

STATE	STATE PROJECT REFERENCE NO.	SUBST NO.	TOTAL SHEETS
N.C.	R-2514B	1	151
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34442.1.2	NHF-17(7)	P.E.	
		RW & UTIL.	

NOTE: SEE SHEET 2A FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

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

**ROADWAY**  
**SUBSURFACE INVESTIGATION**

PROJ. REFERENCE NO. 34442.1.2 (R-2514B) F.A. PROJ. NHF-17(7)  
COUNTY ONslow & JONES  
PROJECT DESCRIPTION US 17 FROM SOUTH OF BELGRADE AT  
SR 1330/SR 1439 TO NORTH OF MAYSVILLE

**INVENTORY**

**CONTENTS**

LINE	STATION	PLAN	PROFILE
-L-	12+00 TO 23+42	4-20	24-31
-Y1-	10+00 TO 17+25	7	32
-Y1A-	10+00 TO 18+46	7	33
-Y2-	12+00 TO 32+00	11,21,22	34
-Y2A-	10+00 TO 43+00	9-11,21	35-36
-Y2B-	10+00 TO 12+75	21	37
-Y2C-	10+00 TO 13+51	11	38
-Y2D-	10+00 TO 30+62	11-12	39
-Y2E-	10+00 TO 14+65	21	40
-Y3-	10+50 TO 27+50	19,23	41
-Y3A-	10+00 TO 40+35	17-19	42-43
-Y3B-	10+00 TO 13+10	23	44
-Y3C-	10+00 TO 18+70	19,23	45
-Y3D-	10+00 TO 12+68	19	46
-Y3E-	10+00 TO 13+00	18	47

**CROSS SECTIONS**

LINE	STATION	SHEET
-L-	12+00 TO 13+50	48
-L-	20+50 TO 22+50	49
-L-	29+00 TO 32+00	50-51
-L-	71+50 TO 77+50	52-54
-L-	94+00 TO 101+50	55-58
-L-	104+00 TO 142+50	59-74
-L-	147+50 TO 149+50	75-76
-L-	181+00 TO 185+00	77-78
-L-	197+00 TO 203+00	79-81
-L-	207+00 TO 211+50	82-84
-L-	217+00 TO 231+00	85-92
-Y1-	13+00 TO 15+50	93-94
-Y2-	12+50 TO 15+00	95-96
-Y2A-	11+00 TO 25+50	97-104
-Y2A-	30+00 TO 32+00	105-106
-Y2A-	33+00 TO 43+00	107-112
-Y2B-	11+50 TO 12+50	113
-Y2D-	11+56 TO 25+50	114-121
-Y2E-	10+50 TO 14+50	122-124
-Y3-	11+00 TO 11+50	125
-Y3-	25+00 TO 27+50	126-127
-Y3A-	15+50 TO 40+35	128-141
-Y3B-	11+00 TO 13+08	142-143
-Y3C-	12+50 TO 18+50	144-147
-Y3D-	11+06 TO 12+50	148-149
-Y3E-	10+50 TO 12+50	150-151

**APPENDIX**

CPT LOGS

DRAWN BY: C.P. TURNER

**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) 707-6650, NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE 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 THIS 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.

PERSONNEL

J.R. SWARTLEY

C.M. WRIKE

R.E. SMITH

D.G. PINTER

CATLIN PERSONNEL

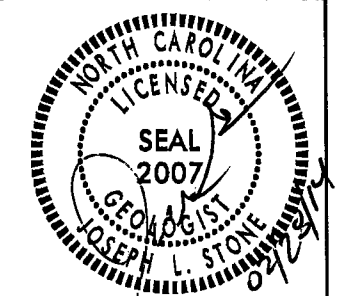
MID-ATLANTIC PERSONNEL

INVESTIGATED BY J.L. STONE

CHECKED BY D.N. ARGENBRIGHT

SUBMITTED BY D.N. ARGENBRIGHT

DATE FEBRUARY 2014



NOTE - THE INFORMATION CONTAINED HEREIN IS NOT IMPLIED OR GUARANTEED BY THE N.C. DEPARTMENT OF TRANSPORTATION AS BEING ACCURATE NOR IT IS CONSIDERED TO BE PART OF THE PLANS, SPECIFICATIONS, OR CONTRACT FOR THE PROJECT.

NOTE - 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.

**CONTRACT: ID: R-2514B**

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																																																																																																																														
<p>SOIL IS CONSIDERED TO BE THE 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 STANDARD PENETRATION TEST (ASTM D-1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY SHALL INCLUDE: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. EXAMPLE:</p> <p>VERY STIFF, GRAY, SILTY CLAY, MOST WITH INTERBEDDED FINE SAND LAYERS, HIGH PLASTIC, A-7-6</p>		<p>WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORM - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. (ALSO POORLY GRADED)</p> <p>GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLES OF TWO OR MORE SIZES.</p> <p>THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.</p>		<p>HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT IF TESTED, WOULD YIELD SPT REFUSAL, 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:</p>		<p>ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.</p> <p>ADUIFIER - A WATER BEARING FORMATION OR STRATA.</p> <p>ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.</p> <p>ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, AS SHALE, SLATE, ETC.</p> <p>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.</p> <p>CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.</p> <p>COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.</p> <p>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.</p> <p>DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.</p> <p>DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.</p> <p>DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.</p> <p>FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.</p> <p>FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.</p> <p>FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOGGED FROM PARENT MATERIAL.</p> <p>FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.</p> <p>FORMATION (FM) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.</p> <p>JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.</p> <p>LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.</p> <p>LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.</p> <p>MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.</p> <p>PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.</p> <p>RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.</p> <p>ROCK QUALITY DESIGNATION (RQD) - 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.</p> <p>SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.</p> <p>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 INTRODUCED ROCKS.</p> <p>SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.</p> <p>STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS IN OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.</p> <p>STRATA CORE RECOVERY (SCREC) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.</p> <p>STRATA ROCK QUALITY DESIGNATION (SRQD) - 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.</p> <p>TOPSOIL (TS) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.</p>																																																																																																																														
<p><b>SOIL LEGEND AND AASHTO CLASSIFICATION</b></p> <table border="1"> <tr> <th>GENERAL CLASS.</th> <th colspan="4">GRANULAR MATERIALS (&lt; 35% PASSING #200)</th> <th colspan="4">SILT-CLAY MATERIALS (&gt; 35% PASSING #200)</th> <th colspan="4">ORGANIC MATERIALS</th> </tr> <tr> <th>GROUP CLASS.</th> <th>A-1</th> <th>A-3</th> <th>A-2</th> <th>A-4</th> <th>A-5</th> <th>A-6</th> <th>A-7</th> <th>A-1, A-2</th> <th>A-3</th> <th>A-4, A-5</th> <th>A-6, A-7</th> <th colspan="2"></th> </tr> <tr> <th>SYMBOL</th> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="2"></td> </tr> <tr> <th>% PASSING</th> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td>10 30 60 100</td> <td colspan="2"></td> </tr> <tr> <th>LIQUID LIMIT</th> <td>5</td> <td>10</td> <td>15</td> <td>20</td> <td>25</td> <td>30</td> <td>35</td> <td>40</td> <td>45</td> <td>50</td> <td>55</td> <td colspan="2"></td> </tr> <tr> <th>PLASTIC INDEX</th> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td colspan="2"></td> </tr> <tr> <th>GROUP INDEX</th> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td colspan="2"></td> </tr> <tr> <th>USUAL TYPES OF MAJOR MATERIALS</th> <td colspan="2">STONE FRAGS, GRAVEL, AND SAND</td> <td>FINE SAND</td> <td colspan="2">SILTY OR CLAYEY GRAVEL AND SAND</td> <td>SILTY SOILS</td> <td>CLAYEY SOILS</td> <td colspan="2">SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER</td> <td colspan="2">HIGHLY ORGANIC SOILS</td> <td colspan="2"></td> </tr> <tr> <th>GEN. 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RATING AS A SUBGRADE	EXCELLENT TO GOOD				FAIR TO POOR				POOR	UNSATURABLE				<p><b>MINERALOGICAL COMPOSITION</b></p> <p>MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHENEVER THEY ARE CONSIDERED OF SIGNIFICANCE.</p>		<p><b>WEATHERING</b></p> <p>FRESH - ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING, ROCK RINGS UNDER HAMMER IF CRYSTALLINE.</p> <p>VERY SLIGHT (V SL.) - ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.</p> <p>SLIGHT (SL.) - ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.</p> <p>MODERATE (MOD.) - SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.</p> <p>MODERATELY SEVERE (MOD. SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES 'CLUNK' SOUND WHEN STRUCK. IF TESTED, WOULD YIELD SPT REFUSAL.</p> <p>SEVERE (SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. IF TESTED, YIELDS SPT N VALUES &gt; 100 BPF.</p> <p>VERY SEVERE (V SEV.) - ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT THE MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE SUCH THAT ONLY MINOR VESTIGES OF THE ORIGINAL ROCK FABRIC REMAIN. IF TESTED, YIELDS SPT N VALUES &lt; 100 BPF.</p> <p>COMPLETE - ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.</p>		<p><b>GROUND WATER</b></p> <p>▽ WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING</p> <p>▽ 24 STATIC WATER LEVEL AFTER 24 HOURS</p> <p>▽ PW PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA</p> <p>○ SPRING OR SEEP</p>	
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<p><b>INDURATION</b></p> <p>FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF THE MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.</p> <p>FRIABLE - RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.</p> <p>MODERATELY INDURATED - GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.</p> <p>INDURATED - GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.</p> <p>EXTREMELY INDURATED - SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.</p>		<p><b>FRACTURE SPACING</b></p> <table border="1"> <tr> <th>TERM</th> <th>SPACING</th> </tr> <tr> <td>VERY WIDE</td> <td>MORE THAN 10 FEET</td> </tr> <tr> <td>WIDE</td> <td>3 TO 10 FEET</td> </tr> <tr> <td>MODERATELY CLOSE</td> <td>1 TO 3 FEET</td> </tr> <tr> <td>CLOSE</td> <td>0.15 TO 1 FEET</td> </tr> <tr> <td>VERY CLOSE</td> <td>LESS THAN 0.15 FEET</td> </tr> </table> <p><b>BEDDING</b></p> <table border="1"> <tr> <th>TERM</th> <th>THICKNESS</th> </tr> <tr> <td>VERY THICKLY BEDDED</td> <td>&gt; 4 FEET</td> </tr> <tr> <td>THICKLY BEDDED</td> <td>1.5 - 4 FEET</td> </tr> <tr> <td>MODERATELY BEDDED</td> <td>0.16 - 1.5 FEET</td> </tr> <tr> <td>VERY THINLY BEDDED</td> <td>0.03 - 0.16 FEET</td> </tr> <tr> <td>THICKLY LAMINATED</td> <td>0.008 - 0.03 FEET</td> </tr> <tr> <td>THINLY LAMINATED</td> <td>&lt; 0.008 FEET</td> </tr> </table>		TERM	SPACING	VERY WIDE	MORE THAN 10 FEET	WIDE	3 TO 10 FEET	MODERATELY CLOSE	1 TO 3 FEET	CLOSE	0.15 TO 1 FEET	VERY CLOSE	LESS THAN 0.15 FEET	TERM	THICKNESS	VERY THICKLY BEDDED	> 4 FEET	THICKLY BEDDED	1.5 - 4 FEET	MODERATELY BEDDED	0.16 - 1.5 FEET	VERY THINLY BEDDED	0.03 - 0.16 FEET	THICKLY LAMINATED	0.008 - 0.03 FEET	THINLY LAMINATED	< 0.008 FEET																																																																																																							
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<p><b>COLOR</b></p> <p>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.</p>		<p><b>NOTES:</b></p> <p>UNDIVIDED C.P. = UNDIVIDED COASTAL PLAIN</p> <p> APPROXIMATE LIMIT OF ORGANIC SOILS</p> <p> VST = VANE SHEAR TEST</p>																																																																																																																																		

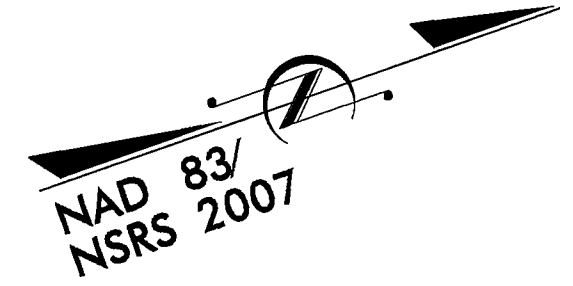
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2514B	2A	151
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34442.1.2	NHF-17(7)	PE	

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

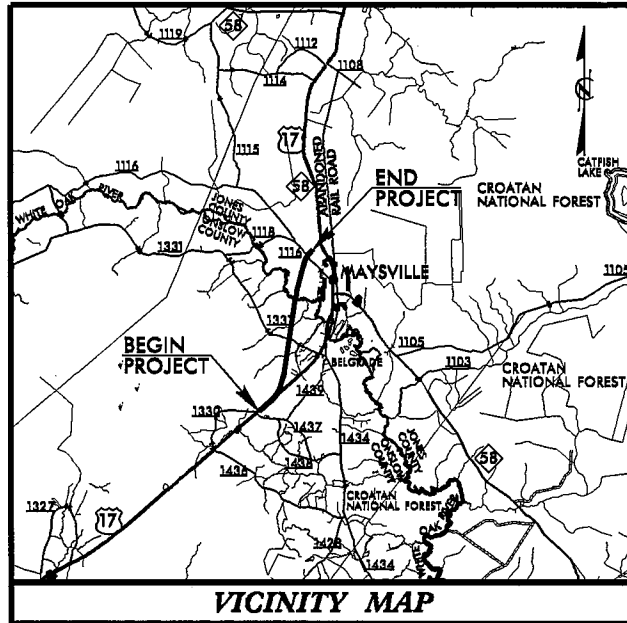
# ONSLOW & JONES COUNTIES

LOCATION: US 17 FROM SOUTH OF BELGRADE AT  
SR 1330/SR 1439 TO NORTH OF MAYSVILLE

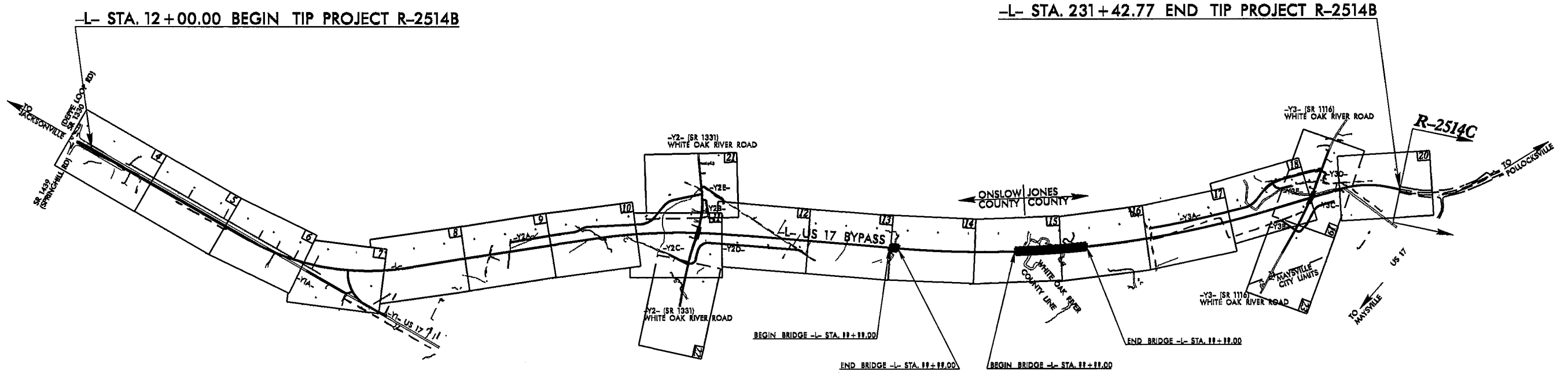
TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND STRUCTURES



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

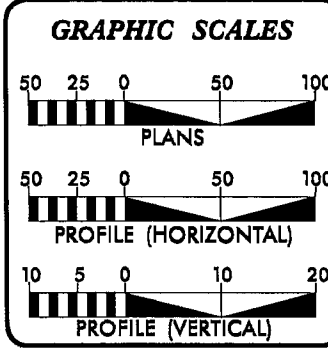


TIP PROJECT: R-2514B



\*DESIGN EXCEPTION REQUIRED FOR SAG VERTICAL CURVE K FACTORS AND STOPPING SIGHT DISTANCE (-Y2- & -Y3-)  
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES.  
THIS IS A FULL CONTROLLED-ACCESS PROJECT WITH ACCESS AS SHOWN ON PLANS.  
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD

INCOMPLETE PLANS  
DO NOT USE FOR R/W ACQUISITION  
PRELIMINARY PLANS  
DO NOT USE FOR CONSTRUCTION



**DESIGN DATA**

ADT 2015 =	6800 vpd
ADT 2035 =	11400 vpd
DHV =	7 %
D =	65 %
T =	7 % *
V =	70 MPH
* TTST =	4% DUAL = 3%
FUNC CLASS =	FREWAY
STATEWIDE TIER	

**PROJECT LENGTH**

LENGTH ROADWAY OF TIP PROJECT R-2514B =	???? MILES
LENGTH STRUCTURE OF TIP PROJECT R-2514B =	???? MILES
TOTAL LENGTH OF TIP PROJECT R-2514B =	4.156 MILES

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

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
DECEMBER 20, 2013

LETTING DATE:  
JULY 17, 2018

JAMES A. SPEER, PE  
PROJECT ENGINEER

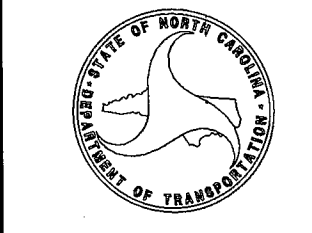
JOHN LANSFORD, PE  
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

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

ROADWAY DESIGN ENGINEER

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



18-JUL-2013 14:30 L:\ERO\Greenville\_Investigation\TIP\R2514B\_GEO\_RDWY\CADD\_GEO\TECH\Site&Sub\R2514B\_GEO\_RDY\_TITILE.dgn cbturner AT GEG25546

CONTRACT:



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

February 28, 2014

STATE PROJECT: 34442.1.3 (R-2514B)  
F.A. PROJECT: NHF-17(7)  
COUNTY: Jones  
DESCRIPTION: US 17 from South of Belgrade at SR1330/SR 1439 to North of Maysville

SUBJECT: Geotechnical Inventory Report

**Project Description**

This project begins south of Maysville in Onslow County, just north of the existing US 17/ SR 1330-SR1437 intersection and extends north for approximately 4.2 miles. This geotechnical investigation was confined to the areas of proposed construction.

Fieldwork was conducted in August of 2012 through September 2012. CPT, SPT, and hand auger borings were completed at various offsets along the project corridor. Representative soil samples were collected for visual classification in the field and for laboratory analysis by the Materials and Tests Unit.

The following alignments were investigated. Subsurface profiles and selected cross sections of these alignments are included in this report.

<u>Line</u>	<u>Station(±)</u>
-L-	12+00 to 231+42
-Y1-	10+00 to 17+25
-Y1A-	10+00 to 18+46
-Y2-	12+00 to 32+00
-Y2A-	10+00 to 43+00
-Y2B-	10+00 to 12+75
-Y2C-	10+00 to 13+51
-Y2D-	10+00 to 30+62

<u>Line</u>	<u>Station(±)</u>
-Y2E-	10+00 to 14+65
-Y3-	10+50 to 27+50
-Y3A-	10+00 to 40+35
-Y3B-	10+00 to 13+10
-Y3C-	10+00 to 18+70
-Y3D-	10+00 to 12+68
-Y3E-	10+00 to 13+00

**Areas of Special Geotechnical Interest**

1) The following sections were found to exhibit seasonal high ground water.

<u>Line</u>	<u>Station(±)</u>
-L-	12+00 to 45+00
-L-	55+00 to 80+00
-L-	85+00 to 91+00
-L-	97+00 to 168+00
-L-	209+00 to 231+42
-Y1-	10+00 to 17+25
-Y1A-	10+00 to 18+46
-Y2-	12+00 to 32+00
-Y2A-	10+00 to 21+50
-Y2A-	25+00 to 35+00
-Y2A-	37+00 to 43+00
-Y2B-	10+00 to 12+75
-Y2C-	10+00 to 13+51
-Y2D-	10+00 to 12+00
-Y2D-	19+50 to 30+62
-Y2E-	10+00 to 14+65
-Y3-	14+00 to 27+50
-Y3A-	10+00 to 40+35
-Y3C-	12+00 to 18+70

2) All but the following sections contain cohesive soils which have the potential to cause embankment/subgrade and or slope stability problems during construction.

<u>Line</u>	<u>Station(±)</u>
-L-	97+75 to 103+25
-L-	144+10 to 151+10
-Y2-	25+10 to 32+00
-Y2A-	25+40 to 33+40

MAILING ADDRESS:  
NC DEPARTMENT OF TRANSPORTATION  
GEOTECHNICAL ENGINEERING UNIT  
1589 MAIL SERVICE CENTER  
RALEIGH NC 27699-1589

TELEPHONE: 919-707-6850  
FAX: 919-250-4237

WEBSITE: WWW.DOH.DOT.STATE.NC.US

LOCATION:  
CENTURY CENTER COMPLEX  
ENTRANCE B-2  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC

<u>Line</u>	<u>Station(±)</u>
-Y2C-	10+00 to 13+51
-Y2D-	10+00 to 11+70
-Y2D-	25+10 to 30+62

3) The following sections contain organic soils that have the potential to cause embankment/subgrade and or slope stability problems during construction.

<u>Line</u>	<u>Station(±)</u>
-L-	71+71 to 77+29
-L-	99+05 to 101+26
-L-	128+30 to 131+60
-L-	147+27 to 149+26
-Y2A-	30+20 to 31+95

**Physiography and Geology**

This project corridor is located within the Coastal Plain Physiographic Province. Topography along the project is nearly flat to gently sloping. Natural ground elevations ranged from 5± to 46± feet above sea level.

Surficial soils in this area are generally classified as undivided coastal plain sediments and are underlain by formational soils belonging to the Belgrade and River Bend Formation.

**Ground Water**

Ground water data was collected from August 2012 through September 2012. Ground water elevations ranged from 11± to 43± feet above sea level.

**Soils**

Soils encountered within this project area have been divided into four categories, alluvial soils, undivided coastal plain soils, formational soils, and roadway embankment.

Surficial alluvial organic soils were also identified. These soils were typically 1± to 5± feet thick and composed of very soft muck, very soft silts (A-5), along with very loose sands (A-2-4). Lab analysis of these soils returned organic percentages ranging from 2% to 19% and moisture contents ranging from 16% to 60%.

Soils identified as undivided coastal plain are composed of 4± to 25± feet of very loose to dense sand (A-2-6, A-2-4, A-3, A-1-b), with 2± to 9± feet of soft to stiff sandy clay (A-6, A-7-6) and sandy silt (A-4). Moisture samples taken within these cohesive units returned a natural moisture content ranging from 21% to 23%. Vane shear tests completed within these soils show shear strength values ranging from 753 psf to 4343 psf.

Formational soils belonging to the Belgrade Formation and the River Bend Formation were also encountered. The Belgrade Formation was found to be 12± feet of very loose to medium dense sand (A-2-4) and 3± feet of very stiff sandy silt (A-4); whereas the underlying River Bend Formation was composed of 11± feet of soft limestone underlain by dense sand (A-2-4).

Roadway embankment soils were found along the existing US 17 corridor and associated intersecting roads. Where encountered it was composed of 1± to 3± feet of loose to medium dense sand (A-2-4) with 2± feet of medium stiff sandy clay (A-6) and sandy silt (A-4).

**Undisturbed Samples**

Undisturbed thin wall Shelby tube samples were collected at the following locations and submitted for testing.

<u>Sample No.</u>	<u>Station</u>	<u>Depth</u>	<u>Test</u>
ST-1	-L- STA. 60+05, CL	2.0-4.0	Consolidation
ST-2	-L- STA. 90+05, CL	3.0-5.0	Consolidation
ST-3	-L- STA. 130+05, CL	8.0-10.0	Consolidation
ST-4	-L- STA. 220+05, CL	6.5-8.5	Consolidation

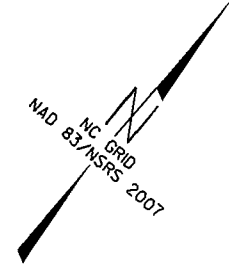
Respectfully Submitted,

Joseph L. Stone, L.G.  
Project Engineering Geologist

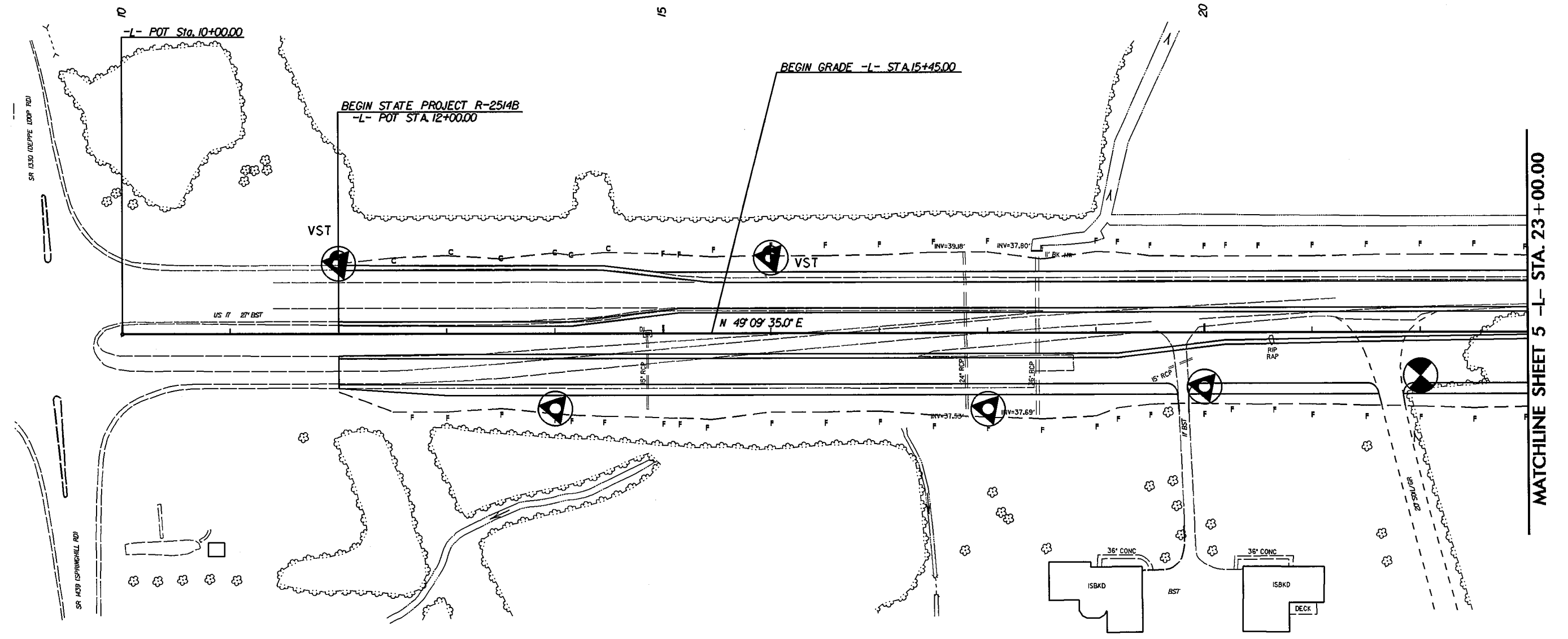
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REVISIONS



PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>4</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



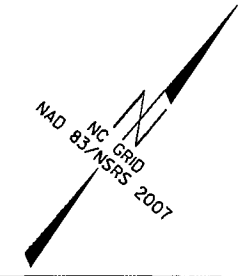
MATCHLINE SHEET 5 -L- STA. 23+00.00

8/17/99

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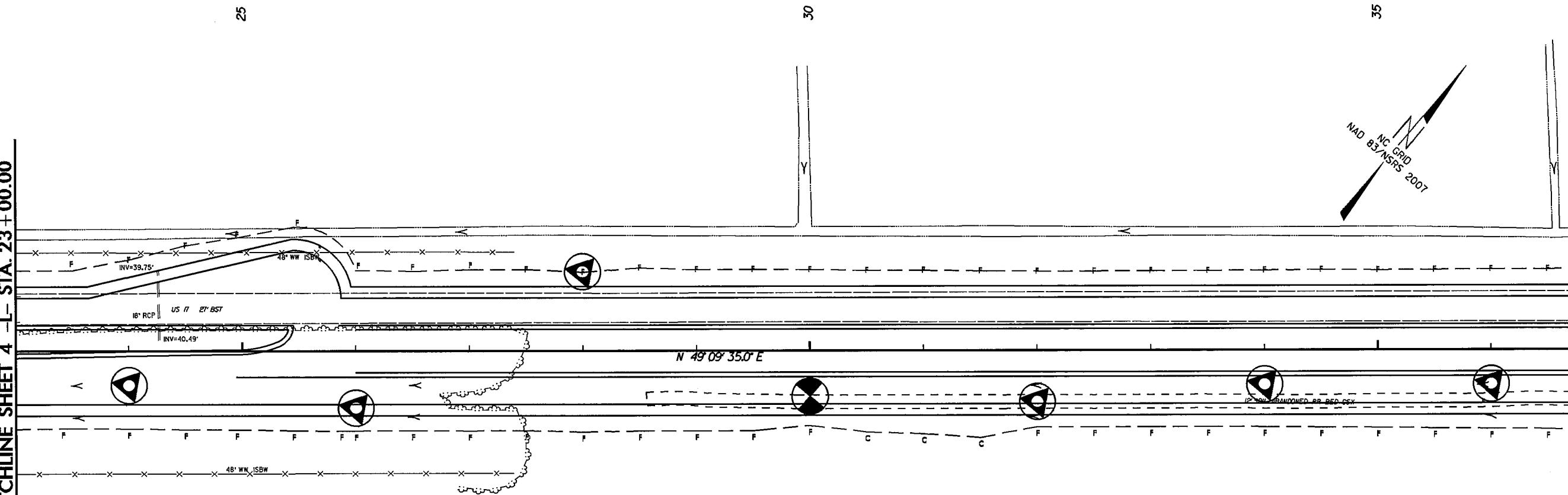
REVISIONS

PROJECT REFERENCE NO.		SHEET NO.	
R-2514B		5	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



MATCHLINE SHEET 4 -L- STA. 23+00.00

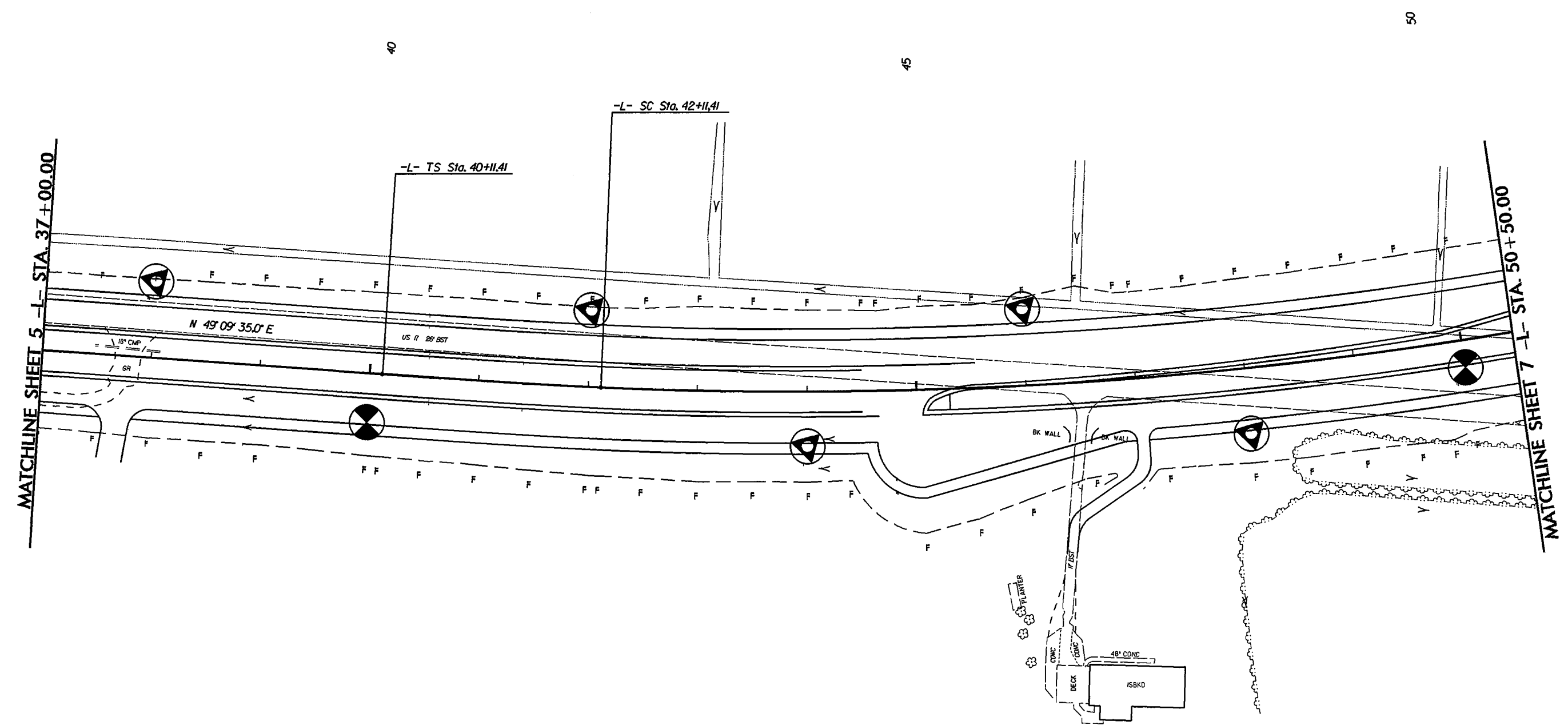
MATCHLINE SHEET 6 -L- STA. 37+00.00



CONCRETE ISLAND

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 25148.dgn

PROJECT REFERENCE NO. R-2514B	SHEET NO. 6
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



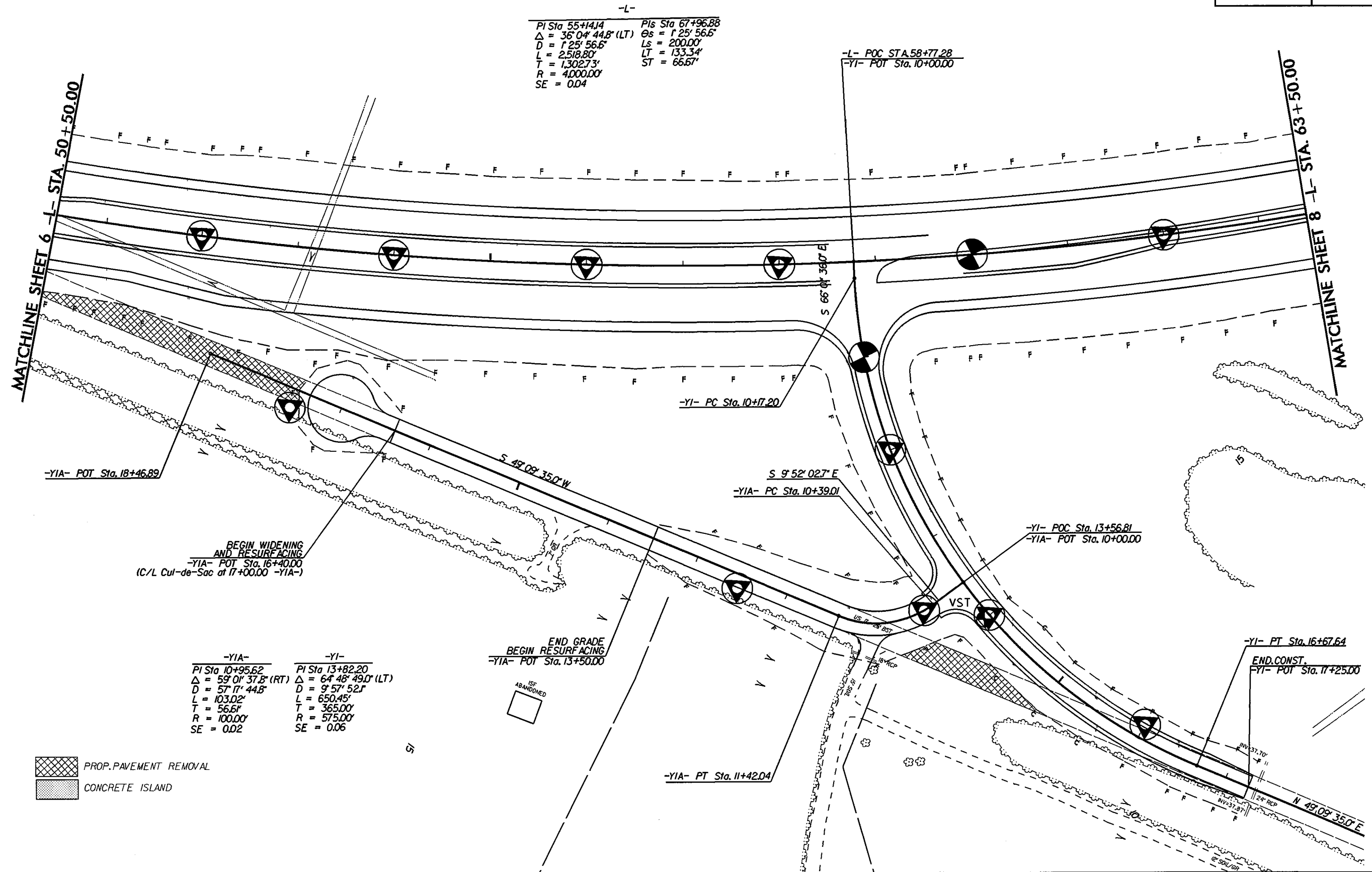
-L-

Pls Sta 41+44.75	PI Sta 55+14.14	Pls Sta 67+96.88
$\theta_s = 1^\circ 25' 56.6''$	$\Delta = 36^\circ 04' 44.8''$ (LT)	$\theta_s = 1^\circ 25' 56.6''$
$L_s = 200.00'$	$D = 1^\circ 25' 56.6''$	$L_s = 200.00'$
$LT = 133.34'$	$L = 2,518.80'$	$LT = 133.34'$
$ST = 66.67'$	$T = 1,302.73'$	$ST = 66.67'$
	$R = 4,000.00'$	
	$SE = 0.04$	

CONCRETE ISLAND  
 PROP. PAVEMENT REMOVAL



PROJECT REFERENCE NO. R-2514B		SHEET NO. 7	
RAW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION			



-L-

PI Sta 55+14.14	PIs Sta 67+96.88
$\Delta = 36^{\circ}04'44.8''$ (LT)	$\Theta s = 1^{\circ}25'56.6''$
D = 125' 56.6'	LS = 200.00'
L = 2518.80'	LT = 133.34'
T = 1302.73'	ST = 66.67'
R = 4000.00'	
SE = 0.04	

MATCHLINE SHEET 6 -L- STA. 50+50.00

MATCHLINE SHEET 8 -L- STA. 63+50.00

-YIA- POT Sta. 18+46.89

BEGIN WIDENING AND RESURFACING  
-YIA- POT Sta. 16+40.00  
(C/L Cul-de-Sac at 17+00.00 -YIA-)

-YIA-	-YI-
PI Sta 10+95.62	PI Sta 13+82.20
$\Delta = 59^{\circ}01'37.8''$ (RT)	$\Delta = 64^{\circ}46'49.0''$ (LT)
D = 57' 17" 44.8"	D = 9' 57" 52.1"
L = 103.02'	L = 650.45'
T = 56.6'	T = 365.00'
R = 100.00'	R = 575.00'
SE = 0.02	SE = 0.06

END GRADE BEGIN RESURFACING  
-YIA- POT Sta. 13+50.00

- PROP. PAVEMENT REMOVAL
- CONCRETE ISLAND

-YI- PT Sta. 16+67.64  
END CONST.  
-YI- POT Sta. 17+25.00

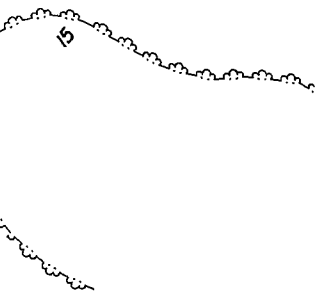
-YIA- PT Sta. 11+42.04

-L- POC STA. 58+77.28  
-YI- POT Sta. 10+00.00

-YI- PC Sta. 10+17.20

S 9' 52" 02.7" E  
-YIA- PC Sta. 10+39.01

-YI- POC Sta. 13+56.81  
-YIA- POT Sta. 10+00.00



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REVISIONS

PROJECT REFERENCE NO. R-2514B	SHEET NO. 8
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

-L-

PI Sta 55+14.14	PIs Sta 67+96.88
$\Delta = 36^{\circ} 04' 44.8''$ (LT)	$\Theta_s = 1^{\circ} 25' 56.6''$
D = 125' 56.6"	Ls = 200.00'
L = 2,518.80'	LT = 133.34'
T = 1,302.73'	ST = 66.67'
R = 4,000.00'	
SE = 0.04	

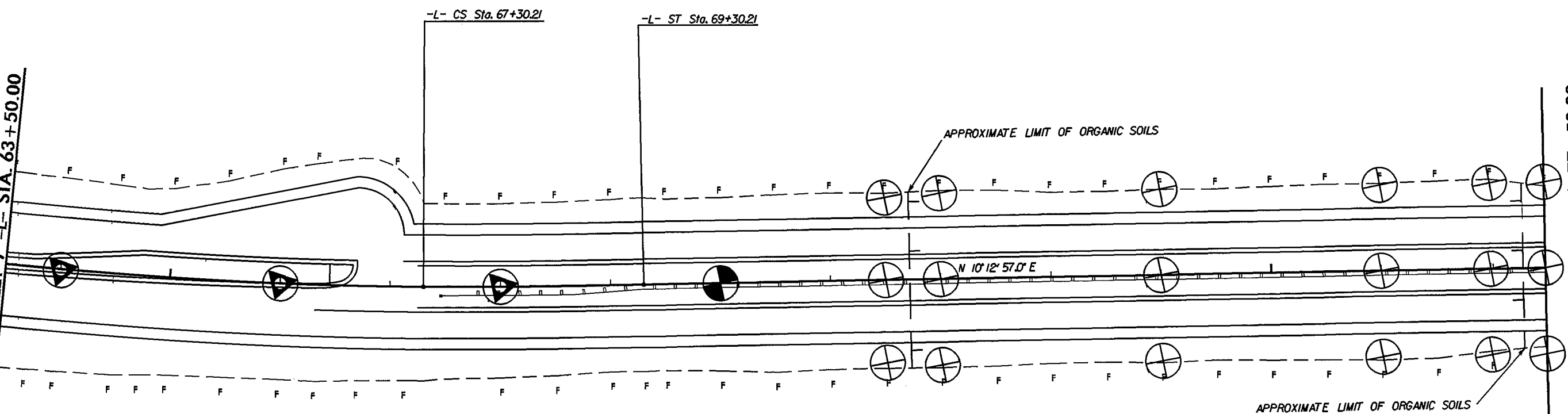
65

70

75

MATCHLINE SHEET 7 -L- STA. 63+50.00

MATCHLINE SHEET 9 -L- STA. 77+50.00



CONCRETE ISLAND

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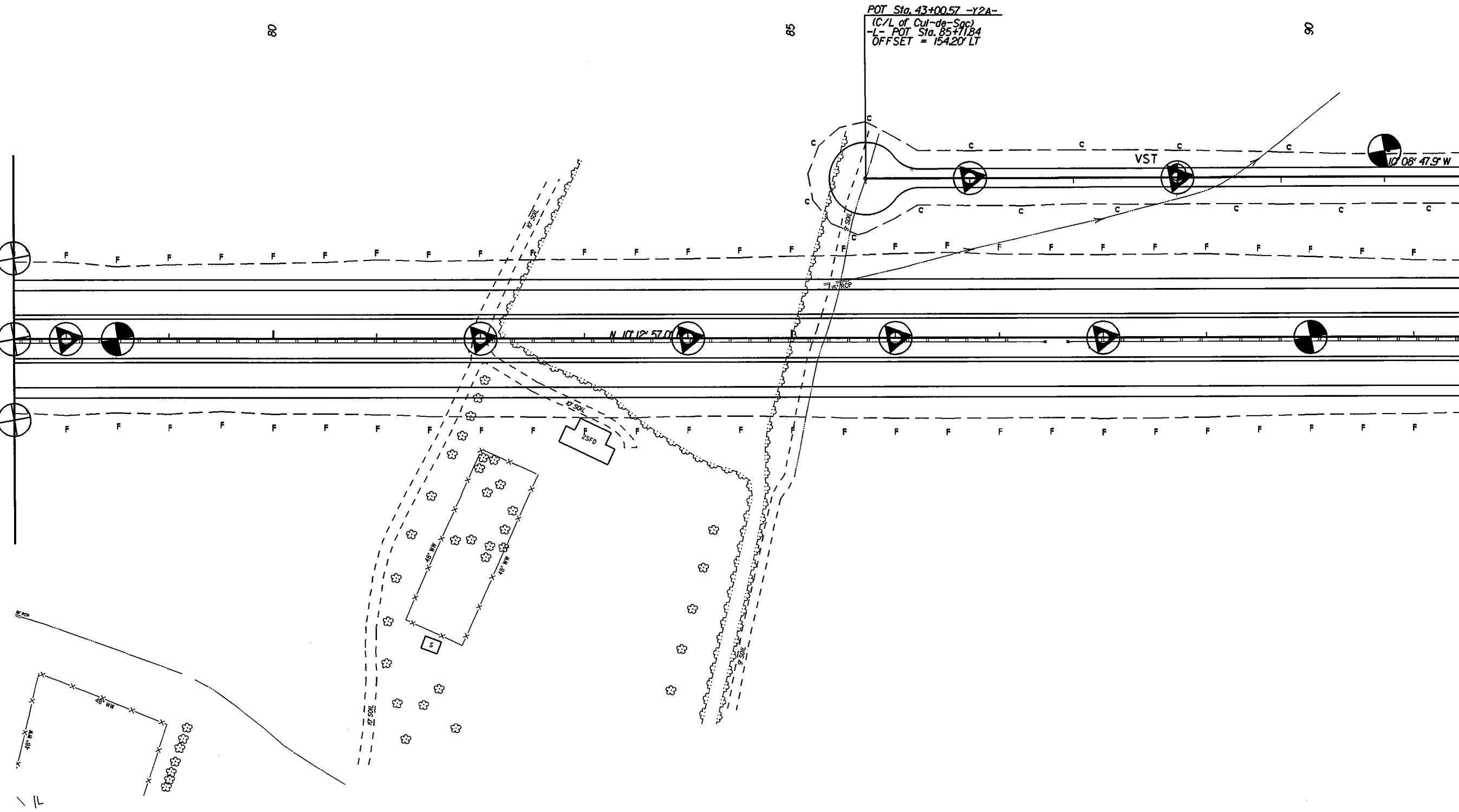
REVISIONS

PROJECT REFERENCE NO. R-2514B	SHEET NO. 9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE SHEET 8 -L- STA. 77 +50.00

MATCHLINE SHEET 10  
-L- STA. 91 +50.00



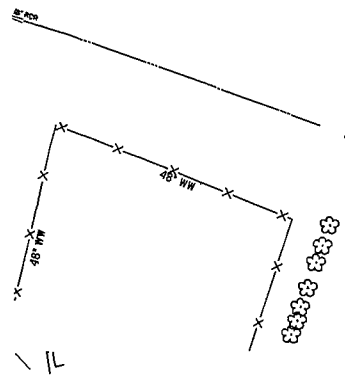
POT Sta. 43+00.57 -Y2A-  
(C/L of Cul-de-Sac)  
-L- POT Sta. 85+71.84  
OFFSET = 154.20' LT

N 10° 12' 57.00"

VST

10° 08' 47.9" W

25FO





PROJECT REFERENCE NO.	SHEET NO.
R-2514B	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

8/17/99

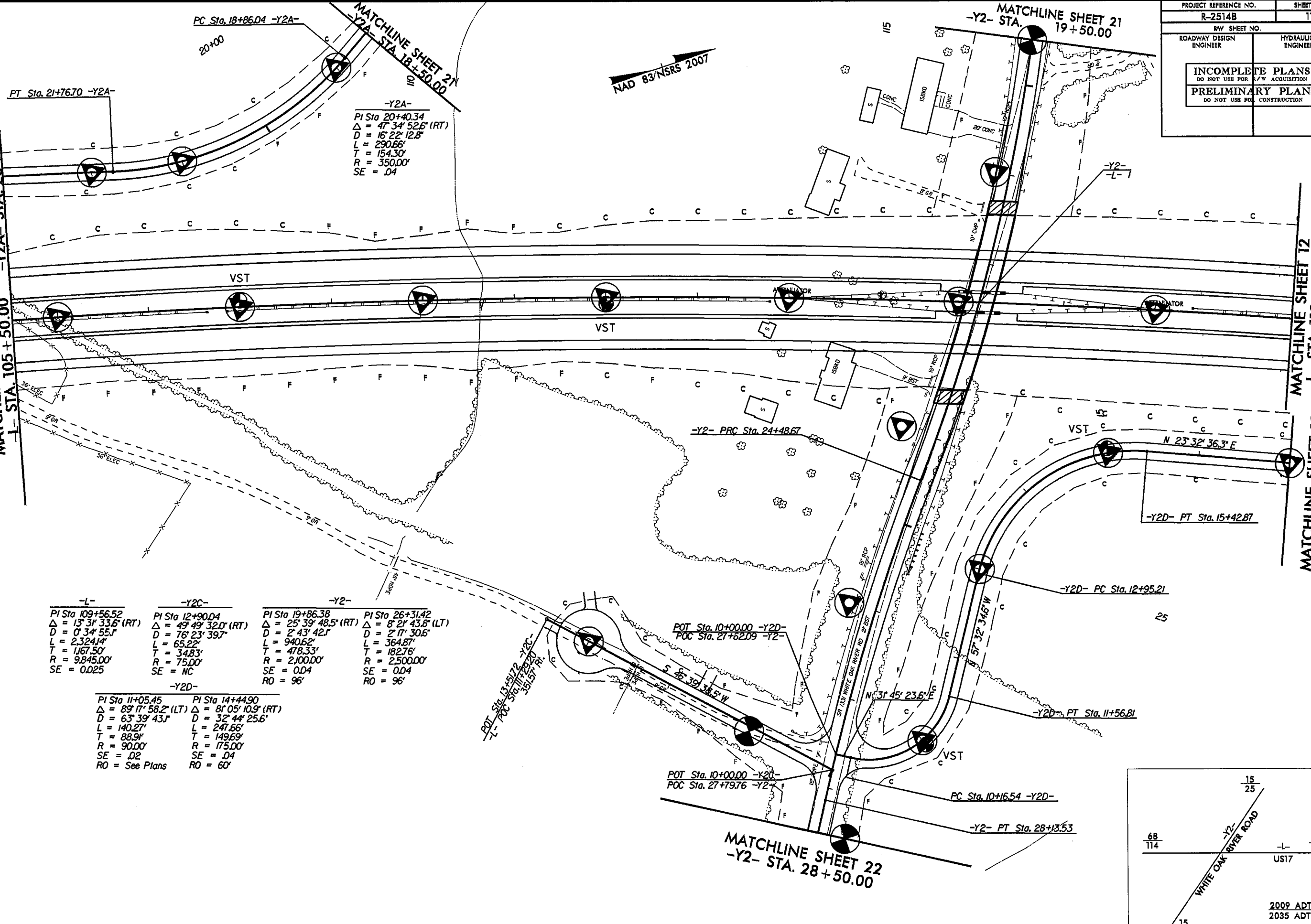


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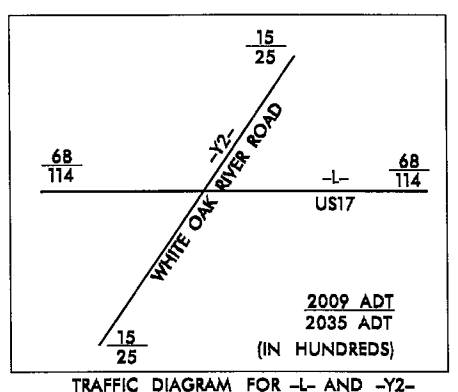
MATCHLINE SHEET 10  
-L- STA. 105+50.00  
MATCHLINE SHEET 10  
-Y2A- STA. 23+00.00

MATCHLINE SHEET 12  
-L- STA. 119+50.00  
MATCHLINE SHEET 12  
-Y2D- STA. 17+00.00



-L-	-Y2C-	-Y2-	-Y2-
PI Sta 109+56.52 $\Delta = 13^\circ 31' 33.6''$ (RT) D = 0' 34' 55.1" L = 2,324.14' T = 1,167.50' R = 9,845.00' SE = 0.025	PI Sta 12+90.04 $\Delta = 49^\circ 49' 32.0''$ (RT) D = 76' 23' 39.7" L = 65.22' R = 75.00' SE = NC	PI Sta 19+86.38 $\Delta = 25^\circ 39' 48.5''$ (RT) D = 2' 43' 42.1" L = 940.62' T = 478.33' R = 2,100.00' SE = 0.04 RO = 96'	PI Sta 26+31.42 $\Delta = 8^\circ 21' 43.8''$ (LT) D = 2' 17' 30.5" L = 364.87' T = 182.76' R = 2,500.00' SE = 0.04 RO = 96'
PI Sta 11+05.45 $\Delta = 89^\circ 17' 58.2''$ (LT) D = 65' 39' 43.1" L = 140.27' T = 88.91' R = 90.00' SE = .02 RO = See Plans	PI Sta 14+44.90 $\Delta = 8^\circ 05' 10.9''$ (RT) D = 32' 44' 25.6" L = 247.66' T = 149.69' R = 175.00' SE = .04 RO = 60'		

MATCHLINE SHEET 22  
-Y2- STA. 28+50.00



2009 ADT  
2035 ADT  
(IN HUNDREDS)

8/17/99

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PROJECT REFERENCE NO. R-2514B	SHEET NO. 12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NRS 2007

-L-  
 PI Sta 109+56.52  
 $\Delta = 13^{\circ} 31' 33.6''$  (RT)  
 $D = 0^{\circ} 34' 55.1''$   
 $L = 2,324.14'$   
 $T = 1,167.50'$   
 $R = 9,845.00'$   
 $SE = 0.025$   
 $RO = 80'$

-L- PT Sta. 121+13.17

N 23° 44' 30.6" E

N 23° 32' 36.3" E

-Y2D-DR-  
 PI Sta 30+01.38  
 $\Delta = 27^{\circ} 44' 17.7''$  (RT)  
 $D = 63^{\circ} 39' 43.1''$   
 $L = 43.57'$   
 $T = 22.22'$   
 $R = 90.00'$   
 $SE = NC$

C/L CUL-DE-SAC  
 -Y2D-DR- POT Sta. 28+20.00  
 -Y2D-DR- PC Sta. 29+79.15  
 -Y2D-DR- PT Sta. 30+22.73

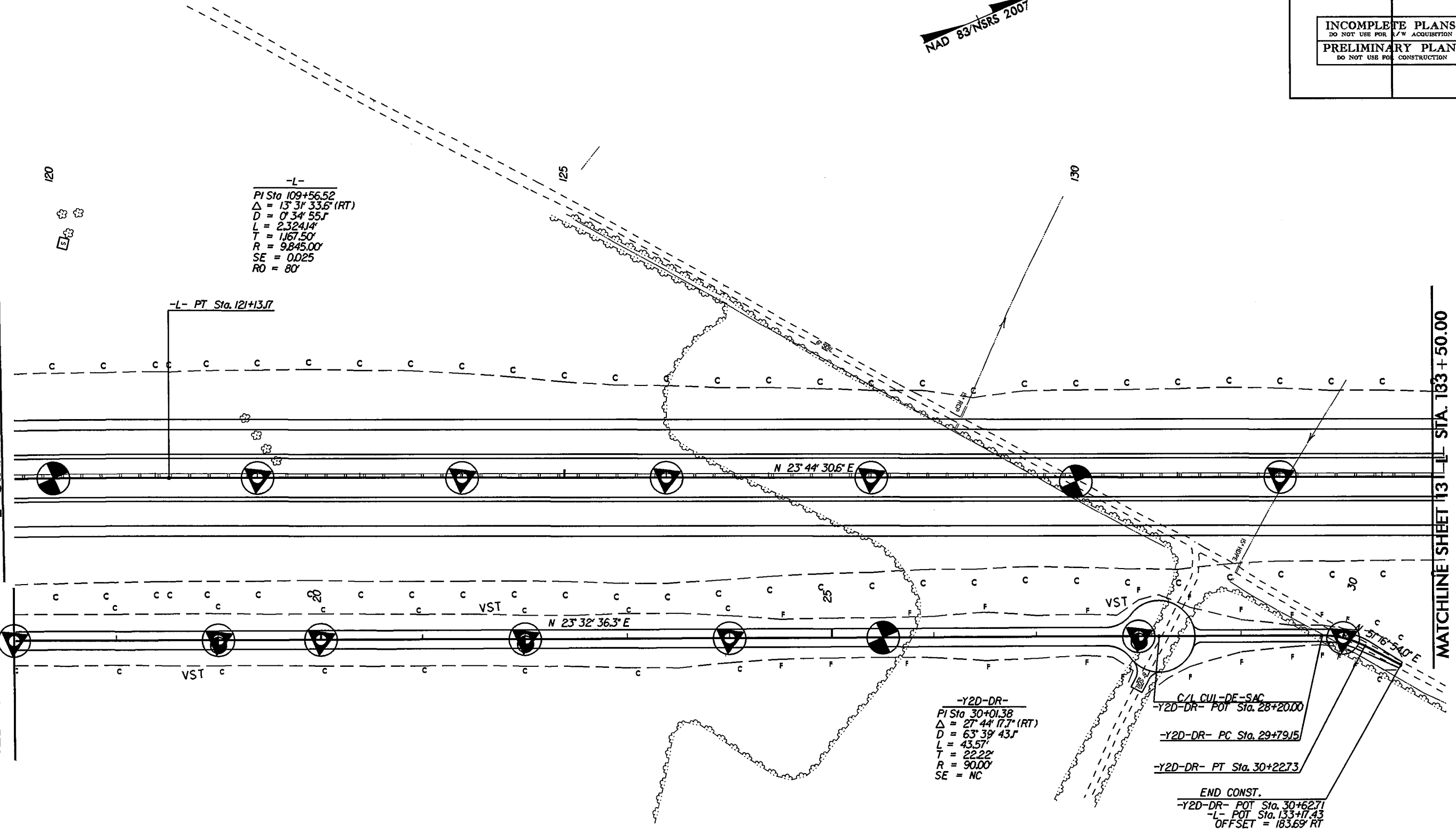
END CONST.  
 -Y2D-DR- POT Sta. 30+62.71  
 -L- POT Sta. 133+17.43  
 OFFSET = 183.69' RT

MATCHLINE SHEET 11  
-L- STA. 119 + 50.00

MATCHLINE SHEET 11  
-Y2D- STA. 17 + 00.00

MATCHLINE SHEET 13  
-L- STA. 133 + 50.00

REVISIONS

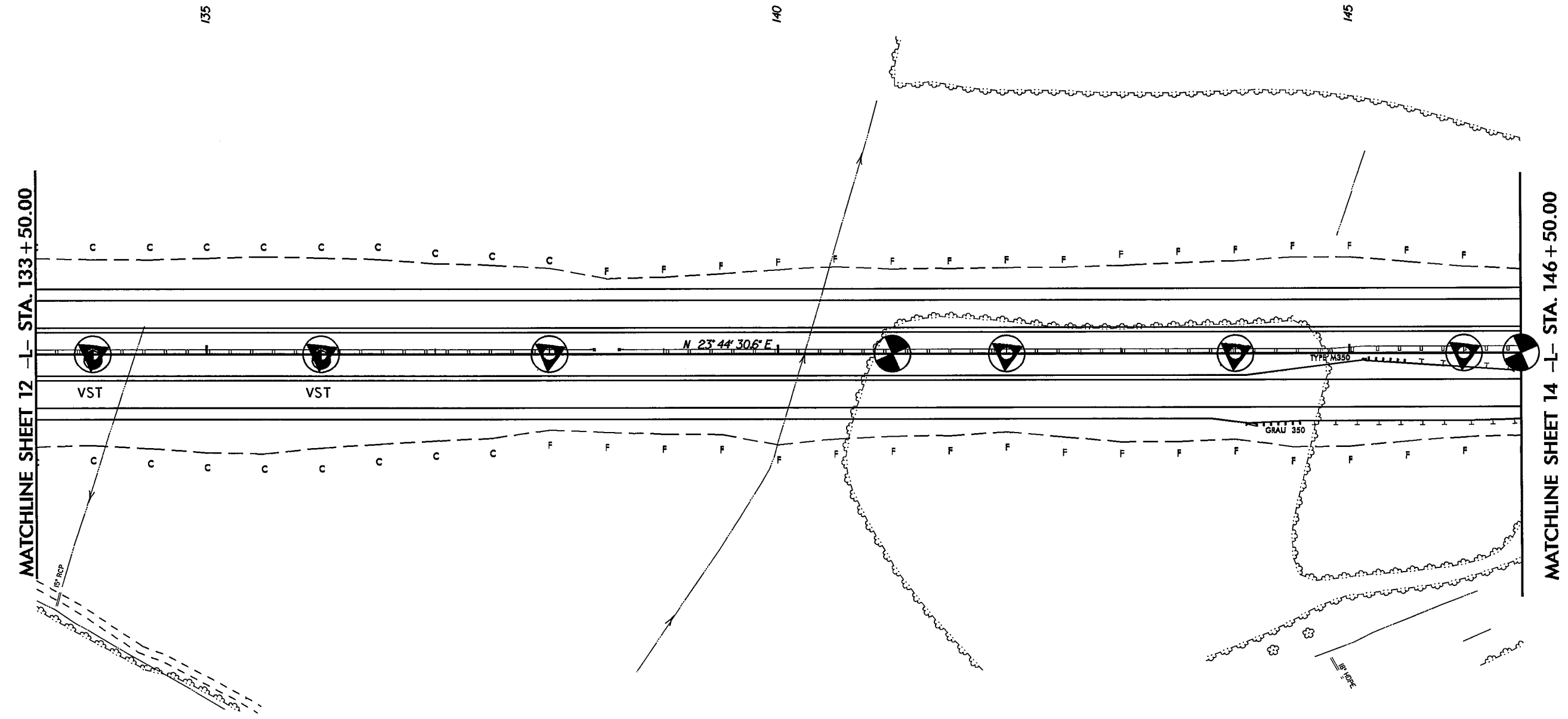


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REVISIONS

PROJECT REFERENCE NO. R-2514B	SHEET NO. 13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007



MATCHLINE SHEET 12 -L- STA. 133 + 50.00

MATCHLINE SHEET 14 -L- STA. 146 + 50.00

VST

VST

$N 23^{\circ} 44' 30.6'' E$

GRAU 350

1" = 100'

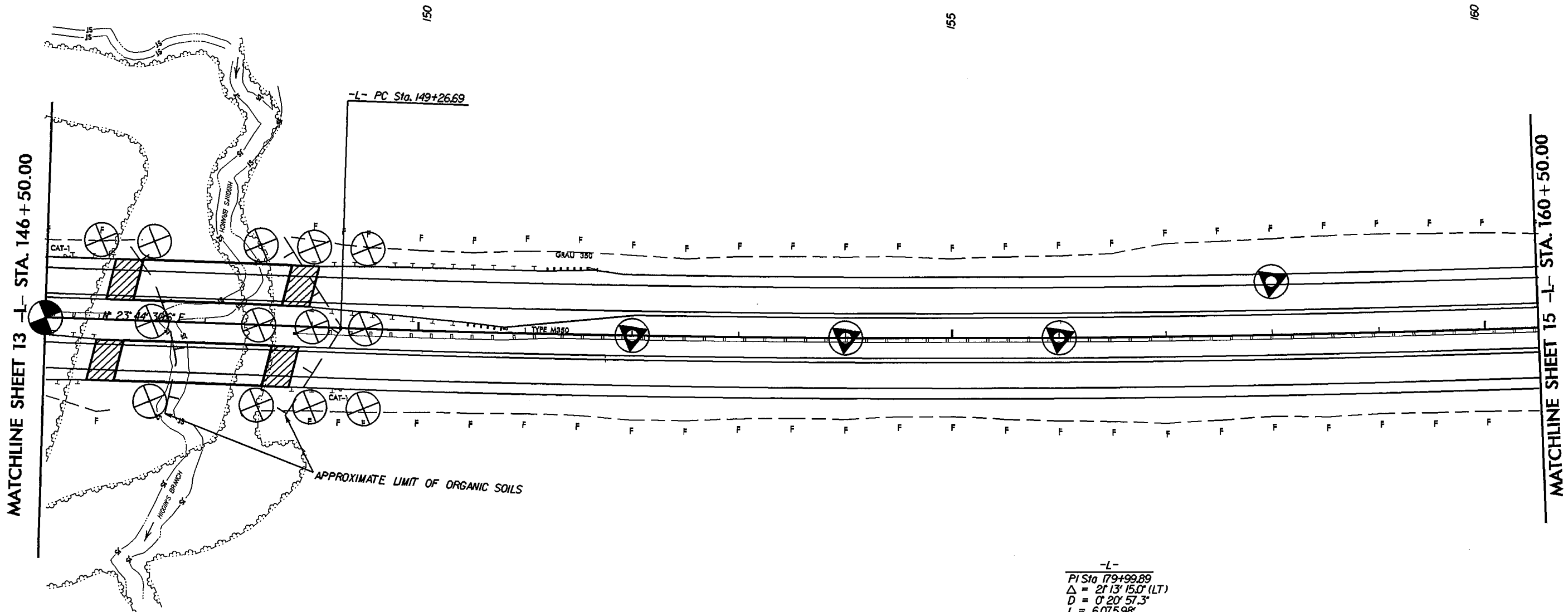
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REVISIONS

PROJECT REFERENCE NO.		SHEET NO.	
R-2514B		14	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR A/W ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007



-L-  
 PI Sta 179+99.89  
 $\Delta = 21' 13" 15.0" (LT)$   
 $D = 0' 20" 57.3"$   
 $L = 6,075.98'$   
 $T = 3,073.20'$   
 $R = 16,405.00'$   
 SE = NC

MATCHLINE SHEET 13 -L- STA. 146+50.00

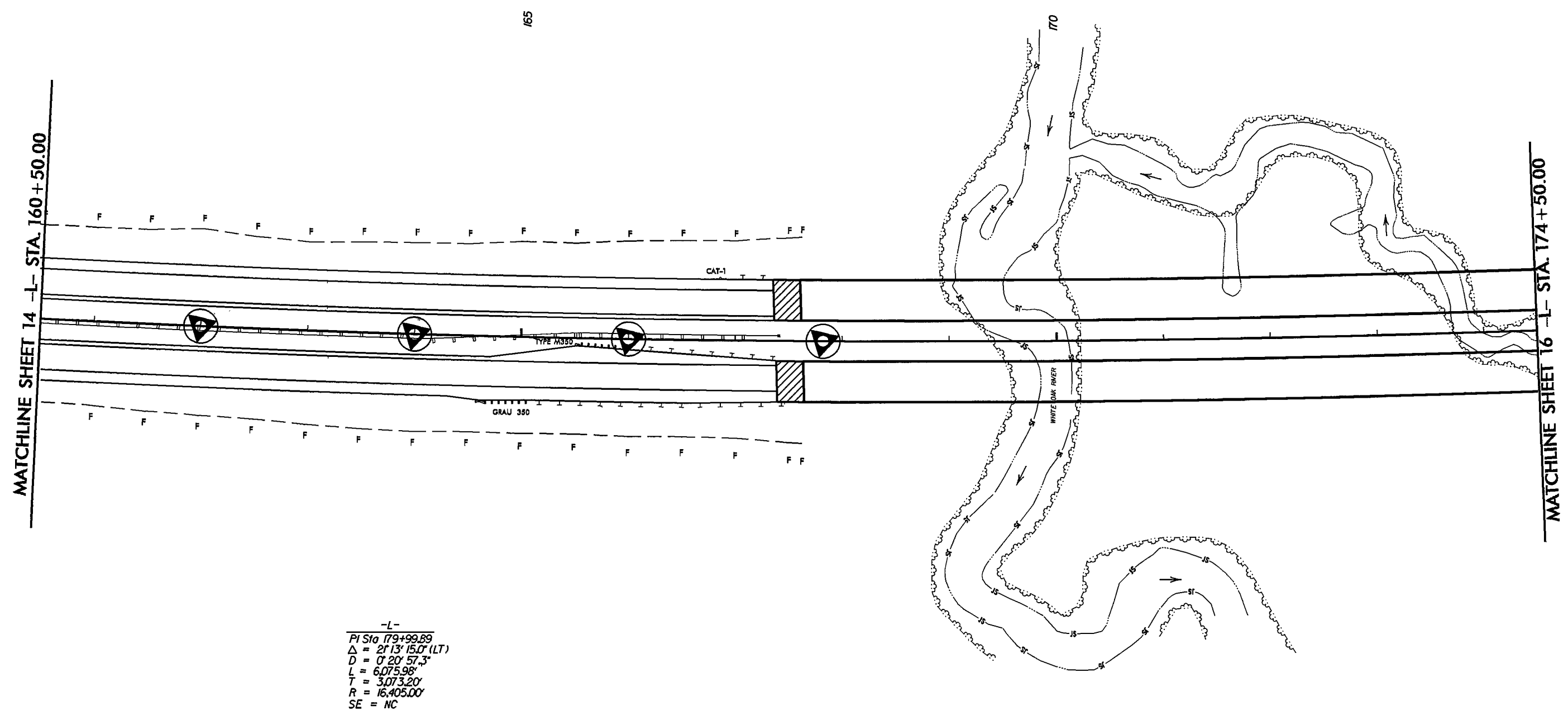
MATCHLINE SHEET 15 -L- STA. 160+50.00



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PROJECT REFERENCE NO.	SHEET NO.
R-2514B	15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007



-L-  
 PI Sta 179+99.89  
 $\Delta = 21^{\circ} 13' 15.0''$  (LT)  
 $D = 0^{\circ} 20' 57.3''$   
 $L = 6,075.98'$   
 $T = 3,073.20'$   
 $R = 16,405.00'$   
 SE = NC

165

170

MATCHLINE SHEET 14 -L- STA. 160+50.00

MATCHLINE SHEET 16 -L- STA. 174+50.00

CAT-1

TYPE M350

GRAU 350

WHITE OAK RIVER

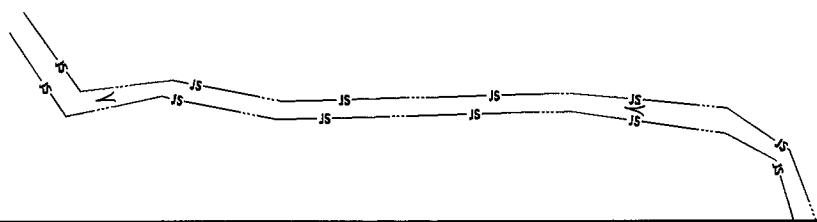
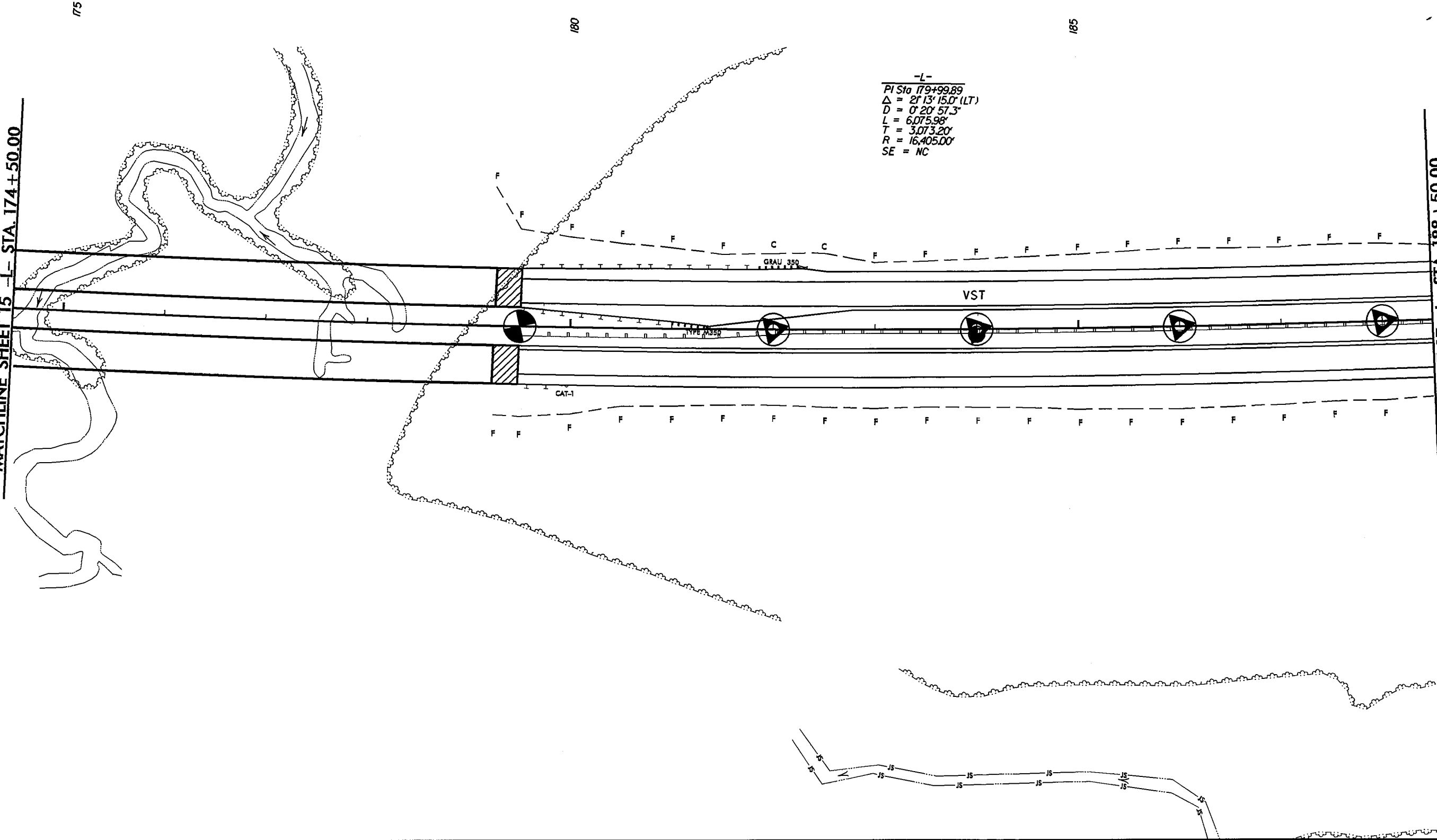
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PROJECT REFERENCE NO. R-2514B	SHEET NO. 16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007

MATCHLINE SHEET 15 -L- STA. 174+50.00

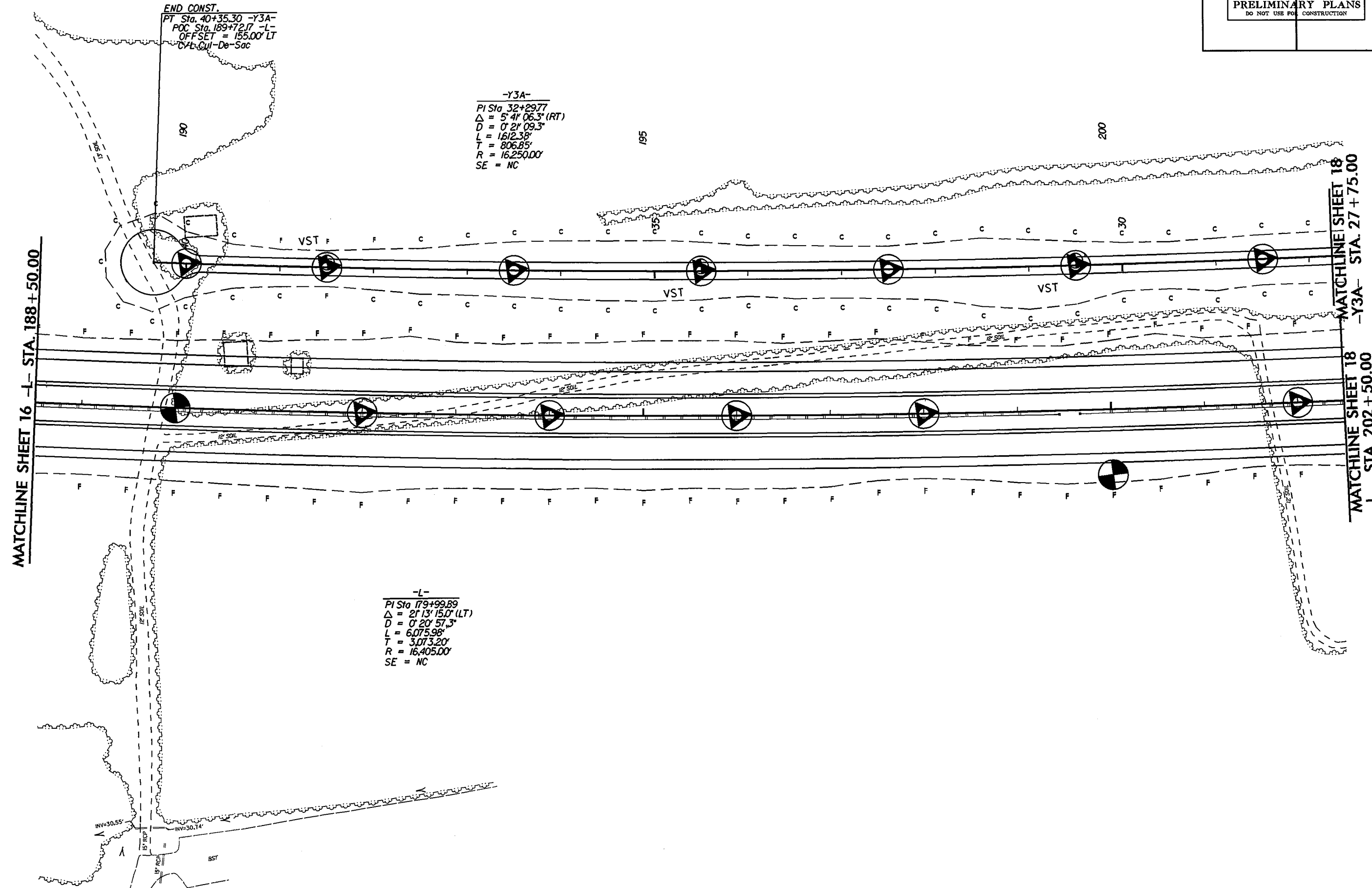
MATCHLINE SHEET 17 -L- STA. 188+50.00



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PROJECT REFERENCE NO.	SHEET NO.
R-2514B	17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83/NSRS 2007



**END CONST.**  
 PT Sta. 40+35.30 -Y3A-  
 POC Sta. 189+72.17 -L-  
 OFFSET = 155.00' LT  
 CxL-Cul-De-Sac

-Y3A-  
 PI Sta 32+29.77  
 $\Delta = 5^\circ 41' 06.3''$  (RT)  
 $D = 0^\circ 21' 09.3''$   
 $L = 1612.38'$   
 $T = 806.85'$   
 $R = 16,250.00'$   
 SE = NC

-L-  
 PI Sta 179+99.89  
 $\Delta = 2^\circ 13' 15.0''$  (LT)  
 $D = 0^\circ 20' 57.3''$   
 $L = 6,075.98'$   
 $T = 3,073.20'$   
 $R = 16,405.00'$   
 SE = NC

MATCHLINE SHEET 16 -L- STA. 188+50.00

MATCHLINE SHEET 18  
 -Y3A- STA. 27+75.00  
 MATCHLINE SHEET 18  
 -L- STA. 202+50.00

REVISIONS

8/17/09

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REVISIONS

**-Y3A-**

PI Sta 23+15.07	PI Sta 18+47.39
$\Delta = 36^\circ 36' 23.8''$ (RT)	$\Delta = 37^\circ 21' 13.2''$ (LT)
D = 16' 22' 12.8"	D = 11' 27' 33.0"
L = 223.62'	L = 325.97'
T = 115.77'	T = 169.02'
R = 350.00'	R = 500.00'
SE = .04	SE = .04
RO = 60'	RO = 60'

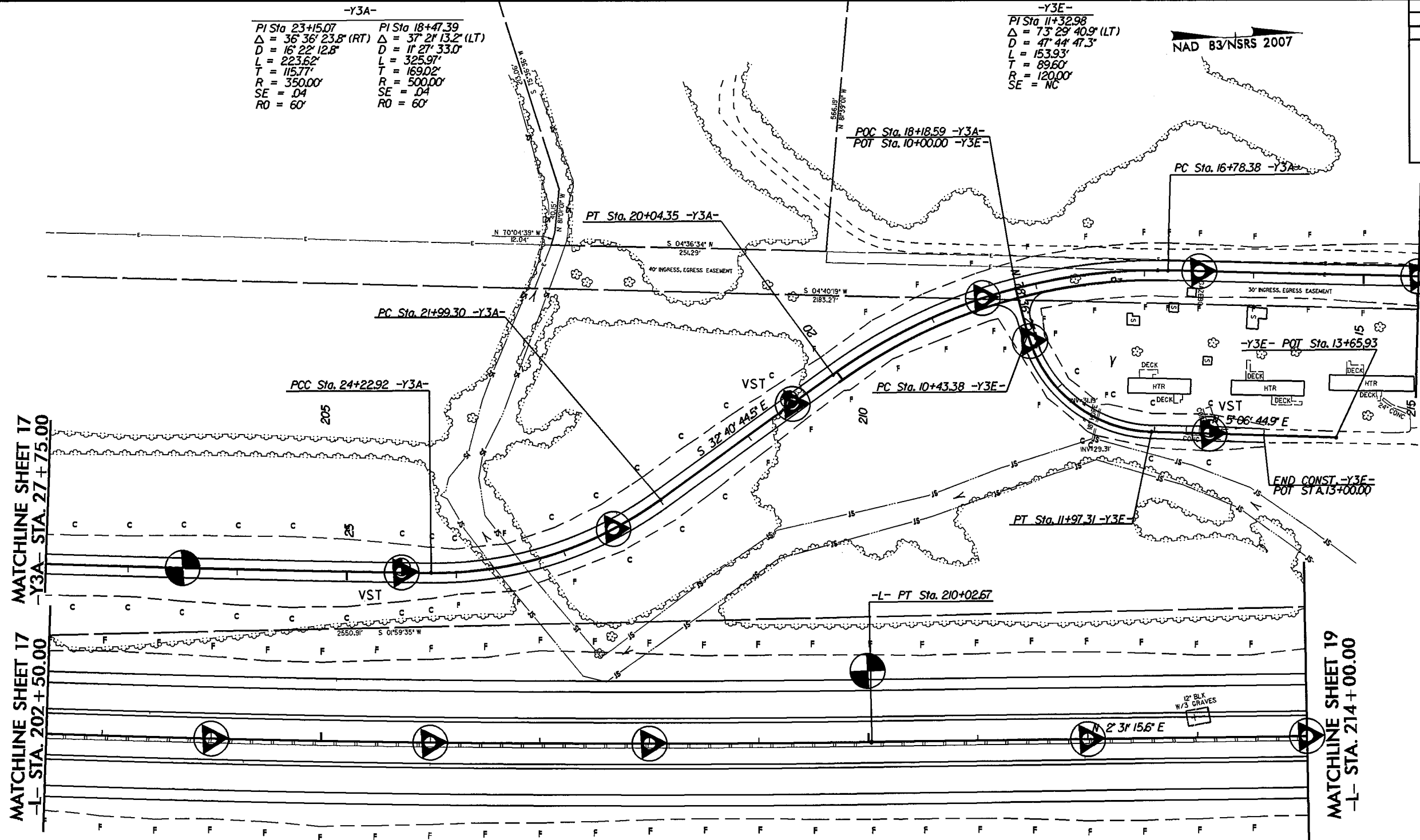
**-Y3E-**

PI Sta 11+32.98
$\Delta = 73^\circ 29' 40.9''$ (LT)
D = 47' 44' 47.3"
L = 153.93'
T = 89.60'
R = 120.00'
SE = NC

**-L-**

PI Sta 179+99.89
$\Delta = 21^\circ 13' 15.0''$ (LT)
D = 0' 20' 57.3"
L = 6,075.98'
T = 3,073.20'
R = 16,405.00'
SE = NC

PROJECT REFERENCE NO. R-2514B	SHEET NO. 18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



MATCHLINE SHEET 17  
-L- STA. 202 + 50.00

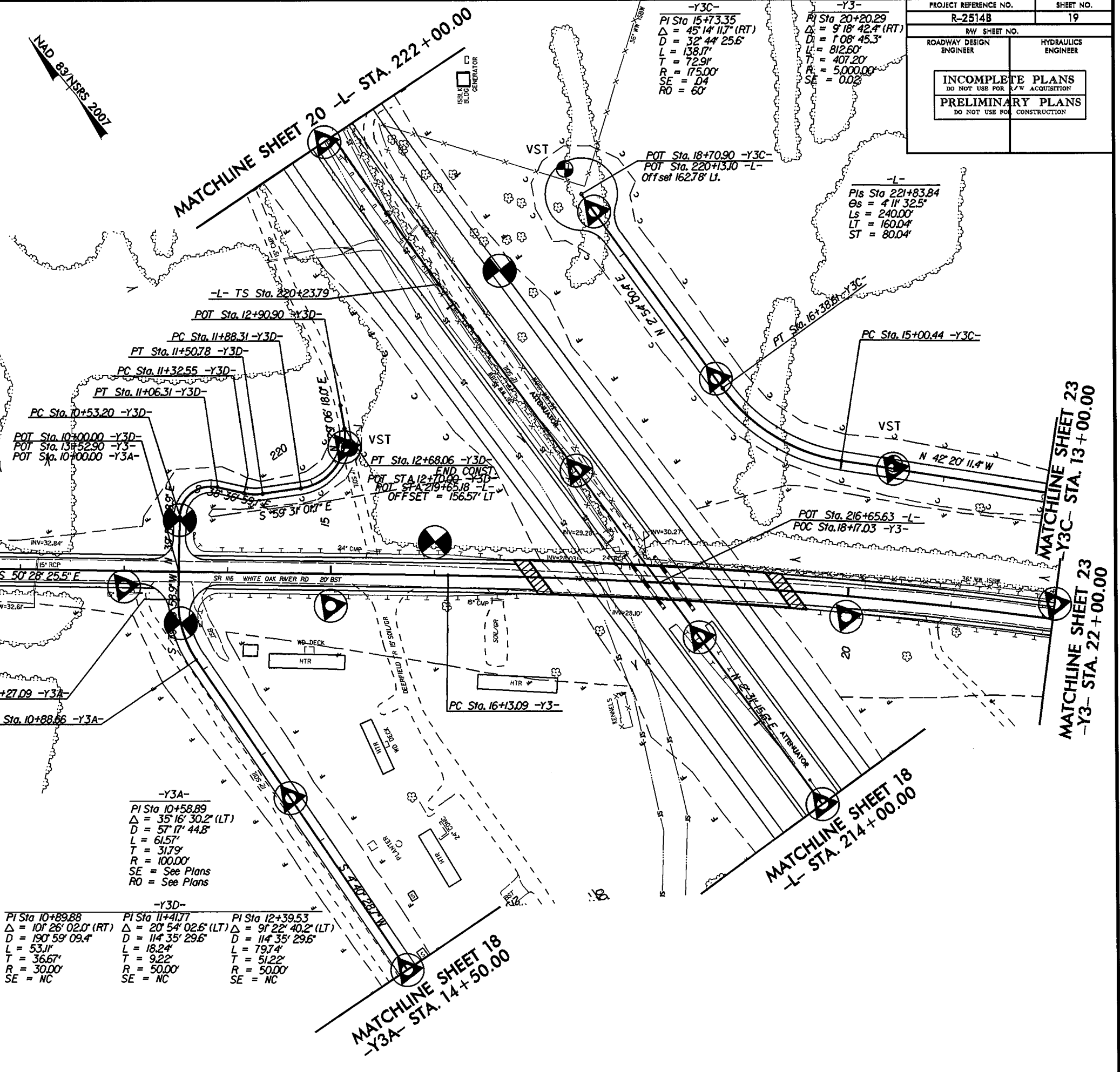
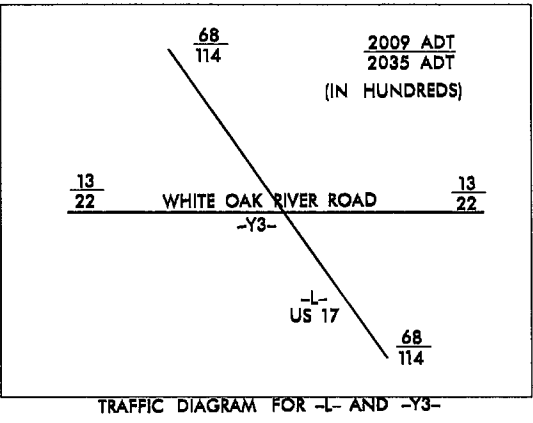
MATCHLINE SHEET 17  
-Y3A- STA. 27 + 75.00

MATCHLINE SHEET 19  
-L- STA. 214 + 00.00

MATCHLINE SHEET 19  
-Y3A- STA. 14 + 50.00

NAD 83/NSRS 2007

PROJECT REFERENCE NO. R-2514B	SHEET NO. 19
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**-Y3C-**  
 PI Sta 15+73.35  
 $\Delta = 45^\circ 14' 11.7''$  (RT)  
 $D = 32' 44' 25.6''$   
 $L = 138.17'$   
 $T = 72.91'$   
 $R = 175.00'$   
 $SE = .04'$   
 $RO = 60'$

**-Y3-**  
 RI Sta 20+20.29  
 $\Delta = 9^\circ 18' 42.4''$  (RT)  
 $D = 1' 08' 45.3''$   
 $L = 812.60'$   
 $T = 407.20'$   
 $R = 5,000.00'$   
 $SE = 0.02'$

**-L-**  
 PI Sta 221+83.84  
 $G_s = 4' 11' 32.5''$   
 $L_s = 240.00'$   
 $LT = 160.04'$   
 $ST = 80.04'$

**-Y3A-**  
 PI Sta 10+58.89  
 $\Delta = 35^\circ 16' 30.2''$  (LT)  
 $D = 57' 17' 44.8''$   
 $L = 61.57'$   
 $T = 31.79'$   
 $R = 100.00'$   
 $SE = \text{See Plans}$   
 $RO = \text{See Plans}$

<b>-Y3D-</b>		
PI Sta 10+89.88	PI Sta 11+41.77	PI Sta 12+39.53
$\Delta = 10^\circ 26' 02.0''$ (RT)	$\Delta = 20^\circ 54' 02.6''$ (LT)	$\Delta = 9^\circ 22' 40.2''$ (LT)
$D = 190^\circ 59' 09.4''$	$D = 114^\circ 35' 29.6''$	$D = 114^\circ 35' 29.6''$
$L = 53.11'$	$L = 18.24'$	$L = 79.74'$
$T = 36.67'$	$T = 9.22'$	$T = 51.22'$
$R = 30.00'$	$R = 50.00'$	$R = 50.00'$
$SE = NC$	$SE = NC$	$SE = NC$

REVISIONS

8/17/99

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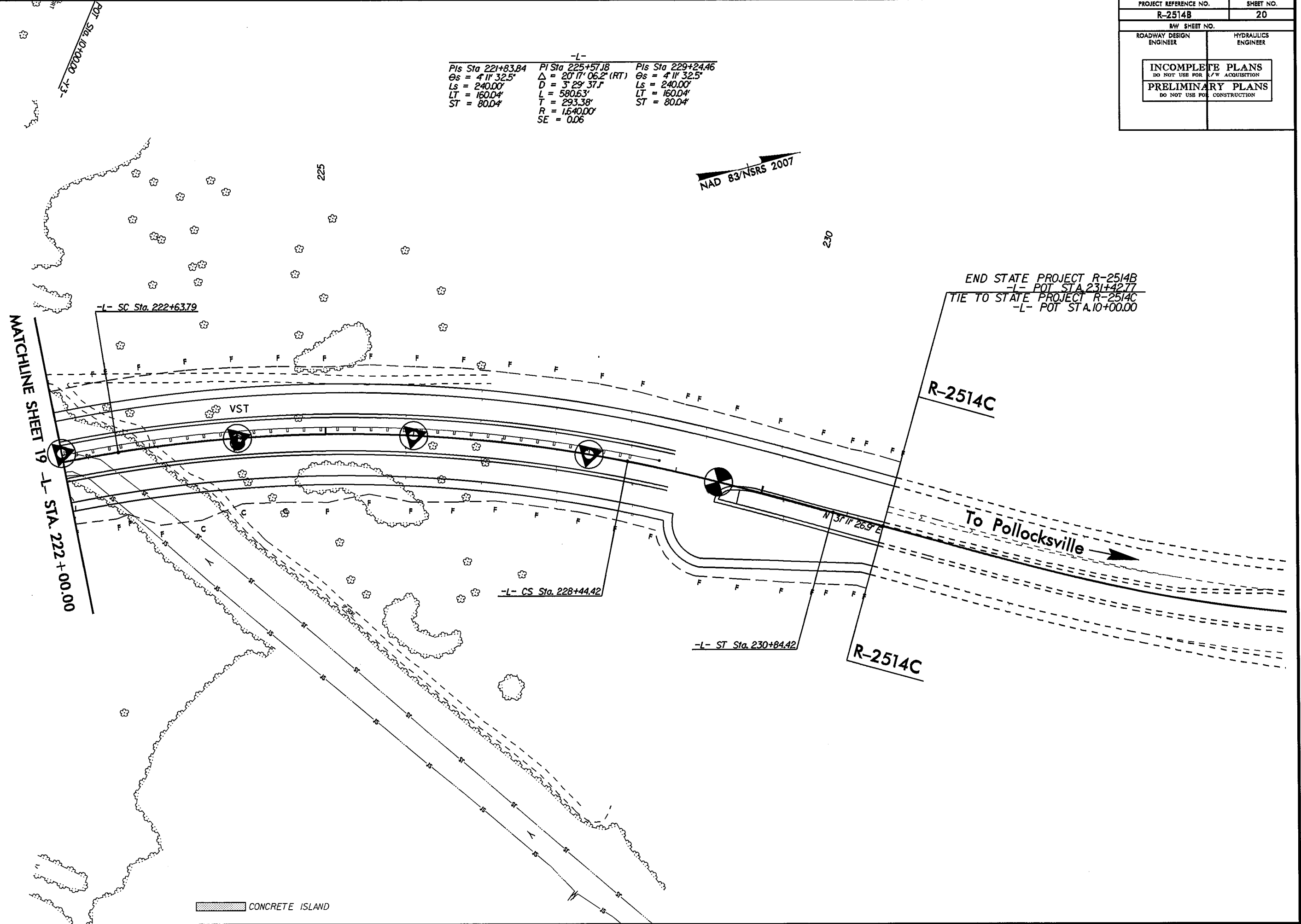
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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>20</b>
RAW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> <small>DO NOT USE FOR A/W ACQUISITION</small>	
<b>PRELIMINARY PLANS</b> <small>DO NOT USE FOR CONSTRUCTION</small>	

-L-

PIs Sta 221+83.84 θs = 4° 11' 32.5" Ls = 240.00' LT = 160.04' ST = 80.04'	PI Sta 225+57.18 Δ = 20° 17' 06.2" (RT) D = 3° 29' 37.1" L = 580.63' T = 293.38' R = 1,640.00' SE = 0.06	PIs Sta 229+24.46 θs = 4° 11' 32.5" Ls = 240.00' LT = 160.04' ST = 80.04'
---	--	---

NAD 83/NSRS 2007



MATCHLINE SHEET 19 -L- STA. 222+00.00

END STATE PROJECT R-2514B  
 -L- POT STA. 231+42.77  
 TIE TO STATE PROJECT R-2514C  
 -L- POT STA. 10+00.00

R-2514C

To Pollocksville

R-2514C

CONCRETE ISLAND

REVISIONS

8/17/09

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REVISIONS

PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>21</b>
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

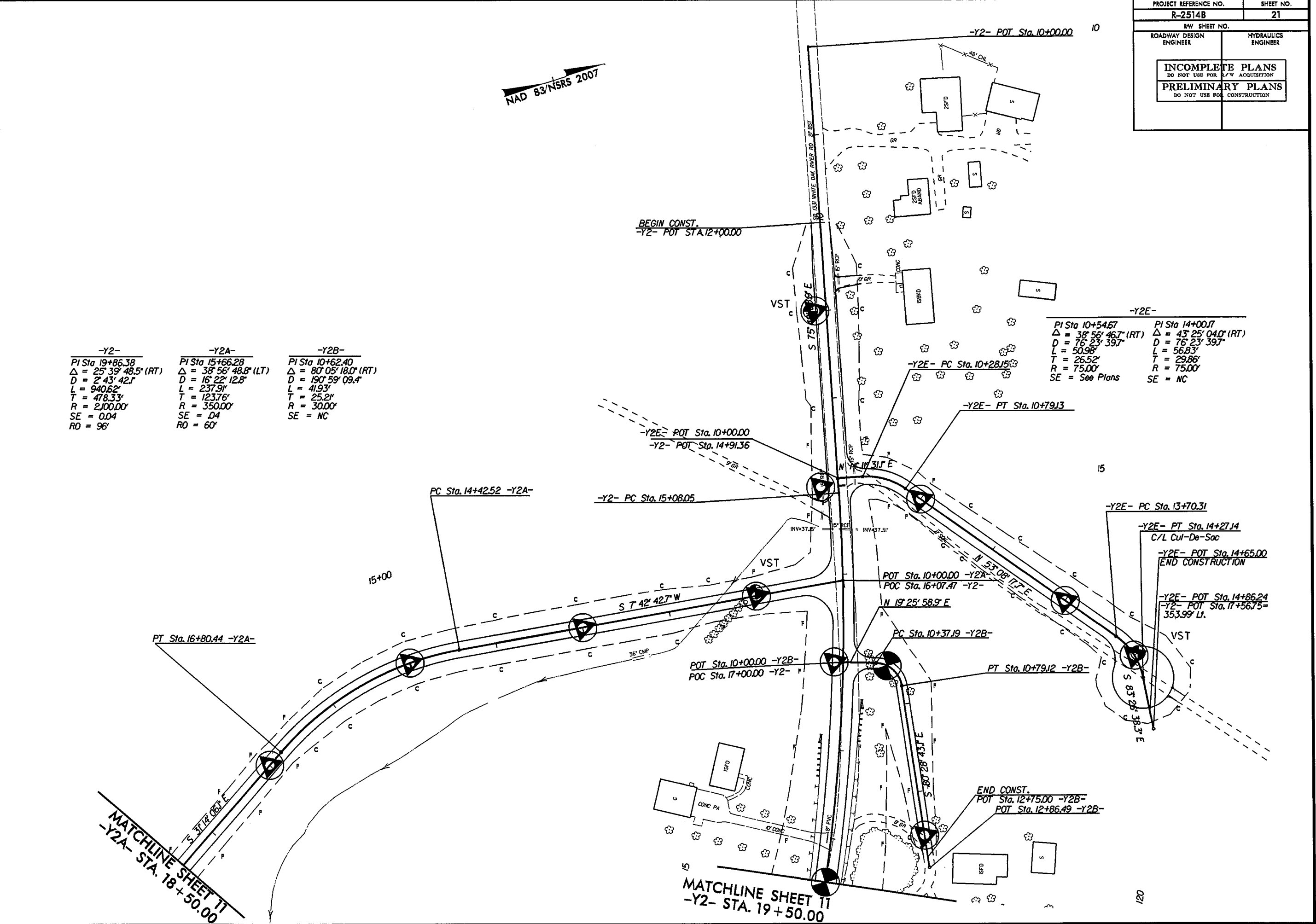


-Y2-	-Y2A-	-Y2B-
PI Sta 19+86.38	PI Sta 15+66.28	PI Sta 10+62.40
Δ = 25° 39' 48.5" (RT)	Δ = 38° 56' 48.8" (LT)	Δ = 80° 05' 18.0" (RT)
D = 2° 43' 42"	D = 16° 22' 12.8"	D = 190° 59' 09.4"
L = 940.62'	L = 237.91'	L = 41.93'
T = 478.33'	T = 123.76'	T = 25.21'
R = 2,100.00'	R = 350.00'	R = 30.00'
SE = 0.04	SE = .04	SE = NC
RO = 96'	RO = 60'	

-Y2E-	
PI Sta 10+54.67	PI Sta 14+00.17
Δ = 38° 56' 46.7" (RT)	Δ = 43° 25' 04.0" (RT)
D = 76° 23' 39.7"	D = 76° 23' 39.7"
L = 50.98'	L = 56.83'
T = 26.52'	T = 29.86'
R = 75.00'	R = 75.00'
SE = See Plans	SE = NC

MATCHLINE SHEET 11  
-Y2A- STA. 18+50.00

MATCHLINE SHEET 11  
-Y2- STA. 19+50.00



120

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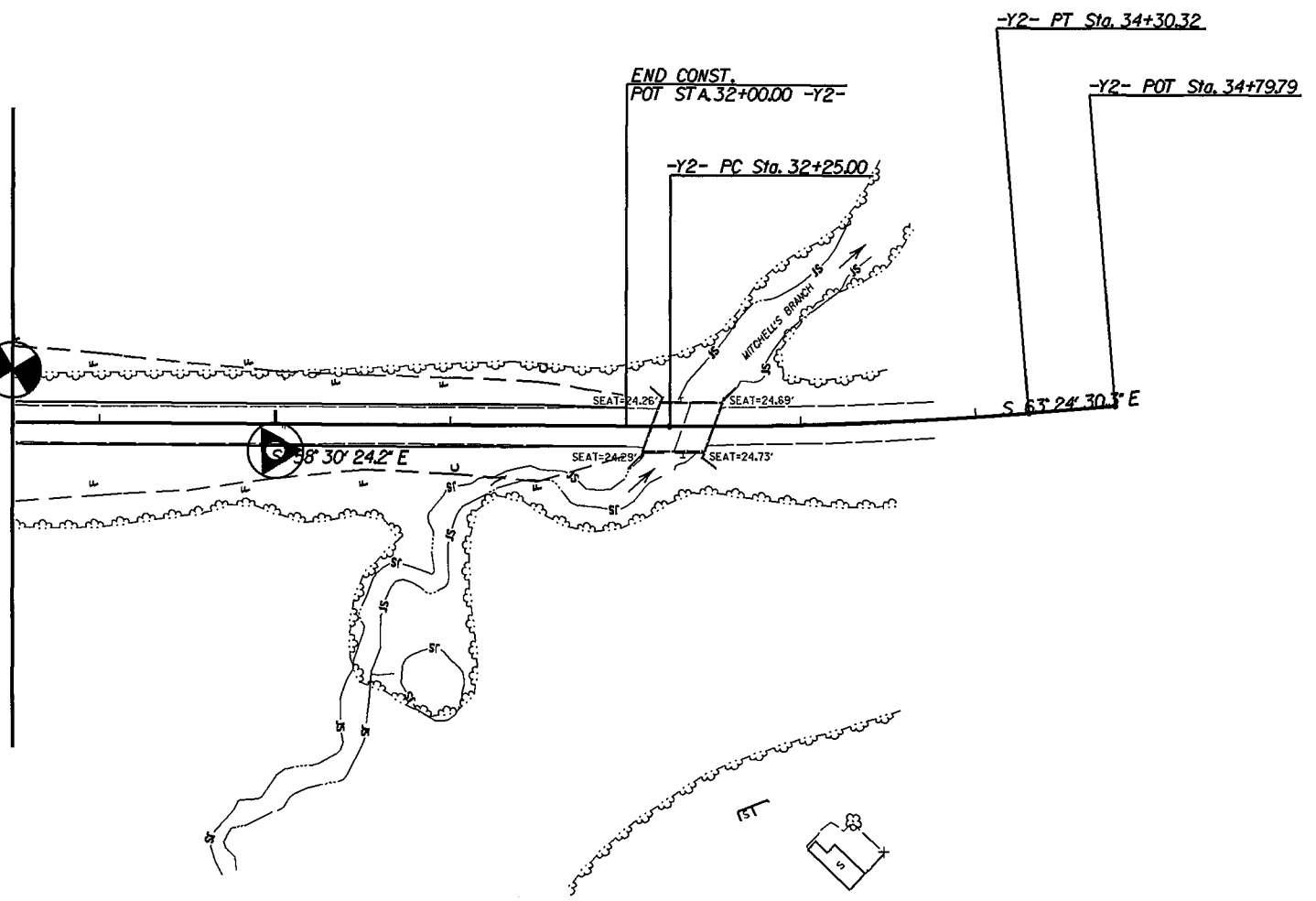
REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-2514B	22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

NAD 83 NRS 2007

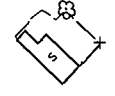
MATCHLINE SHEET 11 -Y2- STA. 28+50.00

-Y2-  
 PI Sta 33+27.72  
 $\Delta = 4^{\circ}54'06.0''$  (LT)  
 D = 2'23'14.4"  
 L = 205.32'  
 T = 102.72'  
 R = 2,400.00'



30

1ST





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 REVISIONS  
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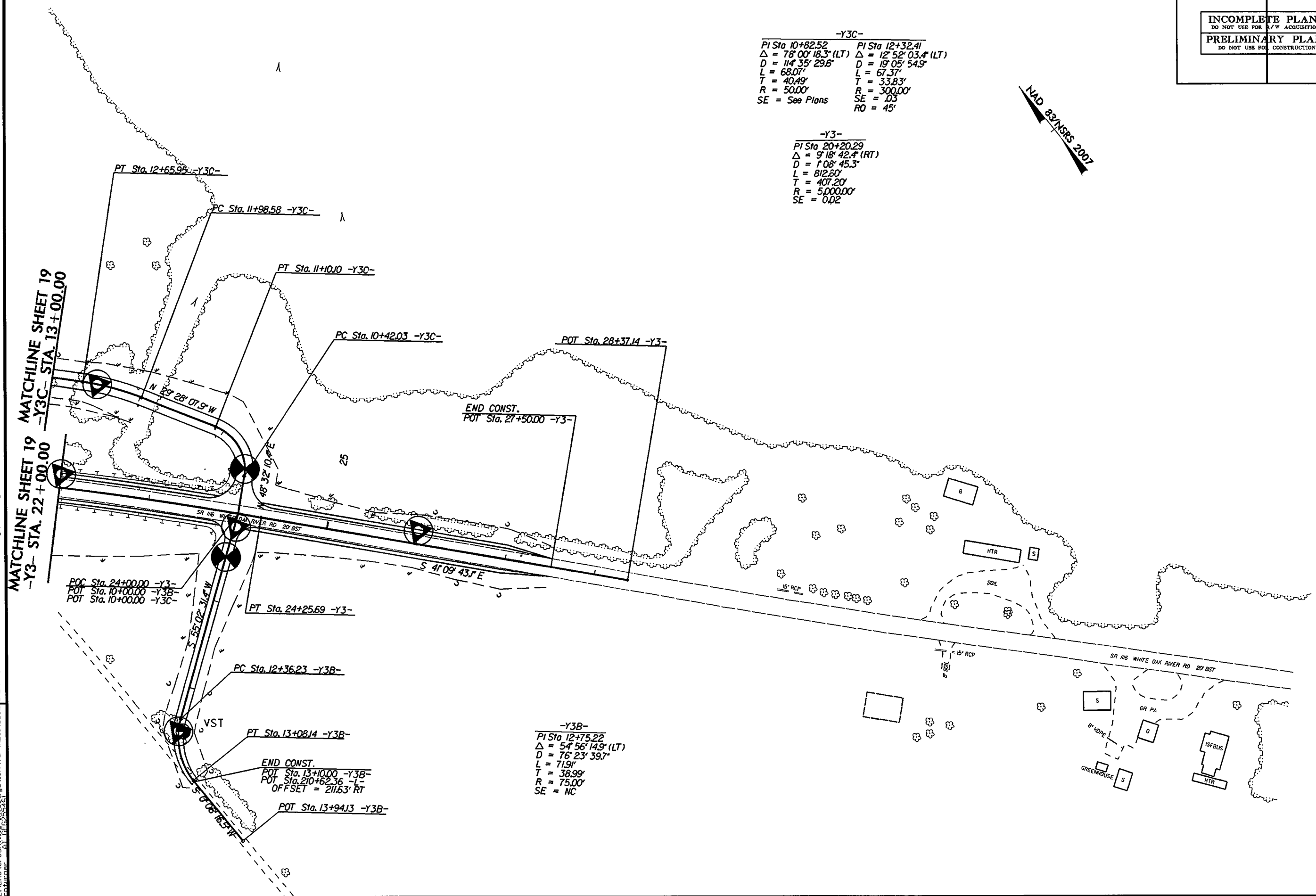
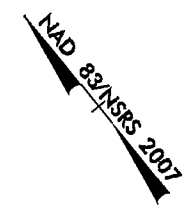
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

-Y3C-

PI Sta 10+82.52	PI Sta 12+32.41
$\Delta = 78^{\circ}00'18.3"$ (LT)	$\Delta = 12^{\circ}52'03.4"$ (LT)
D = 114'35"29.6"	D = 19'05"54.9"
L = 68.07'	L = 67.37'
T = 40.49'	T = 33.83'
R = 50.00'	R = 300.00'
SE = See Plans	SE = 03
	RO = 45'

-Y3-

PI Sta 20+20.29
$\Delta = 9^{\circ}18'42.4"$ (RT)
D = 108'45.3"
L = 812.60'
T = 407.20'
R = 5,000.00'
SE = 0.02



-Y3B-

PI Sta 12+75.22
$\Delta = 54^{\circ}56'14.9"$ (LT)
D = 76'23"39.7"
L = 71.91'
T = 38.99'
R = 75.00'
SE = NC

POC Sta. 24+00.00 -Y3-  
 POT Sta. 10+00.00 -Y3B-  
 POT Sta. 10+00.00 -Y3C-

END CONST.  
 POT Sta. 13+10.00 -Y3B-  
 POT Sta. 210+62.36 -L-  
 OFFSET = 211.63' RT  
 POT Sta. 13+94.13 -Y3B-

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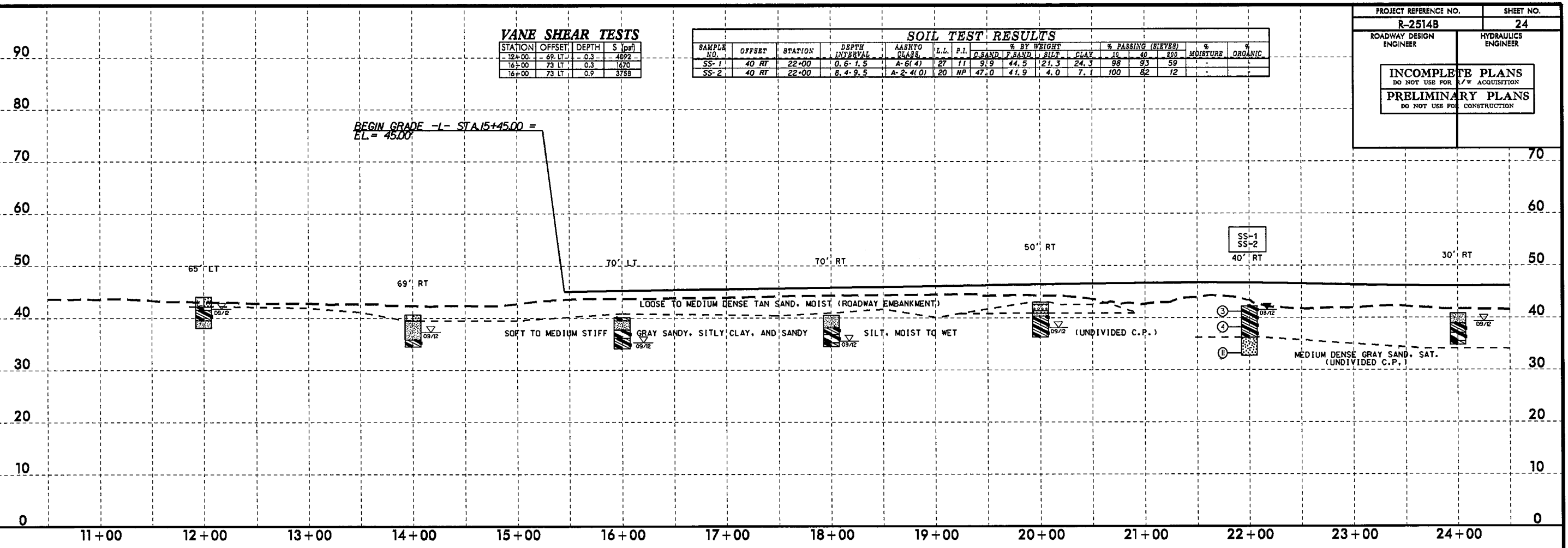
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (pcf)
12+00	69' LT	0.3	4892
16+00	73' LT	0.3	1470
16+00	73' LT	0.9	3758

**SOIL TEST RESULTS**

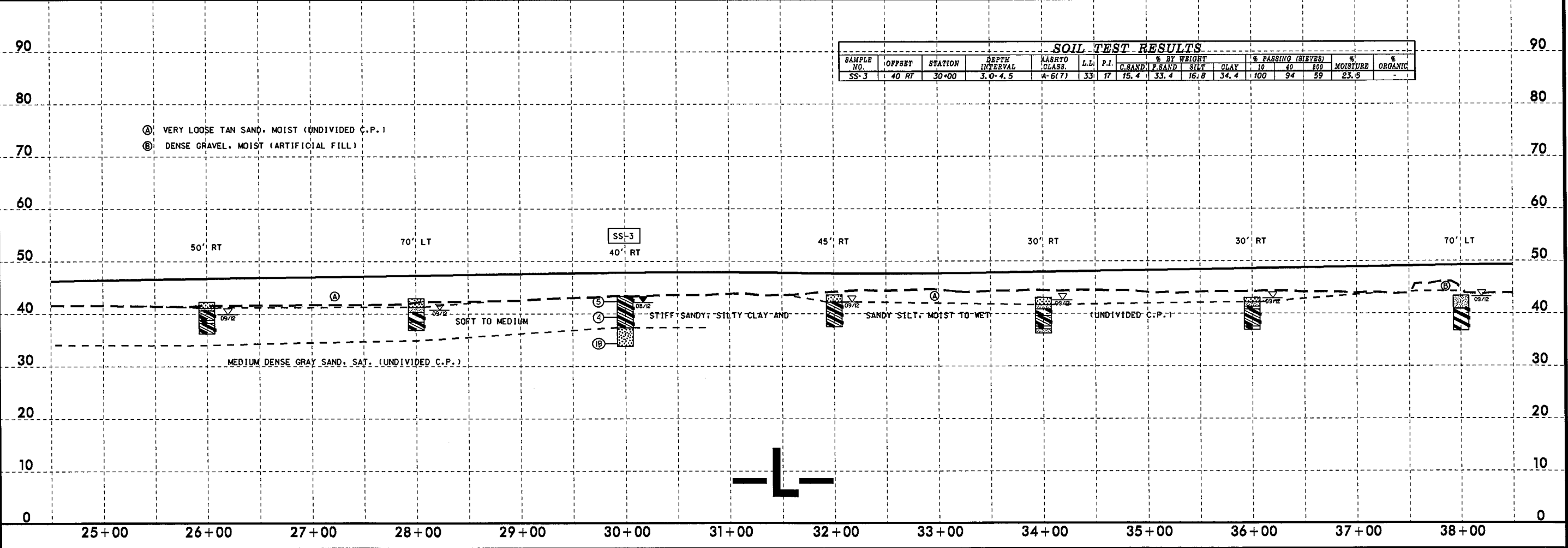
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	200		
SS-1	40' RT	22+00	0.6-1.5	A-6(4)	27	11	9.9	44.5	21.3	24.3	98	93	59	-
SS-2	40' RT	22+00	8.4-9.5	A-2-4(0)	20	NP	47.0	41.9	4.0	7.1	100	82	12	-



**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	200		
SS-3	40' RT	30+00	3.0-4.5	A-6(7)	33	17	15.4	33.4	16.8	34.4	100	94	59	23.5

- Ⓐ VERY LOOSE TAN SAND, MOIST (UNDIVIDED C.P.)
- Ⓑ DENSE GRAVEL, MOIST (ARTIFICIAL FILL)

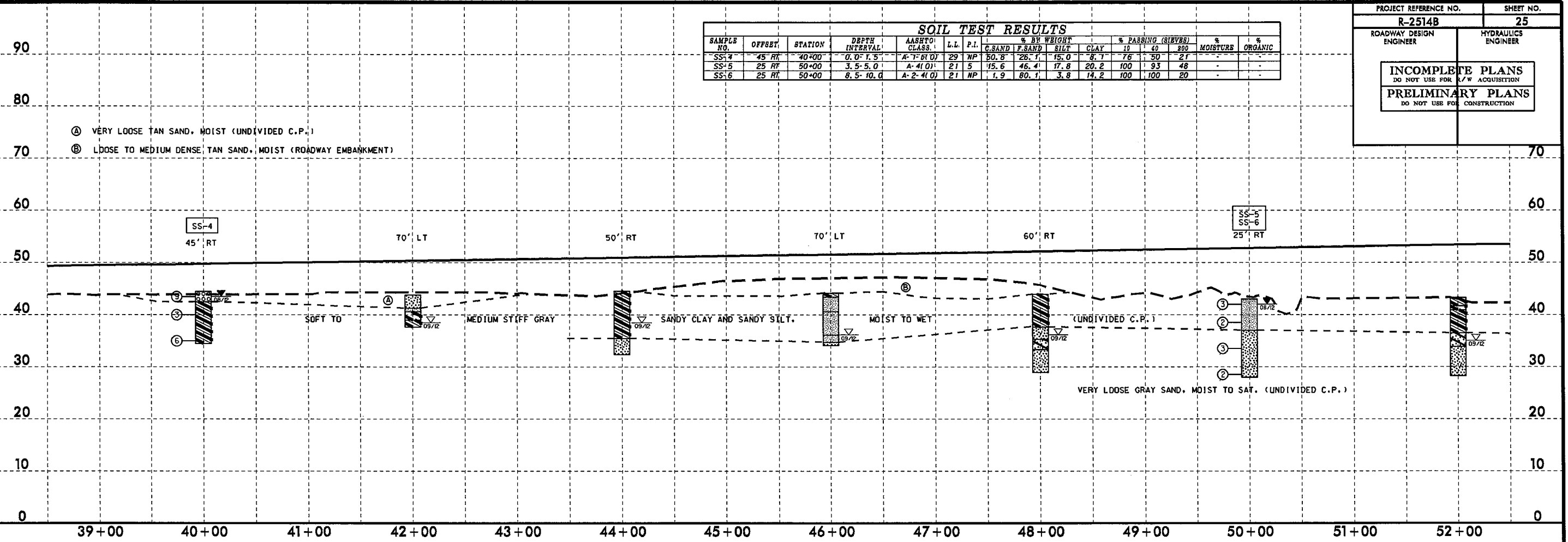


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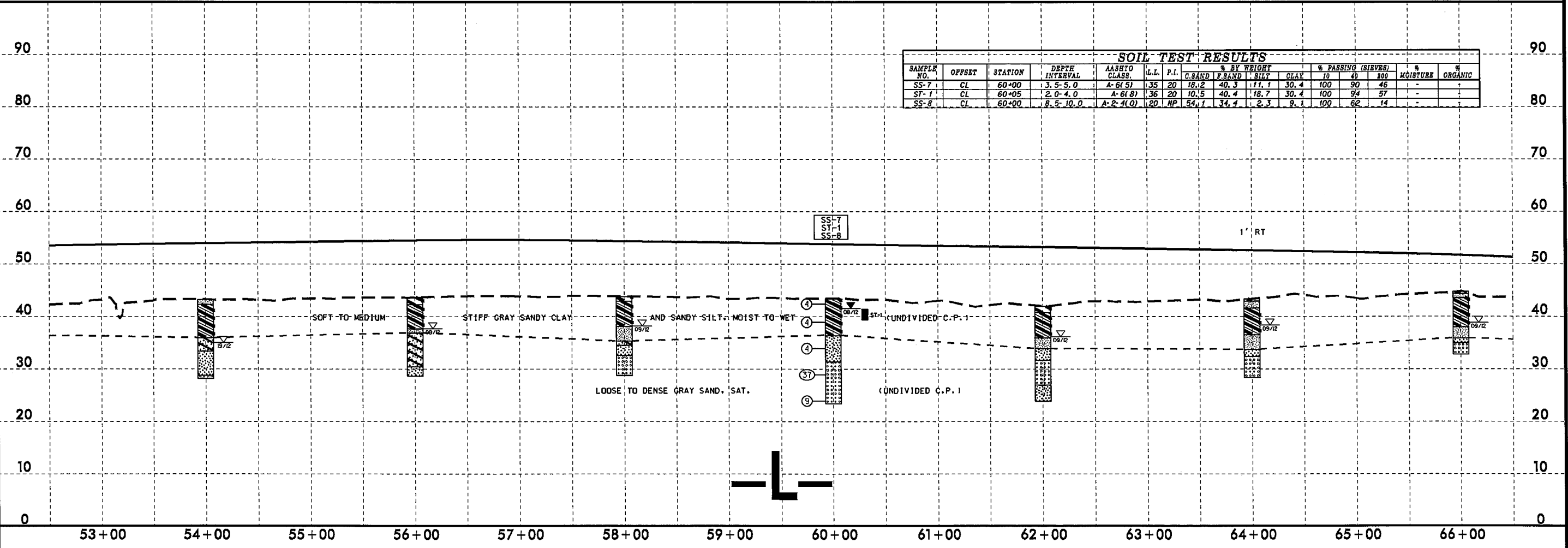
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PROJECT REFERENCE NO. <b>R-25148</b>	SHEET NO. <b>25</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

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-4	45' RT	40+00	0.0-1.5	A-7(6)0	29	NP	50.8	26.1	15.0	8.1	76	50	21	-	-
SS-5	25' RT	50+00	3.5-5.0	A-4(0)	21	5	15.6	46.4	17.8	20.2	100	93	48	-	-
SS-6	25' RT	50+00	8.5-10.0	A-2-4(0)	21	NP	1.9	80.1	3.8	14.2	100	100	20	-	-



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-7	CL	60+00	3.5-5.0	A-6(5)	35	20	18.2	40.3	11.1	30.4	100	90	46	-	-
ST-1	CL	60+05	2.0-4.0	A-6(8)	36	20	10.5	40.4	18.7	30.4	100	94	57	-	-
SS-8	CL	60+00	8.5-10.0	A-2-4(0)	20	NP	54.1	34.4	2.3	9.1	100	62	14	-	-

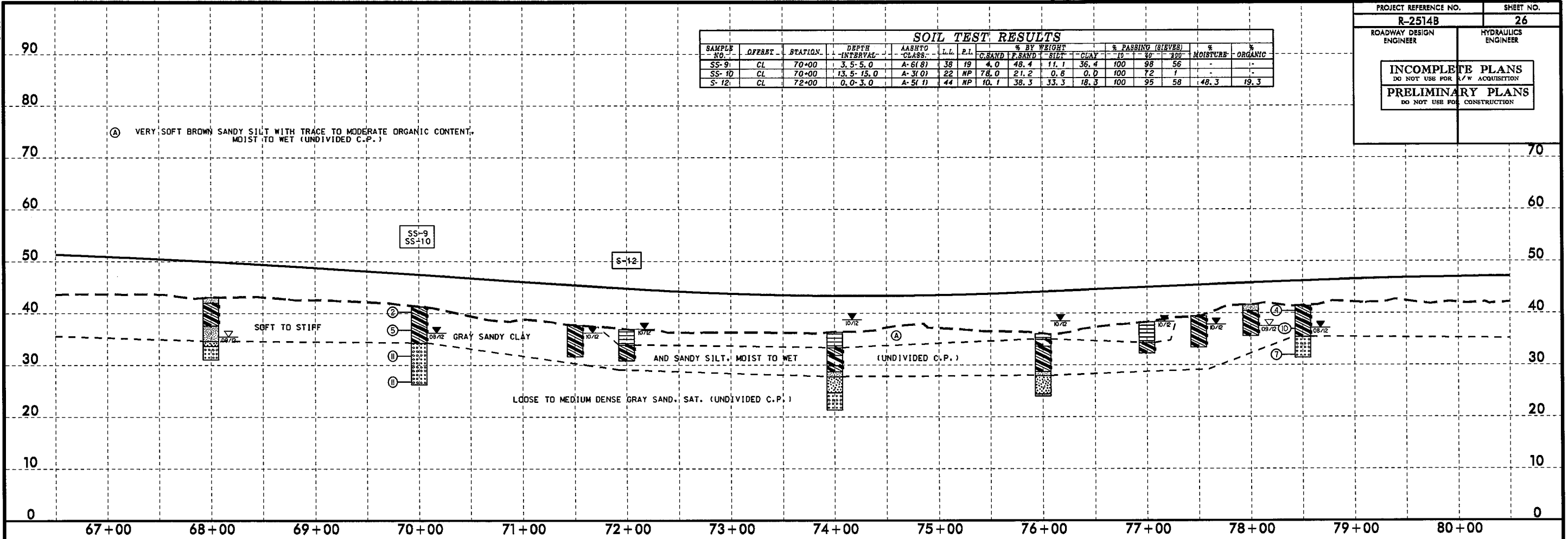


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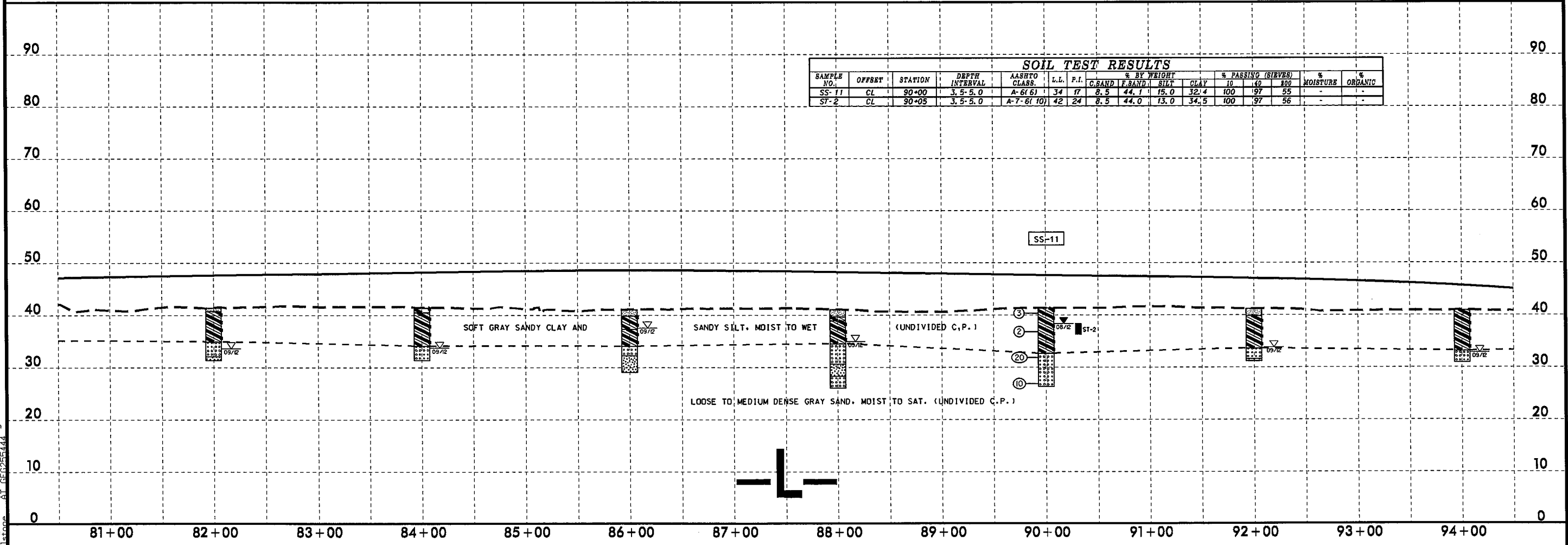
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PROJECT REFERENCE NO.	SHEET NO.
R-2514B	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

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	10	40	200			
SS-9	CL	70+00	3.5-5.0	A-6(8)	38	19	4.0	48.4	11.1	36.4	100	98	56	-	-
SS-10	CL	70+00	13.5-15.0	A-3(0)	22	NP	78.0	21.2	0.8	0.0	100	72	1	-	-
S-12	CL	72+00	0.0-3.0	A-5(1)	44	NP	10.1	38.3	33.3	18.3	100	95	58	48.3	19.3



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	10	40	200			
SS-11	CL	90+00	3.5-5.0	A-6(6)	34	17	8.5	44.1	15.0	32.4	100	97	55	-	-
ST-2	CL	90+05	3.5-5.0	A-7-6(10)	42	24	8.5	44.0	13.0	34.5	100	97	56	-	-



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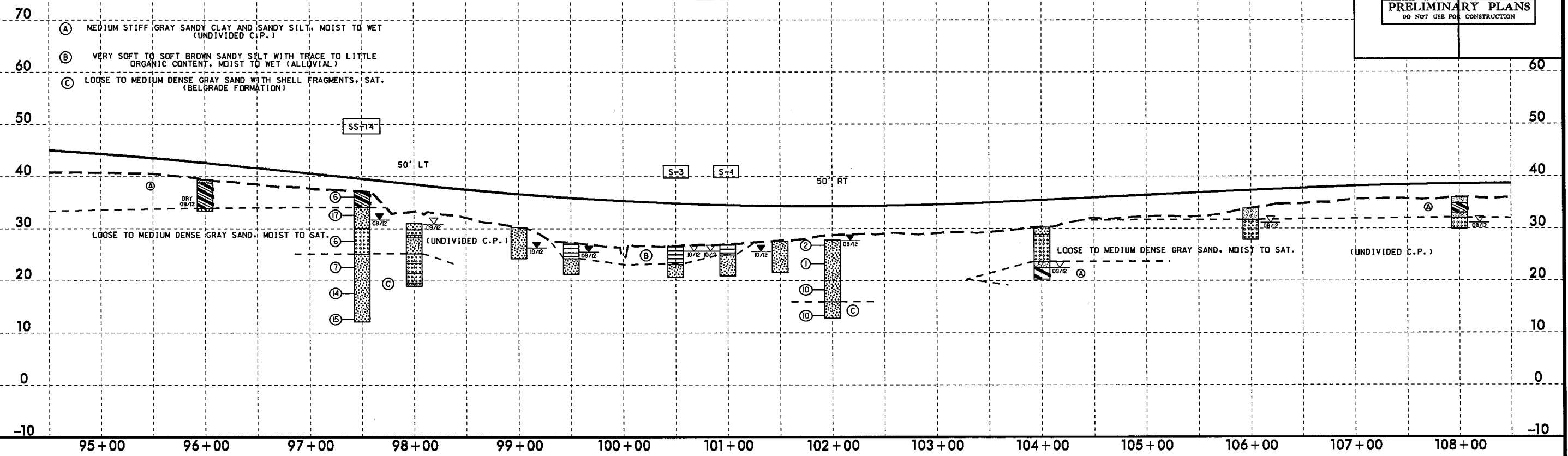
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
108+00	7 LT	0.3	4343

**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-14	CL	97+50	13.5-15.0	A-2-4(0)	26	NP	41.1	46.0	2.8	10.1	90	68	14	-	-
S-3	CL	100+50	0.0-3.4	A-4(2)	33	9	17.3	40.3	30.3	12.1	95	89	46	-	7.4
S-4	CL	101+00	0.0-2.0	A-2-4(0)	18	NP	31.1	53.0	7.7	8.1	99	87	21	16.5	2.5

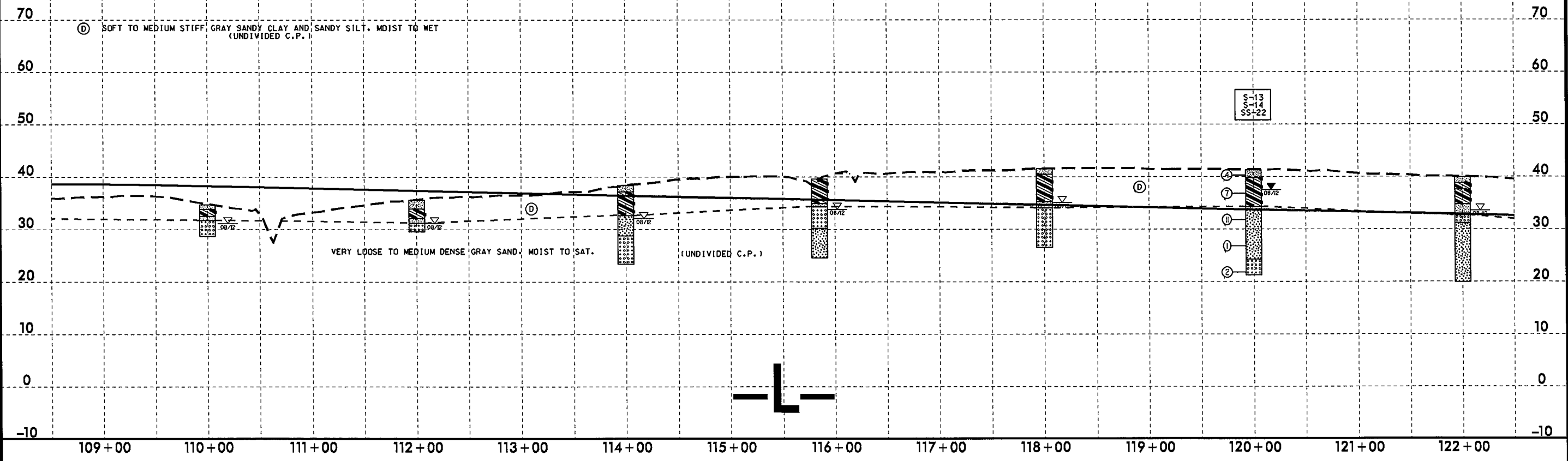


**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
112+00	7 RT	0.3	2756

**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		
S-13	2 RT	120+00	0.0-1.5	A-4(0)	22	NP	19.1	52.8	24.2	4.0	100	93	40	-	-
S-14	2 RT	120+00	1.5-6.0	A-6(8)	33	16	13.0	33.1	21.8	32.1	100	95	63	-	-
SS-22	CL	120+00	13.5-15.0	A-2-4(0)	22	NP	19.0	69.2	2.6	9.1	100	92	14	-	-



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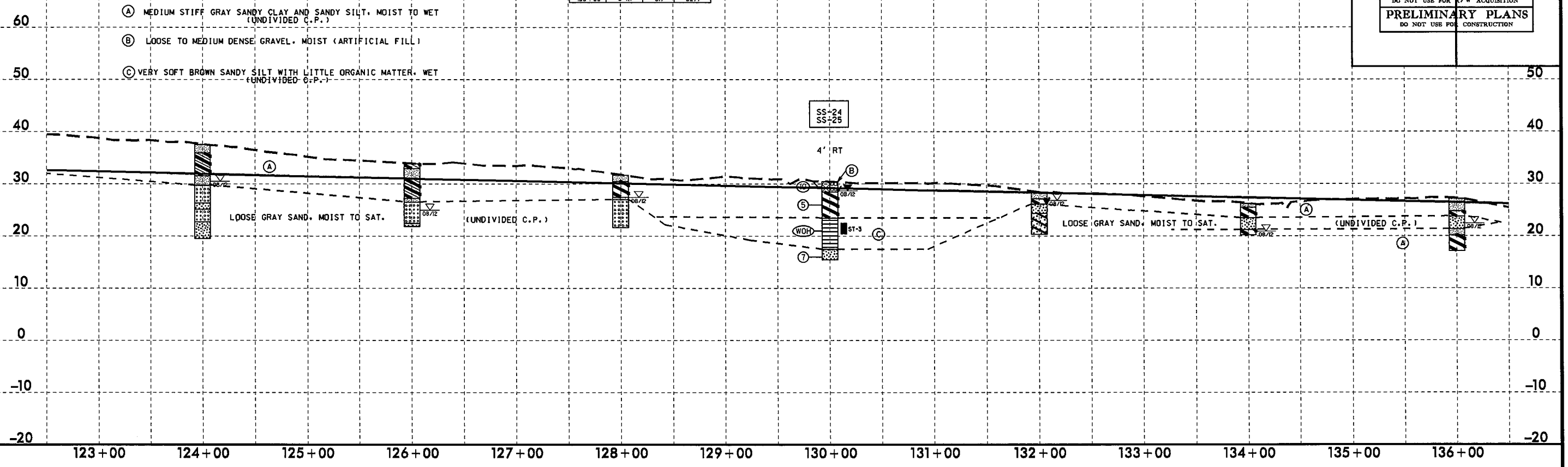
**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
134+00	4 RT	0.3	1128
134+00	5 RT	0.9	1629
136+00	5 RT	0.3	2004
136+00	5 RT	0.9	3299

**SOIL TEST RESULTS**

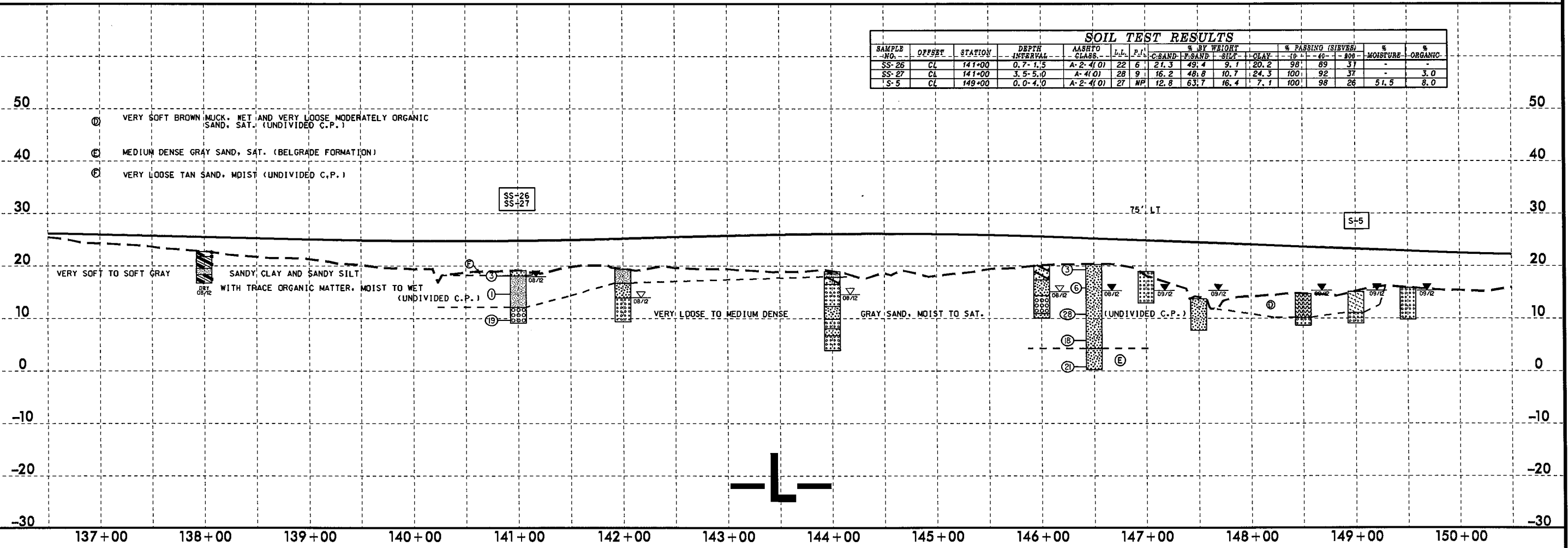
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE		% ORGANIC
							C-SAND	F-SAND	SILT	CLAY	10	20	10	20	
SS-24	4 RT	130+00	3.5-5.0	A-7-6(12)	50	28	36.8	7.5	11.1	44.5	94	74	54	-	-
SS-25	4 RT	130+00	8.5-10.0	A-4(0)	34	NP	20.2	39.9	25.7	14.2	100	92	44	60.0	10.1

PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>28</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**SOIL TEST RESULTS**

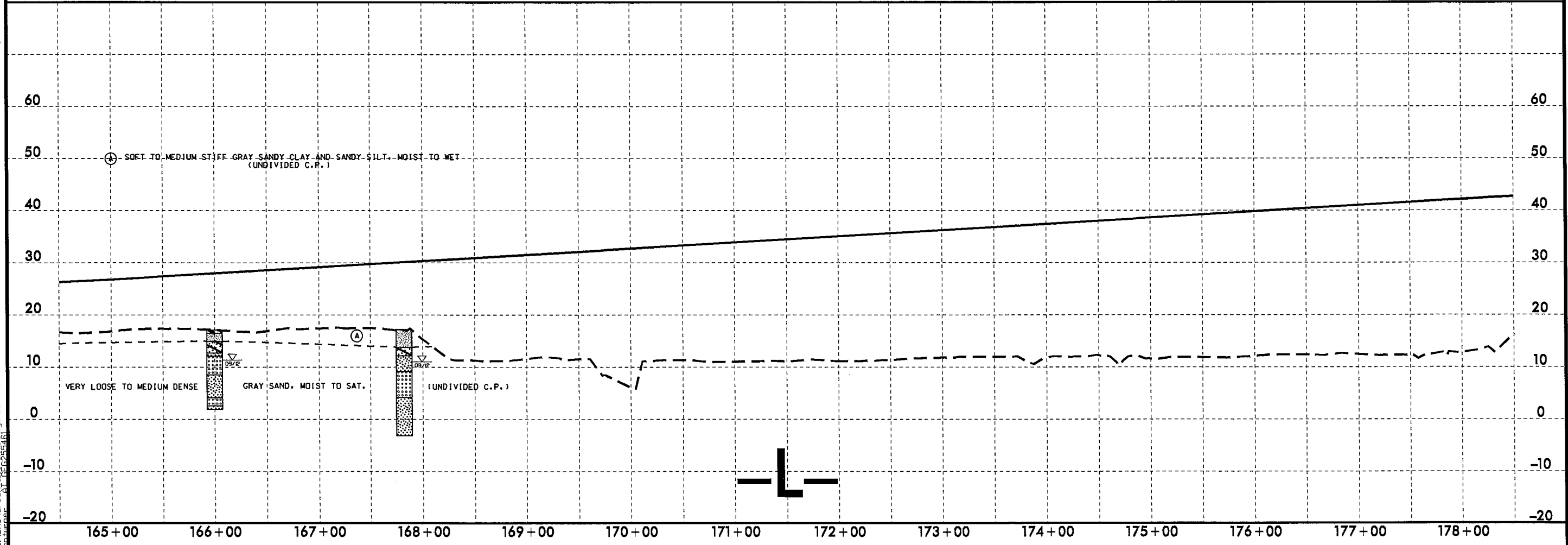
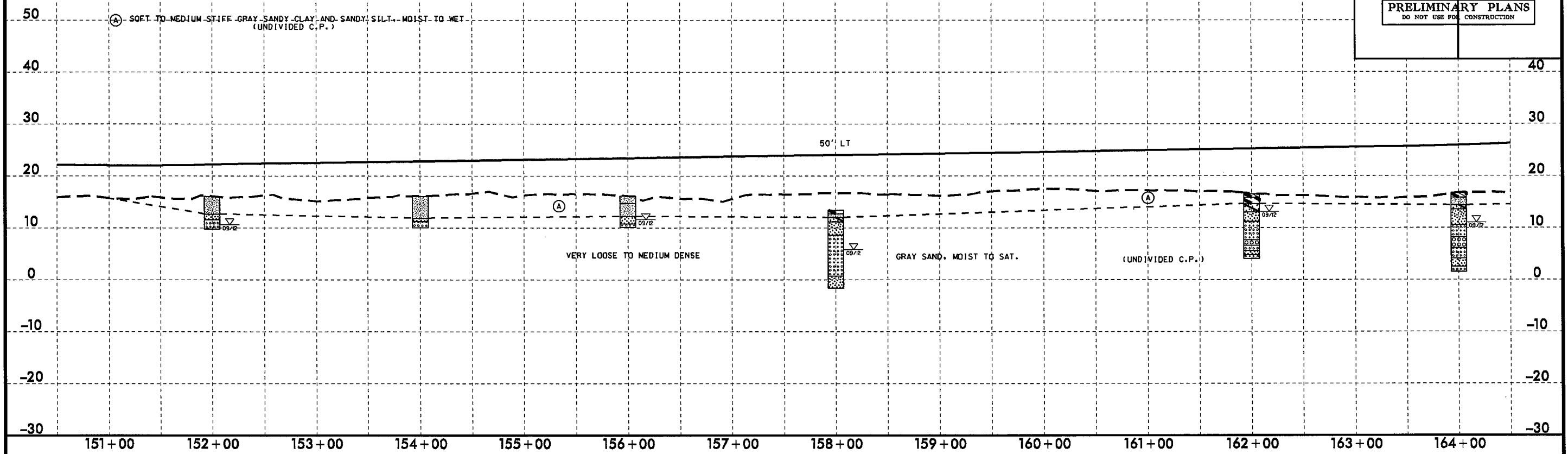
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE		% ORGANIC
							C-SAND	F-SAND	SILT	CLAY	10	20	10	20	
SS-26	CL	141+00	0.7-1.5	A-2-4(0)	22	6	21.3	49.4	9.1	20.2	98	89	37	-	-
SS-27	CL	141+00	3.5-5.0	A-4(0)	28	9	16.2	48.8	10.7	24.3	100	92	37	-	3.0
S-5	CL	149+00	0.0-4.0	A-2-4(0)	27	NP	12.8	63.7	16.4	7.1	100	98	26	51.5	8.0



