



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

March 26, 2018

MEMORANDUM TO: Christopher A. Peoples, PE
State Materials Engineer

Teresa Bruton, PE
Design Build Manager

FROM: J. L. Pilipchuk, PE, LG
State Geotechnical Engineer

STATE PROJECT: 45905.1.1 (I-5912) – Design-Build
COUNTY: Surry & Yadkin

DESCRIPTION: I-77 from US 21 (exit 79) to Mile Marker 83.4

SUBJECT: Pavement Design Inventory

DS
MAM DocuSigned by:
John Pilipchuk
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The NCDOT's Geotechnical Engineering Unit has completed the investigation of the pavement and subgrade and submits the following information. Pavement and Subgrade Inventory Report.

The NCDOT's Geotechnical Engineering Unit contracted ECS Southeast, LLP to perform the pavement and subgrade investigation on I-77. The fieldwork was performed in January and February of 2018. ECS Southeast utilized a CME 550 drill machine to cut 4 inch pavement cores and augured approximately 6.5 feet below subgrade and extracted soil samples. Dynamic Cone Penetrometer Tests were conducted to determine in-situ soil strengths on materials below the pavement and the underlying soils. Representative soil and moisture samples were collected for visual field classification and laboratory analysis. Bulk samples were taken at select location to be tested for CBR. Laboratory testing was performed by ECS Southeast, LLP.

JLP/MAM/JBB

ATTACHMENT 1: Pavement and Subgrade Investigation

77

REFERENCE: I-5912

PROJECT: 45905

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

ROADWAY
SUBSURFACE INVESTIGATION

COUNTY SURRY & YADKIN
PROJECT DESCRIPTION I-77 FROM US 21 (EXIT 79)
TO MILE MARKER 83.4

PAVEMENT AND SUBGRADE INVESTIGATION

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5912	1	77

CAUTION NOTICE

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

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

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

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

PERSONNEL
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INVESTIGATED BY ECS SOUTHEAST, LLP

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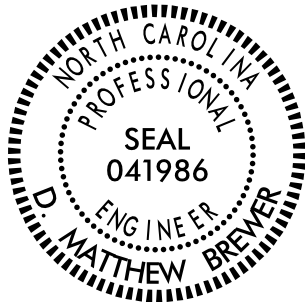
SUBMITTED BY ECS SOUTHEAST, LLP

DATE MARCH 2018



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SIGNATURE DATE
EC2ABFEF99DB48C

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NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS

GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION

SOIL IS CONSIDERED UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO THE STANDARD PENETRATION TEST (AASHTO T 206, ASTM D1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY INCLUDE THE FOLLOWING: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. FOR EXAMPLE, *VERY STIFF, GRAY, SILTY CLAY, MOIST WITH INTERBEDDED FINE SAND LAYERS, HIGHLY PLASTIC, A-7-6*

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)										SILT-CLAY MATERIALS (> 35% PASSING #200)						ORGANIC MATERIALS													
GROUP CLASS.	A-1		A-3		A-2		A-2-4		A-2-5		A-2-6		A-2-7		A-4		A-5		A-6		A-7		A-1, A-2		A-3		A-4, A-5		A-6, A-7	
SYMBOL																														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX		50 MX 25 MX		51 MN 10 MX		35 MX		35 MX		35 MX		35 MX		36 MN		36 MN		36 MN		36 MN		GRANULAR SOILS		SILT-CLAY SOILS		MUCK, PEAT			
MATERIAL PASSING #40 LL PI	— 6 MX		— NP		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		40 MX 41 MN		SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS					
GROUP INDEX	0		0		0		4 MX		8 MX		12 MX		16 MX		NO MX															
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND		SILTY OR CLAYEY GRAVEL AND SAND		SILTY SOILS		CLAYEY SOILS																					
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD										FAIR TO POOR										FAIR TO POOR		POOR		UNSUITABLE					

PI OF A-7-5 SUBGROUP IS ≤ LL - 30 ; PI OF A-7-6 SUBGROUP IS > LL - 30

GRADATION

WELL GRADED - INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE TO COARSE. UNIFORMLY GRADED - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLE SIZES OF TWO OR MORE SIZES.

ANGULARITY OF GRAINS

THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS IS DESIGNATED BY THE TERMS: ANGULAR, SUBANGULAR, SUBROUNDED, OR ROUNDED.

MINERALOGICAL COMPOSITION

MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN DESCRIPTIONS WHEN THEY ARE CONSIDERED OF SIGNIFICANCE.

COMPRESSIBILITY

SLIGHTLY COMPRESSIBLE LL < 31
MODERATELY COMPRESSIBLE LL = 31 - 50
HIGHLY COMPRESSIBLE LL > 50

PERCENTAGE OF MATERIAL

ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY

GROUND WATER

WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING

STATIC WATER LEVEL AFTER 24 HOURS

PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA

SPRING OR SEEP

MISCELLANEOUS SYMBOLS

ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION

SOIL SYMBOL

ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT

INFERRED SOIL BOUNDARY

INFERRED ROCK LINE

ALLUVIAL SOIL BOUNDARY

DIP & DIP DIRECTION OF ROCK STRUCTURES

TEST BORING

AUGER BORING

CORE BORING

MONITORING WELL

PIEZOMETER INSTALLATION

SLOPE INDICATOR INSTALLATION

CONE PENETROMETER TEST

SOUNDING ROD

TEST BORING WITH CORE

SPT N-VALUE

ROCK DESCRIPTION

HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT REFUSAL IF TESTED. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL. SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS IN NON-COASTAL PLAIN MATERIAL. THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE OF WEATHERED ROCK. ROCK MATERIALS ARE TYPICALLY DIVIDED AS FOLLOWS:

WEATHERED ROCK (WR)

NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.

CRYSTALLINE ROCK (CR)

FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.

NON-CRYSTALLINE ROCK (NCR)

FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.

COASTAL PLAIN SEDIMENTARY ROCK (CP)

COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

WEATHERING

FRESH
ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.

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.

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.

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.

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*

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, WOULD YIELD SPT N VALUES > 100 BPF*

VERY SEVERE (V SEV.)
ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF*

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.

TERMS AND DEFINITIONS

ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.
AQUIFER - A WATER BEARING FORMATION OR STRATA.
ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.
ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.
CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.
CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.
DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.
DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.
FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLOOED FROM PARENT MATERIAL.
FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.
FORMATION (FM) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.
JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.
LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.
RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
ROCK QUALITY DESIGNATION (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.
SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.
SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.
SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.
STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.
STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
STRATA ROCK QUALITY DESIGNATION (SROD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.
TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE OPENING (MM)	4	10	40	60	200	270
	4.75	2.00	0.42	0.25	0.075	0.053

	BOULDER (BLDR.)	COBBLE (COB.)	GRAVEL (GR.)	COARSE SAND (CSE. SD.)	FINE SAND (F SD.)	SILT (SL.)	CLAY (CL.)
GRAIN SIZE	MM 305 IN. 12	75	2.0	0.25	0.05	0.005	

SOIL MOISTURE - CORRELATION OF TERMS

SOIL MOISTURE SCALE (ATTERBERG LIMITS)		FIELD MOISTURE DESCRIPTION	GUIDE FOR FIELD MOISTURE DESCRIPTION
PLASTIC RANGE (PI)	LL	- SATURATED - (SAT.)	USUALLY LIQUID; VERY WET, USUALLY FROM BELOW THE GROUND WATER TABLE
	PL		SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE
	OM	- WET - (W)	
		- MOIST - (M)	SOLID; AT OR NEAR OPTIMUM MOISTURE
SL	- DRY - (D)	REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE	

PLASTICITY

	PLASTICITY INDEX (PI)	DRY STRENGTH
NON PLASTIC	0-5	VERY LOW
SLIGHTLY PLASTIC	6-15	SLIGHT
MODERATELY PLASTIC	16-25	MEDIUM
HIGHLY PLASTIC	26 OR MORE	HIGH

COLOR

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.

RECOMMENDATION SYMBOLS

UNDERCUT

SHALLOW UNDERCUT

UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE

UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK

UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL

ABBREVIATIONS

AR - AUGER REFUSAL
BT - BORING TERMINATED
CL - CLAY
CPT - CONE PENETRATION TEST
CSE - COARSE
DMT - DILATOMETER TEST
DPT - DYNAMIC PENETRATION TEST
e - VOID RATIO
F - FINE
FOSS. - FOSSILIFEROUS
FRAC. - FRACTURED, FRACTURES
FRAGS. - FRAGMENTS
HL - HIGHLY
MED. - MEDIUM
MICA - MICACEOUS
MOD. - MODERATELY
NP - NON PLASTIC
ORG. - ORGANIC
PMT - PRESSUREMETER TEST
SAP. - SAPROLITIC
SD. - SAND, SANDY
SL. - SILT, SILTY
SLI. - SLIGHTLY
TCR - TRICONE REFUSAL
w - MOISTURE CONTENT
V - VERY
VST - VANE SHEAR TEST
WEA. - WEATHERED
W - UNIT WEIGHT
W_d - DRY UNIT WEIGHT
SAMPLE ABBREVIATIONS
S - BULK
SS - SPLIT SPOON
ST - SHELBY TUBE
RS - ROCK
RT - RECOMPACTED TRIAXIAL
CBR - CALIFORNIA BEARING RATIO

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
☐ CME-45C
☐ CME-55
☒ CME-550
☐ VANE SHEAR TEST
☐ PORTABLE HOIST
☐ _____
☐ _____

ADVANCING TOOLS:
☐ CLAY BITS
☒ 4" CONTINUOUS FLIGHT AUGER
☐ 8" HOLLOW AUGERS
☐ HARD FACED FINGER BITS
☐ TUNG-CARBIDE INSERTS
☐ CASING ☐ W/ ADVANCER
☐ TRICONE _____ * STEEL TEETH
☐ TRICONE _____ * TUNG.-CARB.
☒ CORE BIT (4-INCH DIAMETER)
☐ _____

HAMMER TYPE:
☐ AUTOMATIC ☐ MANUAL
CORE SIZE:
☐ -B _____ ☐ -H _____
☐ -N _____
HAND TOOLS:
☐ POST HOLE DIGGER
☐ HAND AUGER
☐ SOUNDING ROD
☐ VANE SHEAR TEST
☒ DUAL MASS DCP

ROCK HARDNESS

VERY HARD
CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.

HARD
CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.

MODERATELY HARD
CAN BE SCRATCHED BY KNIFE OR PICK, GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.

MEDIUM HARD
CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. CAN BE EXCAVATED IN SMALL CHIPS TO PIECES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.

SOFT
CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.

VERY SOFT
CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGER NAIL.

FRACTURE SPACING

TERM	SPACING
VERY WIDE	MORE THAN 10 FEET
WIDE	3 TO 10 FEET
MODERATELY CLOSE	1 TO 3 FEET
CLOSE	0.16 TO 1 FOOT
VERY CLOSE	LESS THAN 0.16 FEET

BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY 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

INDURATION

FOR SEDIMENTARY ROCKS, INDURATION IS THE HARDENING OF MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.

FRIABLE
RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.

MODERATELY INDURATED
GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.

INDURATED
GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.

EXTREMELY INDURATED
SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.

BENCH MARK: N/A

ELEVATION: N/A FEET

NOTES:
NO ROADWAY DESIGN FILES PROVIDED BY NCDOT AS PART OF THIS REPORT

CORE WITH DCP TEST

DCP TEST ONLY

DATE: 8-15-14

Tip No. I-5912 | WBS No. 45905.1.1 | Surry & Yadkin County

ABBREVIATIONS

- OSL Outside Lane
- OSS Outside Shoulder
- PS Paved Shoulder
- ISL Inside Lane
- ISS Inside Shoulder
- LTL Left Turn Lane
- RTL Right Turn Lane
- SB Southbound
- NB Northbound
- ABC Aggregate Base Course
- C Cut
- Cly. Clayey
- DCP Dynamic Cone Penetrometer
- F Fill
- f. Fine
- M Moist
- N/A No distress observed
- NSR No Sample Recovered
- PADL Permeable Asphalt Drainage Layer
- Ref- Soil Reference sample
- R.E. Roadway Embankment
- Res. Residual
- Sdy Sandy
- Sev. Severe/severity
- Sl Silt/silty
- S- Soil sample
- M- Moisture Sample
- Tr Trace



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ENGINEERING
FIRM # F-1078

PROJECT REFERENCE NO.

I-5912

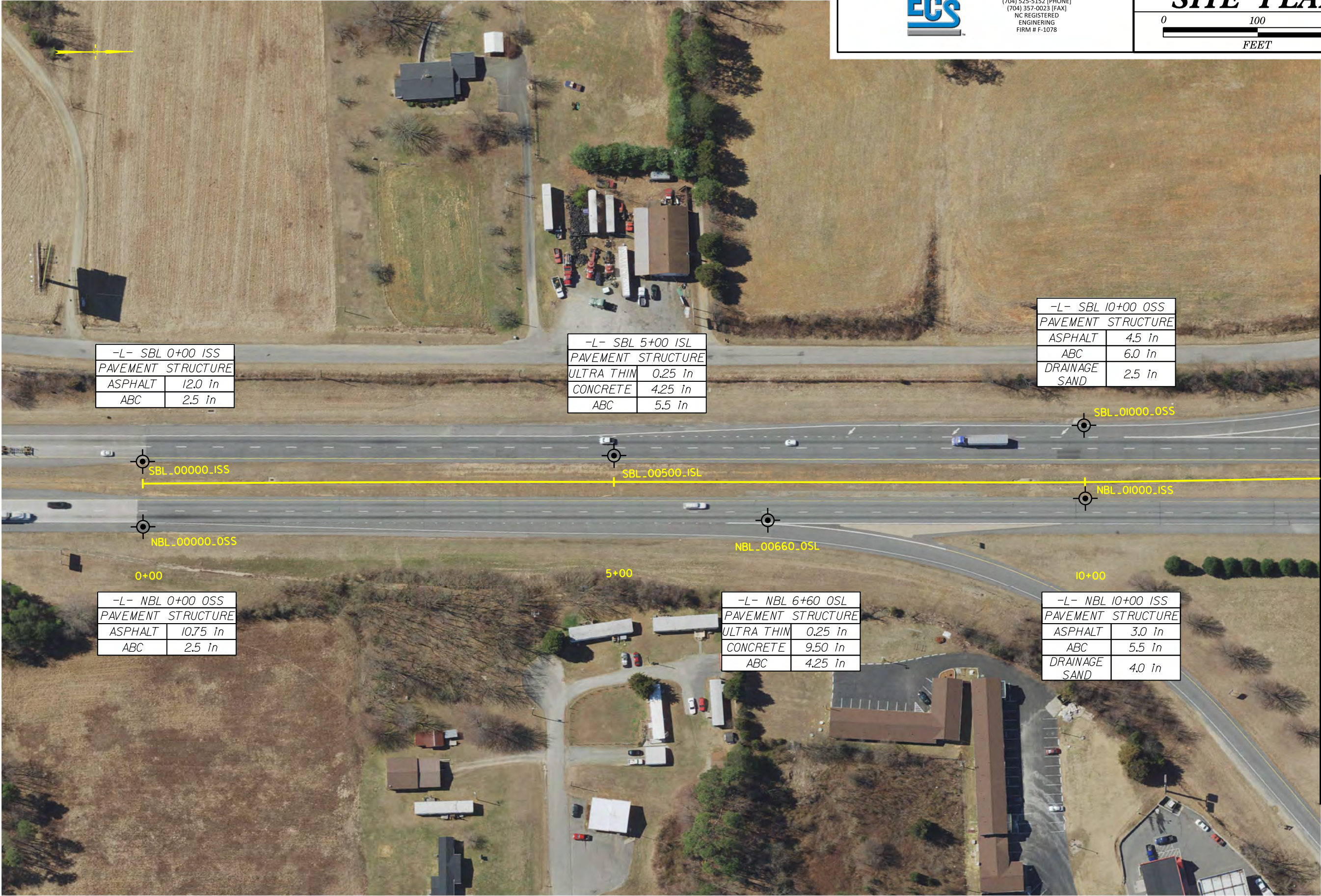
SHEET NO.

3

SITE PLAN

0100200

FEET



MATCHLINE -L- STA. 12+50



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I-5912

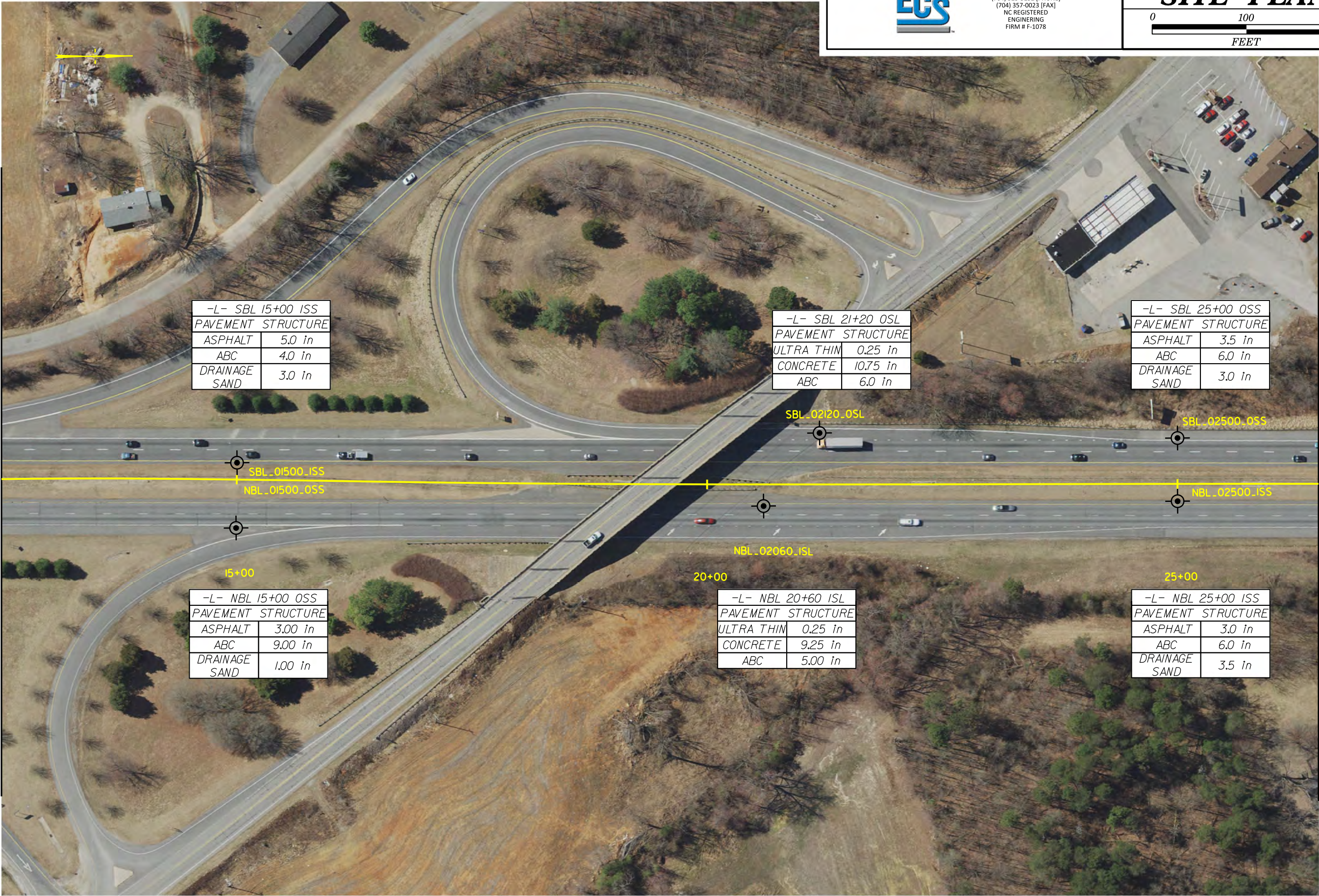
SHEET NO.

4

SITE PLAN

0100200

FEET



MATCHLINE -L- STA. 12+50

MATCHLINE -L- STA. 26+50

-L- SBL 15+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	5.0 in
ABC	4.0 in
DRAINAGE SAND	3.0 in

-L- SBL 21+20 OSL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	10.75 in
ABC	6.0 in

-L- SBL 25+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	3.5 in
ABC	6.0 in
DRAINAGE SAND	3.0 in

-L- NBL 15+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	3.00 in
ABC	9.00 in
DRAINAGE SAND	1.00 in

-L- NBL 20+60 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.25 in
ABC	5.00 in

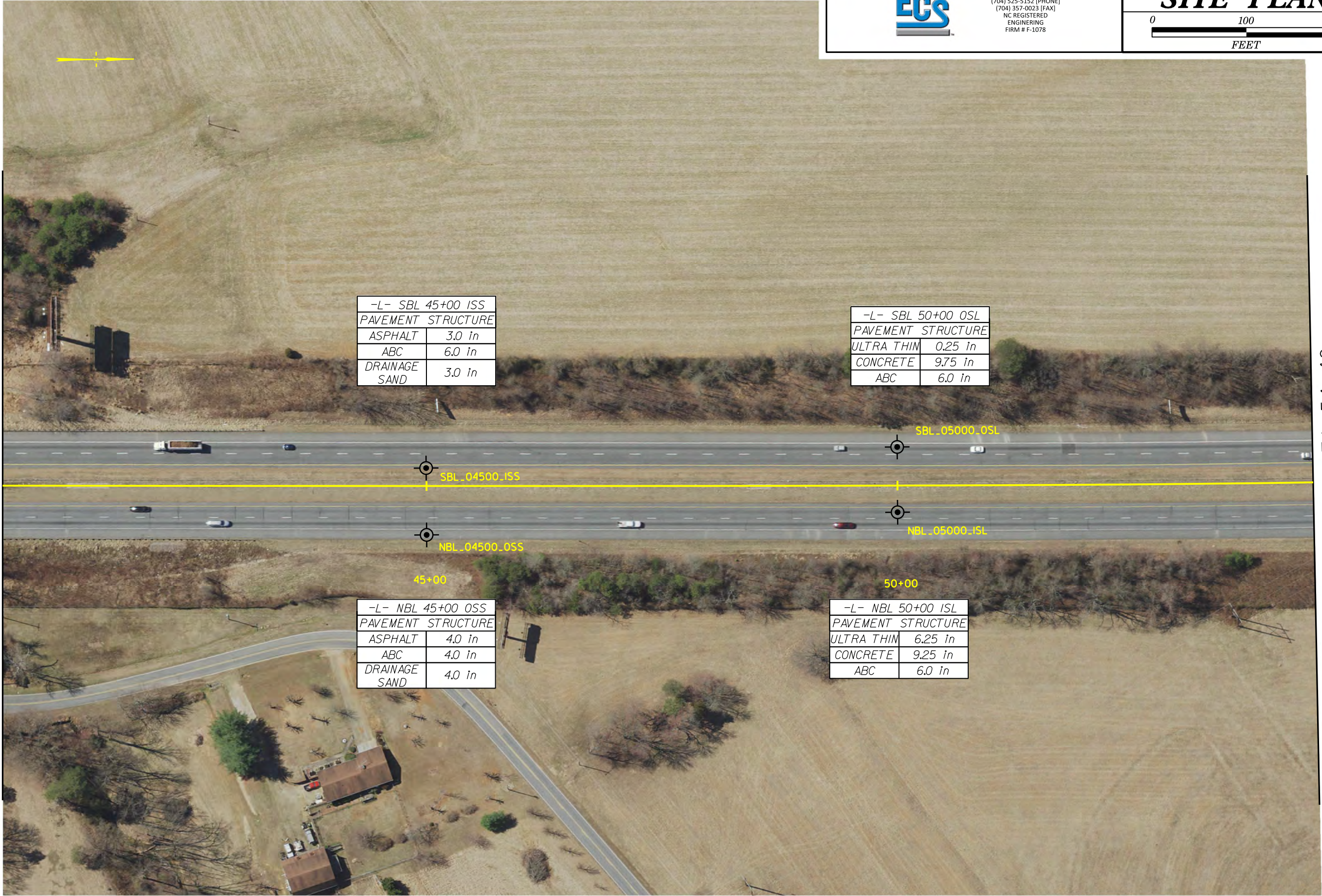
-L- NBL 25+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	3.0 in
ABC	6.0 in
DRAINAGE SAND	3.5 in



I-5912	5
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MATCHLINE -L- STA. 40+50



MATCHLINE -L- STA. 54+40



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	6
SITE PLAN	
0100200 FEET	



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	7
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 54+40

-L- SBL 55+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	3.5 in
ABC	5.5 in
DRAINAGE SAND	4.0 in

SBL_05500_OSS

NBL_05500_ISS

55+00

-L- NBL 55+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	4.5 in
ABC	3.5 in
DRAINAGE SAND	4.0 in

-L- SBL 60+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	3.5 in
ABC	5.5 in
DRAINAGE SAND	3.5 in

SBL_06000_ISS

NBL_06000_OSS

60+00

-L- NBL 60+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	3.5 in
ABC	5.5 in
DRAINAGE SAND	4.0 in

-L- SBL 65+00 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	10.75 in
ABC	6.0 in

SBL_06500_ISL

NBL_06500_OSL

65+00

-L- NBL 65+00 OSL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.75 in
ABC	8.0 in (H2O)

MATCHLINE -L- STA. 68+15



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MATCHLINE -L- STA. 68+15



MATCHLINE -L- STA. 81+80



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	9
SITE PLAN	
0100200 FEET	

MATCHLINE -L- STA. 81+80



MATCHLINE -L- STA. 95+45

MATCHLINE -L- STA. 95+45



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	10
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 109+25



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	11
SITE PLAN	
0100200 FEET	



MATCHLINE -L- STA. 109+25

MATCHLINE -L- STA. 122+95



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MATCHLINE -L- STA. 122+95



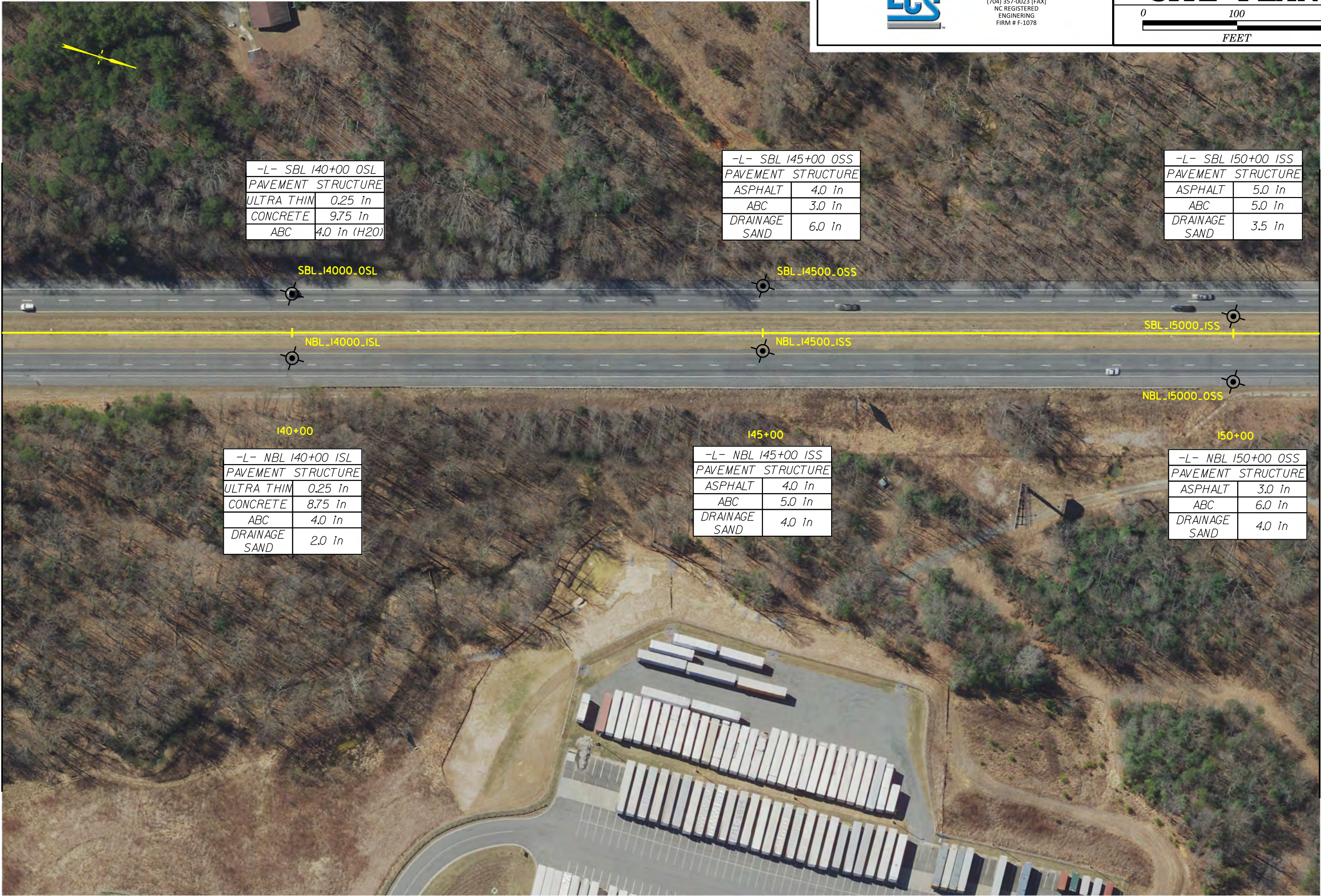
MATCHLINE -L- STA. 136+90



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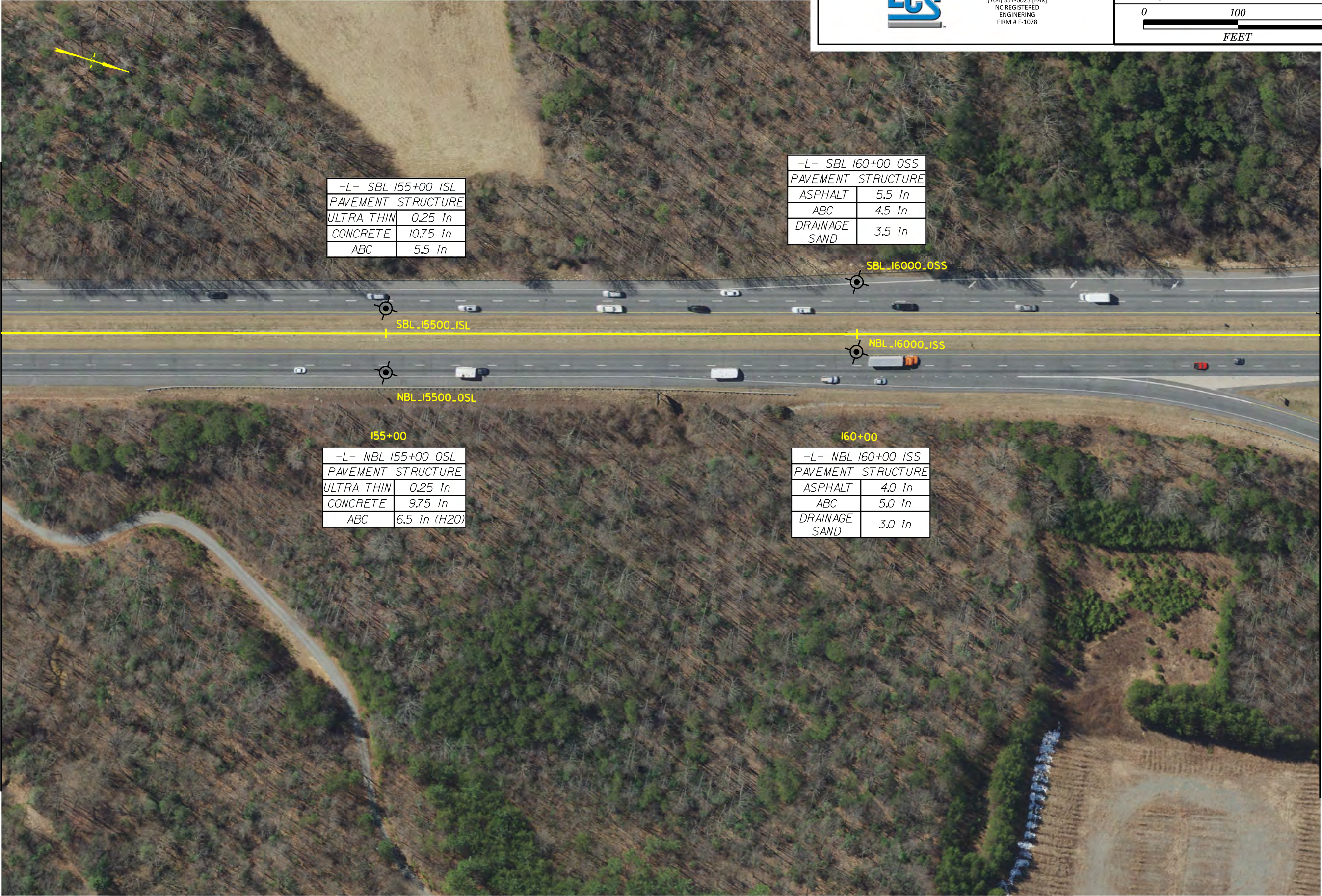
PROJECT REFERENCE NO.	SHEET NO.
I-5912	13
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 136+90



MATCHLINE -L- STA. 150+90

MATCHLINE -L- STA. 150+90



-L- SBL 155+00 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	10.75 in
ABC	5.5 in

-L- SBL 160+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	5.5 in
ABC	4.5 in
DRAINAGE SAND	3.5 in

-L- NBL 155+00 OSL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.75 in
ABC	6.5 in (H2O)

-L- NBL 160+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	4.0 in
ABC	5.0 in
DRAINAGE SAND	3.0 in



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	14
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 164+90



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PROJECT REFERENCE NO.

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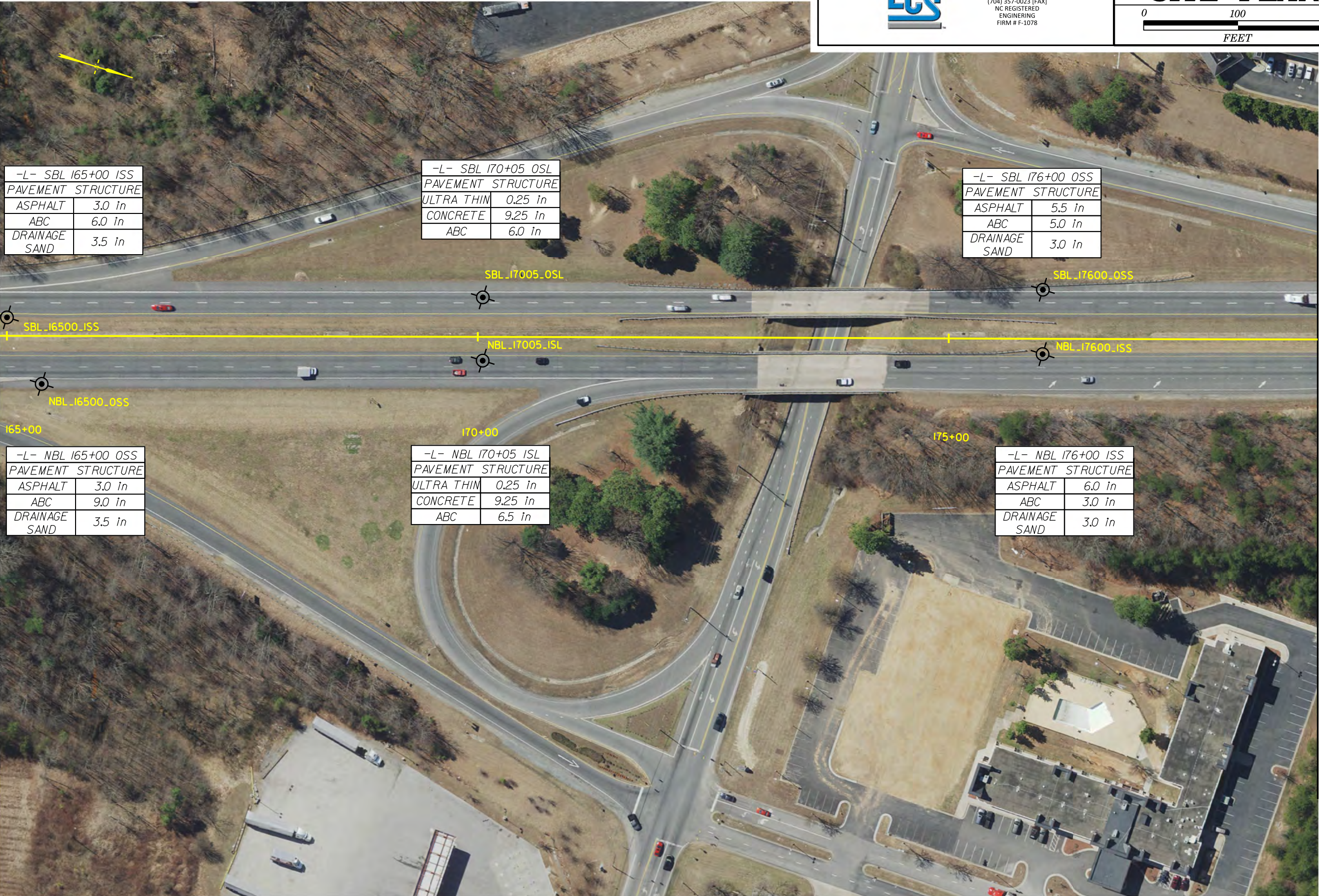
SHEET NO.

15

SITE PLAN

0100200

FEET



-L- SBL 165+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	3.0 in
ABC	6.0 in
DRAINAGE SAND	3.5 in

-L- SBL 170+05 OSL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.25 in
ABC	6.0 in

-L- SBL 176+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	5.5 in
ABC	5.0 in
DRAINAGE SAND	3.0 in

-L- NBL 165+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	3.0 in
ABC	9.0 in
DRAINAGE SAND	3.5 in

-L- NBL 170+05 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.25 in
ABC	6.5 in

-L- NBL 176+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	6.0 in
ABC	3.0 in
DRAINAGE SAND	3.0 in

MATCHLINE -L- STA. 164+90

MATCHLINE -L- STA. 178+90



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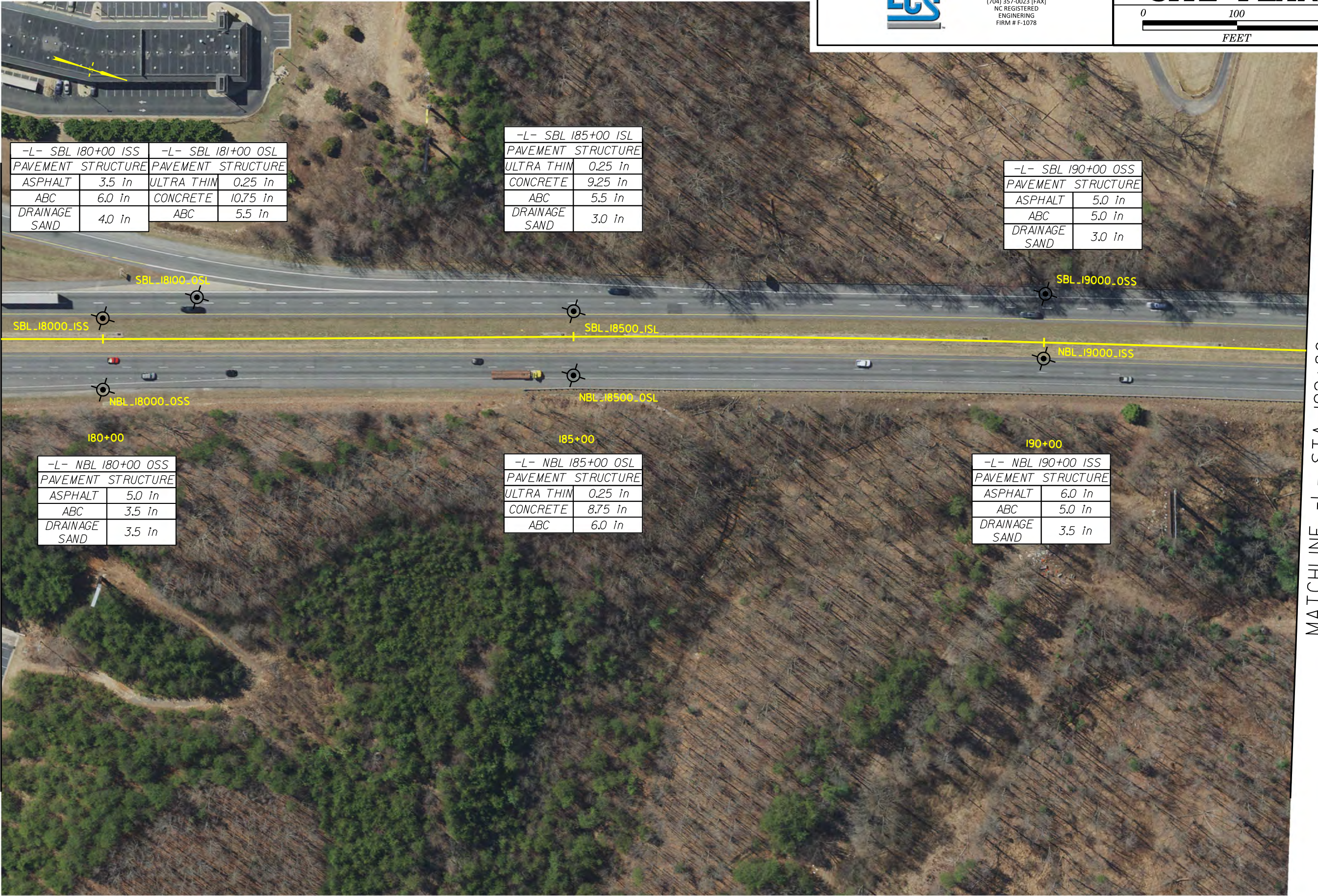
SHEET NO.

16

SITE PLAN

0100200

FEET



MATCHLINE -L- STA. 178+90

MATCHLINE -L- STA. 192+80



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	17
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 192+80



MATCHLINE -L- STA. 206+70



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	18
SITE PLAN	
0100200 FEET	

MATCHLINE -L- STA. 206+70



-L- SBL 210+00 ISS
PAVEMENT STRUCTURE
ASPHALT 18.0 in

-L- NBL 210+00 OSS
PAVEMENT STRUCTURE
ASPHALT 23.0 in
DRAINAGE SAND 5.5 in



I-5912	19
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-L- SBL 235+00 OSL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	10.75 in
ABC	2.5 in (H2O)

-L- SBL 240+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	9.5 in
ABC	5.0 in (H2O)

-L- SBL 245+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	9.5 in
DRAINAGE SAND	5.0 in

-L- NBL 235+00 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	0.25 in
CONCRETE	9.75 in
ABC	6.5 in

-L- NBL 240+00 ISS	
PAVEMENT STRUCTURE	
ASPHALT	7.5 in
DRAINAGE SAND	4.5 in

-L- NBL 245+00 OSS	
PAVEMENT STRUCTURE	
ASPHALT	9.0 in
DRAINAGE SAND	4.0 in



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	20
SITE PLAN	
0 100 200 FEET	

MATCHLINE -L- STA. 234+50

MATCHLINE -L- STA. 248+20



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PROJECT REFERENCE NO.

I-5912

SHEET NO.

