

REFERENCE: BR-0095

PROJECT: 67095

SEE SHEET 4 FOR PLAN SHEET LAYOUT  
AT TIME OF INVESTIGATION

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0095	1	22

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<u>LINE</u>	<u>STATION</u>	<u>PLAN</u>	<u>XSC</u>
-L-	12+25.00 to 21+50.00	4	5-11
-RPA-	11+30.00 to 14+09.39	4	12-14
-RPB-	10+00.00 to 11+30.00	4	15-16
-RPC-	10+00.00 to 11+00.00	4	17-18
-RPD-	12+20.00 to 13.24.94	4	19

**APPENDICES**

<u>APPENDIX</u>	<u>TITLE</u>	<u>SHEETS</u>
A	LABORATORY TESTS RESULTS SUMMARY	20-21

**ROADWAY**  
**SUBSURFACE INVESTIGATION**

COUNTY ROCKINGHAM  
PROJECT DESCRIPTION REPLACE BRIDGE 780170 ON  
SR 1360 (SMITH RD) OVER US 220

**INVENTORY**

**CAUTION NOTICE**

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

GENERAL SOIL AND ROCK STRATA DESCRIPTIONS AND INDICATED BOUNDARIES ARE BASED ON A GEOTECHNICAL INTERPRETATION OF ALL AVAILABLE SUBSURFACE DATA AND MAY NOT NECESSARILY REFLECT THE ACTUAL SUBSURFACE CONDITIONS BETWEEN BORINGS OR BETWEEN SAMPLED STRATA WITHIN THE BOREHOLE. THE LABORATORY SAMPLE DATA AND THE IN SITU (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.

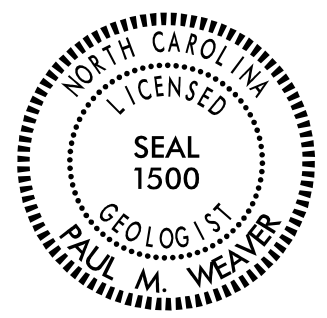
- NOTES:
- THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N. C. DEPARTMENT OF TRANSPORTATION AS ACCURATE NOR IS IT CONSIDERED PART OF THE PLANS, SPECIFICATIONS OR CONTRACT FOR THE PROJECT.
  - BY HAVING REQUESTED THIS INFORMATION, THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR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

PERSONNEL

P.M. WEAVER  
C.R. PASTRANA  
SUMMIT

INVESTIGATED BY ESP Associates, INC.  
DRAWN BY C.R. PASTRANA  
CHECKED BY P.M. WEAVER  
SUBMITTED BY ESP Associates, INC.  
DATE September 2022

**ESP ASSOCIATES, INC.**  
7011 ALBERT PICK RD  
SUITE E  
GREENSBORO, NC 27409  
WWW.ESPASSOCIATES.COM



DocuSigned by:  
Paul Weaver 10/11/2022

01847D3739AD18C 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

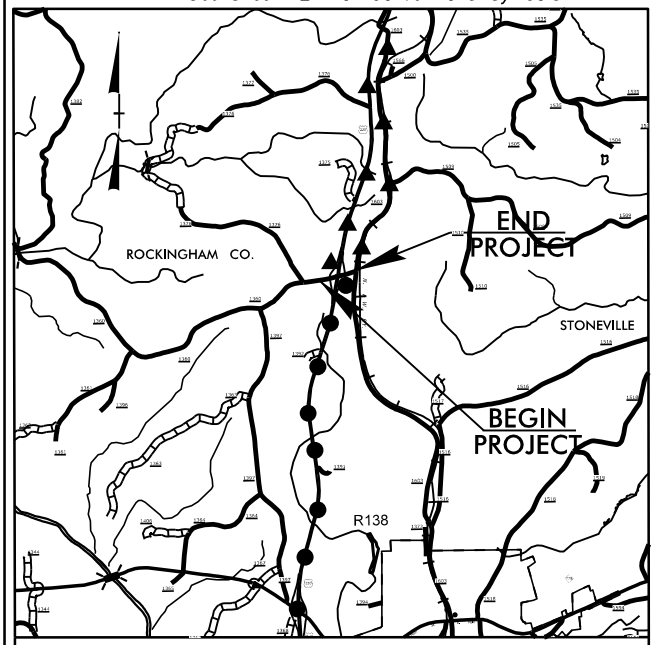
Table with multiple columns: SOIL DESCRIPTION, GRADATION, ROCK DESCRIPTION, TERMS AND DEFINITIONS, SOIL LEGEND AND AASHTO CLASSIFICATION, MINERALOGICAL COMPOSITION, COMPRESSION, PERCENTAGE OF MATERIAL, GROUND WATER, MISCELLANEOUS SYMBOLS, RECOMMENDATION SYMBOLS, ABBREVIATIONS, SOIL MOISTURE - CORRELATION OF TERMS, PLASTICITY, COLOR, EQUIPMENT USED ON SUBJECT PROJECT, ROCK HARDNESS, FRACTURE SPACING, BEDDING, INDURATION.

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 W:\Projects\2020 (I)\SI4.300 (NCDOT 2020-2022 On-Call Contract)\SI4.320 (BR-0095 Roadway)\BR0095\_GEO\_RDWY\CADD\_GEOTECH\PlanPr of \BR0095\_Rdy\_1.sh.dgn  
 pbarrera

**CONTRACT:**

**TIP PROJECT: BR-0095**

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Symbols



FIELD INSPECTION PLAN SET

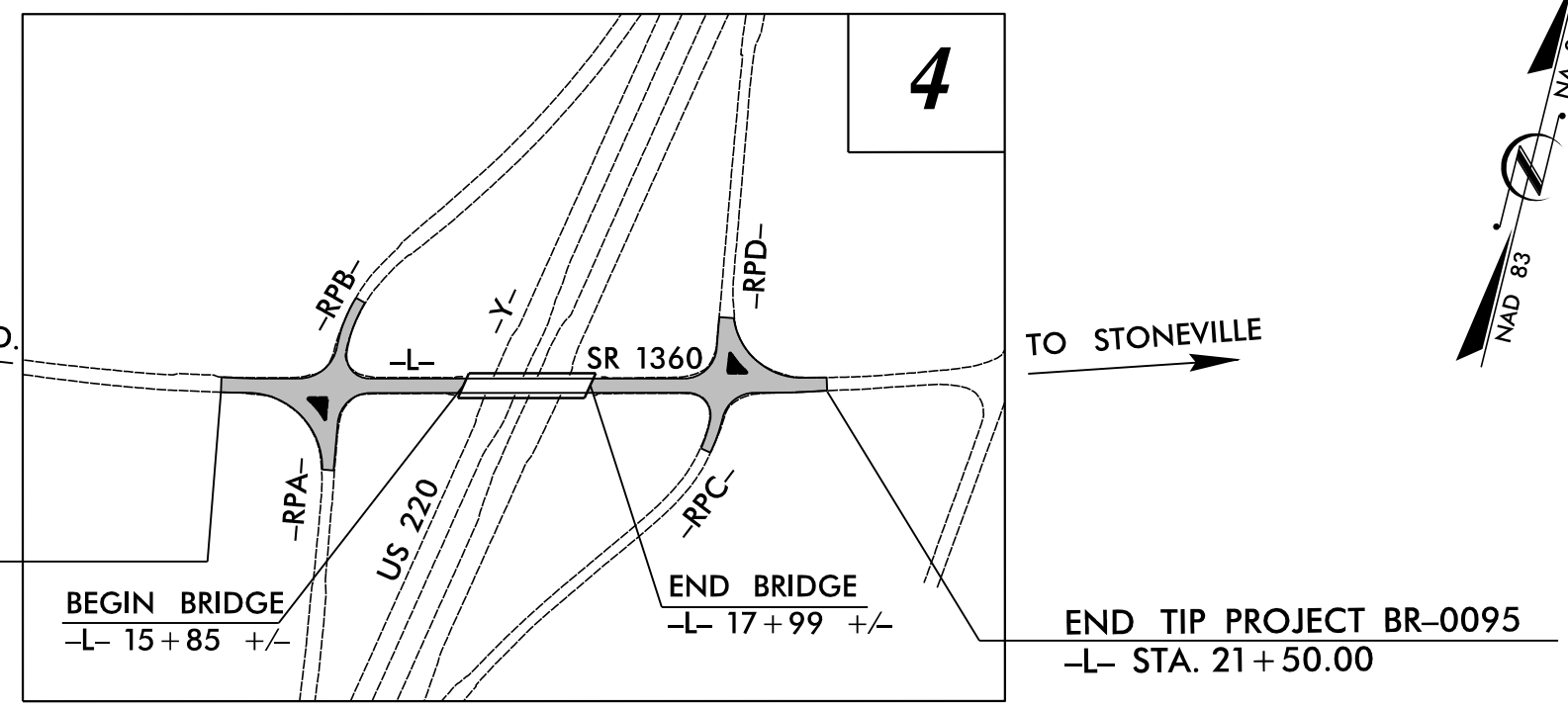
STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**ROCKINGHAM COUNTY**

**LOCATION: BRIDGE #70 ON SR 1360 (SMITH RD)  
OVER US 220**

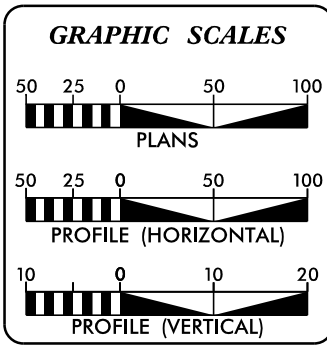
**TYPE OF WORK: GRADING, PAVING, DRAINAGE AND STRUCTURE**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	BR-0095	2A	22
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
67095.1.1		PE	
67095.2.1		RW/UTIL	
67095.3.1		CONST	



THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
THIS IS NOT A CONTROL OF ACCESS FACILITY.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD \_\_\_\_\_.

