STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2525C	1	354

REFERENCE: U-2525C

PROJECT: 34821

SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

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

ROADWAY SUBSURFACE INVESTIGATION

COUNTY *GUILFORD*

PROJECT DESCRIPTION *GREENSBORO LOOP FROM US 29 NORTH OF GREENSBORO TO SR 2303 LAWNDALE DRIVE*

RECOMMENDATIONS

CONTENTS

LINE	STATION	PLAN	PROFILE
-L-	270+00 - 361+00		4 - 10
-L-	400+00 - 504+00		11 - 18
-L-	517+00 - 552+99.67		19 - 21
-Y4LPA-	10+00 - 18+94.25		22
-Y4LPC-	10+00 - 18+99.87		23
-Y4RPA-	10+00 - 26+58.29		24
-Y6LPA-	10+00 - 20+42.49		25
-Y6LPC-	10+00 - 20+80.90		26
-Y6RPA-	10+00 - 29+25.97		27
-Y13RPA-	10+00 - 27+72.75		28
-Y13RPD-	10+00 - 38+32.74		29
-Y4DET-	11+38.51 - 22+13.42		30
-Y5DET-	10+89.44 - 18+24.96		30

SECTIONS

SECTION	TITLE	SHEETS
1	CROSS SECTIONS -L- LEFT	31 - 148
2	CROSS SECTIONS -L- RIGHT	149 - 272
3	CROSS SECTIONS -Y- LINES	273 - 351

CAUTION NOTICE

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

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

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

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

PERSONNEL

S.TIERNAN	*C. CHANDLER*
F. WRIGHT	*K. HILL*
L. BUTLER	*S. LANEY*
J. POOLE	*S. MITCHELL*
A. CULPEPPER	*N. BRADLEY*

INVESTIGATED BY *S&ME, INC.*

DRAWN BY *C. CHANDLER*

CHECKED BY *S. MITCHELL*

SUBMITTED BY *S&ME, INC.*

DATE *MAY 2017*

S&ME

NORTH CAROLINA PROFESSIONAL SEAL 031013 ENGINEER STEWART S. LANEY

DocuSigned by:
Stewart S. Laney, PE 5/30/2017
75BB4AB1AB3B4CB...
SIGNATURE DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	2

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-4	A-5	A-6	A-7	A-1, A-2 A-3	A-4, A-5 A-6, A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6			
SYMBOL														
% PASSING #10	50 MX													
#40	30 MX	50 MX	51 MN											
#200	15 MX	25 MX	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	—		—	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
PI	6 MX		NP	10 MX	10 MX	11 MN	11 MN	10 MX	10 MX	11 MN	11 MN			
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

CONSISTENCY OR DENSENESS

PRIMARY SOIL TYPE	COMPACTNESS OR CONSISTENCY	RANGE OF STANDARD PENETRATION RESISTENCE (N-VALUE)	RANGE OF UNCONFINED COMPRESSIVE STRENGTH ($TONS/FT^2$)
GENERALLY GRANULAR MATERIAL (NON-COHESIVE)	VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	< 4 4 TO 10 10 TO 30 30 TO 50 > 50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	< 2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 > 30	< 0.25 0.25 TO 0.5 0.5 TO 1.0 1 TO 2 2 TO 4 > 4

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE	4	10	40	60	200	270
OPENING (MM)	4.76	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	75	2.0	0.25	0.05	0.005
	IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

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

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	1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY	35% AND ABOVE

GROUND WATER

- WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
- STATIC WATER LEVEL AFTER 24 HOURS
- PW — 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
- 25/025 — DIP & DIP DIRECTION OF ROCK STRUCTURES
- SPT, DPT, DMT, VST, PMT — TEST BORING
- AUGER BORING
- CORE BORING
- MW — MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

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
HI. - 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
γ - UNIT WEIGHT
γ_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
- [X] CME-550
- [ ] VANE SHEAR TEST
- [ ] PORTABLE HOIST
- [X] CME-850
- [X] DIETRICH D50

ADVANCING TOOLS:
- [ ] CLAY BITS
- [ ] 6" CONTINUOUS FLIGHT AUGER
- [ ] 8" HOLLOW AUGERS
- [ ] HARD FACED FINGER BITS
- [ ] TUNG.-CARBIDE INSERTS
- [ ] CASING [ ] W/ ADVANCER
- [ ] TRICONE _____" STEEL TEETH
- [ ] TRICONE _____" TUNG.-CARB.
- [ ] CORE BIT
- [X] 3 1/4" HSA

HAMMER TYPE:
- [X] AUTOMATIC [ ] MANUAL

CORE SIZE:
- [ ] -B _____ [ ] -H _____
- [ ] -N _____

HAND TOOLS:
- [ ] POST HOLE DIGGER
- [ ] HAND AUGER
- [ ] SOUNDING ROD
- [ ] VANE SHEAR TEST
- [ ] _____

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 YEILD 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 SLI.)	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 (SLI.)	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.

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 PEICES 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 FINGERNAIL.

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.

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 DISLODGED 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 (SRQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.

TOPSOIL (TS.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.

BENCH MARK:

ELEVATION: FEET

NOTES:

FIAD - FILLED IMMEDIATLEY AFTER DRILLING

GROUNDLINE TAKEN FROM .TIN FILE PROVIDED BY NCDOT, DATED 05/13/2014

DATE: 8-15-14

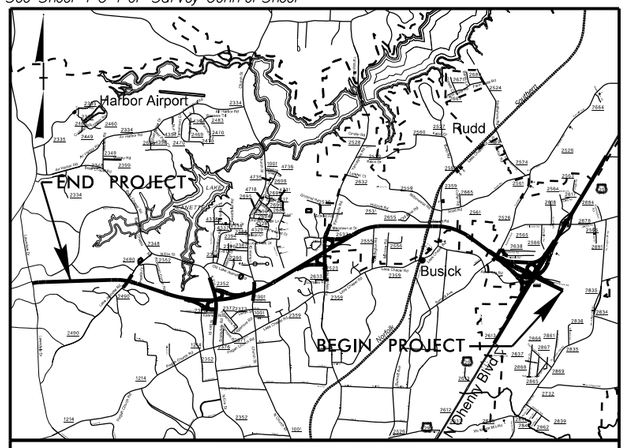
09/08/99

TIP PROJECT: U-2525C

CONTRACT:

\$\$\$\$\$\$SYSTIME\$\$\$\$\$\$
\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$DGN\$\$\$\$\$\$\$\$\$\$\$\$\$\$
\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$USERNAME\$\$\$\$\$\$\$\$\$\$\$\$\$\$

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Plan Sheet Symbols
See Sheet 1-C For Survey Control Sheet



VICINITY MAP

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

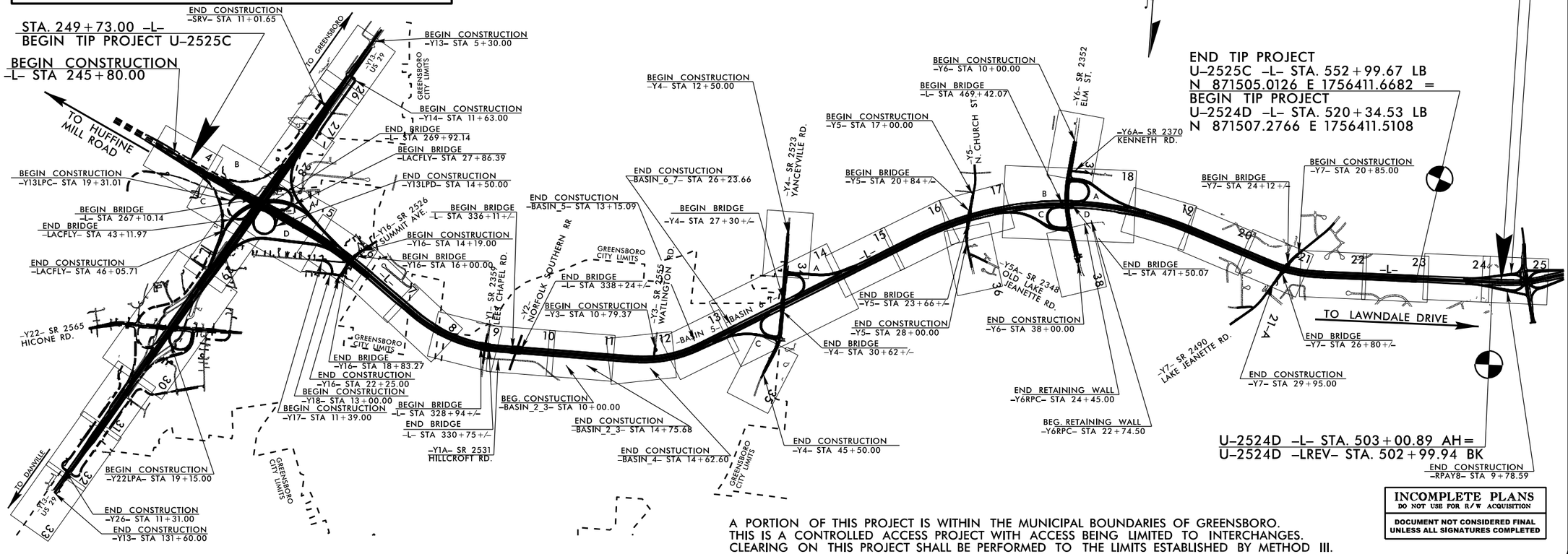
GUILFORD COUNTY

LOCATION: GREENSBORO LOOP FROM US 29 NORTH OF GREENSBORO TO EAST OF LAWNDALE DRIVE

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

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2525C	3	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
34821.1.5		PE	

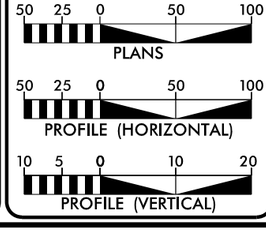
FDFI PLANS



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

A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF GREENSBORO.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

GRAPHIC SCALES



DESIGN DATA

ADT 2018	=	63160
ADT 2040	=	96400
K	=	10 %
D	=	60 %
T	=	14 % *
V	=	70 MPH

* TTST = 8% DUAL = 6%

FUNC CLASS = INTERSTATE
"STATEWIDE TIER"

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-2525C = 0.000 MILES
LENGTH STRUCTURE TIP PROJECT U-2525C = 0.000 MILES
TOTAL LENGTH OF TIP PROJECT U-2525C = 5.744 MILES

Prepared for the North Carolina Department of Transportation in the Office of:
WETHERILL ENGINEERING
1223 JONES FRANKLIN ROAD
Raleigh, N.C. 27606
License No. 1-0377
Bus: 919 851 8077
Fax: 919 851 8107

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: MAY 20, 2016

LETTING DATE: JULY 17, 2018

EDWARD G. WETHERILL, PE
PROJECT ENGINEER

BOB A. MAY, PE
PROJECT DESIGN ENGINEER

NCDOT CONTACT: REKHA PATEL, PE
ROADWAY DESIGN: PROJECT ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: P.E.

