

REFERENCE: R-2707E

PROJECT: 34497

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY CLEVELAND
 PROJECT DESCRIPTION US 74, SHELBY BYPASS FROM
EXISTING US 74 WEST OF SR 2238 (LONG
BRANCH RD.) TO WEST OF SR 1001
 SITE DESCRIPTION NOISE WALL 10a FROM -NW10a-
STA. 10 + 00.00 (-L- STA. 935 + 69.92, 61.76' LT) TO
-NW10a- STA. 23 + 95.00 (-L- STA. 949 + 50.07, 72.5' LT)

CONTENTS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND
3	SITE PLAN AND PROFILE
4 - 10	BORE LOGS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2707E	1	10

CAUTION NOTICE

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

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

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

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

PERSONNEL

TRIGON

GOODNIGHT, D.J.

INVESTIGATED BY GOODNIGHT, D.J.

DRAWN BY CROCKETT, S.C.

CHECKED BY HUNSBERGER, W.S.

SUBMITTED BY FALCON ENG.

DATE JANUARY 2023



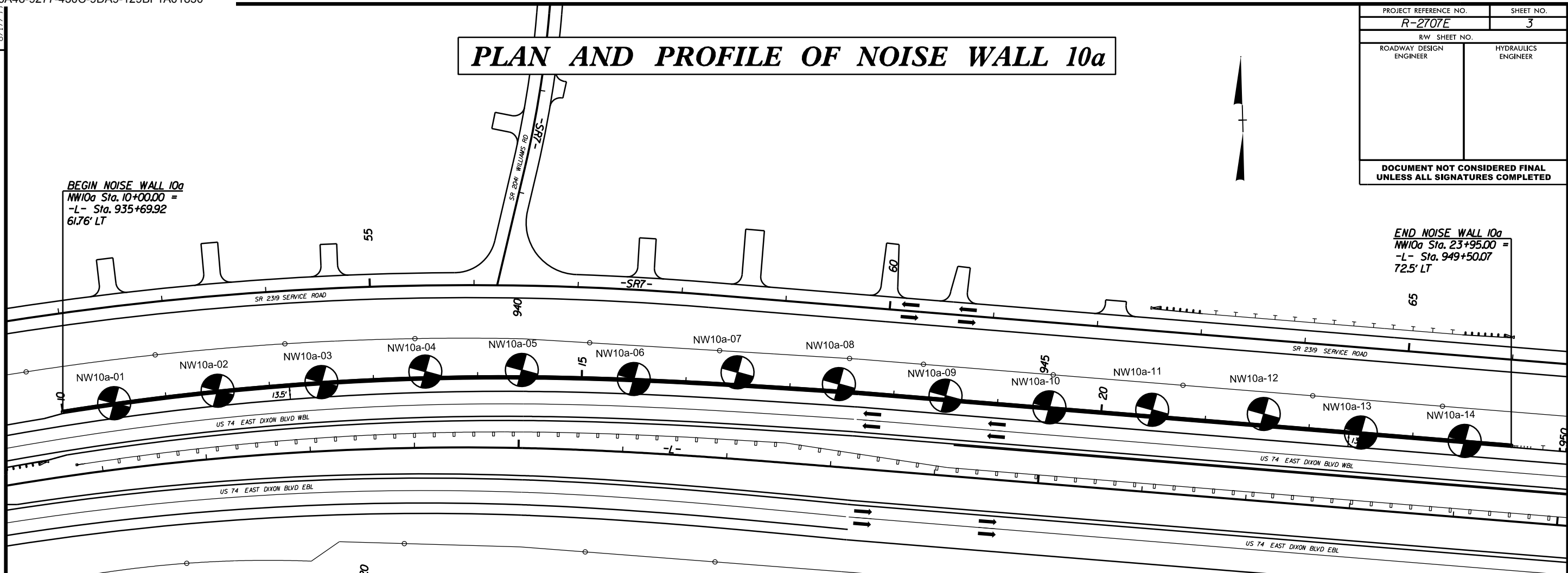
DocuSigned by:
Stephen Crockett 1/6/2023
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 SIGNATURE DATE