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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>29</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



5/28/99

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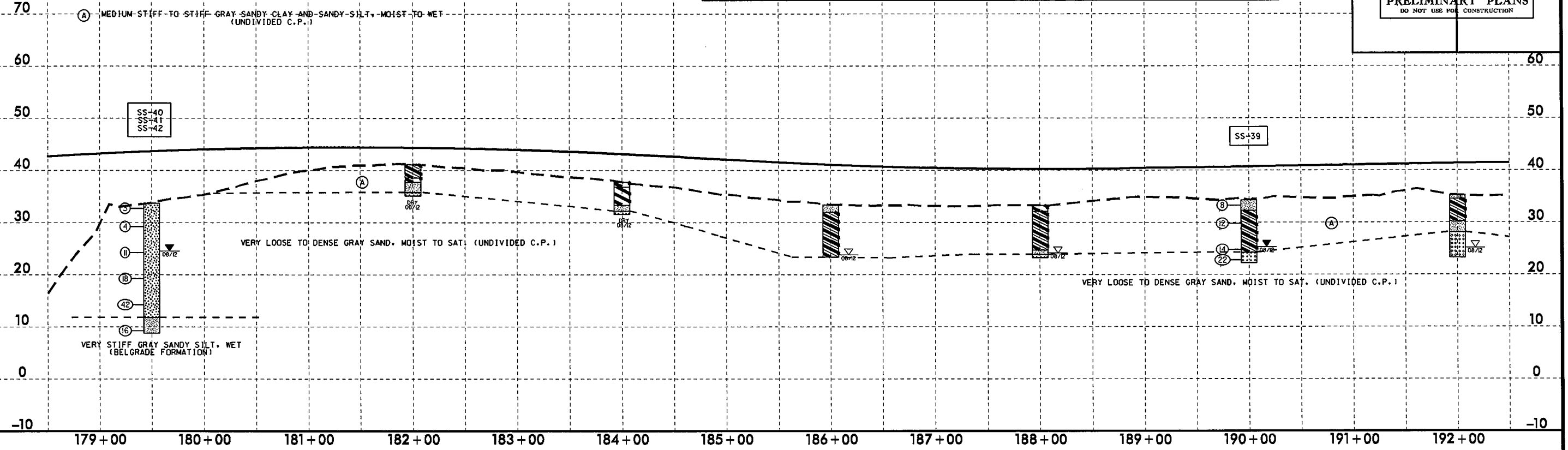
**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psi)
184+00	5' RT	0.3	3253
184+00	5' RT	0.3	2881
184+00	5' RT	1.3	3090

**SOIL TEST RESULTS**

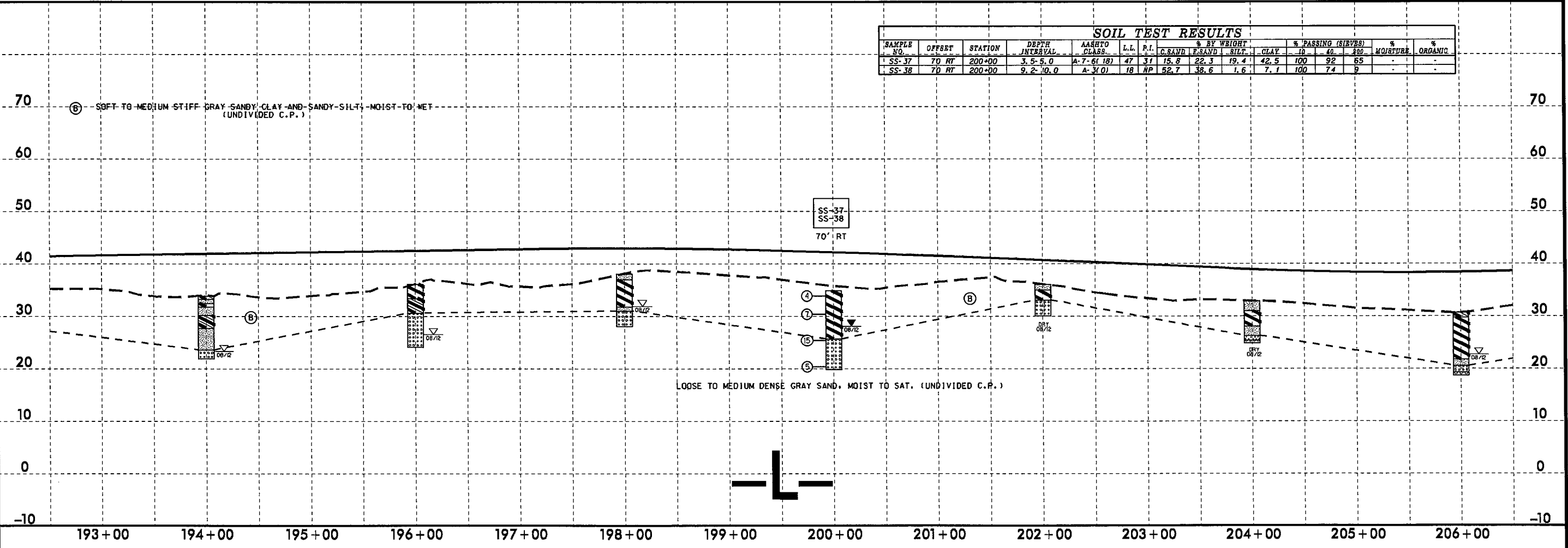
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	10	40	60		
SS-40	CL	179+50	0.0-1.5	A-2-4(0)	18	NP	37.7	46.0	7.3	3.1	100	86	18	-
SS-41	CL	179+50	8.5-10.0	A-2-4(0)	31	8	35.7	45.0	5.1	14.2	100	84	21	-
SS-42	CL	179+50	23.5-25.0	A-4(0)	25	8	35.8	18.6	27.3	18.2	91	72	43	-
SS-39	CL	190+00	0.0-1.5	A-4(0)	15	2	27.9	36.4	23.5	18.1	98	86	39	-

PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>30</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**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	10	40	60		
SS-37	70' RT	200+00	3.5-5.0	A-7-6(18)	47	31	15.8	22.3	19.4	42.5	100	92	65	-
SS-38	70' RT	200+00	9.2-10.0	A-3(0)	18	NP	52.7	38.6	1.6	7.1	100	74	8	-

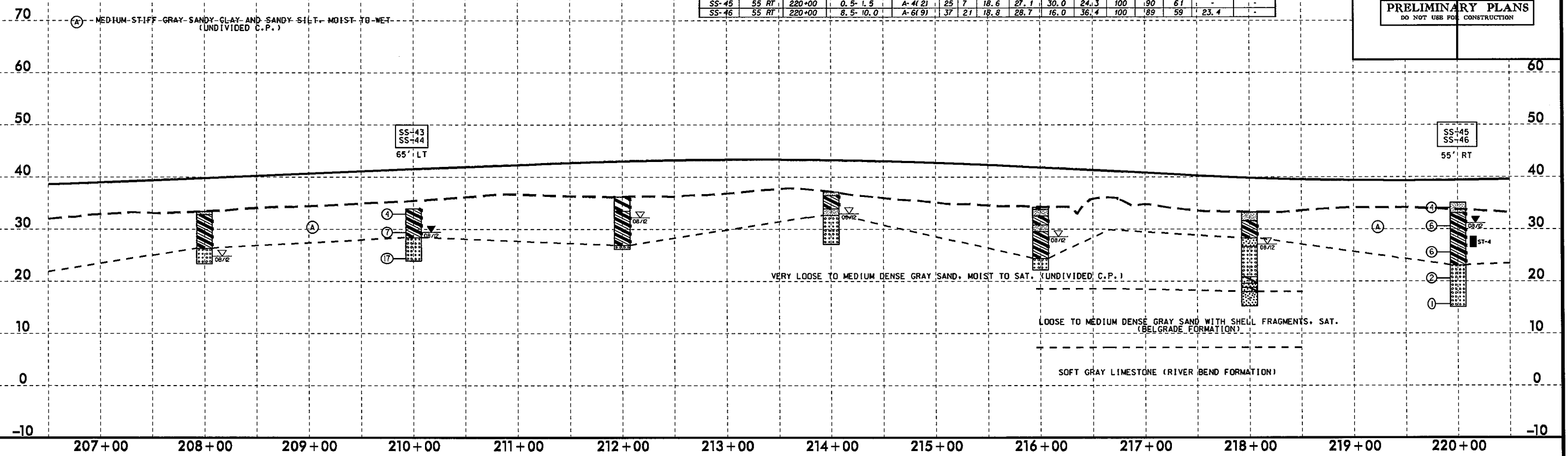




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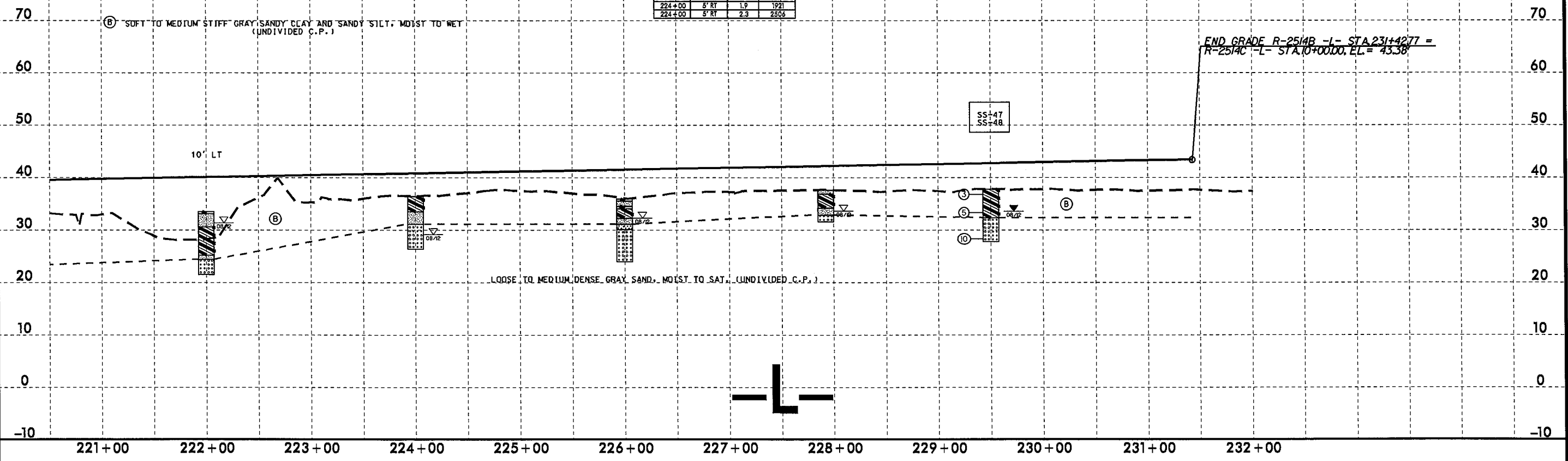
PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>31</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

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	MOISTURE	ORGANIC	
SS-43	65' LT	210+00	0.6-1.5	A-6(5)	33	18	23.7	30.8	13.8	32.4	100	187	49	-	
SS-44	65' LT	210+00	3.5-5.0	A-6(6)	39	25	28.5	30.6	12.6	28.3	100	183	44	-	
SS-45	55' RT	220+00	0.5-1.5	A-4(2)	25	7	18.6	27.1	30.0	24.3	100	190	61	-	
SS-46	55' RT	220+00	8.5-10.0	A-6(9)	37	21	18.8	28.7	16.0	36.4	100	189	59	23.4	



STATION	OFFSET	DEPTH	S (PSF)
224+00	8' RT	0.3	1086
224+00	8' RT	0.9	1293
224+00	8' RT	1.3	2547
224+00	8' RT	1.9	1921
224+00	8' RT	2.3	2506

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	MOISTURE	ORGANIC	
SS-47	CL	229+50	0.6-1.5	A-6(6)	30	14	16.4	26.9	28.3	28.3	100	91	60	-	
SS-48	CL	229+50	8.5-10.0	A-3(0)	20	NP	50.5	43.0	1.4	5.1	100	97	7	-	



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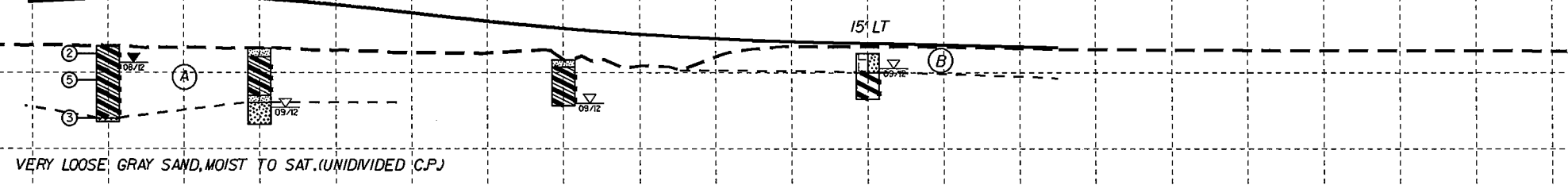
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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>32</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S <sub>v</sub> (psf)
14+00	7 RT	0.3	2673
14+00	7 RT	0.9	2798

- (A) SOFT TO MEDIUM STIFF TAN GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)
- (B) MEDIUM-DENSE TAN SAND, MOIST TO SAT. (ROADWAY EMBANKMENT)



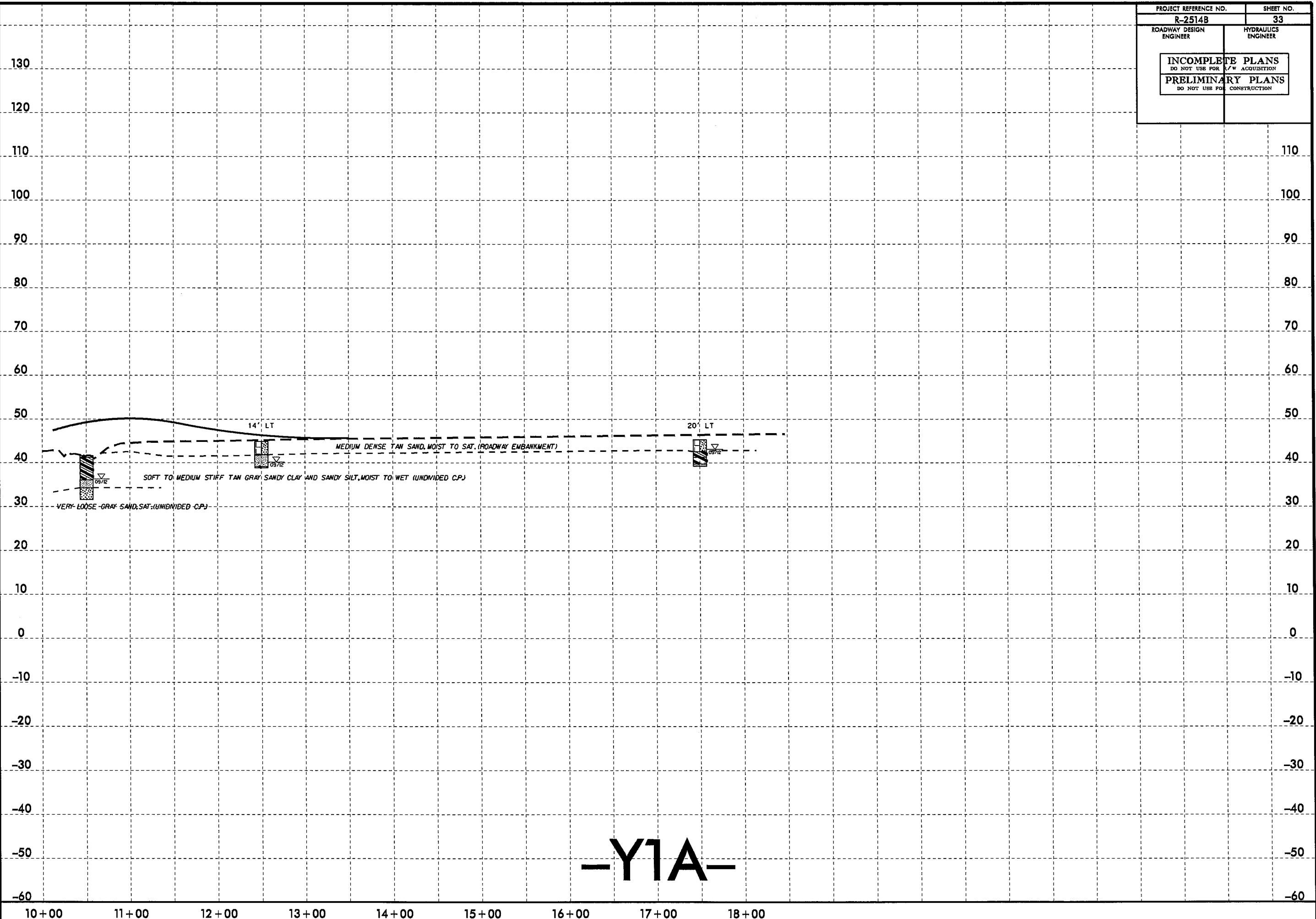
-Y1-

10+00    11+00    12+00    13+00    14+00    15+00    16+00    17+00    18+00    19+00    20+00

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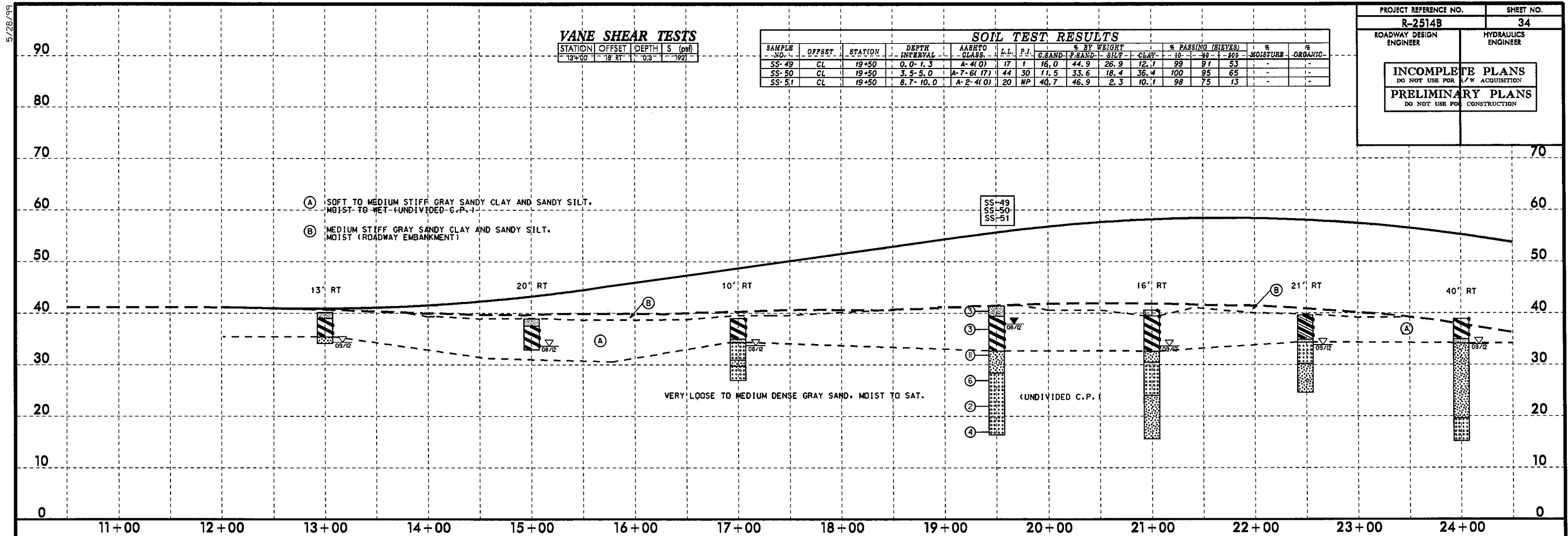
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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>33</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

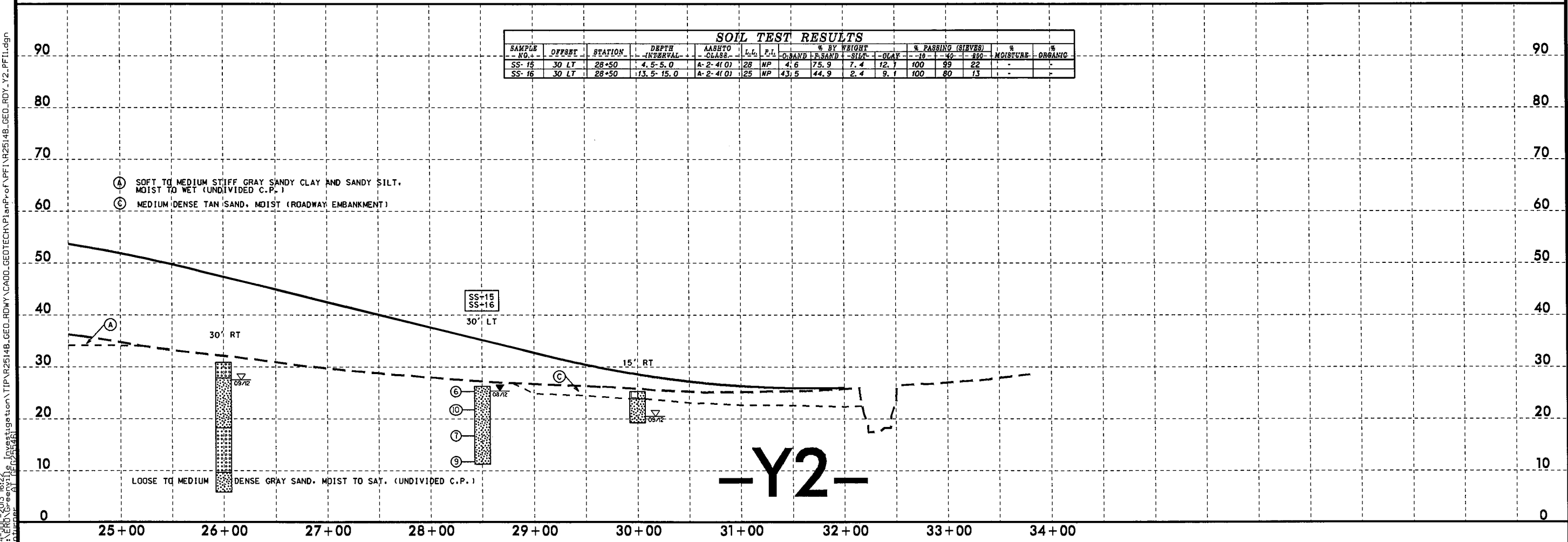


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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>34</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



-Y2-

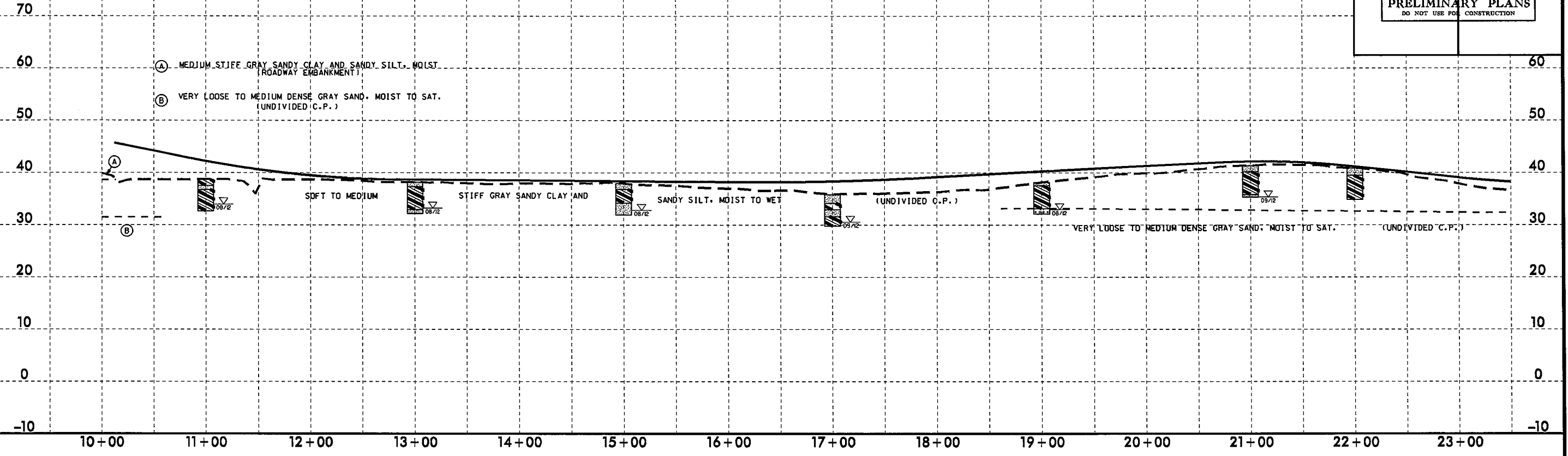
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PROJECT REFERENCE NO. R-25148	SHEET NO. 35
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
11+00	5 RT	0.3'	2380
11+00	5 RT	0.9'	3550

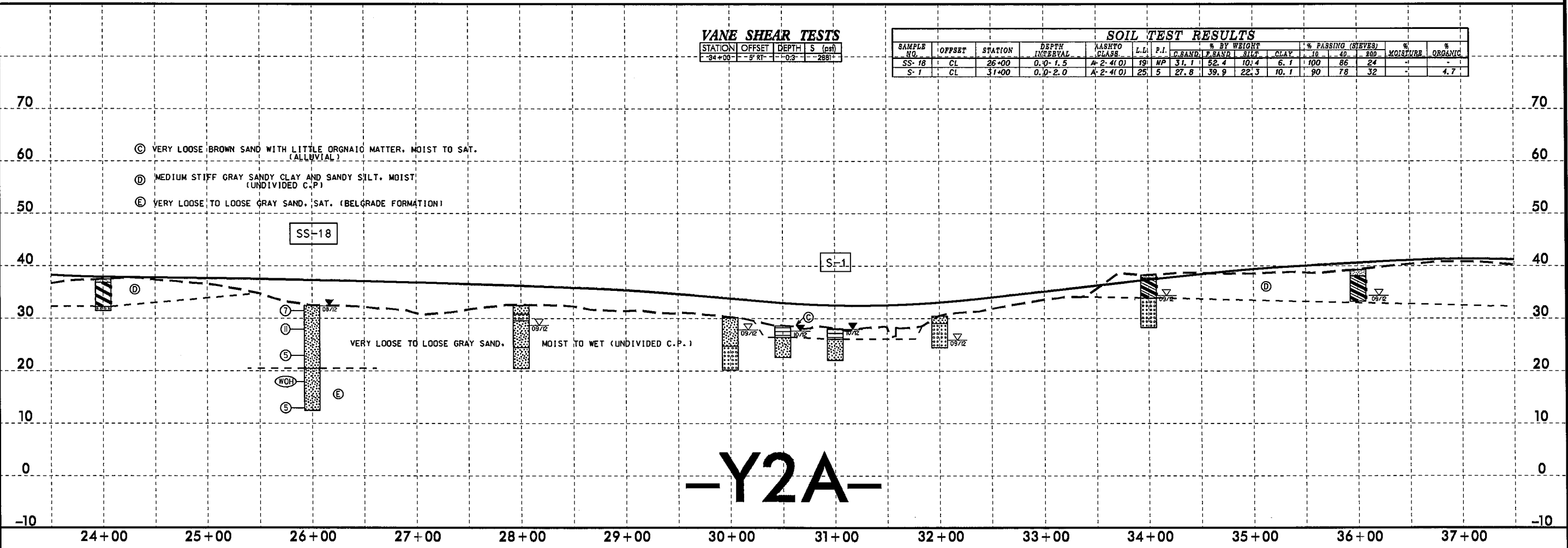


**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
34+00	5 RT	0.3'	2881

**SOIL TEST RESULTS**

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTHO CLASS.	L.L.	P.L.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							SAND	SILT	CLAY	10	40	200			
SS-18	CL	26+00	0.0-1.5	A-2-4(0)	19	NP	31.1	52.4	10.4	6.1	100	86	24	-	-
S-1	CL	31+00	0.0-2.0	A-2-4(0)	25	5	27.8	39.9	22.3	10.1	90	78	32	-	4.7



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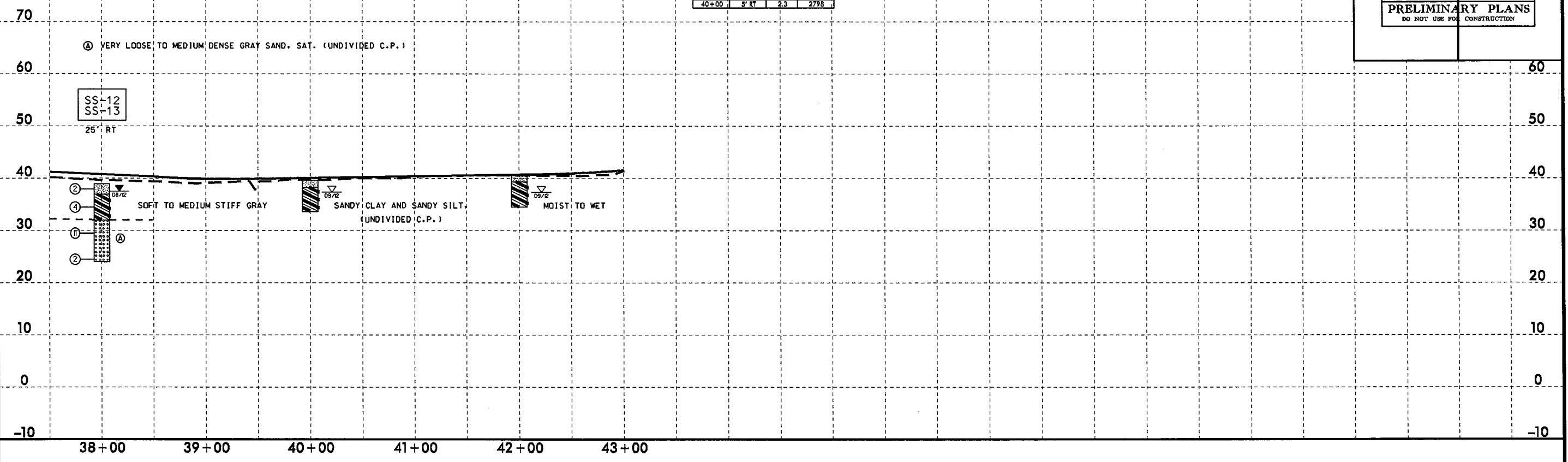
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SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.F.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	#10	#40	#200		
SS-12	25 RT	38+00	0.0-1.5'	A-4(0)	17	2	22.7	44.7	15.0	18.2	100	88	40	-	-
SS-13	25 RT	38+00	3.5-5.0'	A-6(5)	33	17	17.0	38.7	14.0	30.4	100	92	50	-	-

VANE SHEAR TESTS				
STATION	OFFSET	DEPTH	S (psf)	
40+00	5' RT	0.3	2218	
40+00	5' RT	0.9	3508	
40+00	5' RT	1.3	1963	
40+00	5' RT	1.9	1754	
40+00	5' RT	2.3	2798	

PROJECT REFERENCE NO. <b>R-25148</b>	SHEET NO. <b>36</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

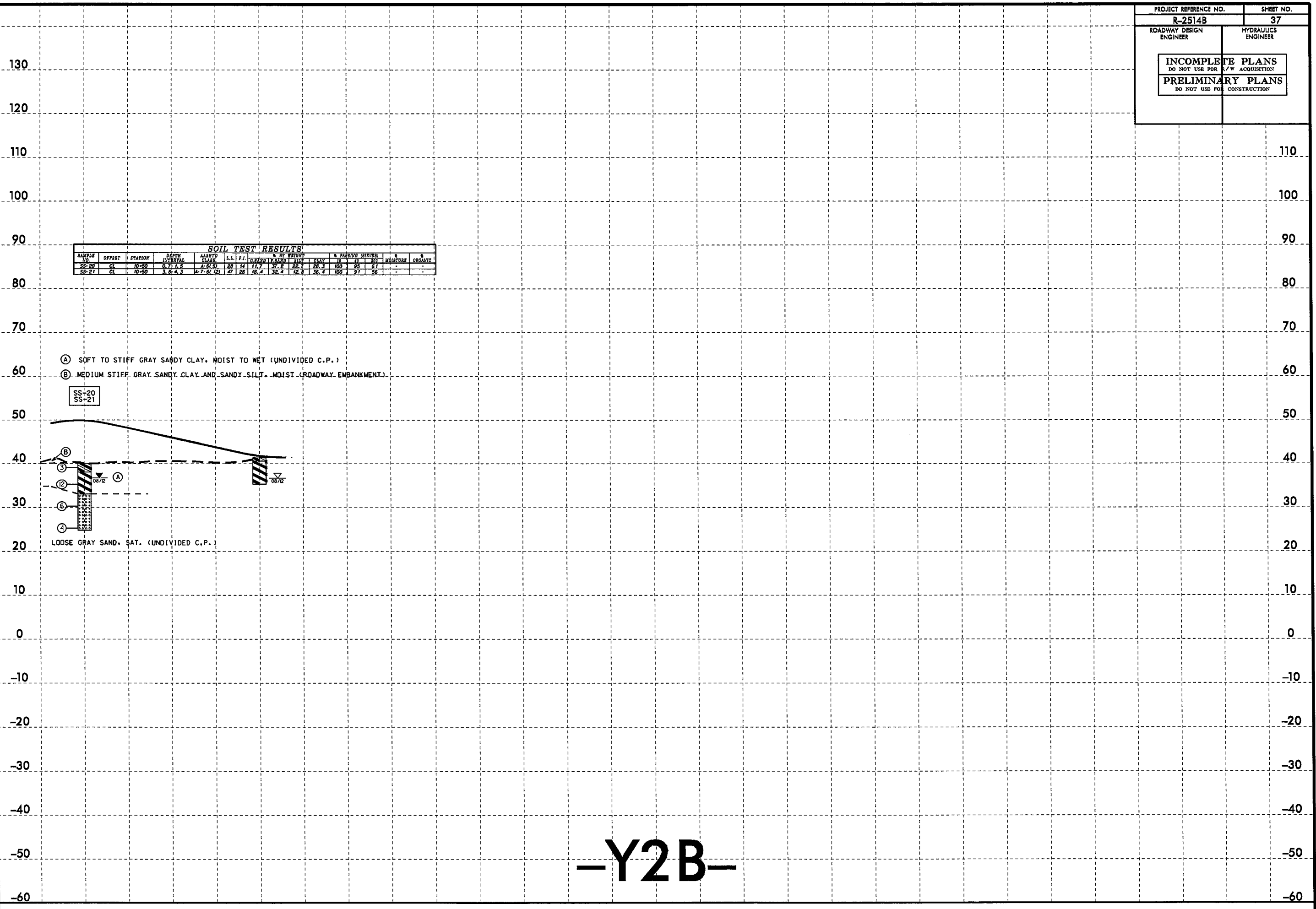


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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>37</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION <b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS.	L.L.	P.L.	% BY WEIGHT			% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							SAND	FINE SAND	SILT	NO. 10	NO. 40	NO. 100		
SS-20	C	10+30	0.7-2.5	4-BL	28	14	11.1	37.2	22.1	66.3	100	95	61	-
SS-21	CL	10+50	1.8-4.1	4-F-CL	27	22	16.4	32.4	12.4	36.4	100	91	56	-

- (A) SOFT TO STIFF GRAY SANDY CLAY. MOIST TO WET (UNDIVIDED C.P.)
- (B) MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT. MOIST (ROADWAY EMBANKMENT)

SS-20  
SS-21

LOOSE GRAY SAND, SAT. (UNDIVIDED C.P.)

**-Y2B-**

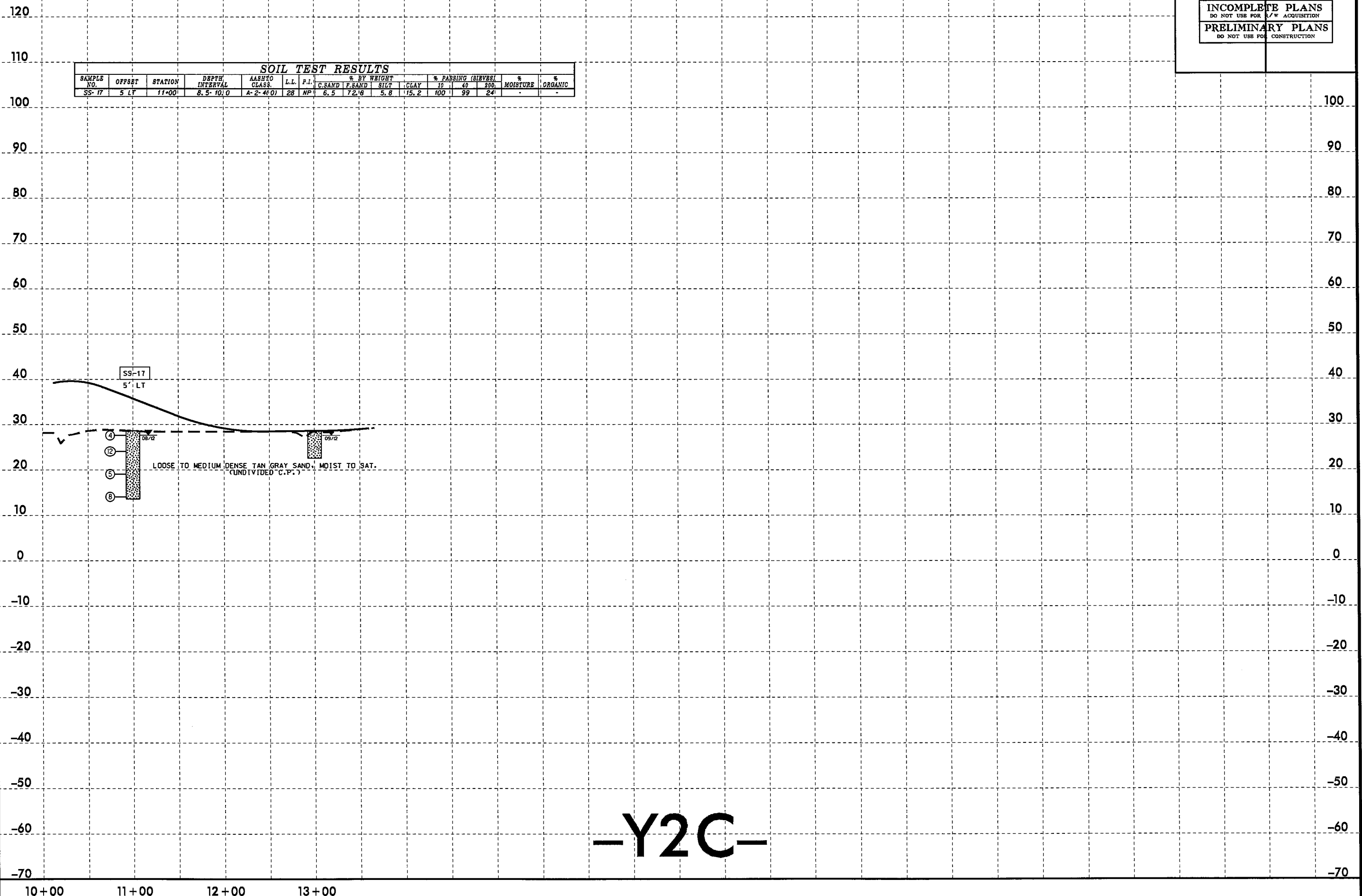
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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>38</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-17	5 LT	11+00	8.5-10.0	A-2-4(0)	28	NP	6.5	72.6	5.8	15.2	100	99	24	-	-



**-Y2C-**

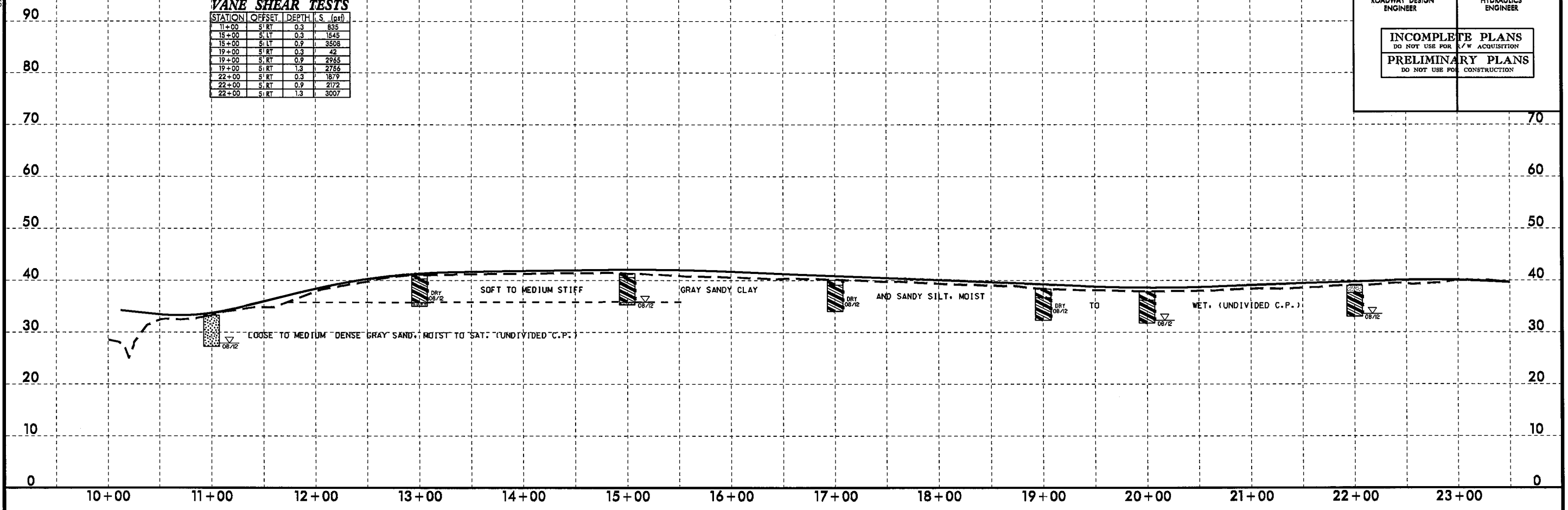


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PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>39</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
11+00	5' RT	0.3	835
15+00	5' LT	0.3	1545
15+00	5' LT	0.9	3508
19+00	5' RT	0.3	42
19+00	5' RT	0.9	2965
19+00	5' RT	1.3	2756
22+00	5' RT	0.3	1879
22+00	5' RT	0.9	2172
22+00	5' RT	1.3	3007



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**SOIL TEST RESULTS**

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	#10	#40	#200		
SS-23	CL	25+50	0.0' - 1.5'	A-2-4(0)	20	NP	24.3	54.3	11.3	10.1	100	90	24	-	-

**VANE SHEAR TESTS**

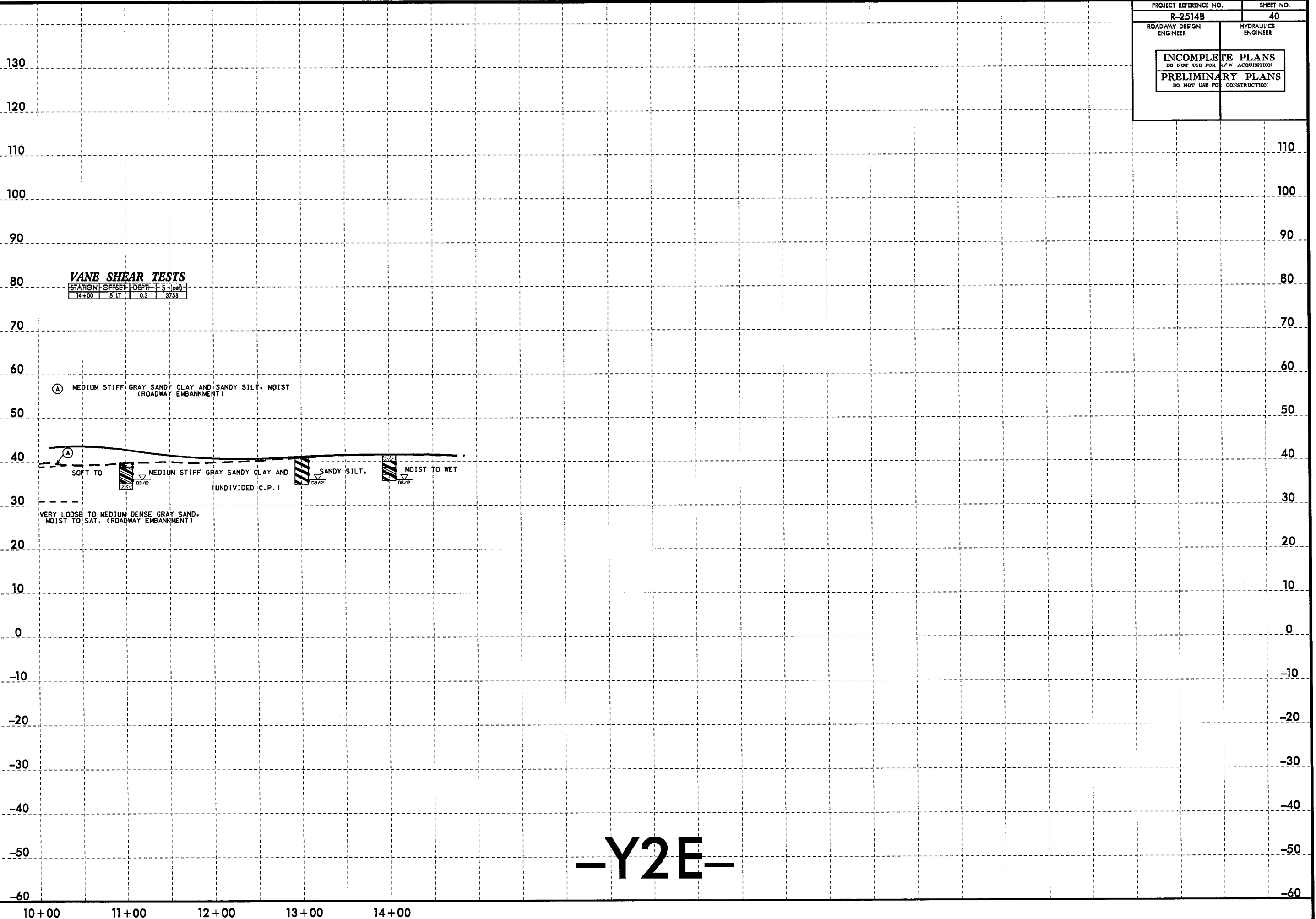
STATION	OFFSET	DEPTH	S (psf)
28+00	5' RT	0.3	752
28+00	5' RT	0.9	1879



-Y2D-

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PROJECT REFERENCE NO.		SHEET NO.	
R-2514B		40	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



-Y2E-

5/28/99

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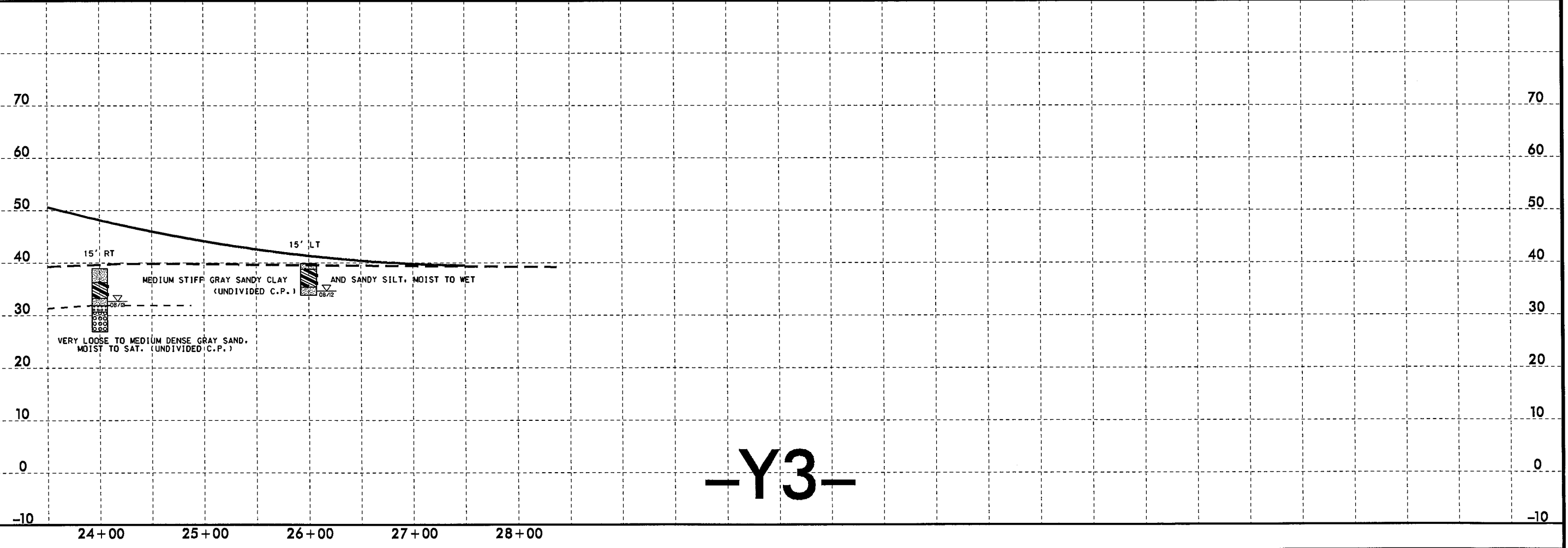
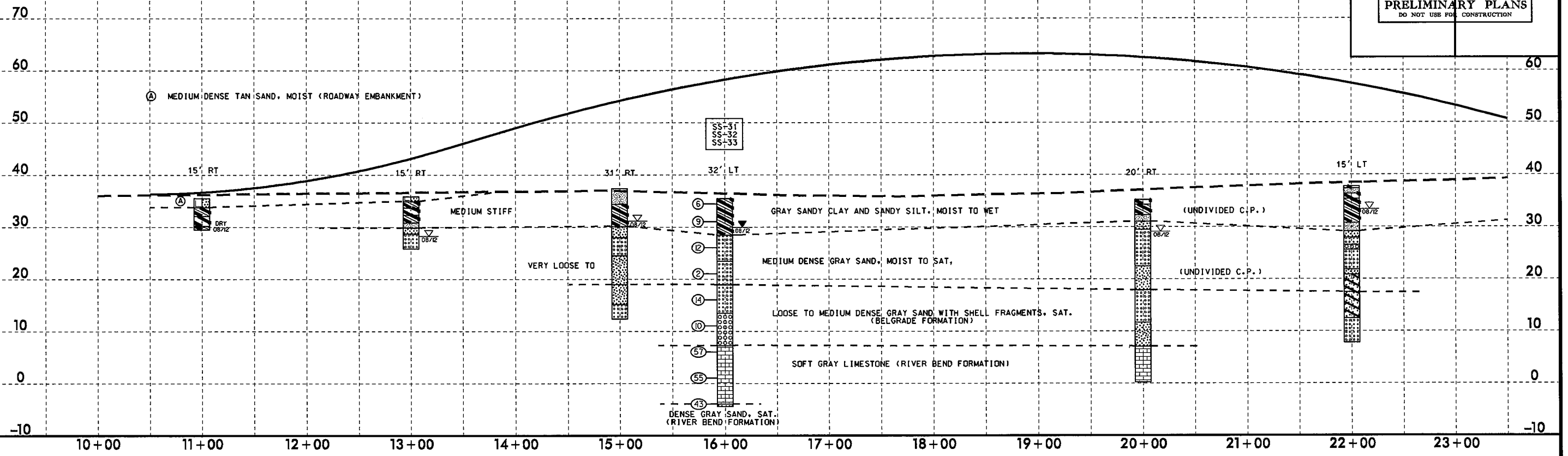
**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
11+00	17' RT	0.3	2464
11+00	17' RT	1.3	2088
11+00	17' RT	1.9	1629
11+00	17' RT	2.3	2004

**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-31	32' LT	16+00	0.5-1.5	A-61-151	39	23	8.9	23.5	27.1	40.5	100	95	74	-	-
SS-32	32' LT	16+00	3.4-4.9	A-61-51	32	16	19.2	36.6	15.8	28.3	100	91	50	-	-
SS-33	32' LT	16+00	23.4-24.9	A-1-b(0)	19	NP	83.9	13.8	2.3	0.0	93	47	3	-	-

PROJECT REFERENCE NO. <b>R-2514B</b>	SHEET NO. <b>41</b>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



**-Y3-**

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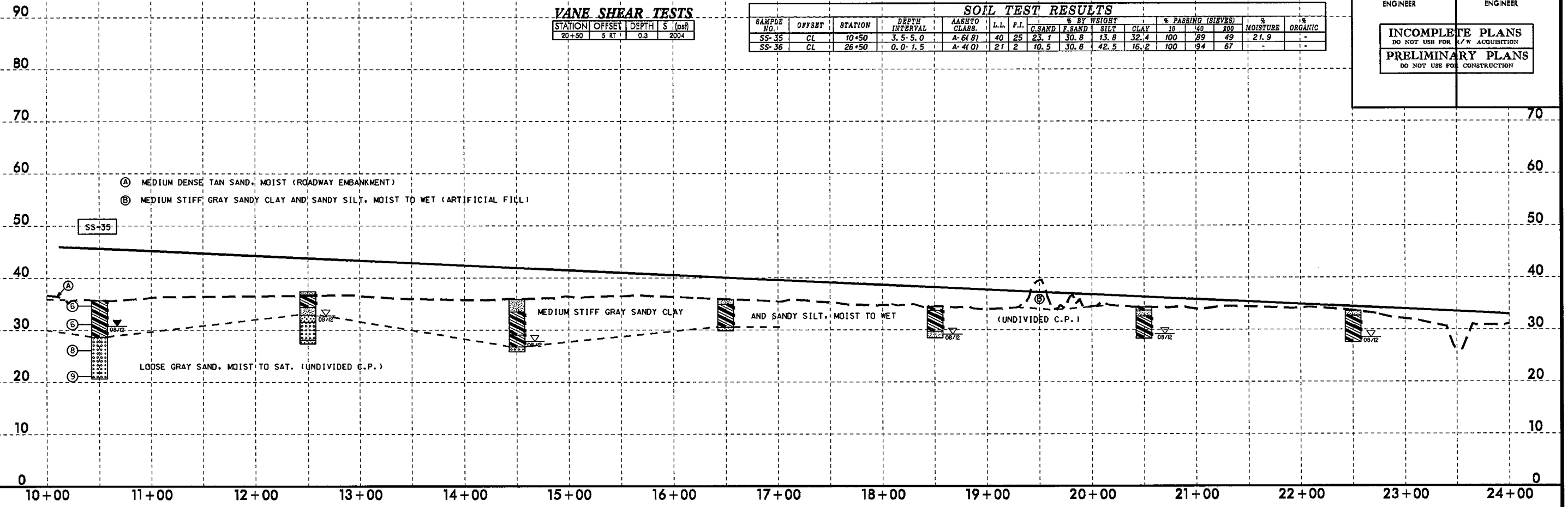
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ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (pcf)
20+50	5' RT	0.3	2004

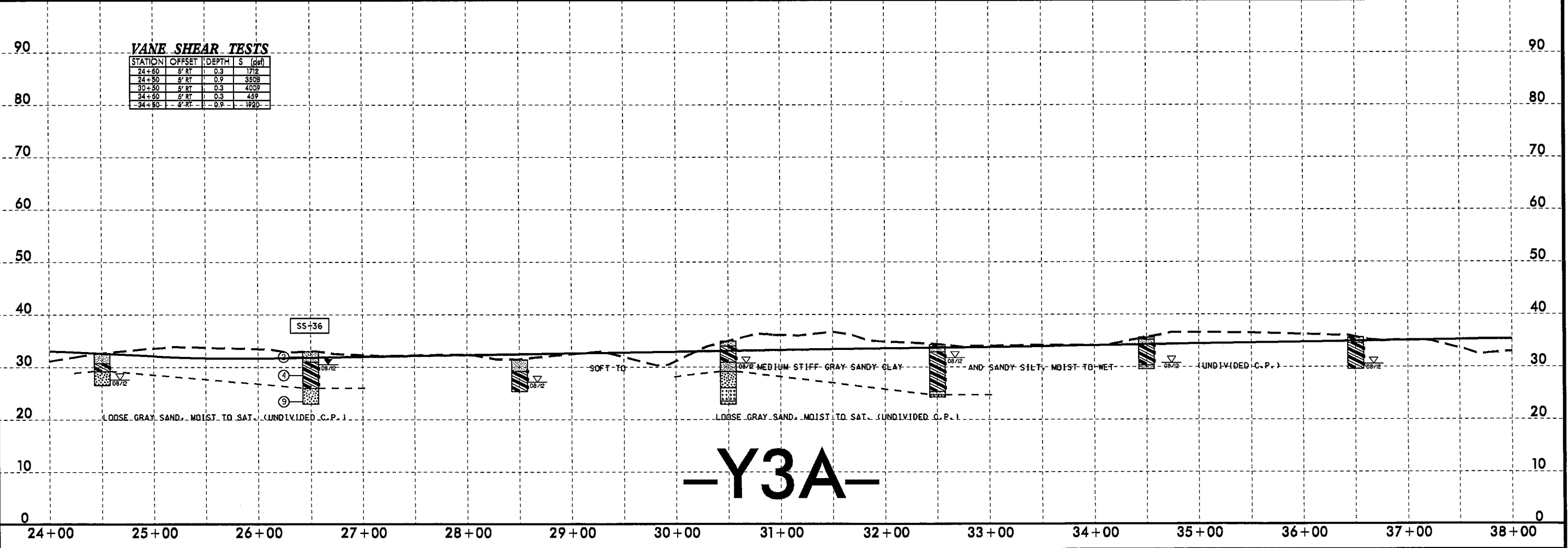
**SOIL TEST RESULTS**

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-35	CL	10+50	3.5-5.0	A-6(8)	40	25	23.1	30.8	13.8	32.4	100	89	49	21.9	-
SS-36	CL	26+50	0.0-1.5	A-4(0)	21	2	10.5	30.8	42.5	16.2	100	94	67	-	-



**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (pcf)
24+50	5' RT	0.3	1712
24+50	5' RT	0.9	3508
30+50	5' RT	0.3	4009
34+50	5' RT	0.3	459
34+50	5' RT	0.9	1920



**-Y3A-**

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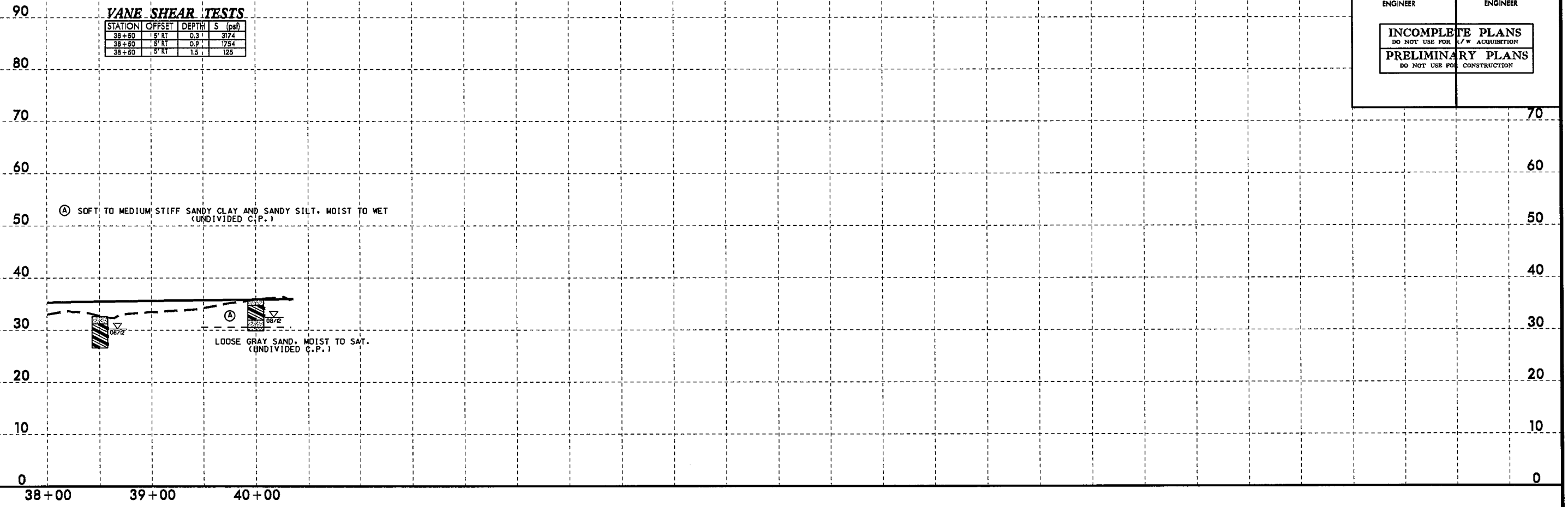
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PROJECT REFERENCE NO.	SHEET NO.
R-2514B	43
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/CQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
38+50	5 RT	0.3	374
38+50	5 RT	0.9	1754
38+50	5 RT	1.5	125



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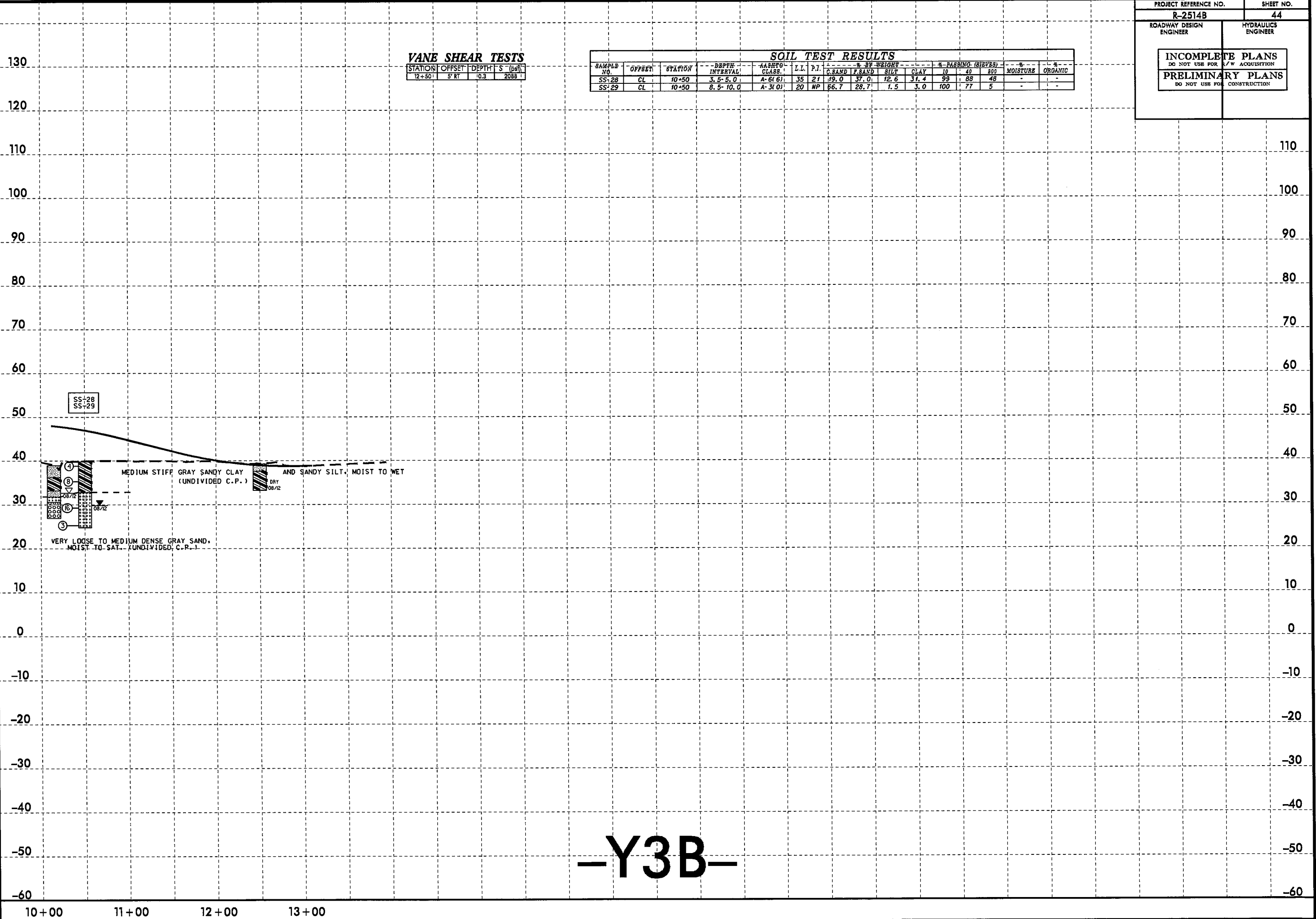
PROJECT REFERENCE NO.	SHEET NO.
R-2514B	44
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
12+50.1	5' RT	0.3	2088

**SOIL TEST RESULTS**

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	ASTM CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		MOISTURE	ORGANIC	
							C. SAND	F. SAND	SILT	CLAY	10	40			600
SS-28	CL	10+50	3.5- 5.0	A- 6( 6)	35	21	19.0	37.0	12.6	31.4	99	88	48	-	-
SS-29	CL	10+50	8.5- 10.0	A- 3( 0)	20	NP	66.7	28.7	1.5	3.0	100	77	5	-	-



**-Y3B-**

5/14/99

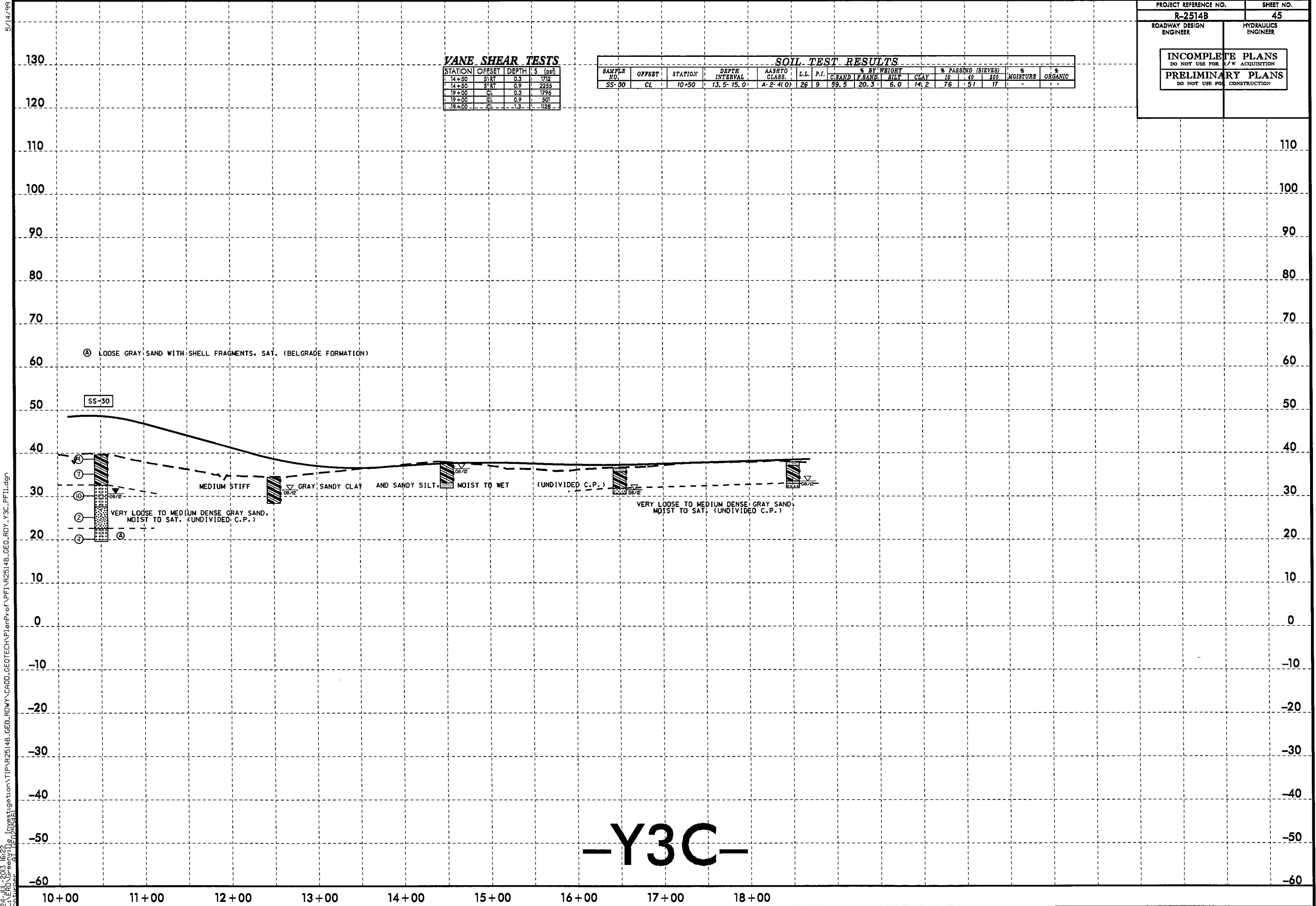
PROJECT REFERENCE NO.		SHEET NO.	
R-2514B		45	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION		PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (pcf)
14+50	5' RT	0.3	1712
14+50	5' RT	0.9	2255
19+00	CL	0.3	1796
19+00	CL	0.9	501
19+00	CL	1.3	1128

**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-30	CL	10+50	13.5-15.0'	A-2-4(0)	26	9	59.5	20.3	6.0	14.2	76	51	17	-	-



**-Y3C-**

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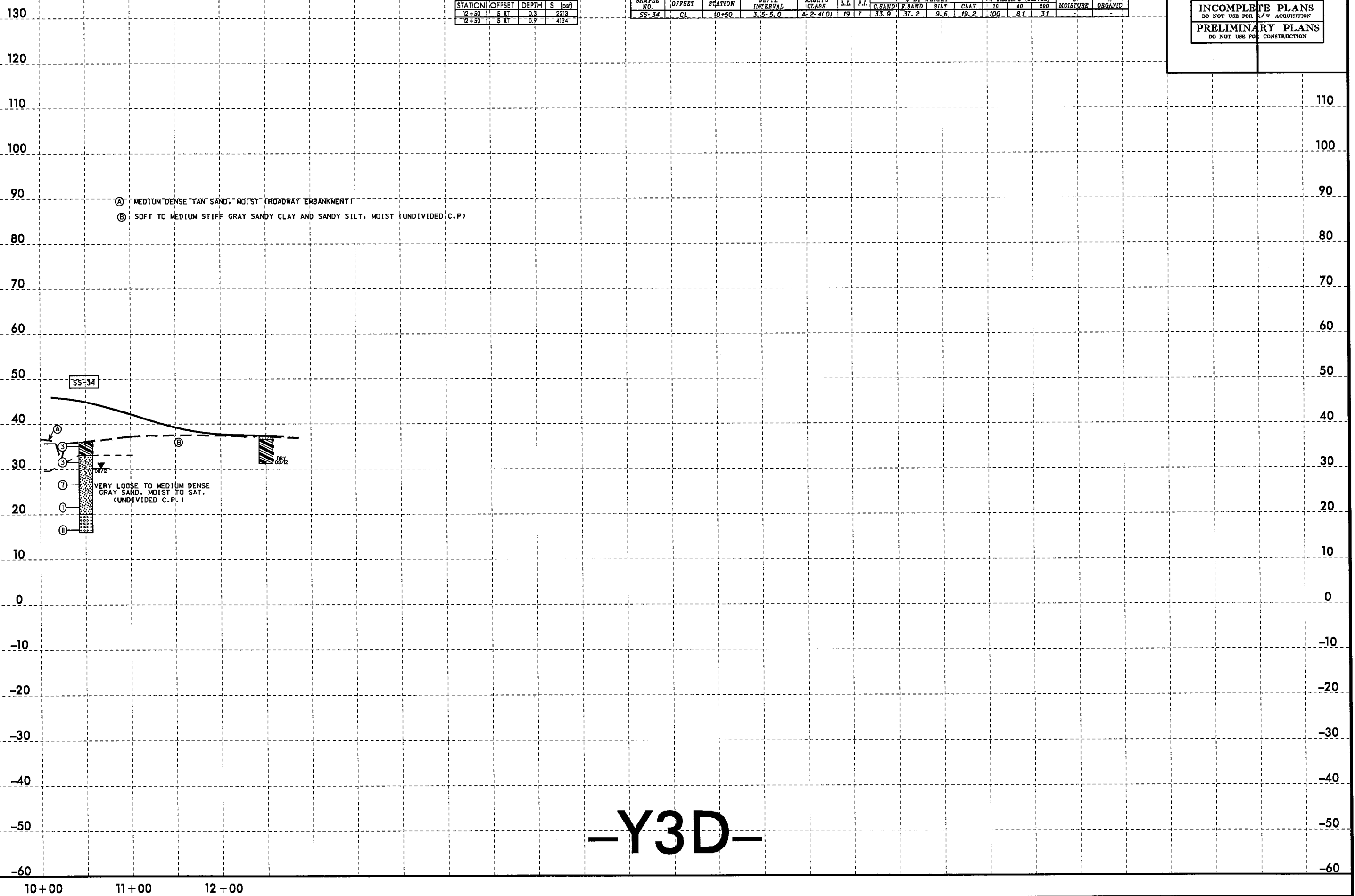
PROJECT REFERENCE NO.	SHEET NO.
R-2514B	46
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR A/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (pcf)
12+50	5 RT	0.3	2213
12+50	5 RT	0.9	4134

**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-34	CL	10+50	3.5-5.0	A-2-4(0)	19.7	7	33.9	37.2	9.6	19.2	100	81	31	-	-

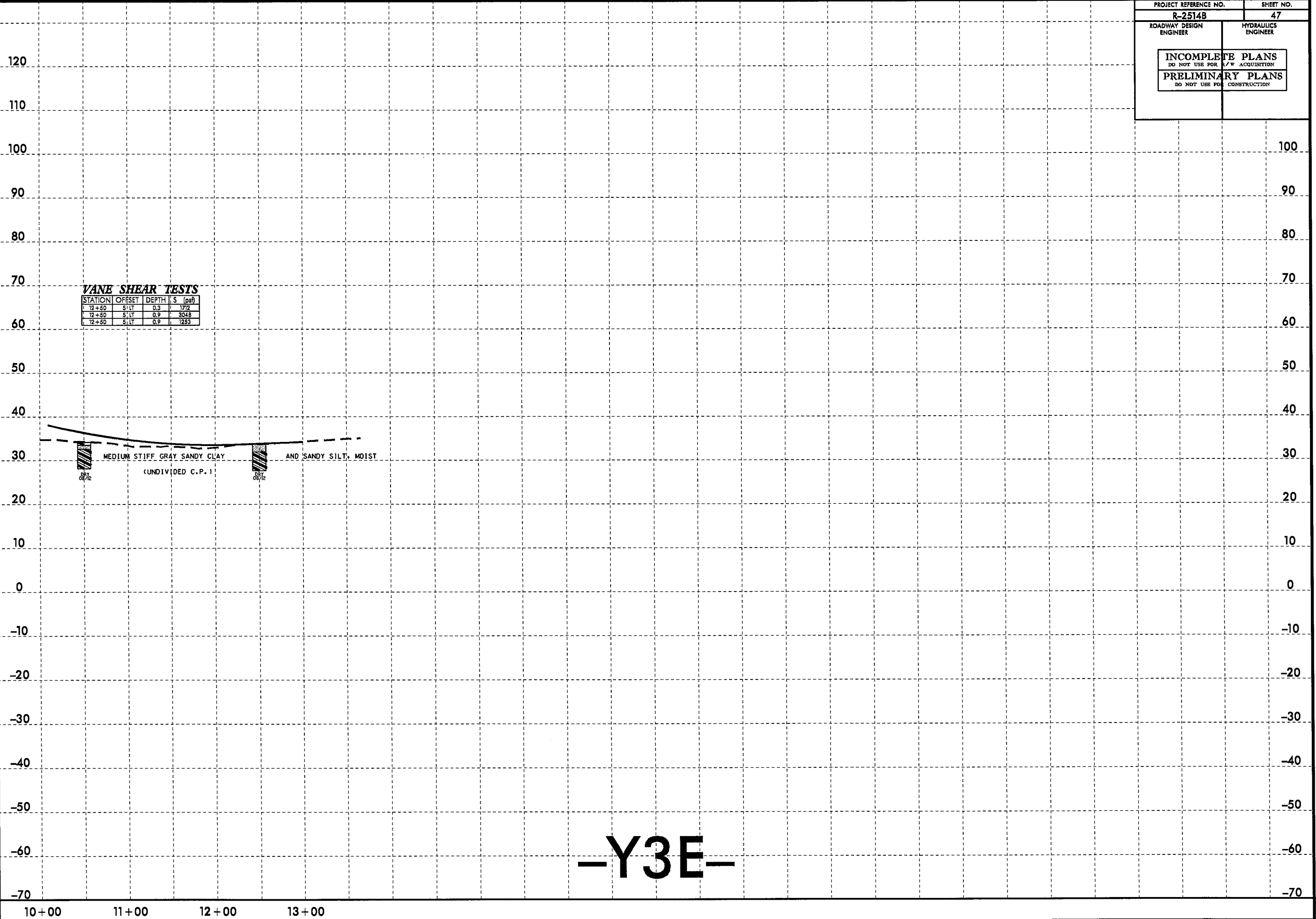


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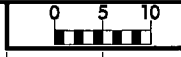


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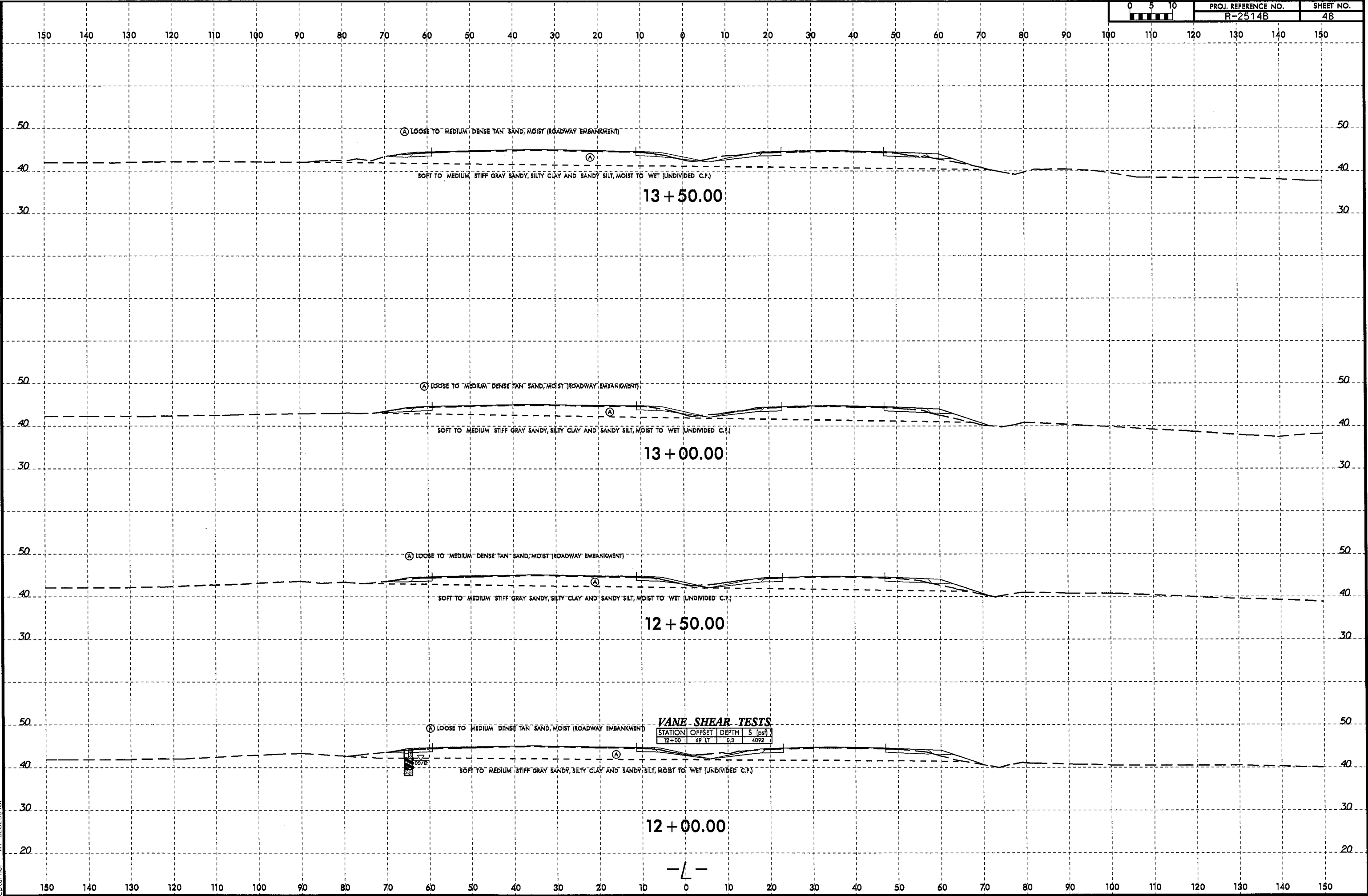
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<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	



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PROJ. REFERENCE NO.	SHEET NO.
R-2514B	48



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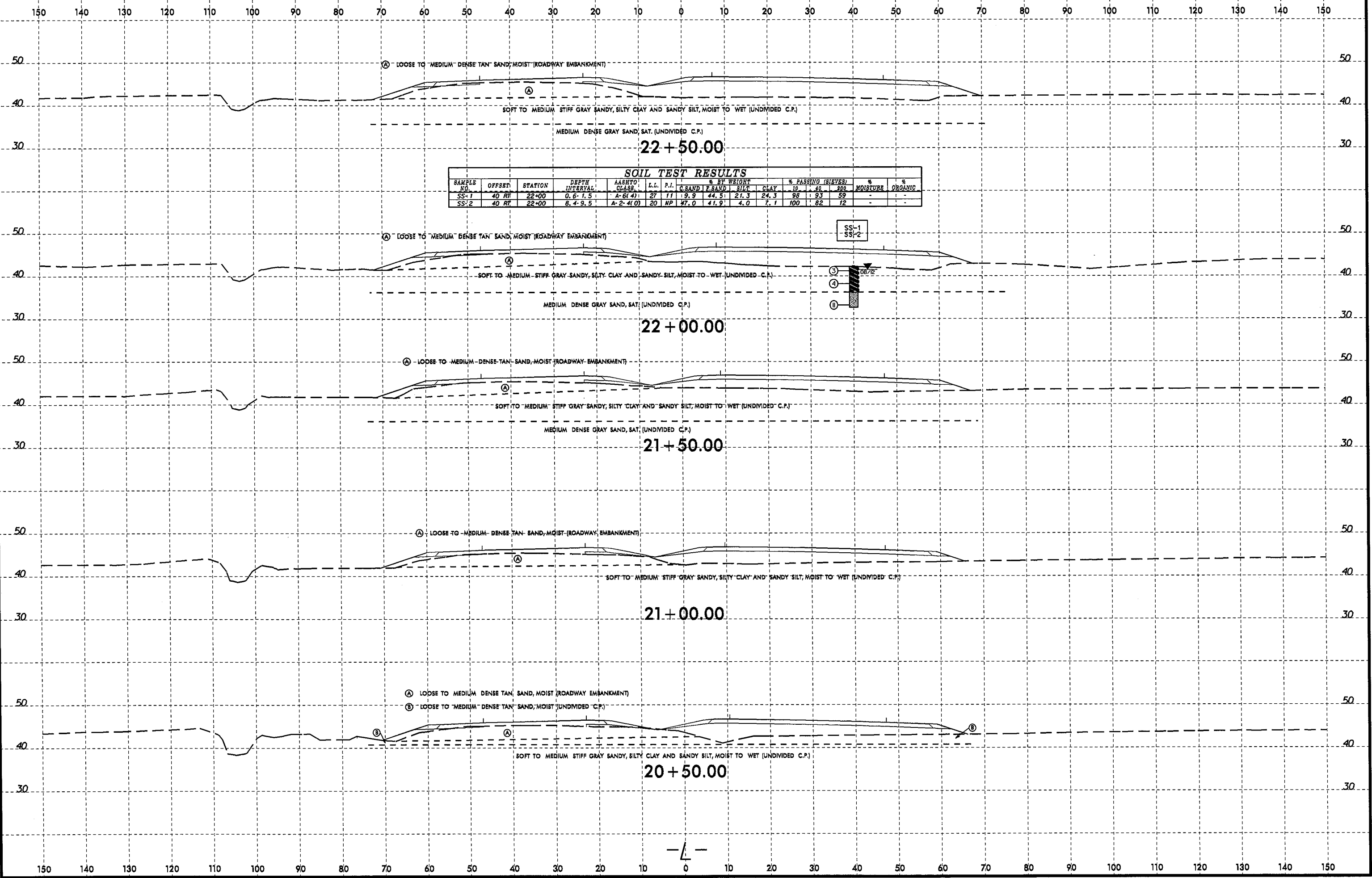
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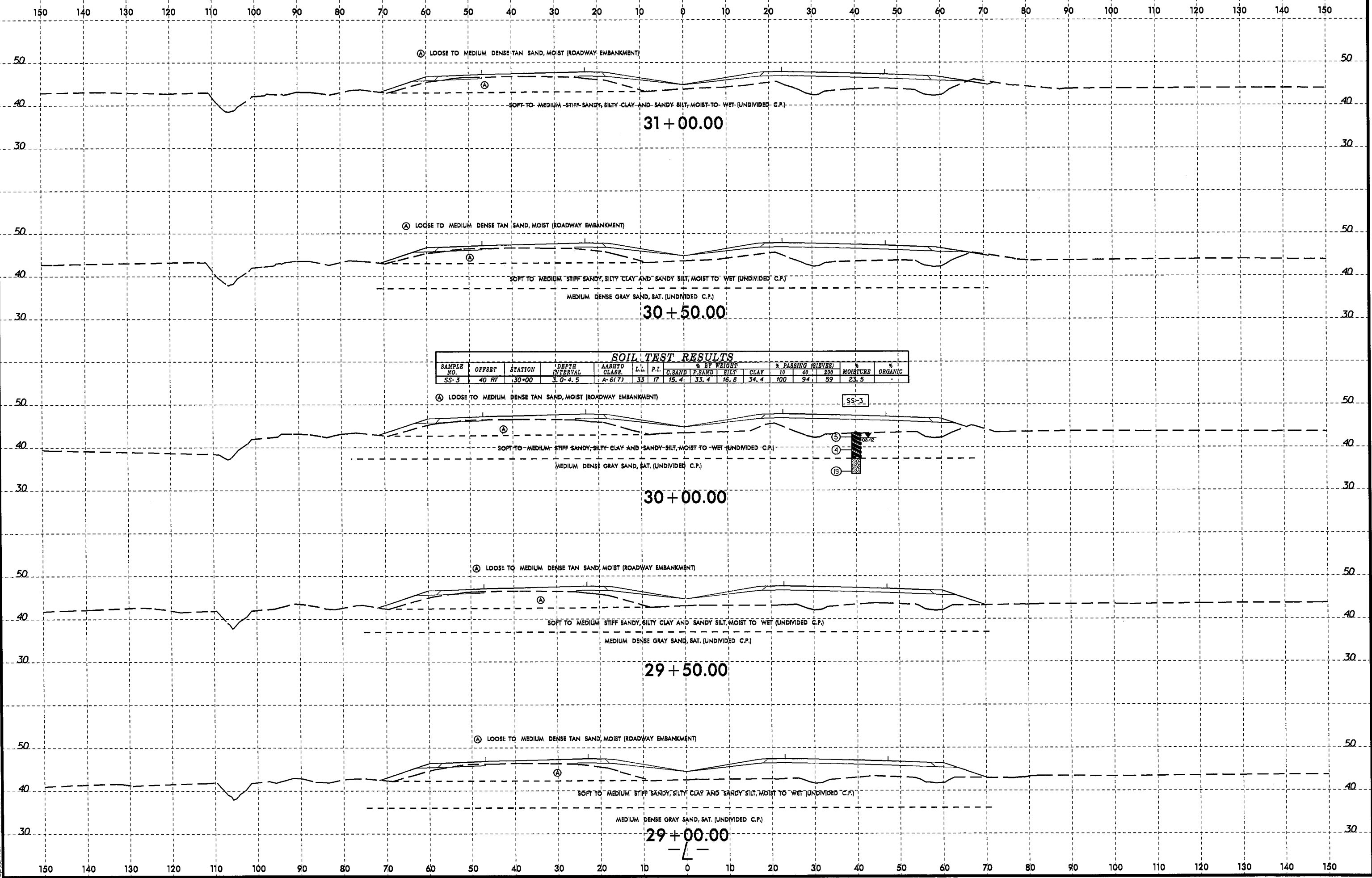
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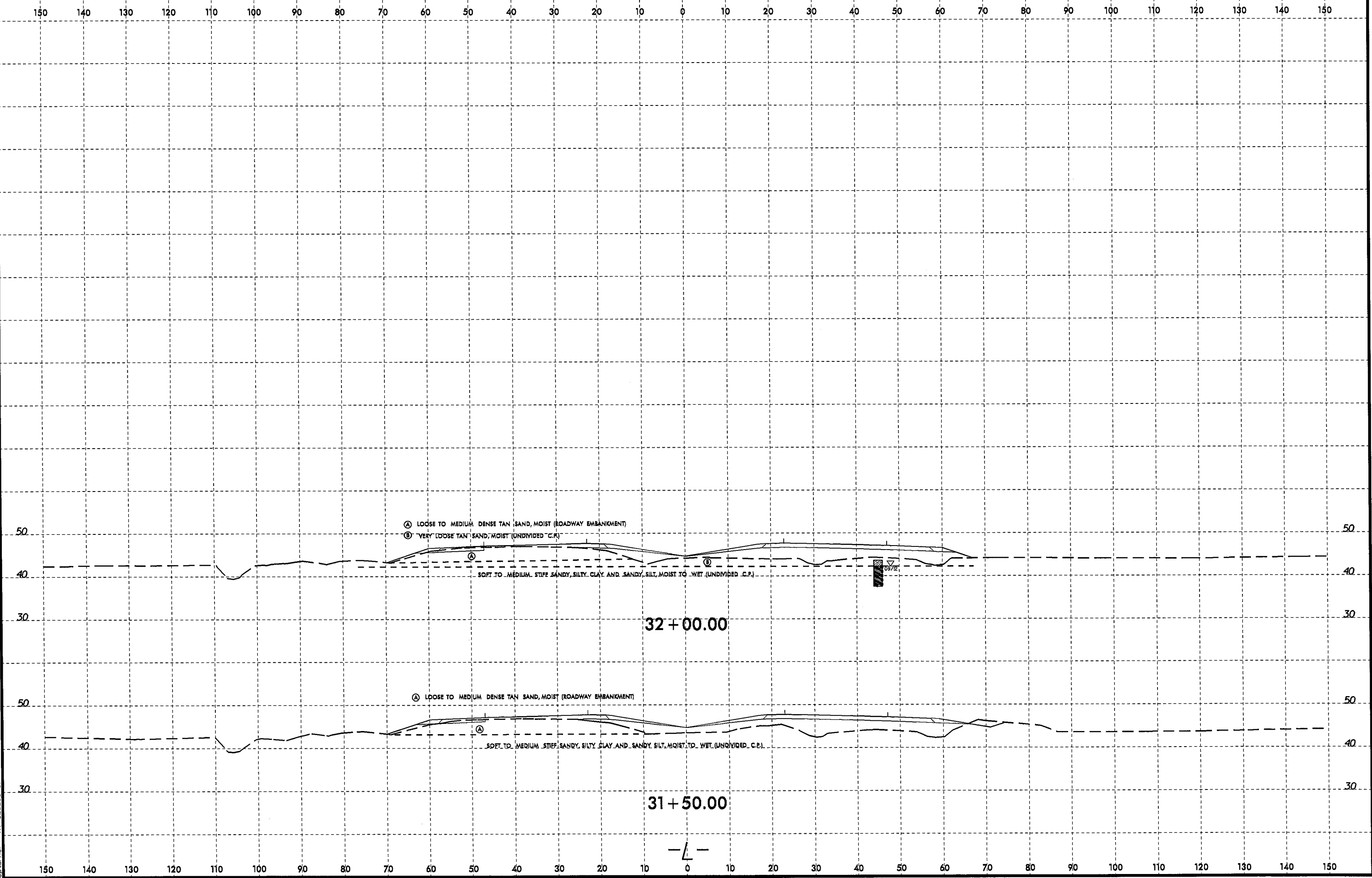
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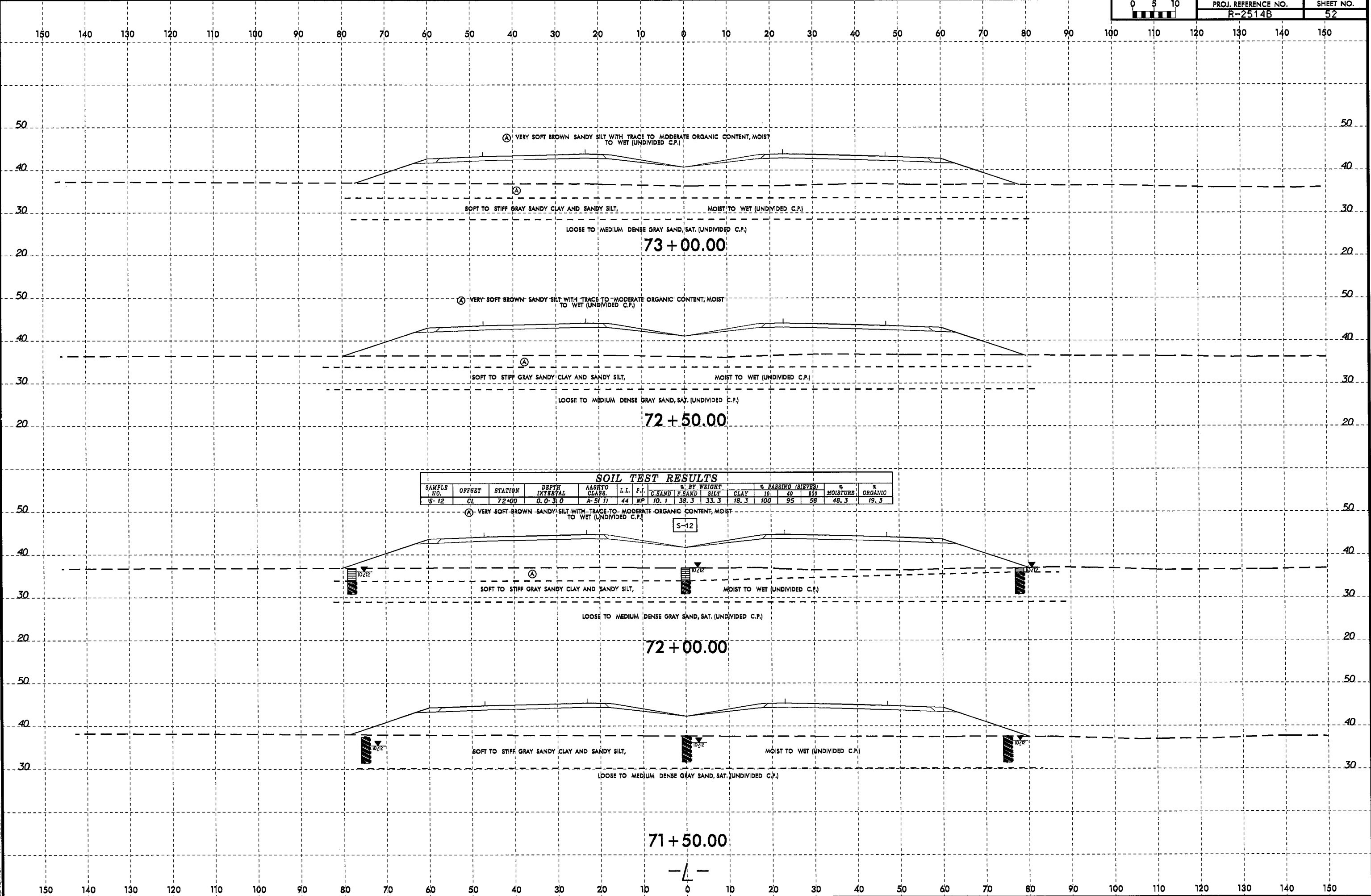
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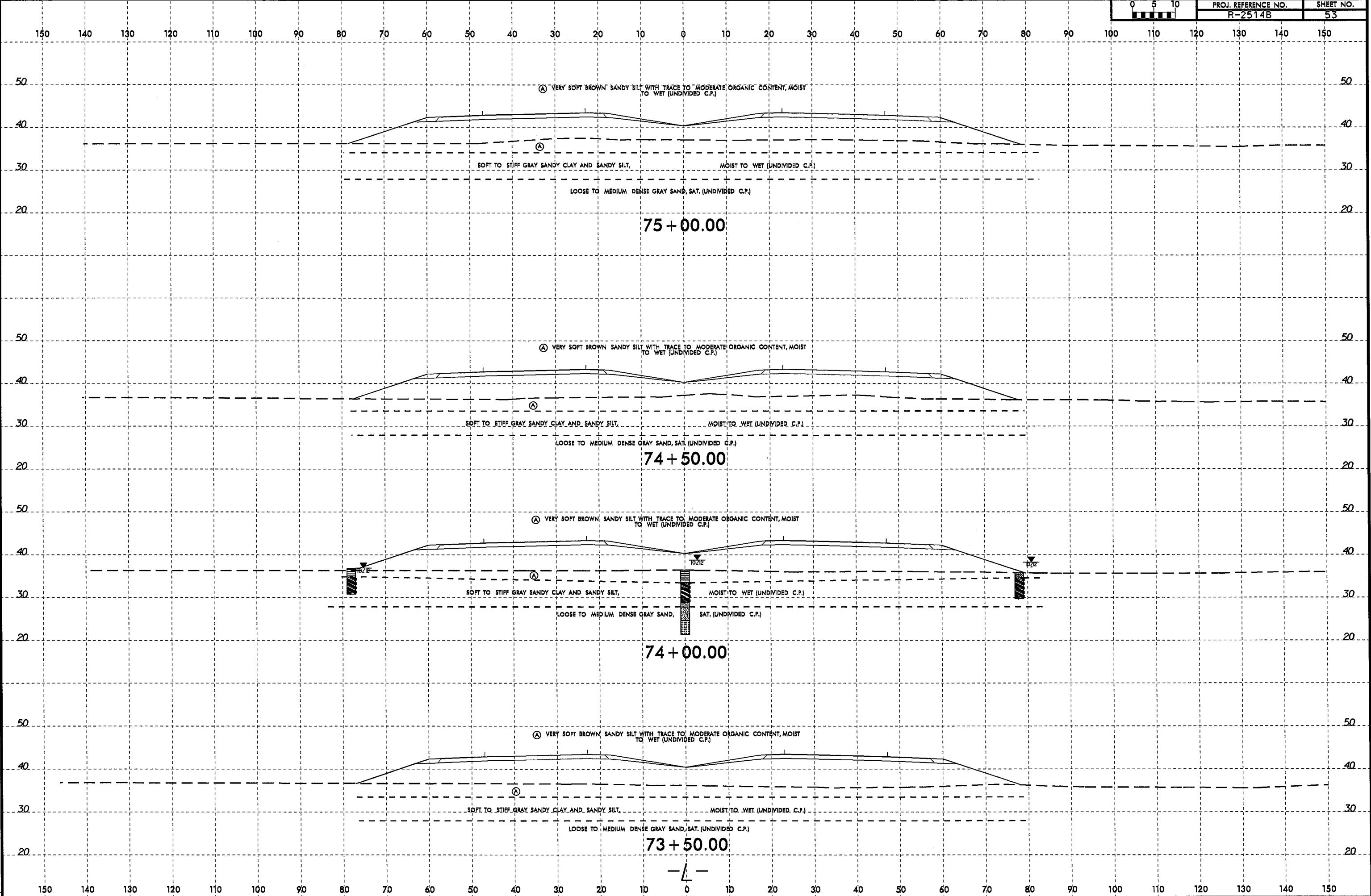
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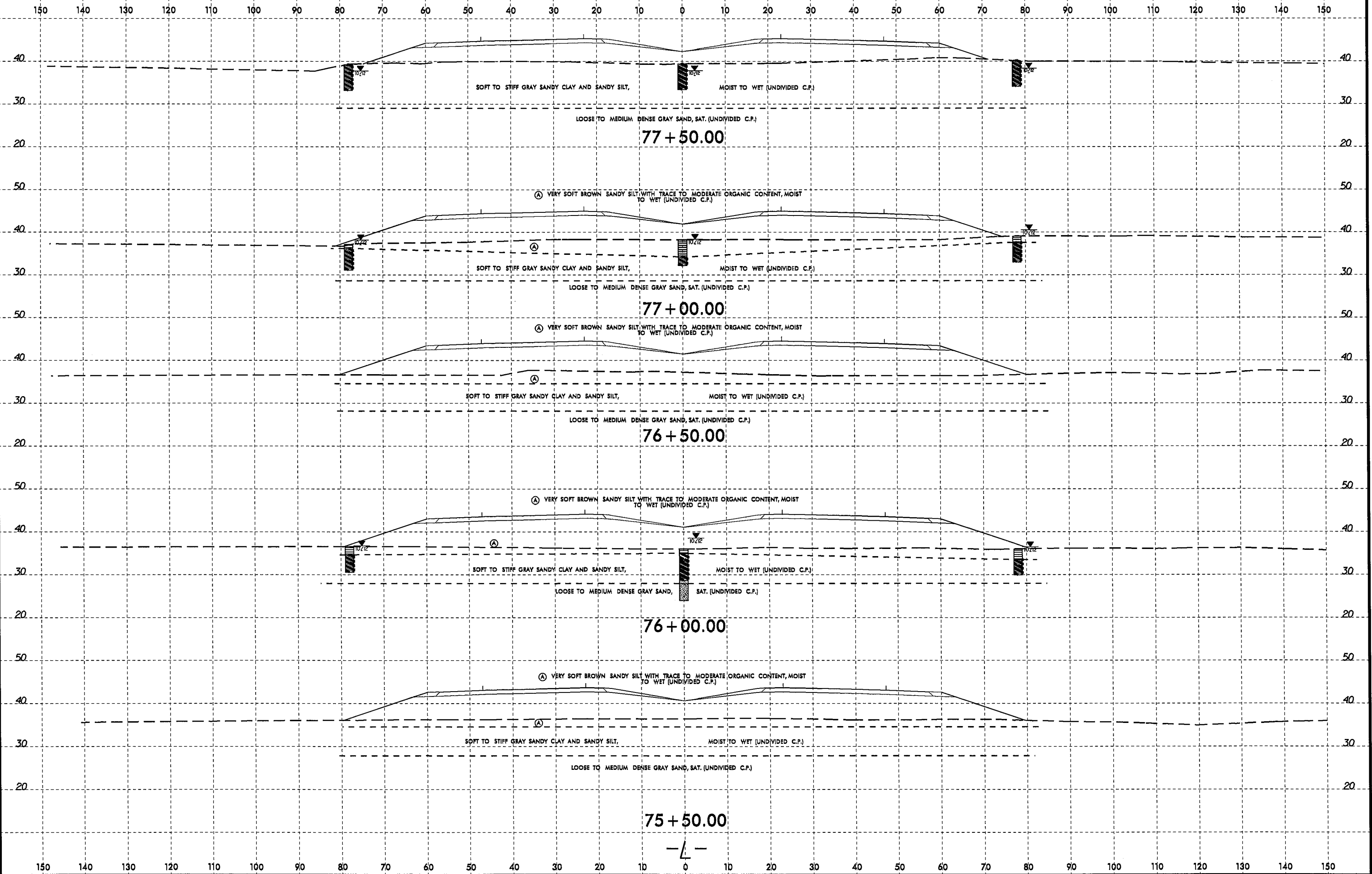
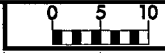
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PROJ. REFERENCE NO.	SHEET NO.
R-2514B	53

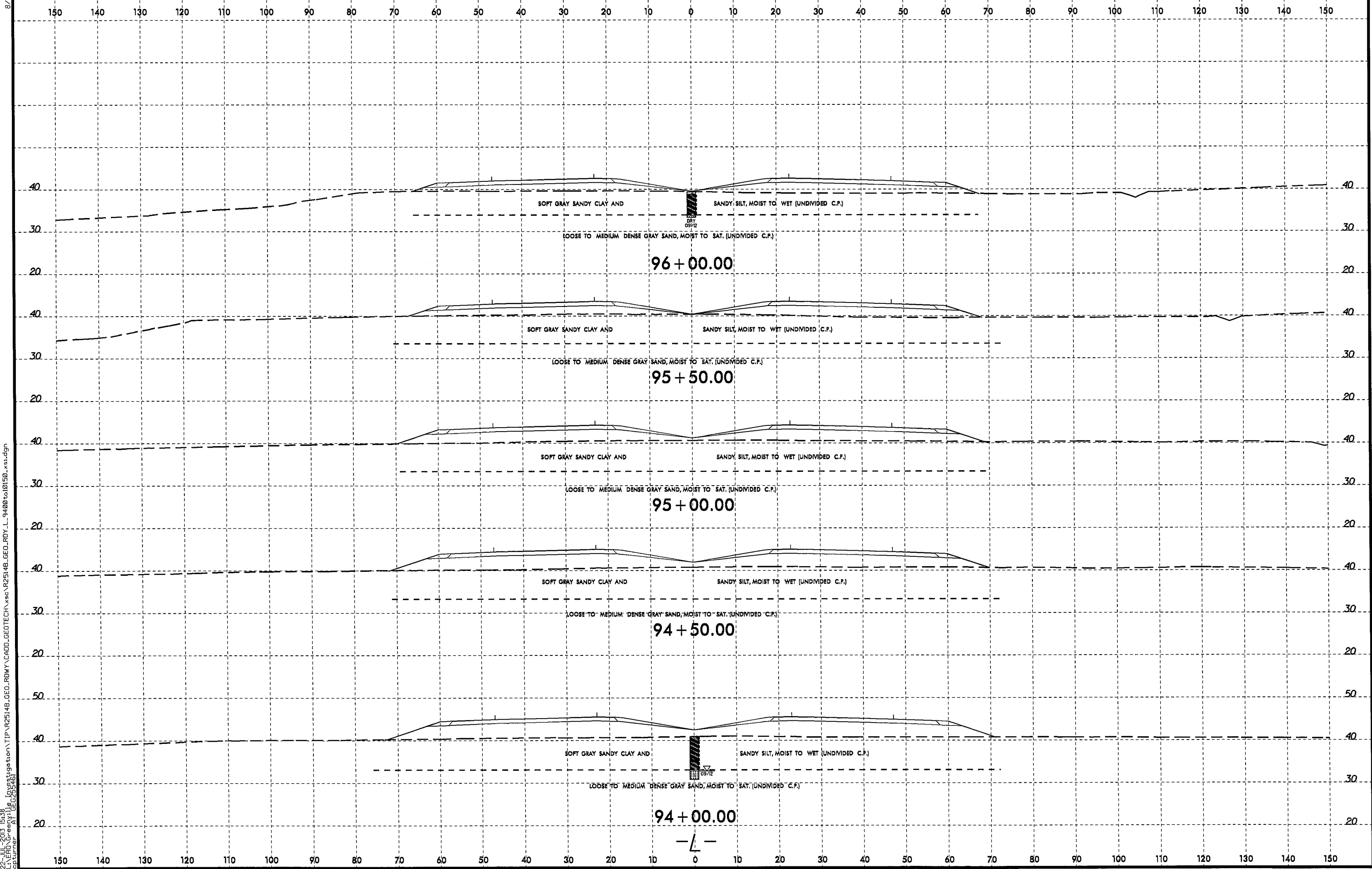


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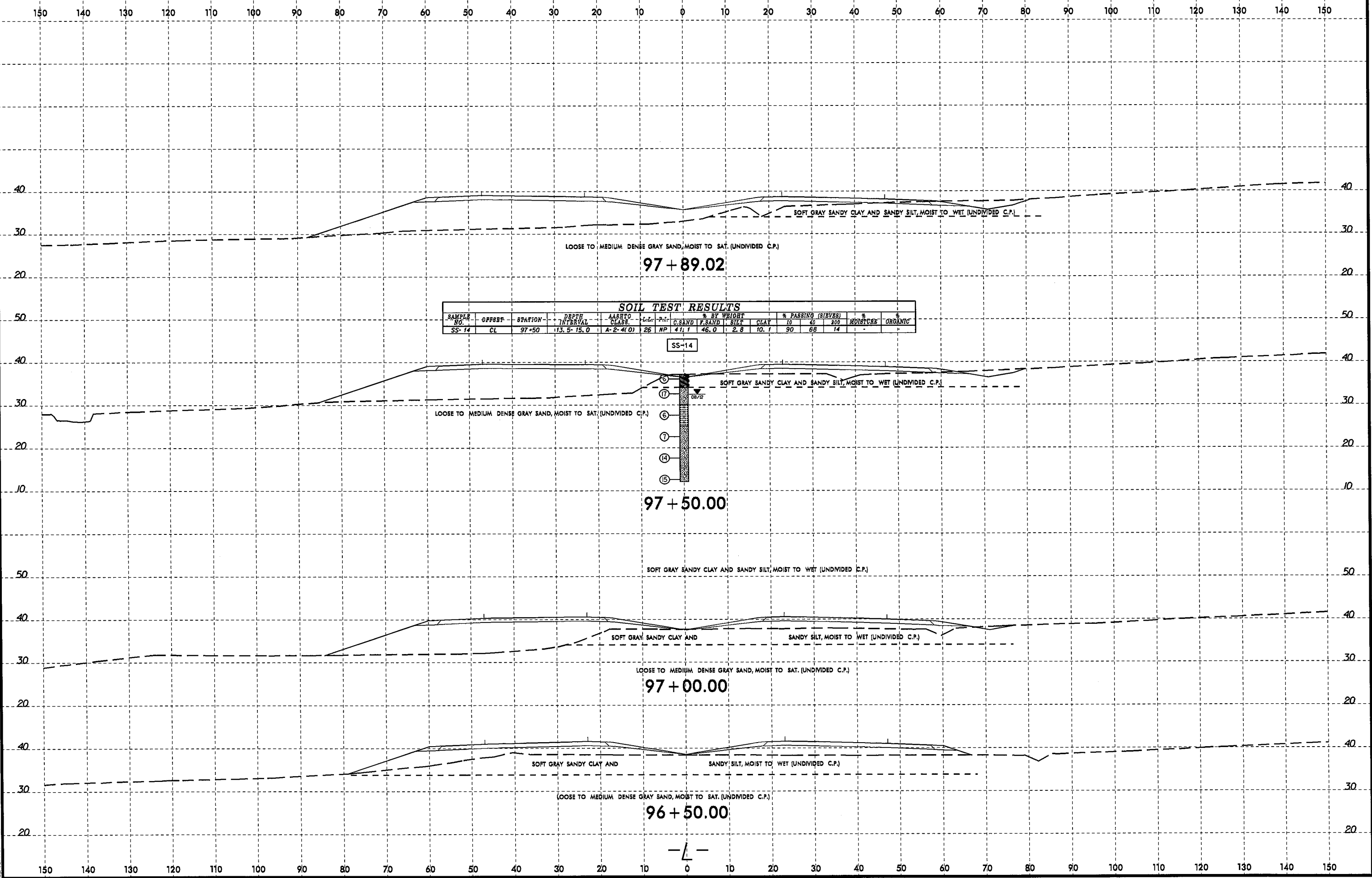


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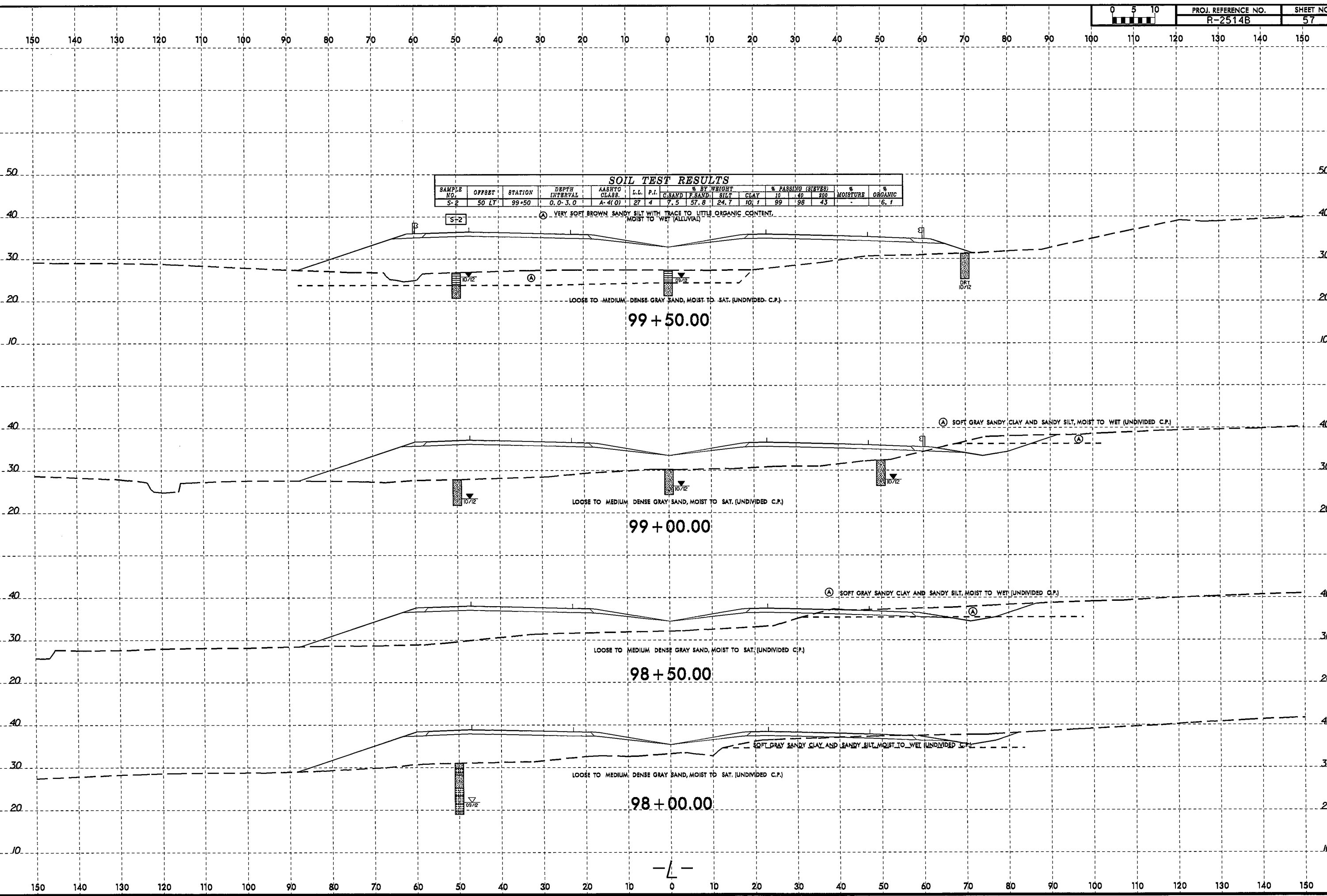
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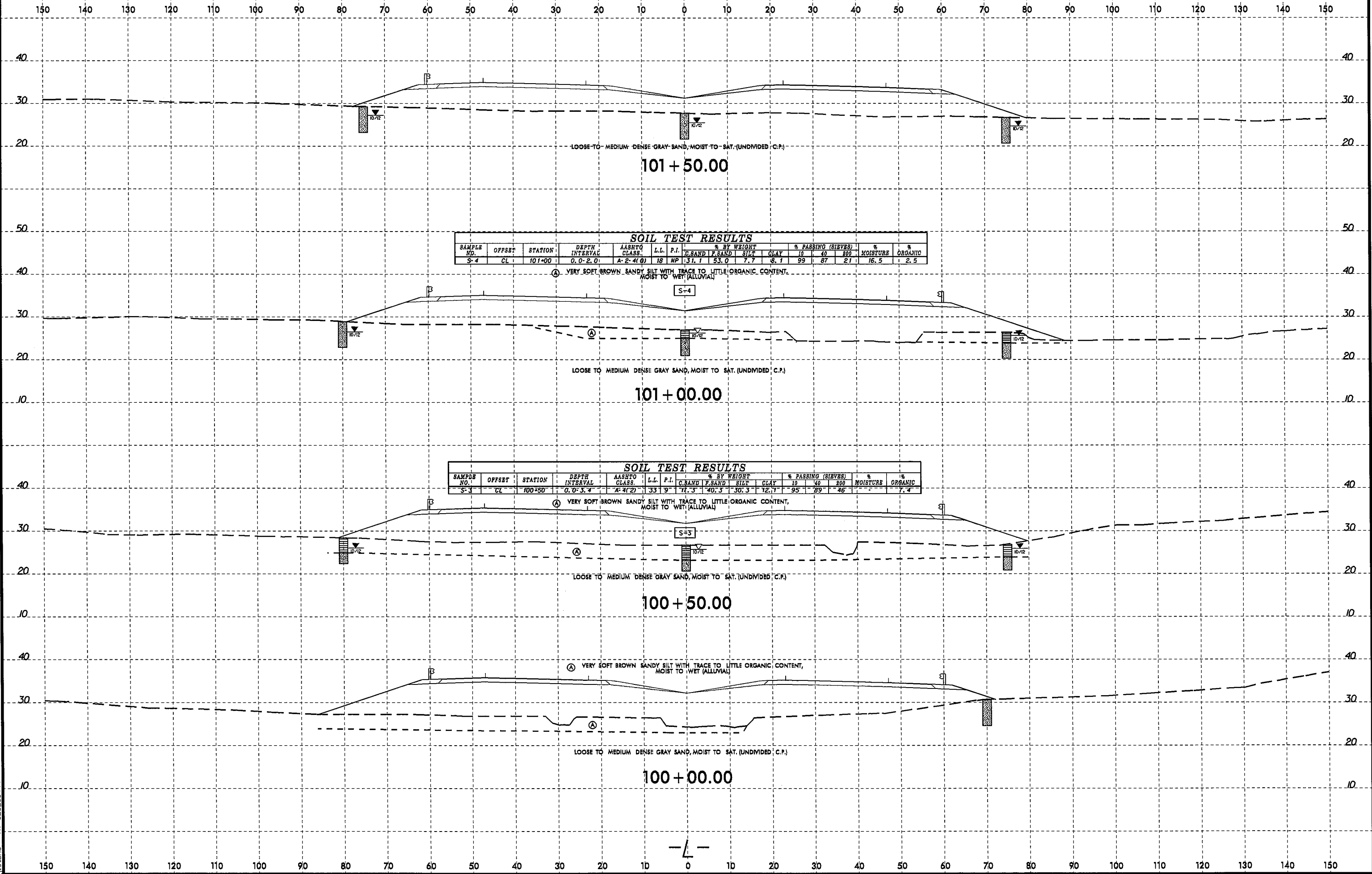
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SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	10	200		
S-2	50 LT	99+50	0.0-3.0	A-4(O)	27	4	7.5	57.8	24.7	10.1	99	98	43	6.1



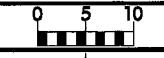
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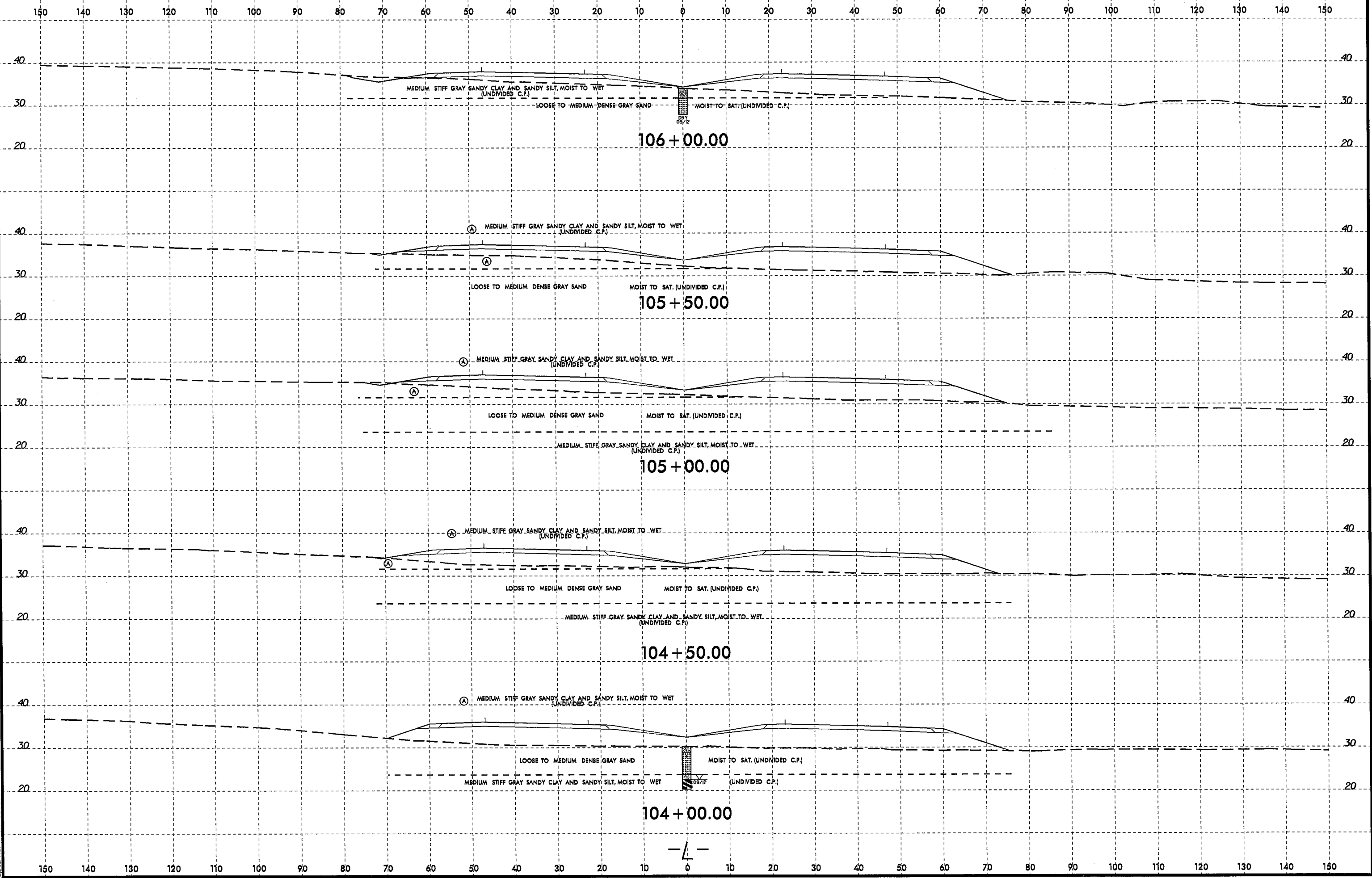


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R-2514B  
SHEET NO.  
59



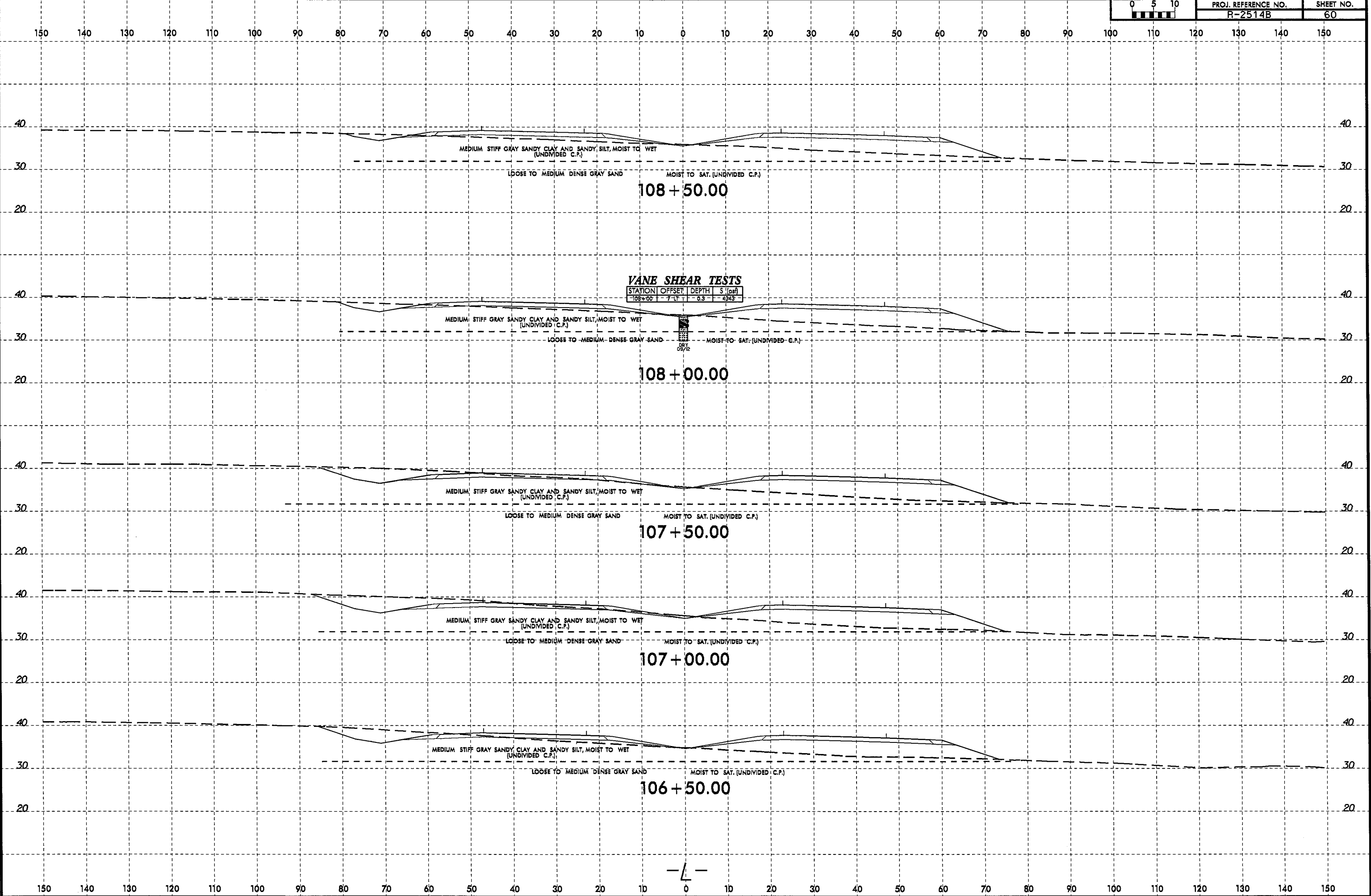
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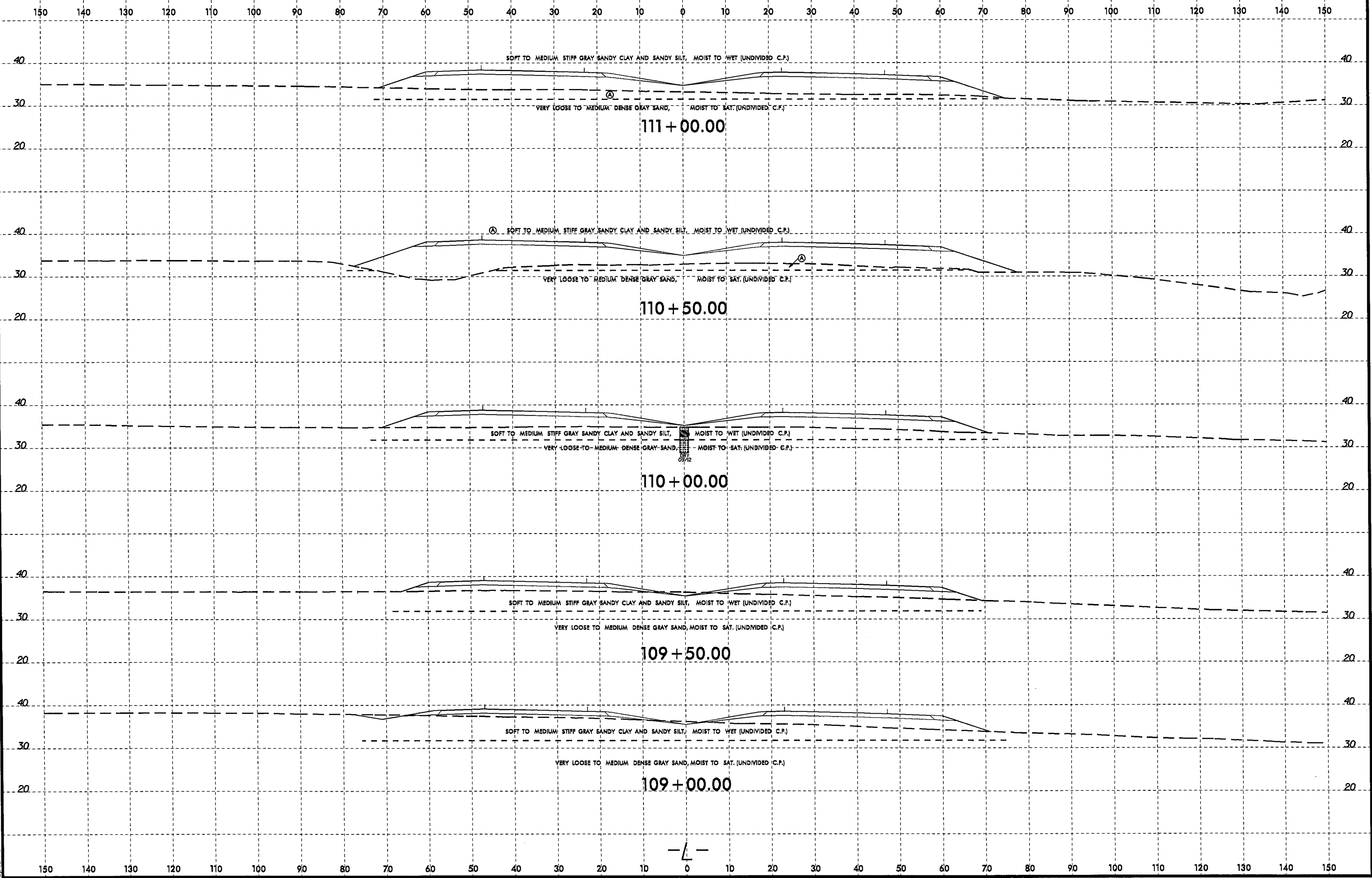


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R-2514B	60



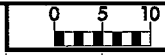
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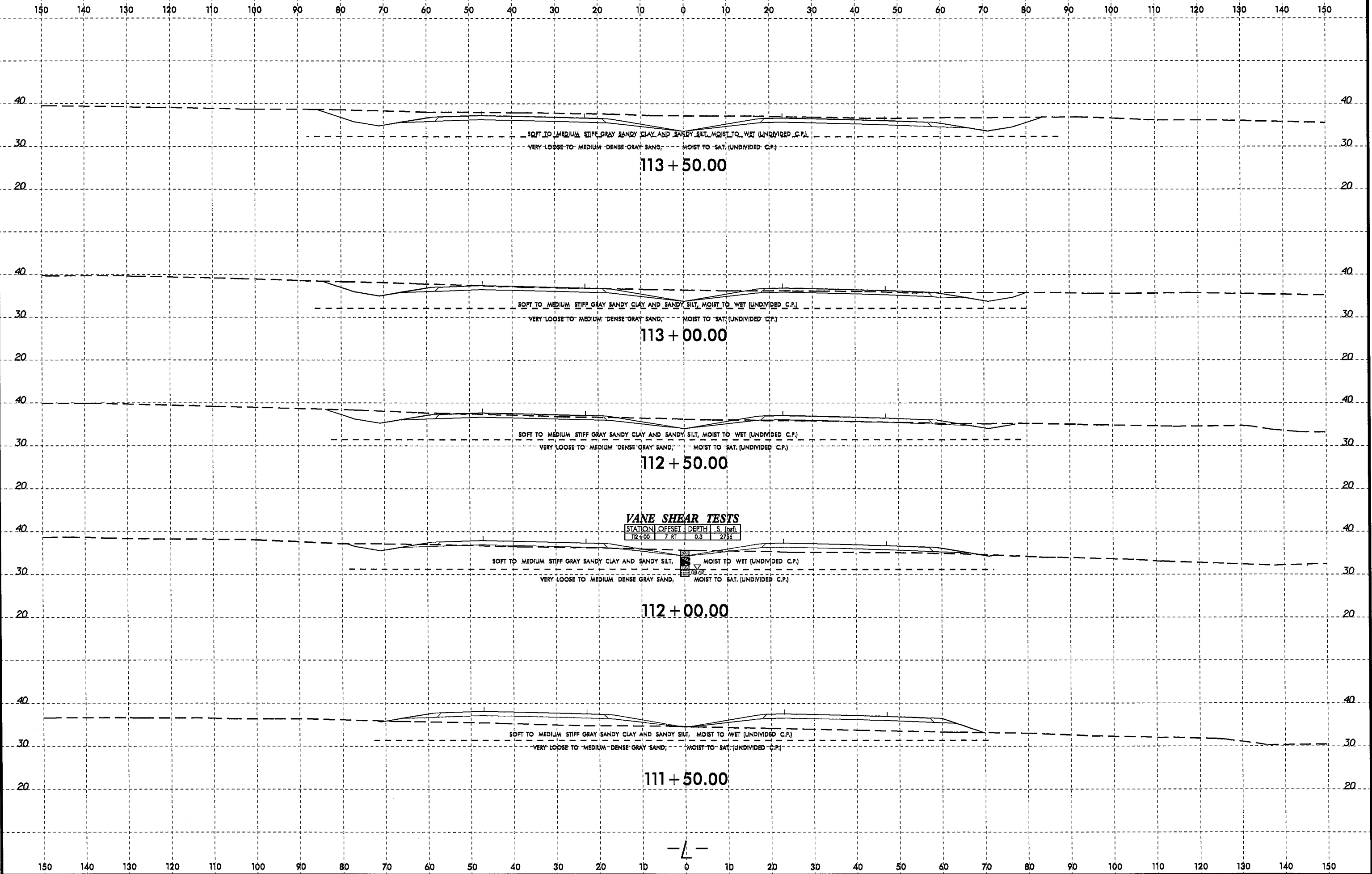


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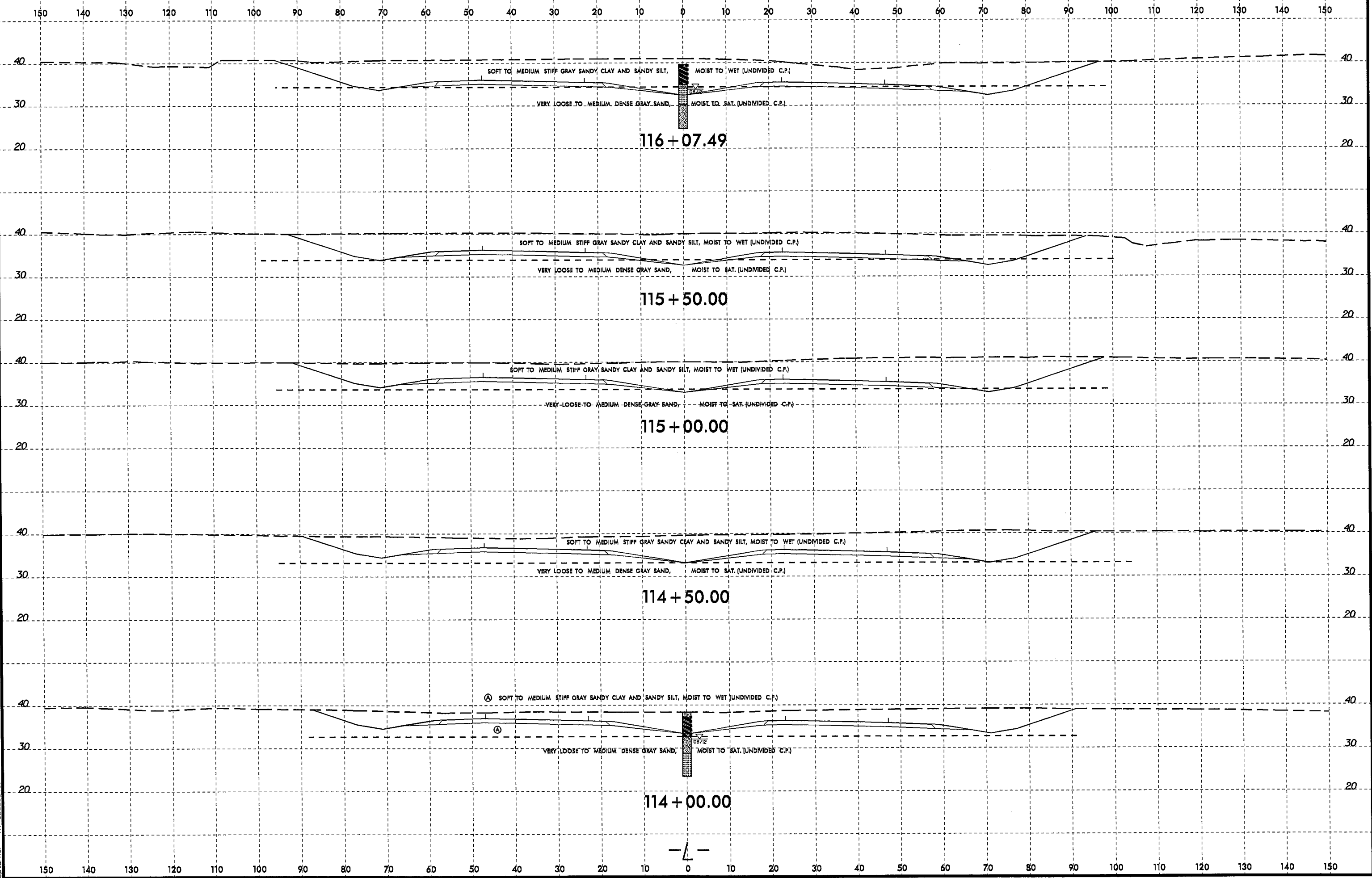


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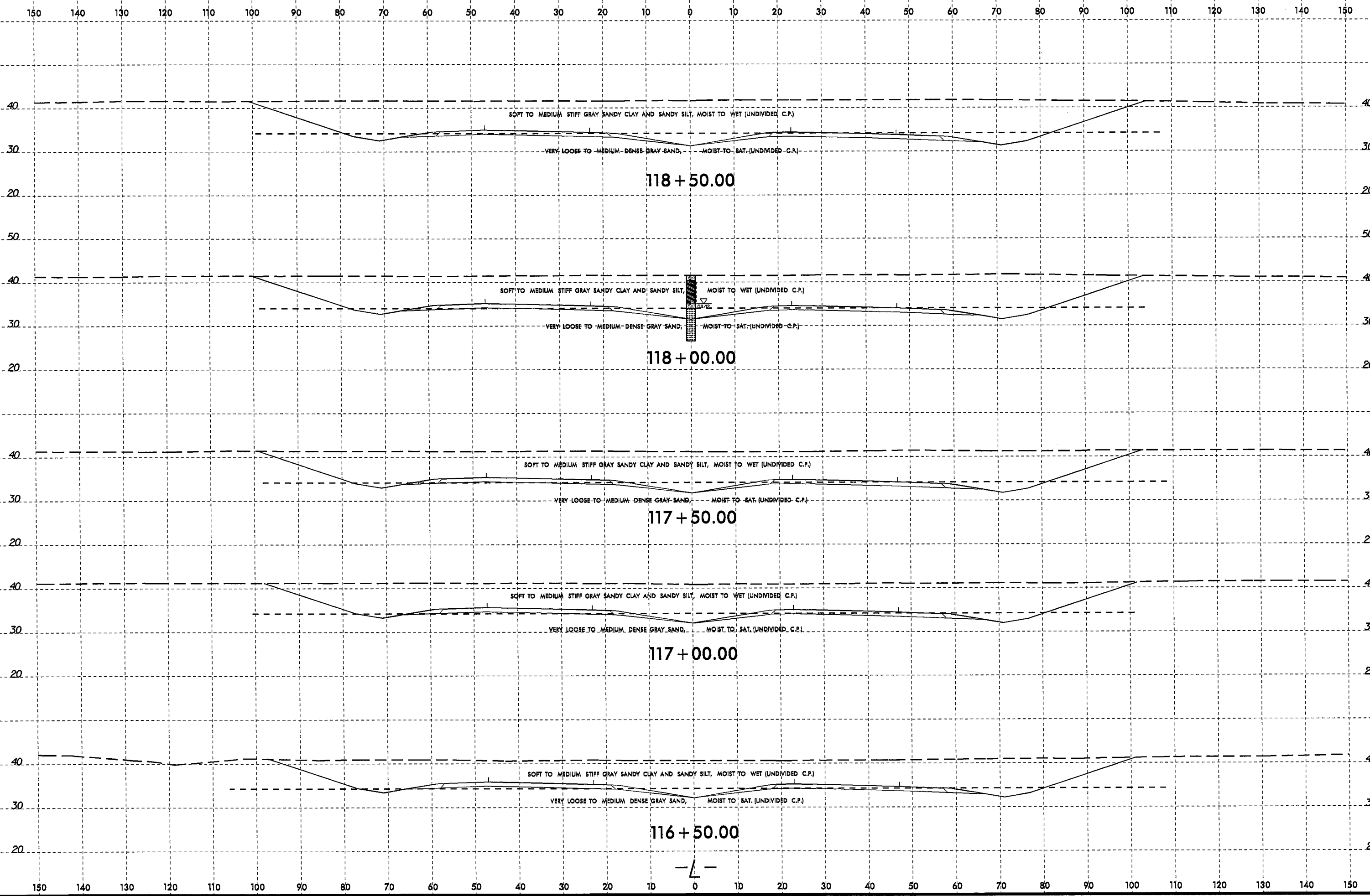




