
	882.2	19.2											889.4 Very Stiff to Stiff, Red, Silty CLAY (A-7), Trace Mica, Saprolitic
885													887.6 Medium Dense, Olive, Silty Fine to Coarse SAND (A-2-4), Trace Mica, Saprolitic 13.8
													884.4 WEATHERED ROCK 17.0
													882.2 Gray, BIOTITE GNEISS 19.2
													882.1 CRYSTALLINE ROCK 19.3
													Gray, BIOTITE GNEISS
													Boring Terminated with Standard Penetration Test Refusal at Elevation 882.1 ft in CRYSTALLINE ROCK (BIOTITE GNEISS)
													NOTE: Topsoil (0.2 Foot)
													Auger refusal at 19.2 feet.

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-												GROUND WTR (ft)					
BORING NO. NW5-5				STATION 13+25				OFFSET 22 ft LT				ALIGNMENT -NW5-				0 HR. Dry	
COLLAR ELEV. 906.3 ft				TOTAL DEPTH 22.0 ft				NORTHING 843,351				EASTING 1,638,419				24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/15/24				COMP. DATE 07/15/24				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 ELEV. (ft) DEPTH (ft)			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100							
910																	
905	906.3	0.0	4	7	7									906.3	GROUND SURFACE 0.0		
	902.8	3.5	5	6	9												
900	897.8	8.5	3	4	3									899.8	6.5		
	892.8	13.5	3	3	3												
895	887.8	18.5	7	70	30/0.1									886.8	19.5		
	884.3	22.0												884.3	22.0		
			60/0.0											Boring Terminated with Standard Penetration Test Refusal at Elevation 884.3 ft on CRYSTALLINE ROCK (BIOTITE GNEISS)			
														NOTE: Topsoil (0.3 Foot) Auger refusal at 22.0 feet			

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B.Lasseter					
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-									GROUND WTR (ft)					
BORING NO. NW5-6			STATION 14+31			OFFSET 10 ft LT			ALIGNMENT -NW5-					
COLLAR ELEV. 909.5 ft			TOTAL DEPTH 25.0 ft			NORTHING 843,319			EASTING 1,638,522					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/15/24			COMP. DATE 07/15/24			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				
910														
	909.5	0.0	6	9	10									GROUND SURFACE 0.0
905	906.0	3.5	5	9	9									RESIDUAL Very Stiff, Highly Plastic, Red, Silty CLAY (A-7), Trace Mica 3.9
900	901.0	8.5	5	7	7									Very Stiff, Reddish Brown, Silty CLAY (A-7), Trace Mica, Saprolitic
895	896.0	13.5	4	7	8									Stiff, Brown, Reddish Brown, and Reddish Yellow, Clayey SILT (A-5), Trace Mica, Saprolitic 7.0
890	891.0	18.5	3	6	4									
885	886.0	23.5	4	6	6									Stiff, Olive Brown, Coarse to Fine Sandy SILT (A-4), Little Mica, Saprolitic 22.0
														Boring Terminated at Elevation 884.5 ft in RESIDUAL (Sandy SILT) 25.0

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-												GROUND WTR (ft)					
BORING NO. NW5-7				STATION 15+25				OFFSET 10 ft LT				ALIGNMENT -NW5-				0 HR. Dry	
COLLAR ELEV. 911.7 ft				TOTAL DEPTH 20.0 ft				NORTHING 843,288				EASTING 1,638,611				24 HR. FIAD	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/11/24				COMP. DATE 07/11/24				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)		
915																	
910	911.7	0.0	4	7	9									911.7	GROUND SURFACE	0.0	
	908.2	3.5	4	7	6							M		909.2	ARTIFICIAL FILL Very Stiff, Reddish Brown, Silty CLAY (A-7), Little Gravel	2.5	
905	903.2	8.5	2	6	11							M			RESIDUAL Stiff to Very Stiff, Reddish Brown and Pink, Silty CLAY (A-7), Little Mica, Trace Quartz Rock Fragments, Saprolitic		
	898.2	13.5	5	6	5							M		899.7	Stiff, Yellowish Brown, Coarse to Fine Sandy SILT (A-4), Trace Mica, Saprolitic	12.0	
895	893.2	18.5	9	6	6							M		891.7	Boring Terminated at Elevation 891.7 ft in RESIDUAL (Sandy SILT)	20.0	
															NOTE: Topsoil (0.1 Foot)		