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

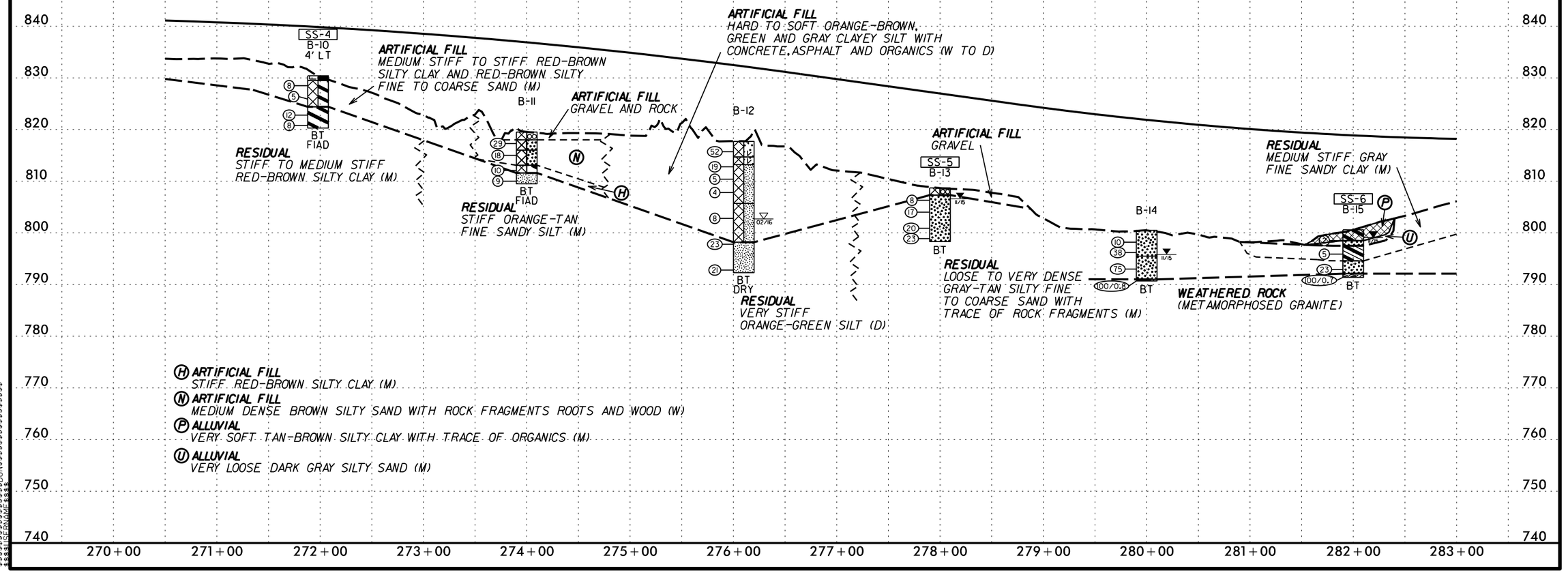
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

—L—

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-4	4' LT	271+98	0.9-2.4	A-7-6(10)	48	23	33	13	17	37	96	69	64	55.0	23.2	ND
SS-5	CL	278+00	1.4-2.9	A-4(1)	37	6	34	25	30	11	100	77	66	47.5	26.5	ND
SS-6	CL	282+00	1.1-2.6	A-2-4(0)	29	10	42	25	14	19	96	71	56	35.3	29.5	ND



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$ENAME$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

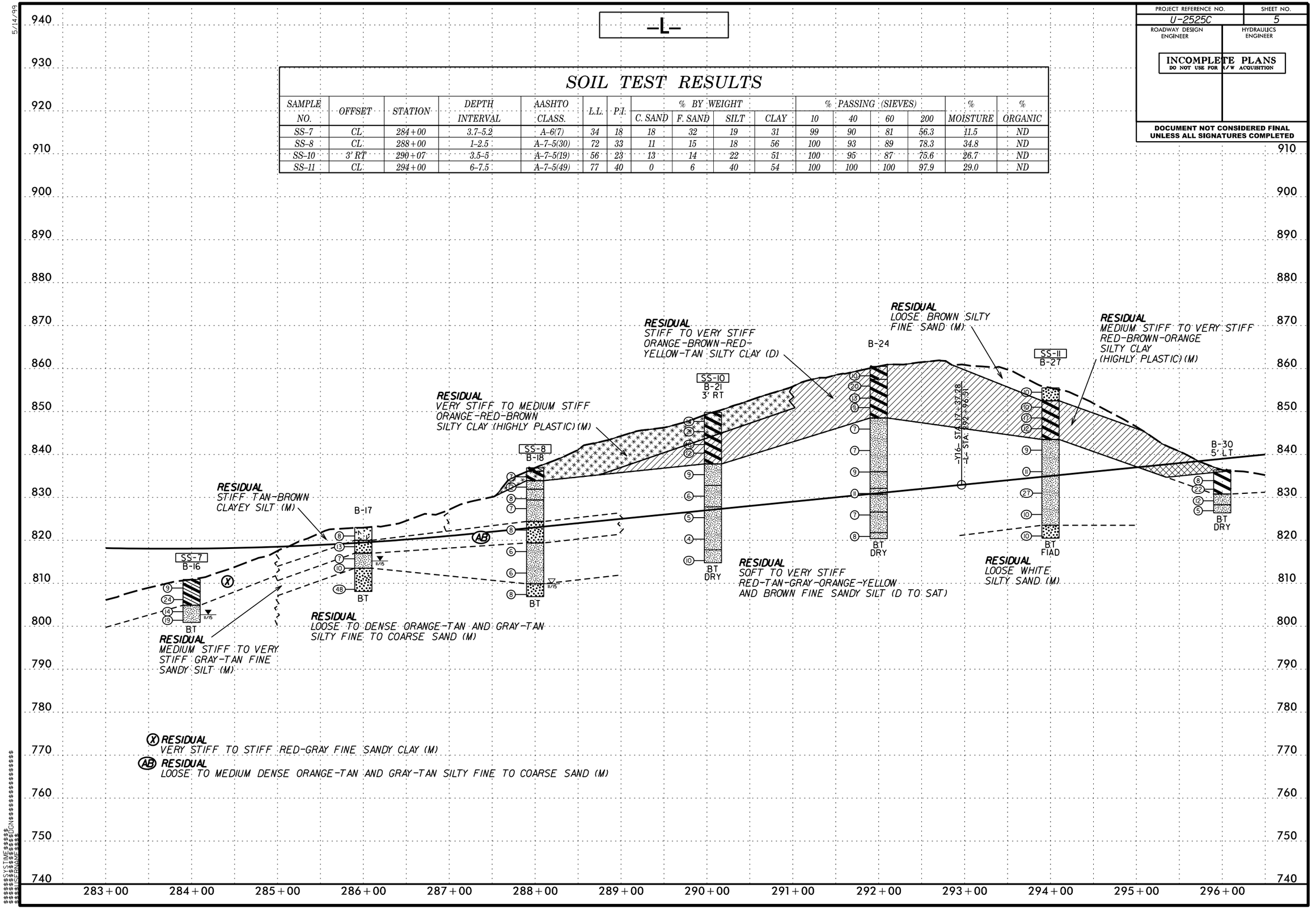
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-7	CL	284+00	3.7-5.2	A-6(7)	34	18	18	32	19	31	99	90	81	56.3	11.5	ND
SS-8	CL	288+00	1-2.5	A-7-5(30)	72	33	11	15	18	56	100	93	89	78.3	34.8	ND
SS-10	3' RT	290+07	3.5-5	A-7-5(19)	56	23	13	14	22	51	100	95	87	75.6	26.7	ND
SS-11	CL	294+00	6-7.5	A-7-5(49)	77	40	0	6	40	54	100	100	100	97.9	29.0	ND



(X) RESIDUAL
VERY STIFF TO STIFF RED-GRAY FINE SANDY CLAY (M)

(AB) RESIDUAL
LOOSE TO MEDIUM DENSE ORANGE-TAN AND GRAY-TAN SILTY FINE TO COARSE SAND (M)

$$$$$$$SYSTIME$$$$$$$
$$$$$$$USERNAME$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