**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION  
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED



**DESIGN DATA**

ADT 2023 =	862
ADT 2045 =	1200
K =	9 %
D =	60 %
T =	6 % *
V =	50 MPH
* TTST =	2% DUAL 4%
FUNC CLASS =	LOCAL SUBREGIONAL
TIER	

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT BR-0095 =	0.134 MILES
LENGTH STRUCTURES TIP PROJECT BR-0095 =	0.041 MILES
TOTAL LENGTH TIP PROJECT BR-0095 =	0.175 MILES

Prepared In the Office of:  
**DIVISION OF HIGHWAYS**  
1000 Birch Ridge Dr., Raleigh NC, 27610

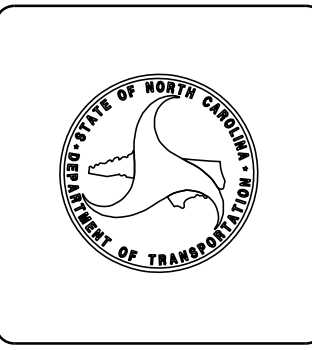
2018 STANDARD SPECIFICATIONS	PROJECT MANAGER
RIGHT OF WAY DATE: AUGUST 3, 2022	KRISTY W. ALFORD, PE
LETTING DATE: JUNE 20, 2023	JORDAN A. WOODARD, PE ROADWAY GROUP LEAD
	SHERRI E. CALHOUN, PE ROADWAY TEAM LEAD

**HYDRAULICS ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.

**ROADWAY DESIGN ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.



September 21, 2022

STATE PROJECT NO.: 67095.1.1  
 TIP: BR-0095  
 COUNTY: Rockingham  
 DESCRIPTION: Replace Bridge 780170 on SR 1360 over US 220  
 SUBJECT: Geotechnical Report – Roadway Inventory

### Project Description

This proposed project is located on the north side of Stoneville, North Carolina approximately 3 miles from the Virginia state line. The project begins at -L- (SR 1360/Smith Road) Station 12+25.00 and continues to -L-Station 21+50.00. The total length of the project is 0.175 miles. The existing -L- within the project corridor is a two-lane road. The project area is rural.

The proposed project construction consists of the following:

- The replacement of the existing bridge on the -L- alignment over US 220
- Widening of -L- and the US 220 ramps to accommodate paved shoulders

The proposed maximum new embankment fill heights are approximately 9 feet. The maximum cuts proposed for the project are approximately 2 feet.

The drainage along the project is generally handled by side ditches.

This geotechnical investigation was confined to the areas of proposed construction.

Initial site scoping was performed on June 10, 2022. The field investigation was performed from June 13 to June 14, 2022. Standard Penetration Test borings were advanced with a CME 550X drilling machine equipped with an automatic hammer. Representative soil samples were collected for visual classification in the field and for laboratory analyses.

The following alignments were investigated. Subsurface cross sections of the alignments are included in this report:

Alignment	Station (±)
-L-	12+25.00 to 21+50.00
-RPA-	11+30.00 to 14+09.39
-RPB-	10+00.00 to 11+30.00
-RPC-	10+00.00 to 11+00.00
-RPD-	12+20.00 to 13+24.94

### Physiography and Geography

The project corridor is located in the Sauratown Mountains Anticlinorium of the Piedmont physiographic province. “The Sauratown Mountains Anticlinorium lies at the juncture of the Blue Ridge, Inner Piedmont block, and the central Piedmont. The anticlinorium is a northeast-trending foliation arch characterized by a nearly symmetrical distribution of basement-cover rock sequences and an inverted sequence of metamorphic isograds” (*The Geology of the Carolinas*, Horton and Zullo, 1991). Parts of four stacked thrust sheets containing Middle Proterozoic basement and an overlying sequence of Late Proterozoic to early Cambrian metasedimentary and

metagneous rocks are exposed in the Sauratown Mountains window. According to the Geologic Map of North Carolina, 1985, the rock underlying the project corridor is “Mica Schist; garnet, staurolite, kyanite, or sillimanite locally; lenses and layers of quartz schist, micaceous quartzite, calc-silicate rock, biotite gneiss, amphibolite, and phyllite”. The relic rock structure evident in some of the soil samples obtained during our subsurface investigation, plus the high mica content in many of the soil samples, indicate that the underlying rock at the project site is most likely Mica Schist.

The topography along the project corridor generally consists of rolling hills. The roadway along Smith Road (-L-) generally slopes up from the beginning to the end of the project with elevations ranging from approximately 982 feet (MSL) to approximately 994 feet (MSL) except for under the bridge over US 220 where the elevation of the side ditches along both sides of US 220 along the -L- centerline is approximately 967 feet (MSL). The ramps roadways slope up towards -L- with elevations within the area of construction ranging from approximately 981 feet (MSL) to approximately 994 feet (MSL).

### Soil Properties

Soils encountered within this project area have been divided into two categories: roadway embankment and residual soils.

Roadway embankment is present in the vicinity of the bridge over US 220 and in ramps A, B and C as they approach Smith Road. Roadway embankment was encountered in Borings L\_1500 and L\_1900 and ranged in thickness from approximately 2 feet to approximately 3 feet. The roadway embankment encountered consists of loose, silty sand (A-2-4) and very stiff, silty clay (A-7-5) with mica.

Residual soils were encountered in all the borings drilled for this project. The residual soils consist of very loose to dense silty sand (A-2-4) and of medium stiff to very stiff silty clay (A-7-5). Plasticities within the cohesive residual soils range from slightly to moderately plastic with laboratory plasticity index results ranging from 15 to 21. Mica was encountered in the majority of the soil samples collected with estimated mica contents ranging from trace mica to highly micaceous.

### Rock Properties

Rock was not encountered within the depths explored and should not affect construction based on the 25 percent plans provided to ESP.

### Groundwater Properties

Groundwater data was collected in June 2022. Groundwater was not encountered in any of the borings drilled and therefore, is not expected to be encountered during construction within 6 feet of the proposed grade.

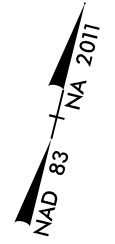
### Areas of Special Geotechnical Interest

The borings drilled for this project did not encounter loose sands or soft cohesive soils, wet to saturated soils, highly plastic soils, organic soils, or shallow groundwater or rock.

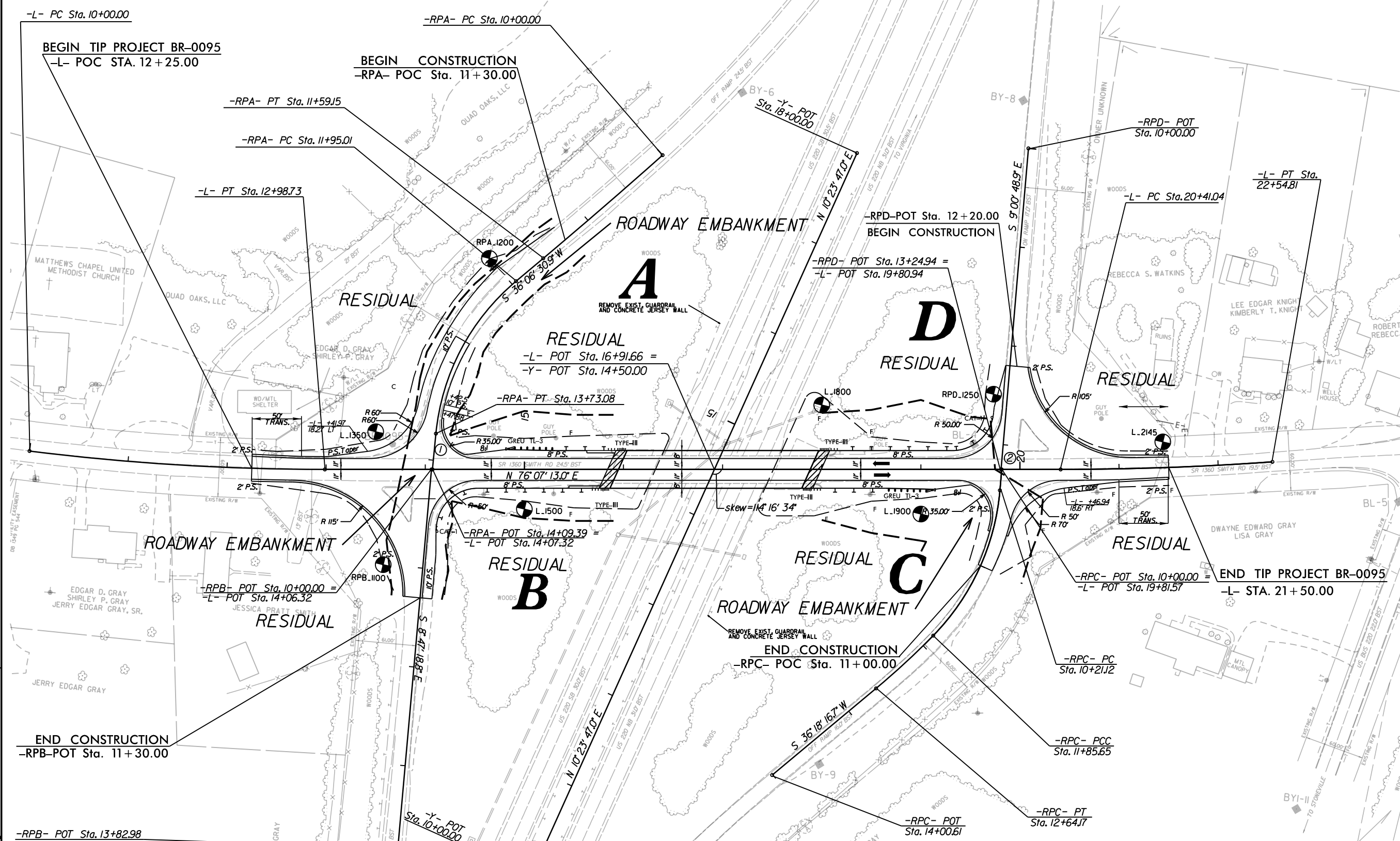
### Water Wells

No water wells were identified within or adjacent to the proposed right-of-way on the plans provided to ESP or by ESP personnel in the field.