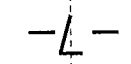
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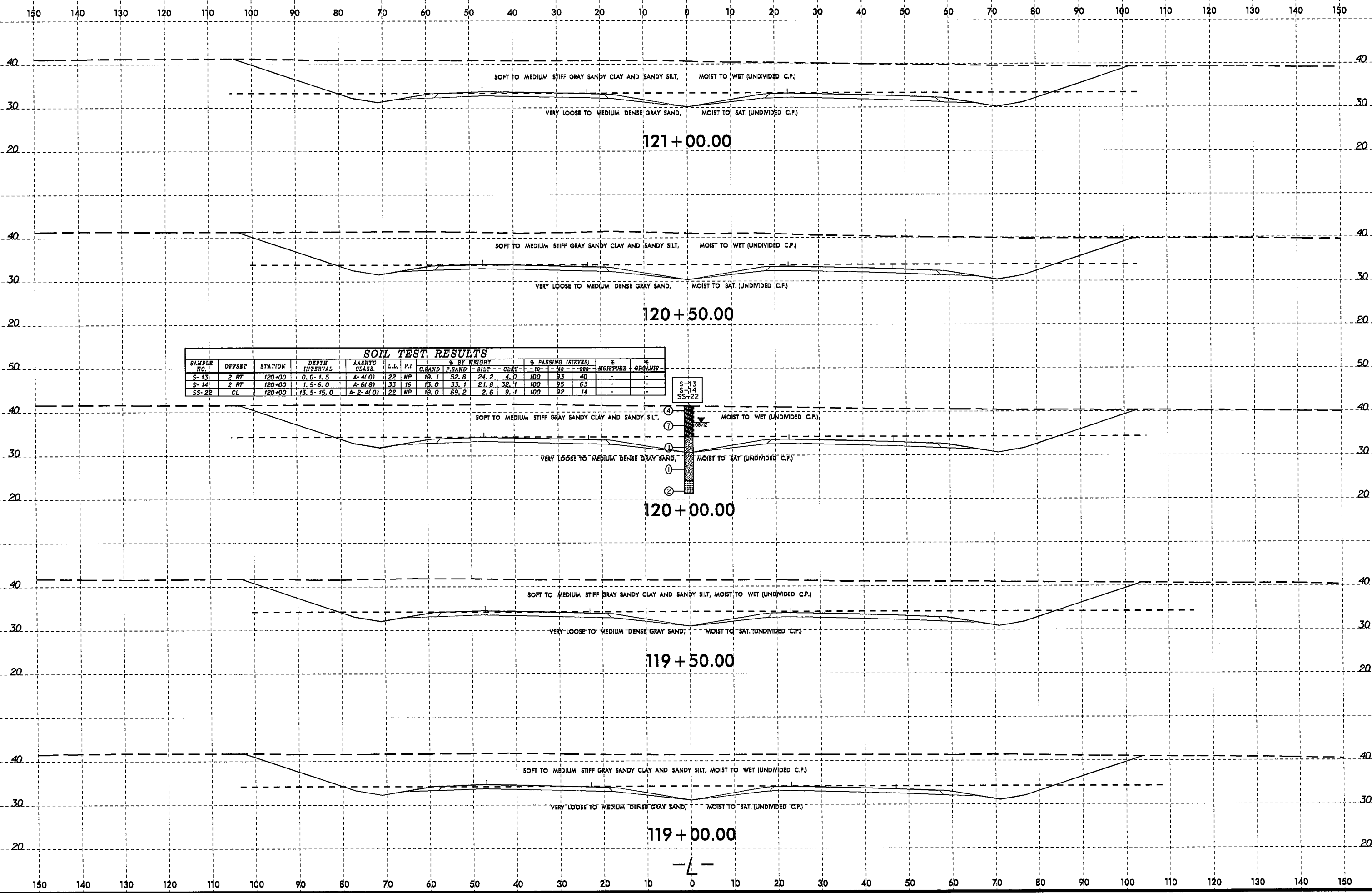
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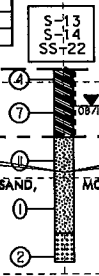
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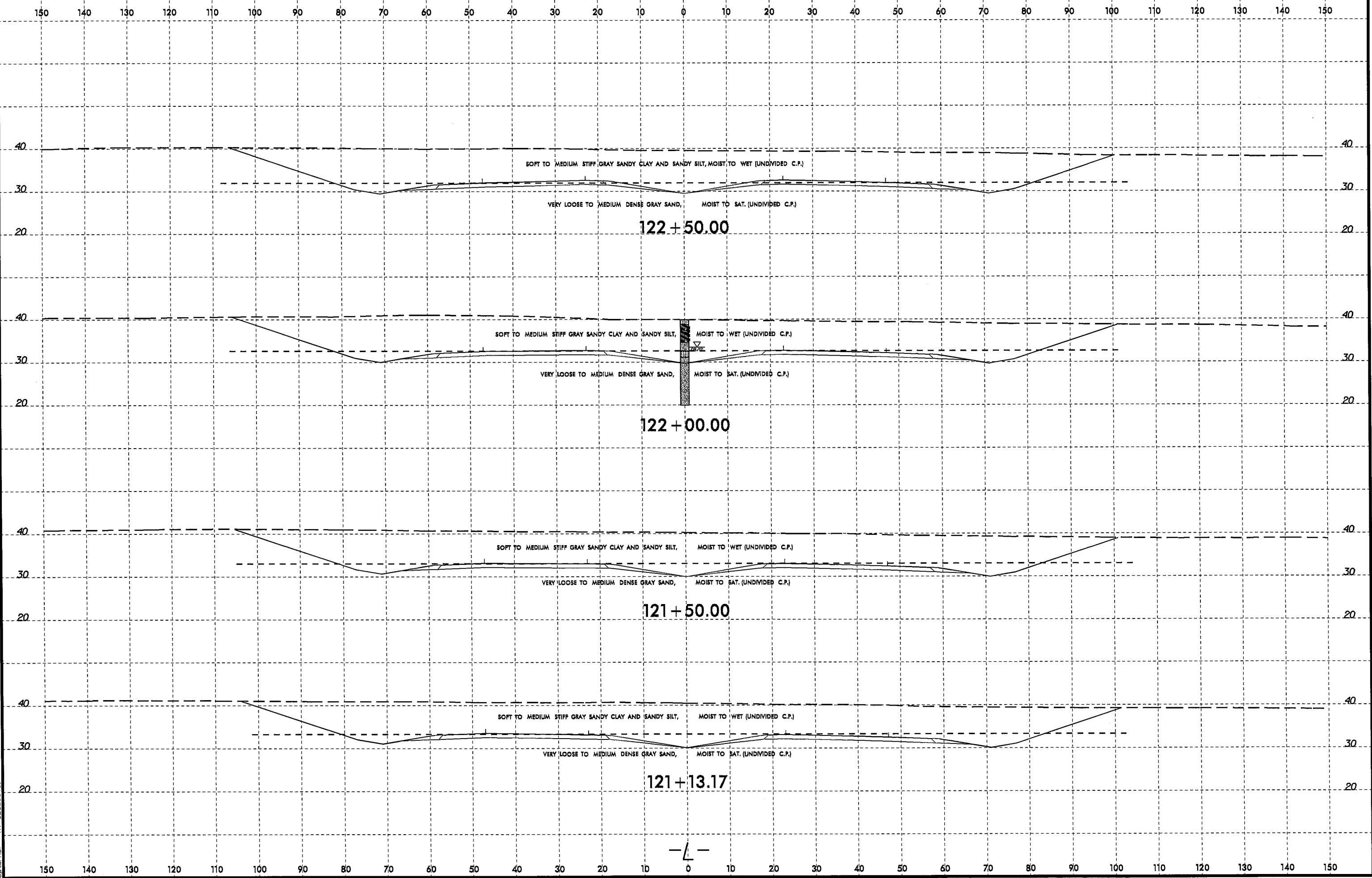
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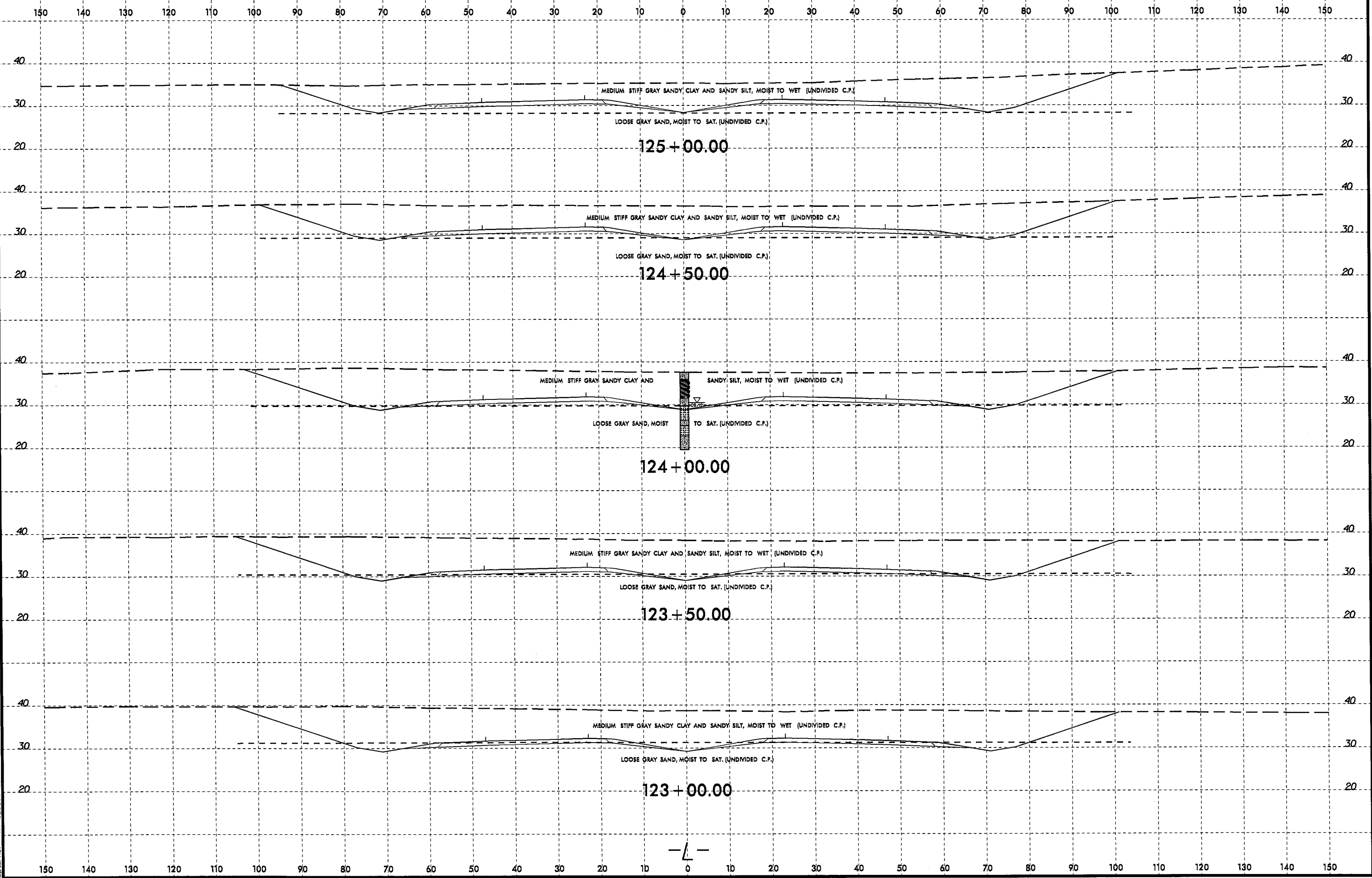
SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.L.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							SAND	FINE SAND	SILT	CLAY	10	40	200		
S-13	2 RT	120+00	0.0-1.5	A-4(0)	22	NP	19.1	52.8	24.2	4.0	100	93	40	-	-
S-14	2 RT	120+00	1.5-6.0	A-6(8)	33	16	13.0	33.1	21.8	32.1	100	95	63	-	-
SS-22	CL	120+00	13.5-15.0	A-2-4(0)	22	NP	19.0	69.2	2.6	9.1	100	92	14	-	-



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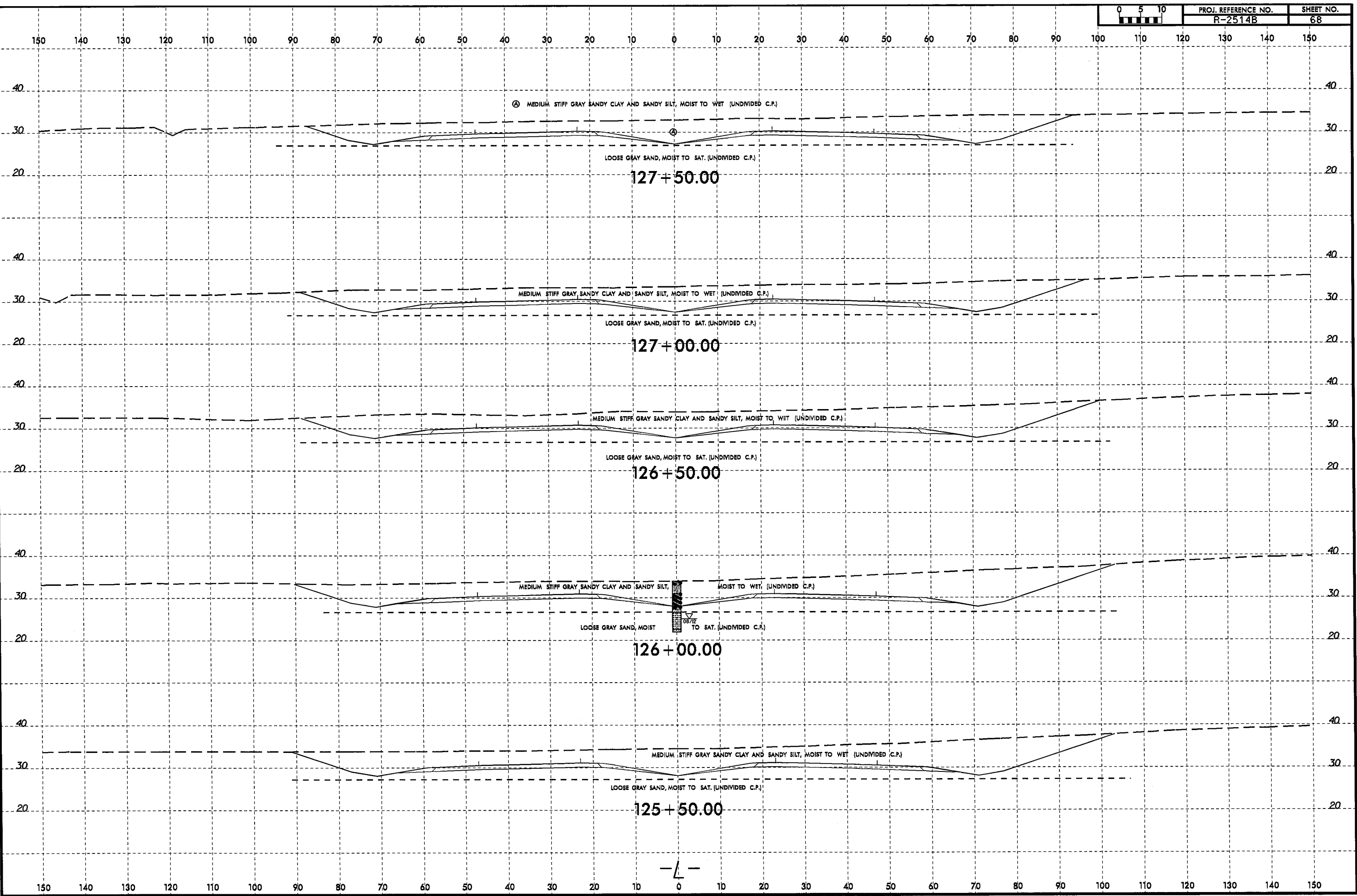
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PROJ. REFERENCE NO.  
R-2514B

SHEET NO.  
68

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Ⓐ MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

127 + 50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

127 + 00.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

126 + 50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

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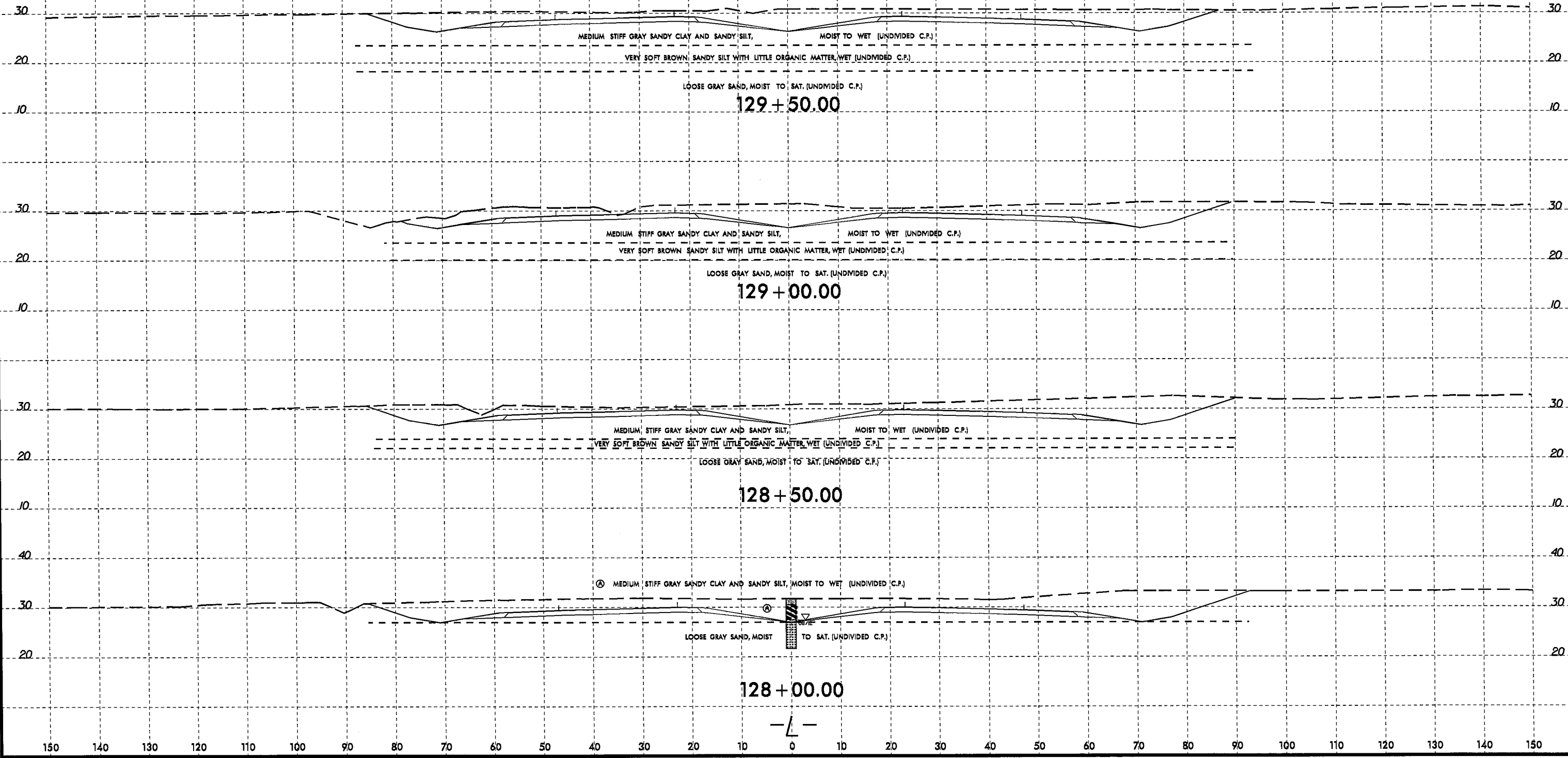
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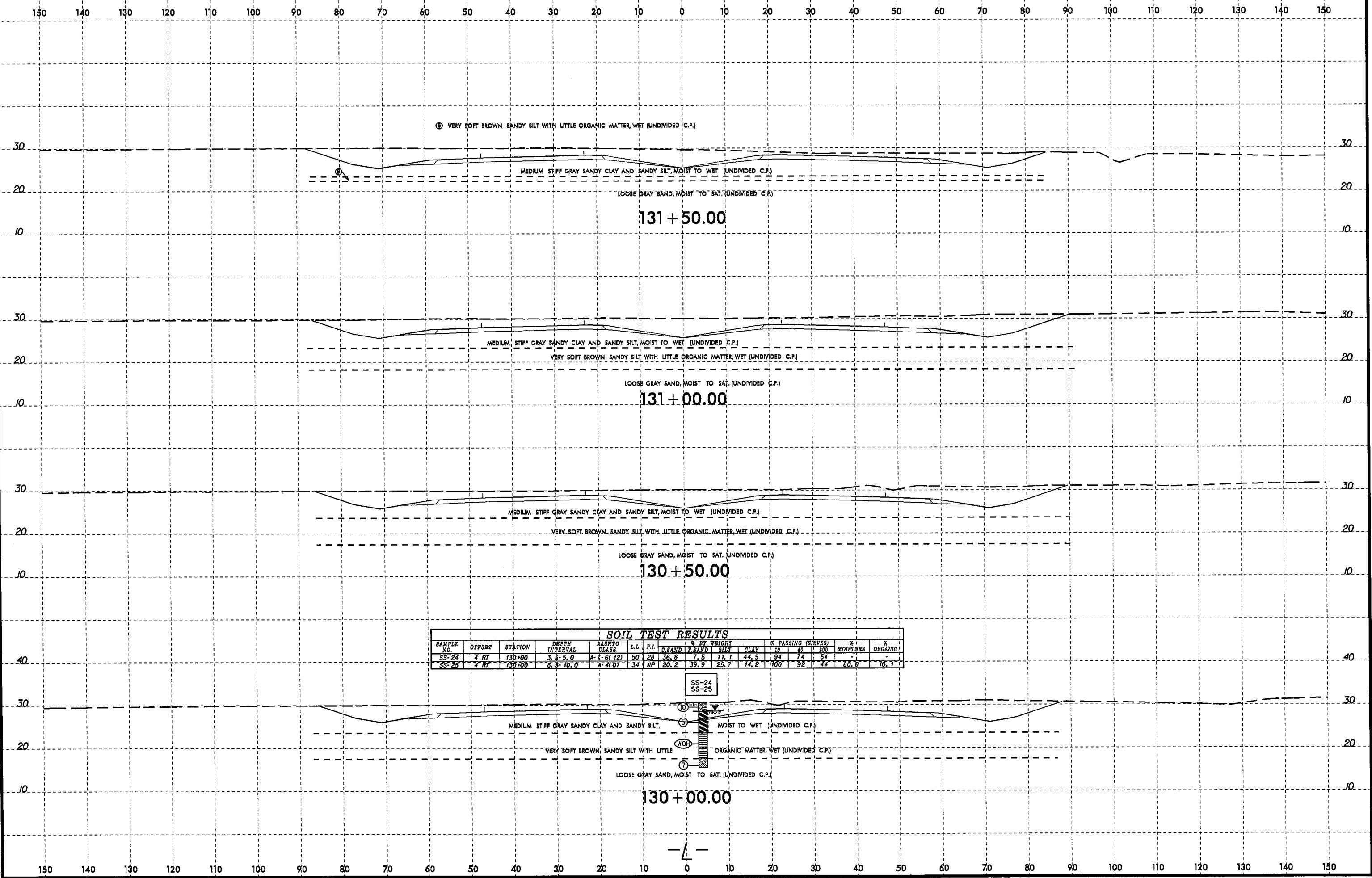
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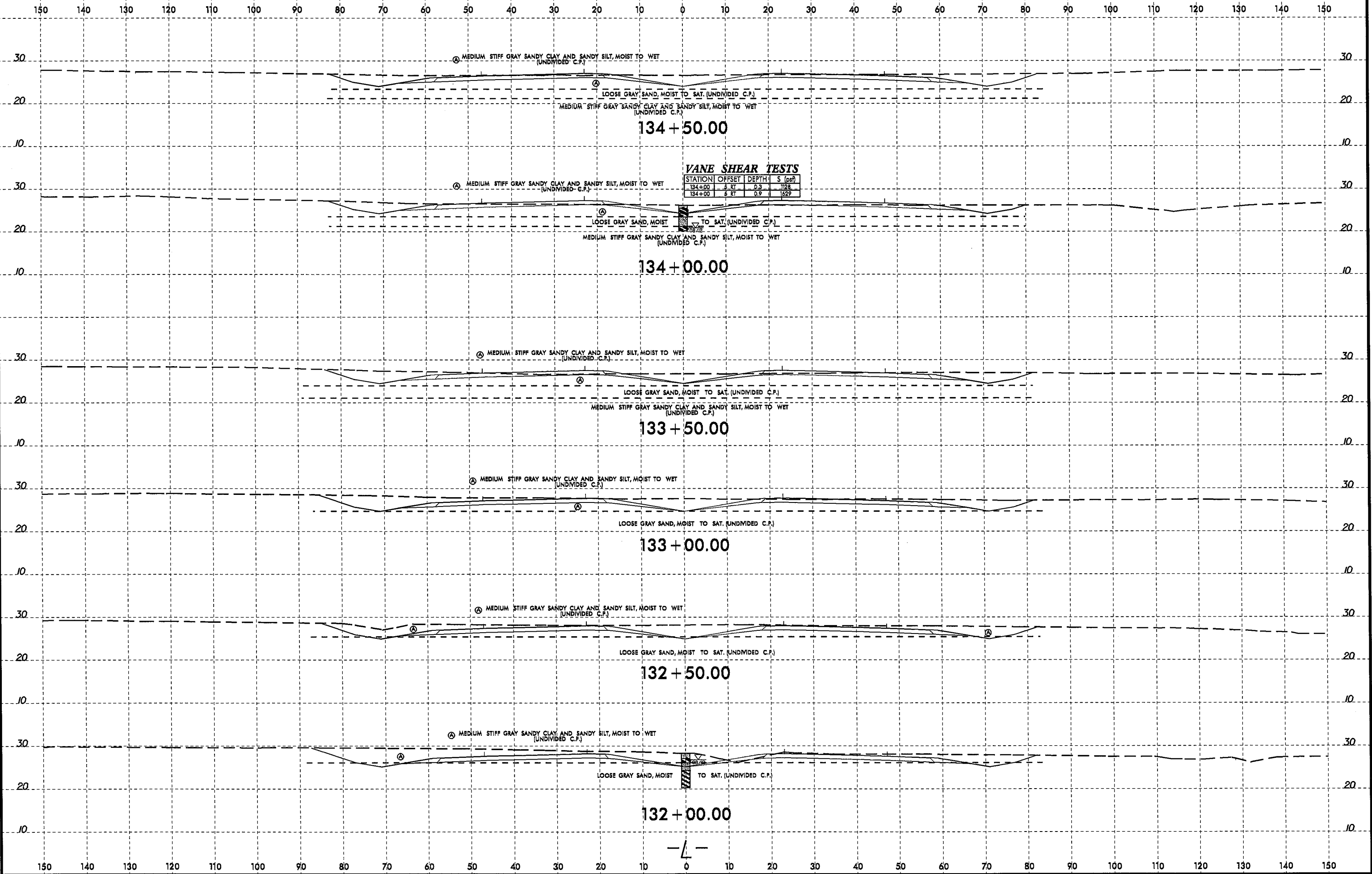




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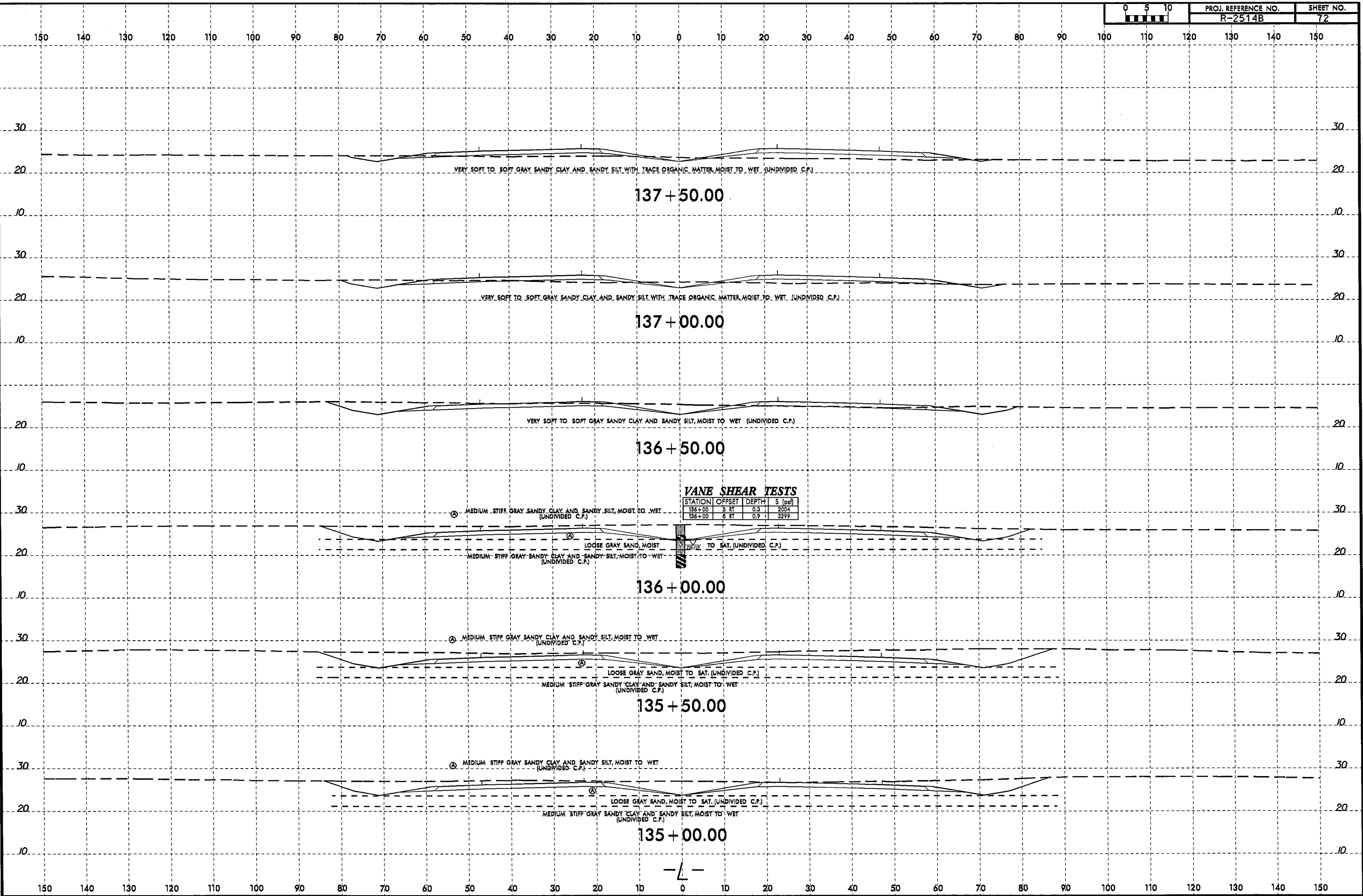
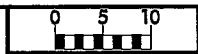


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R-2514B	71

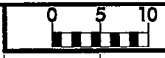


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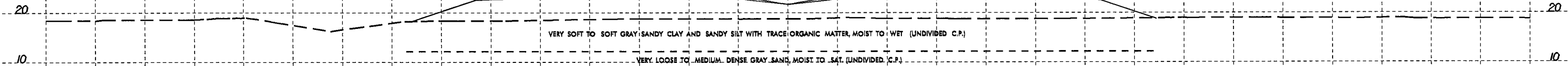


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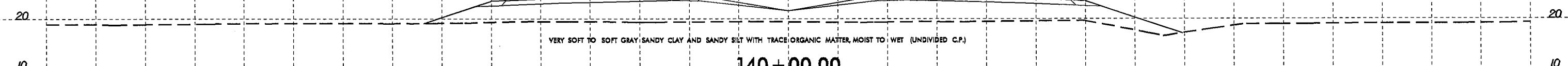


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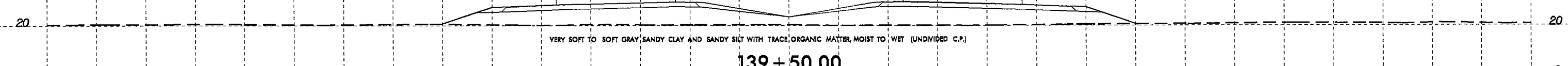
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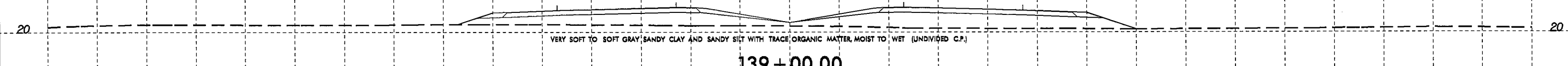
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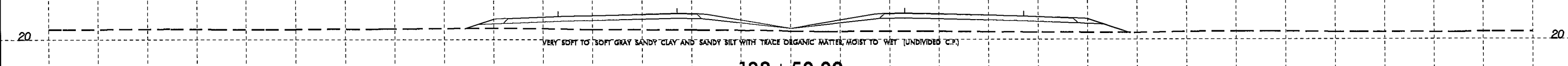
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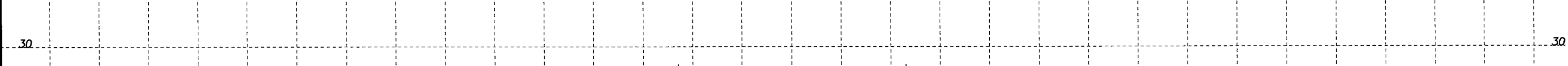
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139 + 00.00



138 + 50.00



138 + 00.00

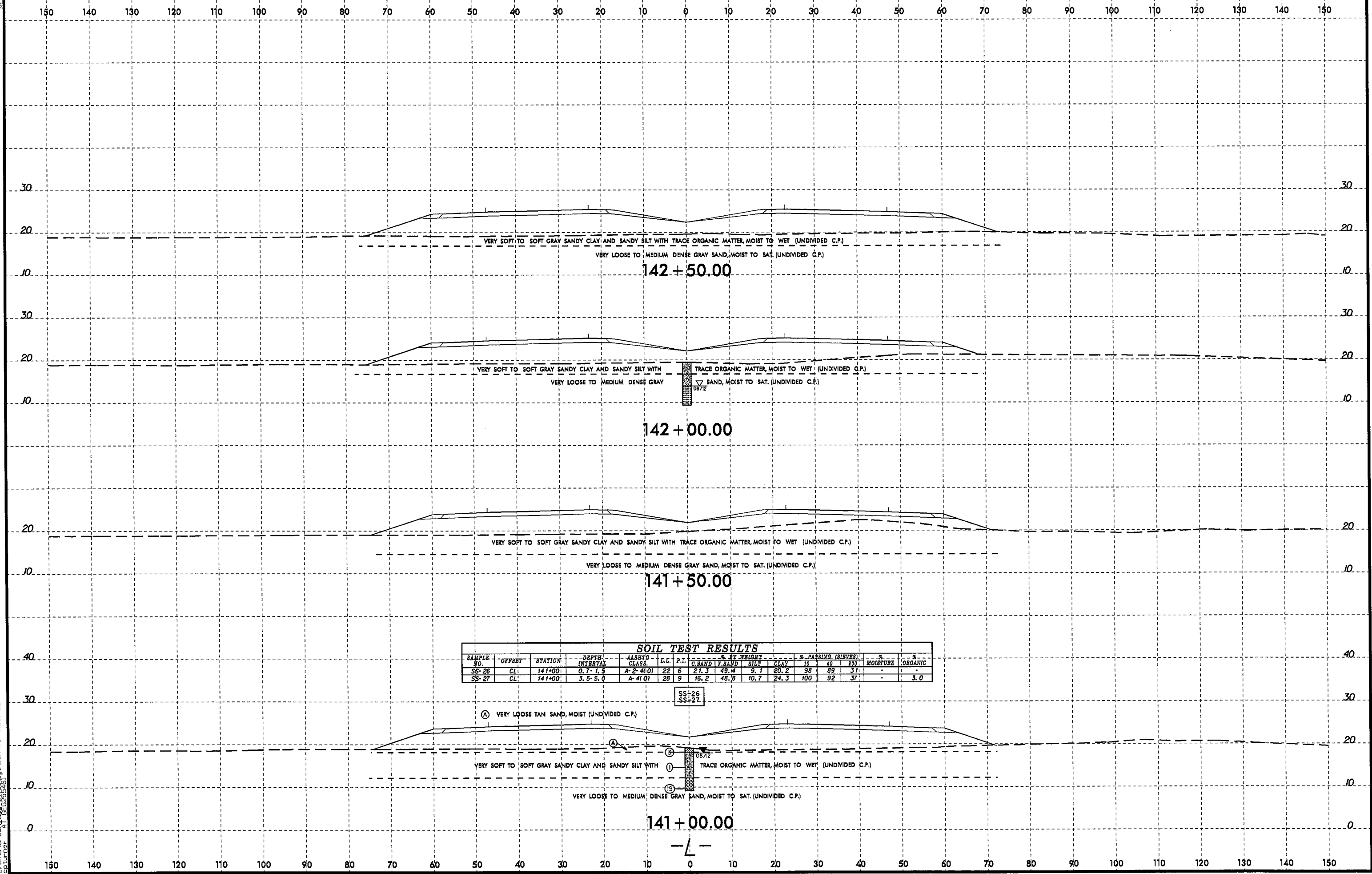
DRY 08/12

138 + 00.00

-L-

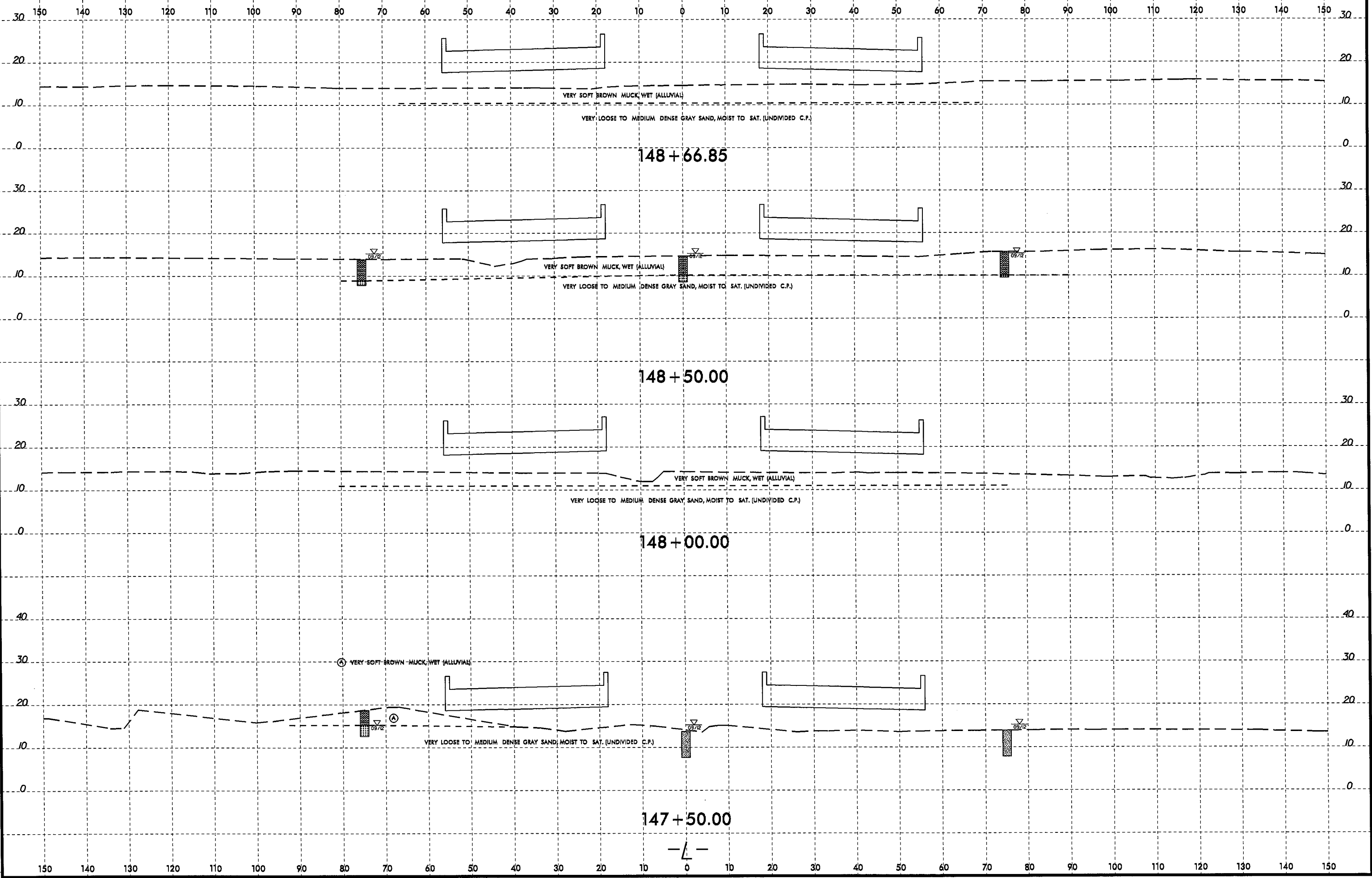
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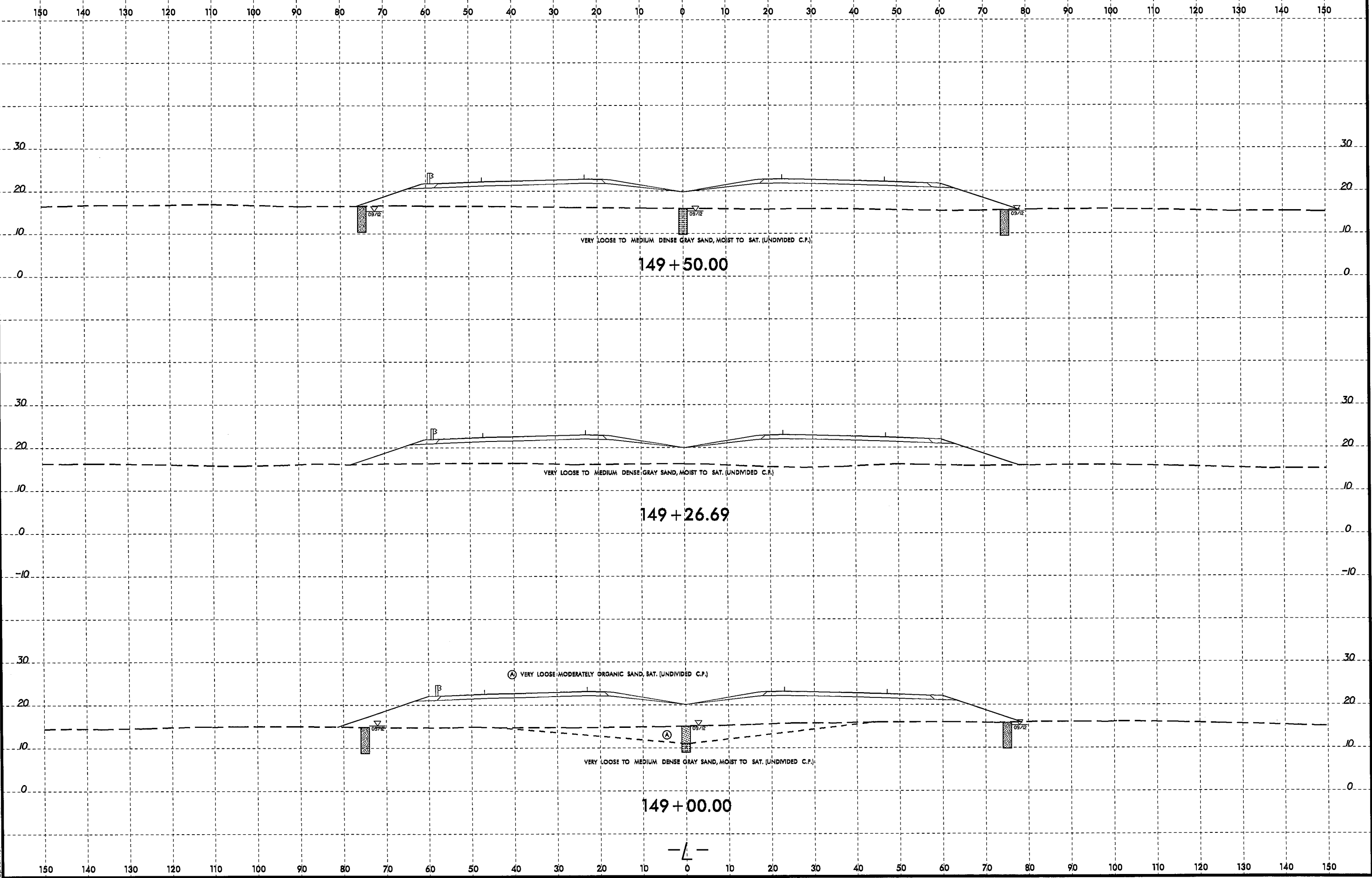
SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	LABOR CLASS.	L.C.	P.T.	% BY WEIGHT			S. PASSING (SIEVES)			% MOISTURE	% ORGANIC	
							C. SAND	F. SAND	SILT	10	40	200			
SS-26	CL	141+00'	0.7 - 1.5	A-2-4(0)	22	6	21.3	49.4	9.1	20.2	98	89	31	-	-
SS-27	CL	141+00'	3.5 - 5.0	A-4(0)	28	9	16.2	48.8	10.7	24.3	100	92	37	-	3.0

8/23/99



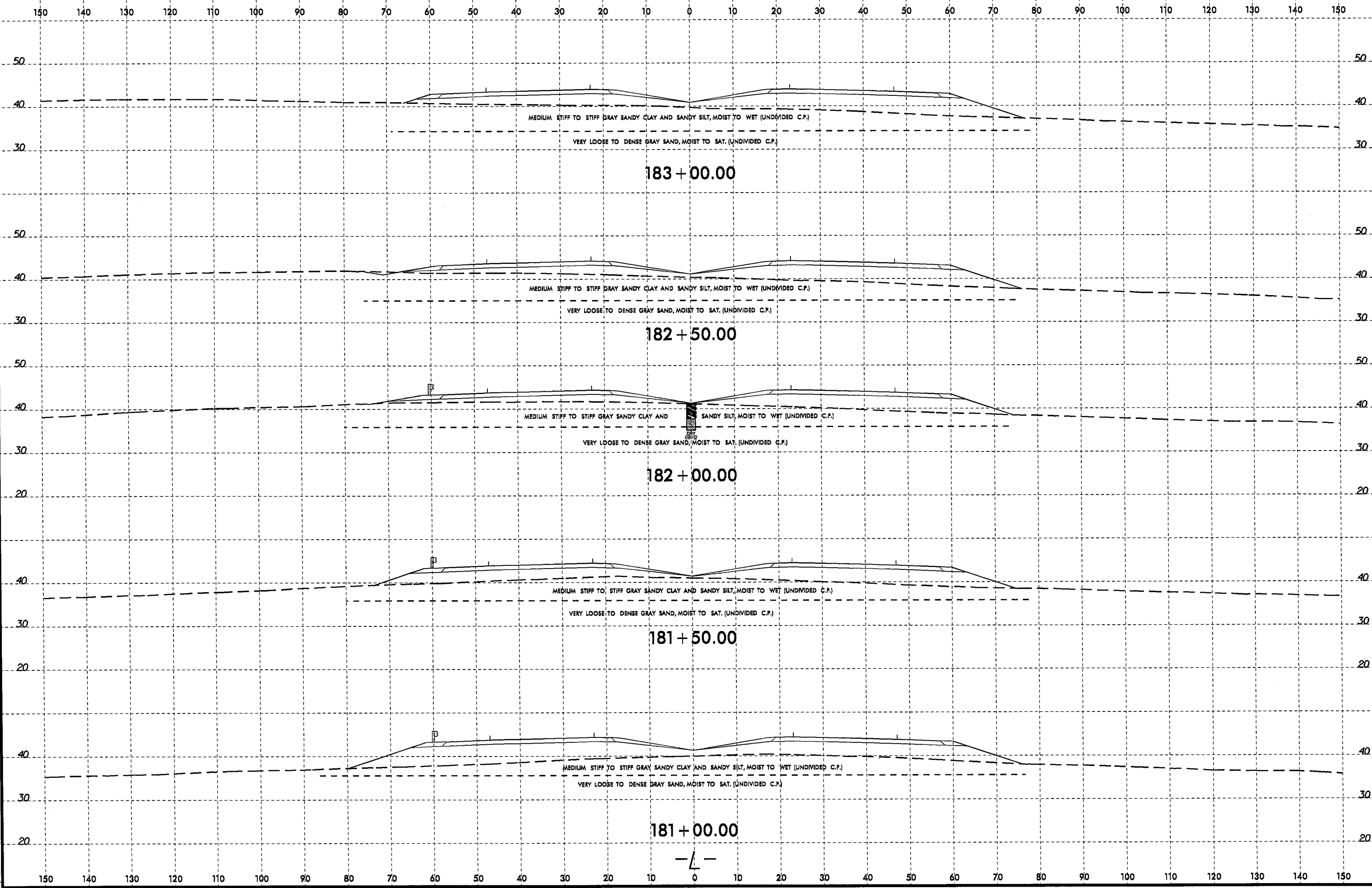
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 capturner AT GEO55461

8/23/99  
22-JUL-2013 15:44  
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SP Turner



-L-

8/23/99



22-JUL-2013 15:44  
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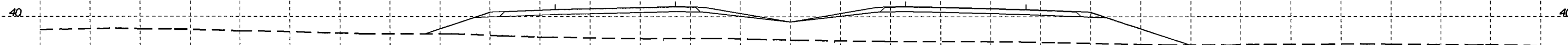
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8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	78

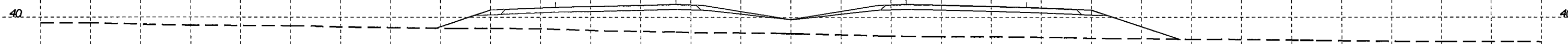
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MEDIUM STIFF TO STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

185 + 00.00



MEDIUM STIFF TO STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

184 + 50.00

**VANE SHEAR TESTS**

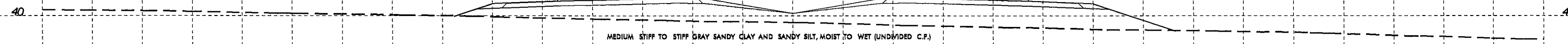
STATION	OFFSET	DEPTH	S (psf)
184+00	5 RT	0.3	1253
184+00	5 RT	0.9	2881
184+00	5 RT	1.3	3090



MEDIUM STIFF TO STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

184 + 00.00



MEDIUM STIFF TO STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

183 + 50.00

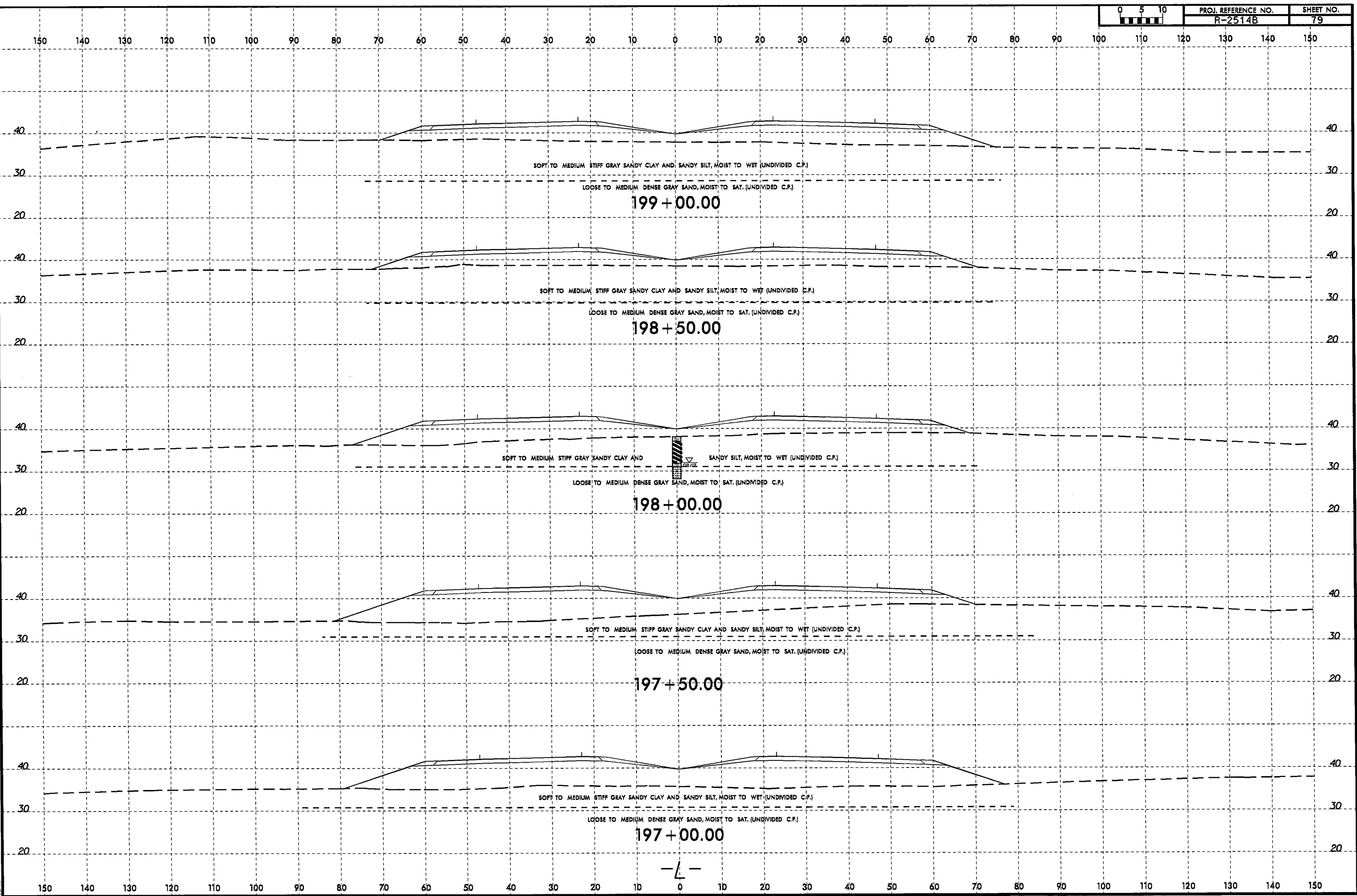
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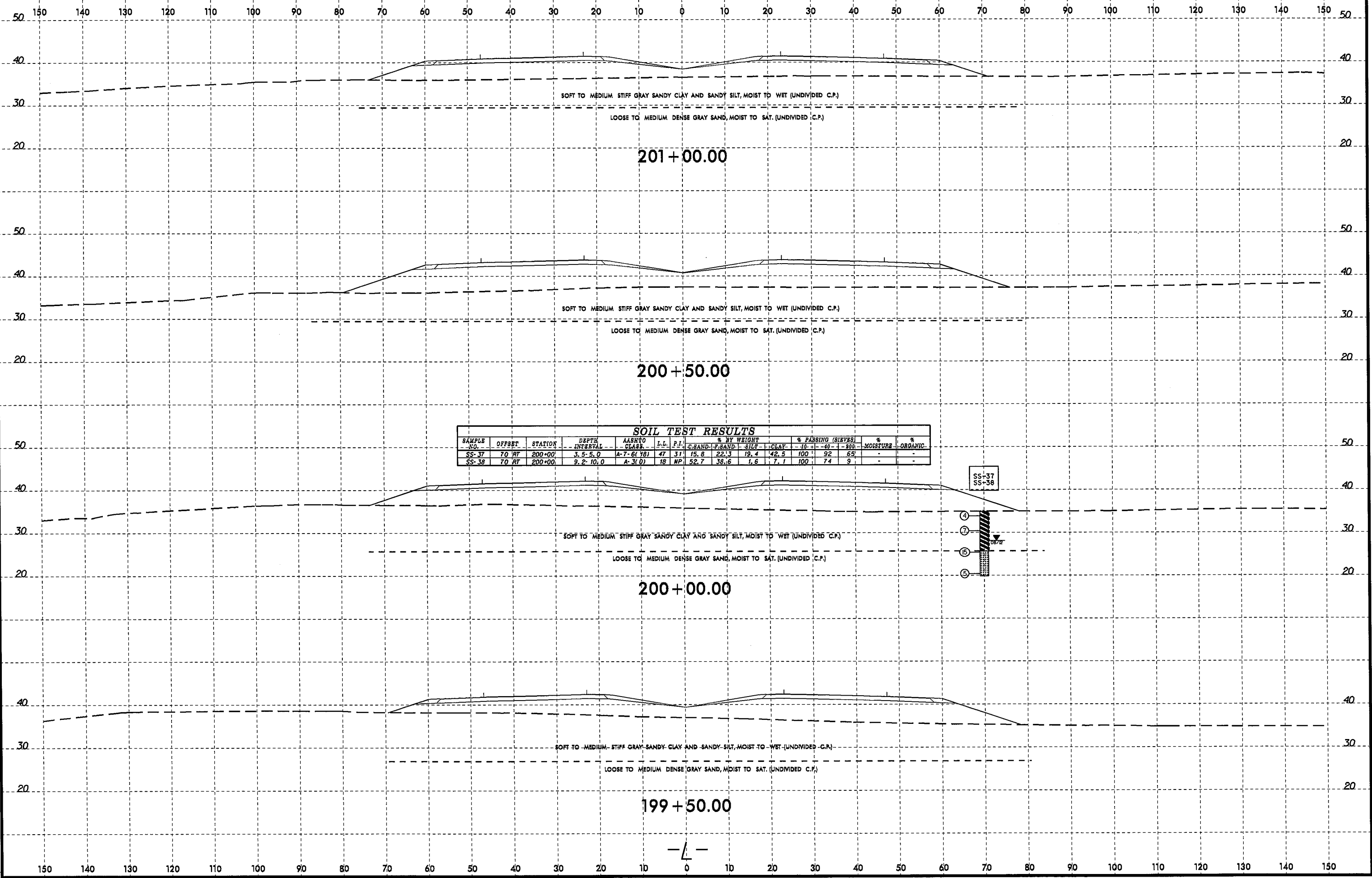
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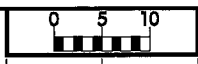
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cbturner AT 66255461



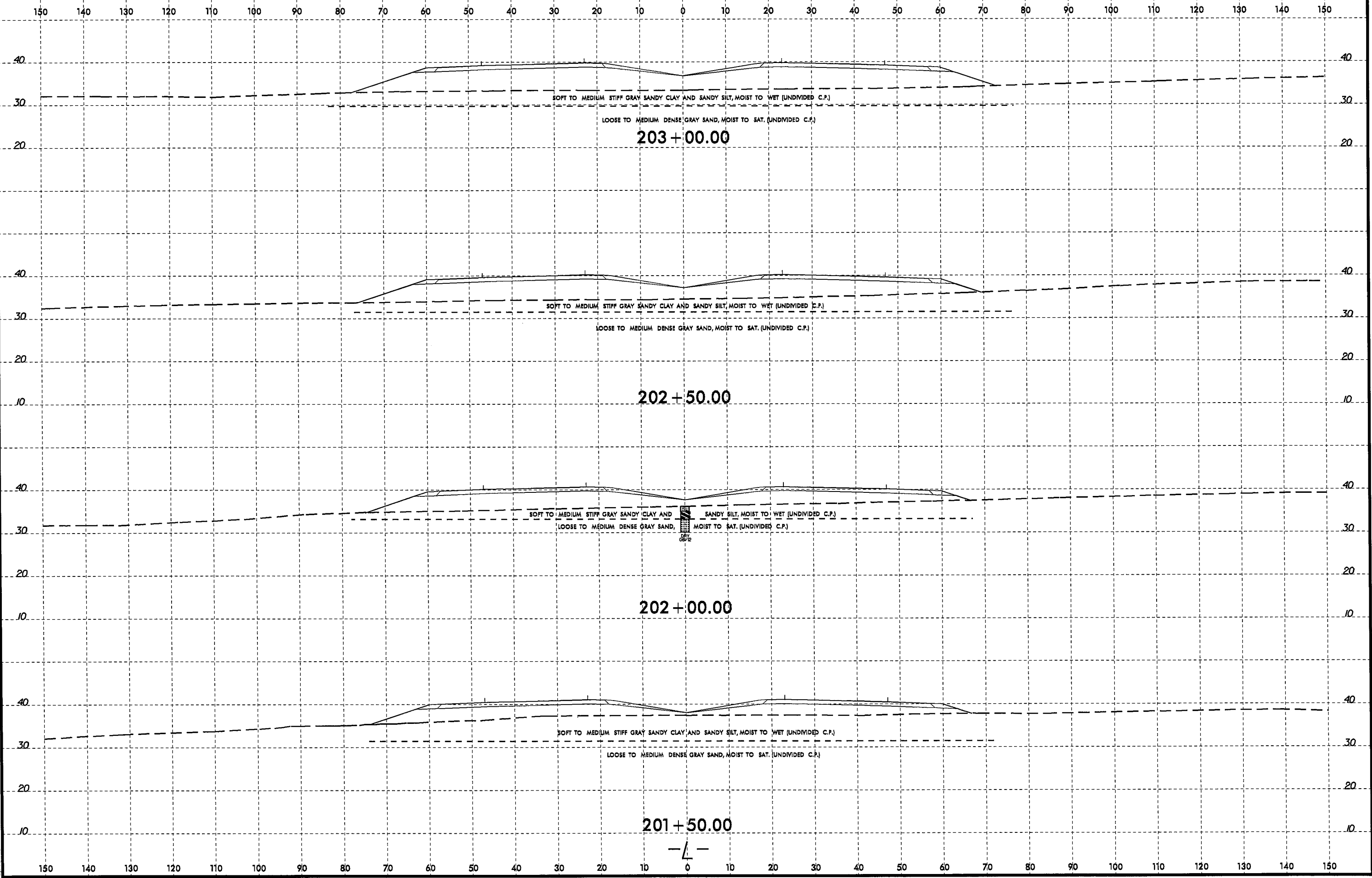
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8/23/99

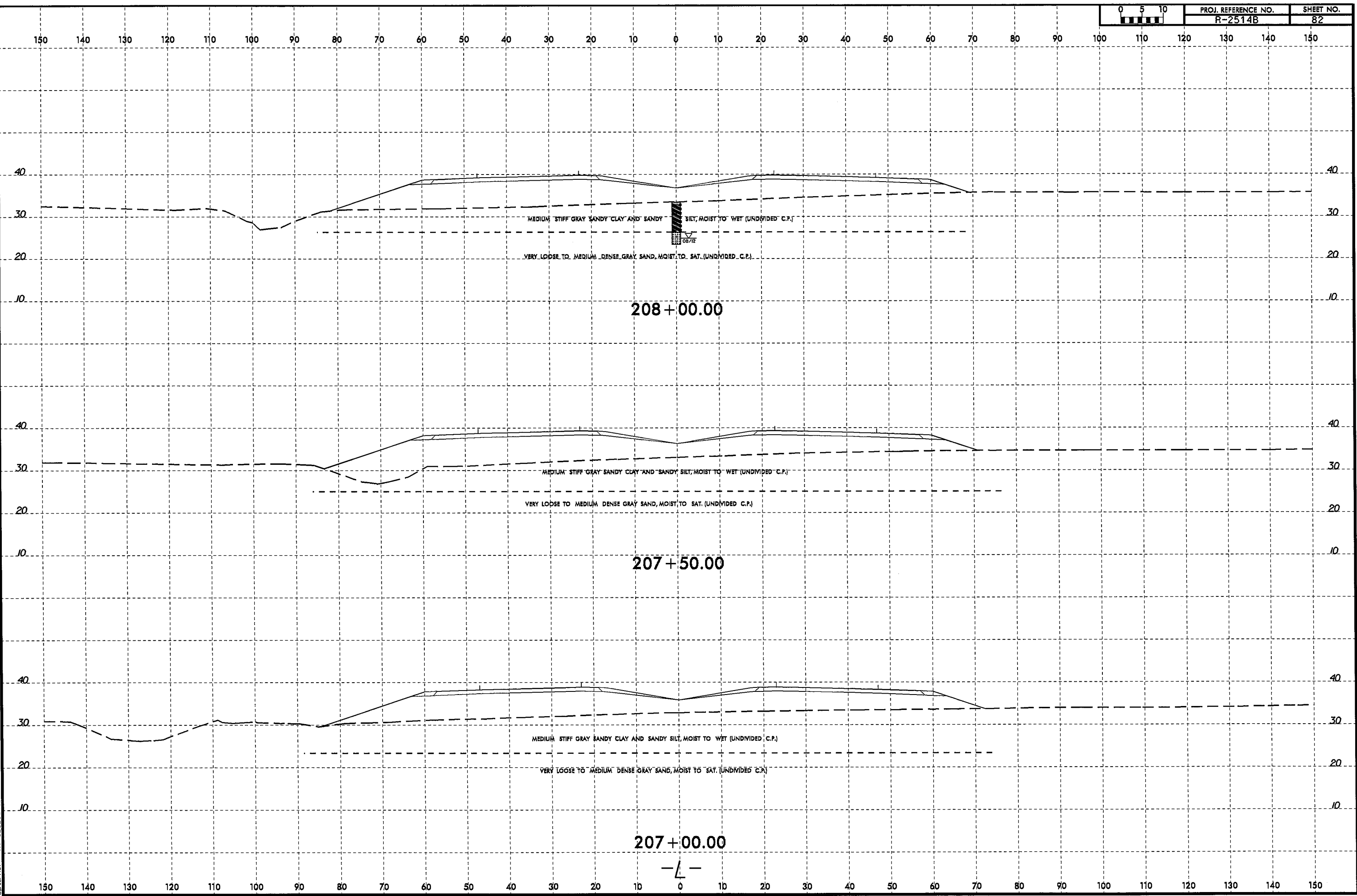


PROJ. REFERENCE NO. R-2514B	SHEET NO. 81
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 capturner AT GEG55461

8/23/99

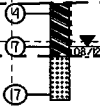


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 G.P. Turner AT 6625481



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		
SS-43	65 LT	210+00	0.6-1.5	A-6(5)	33	18	23.1	30.8	13.8	32.4	100	87	49	-
SS-44	65 LT	210+00	3.5-5.0	A-6(6)	39	25	28.5	30.6	12.6	28.3	100	83	44	-

210+00  
SS-43  
SS-44



MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

210+02.67

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

209+50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

209+00.00

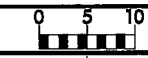
MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

208+50.00

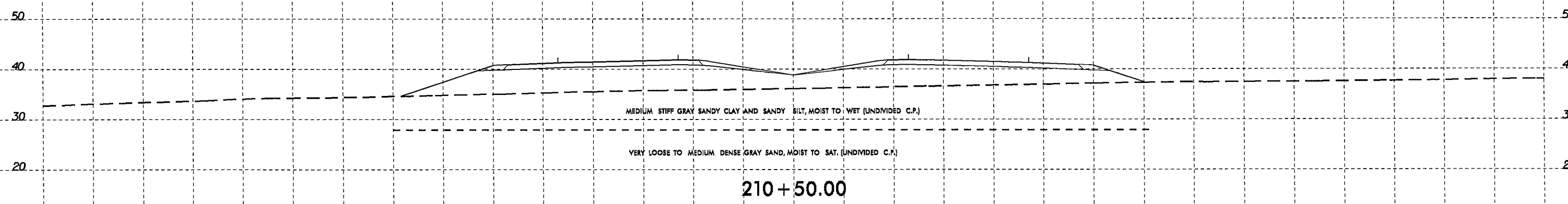
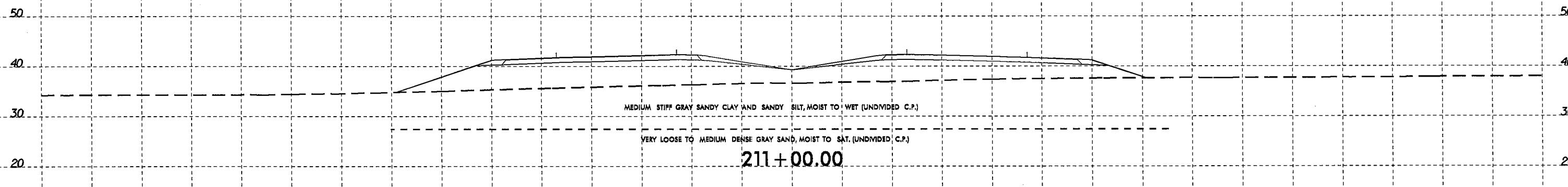
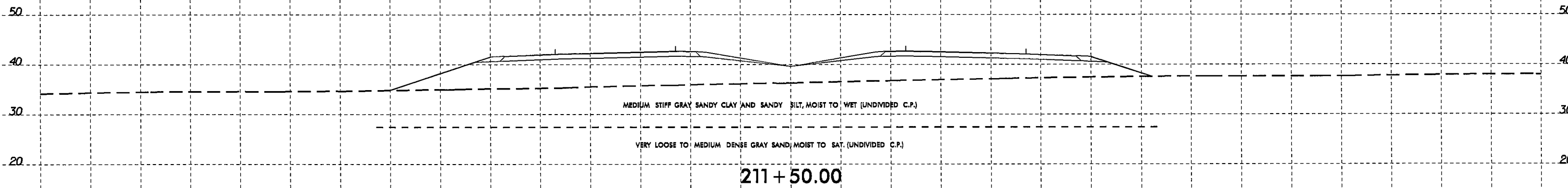
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8/23/99



PROJ. REFERENCE NO. R-2514B	SHEET NO. 84
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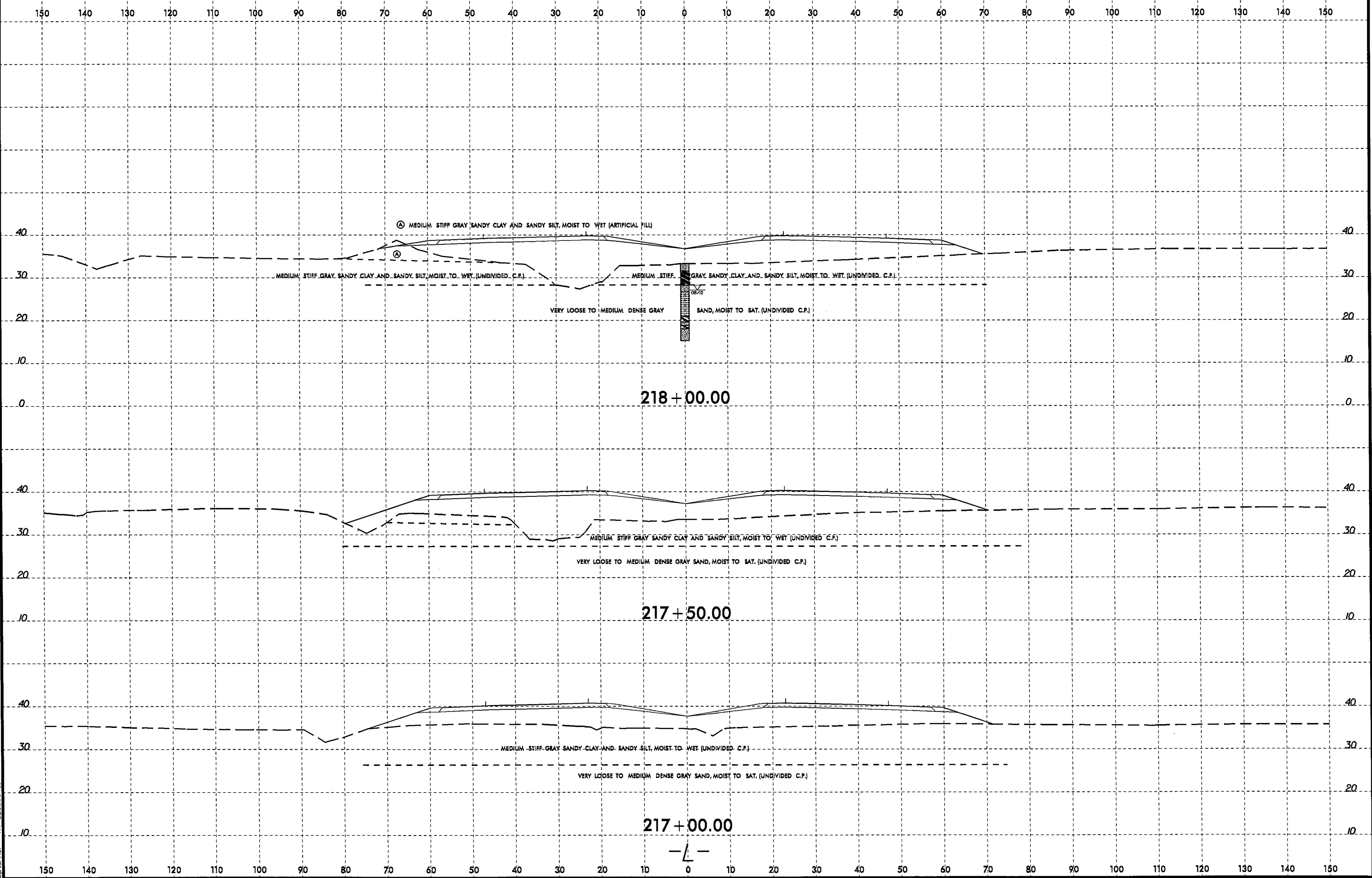


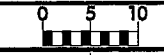
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 capture AT BEG25461

8/23/99  
22-JUL-2013 15:44  
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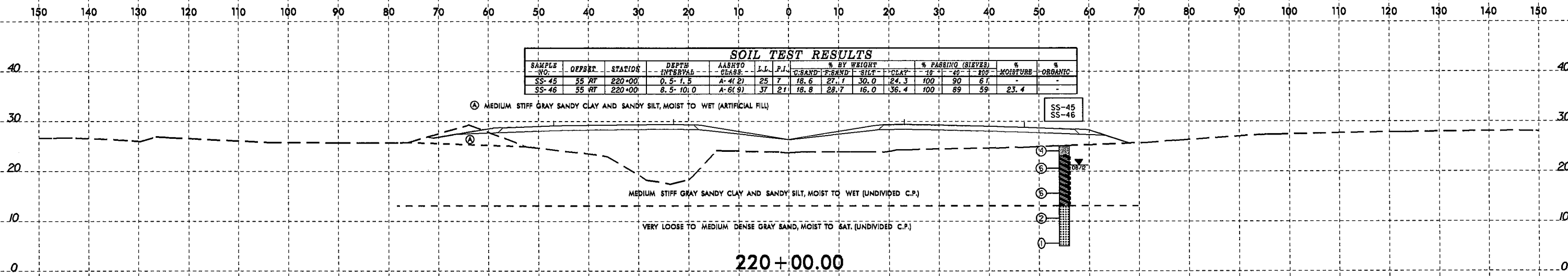
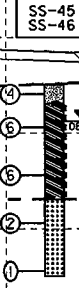




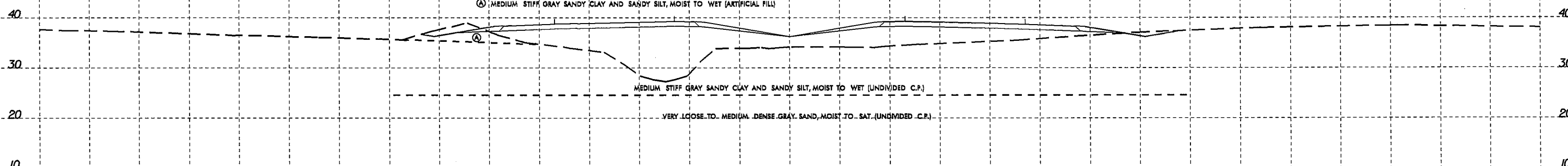
PROJ. REFERENCE NO. R-2514B	SHEET NO. 86
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SOIL TEST RESULTS															
SAMPLE NO.	DEPTH	STATION	DEPTH INTERVAL	AASHTO CLASS.			% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
				LL	PL	PI	SAND	SILT	CLAY	-10	-40	-200			
SS-45	55 FT	220+00	0.5'-1.5'	A-1(2)	25	7	18.6	27.1	30.0	24.3	100	90	61	-	-
SS-46	55 FT	220+00	8.5'-10.0'	A-6(9)	37	21	18.8	28.7	16.0	36.4	100	89	59	23.4	-

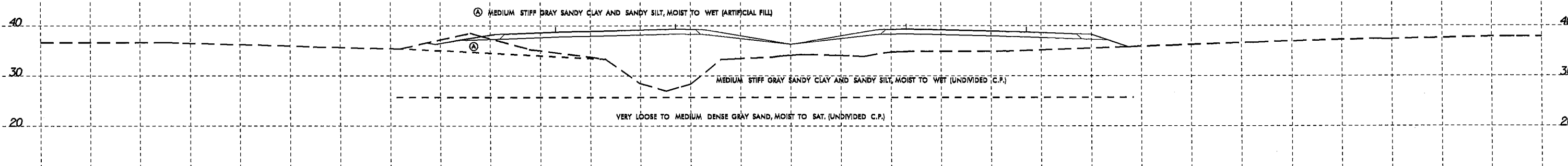
(A) MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (ARTIFICIAL FILL) SS-45  
SS-46



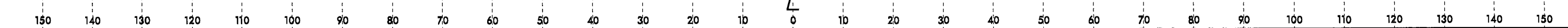
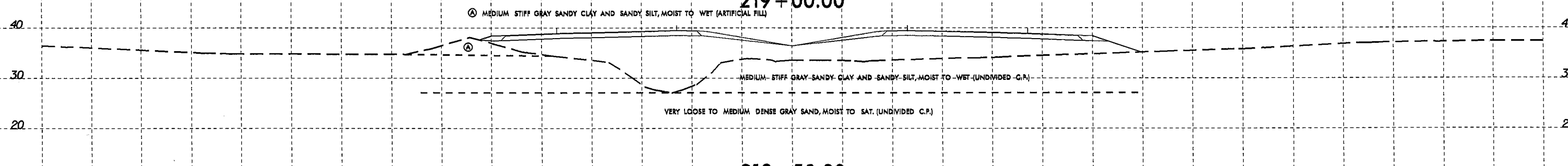
(A) MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (ARTIFICIAL FILL)



(A) MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (ARTIFICIAL FILL)

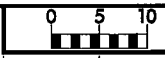


(A) MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (ARTIFICIAL FILL)



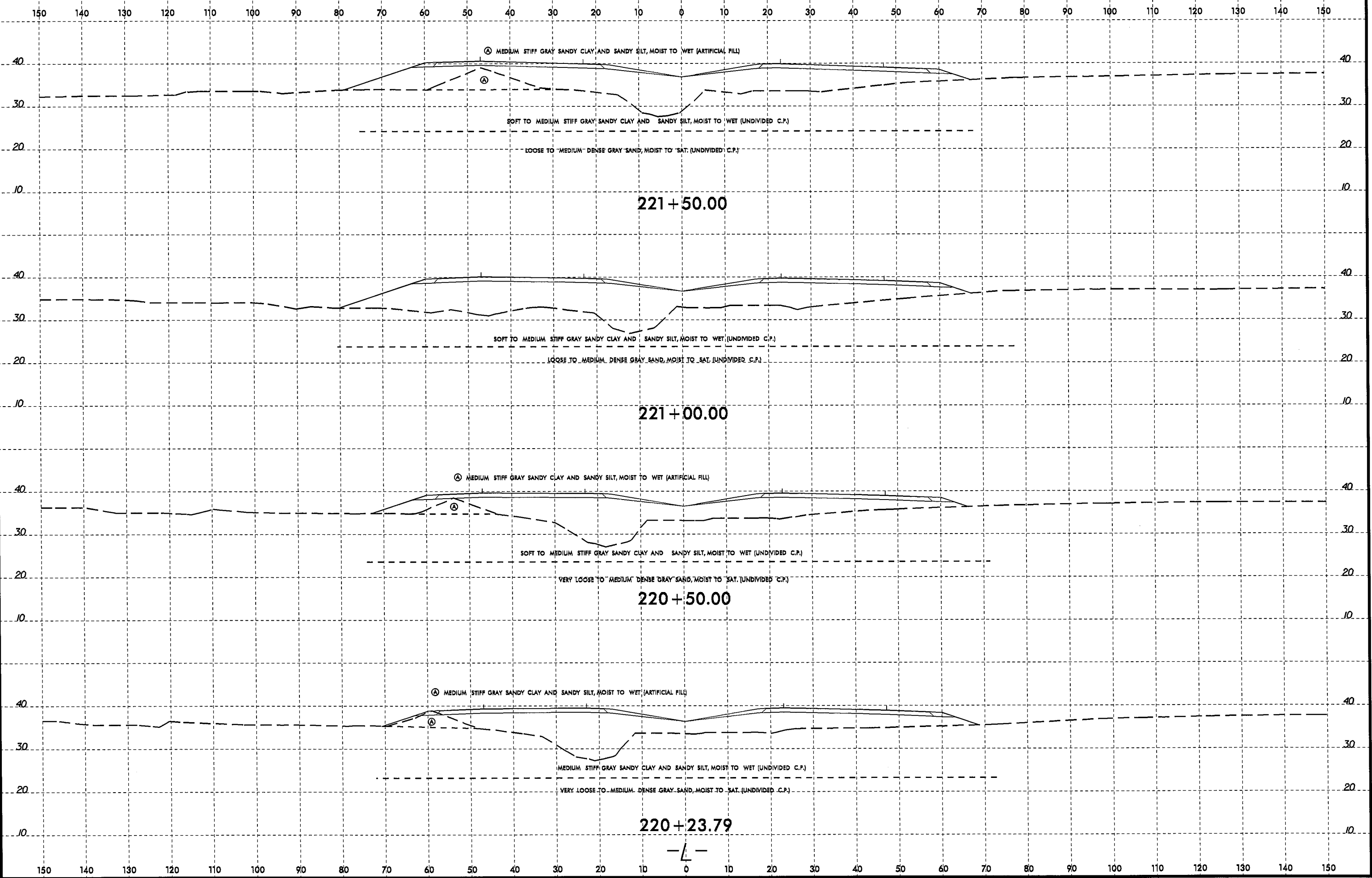


8/23/99



PROJ. REFERENCE NO.  
R-2514B

SHEET NO.  
87

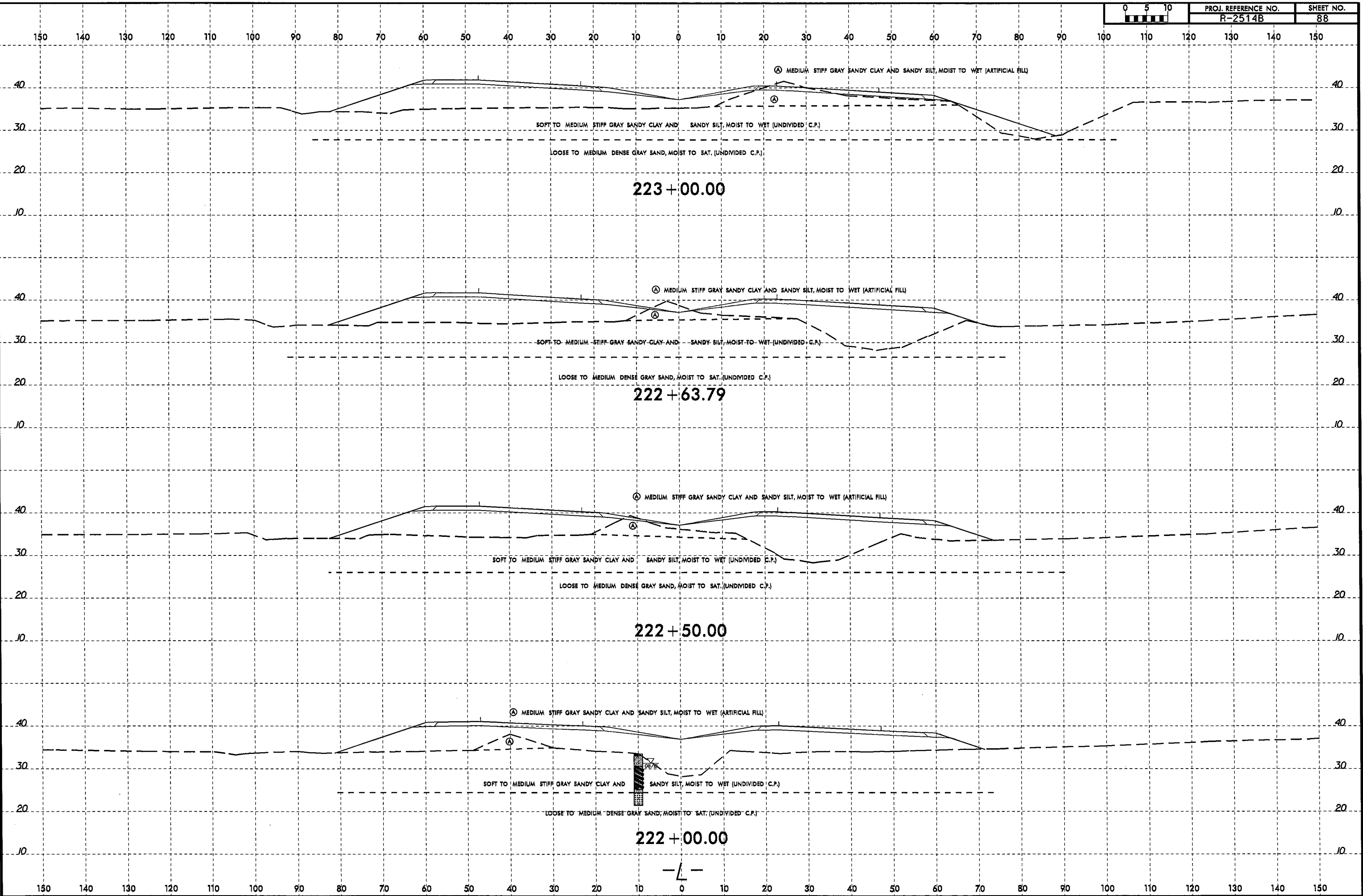


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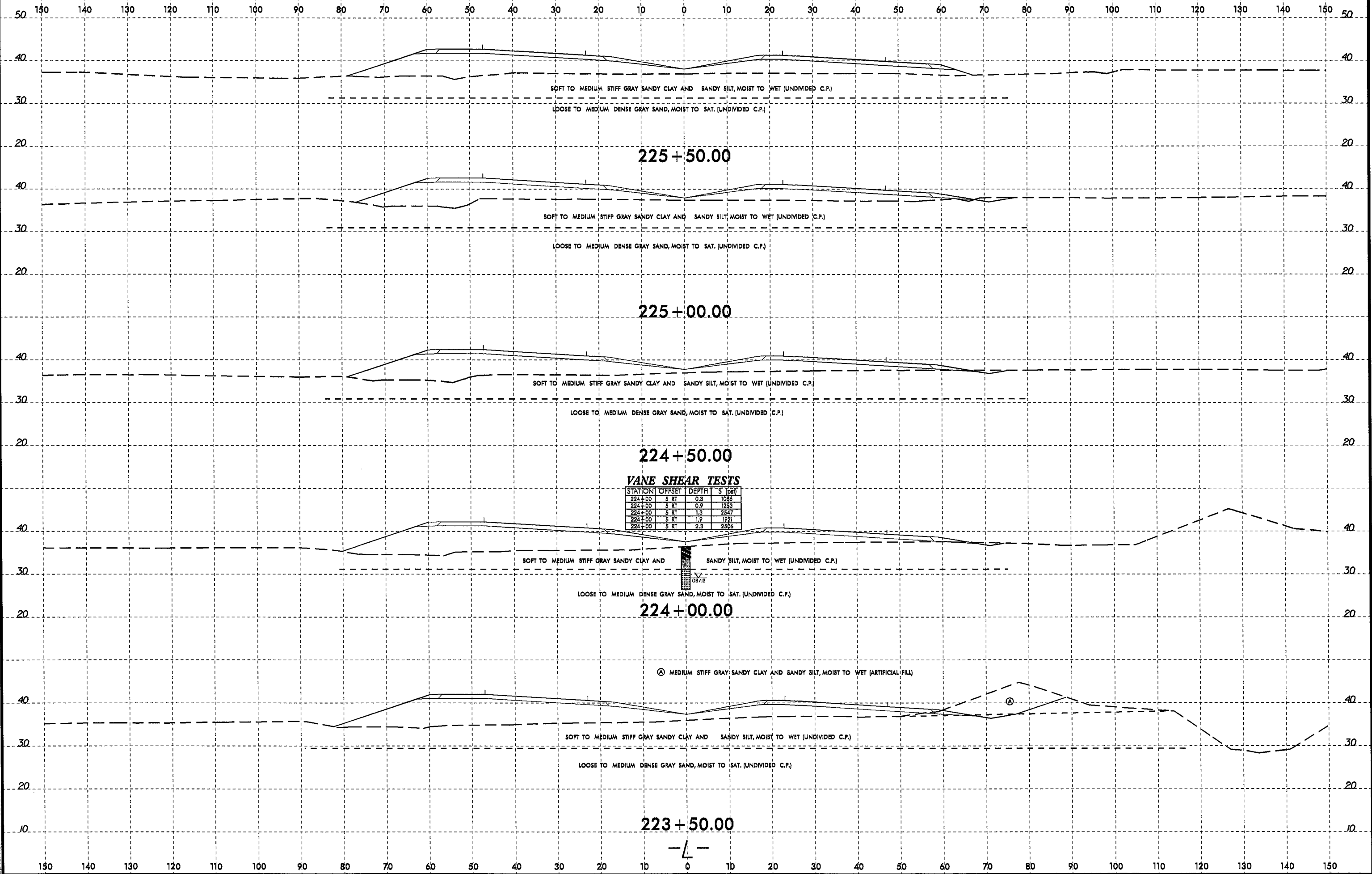
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PROJ. REFERENCE NO.	SHEET NO.
R-2514B	88



8/23/99

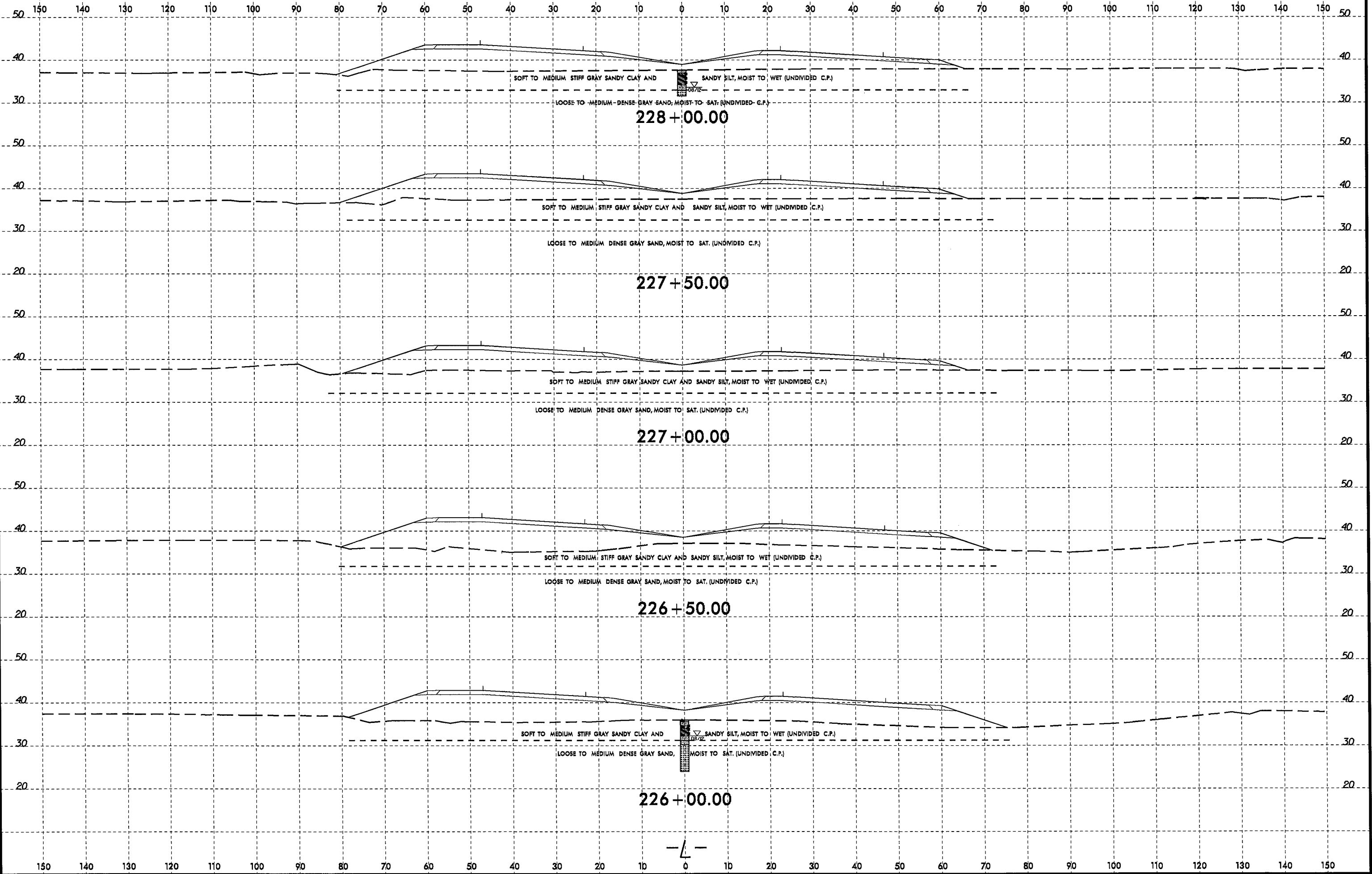


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8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	90



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 spturner RT DEC2514B

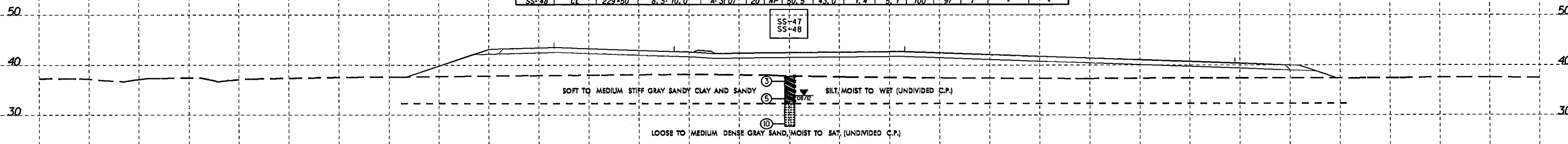
8/23/99



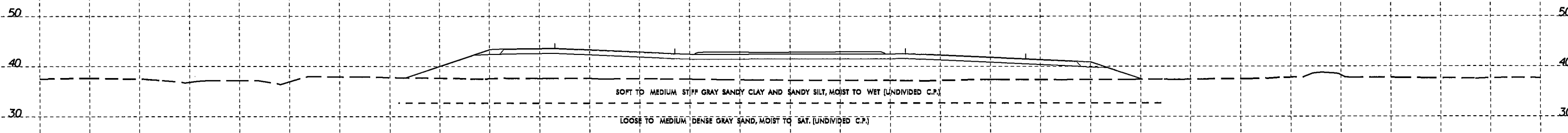
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SOIL TEST RESULTS														
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)		% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40		
SS-47	CL	229+50	0.6-1.5	A-6(6)	30	14	16.4	26.9	28.3	28.3	100	97	60	-
SS-48	CL	229+50	8.5-10.0	A-3(0)	20	NP	50.5	43.0	1.4	5.1	100	97	7	-

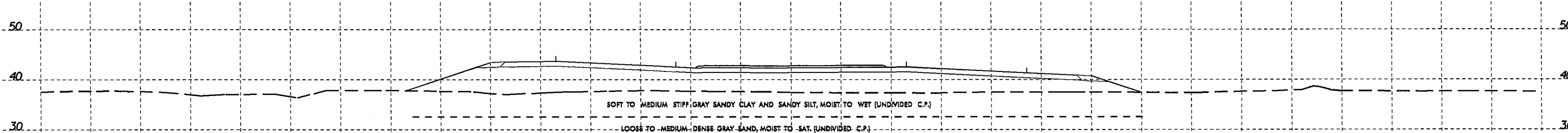
SS-47  
SS-48



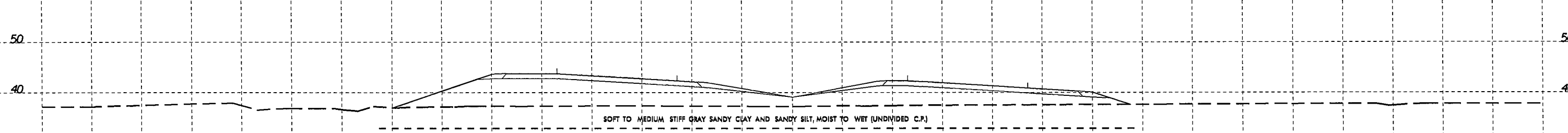
229 + 50.50



229 + 07.70



228 + 95.00



228 + 44.42

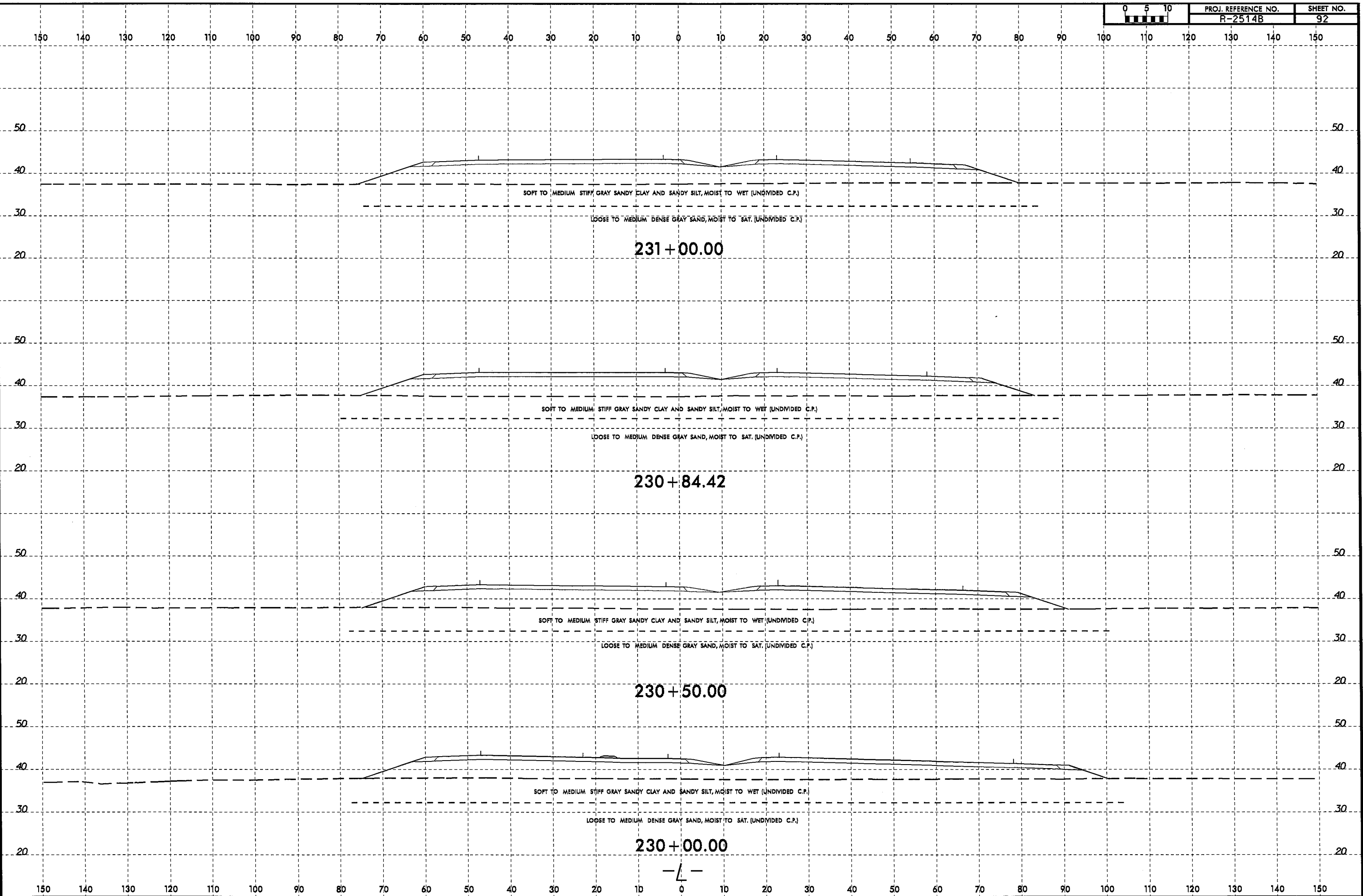
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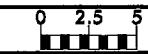
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cpturner AT GEO2514B

8/23/99  
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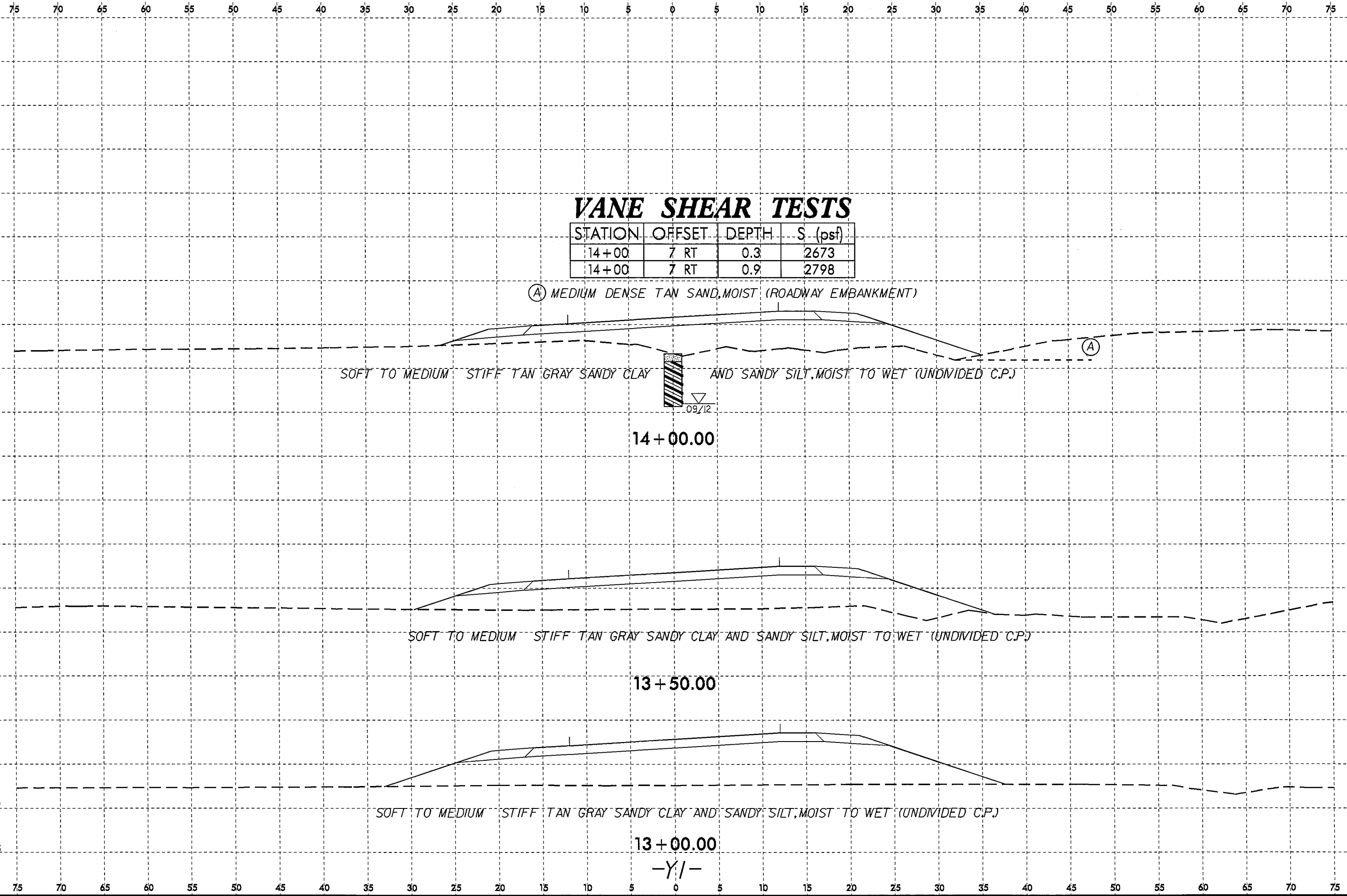
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	R-2514B	92



8/23/99



PROJ. REFERENCE NO. R-2514B SHEET NO. 93

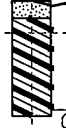


# VANE SHEAR TESTS

STATION	OFFSET	DEPTH	S (psf)
14+00	7 RT	0.3	2673
14+00	7 RT	0.9	2798

(A) MEDIUM DENSE TAN SAND, MOIST (ROADWAY EMBANKMENT)

SOFT TO MEDIUM STIFF TAN GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)



09/12

14+00.00

SOFT TO MEDIUM STIFF TAN GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

13+50.00

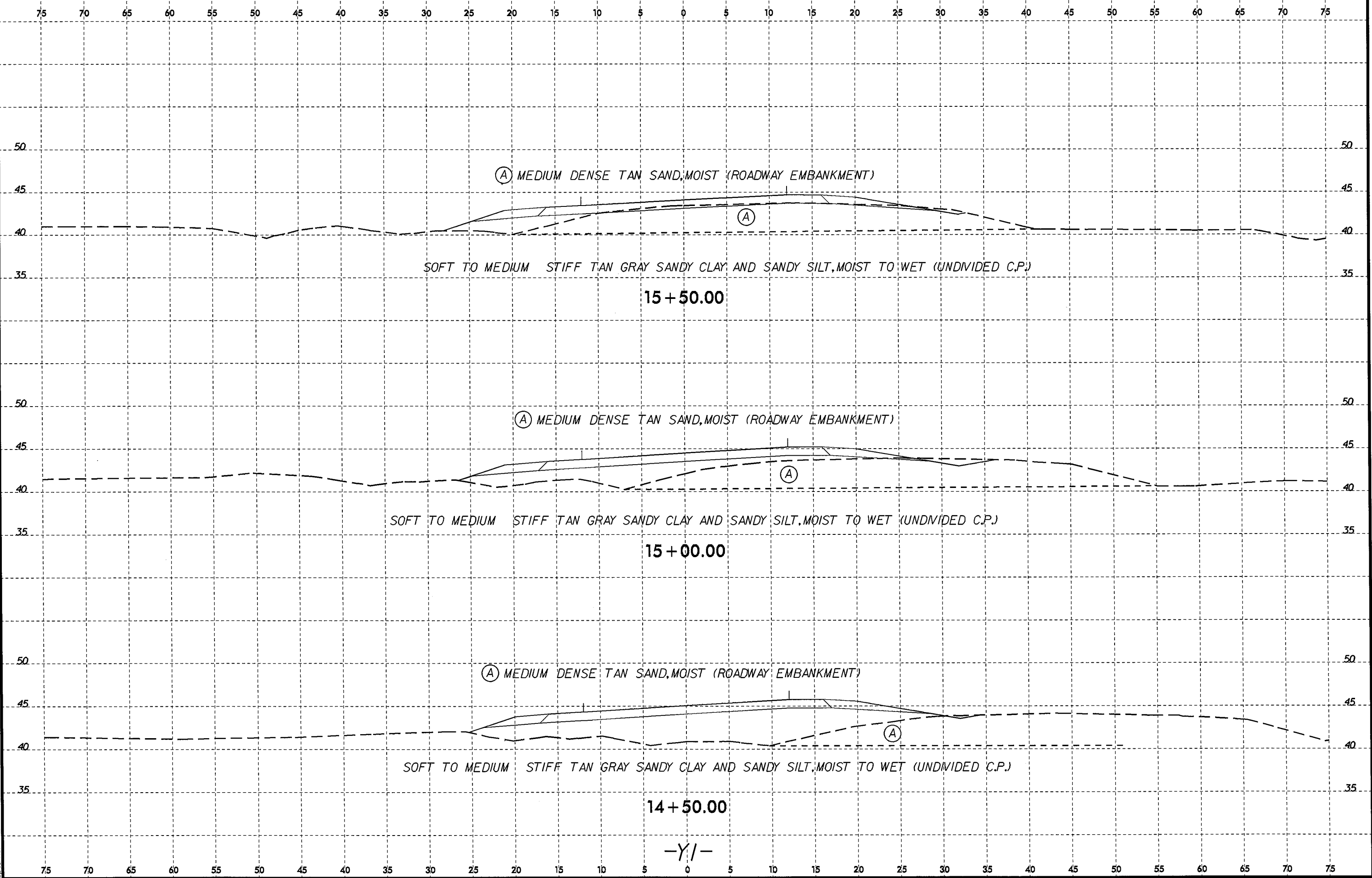
SOFT TO MEDIUM STIFF TAN GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

13+00.00

-Y/-

25-JUL-2013 11:48 L:\FERD\perry\11e\_j\investigation\TIP\R2514B\_GEO\_ROWY\CAADD\_GEO\TECH\sc\R2514B\_GEO\_ROWY\_Y113000to1550\_xsi.dgn cbrturner

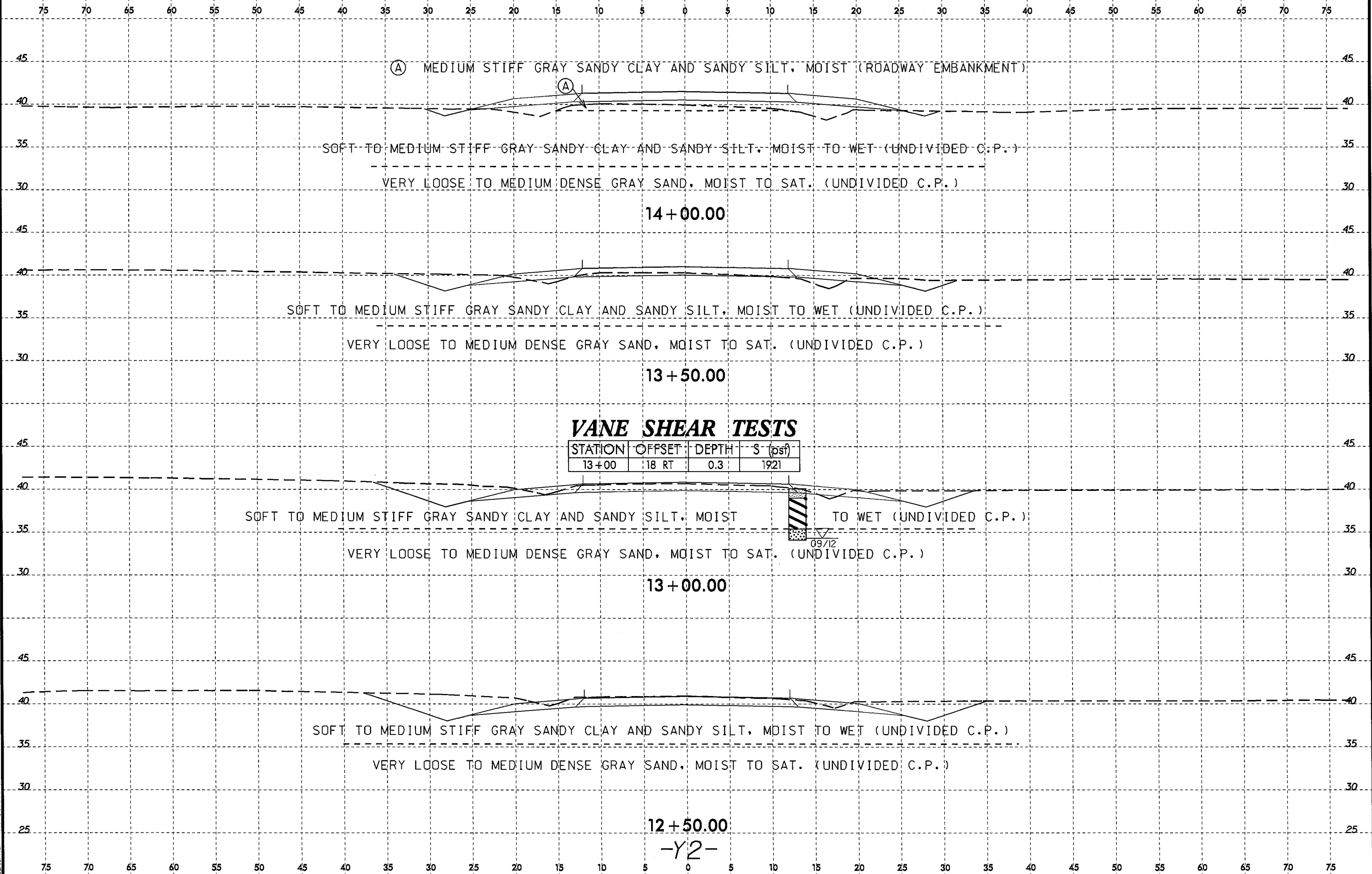
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c:\turner AT 062546



-Y/-



8/23/99  
25-JUL-2013 14:49  
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c:\turner AT GE025461



① MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (ROADWAY EMBANKMENT)

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

14+00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

13+50.00

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
13+00	18 RT	0.3	1921

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

13+00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

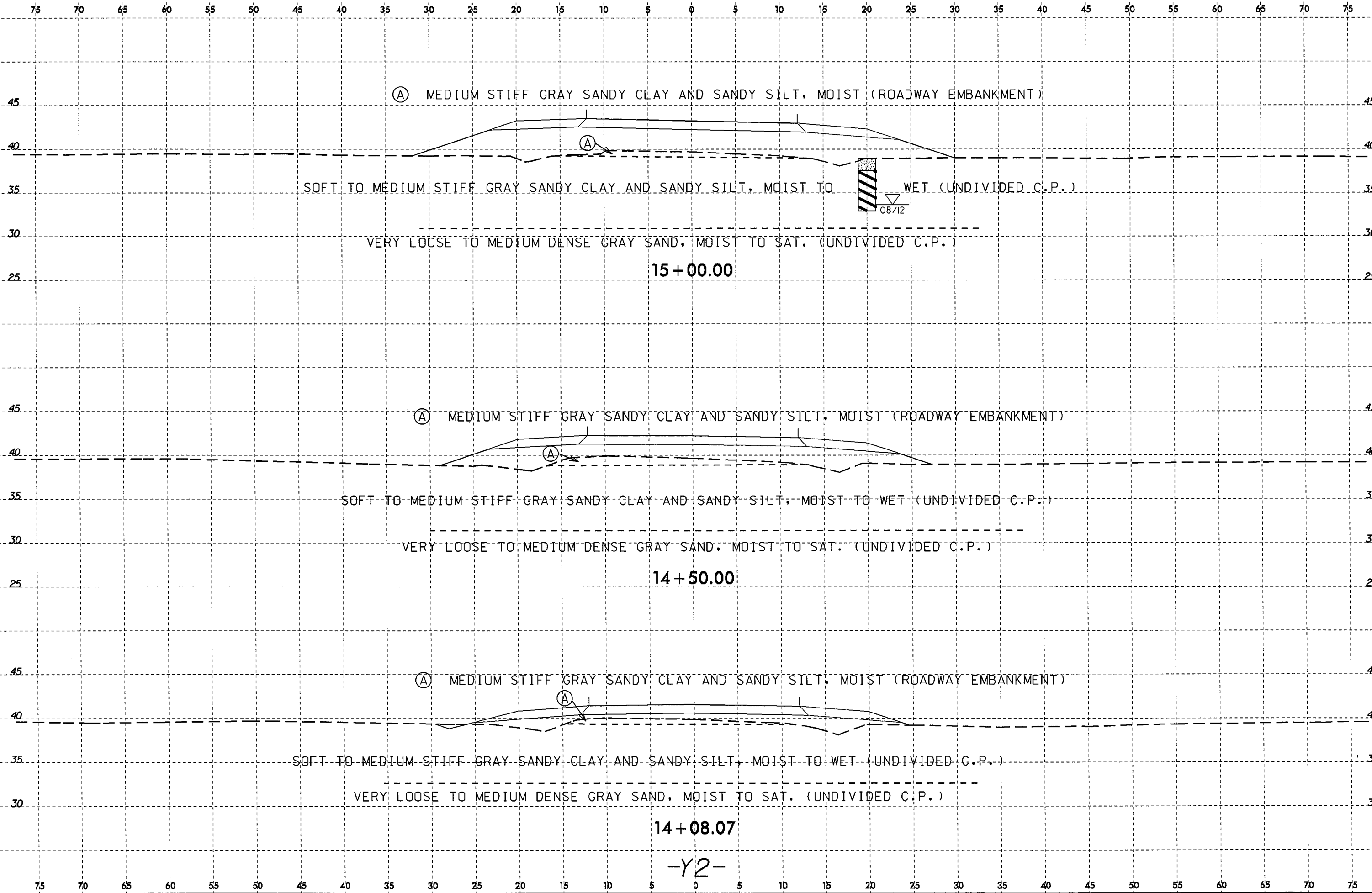
12+50.00

-Y2-

8/23/99

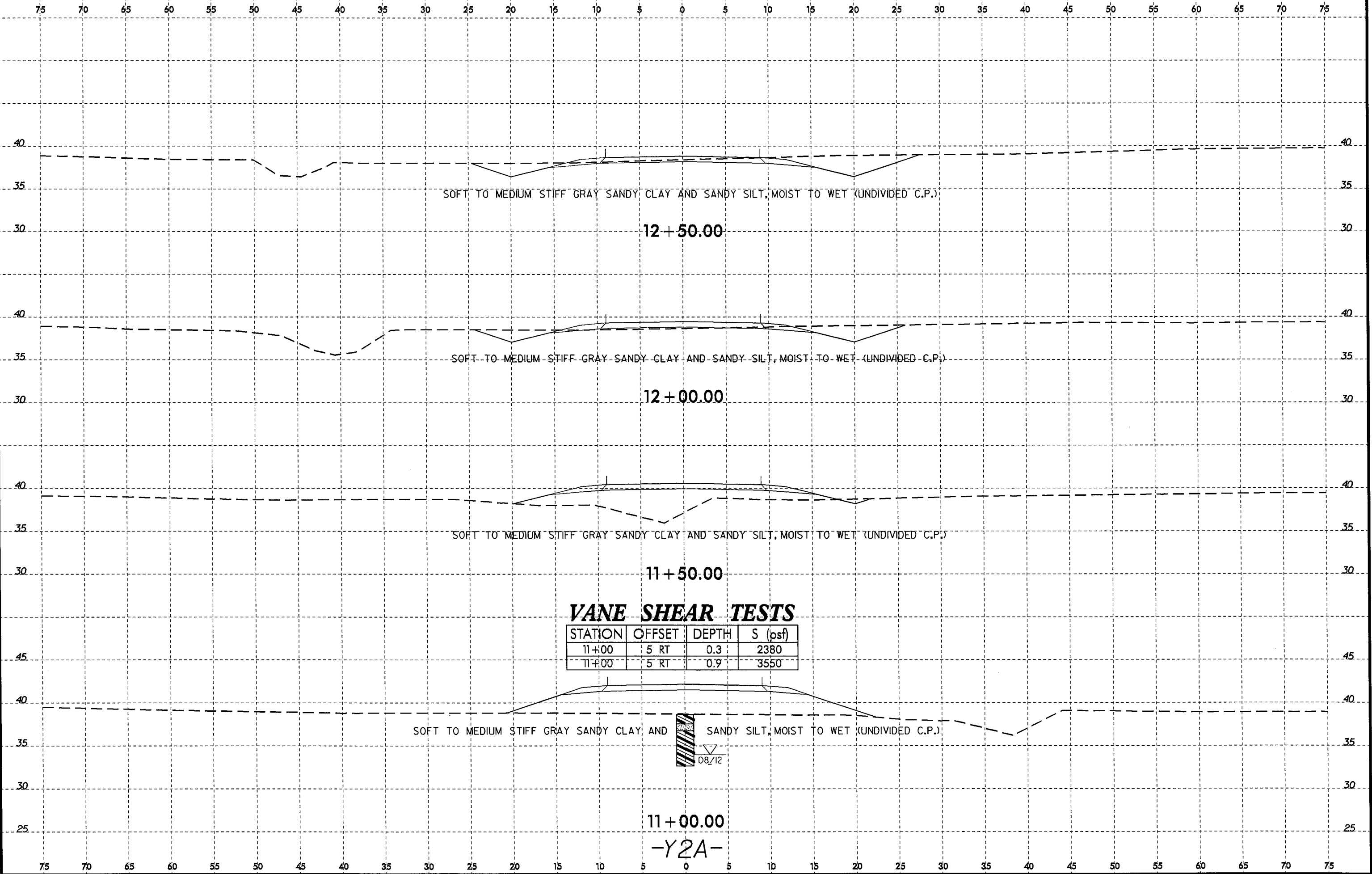


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R-2514B	96



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 copturner RT (625548)



**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
11+00	5 RT	0.3	2380
11+00	5 RT	0.9	3550

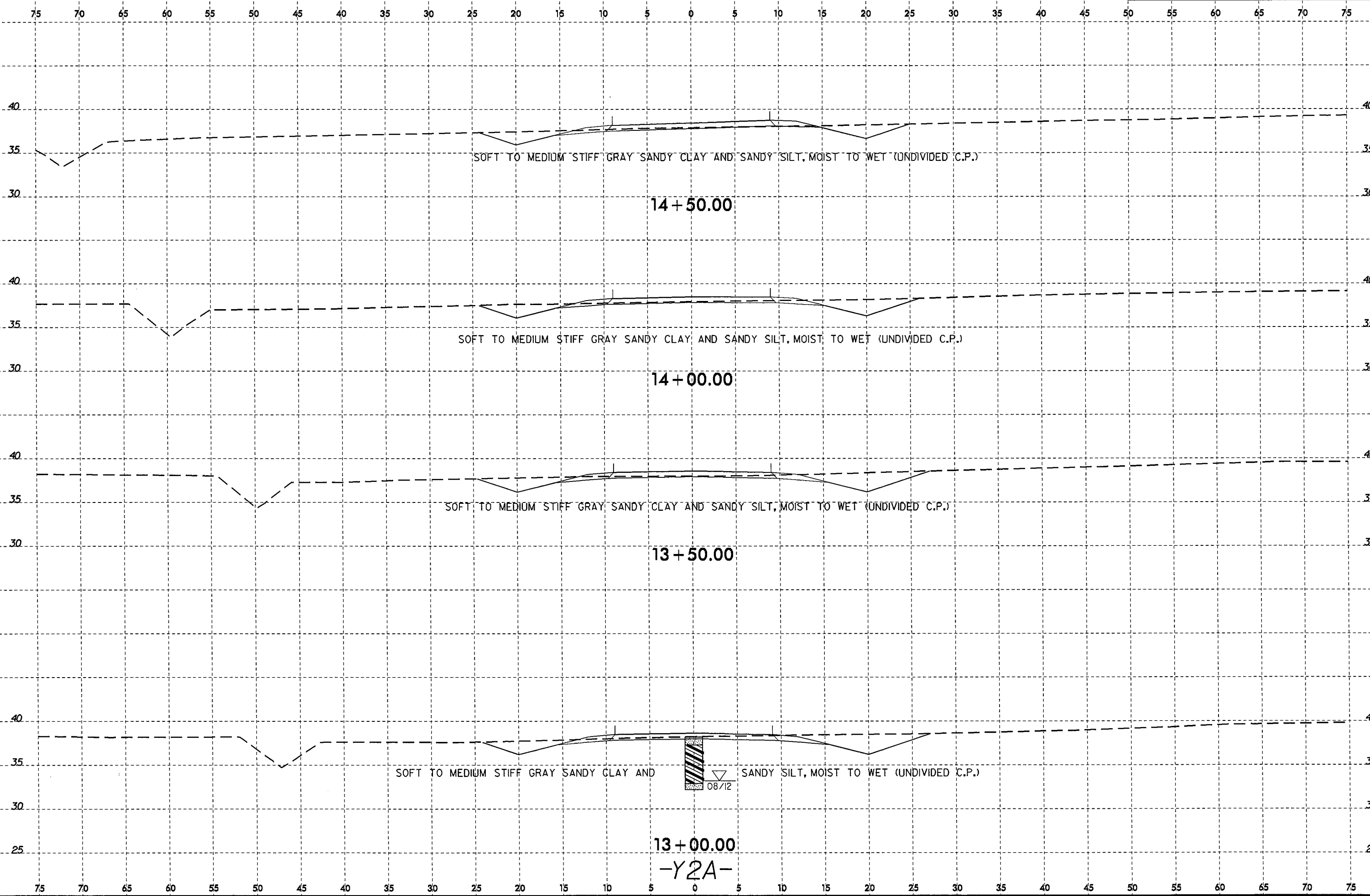


11+00.00  
-Y2A-

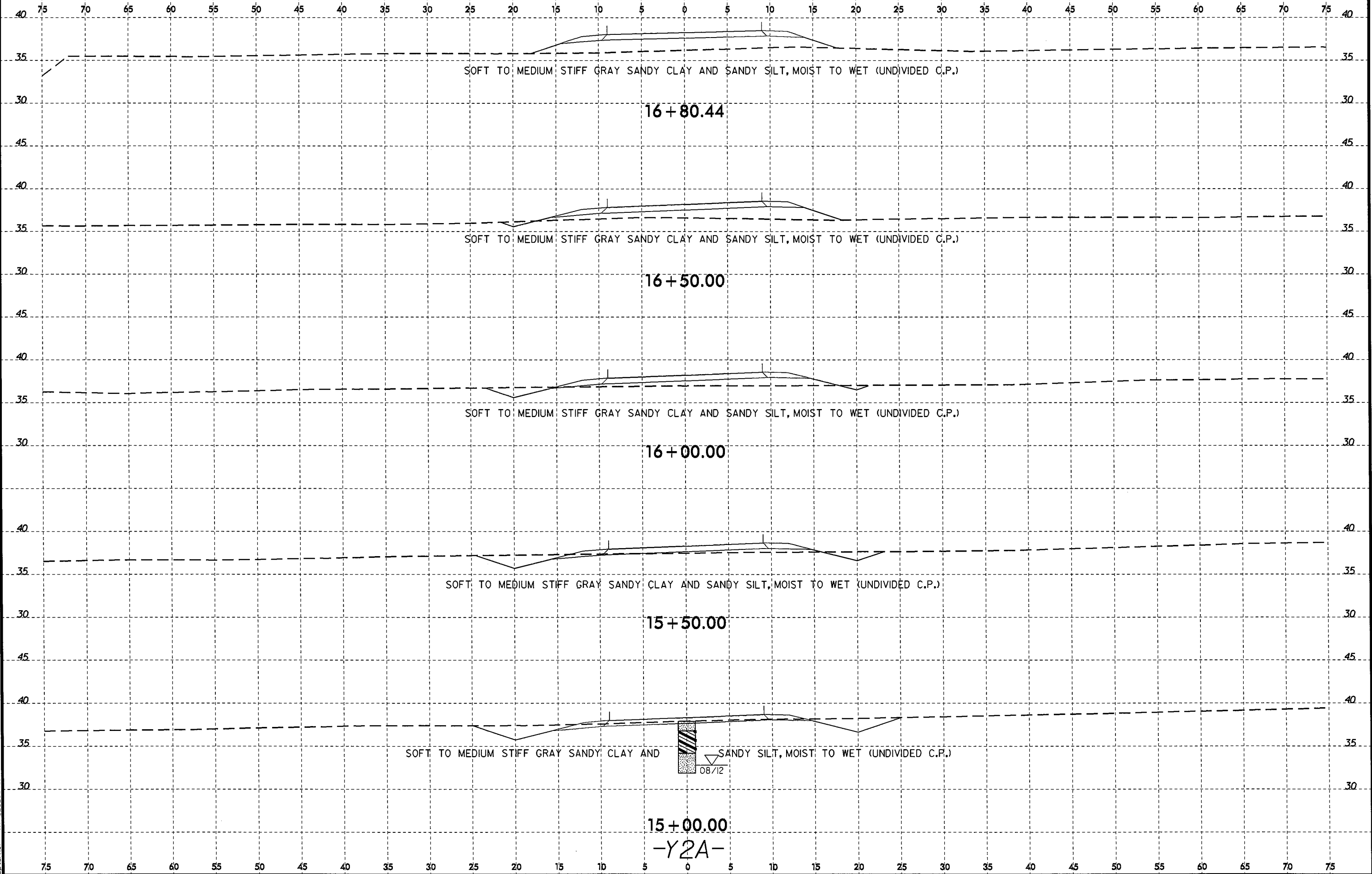
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Cpturner

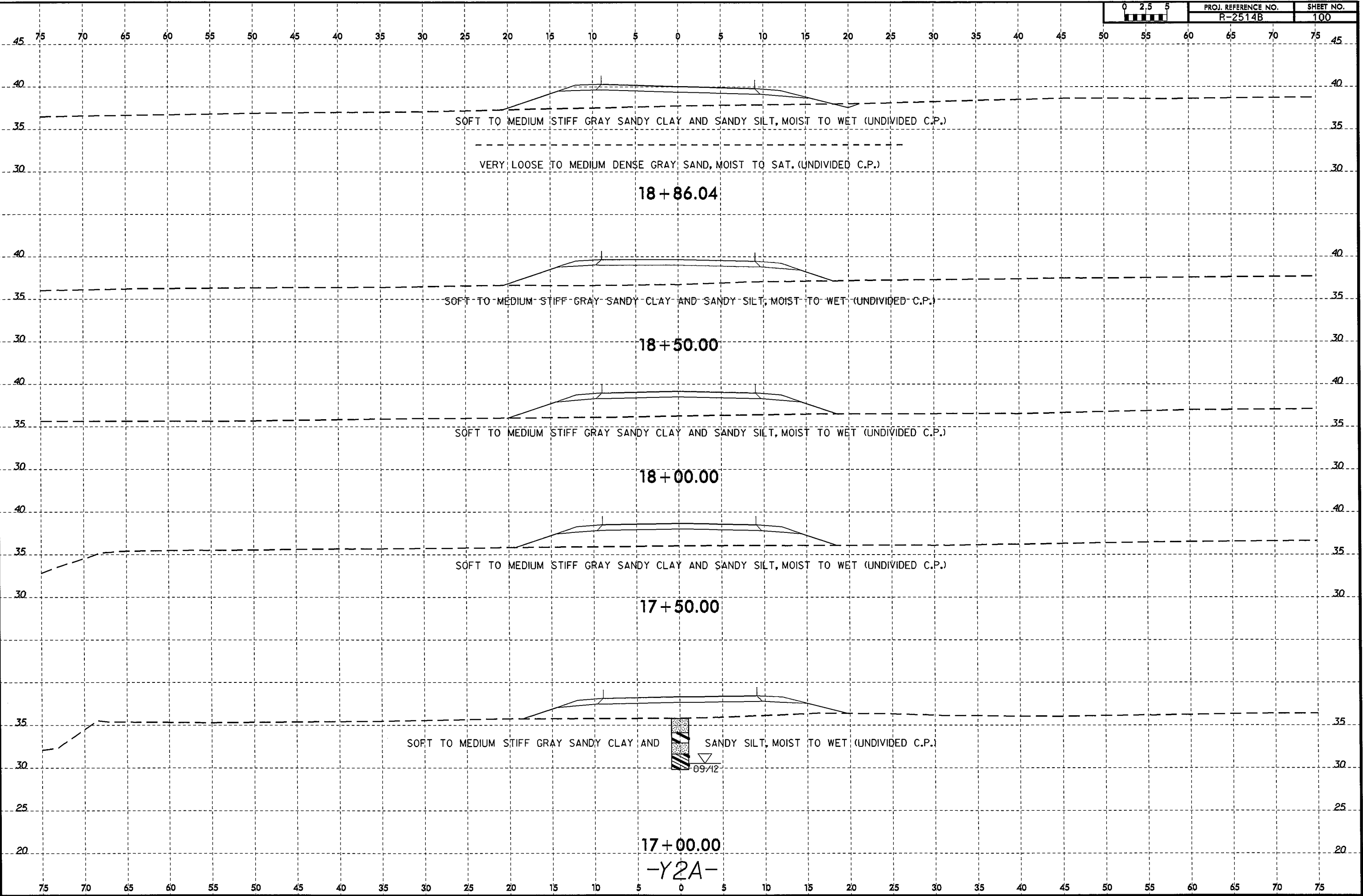


PROJ. REFERENCE NO.	SHEET NO.
R-2514B	98



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cpturner AT GEO25461





SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

18+86.04

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

18+50.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

18+00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

17+50.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)



09/12

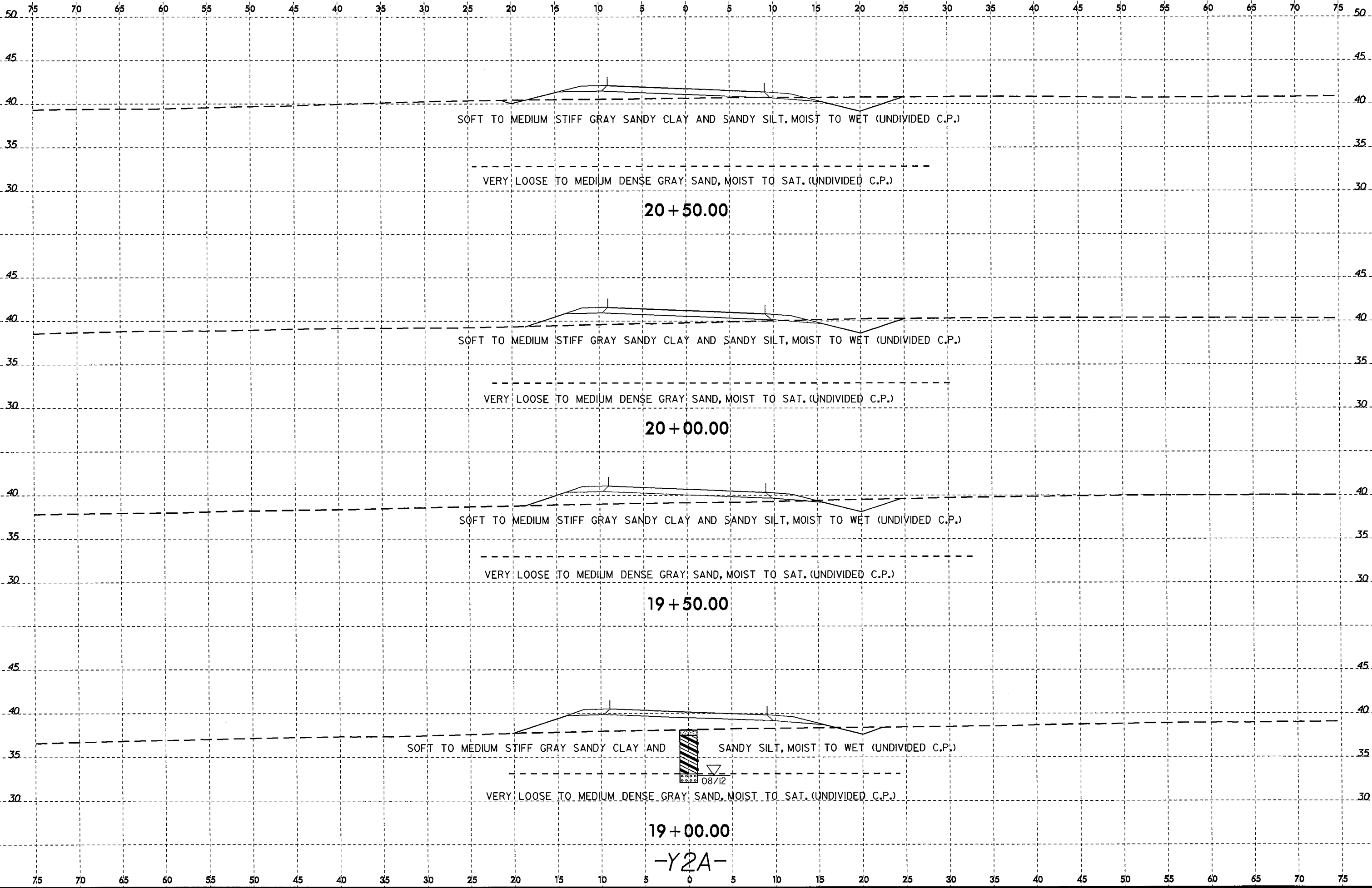
17+00.00

-Y2A-

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PROJ. REFERENCE NO.  
R-2514B  
SHEET NO.  
101



SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

20 + 50.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

20 + 00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

19 + 50.00

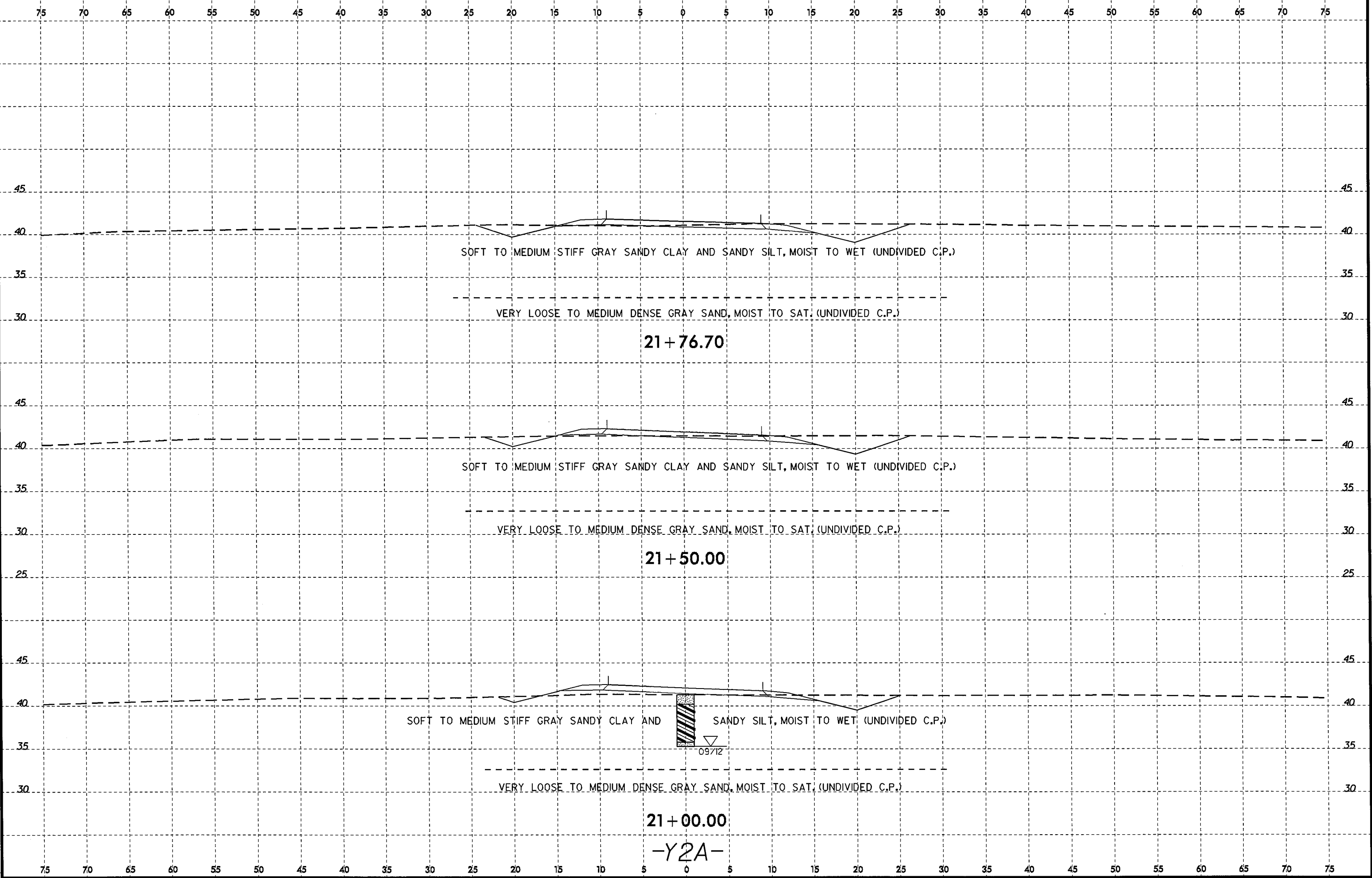
SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

19 + 00.00

-Y2A-

8/23/99  
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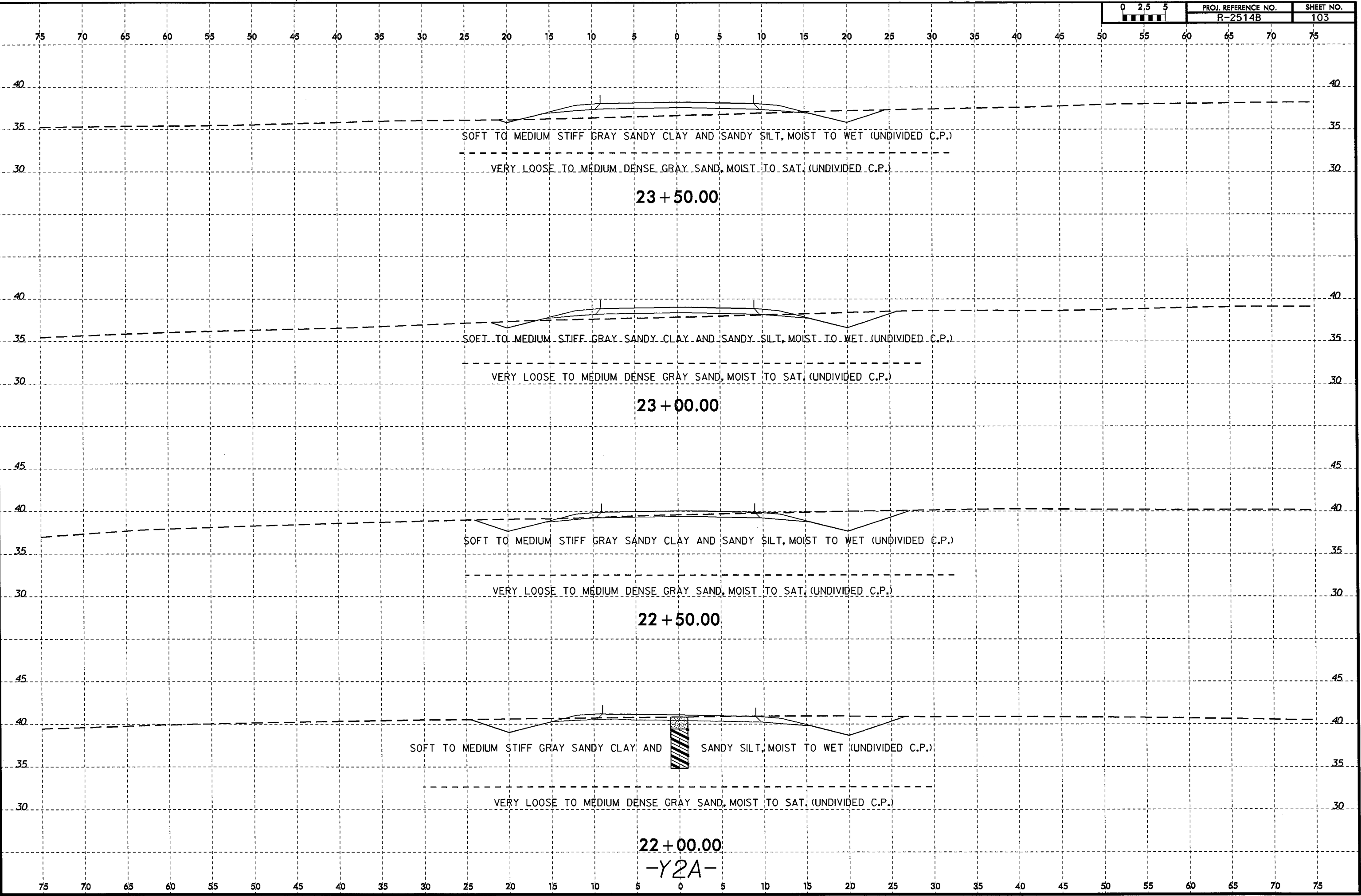