PROJECT REFERENCE NO.	SHEET NO.
R-2707E	3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

PLAN AND PROFILE OF NOISE WALL 10a

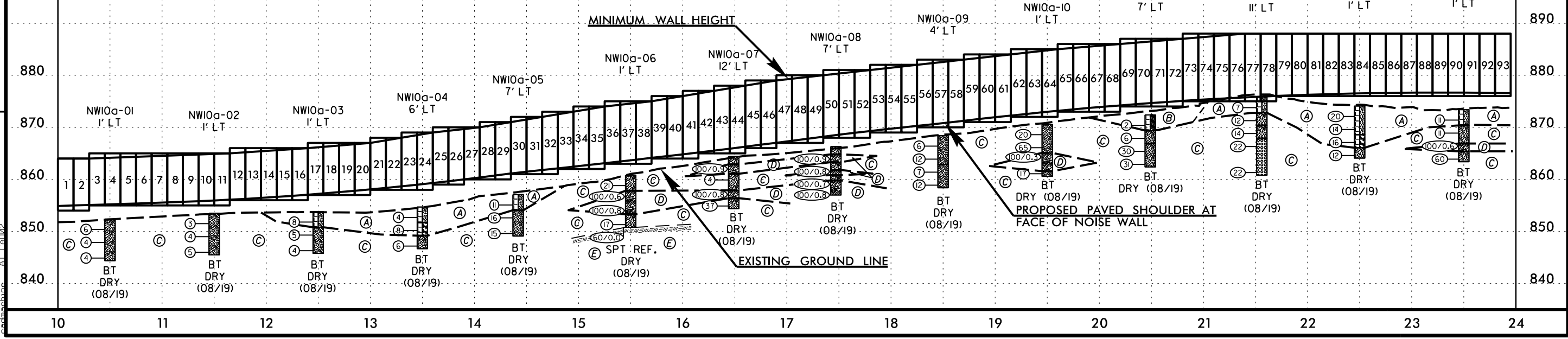
BEGIN NOISE WALL 10a
 NW10a Sta. 10+00.00 =
 -L- Sta. 935+69.92
 61.76' LT

END NOISE WALL 10a
 NW10a Sta. 23+95.00 =
 -L- Sta. 949+50.07
 72.5' LT



PANEL NUMBER	1-2	3-11	12-16	17-20	21-22	23-24	25-26	27	28-29	30-31	32	33	34-35	36-38	39-40	41	42	43-44	45-46	47-49	50-52	53-55	56-58	59-61	62-64	65-68	69-72	73-78	79-93
TOP ELEVATION	864'	865'	866'	867'	868'	869'	870'	870'	871'	872'	873'	873'	874'	875'	876'	877'	877'	878'	879'	880'	881'	882'	883'	884'	885'	886'	887'	888'	888'
PANEL LENGTH	30'	135'	75'	60'	30'	30'	30'	15'	30'	30'	15'	15'	30'	45'	30'	15'	15'	30'	30'	45'	45'	45'	45'	45'	60'	60'	90'	225'	
PANEL HEIGHT	10'	10'	10'	10'	10'	11'	11'	10'	11'	11'	12'	11'	12'	12'	12'	13'	12'	13'	13'	13'	13'	13'	13'	13'	13'	13'	13'	13'	12'