PROJECT REFERENCE NO. <b>BR-0095</b>	SHEET NO. <b>4</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	



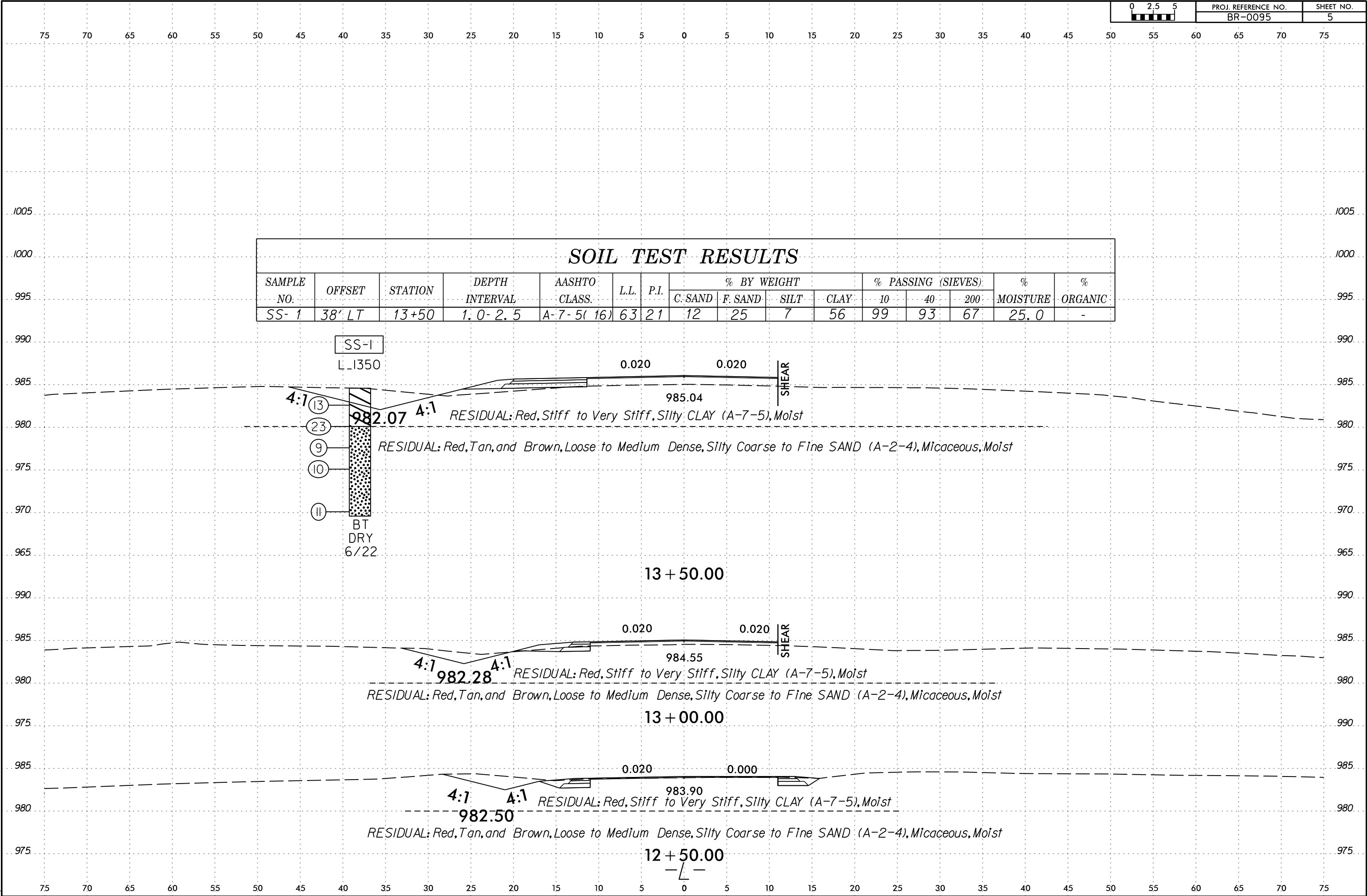
L		RPA		RPC	
PI Sta 11+49.56	PI Sta 21+47.97	PI Sta 10+79.58	PI Sta 12+88.81	PI Sta 11+06.81	PI Sta 12+24.94
$\Delta = 7^{\circ}07'53.6"$ (LT)	$\Delta = 4^{\circ}04'57.5"$ (LT)	$\Delta = 1^{\circ}39'28.4"$ (RT)	$\Delta = 44^{\circ}31'04.7"$ (LT)	$\Delta = 39^{\circ}30'07.8"$ (RT)	$\Delta = 5^{\circ}46'40.5"$ (RT)
$D = 2^{\circ}23'14.4"$	$D = 1^{\circ}54'35.5"$	$D = 1^{\circ}02'30.3"$	$D = 25^{\circ}00'01.2"$	$D = 24^{\circ}00'36.3"$	$D = 7^{\circ}21'30.7"$
$L = 298.73'$	$L = 213.77'$	$L = 159.15'$	$L = 178.07'$	$L = 164.52'$	$L = 78.52'$
$T = 149.56'$	$T = 106.93'$	$T = 79.58'$	$T = 93.80'$	$T = 85.68'$	$T = 39.29'$
$R = 2,400.00'$	$R = 3,000.00'$	$R = 5,500.00'$	$R = 2,291.8'$	$R = 238.63'$	$R = 778.63'$
SE = EXIST.	SE = EXIST.		① S 8°24'33.8" E		② S 8°58'31.6" E



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 REVISIONS

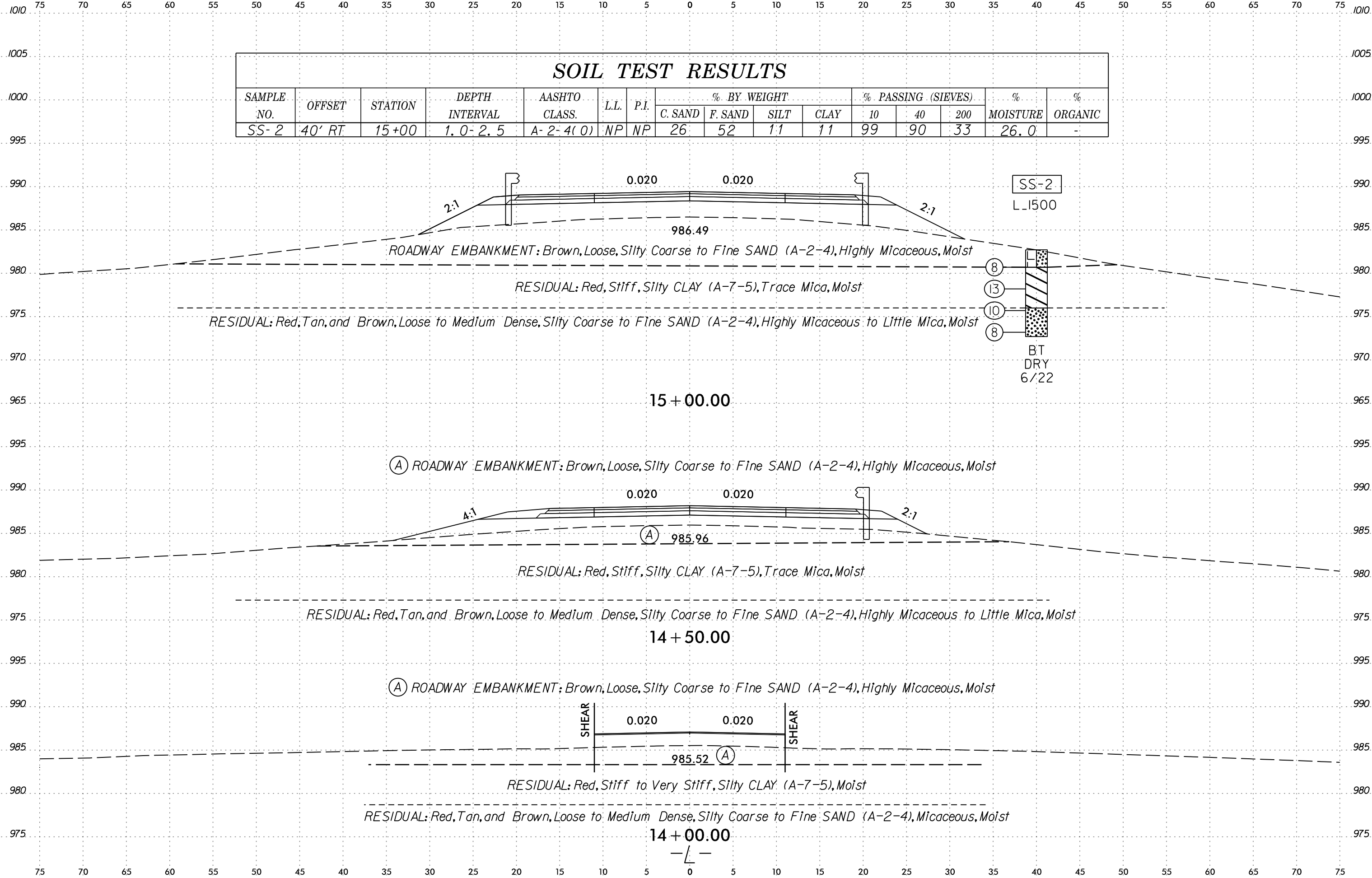
SEE SHEET 5 FOR PROFILE OF -L-  
 SEE SHEET 6 FOR PROFILE OF -RPA-, -RPB-, -RPC-, AND -RPD-

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1	38' LT	13+50	1.0-2.5	A-7-5(16)	63	21	12	25	7	56	99	93	67	25.0	-

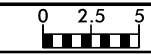


### SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	LL.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-2	40' RT	15+00	1.0-2.5	A-2-4(0)	NP	NP	26	52	11	11	99	90	33	26.0	-

