

REFERENCE: U-2579AB

PROJECT: 34839

CONTENTS

<u>SHEET NO.</u>	<u>DESCRIPTION</u>
1	TITLE SHEET
2	LEGEND (SOIL & ROCK)
3-6	PLAN & PROFILE SHEETS
7-12	BORELOGS

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

STRUCTURE
SUBSURFACE INVESTIGATION

COUNTY FORSYTH
PROJECT DESCRIPTION WINSTON-SALEM BELTWAY
FROM US 421/40 BUS TO I-40

SITE DESCRIPTION SOUND WALL 24/25

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2579AB	1	12

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

A. SUTTLE, G.I.T.

TOTAL DEPTH DRILLING

J. GARRICK, G.I.T.

E. SUSANTO

P. DONNELLY

INVESTIGATED BY ECS SOUTHEAST, LLP

DRAWN BY K. DE MONTBRUN, P.E.

CHECKED BY M. WALKO, P.E.

SUBMITTED BY ECS SOUTHEAST, LLP

DATE JULY 2021

Prepared in the Office of:



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ENGINEERING
FIRM # F-1078



DocuSigned by:

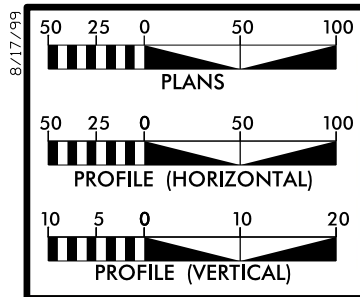
Kelly de Montbrun 7/13/2021

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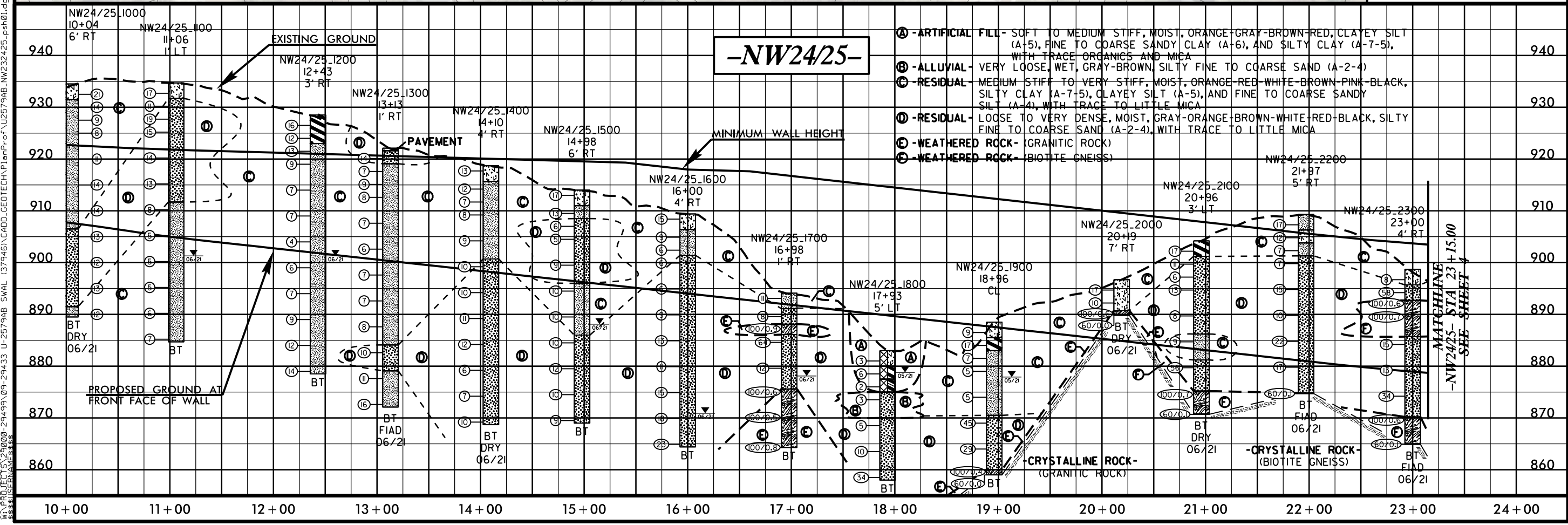
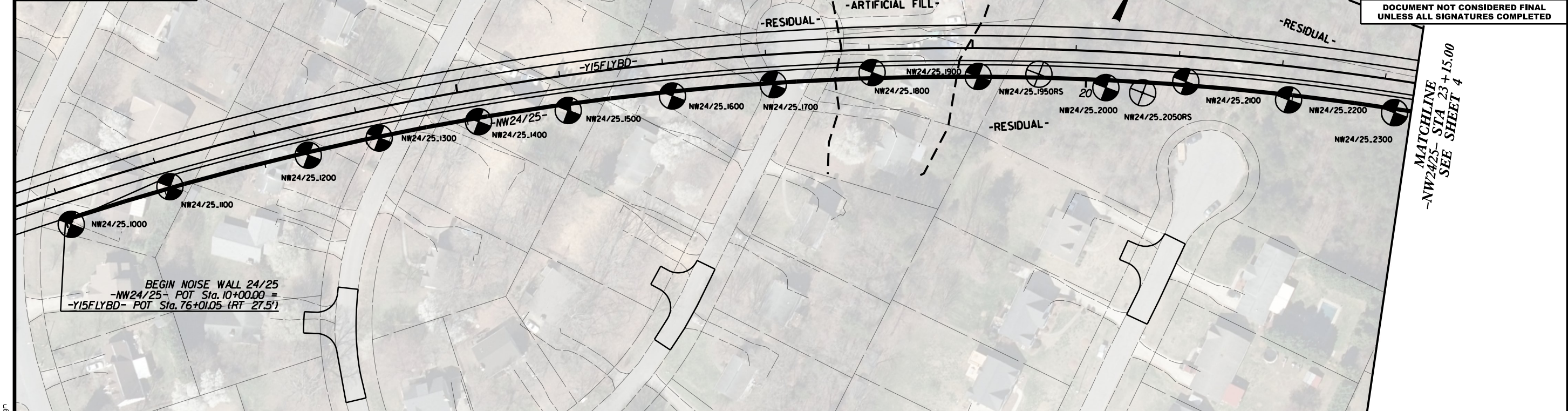
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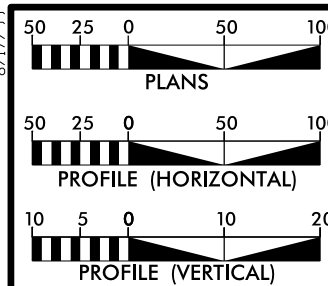