- Ⓐ ROADWAY EMBANKMENT: TAN AND RED, MOIST, LOOSE TO MED. DENSE, SILTY AND CLAYEY SAND (A-2-4, A-2-6) WITH TRACE GRAVEL AND LITTLE MICA
- Ⓑ ROADWAY EMBANKMENT: TAN-BROWN, MOIST, SOFT, SANDY CLAY (A-6)
- Ⓒ RESIDUAL: TAN AND RED, MOIST, LOOSE TO V. DENSE, SILTY AND CLAYEY SILTY SAND (A-1-b, A-2-4, A-2-5) WITH TRACE TO LITTLE MICA AND LITTLE ROCK FRAGMENTS
- Ⓓ WEATHERED ROCK: TAN AND WHITE, GRANITE
- Ⓔ CRYSTALLINE ROCK: GRANITE



REVISIONS

DC: JAN-2023 17:05
 P: Projects\2023\617053.00 DELAYED Startec R2707D&E Shelby Bypass\Bypass\R2707_NCDDT_Electronic_File_Tree\Geotech\InvestigationDesign\R2707_GEO_RDWY\CADD_GEO\TECH\Site&Sub\NOISE_WALL\R2707E_GEO_NW10a_03.dgn
 8/17/19

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-01		STATION 10+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 852.4 ft		TOTAL DEPTH 8.0 ft		NORTHING 553,887		EASTING 1,273,481										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		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						
855																
	851.4	1.0	2	3	3										852.4	0.0
850	848.9	3.5	1	2	2								M		0.3' TOPSOIL RESIDUAL TAN, SILTY SAND (A-2-4) WITH LITTLE MICA	
	845.9	6.5	2	2	2								M			
845													M		844.4	8.0
Boring Terminated at Elevation 844.4 ft IN RESIDUAL: SILTY SAND																

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-02		STATION 11+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 853.5 ft		TOTAL DEPTH 8.0 ft		NORTHING 553,896		EASTING 1,273,580										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		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						
855																
	852.5	1.0	1	2	1										853.5	0.0
850	850.0	3.5	2	2	2								M		RESIDUAL TAN, SILTY SAND (A-2-4)	
	847.0	6.5	2	2	3								M			
													M		845.5	8.0
Boring Terminated at Elevation 845.5 ft IN RESIDUAL: SILTY SAND																

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-03		STATION 12+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 853.8 ft		TOTAL DEPTH 8.0 ft		NORTHING 553,902		EASTING 1,273,680										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		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						
855																
	852.8	1.0	3	3	5								M		853.8	0.0
	850.3	3.5	2	2	3								M		850.8	3.0
	847.3	6.5	1	2	2								M		845.8	8.0
Boring Terminated at Elevation 845.8 ft IN RESIDUAL: SILTY SAND																

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-04		STATION 13+50		OFFSET 6 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 854.7 ft		TOTAL DEPTH 8.0 ft		NORTHING 553,909		EASTING 1,273,780										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		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						
855																
	853.7	1.0	3	2	2								M		854.7	0.0
	851.2	3.5	3	4	4								M		851.7	3.0
	848.2	6.5	2	3	3								M		849.2	5.5
Boring Terminated at Elevation 846.7 ft IN RESIDUAL: SILTY SAND																

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-05		STATION 14+42		OFFSET 7 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 857.1 ft		TOTAL DEPTH 8.0 ft		NORTHING 553,908		EASTING 1,273,873									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
860															
855	856.1	1.0	2	3	8								M	0.3' TOPSOIL	0.0
	853.6	3.5	4	8	8								M	ROADWAY EMBANKMENT RED-TAN, SILTY SAND (A-2-4) WITH LITTLE MICA	3.0
850	850.6	6.5	5	9	6								M	RESIDUAL TAN, SILTY SAND (A-2-4) WITH CLAYEY ZONES	8.0
Boring Terminated at Elevation 849.1 ft IN RESIDUAL: SILTY SAND															