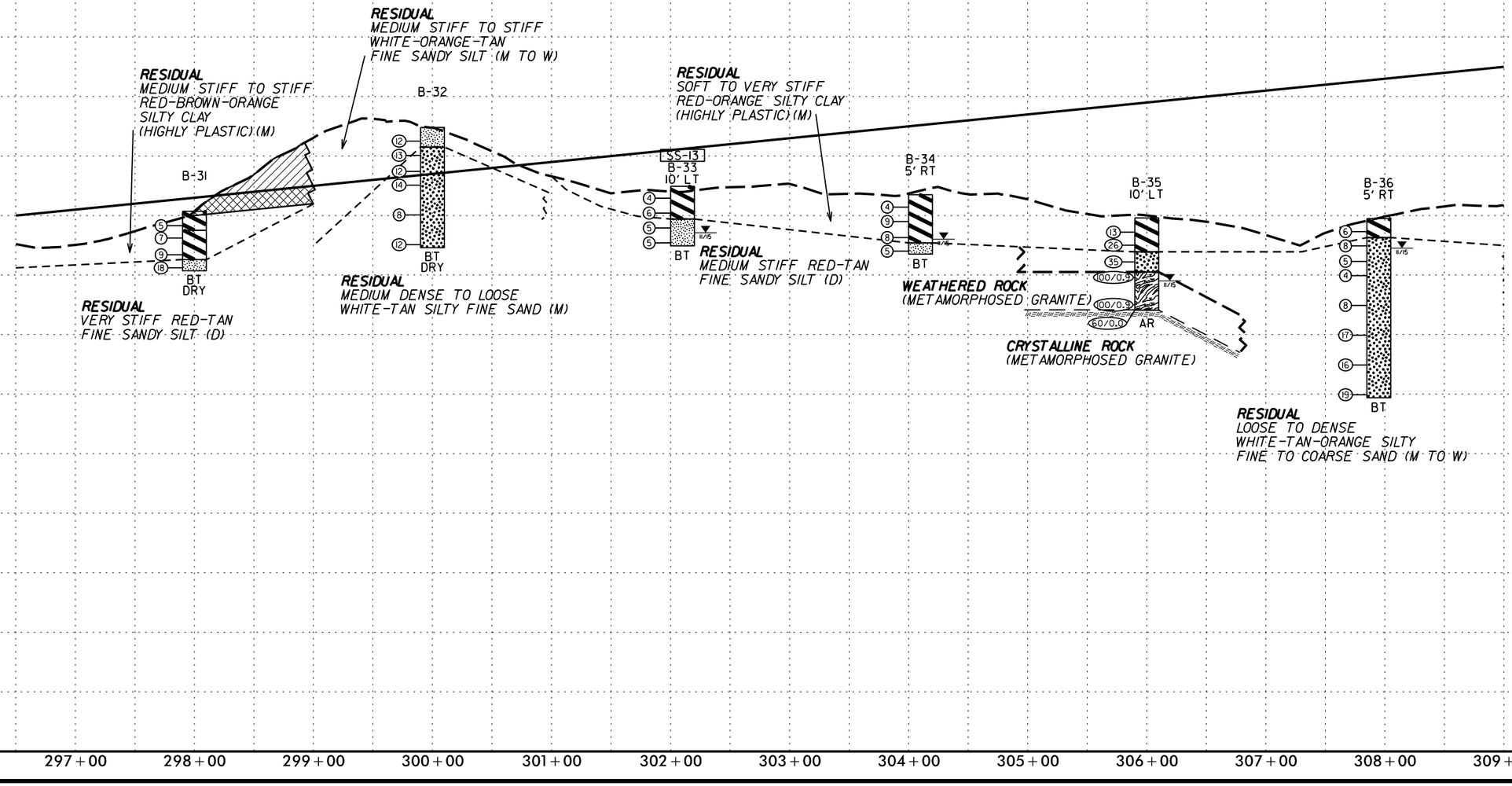
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-13	10' LT	302+00	1-2.5	A-7-6(35)	61	32	2	9	33	56	100	99	98	92.5	34.7	ND



$$$$$$SYSTIME$$$$$$
$$$$$$USERNAME$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

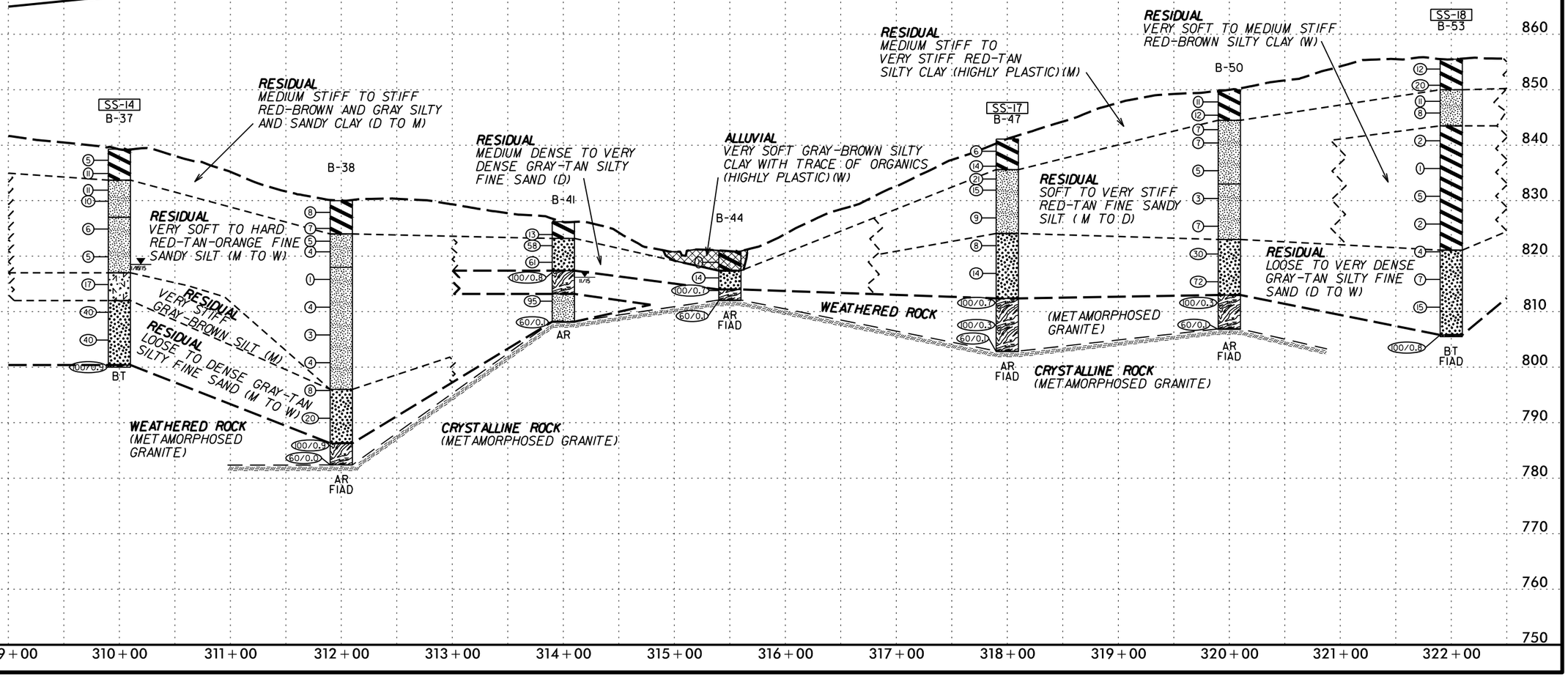
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-14	CL	310+00	23.4-24.9	A-2-4(0)	38	5	52	25	21	2	97	58	47	27.2	17.2	ND
SS-17	CL	318+00	1.2-2.7	A-7-5(43)	71	39	2	13	32	53	100	99	98	92.1	41.0	ND
SS-18	CL	322+00	18.7-20.2	A-7-5(25)	72	18	2	21	54	23	100	99	98	89.2	91.5	ND



$$$$$$$$SYTIME$$$$$
$$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

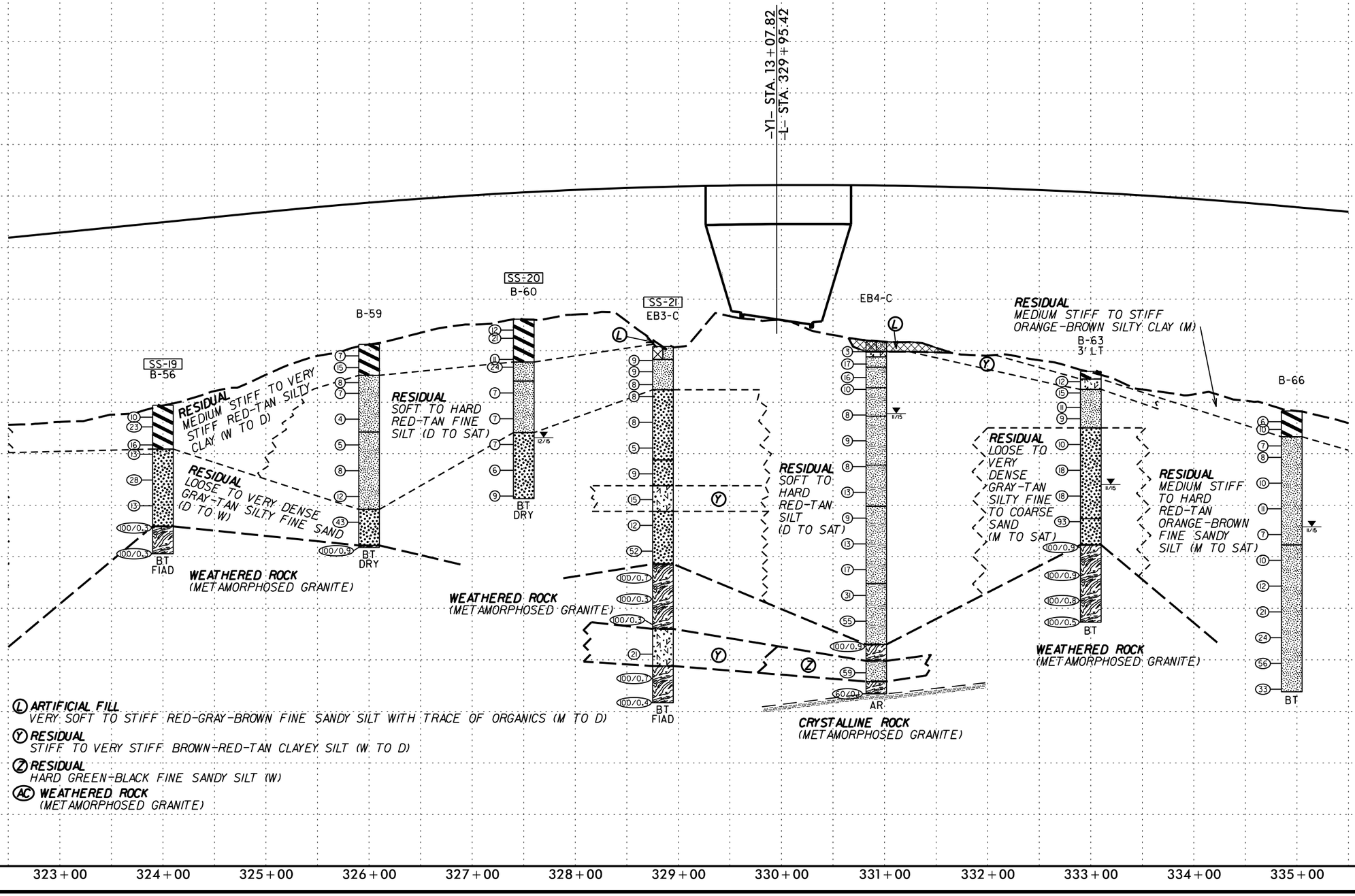
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-19	CL	324+00	6.7-8.2	A-7-5(6)	42	12	16	34	36	14	100	93	84	58.7	29.2	ND
SS-20	CL	327+50	6-7.5	A-7-5(8)	58	13	18	30	27	25	99	87	81	58.7	45.5	ND
SS-21	CL	328+85	28.7-30.2	A-5(1)	47	4	17	51	30	2	100	94	83	45.7	35.9	ND