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-									GROUND WTR (ft)					
BORING NO. NW5-8			STATION 16+54			OFFSET 17 ft LT			ALIGNMENT -NW5-			0 HR. Dry		
COLLAR ELEV. 916.9 ft			TOTAL DEPTH 25.0 ft			NORTHING 843,228			EASTING 1,638,730			24 HR. FIAD		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/21/24			COMP. DATE 06/21/24			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				
920														
	916.9	0.0												
915			16	17	8									
	913.4	3.5	9	12	13									
910														
	908.4	8.5	4	4	4									
905														
	903.4	13.5	7	9	9									
900														
	898.4	18.5	3	3	3									
895														
	893.4	23.5	17	21	20									

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster								
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-										GROUND WTR (ft)						
BORING NO. NW5-9			STATION 17+35			OFFSET 15 ft LT			ALIGNMENT -NW5-		0 HR. Dry					
COLLAR ELEV. 919.4 ft			TOTAL DEPTH 20.0 ft			NORTHING 843,173			EASTING 1,638,790		24 HR. Dry					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 06/21/24			COMP. DATE 06/21/24			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)	
920																
915	919.4	0.0	6	13	12						M		919.4	GROUND SURFACE	0.0	
	915.9	3.5	6	9	11						M		916.9	ARTIFICIAL FILL Medium Dense, Olive Yellow, Silty Fine to Coarse SAND (A-2-4)	2.5	
910											M		912.4	RESIDUAL Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica	7.0	
	910.9	8.5	4	7	8	M		912.4	Stiff, Reddish Brown, Silty CLAY (A-7), Little Mica, Saprolitic							
905	905.9	13.5	4	6	7						M					
900											M		902.4		17.0	
	900.9	18.5	5	5	6	M		899.4	Stiff, Dark Reddish Brown, Coarse to Fine Sandy SILT (A-4), Little Mica, Saprolitic	20.0						
														Boring Terminated at Elevation 899.4 ft in RESIDUAL (Sandy SILT)		
														NOTE: Topsoil (0.2 Foot)		

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster						
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-								GROUND WTR (ft)						
BORING NO. NW5-10		STATION 18+34		OFFSET 13 ft LT		ALIGNMENT -NW5-		0 HR. Dry						
COLLAR ELEV. 921.6 ft		TOTAL DEPTH 20.0 ft		NORTHING 843,095		EASTING 1,638,854		24 HR. Dry						
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic								
DRILLER R. Toothman		START DATE 06/21/24		COMP. DATE 06/21/24		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				
925														
920	921.6	0.0	8	16	7									921.6 GROUND SURFACE 0.0
	920.6										M			920.6 ARTIFICIAL FILL 1.0
915	918.1	3.5	8	9	11									914.6 RESIDUAL 7.0
	913.1	8.5	5	7	10									914.6 Very Stiff, Highly Plastic, Reddish Brown and Reddish Yellow, Silty CLAY (A-7), Trace Mica, Saprolitic 7.0
910	913.1	8.5	5	7	10									909.8 Medium Dense, White and Yellow, Silty Fine to Coarse SAND (A-2-4), Trace Mica, Saprolitic 11.8
	908.1	13.5	5	8	8									909.8 Very Stiff, Reddish Yellow and Reddish Brown, Fine to Coarse Sandy SILT (A-4), Trace Mica, Saprolitic 11.8
905	904.6													904.6 Stiff, Reddish Brown, Clayey SILT (A-5), Little Quartz Rock Fragments and Mica, Saprolitic 17.0
	903.1	18.5	4	6	8									904.6 Stiff, Reddish Brown, Clayey SILT (A-5), Little Quartz Rock Fragments and Mica, Saprolitic 17.0
														901.6 Boring Terminated at Elevation 901.6 ft in RESIDUAL (Clayey SILT) 20.0
NOTE: Topsoil (0.3 Foot)														

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster								
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-										GROUND WTR (ft)						
BORING NO. NW5-11			STATION 19+26			OFFSET 6 ft LT			ALIGNMENT -NW5-		0 HR. Dry					
COLLAR ELEV. 923.6 ft			TOTAL DEPTH 15.0 ft			NORTHING 843,019			EASTING 1,638,907		24 HR. FIAD					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 06/21/24			COMP. DATE 06/21/24			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)	
925																
920	923.6	0.0	7	17	9									923.6	GROUND SURFACE	0.0
	920.1	3.5	7	12	13									921.1	ARTIFICIAL FILL Medium Dense, Yellowish Brown, Silty Fine to Coarse SAND (A-2-4), Trace Mica and Quartz Gravel	2.5
915	915.1	8.5	5	7	8									916.6	RESIDUAL Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica	7.0
910	910.1	13.5	5	6	9									911.6	Stiff, Dark Reddish Brown, Coarse to Fine Sandy SILT (A-4), Trace Mica and Manganese, Saprolitic	12.0
														908.6	Stiff, Dark Reddish Brown and Reddish Yellow, Clayey SILT (A-5)	15.0
														Boring Terminated at Elevation 908.6 ft in RESIDUAL (Clayey SILT)		
														NOTE: Topsoil (0.1 Foot)		