PLAN AND PROFILE OF NOISE WALL NW24/25

PROJECT REFERENCE NO. U-2579AB	SHEET NO. 3
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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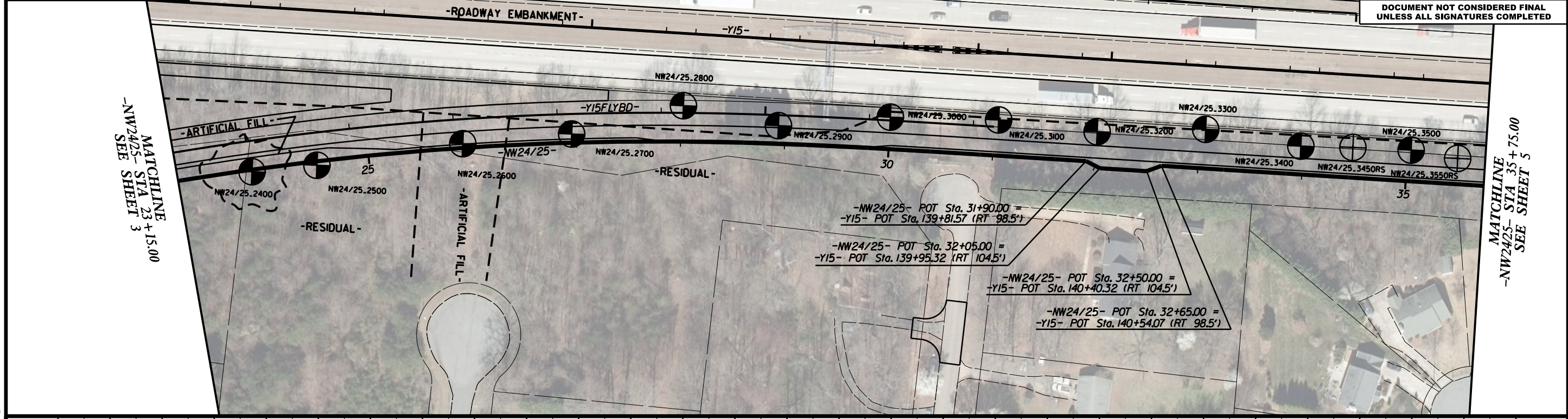
PLAN AND PROFILE OF NOISE WALL 24/25

PROJECT REFERENCE NO. U-2579AB	SHEET NO. 4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	