21

SITE PLAN

0100200

FEET



MATCHLINE -L- STA. 248+20

MATCHLINE -L- STA. 262+20

MATCHLINE -L- STA. 262+20



-L- SBL 265+00 ISL	
PAVEMENT STRUCTURE	
ULTRA THIN	1.0 in
CONCRETE	9.0 in
ABC	4.0 in



SBL_26500_ISL

END PROJECT



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PROJECT REFERENCE NO.	SHEET NO.
I-5912	22
SITE PLAN	
0 100 200 FEET	

PAVEMENT INVESTIGATION DATA SHEET

Project: I-77 from US 21 (Exit 79) to MM 83.4		
TIP: I-5912	WBS No.: 45905.1.1	

Route: I-77 (-L-)	
County: Surry & Yadkin	

ECS Project No.	12605
Notes By: K. Plummer	

SHEET 23

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
NBL_00000_OSS	At Grade	11.3 ft	10.1 ft	4.7 ft RT	C	13.25 in	10.75 in	2.5 in	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Residual: Red-Brown, Silty CLAY (1.1-6.5 ft)	S-1	M-1	A-7-5	M	DCP	6.5 ft	Low severity transverse cracking with some polished aggregate	893762	1465440
NBL_00660_OSL	10.0 ft C	11.0 ft	11.0 ft (Gore)	3.8 ft LT	C	14.0 in	0.25 in	4.25 in	N/A	9.5 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Red-Brown, Fine Sandy SILT (1.2-6.5 ft)	S-2	M-1	A-4	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	894424	1465480
NBL_01000_ISS	2.0 ft F	11.4 ft	4.1 ft	3.1 ft LT	C	12.5 in	3.0 in	5.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Clayey SILT (1.1-6.5 ft)	S-12	M-12	A-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	894762	1465480
NBL_01500_OSS	4.0 ft F	11.0 ft	13.6 ft (Gore)	2.5 ft RT	C	13.0 in	3.0 in	9.0 in	N/A	N/A	N/A	1.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Clayey SILT (1.1-6.5 ft)	S-11	M-11	A-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	895257	1465545
NBL_02060_ISL	4.0 ft C	11.4 ft	4.0 ft	2.1 ft RT	C	14.5 in	0.25 in	5.0 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Gray, Fine Sandy SILT (1.2-6.5 ft)	S-13	M-13	A-4	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	895818	1465564
NBL_02500_ISS	3.0 ft C	11.3 ft	4.0 ft	3.1 ft LT	C	12.5 in	3.0 in	6.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Clayey SILT (1.1-6.5 ft)	S-14	M-14	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	896258	1465588
NBL_03000_OSS	11.0 ft C	11.7 ft	10.3 ft	6.2 ft RT	C	15.0 in	3.5 in	5.5 in	N/A	N/A	N/A	6.0 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Clayey SILT (1.3-6.5 ft)	S-3	M-3	A-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	896754	1465655
NBL_03500_OSL	3.0 ft F	11.5 ft	9.8 ft	3.2 ft LT	C	15.0 in	0.25 in	6.0 in (H2O)	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Clayey SILT (1.3-6.5 ft)	S-4	M-4	A-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	897254	1465679
NBL_04000_ISS	8.0 ft F	11.2 ft	3.8 ft	3.4 ft LT	C	12.0 in	5.0 in	5.0 in	N/A	N/A	N/A	2.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Clayey SILT (1.0-6.5 ft)	S-15	M-15	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	897754	1465695
NBL_04500_OSS	6.0 ft C	11.0 ft	10.0 ft	5.5 ft RT	C	12.0 in	4.0 in	4.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Fine Sandy SILT (1.0-6.5 ft)	S-5	M-5	A-4	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	898250	1465761
NBL_05000_ISL	12.0 ft C	11.3 ft	3.9 ft	4.5 ft RT	C	21.5 in	6.25 in	6.0 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT (1.3-6.5 ft)	S-16	M-16	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	898751	1465773
NBL_05500_ISS	4.0 ft F	11.3 ft	4.0	2.8 ft LT	C	12.0 in	4.5 in	3.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Clayey SILT (1.0-6.5 ft)	S-17	M-17	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	899251	1465797
NBL_06000_OSS	At Grade	11.3 ft	10.2 ft	5.0 ft RT	C	13.0 in	3.5 in	5.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Silty Clay (1.1-6.5 ft)	S-6	M-6	A-7-5	M	DCP	6.5 ft	Low severity longitudinal, transverse and fatigue cracking with some polished aggregate	899750	1465850
NBL_06500_OSL	8.0 ft F	11.4 ft	10.2 ft	3.3 ft LT	C	18.0 in	0.25 in	8.0 in (H2O)	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Silty CLAY (1.5-6.5 ft)	S-7	M-7	A-7-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking, Moderate severity fatigue cracking with some polished aggregate	900251	1465849
NBL_07000_ISS	At Grade	11.3 ft	3.8 ft	2.2 ft LT	C	14.0 in	4.5 in	6.5 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Brown, Fine Sandy SILT (1.2-6.5 ft)	S-18	M-18	A-4	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with polished aggregate	900751	1465824

Notes:

OSL = Outside Lane
ISL = Inside Lane
RTL = Right Turn Lane

CTL = Center Turn Lane
LTL = Left Turn Lane
PS = Paved Shoulder

OSS = Outside Shoulder
ISS = Inside Shoulder
ACCEL = Acceleration Lane

DECEL = Deceleration Lane
IGM = Inside Grass Median
OGS = Outside Grass Shoulder

COL = Collector Lane
FW = From White
FY = From YelLow

RT LN = Right Lane
LT LN = Left Lane
RTL (RT) = Right Turn Lane

LTL=Left Turn Lane
CTL=Center Turn Lane
CL=Center Lane

RT = Right
LT = Left
(O) = Outside

(I) = Inside
BOC = Back of Curb
EOP = Edge of Pavement

NB = North Bound
SB = South Bound
RE = Roadway Embankment

PAVEMENT INVESTIGATION DATA SHEET

Project: I-77 from US 21 (Exit 79) to MM 83.4		
TIP: I-5912	WBS No.: 45905.1.1	

Route: I-77 (-L-)
County: Surry & Yadkin

ECS Project No. 12605
Notes By: K. Plummer

SHEET 24

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
NBL_07500_OSS	10.0 ft C	11.3 ft	10.3 ft	4.8 ft RT	C	12.0 in	3.0 in	5.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.0-6.5 ft)	S-8	M-8	A-4	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	901253	1465843
NBL_08000_ISL	10.0 ft C	11.3 ft	3.8 ft	2.8 ft RT	C	14.0 in	0.25 in	5.0 in	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Red-Brown, Clayey Sandy SILT (1.2-6.5 ft)	S-19	M-19	A-5	M	DCP	6.5 ft	Low severity longitudinal and transverse cracking with some polished aggregate	901752	1465794
NBL_08550_ISS	6.0 ft F	11.4 ft	4.2 ft	2.6 ft LT	C	15.0 in	3.0 in	7.0 in	N/A	N/A	N/A	5.0 in (H2O)	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Silty CLAY (1.3-6.5 ft)	S-20	M-20	A-7-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	902301	1465748
NBL_09000_OSS	15.0 ft C	11.4 ft	10.5 ft	5.0 ft RT	C	12.0 in	3.0 in	5.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Gray, Fine Sandy SILT (1.0-2.8 ft)	S-9	M-9	A-4	M	DCP	2.8 ft (AR)	High severity longitudinal and transverse cracking with some polished aggregate	902753	1465740
NBL_09500_OSL	8.0 ft C	11.6 ft	10.3 ft	3.3 ft LT	C	14.5 in	0.25 in	5.5 in	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT (1.2-2.8 ft)	S-10	M-10	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse cracking with some polished aggregate	903249	1465674
NBL_100000_ISS	5.0 ft C	11.8 ft	4.0 ft	2.3 ft LT	C	14.0 in	4.0 in	6.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.2-6.5 ft)	S-21	M-21	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with polished aggregate	903742	1465584
NBL_10500_OSS	10.0 ft C	11.4 ft	10.2 ft	5.9 ft RT	C	12.0 in	4.0 in	4.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown-Red, Fine Sandy SILT (1.0-3.5 ft) Residual: Gray, Fine Sandy SILT (3.5-6.5 ft)	S-22 S-23	M-22 M-23	A-4 A-4	M	DCP	6.5 ft	Moderate to High long and transverse cracking, Low severity fatigue cracking with some polished aggregate	904242	1465539
NBL_11000_ISL	30.0 ft F	11.4 ft	3.4 ft	3.6 ft RT	C	17.0 in	0.25 in	7.5 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Fine Sandy SILT	S-36	M-36	A-4	M	DCP	6.5 ft	Low to Moderate severity longitudinal and transverse cracking with some polished aggregate	904730	1465424
NBL_11500_ISS	20.0 ft F	11.4 ft	4.2 ft	3.5 ft LT	C	13.0 in	3.5 in	4.5 in	N/A	N/A	N/A	5.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.1-6.5 ft)	S-37	M-37	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate. Kessler started at the sand layer.	905219	1465316
NBL_12000_OSS	15.0 ft C	11.4 ft	10.4 ft	4.3 ft RT	C	14.0 in	4.0 in	6.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Brown, Fine Sandy SILT (1.2-3.1 ft)	S-24	M-24	A-4	M	DCP	3.1 ft (AR)	High severity longitudinal cracking with some polished aggregate	905715	1465238
NBL_12500_OSL	20.0 ft C	11.6 ft	10.5 ft	3.4 ft LT	C	14.5 in	0.25 in	5.5 in	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Brown-Tan, Fine Sandy SILT (1.2-3.5 ft)	S-25	M-25	A-4	M	DCP	3.5 ft (AR)	High severity longitudinal cracking, Moderate severity transverse cracking with some polished aggregate	906199	1465112
NBL_13000_ISS	20.0 ft F	11.3 ft	4.0 ft	2.6 ft LT	C	14.0 in	3.0 in	7.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine Sandy SILT (1.2-6.5 ft)	S-38	M-38	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	906680	1464972
NBL_13500_OSS	10.0 ft C	11.4 ft	10.3 ft	5.0 ft RT	C	12.0 in	3.0 in	5.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Brown-Tan, Fine Sandy SILT (1.0-6.5 ft)	S-26	M-26	A-4	M	DCP	6.5 ft	High severity longitudinal and Low severity transverse cracking with some polished aggregate	907174	1464886
NBL_14000_ISL	10.0 ft C	11.3 ft	3.9 ft	3.6 ft RT	C	15.0 in	0.25 in	4.0 in (H2O)	N/A	8.75 in	N/A	2.0 in	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan-Brown, Fine Sandy SILT (1.3-4.1 ft)	S-39	M-39	A-4	M	DCP	4.1 ft (AR)	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	907654	1464745
NBL_14500_ISS	20.0 ft F	11.3 ft	3.8 ft	2.8 ft LT	C	13.0 in	4.0 in	5.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine Sandy SILT (1.1-6.5 ft)	S-40	M-40	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	908138	1464620

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ACCEL = Acceleration Lane

DECEL = Deceleration Lane
IGM = Inside Grass Median
OGS = Outside Grass Shoulder

COL = Collector Lane
FW = From White
FY = From Yellow

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LT LN = Left Lane
RTL (RT) = Right Turn Lane

LTL=Left Turn Lane
CTL=Center Turn Lane
CL=Center Lane

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LT = Left
(O) = Outside

(I) = Inside
BOC = Back of Curb
EOP = Edge of Pavement

NB = North Bound
SB = South Bound
RE = Roadway Embankment

PAVEMENT INVESTIGATION DATA SHEET

Project:	I-77 from US 21 (Exit 79) to MM 83.4	
TIP:	I-5912	WBS No.: 45905.1.1

Route:	I-77 (-L-)
County:	Surry & Yadkin

ECS Project No.	12605
Notes By:	K. Plummer

SHEET 25

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Molure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
NBL_15000_OSS	At Grade	11.4 ft	10.5 ft	4.5 ft RT	C	13.0 in	3.0 in	6.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Fine Sandy SILT (1.1-6.5 ft)	S-27	M-27	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse cracking with some polished aggregate	908631	1464534
NBL_15500_OSL	20.0 ft F	11.3 ft	10.3 ft	3.8 ft LT	C	16.5 in	0.25 in	6.5 in (H2O)	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Brown, Fine Sandy SILT with trace gravel (1.3-3.7 ft)	S-35	M-35	A-4	M	DCP	3.7 ft (AR)	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	909115	1464408
NBL_16000_ISS	5.0 ft F	11.3 ft	3.9 ft	2.8 ft LT	C	12.0 in	4.0 in	5.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Clayey SILT (1.0-6.5 ft)	S-41	M-41	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	909596	1464269
NBL_16500_OSS	5.0 ft F	11.5 ft	10.3 ft (Gore)	4.5 ft RT	C	15.5 in	3.0 in	9.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine Sandy SILT (1.1-6.5 ft)	S-28	M-28	A-4	M	DCP	6.5 ft	Moderate severity longitudinal and transverse cracking with some polished aggregate	910126	1464175
NBL_17005_ISL	5.0 ft F	11.4 ft	3.7 ft	3.8 ft RT	C	16.0 in	0.25 in	6.5 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.3-6.5 ft)	S-42	M-42	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	910575	1464041
NBL_17600_ISS	15.0 ft C	11.0 ft	3.1 ft	2.4 ft LT	C	12.0 in	6.0 in	3.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Red-Tan, Fine Sandy SILT (1.0-6.5 ft)	S-43	M-43	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking	911151	1463894
NBL_18000_OSS	At Grade	11.4 ft	5.5 ft	4.7 ft RT	C	12.0 in	5.0 in	3.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Tan-Gray, Fine Sandy SILT (1.0-6.5 ft)	S-29	M-29	A-4	M	DCP	6.5 ft	Moderate severity longitudinal and transverse cracking with some polished aggregate	911550	1463837
NBL_18500_OSL	3.0 ft C	11.3 ft	9.8 ft	2.8 ft LT	C	15.0 in	0.25 in	6.0 in	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Brown, Fine Sandy SILT (1.3-6.5 ft)	S-30	M-30	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	912032	1463705
NBL_19000_ISS	15.0 ft C	11.4 ft	3.7 ft	2.9 ft LT	C	14.5 in	6.0 in	5.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Residual: Red-Tan, Fine Sandy SILT with trace gravel-sized rock fragments (1.2-6.5 ft)	S-44	M-44	A-4	M	DCP	6.5 ft	Low to Moderate severity longitudinal and transverse cracking with some polished aggregate	912513	1463570
NBL_19500_OSS	5.0 ft F	11.2 ft	10.3 ft	4.1 ft RT	C	12.0 in	3.0 in	5.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Clayey SILT (1.0-6.5 ft)	S-31	M-31	A-5	M	DCP	6.5 ft	Low to Moderate longitudinal and transverse cracking with some polished aggregate	913009	1463499
NBL_20000_ISL	20.0 ft C	11.1 ft	3.5 ft	2.8 ft RT	C	15.0 in	0.25 in	5.5 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan-Brown, Fine Sandy SILT (1.2-2.8 ft)	S-45	M-45	A-4	M	DCP	2.8 ft (AR)	Moderate to High severity longitudinal and transverse cracking with some polished aggregate	913495	1463382
NBL_20500_ISS	15.0 ft C	11.3 ft	32.2 ft (Paved Median)	3.5 ft LT	C	28.0	28.0 in	N/A	N/A	N/A	N/A	N/A	Asphalt Soil Subgrade	Residual: Brown, Fine Sandy SILT (2.3-7.0 ft)	S-46	M-46	A-4	M	DCP	7.0 ft	Moderate to High severity longitudinal and transverse cracking, Low severity fatigue cracking with some polished aggregate	913984	1463281
NBL_21000_OSS	30.0 ft F	11.3 ft	8.4 ft	0.4 ft RT	C	28.5 in	23.0 in	N/A	N/A	N/A	N/A	5.5 in	Asphalt Drainage Sand	Roadway Embankment: Tan-Brown, Fine Sandy SILT (2.4-7.0 ft)	S-32	M-32	A-4	M	DCP	7.0 ft	Moderate severity longitudinal and Moderate to High severity transverse cracking with some polished aggregate	914481	1463217
NBL_22100_OSL	5.0 ft C	10.8 ft	10.4 ft	3.9 ft LT	C	15.0 in	0.25 in	5.0 in	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Orange, Clayey SILT (1.3-6.5 ft)	S-33	M-33	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and High severity transverse cracking with some polished aggregate	915561	1463005
NBL_22500_ISS	10.0 ft C	11.3 ft	25.2 ft (Paved Median)	3.4 ft LT	C	17.0 in	15.0 in	2.0 in	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Roadway Embankment: Red-Brown-Tan, Clayey SILT (1.4-3.0 ft) Residual: Gray-Tan-Brown, Fine Sandy SILT (3.0-6.5 ft)	S-47 Ref-46	M-47 Ref-46	A-5 A-4	W M	DCP	6.5 ft	High severity joint cracking, High severity longitudinal cracking, Moderate to High severity transverse joint cracking (previously sealed), Low severity fatigue cracking with polished aggregate	915950	1462908

Notes:

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PAVEMENT INVESTIGATION DATA SHEET

Project: I-77 from US 21 (Exit 79) to MM 83.4		
TIP: I-5912	WBS No.: 45905.1.1	

Route: I-77 (-L-)	
County: Surry & Yadkin	

ECS Project No.	12605
Notes By:	K. Plummer/N. McLaren

SHEET 26

		Width				Thickness (inches)								Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting	
NBL_23000_OSS	20.0 ft C	11.3 ft	11.8 ft	3.6 ft RT	C	22.0 in	22.0 in	N/A	N/A	N/A	N/A	N/A	Asphalt Soil Subgrade	Residual: Gray-Tan, Fine Sandy SILT (1.9-6.5 ft)	S-34	M-34	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal, High severity transverse, Moderate severity fatigue cracking with some polished aggregate.	916447	1462846	
NBL_23075_OSS	25.0 ft C	11.5 ft	10.1 ft	10.2 ft RT	C	-	-	-	-	-	-	-	-	N/A	Ref-34	Ref-34	A-4	M	DCP	-	High severity transverse cracking, highsevere transverse joint cracking, Moderate to High severity longitudinal joint cracking, shoving 2.25 in at OSS, Overhead Utility present at test location	916522	1462839	
NBL_23500_ISL	15.0 ft F	11.3 ft	4.4 ft	2.8 ft RT	C	16.5 in	0.25 in	6.5 in	N/A	9.75 in	N/A	N/A	Asphalt ABC Soil Subgrade	Residual: Tan-Brown, Fine Clayey SILT (1.4-6.5 ft)	S-48	M-48	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, some sealant, Low to Moderate severity transverse joint cracking with some polished aggregate, 0.75 in slab depression at transverse joint	916934	1462725	
NBL_24000_ISS	15.0 ft F	11.3 ft	4.3 ft	2.9 ft LT	C	12.0 in	7.5 in	N/A	N/A	N/A	N/A	4.5 in	Asphalt Drainage Sand Soil Subgrade	Roadway Embankment: Red-Brown, Clayey SILT (1.0-3.0 ft) Residual: Tan-Brown, Fine Clayey SILT (3.0-6.5 ft)	S-49 Ref-48	M-49 Ref-48	A-5 A-5	M M	DCP	6.5 ft	Moderate to High seveity longitudinal joint cracking, some sealant, Low to Moderate severity transverse joint cracking, some polished aggregate. Low to Moderate severity shoving of outside shoulder, High severity differential slab settlement at cut/fill transition	917419	1462604	
NBL_24500_OSS	15.0 ft F	11.4 ft	9.7 ft	4.0 ft LT	C	13.0 in	9.0 in	N/A	N/A	N/A	N/A	4.0 in	Asphalt Drainage Sand Soil Subgrade	Roadway Embankment: Red-Tan-Brown, Clayey SILT (1.1-6.5 ft)	S-51	M-51	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking, Moderate severity transverse cracking, 1.5 in shoving with some polished aggregate, Low severity fatigue cracking, 10 in Crack in Pavement Core	917914	1462517	
NBL_25000_OSL	40.0 ft F	11.2 ft	10.2 ft	3.4 ft RT	C	14.0 in	0.5 in	3.5 in	N/A	10.0 in	N/A	N/A	Asphalt ABC Soil Subgrade	Roadway Embankment: Red-Brown, Silty CLAY (1.2-6.5 ft)	S-52	M-52	A-7-5	M	DCP	6.5 ft	Low to Moderate severity transverse cracking, High severity longitudinal joint cracking, Low severity fatigue cracking with some polished aggregate	918398	1462391	
NBL_25500_ISS	10.0 ft C	11.7 ft	3.9 ft	2.3 ft LT	C	13.5 in	11.0 in	N/A	N/A	N/A	N/A	2.5 in	Asphalt Drainage Sand Soil Subgrade	Roadway Embankment: Orange-Tan-Brown, Fine Sandy CLAY (1.2-6.5 ft)	S-50	M-50	A-6	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, High severity transverse joint cracking, Low severity fatigue cracking	918875	1462238	
NBL_25500_OSL	25.0 ft F	11.5 ft	10.9 ft	3.1 ft LT	C	17.0 in	0.25 in	4.0 in	N/A	9.75 in	N/A	3.0 in (H2O)	Ultra Thin & Concrete ABC Drainage Sand	Roadway Embankment: Orange-Tan-Brown, Fine Sandy CLAY (1.4-6.5 ft)	S-54	M-54	A-6	M	DCP	6.5 ft	Moderate to High severity transverse joint cracking, High severity longitudinal joint cracking with 1.0 in shoving at OSS	918884	1462273	
NBL_26000_OSS	30.0 ft F	11.4 ft	11.3 ft	4.9 ft RT	C	13.0 in	3.0 in	4.0 in	N/A	N/A	N/A	6.0 in (H2O)	Asphalt ABC Drainage Sand	Roadway Embankment: Orange-Tan-Brown, Clayey SILT (1.1-6.5 ft)	S-53	M-53	A-5	M	DCP	6.5 ft	High severity transverse cracking, deflection with oncoming traffic, High severity longitudinal joint cracking, High severity transverse joing cracking with some polished aggregate. 1.5 in shoving at OSS	919373	1462164	

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(I) = Inside
BOC = Back of Curb
EOP = Edge of Pavement

NB = North Bound
SB = South Bound
RE = Roadway Embankment

PAVEMENT INVESTIGATION DATA SHEET

Project: I-77 from US 21 (Exit 79) to MM 83.4		
TIP: I-5912	WBS No.: 45905.1.1	

Route: I-77 (-L-)
County: Surry & Yadkin

ECS Project No. 12605
Notes By: N. McLaren

SHEET 27

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
SBL_00000_ISS	5.0 ft C	11.4 ft	4.4 ft	3.4 ft LT	C	14.5 in	12.0 in	2.5 in	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Roadway Embankment: Red-Brown, Silty CLAY (1.2-6.5 ft)	S-108	M-108	A-7-6	M	DCP	6.5 ft	High severity longitudinal joint cracking, Moderate to High severity transverse cracking, Moderate severity transverse joint cracking, polish, High severity edge cracking (transverse)	893766	1465371
SBL_00500_ISL	At Grade	11.2 ft	3.8 ft	3.7 ft RT	C	15.0 in	0.25 in	5.5 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Silty CLAY (1.3-6.5 ft)	S-107	M-107	A-7-6	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse cracking, High severity edge cracking,asphalt repair, shoving in transverse direction between slabs (0.5 in) with polished aggregate	894266	1465400
SBL_01000_OSS	5.0 ft F	11.7 ft Lane 11.3 ft Ramp	4.0 ft	0.3 ft RT	C	13.0 in	4.5 in	6.0 in	N/A	N/A	N/A	2.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine Sandy SILT (1.1-6.5 ft)	S-99	M-99	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity fatigue cracking, High severity fatigue cracking, High severity transverse cracking, shoving 1 in in the transverse direction between slabs, with some polished aggregate	894766	1465402
SBL_01500_ISS	10.0 ft F	11.6 ft	13.6 ft (Gore)	1.7 ft LT	C	12.0 in	5.0 in	4.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.0-6.5 ft)	S-106	M-106	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse cracking with some polished aggregate, Moderate severity edge cracking	895263	1465477
SBL_02120_OSL	15.0 ft C	11.4 ft Lane 11.1 ft Ramp	3.9 ft	4.2 ft LT	C	17.0 in	0.25 in	6.0 in	N/A	10.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine to Coarse Sandy SILT (1.4-6.5 ft)	S-98	M-98	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse cracking with some polished aggregate	895882	1465502
SBL_02500_OSS	10.0 ft F	11.5 ft	10.6 ft	2.7 ft RT	C	12.5 in	3.5 in	6.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine to Coarse Sandy CLAY (1.0-6.5 ft)	S-97	M-97	A-6	M	DCP	6.5 ft	High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking with some polished aggregate	896262	1465520
SBL_03000_ISS	5.0 ft C	11.6 ft	3.1 ft	2.3 ft LT	C	15.0 in	4.0 in	5.5 in	N/A	N/A	N/A	5.5 in	Asphalt ABC Drainage Sand	Residual: Red-Tan, Fine Sandy SILT with trace mica (1.2-6.5 ft)	S-105	M-105	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Moderate to High severity transverse cracking, Low severity edge cracking with some polished aggregate	896759	1465585
SBL_03500_ISL	At Grade	11.6 ft	3.7 ft	3.2 ft RT	C	15.5 in	0.25 in	5.5 in	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Fine Sandy CLAY (1.3-1.8 ft) Roadway Embankment: Red-Brown, Clayey SILT (1.8 ft-2.2 ft)	S-104 Ref-4	M-104 Ref-4	A-6 A-5	M M	DCP	2.2 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking with some polished aggregate	897259	1465611
SBL_04000_OSS	20.0 ft F	11.3 ft	10.2 ft	3.5 ft RT	C	12.0 in	3.5 in	4.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Fine Sandy SILT (1.0-6.5 ft)	S-96	M-96	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse cracking with some polished aggregate	897758	1465626
SBL_04500_ISS	10.0 ft C	11.6 ft	3.4 ft	2.2 ft LT	C	12.0 in	3.0 in	6.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.0-6.5 ft)	S-103	M-103	A-4	M	DCP	6.5 ft	High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking, Moderate to High severity transverse cracking with some polished aggregate	898255	1465690
SBL_05000_OSL	5.0 ft C	11.5 ft	10.6 ft	2.8 ft LT	C	16.0 in	0.25 in	6.0 in	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT (1.3-6.5 ft)	S-95	M-95	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse cracking, Moderate severity edge cracking with some polished aggregate	898755	1465705
SBL_05500_OSS	At Grade	11.6 ft	10.3 ft	5.6 ft RT	C	13.0 in	3.5 in	5.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.2-6.5 ft)	S-94	M-94	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Moderate to High severity fatigue cracking with some polish aggregate, Moderate severity transverse cracking	899254	1465729
SBL_06000_ISS	20.0 ft F	11.3 ft	3.3 ft	1.4 ft LT	C	12.5 in	3.5 in	5.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.0-6.5 ft)	S-102	M-102	A-4	M	DCP	6.5 ft	Low to Moderate severity transverse joint cracking, High severity longitudinal joint cracking with some polished aggregate	899752	1465777
SBL_06500_ISL	15.0 ft F	11.4 ft	3.4 ft	2.6 ft RT	C	17.0 in	0.25 in	6.0 in	N/A	10.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Tan-Brown, Silty CLAY (1.4-6.5 ft)	S-101	M-101	A-7-5	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking with some polished aggregate	900252	1465779
SBL_07000_OSS	5.0 ft C	11.5 ft	10.4 ft	3.5 ft	C	13.0 in	4.0 in	6.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Tan-Brown, Fine Sandy SILT (1.1-6.5 ft)	S-93	M-93	A-4	M	DCP	6.5 ft	High severity transverse and longitudinal joint cracking, Low severity transverse cracking with some polished aggregate	900750	1465756

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PAVEMENT INVESTIGATION DATA SHEET

Project:	I-77 from US 21 (Exit 79) to MM 83.4	
TIP:	I-5912	WBS No.: 45905.1.1

Route:	I-77 (-L-)
County:	Surry & Yadkin

ECS Project No.	12605
Notes By:	N. McLaren

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
SBL_07500_ISS	5.0 ft C	11.1 ft	3.5 ft	1.9 ft LT	C	14.0 in	4.5 in	5.5 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Tan-Brown, Fine Sandy SILT (1.2-6.5 ft)	S-79	M-79	A-4	M	DCP	6.5 ft	Low to Moderate severity longitudinal and transverse joint cracking, Moderate severity transverse cracking at OSS with some polished aggregate, Low severity fatigue cracking at OSS	901250	1465771
SBL_08000_OSL	10.0 ft C	11.6 ft	10.2 ft	2.9 ft LT	C	15.0 in	0.25 in	6.0 in	N/A	8.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Red-Tan, Fine Sandy SILT (1.4-6.5 ft)	S-92	M-92	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse cracking, High severity edge cracking, Moderate severity fatigue cracking with some polished aggregate	901748	1465727
SBL_08550_OSS	5.0 ft C	10.7 ft	10.3 ft	3.9 ft RT	C	13.0 in	4.0 in	5.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Roadway Embankment Red-Orange, Silty CLAY (1.1-6.5 ft)	S-91	M-91	A-7-5	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse joint cracking with some polished aggregate, Low to Moderate severity transverse cracking, standing water on edge of OSS, offset upstation due to overhead utility lines	902295	1465679
SBL_09000_ISS	10.0 ft C	11.5 ft	3.3 ft	2.2 ft LT	C	13.0 in	4.0 in	5.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Red-Brown, Fine Sandy SILT (1.1-4.2 ft)	S-78	M-78	A-4	M	DCP	4.2 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking, Moderate severity fatigue cracking (OSS), shoving (1/2 in) OSS, with some polished aggregate, Low to medium transverse cracking	902745	1465669
SBL_09500_ISL	5.0 ft C	11.4 ft	3.5 ft	3.3 ft RT	C	18.5 in	0.25 in	5.0 in	N/A	9.75 in	N/A	3.5 in	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT (1.6-6.5 ft)	S-77	M-77	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse cracking, Low to Moderate severity transverse crackin in OSS, some shoving in OSS (0.5 in) with some polished aggregate	903241	1465606
SBL_10000_OSS	10.0 ft C	11.4 ft	10.3 ft	3.8 ft RT	C	12.0 in	4.0 in	5.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Red-Tan, Fine Sandy SILT (1.0-6.5 ft)	S-90	M-90	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse edge cracking, Low to Moderate severity transverse cracking (OSS)	903732	1465515
SBL_10500_ISS	10.0 ft C	11.1 ft	3.4 ft	1.9 ft LT	C	14.0 in	3.5 in	6.0 in	N/A	N/A	N/A	4.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Tan, Fine Sandy CLAY (1.2-3.0 ft) Residual: Tan, Fine Sandy SILT (3.0-6.5 ft)	S-76 Ref-23	M-76 Ref-23	A-6 A-4	M M	DCP	6.5 ft	Moderate to High severity longitudinal and transverse joint cracking, High severity fatigue cracking in OSS, Low to Moderate severity transverse crackin with some polished aggregate	904230	1465467
SBL_11000_OSL	30.0 ft F	11.4 ft	9.9 ft	2.1 ft LT	C	16.0 in	0.25 in	6.0 in	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown, Fine Sandy SILT (1.3-6.5 ft)	S-89	M-89	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse edge cracking, Low to Moderate severity transverse cracking (OSS)	904717	1465354
SBL_11500_OSS	20.0 ft C	11.3 ft	9.9 ft	4.2 ft RT	C	12.5 in	4.0 in	5.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Red-Brown,Clayey SILT (1.0-6.5 ft)	S-88	M-88	A-5	W	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Low severity transverse cracking with some polished aggregate	905205	1465249
SBL_12000_ISS	30.0 ft C	11.8 ft	3.2 ft	2.5 ft LT	C	9.5 in	4.0 in	5.5 in	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Residual: Tan-Brown, Silty Fine to Coarse SAND with some gravel-sized rock fragments (0.9-1.8 ft)	S-75	M-75	A-2-4	W	DCP	1.8 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse cracking with some polished aggregate, High severity fatigue cracking on OSS	905699	1465170
SBL_12500_ISL	20.0 ft C	11.7 ft	2.9 ft	3.9 ft RT	C	15.0 in	0.25 in	5.0 in	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT (1.3-4.3 ft)	S-74	M-74	A-4	M	DCP	4.3 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse cracking in shoulder with some polished aggregate	906183	1465045
SBL_13000_OSS	15.0 ft F	11.8 ft	10.3 ft	3.8 ft RT	C	13.0 in	4.0 in	6.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Tan-Brown, Fine Sandy SILT (1.1-6.5 ft)	S-87	M-87	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking with some polished aggregate	906663	1464905
SBL_13500_ISS	30.0 ft C	11.7 ft	3.0 ft	2.7 ft LT	C	13.0 in	4.0 in	6.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.1-6.5 ft)	S-73	M-73	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, Low to Moderate severity transverse cracking in shoulder with some polished aggregate	907155	1464811
SBL_14000_OSL	25.0 ft C	11.4 ft	10.5 ft	3.2 ft LT	C	14.0 in	0.25 in	4.0 in (H2O)	N/A	9.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan-Brown, Fine Sandy SILT (1.2-3.8 ft)	S-86	M-86	A-4	W	DCP	3.8 ft (AR)	High severity longitudinal and transverse cracking, shoving (0.75 in) at OSS, High severity edge cracking with some polished aggregate	907637	1464678
SBL_14500_OSS	15.0 ft F	11.4 ft	10.1 ft	4.2 ft RT	C	13.0 in	4.0 in	3.0 in	N/A	N/A	N/A	6.0 in	Asphalt ABC Drainage Sand	Roadway Embankment: Tan-Brown, Fine Sandy SILT with trace gravel (1.1-6.5 ft)	S-85	M-85	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity fatigue cracking (OSS)	908122	1464553

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PAVEMENT INVESTIGATION DATA SHEET

Project:	I-77 from US 21 (Exit 79) to MM 83.4	
TIP:	I-5912	WBS No.: 45905.1.1

Route:	I-77 (-L-)
County:	Surry & Yadkin

ECS Project No.	12605
Notes By:	N. McLaren

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
SBL_15000_ISS	15.0 ft F	11.7 ft	2.9 ft	2.5 ft LT	C	13.5 in	5.0 in	5.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown-Tan, Fine Sandy CLAY, with trace gravel (1.2-6.5 ft)	S-72	M-72	A-6	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Low to Moderate severity transverse crackin in shoulder	908615	1464467
SBL_15500_ISL	10.0 ft F	11.4 ft	2.9 ft	3.7 ft RT	C	16.5 in	0.25 in	5.5 in	N/A	10.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Red-Brown-Tan, Clayey SILT (1.4-4.2 ft)	S-71	M-71	A-5	M	DCP	4.2 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking, Moderate to High severity transverse cracking, High severity fatigue cracking in outside shoulder	909099	1464341
SBL_16000_OSS	5.0 ft F	11.4 ft (lane) 6.6 ft (turn)	8.2 ft	1.8 ft RT	C	13.5 in	5.5 in	4.5 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Tan-Brown, Fine Sandy SILT, with trace gravel (1.1-3.2 ft)	S-84	M-84	A-4	M	DCP	3.2 ft (AR)	High severity longitudinal and transverse joint cracking, High severity edge cracking with some polished aggregate	909579	1464197
SBL_16500_ISS	15.0 ft F	11.9 ft	3.1 ft	2.5 ft LT	C	12.5 in	3.0 in	6.0 in	N/A	N/A	N/A	3.5 in	Asphalt ABC Drainage Sand	Roadway Embankment: Brown, Fine Sandy SILT (1.0-6.5 ft)	S-70	M-70	A-4	M	DCP	6.5 ft	High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking, Moderate to High severity transverse cracking with some polished aggregate	910073	1464115
SBL_17005_OSL	10.0 ft F	10.9 ft	10.9 ft	3.9 ft LT	C	15.5 in	0.25 in	6.0 in	N/A	9.25 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Tan-Brown, Fine Sandy SILT (1.3-6.5 ft)	S-83	M-83	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse cracking, High severity transverse cracking with some repair and polished aggregate	910560	1463975
SBL_17600_OSS	At Grade	11.2 ft	4.1 ft	1.9 ft RT	C	13.5 in	5.5 in	5.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.2-6.5 ft)	S-82	M-82	A-4	M	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse cracking, Moderate severity edge cracking with some polished aggregate	911136	1463828
SBL_18000_ISS	10.0 ft C	11.9 ft	3.9 ft	2.7 ft LT	C	13.5 in	3.5 in	6.0 in	N/A	N/A	N/A	4.0 in	Asphalt ABC Drainage Sand	Residual: Tan, Fine Sandy SILT (1.2-6.5 ft)	S-69	M-69	A-4	M	DCP	6.5 ft	High severity longitudinal joint cracking, Low to Moderate severity transverse cracking with some repair evident, High severityty transverse and longitudinal cracking, shoving between slabs (transverse) 1.0 in, High severity edge cracking	911531	1463763
SBL_18100_OSL	10.0 ft C	11.5 ft	10.3 ft	3.7 ft LT	C	16.5 in	0.25 in	5.5 in	N/A	10.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan, Fine Sandy SILT, with trace mica (1.4-6.5 ft)	S-81	M-81	A-4	W	DCP	6.5 ft	High severity transverse cracking in lane, Moderate severity transverse cracking in OSS, High severity longitudinal joint cracking, High severity edge cracking with some polished aggregate, 8 in crack in core	911623	1463718
SBL_18500_ISL	5.0 ft C	12.0 ft	4.0 ft	3.1 ft RT	C	18.0 in	0.25 in	5.5 in	N/A	9.25 in	N/A	3.0 in	Ultra Thin & Concrete ABC Drainage Sand	Residual: Tan, Fine Sandy SILT, with trace mica (1.5-6.5 ft)	S-68	M-68	A-4	M	DCP	6.5 ft	Moderate to High severity transverse cracking, transverse longitudinal joint cracking, shoving (1 in), polishing, potholing, High severity edge cracking	912016	1463639
SBL_19000_OSS	5.0 ft C	11.3 ft	10.0 ft	3.9 ft RT	C	13.0 in	5.0 in	5.0 in	N/A	N/A	N/A	3.0 in	Asphalt ABC Drainage Sand	Residual: Tan-Brown, Fine Sandy SILT with trace mica (1.1-6.5 ft)	S-80	M-80	A-4	M	DCP	6.5 ft	High severity longitudinal joint cracking, Moderate severity transverse joint cracking, Low to Moderate severity transverse cracking in shoulder, High severity edge cracking with some polished aggregate	912499	1463503
SBL_19500_ISS	25.0 ft F	11.1 ft	4.0 ft	2.9 ft LT	C	12.5 in	5.0 in	2.5 in	N/A	N/A	N/A	5.0 in	Asphalt ABC Drainage Sand	RE: Tan-Brown, Fine Sandy SILT with trace mica (1.0-6.5 ft)	S-62	M-62	A-4	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking, shoving 1.0 in (transverse) with some polished aggregate	912995	1463432
SBL_20000_OSL	20 ft C	14.2 ft	11.6 ft	4.8 ft LT	C	24.5 in	24.5 in	N/A	N/A	N/A	N/A	N/A	Asphalt Soil Subgrade	Residual: Tan, Fine Sandy SILT (2.0-7.0 ft)	S-100	M-100	A-4	M	DCP	7.0 ft	High severity longitudinal cracking, High severity fatigue crackin with some polished aggregate	913482	1463314
SBL_20500_OSS	15.0 ft C	11.2 ft	13.4 ft	5.7 ft RT	C	21.0 in	18.0 in	N/A	N/A	N/A	N/A	3.0 in	Asphalt Drainage Sand Soil Subgrade	Residual: Tan, Fine Sandy SILT with trace mica (1.7-7.0 ft)	S-67	M-67	A-4	M	DCP	7.0 ft	High severity fatigue cracking in lane and shoulder, Low severity transverse cracking, High severity edge cracking, Low to Moderate severity longitudinal and transverse joint cracking with some polished aggregate	913969	1463196
SBL_21000_ISS	30.0 ft F	11.2 ft	22.1 ft (Paved Median)	4.9 ft LT	C	18.0 in	18.0 in	N/A	N/A	N/A	N/A	N/A	Asphalt Soil Subgrade	RE: Brown, Fine Sandy SILT with trace mica (1.5-6.5 ft)	S-61	M-61	A-4	M	DCP	6.5 ft	Moderate to High severity transverse cracking, Moderate longitudinal joint cracking with some polished aggregate, High severity fatigue cracking, longitudinal shoving (2.0 in) at OSS	914467	1463139
SBL_22100_ISL	15.0 ft C	11.9 ft	24.1 ft	2.8 ft RT	C	22.0 in	18.0 in	4.0 in	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Residual: Tan-Brown, Fine Sandy SILT with trace mica (1.8-7.0 ft)	S-60	M-60	A-4	M	DCP	7.0	High severity fatigue cracking, Moderate severity longitudinal joint cracking, Low to Moderate longitudinal cracking with some polished aggregate	915546	1462925

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PAVEMENT INVESTIGATION DATA SHEET

Project:	I-77 from US 21 (Exit 79) to MM 83.4		
TIP:	I-5912	WBS No.:	45905.1.1

Route:	I-77 (-L-)
County:	Surry & Yadkin

ECS Project No.	12605
Notes By:	N. McLaren

		Width				Thickness (inches)							Subgrade									GPS Coordinates	
Test Location	Cut/Fill (Est. of Amount)	Lane(s)	Shoulder(s)	Offset Distance from White or Yellow Line	Crown inC in or Super inS in	Gross to Top of Soil	Asphalt	ABC	PADL	Concrete	Stabilized Subgrade Soil	Drainage Sand	Pavement Layering	Description	Sample Number	Moisure Sample Number	AASHTO Classification	Soil Moisture	Probe	Boring Depth	Asphalt Notes	Northing	Easting
SBL_22500_OSS	10.0 ft C	12.1 ft	19.5 ft	3.1 ft RT	C	30.0 in	24.0 in	6.0 in (H2O)	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Residual: Orange-Brown, Fine Sandy, Clayey SILT with trace gravel-sized rock fragments (2.5-7.0 ft)	S-66	M-66	A-5	W	DCP	7.0 ft	High severity fatigue cracking in both lane and shoulder, Low to Moderate severity transverse cracking, High severity longitudinal joint cracking with some polish	915932	1462819
SBL_23000_ISS	15.0 ft C	11.2 ft	19.5 ft	5.4 ft LT	C	23.0 in	20.0 in	N/A	N/A	N/A	N/A	3.0 in	Asphalt Drainage Sand	Residual: Tan-Brown, Fine Silty CLAY with trace mica (1.9-7.0 ft)	S-59	M-59	A-7-5	M	DCP	7.0 ft	Low to Moderate severity fatigue cracking, Moderate to High severity longitudinal cracking, Moderate longitudinal joint cracking, Low transverse cracking with some polished aggregate	916434	1462781
SBL_23500_OSL	30.0 ft C	11.4 ft	10.3 ft	2.1 ft LT	C	13.5 in	0.25 in	2.5 in (H2O)	N/A	10.75 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Residual: Tan-Brown, Fine Sandy SILT (1.2-2.8 ft)	S-65	M-65	A-4	M	DCP	2.8 ft (AR)	Moderate to High severity longitudinal and transverse joint cracking, High severity edge cracking, Low to Moderate severity transverse cracking	916916	1462647
SBL_24000_OSS	20.0 ft C	11.3 ft	10.2 ft	3.9 ft RT	C	14.5 in	9.5 in	5.0 in (H2O)	N/A	N/A	N/A	N/A	Asphalt ABC Soil Subgrade	Residual, Tan-Brown, Clayey SILT (1.2-6.5 ft)	S-64	M-64	A-5	W	DCP	6.5 ft	Moderate to High severity longitudinal and transverse joint cracking, High severity transverse cracking	917399	1462523
SBL_24500_ISS	10 ft F	11.1 ft	4.3 ft	3.4 ft LT	C	14.5 in	9.5 in	N/A	N/A	N/A	N/A	5.0 in	Asphalt Drainage Sand	Roadway Embankment: Tan-Brown, Fine Sandy SILT, with trace mica (1.2-6.5 ft)	S-58	M-58	A-4	W	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, High severity transverse cracking, shoving (1.5 in) with some polished aggregate	917890	1462430
SBL_25000_ISL	15.0 ft F	11.0 ft	4.2 ft	3.0 ft RT	C	17.5 in	0.5	7.0 in	N/A	10.0 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Tan-Brown, Clayey SILT, with trace mica (1.4-6.5 ft)	S-57	M-57	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, Low to Moderate severity transverse joint cracking with some polished aggregate, High severity transverse cracking	918367	1462280
SBL_25500_OSS	20.0 ft C	11.3 ft	10.6 ft	5.0 ft RT	C	15.5 in	3.5 in	10.0 in (H2O)	N/A	N/A	N/A	2.0 in	Ultra Thin & Concrete ABC Drainage Sand	Residual: Red-Orange, Silty CLAY (1.3-6.5 ft)	S-63	M-63	A-7-5	S	DCP	6.5 ft	High severity longitudinal and transverse joint cracking, Moderate transverse cracking with some polished aggregate, full depth crack in core	918833	1462090
SBL_26000_ISS	15.0 ft F	10.9 ft	4.4 ft	3.1 ft LT	C	16.0 in	10.0 in	N/A	N/A	N/A	N/A	6.0 in	Asphalt Drainage Sand	Roadway Embankment: Orange-Brown, Clayey SILT, with trace gravel (1.3-6.5 ft)	S-56	M-56	A-5	M	DCP	6.5 ft	Moderate to High severity longitudinal joint cracking, Moderate to High severity transverse joint cracking with some polished aggregate	919328	1462001
SBL_26500_ISL	20 ft F	10.8 ft	4.2 ft	2.6 ft RT	S	14.0 in:	1.0 in	4.0 in	N/A	9.0 in	N/A	N/A	Ultra Thin & Concrete ABC Soil Subgrade	Roadway Embankment: Orange-Brown, Clayey SILT (1.2-6.5 ft)	S-55	M-55	A-5	M	DCP	6.5 ft	Low to Moderate severity longitudinal cracking, Moderate to High severity longitudinal joint cracking, Moderate to High severity transverse cracking, Moderate to High severity transverse joint cracking with some polished aggregate	919811	1461855

Notes:

OSL = Outside Lane
ISL = Inside Lane
RTL = Right Turn Lane

CTL = Center Turn Lane
LTL = Left Turn Lane
PS = Paved Shoulder

OSS = Outside Shoulder
ISS = Inside Shoulder
ACCEL = Acceleration Lane

DECEL = Deceleration Lane
IGM = Inside Grass Median
OGS = Outside Grass Shoulder

COL = Collector Lane
FW = From White
FY = From YelLow

RT LN = Right Lane
LT LN = Left Lane
RTL (RT) = Right Turn Lane

LTL=Left Turn Lane
CTL=Center Turn Lane
CL=Center Lane

RT = Right
LT = Left
(O) = Outside

(I) = Inside
BOC = Back of Curb
EOP = Edge of Pavement

NB = North Bound
SB = South Bound
RE = Roadway Embankment

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
							Yadkin	K. Plummer			J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information					Date Run	
NBL 00000 OSS							1/29/2018	NBL 00500 OSL					1/29/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	51.90	79.20	100.30	119.60			0.00	37.00	93.90					
1.70	52.40	79.70	100.60	119.90			1.70	38.80	94.40					
2.90	52.90	79.90	100.90	120.20			1.96	44.40	95.90					
4.20	53.40	80.20	101.20	120.50			2.23	42.10	97.40					
5.30	53.90	80.53	101.50	120.79			2.49	43.90	99.00					
6.00	54.50	80.86	101.80	121.08			2.76	45.10	100.80					
6.90	54.90	81.19	102.10	121.37			3.02	46.50	102.50					
7.50	55.50	81.52	102.40	121.66			3.29	48.00	104.20					
8.40	55.80	81.85	102.68	121.95			3.55	48.90	105.80					
8.80	56.30	82.18	102.96	122.24			3.82	49.90	107.30					
9.40	56.70	82.51	103.24	122.53			4.08	51.40	108.90					
10.10	57.20	82.84	103.52	122.82			4.35	52.40	110.30					
10.80	57.60	83.17	103.80	123.11			4.61	53.60	111.90					
11.60	58.00	83.50	104.08	123.40			4.88	54.20	113.60					
11.90	58.50	83.89	104.36	123.66			5.14	54.80	115.10					
13.10	58.90	84.28	104.64	123.92			5.41	55.40	116.60					
14.10	59.40	84.67	104.92	124.18			5.67	56.10	118.00					
15.30	59.80	85.06	105.20	124.44			5.94	56.60	119.10					
16.20	60.10	85.45	105.50	124.70			6.20	57.30	120.40					
17.40	60.60	85.84	105.80	124.96			6.49	57.90	121.60					
18.80	61.10	86.23	106.10	125.22			6.78	58.50	122.90					
20.40	61.50	86.62	106.40	125.48			7.07	59.20	124.40					
21.60	61.80	87.01	106.70	125.74			7.36	59.90	125.40					
22.70	62.30	87.40	107.00	126.00			7.65	60.50	126.50					
23.90	62.80	87.70	107.30	126.25			7.94	61.00	127.80					
24.80	63.40	88.00	107.60	126.50			8.23	61.70	129.00					
25.90	63.70	88.30	107.90	126.75			8.52	62.30	130.20					
26.70	64.10	88.60	108.20	127.00			8.81	63.00	131.50					
27.50	64.50	88.90	108.50	127.25			9.10	63.90	132.30					
28.30	64.90	89.20	108.80	127.50			9.44	64.60	134.10					
29.10	65.40	89.50	109.10	127.75			9.78	64.90	135.20					
29.90	65.80	89.80	109.40	128.00			10.12	65.50	136.70					
30.70	66.20	90.10	109.70	128.25			10.46	66.20	137.70					
31.50	66.50	90.40	110.00	128.50			10.80	67.00	138.90					
32.30	67.00	90.70	110.30	128.78			11.14	67.80						
33.00	67.40	91.00	110.60	129.06			11.48	68.60						
33.30	67.80	91.30	110.90	129.34			11.82	69.40						
34.50	68.30	91.60	111.20	129.62			12.16	70.20						
35.40	68.70	91.90	111.48	129.90			12.50	71.00						
36.00	69.10	92.20	111.76	130.18			12.84	71.80						
36.90	69.50	92.50	112.04	130.46			13.18	72.60						
37.50	69.90	92.80	112.32	130.74			13.52	73.00						
38.30	70.40	93.10	112.60	131.02			13.86	74.40						
39.00	70.70	93.40	112.88	131.30			14.20	75.40						
39.80	71.00	93.69	113.16				14.54	76.20						
40.40	71.40	93.98	113.44				14.88	77.00						
41.10	71.80	94.27	113.72				15.22	77.90						
41.70	72.20	94.56	114.00				15.56	78.60						
42.10	72.60	94.85	114.29				15.90	79.20						
42.90	72.90	95.14	114.58				16.48	80.00						
43.60	73.30	95.43	114.87				17.06	80.50						
44.20	73.60	95.72	115.16				17.64	81.10						
44.80	74.00	96.01	115.45				18.22	82.00						
45.40	74.30	96.30	115.74				18.80	82.20						
45.70	74.60	96.61	116.03				19.38	83.50						
46.00	75.00	96.92	116.32				19.96	84.20						
46.60	75.30	97.23	116.61				20.54	84.90						
47.10	75.80	97.54	116.90				21.12	85.60						
47.60	76.20	97.85	117.40				21.70	86.30						
48.30	76.50	98.16	117.50				22.70	87.00						
48.80	76.80	98.47	117.80				24.00	87.70						
49.50	77.10	98.78	118.10				25.50	88.60						
50.00	77.40	99.09	118.40				27.60	89.60						
50.40	78.20	99.40	118.70				30.10	90.10						
50.90	78.60	99.70	119.00				32.50	90.20						
51.50	78.90	100.00	119.30				34.70	93.00						

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
NBL 01000 ISS							1/29/2018	NBL 01500 OSS						1/29/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	91.80						0.00	15.06	99.20						
0.82	92.80						0.14	15.22	100.20						
1.64	93.50						0.28	15.38	100.90						
2.46	94.20						0.42	15.54	101.80						
3.28	94.90						0.56	15.70	102.70						
4.10	95.50						0.70	16.02	103.40						
4.74	96.20						0.84	16.34	104.30						
5.38	97.00						0.98	16.66	105.10						
6.02	97.50						1.12	16.98	105.90						
6.66	98.60						1.26	17.30	106.70						
7.30	99.40						1.40	17.70	107.70						
8.52	100.30						1.66	18.10	108.50						
9.74	101.20						1.92	18.50	109.40						
10.96	102.00						2.18	18.90	110.20						
12.18	102.60						2.44	19.30	111.00						
13.40	103.80						2.70	19.60	112.00						
14.60	104.60						2.94	20.10	112.70						
16.30	105.30						3.18	20.60	113.40						
17.50	106.40						3.42	21.40	114.20						
19.40	107.80						3.66	22.30	115.00						
21.00	108.90						3.90	23.20	115.80						
23.00	109.50						4.06	24.30	116.40						
25.00	110.10						4.22	25.80	117.30						
26.30	110.90						4.38	27.30	118.00						
27.60	111.18						4.54	29.40	118.90						
28.50	111.46						4.70	31.80	119.60						
30.20	111.74						5.06	34.60	120.60						
31.70	112.02						5.42	38.00	121.40						
32.50	112.30						5.78	40.70	122.10						
34.30	112.94						6.14	43.40	122.90						
35.60	113.58						6.50	45.40	123.80						
36.50	114.22						6.78	48.20	124.50						
37.70	114.86						7.06	50.90	125.30						
38.70	115.50						7.34	53.20	126.10						
39.40	116.00						7.62	55.00	126.70						
41.10	116.90						7.90	57.00	127.40						
42.00	117.70						8.20	58.70	128.50						
42.90	118.40						8.50	60.60	129.10						
44.50	119.30						8.80	62.30	129.70						
45.90	120.00						9.10	64.10	130.40						
47.00	120.70						9.40	66.10	131.20						
48.10	121.30						9.62	67.40	131.70						
49.00	122.10						9.84	69.00	132.40						
50.10	123.00						10.06	70.40	133.00						
51.40							10.28	71.90	133.60						
52.80							10.50	73.20	134.20						
54.20							10.70	74.60							
56.00							10.90	76.60							
58.20							11.10	77.50							
60.50							11.30	79.20							
62.00							11.50	80.50							
63.80							11.72	81.90							
65.50							11.94	83.30							
67.90							12.16	84.60							
70.50							12.38	85.80							
73.80							12.60	87.20							
76.50							12.82	88.50							
79.00							13.04	89.60							
81.50							13.26	90.70							
83.30							13.48	92.00							
84.60							13.70	93.30							
86.00							13.94	94.30							
87.50							14.18	95.40							
88.50							14.42	96.40							
89.70							14.66	97.50							
90.80							14.90	98.40							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
							Yadkin	K. Plummer			J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run		
NBL 02060 ISL							1/29/2018	NBL 02500 ISS				1/29/2018		
Type	Test Interval			Datum or reference surface			Type	Test Interval		Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow		Top of ABC				
0.00	61.58	84.81	106.66	118.27			0.00	85.30						
1.60	61.93	85.21	106.74	118.47			0.20	86.20						
2.75	62.27	85.61	106.82	118.66			3.00	87.20						
3.90	62.61	86.00	106.90	118.86			3.70	89.10						
5.20	62.95	86.40	106.98	119.05			4.30	90.20						
6.50	63.29	86.74	107.06	119.24			4.80	91.10						
7.70	63.63	87.07	107.14	119.44			5.30	92.00						
9.30	63.98	87.41	107.22	119.63			5.60	93.40						
11.20	64.32	87.74	107.30	119.82			6.20	94.40						
13.20	64.66	88.08	107.44	120.02			6.70	95.30						
15.30	65.00	88.41	107.58	120.21			7.30	96.40						
17.50	65.24	88.75	107.72	120.41			7.90	97.30						
19.70	65.48	89.08	107.86	120.60			8.20	98.40						
22.00	65.72	89.42	108.00				8.90	99.50						
23.80	65.96	89.75	108.19				9.50	100.50						
25.60	66.20	90.09	108.39				10.20	101.50						
27.80	66.52	90.42	108.58				10.80	102.60						
29.40	66.84	90.76	108.78				11.90	103.50						
30.00	67.16	91.09	108.97				12.90	104.60						
31.70	67.48	91.43	109.16				13.70	105.60						
32.60	67.80	91.76	109.36				14.90	106.60						
33.30	68.12	92.10	109.55				15.90	107.60						
34.10	68.44	92.43	109.74				16.90	108.50						
35.10	68.76	92.77	109.94				18.20	109.40						
35.90	69.08	93.10	110.13				19.70	110.30						
36.70	69.40	93.44	110.33				21.50	111.10						
37.50	69.72	93.77	110.52				24.00	112.20						
38.30	70.04	94.11	110.71				27.00	113.10						
39.20	70.36	94.44	110.91				30.00	113.90						
39.90	70.68	94.78	111.10				32.60	114.70						
40.60	71.00	95.11	111.30				36.70	115.50						
41.30	71.34	95.45	111.49				40.20	116.40						
41.90	71.68	95.78	111.68				42.90	117.10						
42.60	72.02	96.12	111.88				44.60	118.10						
43.20	72.36	96.45	112.07				46.60	118.70						
43.60	72.70	96.79	112.26				47.90	119.40						
44.10	73.06	97.12	112.46				48.50	120.20						
44.60	73.42	97.46	112.65				50.50	121.00						
44.90	73.78	97.79	112.85				51.50	121.70						
45.50	74.14	98.13	113.04				52.50	122.50						
46.06	74.50	98.46	113.23				53.90	123.10						
46.62	74.90	98.80	113.43				55.50	123.70						
47.18	75.29	99.13	113.62				57.10	124.40						
47.74	75.69	99.47	113.82				58.80	125.10						
48.30	76.09	99.80	114.01				60.30	125.70						
48.84	76.48	100.14	114.20				62.00	126.40						
49.38	76.88	100.47	114.40				63.50	127.00						
49.92	77.28	100.81	114.59				64.90	127.60						
50.46	77.67	101.14	114.78				66.20	128.10						
51.00	78.07	101.48	114.98				67.60	128.70						
51.60	78.47	101.81	115.17				68.70	129.30						
52.20	78.86	102.15	115.37				70.10	129.80						
52.80	79.26	102.48	115.56				71.40	130.30						
53.40	79.66	102.82	115.75				72.60	130.80						
54.00	80.05	103.15	115.95				73.80	131.20						
54.72	80.45	103.49	116.14				74.90	131.80						
55.44	80.85	103.82	116.34				76.00	132.40						
56.16	81.24	104.16	116.53				77.10	132.90						
56.88	81.64	104.49	116.72				78.30	133.40						
57.60	82.04	104.83	116.92				79.40							
58.26	82.43	105.16	117.11				80.30							
58.92	82.83	105.50	117.30				81.10							
59.58	83.23	105.83	117.50				81.94							
60.24	83.62	106.17	117.69				82.78							
60.90	84.02	106.50	117.89				83.62							
61.24	84.42	106.58	118.08				84.46							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Station (location) Information							Yadkin	K. Plummer				J. Cliss/M. Thompson			
							Date Run	Station (location) Information				Date Run			
NBL 03000 OSS							1/29/2018	NBL 03500 OSL				1/29/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00							0.00	40.70	61.20						
1.60							0.40	41.70	61.25						
2.90							0.80	42.60	61.30						
4.10							1.20	43.30	61.35						
5.50							1.60	44.10	61.40						
7.00							2.00	44.60							
9.00							2.30	45.40							
11.00							2.60	45.70							
13.00							2.90	46.20							
14.60							3.20	46.70							
16.40							3.50	47.10							
17.90							3.80	47.60							
19.50							4.10	48.10							
21.70							4.40	48.70							
24.20							4.70	49.20							
27.70							5.00	49.90							
30.90							5.38	50.70							
34.30							5.76	51.00							
37.60							6.14	51.40							
40.50							6.52	51.60							
43.20							6.90	51.80							
46.10							7.48	52.03							
48.80							8.06	52.26							
51.50							8.64	52.49							
53.80							9.22	52.72							
56.10							9.80	52.95							
58.80							10.32	53.18							
61.50							10.84	53.41							
64.00							11.36	53.64							
66.70							11.88	53.87							
69.00							12.40	54.10							
70.80							13.30	54.56							
72.90							14.10	55.02							
74.70							15.50	55.48							
76.60							17.20	55.94							
78.60							18.60	56.40							
80.60							20.80	56.86							
82.00							22.30	57.32							
84.40							22.90	57.78							
86.30							23.50	58.24							
88.50							24.30	58.70							
90.80							24.90	58.83							
92.70							25.70	58.96							
95.00							26.40	59.09							
97.40							27.20	59.22							
100.40							28.10	59.35							
102.90							28.80	59.48							
105.60							29.40	59.61							
108.30							29.90	59.74							
110.90							30.20	59.87							
113.40							30.90	60.00							
115.90							31.20	60.09							
118.50							31.70	60.18							
120.90							32.20	60.27							
123.40							32.60	60.36							
125.90							32.90	60.45							
128.20							33.50	60.54							
130.50							33.80	60.63							
132.80							34.20	60.72							
135.00							34.60	60.81							
137.10							34.90	60.90							
139.10							35.60	60.95							
							36.20	61.00							
							36.90	61.05							
							38.20	61.10							
							39.80	61.15							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE						
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER						
Station (location) Information							Yadkin	K. Plummer	J. Cliss/M. Thompson						
NBL_04000_ISS							Date Run	1/29/2018	Station (location) Information				Date Run		
NBL_04000_ISS							NBL_04500_OSS				1/29/2018				
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	81.60	121.26					0.00	79.80							
1.80	82.60	121.90					0.28	82.20							
2.90	83.20	122.54					0.56	84.30							
4.20	83.80	123.18					0.84	86.20							
5.70	84.10	123.82					1.12	88.30							
6.90	84.40	124.46					1.40	90.30							
8.60	84.70	125.10					1.98	92.30							
11.00	85.00						2.56	94.30							
12.90	85.30						3.14	96.40							
13.60	85.72						3.72	98.50							
14.14	86.14						4.30	100.50							
14.68	86.56						4.88	102.90							
15.22	86.98						5.46	105.60							
15.76	87.40						6.04	108.50							
16.30	87.98						6.62	111.00							
17.70	88.56						7.20	113.00							
19.10	89.14						7.92	114.90							
20.50	89.72						8.64	116.70							
21.90	90.30						9.36	118.90							
23.30	91.14						10.08	121.20							
25.90	91.98						10.80	123.80							
28.70	92.82						11.80	126.20							
30.90	93.66						12.60	128.30							
32.80	94.50						13.40	130.60							
34.00	95.20						14.20	133.00							
34.80	96.00						15.30	135.40							
35.70	96.40						16.40	138.20							
36.50	97.10						17.50	140.60							
38.00	97.50						18.70	142.70							
38.80	98.00						20.00	144.60							
39.80	98.90						21.60	146.50							
40.50	99.20						23.40	148.60							
41.60	99.50						25.80	151.00							
42.40	99.70						28.20	152.70							
43.20	100.30						30.20	154.50							
44.08	100.50						31.60	156.60							
44.96	101.10						33.00	158.50							
45.84	102.10						34.60	160.00							
46.72	102.58						36.10	163.10							
47.60	103.06						37.70								
48.60	103.54						39.40								
49.60	104.02						40.80								
50.60	104.50						41.70								
51.60	105.24						42.50								
52.60	105.98						43.40								
53.50	106.72						44.40								
54.30	107.46						45.50								
55.50	108.20						46.60								
56.80	108.88						47.70								
58.20	109.56						48.90								
59.20	110.24						50.30								
60.50	110.92						51.30								
61.80	111.60						52.70								
63.00	112.42						54.80								
64.50	113.24						57.60								
65.90	114.06						60.00								
67.80	114.88						62.00								
69.50	115.70						63.80								
70.90	116.30						65.20								
72.40	116.90						66.40								
73.90	117.50						67.70								
76.00	118.10						69.10								
77.40	118.70						71.00								
78.60	119.34						72.70								
79.70	119.98						74.80								
80.80	120.62						77.30								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
							Yadkin	K. Plummer			J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run		
NBL 05000 ISL							1/29/2018	NBL 05500 ISS				1/30/2018		
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	50.90	74.93	96.22	115.11			0.00	77.80	121.50					
0.51	51.61	75.39	96.42	115.27			0.60	78.70	121.90					
1.02	52.32	75.84	96.62	115.42			0.92	79.80	122.40					
1.52	52.98	76.30	96.82	115.57			1.24	80.80	123.10					
1.83	53.64	76.76	97.03	115.77			1.56	81.60	123.70					
2.13	54.31	77.22	97.33	115.98			1.88	82.50	124.20					
2.44	54.97	77.72	97.64	116.18			2.20	83.10	124.60					
2.74	55.63	78.23	97.94	116.38			2.80	83.80	125.20					
3.05	56.29	78.74	98.25	116.59			3.40	84.70	125.50					
3.40	56.95	79.25	98.55	116.74			4.00	85.50	125.90					
3.76	57.61	79.76	98.91	116.89			4.60	86.60	126.30					
4.11	58.27	80.21	99.26	117.04			5.20	87.50	126.80					
4.47	58.93	80.67	99.62	117.20			5.78	88.10	127.30					
4.83	59.44	81.13	99.97	117.35			6.36	88.90	127.90					
5.38	59.94	81.58	100.33	117.55			6.94	89.40	128.30					
5.94	60.20	82.04	100.74	117.75			7.52	90.10	128.80					
6.50	60.71	82.50	101.14	117.96			8.10	90.90	129.20					
7.06	60.96	82.96	101.55	118.16			9.10	91.60	129.80					
7.62	61.21	83.41	101.96	118.36			10.10	92.40	130.20					
8.33	61.72	83.87	102.36	118.47			11.30	93.20	130.60					
9.04	61.98	84.33	102.82	118.57			12.10	93.70	131.10					
9.75	62.23	84.68	103.28	118.67			13.30	94.50	131.50					
10.46	62.53	85.04	103.73	118.77			14.50	95.20	131.90					
11.18	62.84	85.39	104.19	118.87			15.80	96.10	132.40					
11.38	63.14	85.75	104.65				17.50	96.90						
11.58	63.45	86.11	105.11				19.50	97.50						
11.79	63.75	86.36	105.56				21.20	98.20						
11.99	64.01	86.61	106.02				22.70	98.80						
12.19	64.26	86.87	106.48				24.00	99.50						
13.21	64.52	87.12	106.93				25.30	99.90						
13.97	64.77	87.38	107.29				26.60	100.70						
14.73	65.02	87.58	107.65				27.80	101.20						
15.49	65.28	87.78	108.00				29.20	101.50						
16.51	65.53	87.99	108.36				30.80	102.30						
17.27	65.79	88.19	108.71				32.80	102.90						
17.53	66.04	88.39	109.07				34.80	103.40						
19.05	66.29	88.60	109.42				36.80	104.00						
20.32	66.55	88.80	109.78				38.70	104.50						
21.34	66.80	89.00	110.13				40.60	105.00						
22.61	67.06	89.20	110.49				42.60	105.80						
24.13	67.31	89.41	110.69				44.40	106.20						
25.91	67.56	89.56	110.90				46.40	107.10						
27.18	67.82	89.71	111.10				47.90	107.60						
28.70	68.07	89.87	111.30				49.90	108.10						
29.46	68.33	90.02	111.51				51.40	108.90						
31.75	68.58	90.17	111.66				53.30	109.60						
32.51	68.83	90.42	111.81				55.00	110.30						
33.78	69.09	90.68	111.96				56.60	110.80						
35.05	69.34	90.93	112.12				57.80	111.30						
36.32	69.60	91.19	112.27				59.00	112.20						
37.59	69.85	91.44	112.42				60.40	112.60						
38.61	70.10	91.64	112.57				61.90	113.20						
39.62	70.36	91.85	112.73				63.10	113.80						
40.64	70.61	92.05	112.88				64.30	114.40						
41.66	70.87	92.25	113.03				65.70	114.90						
42.42	71.12	92.46	113.18				66.90	115.30						
43.43	71.37	92.81	113.33				68.10	115.90						
44.20	71.73	93.17	113.49				69.20	116.70						
44.96	72.09	93.52	113.64				70.20	117.20						
45.72	72.44	93.88	113.79				71.30	117.60						
46.48	72.80	94.23	114.00				72.30	118.10						
47.24	73.15	94.59	114.20				73.20	118.70						
48.01	73.51	94.95	114.40				74.40	119.20						
48.77	73.86	95.30	114.60				75.20	119.90						
49.48	74.22	95.66	114.81				76.00	120.30						
50.19	74.57	96.01	114.96				76.80	120.90						

CONE PENETROMETER DATA CODE SHEET						WBS NO.	PROJECT TIP I.D.				ROUTE			
						45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
						COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin						K. Plummer				J. Cliss/M. Thompson				
Station (location) Information						Date Run	Station (location) Information				Date Run			
NBL 06000 OSS						1/30/2018	NBL 06500 OSL				1/30/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	89.20	139.80					0.00	96.30						
0.42	90.60	140.50					0.80	97.60						
0.84	91.60	141.20					1.40	98.80						
1.26	92.60	141.90					1.86	99.90						
1.68	93.60	142.60					2.32	101.20						
2.10	94.60	143.22					2.78	102.30						
2.56	95.60	143.84					3.24	103.20						
3.02	96.60	144.46					3.70	104.00						
3.48	97.70	145.08					4.40	105.20						
3.94	98.80	145.70					5.10	106.00						
4.40	99.50	146.30					5.80	106.90						
4.78	100.30	146.90					6.50	107.70						
5.16	101.20	147.50					7.20	108.50						
5.54	102.30	148.10					7.90	109.50						
5.92	103.30	148.70					8.60	110.80						
6.30	104.20	149.28					9.50	111.60						
6.78	105.10	149.86					10.60	112.30						
7.26	106.00	150.44					11.70	112.90						
7.74	107.00	151.02					12.80	133.30						
8.22	107.80	151.60					14.00	113.60						
8.70	108.60	152.00					15.60	114.40						
9.36	109.30	152.40					17.50	115.30						
10.02	110.10	152.80					19.00	116.20						
10.68	110.90						20.90	117.50						
11.34	111.60						22.70	118.10						
12.00	112.30						25.10	118.30						
12.70	113.00						27.50	119.40						
13.50	113.90						29.80	120.20						
14.50	114.60						32.10	120.80						
15.50	115.30						34.60	121.30						
16.50	116.20						37.10	122.10						
17.70	117.00						39.20	123.00						
18.80	117.70						41.20	123.60						
19.90	118.40						43.30	124.50						
21.20	119.30						45.30	125.10						
22.80	119.90						47.30	125.80						
24.80	120.60						49.50	126.50						
27.60	121.40						51.60	127.30						
30.80	122.00						53.40	127.90						
33.90	122.80						55.30	128.60						
38.50	123.60						57.00	129.40						
42.20	124.30						58.80	130.20						
45.50	124.90						60.80	130.80						
48.30	125.60						62.40	131.50						
51.70	126.40						63.60	132.20						
54.70	127.20						65.90	133.10						
57.70	127.90						67.40	133.70						
60.40	128.70						69.10	134.40						
62.80	129.30						70.30	135.10						
64.90	129.90						72.00	135.80						
67.10	130.60						73.40							
69.10	131.10						74.90							
71.10	131.80						76.30							
73.10	132.20						77.80							
75.10	132.50						78.90							
76.60	133.70						80.60							
78.10	134.20						83.40							
79.40	134.70						84.90							
80.70	135.20						86.00							
81.90	135.70						87.50							
83.20	136.20						88.60							
84.40	136.78						89.90							
85.40	137.36						91.40							
86.30	137.94						92.60							
87.10	138.52						93.60							
88.20	139.10						95.00							

CONE PENETROMETER DATA CODE SHEET						WBS NO.	PROJECT TIP I.D.				ROUTE			
						45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
						COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin						K. Plummer				J. Cliss/M. Thompson				
Station (location) Information						Date Run	Station (location) Information				Date Run			
NBL 07000 ISS						1/30/2018	NBL 07500 OSS				1/30/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	69.10						0.00	105.90						
1.20	70.10						0.62	108.50						
1.70	71.00						1.24	111.50						
2.40	71.90						1.86	113.90						
2.90	72.80						2.48	116.50						
3.20	73.30						3.10	119.50						
3.66	74.30						3.70	123.10						
4.12	75.40						4.30	126.00						
4.58	76.60						4.90	128.70						
5.04	77.30						5.50	131.20						
5.50	78.30						6.10	133.70						
6.04	79.30						6.58	136.10						
6.58	80.20						7.06	138.80						
7.12	81.70						7.54	141.00						
7.66	83.60						8.02	143.30						
8.20	84.90						8.50	145.50						
9.00	86.40						9.30							
9.70	88.20						10.10							
10.30	90.00						10.90							
11.20	91.70						11.70							
12.00	93.60						12.50							
13.10	95.40						14.00							
14.30	96.60						14.50							
15.60	99.30						15.80							
17.00	101.30						16.70							
18.70	103.40						17.90							
20.90	105.90						19.10							
23.90	107.60						20.00							
26.50	109.30						21.20							
28.70	110.90						22.40							
30.10	112.40						24.00							
32.40	113.90						25.50							
34.70	115.30						26.90							
36.80	116.70						28.00							
38.50	118.20						29.20							
39.90	119.50						30.90							
41.40	120.60						32.20							
42.30	121.70						34.30							
43.60	122.90						36.20							
44.80	123.90						38.50							
46.20	125.10						41.30							
47.50	126.30						44.00							
48.80	126.80						47.10							
49.60	127.50						50.90							
50.40	128.90						54.00							
51.00	131.00						57.90							
51.70	132.50						60.70							
52.60	133.70						63.20							
53.50	135.00						64.90							
54.50	136.40						66.70							
55.10							68.70							
55.70							70.60							
56.90							72.90							
57.70							75.00							
58.50							77.60							
59.40							79.90							
60.50							82.30							
61.50							85.00							
62.20							87.40							
62.80							89.80							
63.80							92.00							
64.70							93.80							
65.50							96.20							
66.20							98.50							
67.10							100.90							
68.00							103.50							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin							K. Plummer				J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information				Date Run			
NBL 08000 ISL							1/30/2018	NBL 08550 ISS				1/30/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	144.50						0.00	63.80	91.22	110.50					
1.30	156.20						1.50	64.30	91.60	110.78					
1.60	171.10						2.70	64.90	91.96	111.06					
2.00							3.50	65.40	92.32	111.34					
3.00							4.30	65.80	92.68	111.62					
3.60							5.30	66.10	93.04	111.90					
4.00							5.60	66.60	93.40	112.18					
4.50							6.20	67.10	93.74	112.46					
5.10							6.60	67.60	94.08	112.74					
5.50							7.60	68.10	94.42	113.02					
6.40							8.10	68.60	94.76	113.30					
6.70							8.70	69.00	95.10	113.62					
7.20							9.50	69.50	95.38	113.94					
7.70							10.20	70.00	95.66	114.26					
8.60							10.60	70.50	95.94	114.58					
9.20							11.40	71.10	96.22	114.90					
10.00							12.30	71.30	96.50	115.20					
11.60							13.10	71.60	96.82	115.50					
12.80							14.10	72.06	97.14	115.80					
14.00							15.00	72.52	97.46	116.10					
15.20							16.10	72.98	97.78	116.40					
15.60							17.10	73.44	98.10	116.74					
17.50							18.00	73.90	98.50	117.08					
18.60							19.50	74.36	98.90	117.42					
19.80							20.90	74.82	99.30	117.76					
20.80							22.30	75.28	99.70	118.10					
21.90							23.70	75.74	100.10	118.46					
22.80							25.10	76.20	100.42	118.82					
24.80							25.80	76.64	100.74	119.18					
25.90							27.90	77.08	101.06	119.54					
27.70							30.40	77.52	101.38	119.90					
30.00							33.10	77.96	101.70	120.22					
31.90							35.90	78.40	101.98	120.54					
34.00							37.90	78.76	102.26	120.86					
36.20							39.00	79.12	102.54	121.18					
38.10							39.80	79.48	102.82	121.50					
40.10							41.10	79.84	103.10	121.86					
42.00							42.00	80.20	103.32	122.22					
44.30							42.90	80.64	103.54	122.58					
47.00							73.50	81.08	103.76	122.94					
49.70							43.30	81.52	103.98	123.30					
52.60							45.20	81.96	104.20	123.64					
55.90							46.00	82.40	104.50	123.98					
59.10							46.90	82.80	104.80	124.32					
62.20							47.50	83.20	105.10	124.66					
65.60							48.30	83.60	105.40	125.00					
68.90							49.00	84.00	105.70						
72.30							49.60	84.40	105.94						
75.50							50.00	84.78	106.18						
78.60							50.74	85.16	106.42						
81.50							51.48	85.54	106.66						
84.70							52.22	85.92	106.90						
87.90							52.96	86.30	107.16						
91.40							53.70	86.66	107.42						
95.20							54.54	87.02	107.68						
98.70							55.38	87.38	107.94						
102.20							56.22	87.74	108.20						
105.90							57.06	88.10	108.44						
110.20							57.90	88.42	108.68						
113.90							58.60	88.74	108.92						
117.80							59.50	89.06	109.16						
121.40							60.10	89.38	109.40						
124.10							60.90	89.70	109.62						
127.10							61.70	90.08	109.84						
129.80							62.50	90.46	110.06						
135.80							63.10	90.84	110.28						

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
NBL 09000 OSS							1/30/2018	NBL 09500 OSL						1/30/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	53.88	67.74					0.00	107.60							
0.40	54.56	67.78					0.70	110.40							
0.80	55.24	67.82					1.34	112.60							
1.20	55.92	67.86					1.98	114.80							
1.60	56.60	67.90					2.62	116.30							
2.00	57.24	67.94					3.26	118.30							
2.34	57.88	67.98					3.90	120.00							
2.68	58.52	68.02					4.52	122.40							
3.02	59.16	68.06					5.14	124.60							
3.36	59.80	68.10					5.76	127.20							
3.70	60.50						6.38	129.70							
4.14	60.90						7.00	132.10							
4.58	61.00						8.02	134.80							
5.02	61.30						9.04	137.20							
5.46	61.40						10.06								
5.90	61.60						11.08								
6.30	61.80						12.10								
6.70	62.10						12.90								
7.10	62.30						14.10								
7.50	62.60						15.30								
7.90	62.90						16.10								
8.38	63.00						16.90								
8.86	63.40						17.80								
9.34	63.70						19.10								
9.82	63.90						20.20								
10.30	64.20						21.10								
11.10	64.40						22.10								
13.60	64.60						22.90								
14.50	64.80						24.00								
15.50	65.00						25.30								
16.60	65.30						26.20								
17.70	65.48						27.20								
18.90	65.66						28.60								
19.90	65.84						29.70								
21.10	66.02						30.60								
22.60	66.20						31.80								
24.20	66.32						32.90								
26.10	66.44						34.30								
27.70	66.56						35.60								
29.40	66.68						37.20								
31.20	66.80						38.50								
33.10	66.88						40.60								
35.30	66.96						42.50								
37.30	67.04						44.20								
39.90	67.12						46.80								
41.80	67.20						48.90								
43.70	67.22						51.70								
45.30	67.24						54.50								
46.60	67.26						57.30								
47.20	67.28						59.70								
48.50	67.30						62.10								
48.66	67.34						64.10								
48.82	67.38						66.70								
48.98	67.42						70.20								
49.14	67.46						73.40								
49.30	67.50						76.70								
49.58	67.52						80.50								
49.86	67.54						84.00								
50.14	67.56						87.50								
50.42	67.58						90.30								
50.70	67.60						93.10								
51.20	67.62						95.50								
51.70	67.64						97.60								
52.20	67.66						99.90								
52.70	67.68						102.80								
53.20	67.70						105.50								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run			
NBL 10000 ISS							1/30/2018	NBL 10500 OSS				1/30/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	83.10	118.40					0.00	94.80							
4.60	84.00	118.78					1.10	96.00							
6.30	84.30	119.16					1.70	97.20							
6.90	84.90	119.54					2.10	98.40							
7.40	85.50	119.92					2.80	99.90							
7.70	86.00	120.30					3.20	101.00							
8.06	86.60	120.92					3.80	101.70							
8.42	86.80	121.54					4.30	102.00							
8.78	87.40	122.16					4.80	102.20							
9.14	88.10	122.78					5.50	102.40							
9.50	88.60	123.40					6.20	102.60							
10.00	89.40	123.78					6.90	102.80							
10.50	90.40	124.16					7.70	103.10							
11.00	91.30	124.54					8.60	103.40							
11.50	92.10	124.92					9.30	103.70							
12.00	92.70	125.30					10.20	104.00							
12.68	93.30	126.30					11.10	104.30							
13.36	94.50	127.30					12.10	104.80							
14.04	95.50	128.30					13.10	105.20							
14.72	96.30	129.30					14.10	105.70							
15.40	97.10	130.30					14.90	106.40							
16.60	97.90	131.30					15.90	106.90							
17.80	98.50	132.30					16.90	107.80							
19.60	99.60	133.30					18.00	108.50							
20.80	100.20	134.30					19.30	109.30							
22.40	100.90	135.30					20.50	110.40							
24.30	101.70						21.30	111.70							
26.90	102.50						22.30	112.70							
29.10	103.30						23.40	113.80							
31.90	104.10						24.30	114.80							
35.90	104.40						25.20	115.80							
40.50	105.00						26.40	117.10							
43.50	105.50						27.80	118.00							
46.10	106.00						29.60	119.20							
48.20	106.50						31.90	120.40							
50.20	106.90						34.50	121.60							
52.00	107.20						37.30	122.70							
53.60	107.60						40.70	124.00							
55.30	108.00						43.40	125.40							
56.70	108.40						46.00	126.80							
58.10	108.80						48.70	128.00							
60.00	109.20						51.80	129.10							
61.40	109.56						54.70								
62.60	109.92						57.80								
63.70	110.28						60.80								
64.50	110.64						63.60								
65.50	111.00						65.50								
66.30	111.26						67.90								
67.30	111.52						70.00								
68.30	111.78						72.30								
69.20	112.04						74.50								
70.20	112.30						76.90								
71.30	112.64						78.60								
72.00	112.98						80.10								
72.80	113.32						81.40								
73.80	113.66						82.60								
74.90	114.00						83.90								
75.50	114.38						84.80								
76.10	114.76						86.10								
77.10	115.14						87.50								
77.70	115.52						88.60								
78.40	115.90						89.50								
79.30	116.40						90.50								
80.30	116.90						91.60								
81.30	117.40						92.70								
82.10	117.90						93.70								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
NBL 11000 ISL							1/30/2018	NBL 11500 ISS						1/31/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	59.80						0.00	83.60							
1.10	60.80						2.40	84.50							
1.60	61.90						3.90	85.50							
2.10	63.00						5.60	86.70							
2.60	64.00						6.50	87.90							
2.80	64.90						7.70	89.40							
3.00	65.90						8.80	90.70							
3.20	67.10						9.60	92.30							
3.40	68.40						10.80	93.70							
3.60	69.30						11.90	94.80							
3.80	70.60						13.10	95.90							
4.00	71.50						14.30	97.00							
4.20	72.40						16.10	98.00							
4.40	73.70						17.60	99.20							
4.60	75.10						18.90	100.10							
5.03	76.40						19.90	100.90							
5.46	77.60						21.00	101.60							
5.89	78.90						22.00	102.50							
6.32	80.10						23.30	103.50							
6.75	81.40						24.90	104.50							
7.18	82.90						26.80	105.20							
7.61	84.00						28.80	106.20							
8.04	85.50						31.20	107.40							
8.47	86.80						33.20	108.30							
8.90	87.90						35.20	109.10							
9.46	89.50						36.90	110.10							
10.02	91.30						38.30	111.10							
10.58	93.10						40.90	112.00							
11.14	94.90						42.90	113.20							
11.70	96.30						44.30	114.50							
12.30	97.80						45.90	115.00							
12.90	99.10						47.00	115.70							
14.20	100.30						49.30	116.40							
15.20	101.30						50.90	117.20							
16.30	102.50						52.50	117.70							
17.20	103.40						53.90	118.50							
18.50	104.50						55.00	119.10							
19.90	105.50						56.40	120.00							
21.50	106.70						58.00	120.50							
23.00	107.60						59.70	121.90							
24.70	108.90						61.20	122.10							
26.50	109.90						62.70	122.80							
28.60	110.90						63.90	123.50							
30.40	111.80						65.00	124.10							
31.60	112.70						66.20	124.70							
33.10	113.80						67.10	125.50							
34.20	115.00						68.40	126.20							
35.40	115.90						69.20	126.80							
36.60	116.90						70.10	127.80							
37.60	117.70						70.60	128.00							
37.90	119.10						71.10	128.30							
38.90	120.30						71.80	128.90							
39.80	121.10						72.60								
40.90	122.90						73.40								
42.10	123.50						73.90								
43.10	124.10						74.30								
44.30	125.40						75.00								
46.80	126.40						75.90								
48.40	127.20						76.60								
50.10	128.20						77.40								
52.00	128.90						78.40								
53.80	129.90						79.20								
55.50	131.20						80.10								
56.80							81.00								
57.90							81.90								
58.70							82.90								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.		ROUTE				
							45905.1.1	I-5912		I-77 from US 21 (Exit 79) to Mile Marker 83.4				
							COUNTY	FIELD PROFESSIONAL		DRILLER/HELPER				
Yadkin							K. Plummer		J. Cliss/M. Thompson					
Station (location) Information							Date Run	Station (location) Information				Date Run		
NBL 12000 OSS							1/31/2018	NBL 12500 OSL				1/31/2018		
Type	Test Interval			Datum or reference surface			Type	Test Interval		Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow		Top of ABC				
0.00	36.40	71.88					0.00	79.10						
0.46	37.10	71.90					1.10	79.58						
0.92	37.80	71.92					1.60	80.06						
1.38	38.20	71.94					2.10	80.54						
1.84	38.90	71.96					2.70	81.02						
2.30	40.00	71.98					3.15	81.50						
2.64	41.30	72.00					3.60	82.20						
2.98	42.70						4.20	83.00						
3.32	44.60						4.70	83.80						
3.66	46.40						5.10	84.20						
4.00	48.10						5.70	84.60						
4.28	49.50						6.30	84.90						
4.56	51.10						7.00	85.20						
4.84	52.90						8.40	85.40						
5.12	54.90						8.90	85.46						
5.40	56.80						9.60	85.52						
5.70	58.70						10.40	85.58						
6.00	61.10						11.50	85.64						
6.30	63.60						12.80	85.70						
6.60	66.10						13.70	85.78						
6.90	68.10						14.80	85.86						
7.34	69.20						15.90	85.94						
7.78	69.40						16.90	86.02						
8.22	69.47						17.90	86.10						
8.66	69.54						19.10	86.20						
9.10	69.61						20.30	86.30						
9.90	69.68						21.60	86.40						
10.20	69.75						22.60	86.50						
10.60	69.82						24.40	86.60						
11.10	69.89						25.50	86.76						
11.40	69.96						27.00	86.92						
11.70	70.03						29.30	87.08						
12.10	70.10						31.00	87.24						
12.50	70.18						33.30	87.40						
12.70	70.26						36.20	87.44						
13.00	70.34						38.30	87.48						
13.40	70.42						40.30	87.52						
13.80	70.50						42.40	87.56						
14.10	70.58						44.90	87.60						
14.60	70.66						47.80	87.76						
14.90	70.74						51.10	87.92						
15.00	70.82						52.60	88.08						
15.60	70.90						54.70	88.24						
16.00	70.94						56.80	88.40						
16.30	70.98						59.30	88.56						
16.80	71.02						61.40	88.72						
17.30	71.06						63.10	88.88						
17.60	71.10						65.00	89.04						
18.50	71.14						66.70	89.20						
19.40	71.18						68.30	89.50						
20.10	71.22						69.90	89.80						
20.80	71.26						71.10	90.10						
21.50	71.30						72.40	90.40						
22.40	71.35						73.20	90.70						
23.30	71.40						73.70	90.86						
24.10	71.45						74.30	91.02						
25.10	71.50						74.60	91.18						
26.10	71.55						75.00	91.34						
27.20	71.60						75.20	91.50						
28.40	71.65						75.50							
29.60	71.70						76.20							
31.00	71.75						76.70							
32.00	71.80						77.10							
33.60	71.82						77.60							
34.80	71.84						78.10							
35.80	71.86						78.60							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE						
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER						
Station (location) Information							Yadkin	K. Plummer				J. Cliss/M. Thompson						
							Date Run	Station (location) Information				Date Run						
NBL 13000 ISS							1/31/2018				NBL 13500 OSS				1/31/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface							
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC							
0.00	107.10						0.00	45.10										
2.00	108.50						0.80	46.40										
3.30	109.90						1.30	47.40										
4.20	111.30						1.90	48.20										
5.00	112.80						2.40	48.80										
5.60	114.20						2.60	49.40										
6.60	115.50						3.10	49.90										
7.50	116.70						3.50	50.20										
8.30	118.10						3.70	50.60										
9.10	119.30						4.30	50.74										
10.40	120.70						4.70	50.88										
11.50	121.90						5.20	51.02										
12.70	123.10						5.80	51.16										
13.80	124.50						6.40	51.30										
14.90	125.80						6.80	51.44										
16.70	127.00						7.50	51.58										
18.70	128.40						8.00	51.72										
20.80	129.70						8.50	51.86										
23.30	131.00						9.00	52.00										
24.90	132.20						9.90	52.11										
26.60	133.50						10.60	52.22										
27.90	134.80						11.50	52.33										
29.80	136.20						12.40	52.44										
32.40	137.30						13.00	52.55										
34.90	138.50						13.50	52.66										
36.80							14.50	52.77										
38.90							15.30	52.88										
40.10							16.10	52.99										
41.50							17.00	53.10										
43.20							17.90	53.21										
44.90							18.80	53.32										
46.60							19.60	53.43										
48.40							20.50	53.54										
50.50							21.10	53.65										
52.50							21.70	53.76										
54.30							22.40	53.87										
55.70							22.90	53.98										
57.30							23.30	54.09										
58.30							24.00	54.20										
59.30							24.50	54.33										
60.40							25.30	54.46										
61.50							26.00	54.59										
63.10							26.70	54.72										
65.10							27.40	54.85										
67.10							28.20	54.98										
69.20							29.00	55.11										
71.30							29.80	55.24										
73.70							30.50	55.37										
76.10							31.30	55.50										
78.30							31.90	55.65										
80.70							32.50	55.80										
82.80							33.00	55.95										
84.80							33.40	56.10										
86.60							33.90	56.25										
88.40							34.40	56.40										
90.00							34.80	56.55										
91.50							35.30	56.70										
93.10							36.10	56.85										
94.80							37.00	57.00										
96.40							37.90											
97.90							38.80											
99.10							39.90											
100.50							40.90											
102.40							42.10											
104.00							43.00											
105.50							44.10											

CONE PENETROMETER DATA CODE SHEET				WBS NO.		PROJECT TIP I.D.				ROUTE					
				45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4					
				COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER					
				Yadkin		K. Plummer				J. Cliss/M. Thompson					
Station (location) Information				Date Run		Station (location) Information				Date Run					
NBL 14000 ISL				1/31/2018		NBL 14500 ISS				1/31/2018					
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of ABC			
0.00	70.20	91.62	115.20					0.00	103.00						
1.40	70.90	91.86	115.60					1.30	105.10						
2.50	71.80	92.10	116.00					2.00	107.10						
3.30	72.40	92.38	116.38					2.90	108.80						
3.90	73.10	92.66	116.76					3.40	109.80						
4.60	73.80	92.94	117.14					4.00	111.40						
5.40	74.50	93.22	117.52					4.60	112.70						
6.10	75.20	93.50	117.90					5.30	114.50						
6.70	75.80	93.84	118.30					5.50	115.60						
7.50	76.50	94.18	118.70					6.30	117.10						
8.20	77.00	94.52	118.94					7.30	118.40						
8.90	77.60	94.86	119.18					7.70	120.20						
9.90	78.20	95.20	119.42					8.60	122.20						
10.90	78.60	95.54	119.66					9.00	123.70						
11.90	78.92	95.88	119.90					9.60	125.10						
12.90	79.24	96.22	120.34					10.40	126.70						
13.80	79.56	96.56	120.78					11.00	128.00						
15.20	79.88	96.90	121.22					11.50	129.60						
16.90	80.20	97.28	121.66					12.50	131.00						
18.80	80.60	97.66	122.10					13.50	132.50						
21.10	81.00	98.04	122.56					14.60	133.40						
23.20	81.40	98.42	123.02					15.40	134.90						
24.70	81.80	98.80	123.48					16.70	136.40						
26.10	82.20	99.12	123.94					18.20	137.50						
27.40	82.64	99.44	124.40					19.30	138.90						
28.90	83.08	99.76	124.80					20.90	140.00						
30.00	83.52	100.08	125.20					22.40	141.20						
31.00	83.96	100.40	125.60					23.30	142.50						
32.30	84.40	100.78	126.00					23.70	144.00						
33.60	84.47	101.16	126.40					26.20	145.40						
34.60	84.54	101.54	127.00					26.80	146.40						
35.70	84.61	101.92	115.20					27.20							
37.10	84.68	102.30	115.60					27.80							
38.20	84.75	102.68	116.00					28.40							
39.30	84.82	103.06	116.38					28.90							
40.40	84.89	103.44	116.76					29.60							
41.40	84.96	103.82	117.14					30.20							
42.70	85.03	104.20	117.52					31.00							
43.90	85.10	104.40	117.90					31.90							
45.20	85.26	104.74	118.30					33.40							
46.50	85.42	105.08	118.70					35.30							
47.80	85.58	105.42	118.94					38.20							
49.10	85.74	105.76	119.18					41.90							
49.40	85.90	106.10	119.42					46.10							
50.40	86.06	106.50	119.66					48.20							
51.50	86.22	106.90	119.90					51.30							
52.50	86.38	107.30	120.34					54.80							
53.40	86.54	107.70	120.78					58.40							
54.20	86.70	108.10	121.22					62.00							
55.10	86.96	108.52	121.66					64.90							
55.60	87.22	108.94	122.10					68.10							
56.50	87.48	109.36	122.56					71.90							
57.40	87.74	109.78	123.02					75.50							
58.20	88.00	110.20	123.48					78.80							
59.60	88.26	110.58	123.94					81.50							
60.00	88.52	110.96	124.40					83.50							
61.20	88.78	111.34	124.80					85.10							
62.20	89.04	111.72	125.20					86.60							
63.30	89.30	112.10	125.60					88.20							
64.50	89.62	112.48	126.00					89.90							
65.50	89.94	112.86	126.40					91.60							
66.40	90.26	113.24	127.00					93.50							
67.10	90.58	113.62						95.00							
67.90	90.90	114.00						96.90							
68.70	91.14	114.40						98.90							
69.50	91.38	114.80						100.90							