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster							
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-										GROUND WTR (ft)					
BORING NO. NW5-12			STATION 20+26			OFFSET 5 ft LT			ALIGNMENT -NW5-		0 HR. Dry				
COLLAR ELEV. 923.9 ft			TOTAL DEPTH 20.0 ft			NORTHING 842,947			EASTING 1,638,977		24 HR. Dry				
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 06/21/24			COMP. DATE 06/21/24			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					
925															
920	923.9	0.0	7	10	8								923.9	GROUND SURFACE	0.0
	920.4	3.5	6	9	11								921.4	ARTIFICIAL FILL Very Stiff, Yellowish Brown, Silty CLAY (A-7), Trace Mica, Glass Fragments, and Gravel	
915	915.4	8.5	8	10	11									RESIDUAL Very Stiff, Dark Reddish Brown and Reddish Brown, Silty CLAY (A-7), Trace Mica, Saprolitic	
	910.4	13.5	6	8	10										
905	905.4	18.5	5	8	11									Very Stiff, Dark Reddish Brown and Reddish Yellow, Clayey SILT (A-5), Trace Quartz Rock Fragments and Manganese	17.0
														Boring Terminated at Elevation 903.9 ft in RESIDUAL (Clayey SILT)	20.0
														NOTE: Topsoil (0.2 Foot)	

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster						
SITE DESCRIPTION Noise Wall 5: STA. 10+00.00 -NW5- to 21+10.00 -NW5-										GROUND WTR (ft)				
BORING NO. NW5-13		STATION 21+31		OFFSET 12 ft LT		ALIGNMENT -NW5-		0 HR. Dry						
COLLAR ELEV. 922.1 ft		TOTAL DEPTH 20.0 ft		NORTHING 842,877		EASTING 1,639,055		24 HR. Dry						
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024					DRILL METHOD H.S. Augers			HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 06/20/24		COMP. DATE 06/20/24		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)
925														
920	922.1	0.0	8	8	9								922.1	GROUND SURFACE 0.0
	918.6	3.5	6	7	10						M		919.6	RESIDUAL Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica 2.5
915	913.6	8.5	4	3	4						M		915.3	Very Stiff, Red, Silty CLAY (A-7), Trace Mica 6.8
	908.6	13.5	5	6	7						M		905.1	Medium Stiff to Stiff, Yellow and Dark Reddish Brown, Coarse to Fine Sandy SILT (A-4), Trace Mica, Saprolitic 17.0
905	903.6	18.5	4	7	7						M		902.1	Stiff, Reddish Yellow and Reddish Brown, Clayey SILT (A-5) 20.0
											M		Boring Terminated at Elevation 902.1 ft in RESIDUAL (Clayey SILT)	
													NOTE: Topsoil (0.4 Foot)	

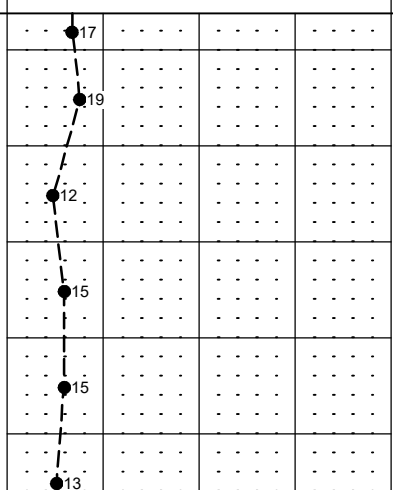
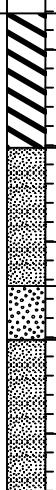
WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST M. Foster						
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-										GROUND WTR (ft)				
BORING NO. NW6/7-1		STATION 10+13		OFFSET 15 ft LT		ALIGNMENT -NW6/7-		0 HR. Dry						
COLLAR ELEV. 916.9 ft		TOTAL DEPTH 20.0 ft		NORTHING 842,722		EASTING 1,639,268		24 HR. FIAD						
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers		HAMMER TYPE Automatic						
DRILLER R. Toothman			START DATE 07/11/24		COMP. DATE 07/11/24		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				
920														
	916.9	0.0												916.9 GROUND SURFACE 0.0
915			7	12	11									
	913.4	3.5												914.4 Very Stiff, Reddish Brown and Brown, Fine Sandy CLAY (A-6), Trace Mica 2.5
			9	13	14									Very Stiff, Highly Plastic, Reddish Brown, Silty CLAY (A-7), Trace Mica
910														910.1 6.8
	908.4	8.5	2	3	4									Medium Stiff to Very Stiff, Reddish Brown, Light Brownish Gray, and Olive Brown, Fine Sandy SILT (A-4), Trace Mica, Saprolitic
905														
	903.4	13.5	4	4	4									
900														
	898.4	18.5	2	8	8									896.9 20.0
														Boring Terminated at Elevation 896.9 ft in RESIDUAL (Sandy SILT)
														NOTE: Topsoil (0.2 Foot)