(L) **ARTIFICIAL FILL**
VERY SOFT TO STIFF RED-GRAY-BROWN FINE SANDY SILT WITH TRACE OF ORGANICS (M TO D)

(Y) **RESIDUAL**
STIFF TO VERY STIFF BROWN-RED-TAN CLAYEY SILT (W TO D)

(Z) **RESIDUAL**
HARD GREEN-BLACK FINE SANDY SILT (W)

(AC) **WEATHERED ROCK**
(METAMORPHOSED GRANITE)

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$USERNAME$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

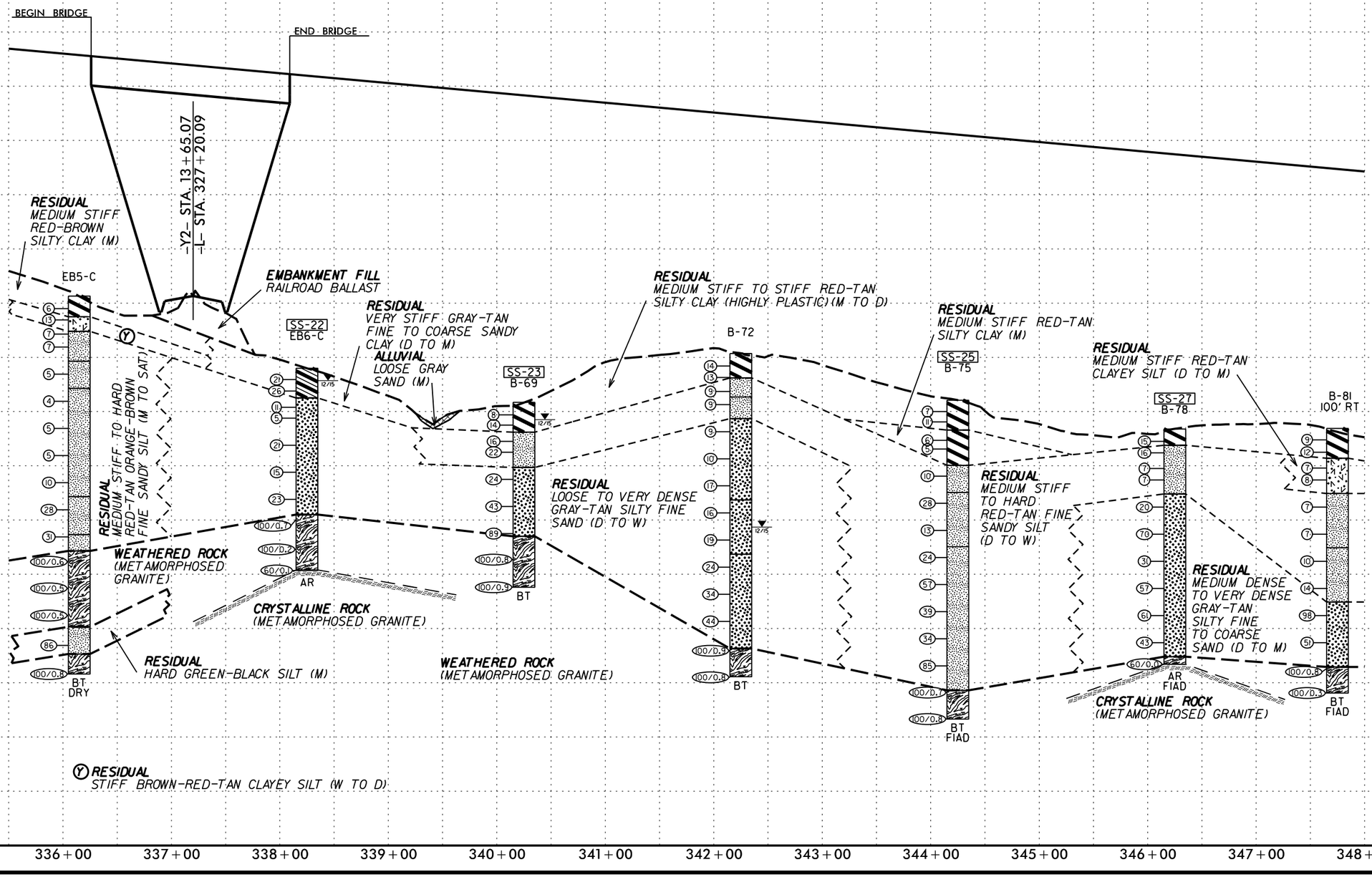
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-22	CL	338+25	1.1-2.6	A-6(4)	35	13	28	25	25	22	99	80	71	51.6	18.2	ND
SS-23	CL	340+25	3.2-4.7	A-7-5(30)	72	41	21	12	20	47	100	82	79	71.2	34.6	ND
SS-25	CL	344+25	3-4.5	A-7-5(25)	67	33	17	10	26	47	95	82	79	71.4	42.0	ND
SS-27	CL	346+25	1.3-2.8	A-7-5(26)	66	34	20	12	16	52	100	84	80	71.7	26.8	ND



$$$$$$$SYSTIME$$$$$
$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770 760 750 740 730 720

348+00 349+00 350+00 351+00 352+00 353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M TO D)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF ORANGE-GRAY FINE SANDY SILT WITH TRACE ORGANICS (M)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF BROWN-ORANGE AND GRAY-BLACK FINE SANDY CLAY WITH TRACE TO SOME ORGANICS (M TO W)

B-87
25' LT

B-90

B-93
20' RT

B-96

B-99
3' RT

RESIDUAL
VERY SOFT TO MEDIUM STIFF RED-ORANGE-TAN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF TAN-BROWN FINE SANDY SILT (M TO W)

RESIDUAL
VERY DENSE TO MEDIUM DENSE GRAY-TAN SILTY FINE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
DENSE TO MEDIUM DENSE DARK GRAY SILTY FINE TO COARSE SAND (W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY STIFF TAN-BLACK FINE TO COARSE SANDY SILT (M)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

(Y) **RESIDUAL**
HARD TAN-GREEN SILT (D)

(AC) **WEATHERED ROCK**
(METAMORPHOSED GRANITE)

$$$$$SYSTIME$$$$$
$$$$$DGN$$$$$
$$$$$CELLNAME$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	11
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

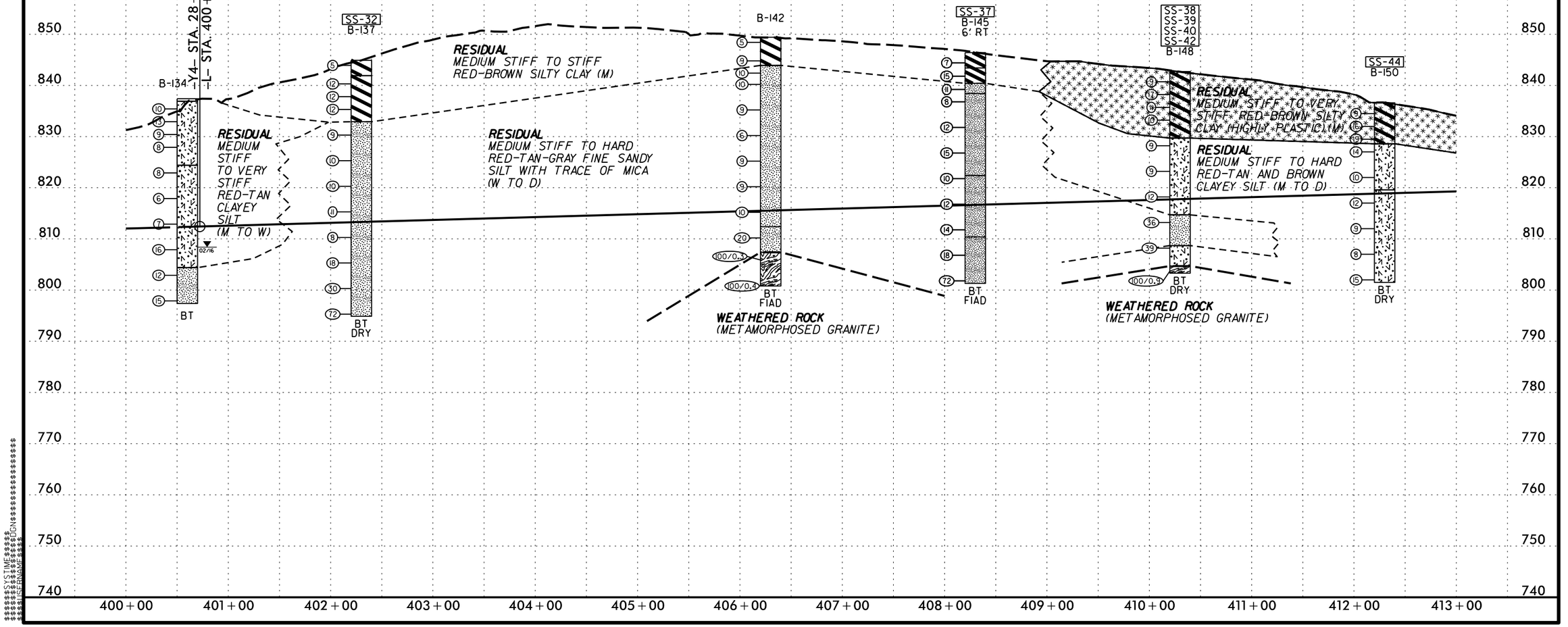
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-32	CL	402+30	6-7.5	A-7-5(14)	53	13	8	18	42	32	100	97	92	79.5	29.6	ND
SS-37	6' RT	408+30	3.6-5.1	A-7-5(18)	62	14	2	24	30	44	100	99	98	83.7	34.2	ND
SS-38	CL	410+30	18.5-20	A-5(9)	56	10	6	44	45	5	100	98	94	66.3	24.5	ND
SS-39	CL	410+30	28.5-30	A-4(4)	37	4	6	38	48	8	100	98	94	73.6	15.4	ND
SS-40	CL	410+30	33.5-35	A-5(8)	52	8	3	44	42	11	100	98	97	70.7	35.5	ND
SS-42	CL	410+30	8.5-10	A-7-5(35)	75	29	2	12	32	54	100	99	98	90.8	47.1	ND
SS-44	CL	412+30	1-2.5	A-7-6(32)	60	33	4	15	17	64	100	98	96	86.6	26.8	ND