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spturner AT 060359463



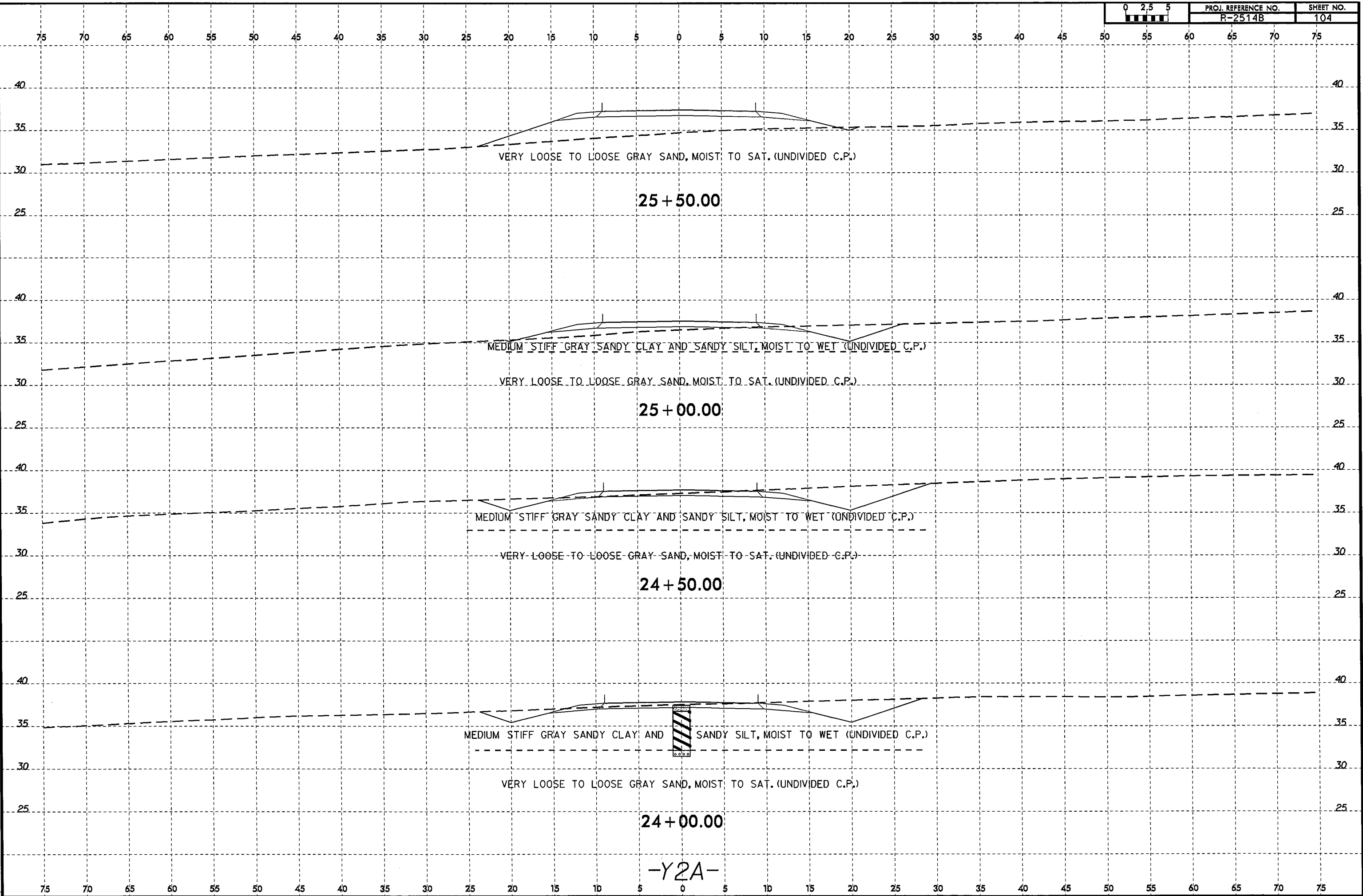
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R-2514B	103



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cpturner AT GEO25461



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	104



VERY LOOSE TO LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

25 + 50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

25 + 00.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

24 + 50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

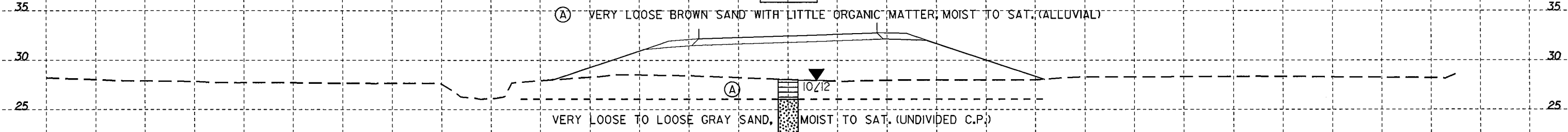
24 + 00.00

-Y2A-

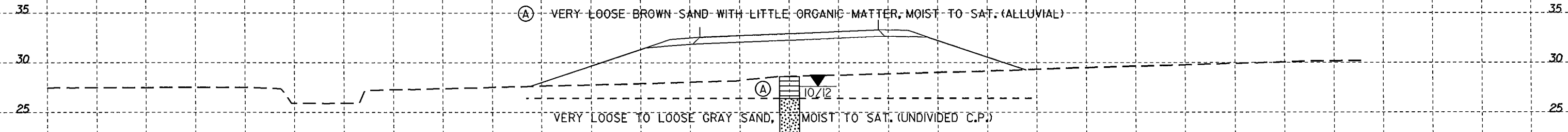
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SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
S-1	CL	31+00	0.0-2.0	A-2-4(0)	25	5	27.8	39.9	22.3	10.1	90	78	32	-	4.7

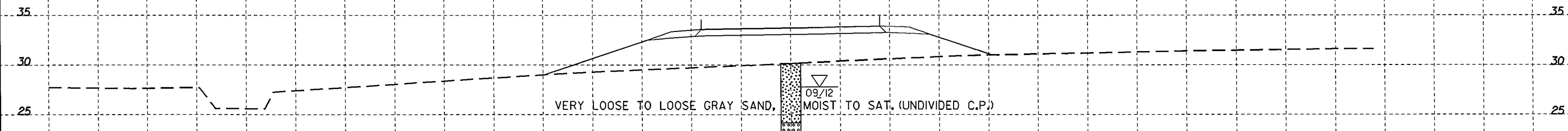
S-1



31+00.00



30+50.00

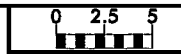


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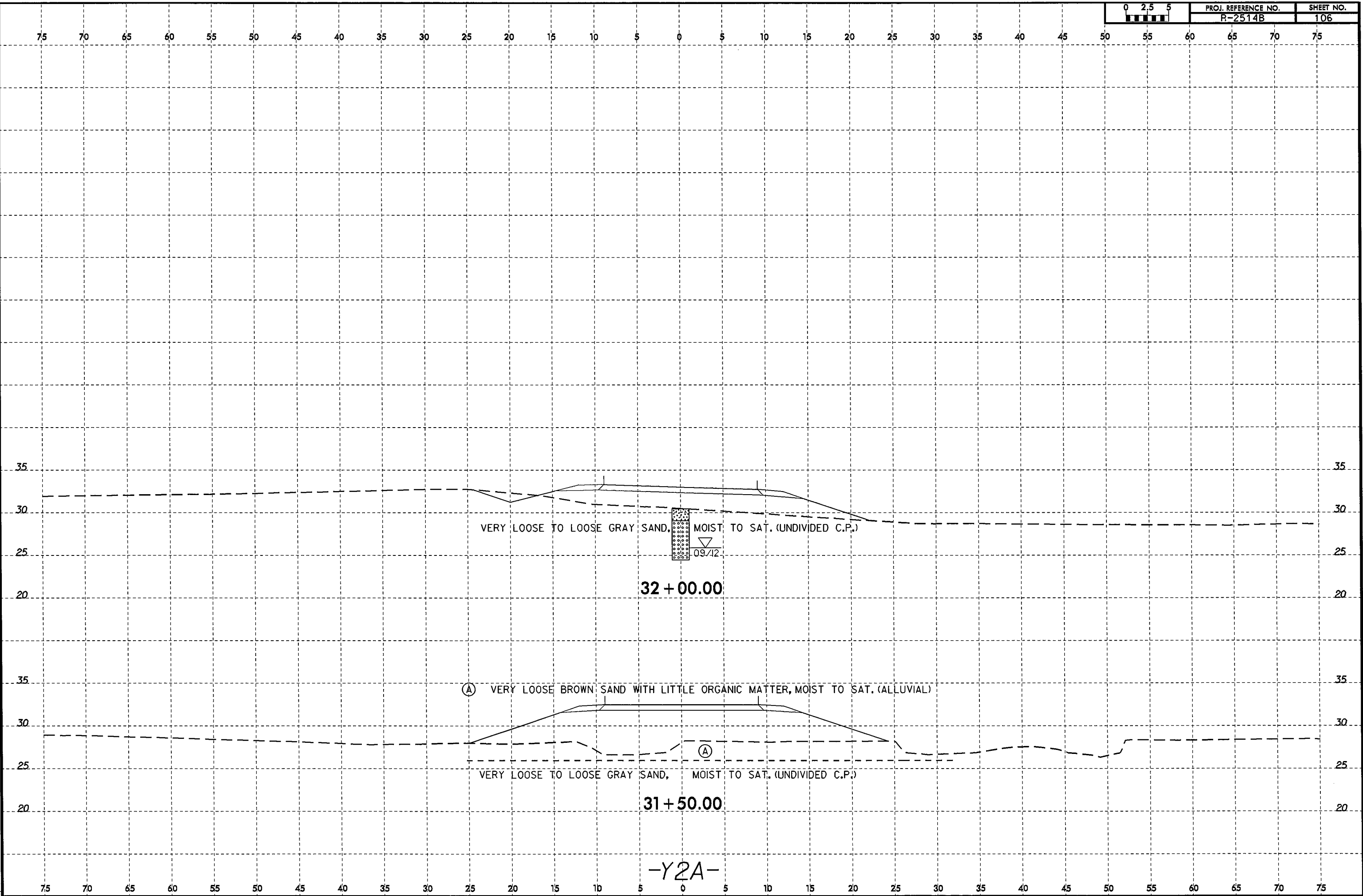
-Y2A-

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

8/23/99  
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PROJ. REFERENCE NO.	SHEET NO.
R-2514B	106

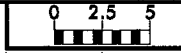


32 + 00.00

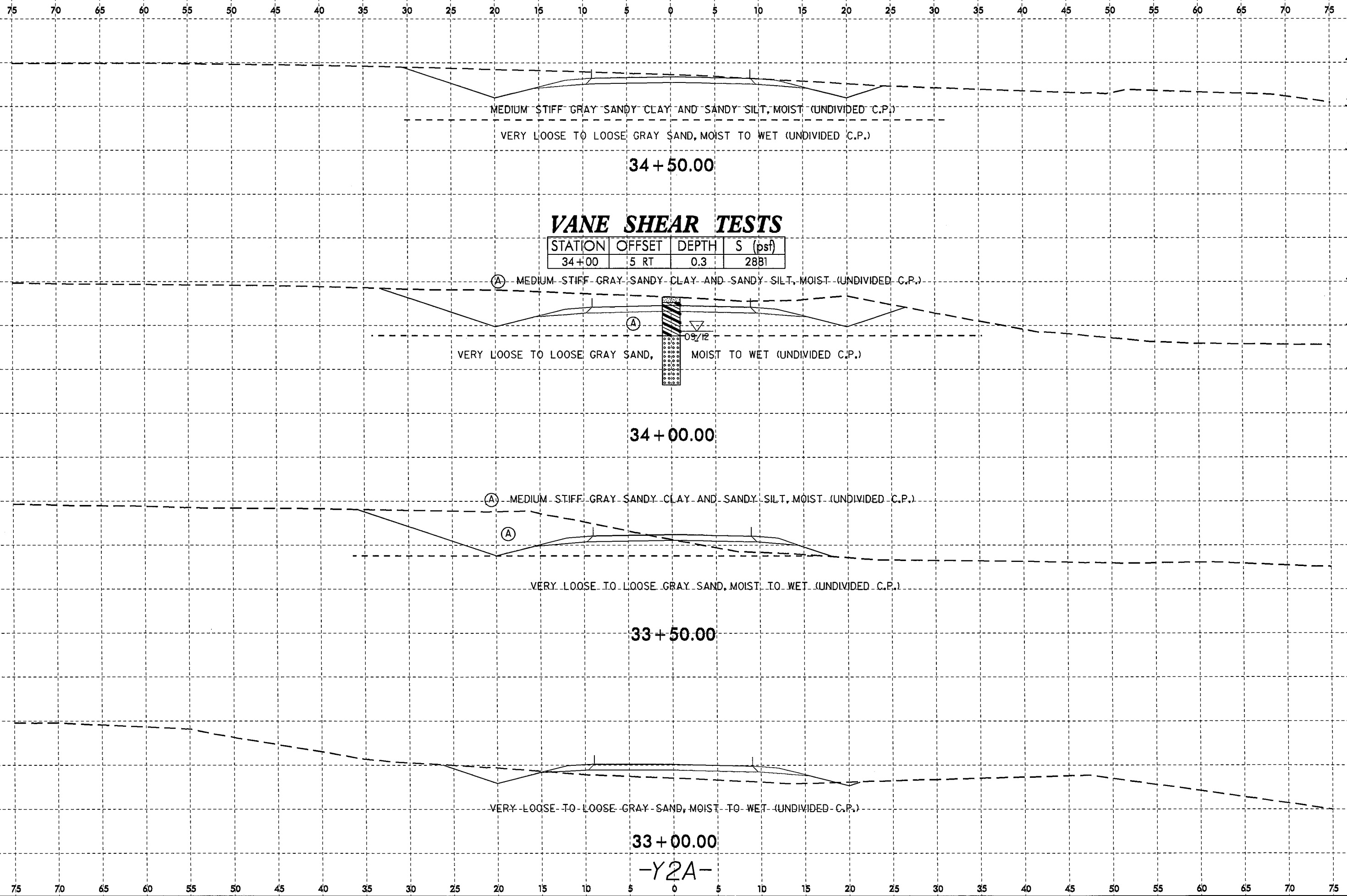
31 + 50.00

-Y2A-

8/23/99

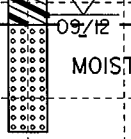


PROJ. REFERENCE NO. R-2514B SHEET NO. 107



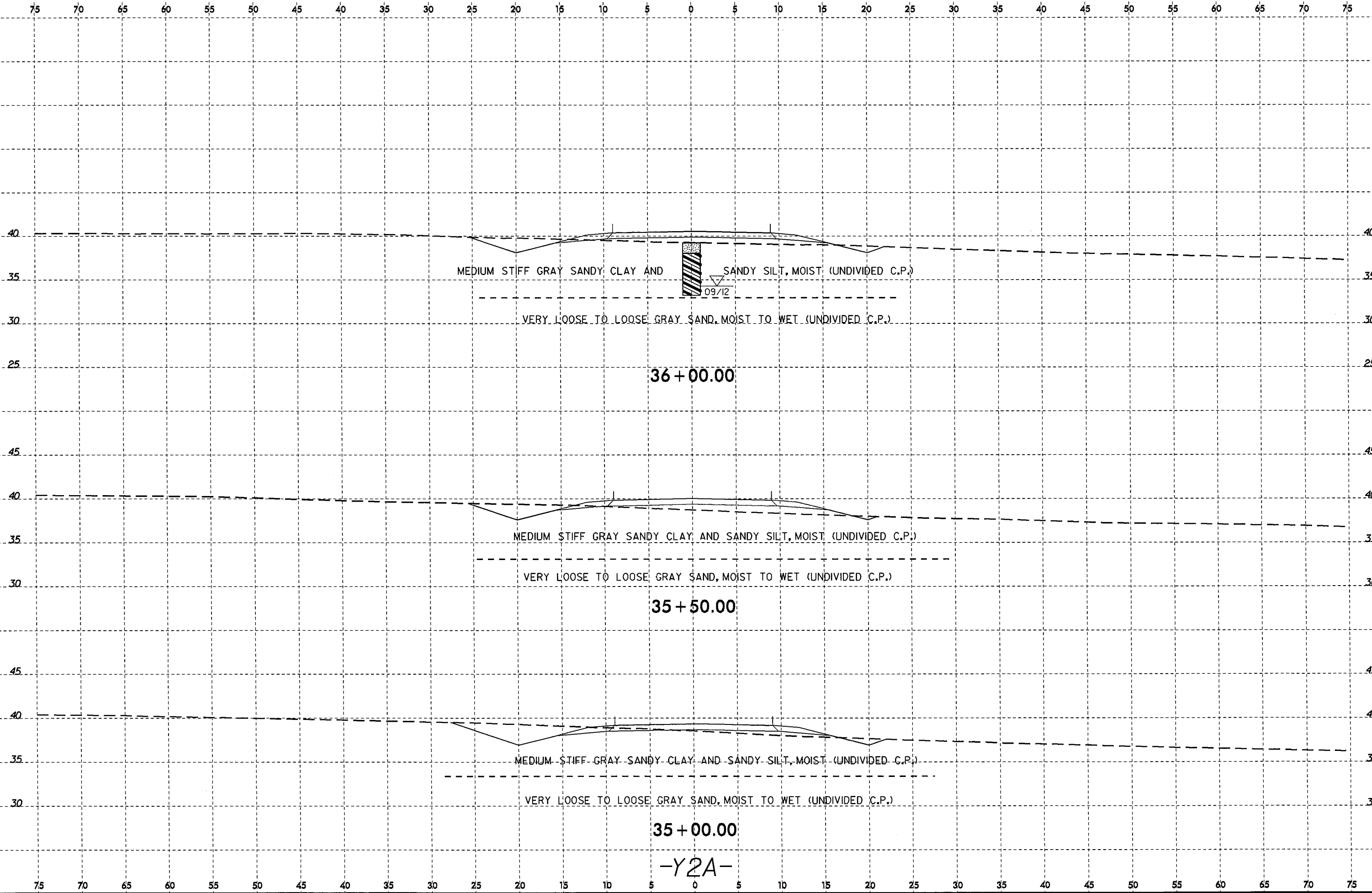
### VANE SHEAR TESTS

STATION	OFFSET	DEPTH	S (psf)
34+00	5 RT	0.3	2881



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8/23/99  
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cpturner AT GEO25481



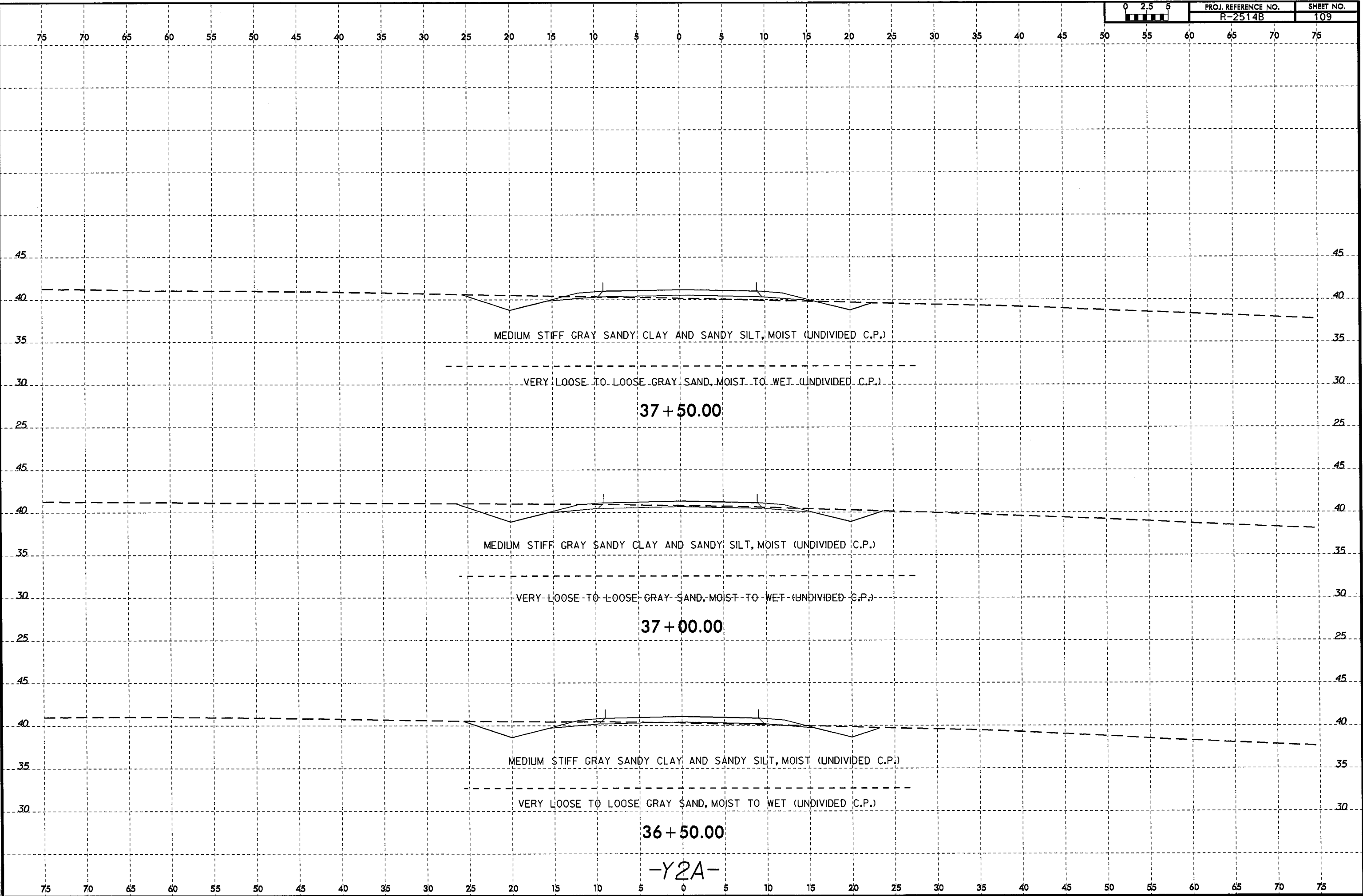
36 + 00.00

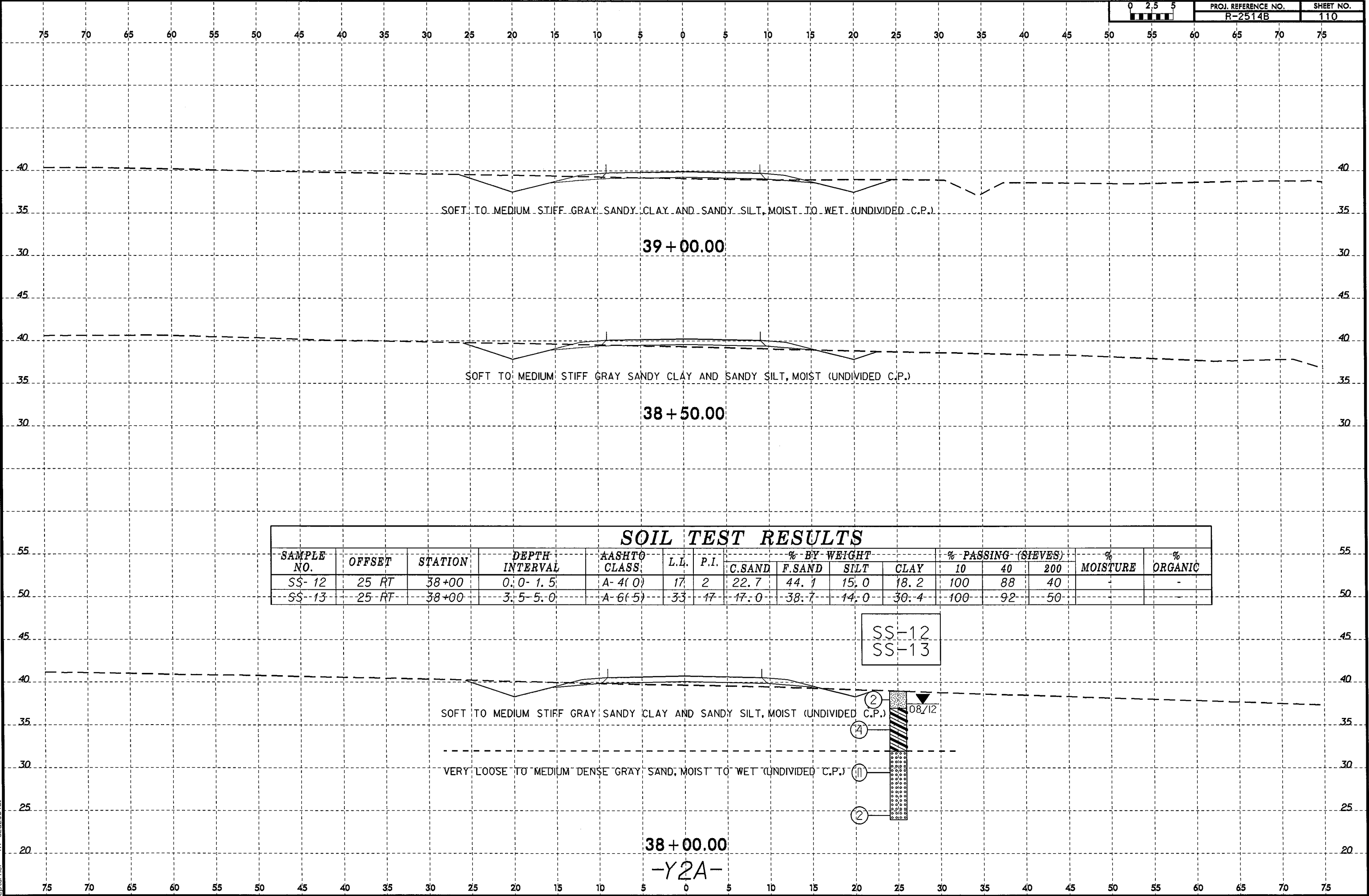
35 + 50.00

35 + 00.00

-Y2A-

8/23/99  
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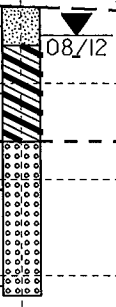




### SOIL TEST RESULTS

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-12	25 RT	38+00	0.0-1.5	A-4(0)	17	2	22.7	44.1	15.0	18.2	100	88	40	-	-
SS-13	25 RT	38+00	3.5-5.0	A-6(5)	33	17	17.0	38.7	14.0	30.4	100	92	50	-	-

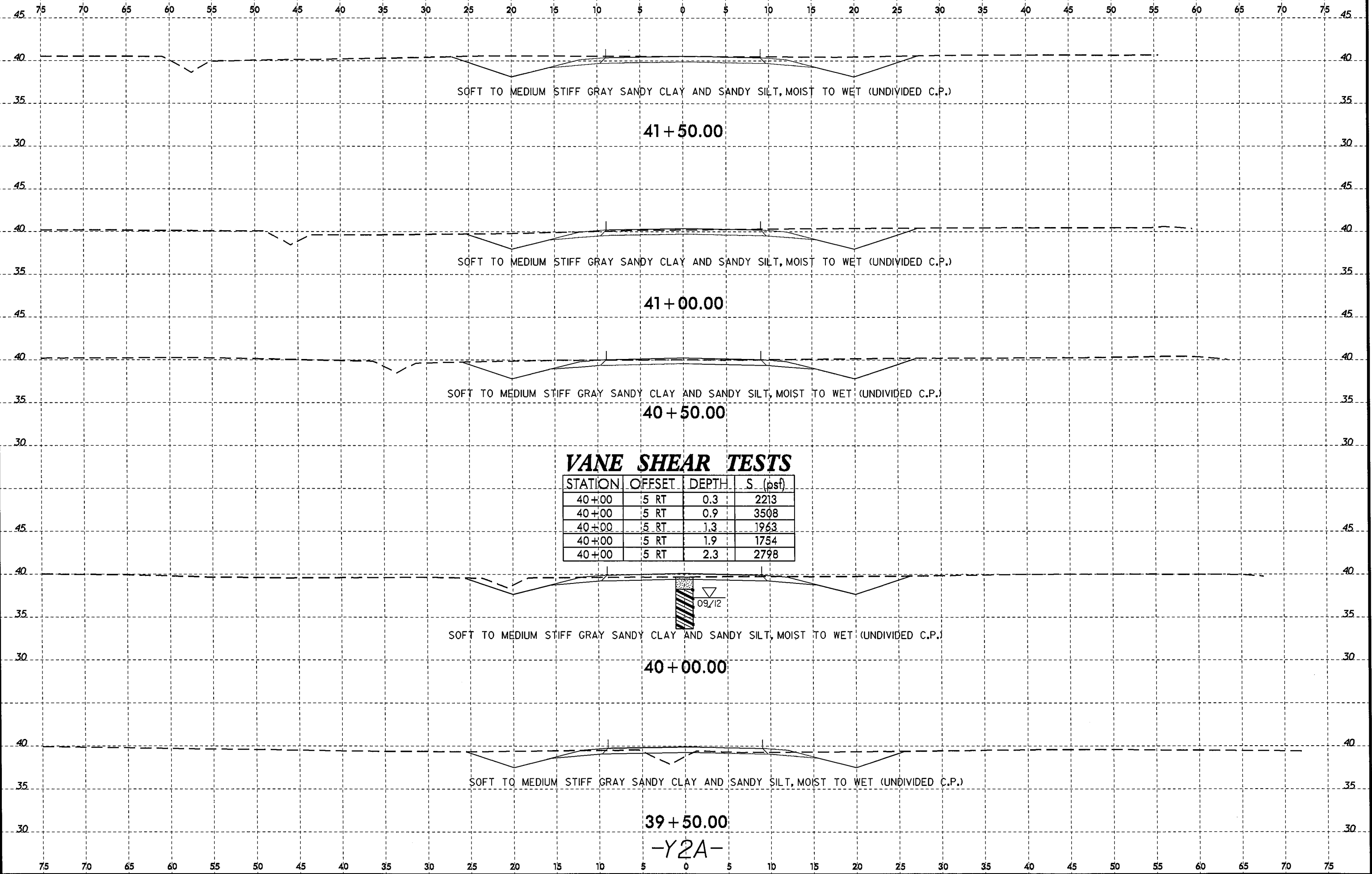
SS-12  
SS-13



38 + 00.00  
-Y2A-



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 spturner AT 06255481



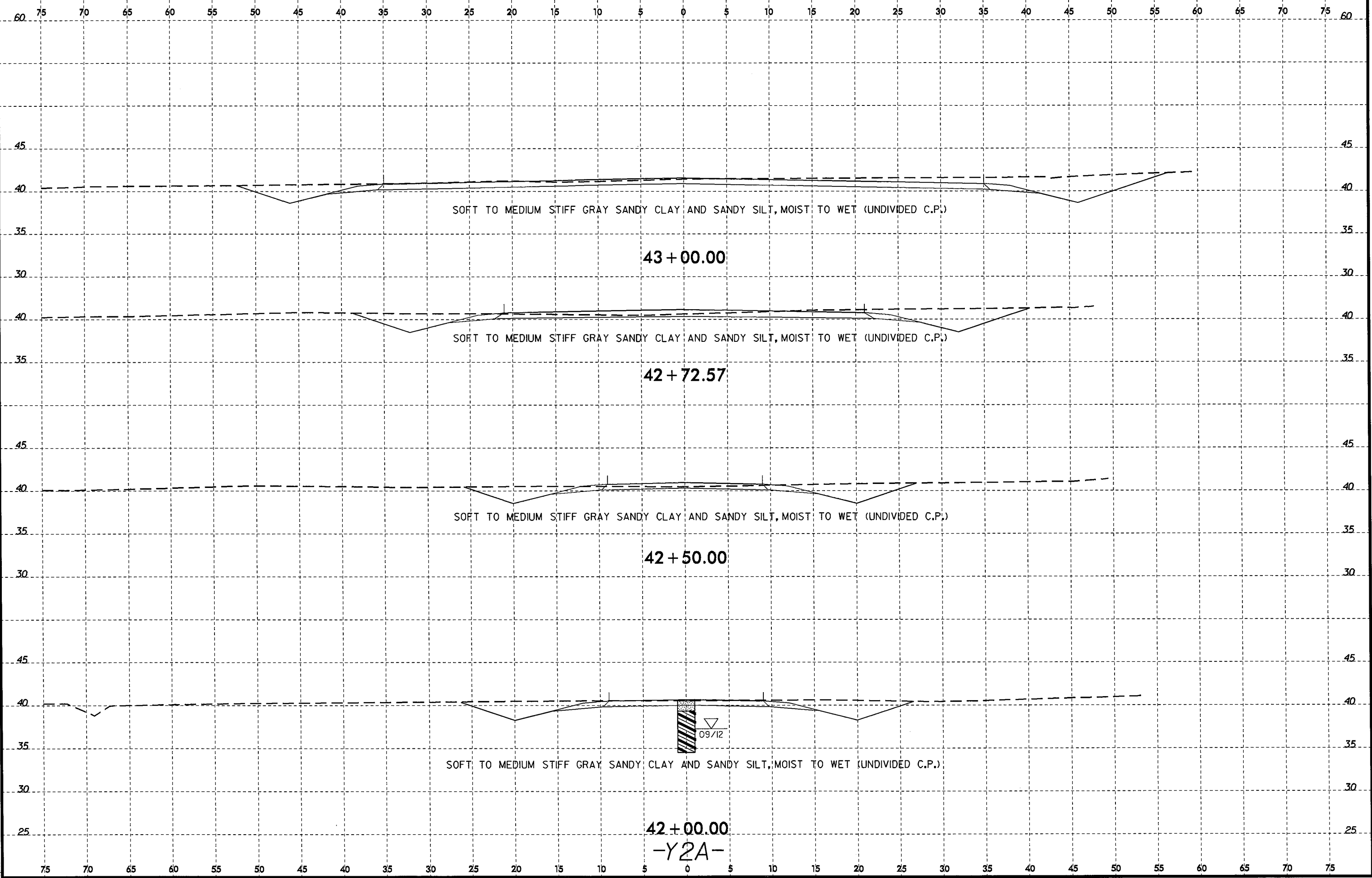
**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
40+00	5 RT	0.3	2213
40+00	5 RT	0.9	3508
40+00	5 RT	1.3	1963
40+00	5 RT	1.9	1754
40+00	5 RT	2.3	2798

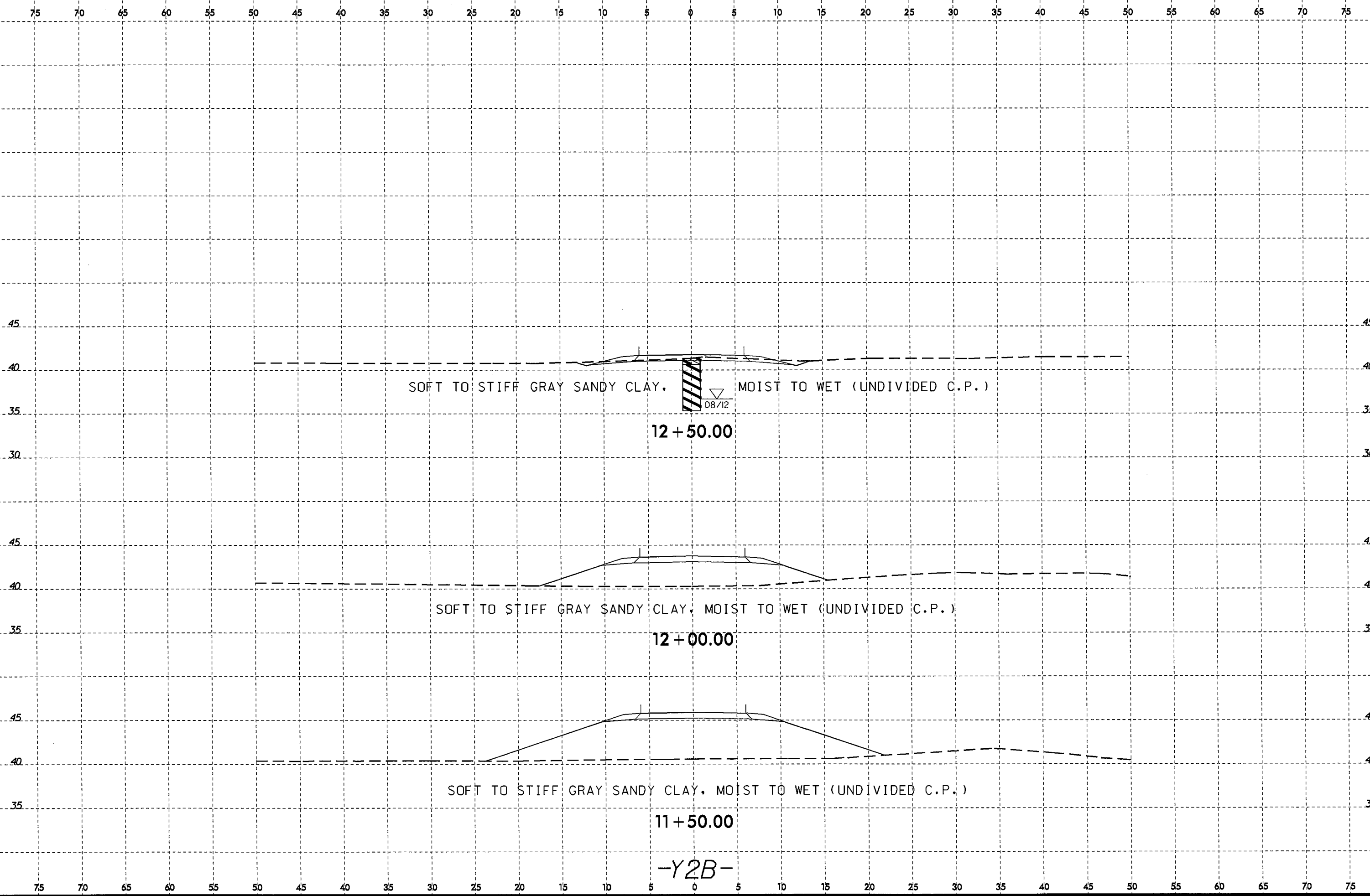


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8/23/99  
22-JUL-2013 15:54  
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CPTURNER



SOFT TO STIFF GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED C.P.)

12+50.00

SOFT TO STIFF GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED C.P.)

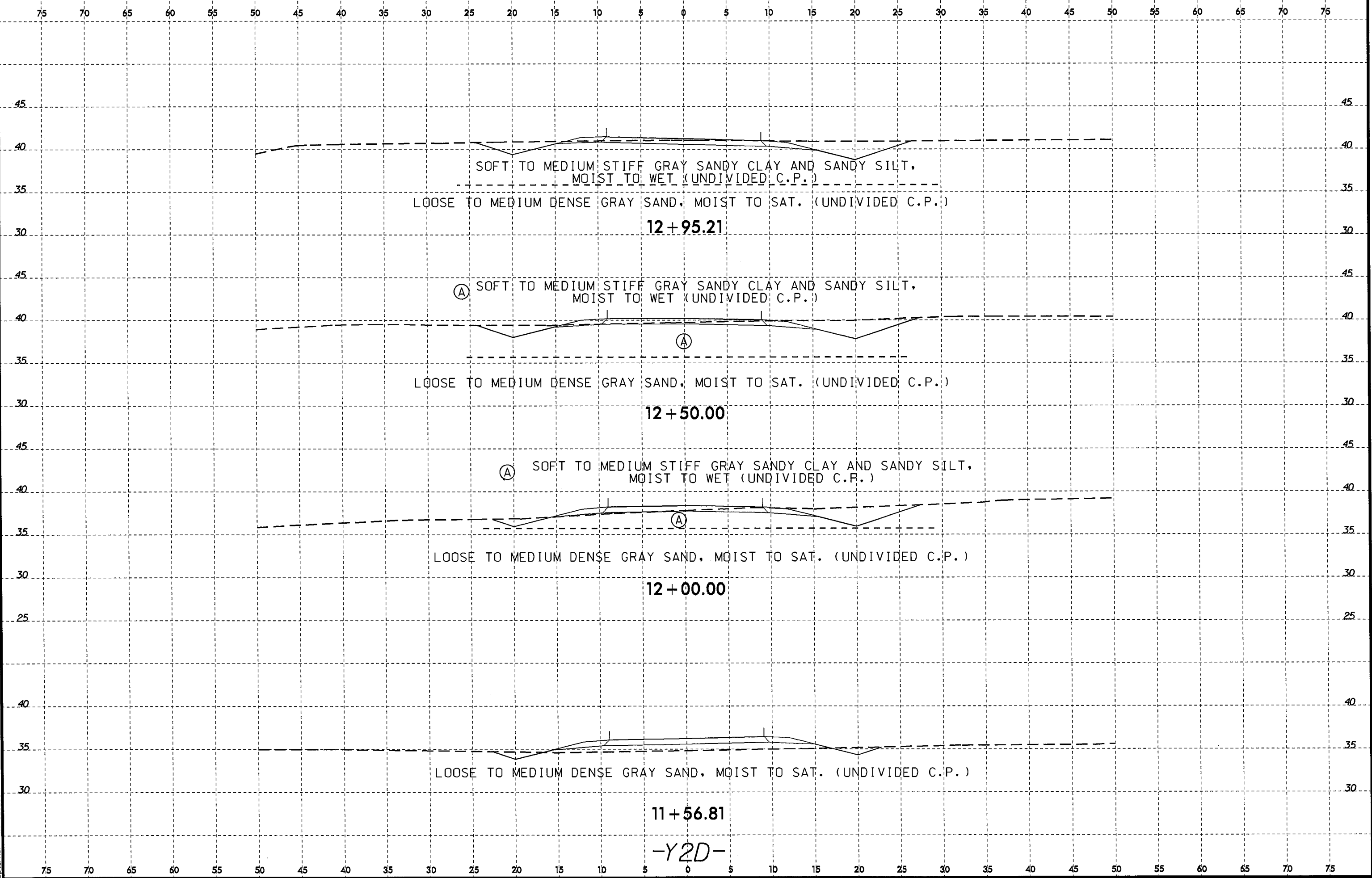
12+00.00

SOFT TO STIFF GRAY SANDY CLAY, MOIST TO WET (UNDIVIDED C.P.)

11+50.00

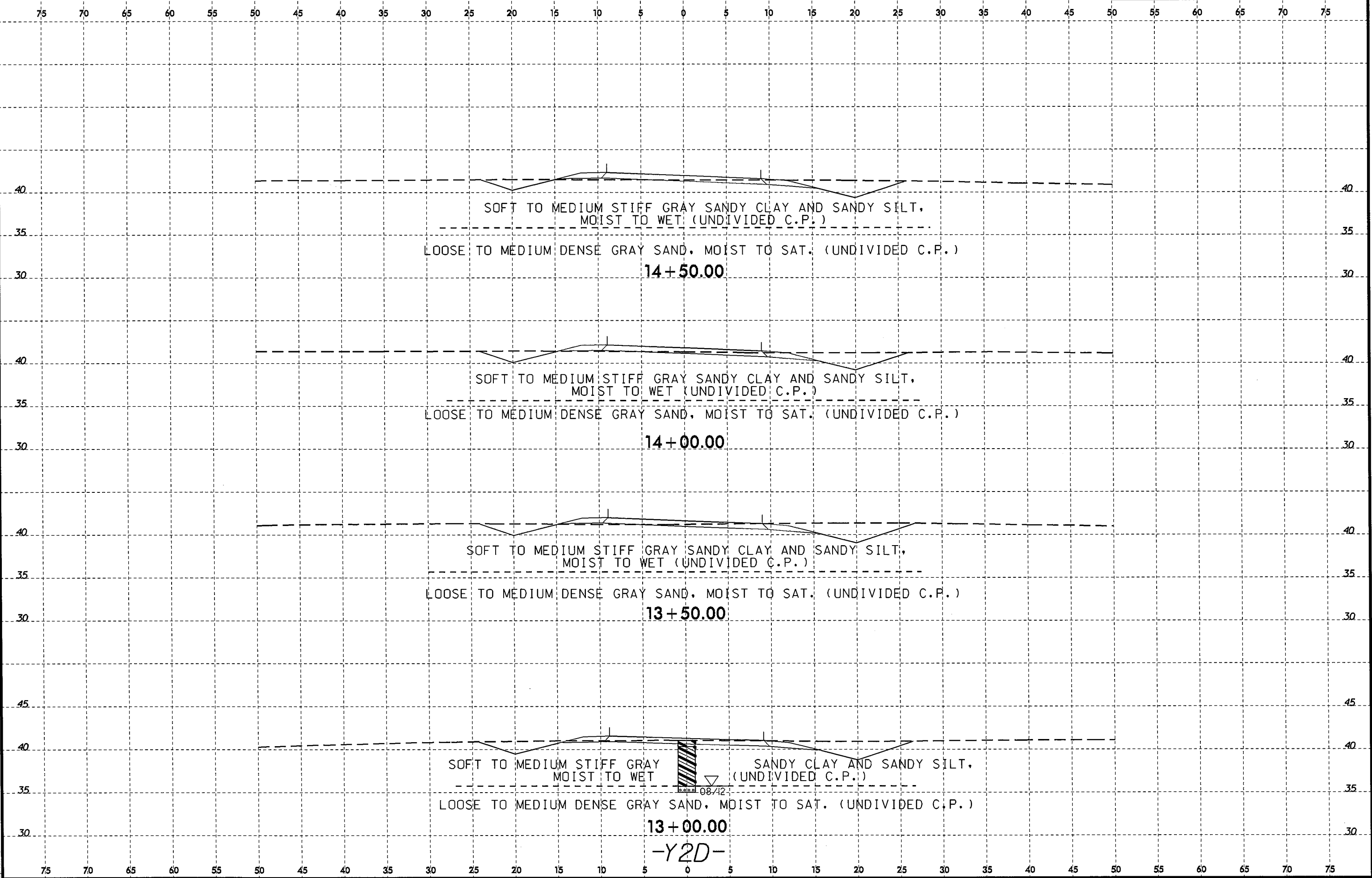
-Y2B-

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cpturner AT GEO255281



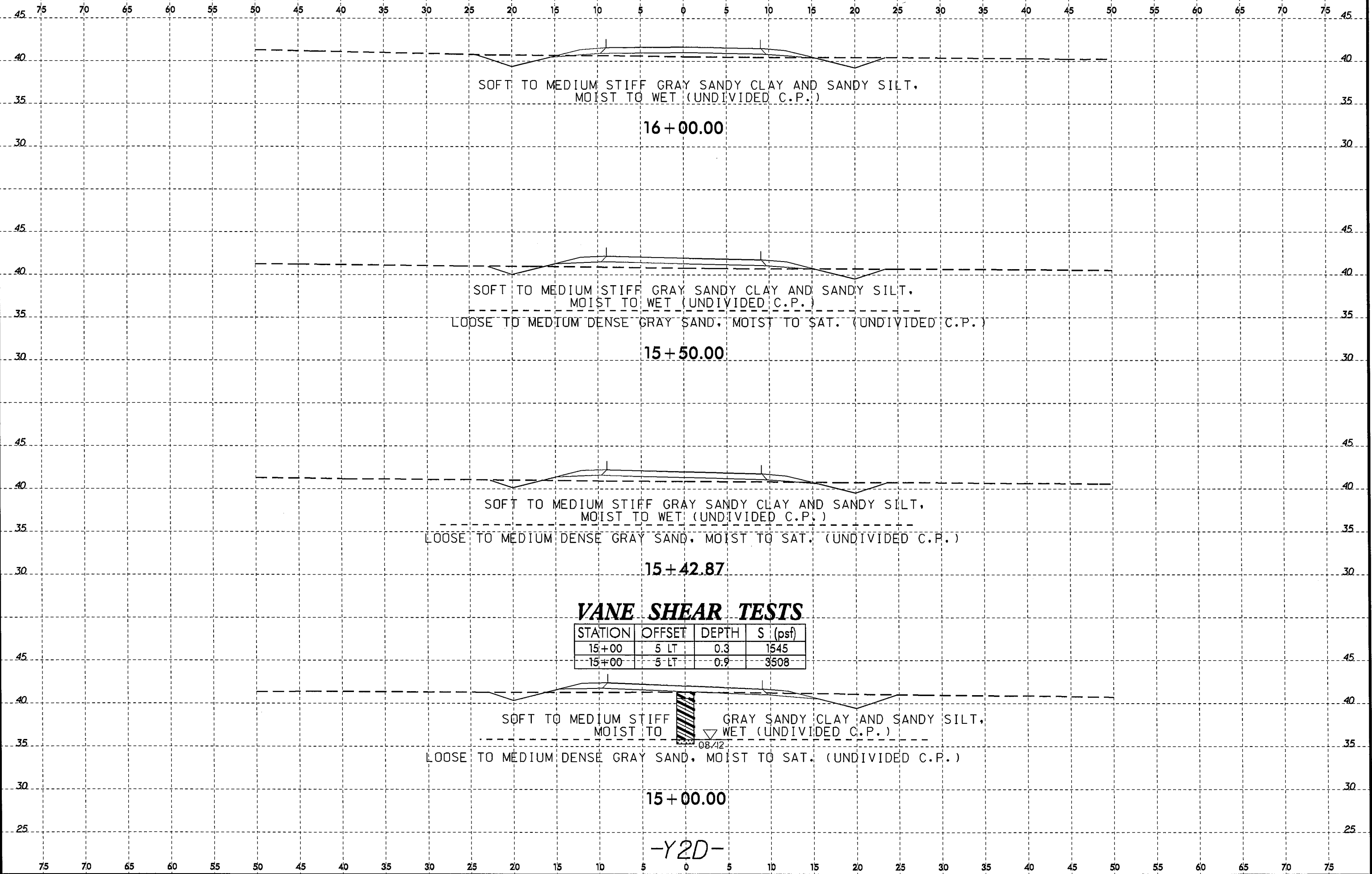
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8/23/99  
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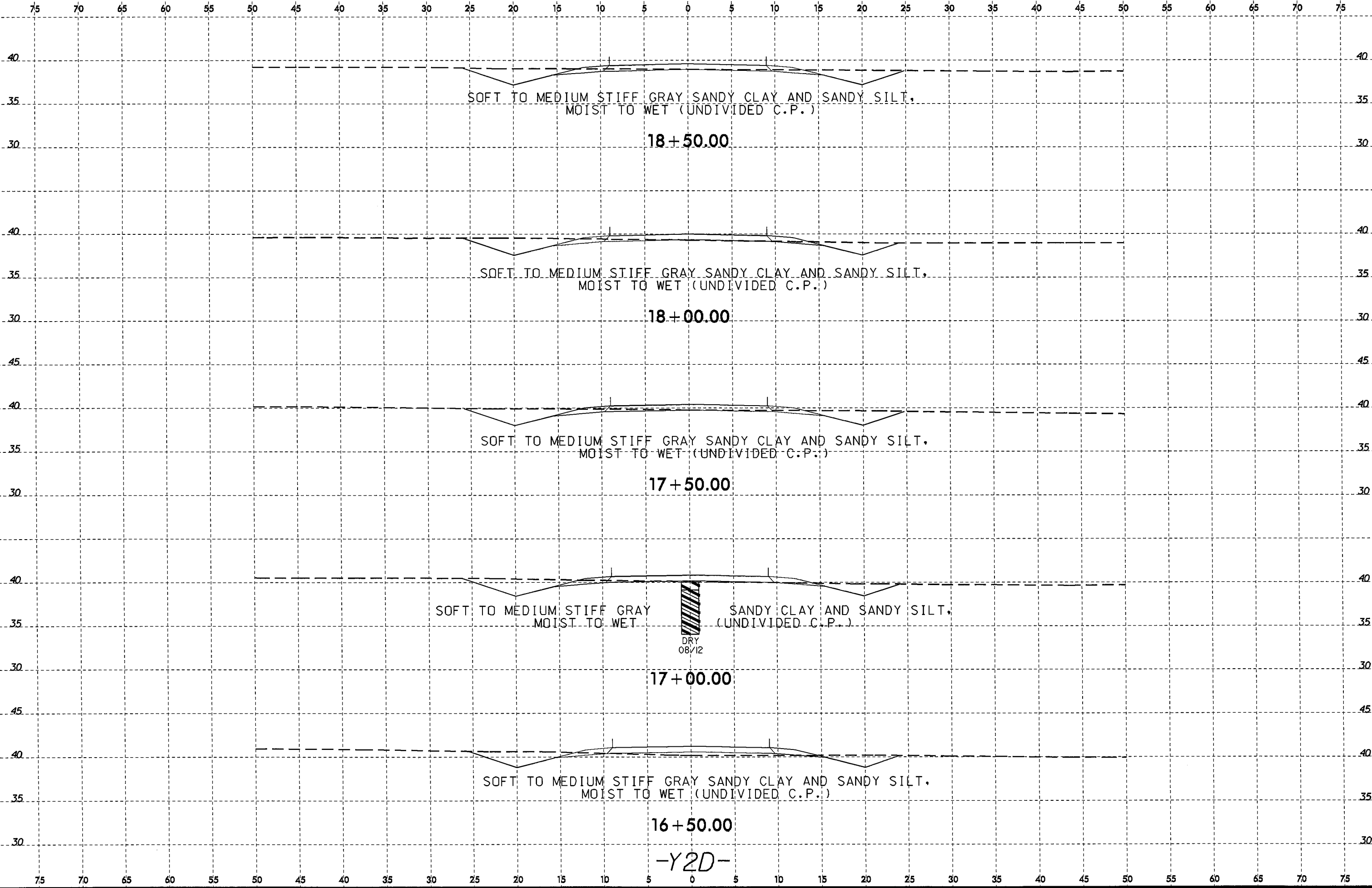
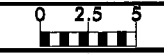


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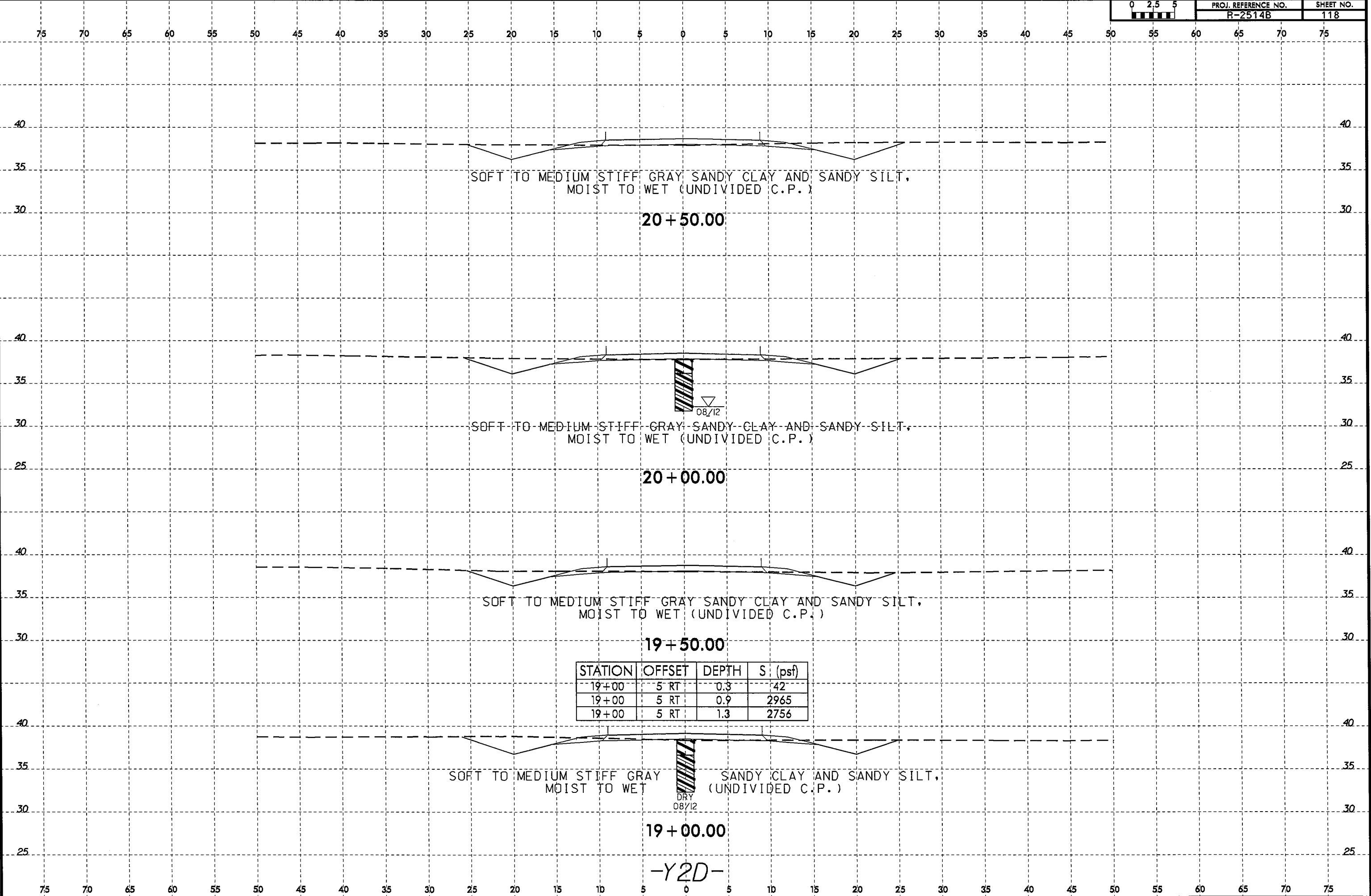
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22-JUL-2013 15:54  
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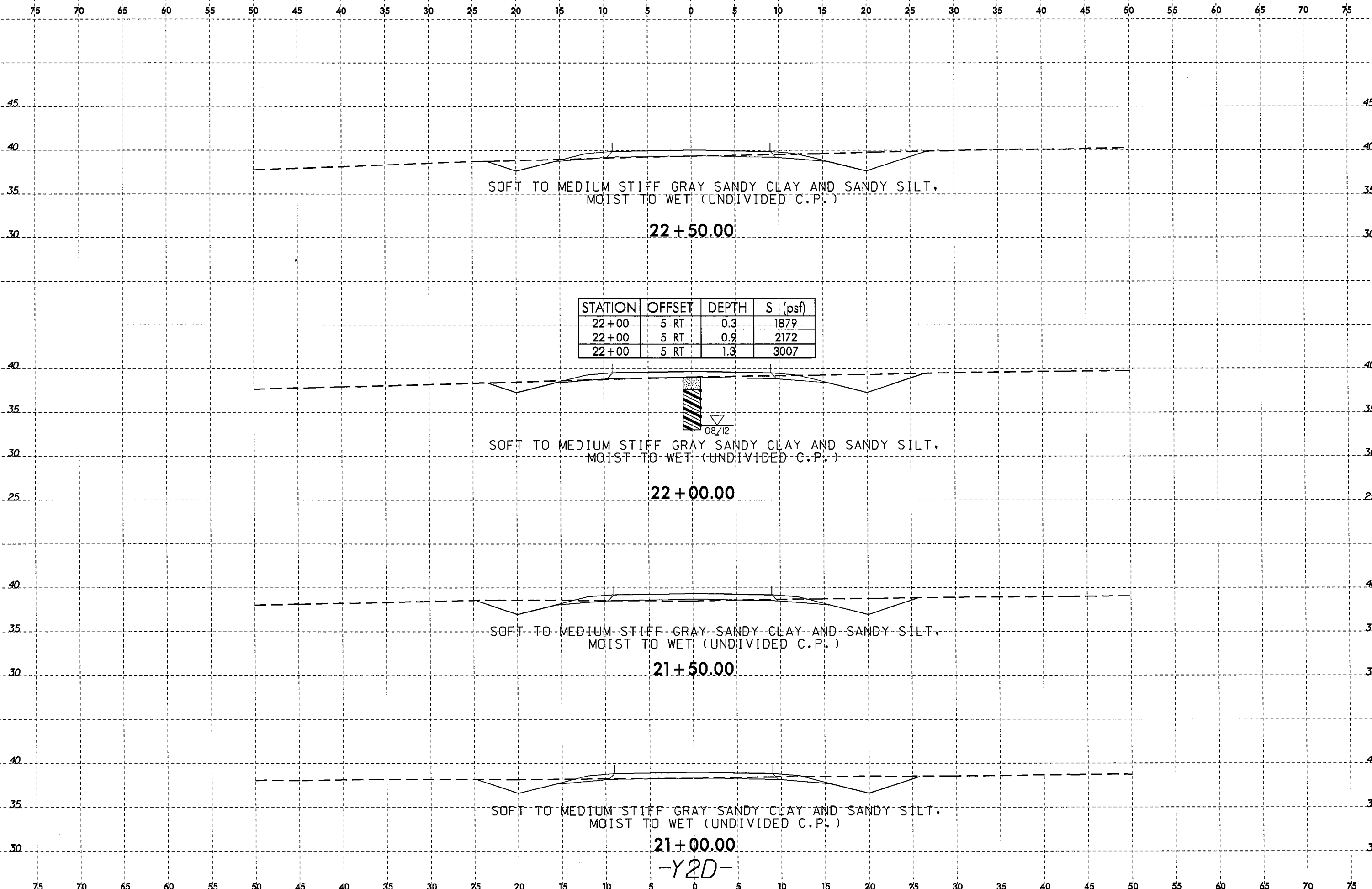


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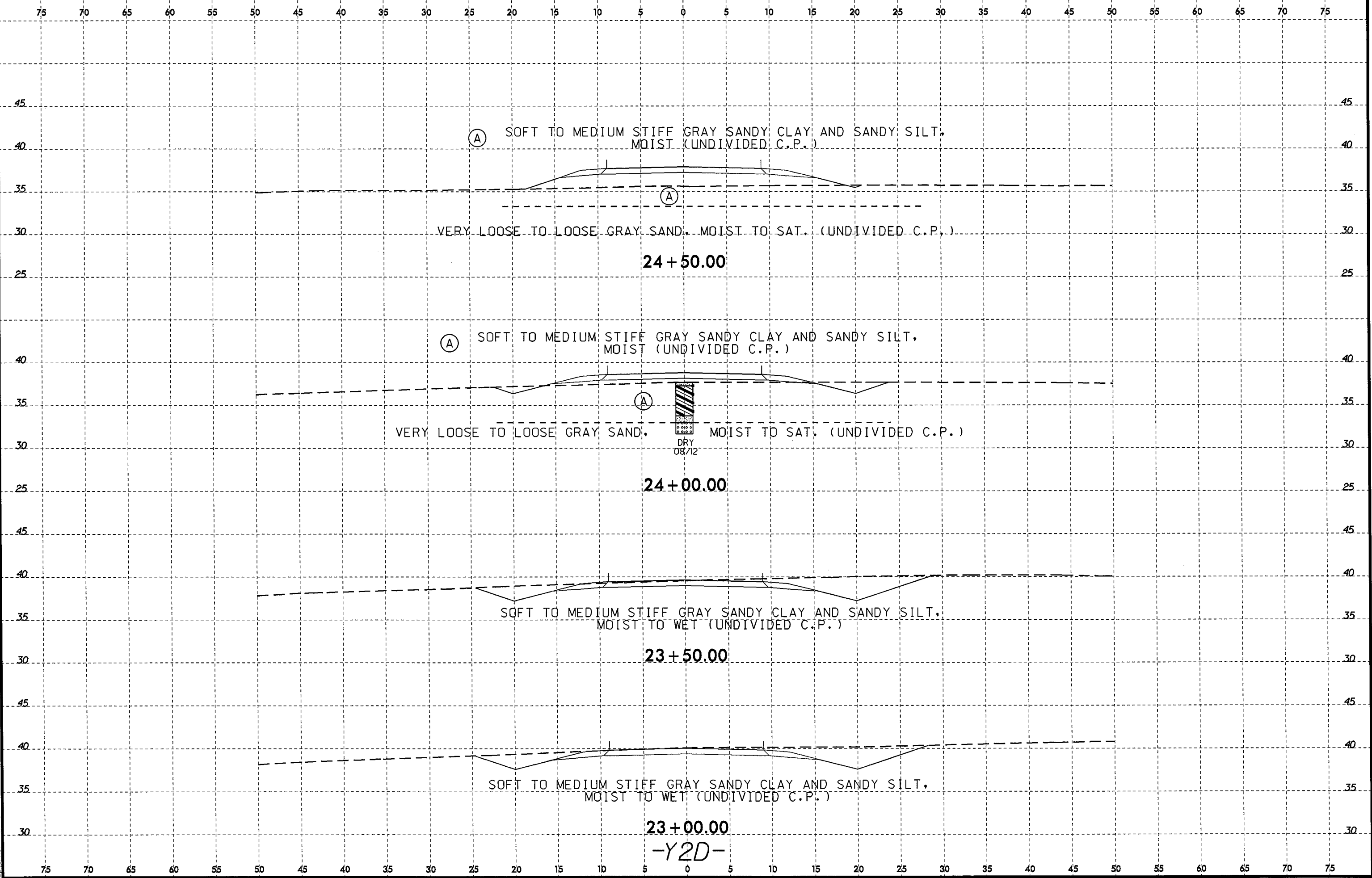




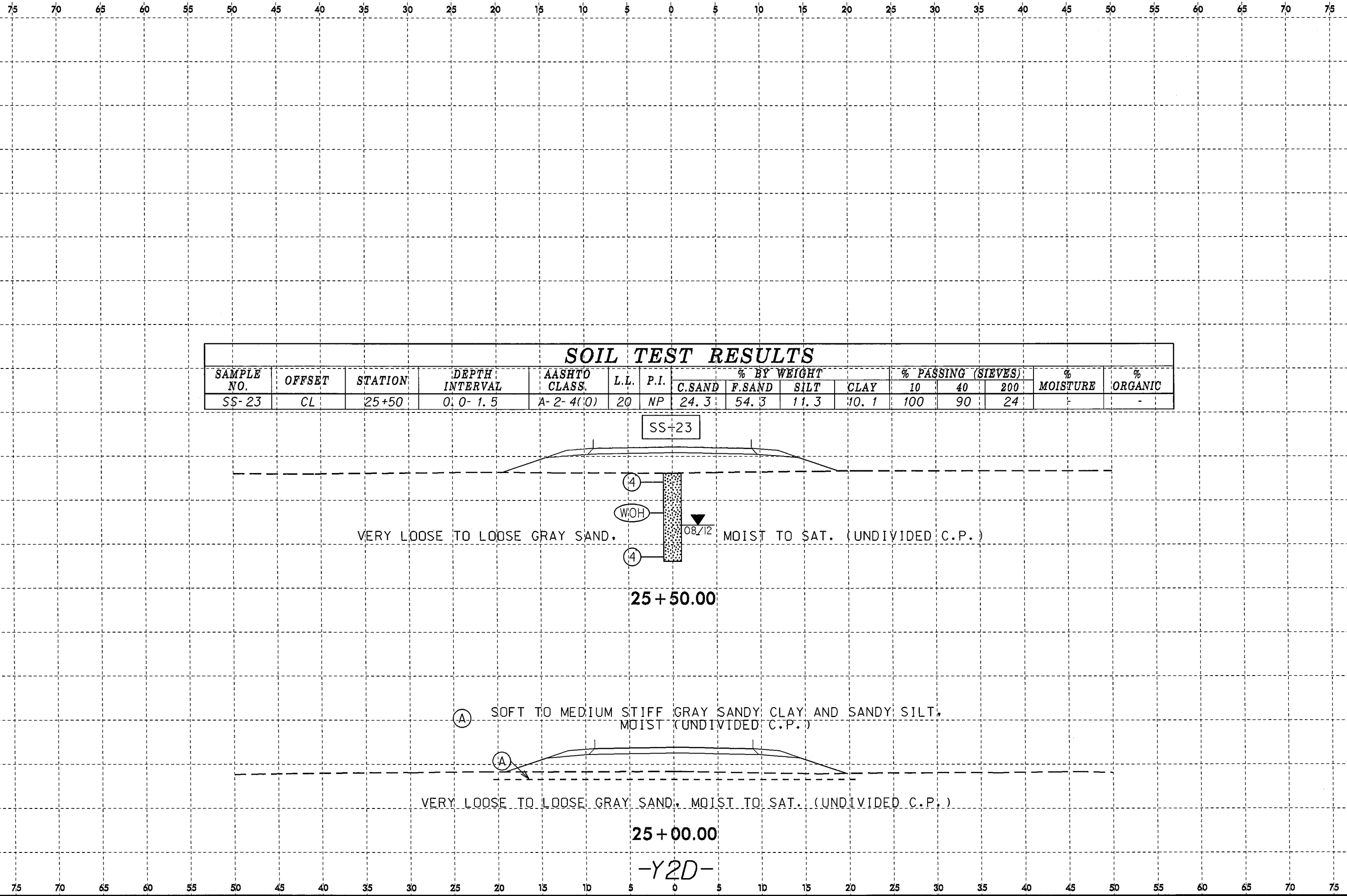
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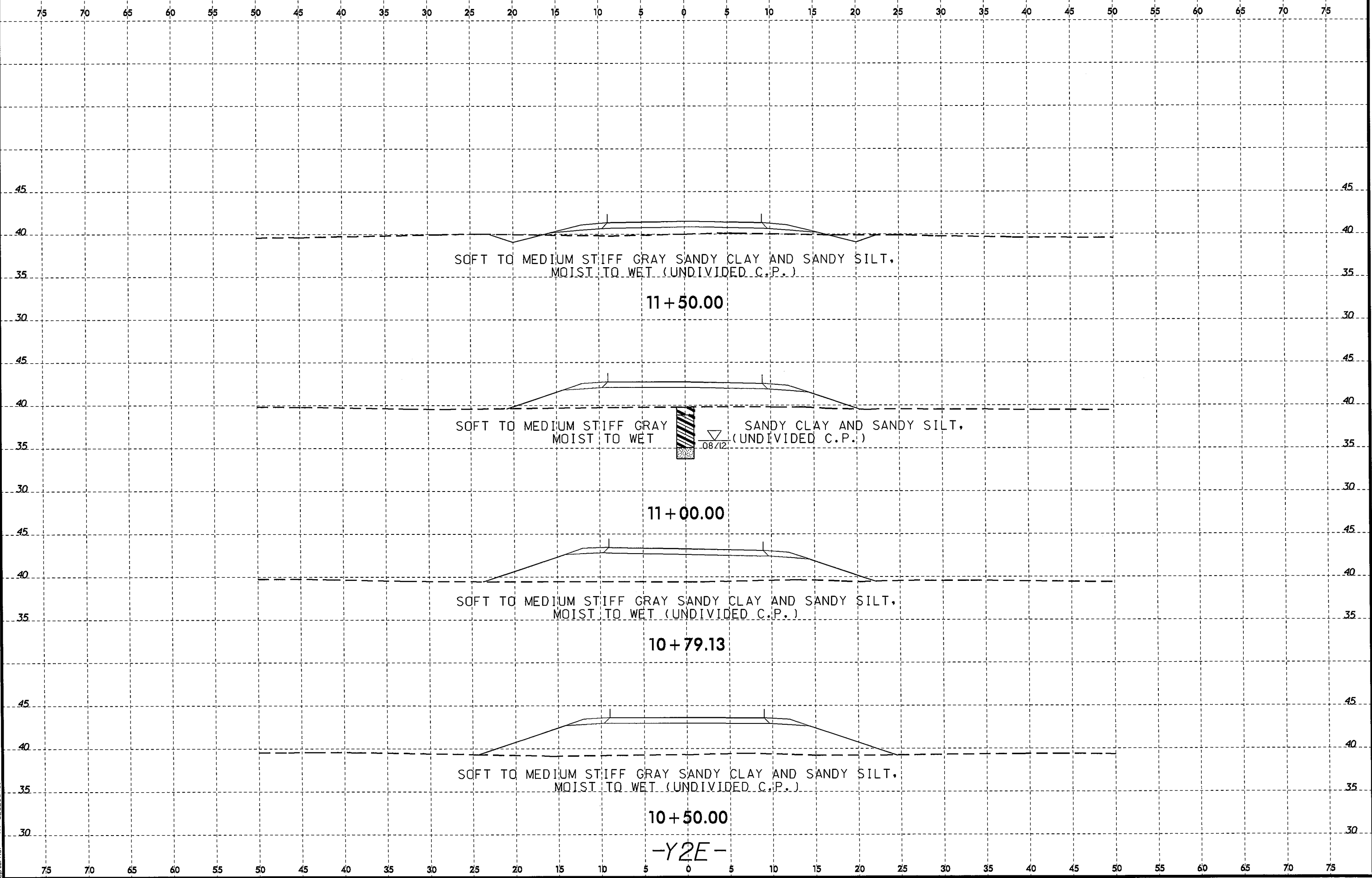
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SOIL TEST RESULTS															
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)			% MOISTURE	% ORGANIC
							C.SAND	F.SAND	SILT	CLAY	10	40	200		
SS-23	CL	25+50	0.0-1.5	A-2-4(0)	20	NP	24.3	54.3	11.3	10.1	100	90	24	-	-

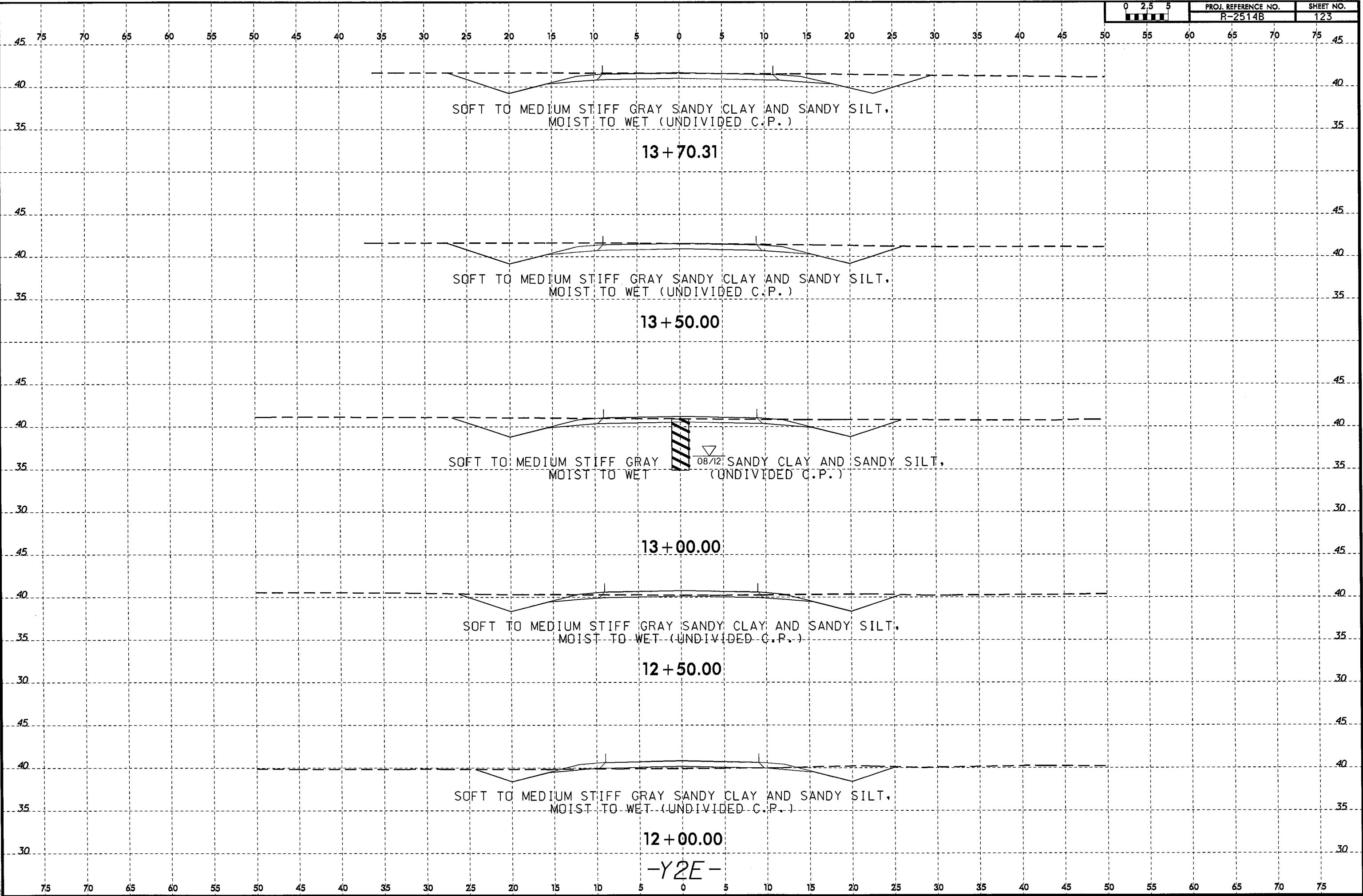
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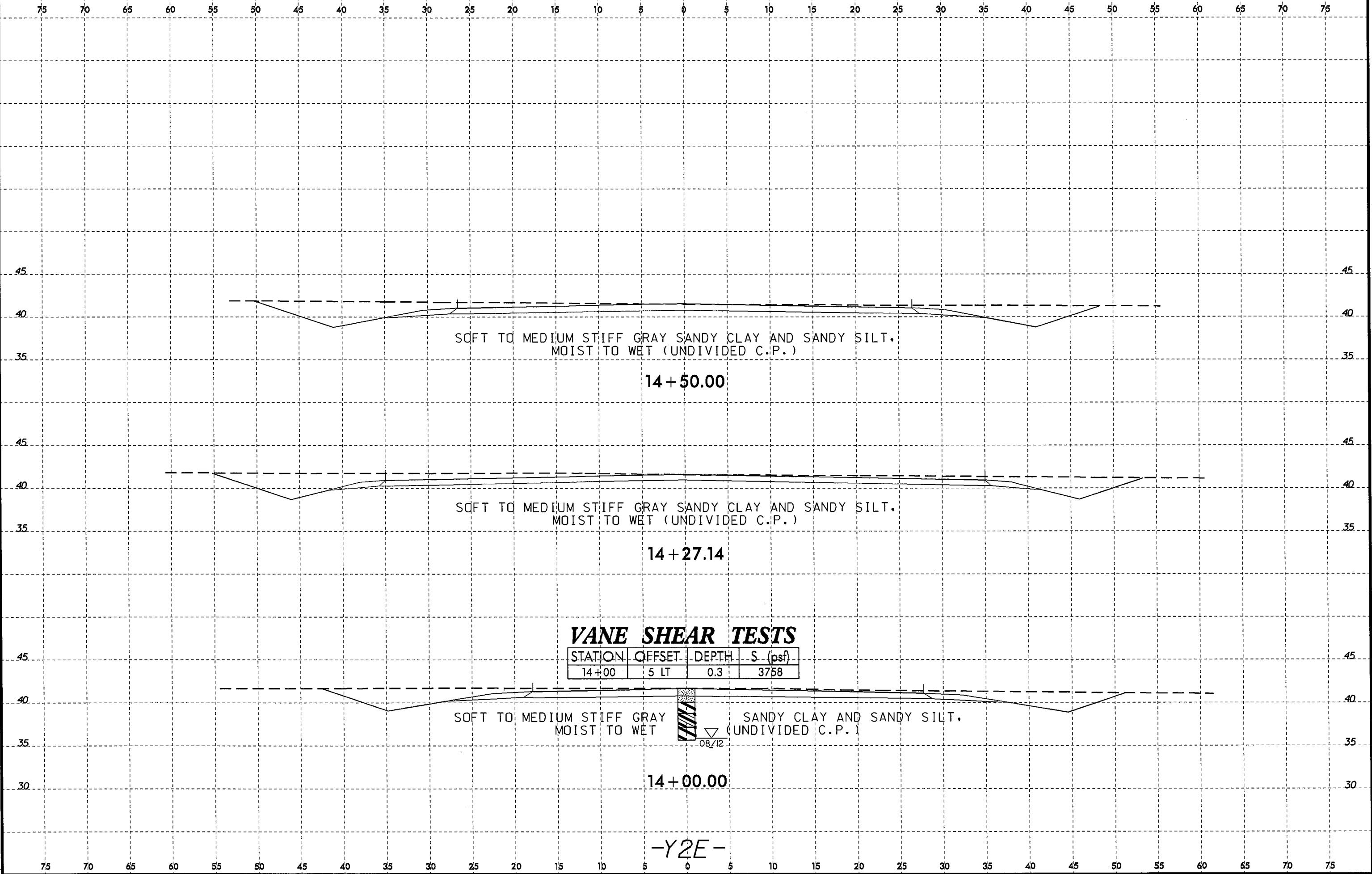


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c:\turner AT GEO25481



SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT.  
MOIST TO WET (UNDIVIDED C.P.)

14 + 50.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT.  
MOIST TO WET (UNDIVIDED C.P.)

14 + 27.14

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
14 + 00	5 LT	0.3	3758

SOFT TO MEDIUM STIFF GRAY  
MOIST TO WET

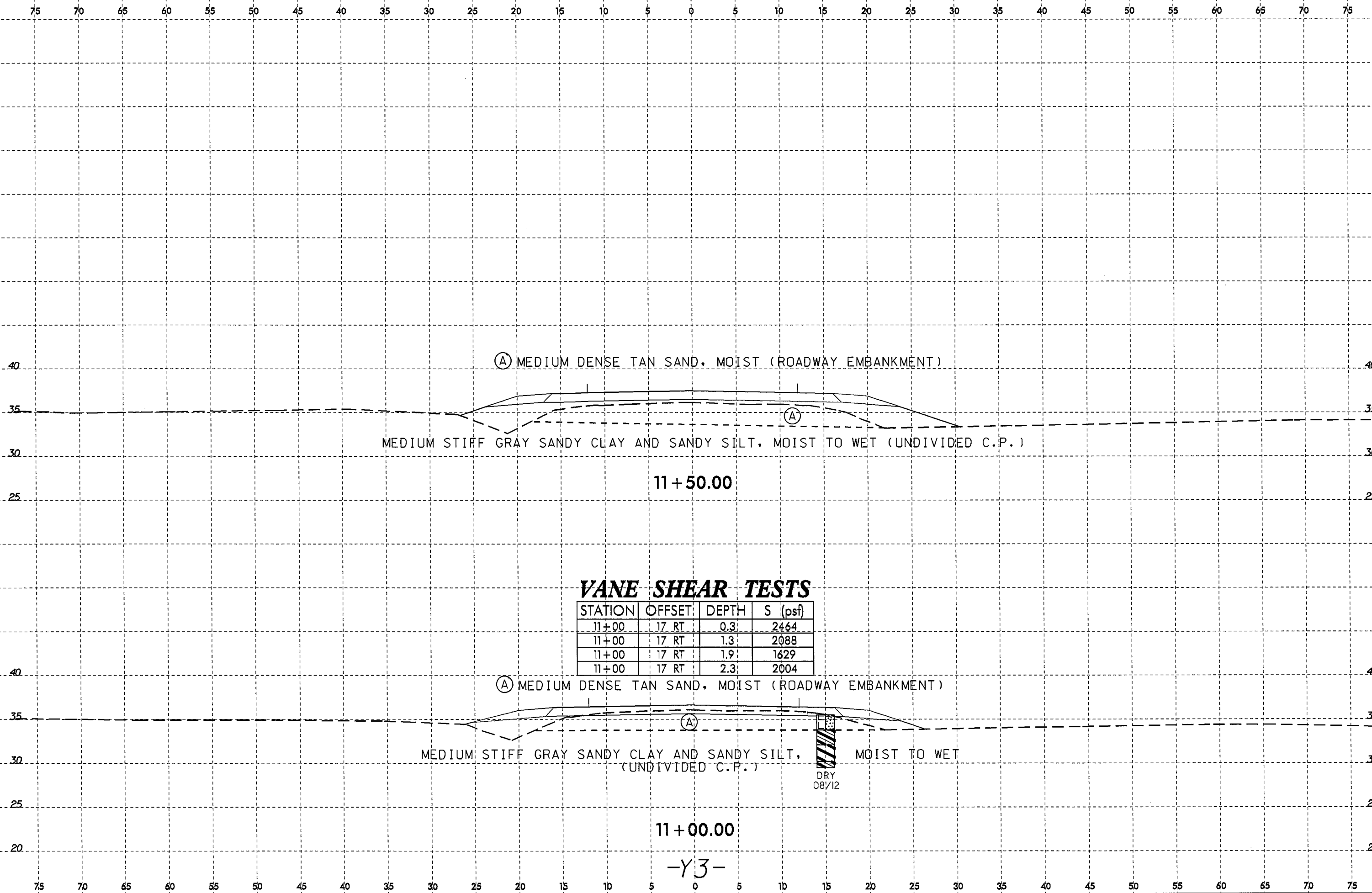
SANDY CLAY AND SANDY SILT,  
(UNDIVIDED C.P.)



14 + 00.00

-Y2E-

8/23/99  
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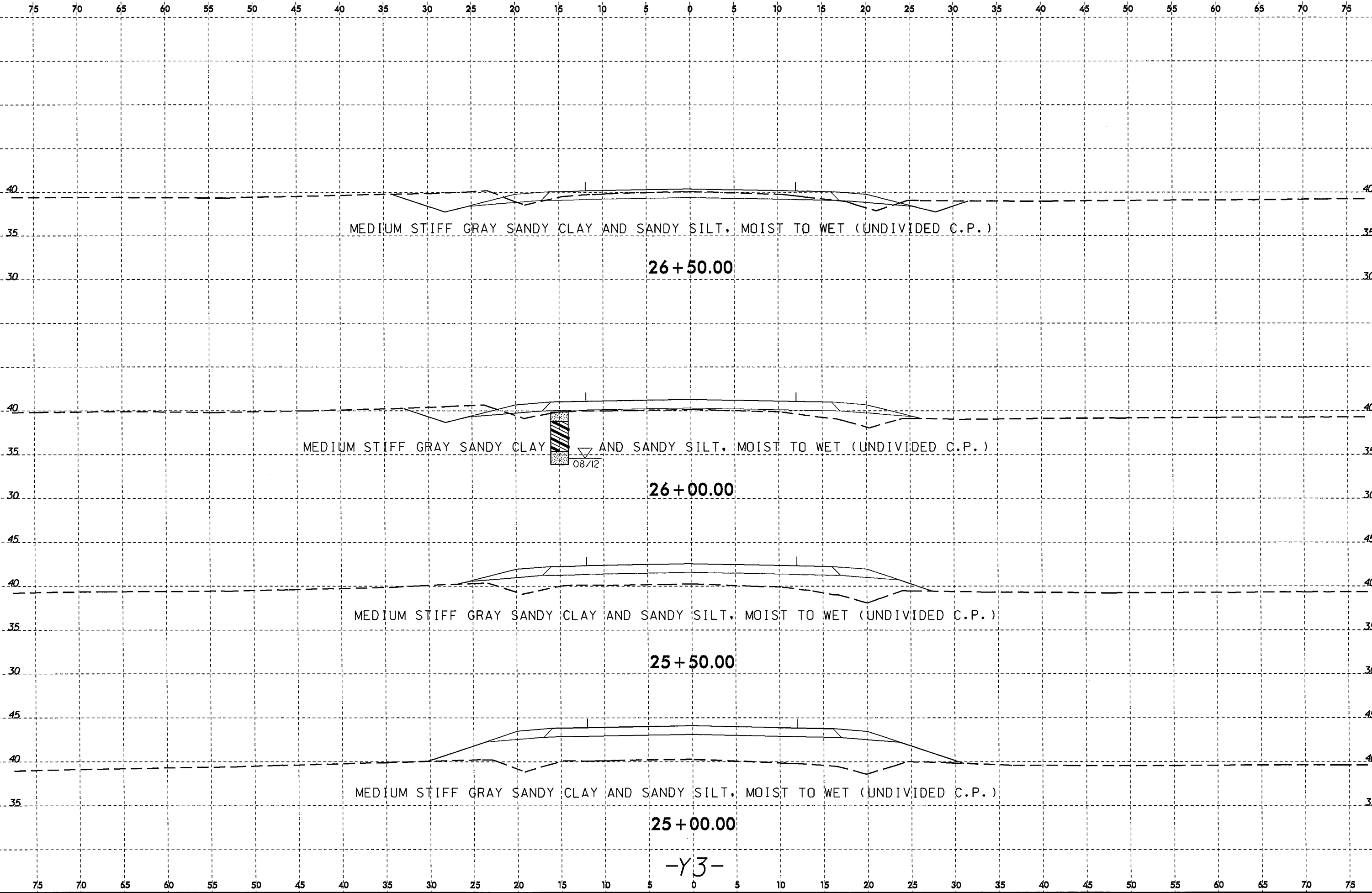


**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
11+00	17 RT	0.3	2464
11+00	17 RT	1.3	2088
11+00	17 RT	1.9	1629
11+00	17 RT	2.3	2004

DRY  
 08/12

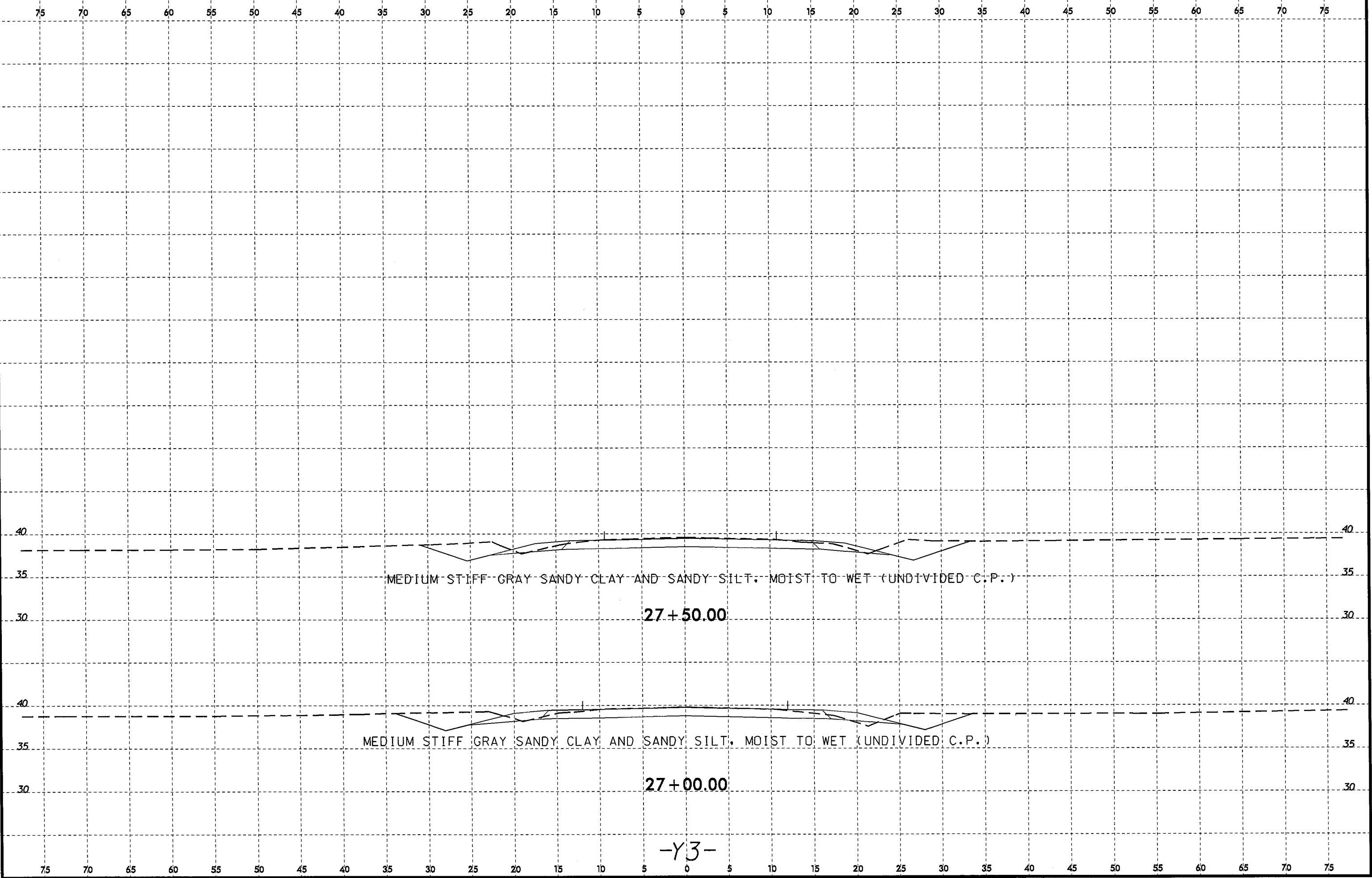
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spturner AT 0625461



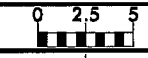


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cbturner AT 06055461

0 2.5 5	PROJ. REFERENCE NO. R-2514B	SHEET NO. 127
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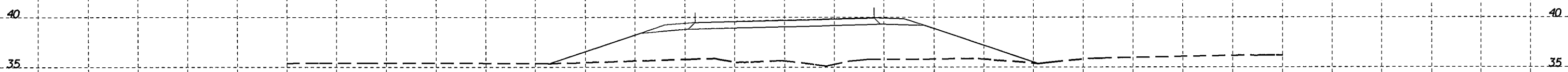
8/23/99



PROJ. REFERENCE NO.  
R-2514B

SHEET NO.  
128

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

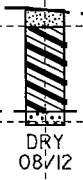


MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)  
LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

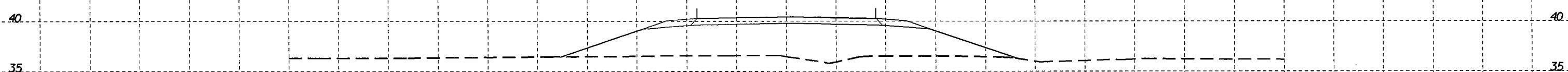
16+78.38



MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)  
LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

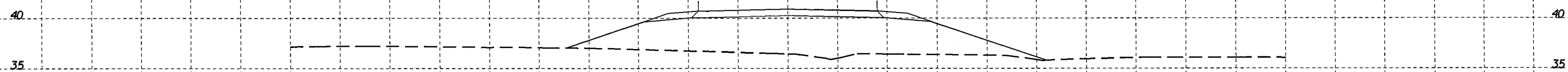


16+50.00



MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)  
LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

16+00.00



MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)  
LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

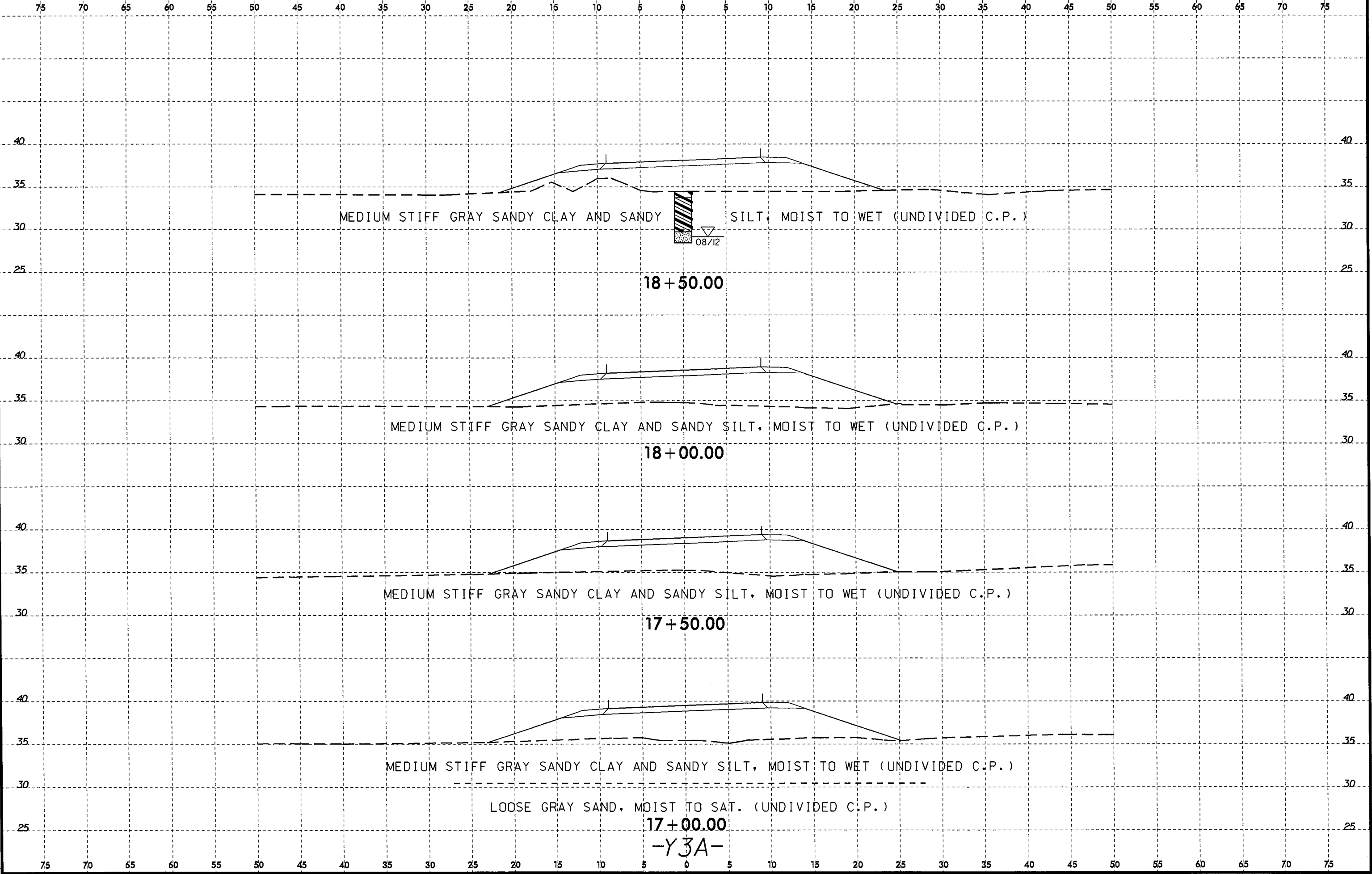
15+50.00

-Y3A-

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22-JUL-2013 15:55  
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cbturner AT GEG55461

22-JUL-2013 15:55  
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cprturner AT (66)255461



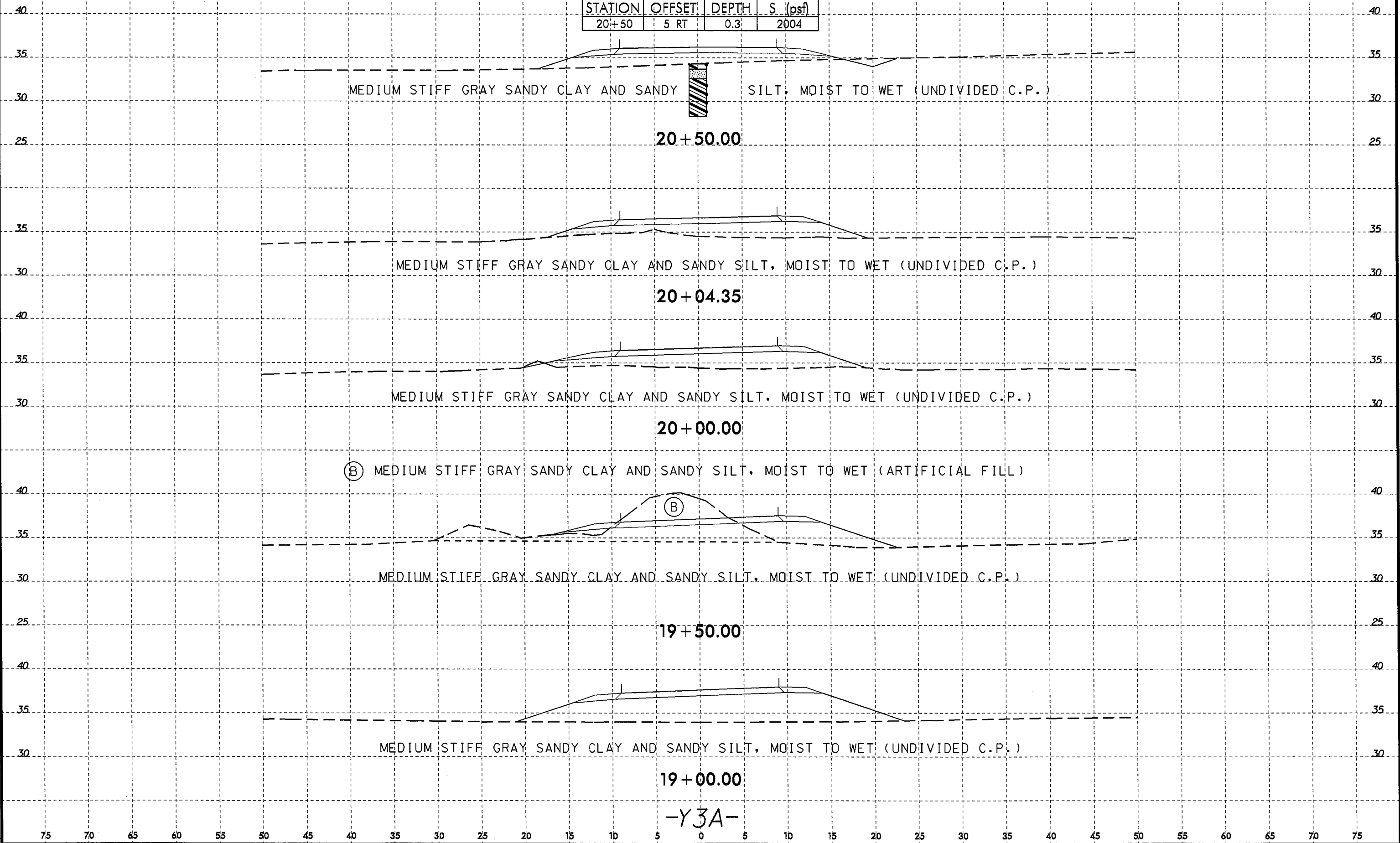
8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	130

# VANE SHEAR TESTS

STATION	OFFSET	DEPTH	S (psf)
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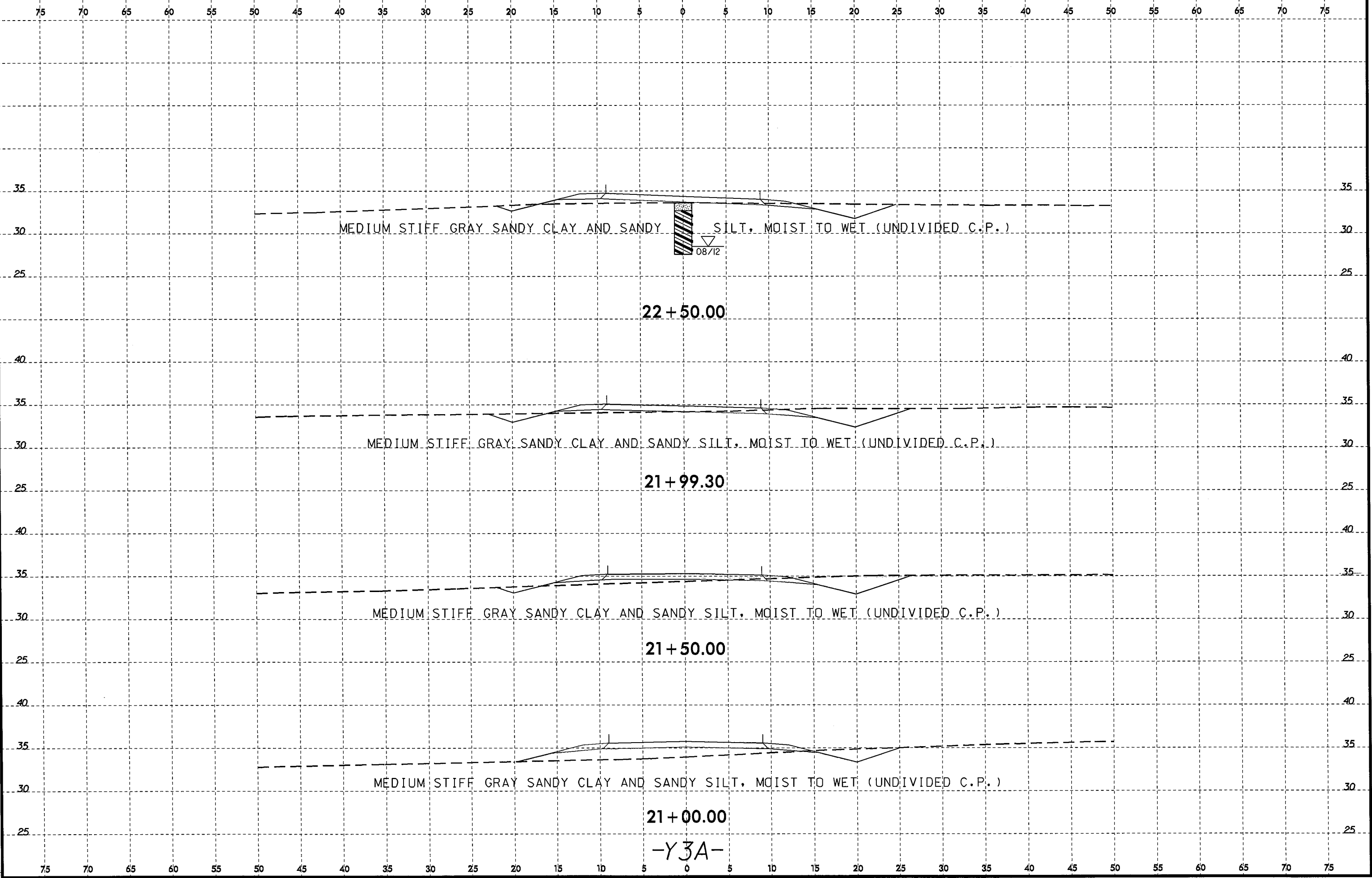


19+00.00

-Y3A-

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cpturner AT 06255461

8/23/99  
22-JUL-2013 15:55  
L:\ERON\preenv\1\investigation\TIP\R2514B\_GEO\_RDWY\_CADD\_GEO\TECH\src\R2514B\_GEO\_RDY\_Y3A\_1550 to 4050\_xsi.dgn  
cbturner AT GEG55461



22+50.00

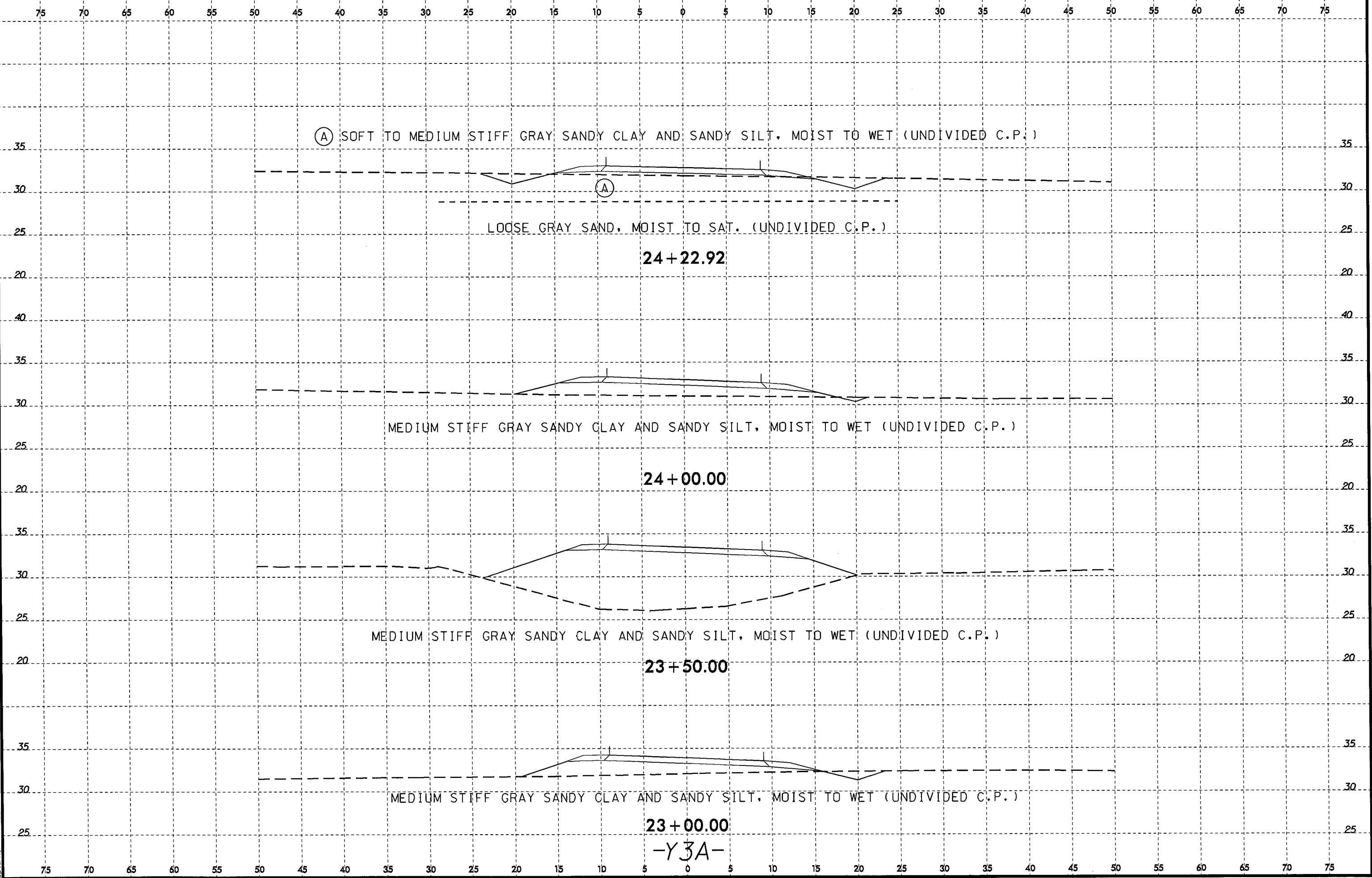
21+99.30

21+50.00

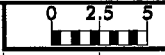
21+00.00

-Y3A-

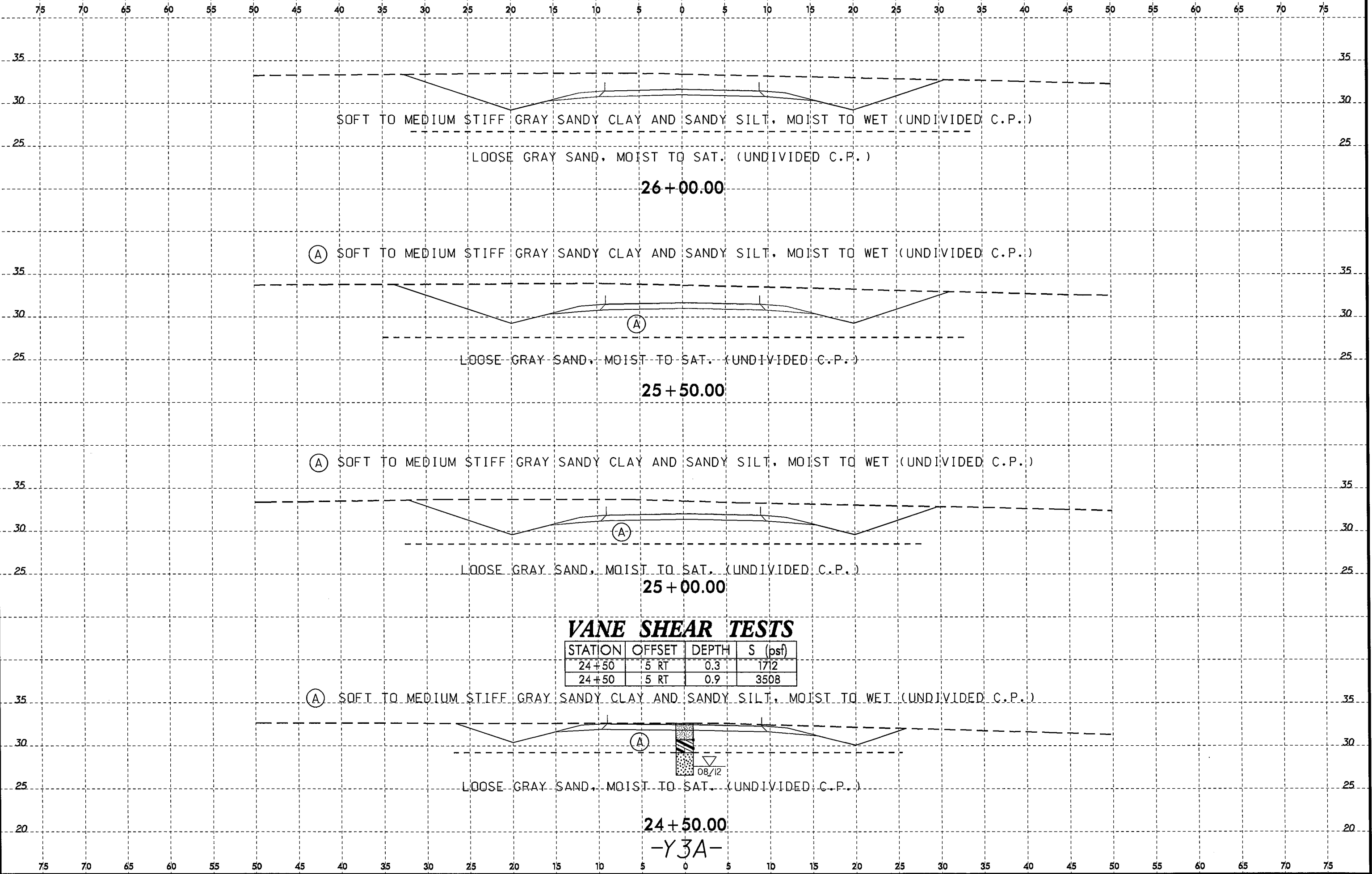
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cbturner AT GEO25461



8/23/99

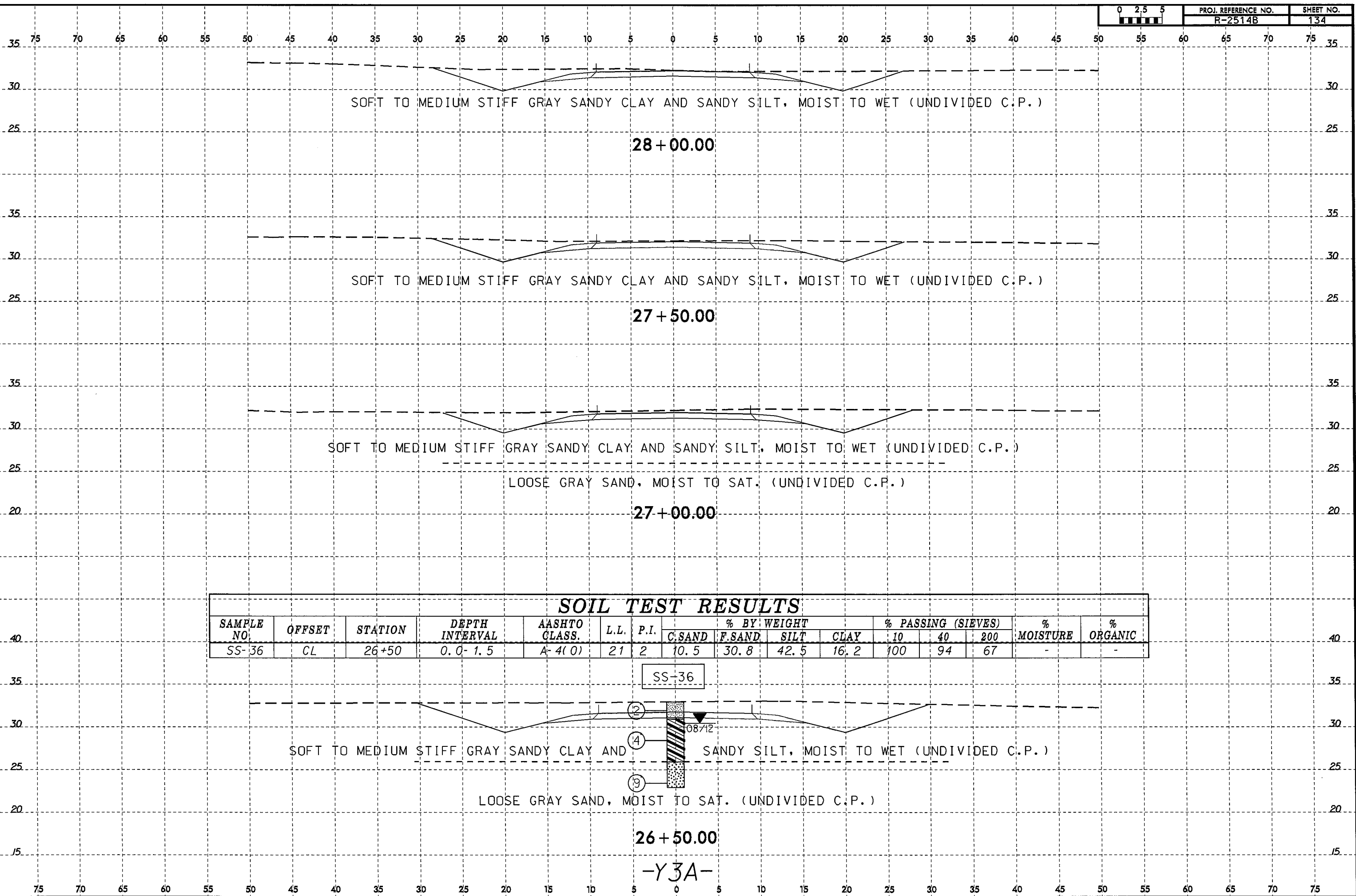


PROJ. REFERENCE NO.	SHEET NO.
R-2514B	133



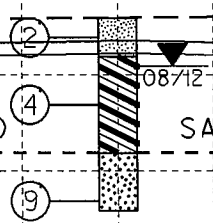
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 spturner HT 08/23/08

8/23/99  
 26-JUL-2013 08:32  
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 AT 08025444



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-36	CL	26+50	0.0-1.5	A-4(0)	21	2	10.5	30.8	42.5	16.2	100	94	67	-	-

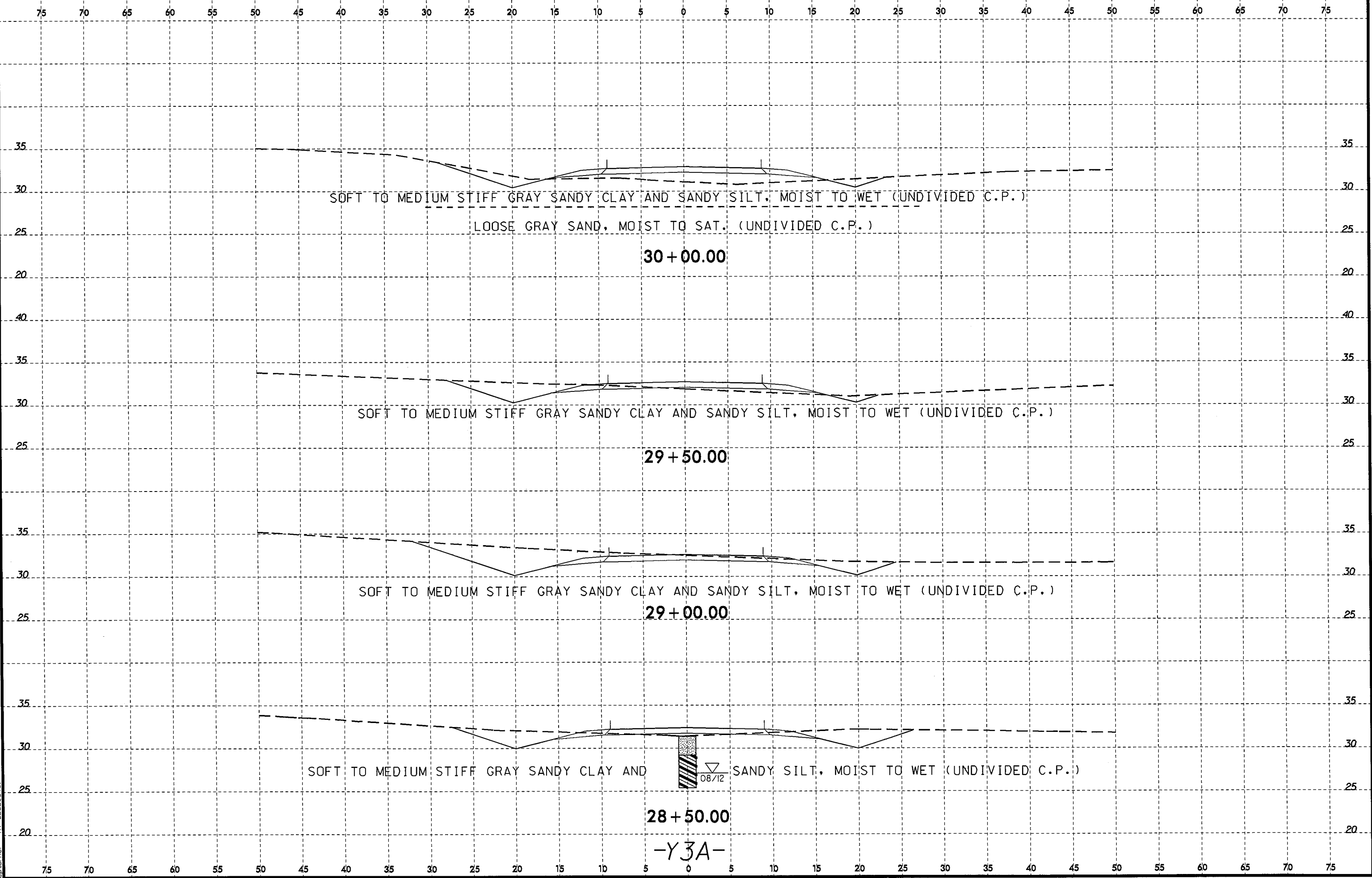
SS-36



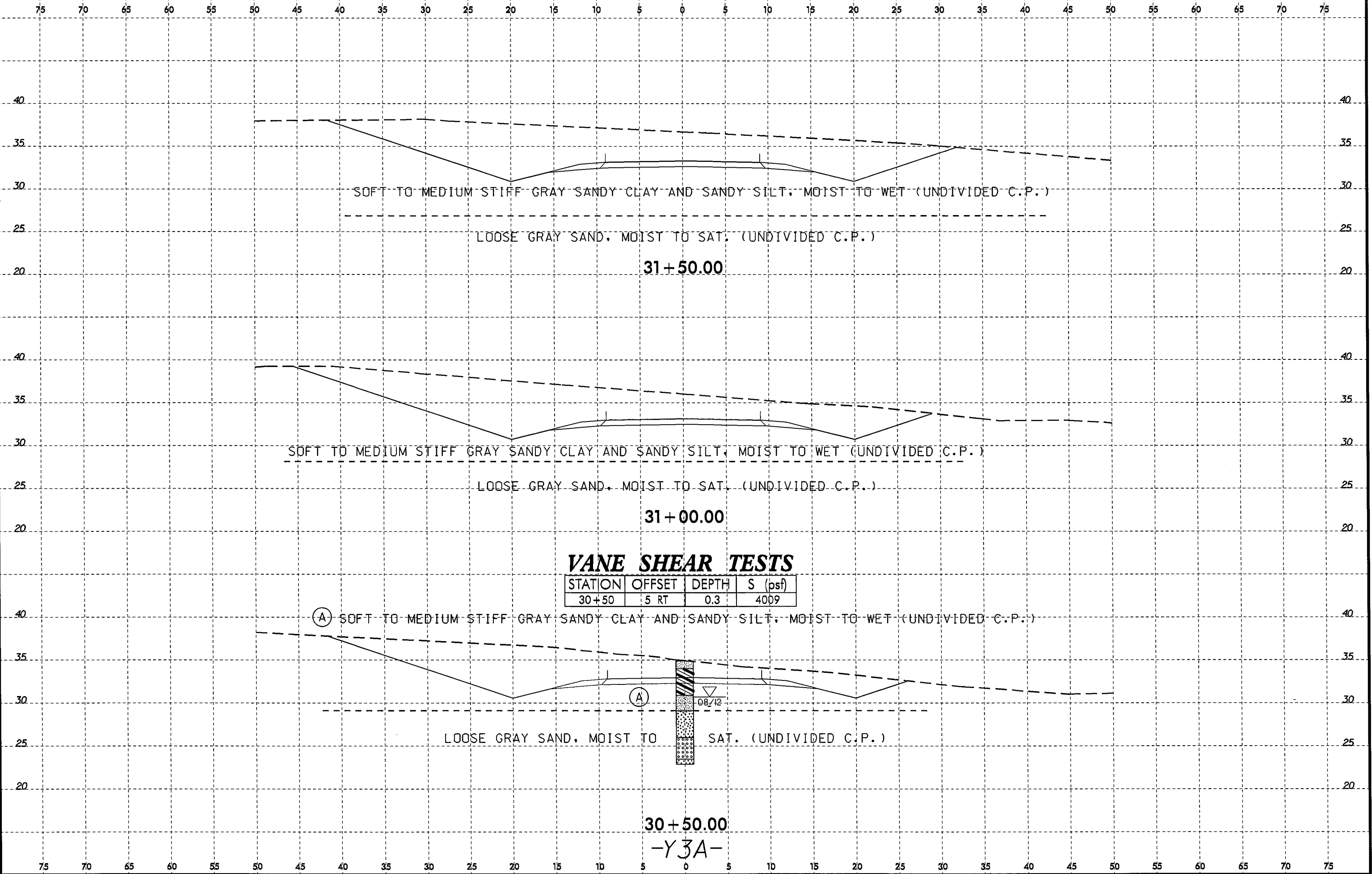
26+50.00  
-Y3A-



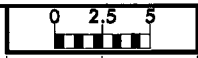
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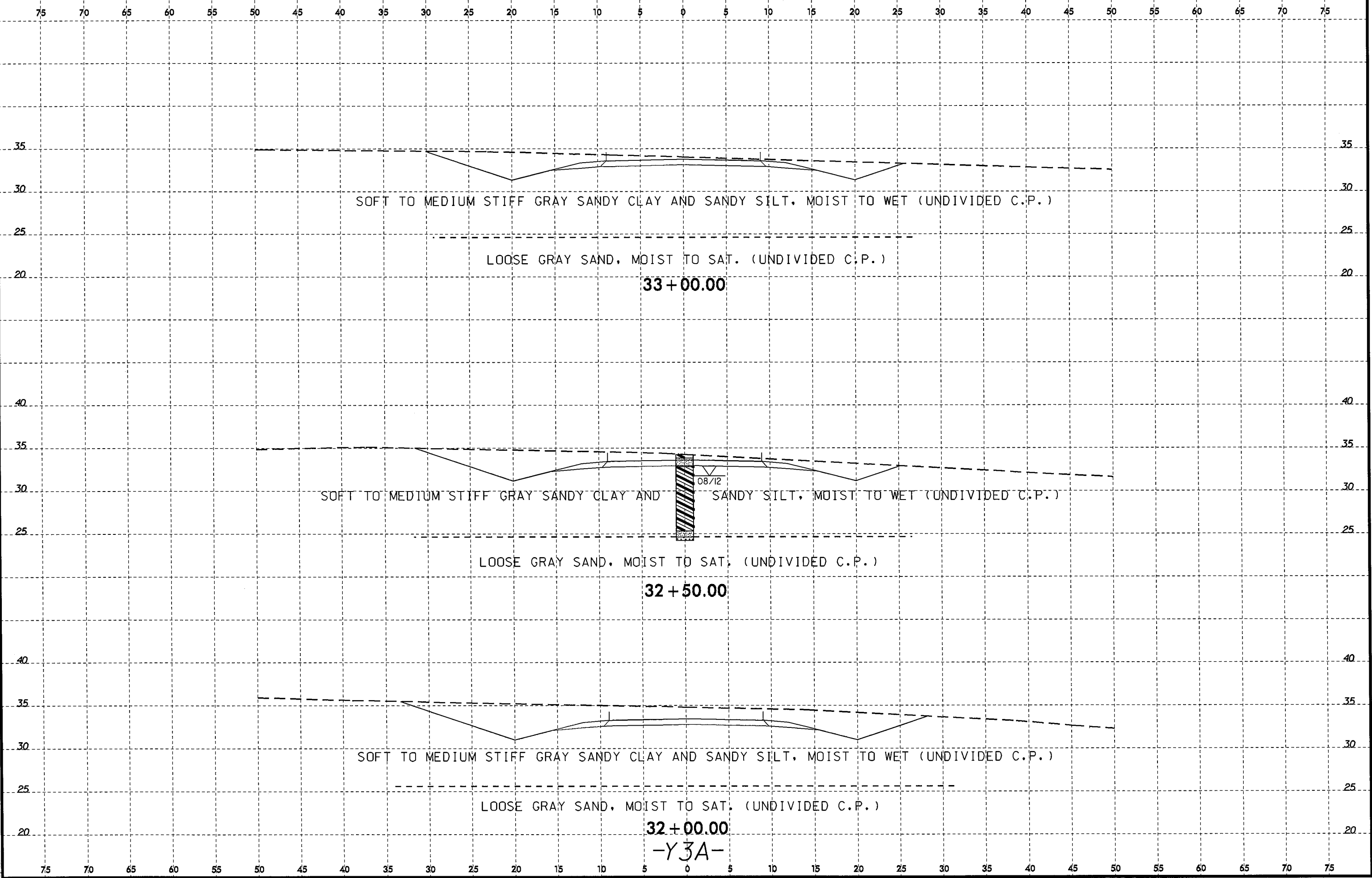
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 spturner AT 08/25/15



8/23/99  
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copturner AT BEG255461



PROJ. REFERENCE NO.  
R-2514B  
SHEET NO.  
137



SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

33+00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

32+50.00

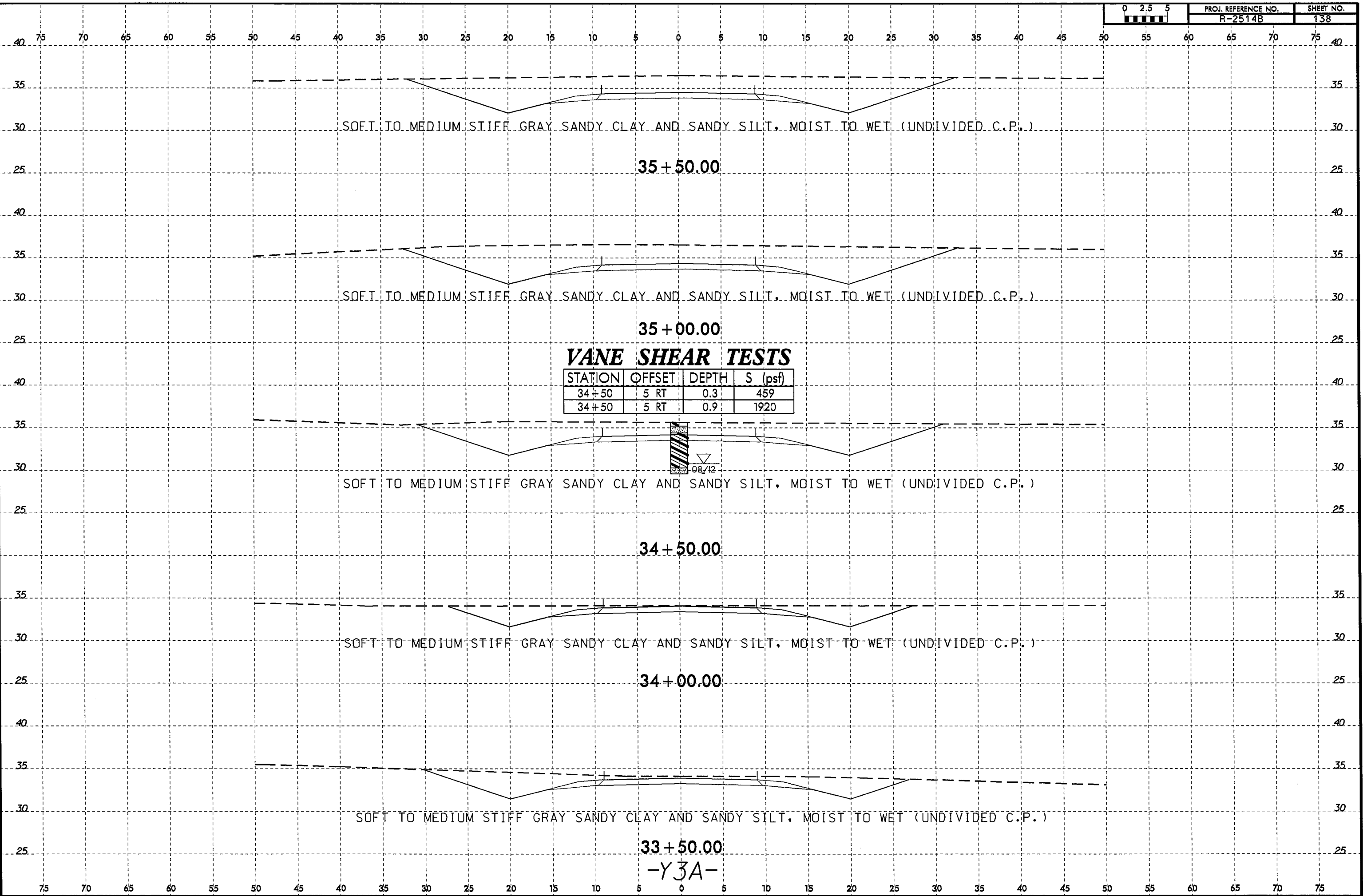
SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

LOOSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

32+00.00

-Y3A-

8/23/99  
 25-JUL-2013 12:27  
 L:\V\RO\br-eevry1\g...  
 spturner RT 06255481



35+50.00

35+00.00

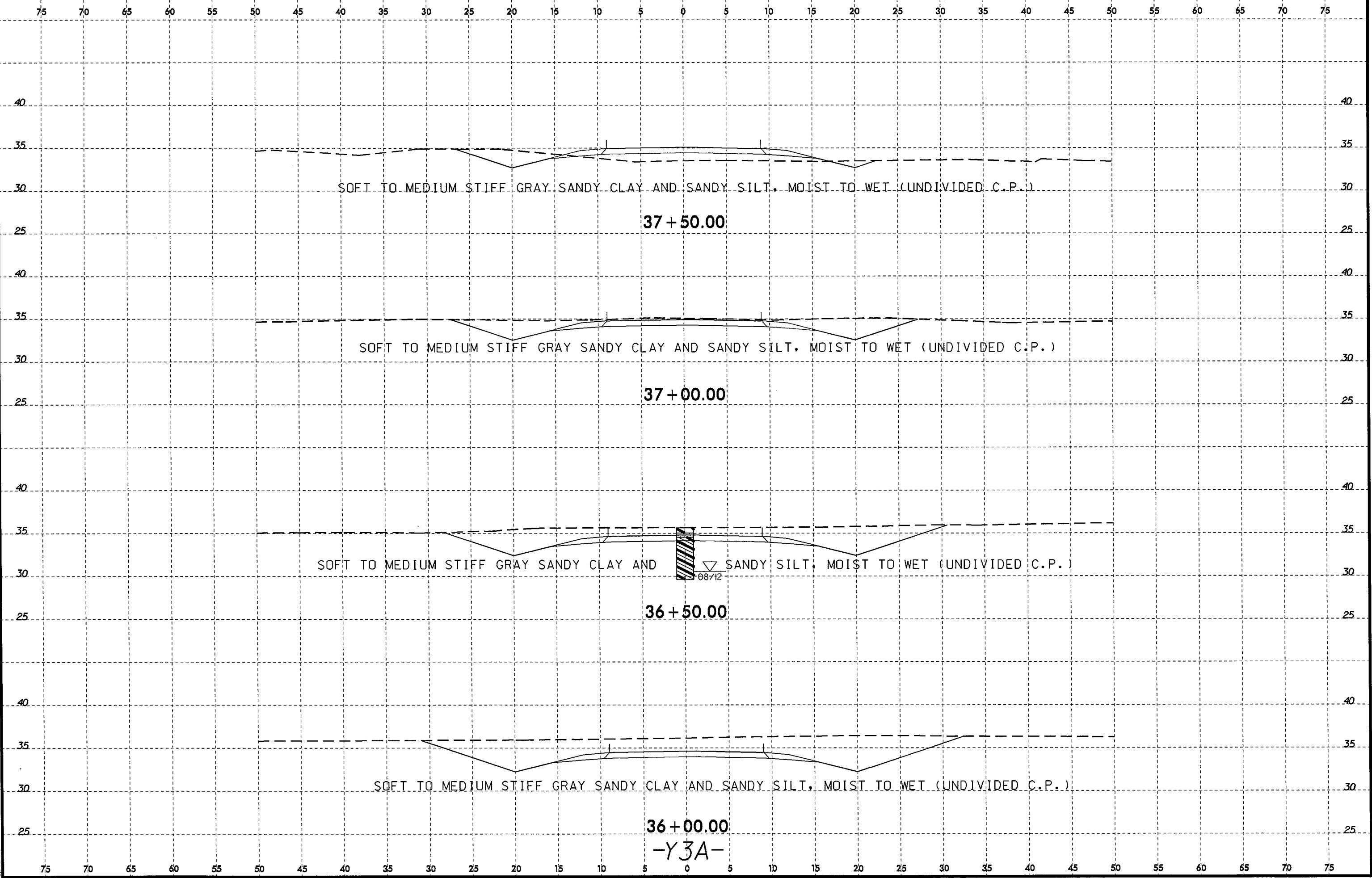
34+50.00

34+00.00

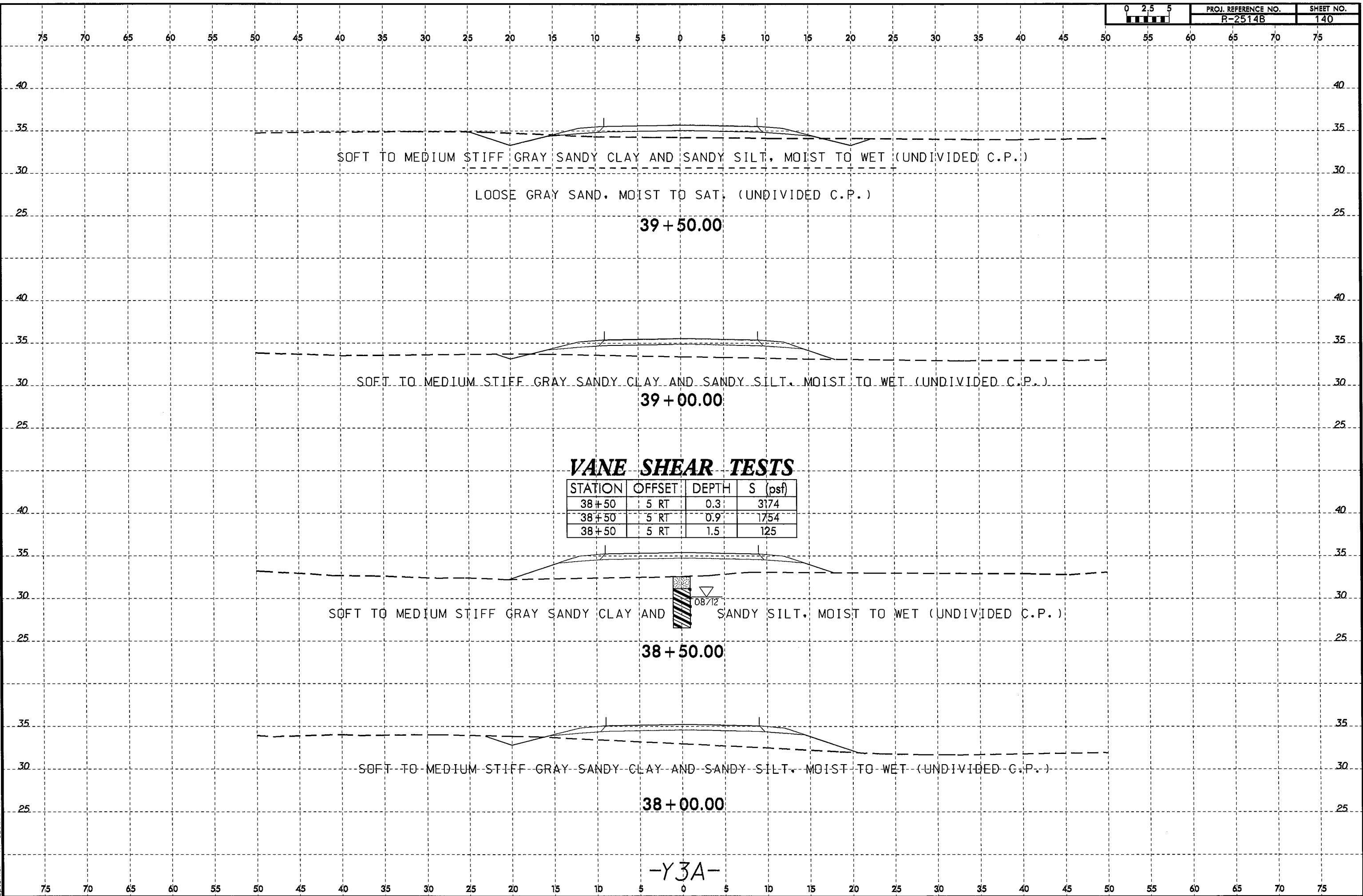
33+50.00

-Y3A-

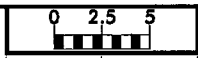
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cbturner



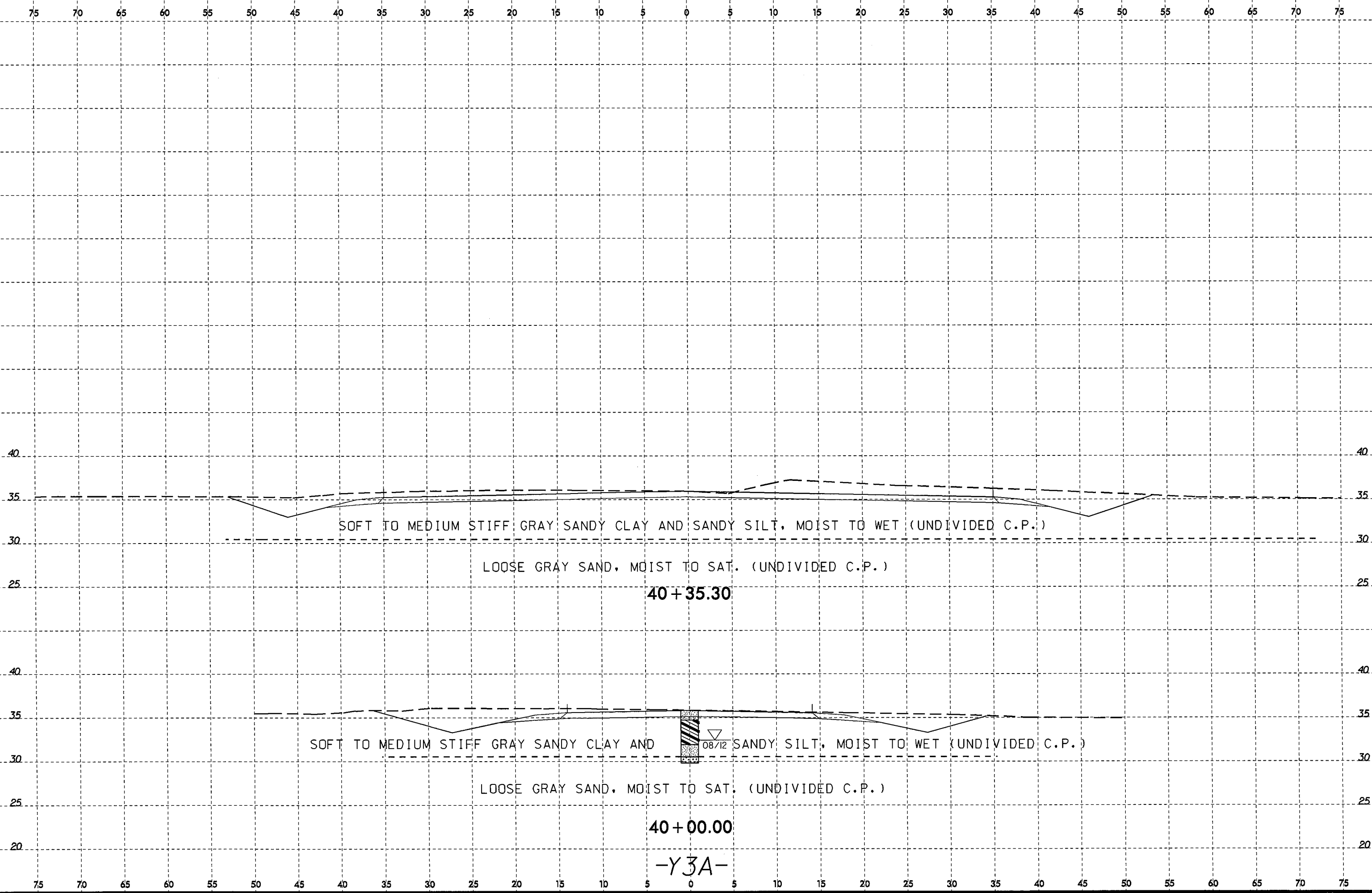
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 cpturner AT GEO25461



8/23/99  
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PROJ. REFERENCE NO.	SHEET NO.
R-2514B	141



40 + 35.30

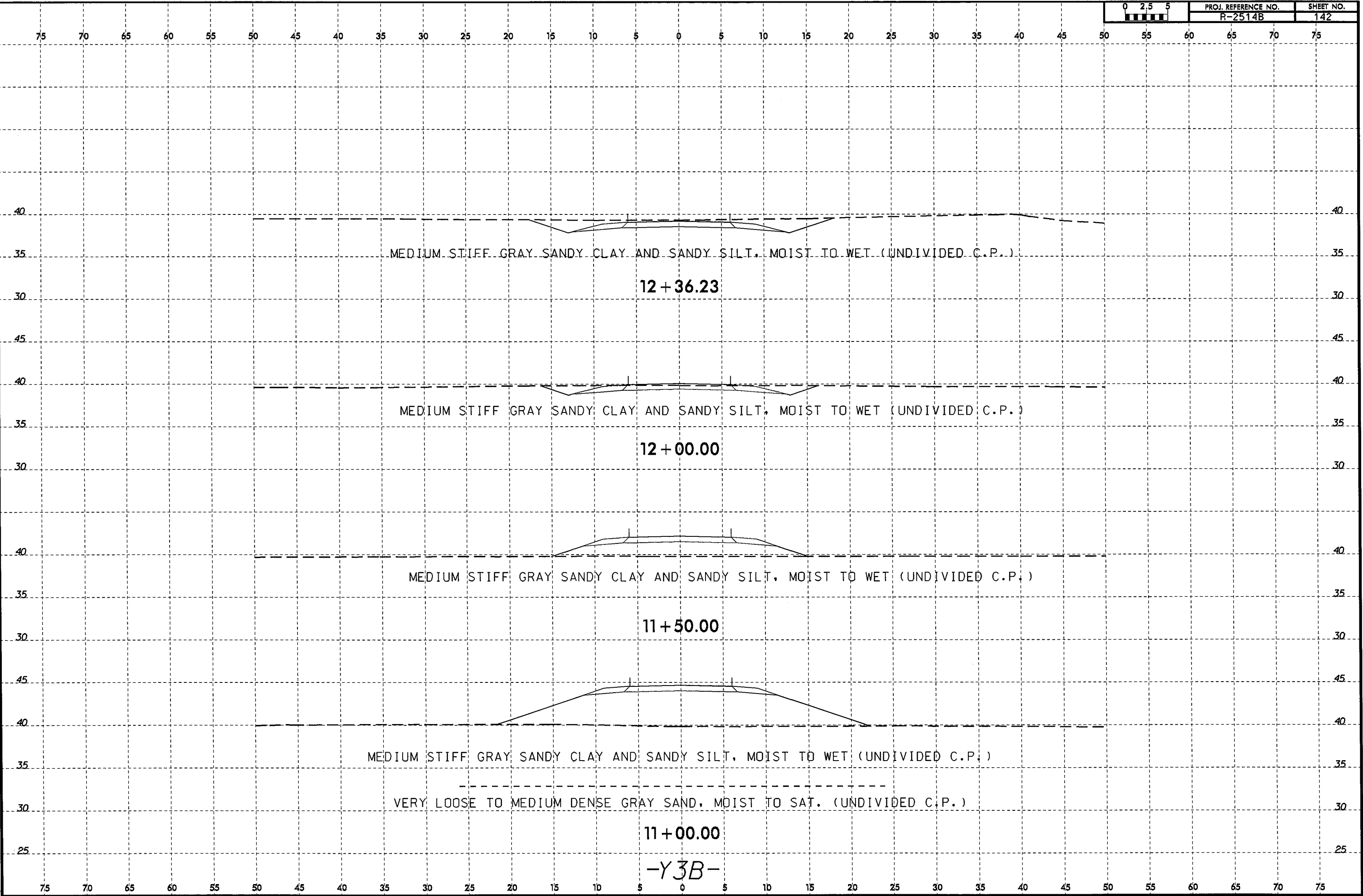
40 + 00.00

-Y3A-

8/23/99  
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cbturner AT 60257461



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	142



MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

12+36.23

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

12+00.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

11+50.00

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

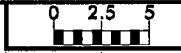
11+00.00

-Y3B-

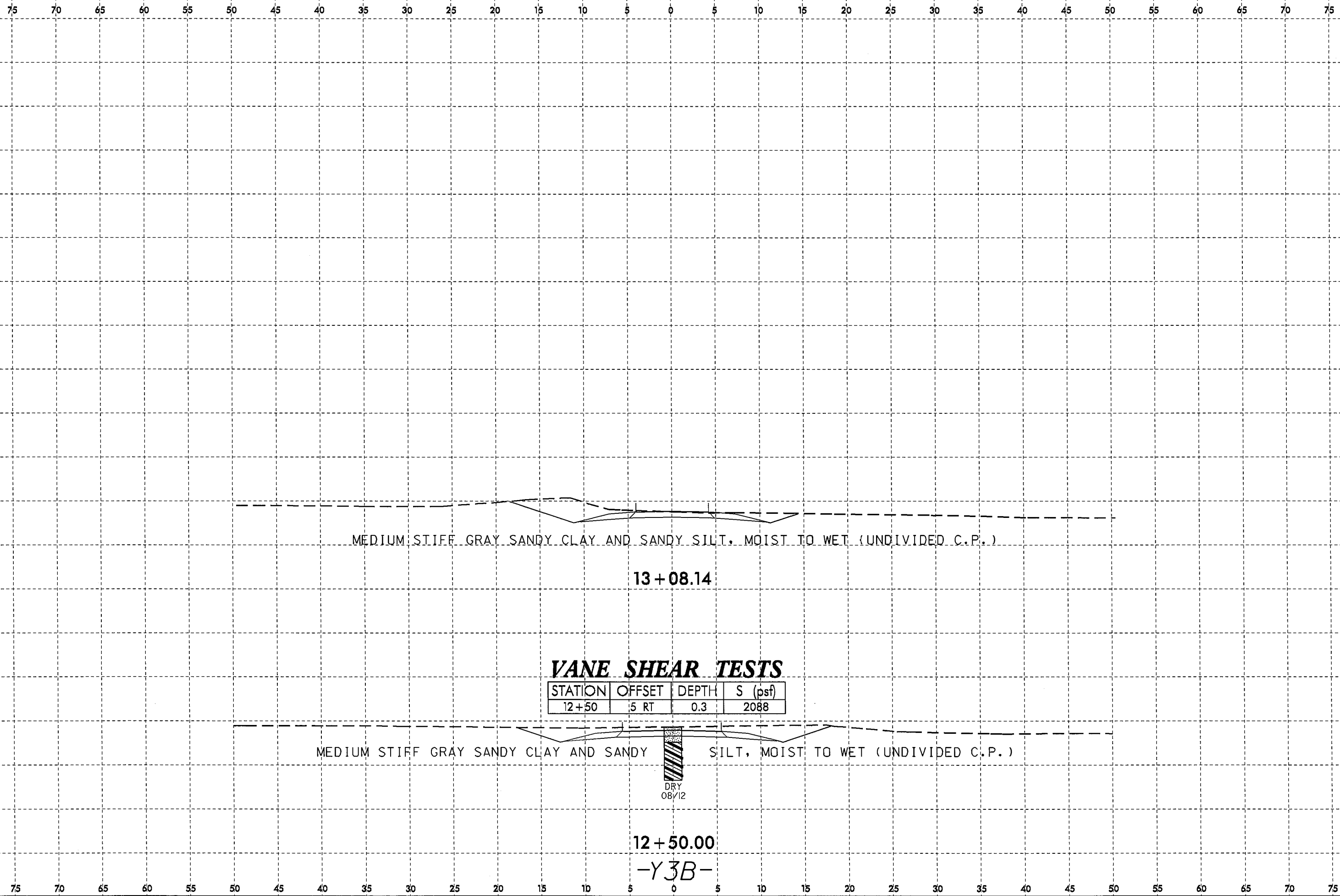


8/23/99

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PROJ. REFERENCE NO. R-2514B	SHEET NO. 143
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MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

13 + 08.14

**VANE SHEAR TESTS**

STATION	OFFSET	DEPTH	S (psf)
12 + 50	5 RT	0.3	2088

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

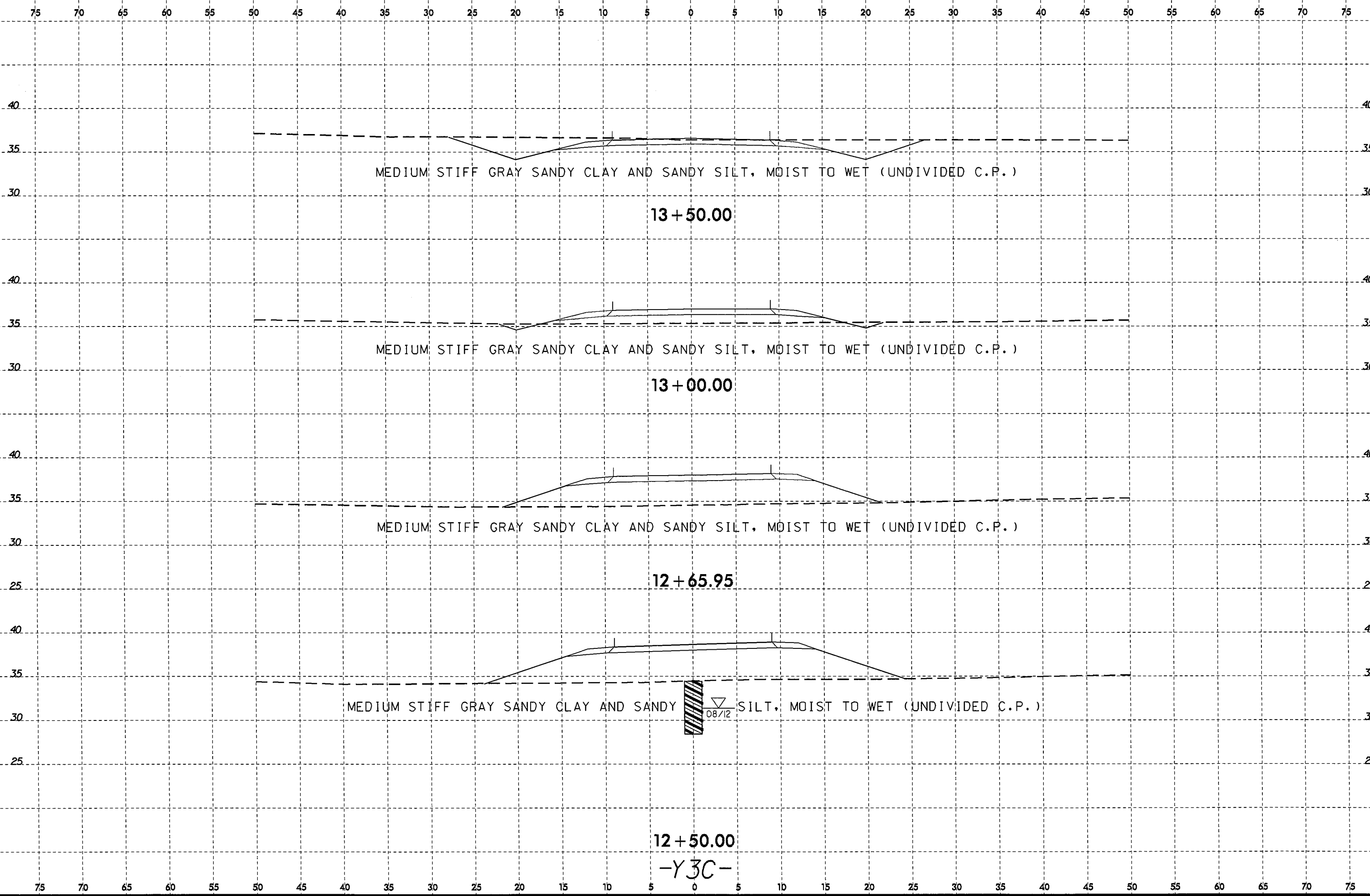


12 + 50.00

-Y3B-

8/23/99  
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CPTurner

0 2.5 5	PROJ. REFERENCE NO. R-2514B	SHEET NO. 144
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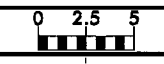


75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

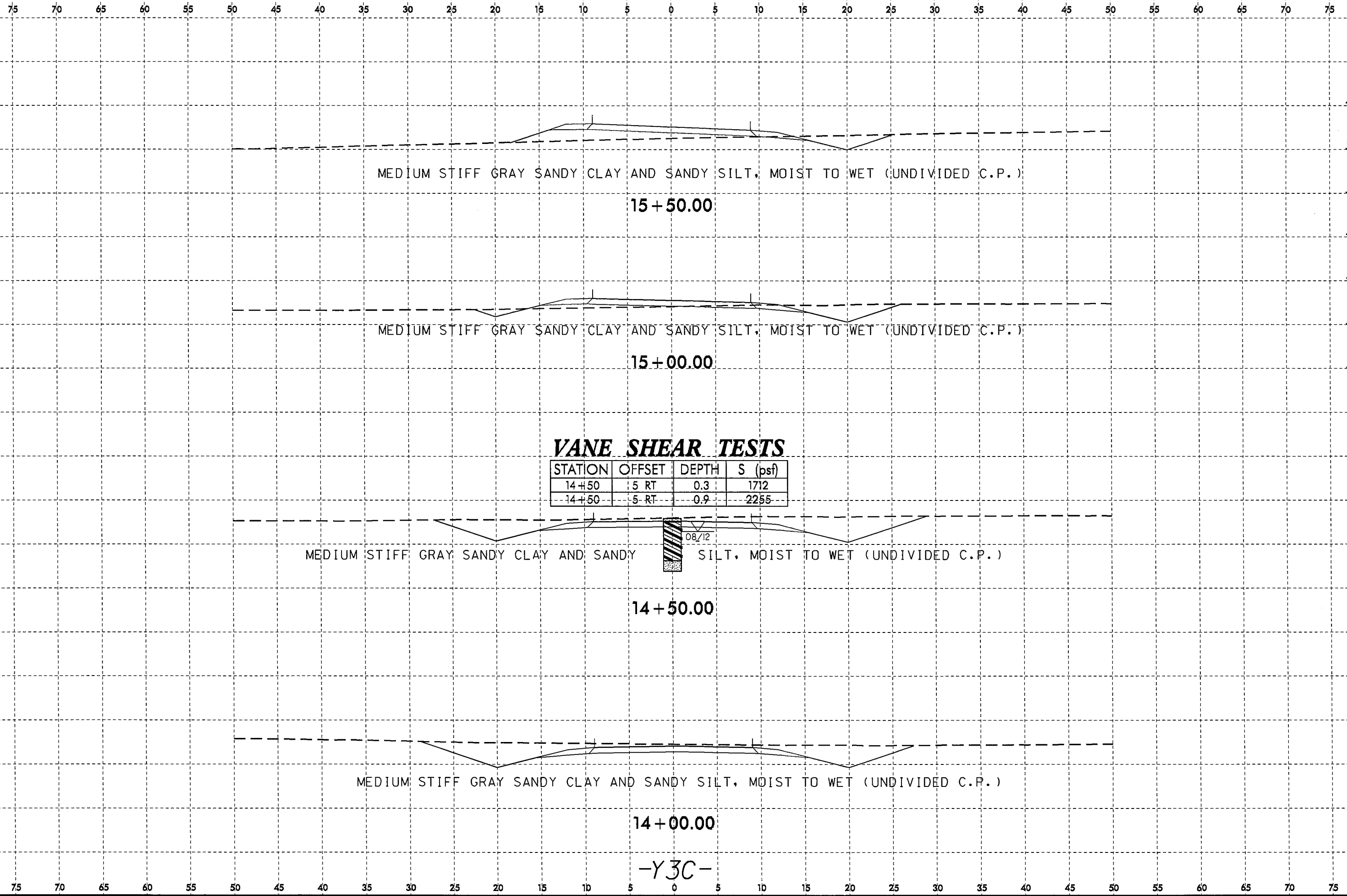
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75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0 5 10 15 20 25 30 35 40 45 50 55 60 65 70 75

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	145



**VANE SHEAR TESTS**

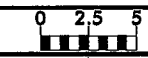
STATION	OFFSET	DEPTH	S (psf)
14+50	5 RT	0.3	1712
14+50	5 RT	0.9	2255



25-JUL-2013 12:32  
 L:\ERD\Brewer\11\Projects\Investigation\TIP\R2514B\_GEO\RDWY\CADD\_GEDTECH\ysec\R2514B\_GEO\_RDWY\_Y3C-1250-01850\_xsi.dgn  
 cbturner A1 GEG55461

-Y3C-

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	146

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

40 40

35 35

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

30 30

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

25 25

17+00.00

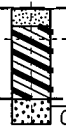
40 40

35 35

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

30 30

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)



16+50.00

40 40

35 35

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

30 30

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

25 25

16+38.61

40 40

35 35

MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST TO WET (UNDIVIDED C.P.)