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

NC DOT BORE DOUBLE I5880 GEO_SWAL1,4,5,6-7 GINT.GPJ NC_DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)					
BORING NO. NW6/7-3			STATION 12+19			OFFSET 7 ft LT			ALIGNMENT -NW6/7-					
COLLAR ELEV. 909.2 ft			TOTAL DEPTH 25.0 ft			NORTHING 842,647			EASTING 1,639,457					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/11/24			COMP. DATE 07/11/24			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				
910	909.2	0.0												
905	905.7	3.5	3	4	5	9					M		909.2 GROUND SURFACE 0.0	
	900.7	8.5	5	8	7	15					M		907.9 ARTIFICIAL FILL 1.3	
900	895.7	13.5	3	4	4	8					M		906.7 Stiff, Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica 2.5	
	890.7	18.5	2	4	5	9					M		Stiff, Olive Gray, Clayey Fine SAND (A-2-6) 7.0	
895	885.7	23.5	3	5	5	10					M		RESIDUAL Stiff, Highly Plastic, Reddish Brown and Red, Silty CLAY (A-7), Trace Mica 7.0	
890											M		Medium Stiff to Stiff, Reddish Brown, Olive Brown, and Reddish Yellow, Fine Sandy SILT (A-4), Trace Mica and Manganese, Saprolitic	
885											M		884.2 Boring Terminated at Elevation 884.2 ft in RESIDUAL (Sandy SILT) 25.0	
NOTE: Topsoil (0.2 Foot)														

NC DOT BORE DOUBLE I5880 GEO_SWAL1,4,5,6-7_GINT.GPJ NC_DOT.GDT 8/3/24

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter							
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)							
BORING NO. NW6/7-5			STATION 14+19			OFFSET 6 ft LT			ALIGNMENT -NW6/7-			0 HR. Dry				
COLLAR ELEV. 906.9 ft			TOTAL DEPTH 25.0 ft			NORTHING 842,644			EASTING 1,639,657			24 HR. Dry				
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic							
DRILLER R. Toothman			START DATE 06/27/24			COMP. DATE 06/27/24			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						
910																
	906.9	0.0	6	9	8									906.9 GROUND SURFACE 0.0		
905	903.4	3.5	6	8	11								D		RESIDUAL Very Stiff, Reddish Yellow, Silty CLAY (A-7), Trace Mica	
900	898.4	8.5	4	5	7								M			899.9 7.0
895	893.4	13.5	4	8	7								M			892.7 14.2
890	888.4	18.5	4	7	8								M			889.9 17.0
885	883.4	23.5	4	5	8								M			Stiff, Reddish Brown and Olive Brown, Fine Sandy SILT (A-4), Trace Mica, Lensed Manganese, Saprolitic
													M			881.9 25.0
Boring Terminated at Elevation 881.9 ft in RESIDUAL (Sandy SILT)																
NOTE: Topsoil (0.3 Foot)																

NCDOT BORE DOUBLE I5880 GEO SWAL1.4.5.6-7 GINT.GPJ NC DOT.GDT 8/3/24

[illegible]

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)					
BORING NO. NW6/7-8				STATION 17+19				OFFSET 8 ft LT				ALIGNMENT -NW6/7-				0 HR. Dry	
COLLAR ELEV. 900.8 ft				TOTAL DEPTH 14.2 ft				NORTHING 842,608				EASTING 1,639,954				24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/07/24				COMP. DATE 07/07/24				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)		
905																	
900	900.8	0.0												900.8 GROUND SURFACE 0.0			
895	897.3	3.5	4	6	6	12						M		RESIDUAL Stiff, Red and Reddish Brown, Fine Sandy CLAY (A-6), Trace to Little Mica			
	892.3	8.5	4	5	5	10						M					
890	892.3	8.5	4	6	8	14						M		888.3 12.5			
	886.6	14.2	100/0.3											886.6 14.2			
														WEATHERED ROCK Light Brownish Gray, BIOTITE GNEISS Boring Terminated with Standard Penetration Test Refusal at Elevation 886.6 ft on CRYSTALLINE ROCK (BIOTITE GNEISS) NOTE: Topsoil (0.1 Foot) Auger refusal at 14.2 feet.			