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	12
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

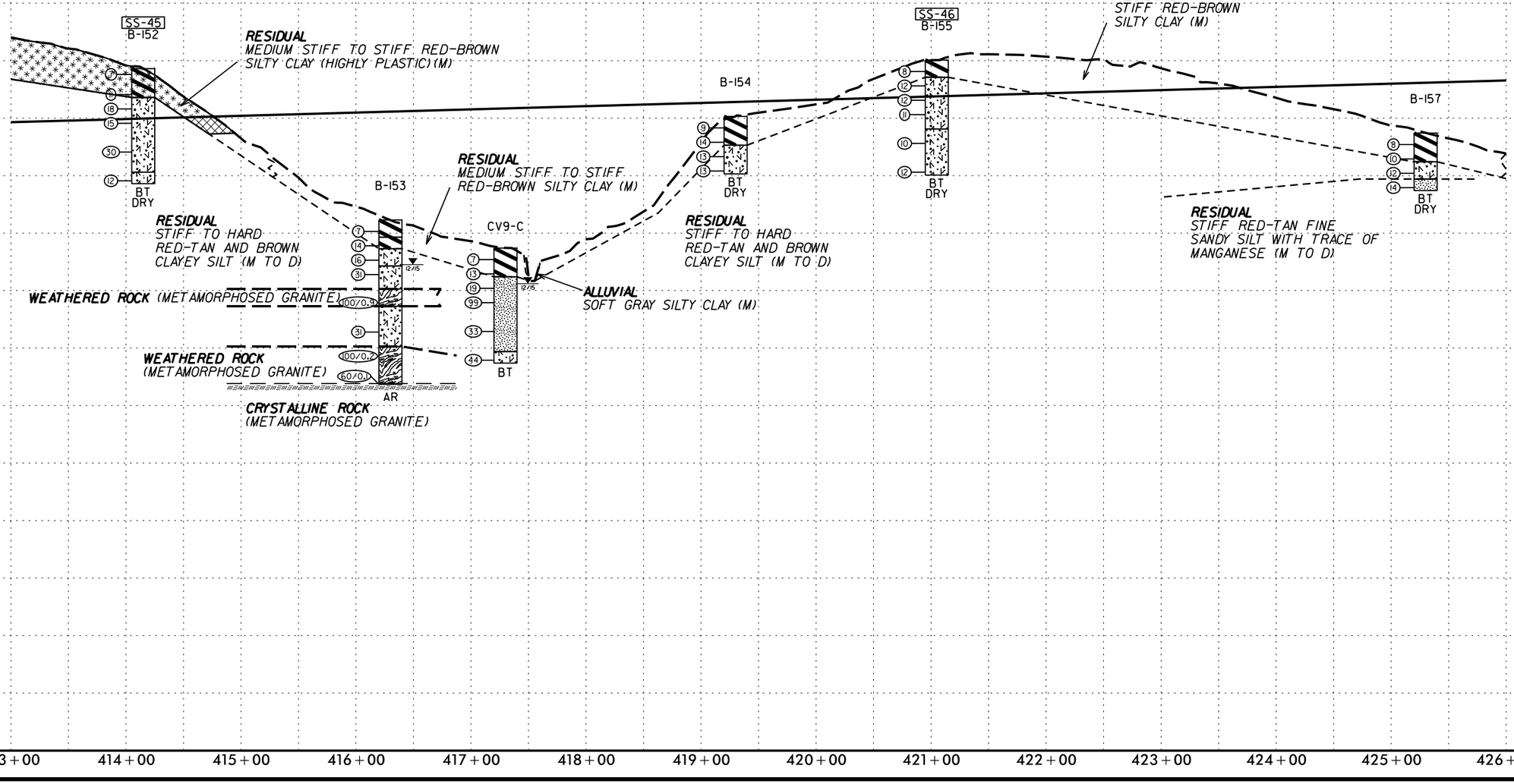
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-45	CL	414+30	3.5-5	A-7-5(35)	77	29	4	12	32	52	100	98	96	89.1	49.6	ND
SS-46	CL	421+30	6-7.5	A-5(8)	52	6	4	35	41	20	100	99	96	74.5	13.6	ND



5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

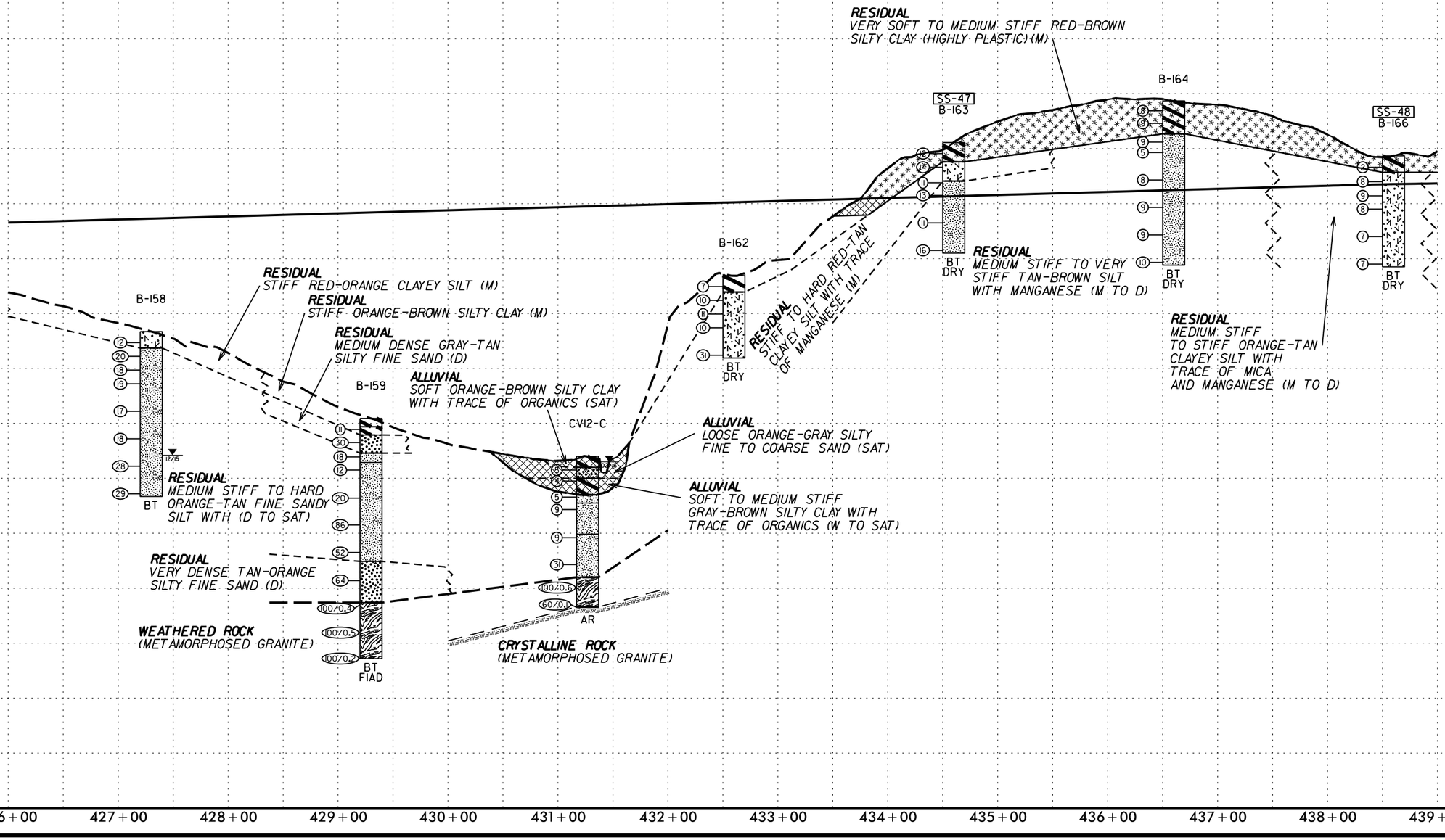
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-47	CL	434+60	3.6-5.1	A-5(7)	55	5	7	37	43	13	100	96	93	71.3	22.7	ND
SS-48	CL	438+60	1.1-2.6	A-7-6(23)	56	27	9	16	22	53	99	93	90	79.4	28.4	ND



$$$$$$$SYSTIME$$$$$$$
$$$$$$$FILENAME$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

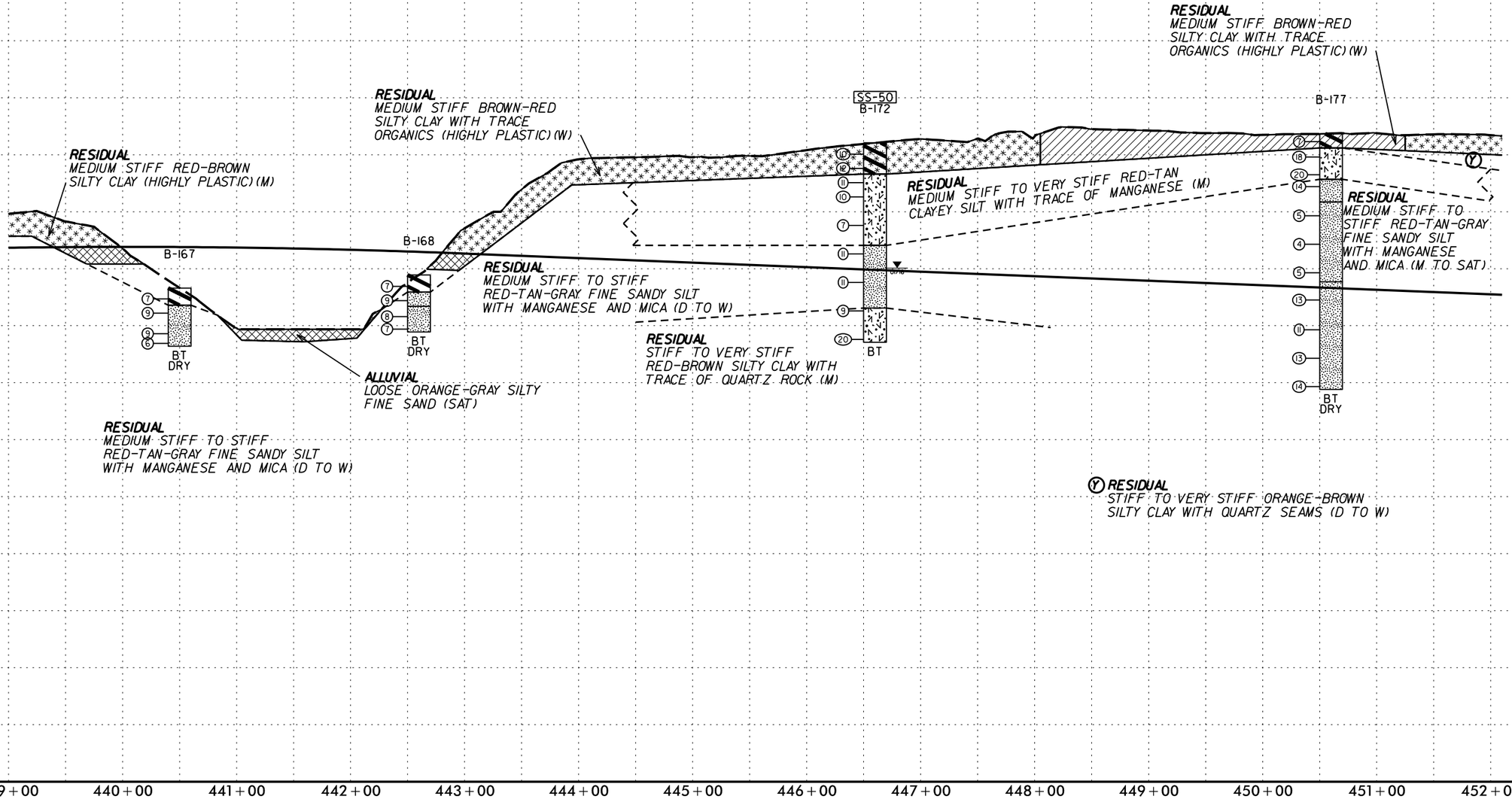
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-50	CL	446+60	6-7.5	A-5(3)	50	4	12	41	32	15	100	94	88	59.5	27.7	ND