CONE PENETROMETER DATA CODE SHEET						WBS NO.	PROJECT TIP I.D.				ROUTE						
						45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4						
						COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER						
Station (location) Information						Yadkin	K. Plummer				J. Cliss/M. Thompson						
						Date Run	Station (location) Information				Date Run						
NBL 15000 OSS						1/31/2018				NBL 15500 OSL				1/31/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface						
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC						
0.00	69.30	125.40					0.00	75.93	96.16								
0.90	70.10	126.20					0.90	76.06	96.20								
1.40	71.10	126.80					1.60	76.19	96.24								
1.90	72.10	127.40					2.10	76.32	96.28								
2.40	73.10	128.40					2.90	76.45	96.32								
2.70	73.90						3.30	76.58	96.36								
3.10	75.20						4.10	76.71	96.40								
3.40	76.80						4.80	76.84	96.44								
3.70	78.20						5.70	76.97	96.48								
3.90	79.10						6.10	77.10	96.52								
4.30	79.90						7.80	77.44	96.56								
4.70	81.00						8.60	77.77	96.60								
4.90	81.90						9.70	78.11	96.64								
5.40	82.90						11.30	78.45	96.68								
5.80	84.00						13.20	78.78	96.72								
6.30	84.90						14.90	79.12	96.76								
6.90	85.90						16.70	79.45	96.80								
7.20	86.90						19.00	79.79									
8.30	87.70						21.00	80.13									
8.50	88.70						23.90	80.46									
9.20	89.70						26.70	80.80									
9.80	90.70						29.70	81.60									
10.30	91.90						32.40	82.50									
10.80	92.60						35.00	83.20									
11.10	93.70						37.10	83.90									
11.90	94.10						39.40	84.60									
12.30	95.60						41.50	85.20									
13.00	96.50						43.40	85.90									
13.60	97.50						45.50	86.60									
14.10	98.20						47.70	86.80									
14.70	99.40						49.90	87.40									
15.60	100.50						52.30	87.90									
16.90	101.40						54.40	88.40									
17.80	102.50						56.20	88.72									
19.00	103.40						57.80	89.04									
20.00	103.80						59.40	89.36									
21.30	104.50						62.60	89.68									
22.60	105.70						64.10	90.00									
23.90	106.90						65.40	90.54									
25.80	107.30						66.40	91.08									
27.60	108.30						67.70	91.62									
29.50	109.40						69.20	92.16									
31.30	110.00						70.50	92.70									
33.40	110.60						71.90	93.06									
35.90	111.30						73.00	93.42									
38.60	111.90						73.80	93.78									
40.60	112.40						73.86	94.14									
43.00	113.00						73.92	94.50									
44.80	113.50						73.98	94.66									
47.00	113.90						74.04	94.82									
48.90	114.40						74.10	94.98									
50.60	115.10						74.16	95.14									
52.30	115.80						74.22	95.30									
53.90	116.30						74.28	95.36									
57.40	117.10						74.34	95.42									
57.70	117.70						74.40	95.48									
58.10	118.40						74.54	95.54									
59.40	119.30						74.68	95.60									
60.50	120.00						74.82	95.68									
61.90	121.00						74.96	95.76									
63.10	121.50						75.10	95.84									
63.80	122.00						75.24	95.92									
65.30	122.70						75.38	96.00									
66.40	123.40						75.52	96.04									
67.30	124.30						75.66	96.08									
68.20	124.70						75.80	96.12									

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin							K. Plummer				J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information					Date Run		
NBL 16000 ISS							1/31/2018	NBL 16500 OSS					1/31/2018		
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	85.70	119.02					0.00	67.10							
1.30	86.40	119.46					0.42	68.90							
1.90	87.10	119.90					0.84	70.40							
2.80	87.80	120.38					1.26	72.30							
3.80	88.40	120.86					1.68	74.00							
4.40	88.90	121.34					2.10	75.80							
5.30	89.50	121.82					2.50	77.50							
6.00	90.20	122.30					2.90	79.30							
6.90	91.00	122.64					3.30	81.10							
7.90	91.50	122.98					3.70	82.70							
8.80	92.00	123.32					4.18	84.50							
10.10	92.30	123.66					4.66	86.30							
11.30	93.00	124.00					5.14	88.40							
12.70	93.60						5.62	90.60							
14.30	94.08						6.10	92.70							
15.80	94.56						6.72	95.20							
17.30	95.04						7.34	98.00							
19.10	95.52						7.96	100.90							
20.90	96.00						8.58	103.50							
23.20	96.54						9.20	106.00							
26.10	97.08						9.60	108.30							
28.80	97.62						10.10	110.20							
31.00	98.16						10.50	112.10							
33.20	98.70						11.20	114.00							
35.20	99.28						11.70	115.70							
37.90	99.86						12.10	117.70							
41.10	100.44						12.60	119.50							
44.20	101.02						13.10	121.50							
46.80	101.60						13.50	123.80							
50.00	102.04						13.90	125.90							
51.60	102.48						14.40	127.50							
53.10	102.92						15.00	129.10							
54.90	103.36						15.60	131.20							
55.50	103.80						16.40	133.50							
56.10	104.26						17.10	135.80							
57.00	104.72						18.00	137.90							
58.20	105.18						19.10	139.70							
59.30	105.64						20.10	141.50							
60.30	106.10						21.20	143.30							
61.50	106.58						22.60								
62.70	107.06						23.90								
63.90	107.54						25.00								
65.20	108.02						26.10								
66.30	108.50						27.60								
67.40	109.02						29.20								
68.40	109.54						30.60								
69.30	110.06						32.10								
70.30	110.58						33.50								
71.10	111.10						35.10								
71.90	111.54						36.60								
72.80	111.98						38.00								
73.80	112.42						39.40								
74.70	112.86						41.00								
75.50	113.30						42.50								
76.40	113.74						44.80								
77.30	114.18						46.90								
77.90	114.62						49.10								
78.90	115.06						51.10								
79.70	115.50						52.90								
80.60	115.94						54.50								
81.40	116.38						56.40								
82.20	116.82						58.20								
82.90	117.26						60.00								
83.40	117.70						61.90								
84.00	118.14						63.60								
84.90	118.58						65.30								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
NBL 17005 ISL							1/31/2018	NBL 17600 ISS						1/31/2018	
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of ABC			
0.00	69.70							0.00	113.20						
1.30	71.20							3.40	115.20						
2.10	72.60							4.80	117.30						
2.70	73.80							6.10	119.40						
3.40	74.80							7.30	121.40						
4.00	76.20							8.30	123.50						
4.60	77.40							9.30	125.70						
5.40	78.90							10.40	127.90						
5.90	80.20							11.60	129.90						
6.60	81.60							12.80	131.90						
7.50	82.70							13.80	133.80						
8.20	83.90							14.70	135.60						
8.80	85.00							15.50	137.40						
9.60	86.40							16.30							
10.40	88.10							17.30							
11.30	89.60							18.30							
11.90	91.30							19.50							
12.50	92.80							20.70							
13.20	94.00							21.70							
14.20	95.40							23.00							
15.60	96.40							24.00							
17.10	97.80							25.40							
18.20	99.00							26.80							
19.00	100.10							28.20							
19.90	101.60							29.50							
21.00	102.80							31.00							
21.80	104.50							32.50							
22.20	105.60							34.10							
23.80	106.80							35.90							
27.10	108.20							37.40							
29.10	109.50							39.10							
31.20	110.90							41.20							
33.50	112.00							43.20							
34.50	112.90							45.10							
35.10	114.00							47.50							
35.60	114.80							49.80							
36.40	115.20							51.50							
37.60	116.10							53.00							
38.80	117.10							55.00							
40.00	118.00							57.80							
41.20	119.20							60.30							
42.30	120.10							62.70							
43.40	121.00							65.00							
44.50	121.80							67.10							
45.70	122.70							69.00							
46.80	123.70							71.20							
47.70	124.30							73.30							
48.70	124.50							75.50							
49.50	124.60							77.10							
50.20								79.70							
50.90								81.60							
51.70								83.60							
52.80								85.40							
53.90								87.30							
55.10								89.20							
56.50								91.20							
58.10								93.10							
59.50								95.40							
60.60								97.80							
61.60								100.20							
62.70								102.20							
63.80								104.00							
64.70								105.90							
65.70								107.60							
66.70								109.60							
68.40								111.30							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE						
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER						
Station (location) Information							Yadkin	K. Plummer				J. Cliss/M. Thompson						
							Date Run	Station (location) Information				Date Run						
NBL 18000 OSS							1/31/2018				NBL 18500 OSL				1/31/2018			
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface						
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of ABC						
0.00	48.00	119.70						0.00	50.00									
1.50	49.50	121.10						1.40	51.30									
2.30	50.90	122.40						1.90	52.70									
2.80	52.50	123.70						2.40	54.30									
3.40	54.30	125.00						2.90	55.00									
3.90	56.10	126.20						3.10	56.90									
4.30	57.60	127.50						3.40	58.40									
4.80	59.00							3.80	59.70									
5.40	60.40							4.10	61.00									
6.00	62.00							4.32	62.90									
6.70	63.30							4.54	64.40									
7.40	64.50							4.76	66.00									
8.00	66.00							4.98	67.50									
8.60	66.90							5.20	69.20									
9.30	67.90							5.62	70.50									
9.90	68.90							6.04	72.40									
10.60	70.00							6.46	74.00									
11.10	71.10							6.88	75.50									
11.70	72.00							7.30	77.60									
12.40	72.90							7.70	79.50									
13.00	73.80							8.10	81.40									
13.40	74.60							8.50	83.30									
14.00	75.50							8.90	85.40									
14.50	76.10							9.30	87.30									
14.90	77.00							9.70	89.00									
15.40	78.00							10.10	90.80									
15.80	78.80							10.50	92.50									
16.10	79.80							10.90	93.90									
16.40	80.60							11.30	95.00									
16.62	81.70							12.04	96.60									
16.84	82.50							12.78	98.00									
17.06	83.40							13.52	99.30									
17.28	84.70							14.26	100.20									
17.50	85.60							15.00	102.20									
17.82	86.30							16.00	103.30									
18.14	87.30							16.80	105.00									
18.46	87.60							17.90	106.40									
18.78	88.20							18.80	107.90									
19.10	89.00							19.60	109.30									
19.38	90.00							20.50	110.70									
19.65	90.90							21.60	112.30									
19.93	92.10							22.60	114.10									
20.20	93.40							23.50	115.70									
20.62	94.70							24.70	117.80									
21.04	96.10							25.70	119.90									
21.46	97.50							27.00	121.90									
21.88	99.00							28.10	123.70									
22.30	100.20							29.50	125.30									
23.02	101.60							30.70	126.70									
23.74	102.70							31.60	128.10									
24.46	103.70							32.70	129.10									
25.18	104.70							33.60	130.10									
25.90	105.70							34.50	131.10									
26.90	106.50							35.50	132.30									
28.40	107.40							36.60	133.70									
29.90	108.40							38.10	135.40									
31.50	109.40							39.30	136.90									
33.40	110.20							40.40	138.70									
35.20	111.30							41.20	140.30									
37.30	112.30							42.40										
39.20	113.20							43.50										
40.80	114.30							44.50										
42.20	115.40							45.50										
43.60	116.30							46.50										
45.10	117.40							47.50										
46.60	118.40							48.70										

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	K. Plummer				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
NBL 19000 ISS							1/31/2018	NBL 19500 OSS						1/31/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	80.40						0.00	56.60	125.20						
1.40	81.90						0.80	57.90	126.40						
2.20	83.10						1.30	58.60	127.30						
3.90	84.40						1.90	59.10	128.40						
5.60	85.30						2.20	60.10	129.50						
8.30	86.40						2.40	61.50	130.60						
8.90	87.10						2.80	63.20	131.70						
9.50	88.10						3.10	65.10	132.60						
9.80	88.70						3.20	66.80	133.60						
10.20	89.80						3.60	68.30							
11.10	90.60						4.00	70.00							
11.60	91.40						4.60	71.60							
12.20	92.40						4.90	73.20							
12.60	93.20						5.20	74.80							
13.10	94.30						5.70	76.30							
13.70	95.40						6.10	77.60							
14.10	96.60						6.60	78.70							
14.60	97.60						7.00	79.50							
15.00	98.70						7.44	80.40							
15.90	100.10						7.88	81.40							
16.60	101.00						8.32	82.10							
17.30	102.60						8.76	82.90							
18.00	104.20						9.20	83.80							
18.80	105.40						9.62	84.70							
20.10	106.60						10.04	85.30							
21.10	107.60						10.46	86.30							
22.20	109.00						10.88	87.00							
23.20	110.30						11.30	88.40							
24.30	111.90						11.70	89.50							
25.40	113.50						12.30	90.30							
26.80	115.20						13.30	91.30							
28.00	117.00						13.90	92.10							
29.40	118.90						14.50	93.10							
30.60	120.60						15.50	94.10							
32.50	122.70						16.40	95.10							
33.90	124.70						17.10	96.10							
35.60	126.50						17.90	97.00							
37.70	127.10						18.20	97.90							
39.50							19.40	98.90							
40.20							20.80	99.90							
42.90							21.60	100.70							
44.30							22.50	101.50							
45.70							23.20	102.00							
47.00							23.90	102.80							
48.20							24.80	103.50							
49.70							25.50	104.00							
50.90							26.10	104.60							
52.20							26.70	105.00							
53.60							27.30	105.20							
55.00							28.10	106.10							
56.60							28.90	106.70							
57.80							30.10	107.80							
59.00							31.50	108.50							
60.40							33.00	109.50							
61.60							34.10	110.50							
63.10							36.20	111.40							
64.40							37.60	112.80							
66.20							39.00	113.90							
67.90							40.50	115.00							
69.30							42.60	116.20							
71.00							44.80	117.50							
72.20							47.10	119.00							
74.00							49.40	120.20							
75.70							51.40	121.40							
77.30							53.10	122.80							
79.10							54.90	124.10							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.		ROUTE			
							45905.1.1	I-5912		I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL		DRILLER/HELPER			
							Yadkin	N. McLaren		J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run	
NBL 20000 ISL							1/31/2018	NBL 20500 ISS				1/31/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval		Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow		Top of ABC			
0.00	57.60						0.00	77.70					
0.90	58.60						2.90	78.50					
1.50	59.20						4.80	79.50					
2.10	59.24						6.50	80.00					
2.46	59.28						8.20	81.00					
2.82	59.32						9.80	81.70					
3.18	59.36						11.50	82.70					
3.54	59.40						13.20	83.70					
3.90	59.44						14.60	84.80					
4.30	59.48						16.20	85.60					
4.70	59.52						17.90	86.40					
5.10	59.56						19.00	87.10					
5.50	59.60						20.40	87.70					
5.90	59.64						21.90	88.50					
6.30	59.68						23.40	89.40					
6.80	59.72						24.50	90.10					
7.30	59.76						26.10	91.00					
7.60	59.80						27.40	91.50					
8.20	59.84						28.40	92.10					
8.70	59.88						29.60	92.90					
9.30	59.92						30.60	93.30					
9.80	59.96						32.00	93.90					
10.30	60.00						33.10	94.70					
10.80	60.03						34.40	95.40					
11.40	60.06						35.40	96.00					
12.00	60.09						36.60	96.50					
12.70	60.12						37.60	97.40					
13.30	60.15						38.50	97.60					
13.90	60.18						39.60	97.40					
14.50	60.21						40.50	97.60					
15.00	60.24						41.70	97.90					
15.60	60.27						42.70	98.50					
16.30	60.30						43.70	99.10					
17.00	60.35						44.50	99.70					
17.60	60.40						45.60	100.20					
18.20	60.45						46.40	100.90					
18.80	60.50						47.30	101.50					
19.20	60.55						48.30	102.20					
19.90	60.60						49.50	102.60					
20.50	60.65						50.10	103.20					
21.20	60.70						51.00	103.90					
22.10	60.75						51.90	104.30					
22.80	60.80						53.00	104.40					
23.70	60.85						54.00						
24.70	60.90						55.00						
25.60	60.95						56.00						
26.40	61.00						57.00						
27.50	61.05						58.10						
28.70	61.10						59.30						
29.70	61.15						60.30						
30.70	61.20						61.40						
32.10	61.25						62.50						
34.00	61.30						63.40						
35.70							64.50						
37.50							65.70						
39.40							66.90						
41.70							68.10						
43.80							69.00						
45.80							70.20						
47.25							71.30						
49.20							72.50						
50.70							73.30						
52.40							74.40						
54.20							75.40						
55.70							76.10						
56.90							77.00						

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE						
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER						
							Yadkin/Surry	K. Plummer	J. Cliss/M. Thompson						
Station (location) Information							Station (location) Information							Date Run	
NBL 21000 OSS							1/31/2018	NBL 22000 OSL							1/31/2018
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of Soil Subgrade			DCP	Cumulative cm per blow			Top of ABC				
0.00	56.32	121.10					0.00								
0.18	56.78	122.00					1.30								
0.36	57.24	122.90					2.00								
0.54	57.70	124.00					2.80								
0.72	58.48	124.90					3.90								
0.90	59.26	125.90					5.00								
1.18	60.04	126.90					6.30								
1.46	60.82						7.70								
1.74	61.60						8.90								
2.02	62.30						10.30								
2.30	63.10						12.00								
2.52	64.00						14.00								
2.74	65.10						15.50								
2.96	65.90						16.60								
3.18	67.10						17.20								
3.40	68.10						17.80								
3.82	68.90						18.30								
4.24	70.00						19.00								
4.66	71.00						19.40								
5.08	71.90						20.13								
5.50	72.90						20.87								
6.26	73.60						21.60								
7.02	74.60						23.40								
7.78	75.50						25.60								
8.54	76.60						28.40								
9.30	77.90						31.00								
10.30	78.80						34.50								
11.50	79.90						37.90								
12.70	81.00						40.30								
14.00	81.80						43.90								
15.40	83.20						46.50								
16.40	84.50						49.30								
17.60	85.70						52.90								
18.60	86.70						56.80								
19.40	87.80						59.80								
20.30	89.20						61.90								
21.50	90.50						64.30								
22.80	91.60						67.00								
24.20	92.70						70.90								
25.30	93.80						72.90								
26.80	95.10						76.90								
28.70	96.20						80.20								
30.90	97.20						83.60								
32.80	98.40						87.10								
35.10	99.40						90.60								
36.40	100.40						95.20								
37.80	101.40						100.40								
38.80	102.40						104.40								
39.70	103.40						107.50								
41.20	104.20						110.00								
42.30	105.00						112.50								
43.70	106.00						114.90								
45.00	107.00						117.40								
46.50	108.00						120.40								
47.90	109.10						122.80								
49.90	110.20														
50.10	111.30														
52.30	112.30														
53.10	113.30														
53.30	114.30														
53.72	115.40														
54.14	116.30														
54.56	117.20														
54.98	118.30														
55.40	119.30														
55.86	120.30														

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE			
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER			
Station (location) Information							Surry	N. McLaren	J. Cliss/M. Thompson			
NBL 22500 ISS							Date Run	Date Run				
1/31/2018							1/31/2018	1/31/2018				
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface	
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of Soil Subgrade	
0.00							0.00	45.70	76.74	94.92	115.20	
4.10							1.20	46.02	77.02	95.20	115.48	
7.60							2.90	46.34	77.30	95.46	115.76	
11.40							4.10	46.66	77.58	95.72	116.04	
15.90							5.40	46.98	77.86	95.98	116.32	
21.00							6.60	47.30	78.14	96.24	116.60	
28.10							7.70	47.70	78.42	96.50	116.92	
32.70							8.70	48.10	78.70	96.74	117.24	
35.80							9.30	48.50	78.98	96.98	117.56	
39.60							10.10	48.90	79.26	97.22	117.88	
43.20							10.90	49.30	79.54	97.46	118.20	
46.90							11.70	49.76	79.82	97.70	118.42	
50.50							12.40	50.22	80.10	98.04	118.64	
53.50							13.00	50.68	80.36	98.38	118.86	
56.20							13.90	51.14	80.62	98.72	119.08	
58.70							14.20	51.60	80.88	99.06	119.30	
61.10							15.10	52.06	81.14	99.40		
63.80							16.00	52.52	81.40	99.76		
67.10							16.90	52.98	81.68	100.12		
72.20							17.80	53.44	81.96	100.48		
77.30							18.60	53.90	82.24	100.84		
81.30							19.70	54.50	82.52	101.20		
84.30							20.20	55.10	82.80	101.50		
87.10							21.20	55.70	83.02	101.80		
89.20							21.70	56.30	83.24	102.10		
91.60							22.40	56.90	83.46	102.40		
94.20							23.10	57.44	83.68	102.70		
97.60							24.10	57.98	83.90	103.00		
101.00							24.70	58.52	84.22	103.30		
103.80							25.30	59.06	84.54	103.60		
106.70							26.00	59.60	84.86	103.90		
111.10							26.70	60.16	85.18	104.20		
115.10							27.30	60.72	85.50	104.54		
117.70							27.90	61.28	85.76	104.88		
121.20							28.60	61.84	86.02	105.22		
124.10							29.70	62.40	86.28	105.56		
							30.15	63.20	86.54	105.90		
							30.60	63.40	86.80	106.20		
							31.30	64.30	87.06	106.50		
							32.00	64.80	87.32	106.80		
							32.60	65.30	87.58	107.10		
							33.20	66.10	87.84	107.40		
							33.70	66.70	88.10	107.72		
							34.40	67.30	88.36	108.04		
							35.00	67.90	88.62	108.36		
							35.70	68.50	88.88	108.68		
							36.40	69.20	89.14	109.00		
							36.90	69.70	89.40	109.30		
							37.40	70.20	89.64	109.60		
							38.00	70.60	89.88	109.90		
							38.80	71.00	90.12	110.20		
							39.10	71.50	90.36	110.50		
							39.70	71.90	90.60	110.82		
							40.70	72.24	90.94	111.14		
							41.10	72.58	91.28	111.46		
							41.60	72.92	91.62	111.78		
							42.30	73.26	91.96	112.10		
							42.72	73.60	92.30	112.40		
							43.14	74.00	92.60	112.70		
							43.56	74.40	92.90	113.00		
							43.98	74.80	93.20	113.30		
							44.40	75.20	93.50	113.60		
							44.66	75.60	93.80	113.92		
							44.92	75.90	94.08	114.24		
							45.18	76.18	94.36	114.56		
							45.44	76.46	94.64	114.88		

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Station (location) Information							Surry	K. Plummer				J. Cliss/M. Thompson			
							Date Run	Station (location) Information				Date Run			
NBL 23075 OSS							2/1/2018	NBL 23500 ISL				2/1/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of Soil Subgrade			DCP	Cumulative cm per blow			Top of ABC				
0.00	24.96	52.90	80.74	110.60			0.00	81.10							
0.80	25.10	53.38	81.08	111.10			1.80	83.40							
1.60	25.40	53.86	81.42	111.60			2.70	85.90							
2.10	25.70	54.34	81.76	112.10			3.50	88.40							
2.60	26.00	54.82	82.10	112.60			4.10	90.60							
3.10	26.30	55.30	82.48	113.10			4.90	92.50							
3.60	26.60	55.76	82.86	113.60			5.60	94.30							
4.10	26.90	56.22	83.24	114.10			6.90	96.10							
4.62	27.20	56.68	83.62	114.60			7.90	98.30							
5.14	27.50	57.14	84.00	114.86			8.90	100.70							
5.66	27.80	57.60	84.50	115.12			10.00	103.30							
6.18	28.10	58.10	85.00	115.38			11.00	106.00							
6.70	28.42	58.60	85.50	115.64			11.80	108.60							
7.28	28.74	59.10	86.00	115.90			12.50	110.80							
7.86	29.06	59.60	86.50	116.16			13.10	112.80							
8.44	29.38	60.10	86.96	116.42			13.50	114.40							
9.02	29.70	60.58	87.42	116.68			13.80	115.80							
9.60	30.02	61.06	87.88	116.94			14.40	117.20							
10.08	30.34	61.54	88.34	117.20			15.10	118.30							
10.56	30.66	62.02	88.80	117.48			15.60	119.40							
11.04	30.98	62.50	89.28	117.76			16.10	120.40							
11.52	31.30	62.90	89.76	118.04			16.50	121.20							
12.00	31.44	63.30	90.24	118.32			17.10	122.10							
12.68	31.58	63.70	90.72	118.60			17.50	122.40							
13.36	31.72	64.10	91.20	118.94			18.00	123.60							
14.04	31.86	64.50	91.52	119.28			18.80	124.26							
14.72	32.00	64.96	91.84	119.62			19.48	124.92							
15.40	32.52	65.42	92.16	119.96			20.16	125.58							
15.56	33.04	65.88	92.48	120.30			20.84	126.24							
15.72	33.56	66.34	92.80	120.59			21.52	126.90							
15.88	34.08	66.80	93.26	120.88			22.20	127.58							
16.04	34.60	67.22	93.72	121.17			23.30	128.26							
16.20	35.22	67.64	94.18	121.46			24.30	128.94							
16.42	35.84	68.06	94.64	121.75			25.50	129.62							
16.64	36.46	68.48	95.10	122.04			26.40	130.30							
16.86	37.08	68.90	95.56	122.33			27.50	130.98							
17.08	37.70	69.30	96.02	122.62			28.60	131.66							
17.30	38.28	69.70	96.48	122.91			29.60	132.34							
17.54	38.86	70.10	96.94	123.20			30.60	133.02							
17.78	39.44	70.50	97.40				31.80	133.70							
18.02	40.02	70.90	97.82				32.90	134.52							
18.26	40.60	71.36	98.24				34.00	135.34							
18.50	41.12	71.82	98.66				35.20	136.16							
18.80	41.64	72.28	99.08				36.50	136.98							
19.10	42.16	72.74	99.50				37.60	137.80							
19.40	42.68	73.20	99.94				39.00	138.74							
19.70	43.20	73.56	100.38				40.60	139.68							
20.00	43.68	73.92	100.82				42.10	140.62							
20.22	44.16	74.28	101.26				44.10	141.56							
20.44	44.64	74.64	101.70				45.90	142.50							
20.66	45.12	75.00	102.18				47.80	143.18							
20.88	45.60	75.34	102.66				49.80	143.86							
21.10	46.08	75.68	103.14				51.50	144.54							
21.50	46.56	76.02	103.62				52.80	145.22							
21.90	47.04	76.36	104.10				53.70	145.90							
22.30	47.52	76.70	104.52				54.70	146.28							
22.70	48.00	77.02	104.94				55.80	146.65							
23.10	48.50	77.34	105.36				57.20	147.03							
23.36	49.00	77.66	105.78				59.00	147.40							
23.62	49.50	77.98	106.20				61.50								
23.88	50.00	78.30	106.88				63.80								
24.14	50.50	78.72	107.56				66.70								
24.40	50.98	79.14	108.24				70.10								
24.54	51.46	79.56	108.92				73.50								
24.68	51.94	79.98	109.60				76.50								
24.82	52.42	80.40	110.10				78.80								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE						
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER						
							Surry	N. McLaren	J. Cliss/M. Thompson						
Station (location) Information							Date Run	Station (location) Information							Date Run
NBL 24000 ISS							2/2/2018	NBL 24500 OSS							2/2/2018
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of Soil Subgrade				DCP	Cumulative cm per blow			Top of Soil Subgrade			
0.00	82.10	137.20						0.00							
2.70	83.00	138.10						2.00							
5.80	83.70	139.00						4.60							
7.50	84.50	139.70						7.40							
8.40	85.30	140.60						10.20							
9.30	86.00	141.30						12.80							
10.00	86.80	142.00						15.30							
11.20	87.60	142.80						17.40							
12.70	88.40	143.60						18.90							
14.70	89.20	144.30						20.50							
16.40	90.00	145.10						22.40							
18.10	90.80	145.80						24.30							
19.60	91.60	146.60						26.20							
21.30	92.50	147.10						28.20							
22.70	93.30							30.10							
24.40	94.10							31.40							
25.90	94.90							33.80							
27.40	95.70							35.60							
28.90	96.70							37.30							
30.10	97.50							39.70							
31.30	98.40							42.20							
32.90	99.40							45.30							
34.20	100.30							48.90							
35.50	101.20							51.30							
37.20	102.00							53.90							
38.50	102.90							56.60							
40.10	103.60							59.30							
41.40	104.50							62.00							
42.80	105.20							63.70							
44.20	105.90							64.90							
45.60	106.80							66.50							
46.80	107.50							69.90							
49.50	108.40							71.60							
50.80	109.20							74.10							
52.00	110.00							76.60							
53.30	110.80							78.80							
54.00	111.70							79.90							
55.60	112.60							80.80							
56.60	113.40							82.10							
57.60	114.30							83.90							
58.50	115.20							86.10							
59.40	116.00							88.20							
60.40	117.10							90.20							
61.30	117.80							92.10							
62.30	118.50							93.90							
63.30	119.40							96.00							
64.30	120.30							98.00							
65.30	121.30							100.10							
66.10	122.10							102.20							
67.10	123.00							104.10							
68.00	123.90							107.10							
68.90	124.70							109.60							
69.70	125.60							112.60							
70.60	126.50							116.00							
71.60	127.30							119.30							
72.60	128.20							122.40							
73.40	129.10							125.20							
74.30	129.90							128.00							
75.20	130.70							130.80							
76.10	131.60							133.80							
76.90	132.40							136.70							
77.80	133.20							139.40							
78.70	134.00							142.10							
79.60	134.70							143.60							
80.50	135.60							147.50							
81.30	136.40														

CONE PENETROMETER DATA CODE SHEET							WBS NO.		PROJECT TIP I.D.				ROUTE			
							45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
							Surry		N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run		Station (location) Information				Date Run			
NBL 25000 OSL							2/2/2018		NBL 25500 ISS				2/2/2018			
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of Soil Subgrade				
0.00	78.30	120.04						0.00	83.10							
1.20	79.10	120.62						1.30	84.10							
1.70	80.00	121.20						2.40	85.00							
2.40	80.80	121.76						3.80	85.90							
3.00	81.60	122.32						5.60	86.60							
3.60	82.40	122.88						7.50	87.60							
4.30	83.20	123.44						9.90	88.40							
4.90	83.90	124.00						12.50	89.30							
5.50	84.80	124.50						14.90	90.20							
6.00	85.60	125.00						17.70	91.20							
6.60	86.40	125.50						20.30	92.30							
7.30	87.00	126.00						22.10	93.40							
7.90	87.60	126.50						24.10	94.60							
8.50	88.40	126.98						26.00	95.60							
9.20	89.12	127.46						27.40	96.70							
10.00	89.84	127.94						28.90	97.80							
11.00	90.56	128.42						30.30	98.90							
12.30	91.28	128.90						31.70	100.00							
13.80	92.00	129.34						33.20	101.10							
15.10	92.60	129.78						34.70	102.30							
18.10	93.20	130.22						36.20	103.40							
22.60	93.80	130.66						37.80	104.40							
24.40	94.40	131.10						39.40	105.50							
25.70	95.00	131.50						41.50	106.50							
26.80	95.66	131.90						43.40	107.50							
28.60	96.32	132.30						44.50	108.50							
30.30	96.98	132.70						45.50	109.50							
32.10	97.64	133.10						46.40	110.40							
34.10	98.30	133.40						47.30	111.40							
36.30	98.88	133.70						48.10	112.20							
38.40	99.46	134.00						49.10	113.20							
40.00	100.04	134.30						49.70	114.20							
41.50	100.62	134.60						50.20	115.10							
42.60	101.20	134.96						50.50	115.90							
43.40	101.80	135.32						51.00	116.80							
44.00	102.40	135.68						51.72	117.80							
44.80	103.00	136.04						52.44	118.60							
45.50	103.60	136.40						53.16	119.50							
46.50	104.20	136.80						53.88	120.30							
47.60	104.76	137.20						54.60	121.20							
49.00	105.32	137.60						55.60	122.00							
50.30	105.88	138.00						56.60	122.90							
51.50	106.44	138.40						57.60	123.70							
52.70	107.00	138.78						58.70	124.50							
53.60	107.52	139.16						60.00	125.40							
54.80	108.04	139.54						61.30	126.30							
56.20	108.56	139.92						62.50	127.30							
57.50	109.08	140.30						63.70	128.10							
58.70	109.60	140.64						64.80	129.00							
60.00	110.18	140.98						65.90	129.90							
61.30	110.76	141.32						67.00	130.70							
62.50	111.34	141.66						68.20	131.70							
63.80	111.92	142.00						69.30	132.60							
65.00	112.50	142.43						70.40	133.50							
66.20	113.06	142.85						71.50	134.40							
67.30	113.62	143.28						72.60	135.30							
68.50	114.18	143.70						73.60	136.20							
69.60	114.74							74.70	137.10							
70.80	115.30							75.60	137.80							
71.80	115.90							76.70	138.60							
72.70	116.50							77.70	139.60							
73.60	117.10							78.70	140.30							
74.70	117.70							79.60								
75.70	118.30							80.50								
76.60	118.88							81.40								
77.50	119.46							82.20								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE				
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4				
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER				
							Surry	N. McLaren			J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information				Date Run			
NBL 25500 OSL							2/2/2018	NBL 26000 OSS				2/3/2018			
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of ABC			
0.00	71.00	142.30						0.00	85.20	119.48					
0.80	72.60	143.20						1.10	85.40	120.00					
1.10	74.20	144.04						2.20	85.60	120.50					
1.40	75.40	144.88						3.10	85.85	121.00					
1.60	77.50	145.72						3.90	86.10	121.50					
1.80	79.00	146.56						4.70	86.35	122.00					
2.00	80.70	147.40						5.70	86.60	122.50					
2.20	82.30	146.78						6.80	86.85	122.92					
2.40	84.00	146.16						7.90	87.10	123.34					
2.56	85.70	145.54						8.80	87.35	123.76					
2.72	87.40	144.92						10.00	87.60	124.18					
2.88	89.00	144.30						11.40	87.85	124.60					
3.04	90.40							12.80	88.10	125.12					
3.20	91.80							14.70	88.48	125.64					
3.64	93.30							17.20	88.86	126.16					
4.08	94.90							20.80	89.24	126.68					
4.52	96.20							24.90	89.62	127.20					
4.96	97.30							29.20	90.00	127.80					
5.40	98.30							33.40	90.38	128.40					
5.74	99.30							37.00	90.76	129.00					
6.08	100.20							40.80	91.14	129.60					
6.42	100.90							43.80	91.52	130.20					
6.76	101.90							46.00	91.90	130.80					
7.10	102.76							47.40	92.46	131.40					
7.48	103.62							49.00	93.02	132.00					
7.86	104.48							50.90	93.58	132.60					
8.24	105.34							53.00	94.14	133.20					
8.62	106.20							54.80	94.70	133.70					
9.00	107.16							56.60	95.36	134.20					
9.80	108.12							58.30	96.02	134.70					
10.60	109.08							60.00	96.68	135.20					
11.60	110.04							61.50	97.34	135.70					
12.60	111.00							63.00	98.00	136.36					
13.60	111.90							64.20	98.32	137.02					
14.50	112.80							65.70	98.64	137.68					
15.40	113.70							67.40	98.96	138.34					
16.40	114.60							68.90	99.28	139.00					
17.20	115.50							70.40	99.60	139.76					
18.30	116.46							72.10	100.32	140.52					
19.70	117.42							73.40	101.04	141.28					
21.90	118.38							74.80	101.76	142.04					
24.20	119.34							76.30	102.48	142.80					
26.60	120.30							77.80	103.20	143.58					
28.60	121.24							78.90	104.00	144.36					
30.20	122.18							80.00	104.80	145.14					
31.50	123.12							80.80	105.60	145.92					
32.90	124.06							81.20	106.40	146.70					
35.00	125.00							81.50	107.20	147.56					
37.20	125.80							81.70	107.86	148.42					
39.50	126.60							81.89	108.52	149.28					
41.40	127.40							82.08	109.18	150.14					
43.40	128.20							82.27	109.84	151.00					
45.40	129.00							82.46	110.50						
47.50	130.06							82.65	111.20						
49.40	131.12							82.84	111.90						
51.50	132.18							83.03	112.60						
53.40	133.24							83.22	113.30						
55.20	134.30							83.41	114.00						
57.10	135.18							83.60	114.68						
58.80	136.06							83.80	115.36						
60.40	136.94							84.00	116.04						
62.00	137.82							84.20	116.72						
63.90	138.70							84.40	117.40						
65.70	139.60							84.60	117.92						
67.70	140.50							84.80	118.44						
69.30	141.40							85.00	118.96						

CONE PENETROMETER DATA CODE SHEET				WBS NO.		PROJECT TIP I.D.				ROUTE					
				45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4					
				COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER					
Yadkin				N. McLaren		J. Cliss/M. Thompson									
Station (location) Information				Date Run		Station (location) Information				Date Run					
SBL 00000 ISS				2/8/2018		SBL 00500 ISL				2/8/2018					
Type		Test Interval		Datum or reference surface				Type		Test Interval		Datum or reference surface			
DCP		Cumulative cm per blow		Top of ABC				DCP		Cumulative cm per blow		Top of ABC			
0.00		59.30	86.80	109.84				0.00		73.30					
2.00		59.80	87.10	110.22				0.85		74.80					
3.50		60.30	87.40	110.60				1.70		75.90					
4.70		60.80	87.70	110.92				2.10		77.30					
6.20		61.30	88.04	111.24				2.50		78.60					
8.20		61.72	88.38	111.56				2.90		79.90					
10.60		62.14	88.72	111.88				3.30		81.20					
11.40		62.56	89.06	112.20				3.70		82.60					
14.60		62.98	89.40	112.54				4.06		83.80					
16.60		63.40	89.74	112.88				4.42		85.00					
18.30		63.96	90.08	113.22				4.78		86.20					
20.00		64.52	90.42	113.56				5.14		87.30					
21.60		65.08	90.76	113.90				5.50		88.30					
23.10		65.64	91.10	114.20				6.00		89.40					
24.60		66.20	91.44	114.50				6.50		90.50					
25.20		66.64	91.78	114.80				7.00		91.60					
26.40		67.08	92.12	115.10				7.50		92.90					
27.40		67.52	92.46	115.40				8.00		93.90					
28.60		67.96	92.80	115.60				8.42		95.40					
29.80		68.40	93.20	115.80				8.84		96.50					
30.70		68.80	93.60	116.00				9.26		97.50					
31.54		69.20	94.00	116.20				9.68		98.70					
32.38		69.60	94.40	116.40				10.10		99.70					
33.22		70.00	94.80	116.68				10.54		100.60					
34.06		70.40	95.14	116.96				10.98		101.70					
34.90		70.78	95.48	117.24				11.42		102.50					
35.68		71.16	95.82	117.52				11.86		103.44					
36.46		71.54	96.16	117.80				12.30		104.38					
37.24		71.92	96.50	118.02				12.92		105.32					
38.02		72.30	96.84	118.24				13.54		106.26					
38.80		72.70	97.18	118.46				14.16		107.20					
39.46		73.10	97.52	118.68				14.78		107.92					
40.12		73.50	97.86	118.90				15.40		108.64					
40.78		73.90	98.20	119.20				16.30		109.36					
41.44		74.30	98.54	119.50				17.20		110.08					
42.10		74.78	98.88	119.80				18.50		110.80					
42.76		75.26	99.22	120.10				20.00		111.62					
43.42		75.74	99.56	120.40				21.90		112.44					
44.08		76.22	99.90	120.66				24.40		113.26					
44.74		76.70	100.38	120.92				27.50		114.08					
45.40		77.04	100.86	121.18				30.00		114.90					
45.98		77.38	101.34	121.44				32.50		115.72					
46.56		77.72	101.82	121.70				34.80		116.54					
47.14		78.06	102.30	122.06				37.00		117.36					
47.72		78.40	102.64	122.42				38.70		118.18					
48.30		78.80	102.98	122.78				40.40		119.00					
48.84		79.20	103.32	123.14				42.60		119.72					
49.38		79.60	103.66	123.50				44.30		120.44					
49.92		80.00	104.00					46.20		121.16					
50.46		80.40	104.32					47.80		121.88					
51.00		80.74	104.64					49.50		122.60					
51.54		81.08	104.96					51.30		123.24					
52.08		81.42	105.28					52.80		123.88					
52.62		81.76	105.60					54.40		124.52					
53.16		82.10	105.90					56.30		125.16					
53.70		82.52	106.20					57.80		125.80					
54.24		82.94	106.50					59.20							
54.78		83.36	106.80					60.80							
55.32		83.78	107.10					62.40							
55.86		84.20	107.42					63.60							
56.40		84.60	107.74					64.90							
56.88		85.00	108.06					66.30							
57.36		85.40	108.38					67.80							
57.84		85.80	108.70					69.20							
58.32		86.20	109.08					70.70							
58.80		86.50	109.46					71.80							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Station (location) Information							Yadkin	N. McLaren				J. Cliss/M. Thompson			
							Date Run	Station (location) Information				Date Run			
SBL 01000 OSS							2/7/2018	SBL 01500 ISS				2/7/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	66.60						0.00	54.60							
1.20	67.30						1.10	55.90							
1.70	68.00						1.90	57.30							
2.30	68.70						2.52	58.60							
2.90	69.40						3.14	60.00							
3.20	69.92						3.76	61.50							
3.50	70.44						4.38	63.10							
3.80	70.96						5.00	64.90							
4.10	71.48						5.42	66.60							
4.40	72.00						5.84	68.50							
4.82	73.90						6.26	70.20							
5.24	76.40						6.68	71.60							
5.66	79.00						7.10	73.10							
6.08	81.20						7.62	74.50							
6.50	83.40						8.14	75.70							
6.88	85.40						8.66	76.90							
7.26	86.00						9.18	78.10							
7.64	87.20						9.70	79.60							
8.02	88.20						10.40	81.00							
8.40	89.40						11.10	82.60							
9.16	90.60						11.80	83.90							
9.92	92.30						12.60	84.70							
10.68	92.90						13.40	85.40							
11.44	93.30						14.20	86.10							
12.20	94.20						15.20	87.20							
12.96	96.80						16.20	88.30							
13.72	100.80						17.30	89.40							
14.48	105.40						18.60	90.50							
15.24	110.40						19.80	91.60							
16.00	116.70						20.70	93.20							
16.92	123.70						21.30	94.90							
17.84	133.70						21.84	96.60							
18.76	135.40						22.38	98.10							
19.68	136.90						22.92	99.60							
20.60	137.90						23.46	100.90							
21.40	138.40						24.00	102.30							
22.20	139.30						24.86	103.40							
23.00	141.50						25.72	105.00							
23.80	142.40						26.58	106.50							
24.60	143.60						27.44	107.70							
25.74	144.90						28.30	108.60							
26.88	145.60						28.90	109.60							
28.02	147.00						29.70	110.40							
29.16	148.10						30.40	111.20							
30.30							31.00	111.70							
31.20							31.70	112.40							
32.40							32.40	113.10							
33.60							33.00	113.70							
34.60							33.60	114.40							
35.90							34.30	115.20							
37.10							35.00	116.00							
38.60							35.70	116.80							
40.40							36.50	117.58							
42.10							37.30	118.36							
43.90							38.00	119.14							
45.70							38.98	119.92							
47.60							39.96	120.70							
49.70							40.94	121.48							
51.80							41.92	122.26							
54.00							42.90	123.04							
55.30							44.40	123.82							
57.42							45.50	124.60							
59.54							47.90								
61.66							50.00								
63.78							51.80								
65.90							53.20								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
Yadkin							N. McLaren			J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information					Date Run	
SBL 02120 OSL							2/7/2018	SBL 02500 OSS					2/7/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	23.44						0.00	34.90	102.80					
1.40	23.44						1.60	36.20	103.90					
2.90	23.45						1.86	37.00	105.00					
5.80	23.45						2.12	38.30	105.60					
7.90	23.46						2.38	39.90	106.20					
9.70	23.46						2.64	41.60	106.80					
12.00	23.47						2.90	43.40	107.40					
13.70	23.47						3.08	44.90	108.00					
14.60	23.48						3.26	46.30	108.70					
15.30	23.48						3.44	47.60	109.40					
15.86	23.49						3.62	49.30	110.10					
16.42	23.49						3.80	50.90	110.80					
16.98	23.50						4.18	52.30	111.50					
17.54	23.50						4.56	53.80	112.26					
18.10							4.94	55.20	113.02					
18.40							5.32	56.60	113.78					
18.70							5.70	57.90	114.54					
19.00							6.12	59.10	115.30					
19.30							6.54	60.20	116.16					
19.60							6.96	61.30	117.02					
19.74							7.38	62.60	117.88					
19.88							7.80	63.60	118.74					
20.02							7.88	64.70	119.60					
20.16							7.96	65.90	120.40					
20.30							8.04	66.94	121.20					
20.54							8.12	67.98	122.00					
20.78							8.20	69.02	122.80					
21.02							8.30	70.06	123.60					
21.26							8.40	71.10						
21.50							8.50	71.98						
21.61							8.60	72.86						
21.72							8.70	73.74						
21.83							8.96	74.62						
21.94							9.22	75.50						
22.05							9.48	76.48						
22.16							9.74	77.46						
22.27							10.00	78.44						
22.38							10.44	79.42						
22.49							10.88	80.40						
22.60							11.32	81.10						
22.64							11.76	81.80						
22.68							12.20	82.50						
22.72							12.52	83.20						
22.76							12.84	83.90						
22.80							13.16	84.66						
22.84							13.48	85.42						
22.88							13.80	86.18						
22.92							14.36	86.94						
22.96							14.92	87.70						
23.00							15.48	88.52						
23.04							16.04	89.34						
23.08							16.60	90.16						
23.12							17.40	90.98						
23.16							18.30	91.80						
23.20							19.10	92.60						
23.24							19.90	93.40						
23.28							20.80	94.20						
23.32							21.70	95.00						
23.36							22.80	95.80						
23.40							24.10	96.60						
23.41							25.30	97.40						
23.41							27.00	98.20						
23.42							28.60	99.00						
23.42							30.40	99.80						
23.43							32.10	100.60						
23.43							33.50	101.70						