30 30

VERY LOOSE TO MEDIUM DENSE GRAY SAND, MOIST TO SAT. (UNDIVIDED C.P.)

25 25

16+00.00

-Y3C-

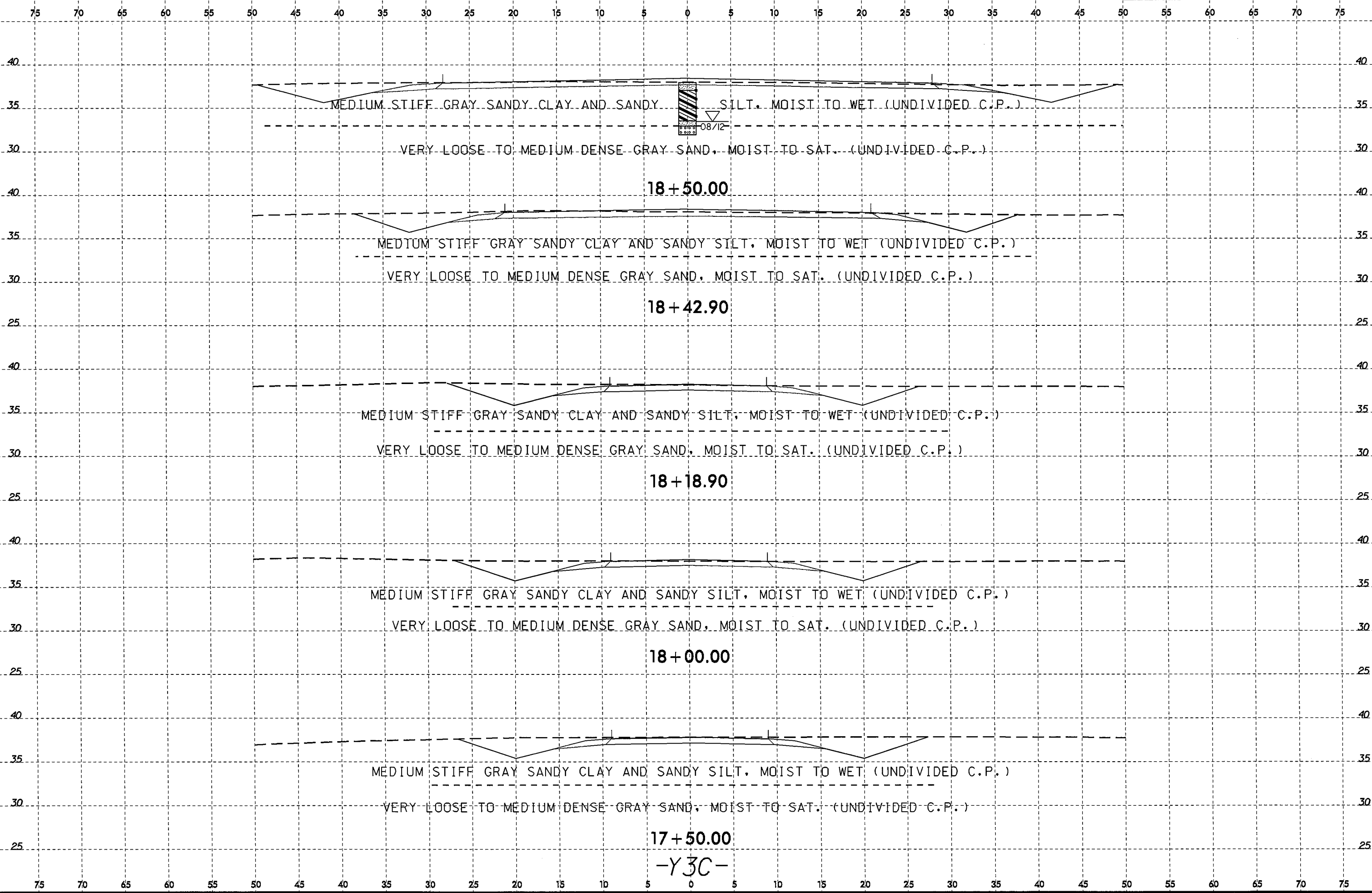
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 CPTurner

8/23/99



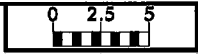
PROJ. REFERENCE NO.	SHEET NO.
R-2514B	147



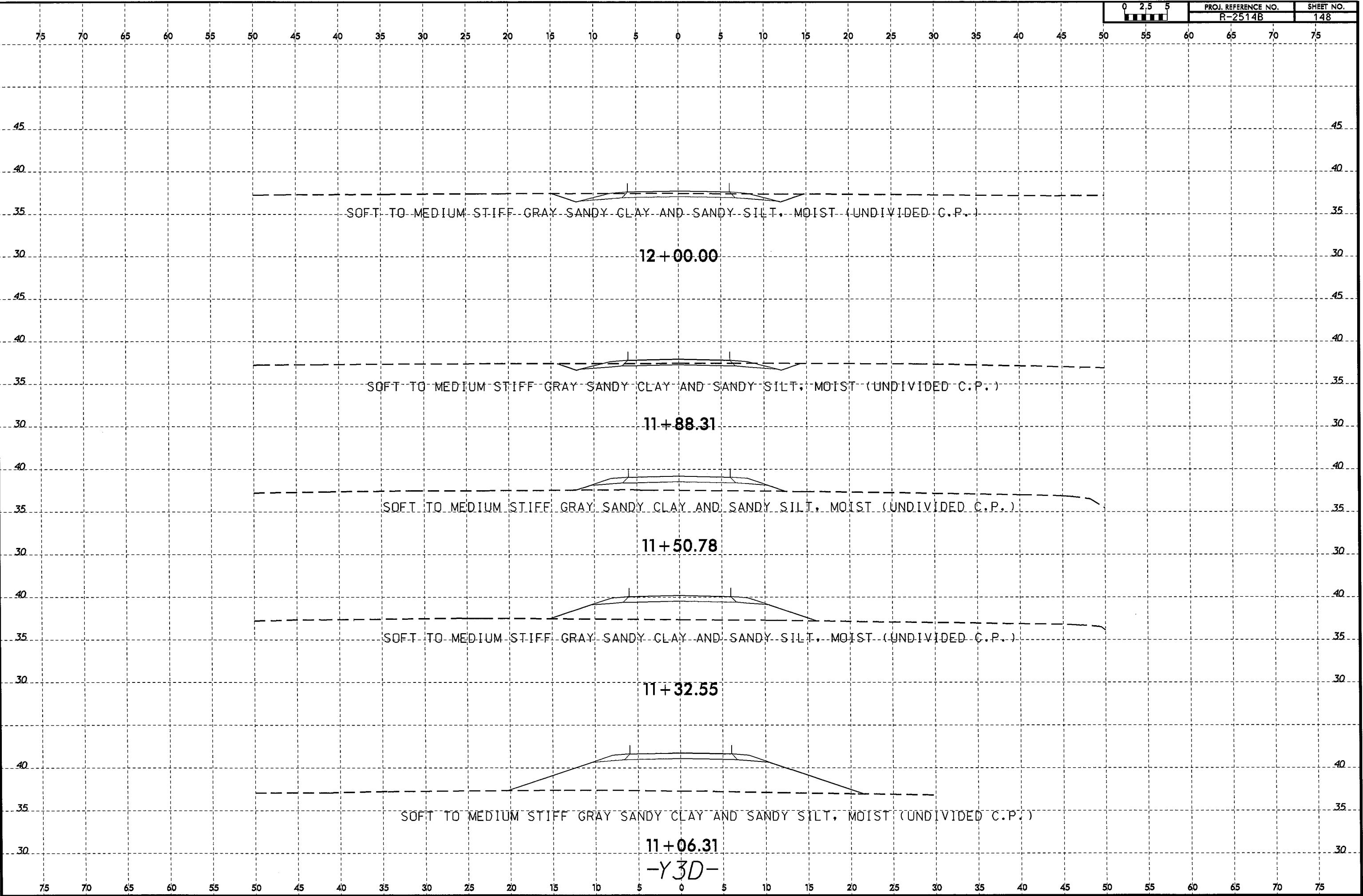
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 CPTurner

17+50.00  
-Y3C-

8/23/99  
22-JUL-2013 15:55  
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cputner AT 06255481



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	148



SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

12+00.00

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

11+88.31

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

11+50.78

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

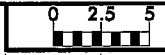
11+32.55

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

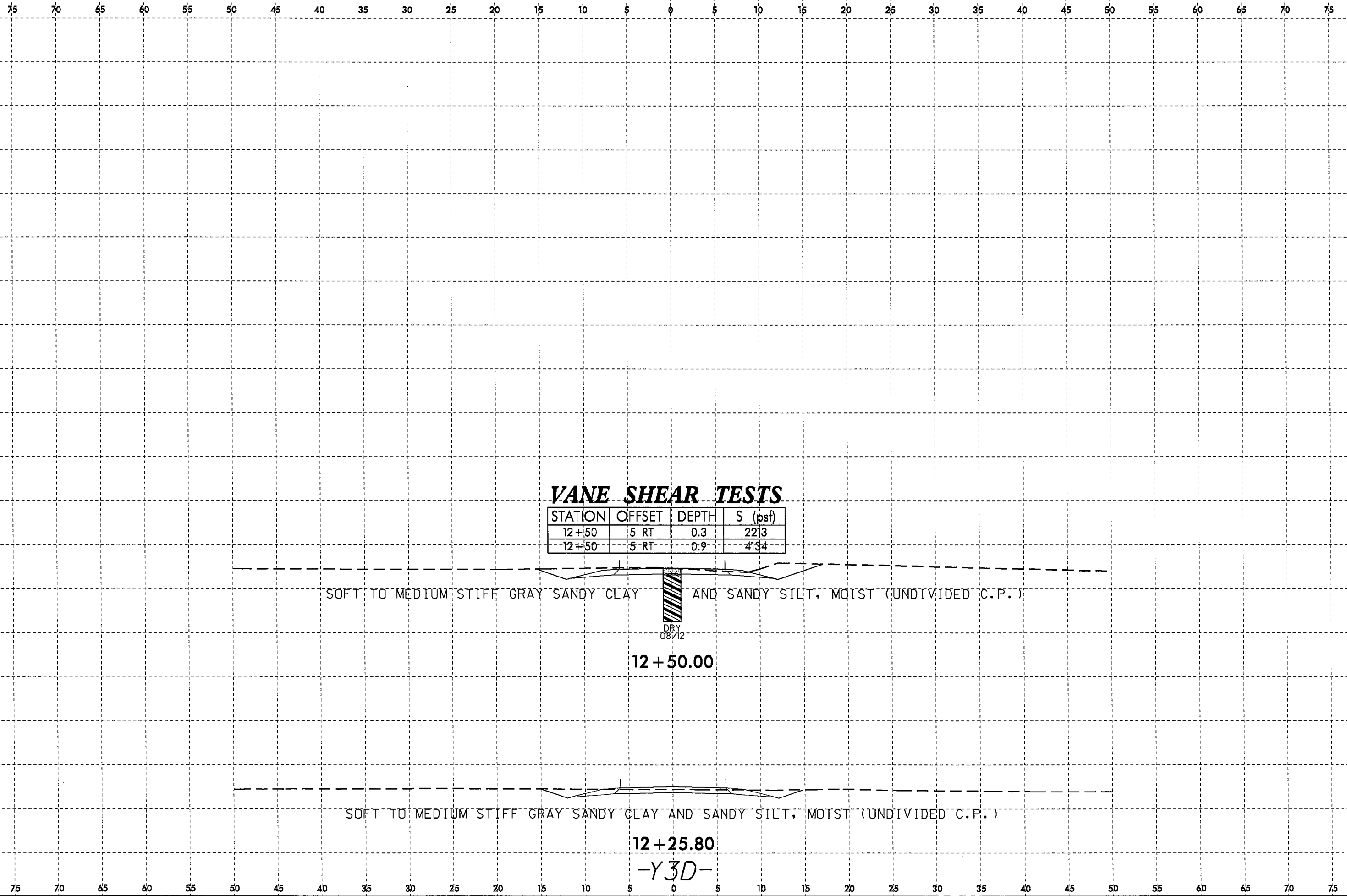
11+06.31

-Y3D-

8/23/99



PROJ. REFERENCE NO.	SHEET NO.
R-2514B	149



### VANE SHEAR TESTS

STATION	OFFSET	DEPTH	S (psf)
12+50	5 RT	0.3	2213
12+50	5 RT	0.9	4134

SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)



12 + 50.00

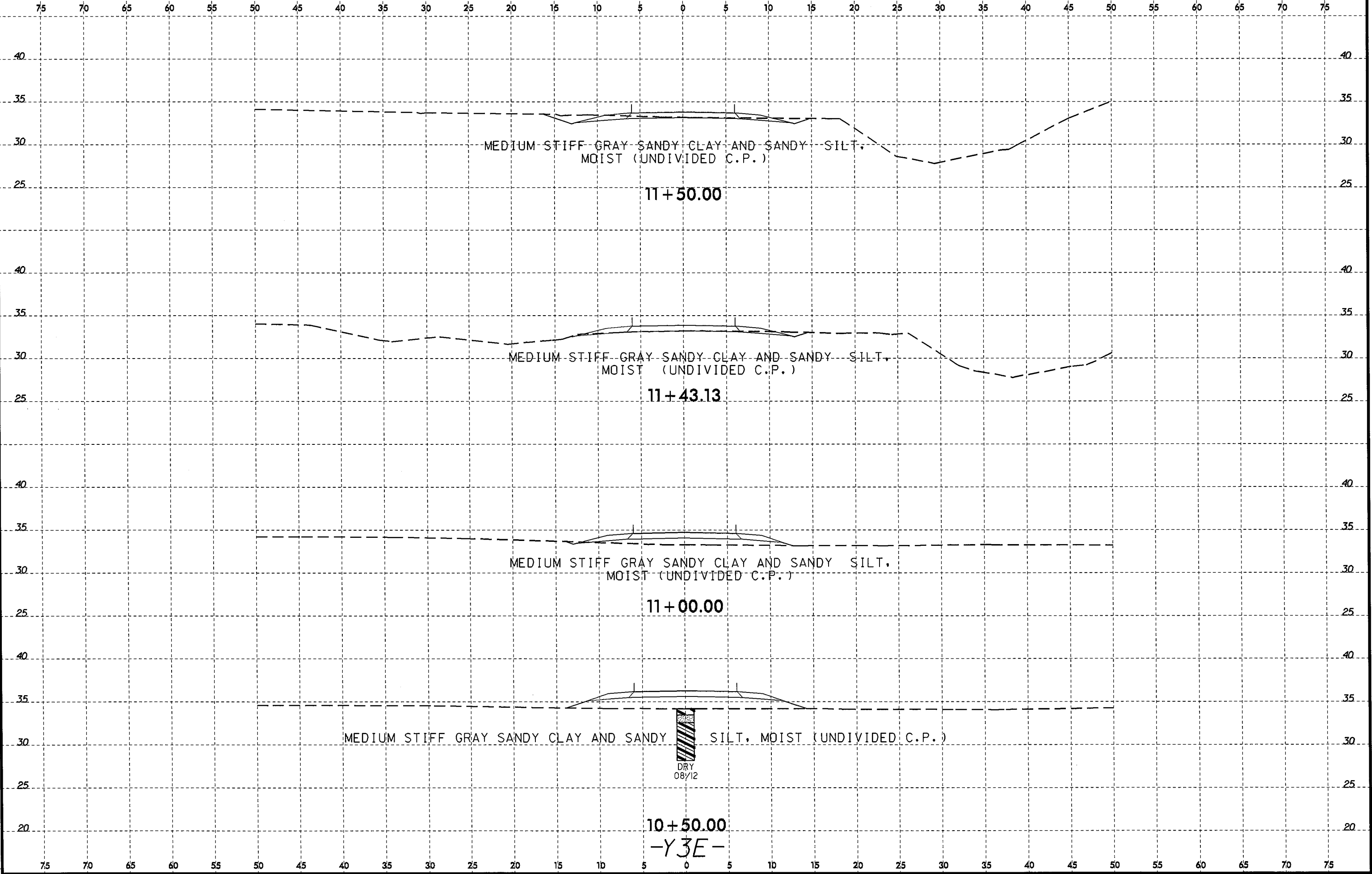
SOFT TO MEDIUM STIFF GRAY SANDY CLAY AND SANDY SILT, MOIST (UNDIVIDED C.P.)

12 + 25.80

-Y3D-

25-JUL-2013 12:34  
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 spturner AT 06/25/13

8/23/99  
22-JUL-2013 15:55  
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cortner AT 06255461

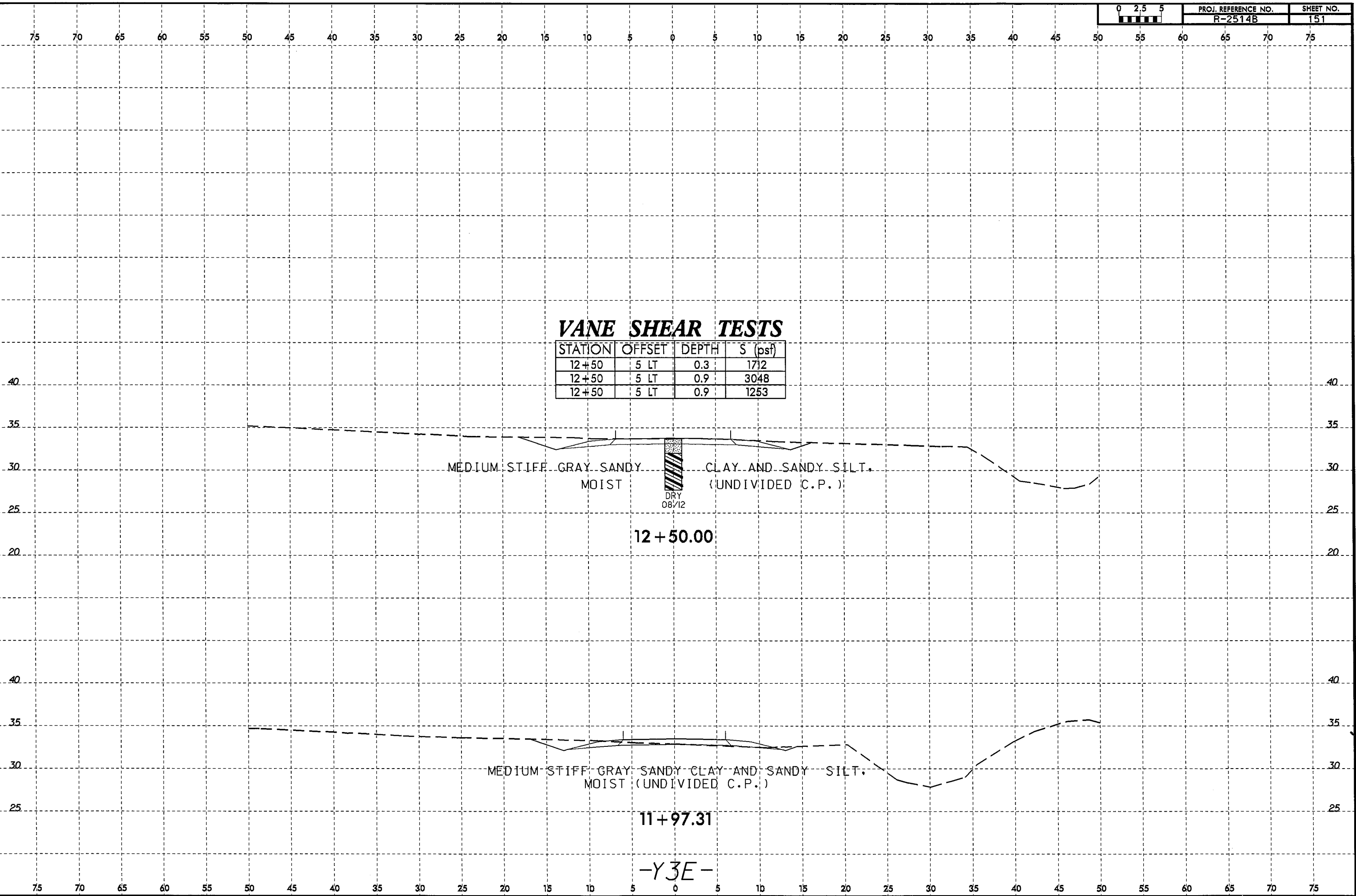




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 cturner AT GEO255461

### VANE SHEAR TESTS

STATION	OFFSET	DEPTH	S (psf)
12+50	5 LT	0.3	1712
12+50	5 LT	0.9	3048
12+50	5 LT	0.9	1253



12 + 50.00

11 + 97.31

-Y3E-

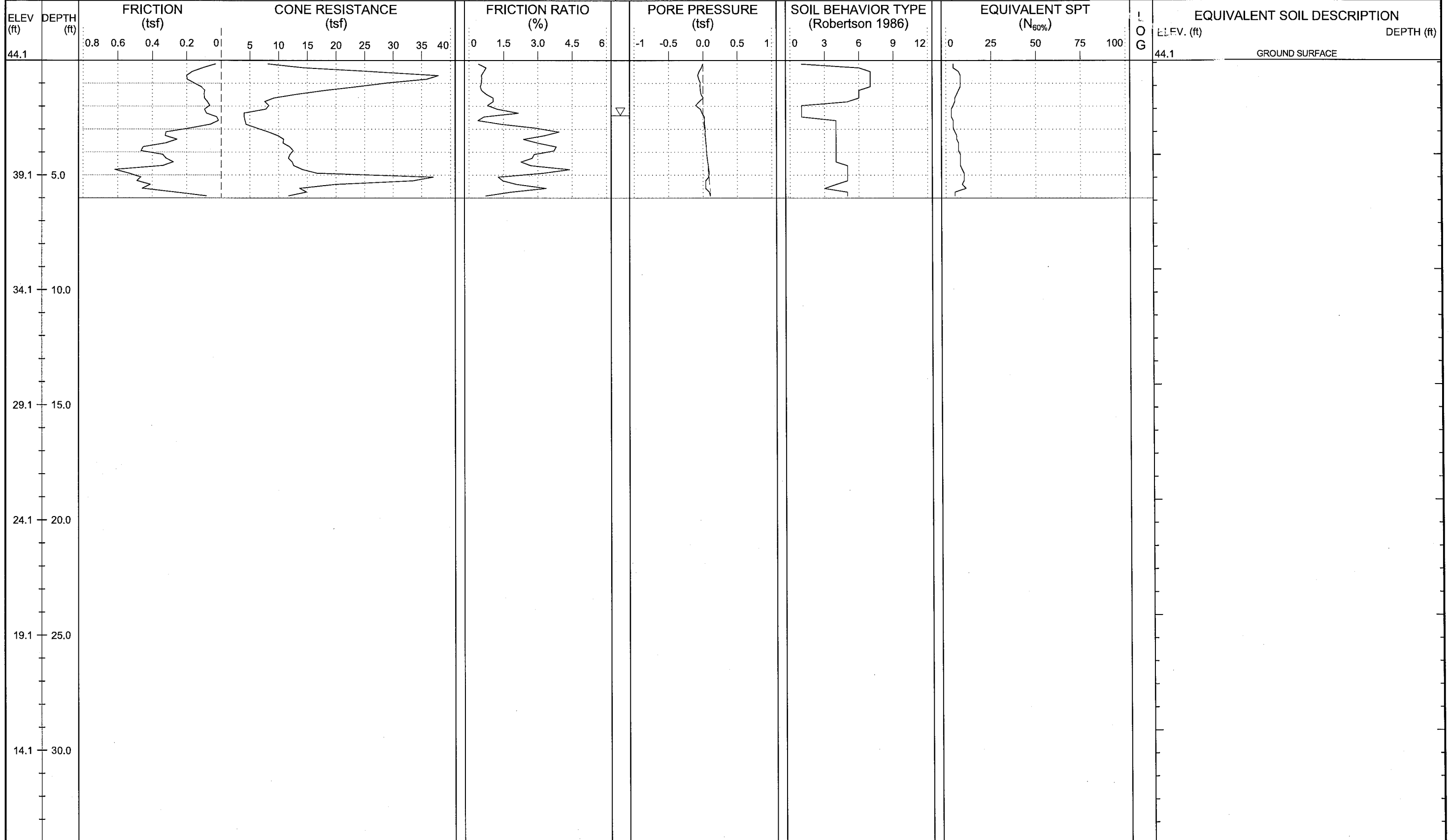


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 1  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

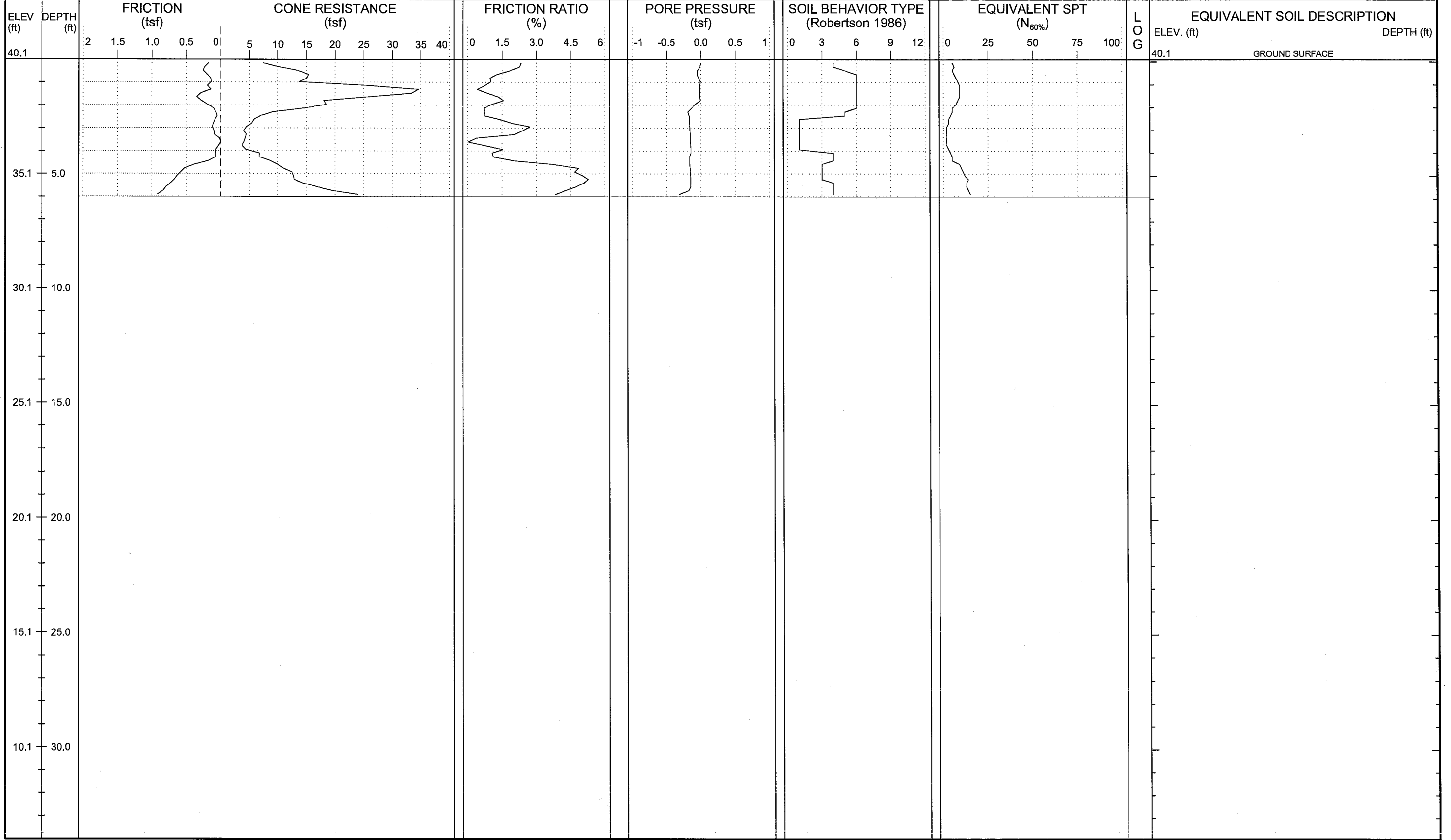
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 2.4, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-012	STATION: 12+00	OFFSET: 65ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 44.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 409,115	EASTING: 2,520,792	START DATE: 09/11/12	CONE ID: DSA1123
				COMP. DATE: 09/11/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





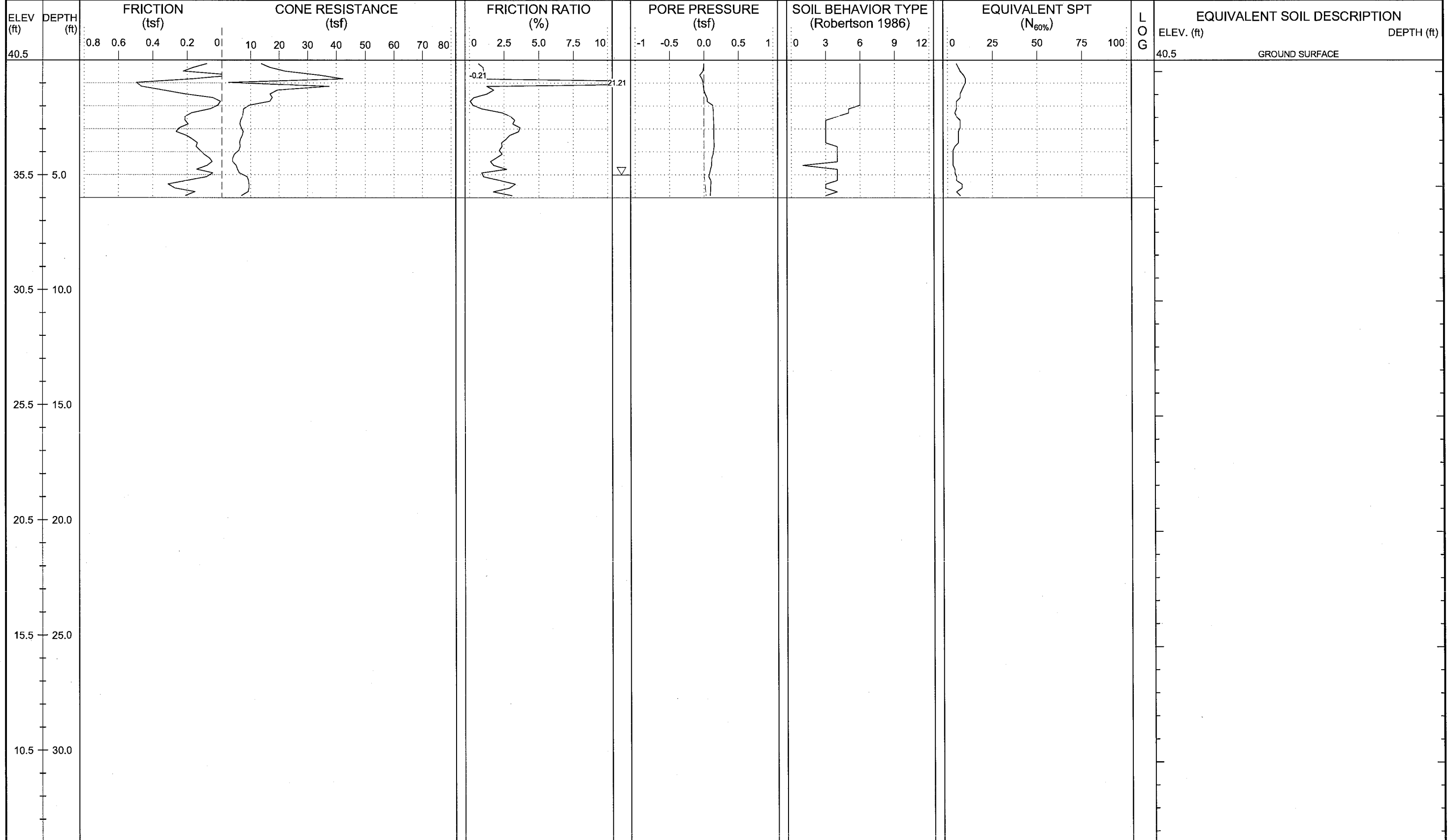


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-016	STATION: 16+00	OFFSET: 70ft LT	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 40.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 409,380	EASTING: 2,521,091	24 HR. N/A	START DATE: 09/11/12
				CONC. DATE: 09/11/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.0	DRILL METHOD: CPT / DPT
BORING NO.: L-018	STATION: 18+00	OFFSET: 70ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 40.5 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 409,405	EASTING: 2,521,334	24 HR. N/A	START DATE: 09/11/12
				COMP. DATE: 09/11/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



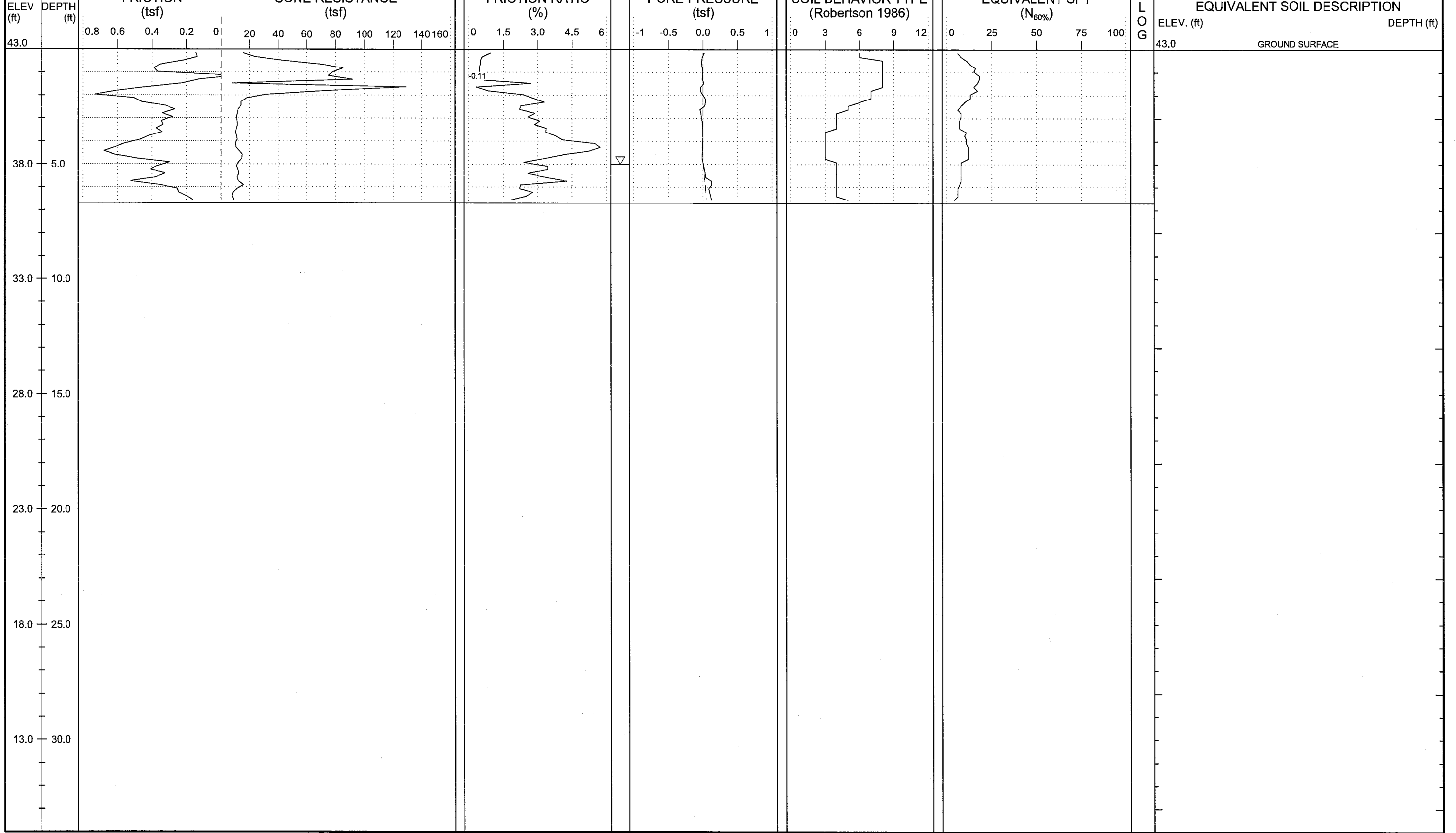


WBS: 34442.1.2    TIP: R-2514B    COUNTY: JONES/ONSLOW    GEOLOGIST: Steven Hudson    DRILL MACHINE: Hogentogler Track    MAX. DOWN PRESSURE: 10 Ton

SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville    GROUND WTR (ft)    DRILL METHOD: CPT / DPT    CONE TYPE: 1.44 Vertek Piezocone    DRILLER: Cory Robison

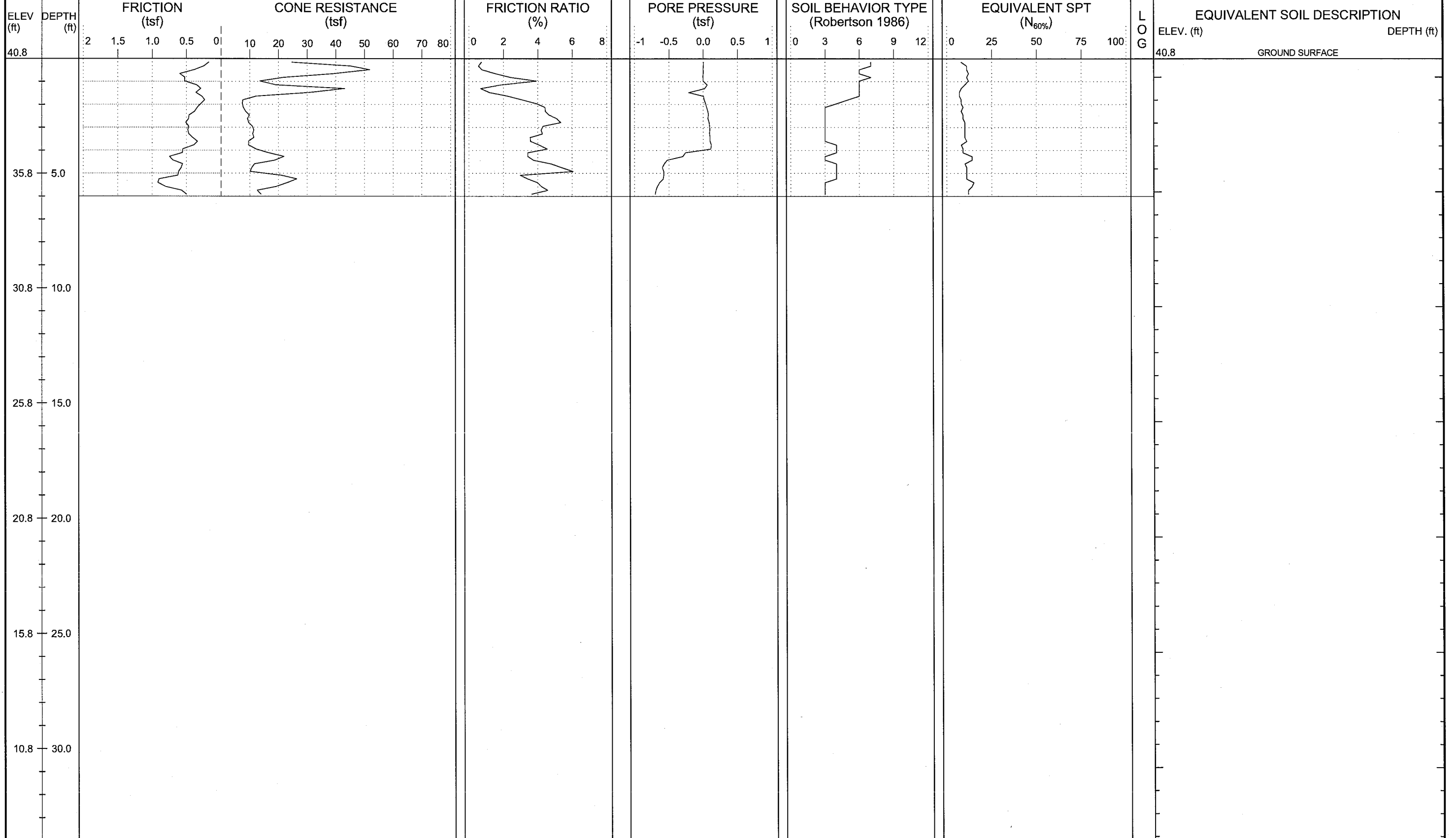
BORING NO.: L-020    STATION: 20+00    OFFSET: 50ft RT    ALIGNMENT: -L-    0 HR. 5.0    ROD TYPE: Pre-strung    CONE ID: DSA1123    TECHNICIAN: M.A.D.

COLLAR ELEV.: 43.0 ft    TOTAL DEPTH: 6.7 ft    NORTHING: 409,551    EASTING: 2,521,472    24 HR. N/A    START DATE: 09/11/12    COMP. DATE: 09/11/12    SURFACE WATER DEPTH: N/A



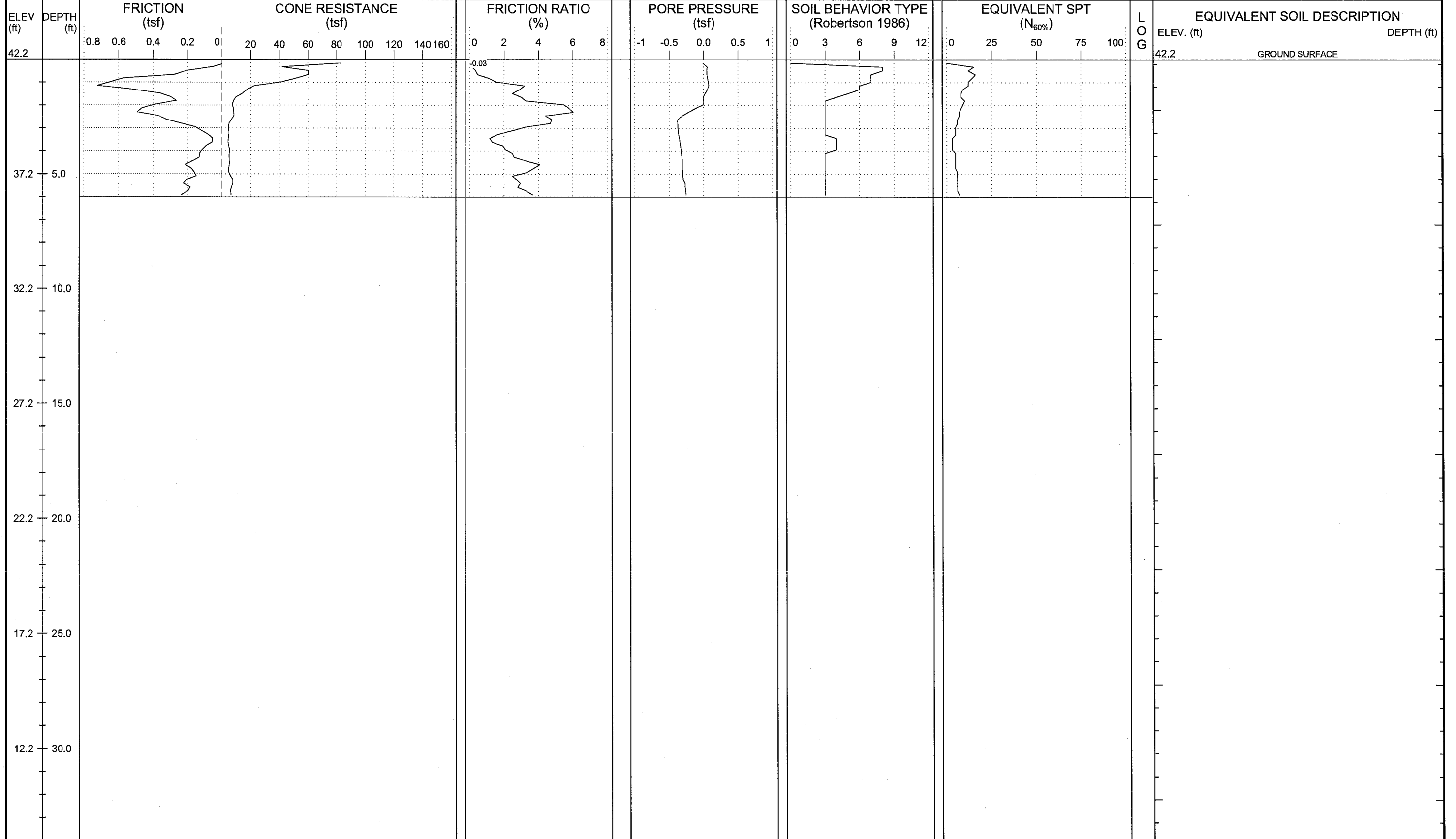


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-024	STATION: 24+00	OFFSET: 30ft RT	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 40.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 409,828	EASTING: 2,521,762	24 HR. N/A	START DATE: 09/11/12
				CONE ID: DSA1123	DRILLER: Cory Robison
				COMP. DATE: 09/11/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-026	STATION: 26+00	OFFSET: 50ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 42.2 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 409,944	EASTING: 2,521,926	START DATE: 09/11/12	CONE ID: DSA1123
				24 HR. N/A	COMP. DATE: 09/11/12
				DRILLER: Cory Robison	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	







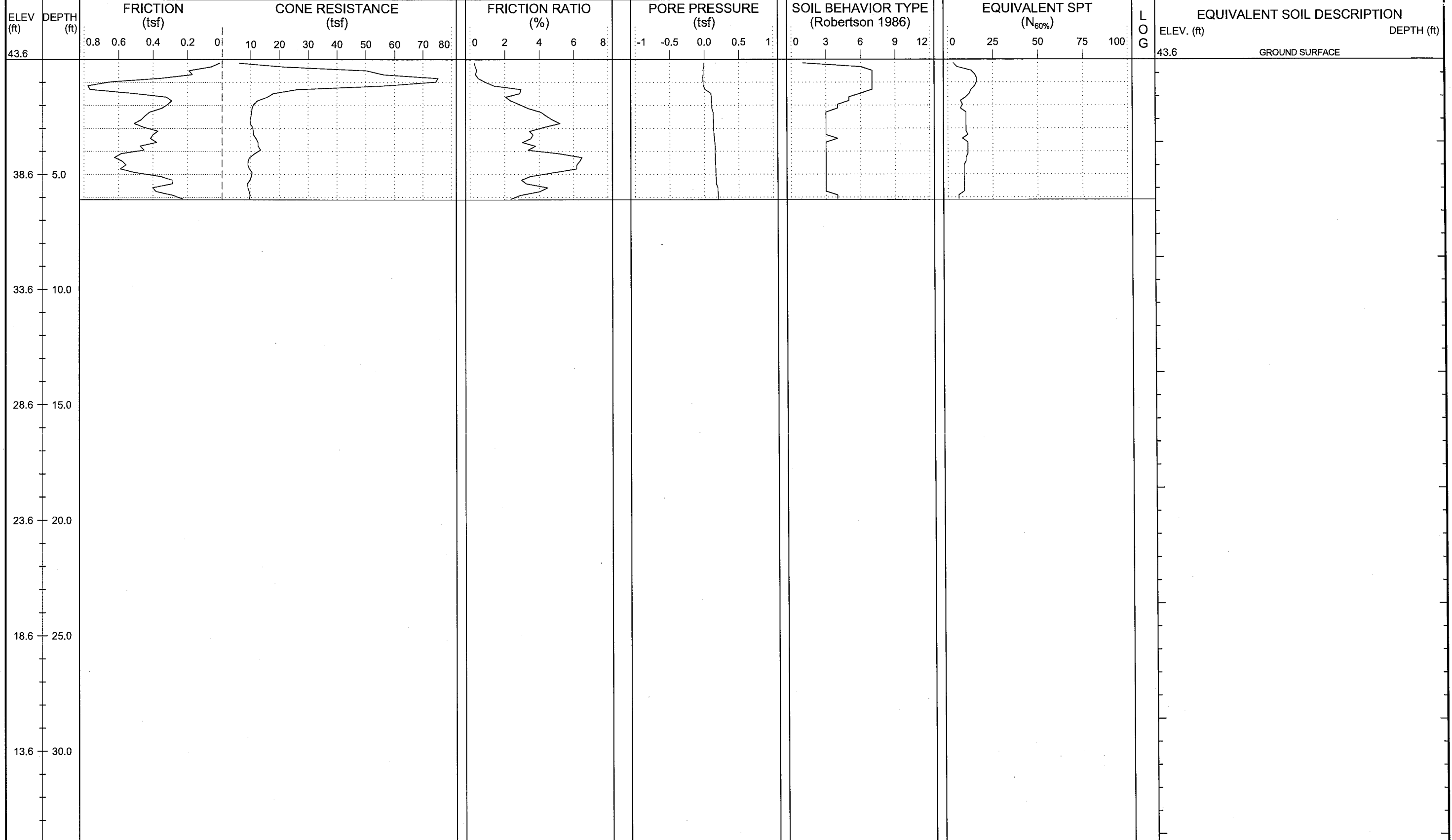


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

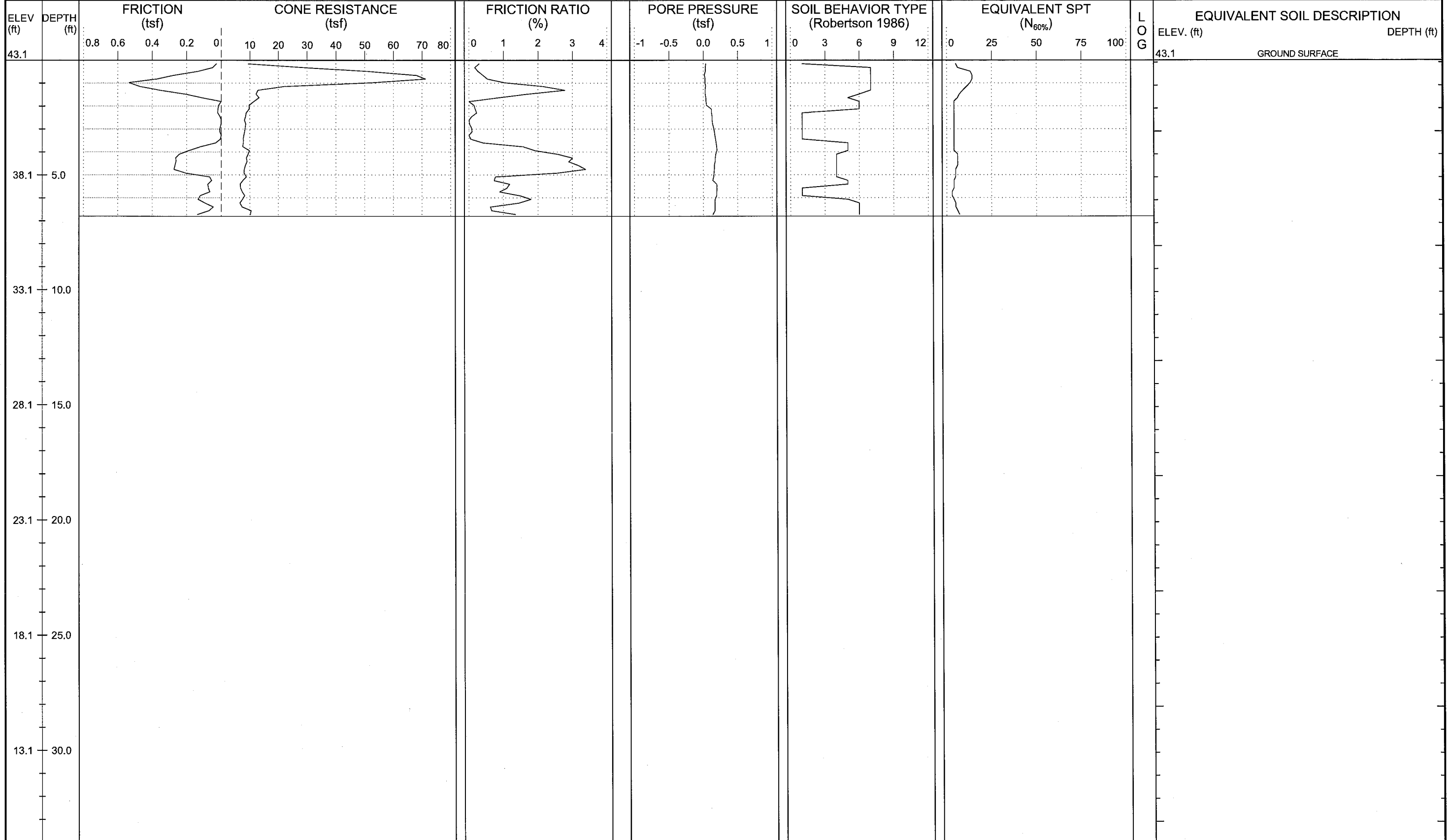
SHEET NO.:	9
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry / 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-032	STATION: 32+00	OFFSET: 45ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 43.6 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 410,340	EASTING: 2,522,377	START DATE: 09/10/12	COMP. DATE: 09/10/12	SURFACE WATER DEPTH: N/A	



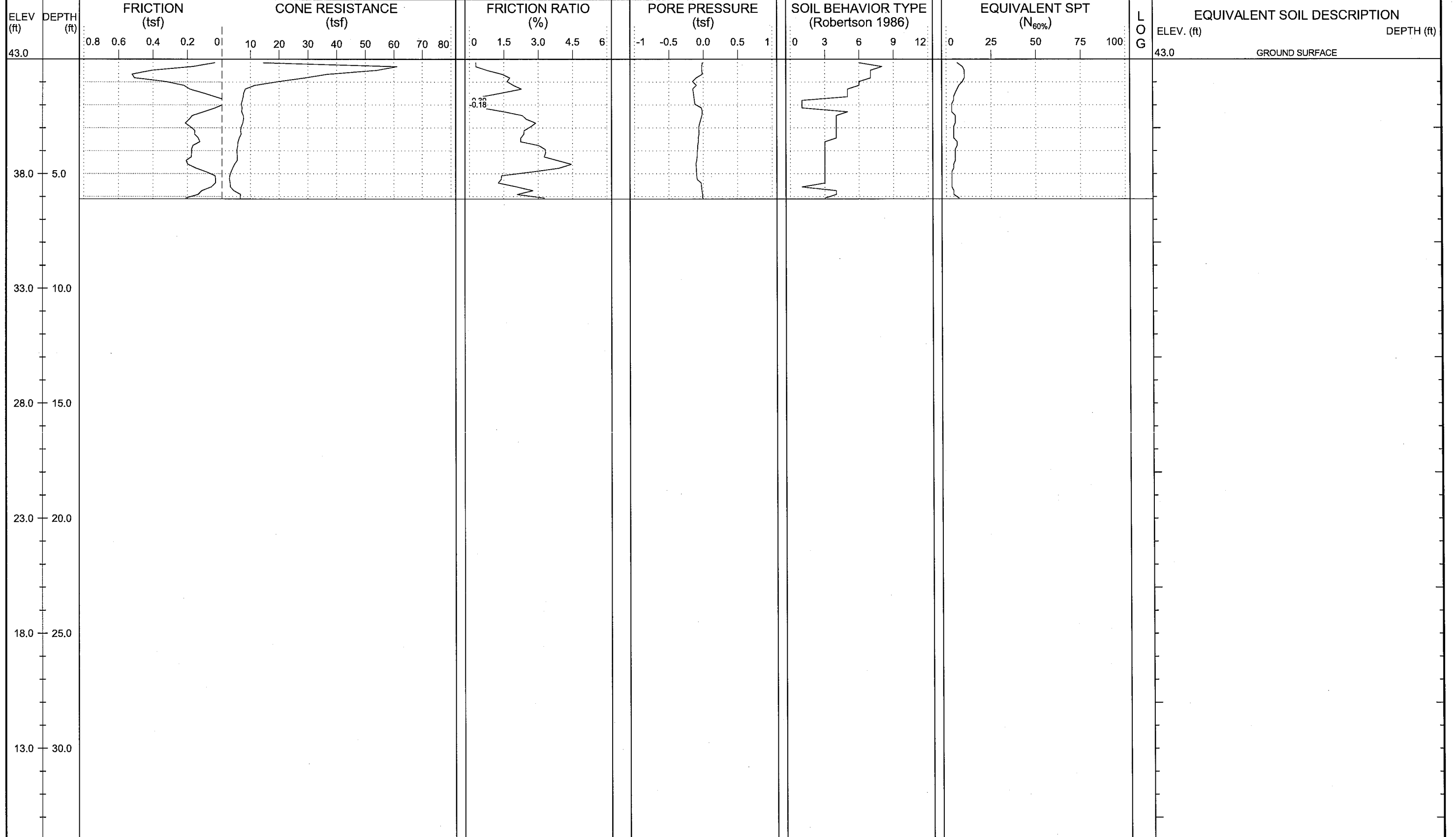


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-034	STATION: 34+00	OFFSET: 30ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 43.1 ft	TOTAL DEPTH: 6.8 ft	NORTHING: 410,482	EASTING: 2,522,518	24 HR. N/A	START DATE: 09/10/12
				COMP. DATE: 09/10/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



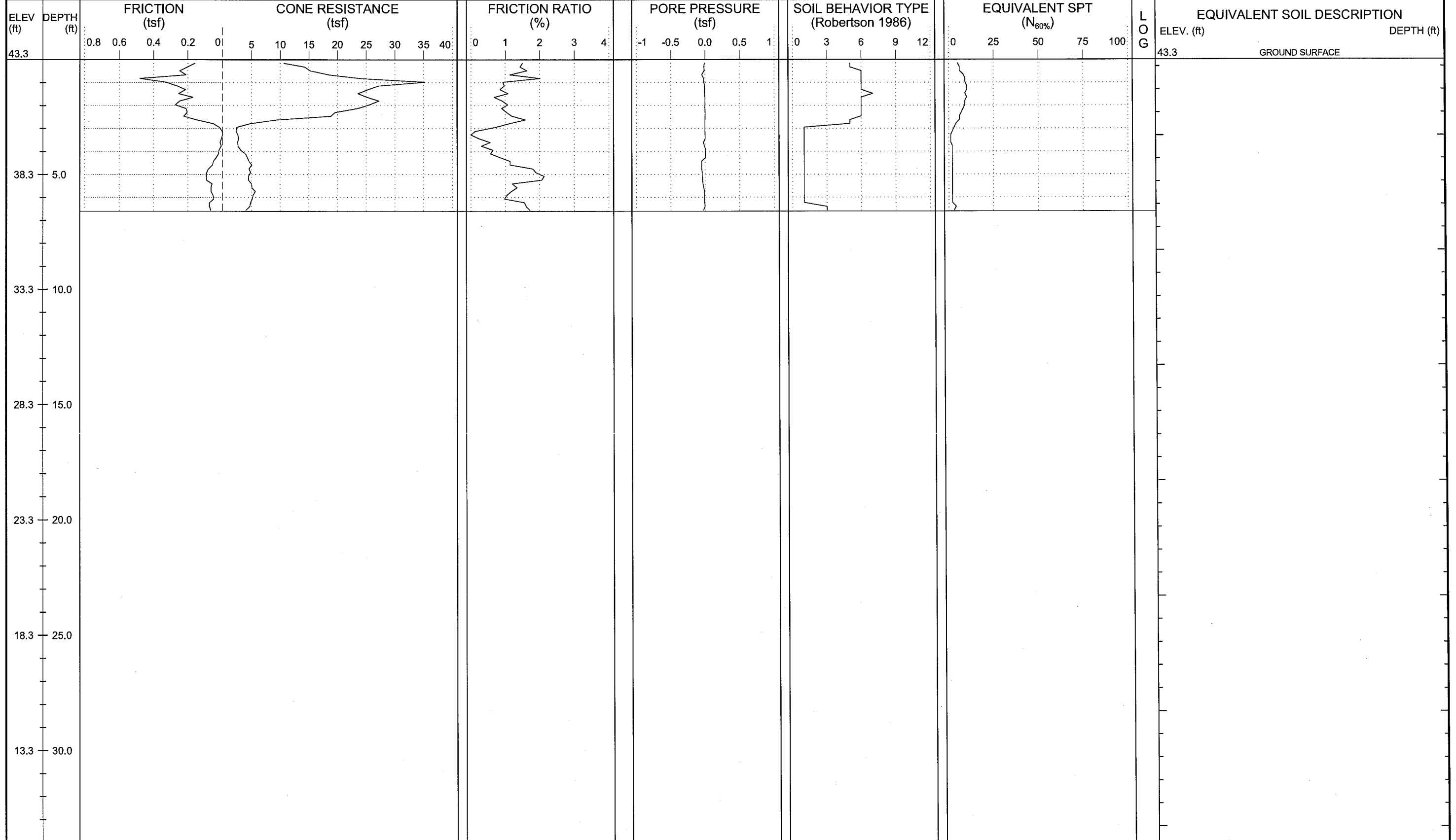


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-036	STATION: 36+00	OFFSET: 30ft RT	ALIGNMENT: -L-	24 HR. N/A	DRILLER: Ron Stewart
COLLAR ELEV.: 43.0 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 410,613	EASTING: 2,522,670	ROD TYPE: Pre-strung	CONC. TYPE: 1.44 Vertek Piezocone
				START DATE: 09/10/12	CONE ID: DSA1123
					TECHNICIAN: M.A.D.
					COMP. DATE: 09/10/12
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-038	STATION: 38+00	OFFSET: 70ft LT	ALIGNMENT: -L-	24 HR. N/A	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 43.3 ft	TOTAL DEPTH: 6.6 ft	NORTHING: 410,819	EASTING: 2,522,756	ROD TYPE: Pre-strung	CONE ID: DSA1123
				START DATE: 09/10/12	DRILLER: Ron Stewart
				COMP. DATE: 09/10/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



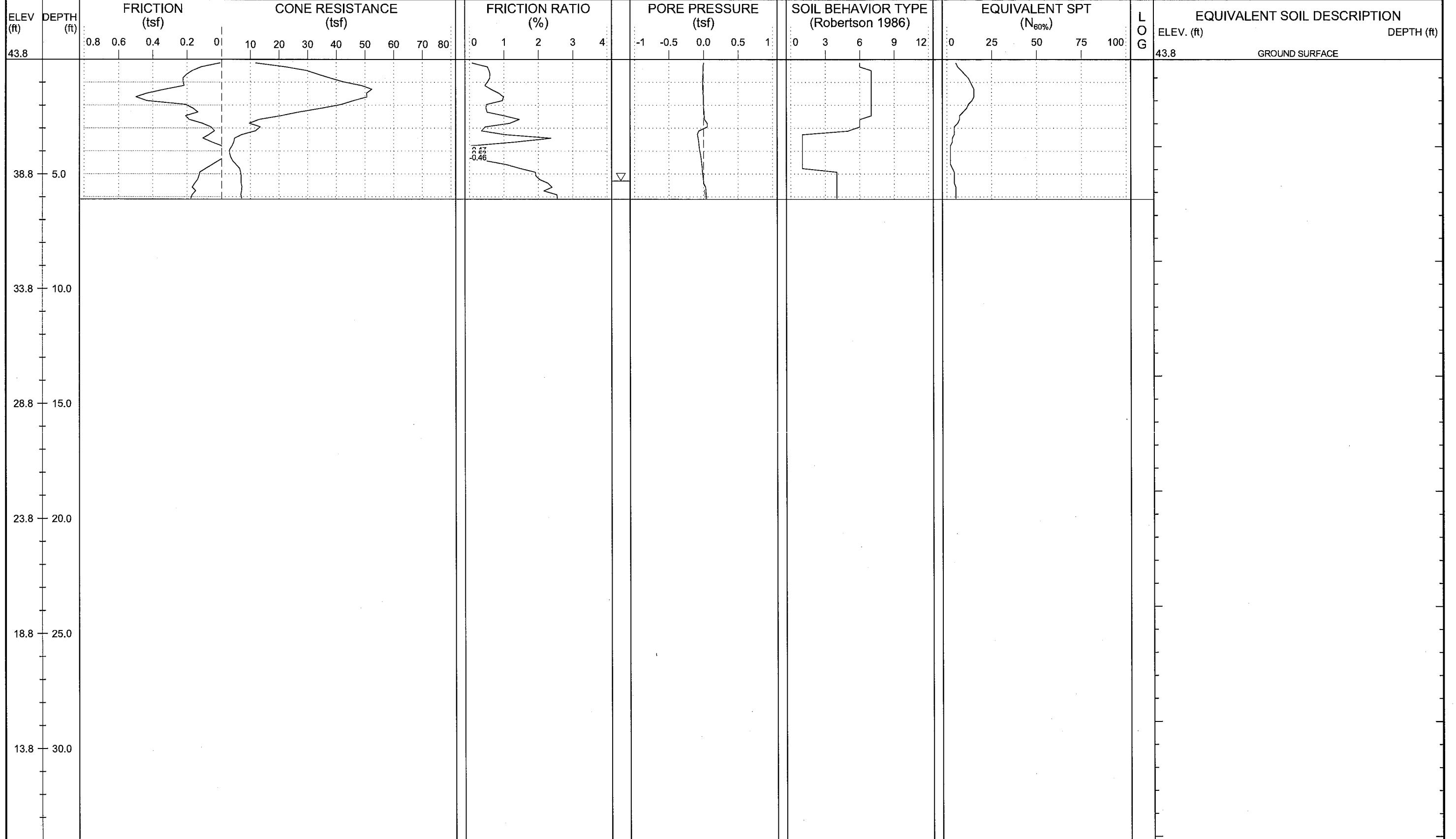


**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 13  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2    TIP: R-2514B    COUNTY: JONES/ONSLOW    GEOLOGIST: Steven Hudson    DRILL MACHINE: Hogentogler Track    MAX. DOWN PRESSURE: 10 Ton

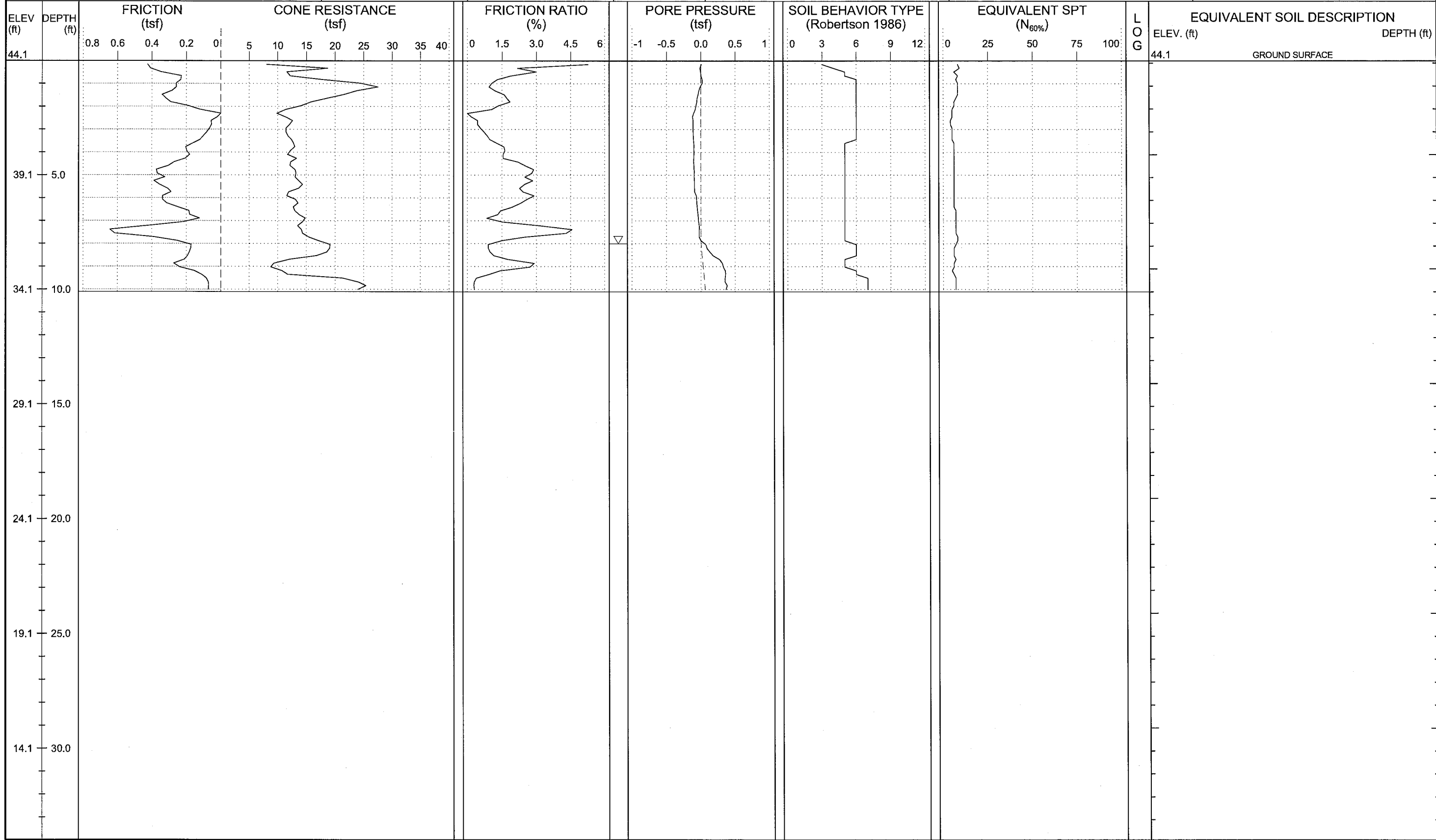
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville    GROUND WTR (ft): 0 HR. 5.3    DRILL METHOD: CPT / DPT    CONE TYPE: 1.44 Vertek Piezocone    DRILLER: Ron Stewart  
 BORING NO.: L-042    STATION: 42+00    OFFSET: 70ft LT    ALIGNMENT: -L-    24 HR. N/A    ROD TYPE: Pre-strung    CONE ID: DSA1123    TECHNICIAN: M.A.D.  
 COLLAR ELEV.: 43.8 ft    TOTAL DEPTH: 6.1 ft    NORTHING: 411,081    EASTING: 2,523,056    START DATE: 09/10/12    COMP. DATE: 09/10/12    SURFACE WATER DEPTH: N/A







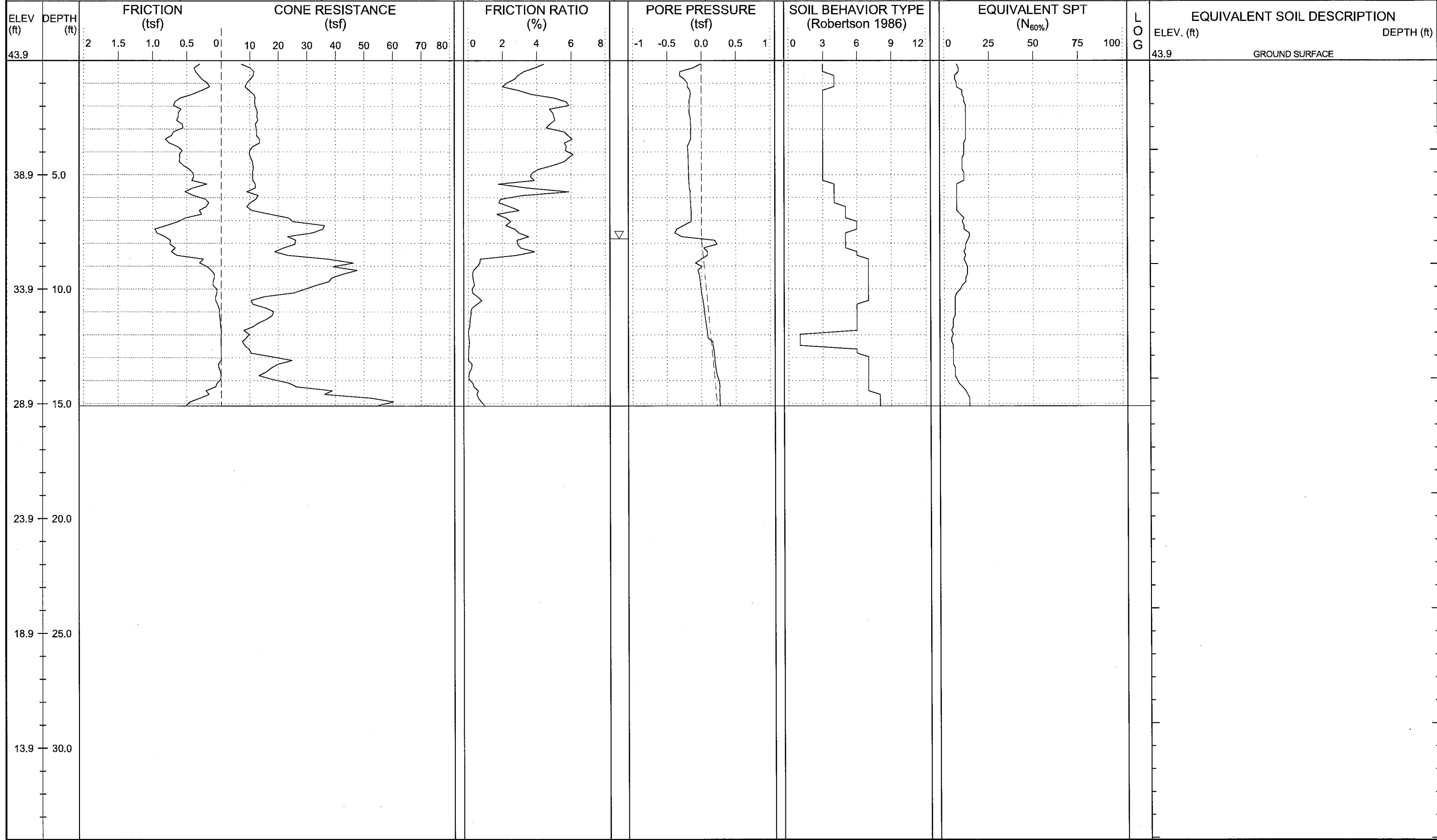
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.0, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-046	STATION: 46+00	OFFSET: 70ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 44.1 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 411,358	EASTING: 2,523,334	START DATE: 09/10/12	COMP. DATE: 09/10/12	SURFACE WATER DEPTH: N/A	







WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.8, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-048	STATION: 48+00	OFFSET: 60ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 43.9 ft	TOTAL DEPTH: 15.1 ft	NORTHING: 411,425	EASTING: 2,523,563	START DATE: 09/10/12	COMP. DATE: 09/10/12	SURFACE WATER DEPTH: N/A	



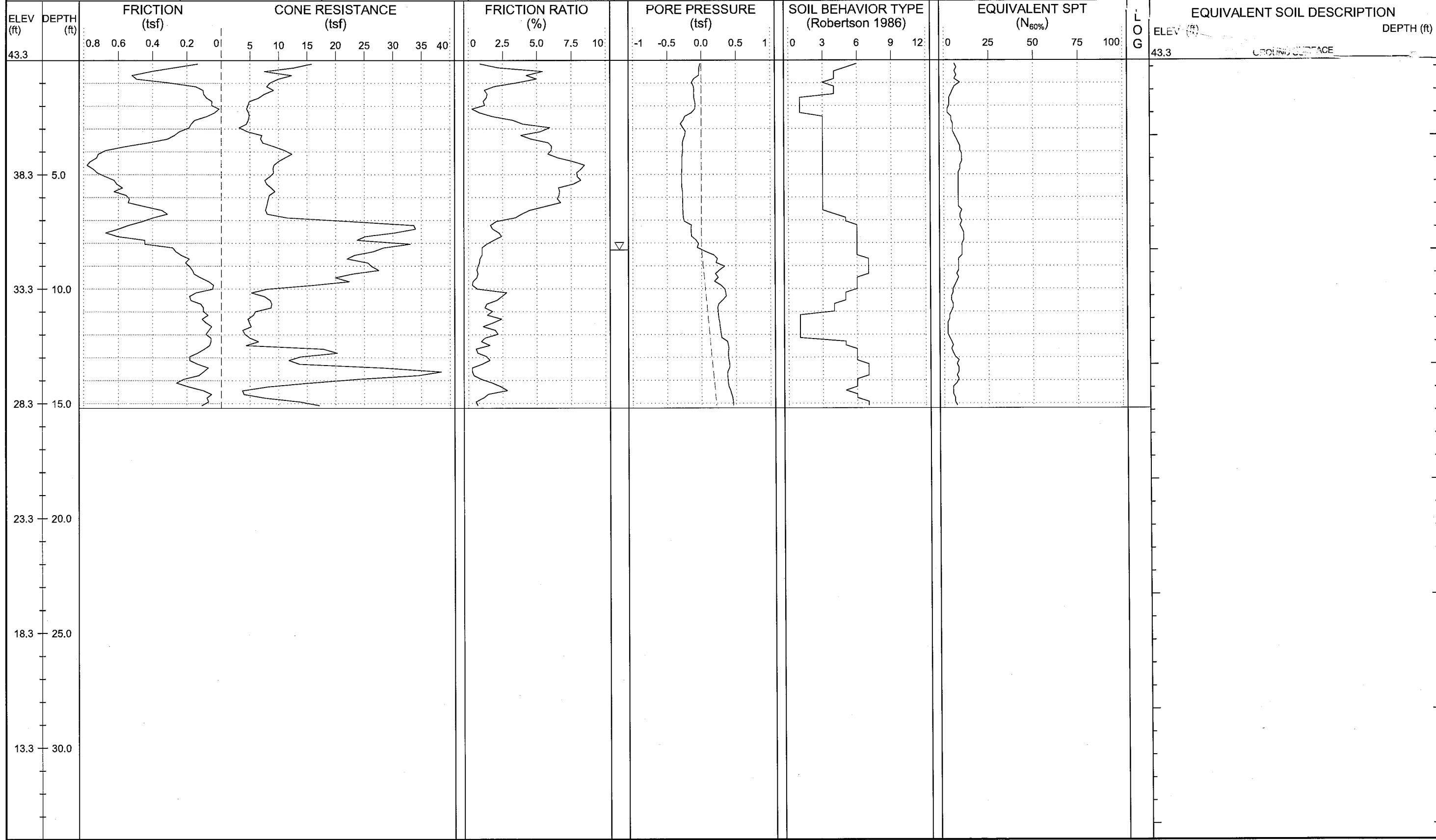


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

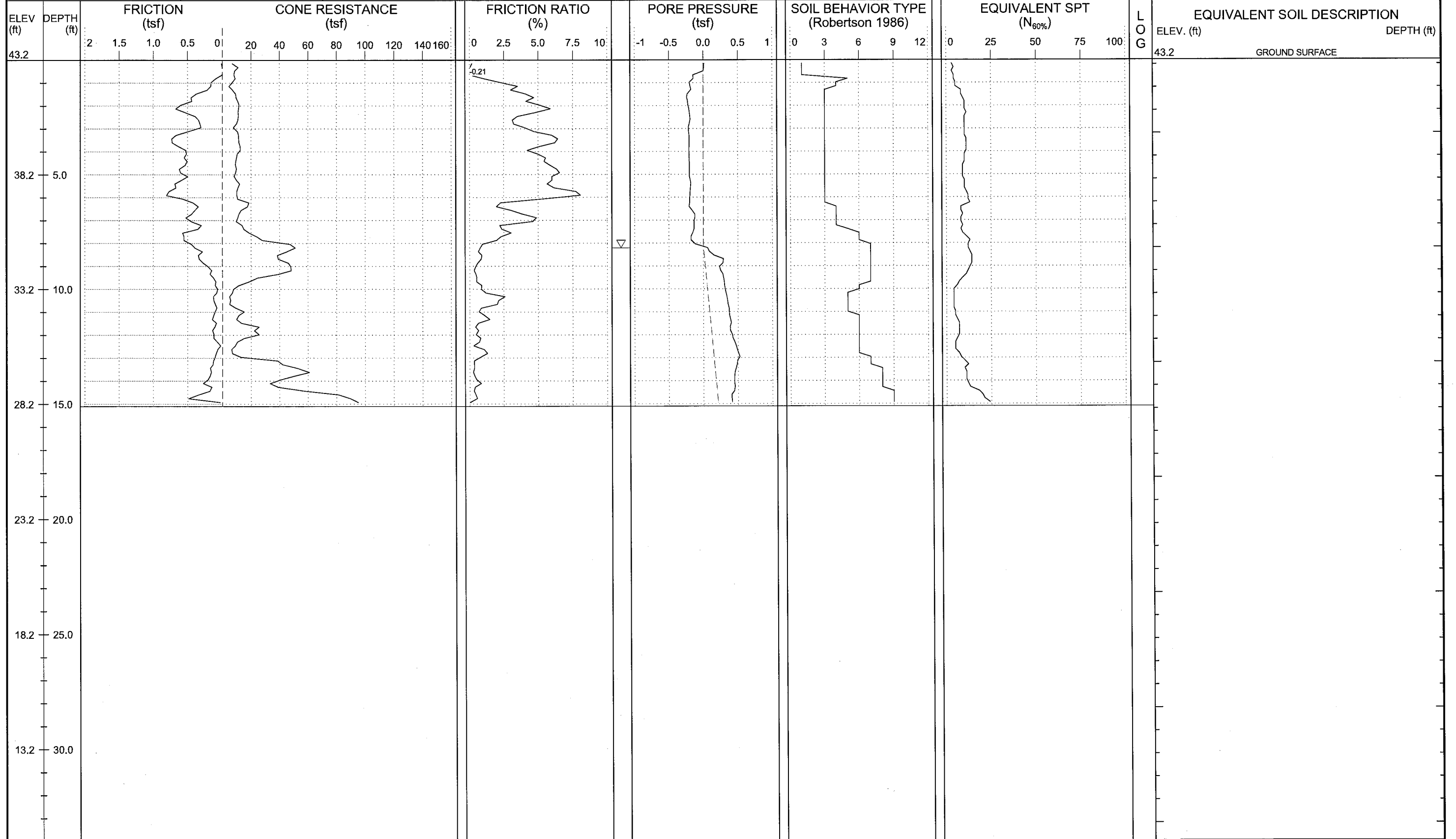
SHEET NO.:	17
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-052	STATION: 52+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 43.3 ft	TOTAL DEPTH: 15.2 ft	NORTHING: 411,785	EASTING: 2,523,754	START DATE: 09/07/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



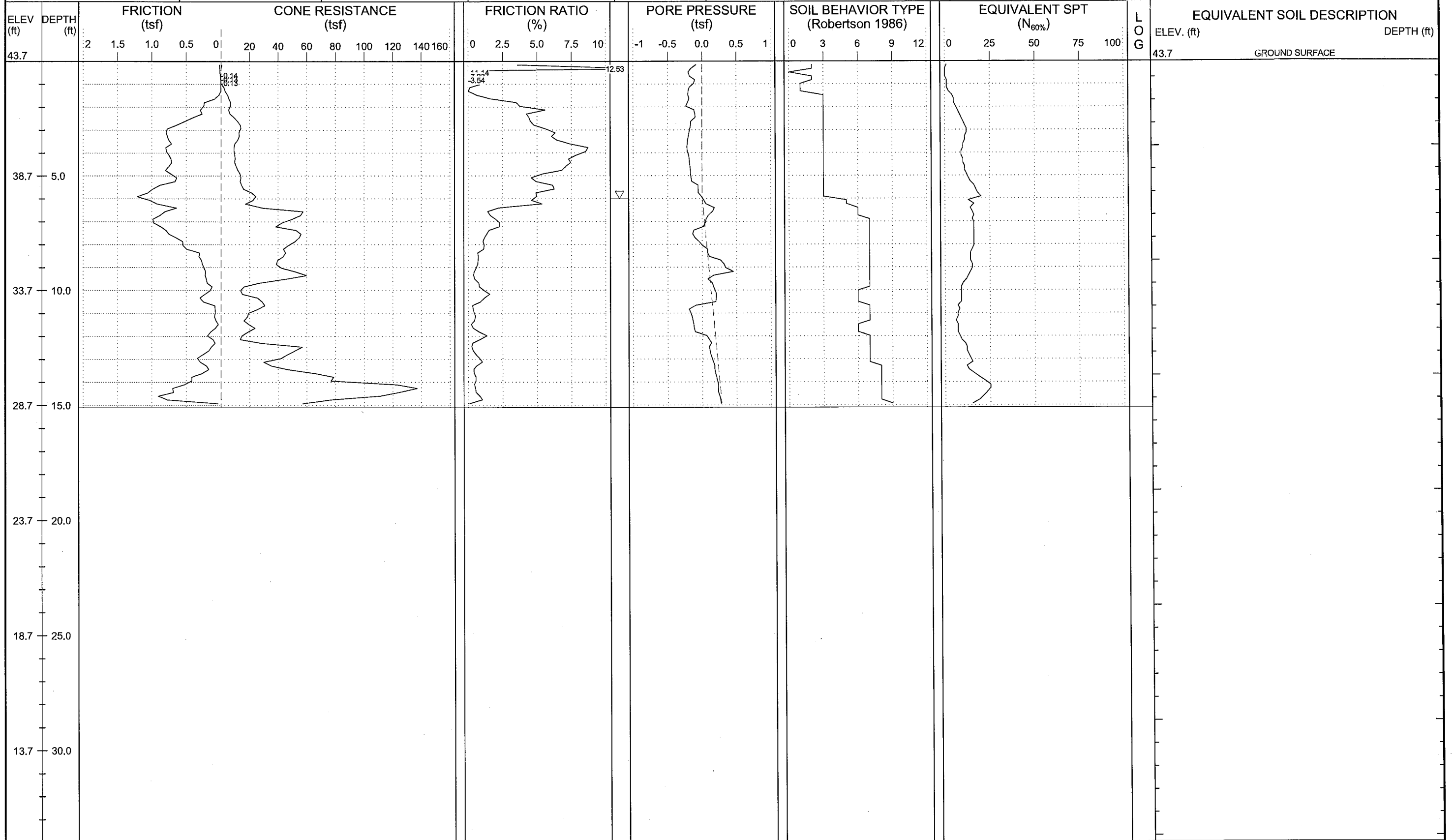


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-054	STATION: 54+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 43.2 ft	TOTAL DEPTH: 15.1 ft	NORTHING: 411,954	EASTING: 2,523,860	START DATE: 09/07/12	CONE ID: DSA1123
				COMP. DATE: 09/07/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-056	STATION: 56+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 6.0	ROD TYPE: Pre-strung
COLLAR ELEV.: 43.7 ft	TOTAL DEPTH: 15.1 ft	NORTHING: 412,128	EASTING: 2,523,958	24 HR. N/A	START DATE: 09/07/12
				COMP. DATE: 09/07/12	SURFACE WATER DEPTH: N/A

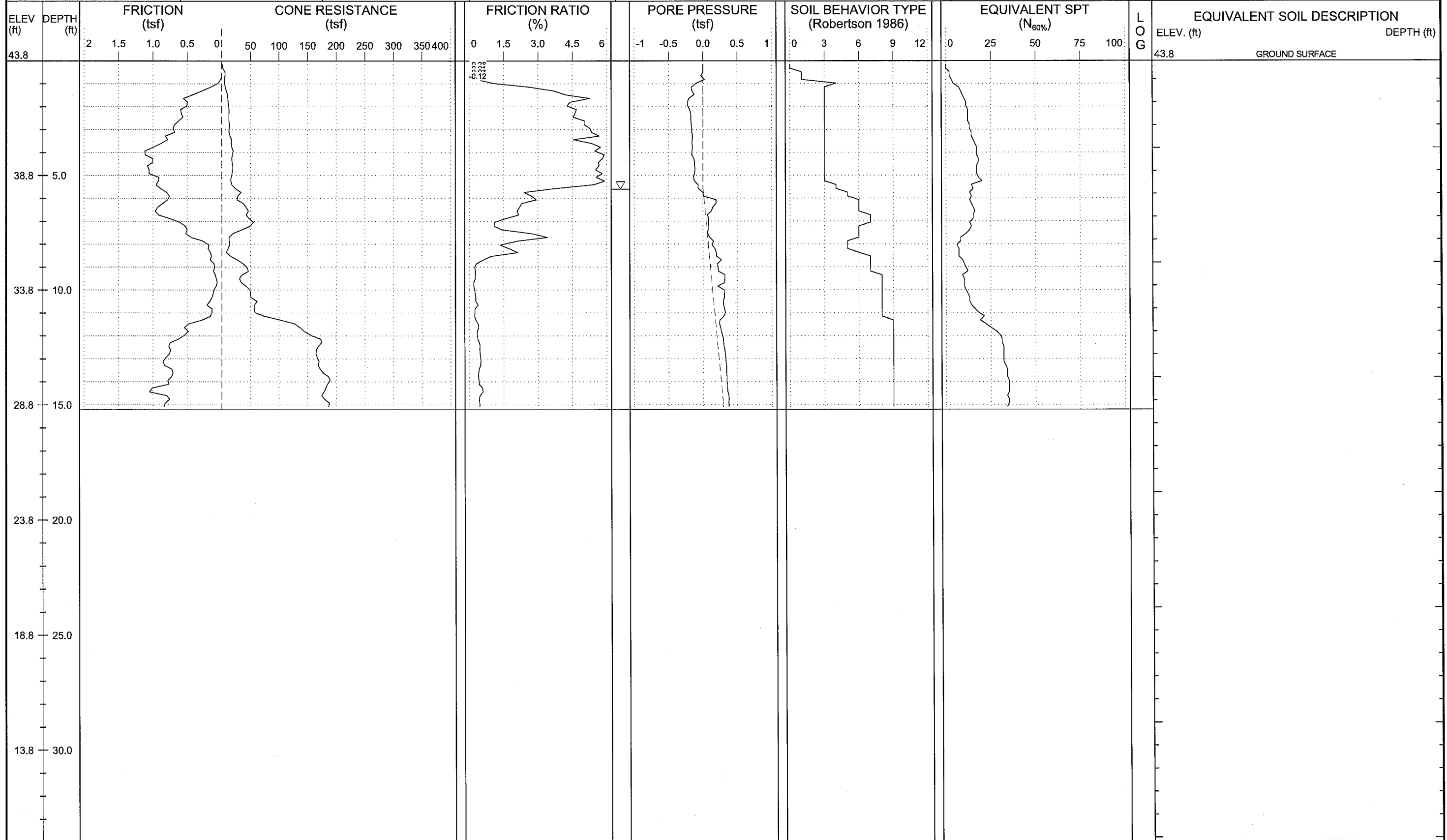




# NCDOT GEOTECHNICAL ENGINEERING UNIT

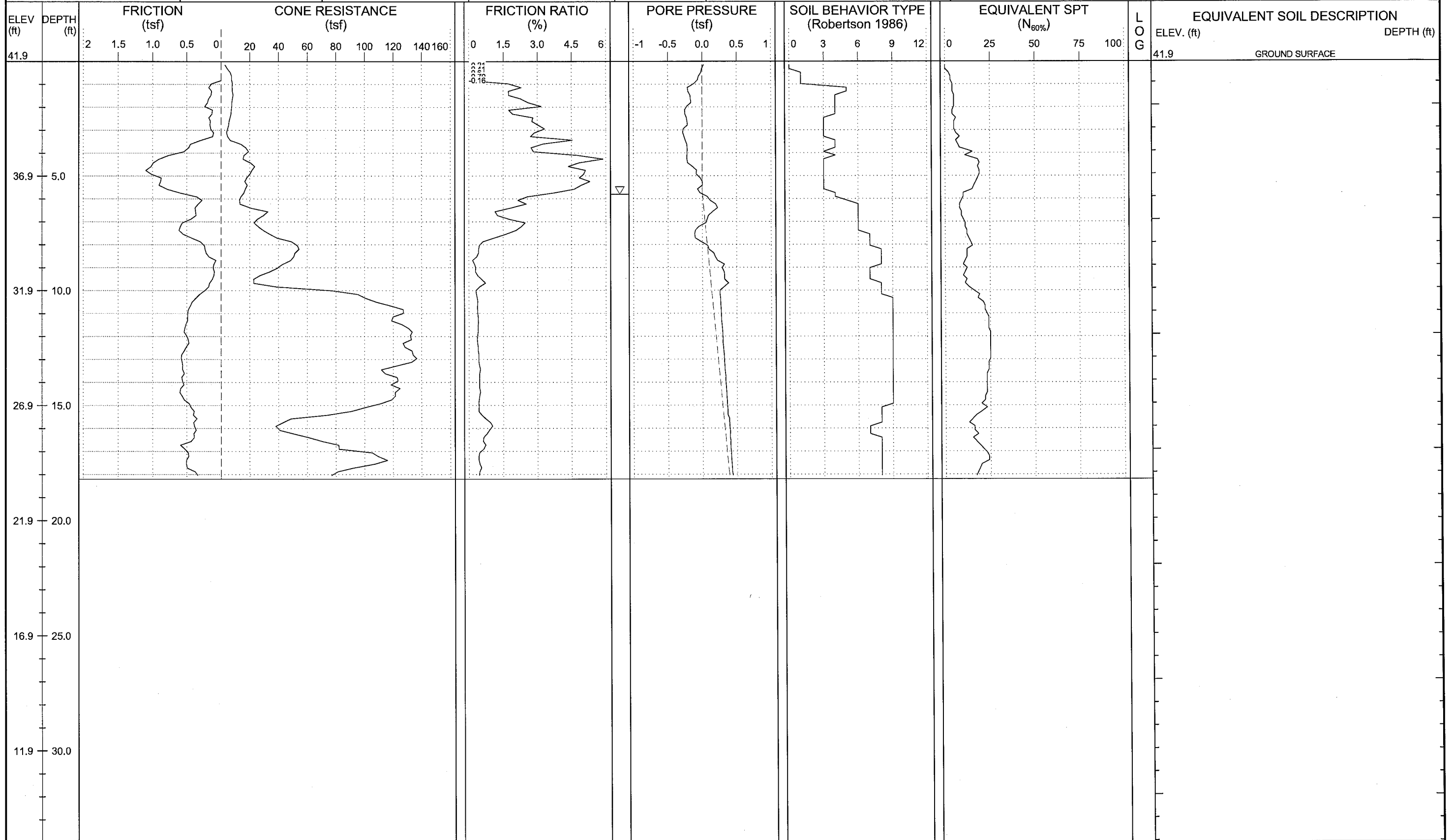
SHEET NO.:	20
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.6, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-058	STATION: 58+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 43.8 ft	TOTAL DEPTH: 15.2 ft	NORTHING: 412,308	EASTING: 2,524,047	START DATE: 09/07/12	COMP. DATE: 09/07/12	SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.8, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-062	STATION: 62+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.9 ft	TOTAL DEPTH: 18.2 ft	NORTHING: 412,678	EASTING: 2,524,197	START DATE: 09/07/12	CONE ID: DSA1123
				COMP. DATE: 09/07/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



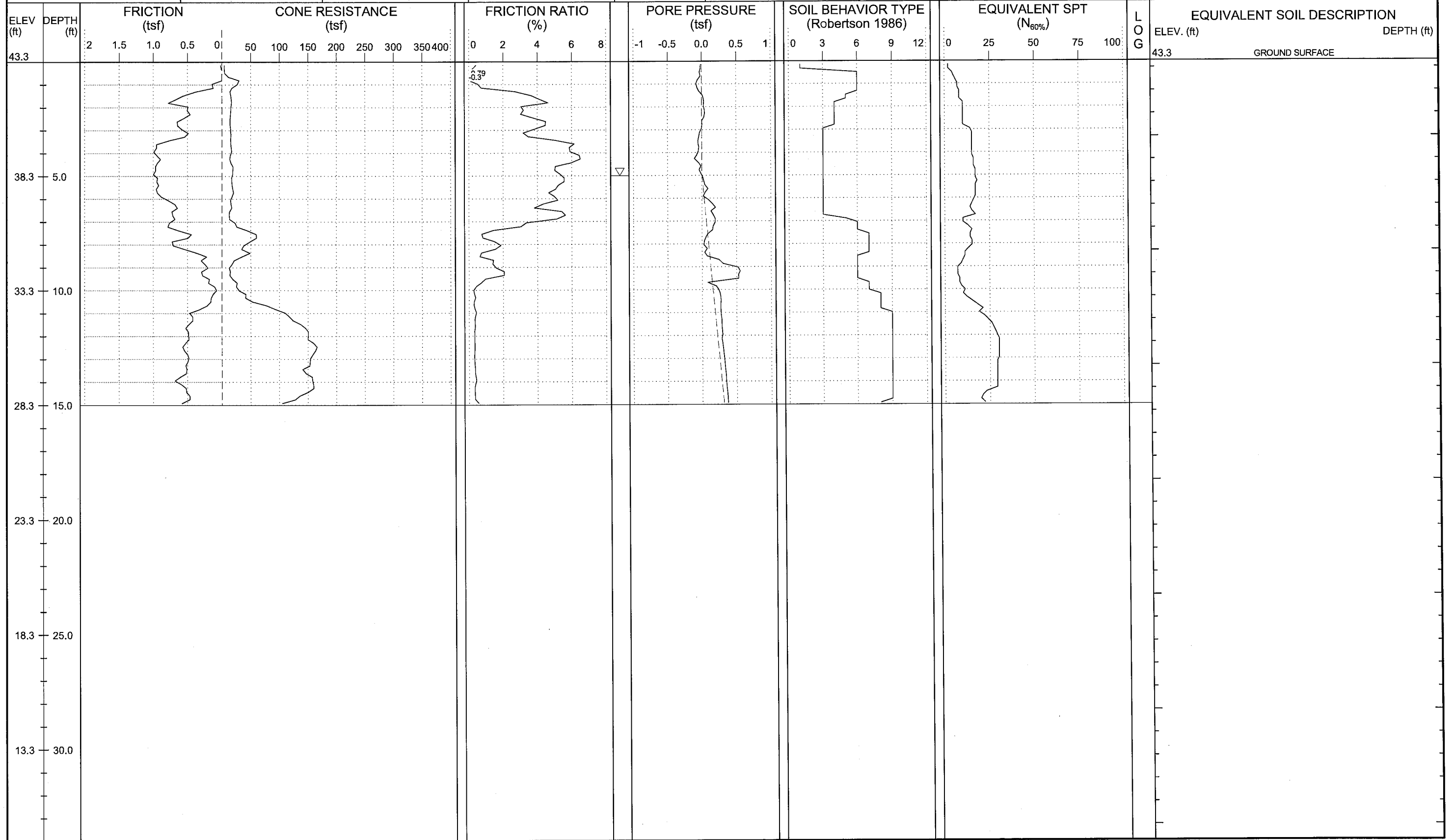


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 22  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONslow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONslow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.0, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-064	STATION: 64+00	OFFSET: 1ft RT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 43.3 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 412,868	EASTING: 2,524,260	START DATE: 09/07/12	CONE ID: DSA1123
				COMP. DATE: 09/07/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

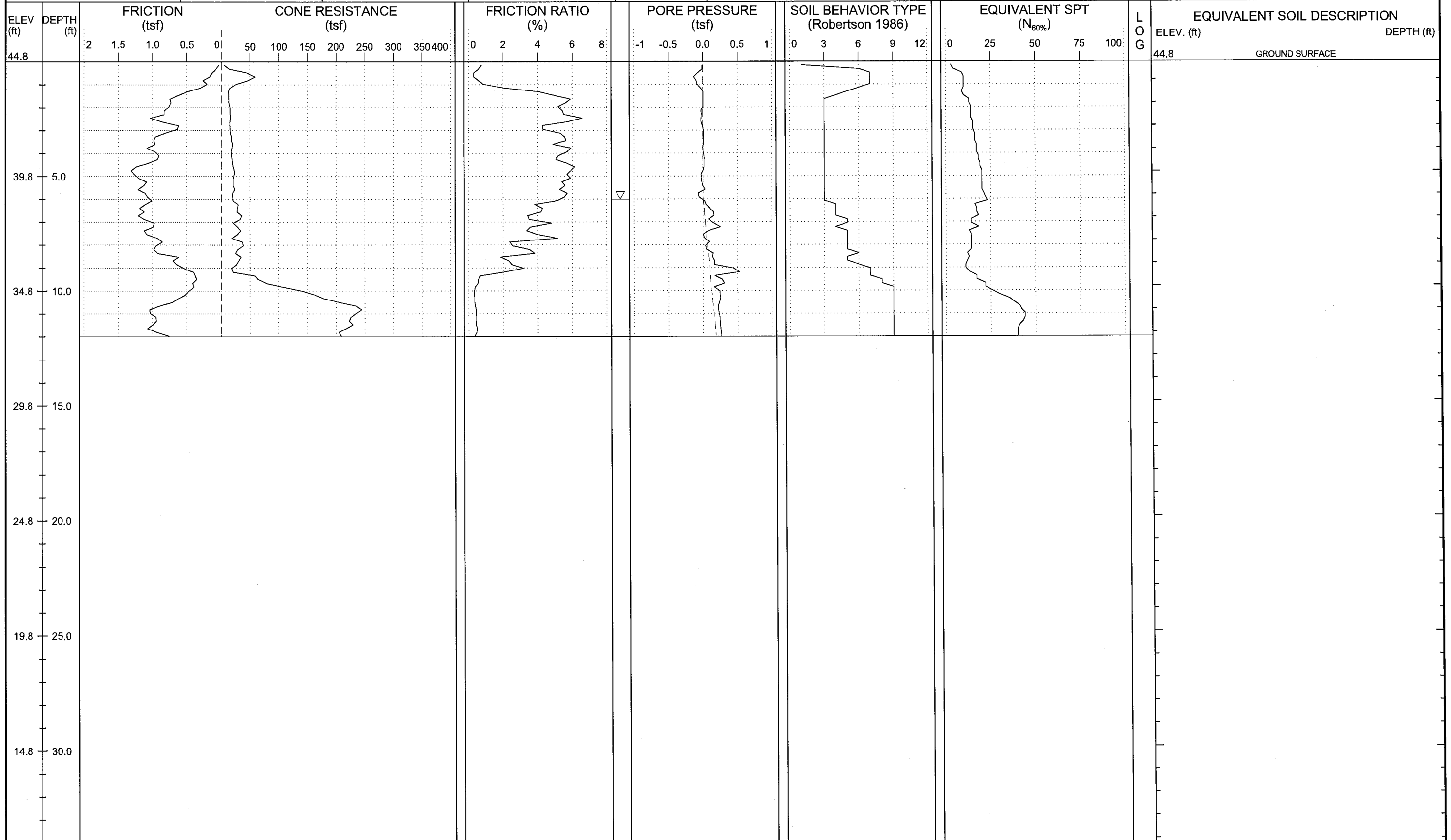




# NCDOT GEOTECHNICAL ENGINEERING UNIT

SHEET NO.:	23
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.0, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-066	STATION: 66+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 44.8 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 413,062	EASTING: 2,524,310	START DATE: 09/07/12	COMP. DATE: 09/07/12	SURFACE WATER DEPTH: N/A	





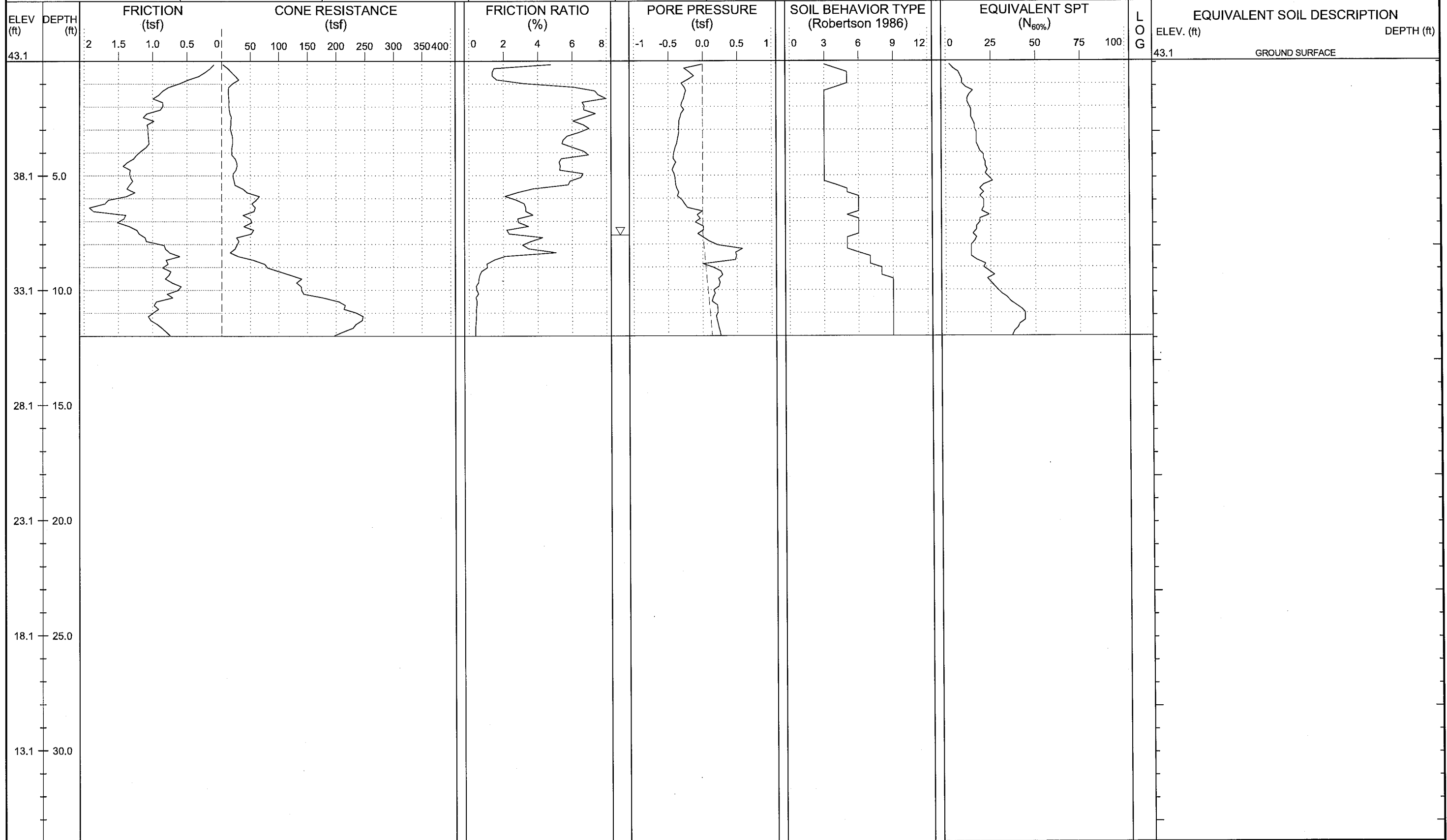


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

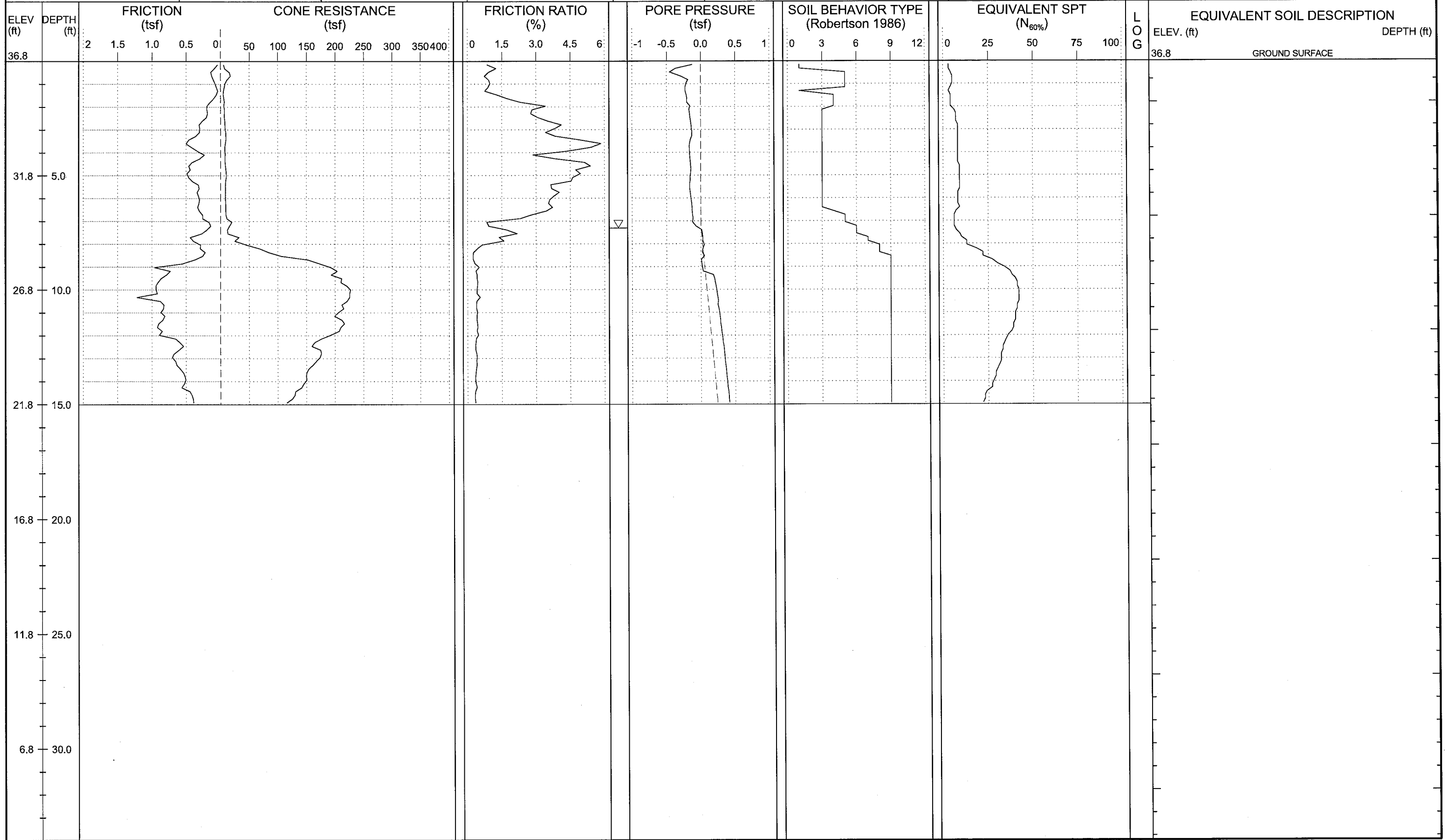
SHEET NO.: 24  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.6, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-068	STATION: 68+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 43.1 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 413,257	EASTING: 2,524,352	START DATE: 09/07/12	COMP. DATE: 09/07/12	SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.3, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
BORING NO.: L-072	STATION: 72+00	OFFSET: 1ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 36.8 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 413,651	EASTING: 2,524,422	START DATE: 09/11/12	COMP. DATE: 09/11/12	SURFACE WATER DEPTH: N/A	

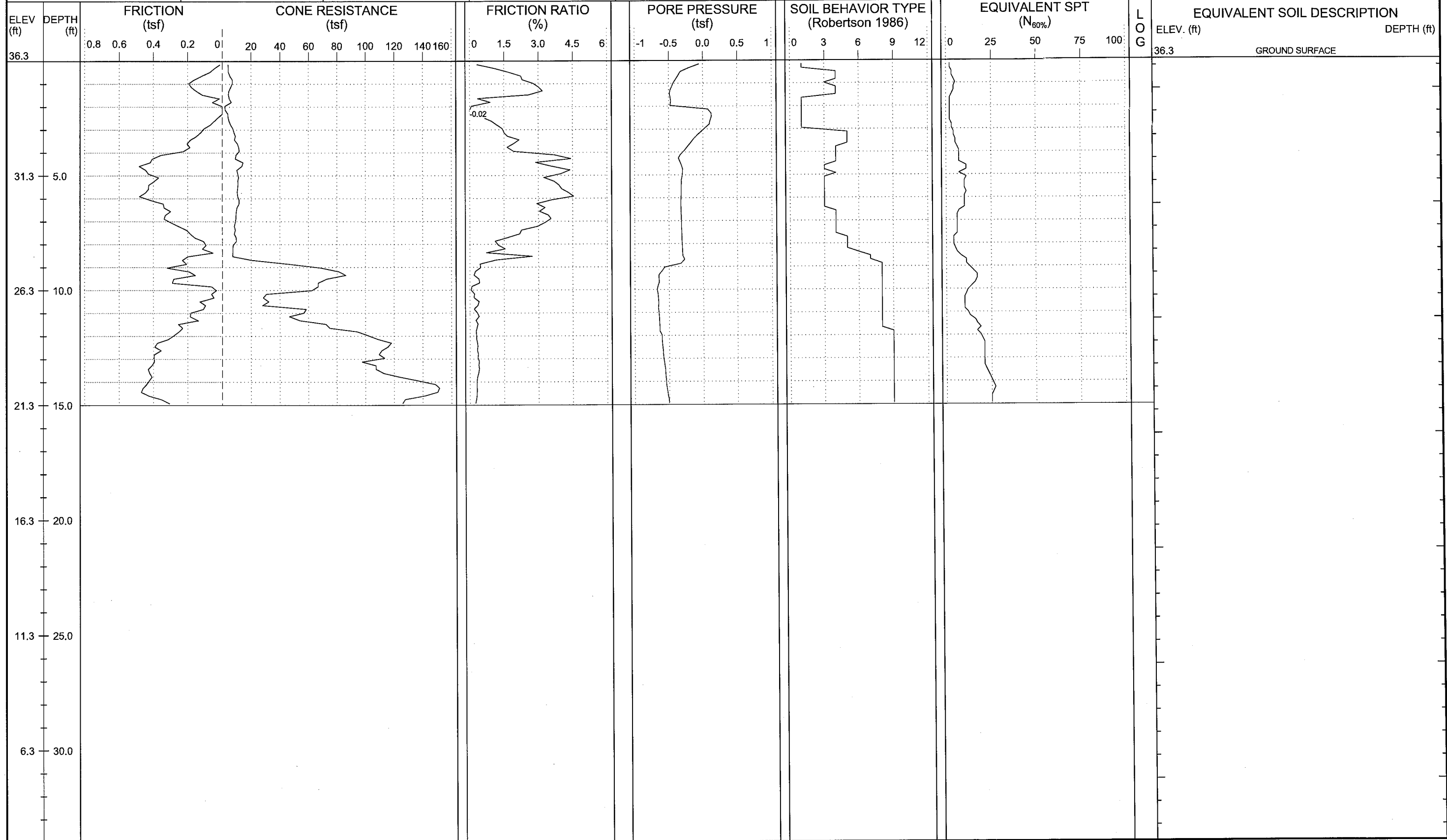




**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 26  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry / 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-074	STATION: 74+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 36.3 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 413,848	EASTING: 2,524,459	START DATE: 09/11/12	COMP. DATE: 09/11/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



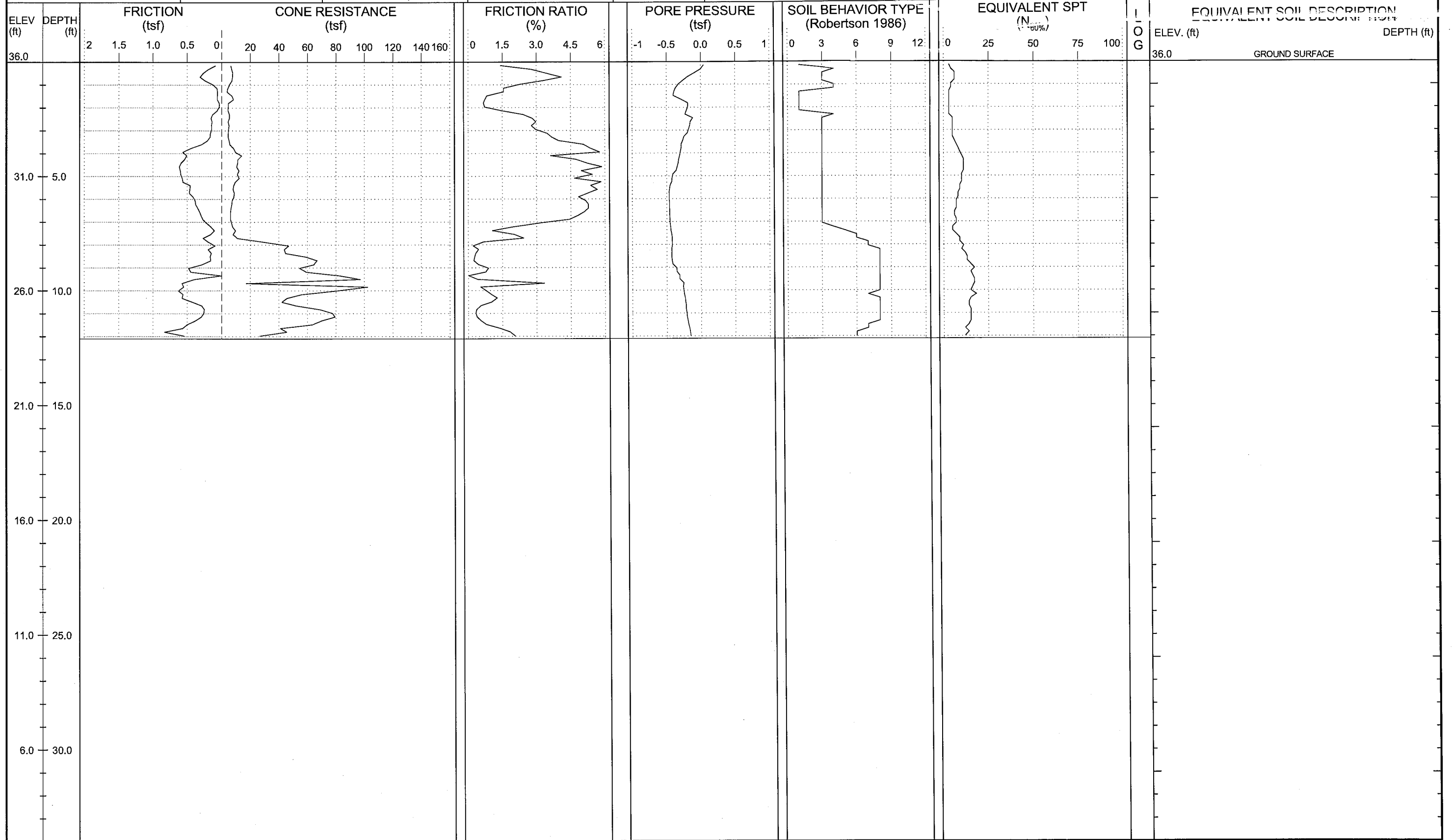


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 27  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-076	STATION: 76+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. N/A	ROD TYPE: Pre-strung
COLLAR ELEV.: 36.0 ft	TOTAL DEPTH: 12.1 ft	NORTHING: 414,044	EASTING: 2,524,494	START DATE: 09/11/12	CONC. DATE: 09/11/12
				CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
				CONE ID: DSA1123	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



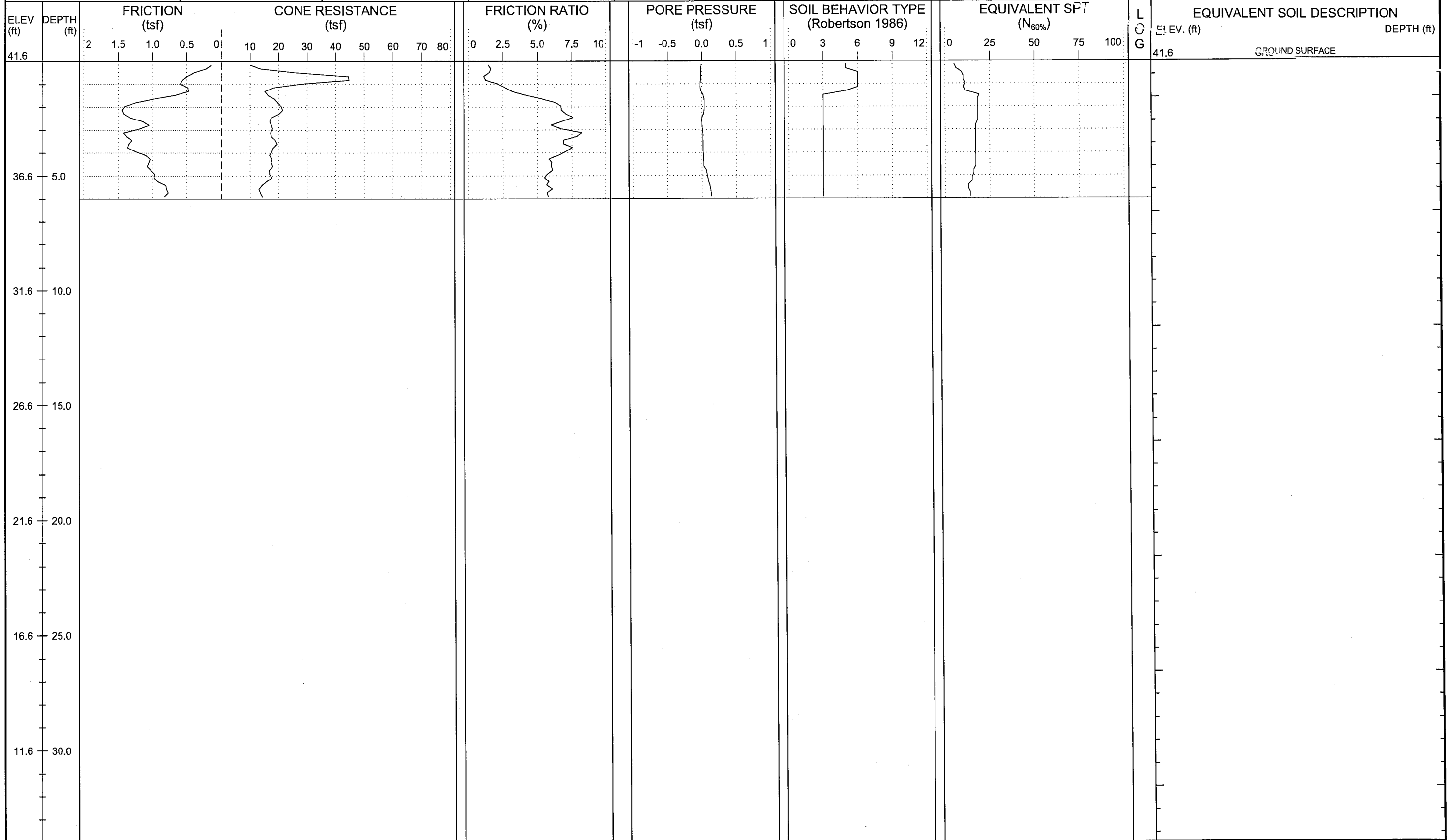


**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH

SHEET NO.:	28
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-078	STATION: 78+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 414,241	EASTING: 2,524,530	24 HR. N/A	START DATE: 09/06/12
				COMP. DATE: 09/06/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

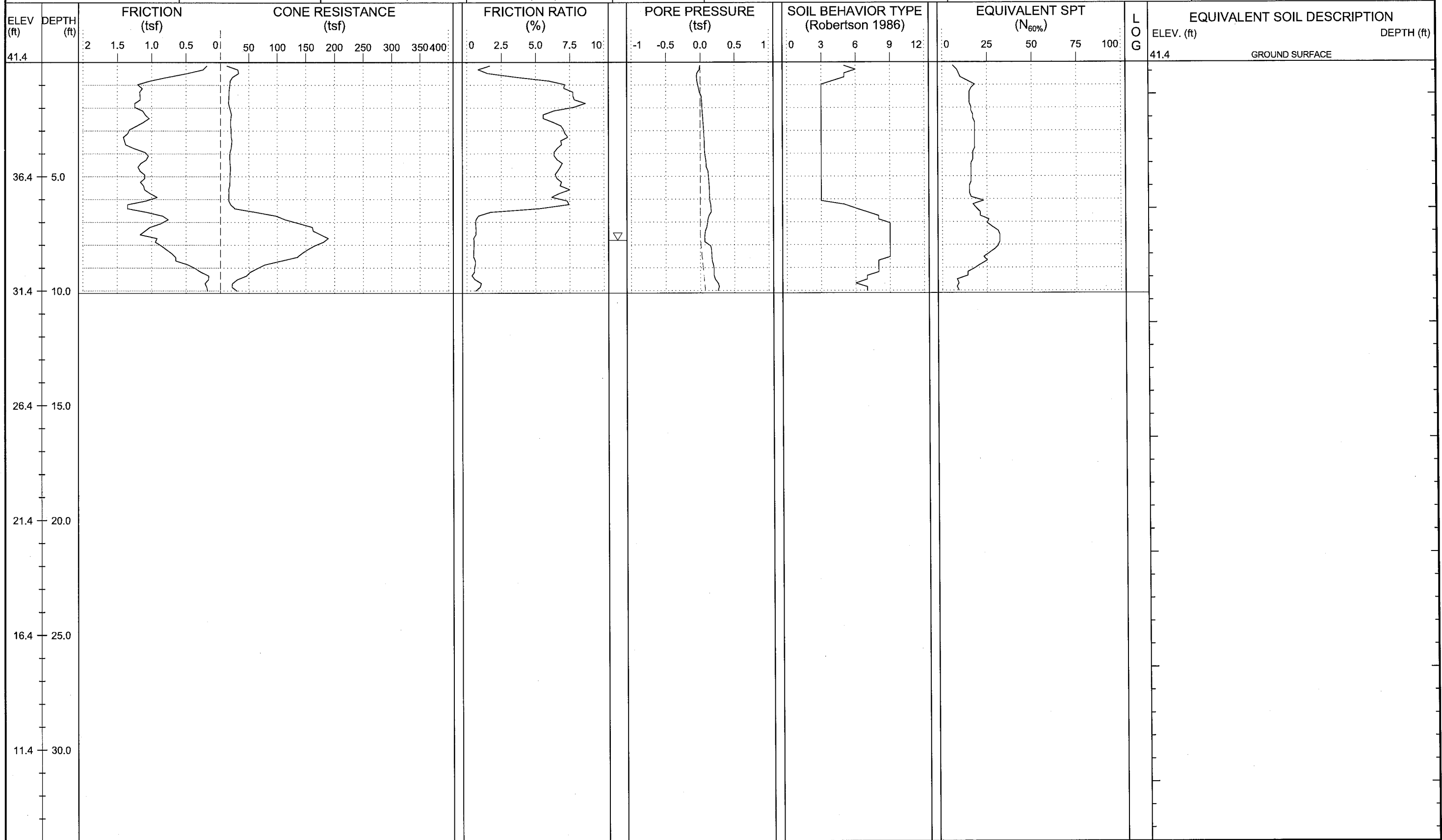




# NCDOT GEOTECHNICAL ENGINEERING UNIT

SHEET NO.:	29
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.8, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
BORING NO.: L-082	STATION: 82+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 41.4 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 414,635	EASTING: 2,524,601	START DATE: 09/06/12	COMP. DATE: 09/06/12	SURFACE WATER DEPTH: N/A	