$$$$$$$$SYSTIME$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$USERNAME$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

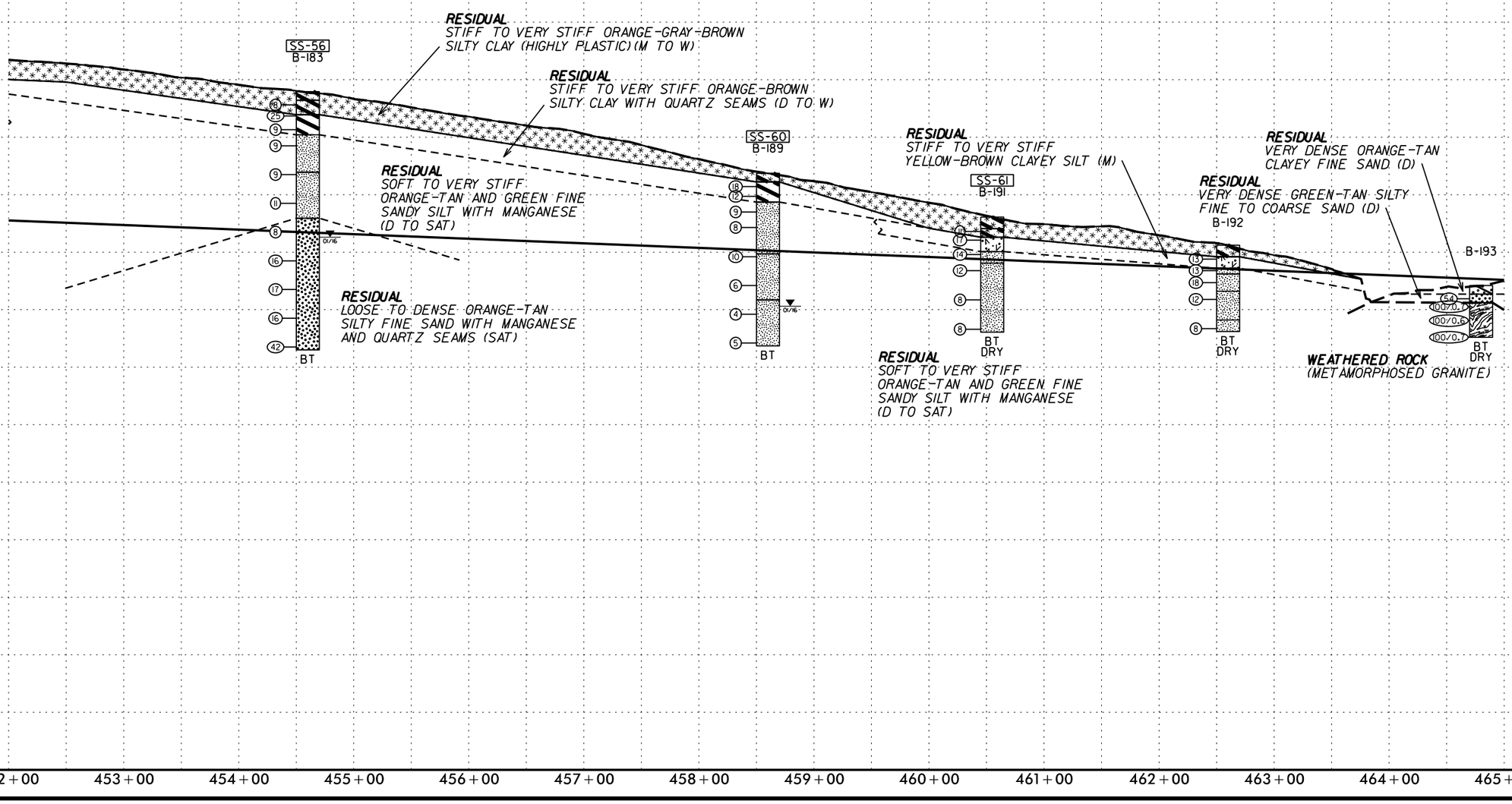
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

—L—

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-56	CL	454+60	5.6-7.1	A-7-5(28)	64	22	1	10	39	50	100	99	99	93.5	48.3	ND
SS-60	CL	458+60	3-4.5	A-7-5(31)	61	25	1	6	40	53	100	100	99	96.8	31.7	ND
SS-61	CL	460+60	1.5-3.5	A-7-5(31)	65	32	8	9	24	59	96	90	88	83.0	27.6	ND



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$DGN$$$$$$$$$$
$$$$$$$USERNAME$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

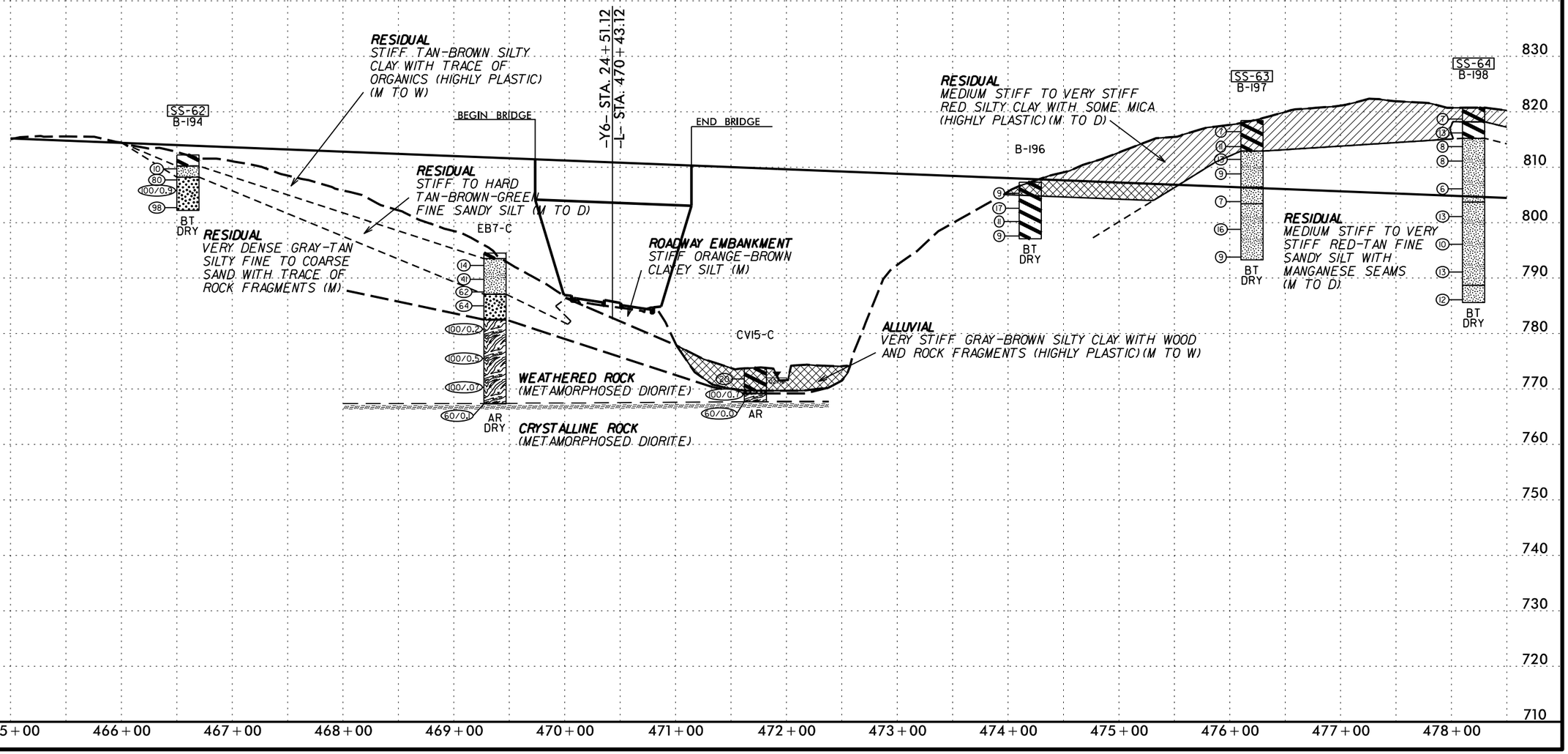
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

—L—

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-62	CL	466+60	1.5-3	A-7-6(26)	53	30	9	14	39	38	100	94	91	83.2	31.1	ND
SS-63	CL	476+20	1-2.5	A-7-5(54)	84	46	1	10	25	64	100	100	99	95.5	34.5	ND
SS-64	CL	478+20	3.5-5	A-7-5(26)	66	22	3	16	32	49	100	99	97	88.0	33.6	ND