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Station (location) Information							Yadkin	N. McLaren				J. Cliss/M. Thompson			
							Date Run	Station (location) Information				Date Run			
SBL 03000 ISS							2/8/2018	SBL 03500 ISL				2/8/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	38.60						0.00	27.18	72.10	104.42					
1.40	40.20						1.00	27.39	72.80	104.84					
2.10	41.90						1.40	27.60	73.50	105.26					
2.52	43.30						1.80	28.11	74.20	105.68					
2.94	44.80						2.18	28.62	74.90	106.10					
3.36	46.60						2.56	29.13	75.60	106.56					
3.78	49.10						2.94	29.64	76.22	107.02					
4.20	52.40						3.32	30.15	76.84	107.48					
4.56	55.10						3.70	30.66	77.46	107.94					
4.92	57.40						4.04	31.17	78.08	108.40					
5.28	59.60						4.38	31.68	78.70	108.86					
5.64	61.50						4.72	32.19	79.32	109.32					
6.00	63.40						5.06	32.70	79.94	109.78					
6.20	66.10						5.40	33.50	80.56	110.24					
6.40	68.40						5.76	34.30	81.18	110.70					
6.60	70.80						6.12	35.10	81.80	111.32					
6.80	73.00						6.48	35.90	82.34	111.94					
7.00	75.10						6.84	36.90	82.88	112.56					
7.27	77.20						7.20	37.80	83.42	113.18					
7.54	79.10						7.54	38.60	83.96	113.80					
7.81	81.10						7.88	39.50	84.50	114.44					
8.08	83.03						8.22	40.40	85.02	115.08					
8.35	84.97						8.56	41.40	85.54	115.72					
8.62	86.90						8.90	42.40	86.06	116.36					
8.89	88.80						9.26	43.30	86.58	117.00					
9.16	90.90						9.62	44.10	87.10	117.78					
9.43	92.80						9.98	44.80	87.38	118.56					
9.70	94.70						10.34	45.52	87.66	119.34					
10.09	96.50						10.70	46.24	87.94	120.12					
10.48	98.20						11.20	46.96	88.22	120.90					
10.87	99.90						11.70	47.68	88.50	121.56					
11.26	101.90						12.20	48.40	88.82	122.22					
11.65	104.00						12.70	48.84	89.14	122.88					
12.04	106.10						13.20	49.28	89.46	123.54					
12.43	108.40						13.88	49.72	89.78	124.20					
12.82	110.50						14.56	50.16	90.10						
13.21	112.70						15.24	50.60	90.44						
13.60	114.60						15.92	51.10	90.78						
14.08	116.40						16.60	51.60	91.12						
14.56	118.40						17.50	52.10	91.46						
15.04	120.30						18.20	52.60	91.80						
15.52	122.30						18.90	53.10	92.24						
16.00	124.50						19.70	53.72	92.68						
16.48	126.40						20.80	54.34	93.12						
16.96	128.30						21.38	54.96	93.56						
17.44	130.00						21.96	55.58	94.00						
17.92	131.80						22.54	56.20	94.48						
18.40	133.90						23.12	57.02	94.96						
19.30	136.00						23.70	57.84	95.44						
20.10	138.20						23.92	58.66	95.92						
20.90	139.80						24.14	59.48	96.40						
21.60	141.50						24.36	60.30	96.84						
22.60	143.20						24.58	61.14	97.28						
23.50	145.00						24.80	61.98	97.72						
24.60	147.00						24.94	62.82	98.16						
25.60	148.10						25.08	63.66	98.60						
26.60	149.20						25.22	64.50	99.18						
28.00							25.36	65.28	99.76						
29.40							25.50	66.06	100.34						
30.40							25.71	66.84	100.92						
31.80							25.92	67.62	101.50						
32.70							26.13	68.40	102.00						
33.60							26.34	69.14	102.50						
34.90							26.55	69.88	103.00						
36.10							26.76	70.62	103.50						
37.30							26.97	71.36	104.00						

CONE PENETROMETER DATA CODE SHEET								WBS NO.		PROJECT TIP I.D.				ROUTE			
								45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
								COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
								Yadkin		N. McLaren				J. Cliss/M. Thompson			
Station (location) Information								Date Run		Station (location) Information				Date Run			
SBL 04000 OSS								2/8/2018		SBL 04500 ISS				2/8/2018			
Type		Test Interval			Datum or reference surface			Type		Test Interval			Datum or reference surface				
DCP		Cumulative cm per blow			Top of ABC			DCP		Cumulative cm per blow			Top of ABC				
0.00		72.10						0.00		72.20							
1.10		73.70						1.30		73.80							
1.62		75.30						2.10		75.30							
2.14		76.90						2.60		76.40							
2.66		78.40						3.10		77.90							
3.18		79.70						3.60		79.30							
3.70		81.10						4.10		80.50							
4.04		82.10						4.60		81.10							
4.38		83.10						5.06		81.90							
4.72		83.90						5.52		82.36							
5.06		85.10						5.98		82.82							
5.40		86.30						6.44		83.28							
5.70		87.40						6.90		83.74							
6.00		88.60						7.44		84.20							
6.30		89.90						7.98		84.48							
6.60		91.10						8.52		84.76							
6.90		92.50						9.06		85.04							
7.20		93.70						9.60		85.32							
7.50		94.90						10.36		85.60							
7.80		96.20						11.12		86.24							
8.10		97.30						11.88		86.88							
8.40		98.50						12.64		87.52							
8.84		99.80						13.40		88.16							
9.28		101.00						14.30		88.80							
9.72		102.10						15.30		90.40							
10.16		103.20						16.40		92.30							
10.60		104.20						17.70		94.10							
11.20		105.10						19.00		95.90							
11.70		105.82						20.40		97.80							
12.08		106.54						22.40		99.50							
12.46		107.26						23.40		101.20							
12.84		107.98						24.00		102.60							
13.22		108.70						25.20		104.80							
13.60		109.38						26.00		107.00							
14.36		110.06						26.60		109.20							
15.12		110.74						27.28		111.10							
15.88		111.42						27.96		113.10							
16.64		112.10						28.64		114.90							
17.40		112.86						29.32		116.80							
18.40		113.62						30.00		118.60							
19.40		114.38						30.98		120.40							
20.60		115.14						31.96		121.90							
21.90		115.90						32.94		123.50							
23.40		116.70						33.92		124.90							
25.10		117.50						34.90		126.40							
27.20		118.30						36.00		127.90							
29.40		119.10						37.00		129.20							
31.40		119.90						38.10		130.40							
33.40		120.60						39.10		131.50							
35.40		121.30						40.40									
37.20		122.00						42.10									
39.90		122.70						44.30									
43.20		123.40						46.80									
45.70		124.08						49.20									
47.70		124.76						51.10									
49.50		125.44						52.90									
51.50		126.12						54.60									
53.90		126.80						56.50									
56.10		127.44						58.10									
58.30		128.08						59.90									
60.50		128.72						61.60									
62.70		129.36						63.40									
64.90		130.00						65.20									
67.00								67.00									
68.70								68.60									
70.50								70.40									

CONE PENETROMETER DATA CODE SHEET								WBS NO.		PROJECT TIP I.D.				ROUTE			
								45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
								COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
								Yadkin		N. McLaren				J. Cliss/M. Thompson			
Station (location) Information								Date Run		Station (location) Information				Date Run			
SBL 05000 OSL								2/8/2018		SBL 05500 OSS				2/8/2018			
Type		Test Interval			Datum or reference surface			Type		Test Interval			Datum or reference surface				
DCP		Cumulative cm per blow			Top of ABC			DCP		Cumulative cm per blow			Top of ABC				
0.00		41.00	64.36	85.52	108.40			0.00		70.10							
1.20		41.60	64.80	85.95	108.57			0.80		72.80							
1.62		42.20	64.90	86.38	108.74			1.50		75.60							
2.04		42.72	65.00	86.81	108.91			1.76		78.00							
2.46		43.24	65.10	87.24	109.08			2.02		80.80							
2.88		43.76	65.20	87.67	109.25			2.28		83.60							
3.30		44.28	65.30	88.10	109.42			2.54		86.60							
3.58		44.80	65.40	88.41	109.59			2.80		89.20							
3.86		45.14	65.66	88.72	109.76			3.16		92.30							
4.14		45.48	65.92	89.03	109.93			3.52		95.20							
4.42		45.82	66.18	89.34	110.10			3.88		98.40							
4.70		46.16	66.44	89.65	110.27			4.24		101.90							
4.94		46.50	66.70	89.96	110.44			4.60		104.80							
5.18		46.74	67.06	90.27	110.61			4.92		107.20							
5.42		46.98	67.42	90.58	110.78			5.24		109.20							
5.66		47.22	67.78	90.89	110.95			5.56		111.30							
5.90		47.46	68.14	91.20	111.12			5.88		113.00							
6.32		47.70	68.50	91.47	111.29			6.20		114.90							
6.74		48.12	68.90	91.74	111.46			6.54		116.40							
7.16		48.54	69.30	92.01	111.63			6.88		118.00							
7.58		48.96	69.70	92.28	111.80			7.22		119.30							
8.00		49.38	70.10	92.55	112.00			7.56		120.60							
8.66		49.80	70.50	92.82	112.20			7.90		121.90							
9.32		50.12	70.86	93.09	112.40			8.28		123.00							
9.98		50.44	71.22	93.36	112.60			8.66		124.20							
10.64		50.76	71.58	93.63	112.80			9.04		125.30							
11.30		51.08	71.94	93.90	113.00			9.42		126.40							
12.20		51.40	72.30	94.26	113.20			9.80		127.50							
12.90		51.92	72.66	94.62	113.40			10.30		128.50							
13.60		52.44	73.02	94.98	113.60			10.80		129.40							
14.00		52.96	73.38	95.34	113.80			11.30		130.20							
14.70		53.48	73.74	95.70	113.92			11.80		131.20							
15.20		54.00	74.10	96.06	114.03			12.30		132.00							
15.80		54.26	74.42	96.42	114.15			12.86		132.80							
16.22		54.52	74.74	96.78	114.26			13.42		133.60							
16.64		54.78	75.06	97.14	114.38			13.98		134.40							
17.06		55.04	75.38	97.50	114.49			14.54		135.10							
17.48		55.30	75.70	97.96	114.61			15.10		135.80							
17.90		55.54	76.14	98.42	114.72			15.84		136.50							
18.54		55.78	76.58	98.88	114.84			16.58		137.20							
19.18		56.02	77.02	99.34	114.95			17.32		137.90							
19.82		56.26	77.46	99.80	115.07			18.06		138.60							
20.46		56.50	77.90	100.26	115.18			18.80		139.24							
21.10		56.76	78.30	100.72	115.30			19.40		139.88							
22.00		57.02	78.70	101.18	115.41			20.30		140.52							
22.90		57.28	79.10	101.64	115.53			21.40		141.16							
23.80		57.54	79.50	102.10	115.64			22.40		141.80							
24.70		57.80	79.90	102.49	115.76			23.20		142.42							
25.60		58.08	80.28	102.88	115.87			24.20		143.04							
27.10		58.36	80.66	103.27	115.99			25.40		143.66							
29.10		58.64	81.04	103.66	116.10			26.90		144.28							
30.90		58.92	81.42	104.05				28.60		144.90							
31.90		59.20	81.80	104.44				30.10									
32.60		59.48	82.00	104.83				31.50									
33.40		59.76	82.20	105.22				33.30									
34.10		60.04	82.40	105.61				35.10									
34.80		60.32	82.60	106.00				37.50									
35.40		60.60	82.80	106.24				40.20									
36.00		61.00	83.00	106.48				43.60									
36.64		61.40	83.20	106.72				47.60									
37.28		61.80	83.40	106.96				52.00									
37.92		62.20	83.60	107.20				55.20									
38.56		62.60	83.80	107.44				57.70									
39.20		63.04	84.23	107.68				60.80									
39.80		63.48	84.66	107.92				63.90									
40.40		63.92	85.09	108.16				66.80									

CONE PENETROMETER DATA CODE SHEET								WBS NO.	PROJECT TIP I.D.	ROUTE			
								45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4			
								COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER			
Station (location) Information								Yadkin	N. McLaren	J. Cliss/M. Thompson			
SBL_06000_ISS								Date Run	Station (location) Information				Date Run
								2/8/2018	SBL_06500_ISL				2/8/2018
Type	Test Interval		Datum or reference surface					Type	Test Interval		Datum or reference surface		
DCP	Cumulative cm per blow		Top of ABC					DCP	Cumulative cm per blow		Top of ABC		
0.00	86.90							0.00	74.10	128.20			
1.60	88.10							1.40	75.10				
2.40	89.40							1.90	76.10				
2.90	90.70							2.50	77.10				
3.26	91.90							3.08	78.00				
3.62	93.10							3.66	78.90				
3.98	94.20							4.24	79.90				
4.34	95.40							4.82	80.84				
4.70	96.40							5.40	81.78				
5.08	97.60							6.06	82.72				
5.46	98.70							6.72	83.66				
5.84	99.80							7.38	84.60				
6.22	100.80							8.04	85.62				
6.60	101.78							8.70	86.64				
7.16	102.76							9.52	87.66				
7.72	103.74							10.34	88.68				
8.28	104.72							11.16	89.70				
8.84	105.70							11.98	90.64				
9.40	106.66							12.80	91.58				
10.08	107.62							13.60	92.52				
10.76	108.58							14.40	93.46				
11.44	109.54							15.20	94.40				
12.12	110.50							16.00	95.30				
12.80	111.38							16.80	96.20				
13.68	112.26							17.90	97.10				
14.56	113.14							19.10	98.00				
15.44	114.02							22.30	98.90				
16.32	114.90							24.00	99.76				
17.20	115.76							26.80	100.62				
18.40	116.62							28.80	101.48				
19.90	117.48							30.60	102.34				
21.80	118.34							32.20	103.20				
24.40	119.20							33.80	104.04				
27.50	120.04							35.10	104.88				
30.20	120.88							36.70	105.72				
32.90	121.72							38.20	106.56				
35.40	122.56							39.90	107.40				
36.80	123.40							41.40	108.22				
37.60	124.14							43.00	109.04				
40.60	124.88							44.40	109.86				
43.00	125.62							45.90	110.68				
45.20	126.36							47.20	111.50				
47.50	127.10							48.60	112.28				
49.60	127.68							49.70	113.06				
51.80	128.26							50.60	113.84				
53.80	128.84							51.50	114.62				
55.50	129.42							52.60	115.40				
57.20	130.00							53.56	116.14				
58.90								54.52	116.88				
60.60								55.48	117.62				
62.30								56.44	118.36				
63.80								57.40	119.10				
65.60								58.60	119.82				
67.30								59.90	120.54				
68.90								61.10	121.26				
70.50								62.40	121.98				
72.10								63.50	122.70				
73.60								64.70	123.36				
75.00								65.80	124.02				
76.50								66.90	124.68				
77.90								67.90	125.34				
79.20								68.90	126.00				
80.50								70.00	126.44				
81.80								71.00	126.88				
83.10								72.10	127.32				
84.40								73.10	127.76				

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE				
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4				
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER				
Station (location) Information							Yadkin	N. McLaren	J. Cliss/M. Thompson				
							Date Run	Station (location) Information					Date Run
SBL 07000 OSS							2/8/2018	SBL 07500 ISS					2/8/2018
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface		
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC		
0.00	52.24	98.40					0.00	59.40	100.74				
0.80	52.96	99.46					1.20	60.30	101.18				
1.40	53.68	100.52					1.30	61.30	101.62				
1.78	54.40	101.58					1.80	62.30	102.06				
2.16	55.00	102.64					2.30	63.10	102.50				
2.54	55.60	103.70					2.78	64.00	103.60				
2.92	56.20	105.10					3.26	64.80	103.93				
3.30	56.80	106.60					3.74	65.60	104.26				
3.72	57.40	108.10					4.22	66.40	104.59				
4.14	58.04	109.80					4.70	67.20	104.92				
4.56	58.68	111.20					5.18	68.00	105.25				
4.98	59.32	112.40					5.66	68.72	105.58				
5.40	59.96	113.30					6.14	69.44	105.91				
5.74	60.60	114.50					6.62	70.16	106.24				
6.08	61.32	115.80					7.10	70.88	106.57				
6.42	62.04	116.80					7.52	71.60	106.90				
6.76	62.76	117.90					7.94	72.22	107.30				
7.10	63.48	119.00					8.36	72.84	107.70				
7.44	64.20	120.10					8.78	73.46	108.10				
7.78	64.88	121.20					9.20	74.08	108.50				
8.12	65.56	122.10					9.68	74.70	108.90				
8.46	66.24	122.80					10.16	75.30	109.30				
8.80	66.92	123.40					10.64	75.90	109.70				
9.06	67.60	124.00					11.12	76.50	110.10				
9.32	68.26	124.60					11.60	77.10	110.50				
9.58	68.92	125.20					12.10	77.70	110.90				
9.84	69.58	125.80					12.60	78.28	111.33				
10.10	70.24	126.28					13.10	78.86	111.76				
10.36	70.90	126.76					13.60	79.44	112.19				
10.62	71.60	127.24					14.10	80.02	112.62				
10.88	72.30	127.72					14.70	80.60	113.05				
11.14	73.00	128.20					15.30	81.18	113.48				
11.40	73.70						15.90	81.76	113.91				
11.76	74.40						16.50	82.34	114.34				
12.12	75.18						17.10	82.92	114.77				
12.48	75.96						18.00	83.50	115.20				
12.84	76.74						18.90	84.20	115.63				
13.20	77.52						20.00	84.90	116.06				
13.84	78.30						21.00	85.60	116.49				
14.48	79.20						22.20	86.30	116.92				
15.12	79.90						23.60	87.00	117.35				
15.76	80.60						25.90	87.62	117.78				
16.40	81.30						26.40	88.24	118.21				
17.30	82.10						27.80	88.86	118.64				
18.80	82.80						29.70	89.48	119.07				
20.40	83.50						31.00	90.10	119.50				
22.20	84.10						32.30	90.66	119.96				
24.60	84.72						34.10	91.22	120.42				
27.20	85.34						35.60	91.78	120.88				
29.50	85.96						37.60	92.34	121.34				
31.40	86.58						39.30	92.90	121.80				
32.90	87.20						41.10	93.42	122.26				
34.40	87.84						42.70	93.94	122.72				
35.90	88.48						44.40	94.46	123.18				
37.50	89.12						47.00	94.98	123.64				
39.20	89.76						48.70	95.50	124.10				
40.90	90.40						49.80	95.98	124.68				
42.50	91.16						50.10	96.46	125.26				
44.00	91.92						51.60	96.94	125.84				
45.40	92.68						52.50	97.42	126.42				
46.60	93.44						53.30	97.90	127.00				
47.90	94.20						54.30	98.38	127.30				
48.90	95.04						55.20	98.86	127.60				
49.90	95.88						56.20	99.34	127.90				
50.80	96.72						57.40	99.82	128.20				
51.52	97.56						58.40	100.30	128.50				

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
							Yadkin	N. McLaren			J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run		
SBL 08000 OSL							2/8/2018	SBL 08550 OSS				2/8/2018		
Type		Test Interval		Datum or reference surface			Type	Test Interval		Datum or reference surface				
DCP	Cumulative cm per blow		Top of ABC			DCP	Cumulative cm per blow		Top of ABC					
0.00	75.00						0.00	55.90	93.58					
1.10	76.70						0.90	56.70	94.10					
1.50	78.70						1.32	57.50	94.64					
1.92	80.90						1.74	58.16	95.18					
2.34	83.20						2.16	58.82	95.72					
2.76	85.80						2.58	59.48	96.26					
3.18	88.80						3.00	60.14	96.80					
3.60	91.90						3.48	60.80	97.34					
4.10	94.60						3.96	61.46	97.88					
4.60	96.40						4.44	62.12	98.42					
5.10	97.30						4.92	62.78	98.96					
5.60	97.80						5.40	63.44	99.50					
6.10	98.32						5.80	64.10	100.02					
6.60	98.84						6.20	64.70	100.54					
7.10	99.36						6.60	65.30	101.06					
7.60	99.88						7.00	65.90	101.58					
8.10	100.40						7.40	66.50	102.10					
8.60	101.06						7.92	67.10	102.62					
9.14	101.72						8.44	67.68	103.14					
9.68	102.38						8.96	68.26	103.66					
10.22	103.04						9.48	68.84	104.18					
10.76	103.70						10.00	69.42	104.70					
11.30	104.60						10.80	70.00	105.14					
12.50	105.50						11.60	70.56	105.58					
13.70	106.40						12.20	71.12	106.02					
14.90	107.30						12.80	71.68	106.46					
15.90	108.20						13.40	72.24	106.90					
17.10	109.40						14.20	72.80	107.42					
18.10	110.50						14.90	73.36	107.94					
19.10	111.70						15.40	73.92	108.46					
19.80	112.80						16.10	74.48	108.98					
20.60	113.80						16.70	75.04	109.50					
21.80	114.80						17.40	75.60	110.02					
22.90	115.80						18.20	76.16	110.54					
23.80	116.90						19.20	76.72	111.06					
24.90	117.90						20.50	77.28	111.58					
26.40	119.00						22.00	77.84	112.10					
28.00	120.10						23.80	78.40	112.58					
29.80	121.50						24.40	78.92	113.06					
31.40	123.00						26.90	79.44	113.54					
33.20	124.50						28.50	79.96	114.02					
35.10	126.00						30.20	80.48	114.50					
37.00	127.60						31.80	81.00	115.02					
38.10	129.00						33.20	81.52	115.54					
39.60	130.50						34.60	82.04	116.06					
41.10	132.10						35.90	82.56	116.58					
42.80	133.60						37.10	83.08	117.10					
44.40	135.20						38.20	83.60	117.56					
46.00	137.00						39.30	84.12	118.02					
47.50	138.70						40.40	84.64	118.48					
49.30	140.60						41.60	85.16	118.94					
51.00	142.70						42.70	85.68	119.40					
53.00	144.60						43.70	86.20	119.94					
54.90							44.90	86.74	120.48					
56.60							45.80	87.28	121.02					
58.20							46.80	87.82	121.56					
59.60							47.80	88.36	122.10					
61.10							48.60	88.90	122.72					
62.60							49.50	89.42	123.34					
64.10							50.30	89.94	123.96					
65.60							51.10	90.46	124.58					
67.10							51.90	90.98	125.20					
68.50							52.70	91.50						
70.10							53.50	92.02						
71.80							54.30	92.54						
73.40							55.10	93.06						

CONE PENETROMETER DATA CODE SHEET						WBS NO.	PROJECT TIP I.D.				ROUTE			
						45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
						COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
						Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information						Date Run		Station (location) Information				Date Run		
SBL 09000 ISS						2/8/2018		SBL 09500 ISL				2/8/2018		
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	28.90	79.24	106.44				0.00	72.00						
0.60	29.16	79.78	106.51				1.40	72.92						
1.00	29.42	80.32	106.58				2.10	73.84						
1.26	29.68	80.86	106.65				2.60	74.76						
1.52	29.94	81.40	106.72				2.96	75.68						
1.78	30.20	82.60	106.79				3.32	76.60						
2.04	30.52	83.50	106.86				3.68	77.90						
2.30	30.84	84.30	106.93				4.04	79.20						
2.56	31.16	85.00	107.00				4.40	80.90						
2.82	31.48	85.70					4.76	83.40						
3.08	31.80	86.50					5.12	86.30						
3.34	32.14	87.30					5.48	89.10						
3.60	32.48	88.10					5.84	92.00						
3.88	32.82	89.00					6.20	94.70						
4.16	33.16	89.70					6.70	97.00						
4.44	33.50	90.30					7.20	99.10						
4.72	33.82	91.10					7.70	101.20						
5.00	34.14	91.80					8.20	103.30						
5.40	34.46	92.40					8.70	105.40						
5.80	34.78	92.90					9.18	107.50						
6.20	35.10	93.26					9.66	109.60						
6.60	35.40	93.62					10.14	111.90						
7.00	35.70	93.98					10.62	113.90						
7.34	36.00	94.34					11.10	116.00						
7.68	36.30	94.70					11.70	118.20						
8.02	36.60	95.06					12.30	120.30						
8.36	36.90	95.42					12.90	122.30						
8.70	37.20	95.78					13.50	124.00						
9.24	37.50	96.14					14.10	125.70						
9.78	37.80	96.50					14.70	127.30						
10.32	38.10	96.86					15.40	128.50						
10.86	38.40	97.22					16.00	129.90						
11.40	38.70	97.58					16.70	131.40						
12.10	39.00	97.94					17.60	132.70						
12.90	39.30	98.30					18.40	134.10						
13.60	39.60	98.84					19.10	135.50						
14.30	40.06	99.38					19.90	136.60						
15.10	40.52	99.92					20.60	137.60						
15.80	40.98	100.46					21.60	138.80						
16.70	41.44	101.00					22.30	139.80						
17.60	41.90	101.18					23.40	140.60						
18.30	44.80	101.36					24.40	142.00						
19.10	47.90	101.54					25.60	143.20						
19.80	51.10	101.72					26.90	144.20						
20.70	54.00	101.90					28.40	145.30						
21.30	57.50	102.20					30.10	146.40						
21.80	60.90	102.50					32.10							
22.60	64.20	102.80					34.10							
23.40	67.30	103.10					36.30							
24.20	70.00	103.40					38.50							
25.00	72.10	103.64					40.60							
25.80	73.60	103.88					42.60							
25.94	74.70	104.12					44.50							
26.08	75.80	104.36					46.10							
26.22	76.40	104.60					47.90							
26.36	76.60	104.78					49.70							
26.50	76.81	104.96					52.00							
26.72	77.02	105.14					54.40							
26.94	77.23	105.32					56.80							
27.16	77.44	105.50					58.70							
27.38	77.65	105.66					60.60							
27.60	77.86	105.82					63.20							
27.86	78.07	105.98					65.90							
28.12	78.28	106.14					68.70							
28.38	78.49	106.30					70.50							
28.64	78.70	106.37					71.30							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
SBL 10000 OSS							28/2018	SBL 10500 ISS						2/8/2018	
Type		Test Interval		Datum or reference surface			Type	Test Interval		Datum or reference surface					
DCP	Cumulative cm per blow		Top of ABC				DCP	Cumulative cm per blow		Top of ABC					
0.00	47.90	95.50					0.00	35.10	55.74	78.26	115.00	136.98			
1.10	48.50	97.50					1.20	35.44	56.18	78.42	115.90	137.20			
1.40	49.00	99.60					1.70	35.78	56.62	78.58	116.60				
1.90	49.50	100.70					2.20	36.12	57.06	78.74	117.40				
2.20	49.98	102.50					2.64	36.46	57.50	78.90	117.90				
2.50	50.46	104.00					3.08	36.80	57.70	79.90	119.10				
2.80	50.94	105.50					3.52	37.10	58.18	80.90	119.80				
3.22	51.42	106.70					3.96	37.40	58.66	81.90	120.40				
3.64	51.90	108.00					4.40	37.70	59.14	83.10	120.90				
4.06	52.32	109.00					4.80	38.00	59.62	84.10	121.60				
4.48	52.74	110.00					5.20	38.30	60.10	85.10	122.10				
4.90	53.16	110.90					5.60	38.46	60.62	86.10	122.80				
5.22	53.58	111.90					6.00	38.62	61.14	87.10	123.40				
5.54	54.00	112.60					6.40	38.78	61.66	87.80	124.00				
5.86	54.38	113.70					6.78	38.94	62.18	88.40	124.60				
6.18	54.76	114.40					7.16	39.10	62.70	88.90	125.20				
6.50	55.14	115.10					7.54	39.24	63.18	89.40	125.70				
6.78	55.52	115.90					7.92	39.38	63.66	90.70	126.00				
7.06	55.90	116.80					8.30	39.52	64.14	91.80	126.24				
7.34	56.28	117.30					8.66	39.66	64.62	92.07	126.48				
7.62	56.66	118.10					9.02	39.80	65.10	92.34	126.72				
7.90	57.04	118.80					9.38	39.96	65.56	92.61	126.96				
8.46	57.42	119.30					9.74	40.12	66.02	92.88	127.20				
9.02	57.80	119.90					10.10	40.28	66.48	93.15	127.40				
9.58	58.18	120.90					10.52	40.44	66.94	93.42	127.60				
10.14	58.56	121.40					10.94	40.60	67.40	93.69	127.80				
10.70	58.94	122.00					11.36	40.76	67.82	93.96	128.00				
11.46	59.32	122.60					11.78	40.92	68.24	94.23	128.20				
12.22	59.70	123.20					12.20	41.08	68.66	94.50	128.48				
12.98	60.14	123.80					12.54	41.24	69.08	94.80	128.76				
13.74	60.58	124.40					12.88	41.40	69.50	95.10	129.04				
14.50	61.02	125.00					13.22	41.64	69.84	95.40	129.32				
15.70	61.46	125.60					13.56	41.88	70.18	95.70	129.60				
16.70	61.90	125.98					13.90	42.12	70.52	96.00	129.86				
17.90	62.50	126.36					14.28	42.36	70.86	96.30	130.12				
19.30	63.10	126.74					14.66	42.60	71.20	96.60	130.38				
21.00	63.70	127.12					15.04	42.92	71.48	96.90	130.64				
22.90	64.30	127.50					15.42	43.24	71.76	97.20	130.90				
24.40	64.90	128.06					15.80	43.56	72.04	97.50	131.08				
25.70	65.90	128.62					16.28	43.88	72.32	98.05	131.26				
26.90	66.90	129.18					16.76	44.20	72.60	98.60	131.44				
27.80	67.90	129.74					17.24	44.58	72.84	99.15	131.62				
28.60	68.90	130.30					17.72	44.96	73.08	99.70	131.80				
29.20	69.90	130.82					18.20	45.34	73.32	100.25	132.00				
29.80	70.84	131.34					18.68	45.72	73.56	100.80	132.20				
30.40	71.78	131.86					19.16	46.10	73.80	101.35	132.40				
31.20	72.72	132.38					19.64	46.52	74.02	101.90	132.60				
31.80	73.66	132.90					20.12	46.94	74.24	102.40	132.80				
32.60	74.60	133.14					20.60	47.36	74.46	102.90	133.04				
33.20	75.20	133.38					21.30	47.78	74.68	103.40	133.28				
34.00	75.80	133.62					21.80	48.20	74.90	103.90	133.52				
35.10	76.40	133.86					22.50	48.66	75.12	104.40	133.76				
36.60	77.00	134.10					23.30	49.12	75.34	104.96	134.00				
37.90	77.60						24.00	49.58	75.56	105.52	134.22				
39.10	79.10						24.80	50.04	75.78	106.08	134.44				
40.20	80.70						25.60	50.50	76.00	106.64	134.66				
41.10	82.50						26.10	50.96	76.22	107.20	134.88				
42.10	83.90						26.80	51.42	76.44	107.90	135.10				
42.90	85.20						27.50	51.88	76.66	108.60	135.30				
43.50	86.60						28.20	52.34	76.88	109.30	135.50				
44.20	87.60						29.10	52.80	77.10	110.00	135.70				
44.80	88.80						30.10	53.30	77.30	110.70	135.90				
45.50	90.10						31.00	53.80	77.50	111.56	136.10				
46.10	91.30						31.90	54.30	77.70	112.42	136.32				
46.80	92.50						32.90	54.80	77.90	113.28	136.54				
47.40	93.70						33.90	55.30	78.10	114.14	136.76				

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
SBL 11000 OSL							2/8/2018	SBL 11500 OSS						2/8/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	46.40	125.20					0.00	74.10							
1.30	47.40	126.20					0.90	76.90							
2.10	48.60	127.50					1.40	78.30							
2.60	49.90	128.40					2.00	79.50							
2.90	51.00	129.20					2.42	80.80							
3.20	52.10	130.30					2.84	82.00							
3.50	53.20	131.90					3.26	83.20							
3.80	54.70	134.10					3.68	84.40							
4.10	56.20	135.40					4.10	85.60							
4.42	57.60	136.30					4.54	86.60							
4.74	59.00						4.98	87.80							
5.06	60.20						5.42	88.90							
5.38	61.60						5.86	90.00							
5.70	62.80						6.30	91.10							
6.04	63.90						6.88	92.20							
6.38	65.00						7.46	93.30							
6.72	66.10						8.04	94.40							
7.06	67.20						8.62	95.50							
7.40	68.40						9.20	96.60							
7.62	69.60						9.92	97.70							
7.84	70.70						10.64	98.80							
8.06	72.00						11.36	99.90							
8.28	73.20						12.08	101.00							
8.50	74.40						12.80	102.10							
9.08	75.40						13.70	103.20							
9.66	76.40						14.60	104.20							
10.24	77.40						15.50	105.20							
10.82	78.70						16.40	106.20							
11.40	79.80						17.30	107.10							
12.10	81.00						18.40	108.20							
12.80	82.50						19.40	109.20							
13.50	83.40						21.50	110.20							
14.20	84.30						23.80	111.30							
14.90	86.00						25.90	112.10							
15.80	87.10						27.80	113.10							
16.20	88.70						29.90	114.02							
17.00	90.20						32.20	114.94							
17.60	91.40						34.00	115.86							
17.90	92.80						35.60	116.78							
18.60	94.10						37.10	117.70							
18.90	95.40						38.40	118.54							
19.50	96.50						39.90	119.38							
20.20	97.80						41.40	120.22							
20.90	99.00						43.10	121.06							
21.40	100.10						44.70	121.90							
22.30	101.20						46.30	122.70							
23.40	102.60						47.80	123.50							
24.60	103.80						49.30	124.30							
26.10	104.70						50.50	125.10							
27.60	106.00						51.90	125.90							
29.10	106.70						53.30	126.36							
30.50	108.00						54.50	126.82							
31.40	109.10						56.30	127.28							
32.40	109.90						57.60	127.74							
33.40	111.40						58.90	128.20							
34.40	112.50						60.30	128.98							
35.40	114.00						61.60	129.76							
36.50	115.10						62.80	130.54							
37.60	116.60						63.90	131.32							
39.00	118.20						65.00	132.10							
40.30	119.40						66.20	132.68							
41.40	120.40						67.40	133.26							
42.50	121.50						68.70	133.84							
43.50	122.70						69.90	134.42							
44.30	123.40						70.30	135.00							
45.50	124.20						72.70								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run	
SBL 12000 ISS							2/8/2018	SBL 12500 ISL						2/8/2018	
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC				DCP	Cumulative cm per blow			Top of ABC			
0.00	38.92	80.16						0.00	97.26						
1.40	39.50	80.35						1.30	97.62						
2.10	40.50	80.54						1.90	97.98						
2.64	41.70	80.73						4.90	98.34						
3.18	43.00	80.92						7.70	98.70						
3.72	44.50	81.11						8.40	98.96						
4.26	46.50	81.30						8.70	99.22						
4.80	48.40	81.65						9.50	99.48						
5.30	50.30	82.00						10.40	99.74						
5.70	52.00	82.35						11.20	100.00						
6.06	53.60	82.70						11.90	100.09						
6.42	54.50	83.05						12.80	100.18						
6.78	55.00	83.40						13.80	100.27						
7.14	55.40	83.75						15.10	100.36						
7.50	55.78	84.10						16.40	100.45						
7.96	56.16	84.45						17.40	100.54						
8.42	56.54	84.80						18.50	100.63						
8.88	56.92	84.90						19.60	100.72						
9.34	57.30	85.00						20.90	100.81						
9.80	58.04	85.10						22.30	100.90						
10.22	58.78	85.20						23.70	100.91						
10.64	59.52	85.30						25.50	100.92						
11.06	60.26	85.40						27.50	100.93						
11.48	61.00	85.50						29.50	100.94						
11.90	61.80	85.60						31.20	100.95						
12.42	62.60	85.70						33.40	100.96						
12.94	63.40	85.80						35.90	100.97						
13.46	64.20							38.30	100.98						
13.98	65.00							41.00	100.99						
14.50	66.00							43.60	101.00						
14.76	66.90							46.40	101.01						
15.02	67.90							49.00	101.02						
15.28	68.70							51.60	101.03						
15.54	69.70							54.20	101.04						
15.80	70.80							56.90	101.05						
16.60	71.70							59.60	101.06						
17.60	72.80							62.20	101.07						
18.50	73.90							64.40	101.08						
19.40	74.90							65.60	101.09						
20.40	75.80							66.70	101.10						
21.40	76.50							68.00	101.11						
22.40	76.90							69.40	101.12						
23.40	77.20							70.90	101.13						
24.40	77.32							72.90	101.14						
25.30	77.44							75.30	101.15						
26.00	77.56							77.60	101.16						
26.50	77.68							79.80	101.17						
27.00	77.80							82.20	101.18						
27.52	77.92							84.40	101.19						
28.04	78.04							85.60	101.20						
28.56	78.16							87.20	101.21						
29.08	78.28							88.20	101.22						
29.60	78.40							89.40	101.23						
30.40	78.50							90.40	101.24						
31.00	78.60							91.40	101.25						
31.90	78.70							92.00	101.26						
32.80	78.80							92.54	101.27						
33.80	78.90							93.08	101.28						
34.40	79.00							93.62	101.29						
34.80	79.10							94.16	101.30						
35.50	79.20							94.70							
36.00	79.30							95.14							
36.60	79.40							95.58							
37.18	79.59							96.02							
37.76	79.78							96.46							
38.34	79.97							96.90							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE						
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER						
Station (location) Information							Yadkin	N. McLaren				J. Cliss/M. Thompson						
							Date Run	Station (location) Information				Date Run						
SBL 13000 OSS							2/8/2018				SBL 13500 ISS				2/8/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface							
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC							
0.00	78.20						0.00	56.30	150.90									
1.10	80.80						1.10	58.10	152.40									
1.40	83.40						1.90	60.10	153.80									
1.80	86.10						2.60	62.30	155.10									
2.20	88.90						3.40	63.40	156.40									
2.60	91.50						3.90	66.40	158.00									
3.00	94.20						4.30	68.60	159.30									
3.40	96.60						4.70	70.50	160.80									
3.68	98.40						5.10	72.30	162.50									
3.96	99.30						5.50	73.90	164.30									
4.24	100.95						5.90	75.60										
4.52	102.60						6.30	77.30										
4.80	104.10						6.70	79.10										
5.16	105.60						7.10	81.00										
5.52	107.10						7.50	82.80										
5.88	108.50						7.90	84.30										
6.24	109.80						8.26	85.70										
6.60	111.10						8.62	86.90										
7.00	112.60						8.98	87.90										
7.40	113.90						9.34	88.90										
7.80	115.10						9.70	89.90										
8.20	116.30						10.18	90.90										
8.60	117.50						10.66	91.80										
8.86	118.60						11.14	92.80										
9.12	119.60						11.62	93.90										
9.38	120.80						12.10	94.90										
9.64	121.80						12.76	96.10										
9.90	122.80						13.42	97.20										
10.40	123.70						14.08	98.30										
11.00	124.80						14.74	99.60										
11.40	125.60						15.40	100.90										
11.90	126.60						16.10	102.10										
12.40	127.22						16.90	103.50										
13.20	127.84						17.80	104.90										
13.88	128.46						18.60	106.30										
14.56	129.08						19.50	107.60										
15.24	129.70						20.40	109.00										
15.92	130.32						21.50	110.30										
16.60	130.94						22.40	111.70										
17.50	131.56						23.40	112.90										
18.40	132.18						24.30	114.20										
19.50	132.80						25.20	115.50										
20.80	133.90						25.90	116.70										
22.10	135.00						26.60	118.00										
24.00	136.10						27.40	119.30										
26.00	137.20						28.20	120.50										
27.80	138.40						29.20	121.60										
29.50	139.50						29.90	123.10										
31.30	140.50						30.70	124.30										
33.30	141.60						31.70	125.50										
35.90	142.70						32.70	126.80										
38.70	143.80						33.90	128.00										
41.10	144.80						35.50	129.20										
43.80	145.70						37.30	130.70										
46.50	146.70						39.40	132.10										
49.50							41.20	133.50										
52.30							43.00	134.80										
55.10							44.90	136.10										
56.17							46.90	137.50										
57.23							48.50	138.90										
58.30							49.60	140.30										
62.00							50.50	141.80										
65.60							51.50	143.20										
69.10							52.40	144.70										
72.40							53.50	146.40										
75.30							54.90	148.00										