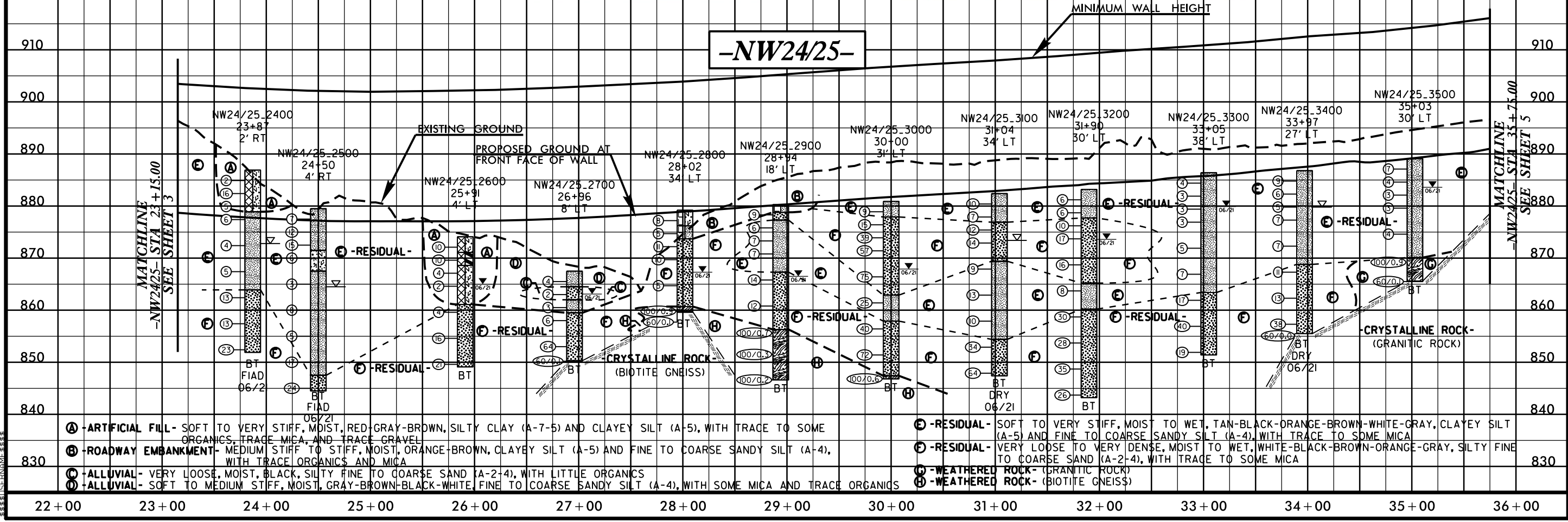
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

MATCHLINE
-NW24/25- STA 23+15.00
SEE SHEET 3

MATCHLINE
-NW24/25- STA 35+75.00
SEE SHEET 5

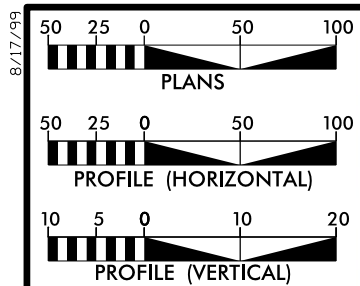


-NW24/25- POT Sta. 31+90.00 = -Y15- POT Sta. 139+81.57 (RT 98.5')
-NW24/25- POT Sta. 32+05.00 = -Y15- POT Sta. 139+95.32 (RT 104.5')
-NW24/25- POT Sta. 32+50.00 = -Y15- POT Sta. 140+40.32 (RT 104.5')
-NW24/25- POT Sta. 32+65.00 = -Y15- POT Sta. 140+54.07 (RT 98.5')