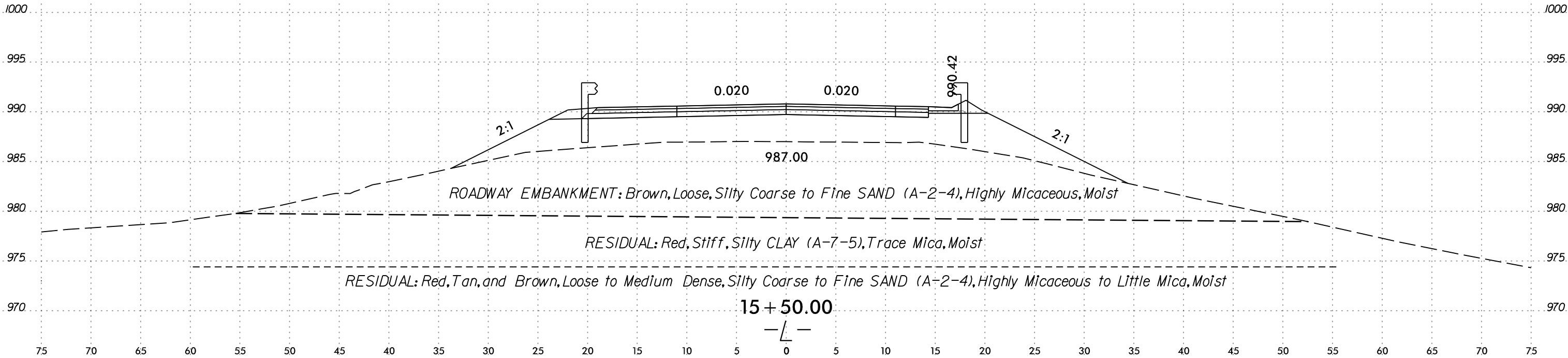


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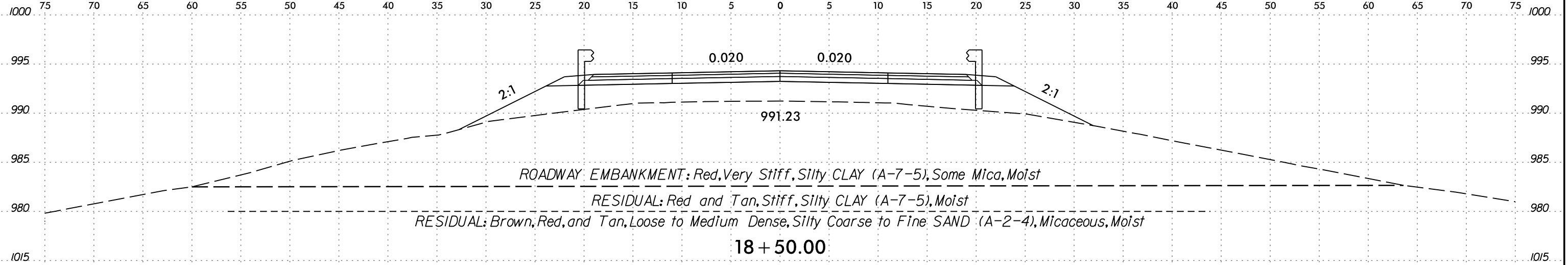
PROJ. REFERENCE NO. BR-0095	SHEET NO. 7
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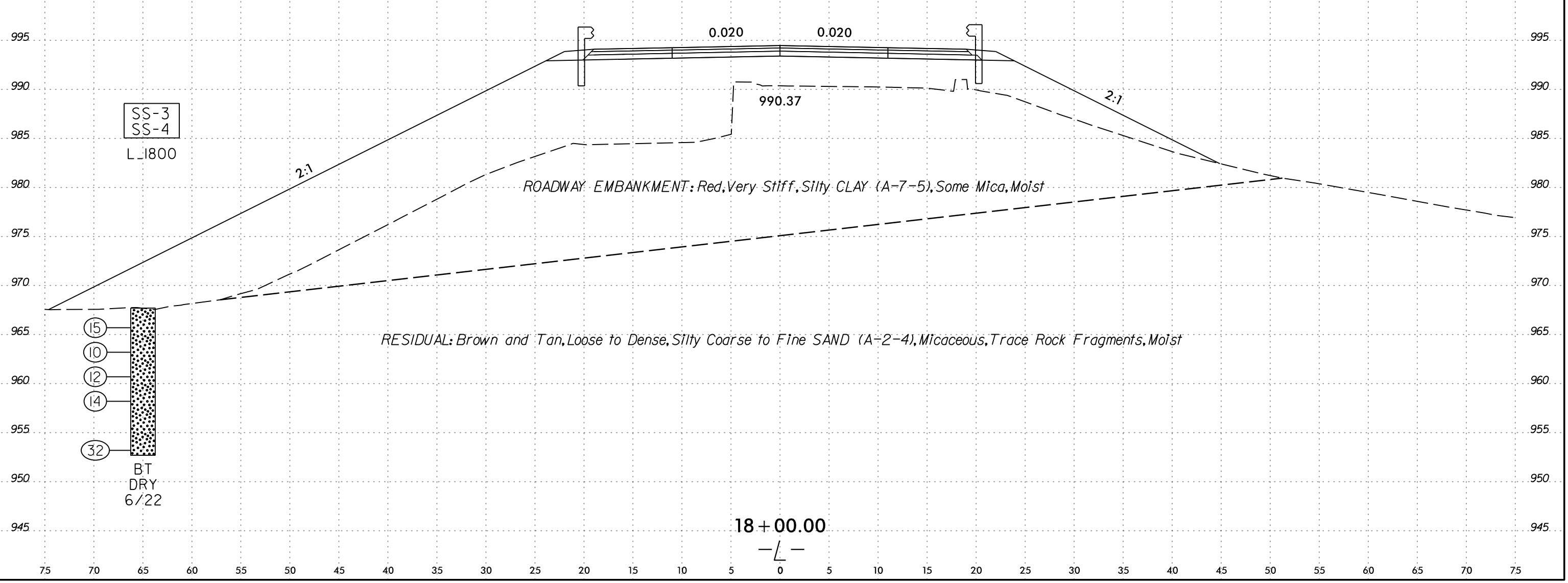


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### SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-3	65' LT	18+00	3.5-5.0	A-2-4(0)	NP	NP	43	37	13	7	100	71	26	13.0	-
SS-4	65' LT	18+00	13.5-15.0	A-2-4(0)	NP	NP	20	62	13	5	96	91	27	14.3	-



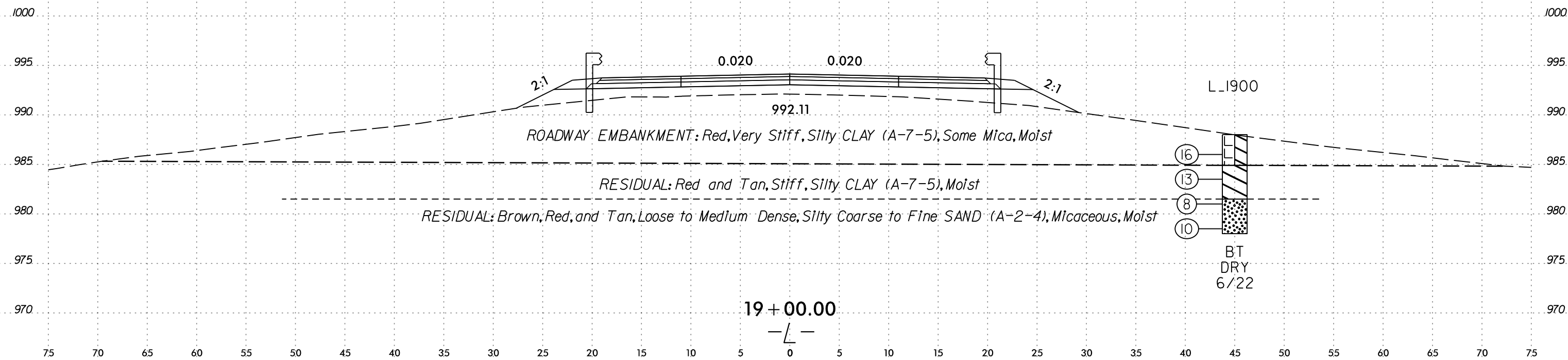
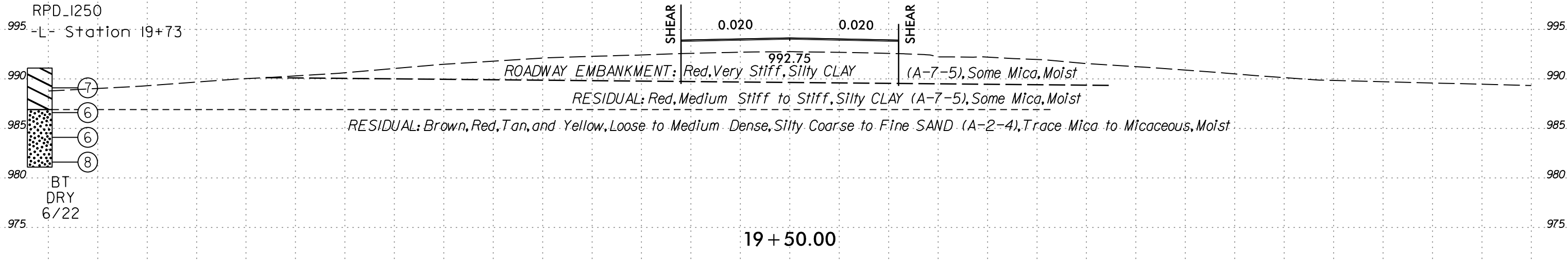
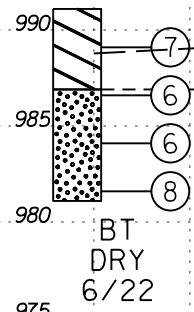
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### SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-6	14' RT	12+50	6.0-7.5	A-2-4(0)	NP	NP	34	45	13	8	99	79	28	15.5	-