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.	ROUTE						
							45905.1.1	I-5912	I-77 from US 21 (Exit 79) to Mile Marker 83.4						
							COUNTY	FIELD PROFESSIONAL	DRILLER/HELPER						
							Yadkin	N. McLaren	J. Cliss/M. Thompson						
Station (location) Information							Date Run	Station (location) Information							Date Run
SBL 14000 OSL							2/8/2018	SBL 14500 OSS							2/8/2018
Type	Test Interval		Datum or reference surface					Type	Test Interval		Datum or reference surface				
DCP	Cumulative cm per blow		Top of ABC					DCP	Cumulative cm per blow		Top of ABC				
0.00	88.70	104.95						0.00	100.00						
0.40	89.04	104.97						1.40	101.00						
1.10	89.38	105.00						2.10	102.50						
1.60	89.72	105.02						2.60	104.00						
2.20	90.06	105.04						3.20	105.40						
2.72	90.40	105.07						3.90	106.70						
3.24	90.90	105.09						4.60	108.10						
3.76	91.40	105.11						5.40	108.90						
4.28	91.90	105.14						6.00	110.00						
4.80	92.40	105.16						6.60	110.90						
5.56	92.90	105.19						7.20	111.90						
6.32	93.02	105.21						7.80	112.80						
7.08	93.14	105.23						8.40	113.70						
7.84	93.26	105.26						8.80	114.80						
8.60	93.38	105.28						9.50	115.90						
9.40	93.50	105.30						10.38	117.00						
10.10	93.90	105.33						11.26	118.50						
11.10	94.30	105.35						12.14	119.30						
11.80	94.70	105.38						13.02	120.50						
12.60	95.10	105.40						13.90	121.70						
13.50	95.50							14.60	123.00						
14.80	95.90							15.30	124.00						
16.10	96.30							16.00	124.90						
17.10	96.70							16.70	126.20						
18.40	97.10							17.40	126.90						
20.20	97.50							18.80	128.90						
21.90	98.07							20.10	129.80						
23.80	98.63							21.60	130.80						
25.40	99.20							23.00	131.80						
27.00	99.77							24.10	132.50						
28.80	100.33							25.50	133.40						
30.60	100.90							26.50	134.10						
32.20	101.47							27.90	134.80						
33.90	102.03							29.10	135.40						
35.50	102.60							30.60	136.20						
37.50	102.80							32.20	136.90						
39.60	103.00							33.60	137.80						
42.00	103.20							35.10							
44.40	103.40							36.40							
47.00	103.60							37.70							
49.50	103.66							38.90							
52.00	103.72							40.20							
54.40	103.78							41.50							
57.20	103.84							43.00							
59.80	103.90							44.70							
62.80	103.95							46.80							
65.40	104.00							49.30							
68.30	104.05							51.90							
72.00	104.10							54.30							
75.00	104.15							56.90							
77.50	104.20							59.60							
79.20	104.25							62.60							
80.40	104.30							65.90							
81.50	104.35							69.00							
82.50	104.40							72.80							
83.40	104.45							74.40							
84.00	104.50							77.00							
84.44	104.55							79.50							
84.88	104.60							82.40							
85.32	104.65							85.00							
85.76	104.70							87.60							
86.20	104.75							89.90							
86.70	104.80							92.40							
87.20	104.85							94.30							
87.70	104.90							96.70							
88.20	104.92							98.50							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information							Date Run
SBL 15000 ISS							2/8/2018	SBL 15500 ISL							2/8/2018
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	121.00						0.00	94.00	123.82						
0.50	121.90						1.40	95.30	124.60						
1.10	122.90						2.60	96.10	125.50						
1.40	124.00						3.40	96.70	126.30						
3.40	125.20						3.90	97.00	127.10						
5.30	126.20						4.90	97.30	128.10						
6.80	127.30						5.60	97.60	128.90						
8.10	128.30						6.50	97.90	129.90						
10.00	129.30						7.20	98.20	130.60						
11.80	130.40						8.00	98.98	131.40						
13.60	131.40						8.60	99.76	132.30						
15.60	132.30						9.40	100.54	133.40						
16.14	133.30						10.10	101.32	134.10						
16.68	134.30						10.50	102.10	134.80						
17.22	135.00						11.16	102.26	135.50						
17.76	135.60						11.82	102.42	136.50						
18.30	136.08						12.48	102.58	137.30						
18.90	136.56						13.14	102.74	137.90						
19.60	137.04						13.80	102.90	138.90						
20.40	137.52						14.50	103.04	139.40						
21.00	138.00						15.10	103.18							
21.60	138.54						15.80	103.32							
22.40	139.08						16.50	103.46							
23.20	139.62						17.10	103.60							
24.20	140.16						17.90	103.76							
25.20	140.70						18.80	103.92							
26.40	141.34						20.10	104.08							
27.40	141.98						21.70	104.24							
28.80	142.62						23.20	104.40							
29.80	143.26						24.90	104.56							
31.00	143.90						26.20	104.72							
32.40	144.62						27.90	104.88							
33.50	145.34						28.60	105.04							
35.20	146.06						31.10	105.20							
37.10	146.78						32.80	105.90							
39.40	147.50						34.30	106.50							
42.20	148.20						35.90	107.10							
44.90	148.90						37.70	107.60							
47.30	149.60						39.60	108.20							
50.40	150.30						41.50	108.80							
53.60	151.00						43.40	109.40							
57.40	151.64						45.10	110.00							
62.00	152.28						46.60	110.60							
67.90	152.92						47.90	111.10							
74.40	153.56						49.50	111.60							
79.60	154.20						51.20	112.10							
82.10	154.78						53.00	112.60							
84.40	155.36						55.00	113.10							
87.30	155.94						56.80	113.48							
89.90	156.52						59.10	113.86							
91.60	157.10						61.80	114.24							
93.90							64.30	114.62							
96.80							66.10	115.00							
99.60							67.60	115.52							
102.40							69.00	116.04							
104.90							70.50	116.56							
107.50							72.10	117.08							
109.70							73.90	117.60							
111.90							76.00	118.22							
113.60							78.50	118.84							
115.40							81.10	119.46							
116.80							83.80	120.08							
117.90							86.60	120.70							
118.70							89.20	121.48							
119.50							91.10	122.26							
120.20							92.80	123.04							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE				
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4				
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER				
							Yadkin	N. McLaren				J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information					Date Run			
SBL 16000 OSS							2/8/2018	SBL 16500 ISS					2/8/2018			
Type		Test Interval		Datum or reference surface			Type	Test Interval		Datum or reference surface						
DCP		Cumulative cm per blow		Top of ABC			DCP		Cumulative cm per blow		Top of ABC					
0.00	83.67						0.00	110.90								
0.90	83.75						3.10	112.40								
1.60	83.84						4.90	113.90								
1.90	83.92						5.70	115.40								
2.90	84.01						6.44	117.10								
3.90	84.09						7.18	118.90								
5.80	84.18						7.92	120.90								
7.40	84.26						8.66	122.70								
9.40	84.35						9.40	124.30								
11.70	84.43						10.10	125.90								
12.30	84.52						11.00	127.10								
12.90	84.60						11.90	127.40								
16.20	84.64						13.00	128.50								
17.20	84.68						14.00	129.70								
17.90	84.72						14.90	130.90								
18.70	84.76						16.10	131.90								
19.30	84.80						17.40	133.00								
19.90	84.84						18.90	134.00								
20.40	84.88						20.70	134.90								
21.10	84.92						22.70	135.70								
21.60	84.96						23.80	137.00								
22.00	85.00						24.60	138.00								
25.20	85.04						25.60	138.90								
26.20	85.08						26.60	140.00								
27.20	85.12						27.30	141.00								
28.50	85.16						27.94	141.90								
29.90	85.20						28.58	142.90								
31.00	85.24						29.22	144.10								
32.50	85.28						29.86	145.20								
34.40	85.32						30.50	146.30								
36.30	85.36						31.26	147.50								
38.10	85.40						32.02	148.50								
40.00							32.78	149.60								
42.00							33.54	150.90								
44.60							34.30	152.50								
47.50							36.10	153.20								
50.30							38.10	154.40								
53.10							40.20	156.40								
56.40							42.20	157.60								
60.00							44.20	158.90								
63.10							46.10	160.40								
66.40							47.50	161.60								
69.40							49.20	162.70								
72.30							51.60									
75.20							54.30									
77.80							56.80									
80.20							59.40									
82.20							62.20									
82.27							65.90									
82.34							69.40									
82.41							72.40									
82.48							75.40									
82.55							78.90									
82.62							80.20									
82.69							82.50									
82.76							85.30									
82.83							88.20									
82.90							90.70									
82.99							93.50									
83.07							96.10									
83.16							98.20									
83.24							100.40									
83.33							102.60									
83.41							104.60									
83.50							106.60									
83.58							108.70									

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin							N. McLaren				J. Cliss/M. Thompson				
Station (location) Information							Date Run	Station (location) Information						Date Run	
SBL 17005 OSL							2/8/2018	SBL 17600 OSS						2/8/2018	
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	81.40						0.00	98.50							
1.50	82.40						2.40	100.00							
2.40	83.50						3.90	101.60							
3.02	84.50						5.10	103.20							
3.64	85.80						5.76	104.60							
4.26	87.10						6.42	106.00							
4.88	88.50						7.08	107.60							
5.50	89.90						7.74	109.20							
6.18	91.20						8.40	110.80							
6.86	92.10						9.04	112.60							
7.54	93.20						9.68	114.90							
8.22	94.20						10.32	116.60							
8.90	95.20						10.96	117.40							
9.64	96.30						11.60	118.30							
10.38	97.40						12.40	120.50							
11.12	98.40						13.20	121.60							
11.86	99.30						14.00	122.60							
12.60	100.40						14.80	123.60							
13.40	101.30						15.60	124.50							
14.20	102.30						16.80	125.60							
15.10	103.20						17.90	126.70							
17.80	104.10						19.30	127.90							
18.90	105.10						20.60	128.60							
19.80	106.10						21.90	130.40							
20.80	107.20						23.90	131.90							
21.80	108.20						25.20	133.90							
23.40	109.10						26.40	135.80							
25.40	110.00						27.60								
27.40	110.74						28.90								
28.80	111.48						30.70								
29.90	112.22						33.20								
31.00	112.96						34.70								
32.40	113.70						36.20								
33.30	114.30						37.50								
34.40	114.90						39.40								
35.50	115.50						40.30								
36.90	116.10						41.76								
38.60	116.70						43.22								
40.40	117.62						44.68								
42.40	118.54						46.14								
44.10	119.46						47.60								
46.00	120.38						49.50								
47.60	121.30						51.50								
49.40	121.72						53.20								
50.90	122.14						56.60								
52.20	122.56						58.20								
53.80	122.98						59.80								
54.50	123.40						61.60								
55.60	124.02						63.40								
56.47	124.64						65.60								
57.33	125.26						67.70								
58.20	125.88						69.50								
59.30	126.50						71.20								
60.40	126.84						73.10								
61.50	127.18						75.30								
62.90	127.52						77.40								
64.40	127.86						79.50								
66.20	128.20						81.30								
67.80							83.00								
69.50							84.80								
72.70							86.70								
74.10							88.70								
76.10							90.60								
77.40							92.00								
78.90							94.60								
80.30							96.70								

CONE PENETROMETER DATA CODE SHEET						WBS NO.		PROJECT TIP I.D.				ROUTE					
						45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4					
						COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER					
Surry						N. McLaren		J. Cliss/M. Thompson									
Station (location) Information						Date Run		Station (location) Information				Date Run					
SBL 18000 ISS						2/7/2018		SBL 18100 OSL				2/7/2018					
Type		Test Interval			Datum or reference surface				Type		Test Interval			Datum or reference surface			
DCP		Cumulative cm per blow			Top of ABC				DCP		Cumulative cm per blow			Top of ABC			
0.00	39.14	51.12	86.38	119.80					0.00	50.10	112.58						
1.80	39.38	51.28	86.70	120.40					0.60	51.20	113.62						
2.40	39.62	51.44	86.98	121.00					0.90	52.10	114.66						
3.10	39.86	51.60	87.26	121.60					1.20	53.20	115.70						
3.60	40.10	51.74	87.54	122.22					1.50	53.90	116.70						
4.20	40.30	51.88	87.82	122.84					1.80	55.60	117.70						
4.70	40.50	52.02	88.10	123.46					2.10	57.10	118.70						
5.28	40.70	52.16	88.38	124.08					2.44	58.40	119.70						
5.86	40.90	52.30	88.66	124.70					2.78	59.80	120.70						
6.44	41.10	52.42	88.94	125.30					3.12	61.20	121.80						
7.02	41.32	52.54	89.22	125.90					3.46	62.70							
7.60	41.54	52.66	89.50	126.50					3.80	64.40							
8.40	41.76	52.78	89.74	127.10					4.10	66.10							
9.20	41.98	52.90	89.98	127.70					4.40	67.80							
10.00	42.20	53.80	90.22	128.30					4.70	69.50							
10.80	42.36	54.70	90.46	128.90					5.00	71.00							
11.60	42.52	55.60	90.70	129.50					5.30	72.30							
12.50	42.68	56.50	91.00	130.10					5.46	73.20							
13.60	42.84	57.40	91.30	130.70					5.62	73.80							
14.70	43.00	58.40	91.60	131.28					5.78	74.52							
15.90	43.22	59.40	91.90	131.86					5.94	75.24							
17.30	43.44	60.40	92.20	132.44					6.10	75.96							
18.50	43.66	61.30	92.60	133.02					6.48	76.68							
19.90	43.88	62.10	93.00	133.60					6.86	77.40							
21.30	44.10	62.80	93.40	134.02					7.24	78.88							
22.60	44.28	63.70	93.80	134.44					7.62	80.36							
23.60	44.46	64.70	94.20	134.86					8.00	81.84							
24.60	44.64	65.60	94.70	135.28					8.58	83.32							
25.20	44.82	66.60	95.20	135.70					9.16	84.80							
25.80	45.00	67.50	95.70	136.14					9.74	85.16							
26.10	45.18	68.40	96.20	136.58					10.32	85.52							
26.90	45.36	69.30	96.70	137.02					10.90	85.88							
27.70	45.54	69.90	97.32	137.46					11.50	86.24							
28.50	45.72	70.70	97.94	137.90					12.20	86.60							
29.30	45.90	71.50	98.56	138.30					12.90	86.94							
30.10	46.04	72.30	99.18	138.70					13.80	87.28							
30.40	46.18	72.90	99.80	139.10					14.50	87.62							
30.70	46.32	73.70	100.60	139.50					15.20	87.96							
31.00	46.46	74.28	101.60	139.90					15.70	88.30							
31.30	46.60	74.86	102.50	140.30					16.60	88.60							
31.60	46.76	75.44	103.30	140.70					17.30	88.90							
31.92	46.92	76.02	103.90	141.10					18.20	89.20							
32.24	47.08	76.60	104.70	141.50					19.10	89.50							
32.56	47.24	77.10	105.60	141.90					20.30	89.80							
32.88	47.40	77.60	106.40	142.28					21.80	91.10							
33.20	47.60	78.10	107.10	142.66					23.30	92.40							
33.48	47.80	78.60	107.80	143.04					24.90	93.60							
33.76	48.00	79.10	108.40	143.42					26.50	94.70							
34.04	48.20	79.50	109.00	143.80					28.30	95.80							
34.32	48.40	79.90	109.60	144.14					30.10	96.90							
34.60	48.56	80.30	110.22	144.48					31.60	98.00							
34.90	48.72	80.70	110.84	144.82					33.10	99.00							
35.20	48.88	81.10	111.46	145.16					34.30	99.90							
35.50	49.04	81.52	112.08	145.50					35.70	100.70							
35.80	49.20	81.94	112.70	145.80					36.80	101.50							
36.10	49.36	82.36	113.30	146.10					37.90	102.26							
36.40	49.52	82.78	113.90	146.40					39.10	103.02							
36.70	49.68	83.20	114.50	146.70					40.30	103.78							
37.00	49.84	83.58	115.10	147.00					41.40	104.54							
37.30	50.00	83.96	115.70						42.70	105.30							
37.60	50.16	84.34	116.28						43.70	106.34							
37.86	50.32	84.72	116.86						44.80	107.38							
38.12	50.48	85.10	117.44						46.00	108.42							
38.38	50.64	85.42	118.02						47.10	109.46							
38.64	50.80	85.74	118.60						48.10	110.50							
38.90	50.96	86.06	119.20						49.20	111.54							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Surry	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information							Date Run
SBL 18500 ISL							2/7/2018	SBL 19000 OSS							2/7/2018
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC				
0.00	98.30						0.00	83.60							
0.90	100.70						0.80	85.20							
1.40	102.80						1.40	86.90							
2.00	105.30						1.90	88.80							
2.50	107.70						2.40	90.40							
3.00	109.80						3.00	92.00							
3.50	112.20						3.50	94.00							
4.10	114.60						3.90	95.70							
4.40	117.10						4.30	97.50							
5.40	119.40						4.80	99.40							
5.90	121.50						5.30	101.30							
6.40	123.90						5.80	102.80							
7.10	126.40						6.20	104.40							
7.60	128.60						6.82	105.90							
8.20	130.70						7.44	107.40							
8.90	133.00						8.06	108.90							
9.50	135.30						8.68	110.30							
10.10	137.60						9.30	111.70							
10.70	140.30						10.60	113.00							
11.40	142.90						11.50	114.00							
11.90	145.60						12.40	115.10							
12.40	148.30						13.30	116.40							
12.90	150.70						14.30	117.50							
13.50							15.40	118.60							
14.00							16.50	119.50							
14.40							17.70	120.60							
16.40							18.90	121.60							
17.40							20.40	122.70							
18.30							21.90	123.80							
19.20							23.40	124.90							
20.20							25.10	126.10							
21.40							26.10	127.50							
22.80							27.10	128.90							
23.70							28.80	130.00							
24.90							30.20	131.50							
25.90							31.90	132.60							
27.40							33.40	133.90							
29.20							34.80	135.10							
31.50							36.50	136.40							
33.90							38.10	137.80							
34.73							39.90	139.60							
35.57							41.50	141.30							
36.40							43.20	143.00							
38.80							45.10	144.60							
41.10							47.10								
43.70							48.90								
46.50							50.40								
49.70							52.20								
53.00							53.70								
56.30							55.20								
59.40							57.00								
62.10							58.80								
64.50							61.00								
67.20							63.40								
69.60							65.40								
71.80							67.30								
74.30							69.00								
76.30							70.80								
79.10							72.10								
81.80							73.40								
84.40							74.80								
86.70							76.30								
88.90							77.80								
91.20							79.30								
93.40							80.40								
95.80							82.10								

CONE PENETROMETER DATA CODE SHEET								WBS NO.		PROJECT TIP I.D.				ROUTE			
								45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
								COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
Yadkin								N. McLaren				J. Cliss/M. Thompson					
Station (location) Information								Date Run		Station (location) Information				Date Run			
SBL 19500 ISS								2/7/2018		SBL 20000 OSL				2/7/2018			
Type		Test Interval		Datum or reference surface				Type		Test Interval		Datum or reference surface					
DCP		Cumulative cm per blow		Top of ABC				DCP		Cumulative cm per blow		Top of Soil Subgrade					
0.00		69.38						0.00		55.30							
0.60		70.02						1.60		55.52							
3.50		70.66						2.90		55.74							
5.30		71.30						4.40		55.96							
6.60		72.02						5.90		56.18							
7.60		72.74						7.40		56.40							
8.70		73.46						8.90		56.62							
9.60		74.18						10.10		56.84							
10.40		74.90						11.00		57.06							
11.10		75.72						11.90		57.28							
11.60		76.54						13.10		57.50							
12.20		77.36						14.80		57.64							
12.90		78.18						16.60		57.78							
13.60		79.00						18.40		57.92							
14.30		80.10						20.00		58.06							
14.90		81.00						21.50		58.20							
15.60		81.90						22.90		58.34							
16.50		82.80						24.40		58.48							
17.10		83.60						25.70		58.62							
17.80		84.50						27.20		58.76							
18.60		85.30						28.60		58.90							
19.50		86.10						29.80		59.02							
20.50		86.90						30.90		59.14							
21.50		87.80						31.80		59.26							
22.60		88.60						32.70		59.38							
23.90		89.40						33.60		59.50							
24.90		90.38						34.60		59.62							
26.00		91.36						35.40		59.74							
27.10		92.34						36.40		59.86							
28.10		93.32						37.10		59.98							
29.60		94.30						37.90		60.10							
31.30		95.45						38.60									
32.20		96.60						39.48									
35.20		98.20						40.36									
37.10		99.60						41.24									
38.80		101.00						42.12									
40.80		102.30						43.00									
42.60		103.60						43.78									
44.40		104.90						44.56									
46.10		106.30						45.34									
47.50		107.60						46.12									
48.60		108.90						46.90									
49.80		110.40						47.40									
51.00		112.10						47.90									
52.20		113.90						48.40									
53.40		115.80						48.90									
54.80		117.90						49.40									
56.10		120.30						49.80									
57.40		122.40						50.20									
58.40		124.50						50.60									
59.20		126.70						51.00									
60.00		128.40						51.40									
60.70		130.10						51.78									
61.30		131.90						52.16									
62.10		134.20						52.54									
62.66		136.10						52.92									
63.22		137.80						53.30									
63.78		139.60						53.50									
64.34		141.40						53.70									
64.90		143.20						53.90									
65.54		145.10						54.10									
66.18		146.90						54.30									
66.82		148.90						54.50									
67.46		150.80						54.70									
68.10		152.60						54.90									
68.74								55.10									

CONE PENETROMETER DATA CODE SHEET							WBS NO.		PROJECT TIP I.D.				ROUTE			
							45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
							Surry/Yadkin		N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run		Station (location) Information				Date Run			
SBL 20500 OSS							2/7/2018		SBL 21000 ISS				2/7/2018			
Type		Test Interval			Datum or reference surface			Type		Test Interval			Datum or reference surface			
DCP		Cumulative cm per blow			Top of ABC			DCP		Cumulative cm per blow			Top of Soil Subgrade			
	0.00	65.30	113.50						0.00	28.70	115.30					
	2.20	66.20	114.10						0.32	29.70	116.50					
	3.90	67.00	114.90						0.64	30.50	117.70					
	5.30	67.80	115.90						0.96	31.10	118.80					
	6.40	68.60	116.60						1.28	32.10	120.50					
	7.70	69.60	117.40						1.60	32.90	121.70					
	9.10	70.40	118.40						2.06	33.50	123.30					
	10.30	71.20	118.90						2.52	34.10	124.70					
	11.40	72.10	119.80						2.98	35.00	125.80					
	12.50	72.90	120.70						3.44	35.90						
	13.60	73.70	121.60						3.90	36.90						
	14.60	74.40	122.50						4.30	37.80						
	15.60	75.20	123.20						4.70	38.80						
	16.70	76.00	124.60						5.10	39.90						
	17.70	76.80	125.00						5.50	40.90						
	18.70	77.50	126.30						5.90	42.00						
	19.70	78.20							6.30	43.10						
	20.60	78.90							6.80	44.10						
	21.50	79.60							7.20	45.30						
	22.60	80.30							7.50	46.40						
	23.50	80.86							7.80	47.60						
	24.50	81.42							8.20	48.70						
	25.40	81.98							8.30	49.90						
	26.40	82.54							8.54	50.90						
	27.30	83.10							8.78	52.10						
	28.20	83.76							9.02	53.40						
	29.20	84.42							9.26	54.70						
	30.10	85.08							9.50	56.00						
	31.00	85.74							9.74	57.40						
	31.90	86.40							9.98	58.70						
	32.90	87.06							10.22	60.10						
	33.80	87.72							10.46	61.60						
	34.70	88.38							10.70	63.20						
	35.60	89.04							10.96	64.80						
	36.50	89.70							11.22	66.20						
	37.40	90.40							11.48	67.80						
	38.40	91.10							11.74	69.20						
	39.30	91.80							12.00	70.90						
	40.20	92.50							12.40	72.30						
	41.20	93.20							12.80	74.10						
	42.00	93.90							13.20	75.90						
	43.00	94.60							13.60	77.50						
	43.90	95.30							14.00	79.30						
	44.80	96.00							14.52	81.10						
	45.80	96.70							15.04	83.20						
	46.70	97.40							15.56	85.60						
	47.60	98.10							16.08	87.80						
	48.50	98.80							16.60	89.50						
	49.40	99.50							17.20	90.90						
	50.30	100.20							17.50	92.40						
	51.20	101.10							18.00	93.90						
	52.10	101.90							18.80	95.40						
	53.00	102.70							19.10	96.80						
	53.90	103.60							19.60	98.30						
	54.80	104.30							20.10	99.70						
	55.60	105.20							20.80	101.10						
	56.60	106.10							21.30	102.50						
	57.50	106.90							22.00	103.80						
	58.30	107.60							22.70	105.30						
	59.20	108.40							23.40	106.50						
	60.10	109.40							24.00	107.90						
	60.90	109.90							24.60	109.10						
	61.80	110.80							25.40	110.40						
	62.80	111.50							26.10	111.60						
	63.80	112.10							27.00	112.70						
	64.50	113.00							27.80	114.10						

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Surry/Yadkin	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information					Date Run		
SBL 22100 ISL							2/7/2018	SBL 22500 OSS					2/5/2018		
Type	Test Interval			Datum or reference surface				Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of Soil Subgrade				DCP	Cumulative cm per blow			Top of ABC			
0.00	90.60							0.00	109.00						
1.70	92.80							2.40							
2.40	95.30							3.40							
2.80	97.90							4.10							
3.20	100.60							4.60							
3.60	103.20							5.40							
4.00	106.30							5.90							
4.40	109.20							6.60							
4.80	111.90							7.40							
5.20	114.40							8.00							
5.60	117.10							8.80							
6.00	118.80							9.60							
6.40	120.30							10.40							
6.94	121.70							11.00							
7.48	123.30							11.70							
8.02	124.50							12.40							
8.56	126.00							13.00							
9.10	127.50							13.90							
9.90	128.40							14.80							
10.70	129.40							15.60							
11.80	130.20							16.10							
13.00								17.50							
14.50								18.50							
15.90								19.70							
17.10								20.80							
18.50								22.10							
20.10								23.40							
21.30								24.50							
22.50								25.40							
23.70								26.10							
25.00								26.90							
26.50								27.50							
27.90								28.45							
29.50								29.40							
31.30								30.55							
32.00								31.70							
34.80								33.10							
36.40								34.70							
38.00								36.60							
39.70								38.80							
41.40								41.00							
43.50								43.40							
45.40								45.90							
47.10								48.40							
48.70								50.90							
50.10								53.80							
51.70								56.50							
53.50								59.40							
55.20								62.40							
57.40								64.90							
60.10								67.40							
62.80								70.20							
64.60								72.90							
66.00								75.90							
67.40								78.50							
69.00								80.80							
70.50								82.80							
72.20								85.40							
73.90								87.80							
75.40								89.90							
77.20								92.10							
79.10								94.40							
81.40								96.90							
83.80								99.60							
86.30								103.70							
88.50								107.20							

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
Station (location) Information							Surry	N. McLaren				J. Cliss/M. Thompson			
							Date Run	Station (location) Information				Date Run			
SBL 23000 ISS							2/5/2018	SBL 23500 OSL				2/5/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface				
DCP	Cumulative cm per blow			Top of Soil Subgrade			DCP	Cumulative cm per blow			Top of ABC				
0.00	118.80						0.00	60.56							
4.00	121.00						3.90	60.60							
6.50							7.20	60.64							
9.10							9.10	60.68							
12.00							10.40	60.72							
14.10							11.40	60.76							
16.10							12.10	60.80							
18.10							12.90	60.84							
19.70							13.70	60.88							
21.40							14.30	60.92							
23.20							15.10	60.96							
25.10							15.90	61.00							
26.10							16.90	61.02							
27.40							17.90	61.03							
29.40							19.00	61.05							
31.20							20.20	61.06							
32.90							21.60	61.08							
34.60							22.90	61.09							
36.10							24.00	61.11							
37.40							25.20	61.12							
38.60							26.40	61.14							
39.90							27.40	61.15							
41.80							28.70	61.17							
43.90							30.10	61.18							
45.80							31.20	61.20							
47.40							32.50	61.21							
49.20							33.60	61.23							
50.90							34.70	61.24							
52.70							35.90	61.26							
54.40							37.10	61.27							
56.40							38.00	61.29							
58.60							39.00	61.30							
60.70							40.00								
62.50							40.90								
64.60							42.00								
66.50							43.20								
68.30							44.30								
70.10							45.40								
71.90							46.70								
73.50							47.80								
75.10							48.90								
76.90							50.00								
79.00							51.10								
80.80							52.80								
82.70							54.50								
83.50							56.30								
84.90							58.20								
86.90							59.60								
88.70							59.66								
90.70							59.72								
92.30							59.78								
93.90							59.84								
95.30							59.90								
96.60							59.96								
98.00							60.02								
99.60							60.08								
101.10							60.14								
102.90							60.20								
104.70							60.24								
106.50							60.28								
108.00							60.32								
109.80							60.36								
111.40							60.40								
113.40							60.44								
115.30							60.48								
117.00							60.52								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.				ROUTE			
							45905.1.1	I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL				DRILLER/HELPER			
							Surry	N. McLaren				J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information				Date Run			
SBL 24000 OSS							2/5/2018	SBL 24500 ISS				2/5/2018			
Type	Test Interval			Datum or reference surface			Type	Test Interval		Datum or reference surface					
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow		Top of Soil Subgrade					
0.00	73.30	106.00					0.00	126.35							
1.90	74.20	106.30					2.20	127.60							
3.40	75.10	106.60					3.40	128.90							
4.90	76.10	106.90					4.40	130.20							
6.60	77.20	107.20					5.40	131.20							
7.60	78.30	107.50					6.20	132.50							
8.60	79.40	107.80					6.90	133.40							
9.30	80.80	108.10					7.70	134.00							
9.90	82.50	108.40					8.80	134.80							
10.40	84.30	108.78					9.80	135.50							
11.10	85.90	109.16					11.10	136.20							
11.70	87.20	109.54					12.70	137.00							
12.30	88.40	109.92					14.40	137.90							
12.90	89.50	110.30					15.60	138.60							
13.50	90.50	110.68					17.80	139.40							
14.10	91.40	111.06					20.60	140.00							
14.70	92.10	111.44					23.80	140.90							
15.30	92.90	111.82					26.00	141.50							
15.90	93.50	112.20					28.60	142.30							
16.38	94.10	112.51					32.40	143.00							
16.86	94.50	112.82					35.40								
17.34	94.90	113.13					38.20								
17.82	95.30	113.44					41.30								
18.30	95.70	113.75					44.50								
18.70	96.10	114.06					48.80								
19.10	96.40	114.37					52.80								
19.50	96.70	114.68					56.90								
19.90	97.00	114.99					60.80								
20.30	97.30	115.30					64.00								
20.70	97.60	115.89					67.70								
21.10	97.88	116.48					70.90								
21.50	98.16	117.07					73.20								
21.90	98.44	117.66					75.30								
22.30	98.72	118.25					77.50								
22.70	99.00	118.84					79.60								
23.10	99.42	119.43					81.20								
23.50	99.84	120.02					82.60								
23.90	100.26	120.61					83.90								
24.30	100.68	121.20					85.00								
25.40	101.10	122.14					86.00								
26.70	101.30	123.08					87.00								
28.30	101.50	124.02					87.90								
29.90	101.70	124.96					88.90								
31.90	101.90	125.90					90.00								
33.90	102.10	127.10					91.00								
35.40	102.26	128.90					92.40								
37.40	102.42	130.80					93.60								
39.70	102.58	132.90					95.00								
41.60	102.74	135.00					96.60								
43.30	102.90	136.90					98.30								
44.70	103.06	139.10					99.70								
46.20	103.22	141.20					100.90								
48.20	103.38	143.40					102.80								
50.80	103.54	145.40					104.90								
53.20	103.70						107.00								
54.90	103.87						109.00								
57.10	104.04						110.90								
59.80	104.21						112.70								
62.30	104.38						114.50								
64.50	104.55						116.50								
66.30	104.72						117.90								
67.70	104.89						119.50								
69.00	105.06						120.90								
70.20	105.23						122.30								
71.40	105.40						123.60								
72.40	105.70						125.10								

CONE PENETROMETER DATA CODE SHEET							WBS NO.	PROJECT TIP I.D.			ROUTE			
							45905.1.1	I-5912			I-77 from US 21 (Exit 79) to Mile Marker 83.4			
							COUNTY	FIELD PROFESSIONAL			DRILLER/HELPER			
							Surry	N. McLaren			J. Cliss/M. Thompson			
Station (location) Information							Date Run	Station (location) Information						Date Run
SBL 25000 ISL							2/5/2018	SBL 25500 OSS						2/5/2018
Type	Test Interval			Datum or reference surface			Type	Test Interval			Datum or reference surface			
DCP	Cumulative cm per blow			Top of ABC			DCP	Cumulative cm per blow			Top of ABC			
0.00	67.50						0.00	51.40	137.30					
0.70	68.50						6.30	51.70	138.80					
1.10	69.60						7.20	52.00	140.40					
1.50	70.70						7.70	52.30	142.10					
1.90	72.00						8.08	52.60	143.70					
2.30	73.40						8.46	52.96	145.40					
2.70	74.60						8.84	53.32	146.90					
3.04	75.70						9.22	53.68	149.00					
3.38	76.80						9.60	54.04	151.20					
3.72	77.90						9.96	54.40	152.30					
4.06	78.70						10.32	54.62						
4.40	79.60						10.68	54.84						
4.76	80.30						11.04	55.06						
5.12	81.10						11.40	55.28						
5.48	81.90						12.00	55.50						
5.84	82.90						12.60	55.74						
6.20	83.90						13.20	55.98						
6.70	85.30						13.80	56.22						
7.20	86.50						14.40	56.46						
7.70	87.80						14.92	56.70						
8.20	88.90						15.44	57.08						
8.70	90.10						15.96	57.46						
9.40	91.30						16.48	57.84						
9.90	92.50						17.00	58.22						
10.60	93.90						18.20	58.60						
11.20	95.50						19.60	59.20						
11.90	97.30						21.30	59.80						
12.40	98.90						23.60	60.40						
12.90	100.20						25.60	61.00						
13.40	101.40						27.90	61.60						
14.10	102.50						29.60	62.70						
14.70	103.80						30.90	64.30						
15.40	105.20						32.30	65.80						
16.10	106.70						34.00	67.30						
16.80	108.10						36.30	69.10						
17.40	109.40						38.20	70.90						
18.20	110.70						39.50	72.60						
19.10	112.00						40.80	74.60						
20.40	113.20						42.40	76.60						
22.00	114.50						44.20	78.80						
24.00	116.00						45.50	80.80						
26.20	117.20						45.68	82.80						
28.30	119.60						45.86	84.80						
30.40	121.60						46.04	86.80						
32.80	123.30						46.22	88.80						
35.40	125.20						46.40	91.20						
38.00	127.20						46.56	93.70						
39.80	128.90						46.72	96.60						
41.40	130.40						46.88	99.50						
42.90	132.10						47.04	102.40						
44.20	134.00						47.20	105.10						
45.80	135.80						47.28	107.70						
47.20	137.50						47.36	110.10						
48.60	139.00						47.44	112.30						
50.00	140.80						47.52	114.70						
51.60	141.60						47.60	116.70						
53.10	142.40						47.98	118.60						
54.40	144.20						48.36	120.60						
55.90	145.70						48.74	122.60						
57.50							49.12	124.70						
59.50							49.50	127.00						
61.10							49.82	129.10						
62.50							50.14	131.10						
63.90							50.46	132.80						
65.30							50.78	134.30						
66.50							51.10	135.80						

CONE PENETROMETER DATA CODE SHEET								WBS NO.		PROJECT TIP I.D.				ROUTE			
								45905.1.1		I-5912				I-77 from US 21 (Exit 79) to Mile Marker 83.4			
								COUNTY		FIELD PROFESSIONAL				DRILLER/HELPER			
								Surry		N. McLaren				J. Cliss/M. Thompson			
Station (location) Information								Date Run		Station (location) Information				Date Run			
SBL 26000 ISS								2/5/2018		SBL 26500 ISL				2/2/2018			
Type		Test Interval			Datum or reference surface			Type		Test Interval			Datum or reference surface				
DCP		Cumulative cm per blow			Top of Soil Subgrade			DCP		Cumulative cm per blow			Top of ABC				
	0.00	86.70	123.56						0.00	67.18	131.20						
	2.20	86.80	123.64						1.30	67.72	131.80						
	3.20	86.90	123.72						1.90	68.26	132.50						
	4.10	87.00	123.80						2.50	68.80	133.30						
	4.60	87.10	123.88						3.02	69.68	134.20						
	5.06	87.20	123.96						3.54	70.56	135.00						
	5.52	87.33	124.04						4.06	71.44	135.90						
	5.98	87.46	124.12						4.58	72.32	136.90						
	6.44	87.59	124.20						5.10	73.20	137.90						
	6.90	87.72	124.28						5.58	74.10	138.90						
	7.50	87.85	124.36						6.06	75.00	139.80						
	8.10	87.98	124.44						6.54	76.00	140.70						
	8.70	88.11	124.52						7.02	77.00	141.50						
	9.30	88.24	124.60						7.50	77.90	142.60						
	9.90	88.37	124.68						8.38	78.90	143.60						
	10.10	88.50	124.76						9.26	79.80	144.50						
	10.30	88.79	124.84						10.14	80.80	145.70						
	10.50	89.08	124.92						11.02	81.90	147.00						
	10.70	89.37	125.00						11.90	82.80							
	10.90	89.66	125.07						12.42	83.80							
	13.90	89.95	125.14						12.94	84.70							
	15.90	90.24	125.21						13.46	85.70							
	17.80	90.53	125.28						13.98	86.70							
	19.70	90.82	125.35						14.50	87.70							
	21.50	91.11	125.42						16.40	88.70							
	23.40	91.40	125.49						17.60	89.70							
	24.80	92.00	125.56						18.80	90.70							
	26.50	92.90	125.63						20.00	91.80							
	28.20	93.80	125.70						21.80	93.00							
	30.00	94.80	126.56						23.80	94.00							
	31.90	96.00	127.42						25.60	95.10							
	33.40	97.20	128.28						27.40	96.10							
	35.30	98.40	129.14						29.20	97.10							
	36.90	99.40	130.00						30.80	98.20							
	38.30	100.60	131.00						32.60	99.30							
	39.90	101.40	132.00						34.50	100.40							
	41.50	102.40	132.80						36.70	101.40							
	43.20	103.30	133.60						38.90	102.50							
	45.00	104.10	134.60						41.10	103.60							
	46.50	105.10	135.60						42.90	104.70							
	47.80	106.00	136.70						44.40	105.80							
	49.00	106.90	137.80						45.40	106.70							
	51.50	107.90	138.90						46.40	107.40							
	53.80	109.10	139.90						47.06	108.20							
	56.20	110.50							47.72	108.90							
	57.90	112.40							48.38	109.72							
	59.50	113.90							49.04	110.54							
	61.60	115.20							49.70	111.36							
	64.10	116.40							50.66	112.18							
	67.20	117.70							51.62	113.00							
	70.20	119.00							52.58	114.08							
	73.40	120.10							53.54	115.16							
	76.50	120.90							54.50	116.24							
	77.60	121.60							55.70	117.32							
	78.80	122.60							57.10	118.40							
	79.90	122.68							58.60	119.56							
	80.70	122.76							60.10	120.72							
	81.70	122.84							62.00	121.88							
	82.70	122.92							63.40	123.04							
	84.40	123.00							63.90	124.20							
	85.60	123.08							64.30	125.20							
	86.20	123.16							64.60	126.30							
	86.30	123.24							65.10	127.30							
	86.40	123.32							66.60	128.55							
	86.50	123.40							66.10	129.80							
	86.60	123.48							66.64	130.40							

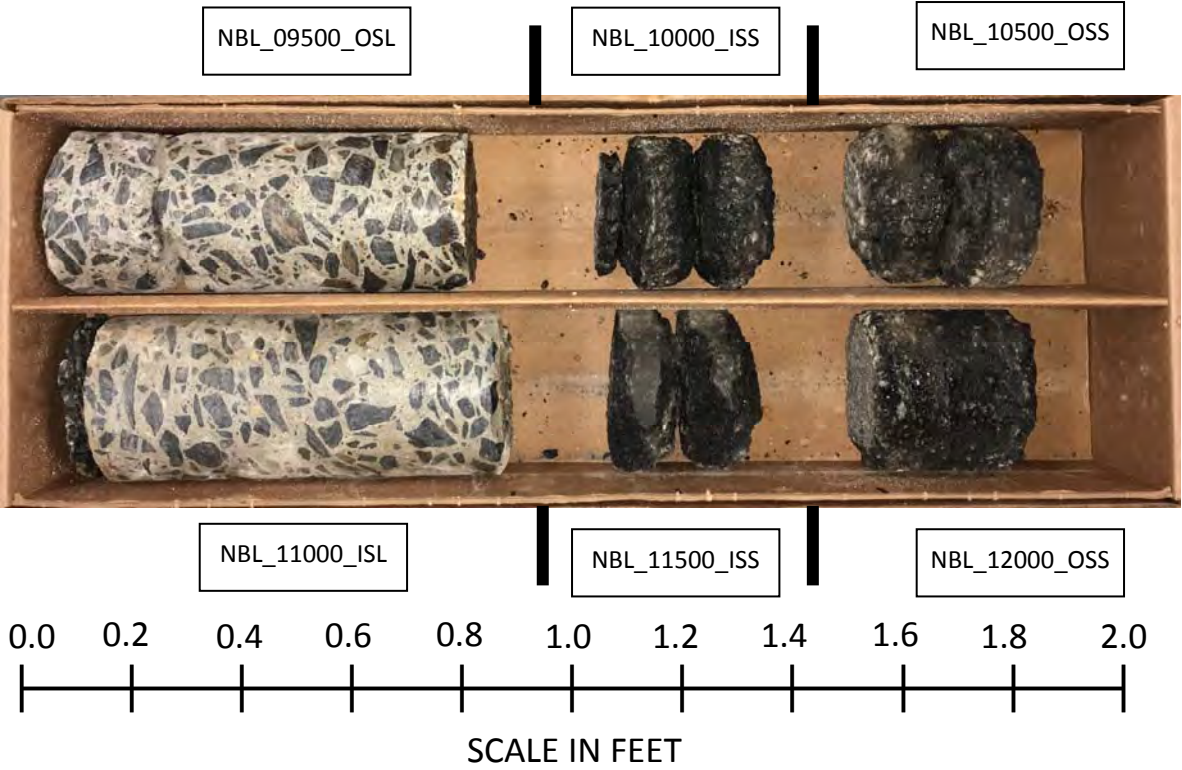
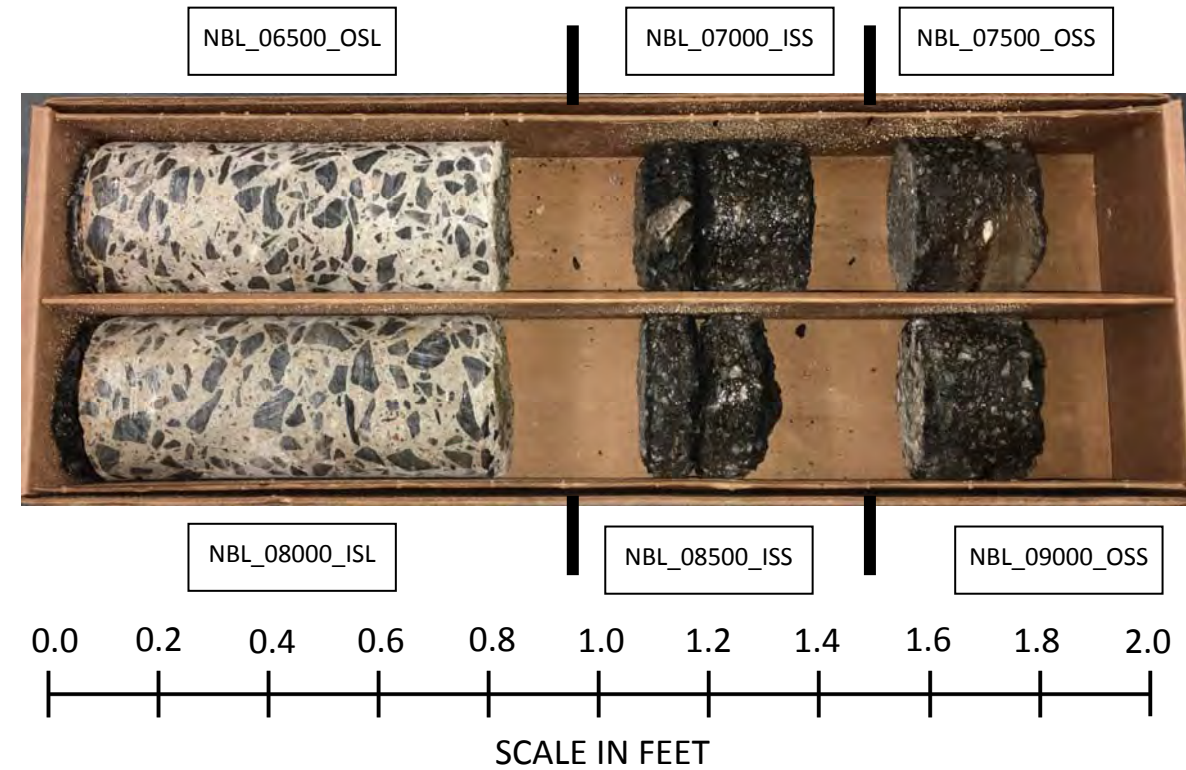
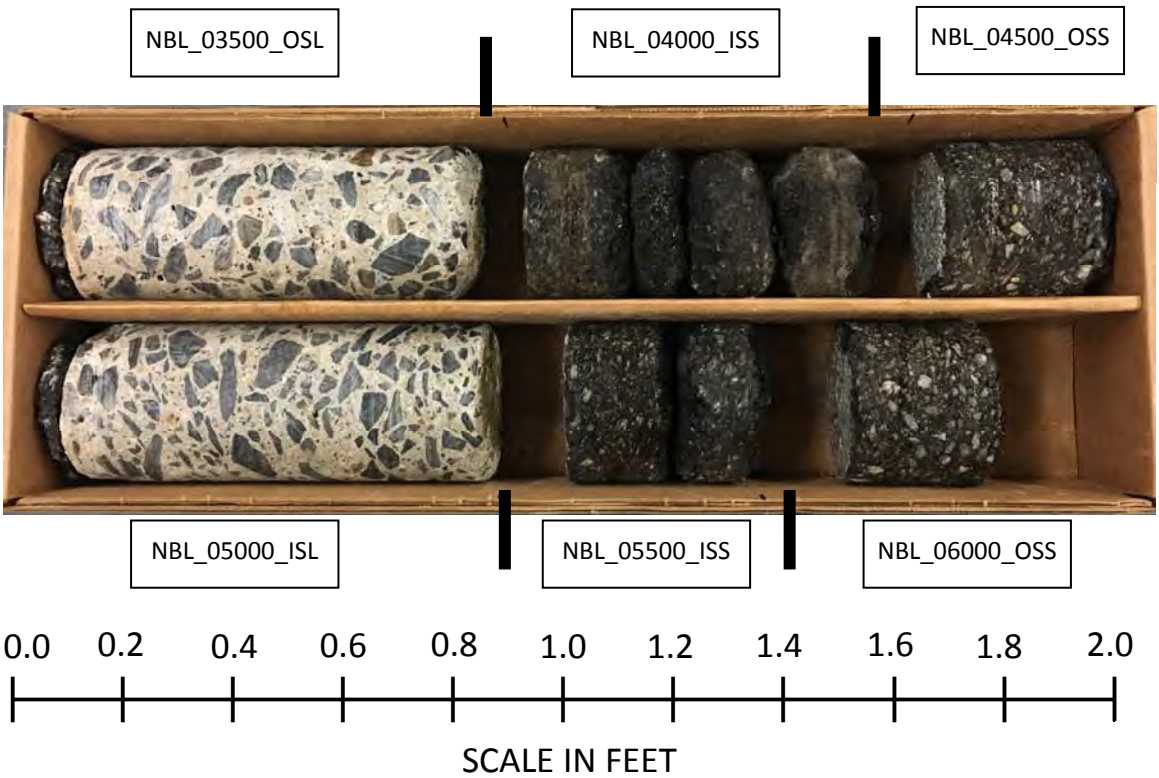
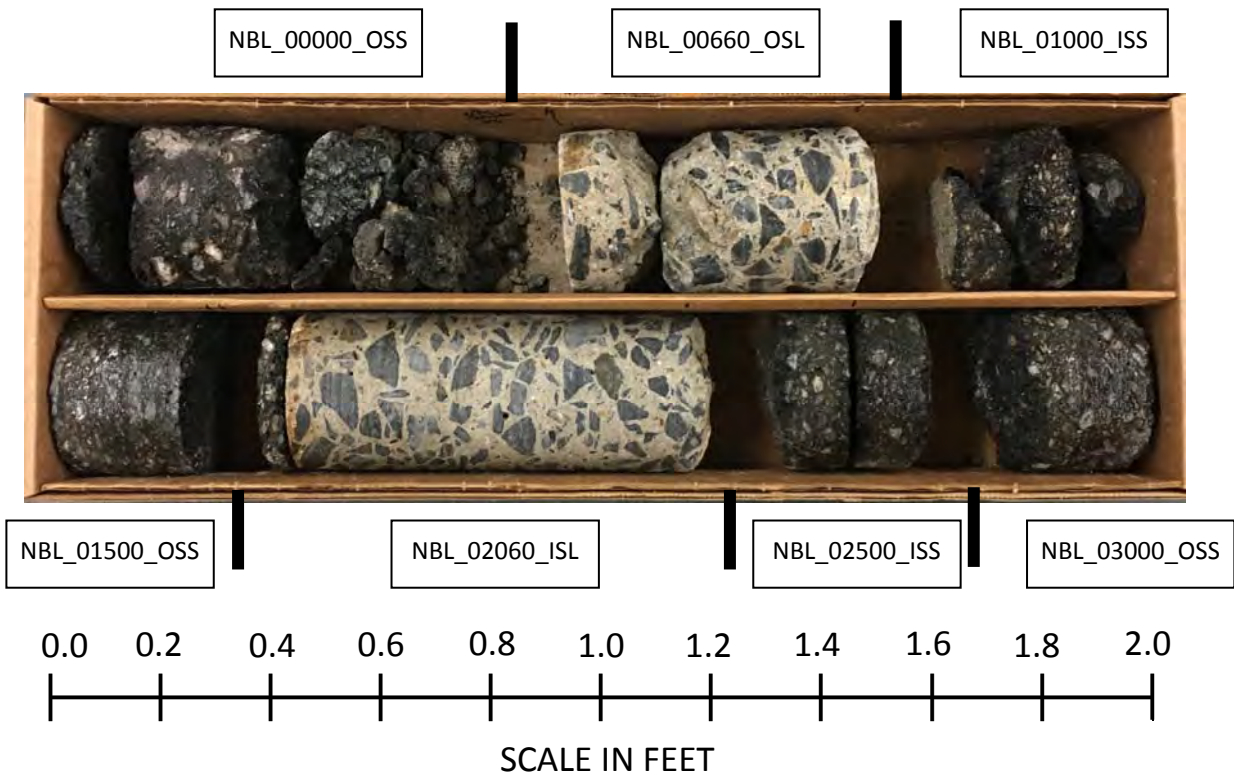