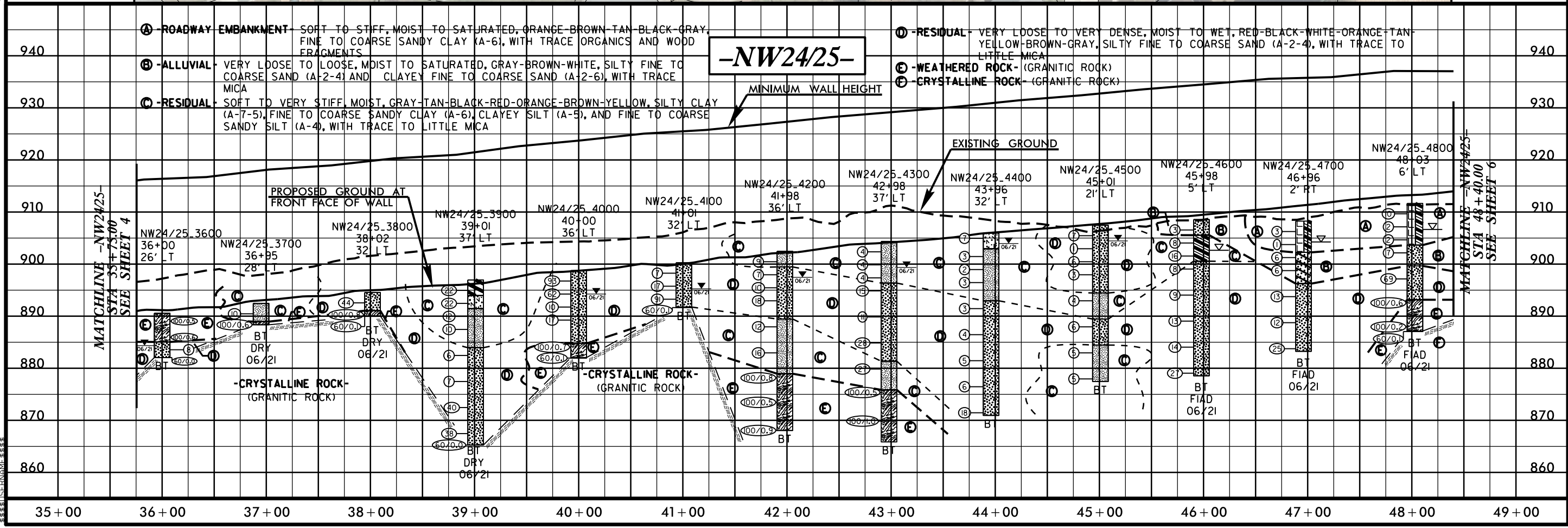
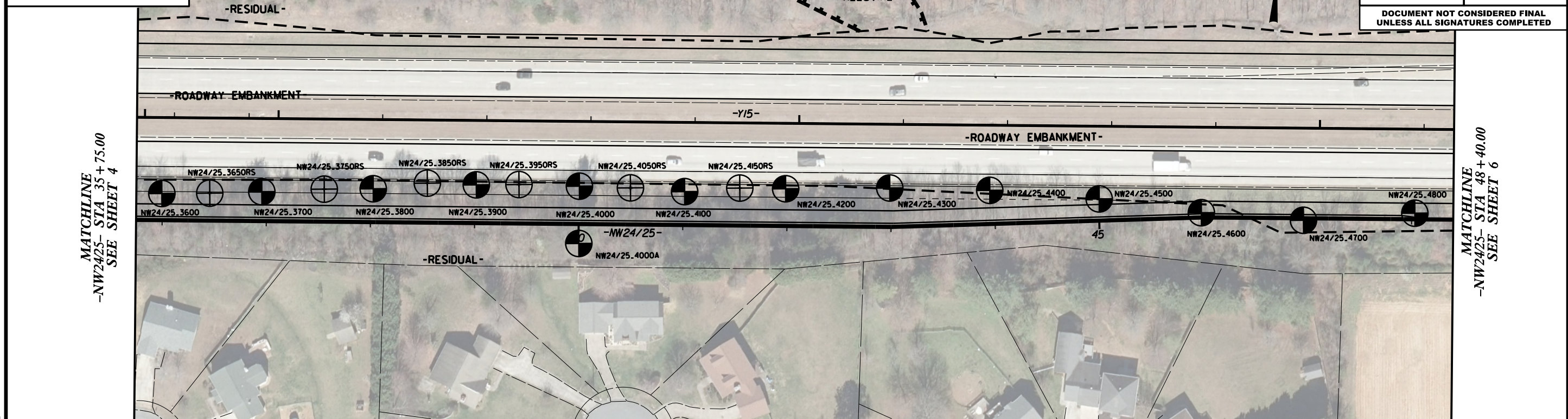
- (A) -ARTIFICIAL FILL-** SOFT TO VERY STIFF, MOIST, RED GRAY-BROWN, SILTY CLAY (A-7-5) AND CLAYEY SILT (A-5), WITH TRACE TO SOME ORGANICS, TRACE MICA, AND TRACE GRAVEL
- (B) -ROADWAY EMBANKMENT-** MEDIUM STIFF TO STIFF, MOIST, ORANGE-BROWN, CLAYEY SILT (A-5) AND FINE TO COARSE SANDY SILT (A-4), WITH TRACE ORGANICS AND MICA
- (C) -ALLUVIAL-** VERY LOOSE, MOIST, BLACK, SILTY FINE TO COARSE SAND (A-2-4), WITH LITTLE ORGANICS
- (D) -ALLUVIAL-** SOFT TO MEDIUM STIFF, BLACK, GRAY-BROWN-BLACK-WHITE, FINE TO COARSE SANDY SILT (A-4), WITH SOME MICA AND TRACE ORGANICS
- (E) -RESIDUAL-** SOFT TO VERY STIFF, MOIST TO WET, TAN-BLACK-ORANGE-BROWN-WHITE-GRAY, CLAYEY SILT (A-5) AND FINE TO COARSE SANDY SILT (A-4), WITH TRACE TO SOME MICA
- (F) -RESIDUAL-** VERY LOOSE TO VERY DENSE, MOIST TO WET, WHITE-BLACK-BROWN-ORANGE-GRAY, SILTY FINE TO COARSE SAND (A-2-4), WITH TRACE TO SOME MICA
- (G) -WEATHERED ROCK-** (GRANITIC ROCK)
- (H) -WEATHERED ROCK-** (BIOTITE GNEISS)