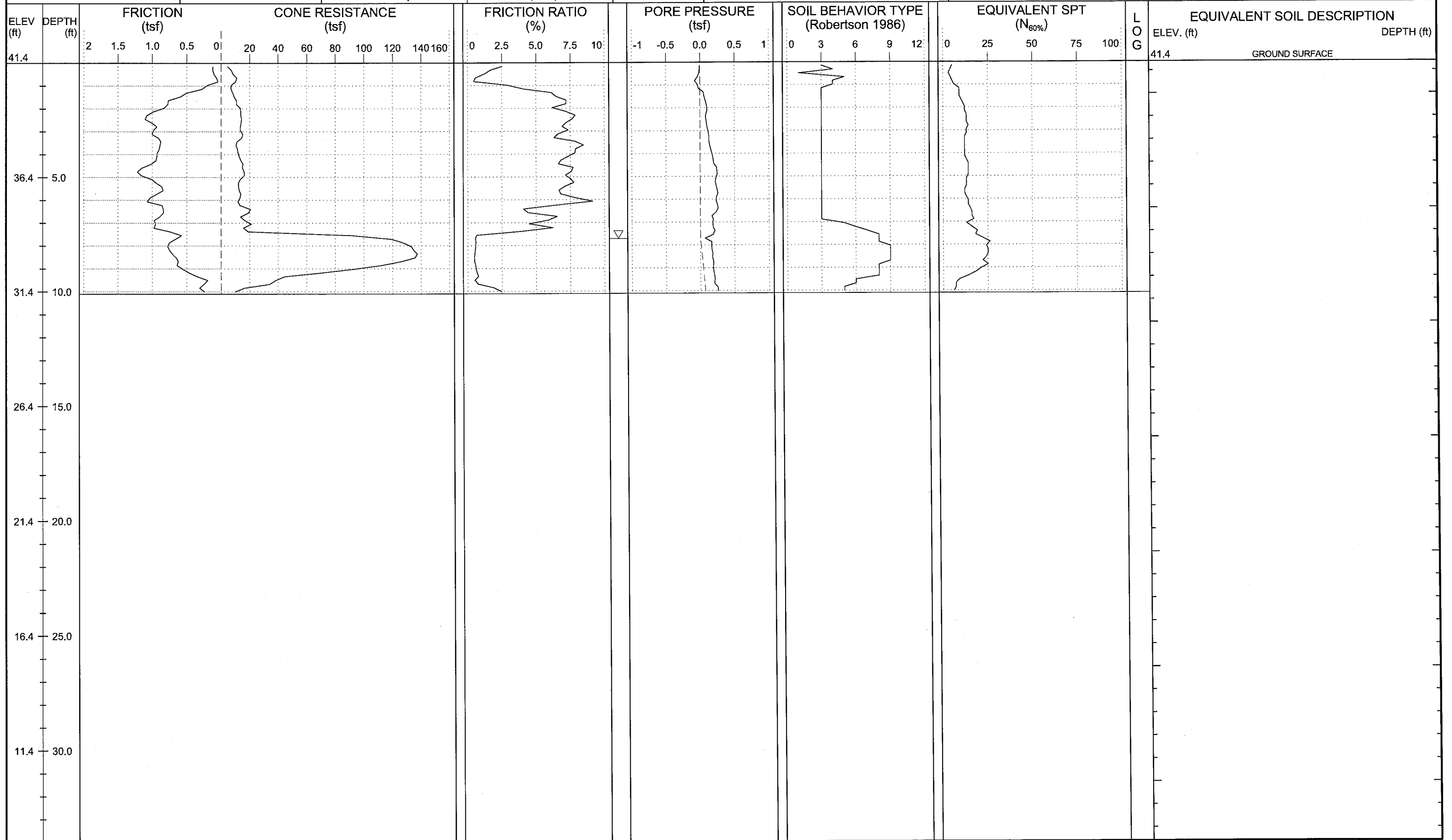




# NCDOT GEOTECHNICAL ENGINEERING UNIT

SHEET NO.:	30
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.7, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-084	STATION: 84+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.4 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 414,832	EASTING: 2,524,636	START DATE: 09/06/12	CONE ID: DSG0867
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					COMP. DATE: 09/06/12
					SURFACE WATER DEPTH: N/A



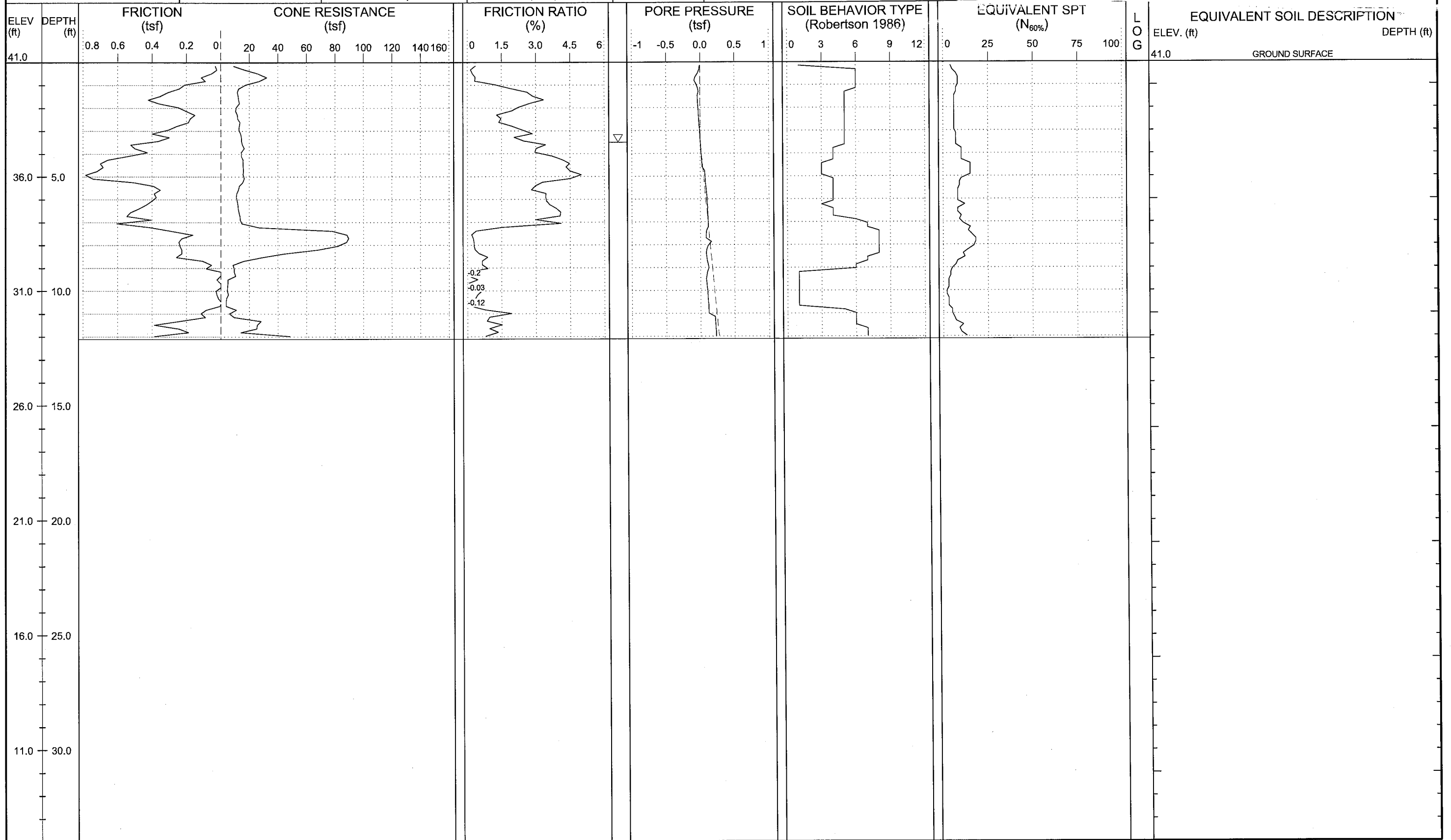


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 31  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 3.5, 24 HR. N/A	DRILL METHOD: CPT / DPT	DRILLER: Ron Stewart
BORING NO.: L-086	STATION: 86+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
COLLAR ELEV.: 41.0 ft	TOTAL DEPTH: 12.1 ft	NORTHING: 415,029	EASTING: 2,524,672	START DATE: 09/05/12	SURFACE WATER DEPTH: N/A
				CONE TYPE: 1.44 Vertek Piezocone	CONC. DATE: 09/05/12





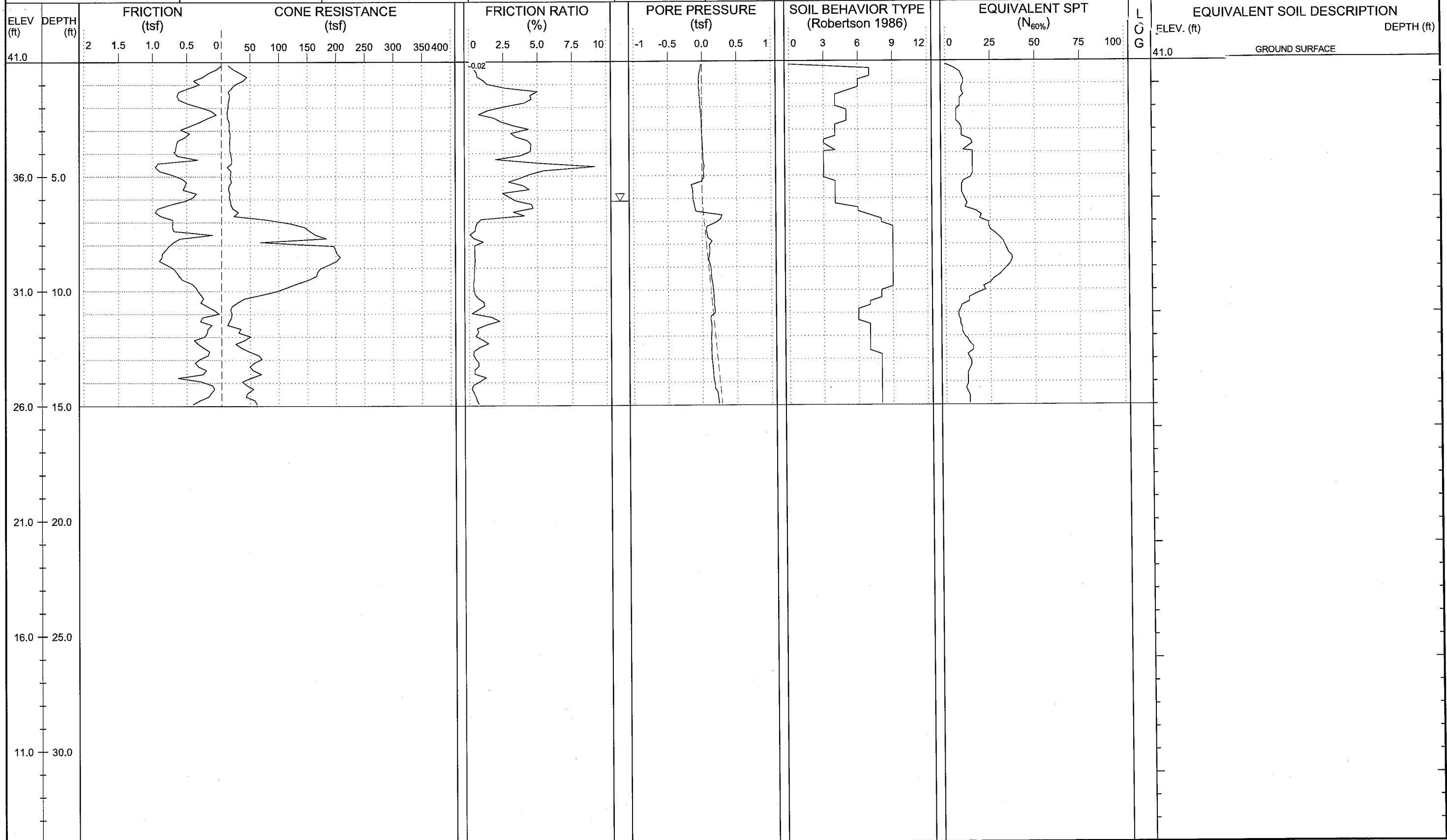


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 32  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-088	STATION: 88+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 41.0 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 415,225	EASTING: 2,524,707	START DATE: 09/05/12	COMP. DATE: 09/05/12	SURFACE WATER DEPTH: N/A	



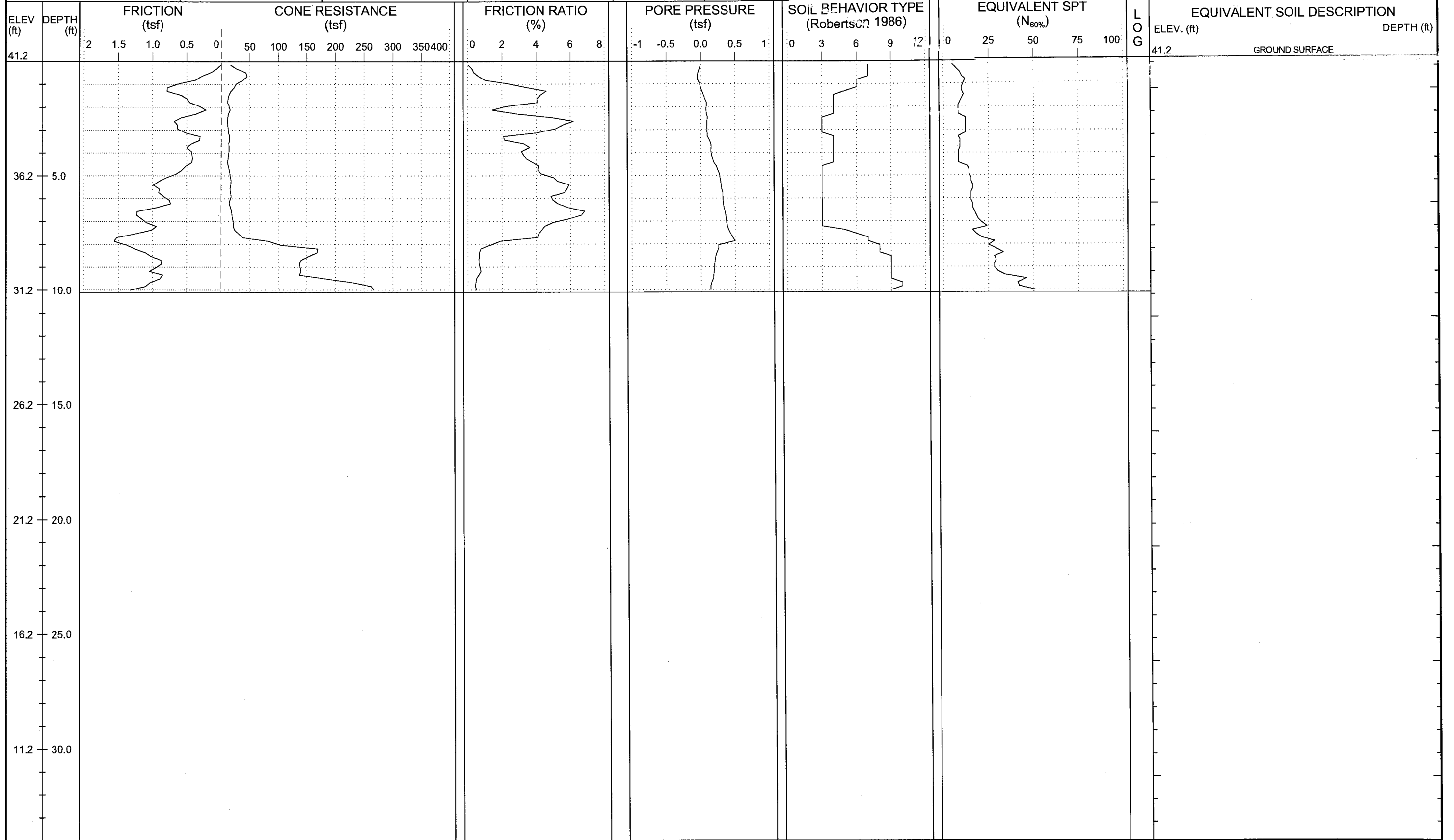


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 33  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
BORING NO.: L-092	STATION: 92+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.
COLLAR ELEV.: 41.2 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 415,619	EASTING: 2,524,778	24 HR. N/A	START DATE: 09/06/12	COMP. DATE: 09/06/12	SURFACE WATER DEPTH: N/A



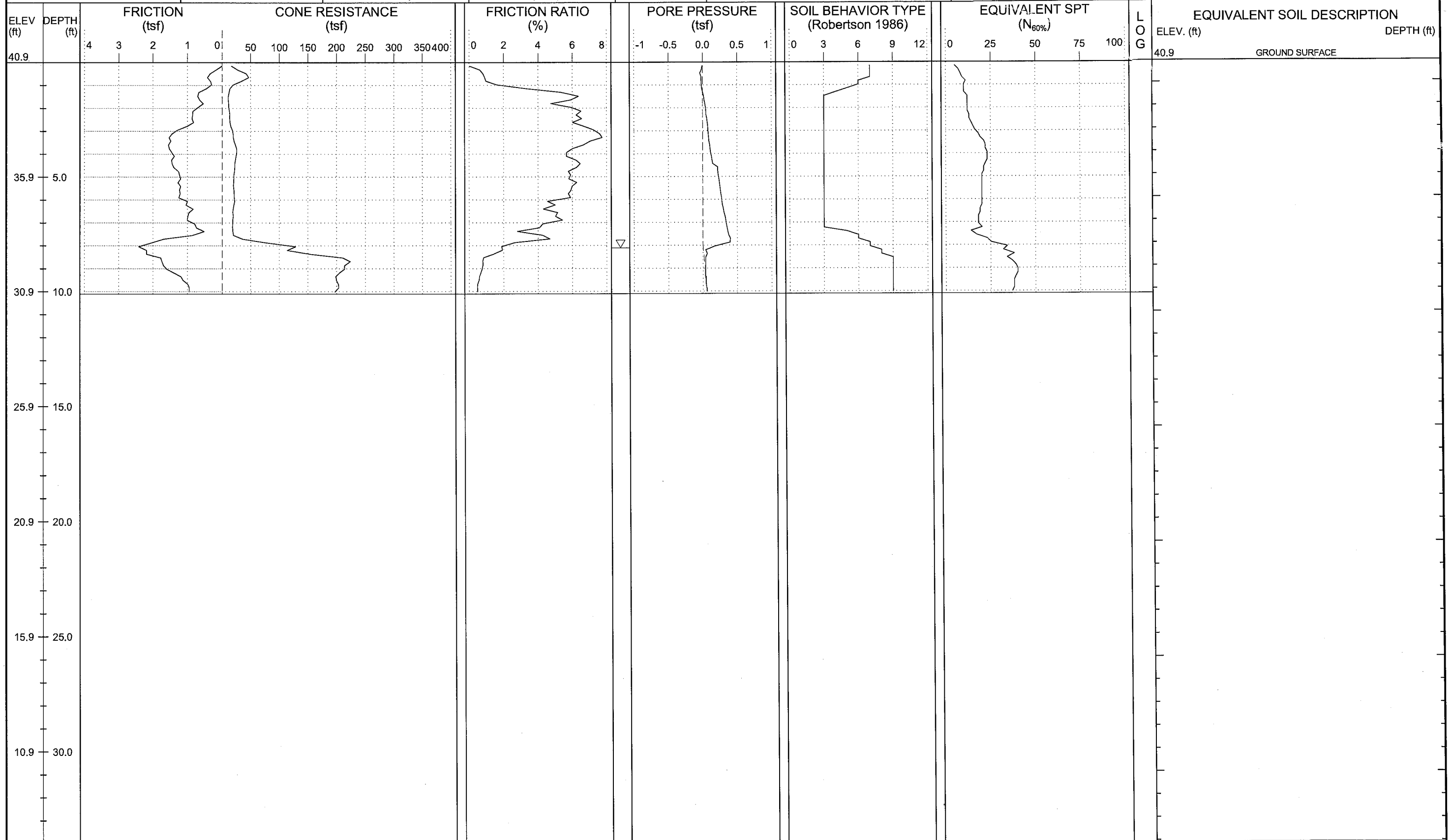


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 34  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				DRILL METHOD: CPT / DPT	DRILLER: Cory Robison
BORING NO.: L-094	STATION: 94+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
COLLAR ELEV.: 40.9 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 415,816	EASTING: 2,524,814	START DATE: 09/06/12	SURFACE WATER DEPTH: N/A
		GROUND WTR (ft)		CONE TYPE: 1.44 Vertek Piezocone	
		0 HR. 8.1		CONE ID: DSG0867	
		24 HR. N/A		COMP. DATE: 09/06/12	



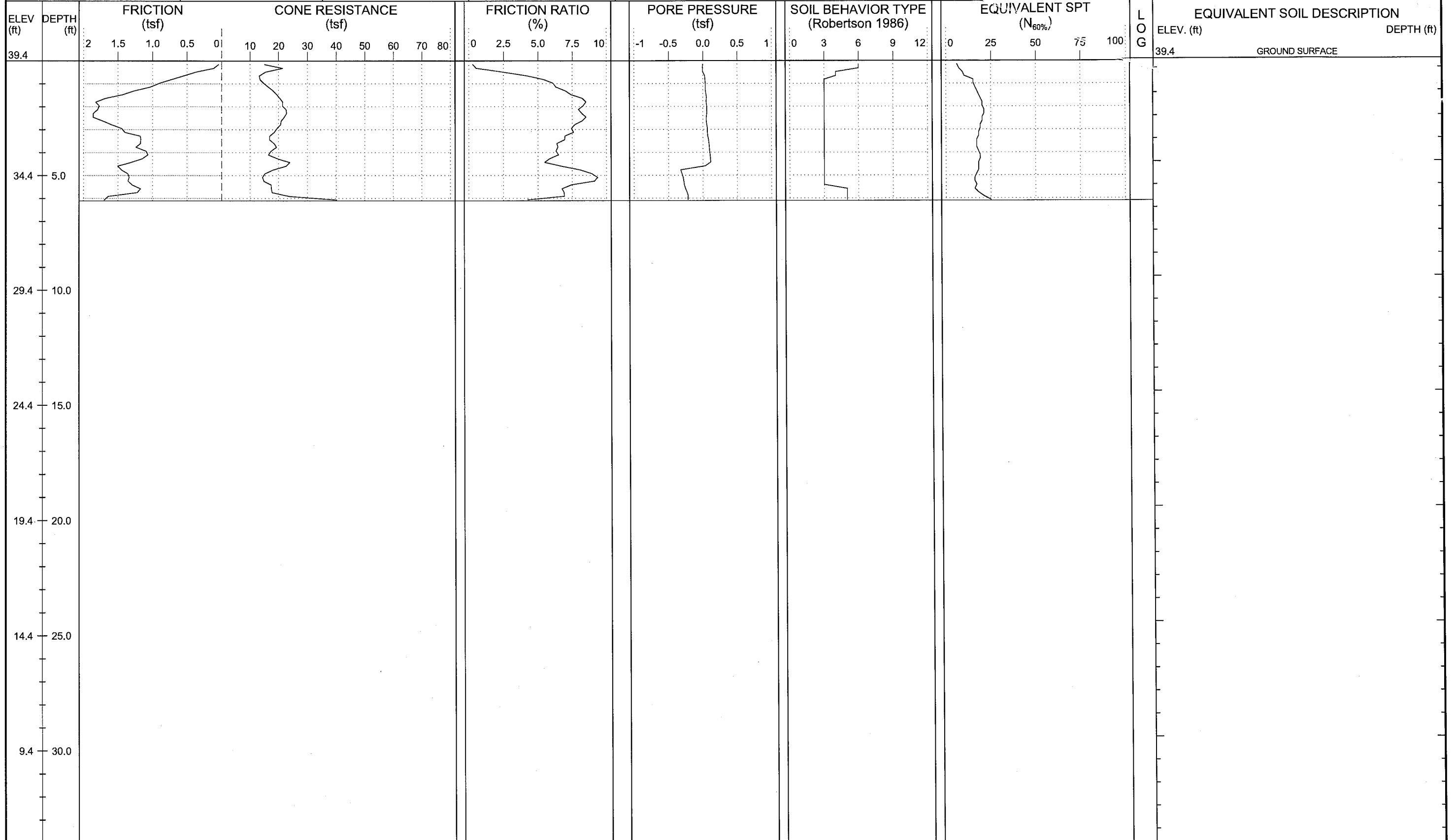


**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH

SHEET NO.:	35
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-096	STATION: 96+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 39.4 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 416,013	EASTING: 2,524,849	24 HR. N/A	START DATE: 09/06/12
				CONC. DATE: 09/06/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



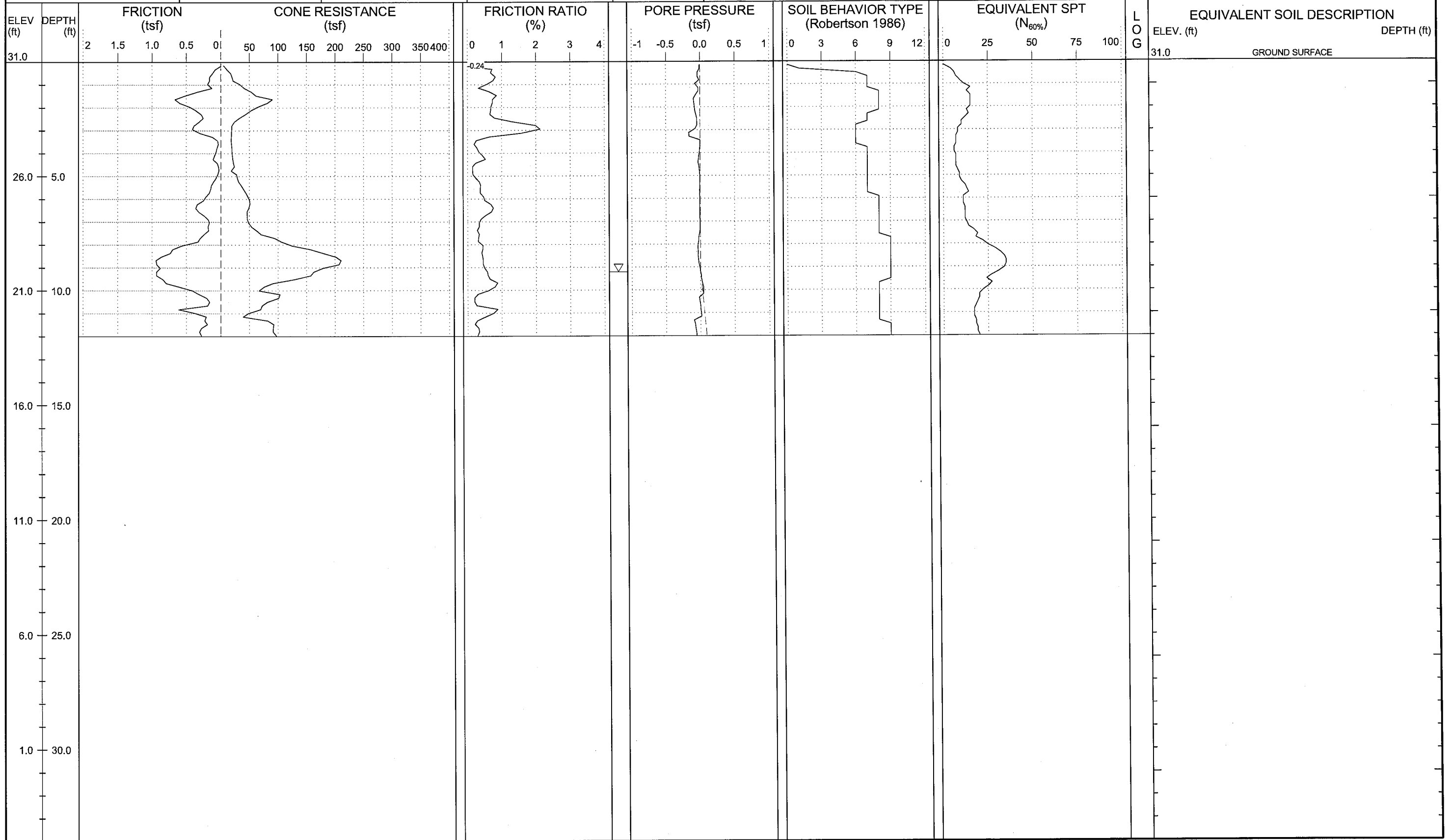


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 36  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 9.2, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-098	STATION: 98+00	OFFSET: 50ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 31.0 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 416,218	EASTING: 2,524,835	START DATE: 09/05/12	COMP. DATE: 09/05/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



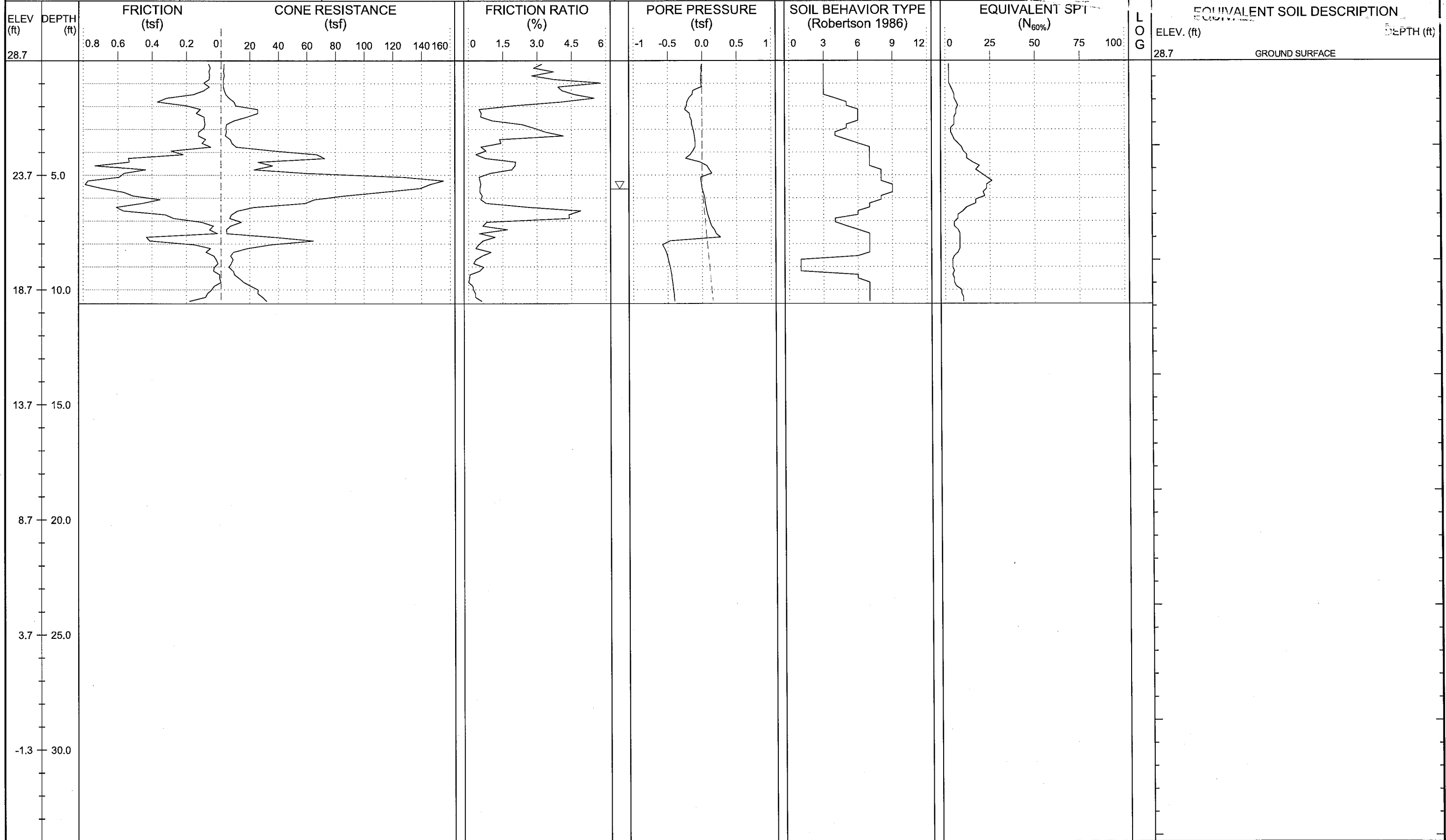


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 37  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-102	STATION: 102+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 5.6	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.
COLLAR ELEV.: 28.7 ft	TOTAL DEPTH: 10.6 ft	NORTHING: 416,602	EASTING: 2,524,964	24 HR. N/A	START DATE: 08/30/12	COMP. DATE: 09/04/12	SURFACE WATER DEPTH: N/A



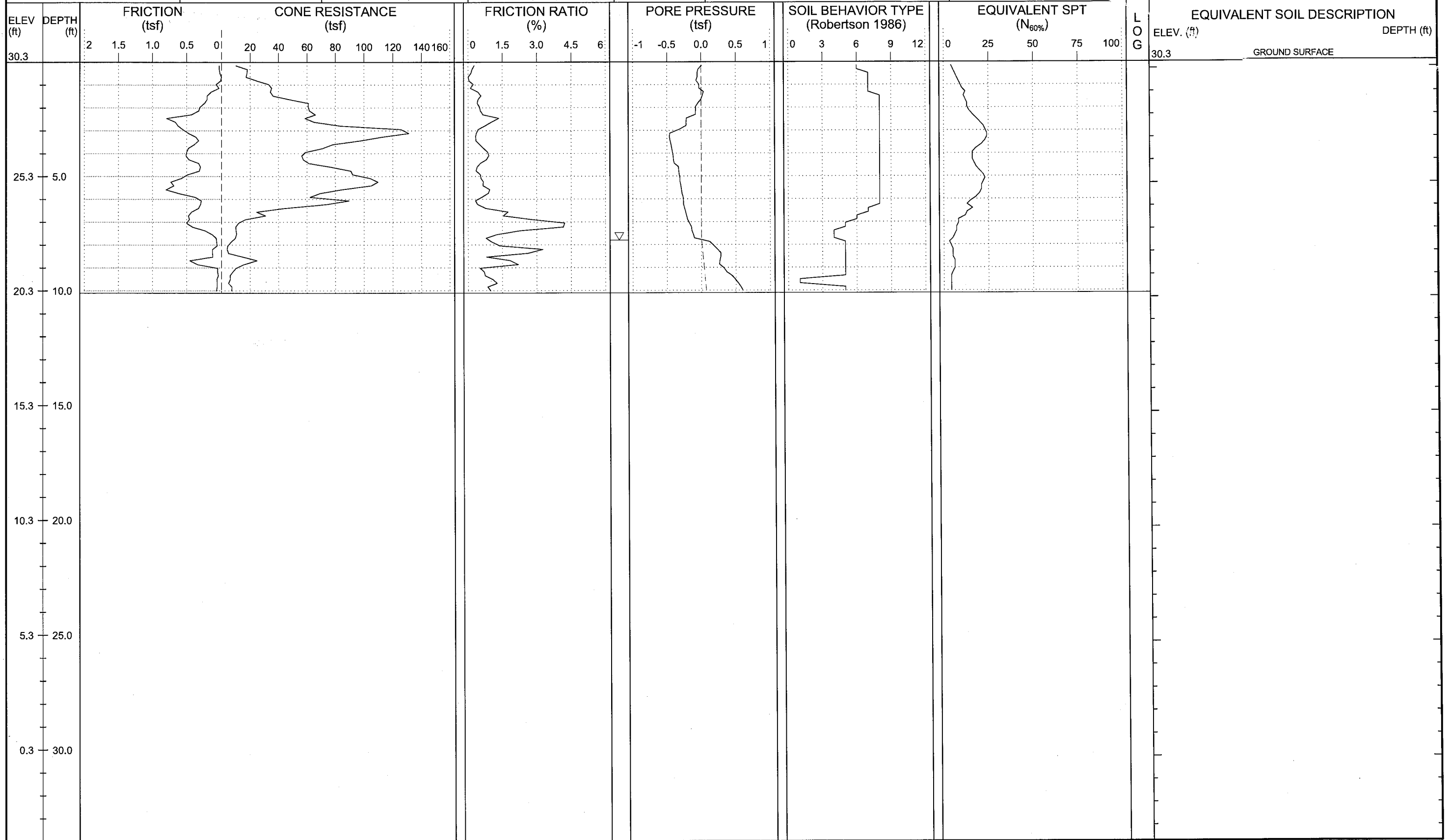


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	38
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-104	STATION: 104+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 7.8	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.
COLLAR ELEV.: 30.3 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 416,796	EASTING: 2,525,010	24 HR. N/A	START DATE: 08/30/12	COMP. DATE: 09/04/12	SURFACE WATER DEPTH: N/A



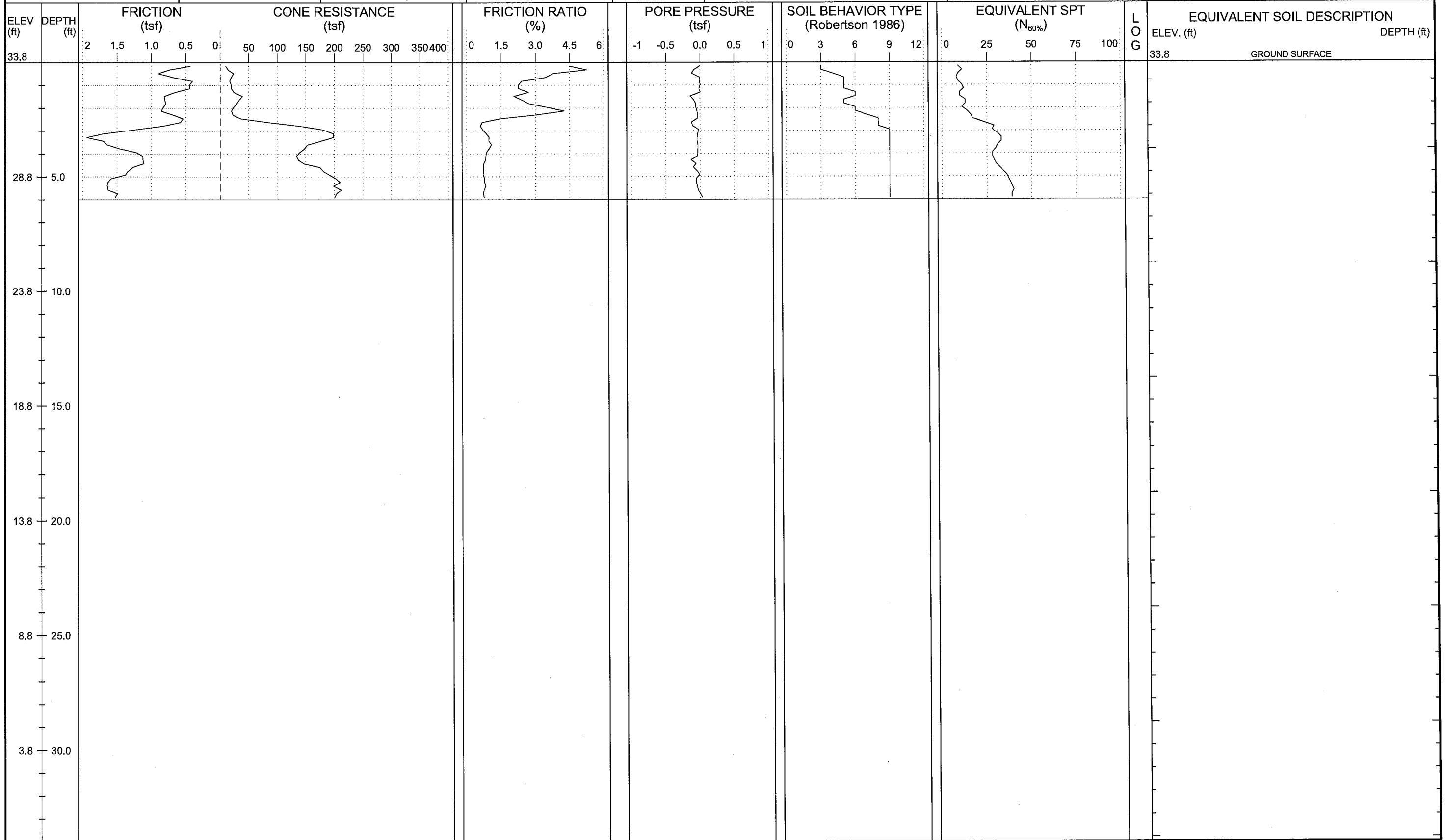


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 39  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-106	STATION: 106+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 416,990	EASTING: 2,525,059	START DATE: 08/30/12	CONE ID: DSG0867
				24 HR. N/A	COMP. DATE: 09/04/12
				DRILLER: Ron Stewart	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	







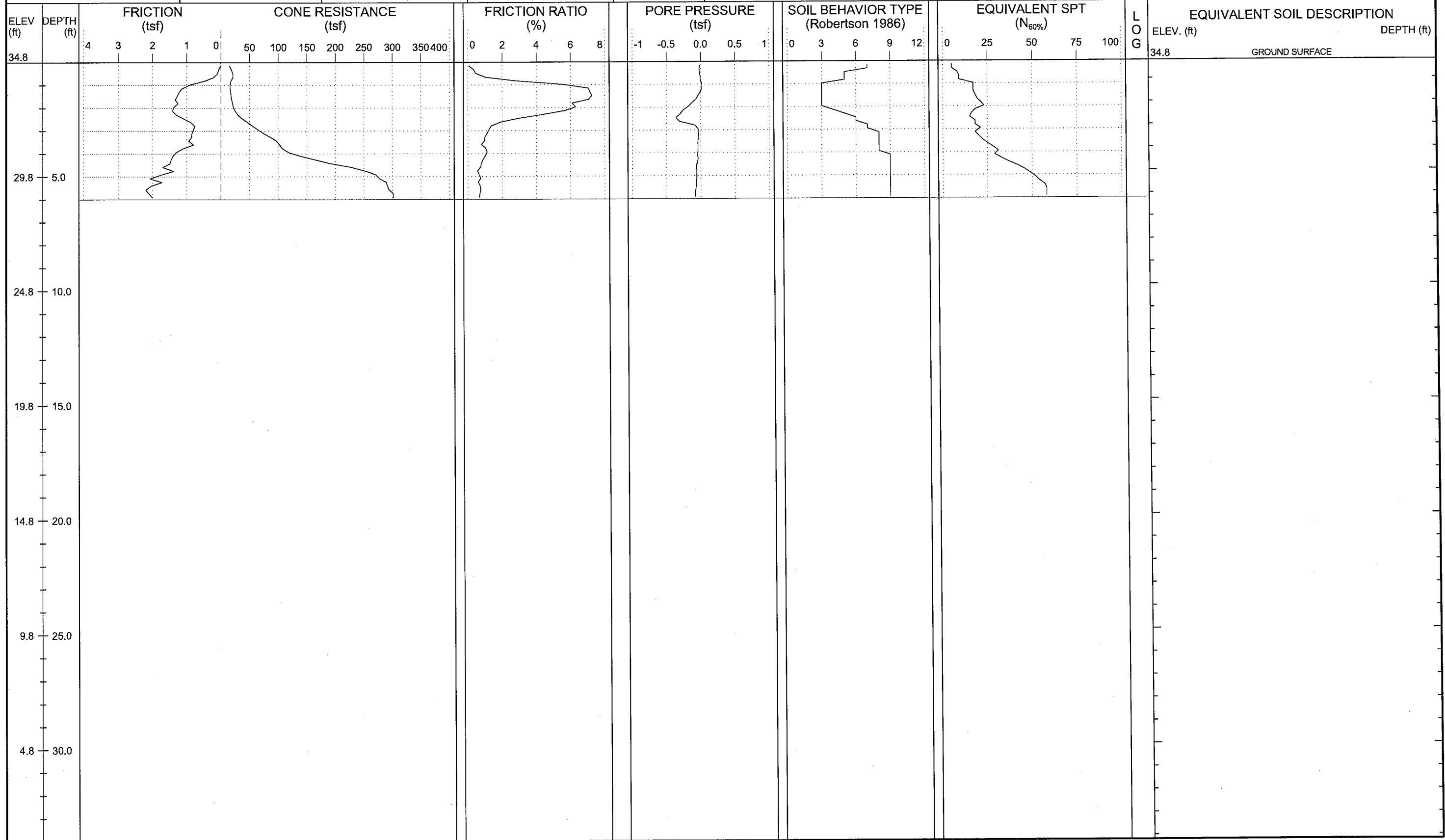


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 41  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONslow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONslow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-110	STATION: 110+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 34.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,374	EASTING: 2,525,170	START DATE: 08/30/12	CONE ID: DSG0867
			24 HR. N/A	COMP. DATE: 08/30/12	DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





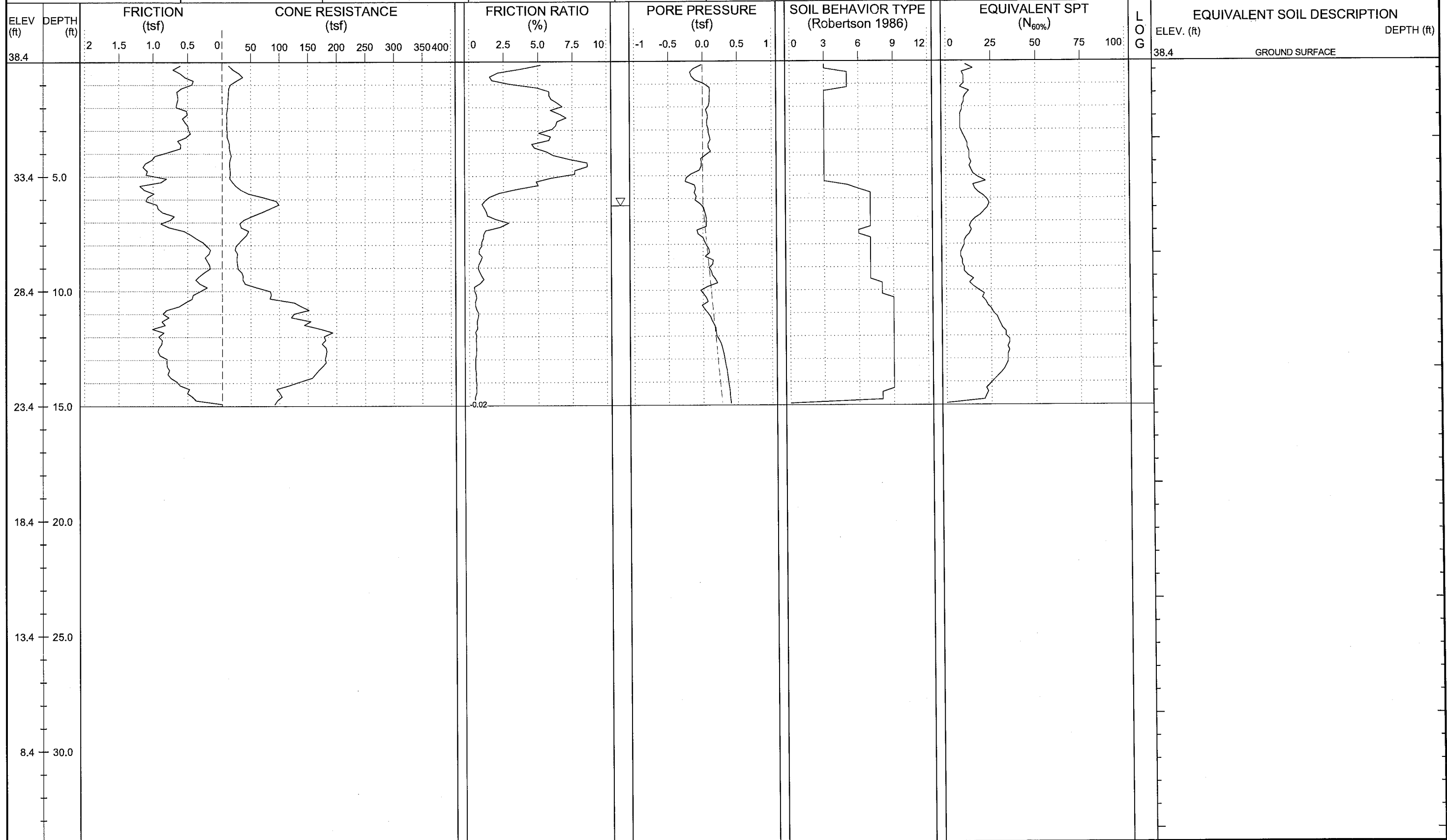


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

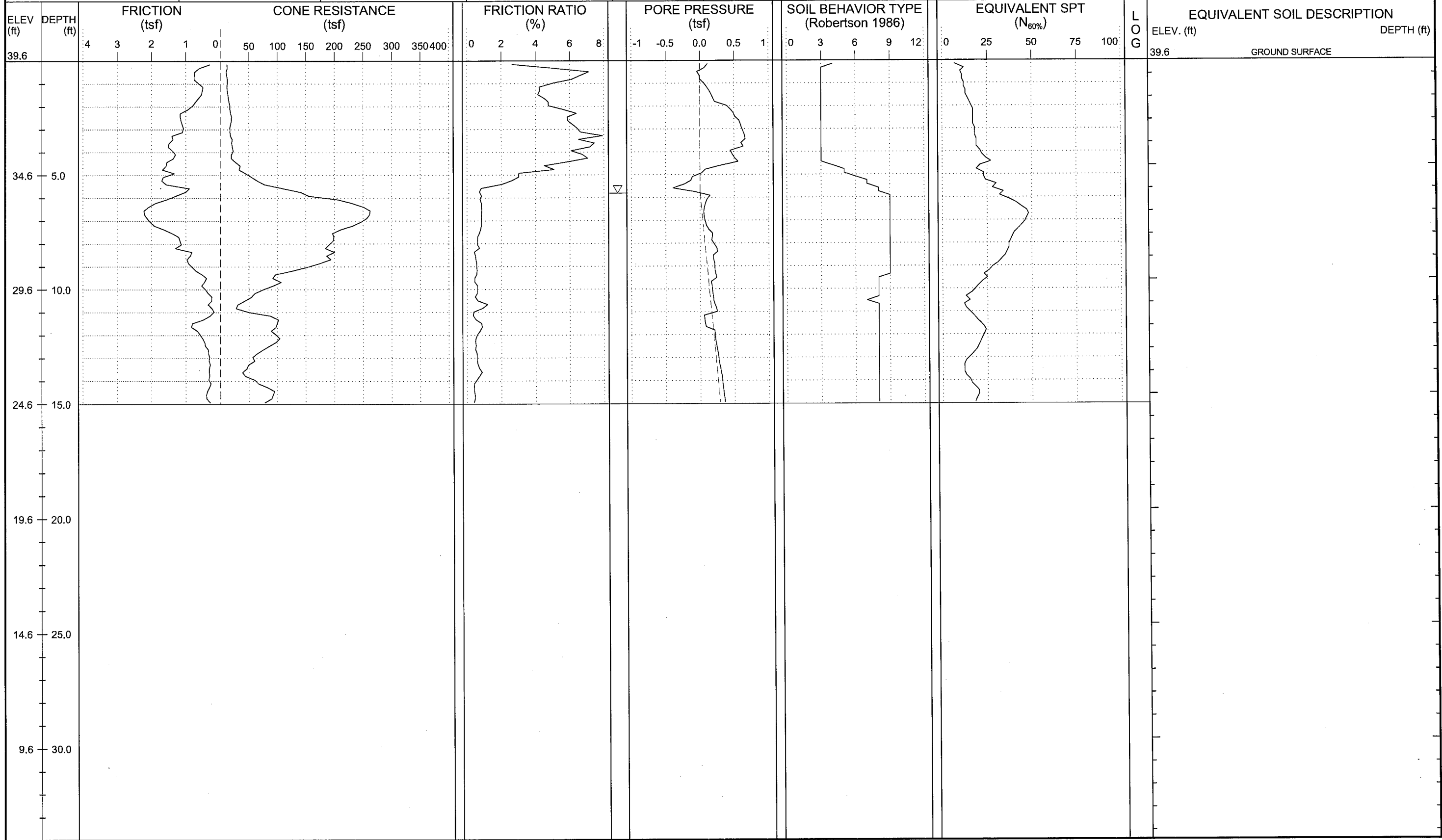
SHEET NO.: 43  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-114	STATION: 114+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.4 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 417,754	EASTING: 2,525,297	START DATE: 08/30/12	CONE ID: DSG0867
				COMP. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.8, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-116	STATION: 115+85	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 39.6 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 417,927	EASTING: 2,525,360	START DATE: 08/30/12	CONE ID: DSG0867
				COMP. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



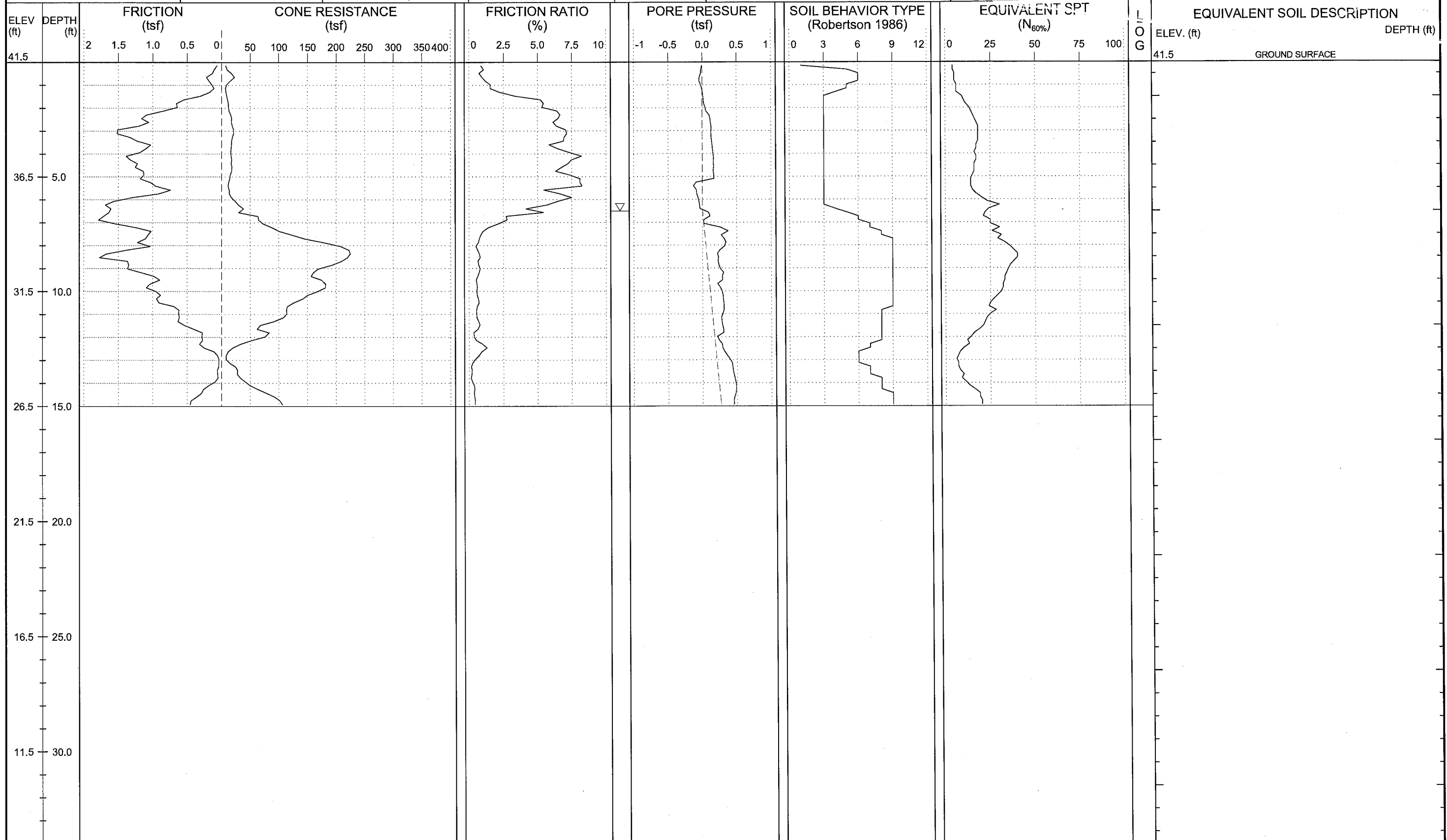


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 45  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.5, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-118	STATION: 118+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.5 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 418,128	EASTING: 2,525,438	START DATE: 08/29/12	CONE ID: DSG0867
				COMP. DATE: 08/29/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



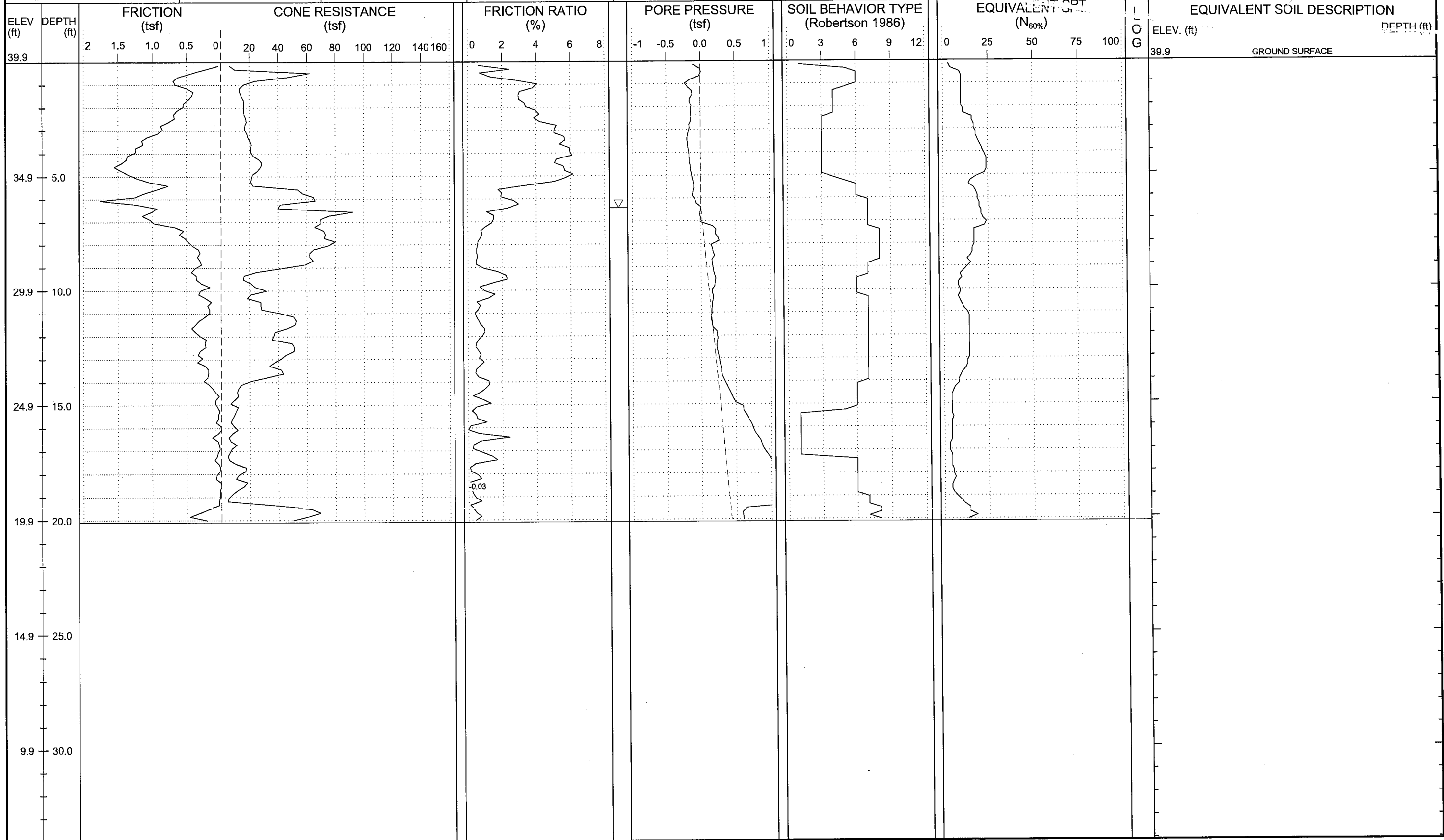


# NCDOT GEOTECHNICAL ENGINEERING UNIT

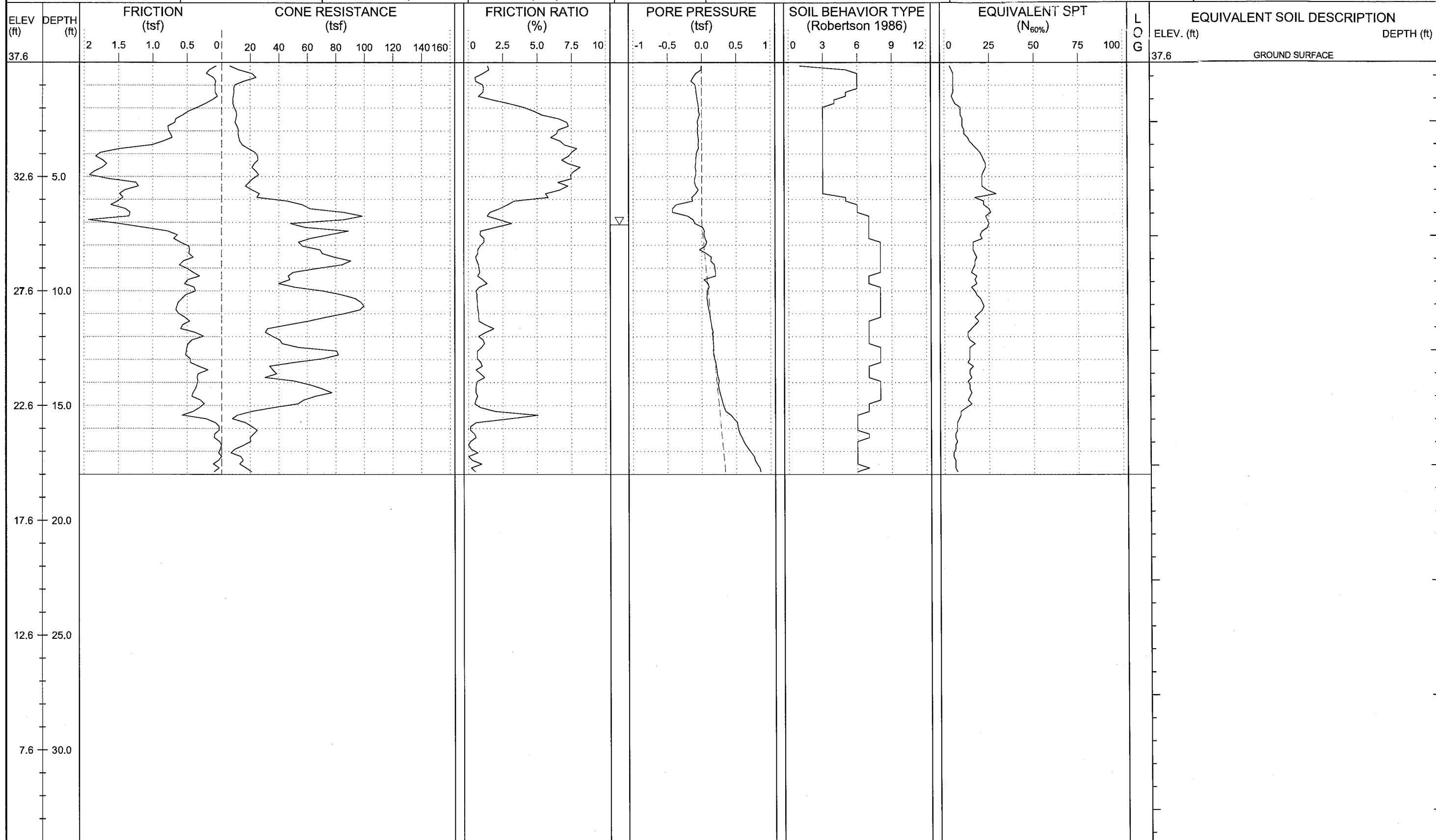
ENGLISH

SHEET NO.: 46  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.4, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
BORING NO.: L-122	STATION: 122+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 39.9 ft	TOTAL DEPTH: 20.1 ft	NORTHING: 418,496	EASTING: 2,525,595	START DATE: 08/28/12	COMP. DATE: 08/28/12	SURFACE WATER DEPTH: N/A	



WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 7.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-124	STATION: 124+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 37.6 ft	TOTAL DEPTH: 18.0 ft	NORTHING: 418,679	EASTING: 2,525,675	START DATE: 08/28/12	COMP. DATE: 08/28/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





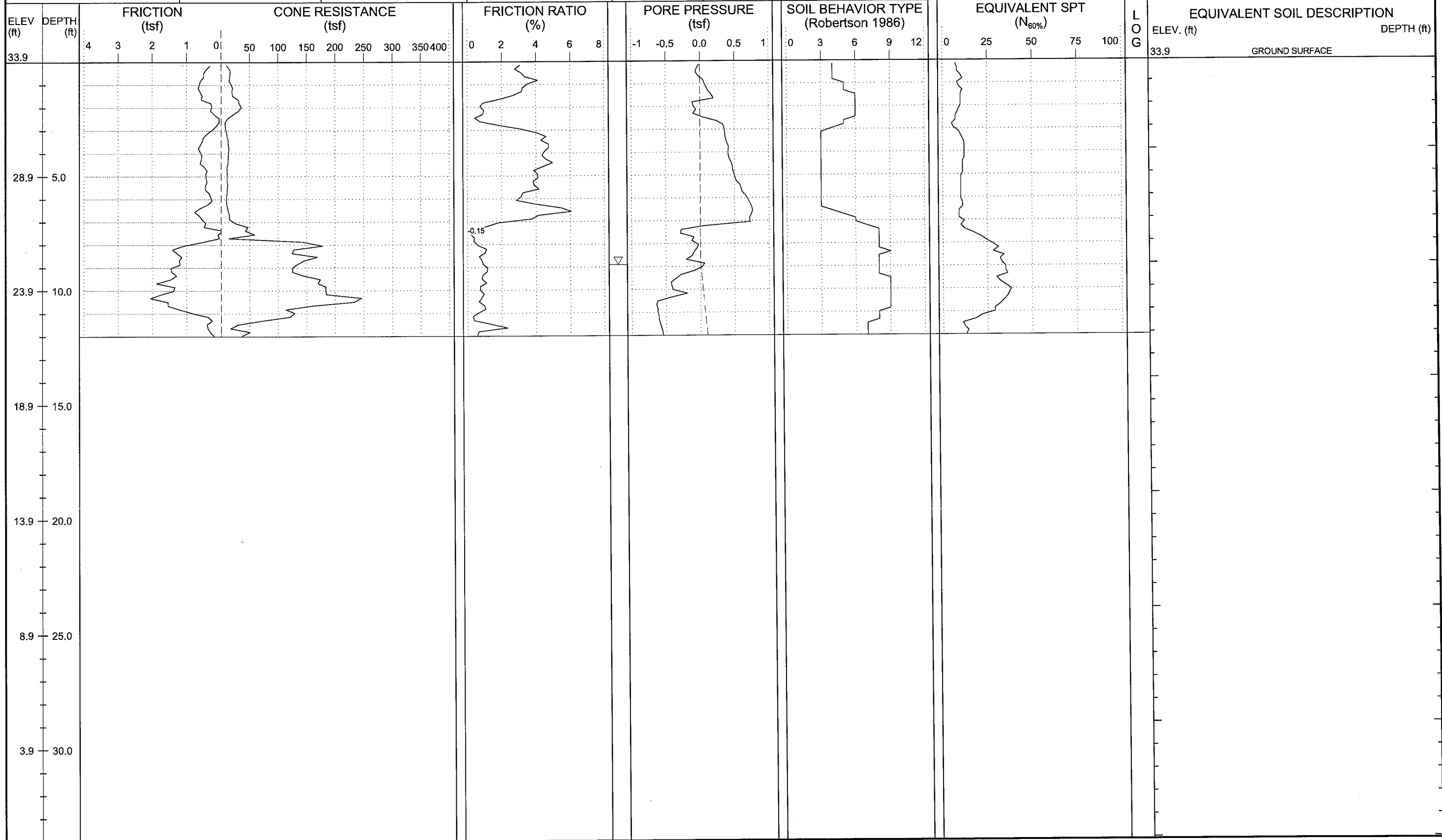


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 48  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.9, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-126	STATION: 126+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.9 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 418,862	EASTING: 2,525,756	START DATE: 08/28/12	CONE ID: DSG0867
				COMP. DATE: 08/28/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



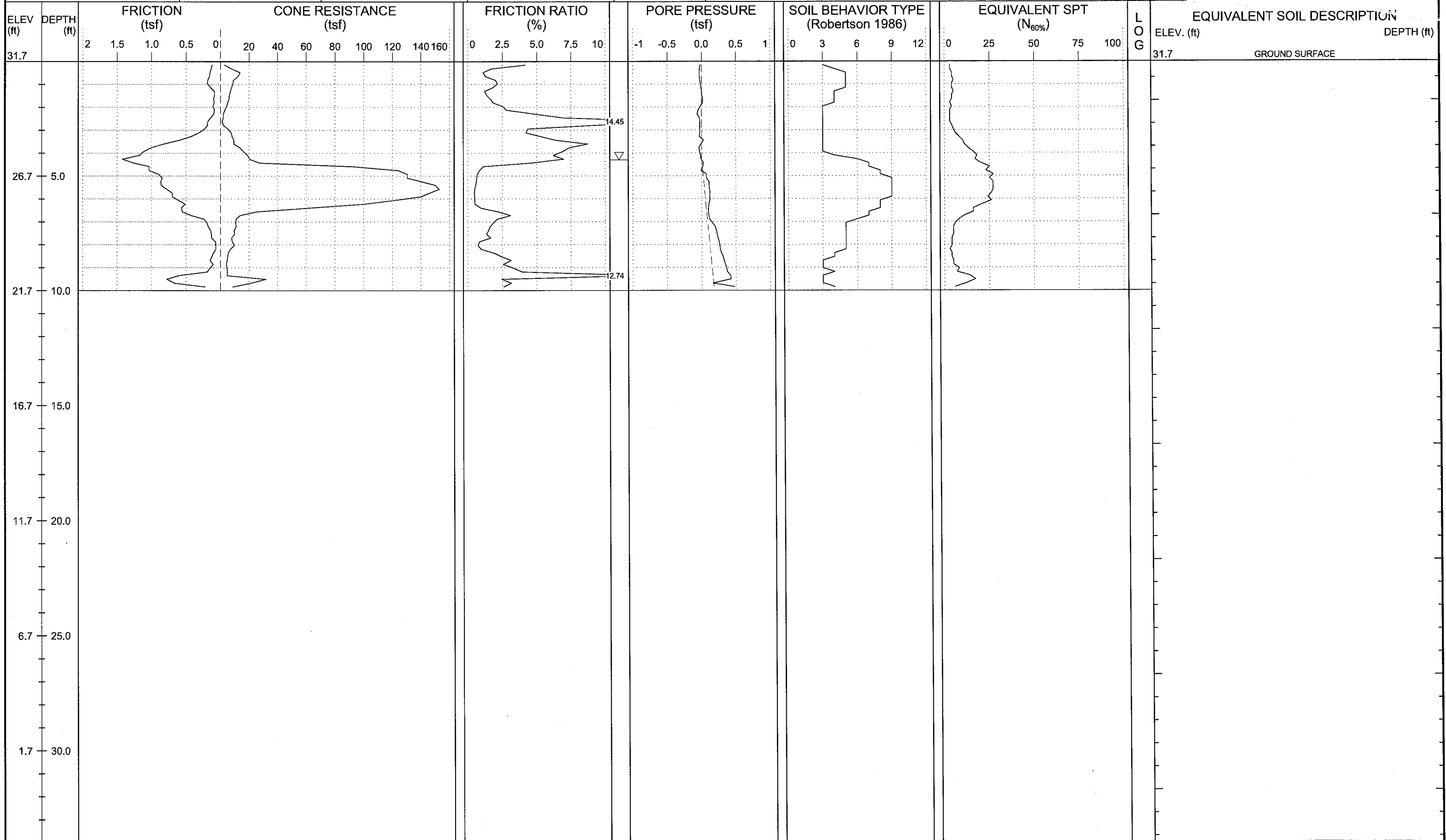


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 49  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogier Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-128	STATION: 128+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 31.7 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 419,045	EASTING: 2,525,836	START DATE: 08/28/12	CONE ID: DSG0867
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

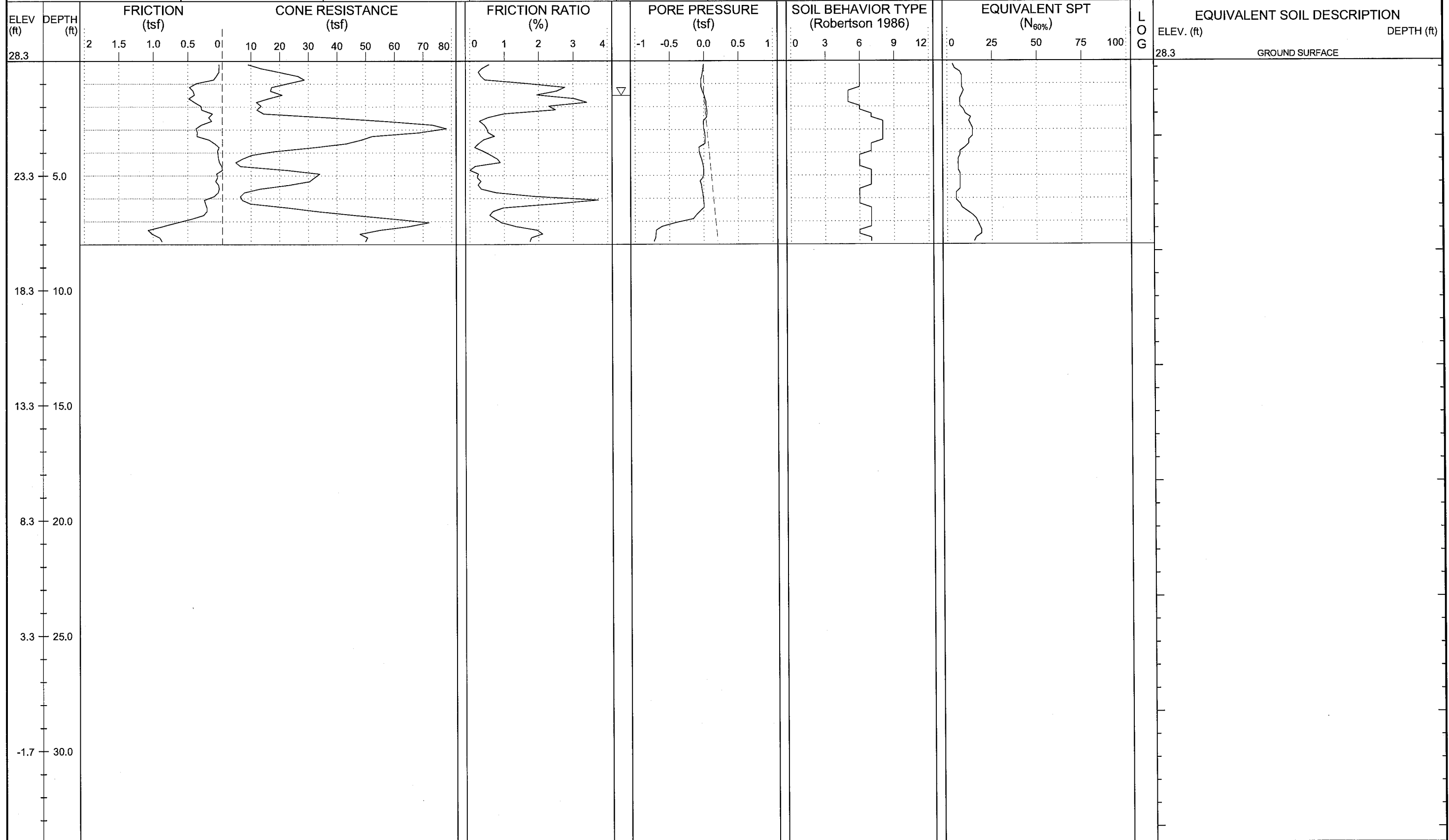




**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 50  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 1.5, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-132	STATION: 132+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 28.3 ft	TOTAL DEPTH: 8.0 ft	NORTHING: 419,411	EASTING: 2,525,997	START DATE: 08/27/12	COMP. DATE: 08/27/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



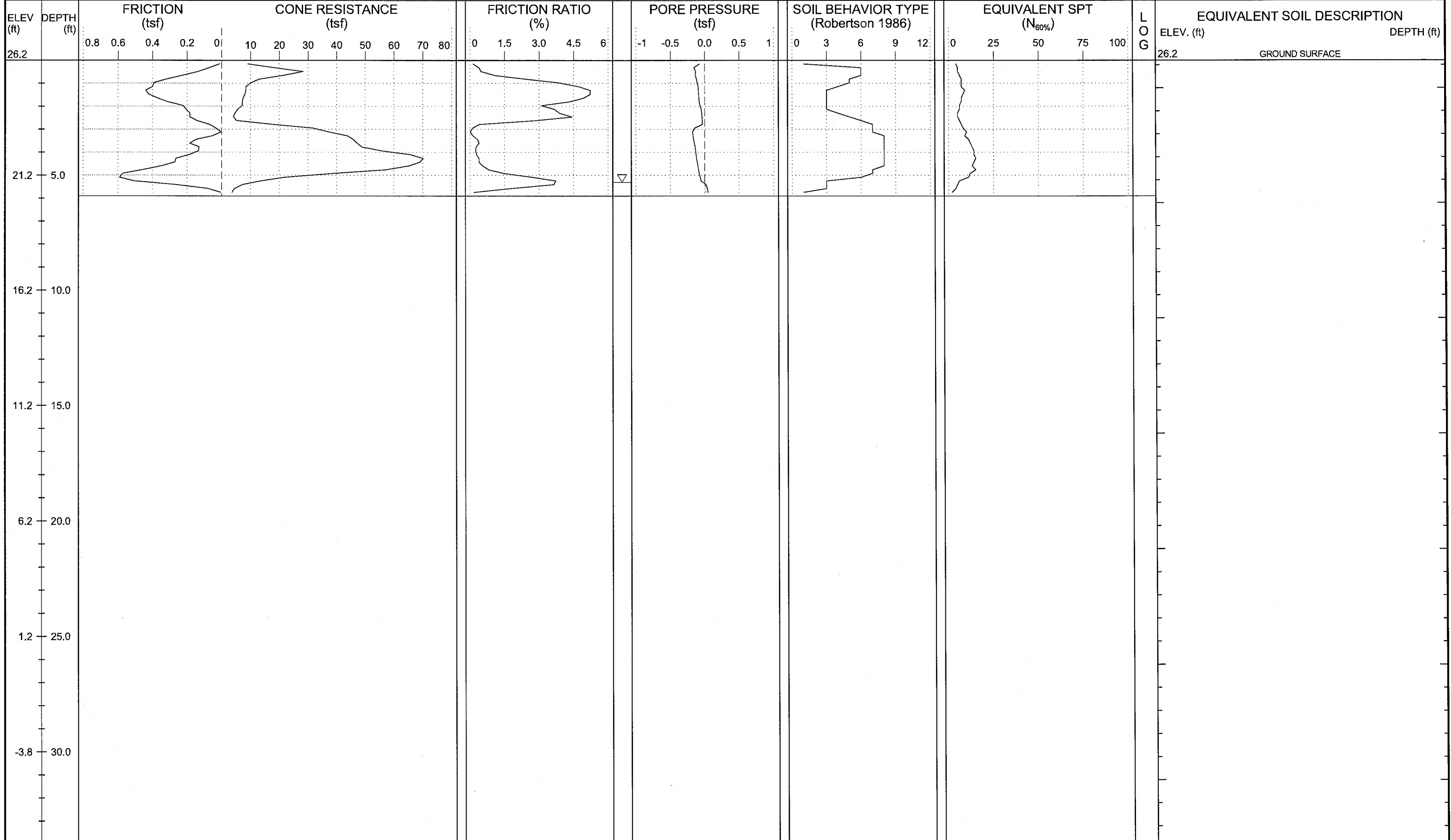


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	51
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-134	STATION: 134+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 5.3	ROD TYPE: Pre-strung
COLLAR ELEV.: 26.2 ft	TOTAL DEPTH: 5.9 ft	NORTHING: 419,594	EASTING: 2,526,078	24 HR. N/A	START DATE: 08/27/12
				CONC. DATE: 08/27/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

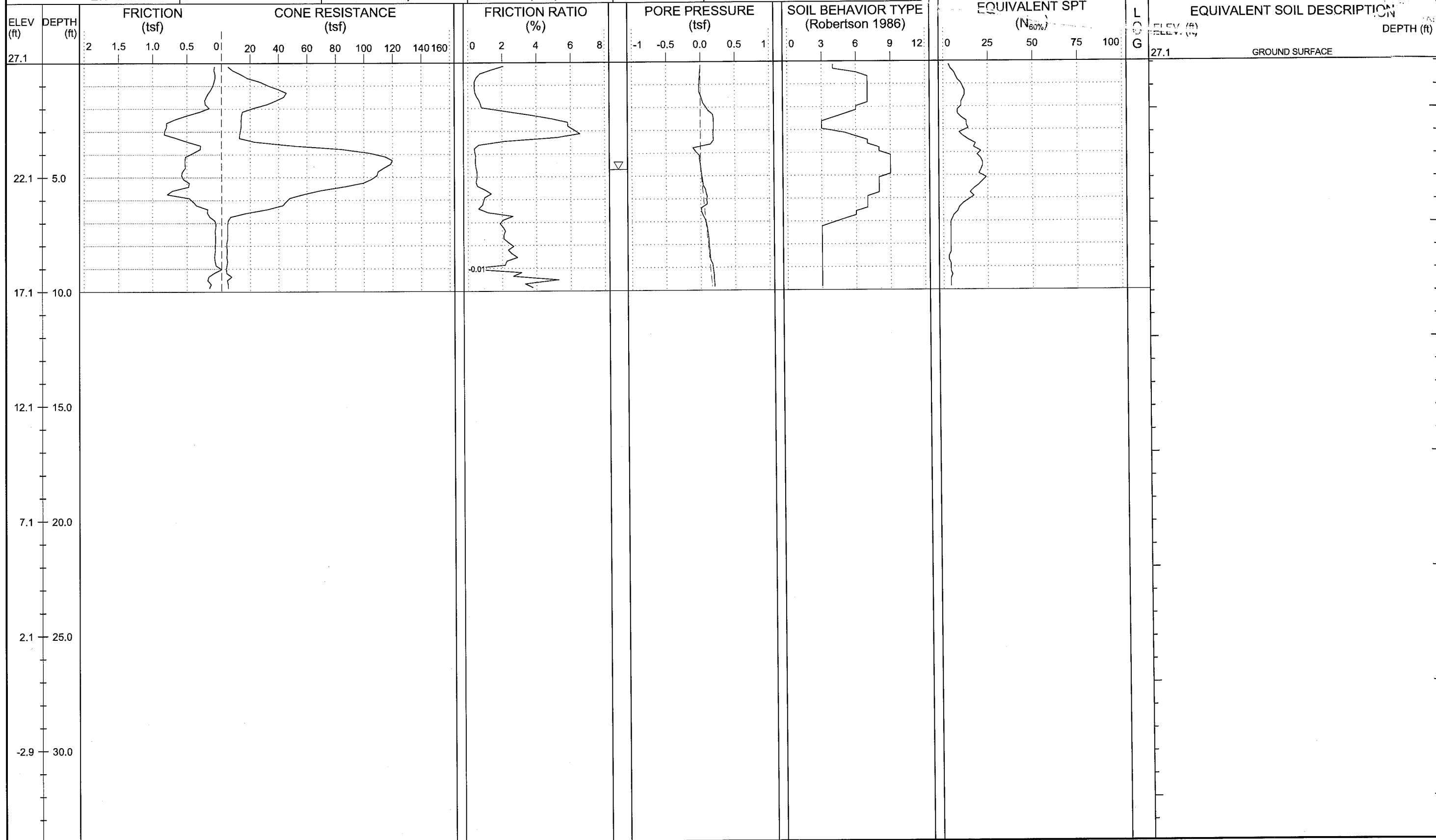




# NCDOT GEOTECHNICAL ENGINEERING UNIT

SHEET NO.:	52
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-136	STATION: 136+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 27.1 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 419,777	EASTING: 2,526,158	START DATE: 08/27/12	COMP. DATE: 08/27/12
			GROUND WTR (ft): 0 HR. 4.7, 24 HR. N/A	DRILLER: Cory Robison	
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



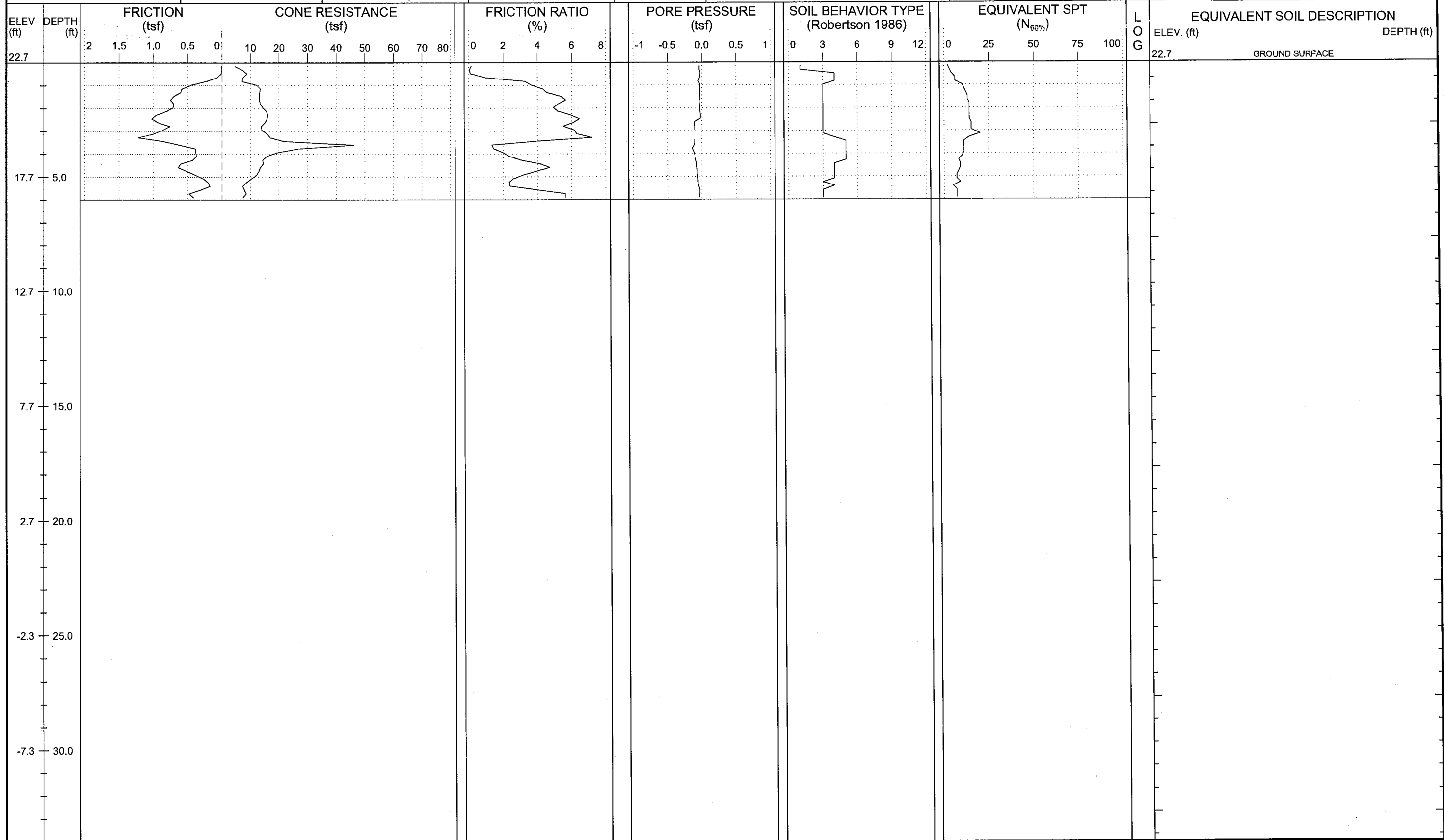


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 53  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT
BORING NO.: L-138	STATION: 138+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. Dry	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 22.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 419,960	EASTING: 2,526,239	24 HR. N/A	ROD TYPE: Pre-strung
				START DATE: 08/27/12	CONE ID: DSG0867
				COMP. DATE: 08/27/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



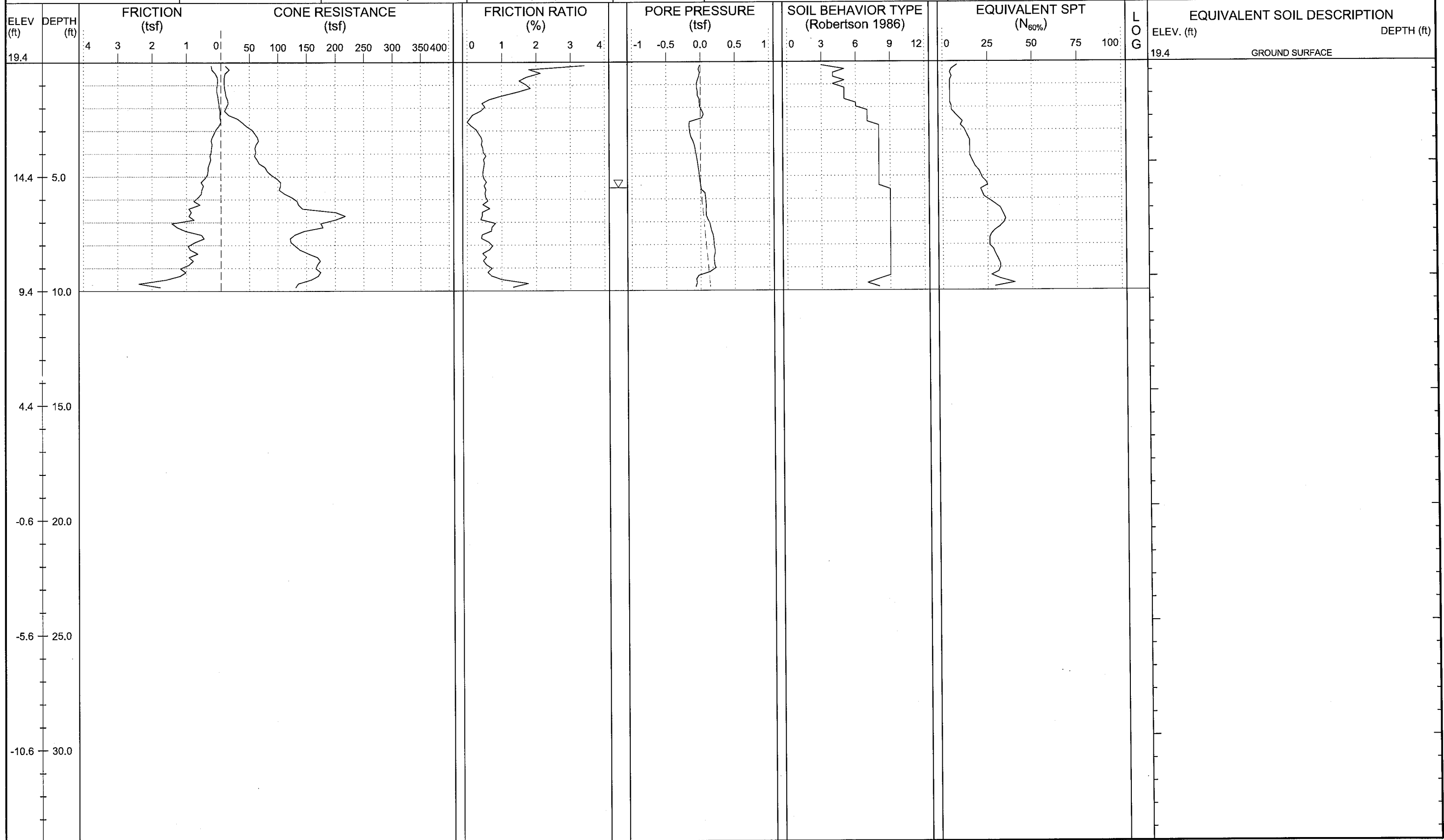


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

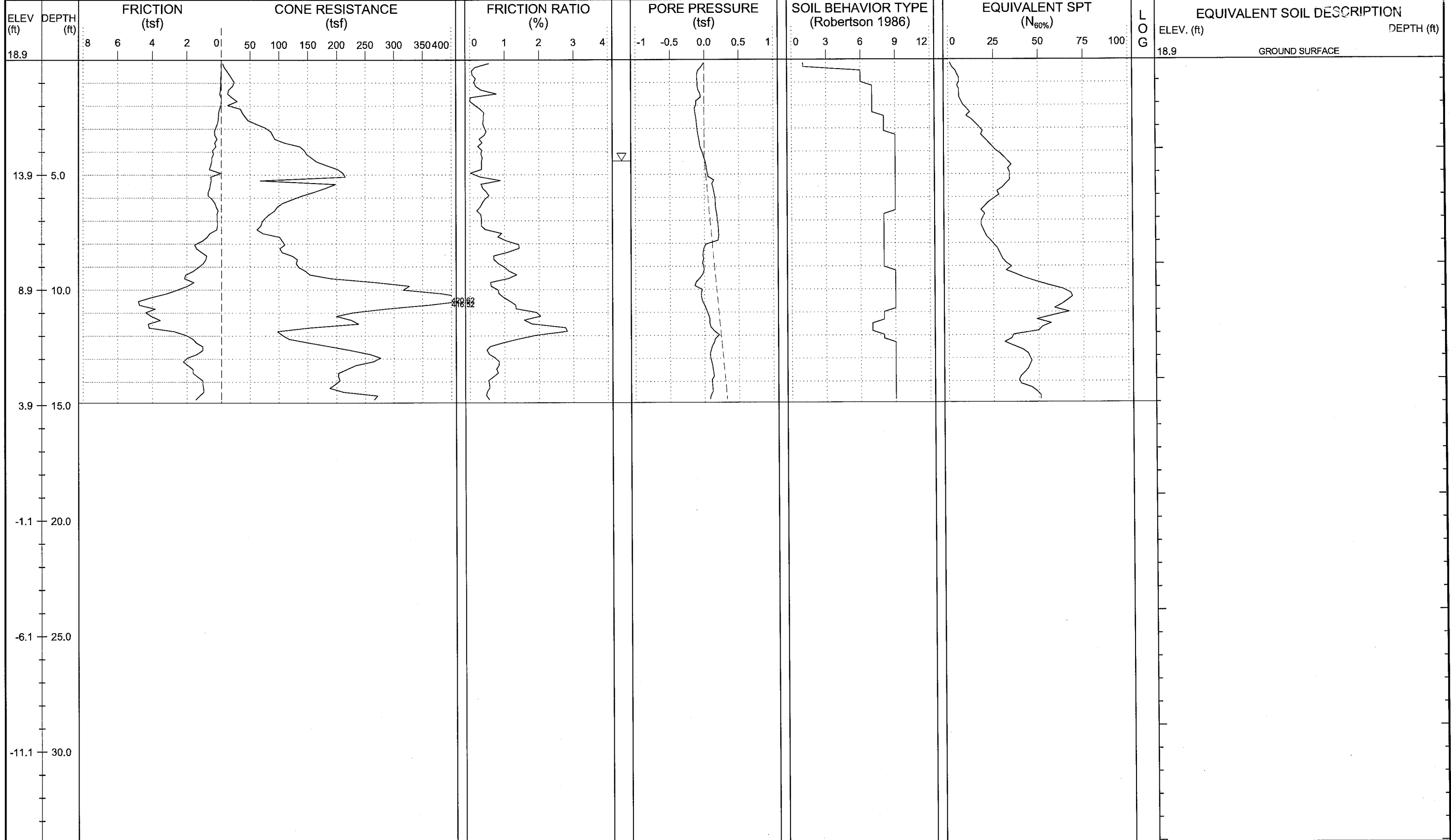
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 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.5, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-142	STATION: 142+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 19.4 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 420,327	EASTING: 2,526,400	START DATE: 08/27/12	CONE ID: DSG0867
				COMP. DATE: 08/27/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.4, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-144	STATION: 144+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 18.9 ft	TOTAL DEPTH: 14.9 ft	NORTHING: 420,510	EASTING: 2,526,480	START DATE: 08/27/12	CONE ID: DSG0867
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





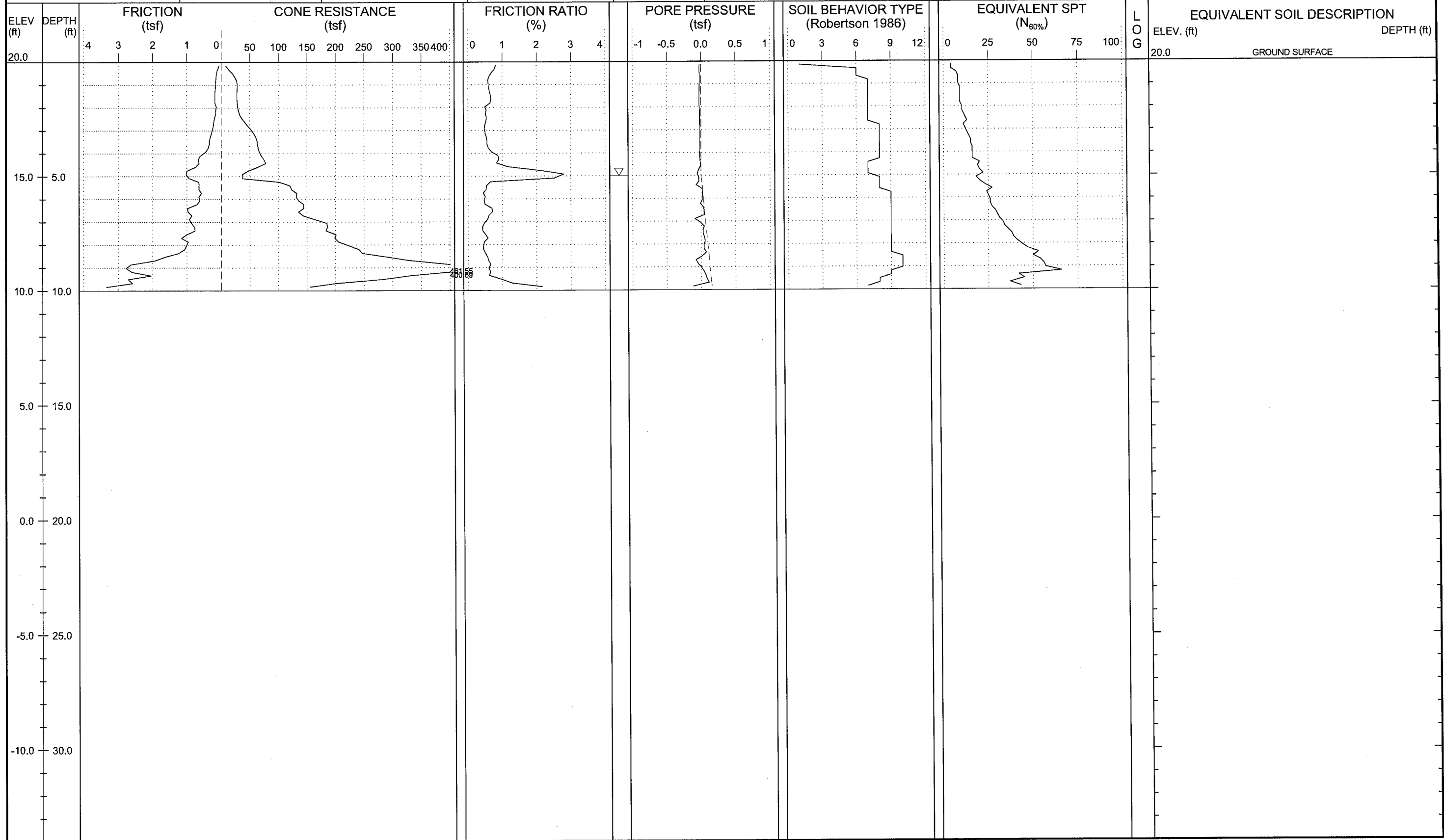


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

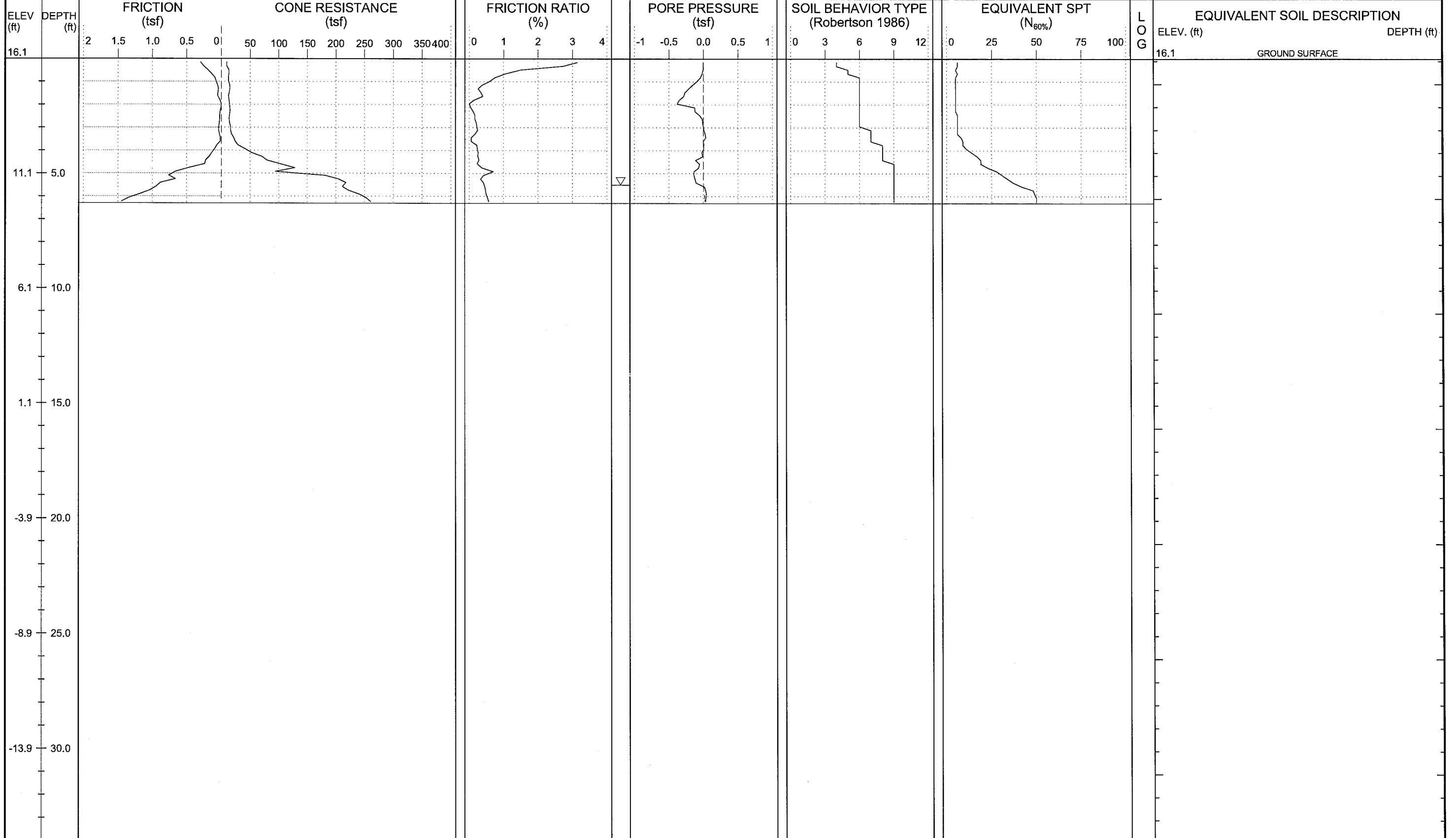
SHEET NO.: 56  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.0, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-146	STATION: 146+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 20.0 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 420,693	EASTING: 2,526,561	START DATE: 08/27/12	CONE ID: DSG0867
				COMP. DATE: 08/27/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 5.5, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-152	STATION: 152+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 16.1 ft	TOTAL DEPTH: 6.3 ft	NORTHING: 421,243	EASTING: 2,526,800	START DATE: 09/12/12	COMP. DATE: 09/12/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

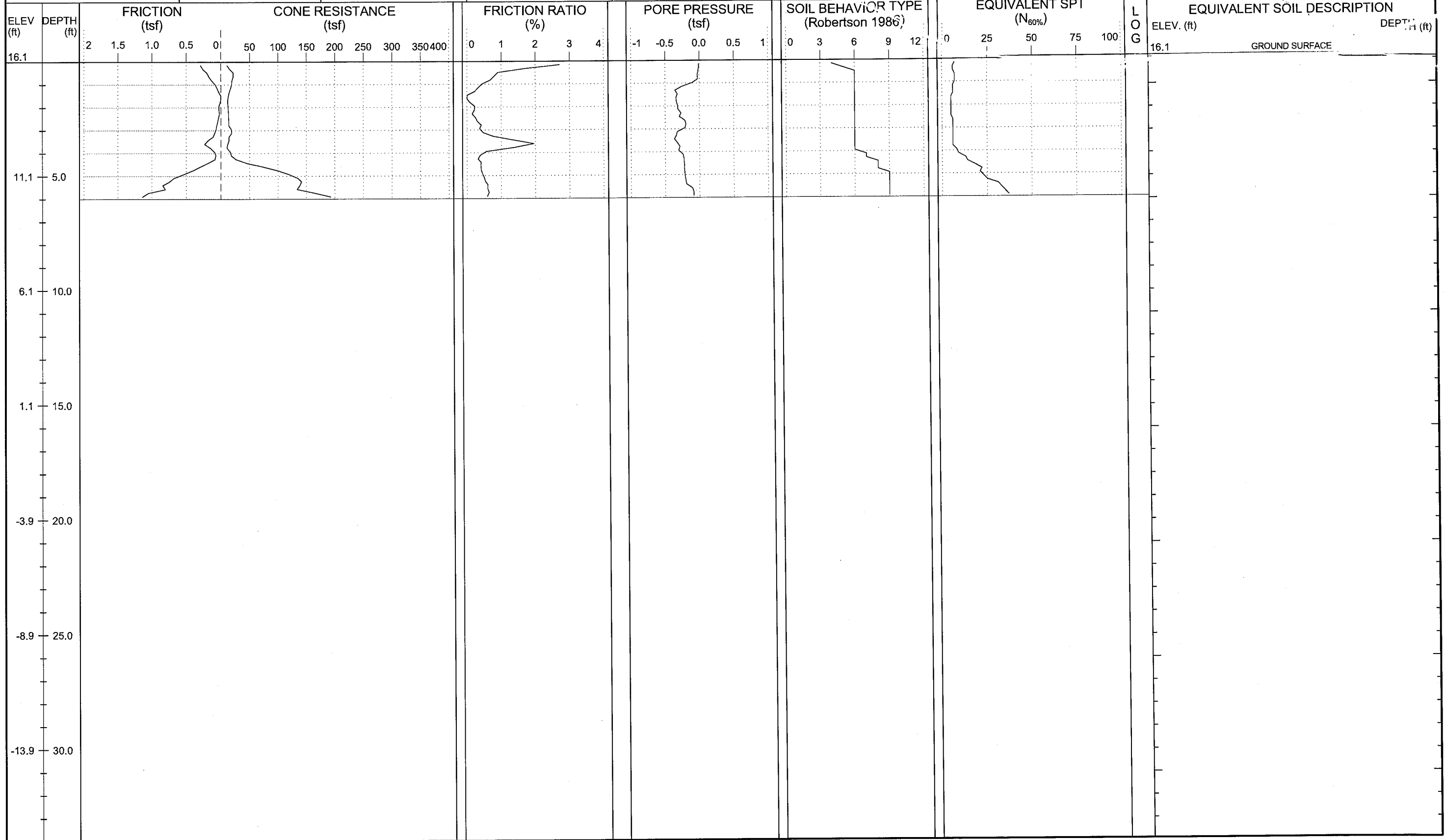




**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 58  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-154	STATION: 154+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 16.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 421,428	EASTING: 2,526,877	24 HR. N/A	START DATE: 09/12/12
				CONE ID: DSA1123	DRILLER: Ron Stewart
				COMP. DATE: 09/12/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



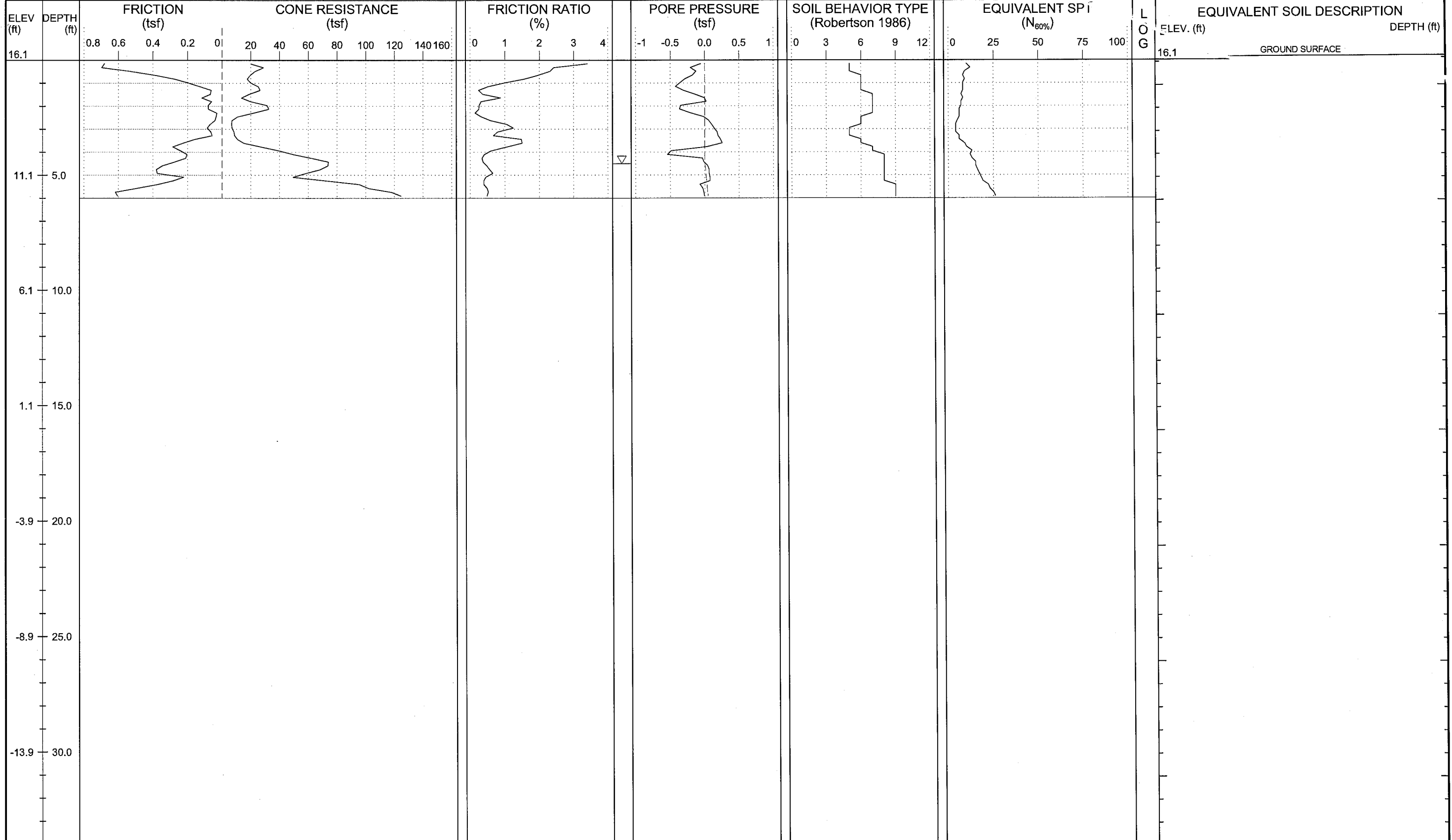


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 59  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-156	STATION: 156+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 4.5	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: 16.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 421,614	EASTING: 2,526,951	24 HR. N/A	START DATE: 09/12/12	COMP. DATE: 09/12/12	SURFACE WATER DEPTH: N/A



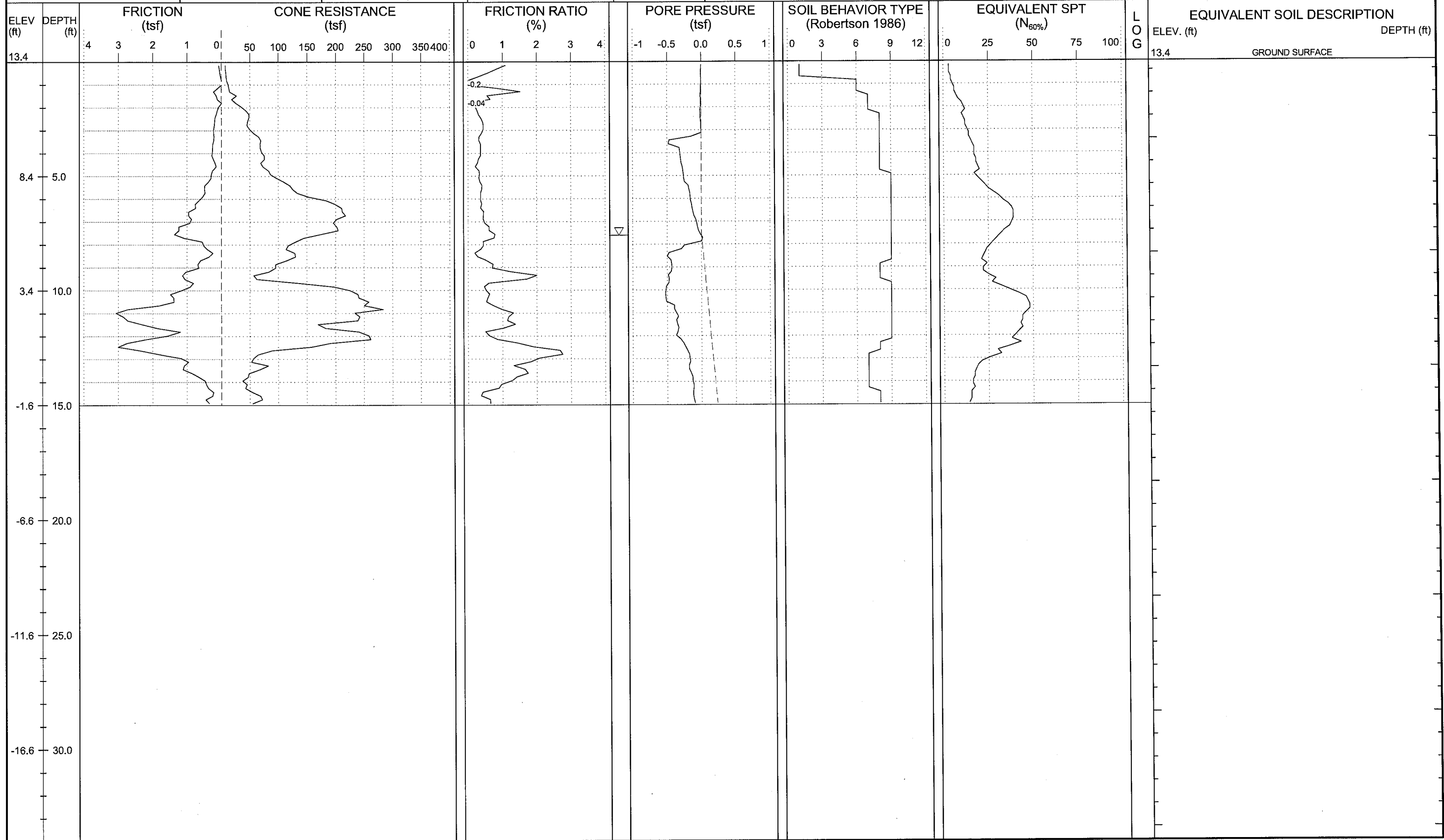


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

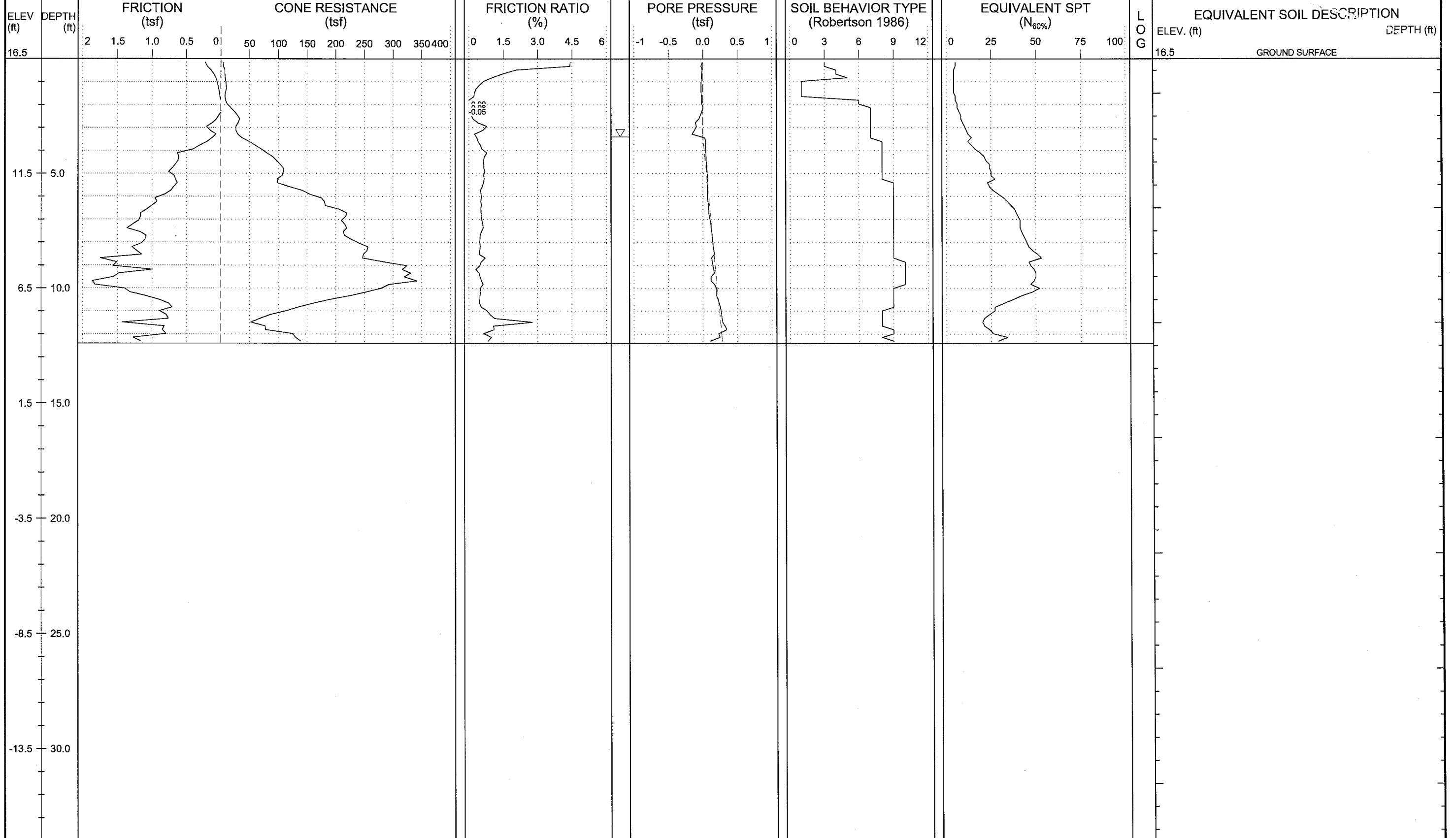
SHEET NO.: 60  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.6, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-158	STATION: 158+00	OFFSET: 50ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 13.4 ft	TOTAL DEPTH: 15.0 ft	NORTHING: 421,818	EASTING: 2,526,976	START DATE: 09/12/12	CONE ID: DSA1123
				COMP. DATE: 09/12/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 3.4, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-162	STATION: 162+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 16.5 ft	TOTAL DEPTH: 12.4 ft	NORTHING: 422,176	EASTING: 2,527,159	START DATE: 09/12/12	COMP. DATE: 09/12/12	SURFACE WATER DEPTH: N/A	





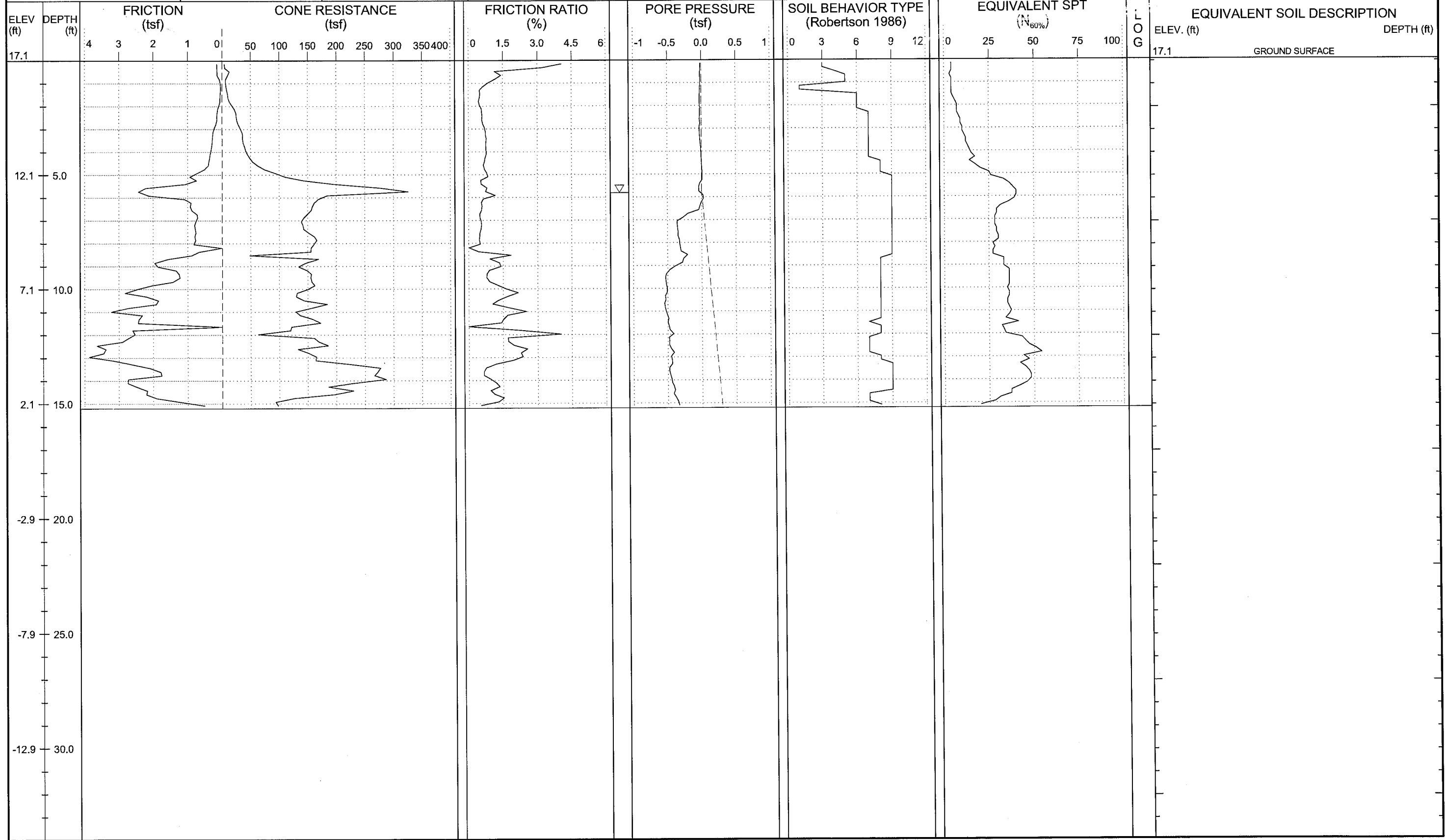


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 63  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.8, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-166	STATION: 166+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 17.1 ft	TOTAL DEPTH: 15.2 ft	NORTHING: 422,555	EASTING: 2,527,287	START DATE: 09/12/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



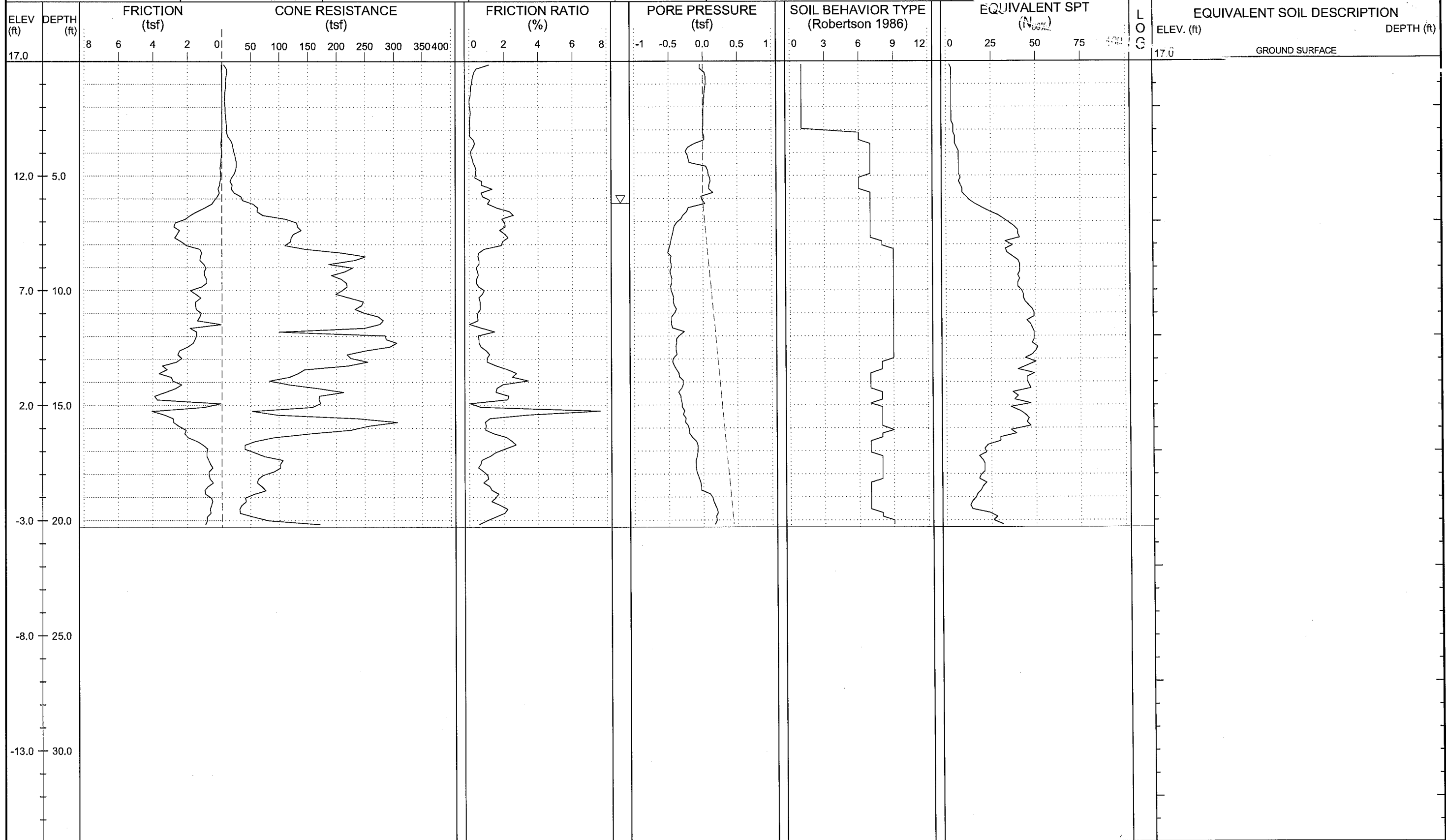




# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH	SHEET NO.: 64
	PROJ. NO.: 34442.1.2
	TIP NO.: R-2514B
	COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-168	STATION: 167+82	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 17.0 ft	TOTAL DEPTH: 20.3 ft	NORTHING: 422,729	EASTING: 2,527,342	START DATE: 09/12/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



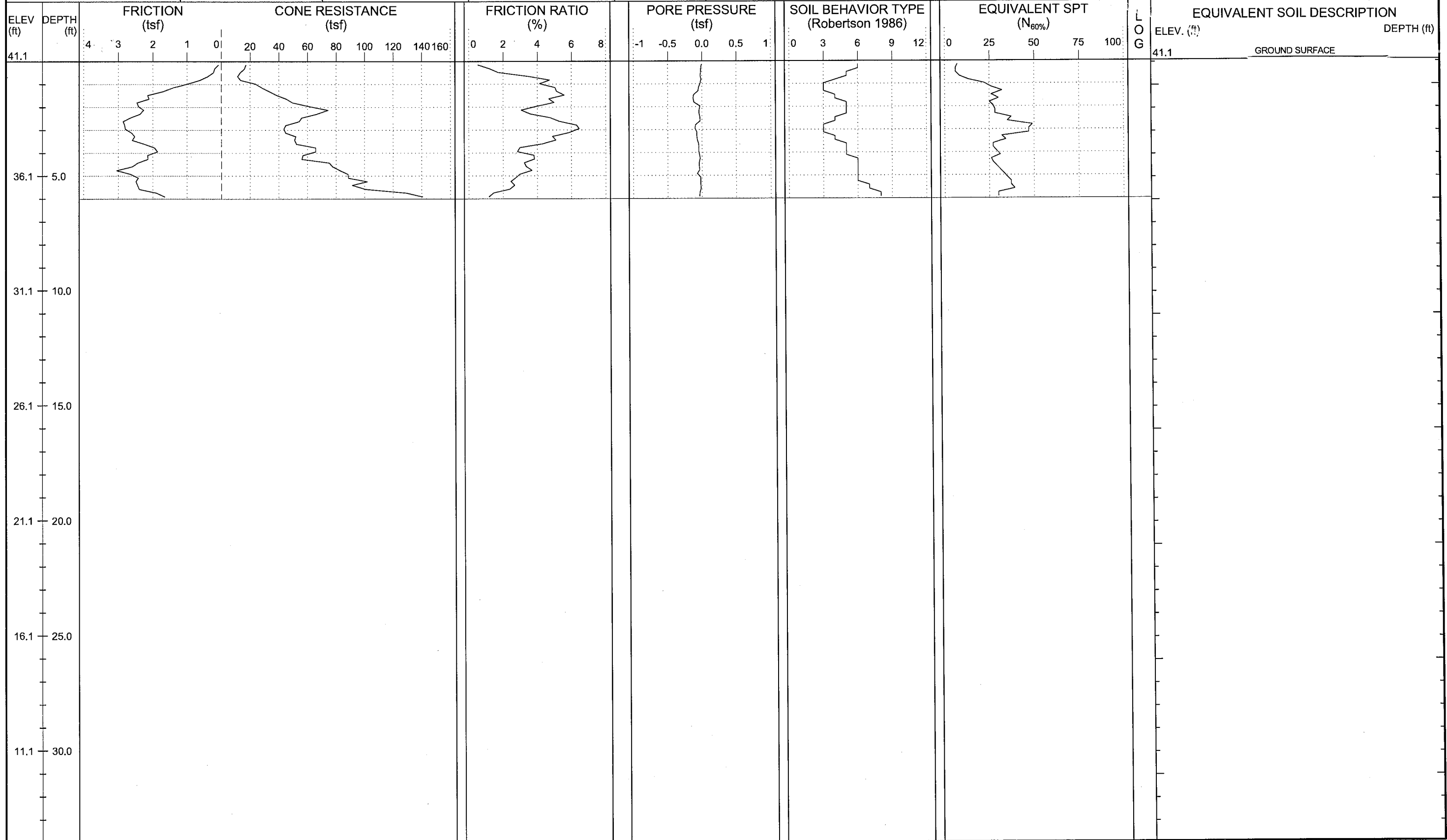


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	65
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-182	STATION: 182+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 424,099	EASTING: 2,527,704	START DATE: 08/24/12	CONE ID: DSA1123
				24 HR. N/A	COMP. DATE: 08/24/12
				DRILLER: Ron Stewart	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



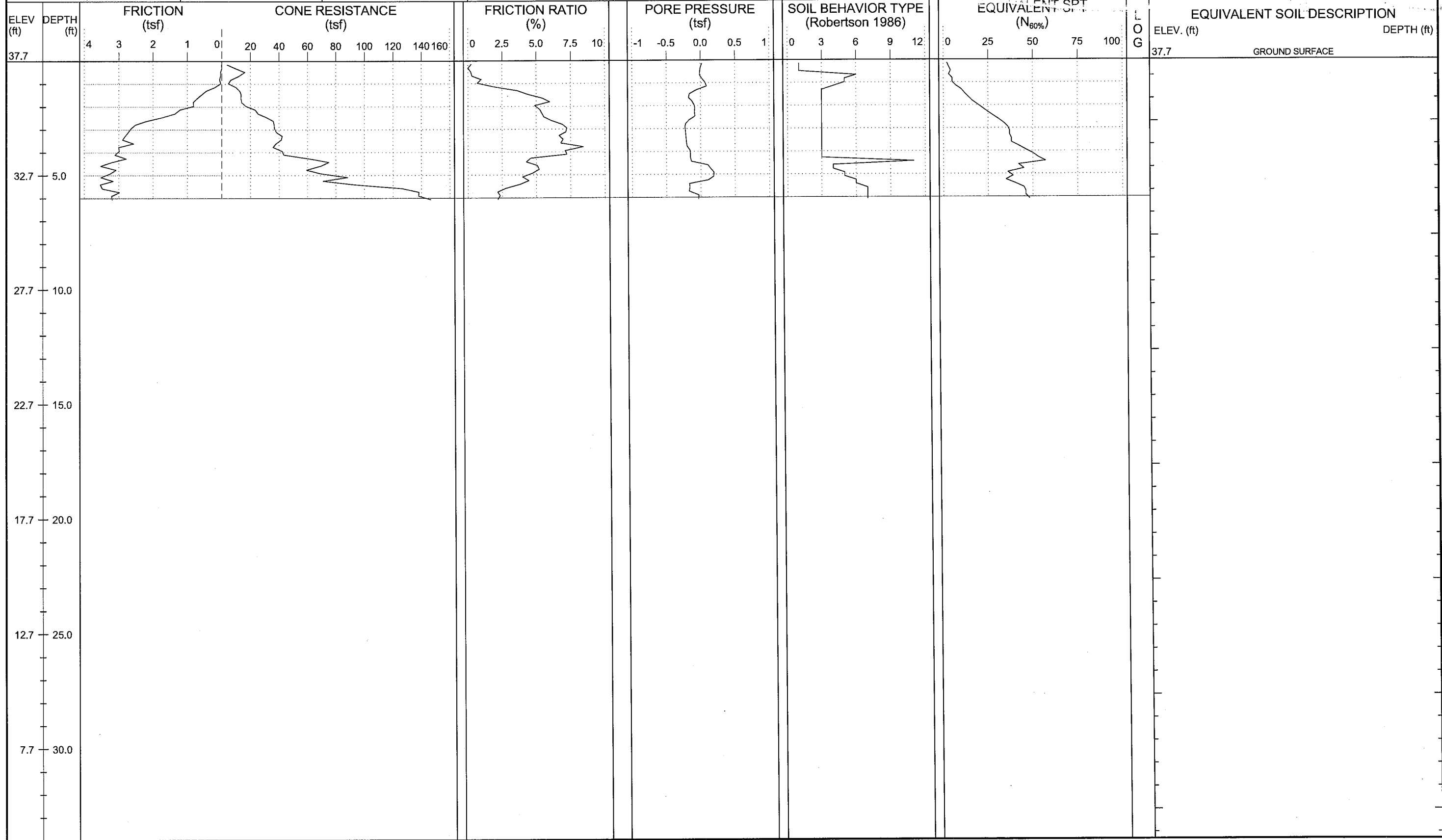


**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH

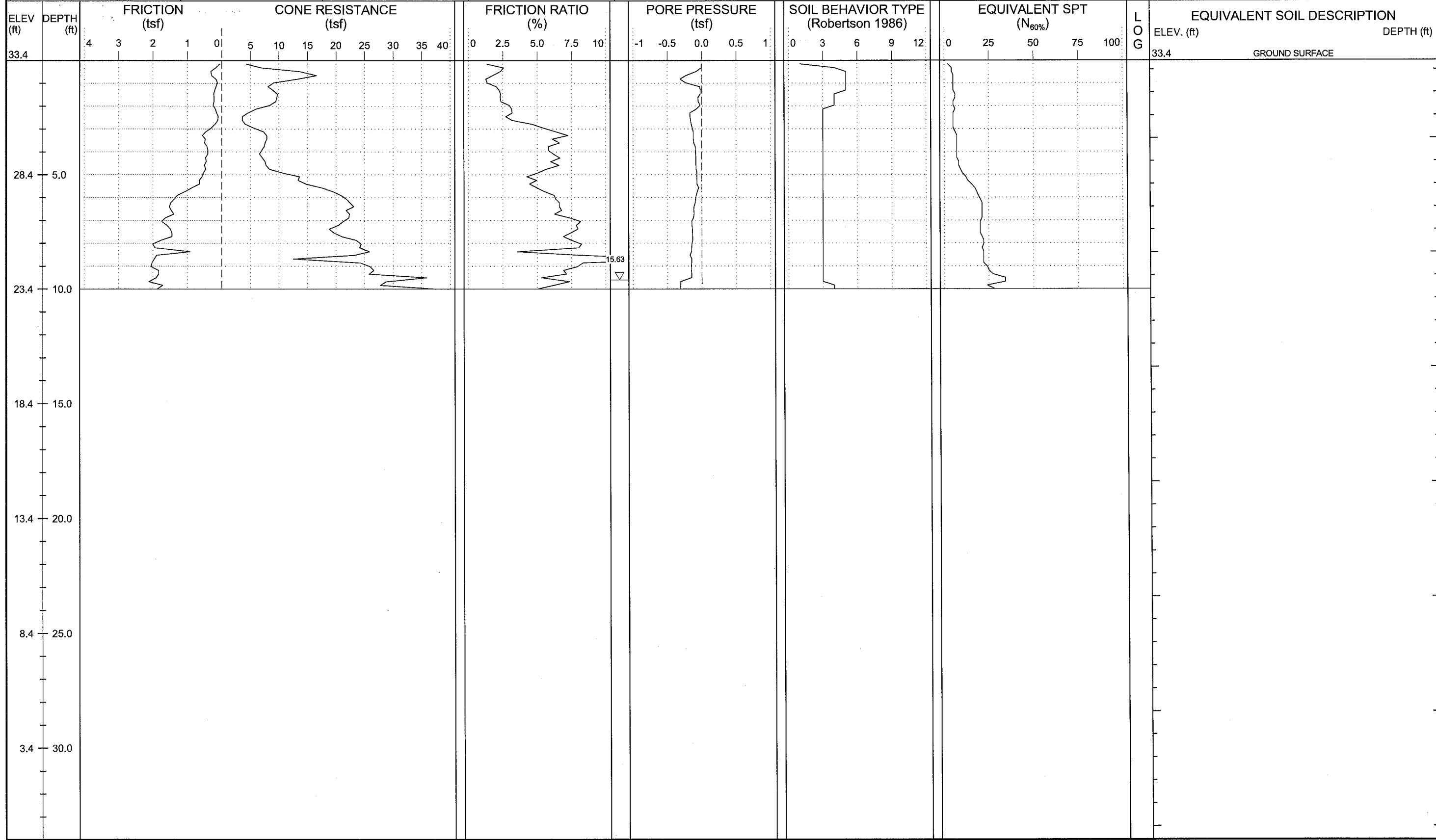
SHEET NO.:	66
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-184	STATION: 184+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 37.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 424,295	EASTING: 2,527,745	24 HR. N/A	START DATE: 08/24/12
				CONE ID: DSA1123	DRILLER: Ron Stewart
				COMP. DATE: 08/24/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 9.6, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-186	STATION: 184+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 33.4 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 424,491	EASTING: 2,527,784	START DATE: 08/24/12	COMP. DATE: 08/24/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