I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

ECS Southeast Project No. 08: 12605

Pavement Core Photographs: NBL



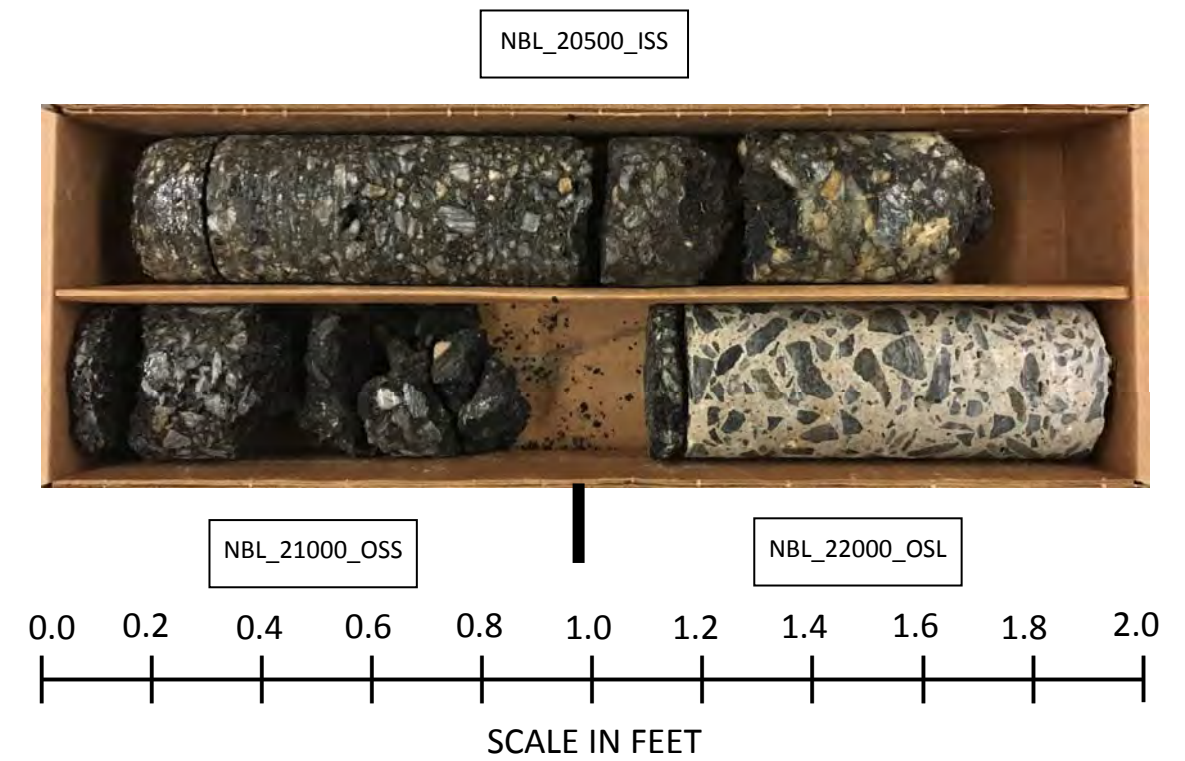
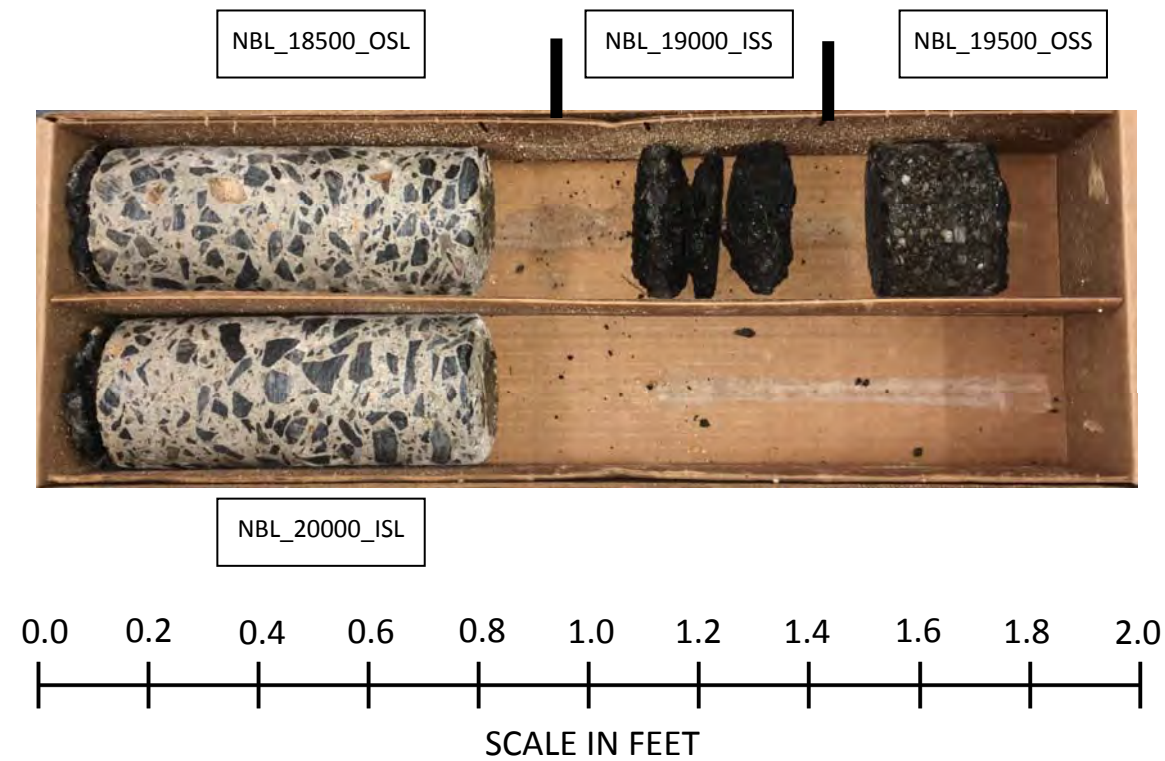
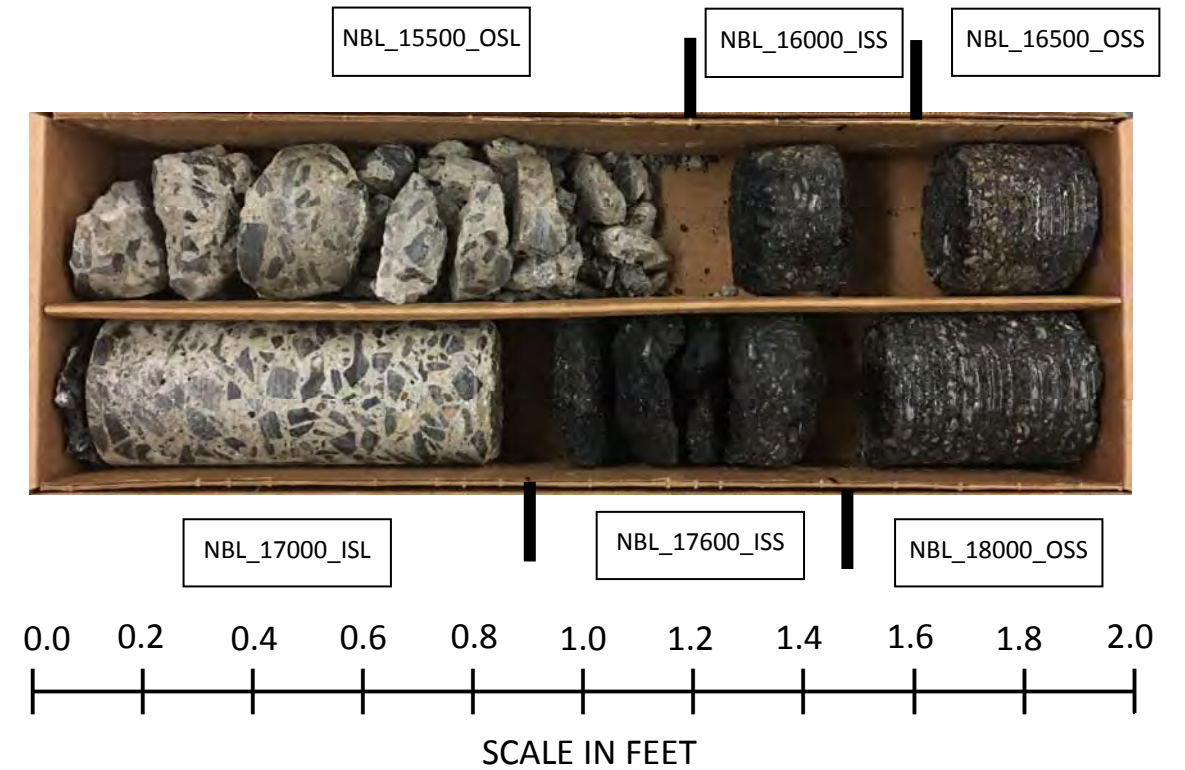
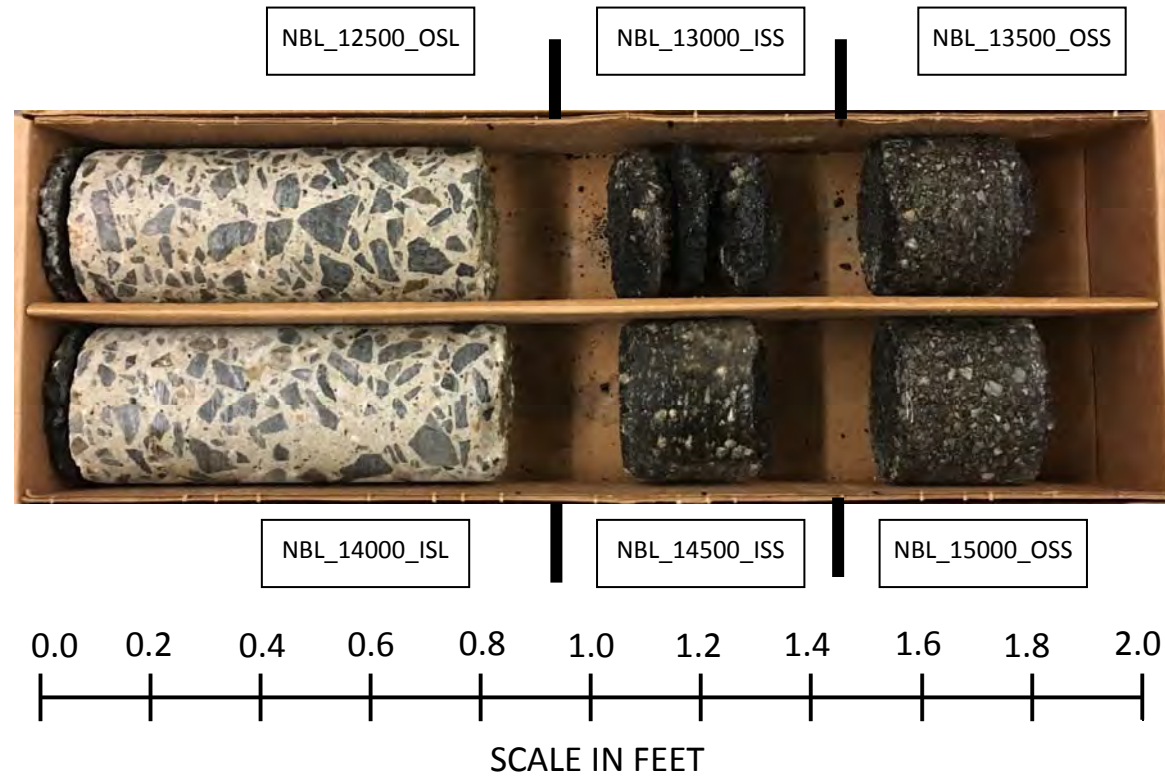


I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

ECS Southeast Project No. 08: 12605

Pavement Core Photographs: NBL





I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

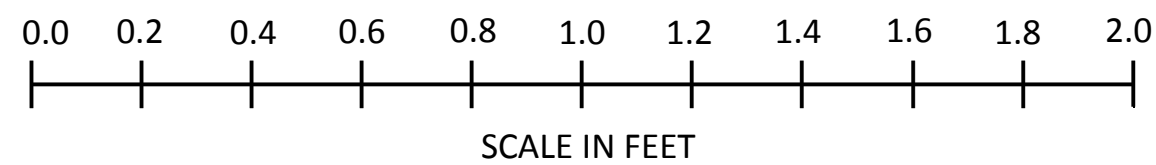
ECS Southeast Project No. 08: 12605

Pavement Core Photographs: NBL

NBL_22500_ISS



NBL_23000_OSS



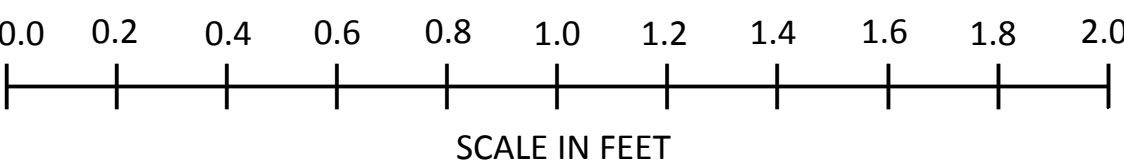
NL_23500_ISL

NL_24000_ISS



NBL_24500_OSS

NBL_25000_OSL

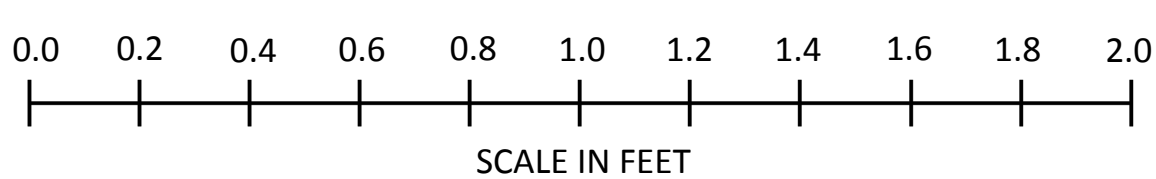


NBL_25500_OSL



NBL_25500_ISS

NBL_26000_OSS



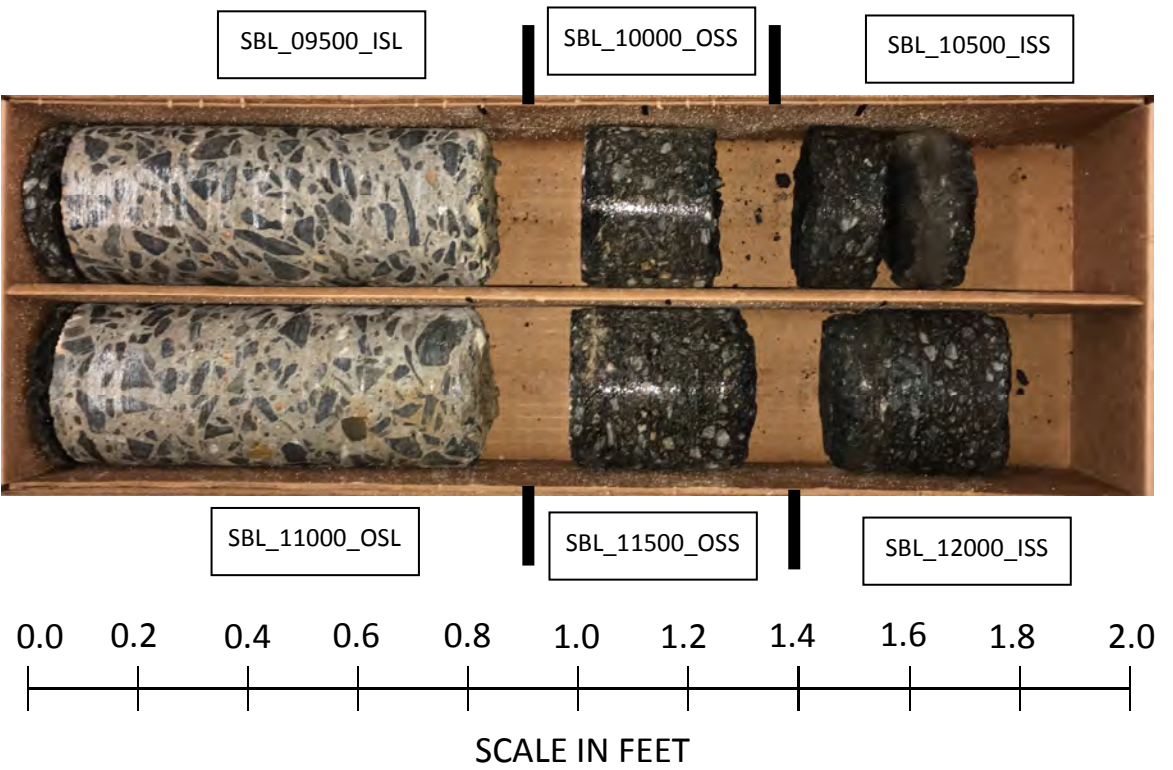
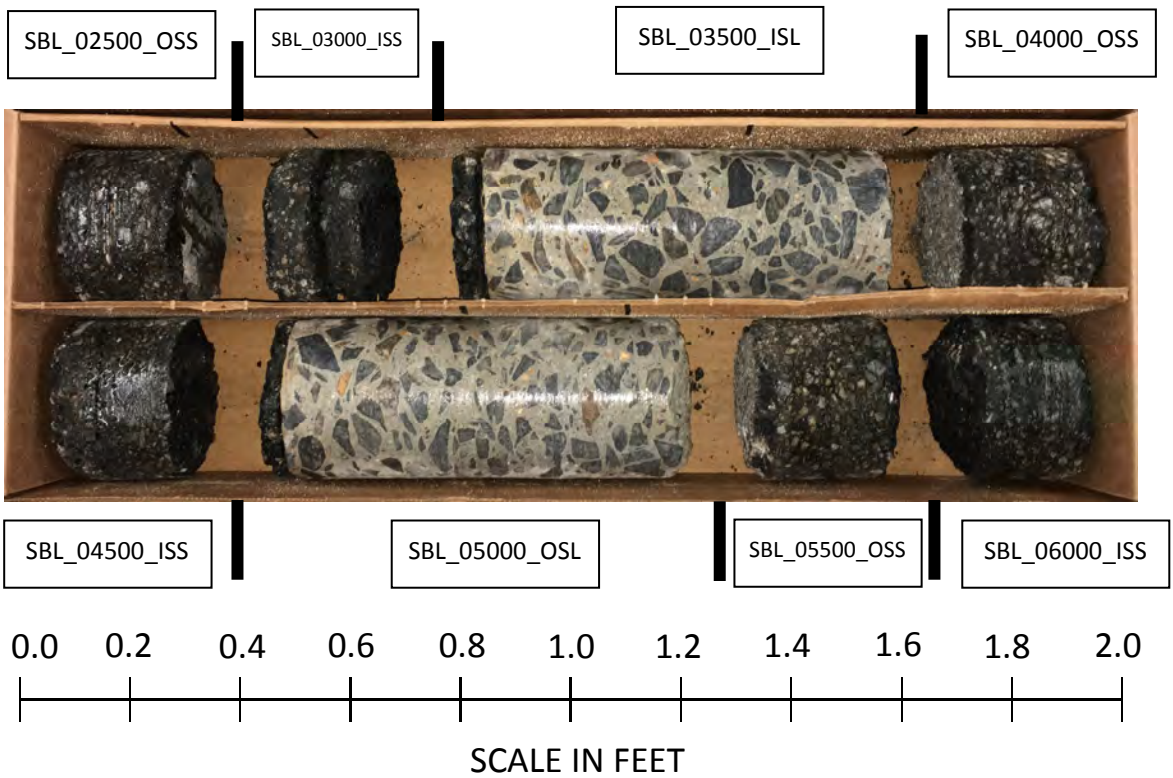
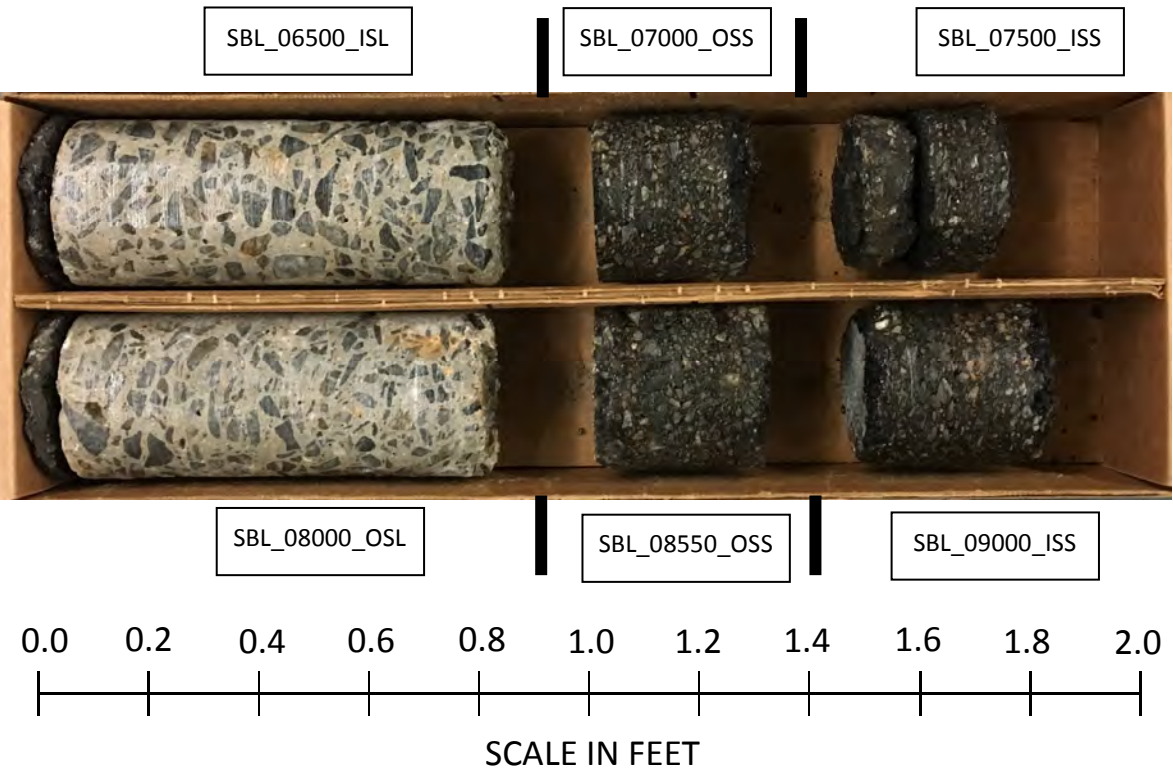
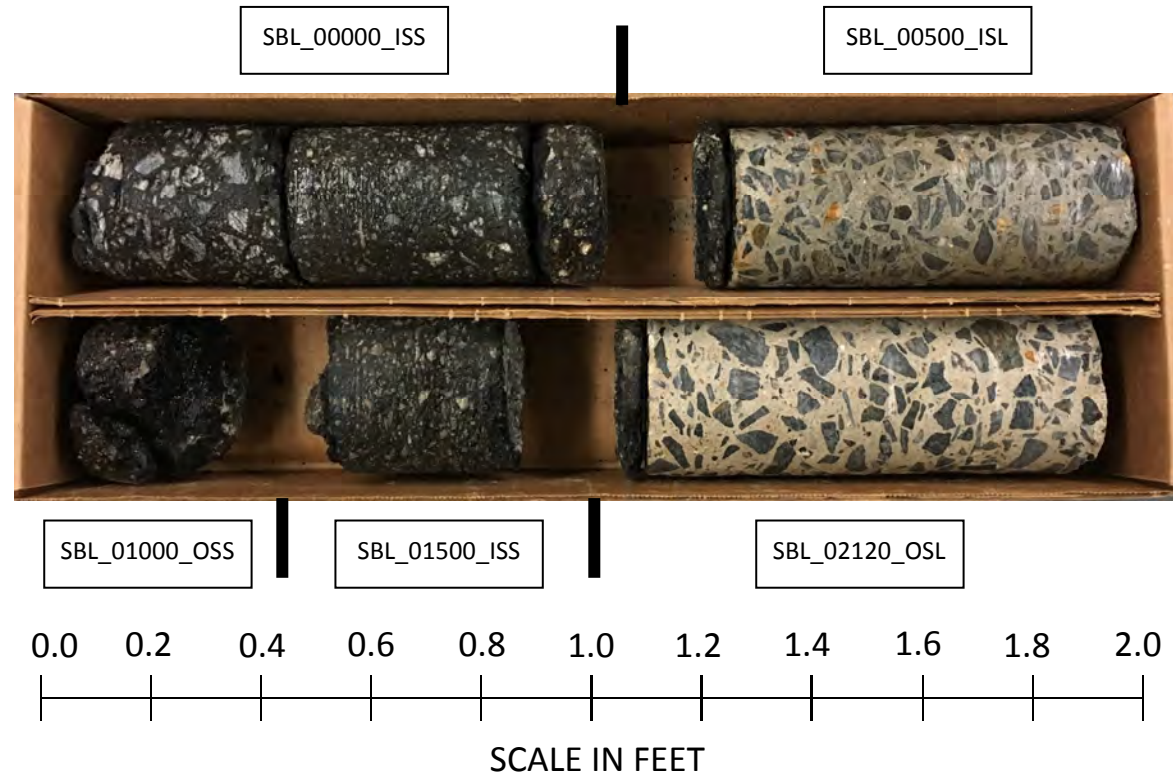


I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

ECS Southeast Project No. 08: 12605

Pavement Core Photographs: SBL



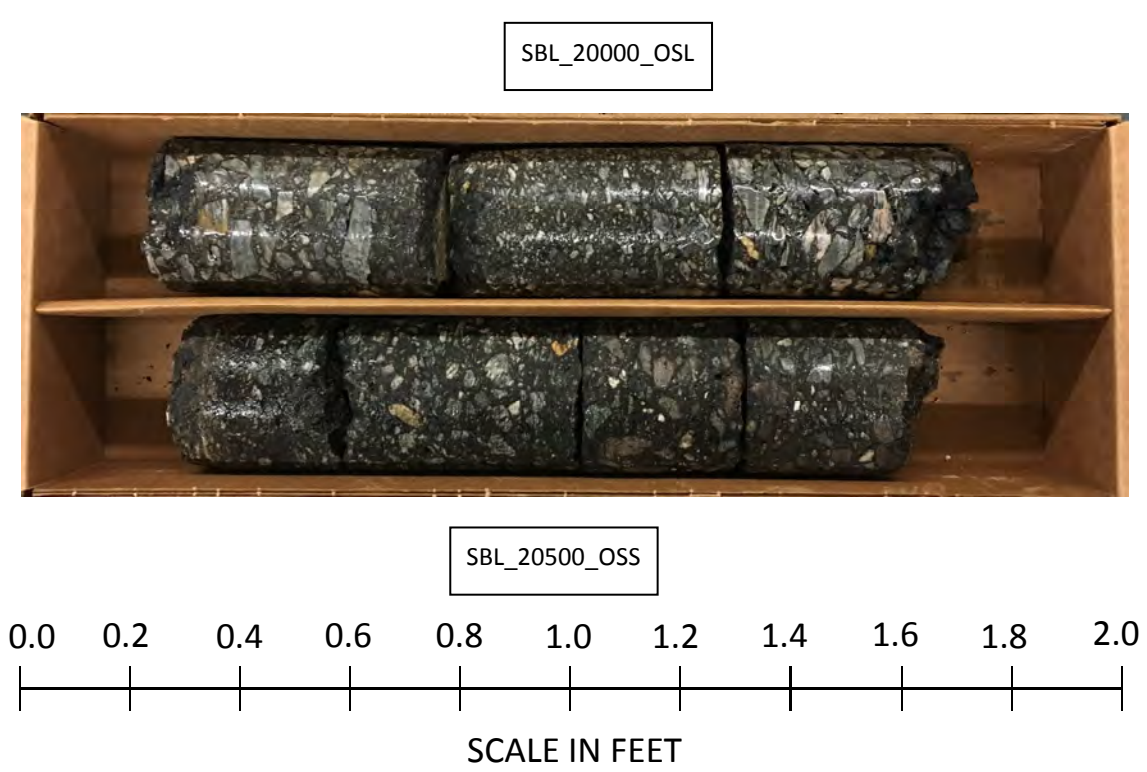
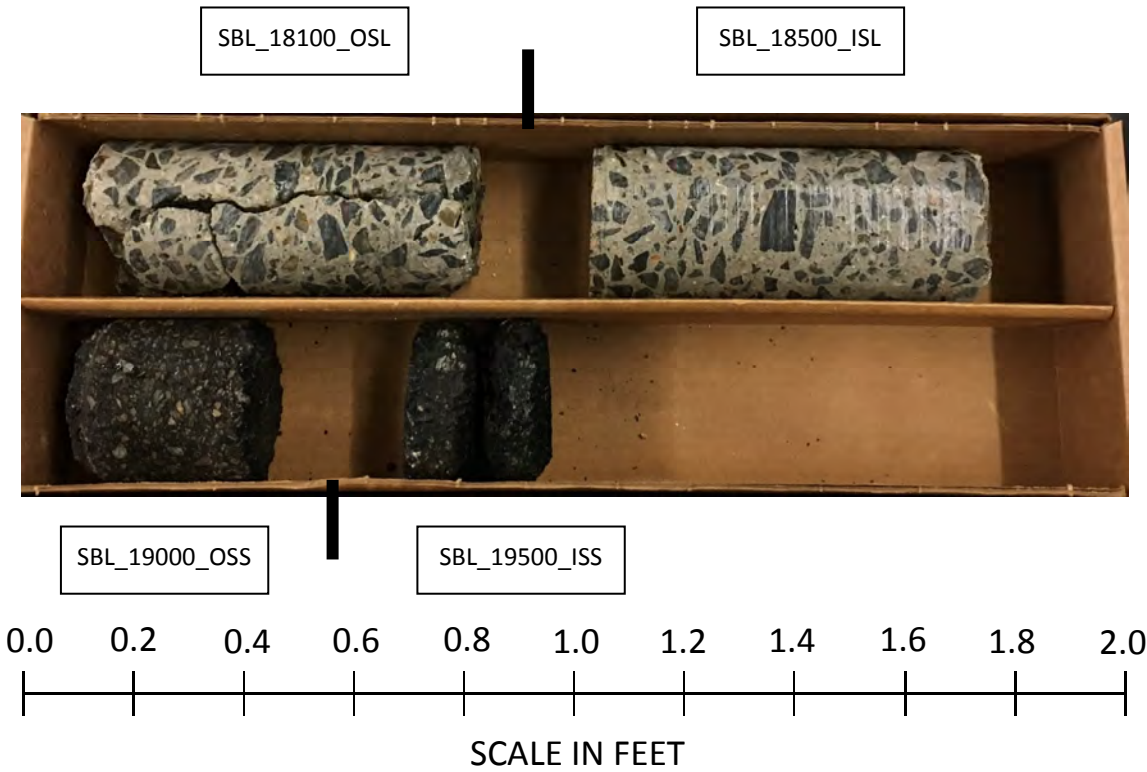
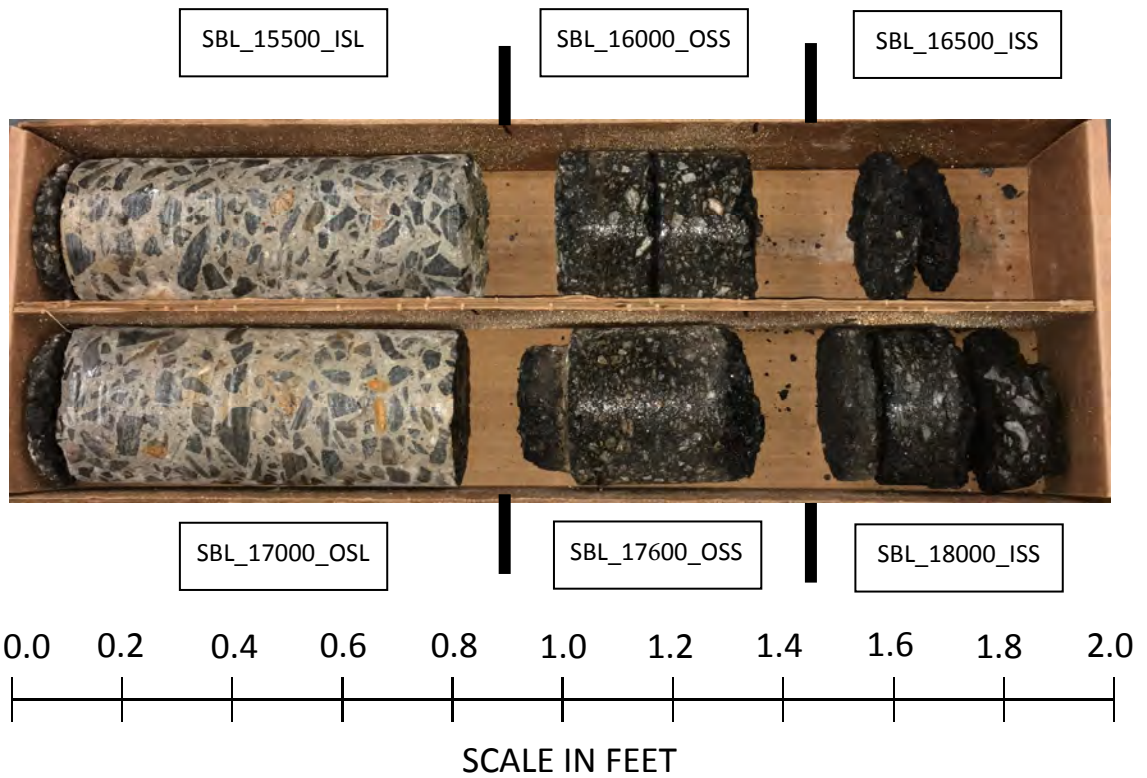
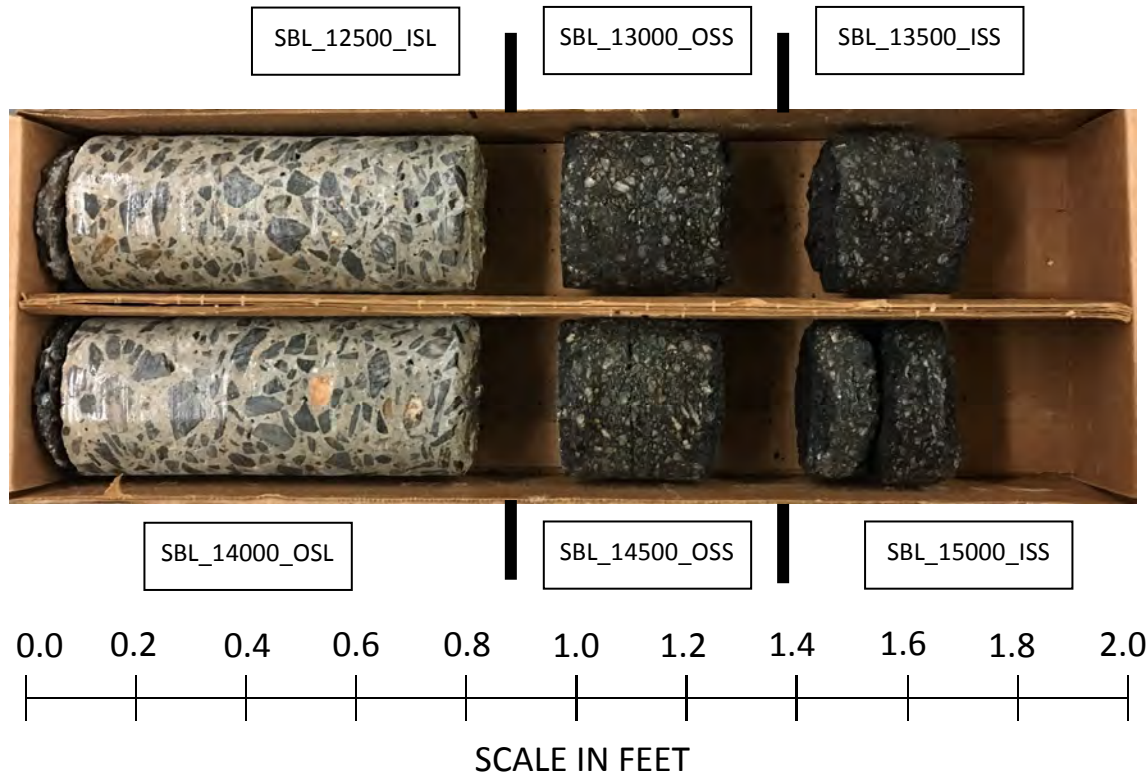


I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

ECS Southeast Project No. 08: 12605

Pavement Core Photographs: SBL





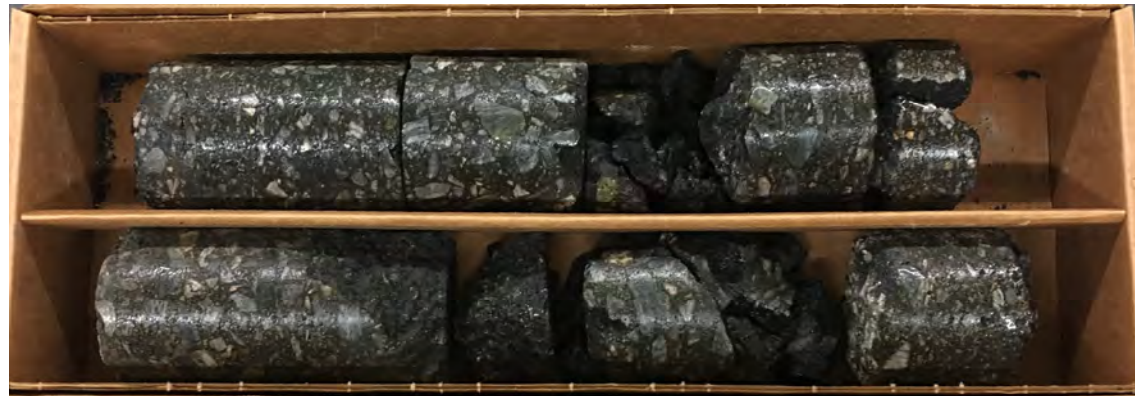
I-77 from US 21 (Exit 79) to Mile Marker 83.4

WBS - 45905.1.1 TIP No. - I-5912

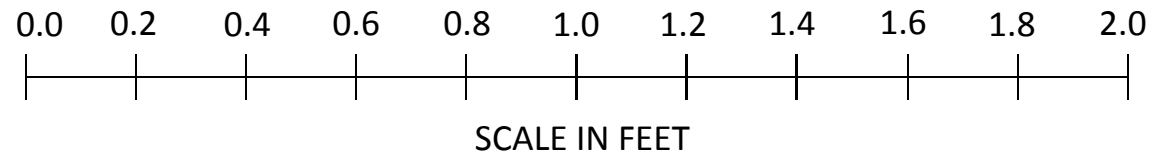
ECS Southeast Project No. 08: 12605

Pavement Core Photographs: SBL

SBL_21000_ISS



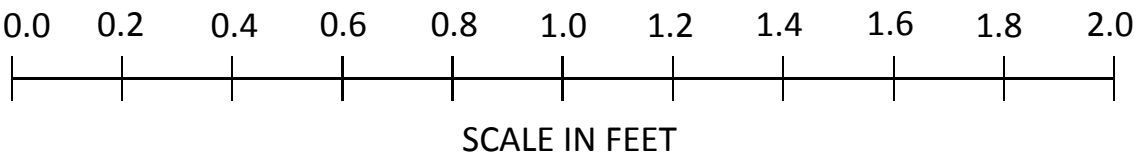
SBL_22000_ISL



SBL_22500_OSS



SBL_23000_ISS

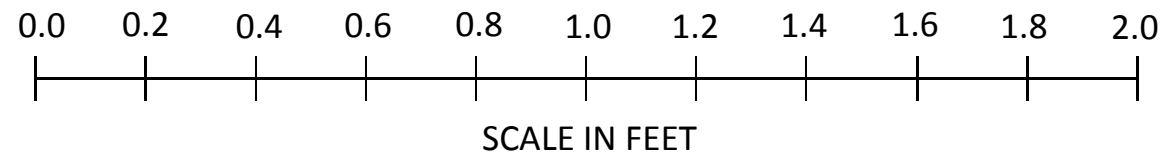


SBL_23500_OSL

SBL_24000_OSS



SBL_24500_ISS



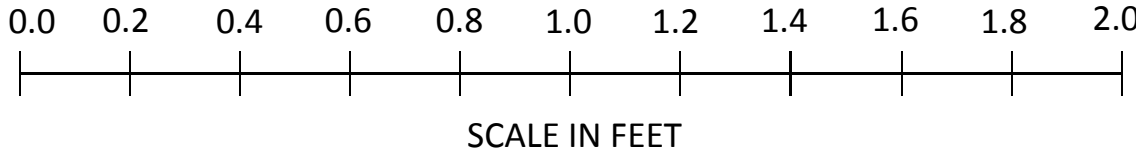
SBL_25000_ISL

SBL_25500_OSS



SBL_26000_ISS

SBL_26500_OSL



PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various

DATE SAMPLED: Soil Test Borings

SAMPLED FROM: D. Matthew Brewer, P.E.

SUBMITTED BY:

COUNTY: Surry/Yadkin

RECEIVED: February 2018

REPORTED: February 2018

BY / CERT NO: A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-1	S-2	S-12	S-13	S-3	S-4	S-15	S-16	S-6	S-7
BORING NO.	NBL_00000_OSS	NBL_00660_OSL	NBL_01000_ISS	NBL_02060_ISL	NBL_03000_OSS	NBL_03500_OSL	NBL_04000_ISS	NBL_05000_ISL	NBL_06000_OSS	NBL_06500_OSL
Retained #4 Sieve %	0.0	0.5	0.4	0.6	0.4	2.5	4.7	1.1	1.2	0.4
Passing #10 Sieve %	99.5	98.2	98.6	97.9	99.3	95.2	94.1	96.2	98.0	98.6
Passing #40 Sieve %	94.5	88.4	90.4	89.0	91.0	88.6	84.5	82.0	93.5	93.6
Passing #200 Sieve %	76.6	56.0	60.0	54.6	57.8	58.4	55.5	46.0	71.6	71.7

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	10.4	17.8	15.4	16.1	17.6	12.7	17.8	23.9	9.9	10.3
Fine Sand Ret - #270 %	15.7	37.3	33.4	37.8	33.7	35.6	33.3	40.9	22.0	23.0
Silt 0.053 - 0.010 mm %	4.7	18.2	20.0	23.3	24.1	13.9	18.0	15.3	17.6	11.5
Clay < 0.010 mm %	69.2	26.7	31.2	22.8	24.6	37.8	30.9	19.9	50.5	55.2
L.L.	70	40	43	27	41	45	43	34	61	59
P.L.	47	39	38	26	40	43	41	NP	45	47
P.I.	23	1	5	1	1	2	2	NP	16	12
AASHTO Classification	A-7-5(23)	A-4(1)	A-5(3)	A-4(0)	A-5(1)	A-5(2)	A-5(1)	A-4(0)	A-7-5(15)	A-7-5(12)
Station	0+00	6+60	10+00	20+60	30+00	35+00	40+00	50+00	60+00	65+00
Offset from Inside Lane Line			3.1' LT	2.1' RT			3.4' LT	4.5' RT		
Offset from Outside Lane Line	4.7' RT	3.8' LT			6.2' RT	3.2' LT			5.0' RT	3.3' LT
Depth (ft)	1.1	1.2	1.0	1.1	1.3	1.3	1.0	1.3	1.1	1.5
to	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Moisture Content (%)	23.2	26.0	24.7	20.0	23.8	27.6	20.4	16.6	28.0	32.8

NP=Not plastic

D. Matthew Brewer, P.E.

Soils Engineer

North Carolina Department of Transportation
Division of Highways
Materials and Test Unit
Soils Laboratory

T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various
DATE SAMPLED: Soil Test Borings
SAMPLED FROM: D. Matthew Brewer, P.E.
SUBMITTED BY:

COUNTY: Surry/Yadkin
RECEIVED: February 2018
REPORTED: February 2018
BY / CERT NO: A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-18	S-19	S-9	S-10	S21	S-36	S-24	S-25	S-38	S-39
BORING NO.	NBL_07000_ISS	NBL_08000_ISL	NBL_09000_OSS	NBL_09500_OSL	NBL_10000_ISS	NBL_11000_ISL	NBL_12000_OSS	NBL_12500_OSL	NBL_13000_ISS	NBL_14000_ISL
Retained #4 Sieve %	0.0	0.0	1.6	2.1	1.2	3.0	8.0	7.8	0.8	18.3
Passing #10 Sieve %	99.9	99.7	95.9	95.0	97.7	96.3	89.1	90.2	98.4	79.5
Passing #40 Sieve %	97.8	96.2	88.5	81.3	87.3	91.1	79.5	84.6	92.9	74.0
Passing #200 Sieve %	63.4	60.2	56.0	52.5	56.0	63.1	49.8	53.7	63.6	52.6

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	5.5	9.7	13.9	23.4	17.8	11.1	19.0	13.3	12.5	12.6
Fine Sand Ret - #270 %	45.9	43.8	40.1	31.7	35.6	33.5	35.0	38.4	32.2	30.4
Silt 0.053 - 0.010 mm %	27.5	25.5	29.7	25.1	29.8	32.4	28.6	31.0	28.4	26.9
Clay < 0.010 mm %	21.1	21.0	16.3	19.9	16.8	23.0	17.4	17.3	26.9	30.1
L.L.	36	41	30	37	34	34	33	34	37	39
P.L.	35	40	NP	33	33	33	NP	33	34	36
P.I.	1	1	NP	4	1	1	NP	1	3	3
AASHTO Classification	A-4(1)	A-5(1)	A-4(0)	A-4(1)	A-4(0)	A-4(0)	A-4(0)	A-4(0)	A-4(2)	A-4(1)
Station	70+00	80+00	90+00	95+00	100+00	110+00	120+00	125+00	130+00	140+00
Offset from Inside Lane Line	2.2' LT	2.8' RT			2.3' LT	3.6' RT			2.6' LT	3.6' RT
Offset from Outside Lane Line			5.0' RT	3.3' LT			4.3' RT	3.4' LT		
Depth (ft)	1.2	1.2	1.0	1.2	1.2	1.4	1.2	1.2	1.2	1.3
to	6.5	6.5	2.8	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Moisture Content (%)	20.3	23.2	19.8	19.6	17.6	21.2	19.0	23.2	26.0	18.2

NP=Not plastic

D. Matthew Brewer, P.E.
Soils Engineer

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various

DATE SAMPLED: Soil Test Borings

SAMPLED FROM: D. Matthew Brewer, P.E.