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)					
BORING NO. NW6/7-9			STATION 18+19			OFFSET 8 ft LT			ALIGNMENT -NW6/7-			0 HR. 26.2		
COLLAR ELEV. 900.7 ft			TOTAL DEPTH 30.0 ft			NORTHING 842,574			EASTING 1,640,048			24 HR. 24.5		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/07/24			COMP. DATE 07/07/24			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				
905														
900	900.7	0.0												
			5	7	8									900.7 GROUND SURFACE 0.0
	897.2	3.5	8	13	13	15					M			899.4 1.3
895														ARTIFICIAL FILL Stiff, Reddish Yellow, Fine Sandy SILT (A-4)
	892.2	8.5	4	6	8						M			RESIDUAL Very Stiff to Stiff, Highly Plastic, Reddish Yellow, Silty CLAY (A-7), Trace Mica
890														
	887.2	13.5	4	4	5	9					M			889.7 11.0
885														Stiff to Very Stiff, Reddish Yellow and Yellowish Brown, Coarse to Fine Sandy SILT (A-4), Little to Trace Mica, Saprolitic
	882.2	18.5	3	4	6	10					M			
880														
	877.2	23.5	3	5	5	10								
875														
	872.2	28.5	7	10	12	22					M			870.7 30.0
														Boring Terminated at Elevation 870.7 ft in RESIDUAL (Sandy SILT)
														NOTE: Topsoil (0.1 Foot)

NCDOT BORE DOUBLE I5880_GEO_SWAL14.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST D. Cade							
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-										GROUND WTR (ft)					
BORING NO. NW6/7-10			STATION 19+19			OFFSET 8 ft LT			ALIGNMENT -NW6/7-		0 HR. Dry				
COLLAR ELEV. 900.8 ft			TOTAL DEPTH 30.0 ft			NORTHING 842,539			EASTING 1,640,142		24 HR. FIAD				
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/07/24			COMP. DATE 07/07/24			SURFACE WATER DEPTH N/A						
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
905															
900	900.8	0.0												GROUND SURFACE	0.0
895	897.3	3.5	5	8	8							M		Very Stiff, Highly Plastic, Reddish Yellow, Silty CLAY (A-7), Trace Mica and Quartz Rock Fragments	2.2
	892.3	8.5	6	9	9							M			
890	887.3	13.5	3	5	6							M		Very Stiff to Medium Stiff, Reddish Brown, Yellow, and Reddish Yellow, Clayey SILT (A-5), Trace Mica, Saprolitic	
	882.3	18.5	3	4	4							M			
885	877.3	23.5	3	4	4							M		Medium Stiff to Stiff, Yellowish Brown, Fine Sandy SILT (A-4)	17.0
	872.3	28.5	2	4	5							M			
880															
875															

WBS 53080.1.1				TIP I-5880		COUNTY FORSYTH		GEOLOGIST D. Cade						
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-										GROUND WTR (ft)				
BORING NO. NW6/7-11			STATION 20+19			OFFSET 8 ft LT			ALIGNMENT -NW6/7-		0 HR. 26.3			
COLLAR ELEV. 901.3 ft			TOTAL DEPTH 35.0 ft			NORTHING 842,505			EASTING 1,640,236		24 HR. 24.5			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 07/09/24			COMP. DATE 07/09/24			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				
905														
900	901.3	0.0	7	7	9	16								GROUND SURFACE 0.0
895	897.8	3.5	4	5	5	10								2.5
890	892.8	8.5	3	4	5	9								
885	887.8	13.5	3	4	5	9								
880	882.8	18.5	3	4	5	9								
875	877.8	23.5	4	5	6	11								
870	872.8	28.5	2	4	4	8								
	867.8	33.5	2	3	4	7								