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-06		STATION 15+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 860.8 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,896		EASTING 1,273,980									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic											
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
865															
860	859.8	1.0	2	13	8								M	0.3' TOPSOIL	0.0
	857.3	3.5	50	50/0.1									M	RESIDUAL TAN AND WHITE, SILTY F. TO CSE. SAND (A-2-4) WITH LITTLE ROCK FRAGMENTS	3.0
855	854.8	6.0	82	18/0.3									M	WEATHERED ROCK WHITE-TAN, GRANITE	7.5
	852.3	8.5	8	4	13								M	RESIDUAL TAN, SILTY SAND (A-2-4) WITH LITTLE ROCK FRAGMENTS	10.0
	850.8	10.0	60/0.0											Boring Terminated WITH STANDARD PENETRATION TEST REFUSAL at Elevation 850.8 ft ON CRYSTALLINE ROCK: GRANITE	

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-07		STATION 16+49		OFFSET 12 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 864.4 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,900		EASTING 1,274,080									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Estep, J. E.		START DATE 08/07/19		COMP. DATE 08/07/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
865															
	863.4	1.0	5	15	85/0.4								M	0.4' TOPSOIL	0.0
	860.9	3.5	5	2	2						100/0.9		M	RESIDUAL TAN, SILTY SAND (A-2-4)	1.5
860	858.4	6.0	3	6	94/0.3								M	WEATHERED ROCK TAN, GRANITE	3.3
	855.9	8.5	50	27	10								M	RESIDUAL TAN, SILTY SAND (A-2-4)	6.5
													M	WEATHERED ROCK TAN, GRANITE	8.0
													M	RESIDUAL TAN, SILTY SAND (A-2-4) WITH TRACE MICA	10.0
Boring Terminated at Elevation 854.4 ft IN RESIDUAL: SILTY SAND															

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-08		STATION 17+47		OFFSET 7 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 866.3 ft		TOTAL DEPTH 9.3 ft		NORTHING 553,886		EASTING 1,274,177									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
870															
865	865.3	1.0	9	12	88/0.4								M	0.3' TOPSOIL	0.0
													M	RESIDUAL TAN, SILTY SAND (A-2-4)	1.5
	862.8	3.5	5	8	92/0.3						100/0.9		M	WEATHERED ROCK TAN, GRANITE	3.0
													M	RESIDUAL TAN, GRANITE	4.5
	860.3	6.0	8	19	82/0.2						100/0.8		M	RESIDUAL TAN, SILTY SAND (A-2-4)	5.5
													M	WEATHERED ROCK TAN, GRANITE	6.5
	857.8	8.5	10	90/0.3							100/0.7		M	RESIDUAL TAN, SILTY SAND (A-2-4)	8.0
													M	WEATHERED ROCK TAN, GRANITE	9.3
Boring Terminated at Elevation 857.0 ft IN WEATHERED ROCK: GRANITE															

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-09		STATION 18+50		OFFSET 4 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 868.4 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,872		EASTING 1,274,279										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		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						
870																
	867.4	1.0	2	2	4										868.4	0.0
	864.9	3.5	1	5	7											
	862.4	6.0	5	3	4										862.9	5.5
	859.9	8.5	5	5	7										858.4	10.0
Boring Terminated at Elevation 858.4 ft IN RESIDUAL: SILTY SAND																

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-10		STATION 19+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 870.6 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,858		EASTING 1,274,378										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		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						
875																
	870.6														870.6	0.0
	869.6	1.0	10	11	9											
	867.1	3.5	3	23	42											
	864.6	6.0	100/0.3												865.1	5.5
	862.1	8.5	58	12	5										861.6	9.0
															860.6	10.0
Boring Terminated at Elevation 860.6 ft IN RESIDUAL: SILTY SAND																

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-11		STATION 20+49		OFFSET 7 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 872.4 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,853		EASTING 1,274,477									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
875															
	871.4	1.0	2	1	1								M	872.4 0.4' TOPSOIL	0.0
	868.9	3.5	2	2	4								M	ROADWAY EMBANKMENT TAN-BROWN, SANDY CLAY (A-6)	3.0
	866.4	6.0	36	20	10								M	RESIDUAL TAN, CLAYEY SILTY SAND (A-2-5)	5.5
	863.9	8.5	15	19	12								M	TAN, SILTY SAND (A-2-4)	
													M	Boring Terminated at Elevation 862.4 ft IN RESIDUAL: SILTY SAND	10.0