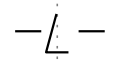
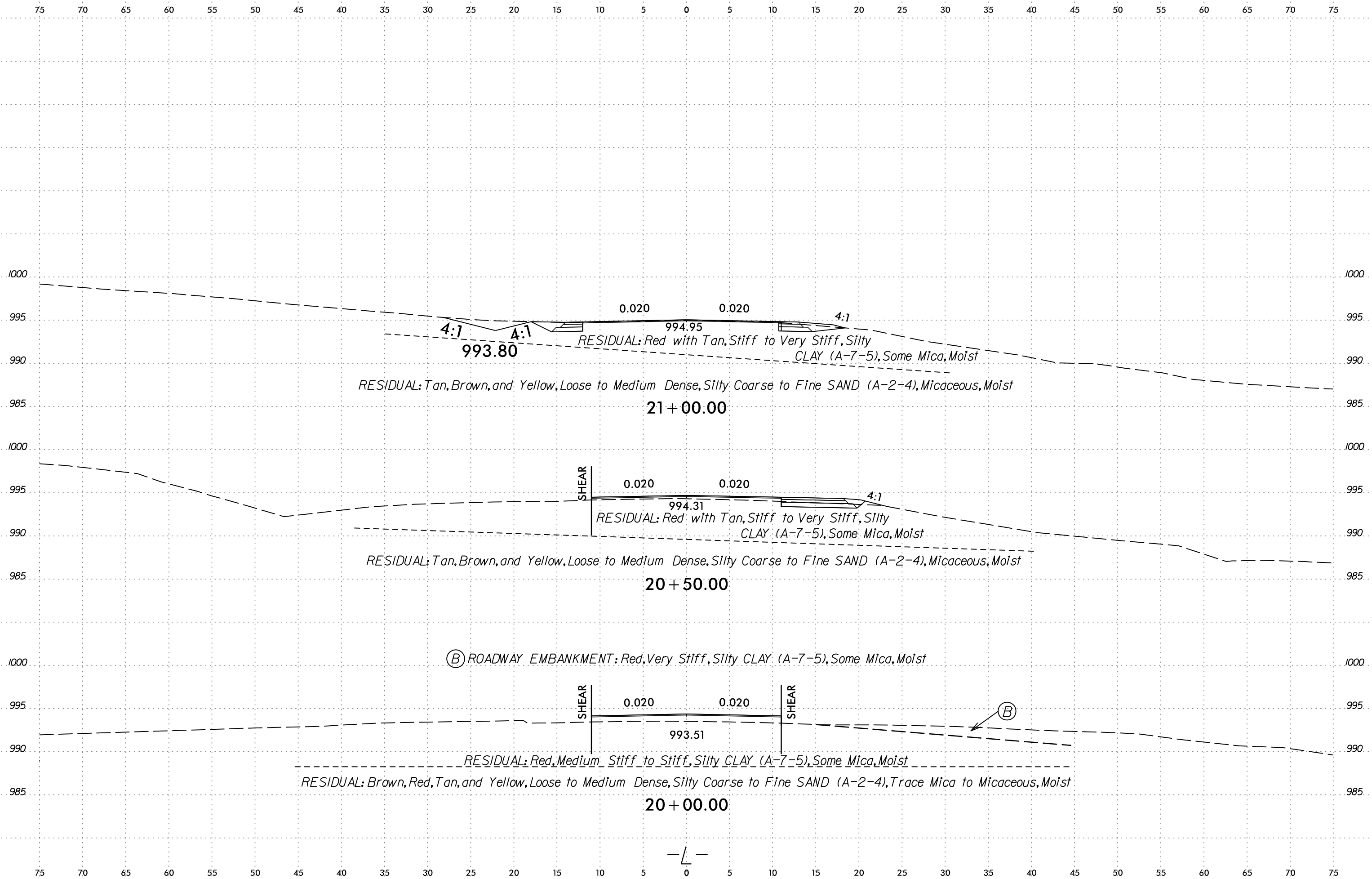
NOTE: STATION AND OFFSET REFER TO -RPD- ALIGNMENT

SS-6  
RPD\_I250  
-L- Station 19+73



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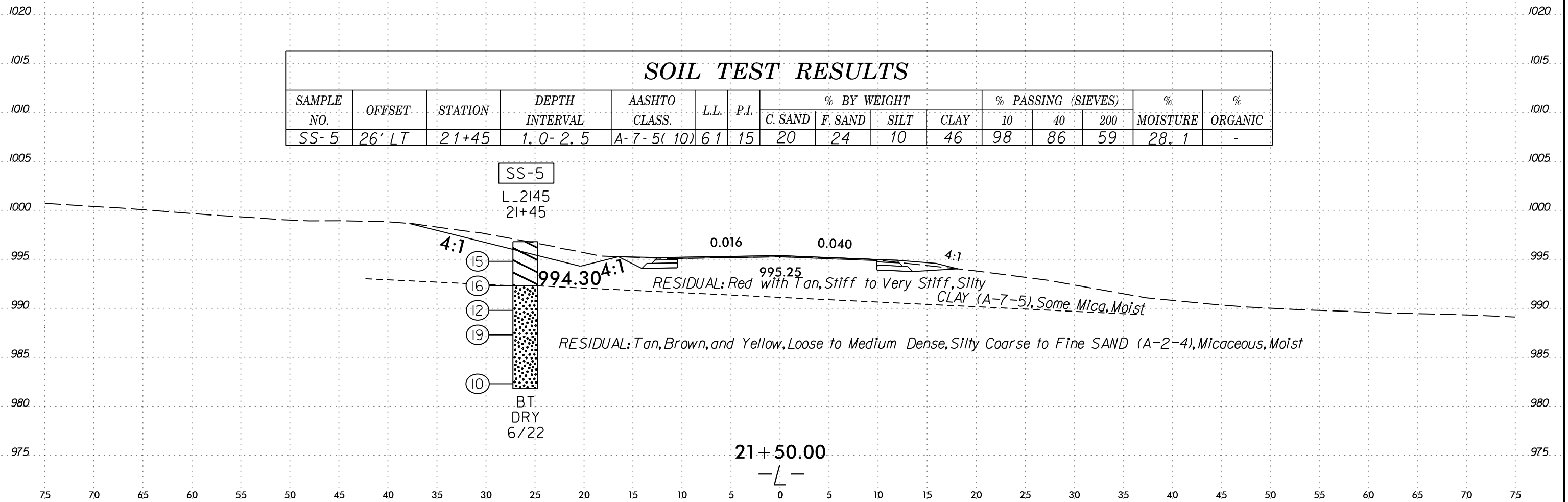
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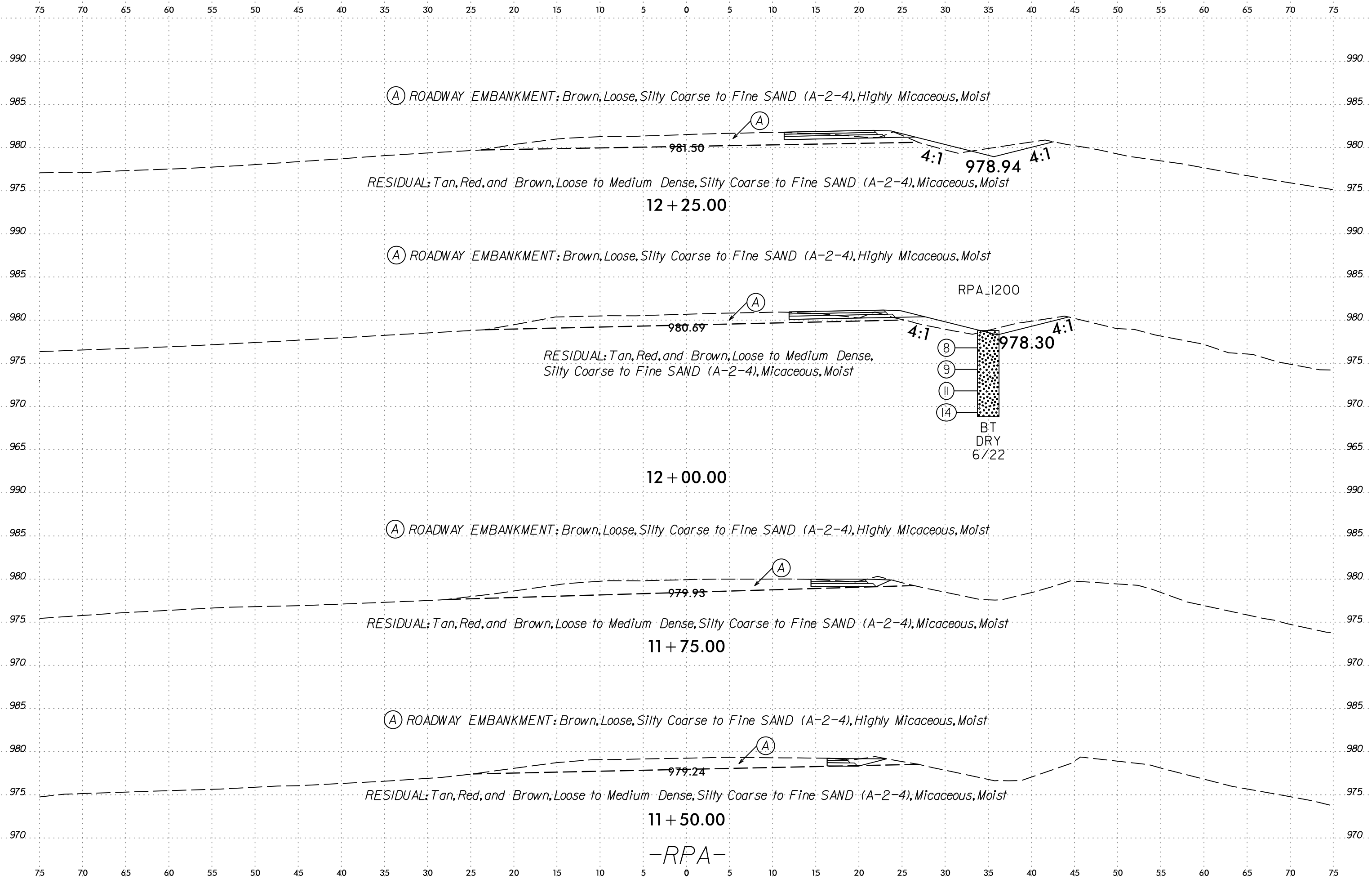
### SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-5	26' LT	21+45	1.0-2.5	A-7-5(10)	61	15	20	24	10	46	98	86	59	28.1	-



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6/23/16  
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(A) ROADWAY EMBANKMENT: Brown, Loose, Silty Coarse to Fine SAND (A-2-4), Highly Micaceous, Moist

RESIDUAL: Tan, Red, and Brown, Loose to Medium Dense, Silty Coarse to Fine SAND (A-2-4), Micaceous, Moist

12 + 25.00

(A) ROADWAY EMBANKMENT: Brown, Loose, Silty Coarse to Fine SAND (A-2-4), Highly Micaceous, Moist

RESIDUAL: Tan, Red, and Brown, Loose to Medium Dense,  
Silty Coarse to Fine SAND (A-2-4), Micaceous, Moist

RPA\_1200

(8)

(9)

(11)

(14)

BT  
DRY  
6/22

12 + 00.00

(A) ROADWAY EMBANKMENT: Brown, Loose, Silty Coarse to Fine SAND (A-2-4), Highly Micaceous, Moist