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

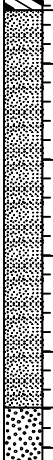
GEOTECHNICAL BORING REPORT
BORE LOG

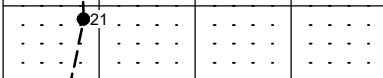
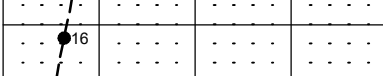
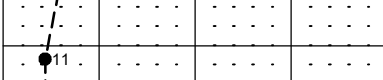
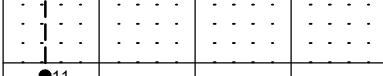
WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade							
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)				
BORING NO. NW6/7-14			STATION 23+20			OFFSET 10 ft LT			ALIGNMENT -NW6/7-			0 HR.	19.0			
COLLAR ELEV. 894.6 ft			TOTAL DEPTH 30.2 ft			NORTHING 842,387			EASTING 1,640,513			24 HR.	20.7			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic							
DRILLER R. Toothman			START DATE 07/09/24			COMP. DATE 07/09/24			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)	
895																
	894.6	0.0	3	5	7							M		894.6	0.0	
	892.1											M		892.1		
890	890.9	3.7	5	7	7											
	887.6											M		887.6		
885	885.9	8.7	3	5	5											
	880.9	13.7	3	3	3							M				
	875.9	18.7	100/0.2								100/0.2					
	870.9	23.7	29	71/0.4							100/0.9					
	865.9	28.7	5	6	61						67		M			

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)					
BORING NO. NW6/7-15			STATION 24+20			OFFSET 10 ft LT			ALIGNMENT -NW6/7-			0 HR. Dry		
COLLAR ELEV. 893.6 ft			TOTAL DEPTH 24.8 ft			NORTHING 842,346			EASTING 1,640,604			24 HR. Dry		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/09/24			COMP. DATE 07/09/24			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				
895														
	893.6	0.0	3	6	9									893.6 GROUND SURFACE 0.0
890	890.1	3.5	12	16	11									
885	885.1	8.5	1	3	1									
880	880.1	13.5	3	4	6									
875	875.1	18.5	23	77/0.4										
870	870.1	23.5												
	868.8	24.8	15	85/0.2										
			60/0.0											

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade									
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-											GROUND WTR (ft)							
BORING NO. NW6/7-16			STATION 24+78			OFFSET 8 ft LT			ALIGNMENT -NW6/7-			0 HR.	Dry					
COLLAR ELEV. 899.1 ft			TOTAL DEPTH 30.0 ft			NORTHING 842,303			EASTING 1,640,647			24 HR.	FIAD					
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers				HAMMER TYPE Automatic								
DRILLER R. Toothman			START DATE 07/10/24			COMP. DATE 07/10/24			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)			
900																		
	899.1	0.0	4	7	11									899.1	0.0	GROUND SURFACE		
895	895.6	3.5	7	8	8							M		896.8	2.3	RESIDUAL Very Stiff, Highly Plastic, Red, Silty CLAY (A-7), Trace Mica		
												M		892.8	6.3	Very Stiff, Reddish Brown, Coarse to Fine Sandy CLAY (A-6), Trace Mica		
890	890.6	8.5	3	5	5							M				Stiff to Hard, Reddish Brown, Reddish Yellow, and Yellowish Brown, Coarse to Fine Sandy SILT (A-4), Little to Trace Mica, Trace Manganese, Saprolitic		
885	885.6	13.5	3	6	8							M						
880	880.6	18.5	6	8	8							M						
875	875.6	23.5	9	21	17							M						
870	870.6	28.5	21	22	28							M		872.1	27.0	Dense, Yellowish Brown, Silty Fine SAND (A-2-4), Little Rock Fragments, Trace Mica, Saprolitic		
														869.1	30.0	Boring Terminated at Elevation 869.1 ft in RESIDUAL (Silty SAND)		
																NOTE: Topsoil (0.1 Foot)		

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter				
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)				
BORING NO. NW6/7-17			STATION 26+00			OFFSET 5 ft LT			ALIGNMENT -NW6/7-			0 HR. Dry	
COLLAR ELEV. 908.8 ft			TOTAL DEPTH 25.0 ft			NORTHING 842,244			EASTING 1,640,751			24 HR. FIAD	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic				
DRILLER R. Toothman			START DATE 07/16/24			COMP. DATE 07/16/24			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	MOI		
910													
	908.8	0.0	8	11	9								908.8 GROUND SURFACE 0.0
905	905.3	3.5	8	10	11								
900	900.3	8.5	11	9	7								902.3 Medium Dense, Red and Gray, Silty Fine SAND (A-2-4), Trace Mica and Rock Fragments 6.5
895	895.3	13.5	3	6	5								896.8 Stiff, Olive Brown and Pink, Fine Sandy SILT (A-4), Little Mica, Saprolitic 12.0
890	890.3	18.5	3	5	6								
885	885.3	23.5	4	4	5								
													883.8 Boring Terminated at Elevation 883.8 ft in RESIDUAL (Sandy SILT) 25.0