$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$$$$USERNAME$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

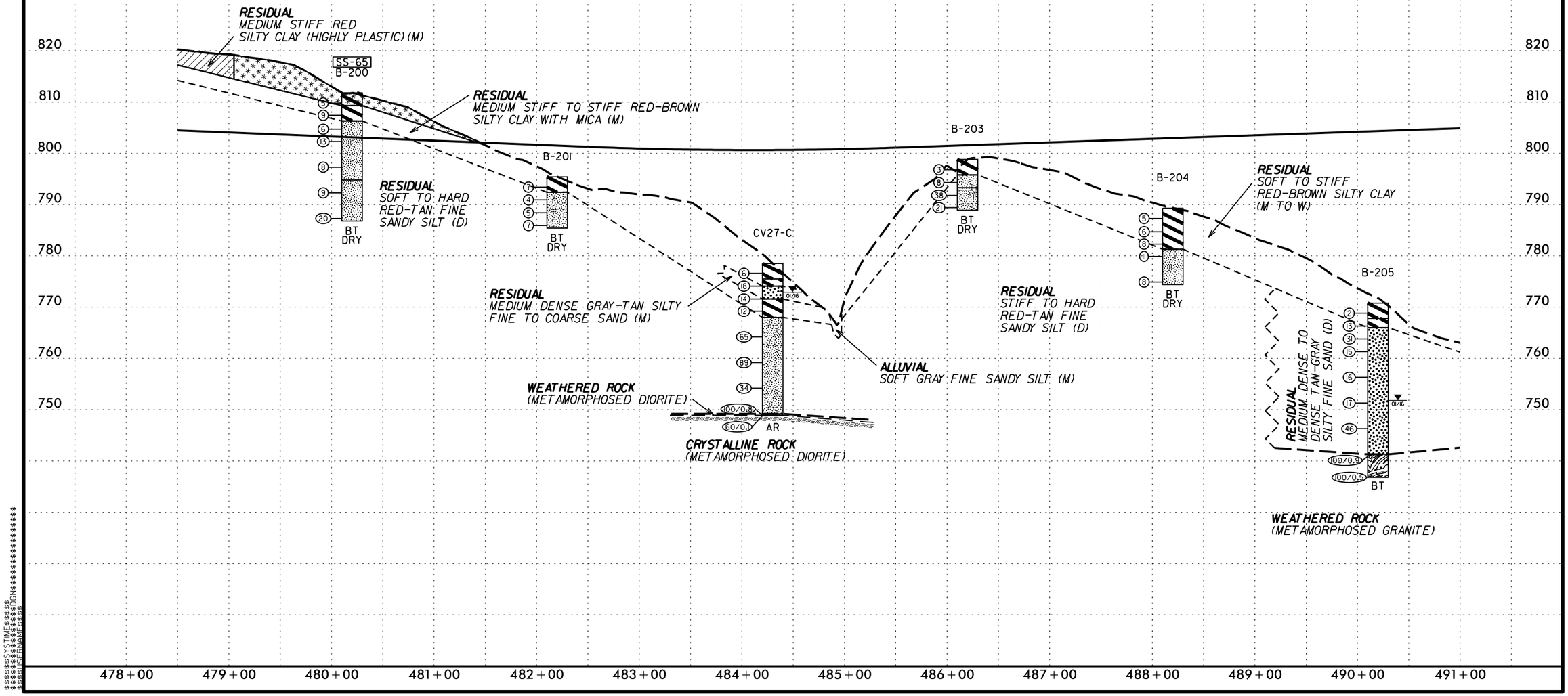
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-65	CL	480+20	1-2.5	A-7-5(41)	75	33	1	10	28	61	100	100	99	94.4	37.5	ND



5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

820
810
800
790
780
770
760
750
740
730

B-207
B-215
B-216
B-217
B-213
B-210
CV18-C

RESIDUAL
SOFT TO STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY CLAY (M)

ALLUVIAL
SOFT GRAY-BROWN SILTY CLAY WITH TRACE OF ORGANICS (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN FINE SANDY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND (M)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

AR
FIAD
BT
DRY

491+00 492+00 493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$USERNAME$$$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

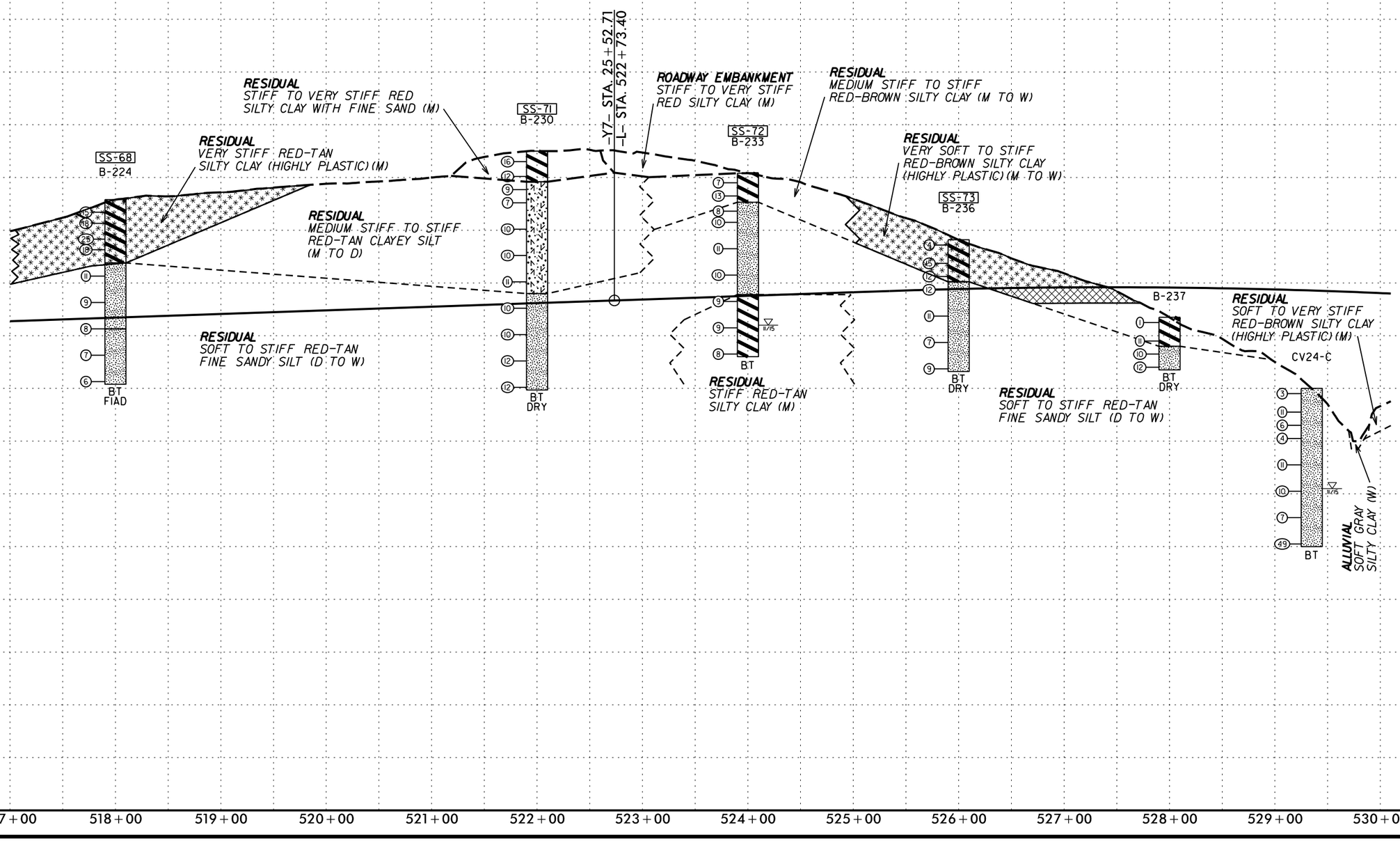
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-68	CL	518+00	6.5-8	A-7-5(37)	74	34	2	16	23	59	100	99	98	87.6	28.0	ND
SS-71	CL	522+00	3.8-5.3	A-7-5(16)	51	18	4	27	34	35	100	98	96	77.6	28.2	ND
SS-72	CL	524+00	23.3-24.8	A-7-5(9)	55	13	12	39	36	13	100	96	88	63.9	29.5	ND
SS-73	CL	526+00	3.5-5	A-7-5(26)	62	28	3	26	24	47	100	99	97	79.9	25.8	ND