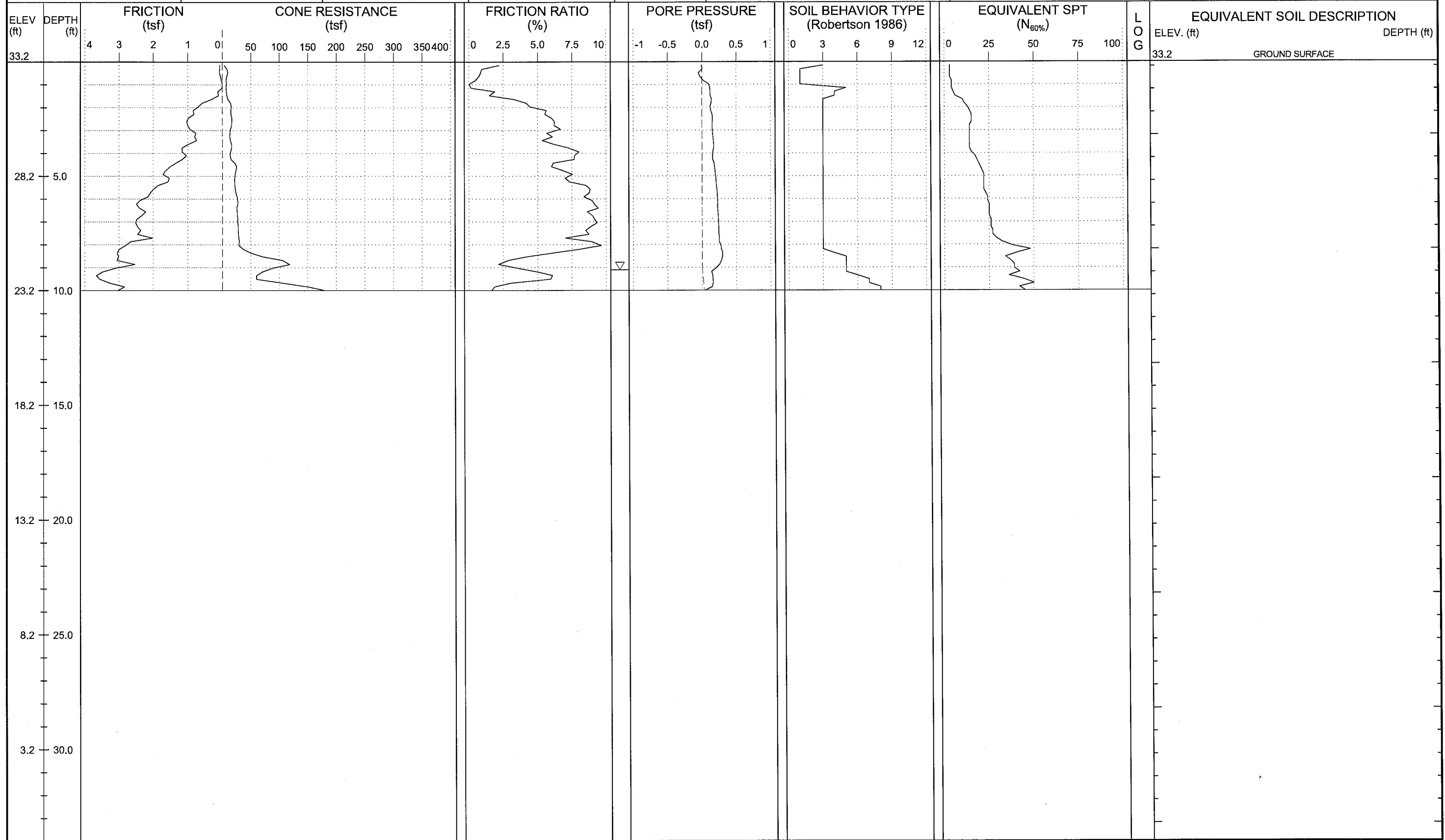


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 68  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 9.1, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-188	STATION: 184+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.2 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 424,688	EASTING: 2,527,821	START DATE: 08/23/12	CONE ID: DSA1123
				COMP. DATE: 08/23/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



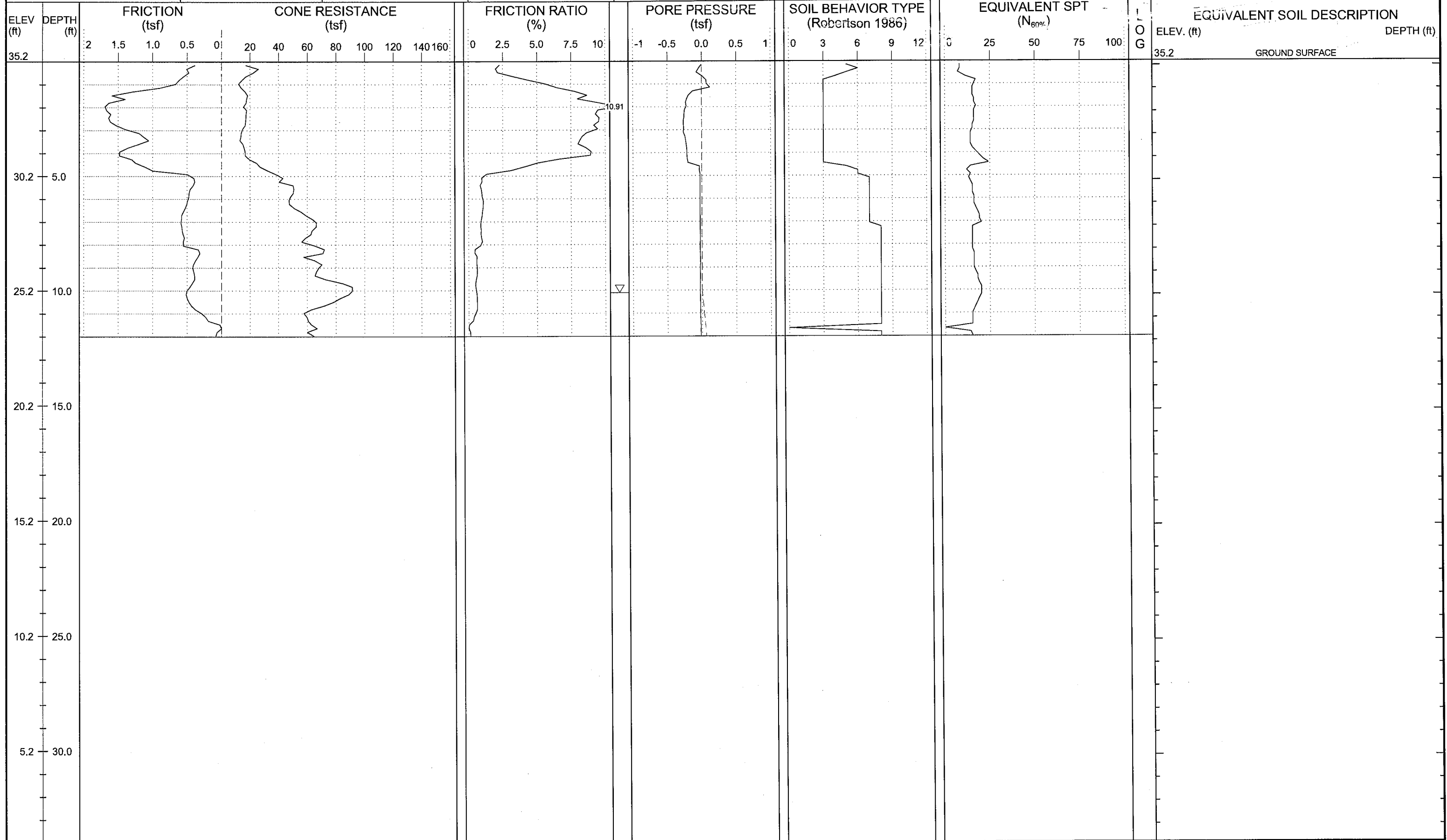


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

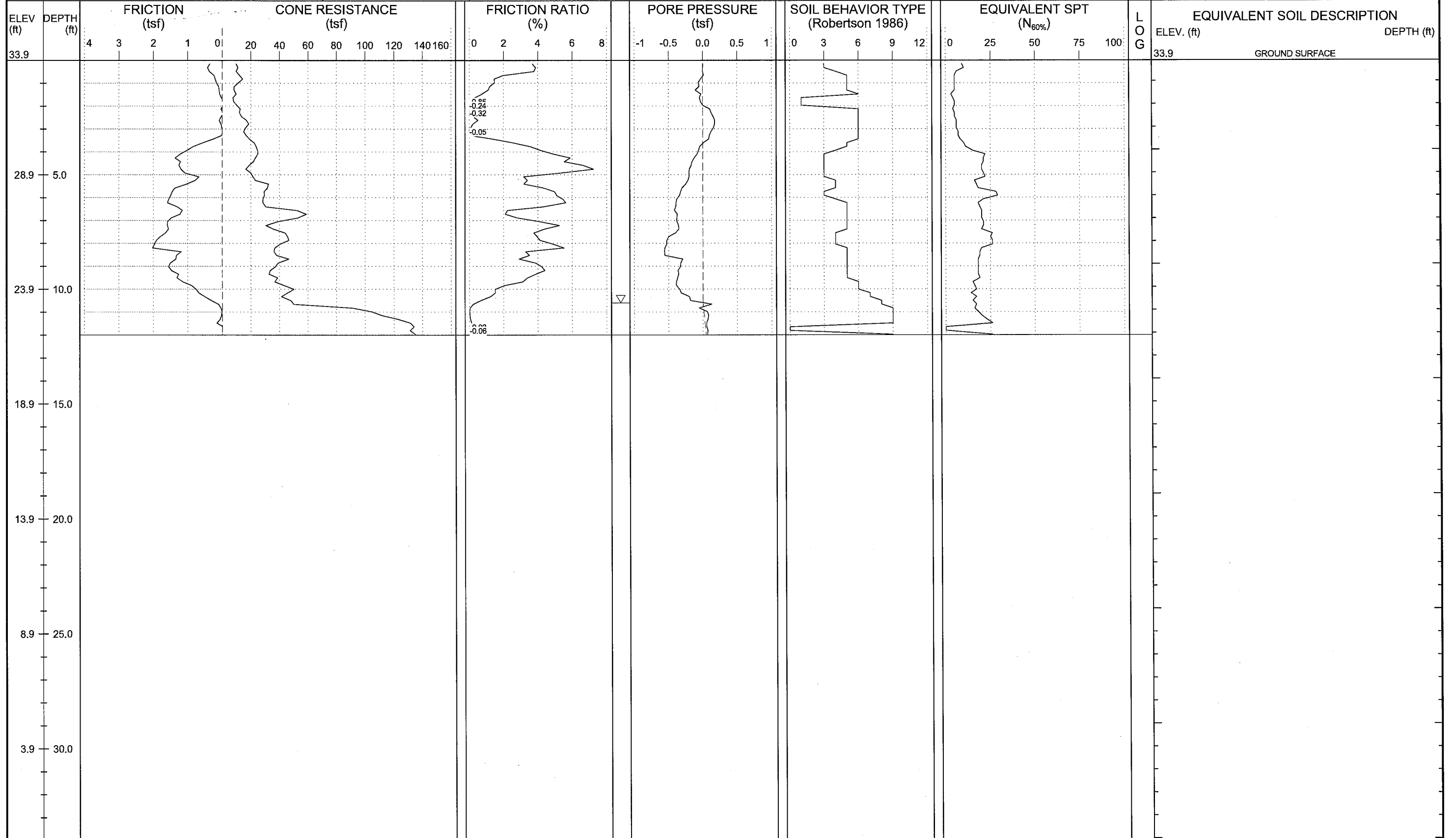
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 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 10.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: L-192	STATION: 192+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 35.2 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 425,082	EASTING: 2,527,887	START DATE: 08/23/12	COMP. DATE: 08/23/12	SURFACE WATER DEPTH: N/A	



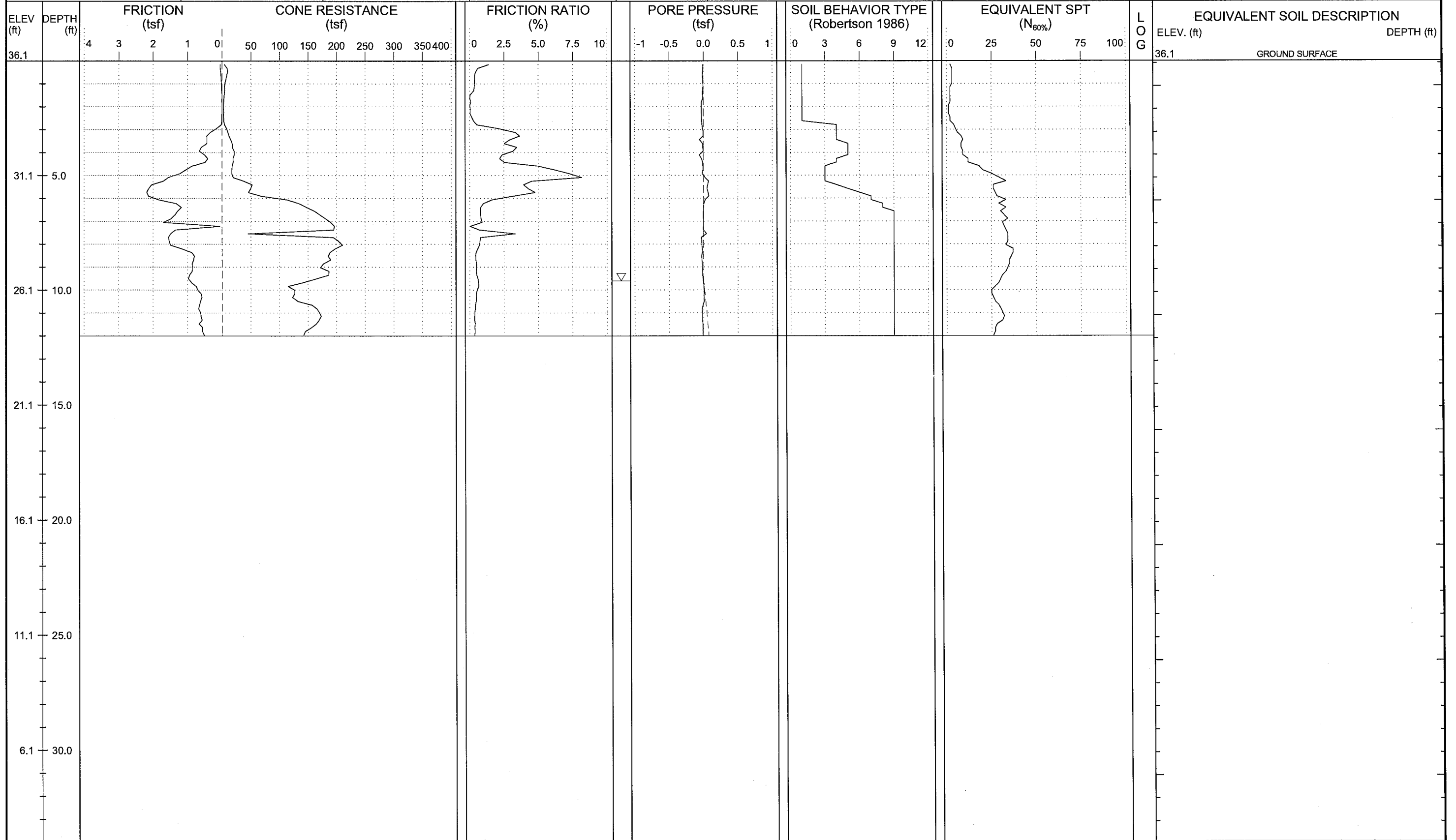


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-194	STATION: 194+00	OFFSET: 0ft CL	ALIGNMENT: -L-	0 HR. 10.6	ROD TYPE: Pre-strung
COLLAR ELEV.: 33.9 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 425,280	EASTING: 2,527,917	24 HR. N/A	START DATE: 08/23/12
				COMP. DATE: 08/23/12	DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 9.6, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-196	STATION: 196+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 36.1 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 425,478	EASTING: 2,527,944	START DATE: 08/23/12	CONE ID: DSA1123
				COMP. DATE: 08/23/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





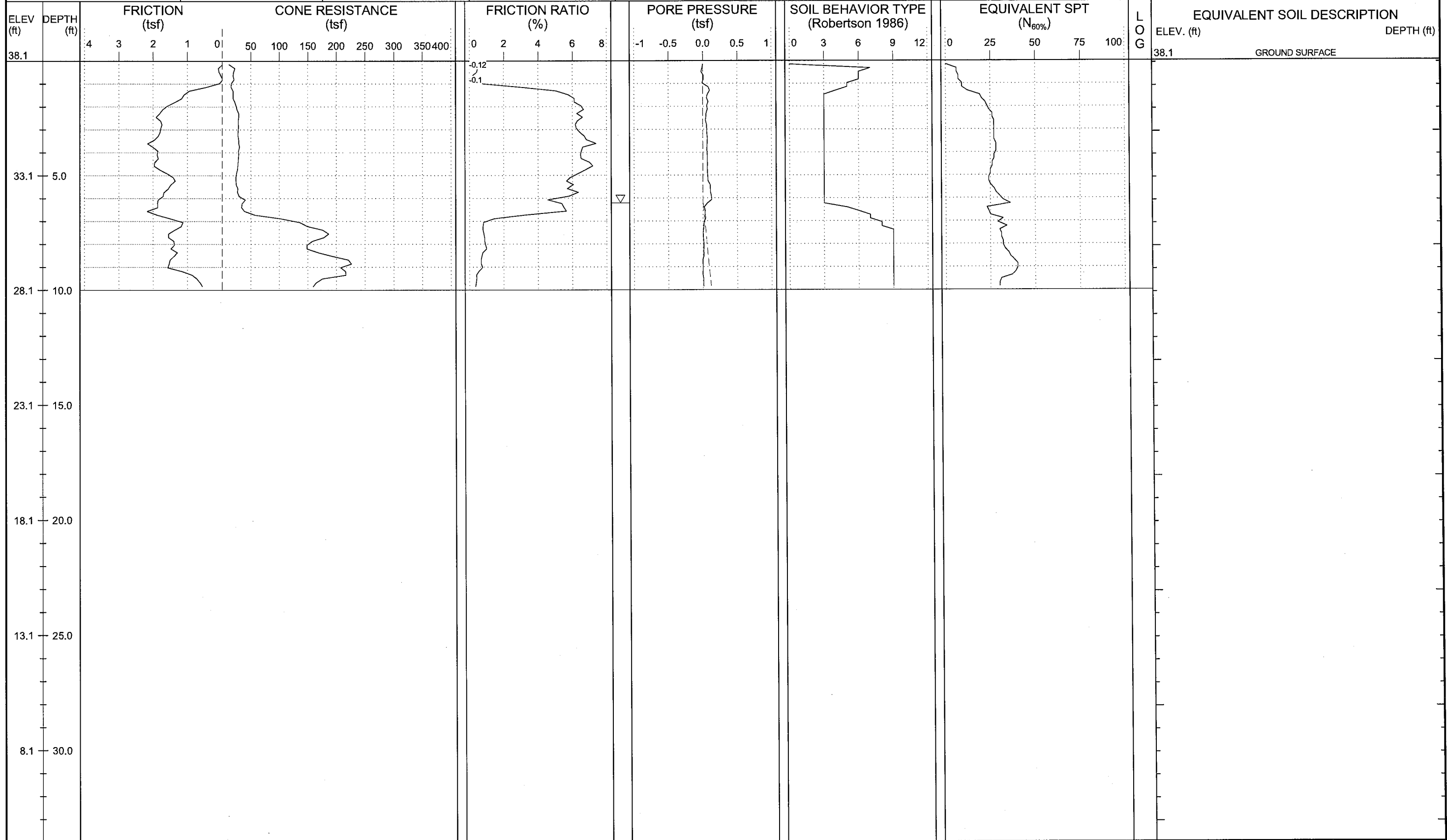


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 72  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-198	STATION: 198+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.1 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 425,677	EASTING: 2,527,968	START DATE: 08/23/12	CONE ID: DSA1123
				COMP. DATE: 08/23/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





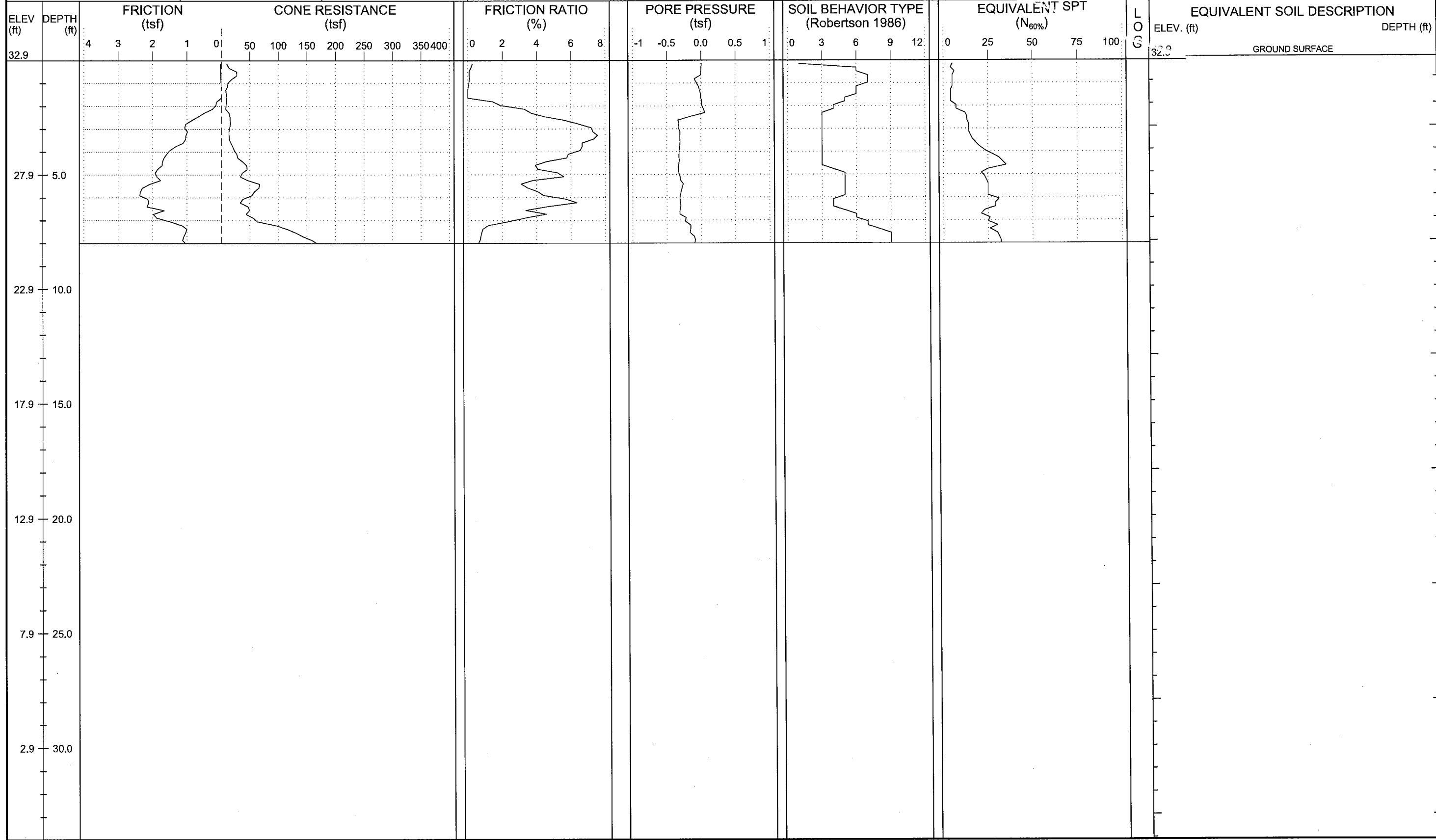


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 74  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: L-204	STATION: 204+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. N/A	DRILLER: Ron Stewart
COLLAR ELEV.: 32.9 ft	TOTAL DEPTH: 8.0 ft	NORTHING: 426,274	EASTING: 2,528,027	ROD TYPE: Pre-strung	CONCRETE TYPE: 1.44 Vertek Piezocone
			START DATE: 08/22/12	CONCRETE ID: DSA1123	TECHNICIAN: M.A.D.
			COMP. DATE: 08/22/12	SURFACE WATER DEPTH: N/A	



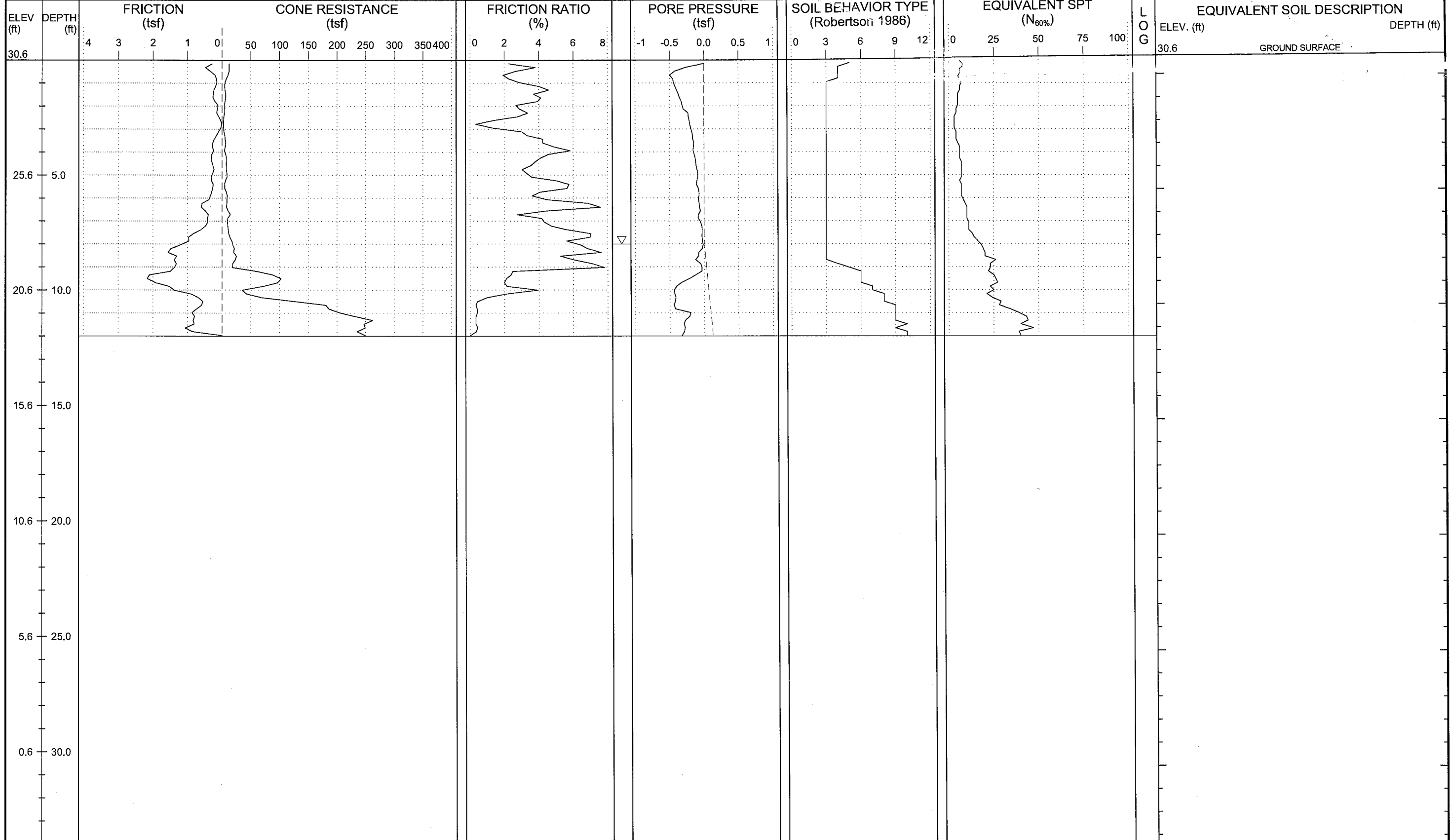


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 75  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.0, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-206	STATION: 206+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 30.6 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 426,473	EASTING: 2,528,042	START DATE: 08/22/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



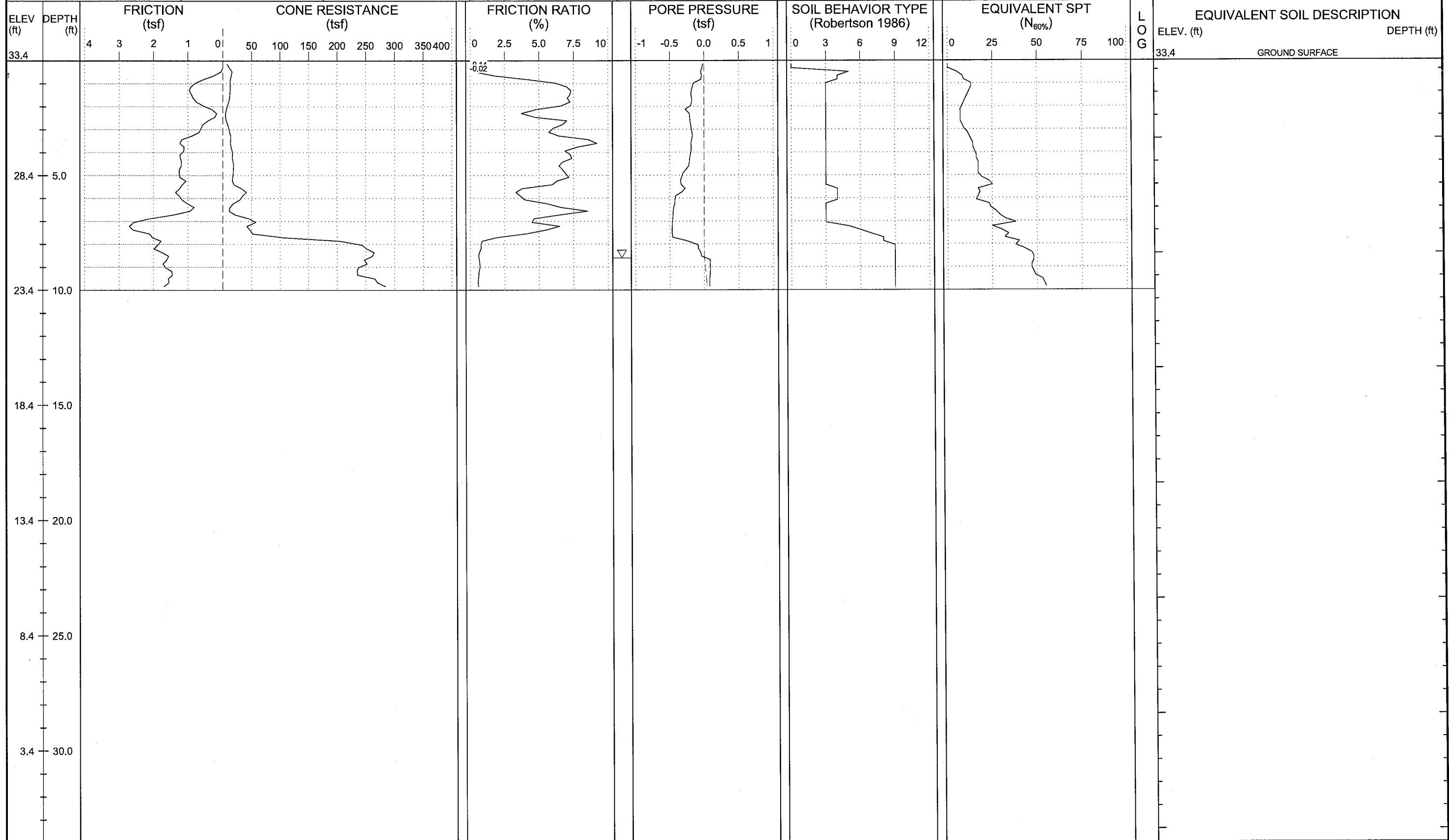


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 76  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 8.6, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-208	STATION: 208+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.4 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 426,673	EASTING: 2,528,055	START DATE: 08/22/12	CONE ID: DSA1123
				TECHNICIAN: M.A.D.	SURFACE WATER DEPTH: N/A
				COMP. DATE: 08/22/12	

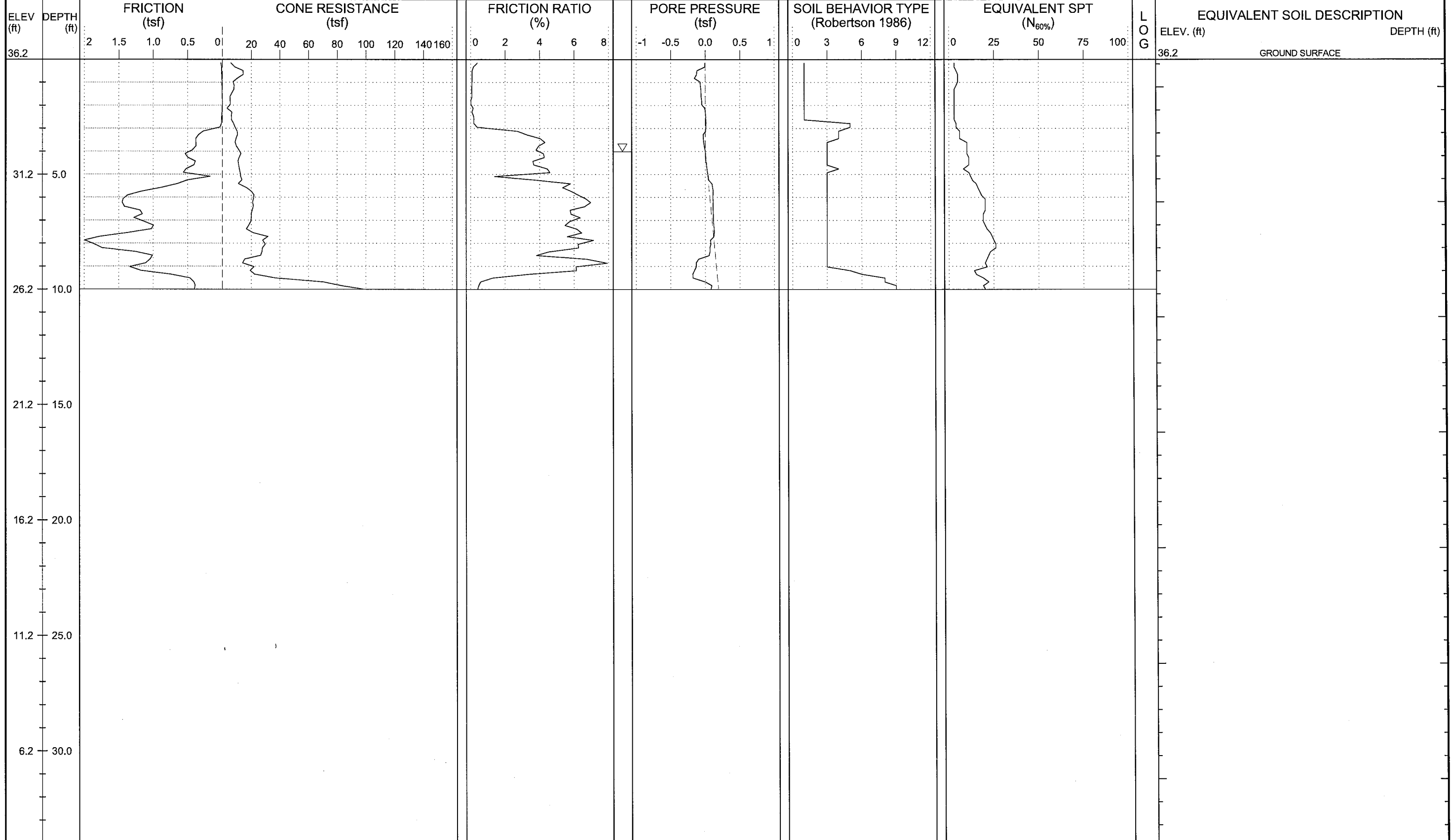




# NCDOT GEOTECHNICAL ENGINEERING UNIT

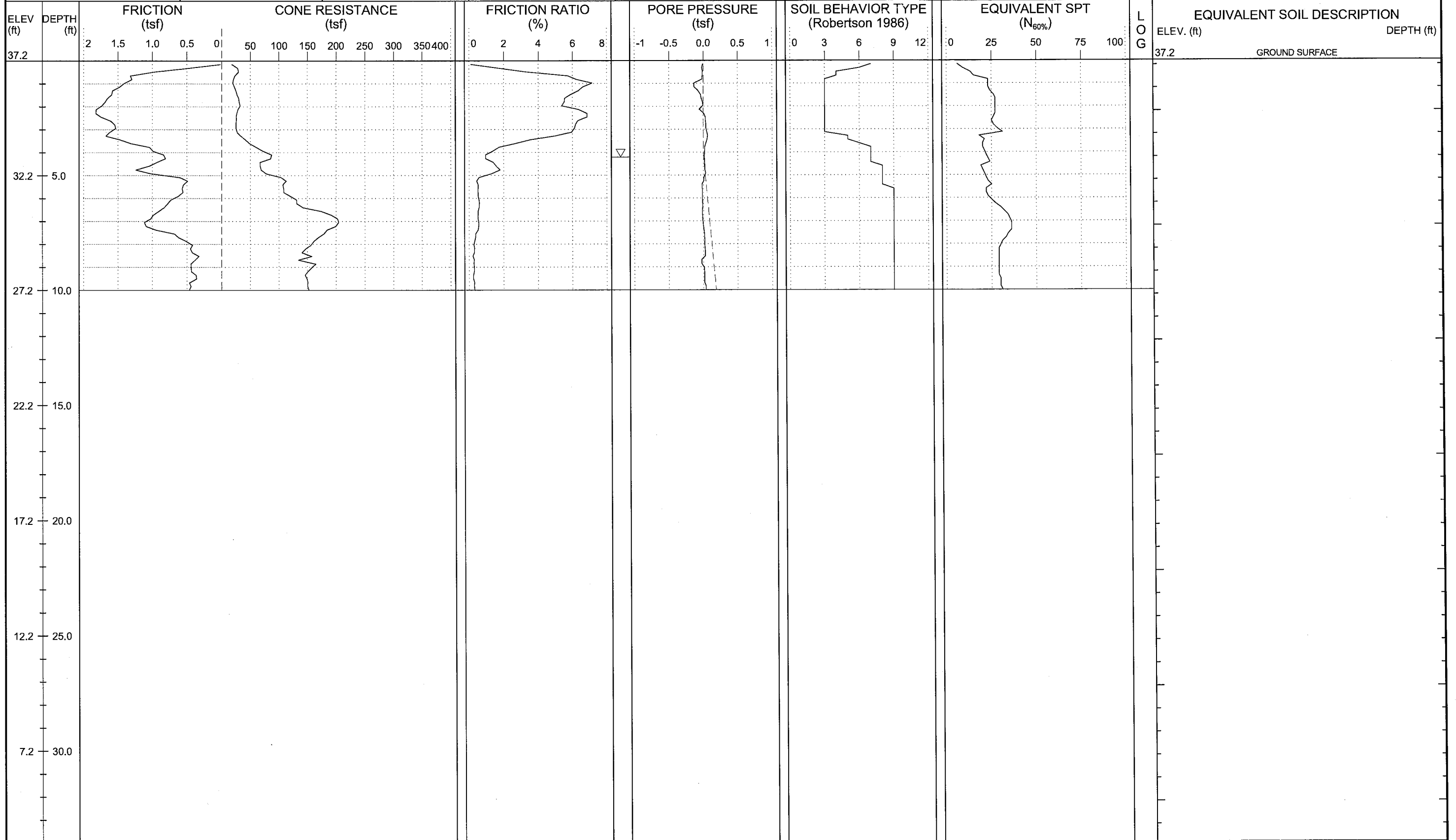
ENGLISH	SHEET NO.: 77
	PROJ. NO.: 34442.1.2
	TIP NO.: R-2514B
	COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.0	DRILL METHOD: CPT / DPT
BORING NO.: L-212	STATION: 212+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. N/A	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 36.2 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 427,072	EASTING: 2,528,074	ROD TYPE: Pre-strung	CONE ID: DSA1123
				START DATE: 08/22/12	COMP. DATE: 08/22/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.2	DRILL METHOD: CPT / DPT
BORING NO.: L-214	STATION: 214+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. N/A	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 37.2 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 427,272	EASTING: 2,528,083	START DATE: 08/22/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



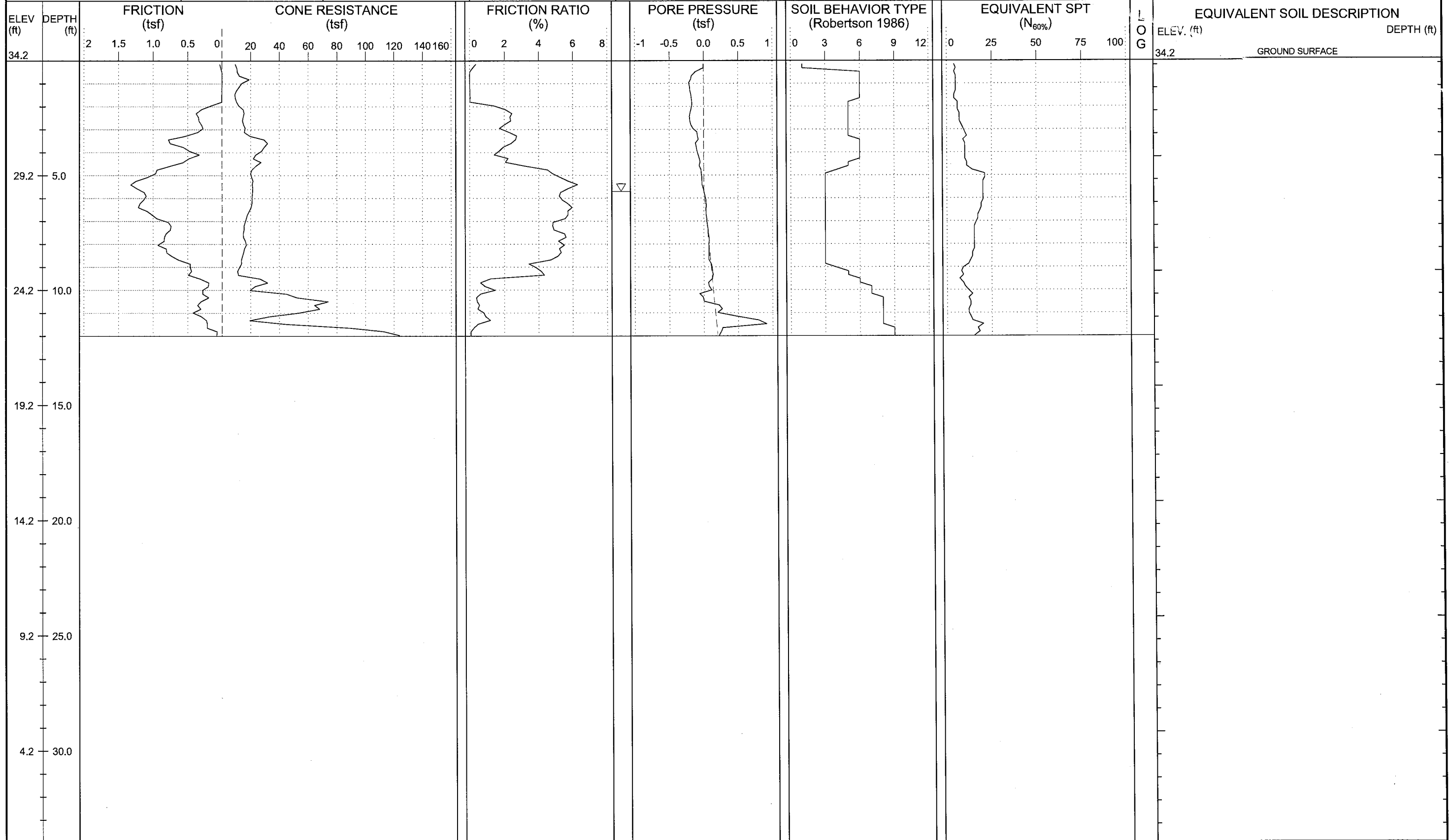


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 79  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

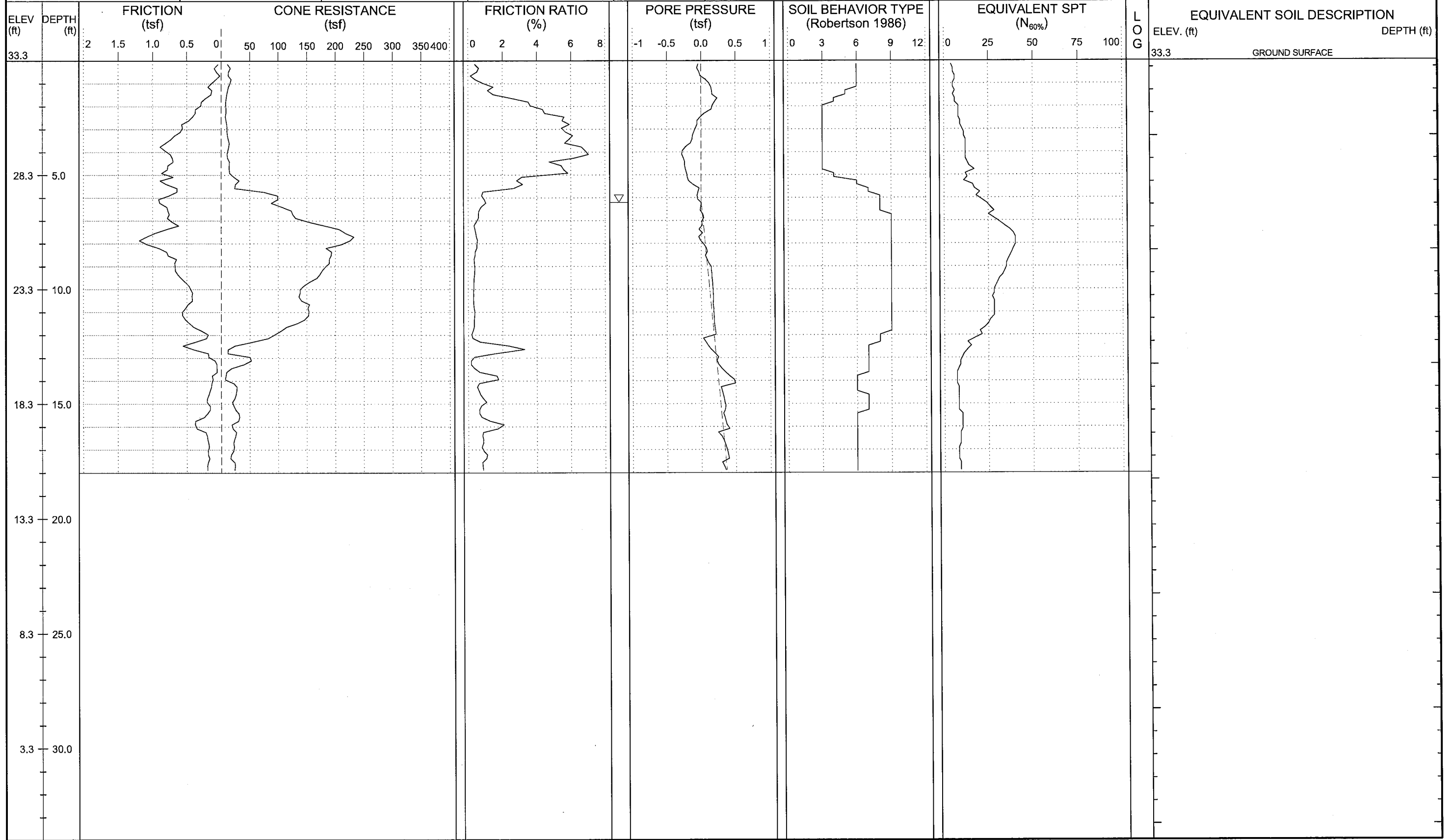
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.7, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-216	STATION: 216+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 34.2 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 427,472	EASTING: 2,528,091	START DATE: 08/22/12	CONE ID: DSA1123
				TECHNICIAN: M.A.D.	SURFACE WATER DEPTH: N/A







WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 6.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-218	STATION: 218+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.3 ft	TOTAL DEPTH: 18.0 ft	NORTHING: 427,672	EASTING: 2,528,100	START DATE: 08/20/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



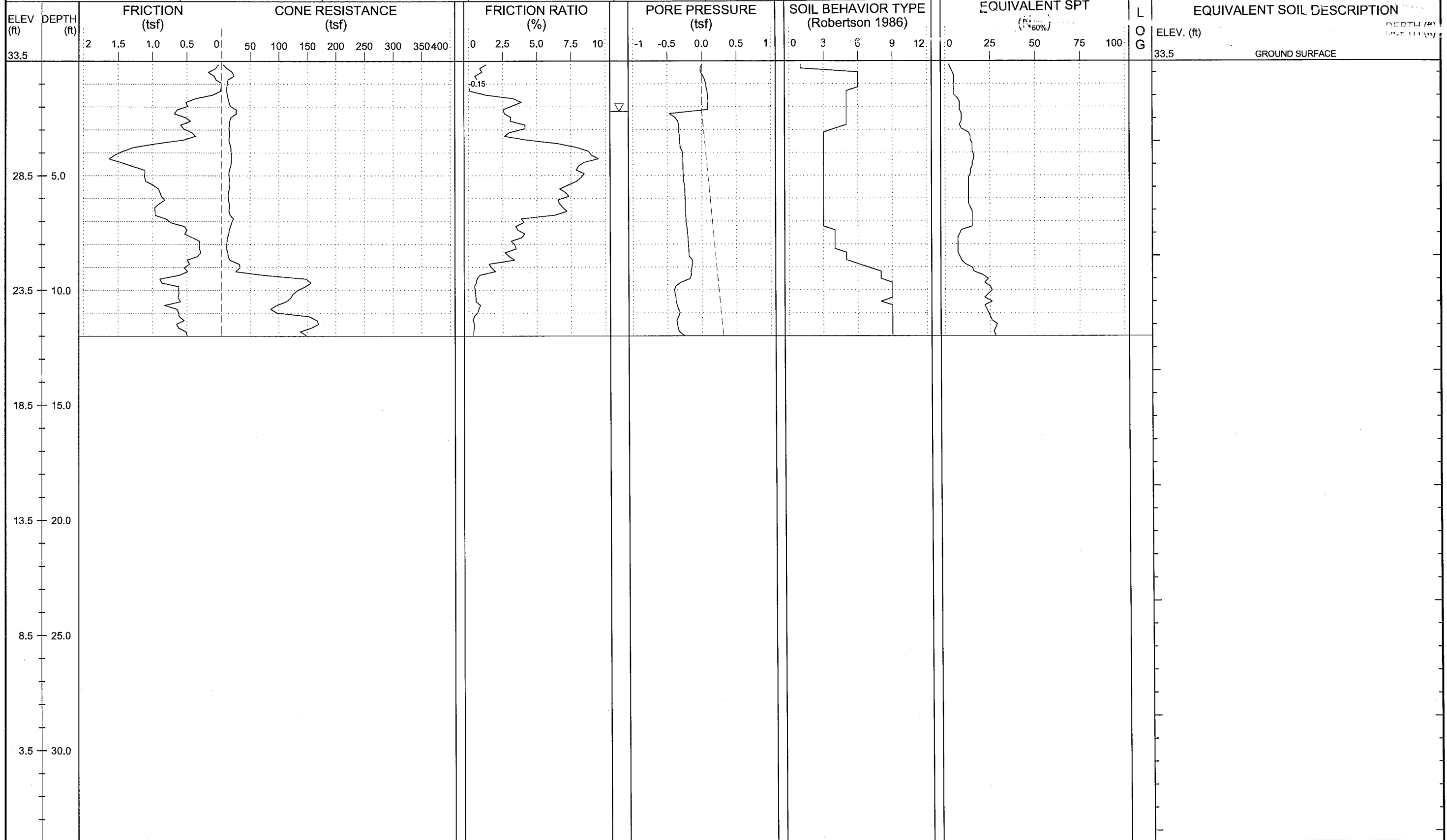


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	81
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 2.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-222	STATION: 222+00	OFFSET: 10ft LT	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 33.5 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 428,072	EASTING: 2,528,110	START DATE: 08/17/12	CONE ID: DSG0867
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



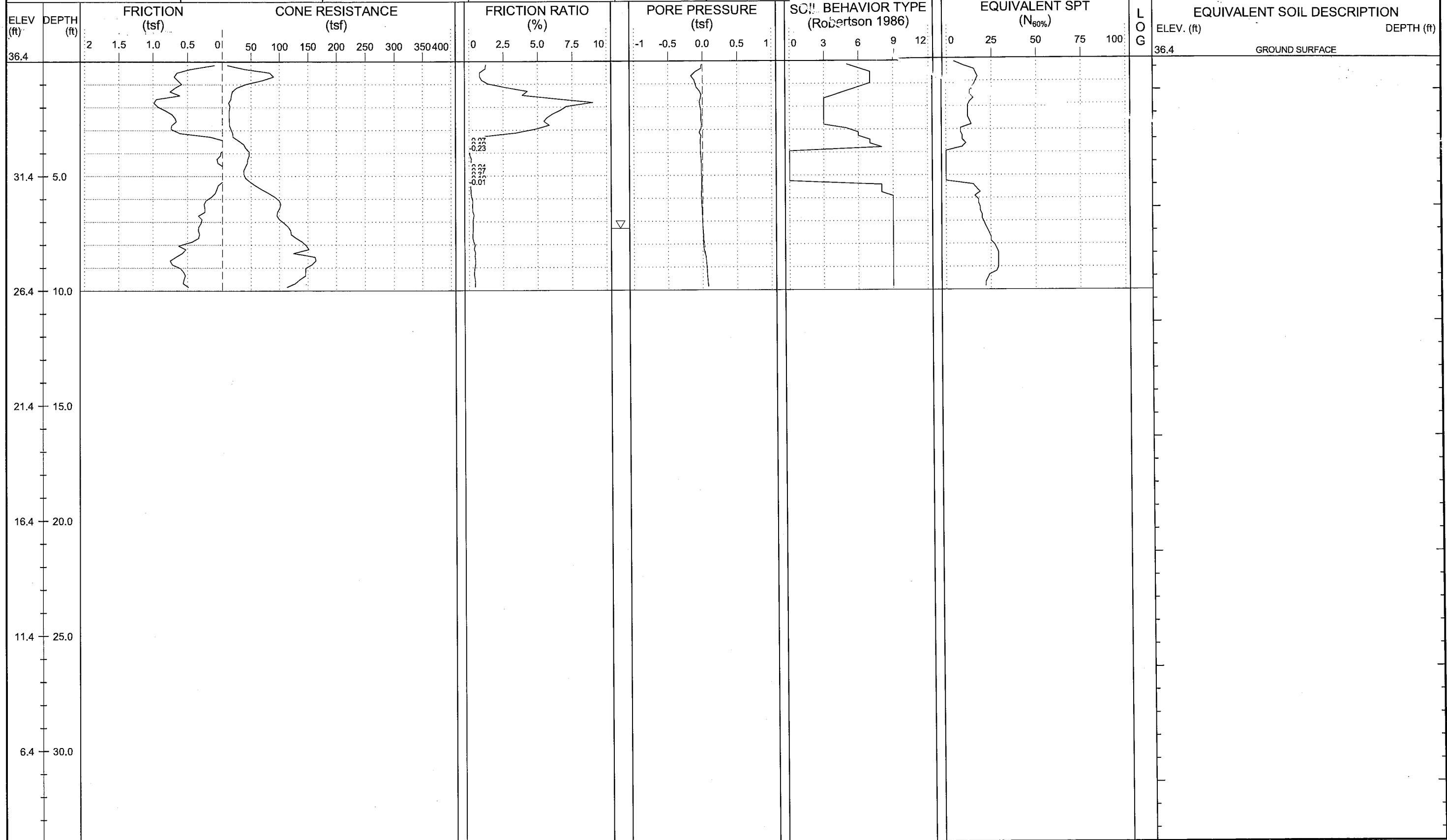


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

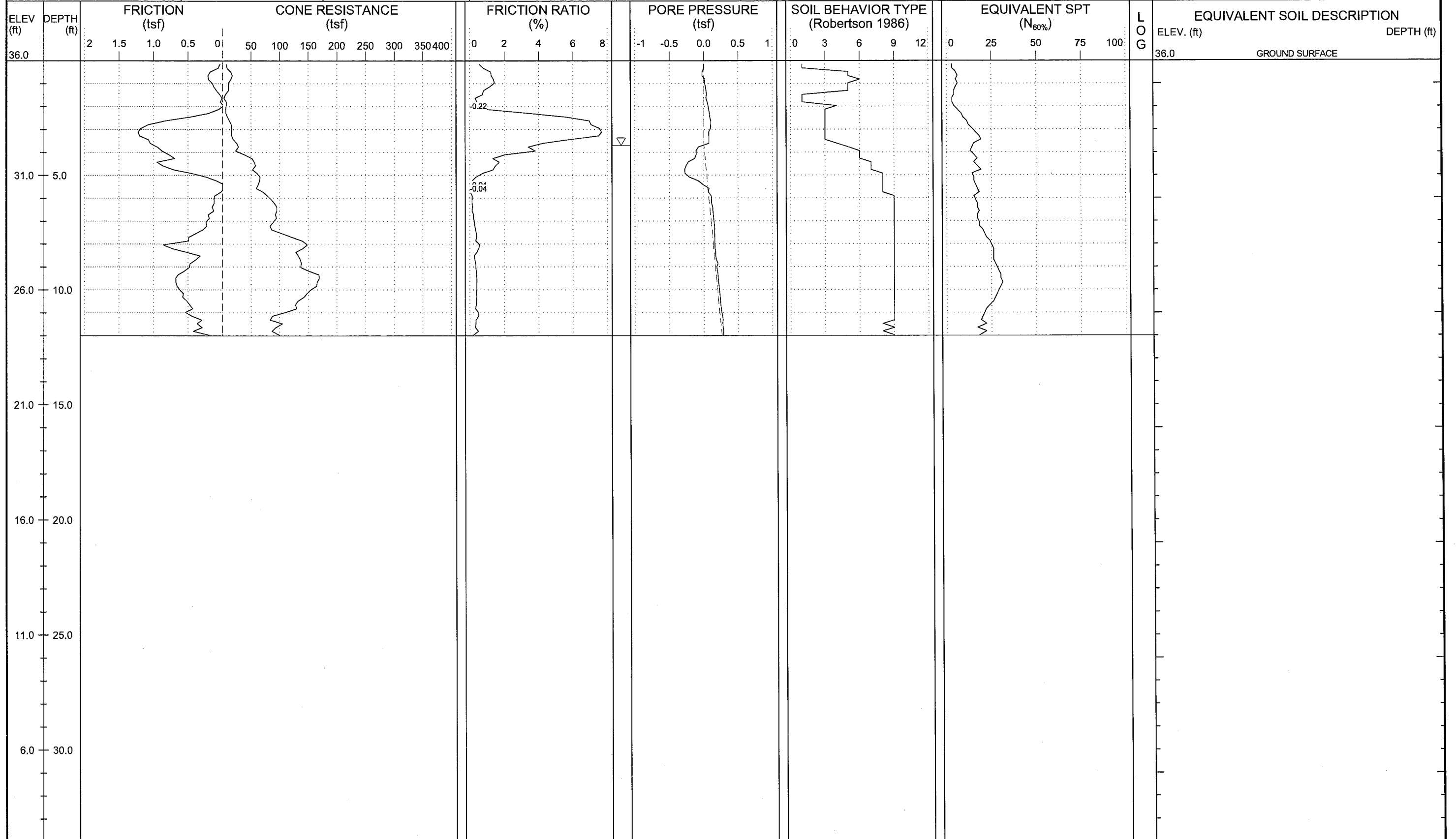
SHEET NO.:	82
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: L-224	STATION: 224+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 36.4 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 428,269	EASTING: 2,528,148	START DATE: 08/17/12	CONE ID: DSG0867
				TECHNICIAN: M.A.D.	SURFACE WATER DEPTH: N/A



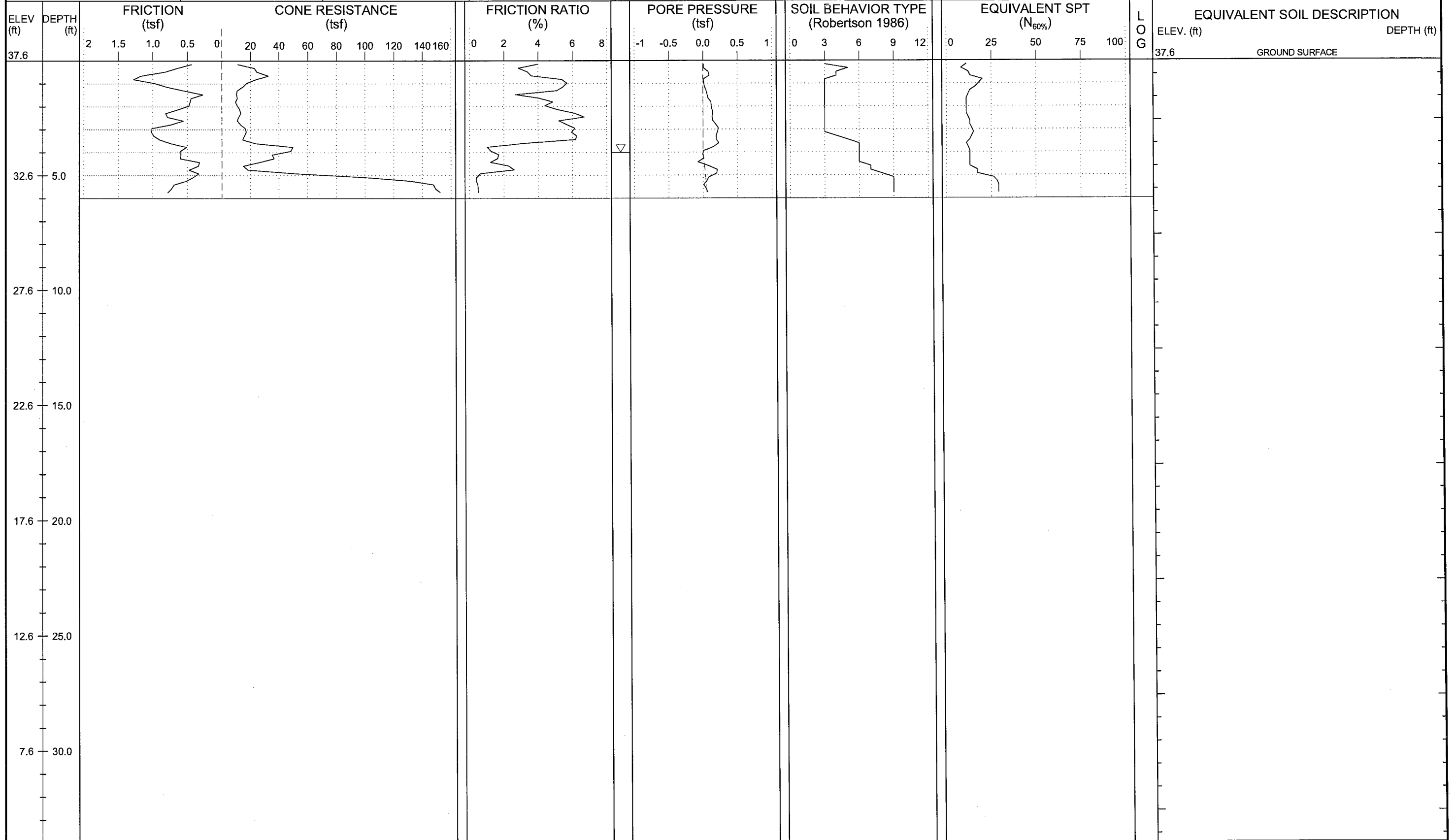


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 3.7	DRILL METHOD: CPT / DPT
BORING NO.: L-226	STATION: 226+00	OFFSET: 0ft CL	ALIGNMENT: -L-	24 HR. N/A	DRILLER: Ron Stewart
COLLAR ELEV.: 36.0 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 428,462	EASTING: 2,528,199	START DATE: 08/17/12	CONC. DATE: 08/17/12
				ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
				CONE TYPE: 1.44 Vertek Piezocone	SURFACE WATER DEPTH: N/A
				CONE ID: DSG0867	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 4.0, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: L-228	STATION: 228+00	OFFSET: 0ft CL	ALIGNMENT: -L-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 37.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 428,648	EASTING: 2,528,274	START DATE: 08/17/12	COMP. DATE: 08/17/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



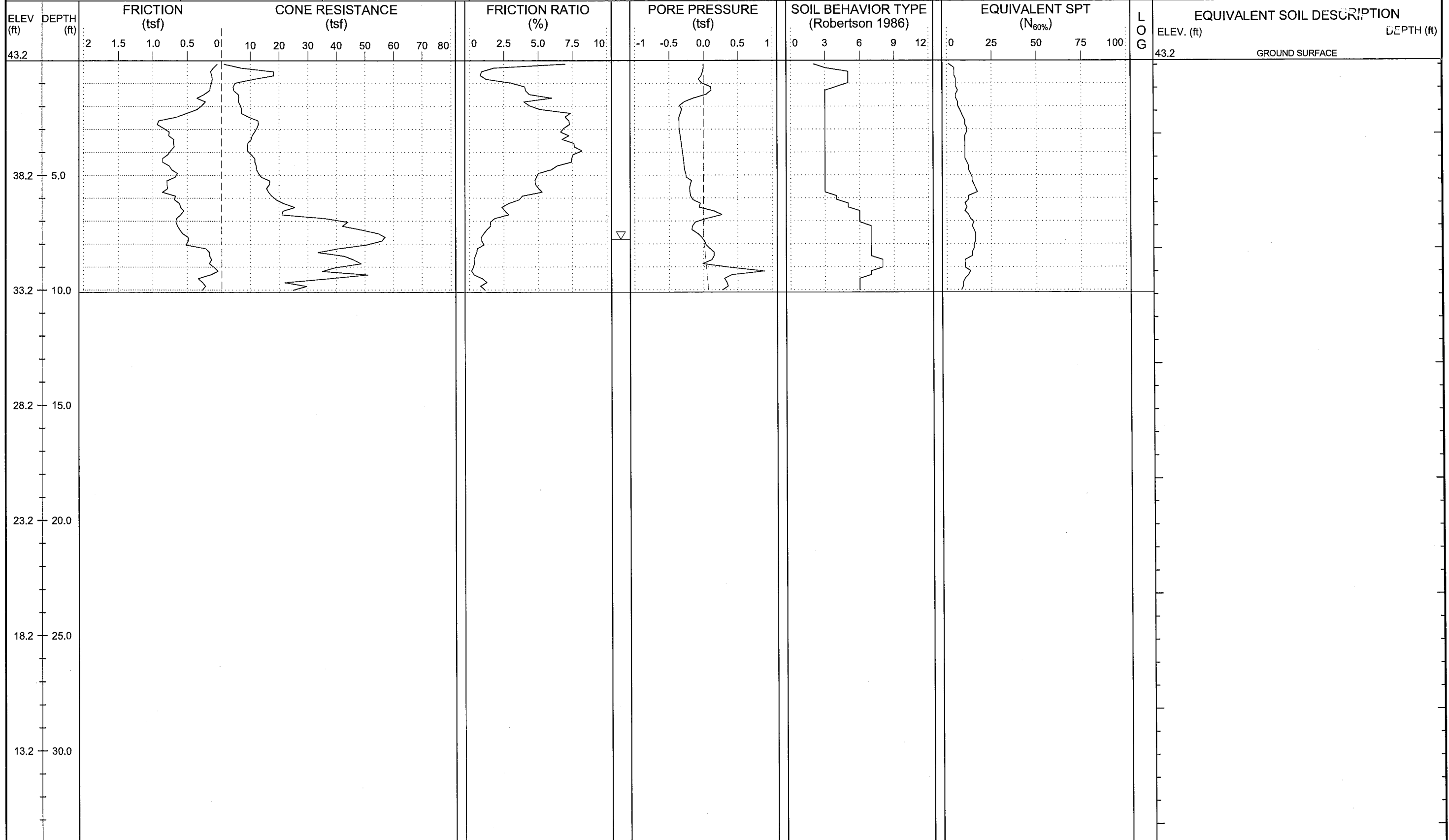


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	85
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 7.8, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y1-12	STATION: 12+00	OFFSET: 0ft CL	ALIGNMENT: -Y1-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 43.2 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 412,324	EASTING: 2,524,271	START DATE: 09/10/12	CONE ID: DSA1123
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





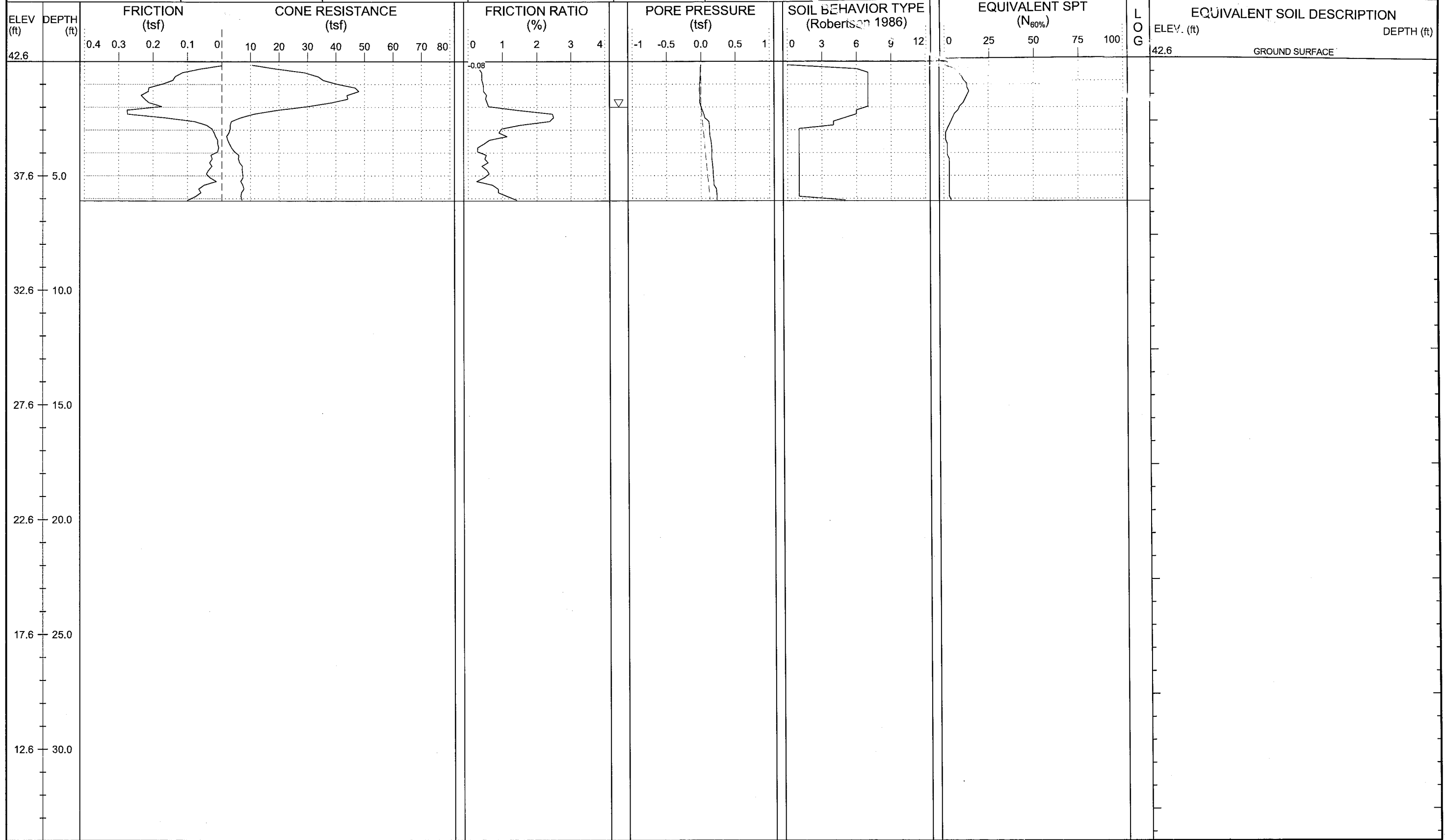


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 87  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 2.0, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y1-16	STATION: 16+00	OFFSET: 15ft LT	ALIGNMENT: -Y1-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 42.6 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 412,433	EASTING: 2,524,642	START DATE: 09/10/12	COMP. DATE: 09/10/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





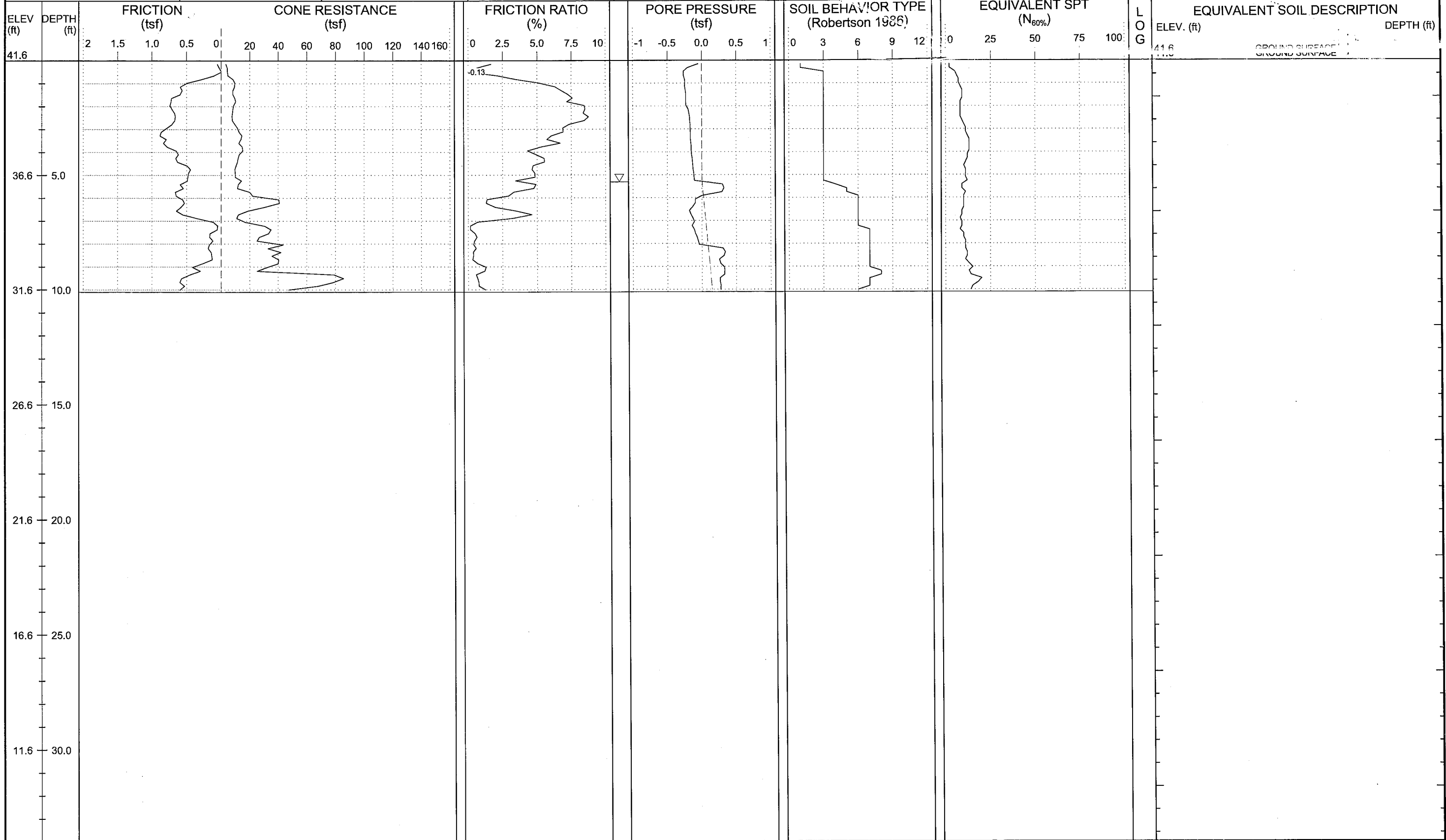


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

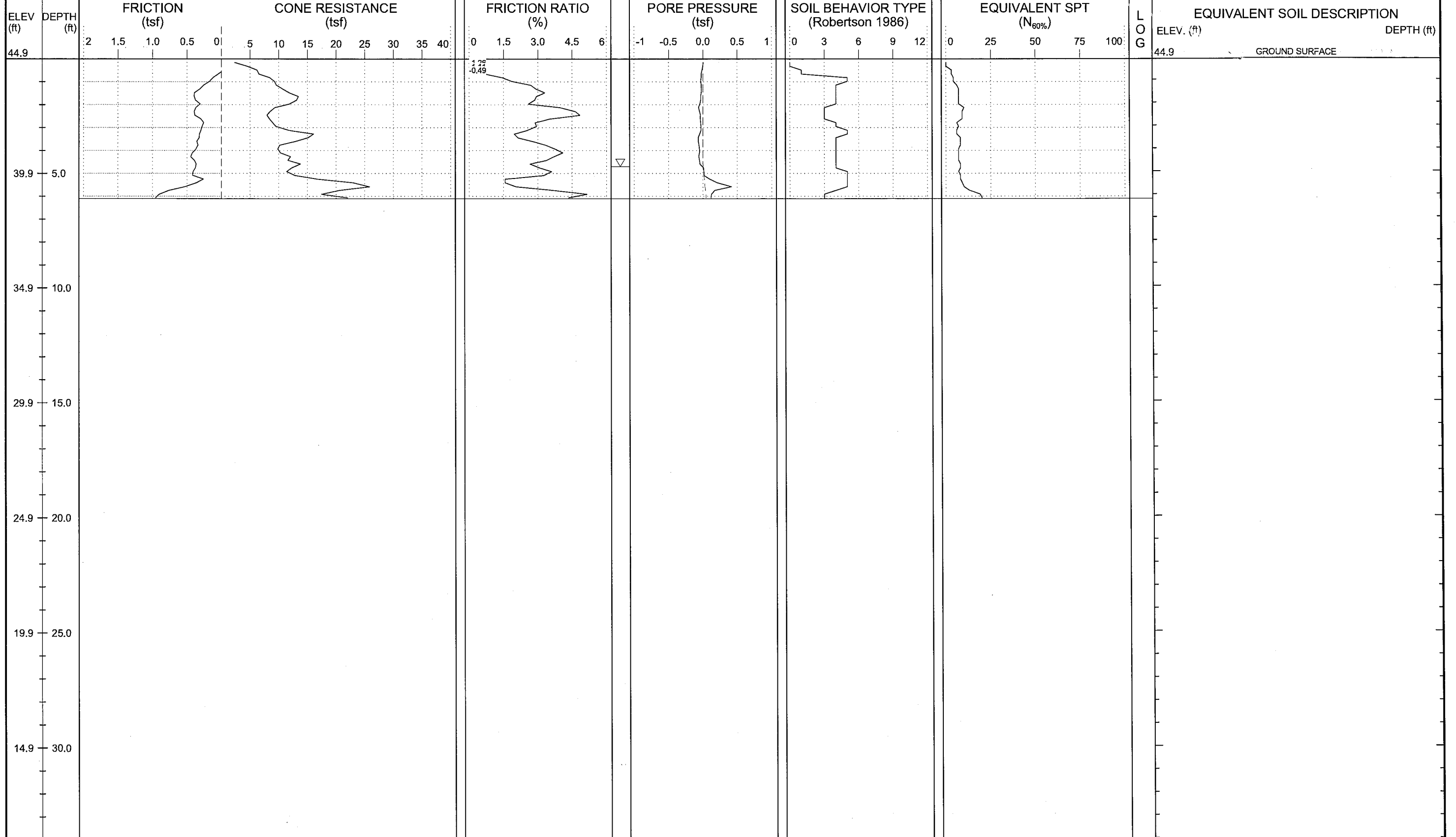
SHEET NO.:	88
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.3	DRILL METHOD: CPT / DPT
BORING NO.: Y1A-1050	STATION: 10+50	OFFSET: 0ft CL	ALIGNMENT: -Y1A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 41.6 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 412,280	EASTING: 2,524,435	24 HR. N/A	CONE ID: DSA1123
				START DATE: 09/10/12	DRILLER: Ron Stewart
				COMP. DATE: 09/10/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.7	DRILL METHOD: CPT / DPT
BORING NO.: Y1A-1250	STATION: 12+50	OFFSET: 14ft LT	ALIGNMENT: -Y1A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 44.9 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 412,117	EASTING: 2,524,328	24 HR. N/A	START DATE: 09/10/12
				COMP. DATE: 09/10/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

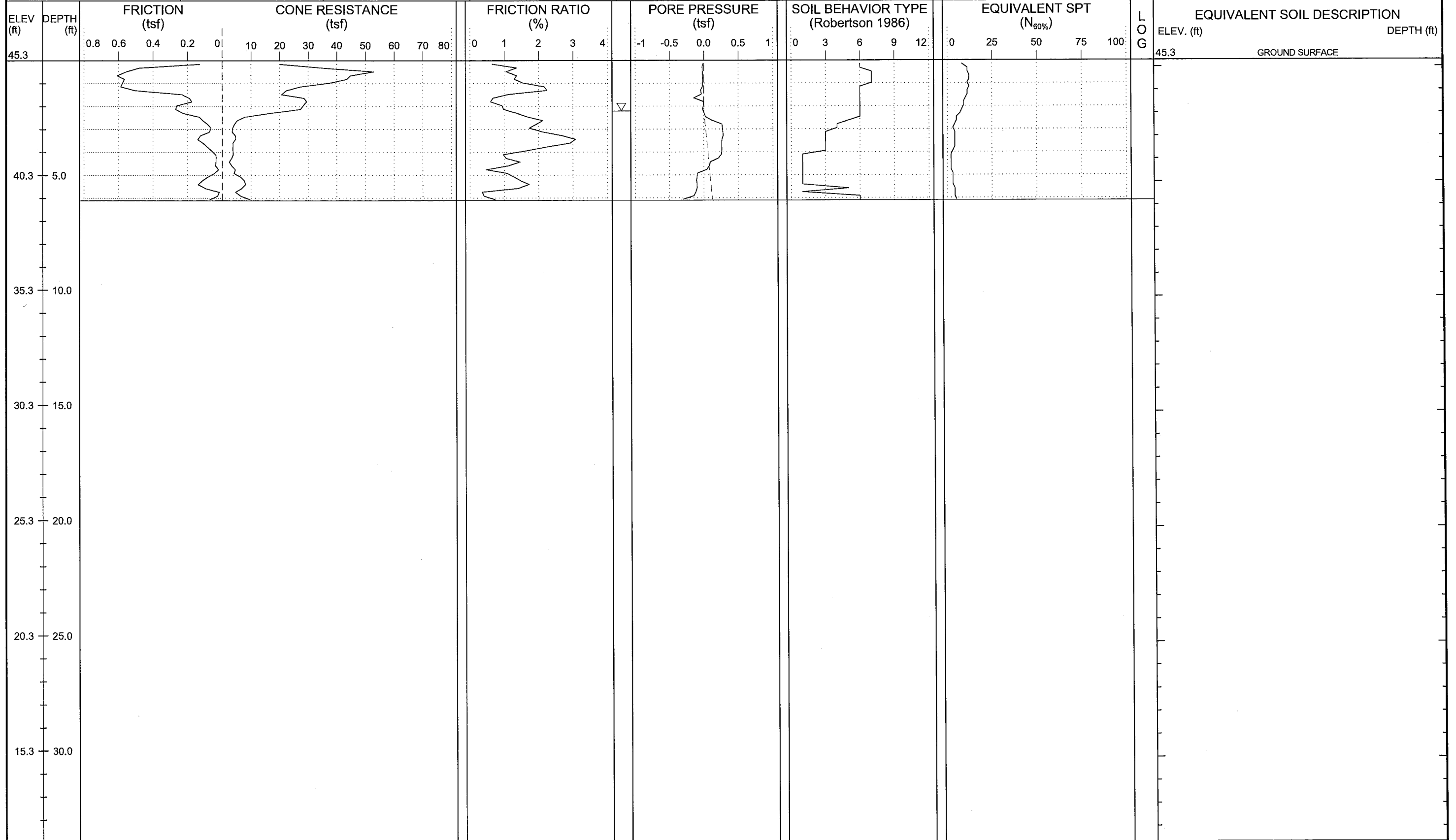




# NCDOT GEOTECHNICAL ENGINEERING UNIT

SHEET NO.:	90
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y1A-1750	STATION: 17+50	OFFSET: 20ft LT	ALIGNMENT: -Y1A-	0 HR. 2.2	ROD TYPE: Pre-strung
COLLAR ELEV.: 45.3 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 411,786	EASTING: 2,523,953	24 HR. N/A	START DATE: 09/10/12
				CONC. DATE: 09/10/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



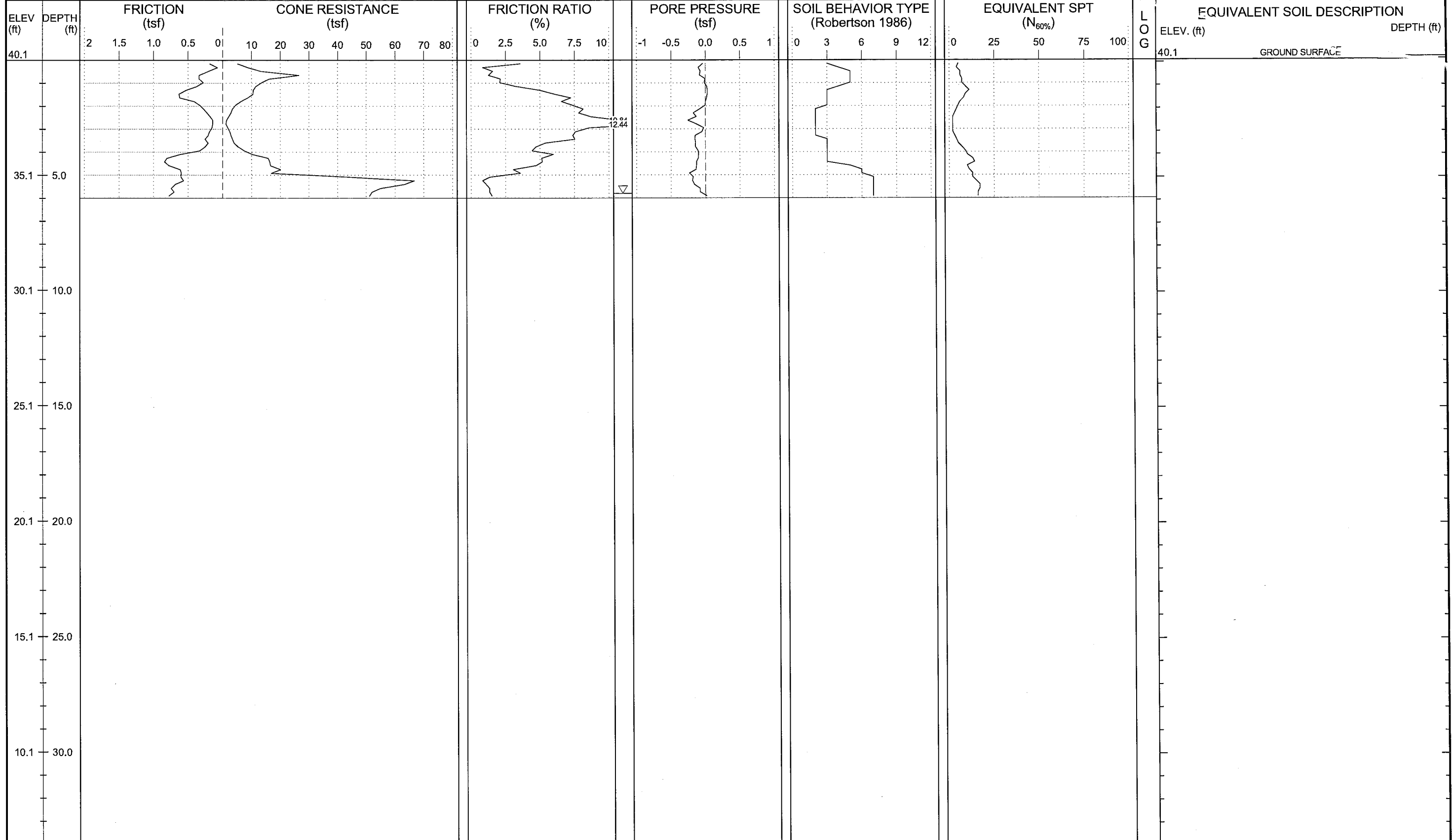


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 91  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

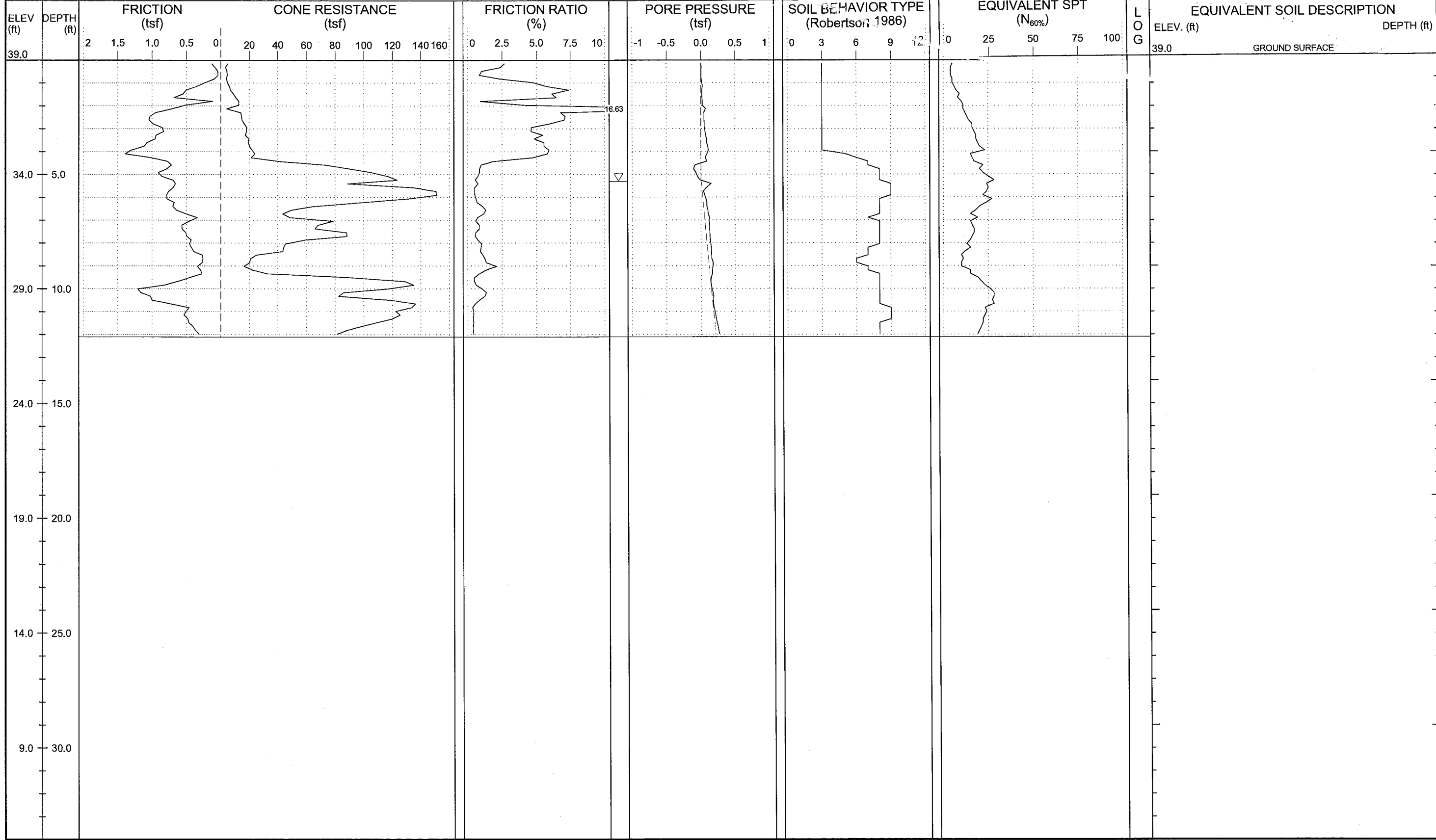
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.8, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2-13	STATION: 13+00	OFFSET: 13ft RT	ALIGNMENT: -Y2-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 40.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,287	EASTING: 2,524,496	START DATE: 08/29/12	CONE ID: DSG0867
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A







WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2-17	STATION: 17+00	OFFSET: 10ft RT	ALIGNMENT: -Y2-	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
COLLAR ELEV.: 39.0 ft	TOTAL DEPTH: 12.1 ft	NORTHING: 418,184	EASTING: 2,524,881	ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
				START DATE: 08/30/12	COMP. DATE: 08/30/12
				SURFACE WATER DEPTH: N/A	





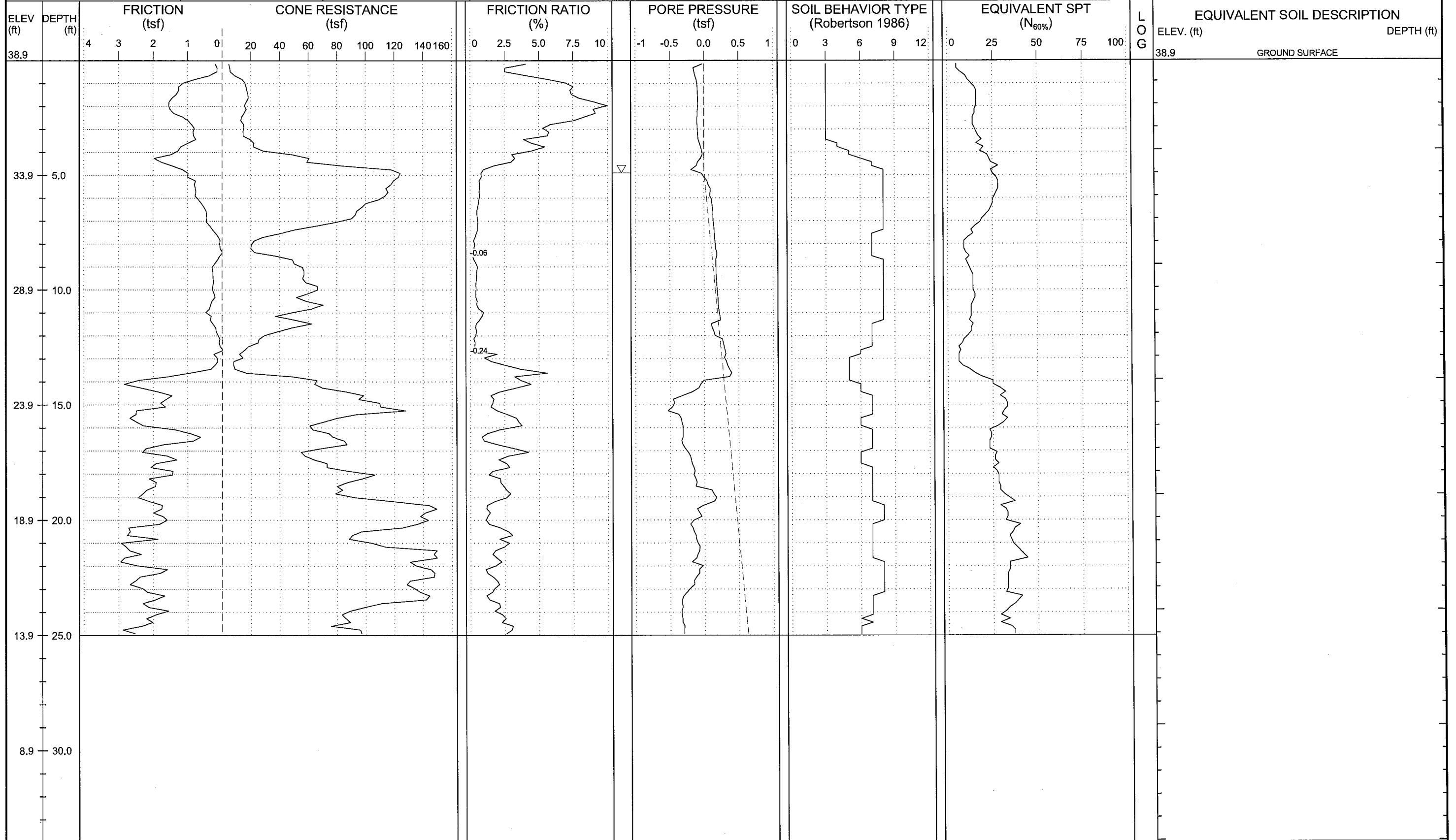


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 95  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.9, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2-24	STATION: 24+00	OFFSET: 40ft RT	ALIGNMENT: -Y2-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.9 ft	TOTAL DEPTH: 25.0 ft	NORTHING: 417,824	EASTING: 2,525,469	START DATE: 08/29/12	CONE ID: DSG0867
				COMP. DATE: 08/29/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





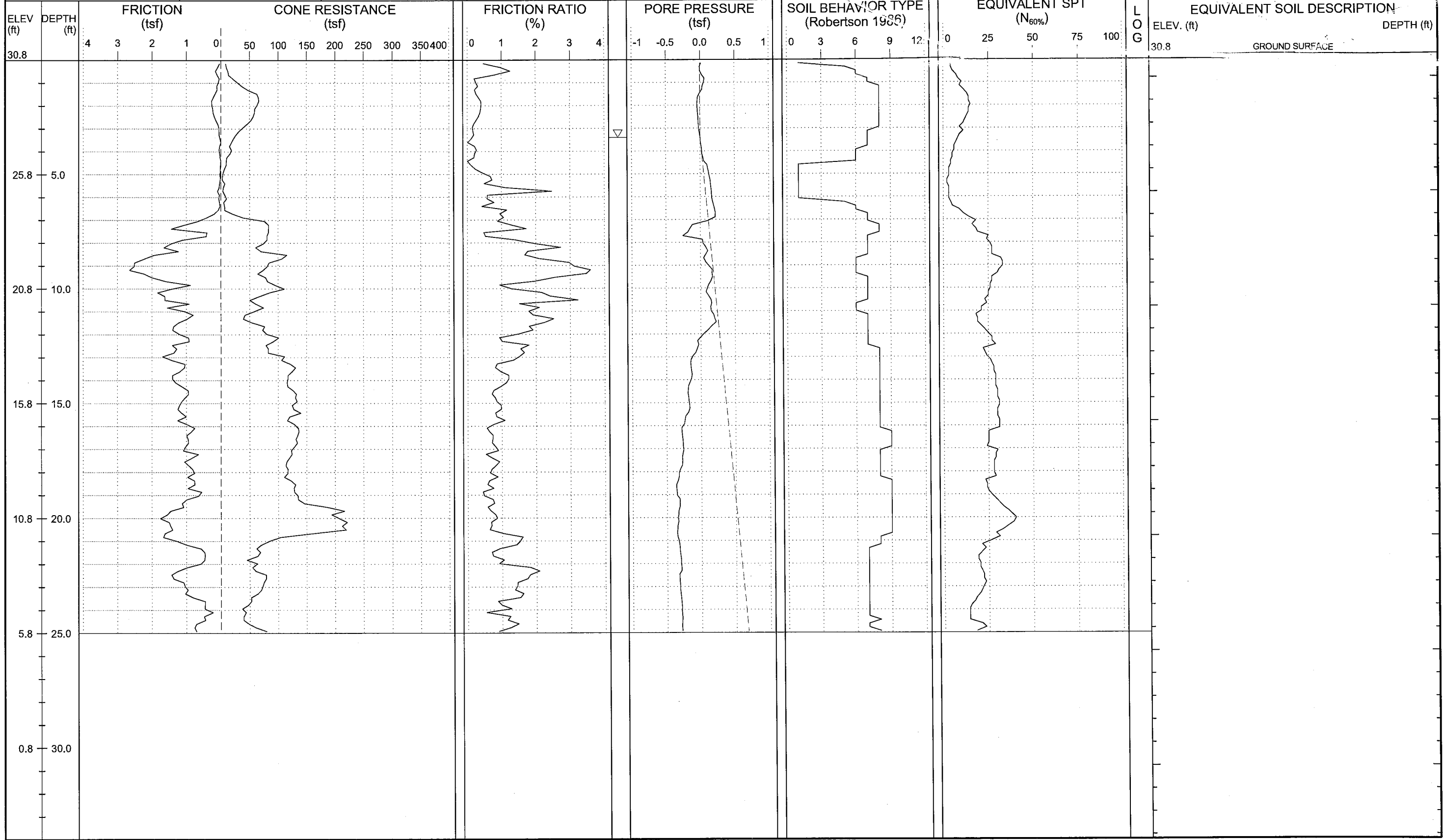


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 96  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 3.4	DRILL METHOD: CPT / DPT
BORING NO.: Y2-26	STATION: 26+00	OFFSET: 30ft RT	ALIGNMENT: -Y2-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 30.8 ft	TOTAL DEPTH: 25.0 ft	NORTHING: 417,707	EASTING: 2,525,633	24 HR. N/A	START DATE: 09/04/12
				DRILLER: Ron Stewart	TECHNICIAN: M.A.D.
				COMP. DATE: 09/04/12	SURFACE WATER DEPTH: N/A





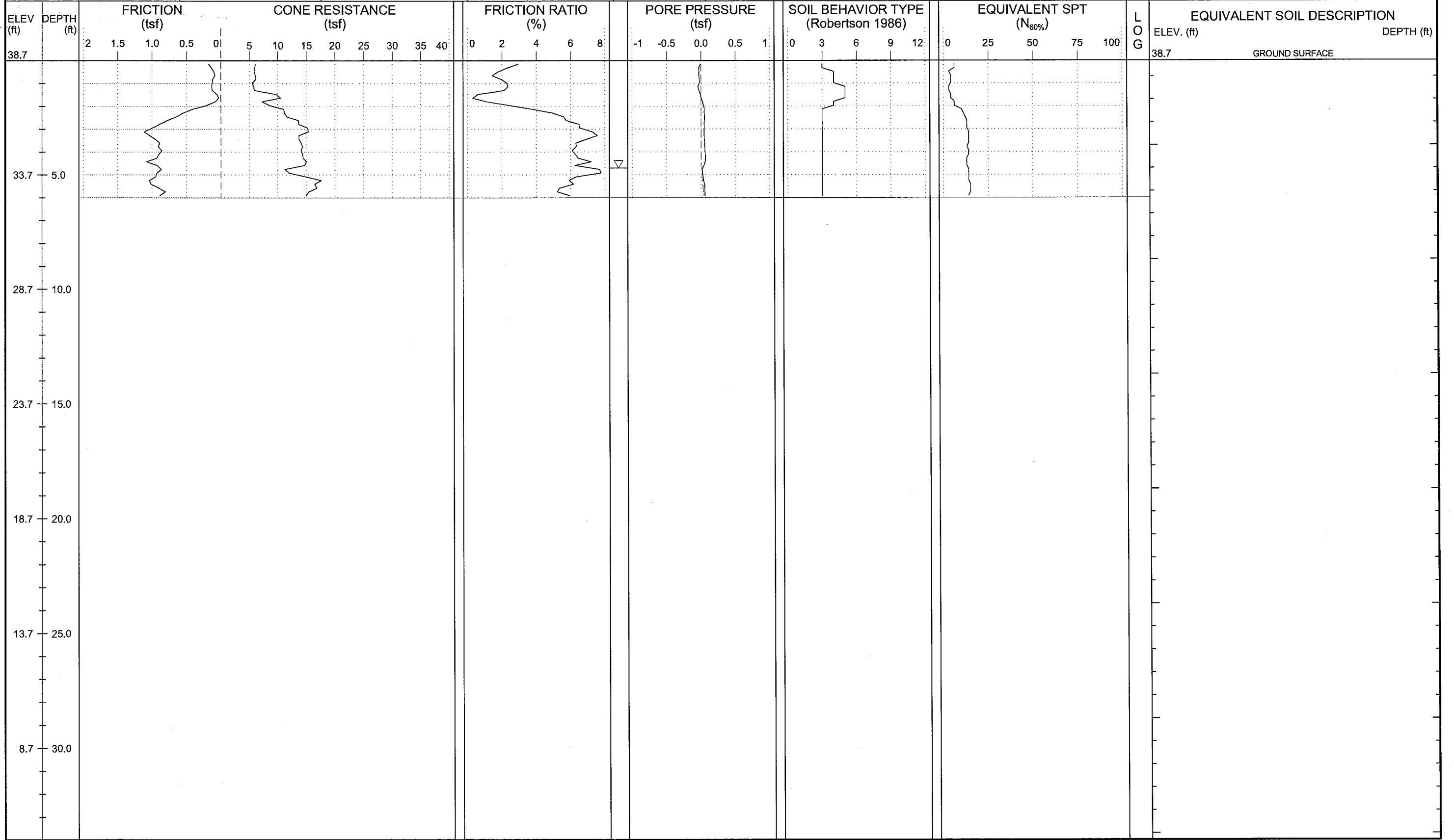


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 98  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.7, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2A-11	STATION: 11+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,123	EASTING: 2,524,783	START DATE: 08/30/12	CONE ID: DSG0867
				COMP. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



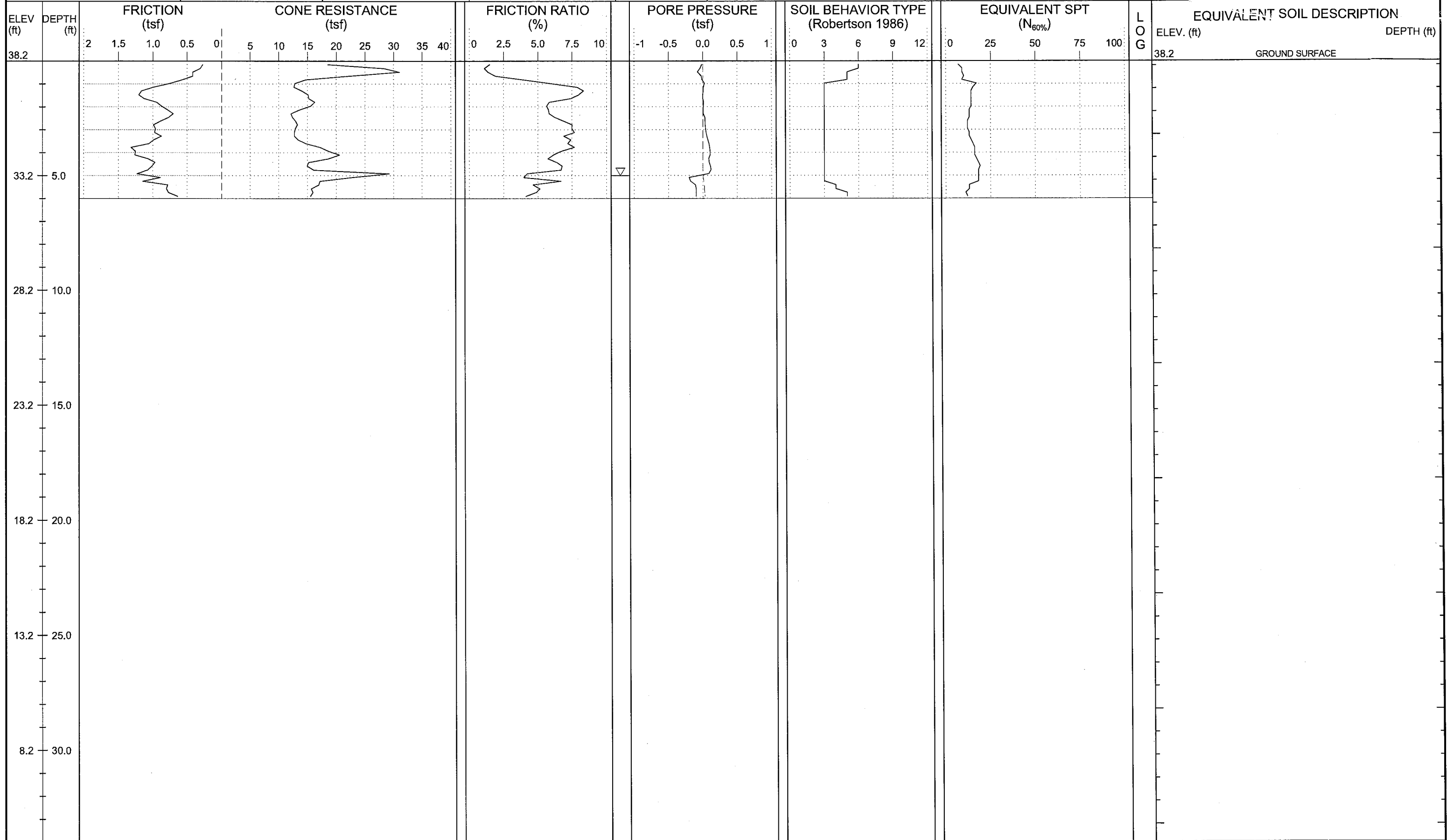


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.:	99
PROJ. NO.:	34442.1.2
TIP NO.:	R-2514B
COUNTY:	JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.0, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2A-13	STATION: 13+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.2 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,925	EASTING: 2,524,756	START DATE: 08/30/12	CONE ID: DSG0867
				COMP. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



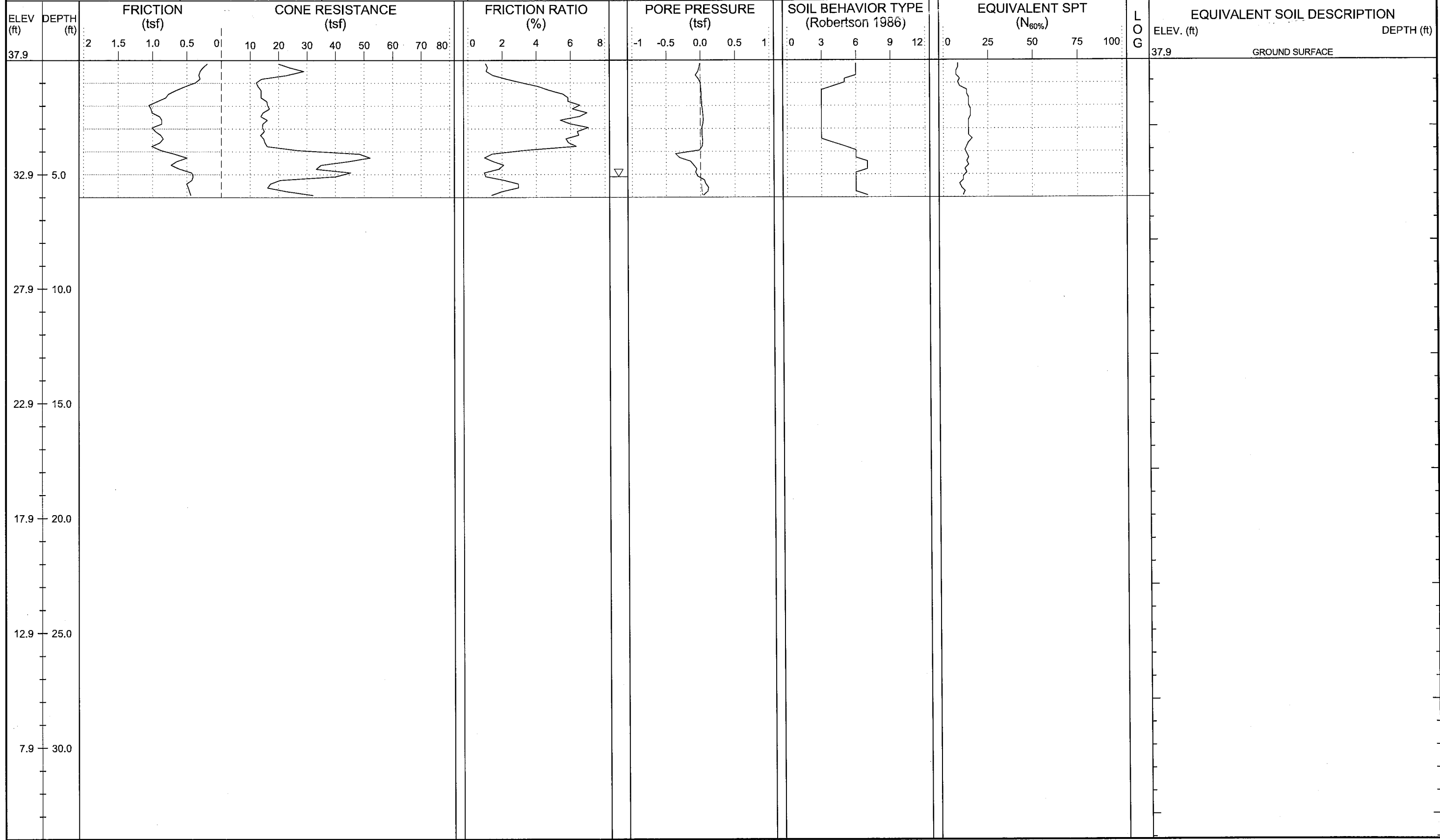


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 100  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-15	STATION: 15+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. 5.1	ROD TYPE: Pre-strung
COLLAR ELEV.: 37.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,726	EASTING: 2,524,734	24 HR. N/A	START DATE: 08/30/12
				CONC. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

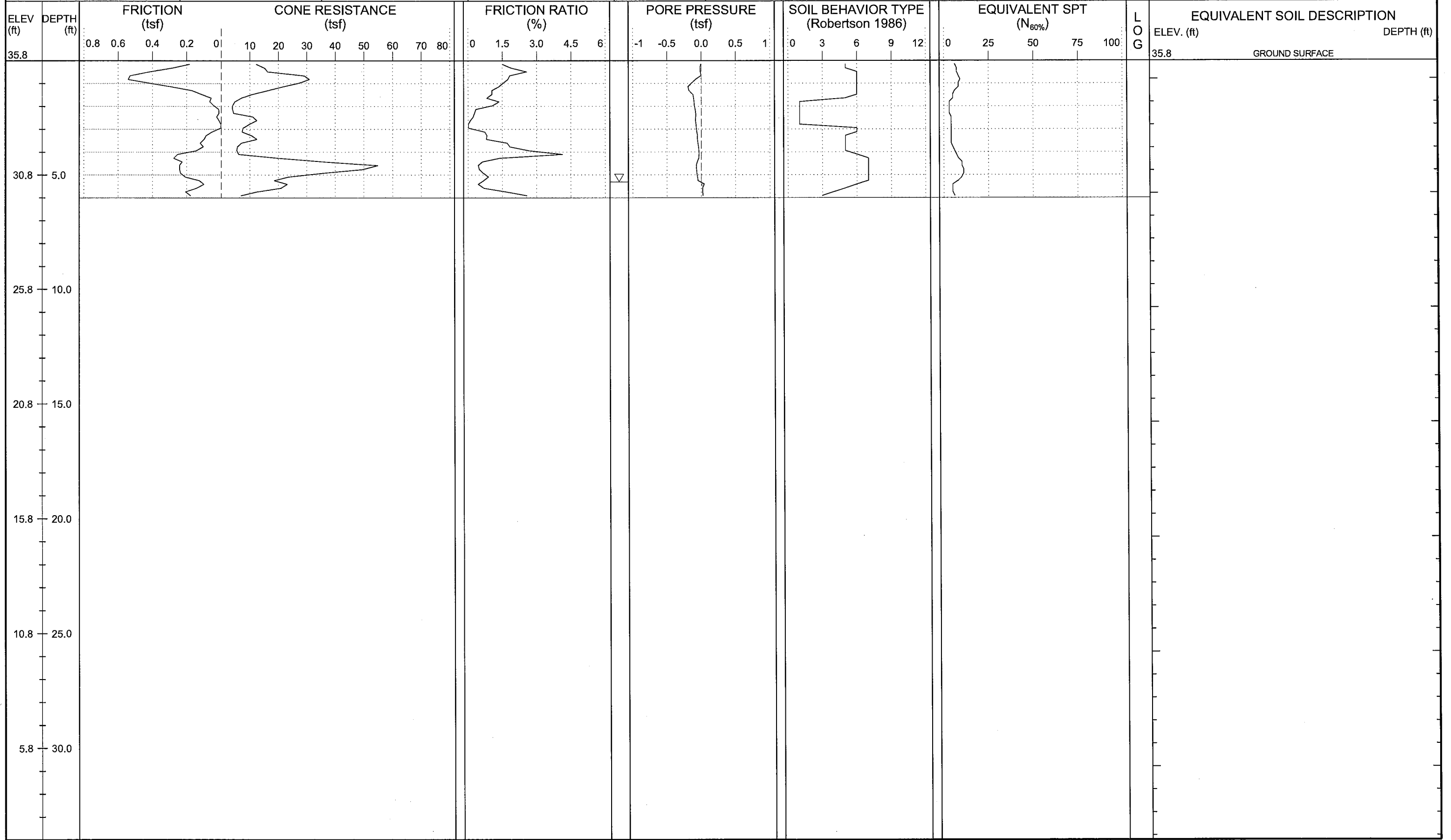




**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 101  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-17	STATION: 17+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. 5.3	ROD TYPE: Pre-strung
COLLAR ELEV.: 35.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,538	EASTING: 2,524,795	24 HR. N/A	START DATE: 08/30/12
				CONC. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



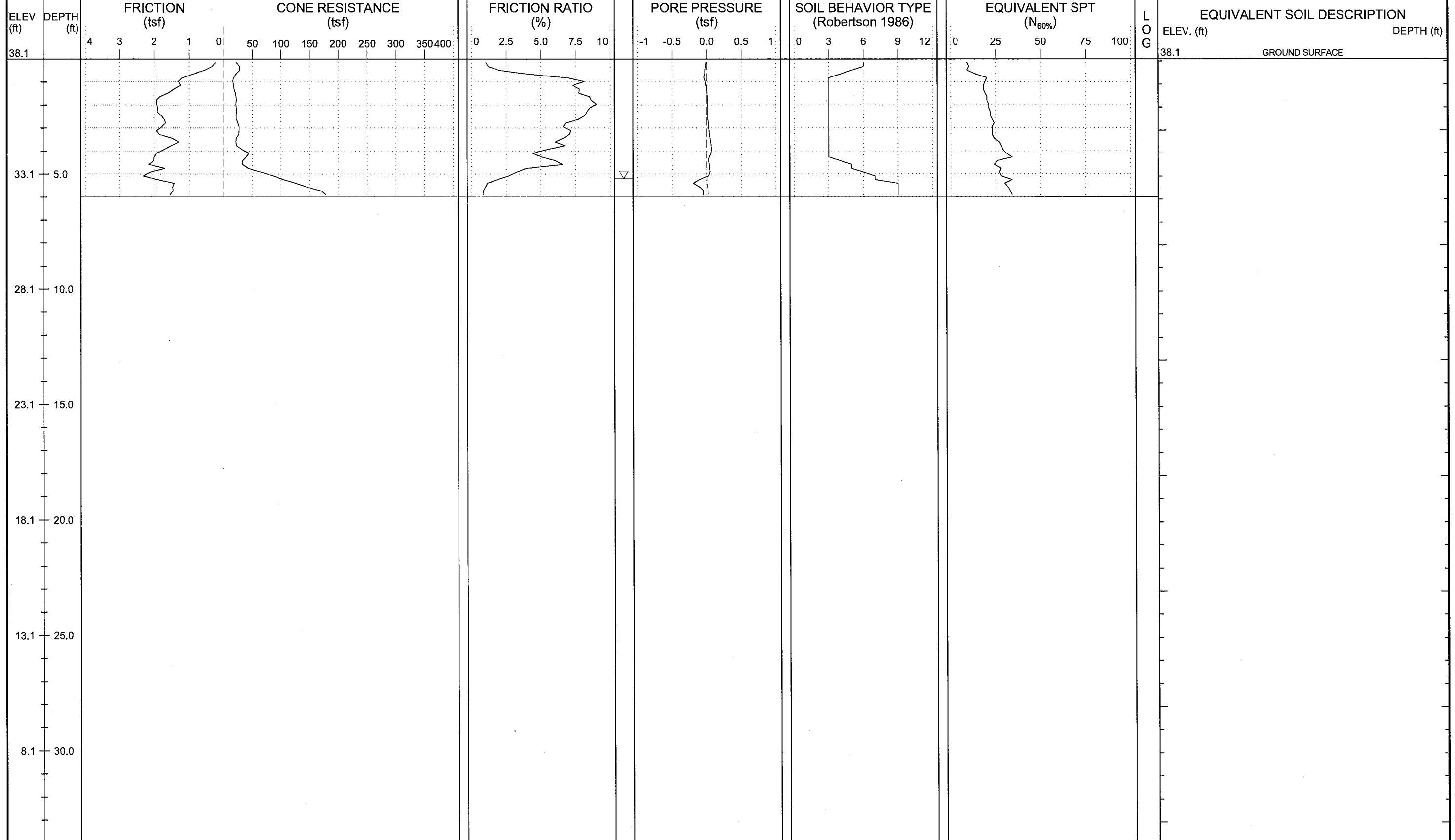


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 102  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.2, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2A-19	STATION: 19+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 38.1 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,367	EASTING: 2,524,899	START DATE: 08/30/12	CONE ID: DSG0867
				COMP. DATE: 08/30/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



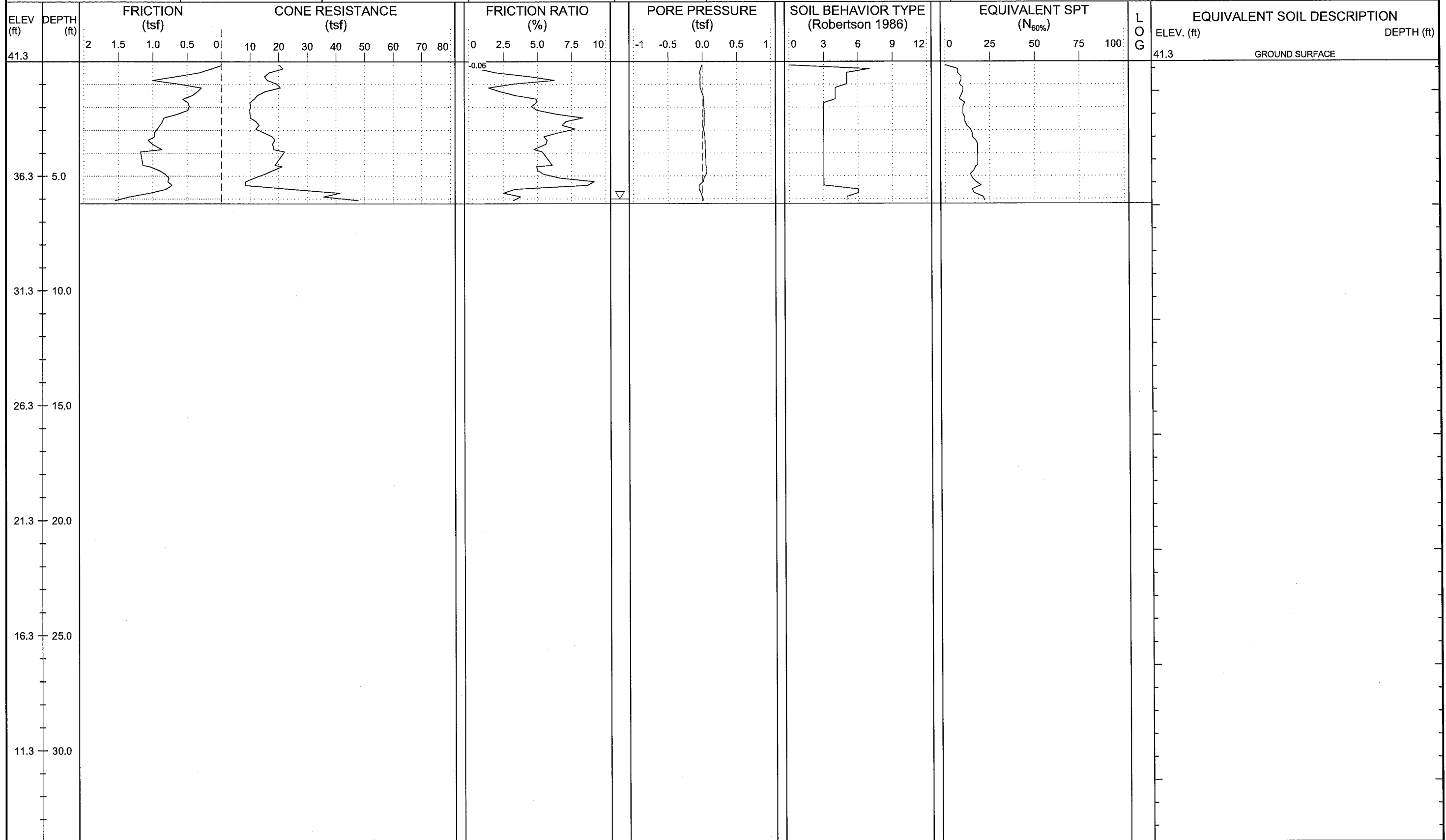


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 103  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-21	STATION: 21+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. 6.0	ROD TYPE: Pre-strung
COLLAR ELEV.: 41.3 ft	TOTAL DEPTH: 6.2 ft	NORTHING: 417,175	EASTING: 2,524,942	24 HR. N/A	START DATE: 08/30/12
				CONC. DATE: 09/04/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



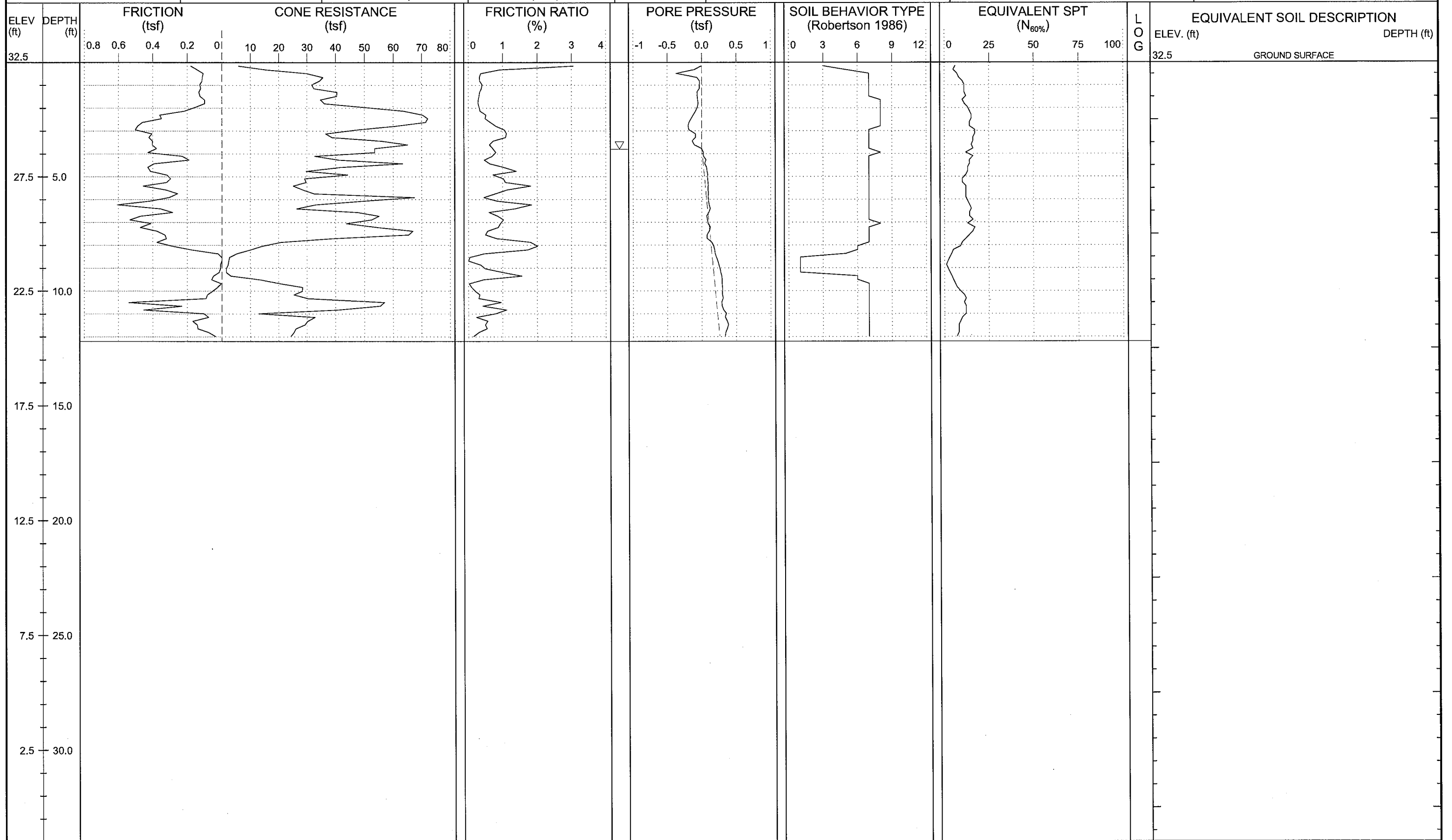




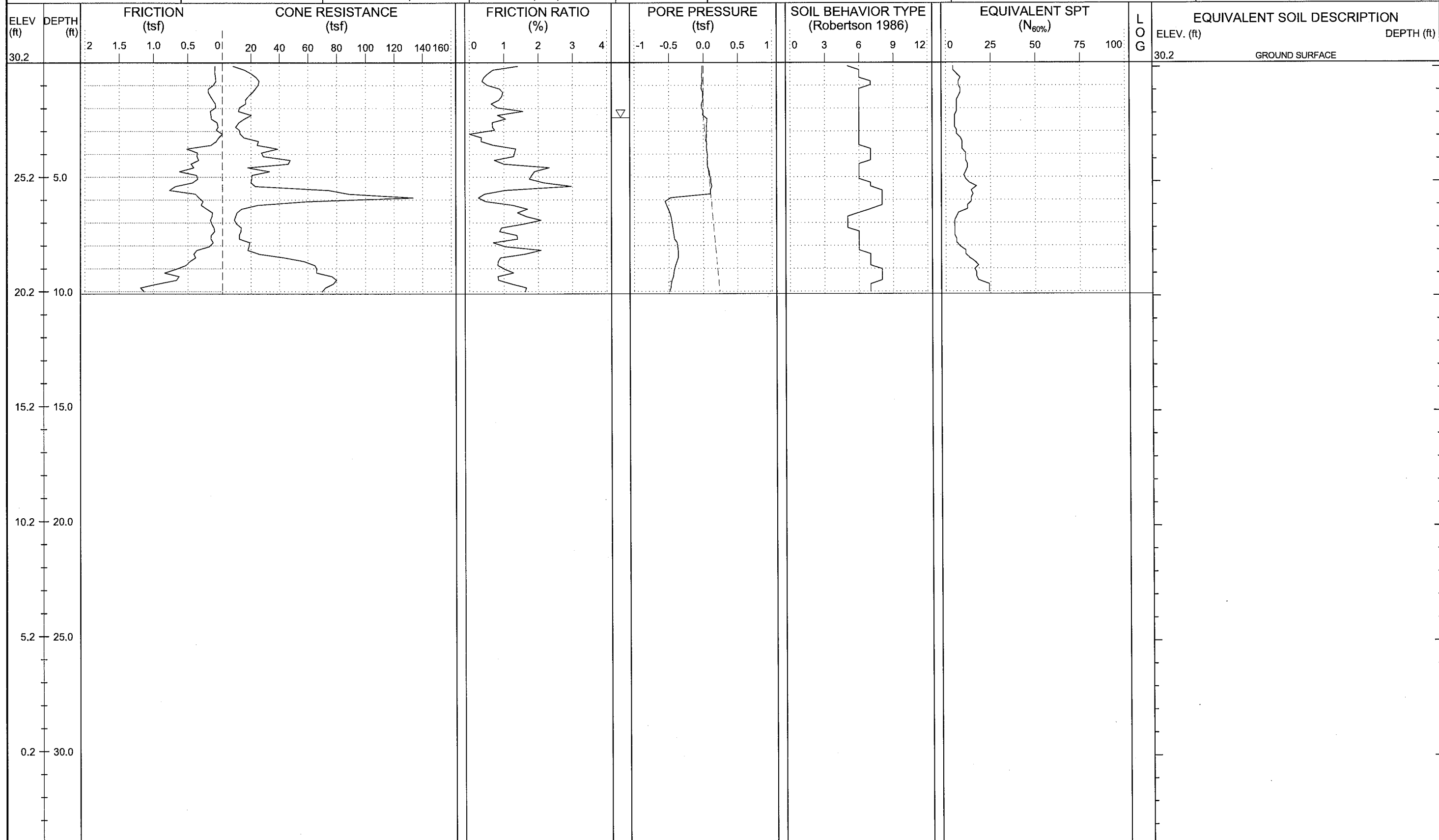




WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-28	STATION: 28+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. 3.8	ROD TYPE: Pre-strung
COLLAR ELEV.: 32.5 ft	TOTAL DEPTH: 12.2 ft	NORTHING: 416,501	EASTING: 2,524,753	24 HR. N/A	START DATE: 08/30/12
				DRILLER: Ron Stewart	TECHNICIAN: M.A.D.
				COMP. DATE: 09/04/12	SURFACE WATER DEPTH: N/A



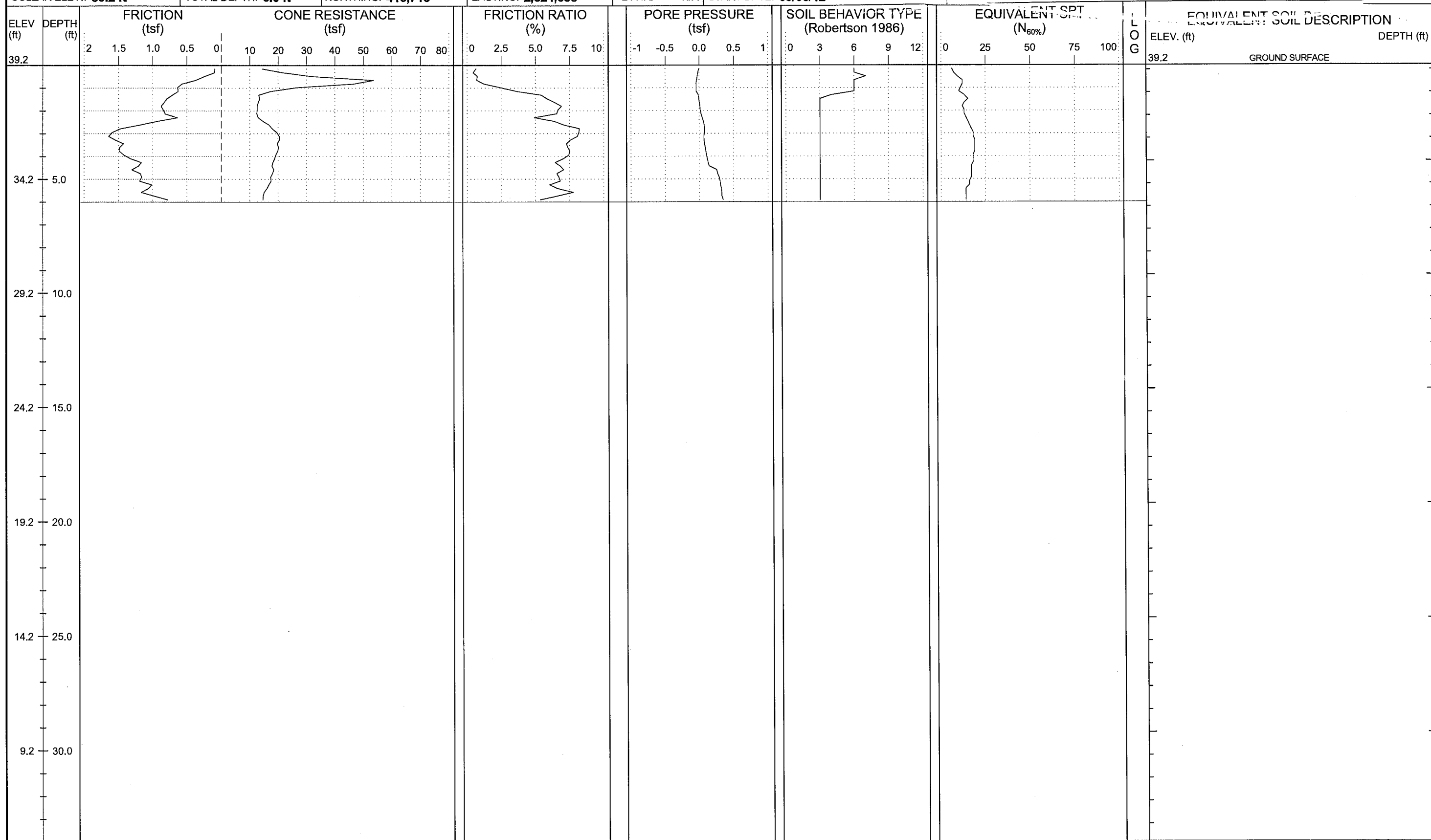
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-30	STATION: 30+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. 2.4	ROD TYPE: Pre-strung
COLLAR ELEV.: 30.2 ft	TOTAL DEPTH: 10.1 ft	NORTHING: 416,309	EASTING: 2,524,696	24 HR. N/A	START DATE: 09/04/12
				CONC. DATE: 09/04/12	DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A







WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-36	STATION: 36+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 39.2 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 415,718	EASTING: 2,524,638	24 HR. N/A	START DATE: 09/06/12
				COMP. DATE: 09/06/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	

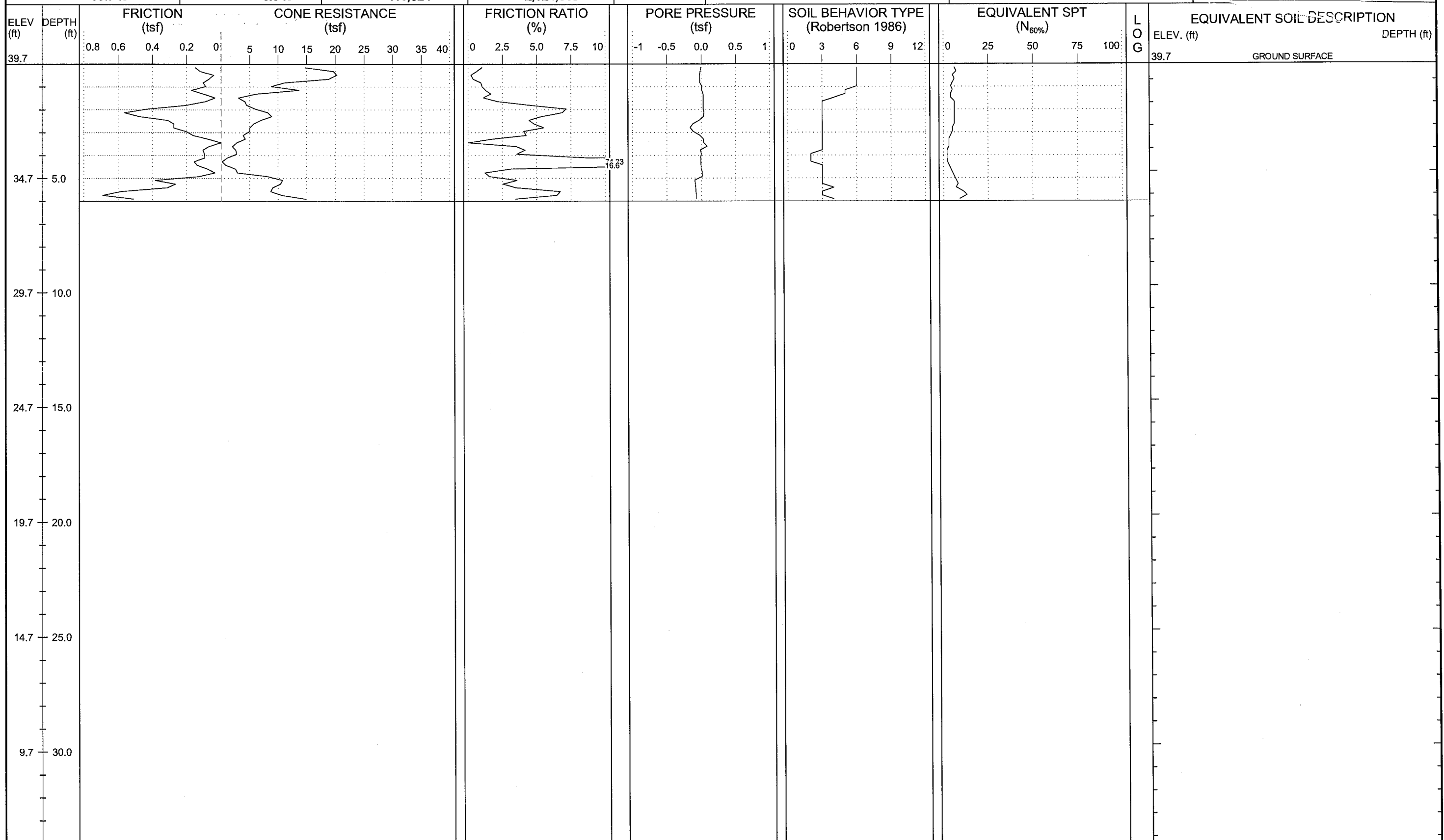




**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 111  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-40	STATION: 40+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 39.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 415,324	EASTING: 2,524,568	24 HR. N/A	START DATE: 09/05/12
				CONE ID: DSG0867	DRILLER: Ron Stewart
				COMP. DATE: 09/05/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



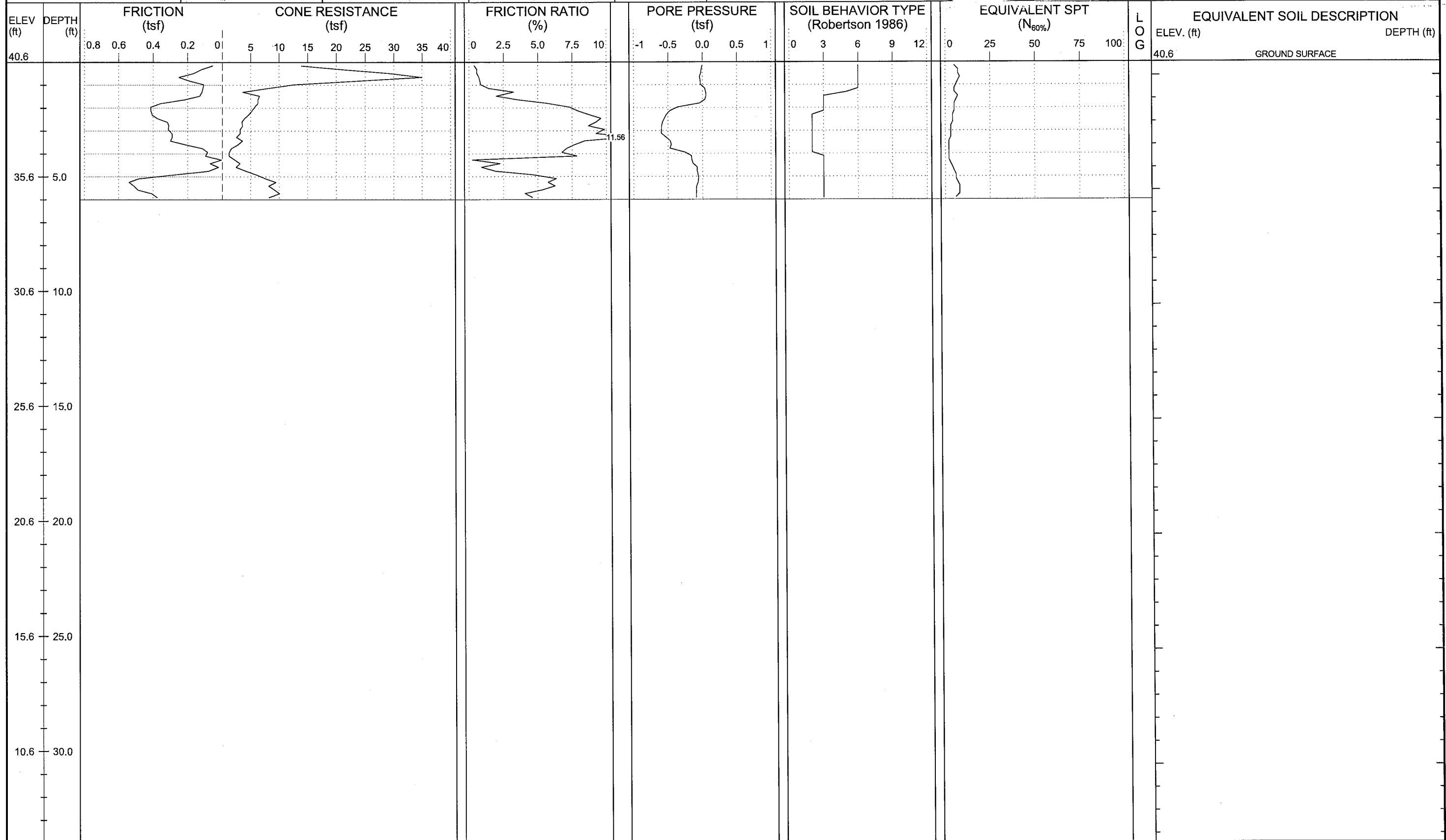




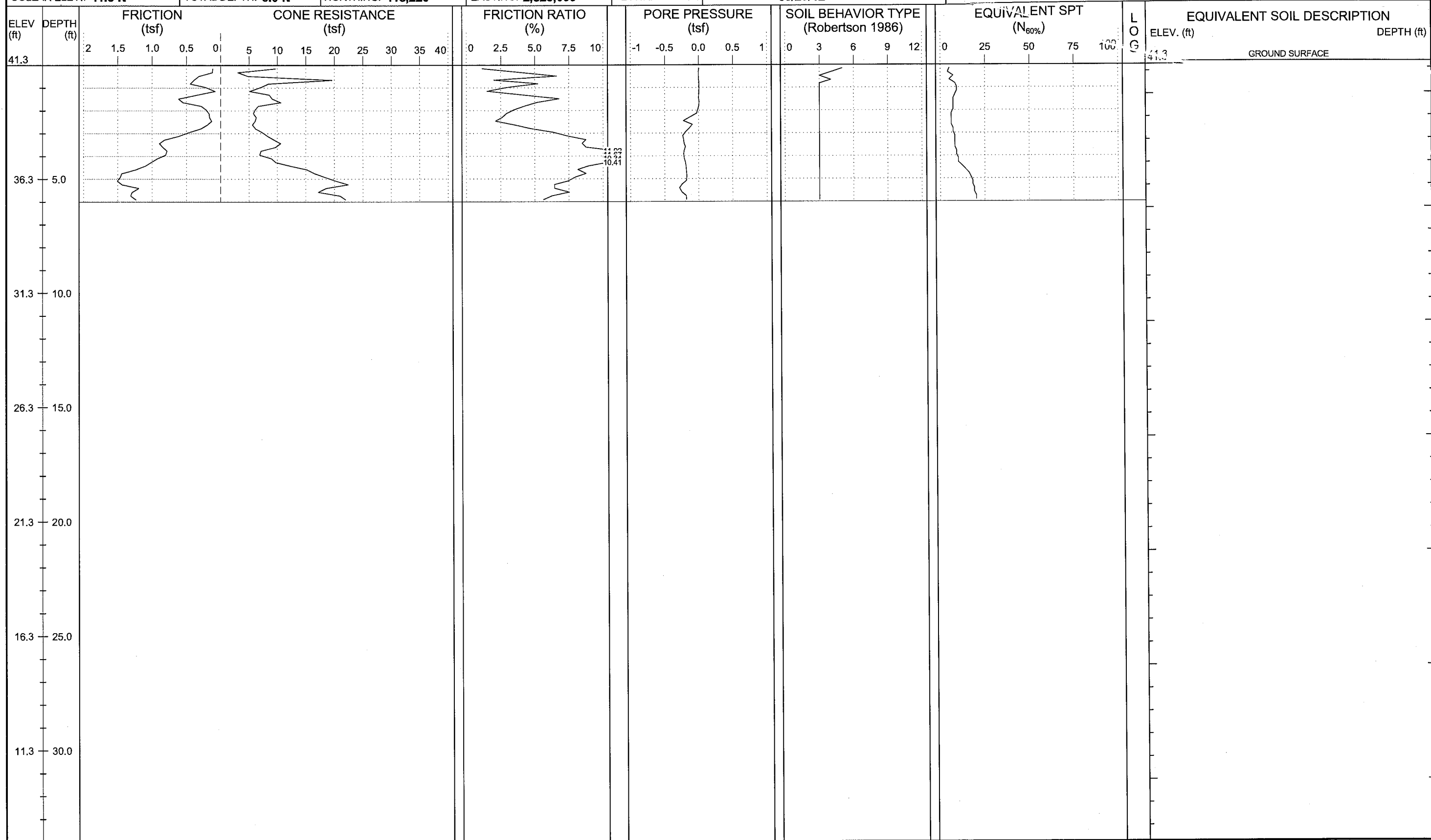
**NCDOT GEOTECHNICAL ENGINEERING UNIT**

ENGLISH  
 SHEET NO.: 112  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2A-42	STATION: 42+00	OFFSET: 0ft CL	ALIGNMENT: -Y2A-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 40.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 415,127	EASTING: 2,524,533	24 HR. N/A	START DATE: 09/06/12
				CONE ID: DSG0867	DRILLER: Cory Robison
				COMP. DATE: 09/06/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	