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PLAN AND PROFILE OF NOISE WALL 24/25

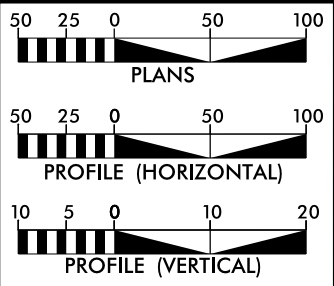
PROJECT REFERENCE NO. U-2579AB	SHEET NO. 5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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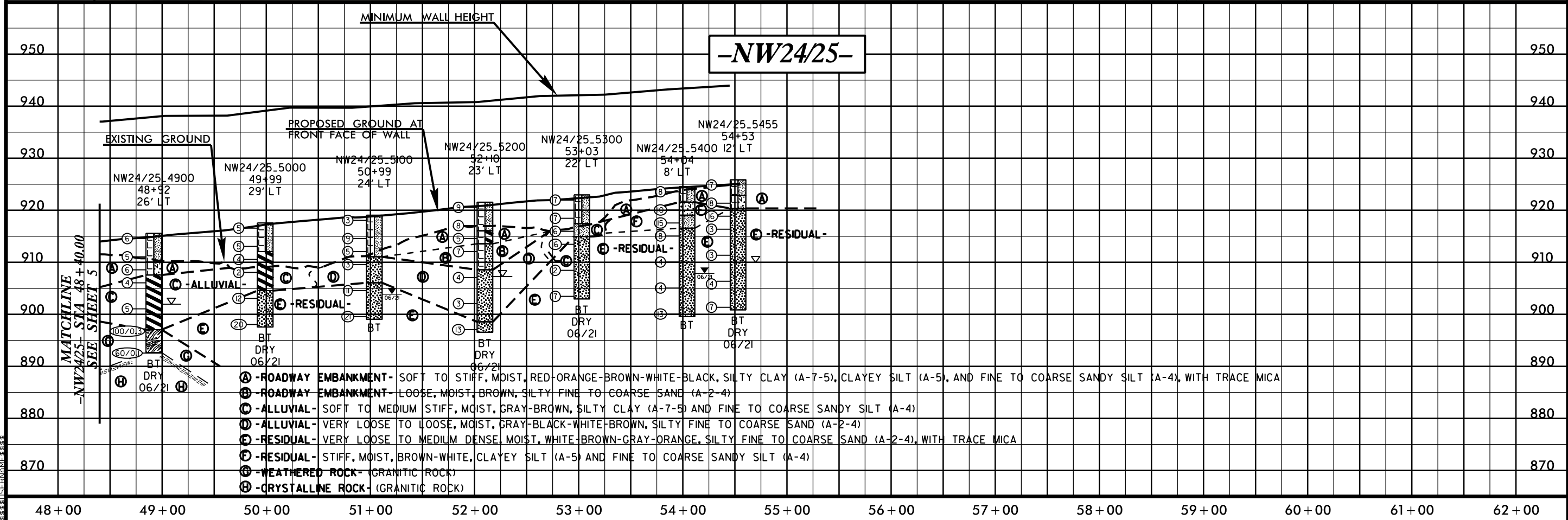
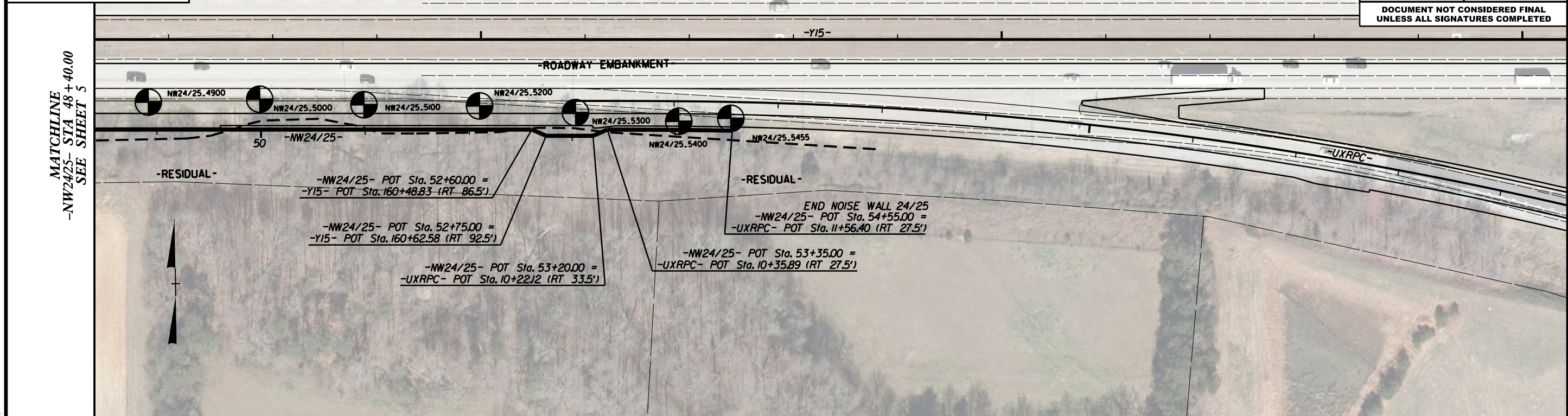
MATCHLINE -NW2425- STA 35+75.00
 SEE SHEET 4