RESIDUAL: Tan, Red, and Brown, Loose to Medium Dense, Silty Coarse to Fine SAND (A-2-4), Micaceous, Moist

11 + 75.00

(A) ROADWAY EMBANKMENT: Brown, Loose, Silty Coarse to Fine SAND (A-2-4), Highly Micaceous, Moist

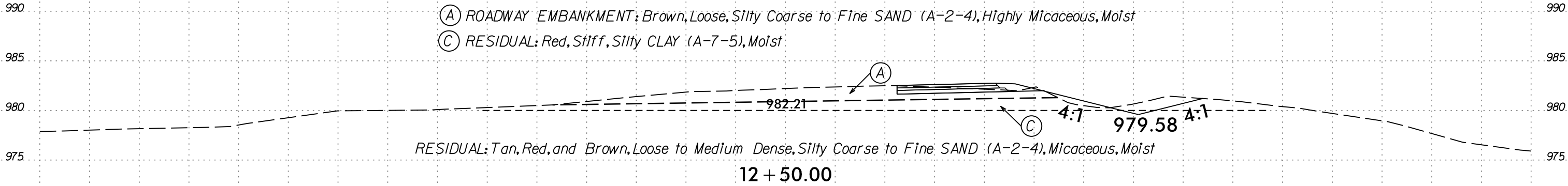
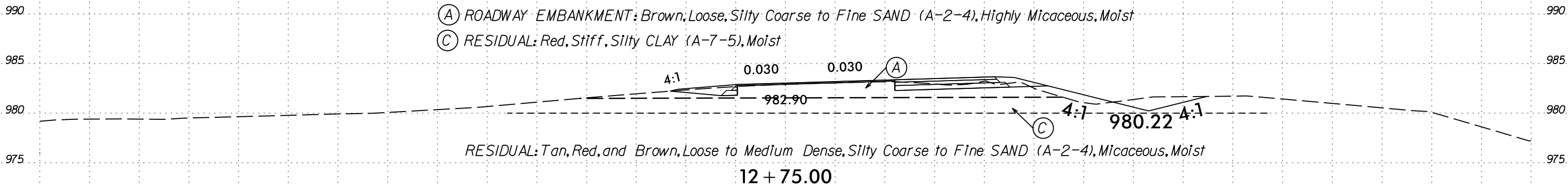
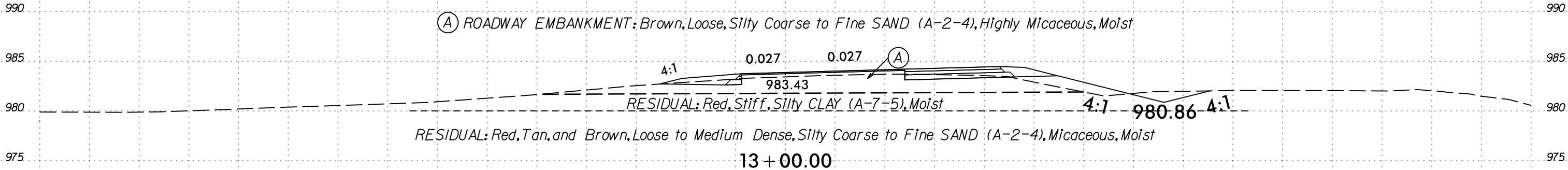
RESIDUAL: Tan, Red, and Brown, Loose to Medium Dense, Silty Coarse to Fine SAND (A-2-4), Micaceous, Moist

11 + 50.00

-RPA-



75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75



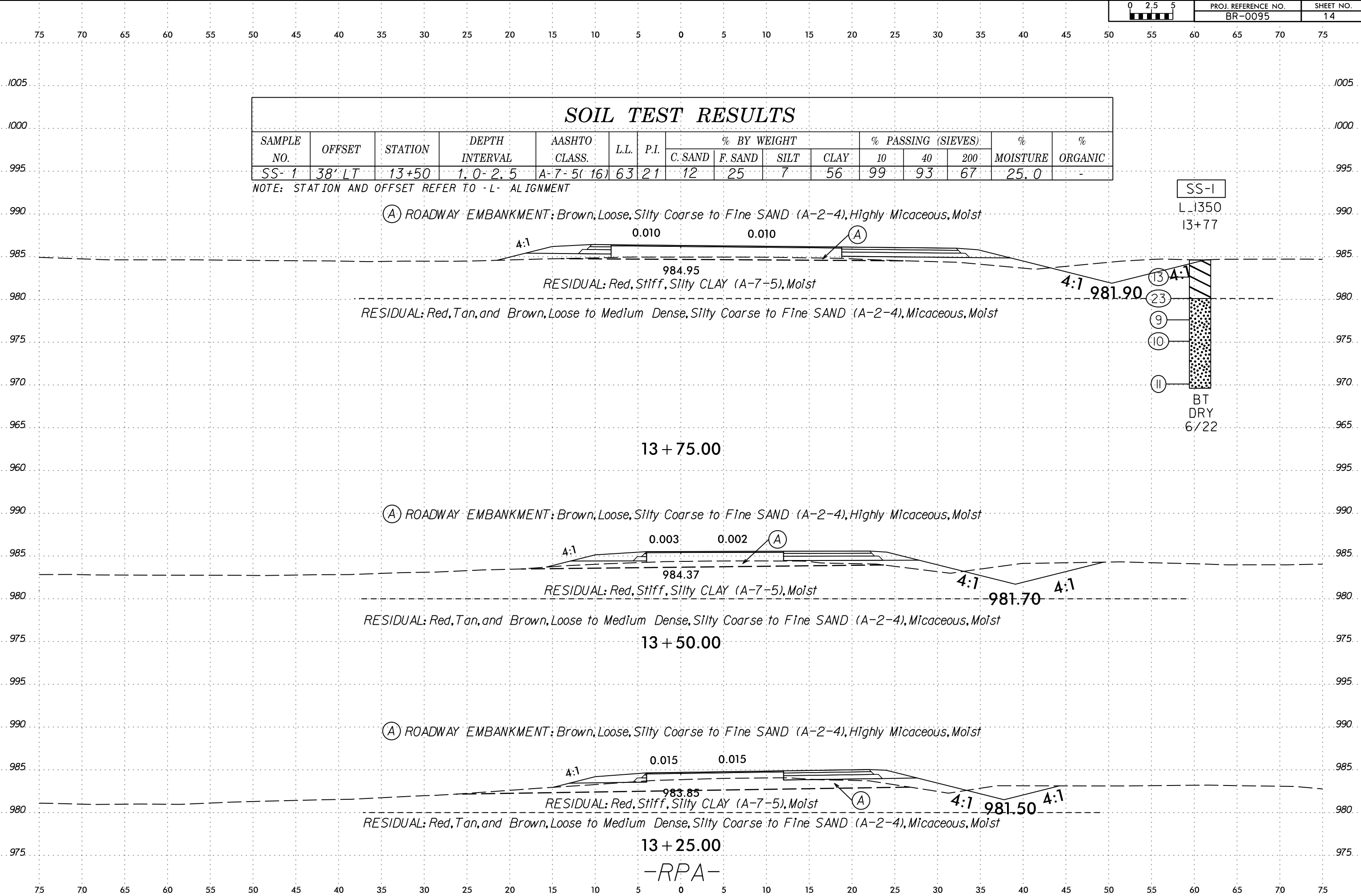
-RPA-

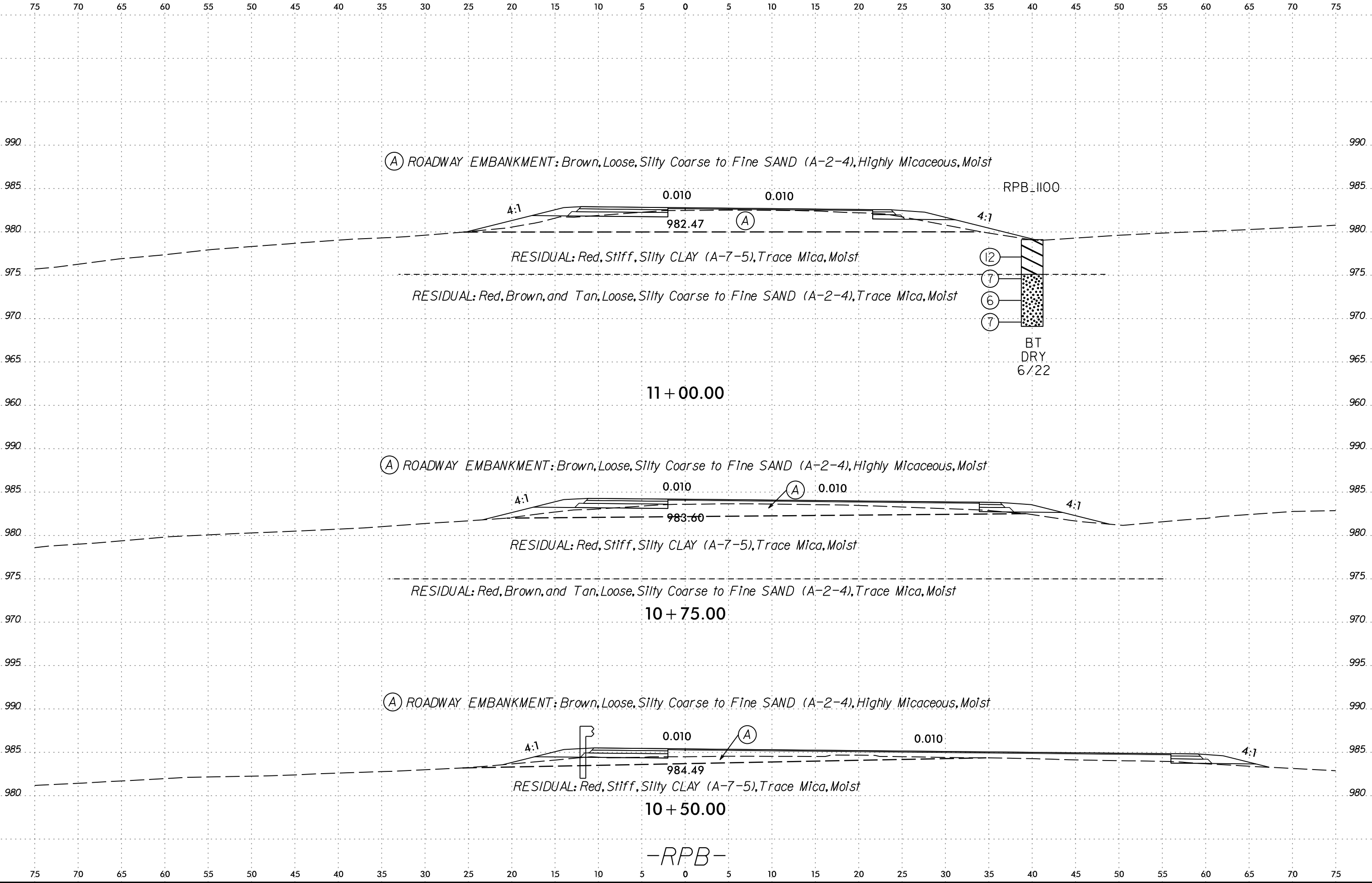
9/22/2022 6:28:45 AM W:\Projects\2020\11\14\14.300\NCDDT 2020-2022 On-Call Contract\14.320 (BR-0095 Roadway)\BR0095\_GEO.RDWY.CADD.GEOTECH\asc\BR0095\_Geo.xpl\_RPA.dgn pber-ero

### SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1	38' LT	13+50	1.0-2.5	A-7-5(16)	63	21	12	25	7	56	99	93	67	25.0	-

NOTE: STATION AND OFFSET REFER TO -L- ALIGNMENT

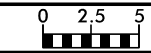




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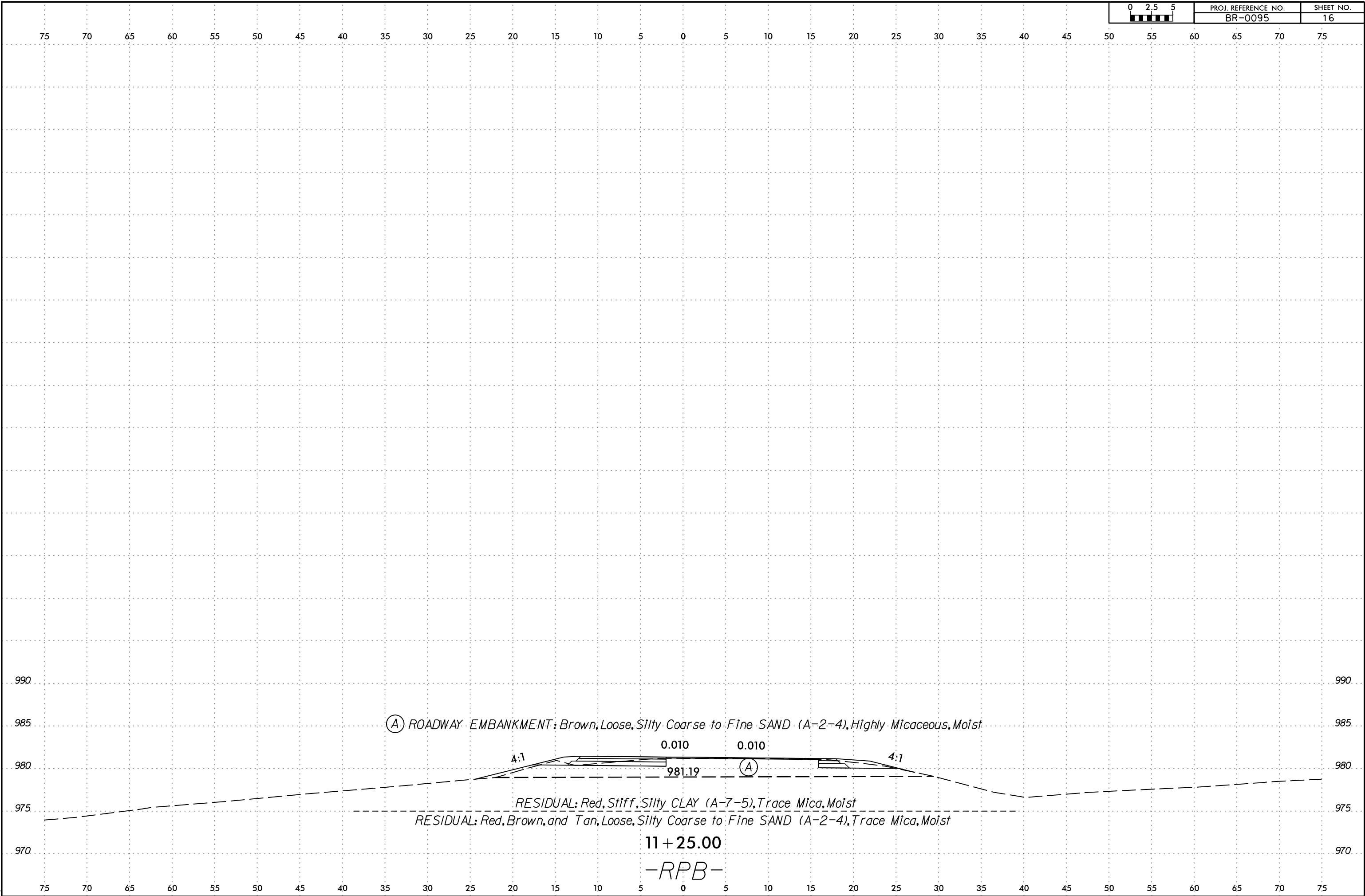


6/23/16  
9/22/2022 6:28:47 AM  
W:\Projects\2020\11\14.300\11\14.300\Contract\14.320\1BR-0095 Roadway\BR0095.GEO.RDWY\CAOD.GEOTECH\asc\BR0095.Geo.xpl.RPB.dgn



PROJ. REFERENCE NO.  
BR-0095

SHEET NO.  
16



(A) ROADWAY EMBANKMENT: Brown, Loose, Silty Coarse to Fine SAND (A-2-4), Highly Micaceous, Moist

4:1

0.010

0.010

4:1

981.19

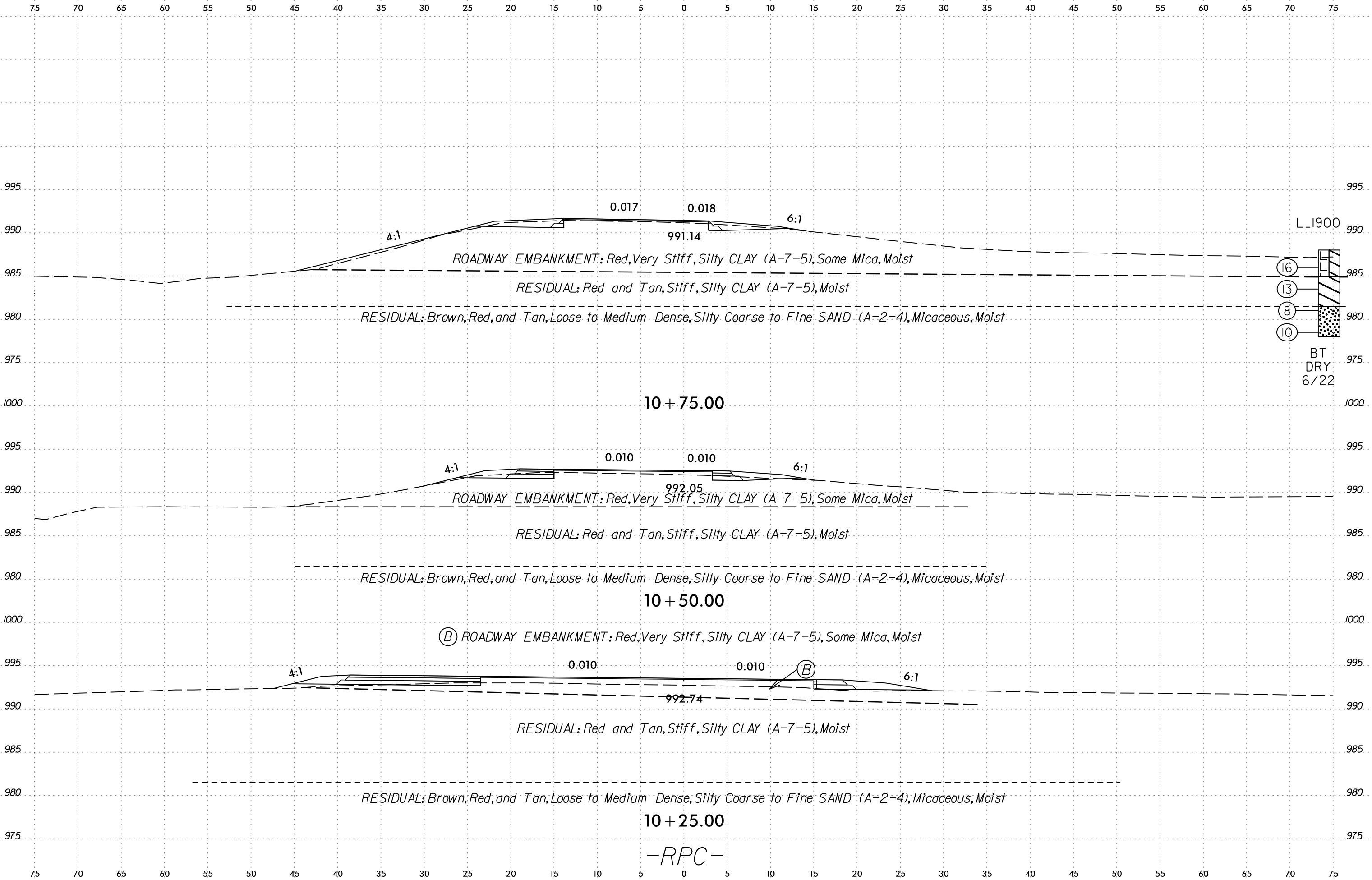
(A)

RESIDUAL: Red, Stiff, Silty CLAY (A-7-5), Trace Mica, Moist

RESIDUAL: Red, Brown, and Tan, Loose, Silty Coarse to Fine SAND (A-2-4), Trace Mica, Moist