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)					
BORING NO. NW6/7-18				STATION 27+00				OFFSET 5 ft LT				ALIGNMENT -NW6/7-				0 HR. Dry	
COLLAR ELEV. 912.2 ft				TOTAL DEPTH 25.0 ft				NORTHING 842,201				EASTING 1,640,841				24 HR. FIAD	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/16/24				COMP. DATE 07/16/24				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)		
915																	
910	912.2	0.0												912.2 GROUND SURFACE 0.0			
	908.7	3.5	10	9	8									RESIDUAL Very Stiff, Red, Fine Sandy CLAY (A-6), Trace Mica			
905	908.7	3.5	12	15	14									905.7 6.5			
	903.7	8.5	4	5	7									Stiff, Reddish Yellow, Reddish Brown, and Olive Brown, Fine to Coarse Sandy SILT (A-4), Trace Mica, Saprolitic			
900	903.7	8.5	4	5	7												
	898.7	13.5	4	6	6												
895	898.7	13.5	4	6	6												
	893.7	18.5	3	5	5												
890	893.7	18.5	3	5	5												
	888.7	23.5	3	5	5									887.2 25.0			
														Boring Terminated at Elevation 887.2 ft in RESIDUAL (Sandy SILT)			

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST B. Lasseter					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)					
BORING NO. NW6/7-19			STATION 27+78			OFFSET 11 ft LT			ALIGNMENT -NW6/7-			0 HR. Dry		
COLLAR ELEV. 913.0 ft			TOTAL DEPTH 25.0 ft			NORTHING 842,173			EASTING 1,640,914			24 HR. FIAD		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/16/24			COMP. DATE 07/16/24			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				
915														
910	913.0	0.0	7	10	8									913.0 GROUND SURFACE 0.0
	909.5	3.5	6	9	9							D		Very Stiff, Red, Fine Sandy CLAY (A-6), Trace Mica
905												M		906.5 Stiff, Red, Fine Sandy SILT (A-4), Trace Mica, Saprolitic 6.5
	904.5	8.5	4	4	5							M		
900												M		901.0 Loose, Olive Gray, Silty Fine to Coarse Sand (A-2-4), Trace Mica, Saprolitic 12.0
	899.5	13.5	3	4	3							M		
895												M		896.0 Very Stiff to Stiff, Olive Gray, Fine Sandy SILT (A-4), Trace Mica and Quartz Rock Fragments, Saprolitic 17.0
	894.5	18.5	4	10	9							M		
890												M		888.0 Boring Terminated at Elevation 888.0 ft in RESIDUAL (Sandy SILT) 25.0
	889.5	23.5	4	4	6							M		

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)					
BORING NO. NW6/7-20				STATION 29+25				OFFSET 21 ft LT				ALIGNMENT -NW6/7-				0 HR. Dry	
COLLAR ELEV. 910.0 ft				TOTAL DEPTH 25.0 ft				NORTHING 842,118				EASTING 1,641,052				24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/10/24				COMP. DATE 07/10/24				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)		
910														910.0	GROUND SURFACE	0.0	
905	910.0	0.0	5	7	9												

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)					
BORING NO. NW6/7-21				STATION 29+99				OFFSET 19 ft LT				ALIGNMENT -NW6/7-				0 HR. Dry	
COLLAR ELEV. 908.6 ft				TOTAL DEPTH 24.8 ft				NORTHING 842,084				EASTING 1,641,117				24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/10/24				COMP. DATE 07/10/24				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	MOI						
910																	
905	908.6	0.0	4	6	6								908.6 GROUND SURFACE 0.0				
	905.3	3.3	7	10	13								907.6 ROADWAY EMBANKMENT 1.0				
900	900.3	8.3	5	7	7								Stiff, Pink, Coarse to Fine Sandy SILT (A-4), Trace Mica				
	895.3	13.3	4	5	6								RESIDUAL				
895	890.3	18.3	4	6	9								Stiff to Very Stiff, Highly Plastic, Red, Silty CLAY (A-7), Trace Mica				
	885.3	23.3	4	6	7								Stiff, Red and Reddish Yellow, Coarse to Fine Sandy SILT (A-4), Trace Mica and Quartz Rock Fragments, Saprolitic				
885													902.1 6.5				
													883.8 24.8				
												Boring Terminated at Elevation 883.8 ft in RESIDUAL (Sandy SILT)					
												NOTE: Topsoil (0.2 Foot)					