MATCHLINE -NW2425- STA 48+40.00
 SEE SHEET 6



PLAN AND PROFILE OF NOISE WALL 24/25

PROJECT REFERENCE NO. U-2579AB	SHEET NO. 6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	



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GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST A. Suttle											
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)										
BORING NO. NW24/25_1950RS		STATION 19+54		OFFSET 3 ft LT		ALIGNMENT -NW24/25-											
COLLAR ELEV. 892.5 ft		TOTAL DEPTH 28.3 ft		NORTHING 847,882		EASTING 1,667,067											
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic											
DRILLER J. Chambless		START DATE 05/27/21		COMP. DATE 05/27/21		SURFACE WATER DEPTH N/A											
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100							
895																	
														892.5		GROUND SURFACE	0.0
																RESIDUAL	
																Red-Brown, Silty CLAY (A-7-5)	
890														889.5		Orange-Brown, Clayey SILT (A-5)	3.0
														885.5		Gray, Silty Fine to Coarse SAND (A-2-4)	7.0
885																	
														880.5		Gray-Orange, Fine to Coarse Sandy SILT (A-4), with trace mica	12.0
880																	
875																	
870																	
865	864.2	28.3												864.2		Boring Terminated with Standard Penetration Test Refusal at Elevation 864.2 ft On Crystalline Rock (GRANITIC ROCK)	28.3
																Surficial Organic Soils 0.0 to 0.3 feet	

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST A. Suttle											
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)										
BORING NO. NW24/25_2050RS		STATION 20+55		OFFSET 10 ft RT		ALIGNMENT -NW24/25-											
COLLAR ELEV. 900.0 ft		TOTAL DEPTH 3.7 ft		NORTHING 847,901		EASTING 1,667,167											
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic											
DRILLER J. Chambless		START DATE 05/27/21		COMP. DATE 05/27/21		SURFACE WATER DEPTH N/A											
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)			
			0.5ft	0.5ft	0.5ft	0	25	50	75	100							
900														900.0		GROUND SURFACE	0.0
																RESIDUAL	
																Brown-Orange, Clayey SILT (A-5)	
	896.4	3.6												896.4		CRYSTALLINE ROCK	3.6
														896.3		Gray-White (GRANITIC ROCK)	3.7
																Boring Terminated with Standard Penetration Test Refusal at Elevation 896.3 ft In Crystalline Rock (GRANITIC ROCK)	
																Surficial Organic Soils 0.0 to 0.4 feet	

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34839.1.8	TIP U-2579AB	COUNTY FORSYTH	GEOLOGIST E. Susanto
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40			GROUND WTR (ft)
BORING NO. NW24/25_3450RS	STATION 34+47	OFFSET 29 ft LT	ALIGNMENT -NW24/25- 0 HR. 6.0
COLLAR ELEV. 887.7 ft	TOTAL DEPTH 25.4 ft	NORTHING 848,060	EASTING 1,668,541 24 HR. 6.3
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021		DRILL METHOD H.S. Augers	HAMMER TYPE Automatic
DRILLER J. Chambless	START DATE 06/04/21	COMP. DATE 06/04/21	SURFACE WATER DEPTH N/A

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
890														
													887.7	GROUND SURFACE 0.0
885														RESIDUAL Brown-Orange-Tan, Fine to Coarse Sandy SILT (A-4), with trace to little mica
880														
875														
870														
865														
	862.4	25.3											862.4	CRYSTALLINE ROCK Gray-White (GRANITIC ROCK) Boring Terminated with Standard Penetration Test Refusal at Elevation 862.3 ft In Crystalline Rock (GRANITIC ROCK) Surficial Organic Soils 0.0 to 0.2 feet
													862.3	25.3 25.4