11+25.00

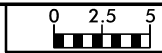
-RPB-



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pber-ero

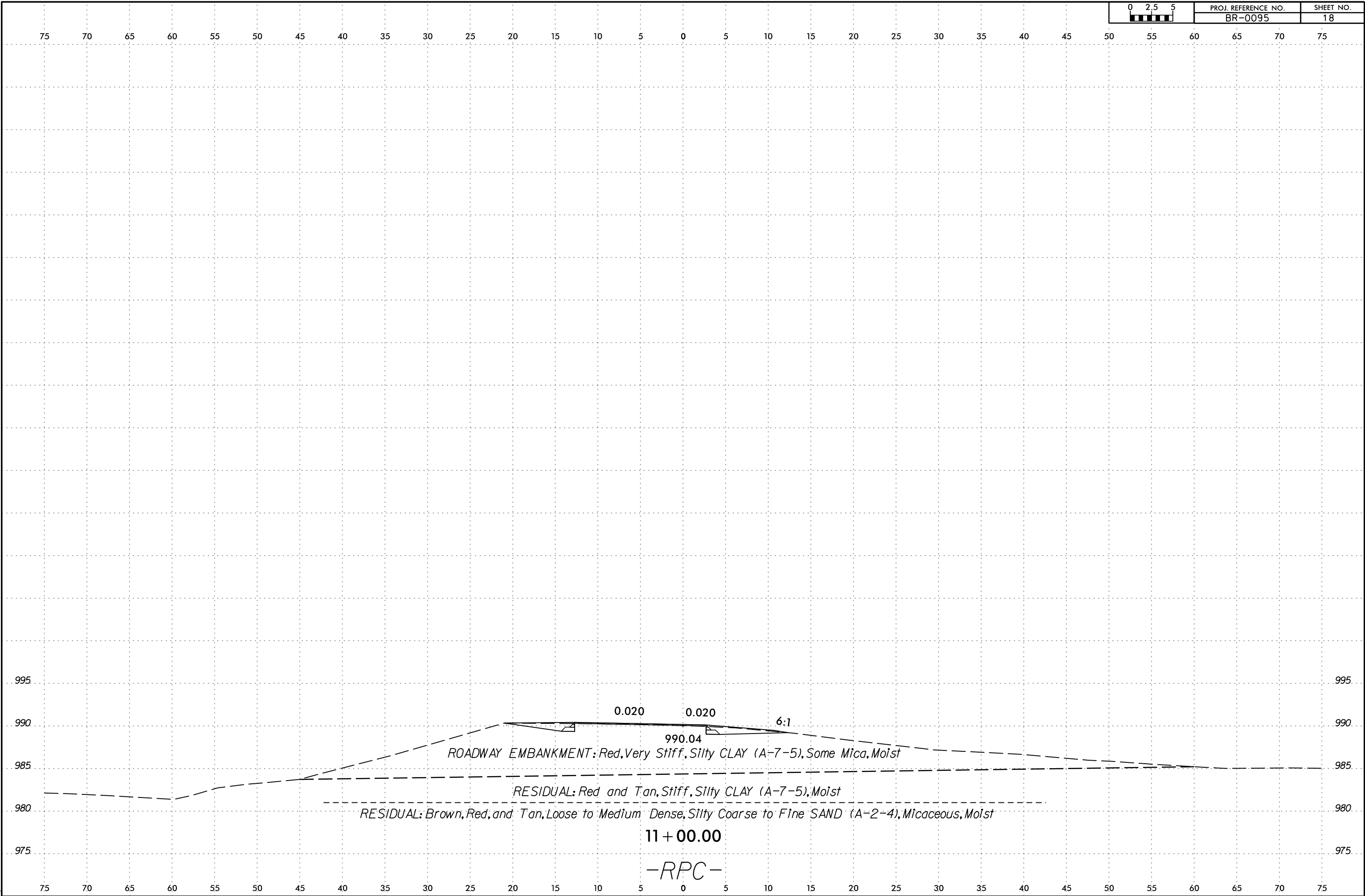
-RPC-

9/22/2022 6:28:49 AM  
W:\Projects\2020\11\114.300\11\114.300\Contract\114.320\1BR-0095 Roadway\BR0095.GEO.RDW\CADD.GEOTECH\asc\BR0095.Geo.xpl\_RPC.dgn



PROJ. REFERENCE NO.  
BR-0095

SHEET NO.  
18



0.020 0.020 6:1

990.04

ROADWAY EMBANKMENT: Red, Very Stiff, Silty CLAY (A-7-5), Some Mica, Moist

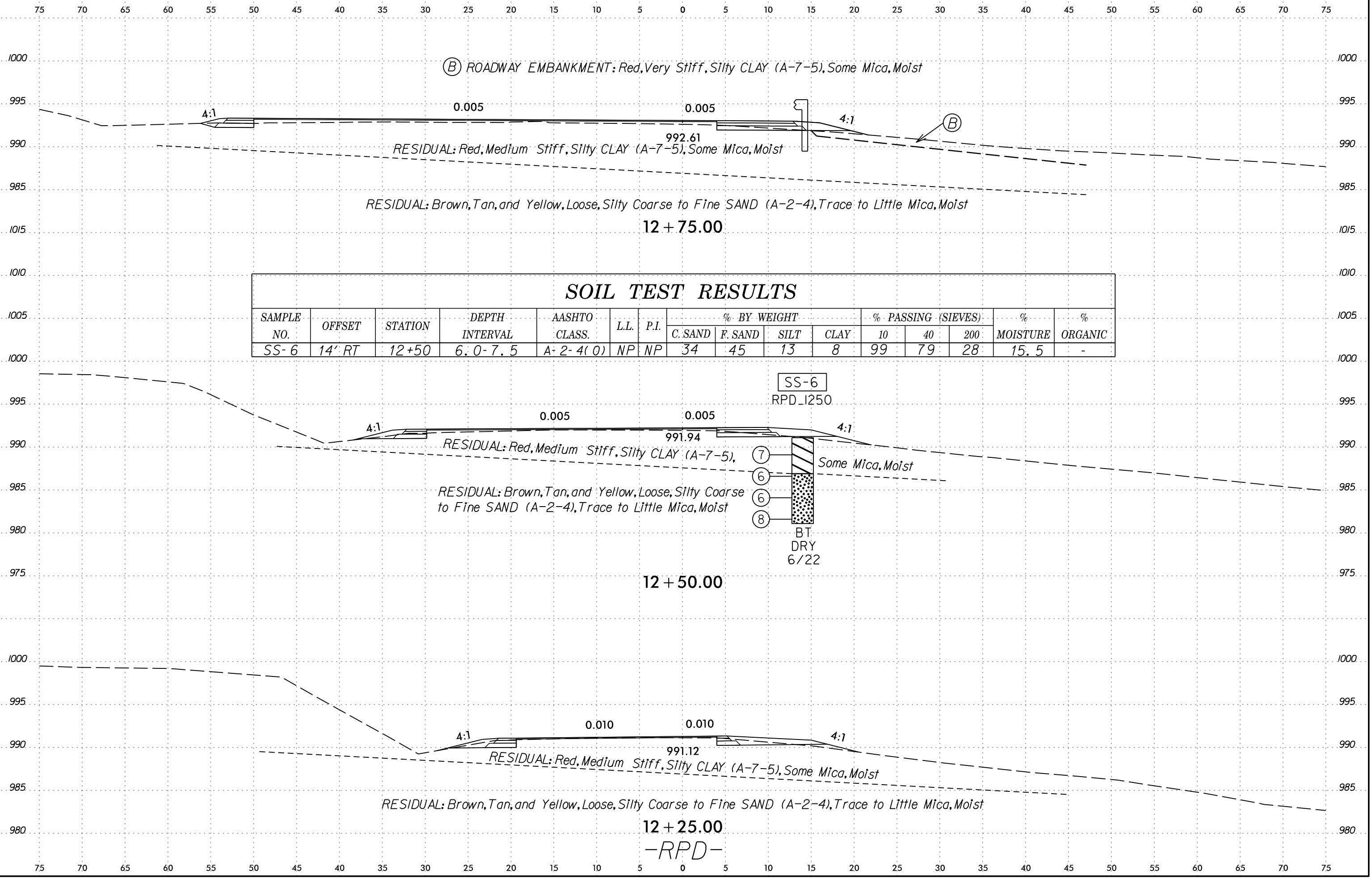
RESIDUAL: Red and Tan, Stiff, Silty CLAY (A-7-5), Moist

RESIDUAL: Brown, Red, and Tan, Loose to Medium Dense, Silty Coarse to Fine SAND (A-2-4), Micaceous, Moist

11 + 00.00

-RPC-

6/23/16  
 9/22/2022 6:29:50 AM  
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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
GEOTECHNICAL ENGINEERING UNIT  
**SUBSURFACE INVESTIGATION**  
APPENDIX A  
LABORATORY TESTS RESULTS SUMMARY

REFERENCE: BR-0095

PROJECT: 67095

SOILS LABORATORY TESTS RESULTS


WBS NO.: 67095.1.1

TIP NO.: BR-0095

COUNTY: Rockingham

SITE DESCRIPTION: Replace Bridge No. 780170 on SR 1360 Over US 220

BORING NO.	SAMPLE NO.	BORING LOCATION	DEPTH INTERVAL (FT)	AASHTO CLASS	N	L.L	P.I.	% BY WEIGHT				% PASSING SIEVES			% MOISTURE	% ORGANIC
								CSE. SAND	F. SAND	SILT	CLAY	10	40	200		
L_1350	SS-1	-L- STA. 13+50, 38' LT	1.0-2.5	A-7-5 (16)	13	63	21	12	25	7	56	99	93	67	25.0	-
L_1500	SS-2	-L- STA. 15+00, 40' RT	1.0-2.5	A-2-4 (0)	8	NP	NP	26	52	11	11	99	90	33	26.0	-
L_1800	SS-3	-L- STA. 18+00, 65' LT	3.5-5.0	A-2-4 (0)	10	NP	NP	43	37	13	7	100	71	26	13.0	-
L_1800	SS-4	-L- STA. 18+00, 65' LT	13.5-15.0	A-2-4 (0)	32	NP	NP	20	62	13	5	96	91	27	14.3	-
L_2145	SS-5	-L- STA. 21+45, 26' LT	1.0-2.5	A-7-5 (10)	15	61	15	20	24	10	46	98	86	59	28.1	-
RPD-1250	SS-6	-RPD- STA. 12+50, 14' RT	6.0-7.5	A-2-4 (0)	6	NP	NP	34	45	13	8	99	79	28	15.5	-

  
 Certification No. 144-02-0718