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.									
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)								
BORING NO. NW10a-12		STATION 21+56		OFFSET 11 ft LT		ALIGNMENT -NW10a-									
COLLAR ELEV. 875.8 ft		TOTAL DEPTH 15.0 ft		NORTHING 553,846		EASTING 1,274,584									
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
880															
	875.8												M	0.3' TOPSOIL	0.0
	874.8	1.0	4	4	3								M	ROADWAY EMBANKMENT TAN, CLAYEY SILTY SAND (A-2-5) WITH TRACE GRAVEL	3.0
	872.3	3.5	2	6	6								M	RESIDUAL TAN, SILTY SAND (A-2-4)	5.5
	869.8	6.0	5	6	8								M	TAN AND BROWN, CLAYEY SILTY SAND (A-2-5) WITH LITTLE MICA	8.0
	867.3	8.5	5	9	13								M	TAN, SILTY F. TO CSE. SAND (A-1-b) WITH LITTLE QUARTZ FRAGMENTS AND MICA	
	862.3	13.5	5	8	14								M	Boring Terminated at Elevation 860.8 ft IN RESIDUAL: SAND	15.0

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-13		STATION 22+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 874.1 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,826		EASTING 1,274,677										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
875														874.1	0.3' TOPSOIL	0.0
	873.1	1.0	6	11	9								M		ROADWAY EMBANKMENT	
	870.6	3.5	8	7	7								M		TAN, CLAYEY SILTY SAND (A-2-5) WITH TRACE GRAVEL	
	868.1	6.0	4	7	9								M		RED-TAN, CLAYEY SAND (A-2-6)	5.5
	865.6	8.5	4	4	8								M		RESIDUAL	8.0
													M		RED-TAN, CLAYEY SILTY SAND (A-2-5)	10.0
Boring Terminated at Elevation 864.1 ft IN RESIDUAL: CLAYEY SILTY SAND																

WBS 34497.1.1		TIP R-2707E		COUNTY CLEVELAND		GEOLOGIST Goodnight, D. J.										
SITE DESCRIPTION Noise Wall 10a from -L- Sta. 935+69.92, 61.76' LT to --L- Sta. 949+50.07, 72.5' LT							GROUND WTR (ft)									
BORING NO. NW10a-14		STATION 23+50		OFFSET 1 ft LT		ALIGNMENT -NW10a-										
COLLAR ELEV. 873.4 ft		TOTAL DEPTH 10.0 ft		NORTHING 553,815		EASTING 1,274,776										
DRILL RIG/HAMMER EFF./DATE TRI8016 MOBILE B-57 97% 02/24/2017		DRILL METHOD H.S. Augers		HAMMER TYPE Automatic												
DRILLER Estep, J. E.		START DATE 08/09/19		COMP. DATE 08/09/19		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
875														873.4	0.3' TOPSOIL	0.0
	872.4	1.0	6	5	6								M		ROADWAY EMBANKMENT	
	869.9	3.5	3	3	8								M		TAN, SILTY SAND (A-2-4) WITH TRACE GRAVEL	3.0
	867.4	6.0	6	41	59/0.1								M		RESIDUAL	6.5
	865.4	8.5											M		TAN, SILTY F. TO CSE. SAND (A-2-4)	8.0
	864.9	8.5	38	35	25								M		WEATHERED ROCK	8.0
													M		TAN, GRANITE	8.0
													M		RESIDUAL	10.0
													M		TAN, SILTY SAND (A-2-4)	10.0
Boring Terminated at Elevation 863.4 ft IN RESIDUAL: SILTY SAND																

NCDOT BORE DOUBLE R2707_GEO_BORINGS CURRENT.GPJ NC_DOT.GDT 1/6/23