WBS 34839.1.8	TIP U-2579AB	COUNTY FORSYTH	GEOLOGIST E. Susanto
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40			GROUND WTR (ft)
BORING NO. NW24/25_3550RS	STATION 35+49	OFFSET 25 ft LT	ALIGNMENT -NW24/25- 0 HR. 6.0
COLLAR ELEV. 889.4 ft	TOTAL DEPTH 17.2 ft	NORTHING 848,054	EASTING 1,668,642 24 HR. 6.4
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021		DRILL METHOD H.S. Augers	HAMMER TYPE Automatic
DRILLER J. Chambless	START DATE 06/04/21	COMP. DATE 06/04/21	SURFACE WATER DEPTH N/A

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100				
890														
													889.4	GROUND SURFACE 0.0
885														RESIDUAL Tan, Fine to Coarse Sandy SILT (A-4), with trace mica
880														
875														
	872.3	17.1											872.3	CRYSTALLINE ROCK White-Gray (GRANITIC ROCK) Boring Terminated with Standard Penetration Test Refusal at Elevation 872.2 ft In Crystalline Rock (GRANITIC ROCK) Surficial Organic Soils 0.0 to 0.2 feet
													872.2	17.1 17.2

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21

GEOTECHNICAL BORING REPORT BORE LOG

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto										
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)									
BORING NO. NW24/25_3650RS		STATION 36+46		OFFSET 26 ft LT		ALIGNMENT -NW24/25-										
COLLAR ELEV. 891.4 ft		TOTAL DEPTH 2.4 ft		NORTHING 848,054		EASTING 1,668,739										
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic										
DRILLER J. Chambless		START DATE 06/04/21		COMP. DATE 06/04/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
895																
														891.4	GROUND SURFACE	0.0
															RESIDUAL	
														889.0	Brown, Fine to Coarse Sandy SILT (A-4)	2.4
	889.0	2.4													Boring Terminated with Standard Penetration Test Refusal at Elevation 889.0 ft On Crystalline Rock (GRANITIC ROCK)	
															Surficial Organic Soils 0.0 to 0.2 feet	
															Note: Rock outcrop on slope observed by field professional.	

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto										
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)									
BORING NO. NW24/25_3750RS		STATION 37+55		OFFSET 31 ft LT		ALIGNMENT -NW24/25-										
COLLAR ELEV. 893.7 ft		TOTAL DEPTH 2.7 ft		NORTHING 848,057		EASTING 1,668,849										
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic										
DRILLER J. Chambless		START DATE 06/03/21		COMP. DATE 06/03/21		SURFACE WATER DEPTH N/A										
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100						
895																
														893.7	GROUND SURFACE	0.0
															RESIDUAL	
														891.1	Brown, Fine to Coarse Sandy SILT (A-4), with trace mica	2.6
														891.0	CRYSTALLINE ROCK	2.7
															Brown-Gray (GRANITIC ROCK)	
															Boring Terminated with Standard Penetration Test Refusal at Elevation 891.0 ft In Crystalline Rock (GRANITIC ROCK)	
															Surficial Organic Soils 0.0 to 0.2 feet	

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto									
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)								
BORING NO. NW24/25_3850RS		STATION 38+54		OFFSET 38 ft LT		ALIGNMENT -NW24/25-									
COLLAR ELEV. 896.3 ft		TOTAL DEPTH 12.0 ft		NORTHING 848,062		EASTING 1,668,948									
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER J. Chambless		START DATE 06/03/21		COMP. DATE 06/03/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
900															
895															
890															
885	884.4	11.9													

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto									
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)								
BORING NO. NW24/25_3950RS		STATION 39+42		OFFSET 37 ft LT		ALIGNMENT -NW24/25-									
COLLAR ELEV. 897.9 ft		TOTAL DEPTH 7.9 ft		NORTHING 848,060		EASTING 1,669,036									
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021			DRILL METHOD H.S. Augers			HAMMER TYPE Automatic									
DRILLER J. Chambless		START DATE 06/03/21		COMP. DATE 06/03/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
900															
895															
890	890.1	7.8													