SUBMITTED BY:

COUNTY: Surry/Yadkin

RECEIVED: February 2018

REPORTED: February 2018

BY / CERT NO: A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-27	S-35	S-41	S-82	S-29	S-30	S-44	S-45	S-32	S-33
BORING NO.	NBL_15000_OSS	NBL_15500_OSL	NBL_16000_ISS	NBL_17005_ISL	NBL_18000_OSS	NBL_18500_OSL	NBL_19000_ISS	NBL_20000_ISL	NBL_21000_OSS	NBL_22000_OSL
Retained #4 Sieve %	0.0	5.9	0.0	2.0	3.0	0.0	0.8	21.7	1.9	0.0
Passing #10 Sieve %	98.6	92.2	99.9	94.4	95.4	99.3	97.9	74.5	95.9	99.5
Passing #40 Sieve %	87.9	85.8	96.8	78.3	87.5	90.7	92.1	66.4	85.2	96.6
Passing #200 Sieve %	58.0	57.6	78.6	49.6	65.7	56.9	66.5	46.0	60.1	77.3

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	19.7	13.3	7.7	25.7	13.6	15.8	10.5	17.2	17.7	6.8
Fine Sand Ret - #270 %	28.1	33.9	18.6	29.2	27.1	40.3	33.2	31.1	27.9	21.8
Silt 0.053 - 0.010 mm %	28.1	31.7	18.4	25.2	41.5	32.1	38.0	32.3	35.7	34.0
Clay < 0.010 mm %	24.1	21.1	55.3	19.9	17.8	11.8	18.3	19.4	18.7	37.4
L.L.	39	38	61	35	39	34	34	33	34	47
P.L.	35	35	54	32	38	33	32	30	33	37
P.I.	4	3	7	3	1	1	2	3	1	10
AASHTO Classification	A-4(2)	A-4(1)	A-5(12)	A-4(0)	A-4(1)	A-4(0)	A-4(1)	A-4(0)	A-4(0)	A-5(10)
Station	150+00	155+00	160+00	170+00	180+00	185+00	190+00	200+00	210+00	220+00
Offset from Inside Lane Line			2.8' LT	3.8' RT			2.9' LT	2.8' RT		
Offset from Outside Lane Line	4.5' RT	3.8' LT			4.7' RT	2.8' LT			0.4' RT	3.9' LT
Depth (ft)	1.1	1.4	1.0	1.3	1.0	1.3	1.2	1.2	2.4	1.4
to	6.5	3.7	6.5	6.5	6.5	6.5	6.5	2.8	7.0	6.5
Moisture Content (%)	23.1	38.8	22.2	16.0	18.4	13.8	16.1	15.9	17.9	31.9

NP=Not plastic

D. Matthew Brewer, P.E.

Soils Engineer

North Carolina Department of Transportation
Division of Highways
Materials and Test Unit
Soils Laboratory

T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various
DATE SAMPLED: Soil Test Borings
SAMPLED FROM: D. Matthew Brewer, P.E.
SUBMITTED BY:

COUNTY: Surry/Yadkin
RECEIVED: February 2018
REPORTED: February 2018
BY / CERT NO: A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-47	S-48	S-51	S-52	S-50	S-53	CBR-1	CBR-2
BORING NO.	NBL_22500_ISS	NBL_23500_ISL	NBL_24500_OSS	NBL_25000_OSL	NBL_25500_ISS	NBL_26000_OSS	NBL_03000	NBL_22000
Retained #4 Sieve %	0.0	0.7	10.9	5.8	2.5	2.9	0.0	1.8
Passing #10 Sieve %	99.3	96.9	85.4	90.3	93.5	94.4	99.7	91.9
Passing #40 Sieve %	95.8	94.7	78.8	79.8	87.7	86.8	95.0	80.1
Passing #200 Sieve %	77.2	65.5	56.8	61.1	75.8	66.5	54.1	60.1

SOIL MORTAR - 100%								
Coarse Sand Ret - #60 %	6.2	4.9	12.9	18.4	9.4	12.4	13.2	18.0
Fine Sand Ret - #270 %	25.5	41.9	29.6	19.0	14.6	25.3	47.5	24.2
Silt 0.053 - 0.010 mm %	40.3	36.8	34.5	22.7	31.9	29.0	30.7	38.1
Clay < 0.010 mm %	28.0	16.4	23.0	39.9	44.1	33.3	8.6	19.7
L.L.	52	42	42	54	40	54	46	44
P.L.	46	41	40	40	25	45	45	42
P.I.	6	1	2	14	15	9	1	2
AASHTO Classification	A-5(8)	A-5(2)	A-5(1)	A-7-5(9)	A-6(11)	A-5(8)	A-5(1)	A-5(2)
Station	225+00	235+00	245+00	250+00	255+00	260+00	30+00*	220+00*
Offset from Inside Lane Line	3.4' LT	3.6' RT			2.3' LT			
Offset from Outside Lane Line			4.0' LT	3.4' RT		4.9' RT		
Depth (ft)	1.4	1.8	1.1	1.1	1.1	1.1	1.0	1.0
to	6.5	7.0	6.5	6.5	6.5	6.5	4.0	3.0
Moisture Content (%)	36.3	21.3	24.3	20.1	22.8	23.5	34.1	28.6

NP=Not plastic
*Note: CBR Bulk Samples obtained from project cut slopes at the approximate stations indicated

D. Matthew Brewer, P.E.
Soils Engineer

North Carolina Department of Transportation
Division of Highways
Materials and Test Unit
Soils Laboratory

T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various
DATE SAMPLED: Soil Test Borings
SAMPLED FROM: D. Matthew Brewer, P.E.
SUBMITTED BY:

COUNTY: Surry/Yadkin
RECEIVED: February 2018
REPORTED: February 2018
BY / CERT NO: T. Pope 134-01-0416
A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-107	S-106	S-98	S-97	S-104	S-103	S-95	S-94	S-101	S-92
BORING NO.	SBL_00500_ISL	SBL_01500_ISS	SBL_02120_OSL	SBL_02500_OSS	SBL_03500_ISL	SBL_04500_ISS	SBL_05000_OSL	SBL_05500_OSS	SBL_06500_ISL	SBL_08000_OSL
Retained #4 Sieve %	2.8	1.1	1.6	0.8	1.7	0.0	1.0	0.4	0.1	0.3
Passing #10 Sieve %	93.0	96.7	94.8	97.5	92.4	99.8	97.2	99.2	99.1	98.5
Passing #40 Sieve %	86.5	85.7	76.6	86.8	74.8	90.6	80.5	85.7	91.3	92.6
Passing #200 Sieve %	66.1	57.1	39.0	59.7	46.7	53.5	42.2	51.0	65.8	57.1

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	17.6	21.3	35.2	20.3	32.7	19.0	32.5	24.8	14.8	13.1
Fine Sand Ret - #270 %	23.4	31.5	35.8	28.8	29.2	39.7	40.3	30.7	26.4	50.3
Silt 0.053 - 0.010 mm %	12.5	14.7	12.7	10.1	11.0	20.2	8.6	17.4	19.5	13.7
Clay < 0.010 mm %	46.5	32.5	16.3	40.8	27.1	21.1	18.6	27.1	39.3	22.9
L.L.	52	38	NP	40	35	37	NP	22	50	NP
P.L.	29	30	NP	26	23	33	NP	17	36	NP
P.I.	23	8	NP	14	12	4	NP	5	14	NP
AASHTO Classification	A-7-6(15)	A-4(3)	A-4(0)	A-6(7)	A-6(3)	A-4(1)	A-4(0)	A-4(0)	A-7-5(10)	A-4(0)
Station	5+00	15+00	21+20	25+00	35+00	45+00	50+00	55+00	60+00	80+00
Offset from Inside Lane Line	3.7' RT	1.7' LT			3.2' RT	2.2' LT			2.6' RT	
Offset from Outside Lane Line			4.2' LT	2.7' RT			2.8' LT	5.6' RT		2.9' LT
Depth (ft)	1.2	1.0	1.4	1.0	1.3	1.0	1.3	1.2	1.4	1.4
to	6.5	6.5	6.5	6.5	2.2	6.5	6.5	6.5	6.5	6.5
Moisture Content (%)	25.1	23.8	9.8	19.5	13.5	23.5	11.9	17.0	23.1	22.0

NP=Not plastic

D. Matthew Brewer, P.E.
Soils Engineer

T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

North Carolina Department of Transportation

Division of Highways

Materials and Test Unit

Soils Laboratory

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various

DATE SAMPLED: Soil Test Borings

SAMPLED FROM: D. Matthew Brewer, P.E.

SUBMITTED BY:

COUNTY: Surry/Yadkin

RECEIVED: February 2018

REPORTED: February 2018

BY / CERT NO: T. Pope 134-01-0416

A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-91	S-77	S-76	S-89	S-88	S-74	S-73	S-86	S-85	S-71
BORING NO.	SBL_08550_OSS	SBL_09500_ISL	SBL_10500_ISS	SBL_11000_OSL	SBL_11500_OSS	SBL_12500_ISL	SBL_13500_ISS	SBL_14000_OSL	SBL_14500_OSS	SBL_15500_ISL
Retained #4 Sieve %	0.2	1.6	1.7	0.0	0.0	0.3	0.3	1.6	1.9	0.8
Passing #10 Sieve %	99.4	97.6	95.3	99.4	99.1	98.9	98.8	96.9	94.7	98.3
Passing #40 Sieve %	94.6	91.0	84.6	94.8	89.6	92.4	93.1	88.5	82.4	93.4
Passing #200 Sieve %	71.8	55.4	59.2	66.4	62.6	60.5	60.1	56.6	52.8	65.3

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	10.9	19.0	21.7	9.9	16.8	13.9	12.8	18.8	24.6	11.5
Fine Sand Ret - #270 %	24.9	34.7	26.3	39.4	30.3	38.0	41.9	46.7	40.6	34.4
Silt 0.053 - 0.010 mm %	16.5	25.6	20.1	19.4	23.7	29.1	32.4	15.9	12.8	21.1
Clay < 0.010 mm %	47.7	20.7	31.9	31.3	29.2	19.0	12.9	18.6	22.0	33.0
L.L.	49	40	39	33	35	38	37	35	36	41
P.L.	30	35	28	29	26	33	34	34	30	34
P.I.	19	5	11	4	9	5	3	1	6	7
AASHTO Classification	A-7-5(14)	A-4(2)	A-6(5)	A-4(2)	A-4(4)	A-4(2)	A-4(1)	A-4(0)	A-4(2)	A-5(5)
Station	85+50	95+00	105+00	110+00	115+00	125+00	135+00	140+00	145+00	155+00
Offset from Inside Lane Line		3.3' RT	1.9' LT			3.9' RT	2.7' LT			3.7' RT
Offset from Outside Lane Line	3.9' RT			2.1' LT	4.2' RT			3.2' LT	4.2' RT	
Depth (ft)	1.1	1.5	1.2	1.3	1.0	1.3	1.1	1.2	1.1	1.4
to	6.5	6.5	6.5	6.5	6.5	4.3	6.5	3.8	6.5	6.5
Moisture Content (%)	26.3	14.5	25.0	19.2	21.2	23.8	18.9	37.6	20.2	37.6

NP=Not plastic

D. Matthew Brewer, P.E.

Soils Engineer

North Carolina Department of Transportation
Division of Highways
Materials and Test Unit
Soils Laboratory

T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various
DATE SAMPLED: Soil Test Borings
SAMPLED FROM: D. Matthew Brewer, P.E.
SUBMITTED BY:

COUNTY: Surry/Yadkin
RECEIVED: February 2018
REPORTED: February 2018
BY / CERT NO: T. Pope 134-01-0416
A. Roth 112-09-1003

PROJ. SAMPLE NO.	S-70	S-84	S-82	S-68	S-62	S-100	S-67	S-60	S-59	S-65
BORING NO.	SBL_16500_ISS	SBL_17005_OSL	SBL_17600_OSS	SBL_18500_ISL	SBL_19500_ISS	SBL_20000_OSL	SBL_20500_OSS	SBL_22000_ISL	SBL_23000_ISS	SBL_23500_OSL
Retained #4 Sieve %	1.0	1.0	2.6	0.9	0.9	5.9	0.4	3.8	0.1	3.5
Passing #10 Sieve %	96.7	95.1	94.9	97.2	97.4	89.5	96.9	93.2	98.9	92.5
Passing #40 Sieve %	90.5	83.7	90.7	88.8	91.9	79.6	89.7	84.3	95.8	81.7
Passing #200 Sieve %	63.1	56.1	61.1	59.9	73.2	66.0	67.0	59.1	65.1	55.1

SOIL MORTAR - 100%										
Coarse Sand Ret - #60 %	14.1	22.8	12.3	17.2	11.2	24.1	15.1	22.1	9.6	24.9
Fine Sand Ret - #270 %	34.6	37.5	38.2	33.4	28.8	15.2	28.3	31.1	45.9	29.2
Silt 0.053 - 0.010 mm %	22.9	15.7	29.4	22.8	29.4	34.5	30.1	21.2	21.3	26.2
Clay < 0.010 mm %	28.4	24.0	20.1	26.6	30.6	26.2	26.5	25.6	23.2	19.7
L.L.	36	36	36	34	38	29	35	35	46	36
P.L.	30	29	30	27	30	26	30	30	35	31
P.I.	6	7	6	7	8	3	5	5	11	5
AASHTO Classification	A-4(3)	A-4(3)	A-4(3)	A-4(3)	A-4(6)	A-4(1)	A-4(3)	A-4(2)	A-7-5(7)	A-4(2)
Station	165+00	170+00	176+00	185+00	195+00	200+00	205+00	220+00	230+00	235+00
Offset from Inside Lane Line	2.5' LT			3.1' RT	2.9' LT			2.8' RT	5.4' LT	
Offset from Outside Lane Line		3.9' LT	1.9' RT			4.8' LT	5.7' RT			2.1' LT
Depth (ft)	1.0	1.3	1.1	1.5	1.0	2.0	1.8	1.8	1.9	1.1
to	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	6.5
Moisture Content (%)	30.9	19.0	20.4	18.8	17.9	33.6	13.2	23.0	29.5	19.1

NP=Not plastic

D. Matthew Brewer, P.E.
Soils Engineer

North Carolina Department of Transportation
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T.I.P. ID NO.: I-5912
DESCRIPTION: I-77 from US 21 (Exit 79) to Mile Marker 83.4

REPORT ON SAMPLES OF: SOIL FOR QUALITY

PROJECT: I-77 from US 21 (Exit 79) to Mile Marker 83.4 Various
DATE SAMPLED: Soil Test Borings
SAMPLED FROM: D. Matthew Brewer, P.E.
SUBMITTED BY:

COUNTY: Surry/Yadkin
RECEIVED: February 2018
REPORTED: February 2018
BY / CERT NO: T. Pope 134-01-0416
A. Roth 112-09-1003

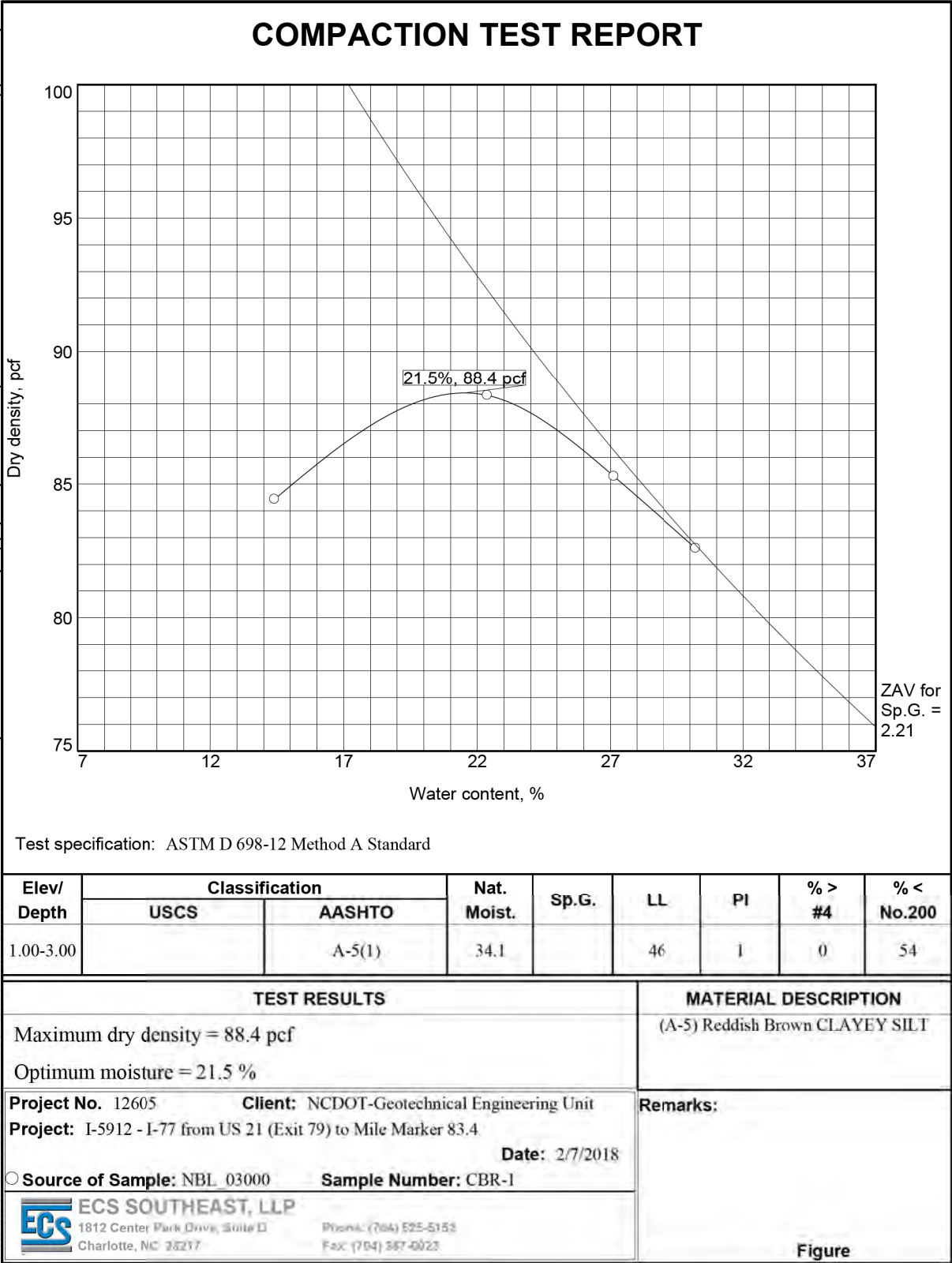
PROJ. SAMPLE NO.	S-64	S-57	S-56	S-55	CBR-4	CBR-3
BORING NO.	SBL_24000_OSS	SBL_25000_ISL	SBL_26000_ISS	SBL_26500_OSL	SBL_08000	SBL_14000
Retained #4 Sieve %	1.3	2.7	5.8	4.5	0.2	0.8
Passing #10 Sieve %	96.7	94.2	90.5	93.2	98.5	98.7
Passing #40 Sieve %	88.6	87.4	82.0	85.2	91.7	89.5
Passing #200 Sieve %	66.0	66.7	63.0	64.9	40.4	39.6

SOIL MORTAR - 100%						
Coarse Sand Ret - #60 %	15.9	17.3	22.3	19.3	16.3	22.2
Fine Sand Ret - #270 %	27.6	23.9	23.6	26.8	59.6	49.8
Silt 0.053 - 0.010 mm %	47.7	29.1	21.8	26.5	12.5	23.8
Clay < 0.010 mm %	8.8	29.7	32.3	27.4	11.6	4.2
L.L.	43	42	43	41	NP	NP
P.L.	37	32	33	33	NP	NP
P.I.	6	10	10	8	NP	NP
AASHTO Classification	A-5(5)	A-5(7)	A-5(6)	A-5(5)	A-5(0)	A-4(0)
Station	240+00	250+00	260+00	265+00	80+00*	140+00*
Offset from Inside Lane Line		3.0' RT	3.1' LT			
Offset from Outside Lane Line	3.9' RT			2.6' RT		
Depth (ft)	1.2	1.5	1.3	1.2	1.0	1.0
to	6.5	6.5	6.5	6.5	3.0	4.0
Moisture Content (%)	27.5	23.4	19.0	23.1	25.3	13.6

NP=Not plastic
*Note: CBR Bulk Samples obtained from project cut slopes at the approximate stations indicated

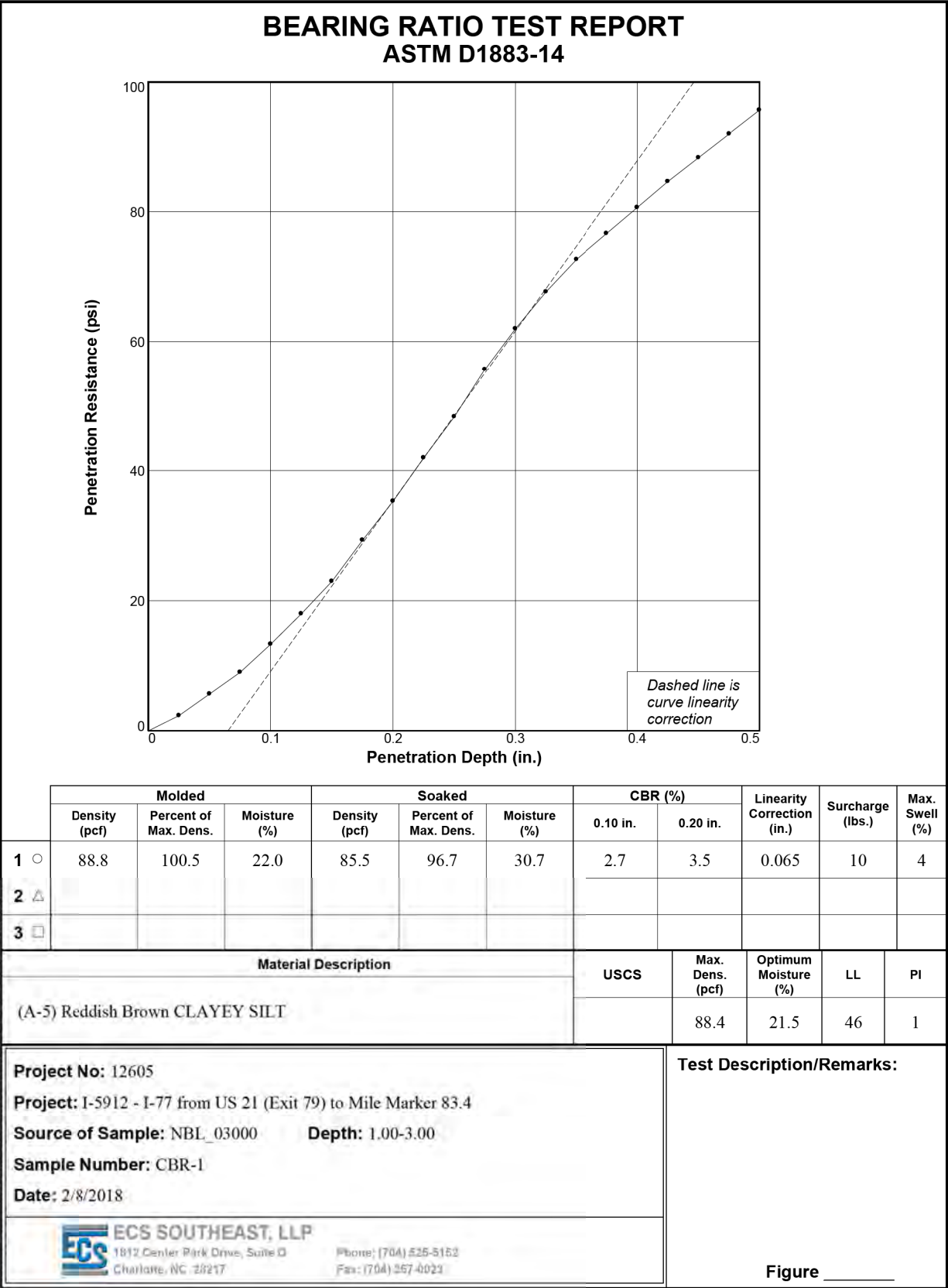
D. Matthew Brewer, P.E.
Soils Engineer

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

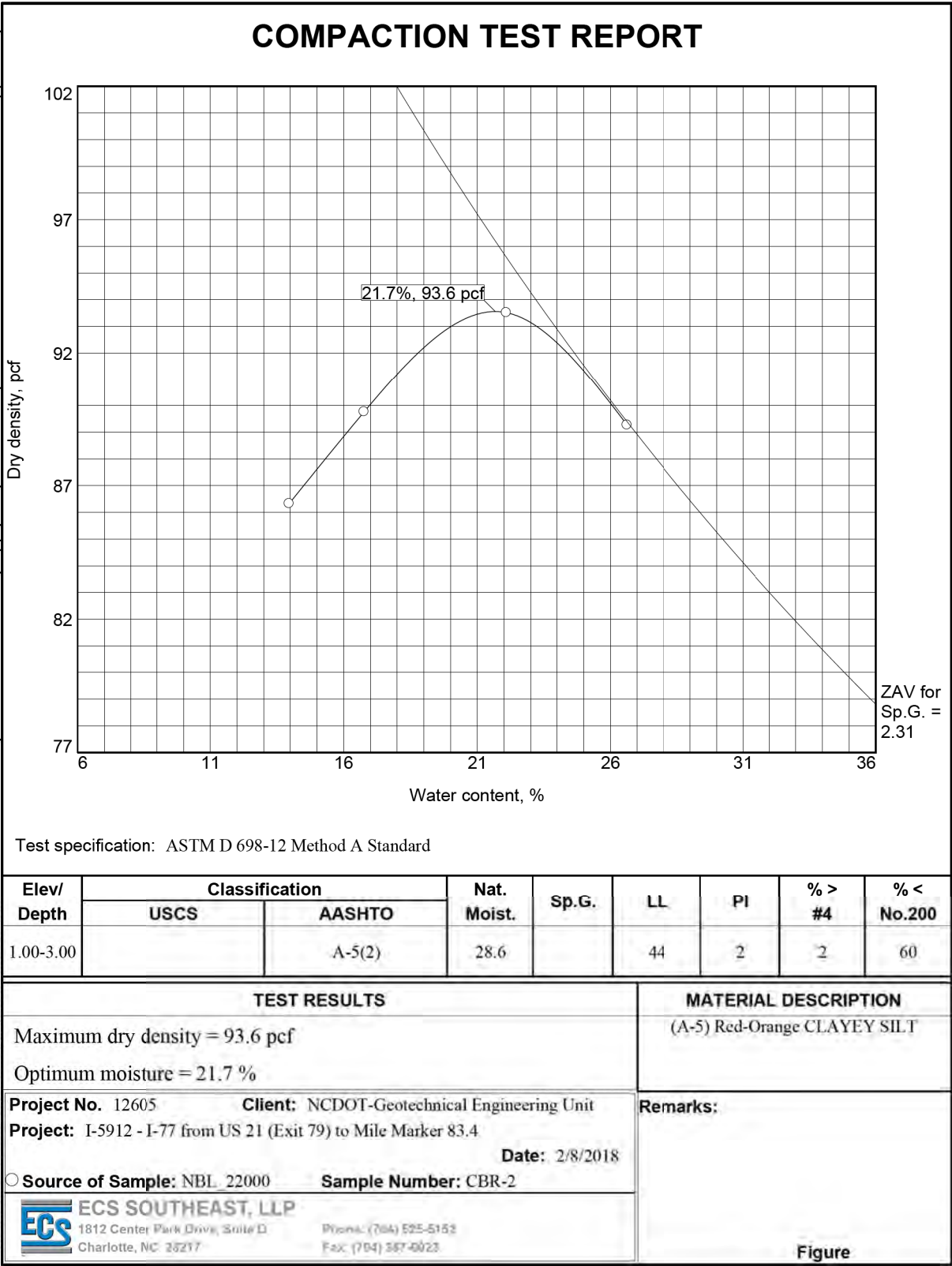


Tested By: AS

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

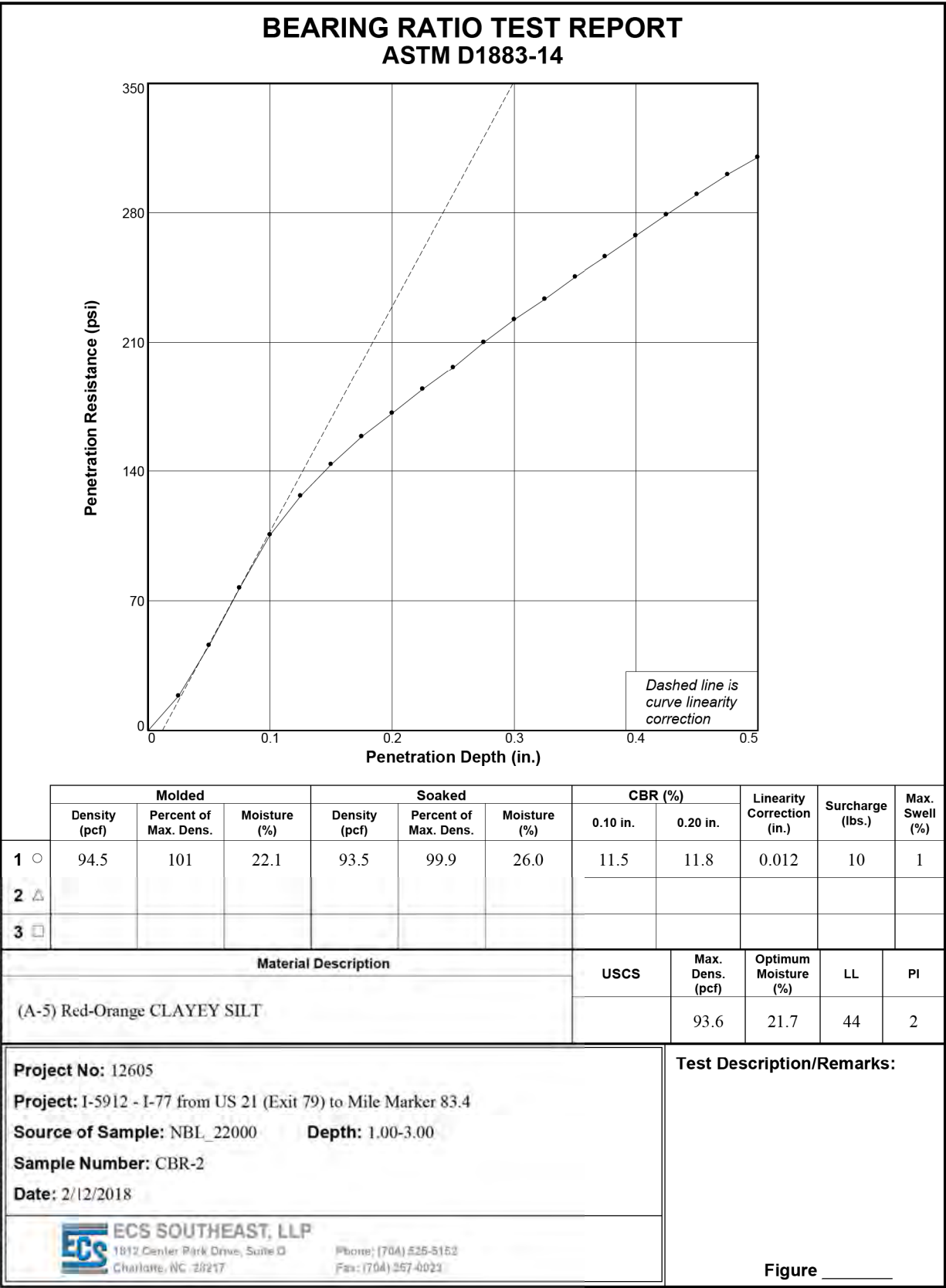


These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.



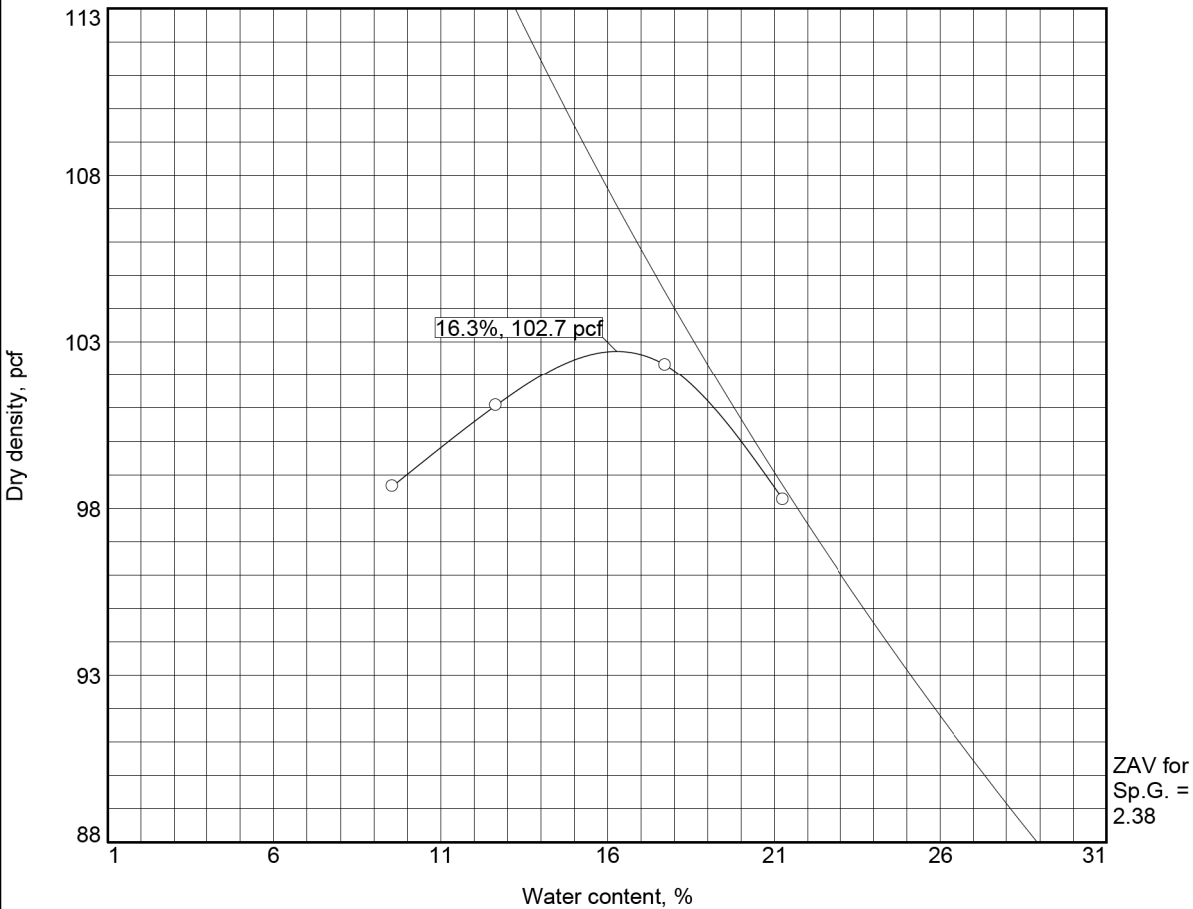
Tested By: AS

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COMPACTION TEST REPORT



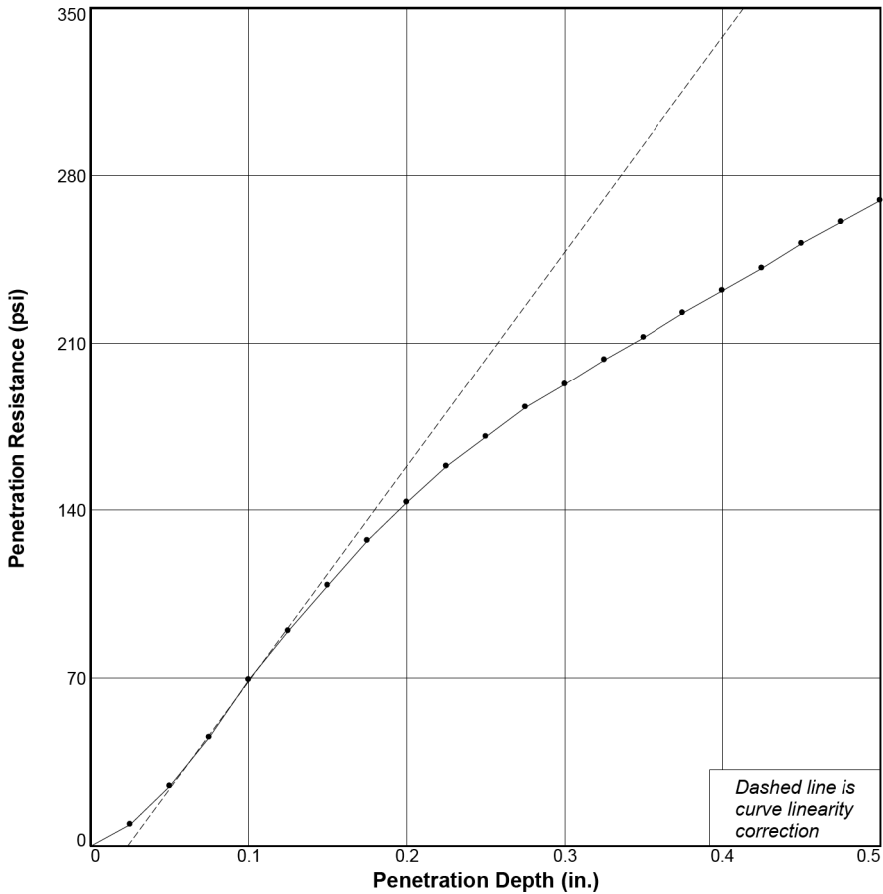
Test specification: ASTM D 698-12 Method A Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > #4	% < No.200
	USCS	AASHTO						
1.00-4.00		A-4(0)	13.6		32	NP	1	40

TEST RESULTS		MATERIAL DESCRIPTION
Maximum dry density = 102.7 pcf		(A-4) Olive Brown Fine to Coarse SANDY SILT
Optimum moisture = 16.3 %		
Project No. 12605 Client: NCDOT-Geotechnical Engineering Unit		Remarks:
Project: I-5912 - I-77 from US 21 (Exit 79) to Mile Marker 83.4		
Date: 2/8/2018		
Source of Sample: SBL 14000 Sample Number: CBR-3		
 ECS SOUTHEAST, LLP 1812 Center Park Drive, Suite D Charlotte, NC 28217 Phone: (704) 525-5152 Fax: (704) 357-0023		Figure

Tested By: AS

BEARING RATIO TEST REPORT
ASTM D1883-14



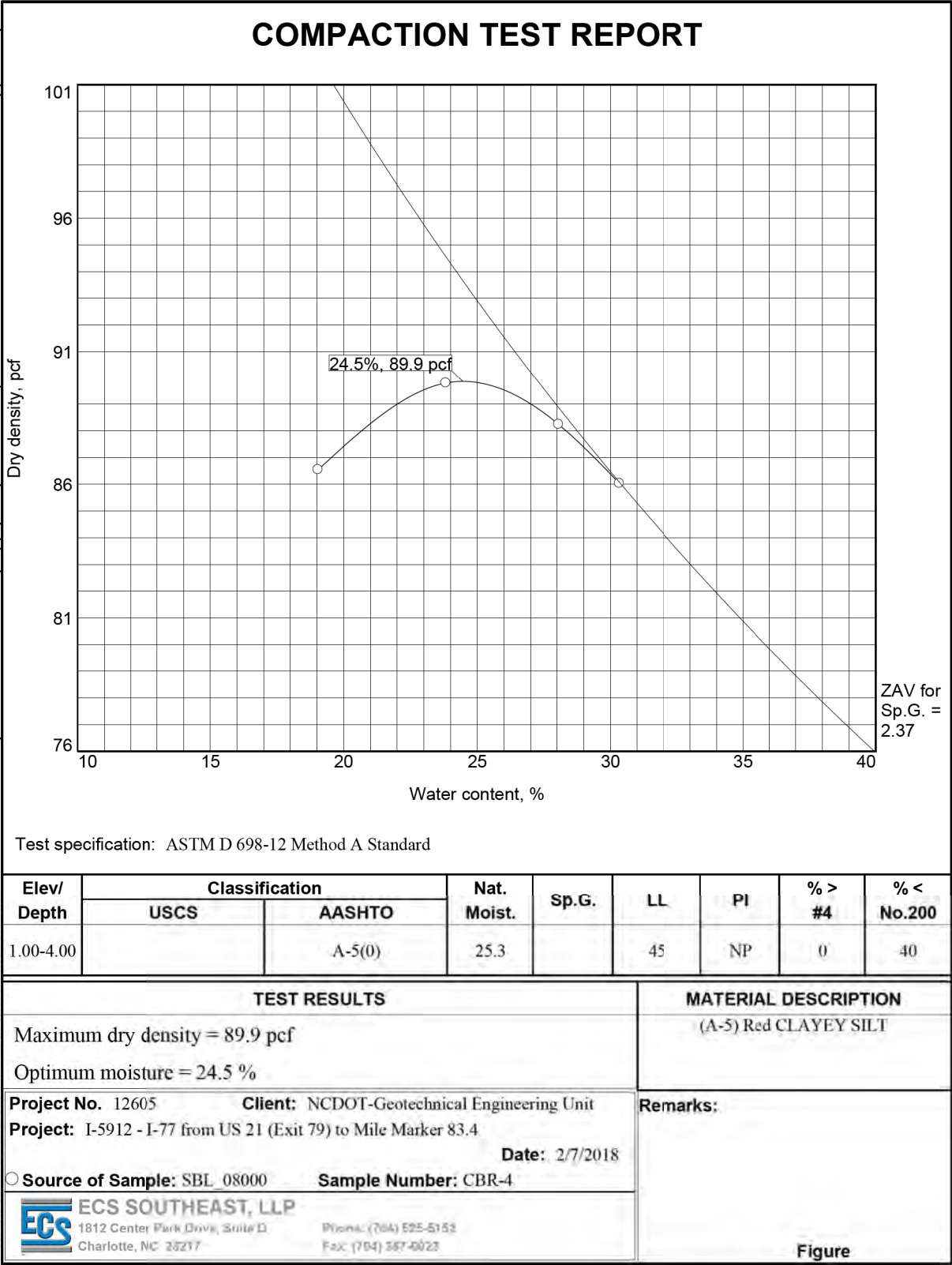
	Molded			Soaked			CBR (%)		Linearity Correction (in.)	Surcharge (lbs.)	Max. Swell (%)
	Density (pcf)	Percent of Max. Dens.	Moisture (%)	Density (pcf)	Percent of Max. Dens.	Moisture (%)	0.10 in.	0.20 in.			
1 ○	103.0	100.3	15.8	102.1	99.4	20.1	8.8	10.5	0.023	10	1
2 △											
3 □											

Material Description							USCS	Max. Dens. (pcf)	Optimum Moisture (%)	LL	PI
(A-4) Olive Brown Fine to Coarse SANDY SILT											
								102.7	16.3	32	NP

Project No: 12605								Test Description/Remarks:			
Project: I-5912 - I-77 from US 21 (Exit 79) to Mile Marker 83.4											
Source of Sample: SBL 14000				Depth: 1.00-4.00							
Sample Number: CBR-3				Date: 2/9/2018							
 ECS SOUTHEAST, LLP 1812 Center Park Drive, Suite D Charlotte, NC 28217 Phone: (704) 525-5152 Fax: (704) 267-0023								Figure _____			

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