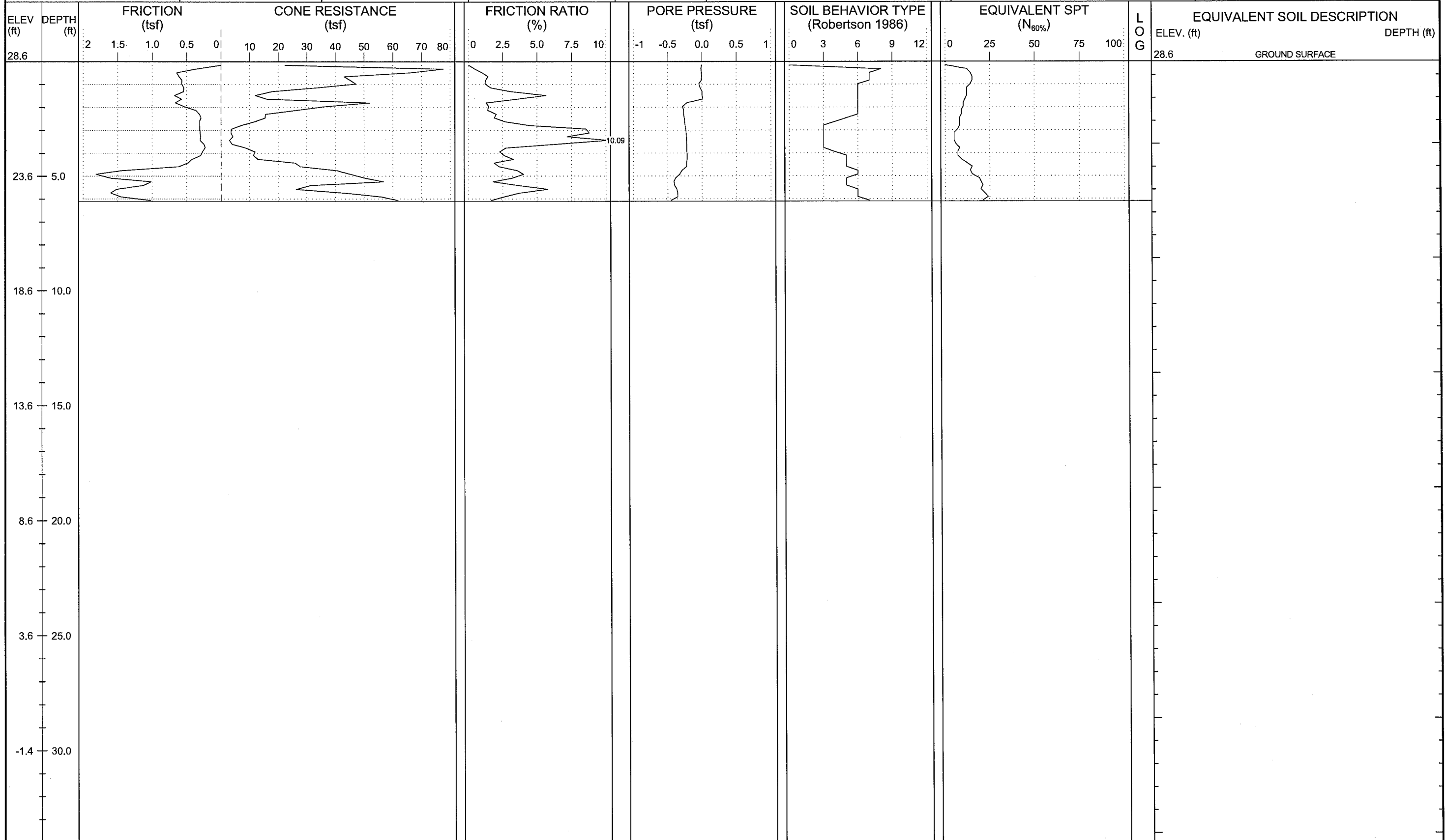


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2B-1250	STATION: 12+50	OFFSET: 0ft CL	ALIGNMENT: -Y2B-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 41.3 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,220	EASTING: 2,525,099	24 HR. N/A	START DATE: 08/29/12
				CONE ID: DSG0867	DRILLER: Cory Robison
				COMP. DATE: 08/29/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: Y2C-13	STATION: 13+00	OFFSET: 0ft CL	ALIGNMENT: -Y2C-	24 HR. N/A	ROD TYPE: Pre-strung	CONE ID: DSG0867	TECHNICIAN: M.A.D.
COLLAR ELEV.: 28.6 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 417,424	EASTING: 2,525,581		START DATE: 09/04/12	COMP. DATE: 09/04/12	SURFACE WATER DEPTH: N/A



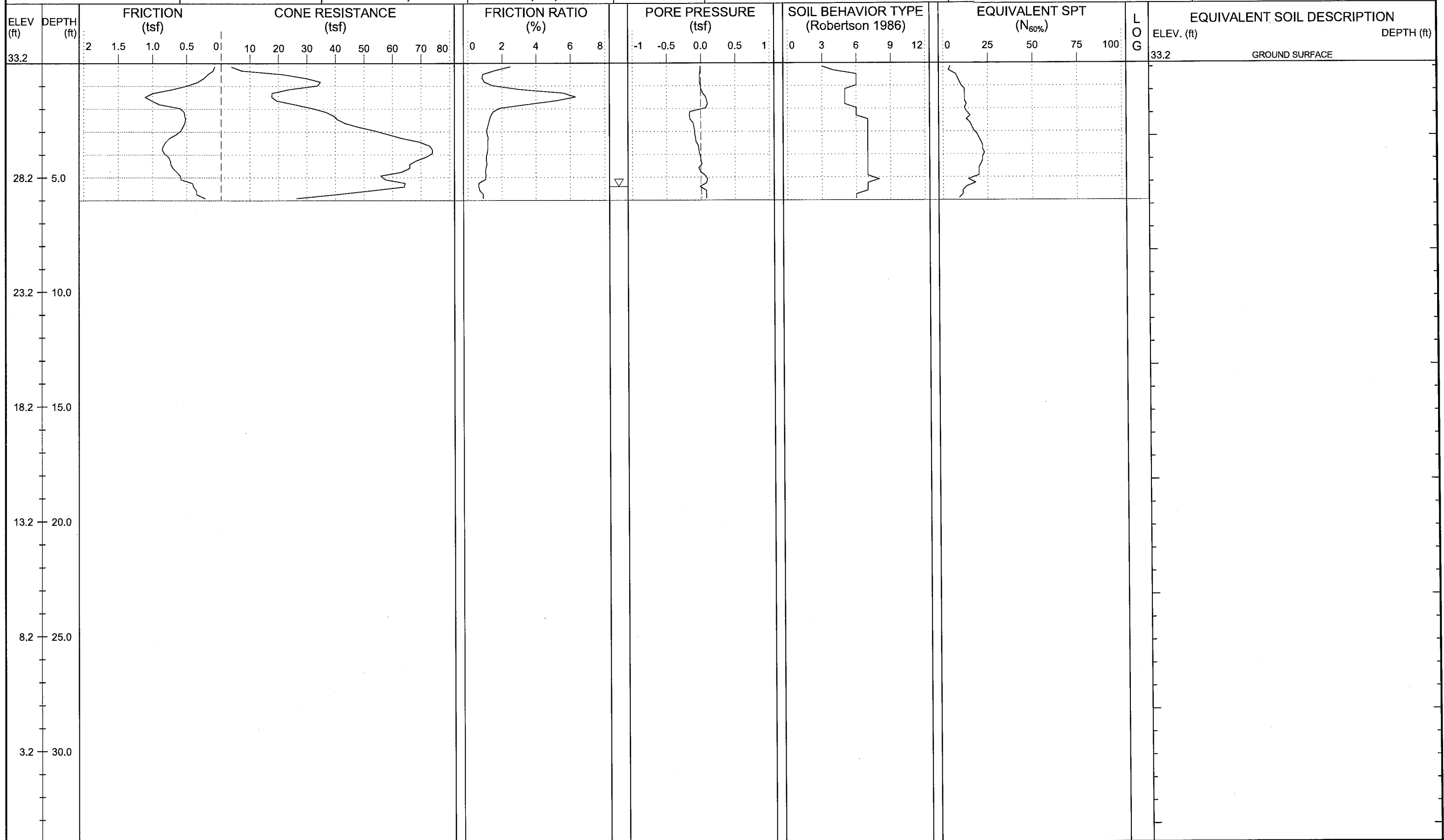


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

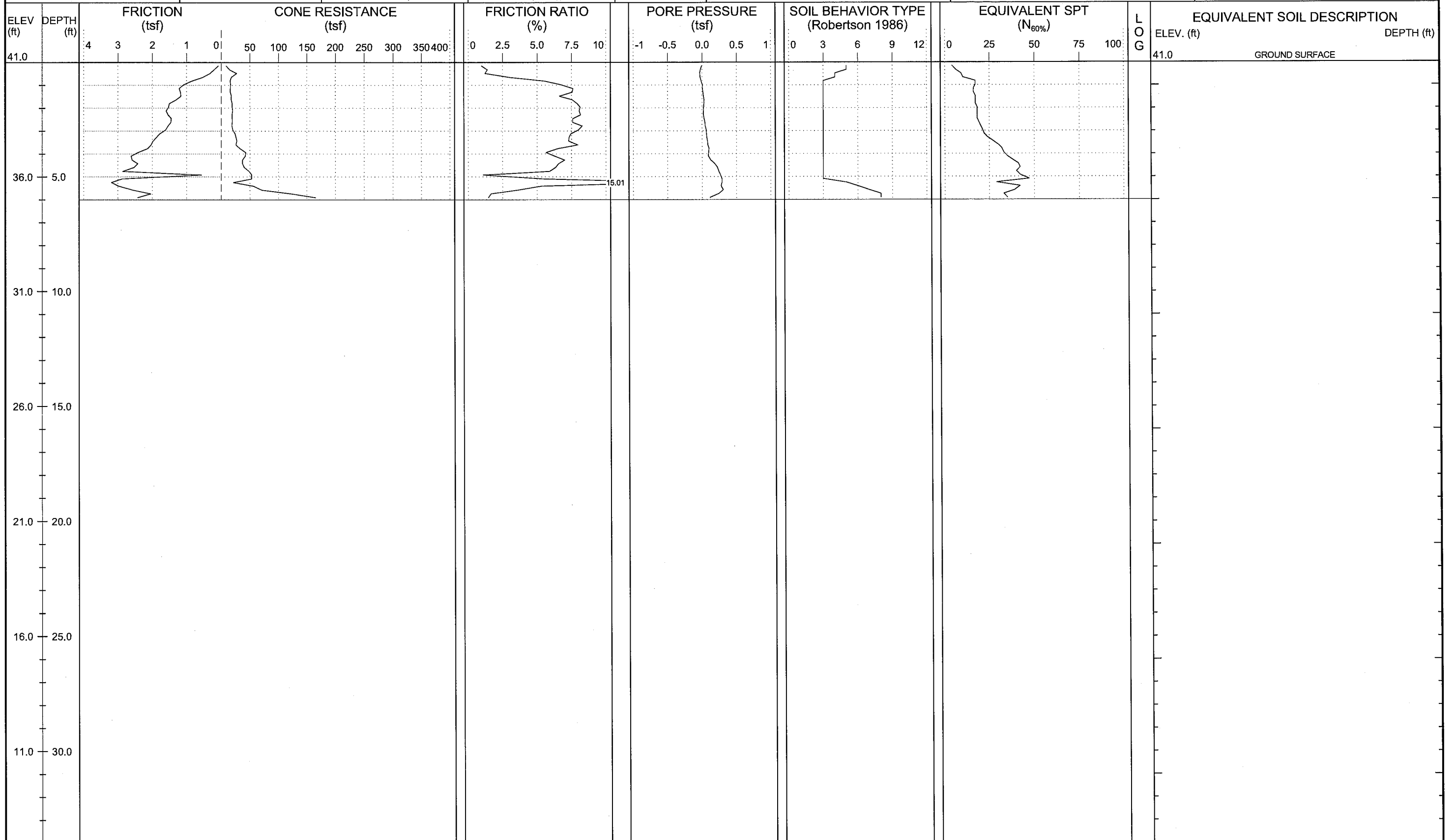
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 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLow

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.4, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y2D-11	STATION: 11+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
COLLAR ELEV.: 33.2 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,734	EASTING: 2,525,800	ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
				START DATE: 08/29/12	COMP. DATE: 08/29/12
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2D-13	STATION: 13+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 41.0 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 417,854	EASTING: 2,525,644	START DATE: 08/29/12	COMP. DATE: 08/29/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



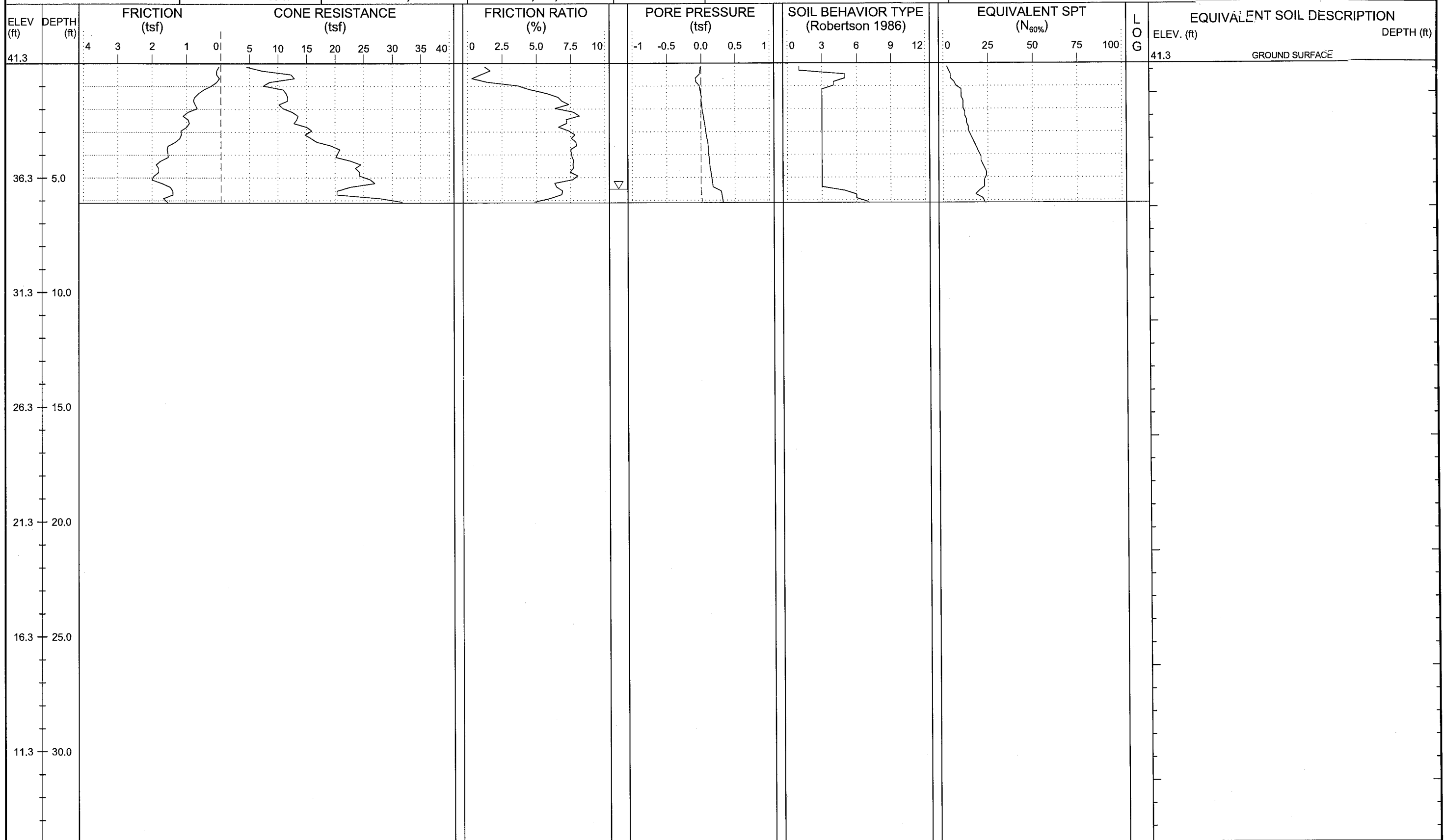


# NCDOT GEOTECHNICAL ENGINEERING UNIT

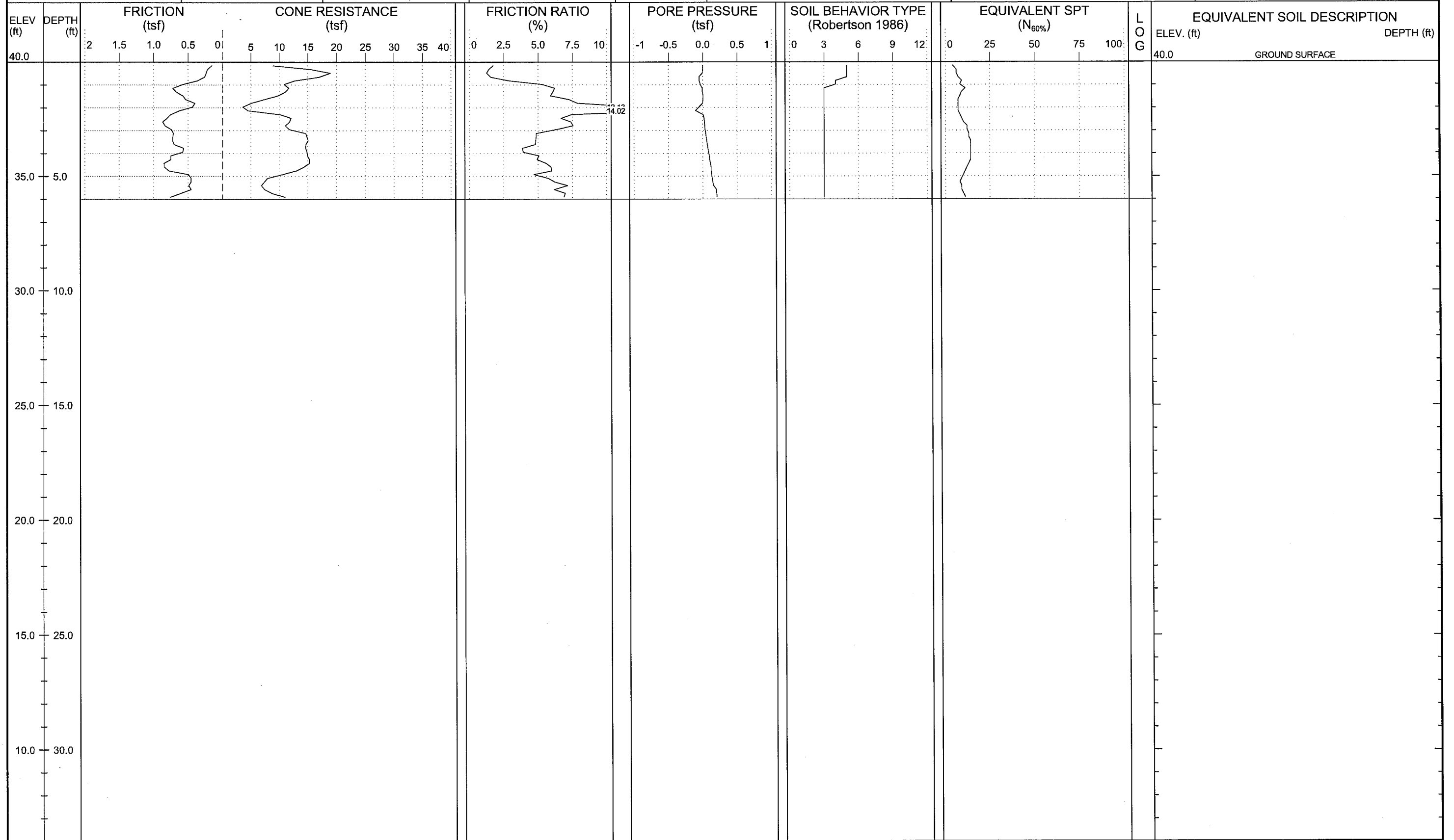
ENGLISH

SHEET NO.: 117  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLOW

WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2D-15	STATION: 15+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	0 HR. 5.5	ROD TYPE: Pre-strung
COLLAR ELEV.: 41.3 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 418,028	EASTING: 2,525,569	24 HR. N/A	START DATE: 08/29/12
				CONE ID: DSG0867	DRILLER: Cory Robison
				COMP. DATE: 08/29/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	

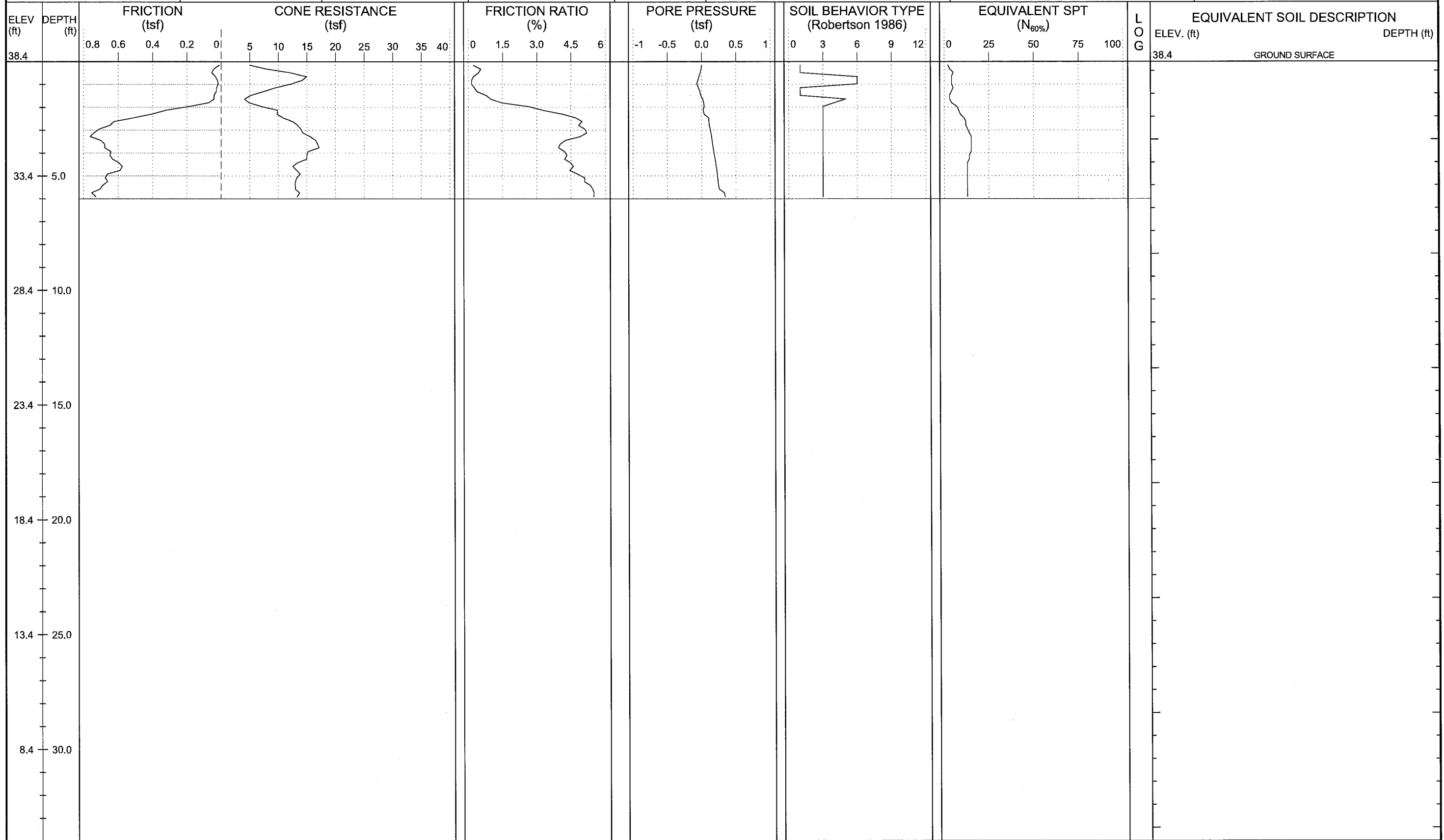


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2D-17	STATION: 17+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 40.0 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,213	EASTING: 2,525,644	24 HR. N/A	START DATE: 08/29/12
				CONC. DATE: 08/29/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





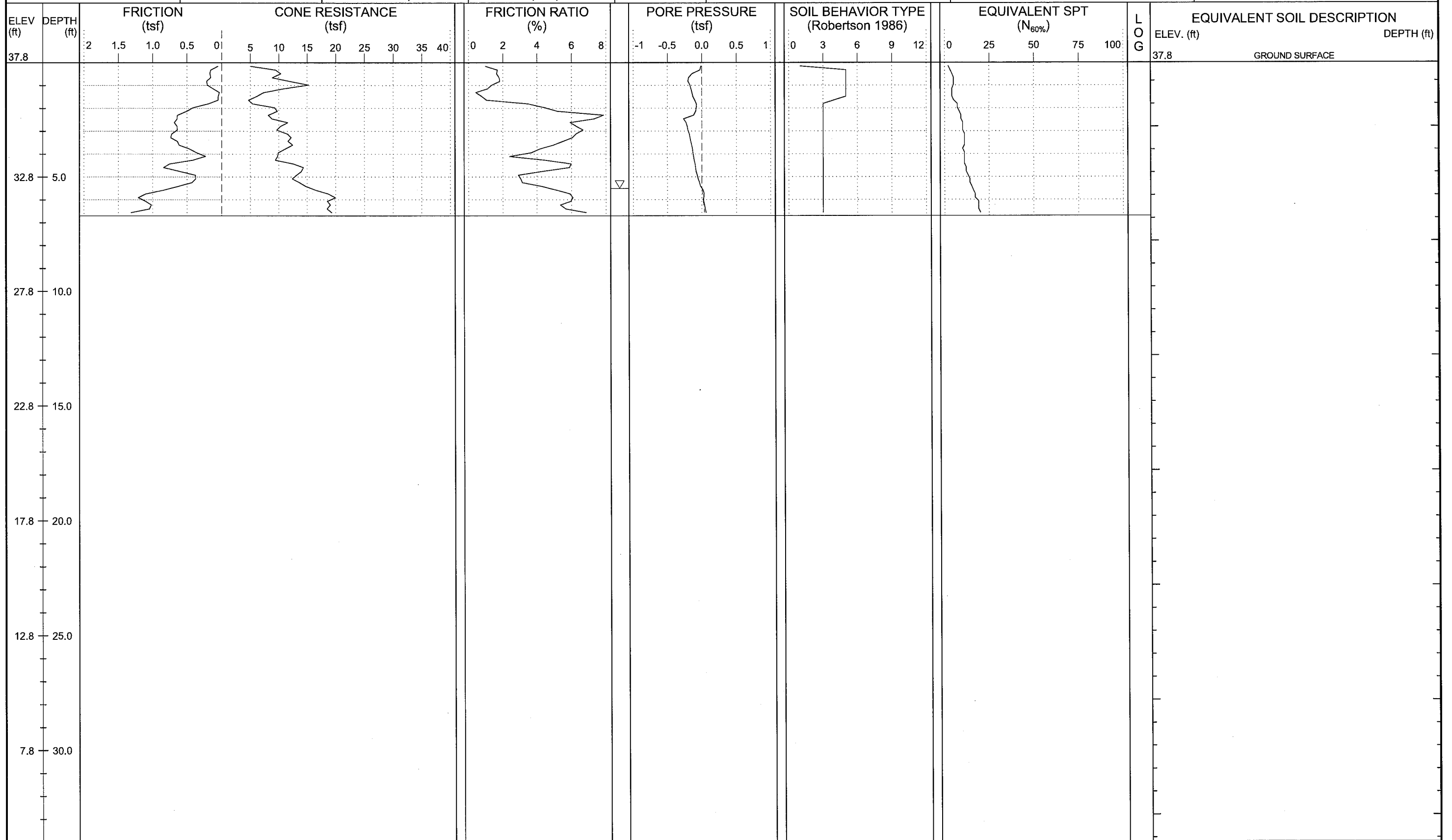
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: Y2D-19	STATION: 19+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	24 HR. N/A	DRILLER: Cory Robison
COLLAR ELEV.: 38.4 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,396	EASTING: 2,525,724	START DATE: 08/29/12	CONCRETE TYPE: 1.44 Vertek Piezocone
					CONE ID: DSG0867
					TECHNICIAN: M.A.D.
					COMP. DATE: 08/29/12
					SURFACE WATER DEPTH: N/A





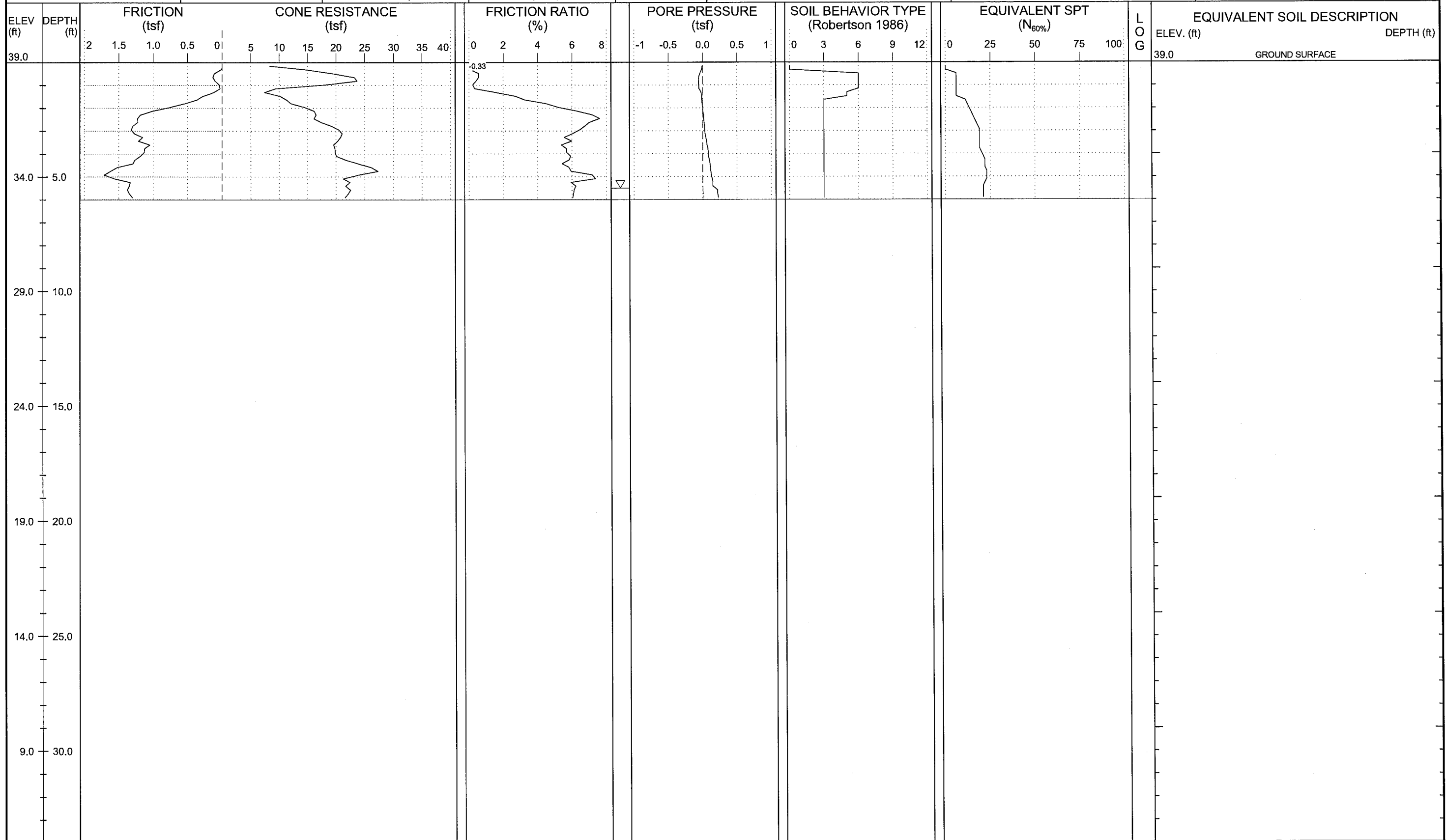


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2D-20	STATION: 20+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	0 HR. 5.5	ROD TYPE: Pre-strung
COLLAR ELEV.: 37.8 ft	TOTAL DEPTH: 6.7 ft	NORTHING: 418,488	EASTING: 2,525,764	24 HR. N/A	START DATE: 08/29/12
				CONC. DATE: 08/29/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



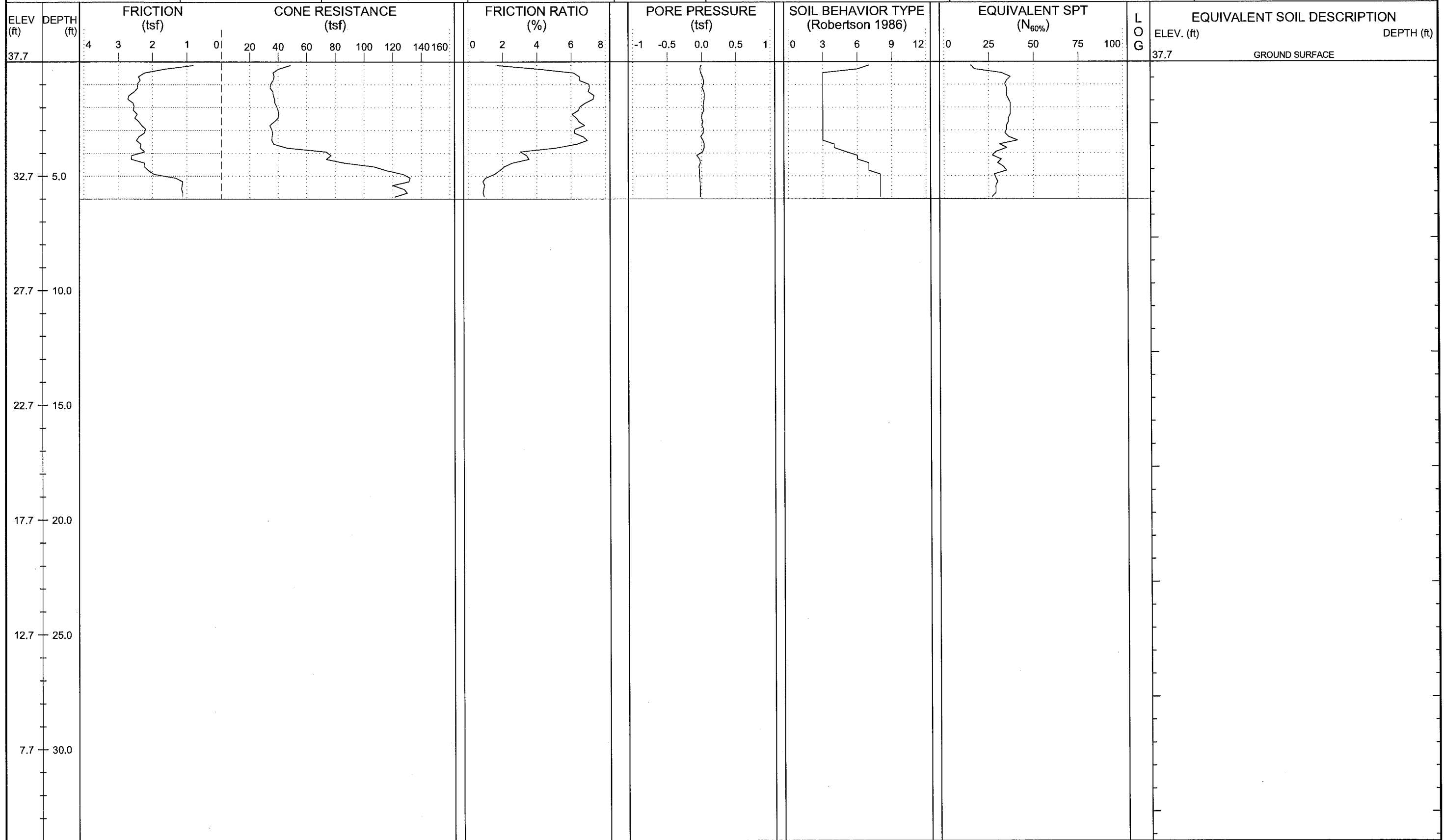


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 5.5, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2D-22	STATION: 22+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 39.0 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,671	EASTING: 2,525,844	START DATE: 08/29/12	COMP. DATE: 08/29/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





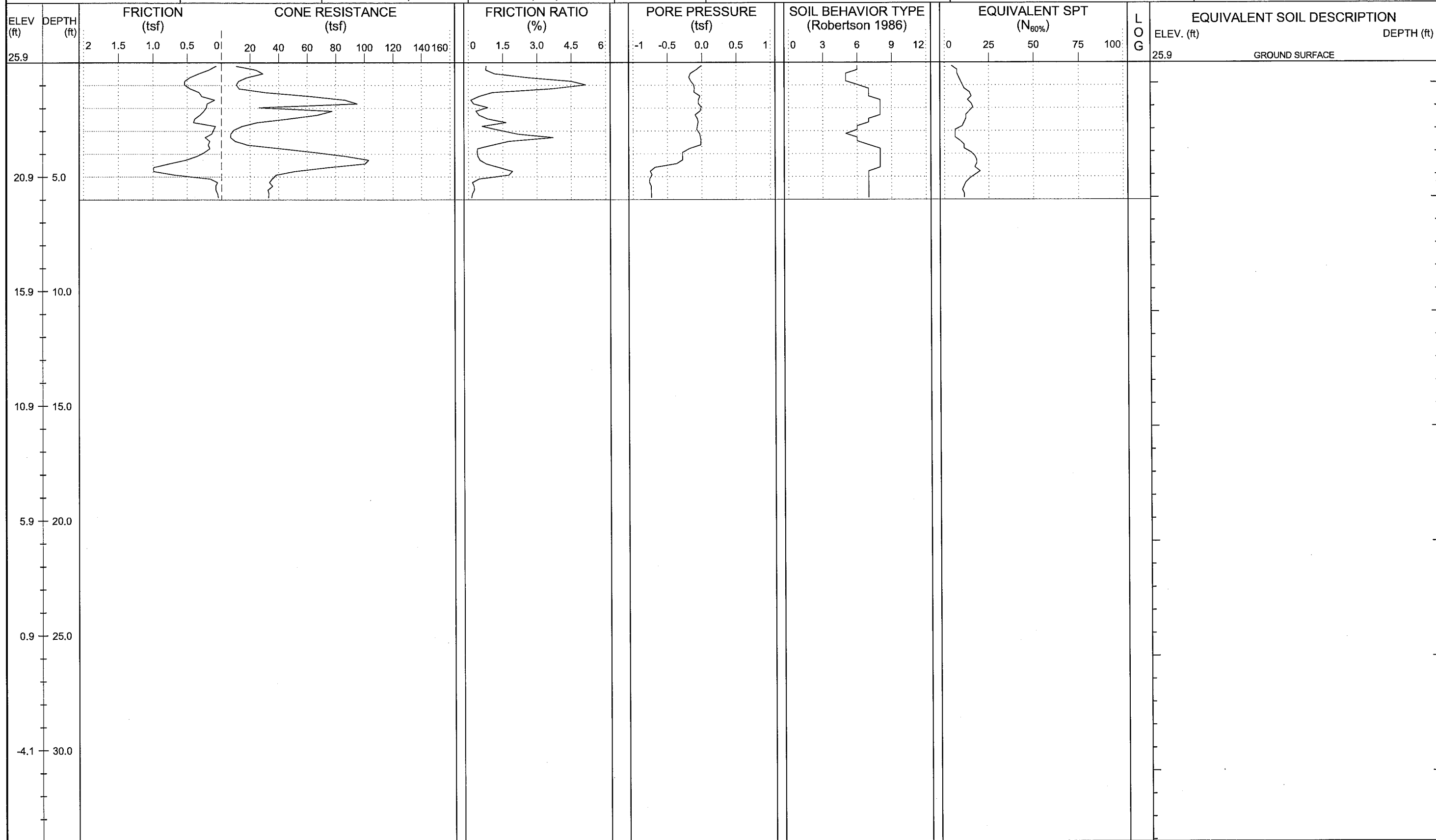
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: Y2D-24	STATION: 24+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 37.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,855	EASTING: 2,525,924	START DATE: 08/28/12	CONE ID: DSG0867
				24 HR. N/A	COMP. DATE: 08/28/12
				DRILLER: Cory Robison	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





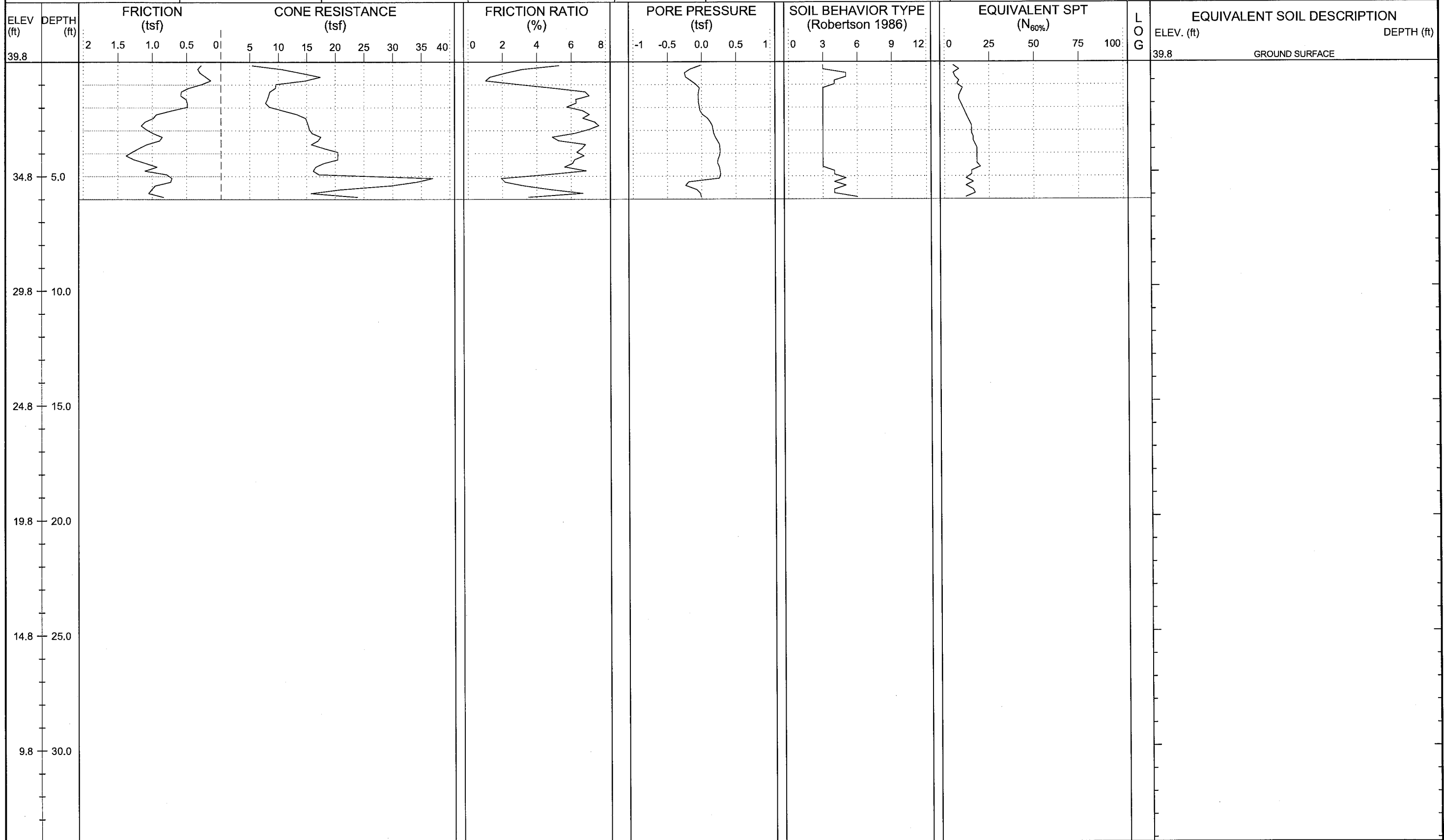


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: Y2D-30	STATION: 30+00	OFFSET: 0ft CL	ALIGNMENT: -Y2D-	24 HR. N/A	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 25.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 419,403	EASTING: 2,526,166	ROD TYPE: Pre-strung	CONE ID: DSG0867
				START DATE: 08/28/12	COMP. DATE: 08/28/12
				DRILLER: Cory Robison	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



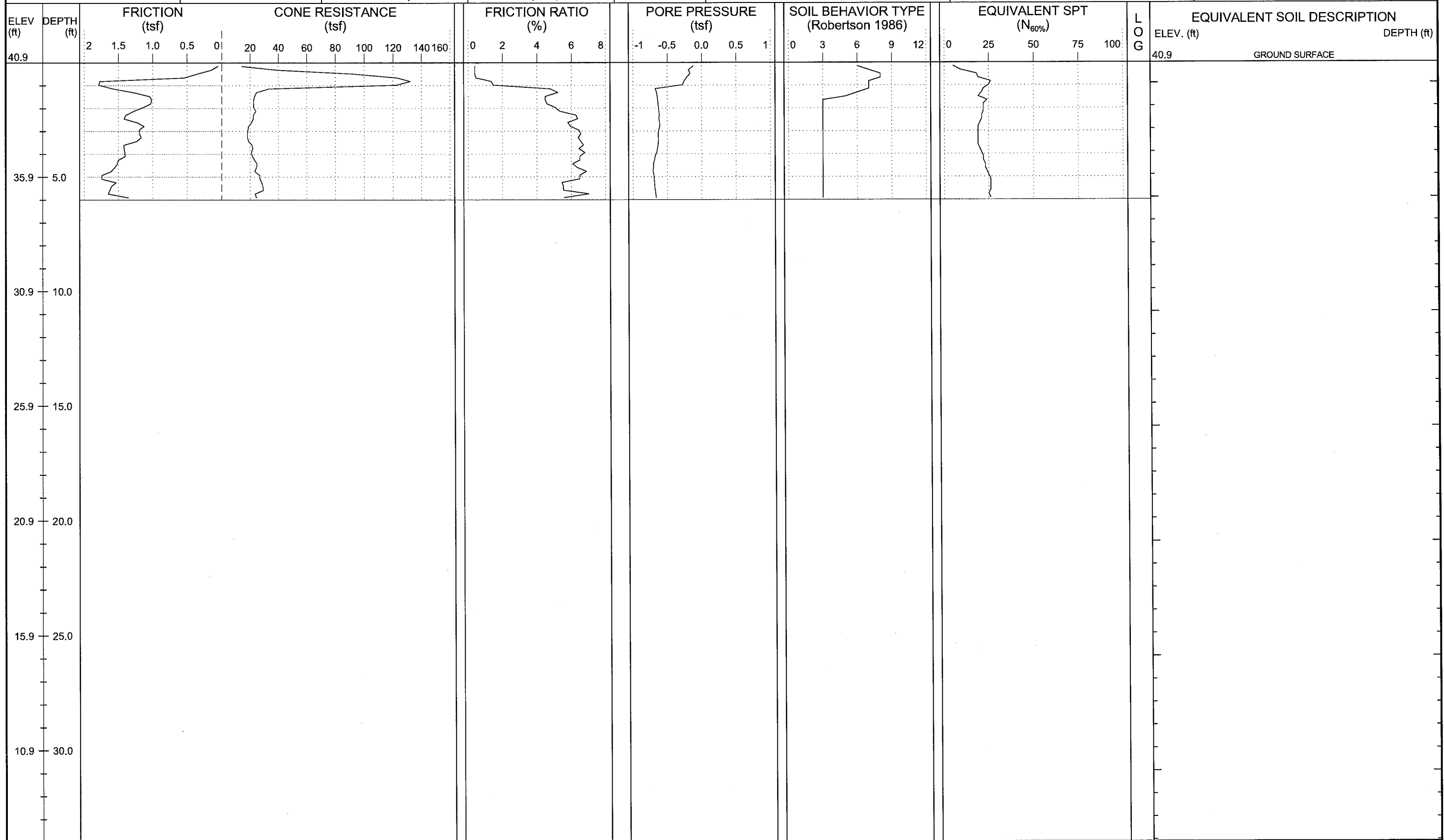


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: Y2E-11	STATION: 11+00	OFFSET: 0ft CL	ALIGNMENT: -Y2E-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 39.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,334	EASTING: 2,524,736	START DATE: 08/29/12	CONE ID: DSG0867
				24 HR. N/A	COMP. DATE: 08/29/12
				DRILLER: Cory Robison	
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y2E-13	STATION: 13+00	OFFSET: 0ft CL	ALIGNMENT: -Y2E-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 40.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 418,454	EASTING: 2,524,896	24 HR. N/A	START DATE: 08/28/12
				CONE ID: DSG0867	DRILLER: Cory Robison
				COMP. DATE: 08/28/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	

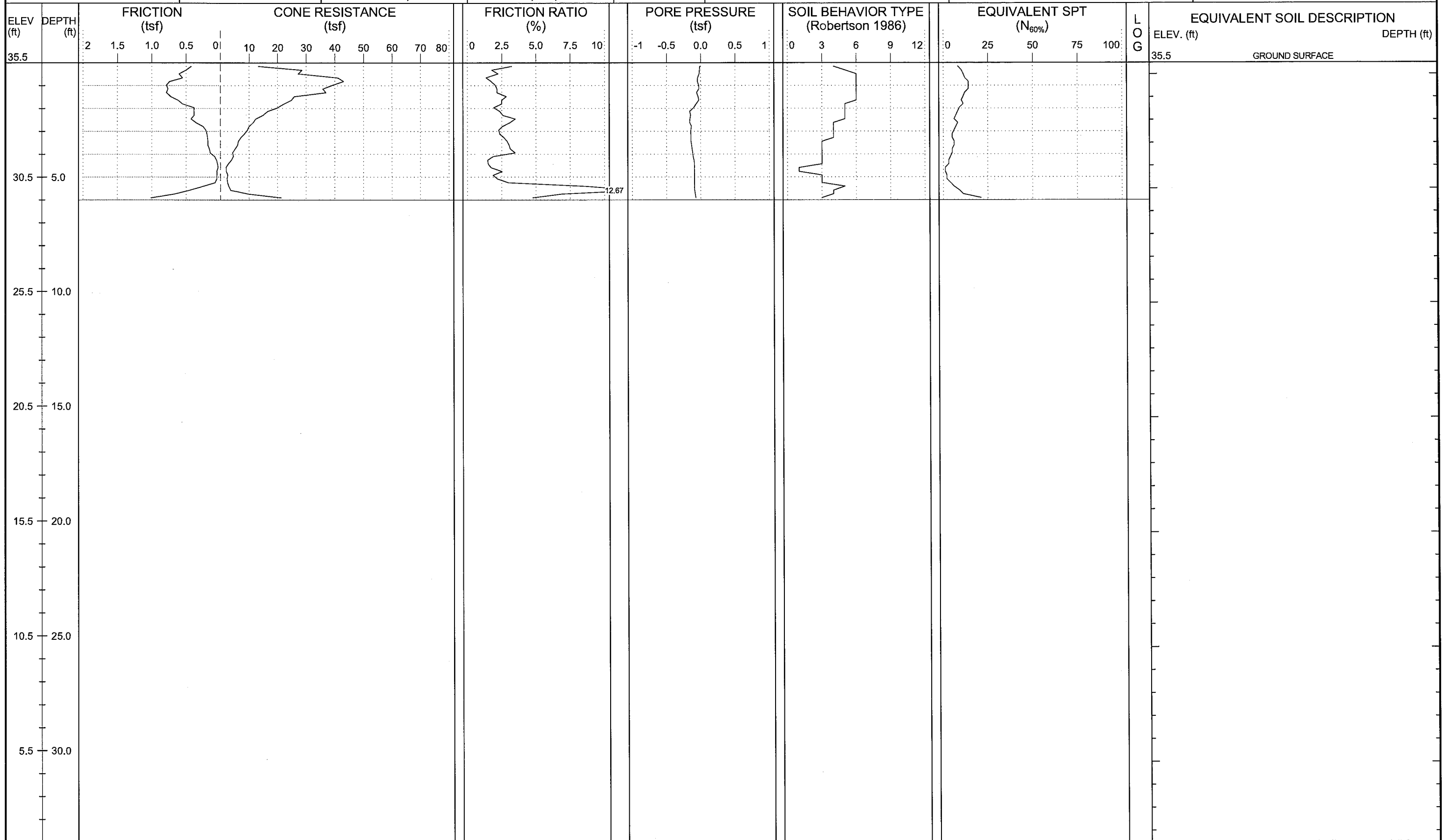








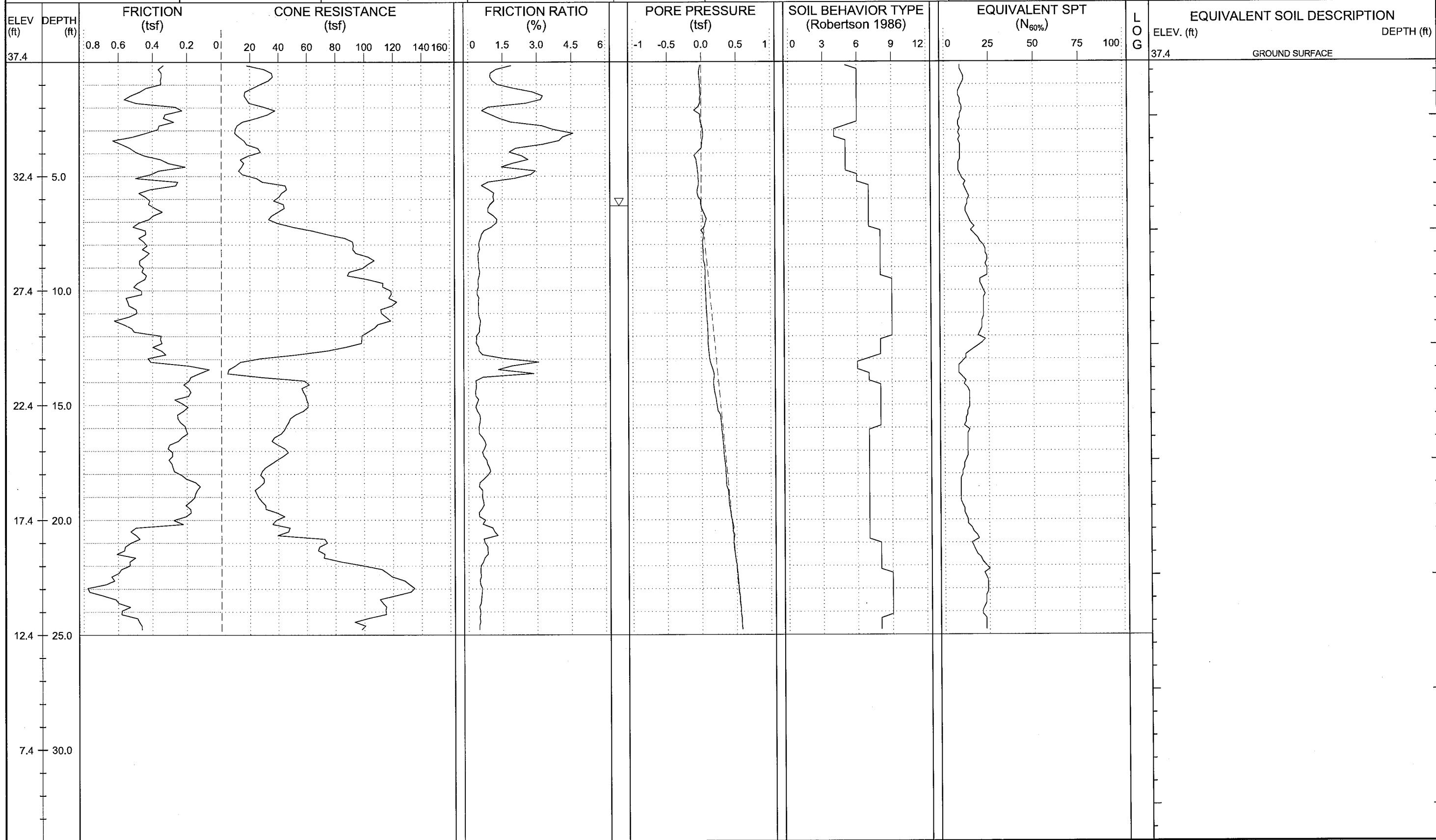
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3-11	STATION: 11+00	OFFSET: 15ft RT	ALIGNMENT: -Y3-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 35.5 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,985	EASTING: 2,527,534	24 HR. N/A	START DATE: 08/17/12
				CONE ID: DSG0867	DRILLER: Ron Stewart
				COMP. DATE: 08/17/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	



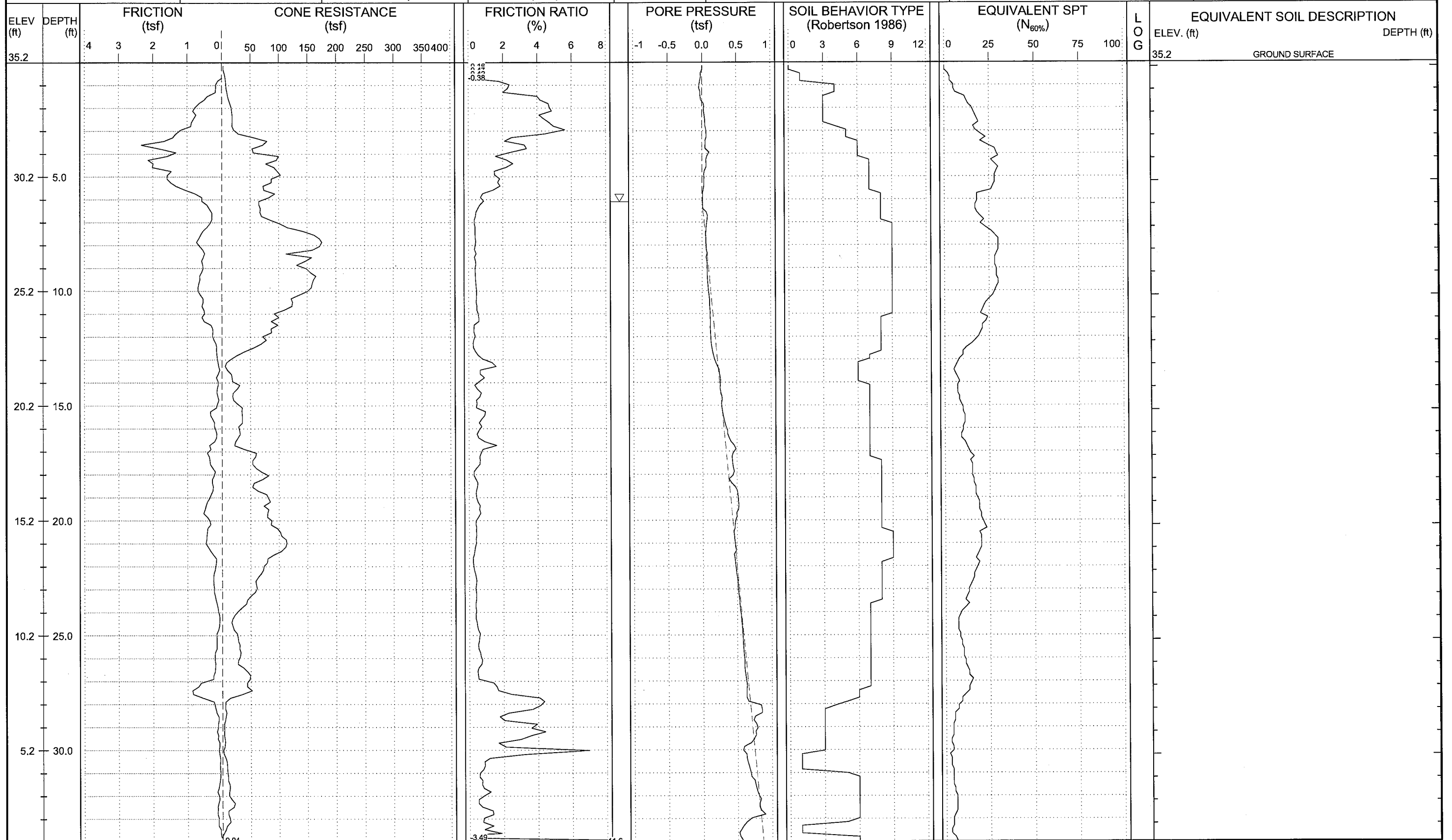




WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 6.3, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3-15	STATION: 15+00	OFFSET: 31ft RT	ALIGNMENT: -Y3-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 37.4 ft	TOTAL DEPTH: 25.0 ft	NORTHING: 427,718	EASTING: 2,527,833	START DATE: 08/17/12	COMP. DATE: 08/17/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



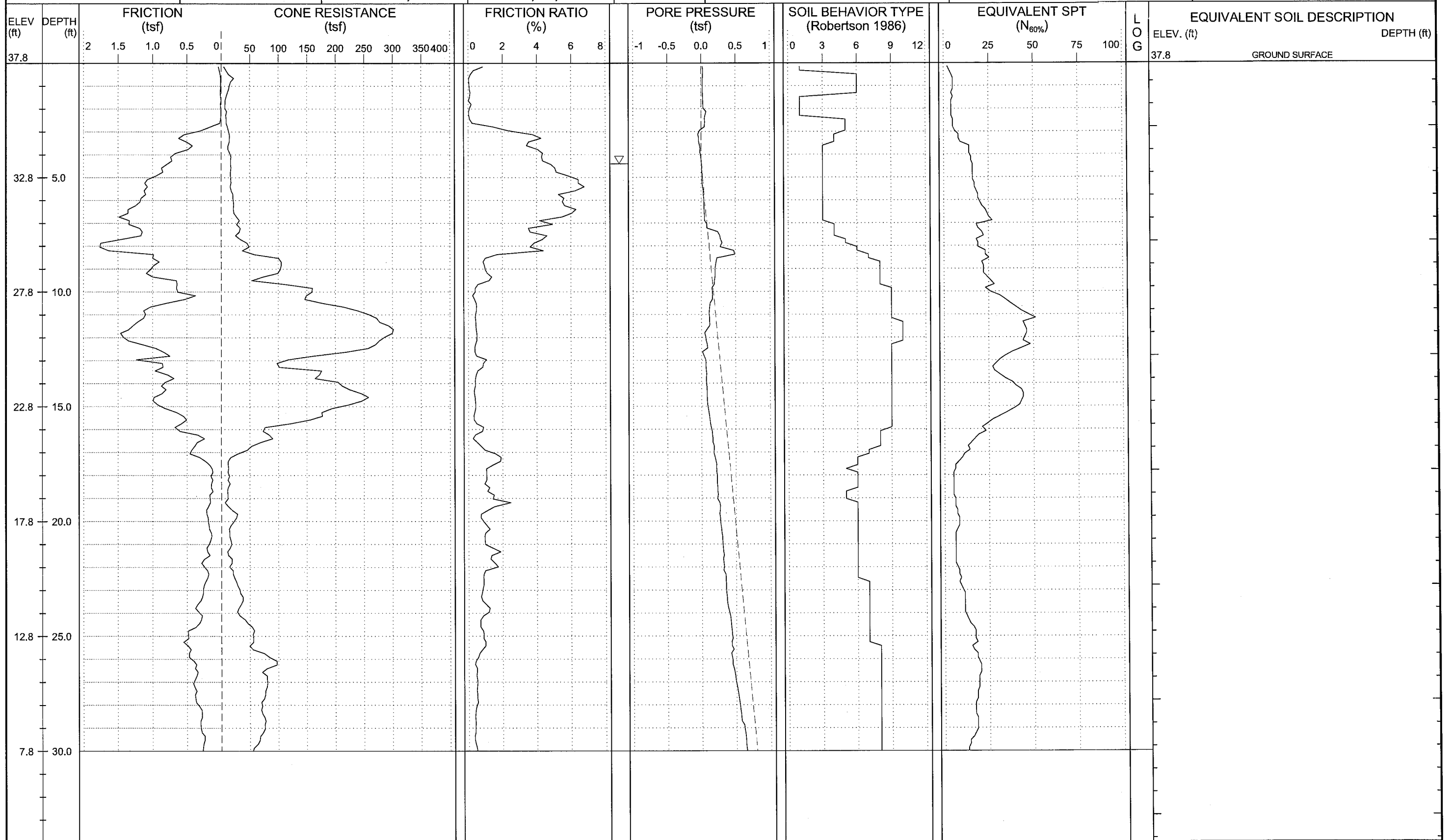
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 6.1	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3-20	STATION: 20+00	OFFSET: 20ft RT	ALIGNMENT: -Y3-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 35.2 ft	TOTAL DEPTH: 35.0 ft	NORTHING: 427,398	EASTING: 2,528,214	START DATE: 08/22/12	COMP. DATE: 08/22/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



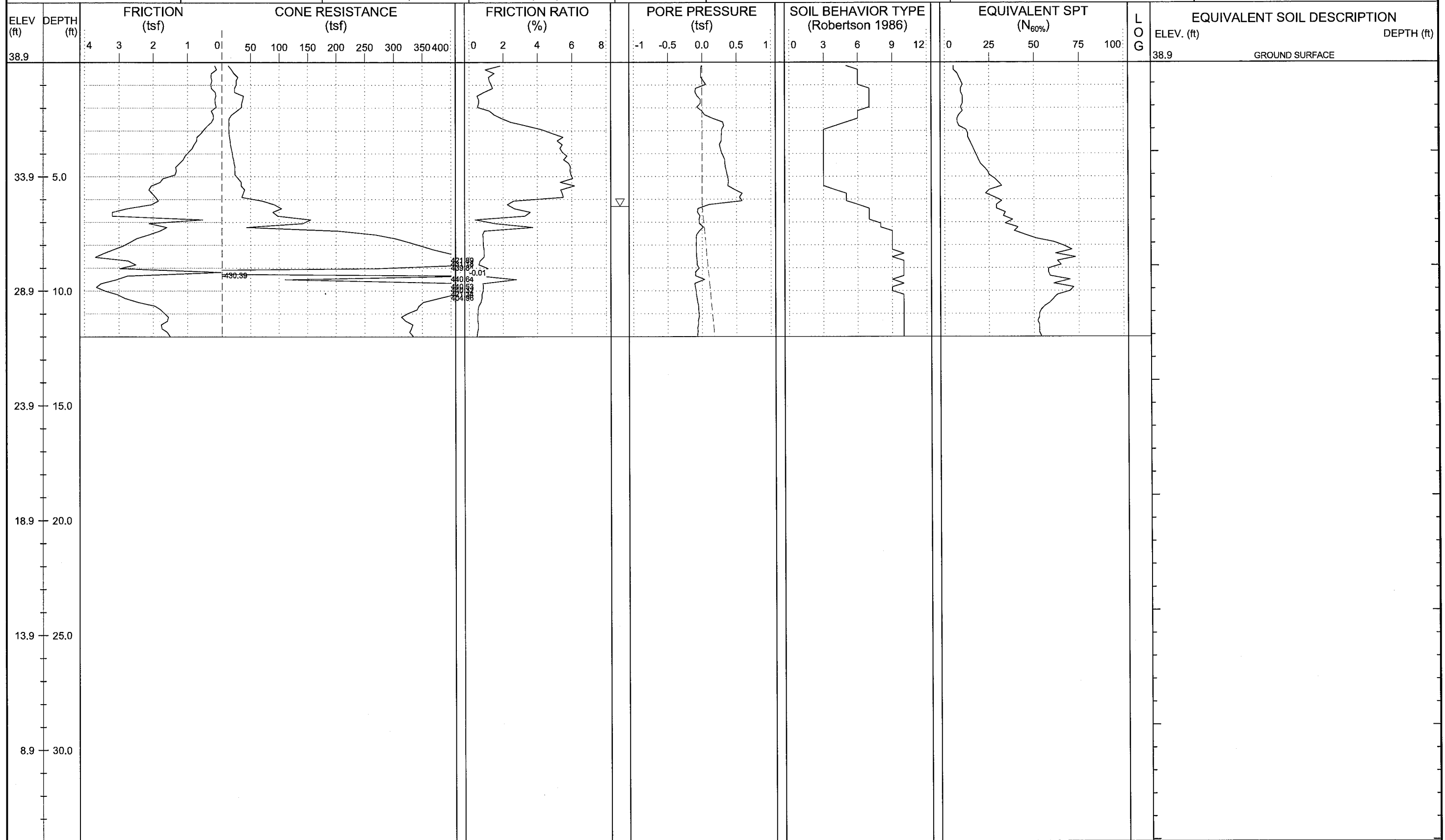




WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 4.4, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3-22	STATION: 22+00	OFFSET: 15ft LT	ALIGNMENT: -Y3-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 37.8 ft	TOTAL DEPTH: 30.0 ft	NORTHING: 427,282	EASTING: 2,528,380	START DATE: 08/22/12	COMP. DATE: 08/22/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

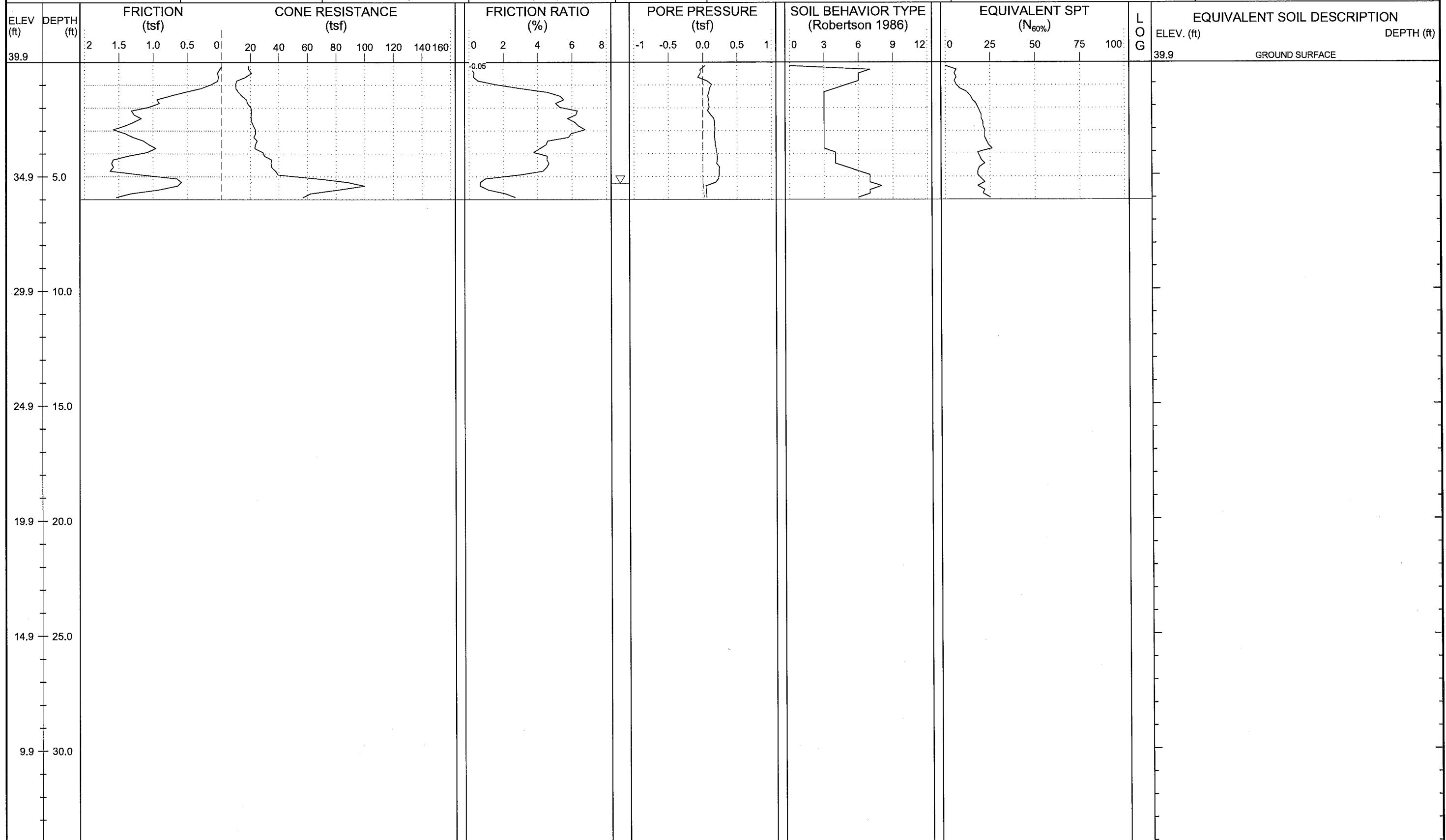


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3-24	STATION: 24+00	OFFSET: 15ft RT	ALIGNMENT: -Y3-	0 HR. 6.3	ROD TYPE: Pre-strung
COLLAR ELEV.: 38.9 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 427,114	EASTING: 2,528,493	24 HR. N/A	START DATE: 08/22/12
				COMP. DATE: 08/22/12	DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT
BORING NO.: Y3-26	STATION: 26+00	OFFSET: 15ft LT	ALIGNMENT: -Y3-	0 HR. 5.3	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 39.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 426,983	EASTING: 2,528,648	24 HR. N/A	ROD TYPE: Pre-strung
			START DATE: 08/22/12		CONE ID: DSA1123
			COMP. DATE: 08/22/12		DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

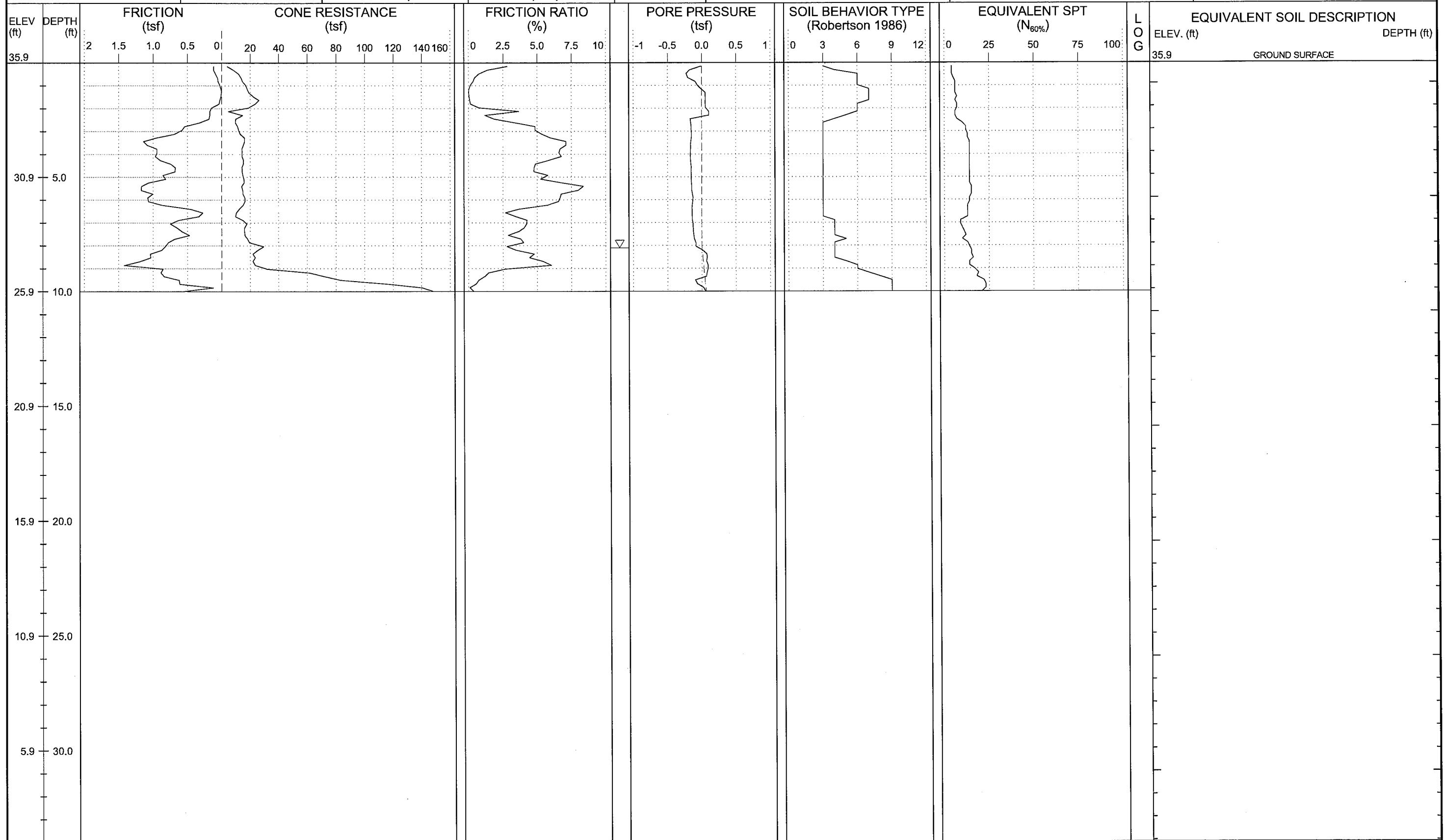






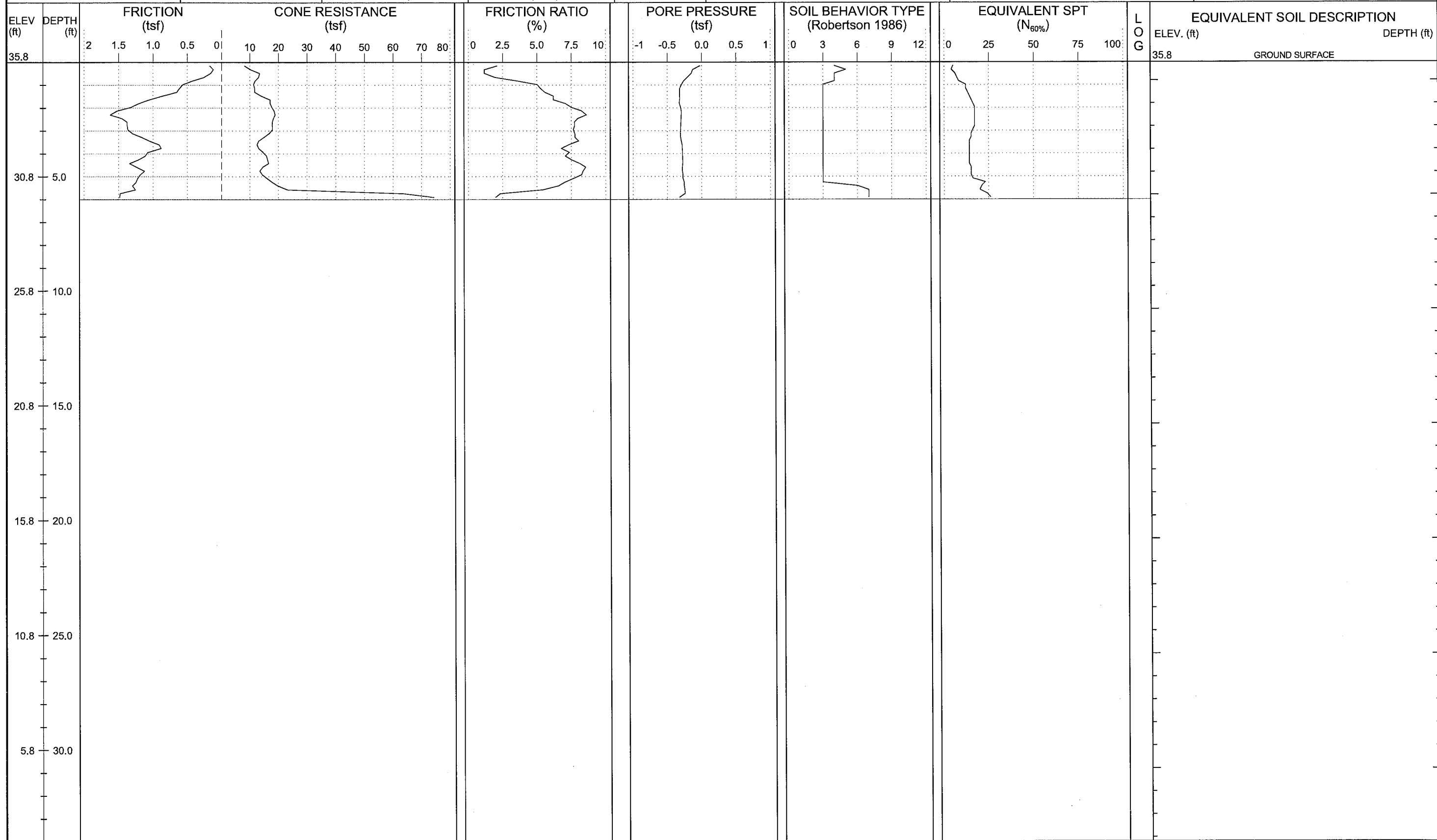


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 8.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-1450	STATION: 14+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 35.9 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 427,399	EASTING: 2,527,669	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



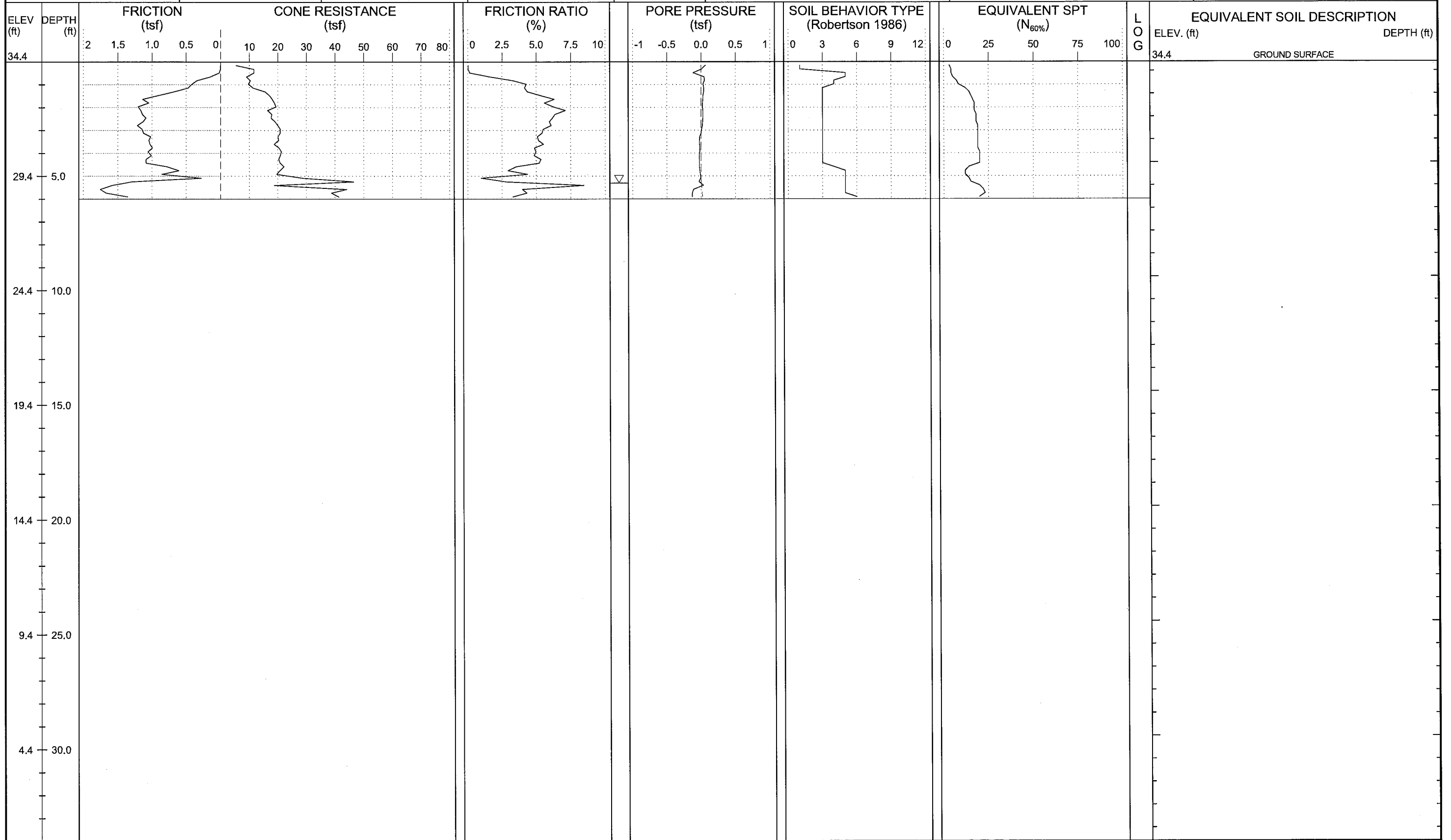


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-1650	STATION: 16+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 35.8 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,200	EASTING: 2,527,653	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





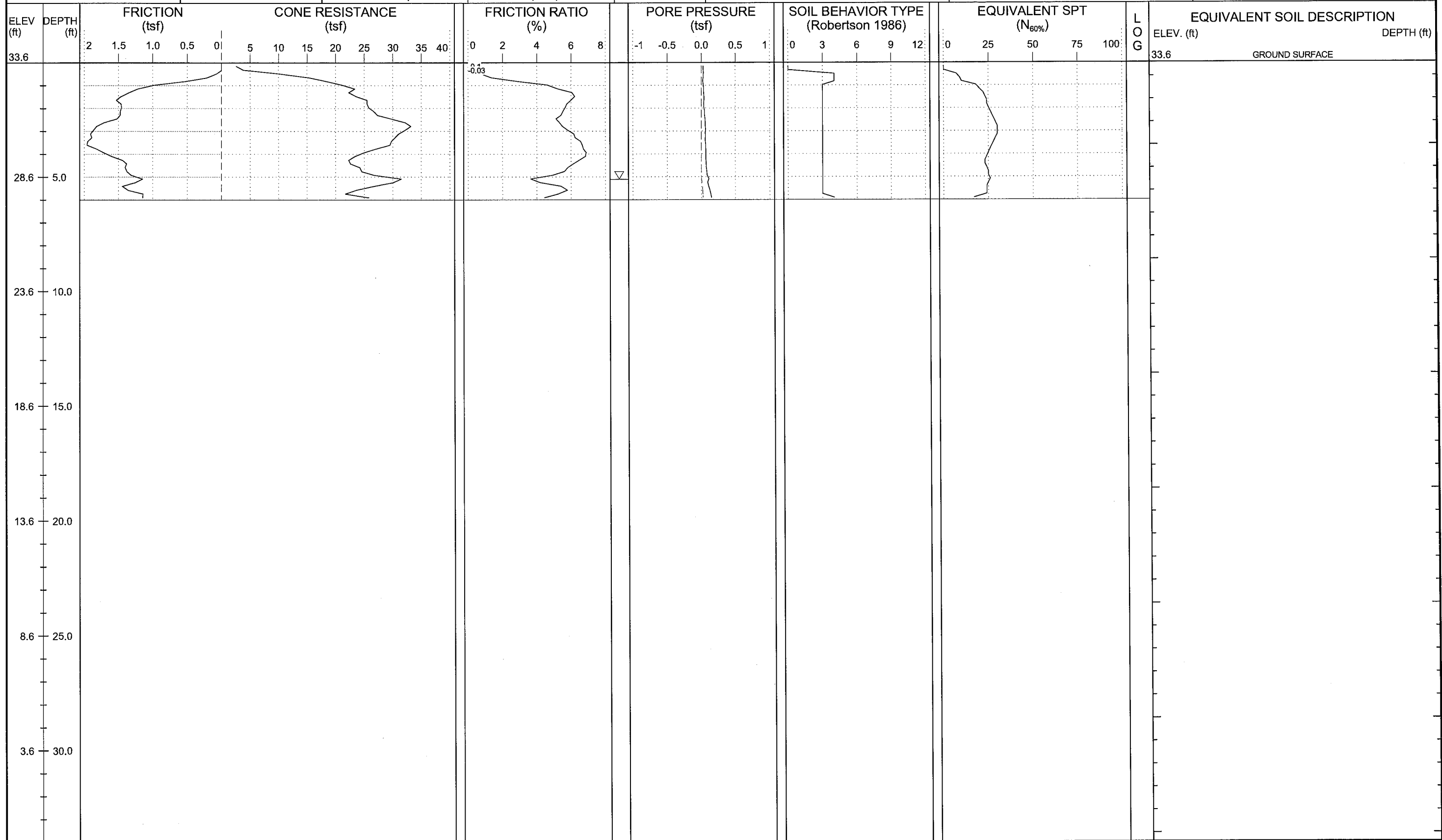
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 5.3, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y3A-1850	STATION: 18+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE TYPE: 1.44 Vertek Piezocone
COLLAR ELEV.: 34.4 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,001	EASTING: 2,527,666	START DATE: 08/20/12	CONE ID: DSA1123
				COMP. DATE: 08/20/12	DRILLER: Cory Robison
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	





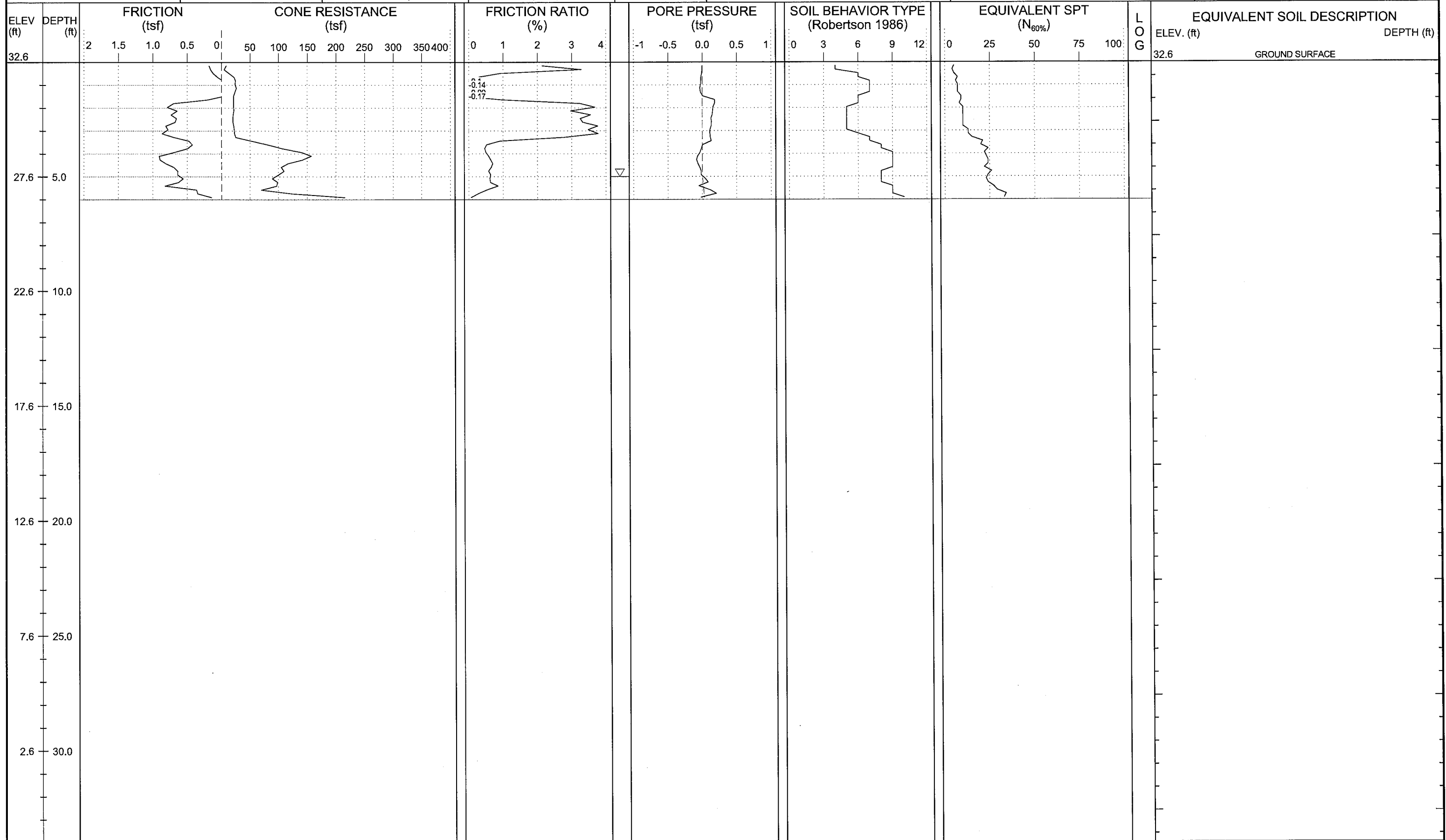


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 5.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-2250	STATION: 22+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 33.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 426,652	EASTING: 2,527,857	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 5.0, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-2450	STATION: 24+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 32.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 426,457	EASTING: 2,527,886	START DATE: 08/23/12	COMP. DATE: 08/23/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A

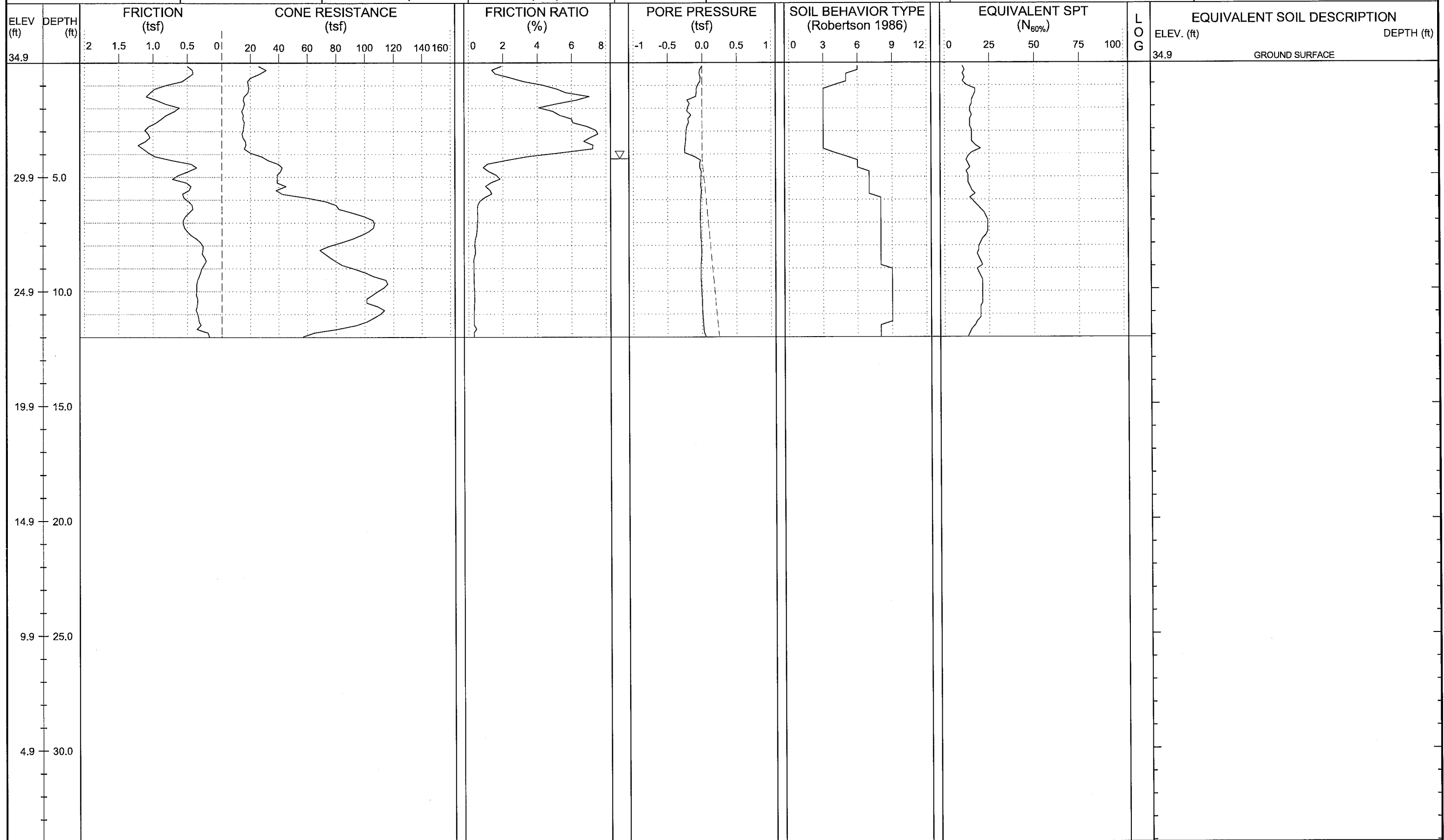






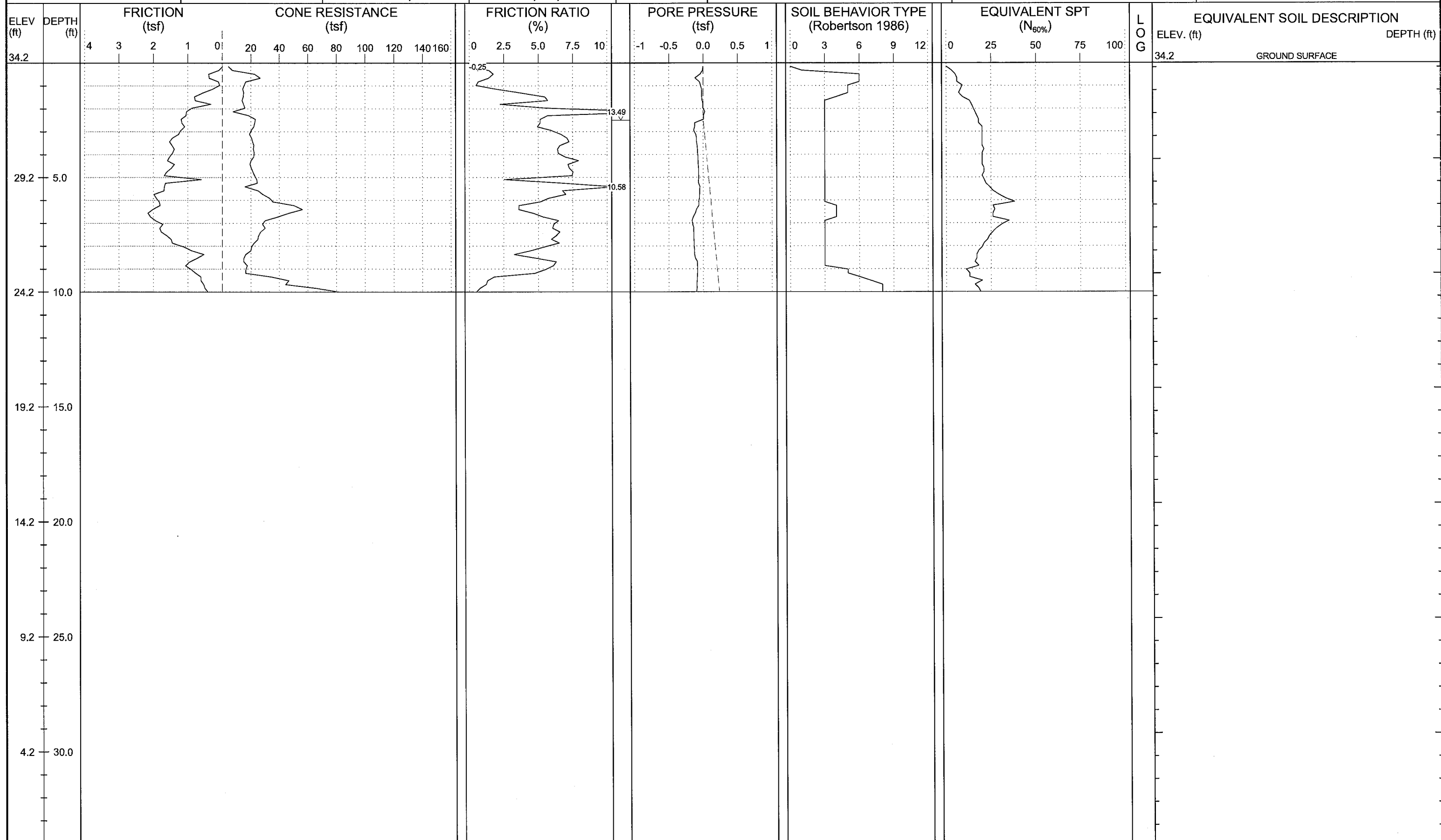


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 4.2, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: Y3A-3050	STATION: 30+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.	
COLLAR ELEV.: 34.9 ft	TOTAL DEPTH: 12.0 ft	NORTHING: 425,859	EASTING: 2,527,833	START DATE: 08/23/12	COMP. DATE: 08/23/12	SURFACE WATER DEPTH: N/A	





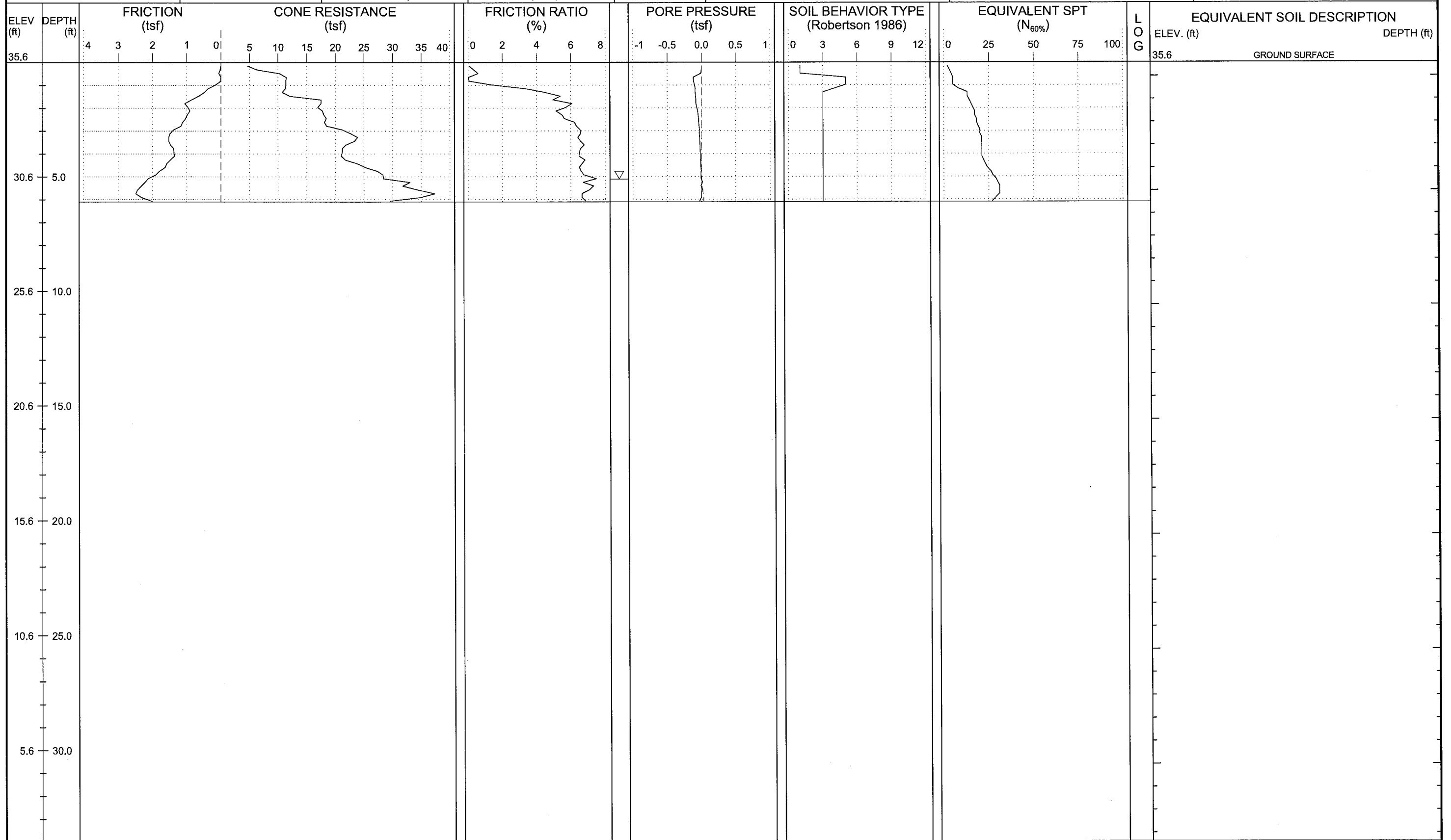
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton		
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: Y3A-3250	STATION: 32+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	0 HR. 2.5	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: 34.2 ft	TOTAL DEPTH: 10.0 ft	NORTHING: 425,660	EASTING: 2,527,810	24 HR. N/A	START DATE: 08/23/12	COMP. DATE: 08/23/12	SURFACE WATER DEPTH: N/A







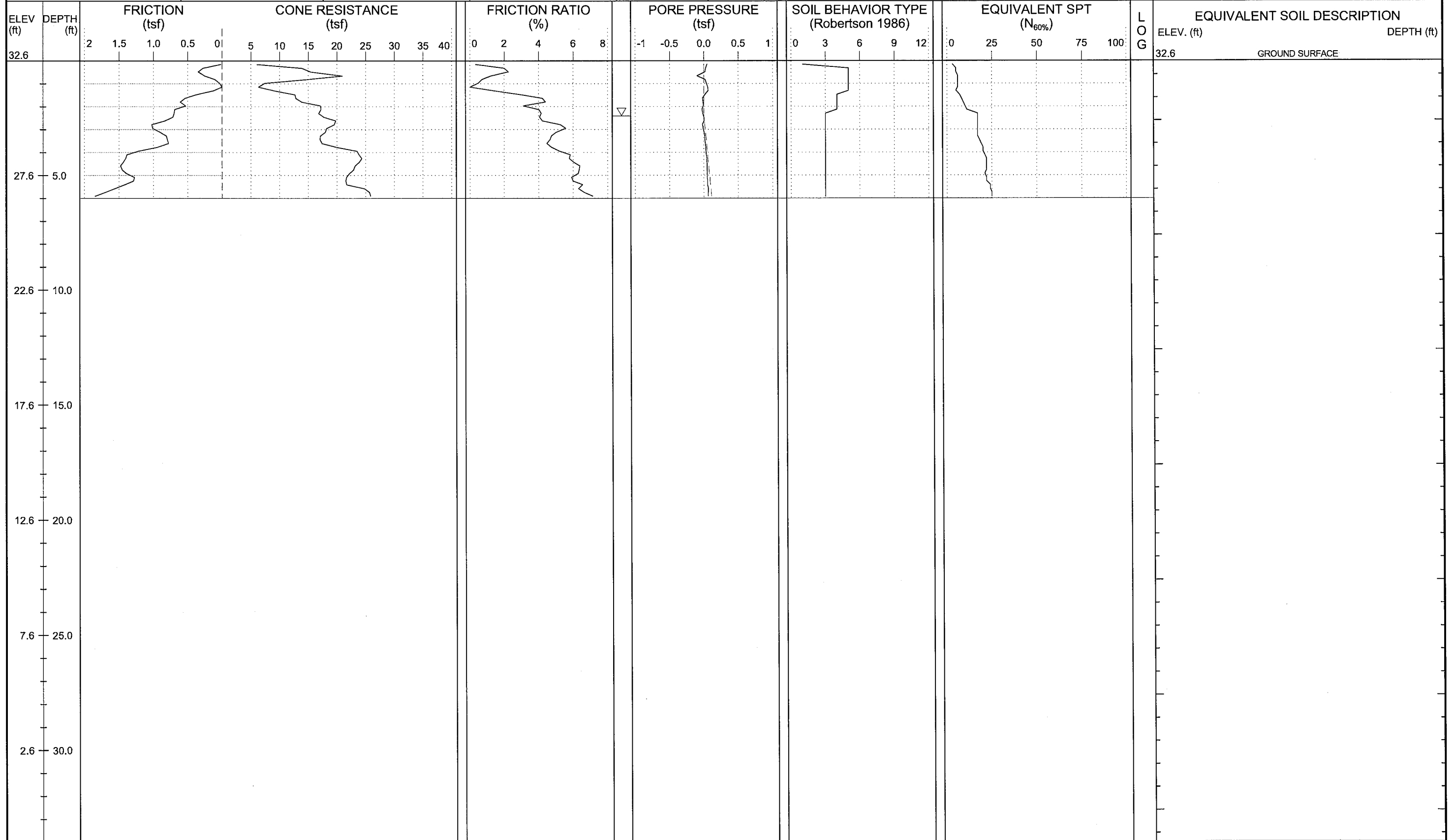
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-3650	STATION: 36+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	0 HR. 5.1	ROD TYPE: Pre-strung
COLLAR ELEV.: 35.6 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 425,264	EASTING: 2,527,758	24 HR. N/A	START DATE: 08/23/12
			CONE ID: DSA1123		DRILLER: Ron Stewart
			COMP. DATE: 08/23/12		TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





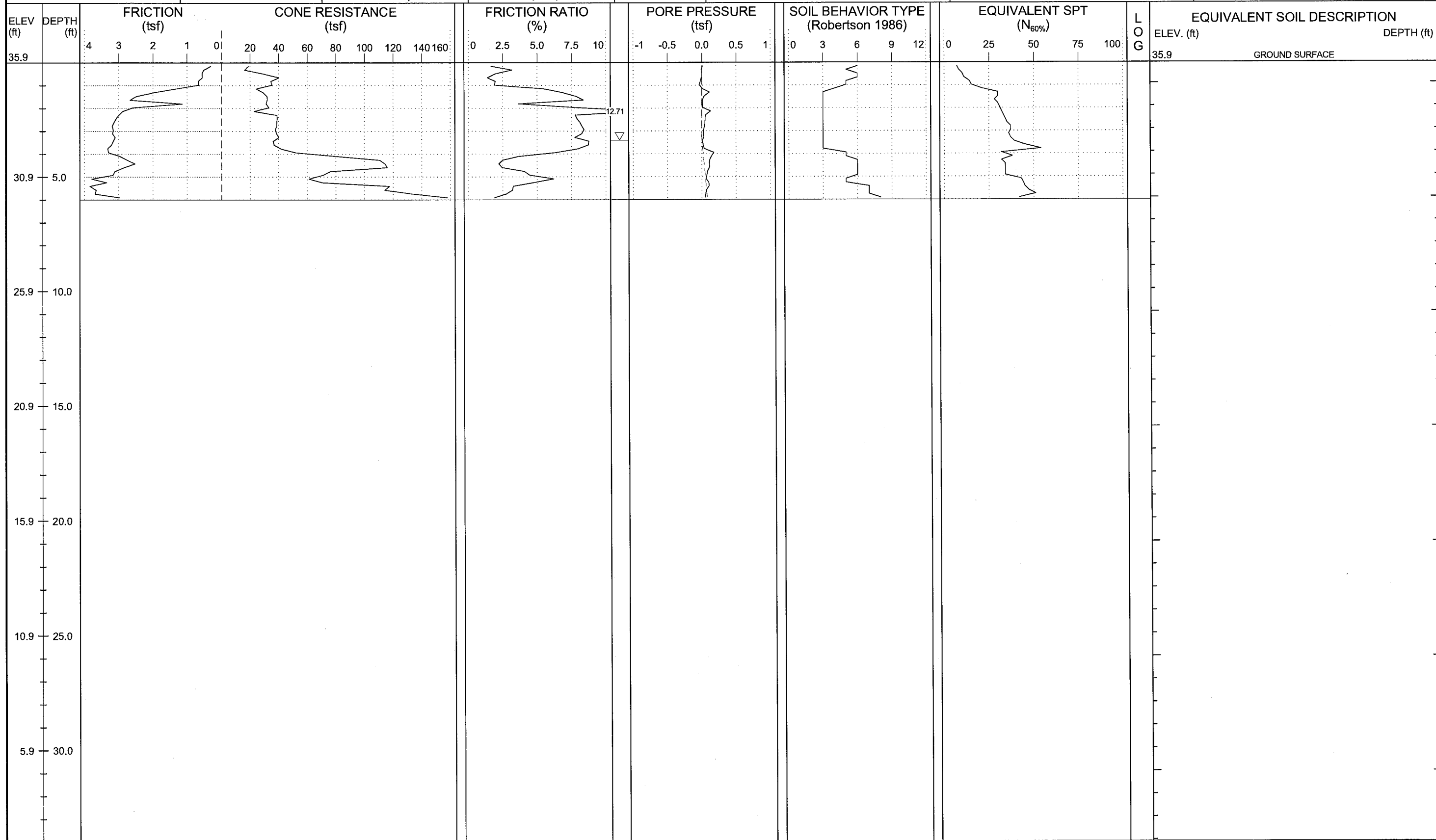
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLOW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
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SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Ron Stewart
BORING NO.: Y3A-3850	STATION: 38+50	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	0 HR. 2.4	ROD TYPE: Pre-strung	CONE ID: DSA1123	TECHNICIAN: M.A.D.
COLLAR ELEV.: 32.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 425,066	EASTING: 2,527,728	24 HR. N/A	START DATE: 08/23/12	COMP. DATE: 08/23/12	SURFACE WATER DEPTH: N/A



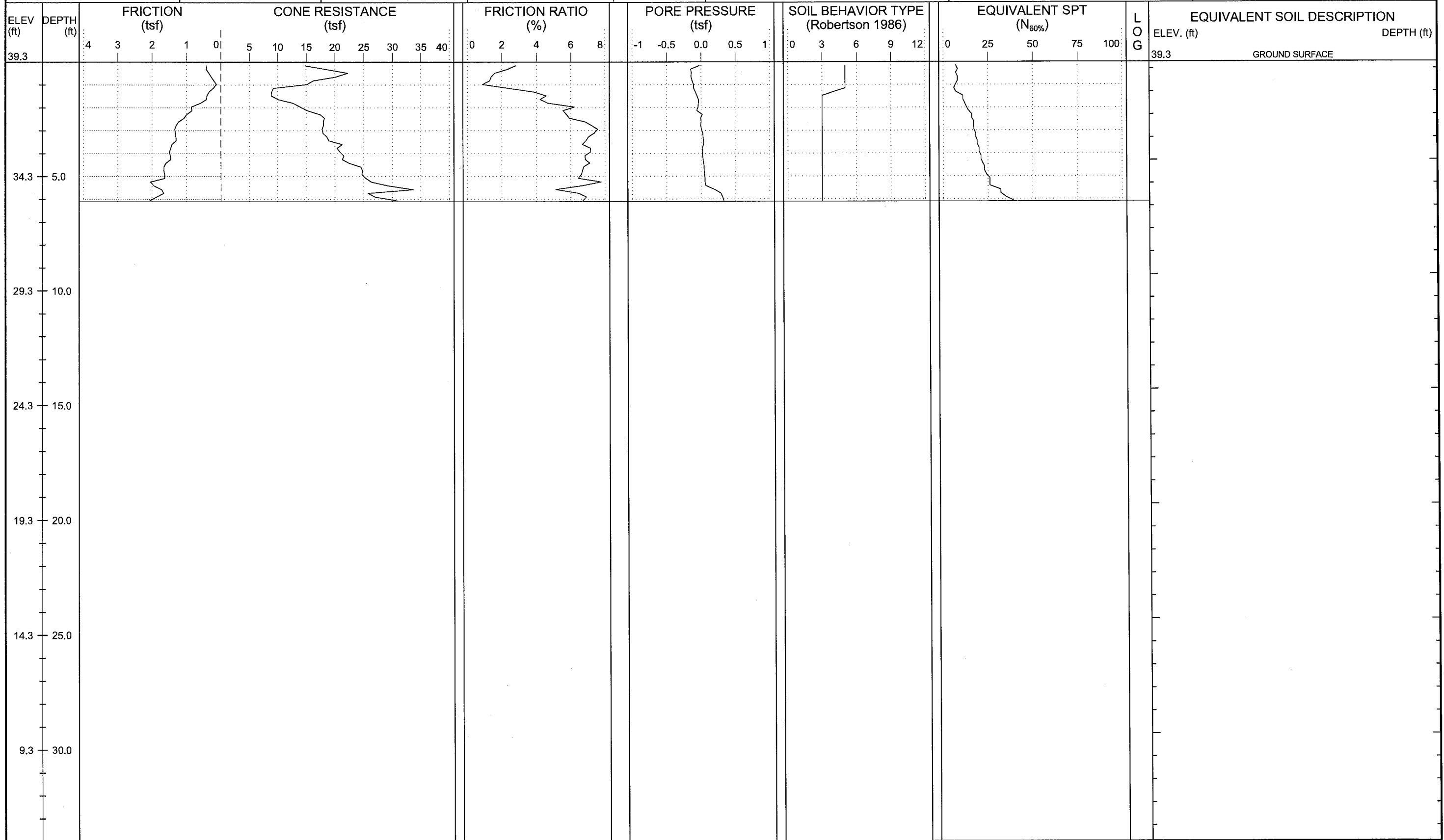


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 3.4, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3A-4000	STATION: 40+00	OFFSET: 0ft CL	ALIGNMENT: -Y3A-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 35.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 424,918	EASTING: 2,527,704	START DATE: 08/24/12	COMP. DATE: 08/24/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT
BORING NO.: Y3B-1250	STATION: 12+50	OFFSET: 0ft CL	ALIGNMENT: -Y3B-	24 HR. N/A	DRILLER: Ron Stewart
COLLAR ELEV.: 39.3 ft	TOTAL DEPTH: 6.1 ft	NORTHING: 426,980	EASTING: 2,528,301	ROD TYPE: Pre-strung	CONC. TYPE: 1.44 Vertek Piezocone
				START DATE: 08/22/12	CONE ID: DSA1123
					TECHNICIAN: M.A.D.
					COMP. DATE: 08/22/12
					SURFACE WATER DEPTH: N/A



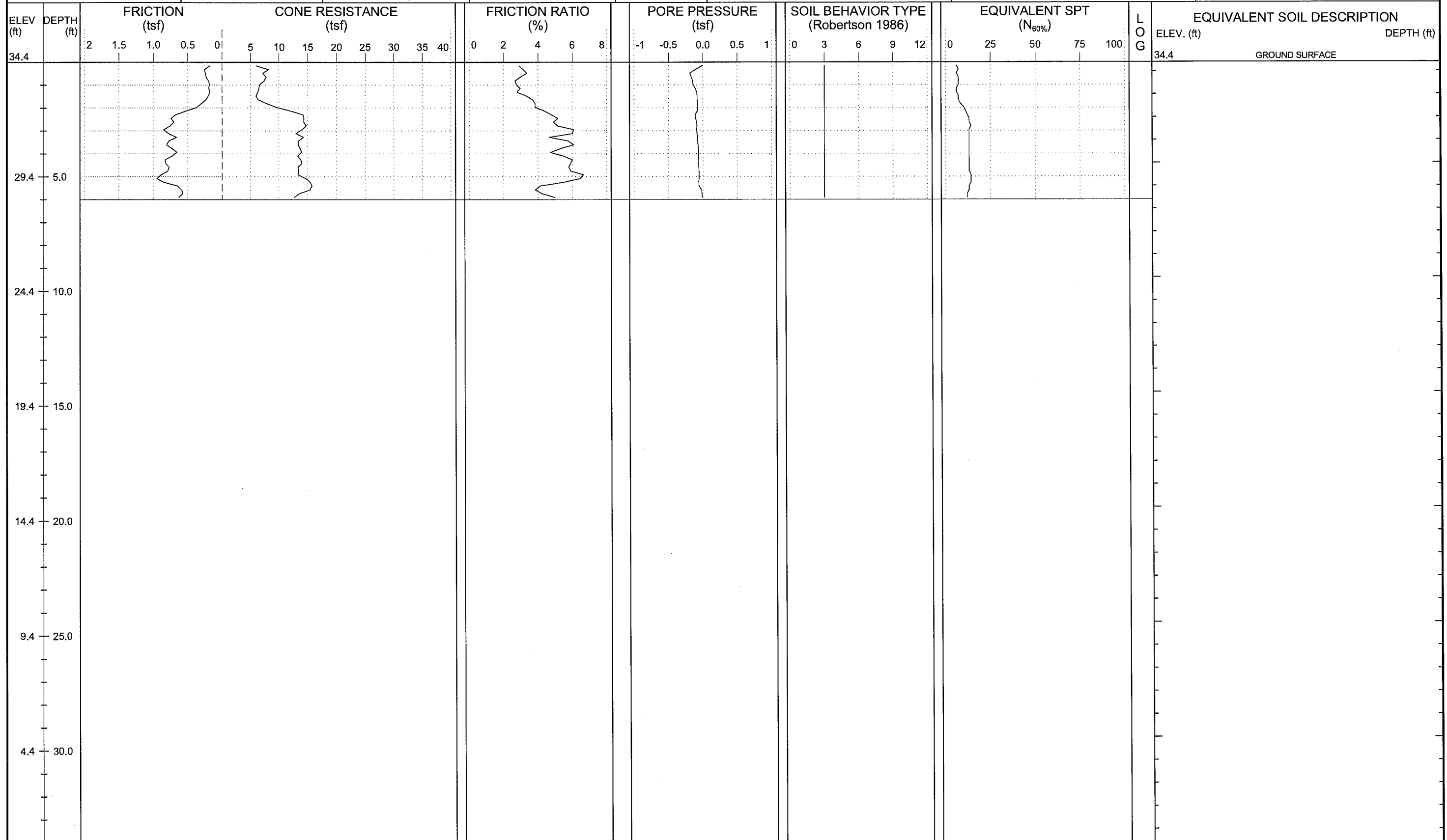


# NCDOT GEOTECHNICAL ENGINEERING UNIT

ENGLISH

SHEET NO.: 151  
 PROJ. NO.: 34442.1.2  
 TIP NO.: R-2514B  
 COUNTY: JONES/ONSLAW

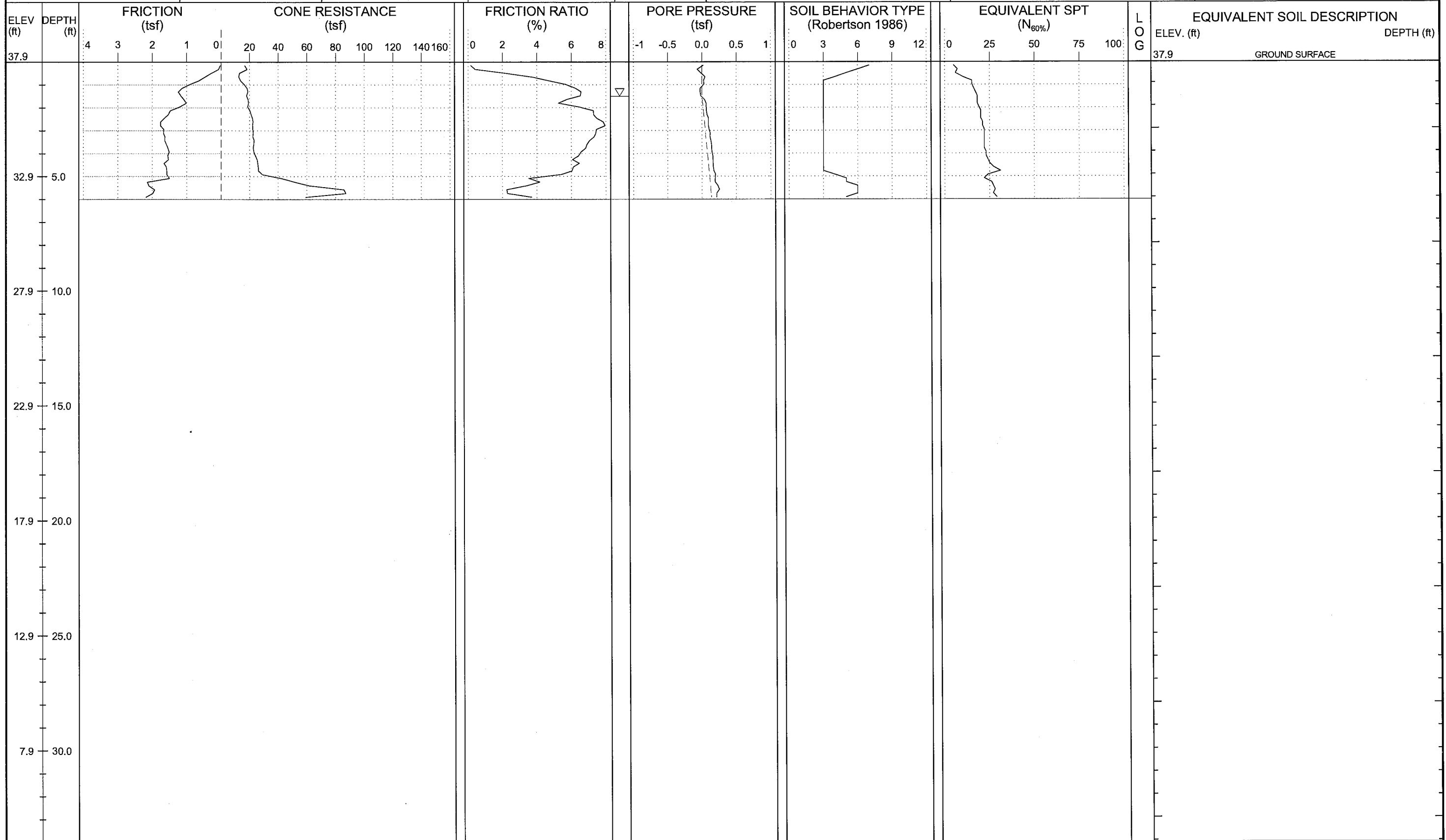
WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3C-1250	STATION: 12+50	OFFSET: 0ft CL	ALIGNMENT: -Y3C-	0 HR. Dry	CONE ID: DSA1123
COLLAR ELEV.: 34.4 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,333	EASTING: 2,528,474	24 HR. N/A	START DATE: 08/22/12
				COMP. DATE: 08/22/12	DRILLER: Ron Stewart
				TECHNICIAN: M.A.D.	
				SURFACE WATER DEPTH: N/A	



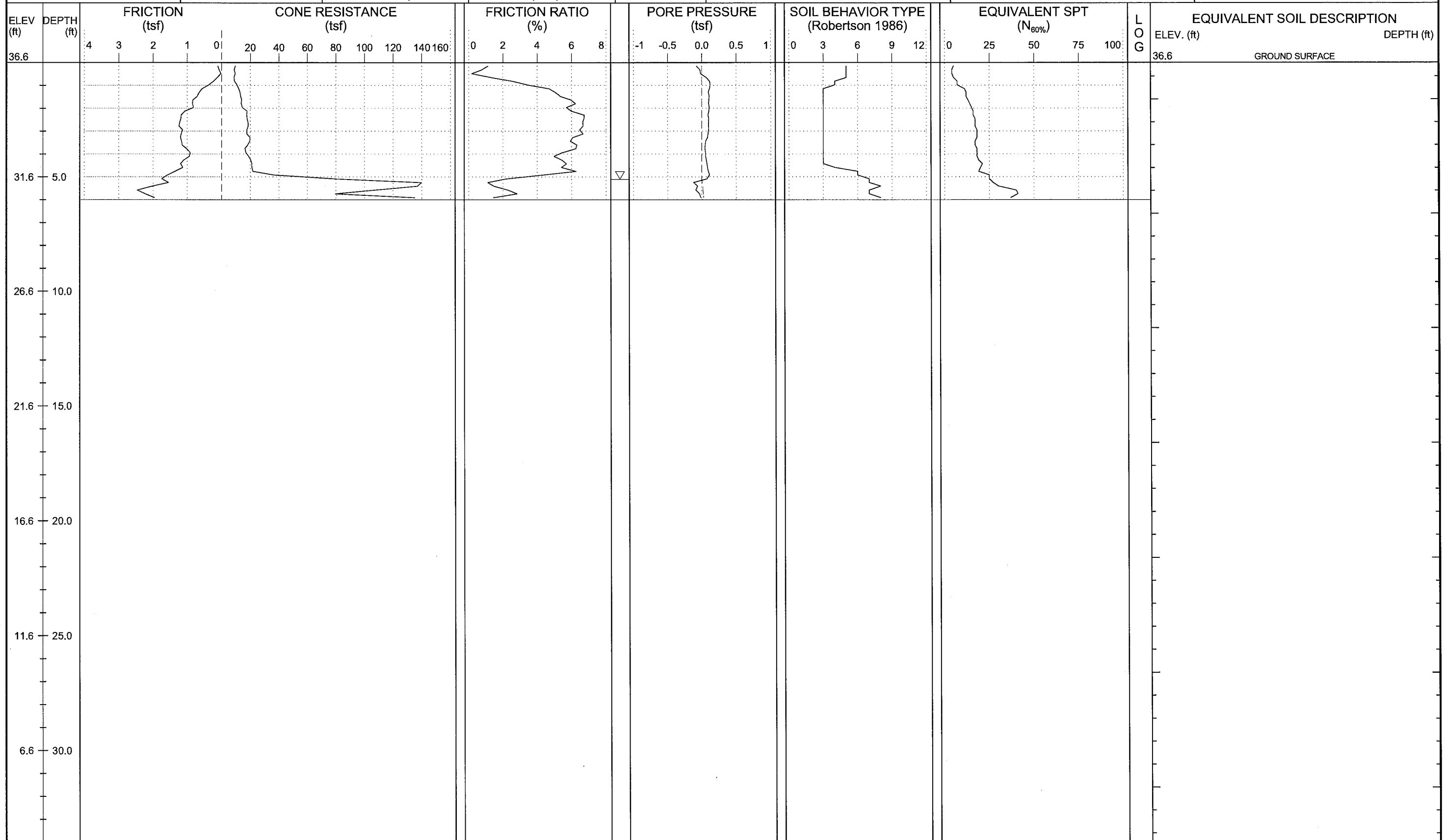




WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville				GROUND WTR (ft): 0 HR. 1.5, 24 HR. N/A	DRILL METHOD: CPT / DPT
BORING NO.: Y3C-1450	STATION: 14+50	OFFSET: 0ft CL	ALIGNMENT: -Y3C-	CONE TYPE: 1.44 Vertek Piezocone	DRILLER: Cory Robison
COLLAR ELEV.: 37.9 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,481	EASTING: 2,528,340	ROD TYPE: Pre-strung	TECHNICIAN: M.A.D.
				START DATE: 08/20/12	COMP. DATE: 08/20/12
				SURFACE WATER DEPTH: N/A	

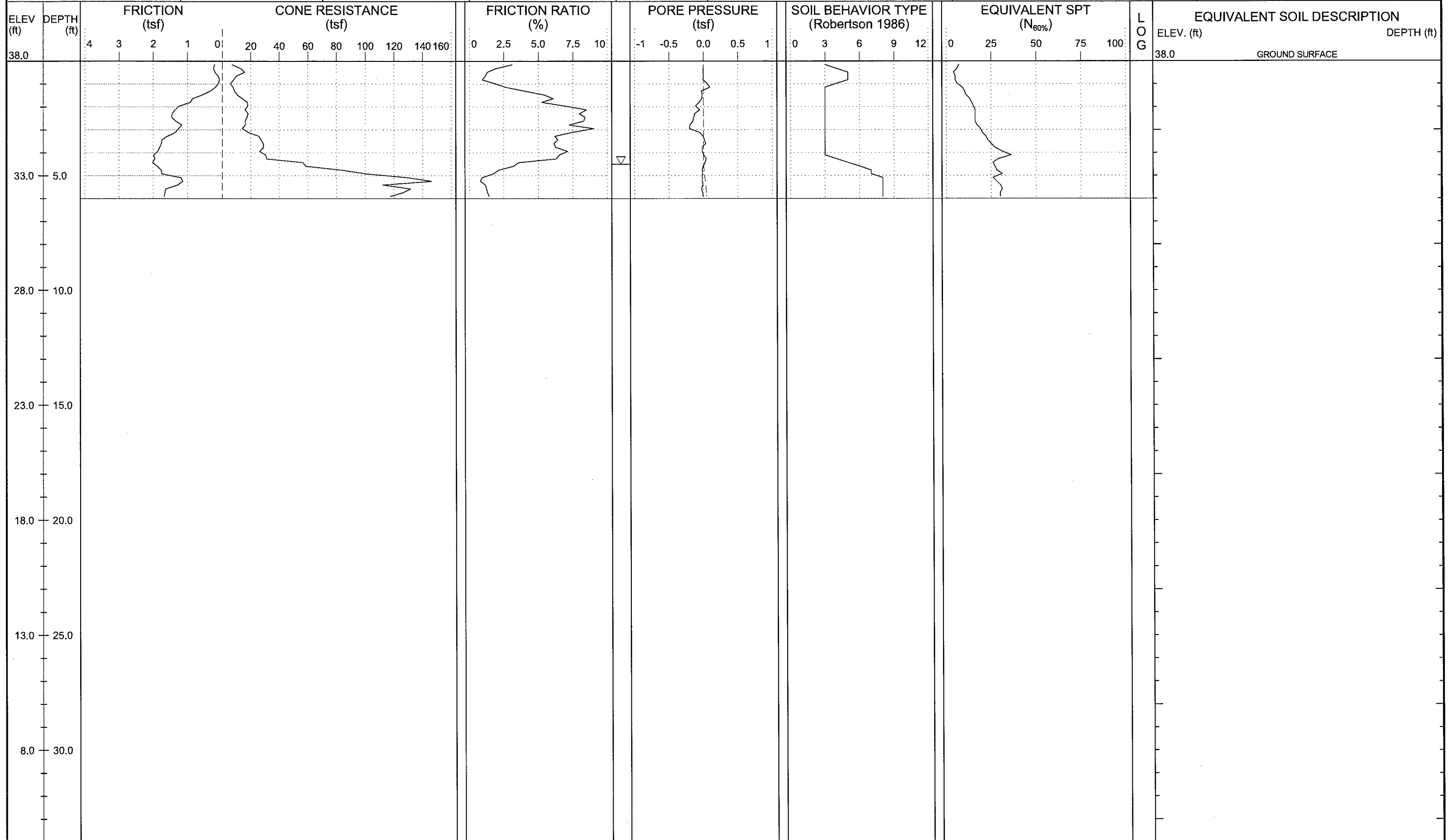


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 5.1, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3C-1650	STATION: 16+50	OFFSET: 0ft CL	ALIGNMENT: -Y3C-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 36.6 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,657	EASTING: 2,528,261	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A



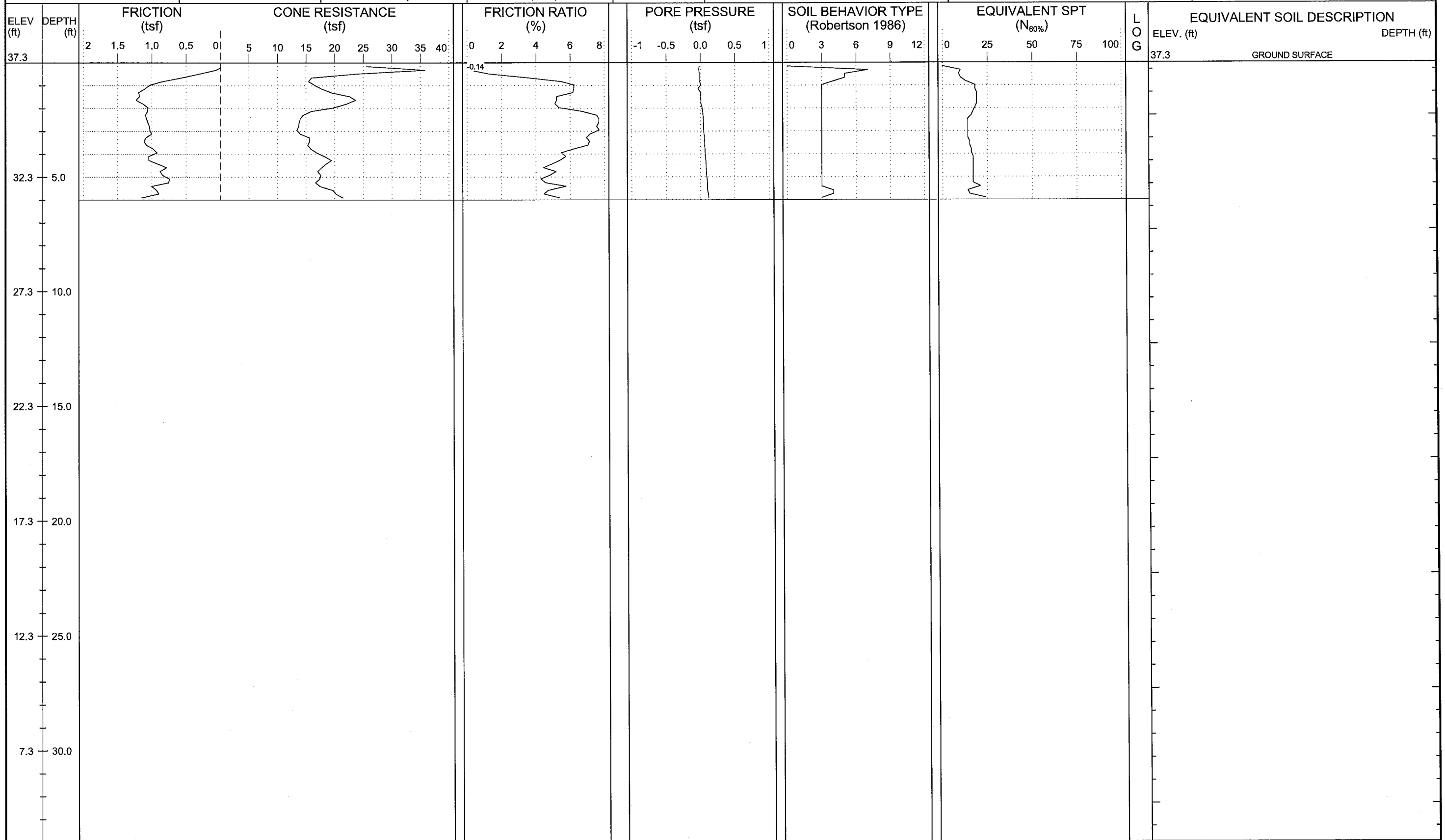


WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. 4.5, 24 HR. N/A	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3C-1850	STATION: 18+50	OFFSET: 0ft CL	ALIGNMENT: -Y3C-	ROD TYPE: Pre-strung	CONE ID: DSA1123
COLLAR ELEV.: 38.0 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,857	EASTING: 2,528,271	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Cory Robison
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A





WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLAW	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft): 0 HR. Dry	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3D-1250	STATION: 12+50	OFFSET: 0ft CL	ALIGNMENT: -Y3D-	ROD TYPE: Pre-strung	CONE ID: DSG0867
COLLAR ELEV.: 37.3 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,830	EASTING: 2,527,940	START DATE: 08/20/12	COMP. DATE: 08/20/12
					DRILLER: Ron Stewart
					TECHNICIAN: M.A.D.
					SURFACE WATER DEPTH: N/A







WBS: 34442.1.2	TIP: R-2514B	COUNTY: JONES/ONSLow	GEOLOGIST: Steven Hudson	DRILL MACHINE: Hogentogler Track	MAX. DOWN PRESSURE: 10 Ton
SITE DESCRIPTION: US 17 from South of Belgrade at SR 1330 to North of Maysville			GROUND WTR (ft)	DRILL METHOD: CPT / DPT	CONE TYPE: 1.44 Vertek Piezocone
BORING NO.: Y3E-1250	STATION: 12+50	OFFSET: 0ft CL	ALIGNMENT: -Y3E-	0 HR. Dry	ROD TYPE: Pre-strung
COLLAR ELEV.: 33.7 ft	TOTAL DEPTH: 6.0 ft	NORTHING: 427,200	EASTING: 2,527,802	24 HR. N/A	START DATE: 08/20/12
				CONE ID: DSA1123	DRILLER: Cory Robison
				COMP. DATE: 08/20/12	TECHNICIAN: M.A.D.
				SURFACE WATER DEPTH: N/A	