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST A. Suttle									
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)								
BORING NO. NW24/25_4000A		STATION 40+00		OFFSET 19 ft RT		ALIGNMENT -NW24/25-									
COLLAR ELEV. 912.3 ft		TOTAL DEPTH 35.0 ft		NORTHING 848,003		EASTING 1,669,093									
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic									
DRILLER J. Chambless		START DATE 06/08/21		COMP. DATE 06/08/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
915															
910	911.3	1.0	5	5	5								M	912.3 GROUND SURFACE 0.0	
	908.8	3.5	4	6	6								M	909.3 RESIDUAL Stiff, Brown, Fine to Coarse Sandy SILT (A-4) 3.0	
	906.3	6.0											M	906.8 Stiff, Brown-orange, Clayey SILT (A-5) 5.5	
905	903.8	8.5	3	5	6								M	906.8 Medium Stiff to Stiff, Brown-Orange, Fine to Coarse Sandy SILT (A-4), with trace to little mica 5.5	
	898.8	13.5	2	4	5								M		
895	893.8	18.5	37	34	35								M	894.3 Very Dense, Gray-White-Brown, Silty Fine to Coarse SAND (A-2-4), with trace mica 18.0	
	888.8	23.5	11	21	34								M		
885	883.8	28.5	100/0.4										M	883.8 WEATHERED ROCK White-Brown (GRANITIC ROCK) 28.5	
880	878.8	33.5	8	13	31								M	879.3 RESIDUAL 877.3 Dense, White-Black-Brown, Silty Fine to Coarse SAND (A-2-4) 35.0	
															Boring Terminated at Elevation 877.3 ft In Residual Silty SAND (A-2-4)
															Surficial Organic Soils 0.0 to 0.3 feet

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto									
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)								
BORING NO. NW24/25_4050RS		STATION 40+49		OFFSET 35 ft LT		ALIGNMENT -NW24/25-									
COLLAR ELEV. 899.5 ft		TOTAL DEPTH 21.6 ft		NORTHING 848,056		EASTING 1,669,143									
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic									
DRILLER J. Chambless		START DATE 06/03/21		COMP. DATE 06/03/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG MOI	SOIL AND ROCK DESCRIPTION	DEPTH (ft)	
			0.5ft	0.5ft	0.5ft	0	25	50	75	100					
900															
															899.5 GROUND SURFACE 0.0
895															895.5 RESIDUAL Brown, Fine to Coarse Sandy SILT (A-4), with little mica 4.0
															891.5 Brown, Silty Fine to Coarse SAND (A-2-4) 8.0
890															891.5 Brown-Gray-Tan, Fine to Coarse Sandy SILT (A-4), with trace mica 8.0
885															
880	877.9	21.6	60/0.0												877.9 Boring Terminated with Standard Penetration Test Refusal at Elevation 877.9 ft On Crystalline Rock (GRANITIC ROCK) 21.6
															Surficial Organic Soils 0.0 to 0.2 feet

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21

GEOTECHNICAL BORING REPORT

BORE LOG

WBS 34839.1.8		TIP U-2579AB		COUNTY FORSYTH		GEOLOGIST E. Susanto									
SITE DESCRIPTION Winston-Salem Beltway from US 421/I-40 Business to I-40							GROUND WTR (ft)								
BORING NO. NW24/25_4150RS		STATION 41+54		OFFSET 36 ft LT		ALIGNMENT -NW24/25-									
COLLAR ELEV. 901.6 ft		TOTAL DEPTH 16.4 ft		NORTHING 848,055		EASTING 1,669,248									
DRILL RIG/HAMMER EFF./DATE TDD1893 CME-550X 79% 06/15/2021				DRILL METHOD H.S. Augers		HAMMER TYPE Automatic									
DRILLER J. Chambless		START DATE 06/03/21		COMP. DATE 06/03/21		SURFACE WATER DEPTH N/A									
ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT			BLOWS PER FOOT					SAMP. NO.	LOG	SOIL AND ROCK DESCRIPTION		
			0.5ft	0.5ft	0.5ft	0	25	50	75	100			ELEV. (ft)	DEPTH (ft)	
905															
900														901.6	GROUND SURFACE 0.0
895															RESIDUAL Medium Stiff Tan-Brown-Black-White, Fine to Coarse Sandy SILT (A-4), with trace to little mica
893.1	893.1	8.5	2	3	4										
890															
888.1	888.1	13.5	19	73	27/0.1										
885.3	885.3	16.3								100/0.6				887.6	WEATHERED ROCK 14.0
		60/0.1								60/0.1				885.3	Gray-White (GRANITIC ROCK) 16.3
														885.2	Gray-Brown (GRANITIC ROCK) 16.4
															CRYSTALLINE ROCK Gray-Brown (GRANITIC ROCK) Boring Terminated with Standard Penetration Test Refusal at Elevation 885.2 ft In Crystalline Rock (GRANITIC ROCK) Surficial Organic Soils 0.0 to 0.2 feet

NCDOT BORE DOUBLE U2579AB_SWAL_GEO.GPJ NC_DOT.GDT 6/22/21