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-										GROUND WTR (ft)				
BORING NO. NW6/7-22			STATION 30+97			OFFSET 25 ft LT			ALIGNMENT -NW6/7-		0 HR. Dry			
COLLAR ELEV. 910.9 ft			TOTAL DEPTH 25.0 ft			NORTHING 842,058			EASTING 1,641,207		24 HR. FIAD			
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/10/24			COMP. DATE 07/10/24			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				
915														
910	910.9	0.0												910.9 GROUND SURFACE 0.0
905	907.4	3.5	4	8	10									ROADWAY EMBANKMENT
	902.4	8.5	6	5	5									Medium Dense, Light Brownish Gray, Silty Coarse to Fine SAND (A-2-4), Trace Gravel and Mica
900	904.2													RESIDUAL
	902.4	8.5	4	7	7									Stiff, Reddish Yellow, Coarse to Fine Sandy CLAY (A-6), Trace Mica
895	897.4	13.5	5	6	6									Stiff, Highly Plastic, Red, Silty CLAY (A-7), Trace Mica
	892.4	18.5	5	16	12									
890	887.4	23.5	10	11	11									Stiff, Reddish Yellow, Coarse to Fine Sandy SILT (A-4), Trace Mica
														Medium Dense, Light Brownish Gray, Silty Coarse to Fine SAND (A-2-4), Trace Rock Fragments and Mica, Saprolitic

WBS 53080.1.1			TIP I-5880			COUNTY FORSYTH			GEOLOGIST D. Cade					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-									GROUND WTR (ft)					
BORING NO. NW6/7-23			STATION 32+00			OFFSET 19 ft LT			ALIGNMENT -NW6/7-			0 HR. Dry		
COLLAR ELEV. 912.7 ft			TOTAL DEPTH 20.0 ft			NORTHING 842,041			EASTING 1,641,302			24 HR. Dry		
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024						DRILL METHOD H.S. Augers			HAMMER TYPE Automatic					
DRILLER R. Toothman			START DATE 07/10/24			COMP. DATE 07/10/24			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				
915														
	912.7	0.0	6	13	11									912.7 GROUND SURFACE 0.0
910	909.2	3.5	8	11	12									910.5 ROADWAY EMBANKMENT 2.2
905	904.2	8.5	6	6	6									906.0 RESIDUAL 6.7
900	899.2	13.5	3	3	3									898.4 14.3
895	894.2	18.5	6	8	7									892.7 20.0
										</				

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 53080.1.1				TIP I-5880				COUNTY FORSYTH				GEOLOGIST M. Foster					
SITE DESCRIPTION Noise Wall 6/7: STA. 10+00.00 -NW6/7- to 33+10.00 -NW6/7-												GROUND WTR (ft)					
BORING NO. NW6/7-24				STATION 33+00				OFFSET 5 ft LT				ALIGNMENT -NW6/7-				0 HR. Dry	
COLLAR ELEV. 914.1 ft				TOTAL DEPTH 19.3 ft				NORTHING 842,032				EASTING 1,641,402				24 HR. Dry	
DRILL RIG/HAMMER EFF./DATE TRI0055 CME-55 74% 05/13/2024								DRILL METHOD H.S. Augers				HAMMER TYPE Automatic					
DRILLER R. Toothman				START DATE 07/11/24				COMP. DATE 07/11/24				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)		
915																	
910	914.1	0.0	4	14	9						M		914.1 GROUND SURFACE 0.0				
	910.6	3.5	8	13	13								912.9 ARTIFICIAL FILL 1.2				
905											M		Very Stiff, Yellowish Brown, Fine to Coarse Sandy SILT (A-4)				
	905.6	8.5	4	4	4								907.3 6.8				
900											M		Very Stiff, Red and Reddish Brown, Fine Sandy CLAY (A-6), Trace Mica				
	900.6	13.5	3	3	5								Stiff, Reddish Brown and Olive Gray, Fine Sandy SILT (A-4), Trace Mica, Saprolitic				
895	895.6	18.5	38	62	0.3						M		897.1 17.0				
													894.8 19.3				
												WEATHERED ROCK					
												Gray, BIOTITE GNEISS					
												Boring Terminated at Elevation 894.8 ft in WEATHERED ROCK (BIOTITE GNEISS)					
												NOTE: Topsoil (0.2 Foot)					

NCDOT BORE DOUBLE I5880_GEO_SWAL1.4.5.6-7_GINT.GPJ NC_DOT.GDT 8/3/24