$$$$$$$SYSTIME$$$$$$
$$$$$$$

5/14/99

-L-

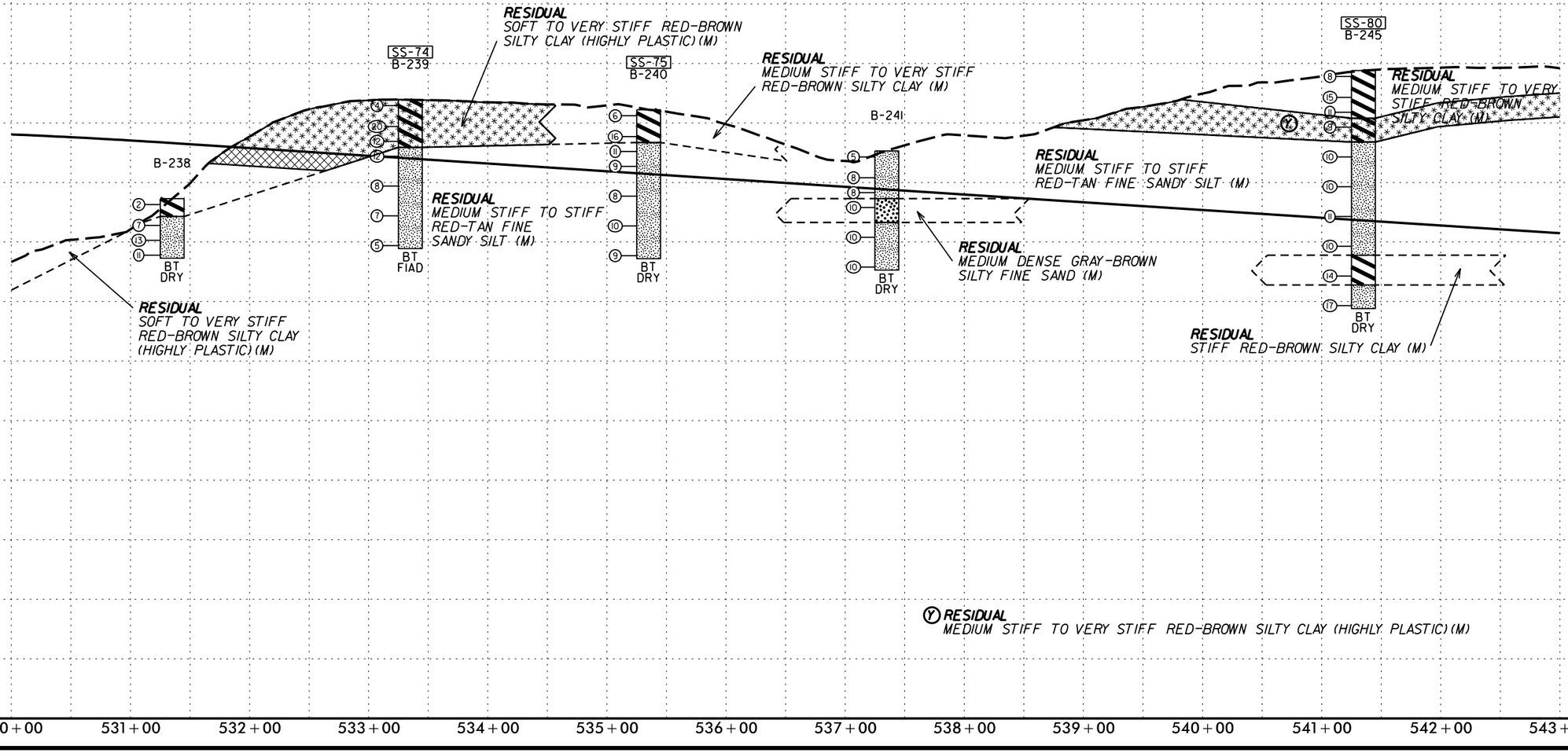
PROJECT REFERENCE NO.	SHEET NO.
U-2525C	20
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-74	533+35	CL	3.5-5	A-7-5(43)	78	33	0	5	24	71	100	100	100	97.2	33.1	ND
SS-75	535+35	CL	0-1.5	A-7-6(13)	43	16	8	19	29	44	97	92	89	77.6	23.4	ND
SS-80	541+35	CL	3.5-5	A-7-5(25)	63	25	2	22	35	41	100	100	98	83.3	29.0	ND



$$$$$$$SYSTIME$$$$$$$
$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

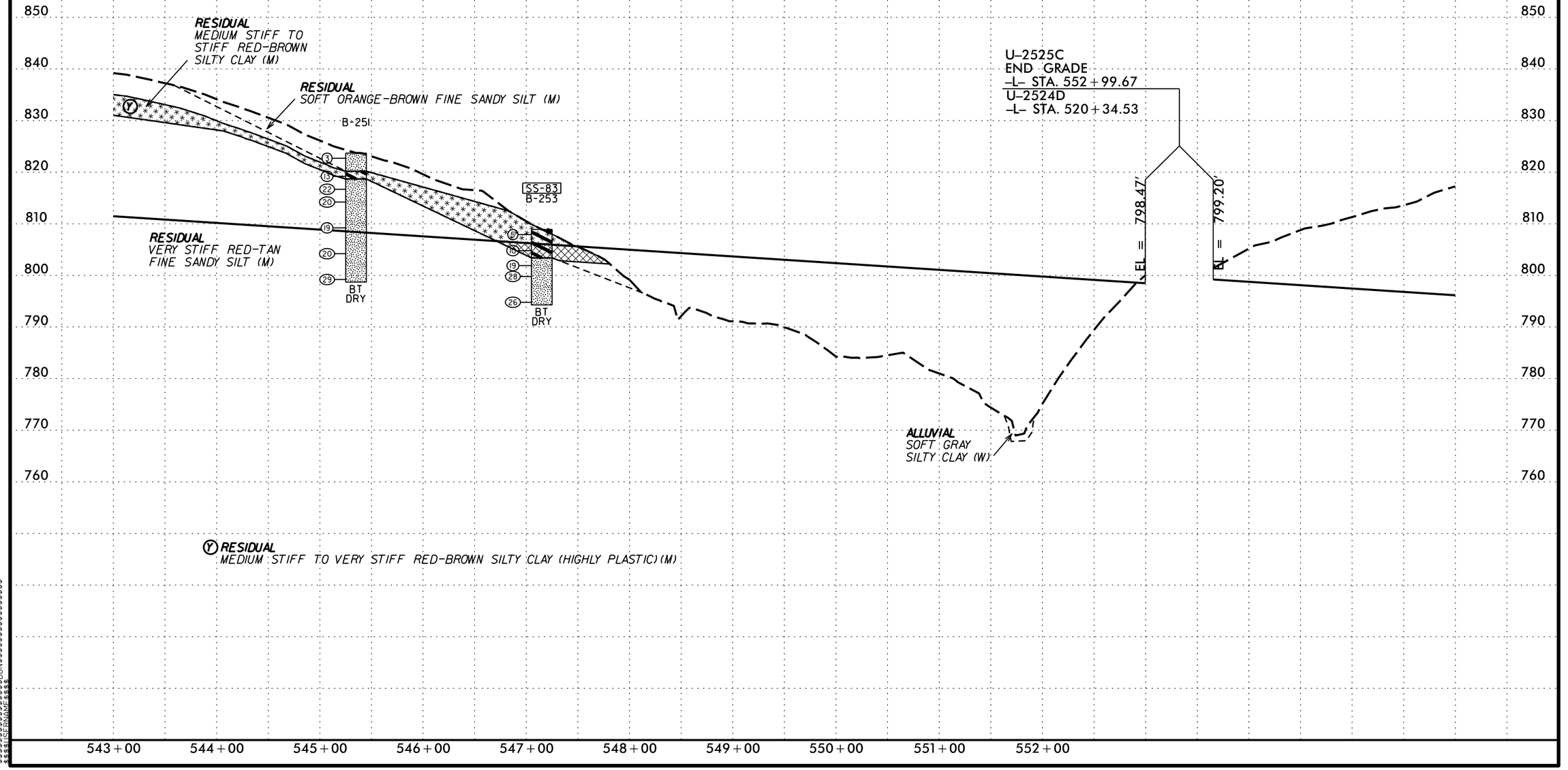
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L-

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-83	CL	547+35	3.5-5	A-7-5(33)	72	27	2	12	29	57	100	99	98	90.1	51.4	ND



(Y) RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$$$$$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

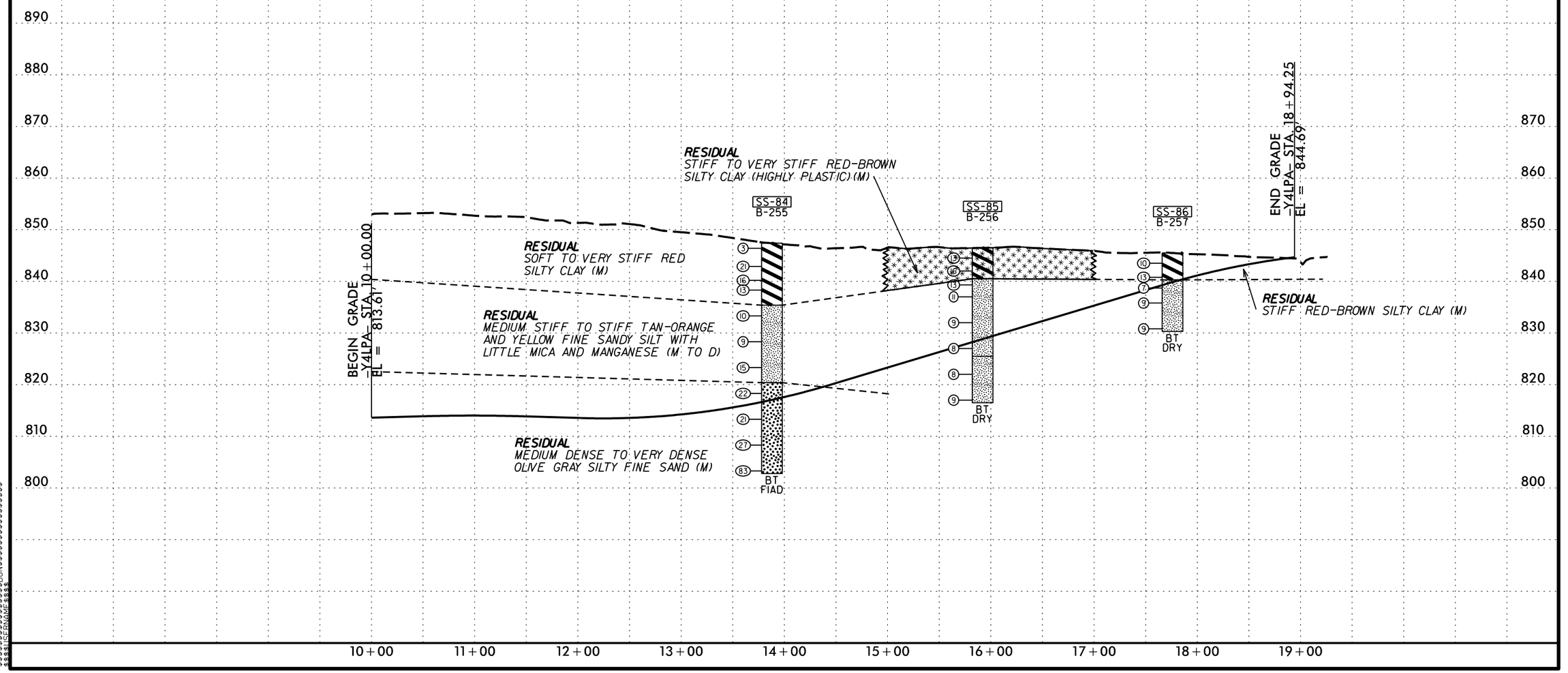
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y4LPA–

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS–84	CL	13+88	8.1–9.6	A–7–5(14)	54	16	3	34	29	34	100	99	97	73.5	32.7	ND
SS–85	CL	15+92	3.5–5.0	A–7–5(42)	79	31	0	5	29	66	100	100	100	97.7	36.9	ND
SS–86	CL	17+76	3.5–5.0	A–7–5(22)	63	24	2	30	31	37	100	99	98	78.0	38.0	ND



$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$$$$$$$$$$$$$CELENGF$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

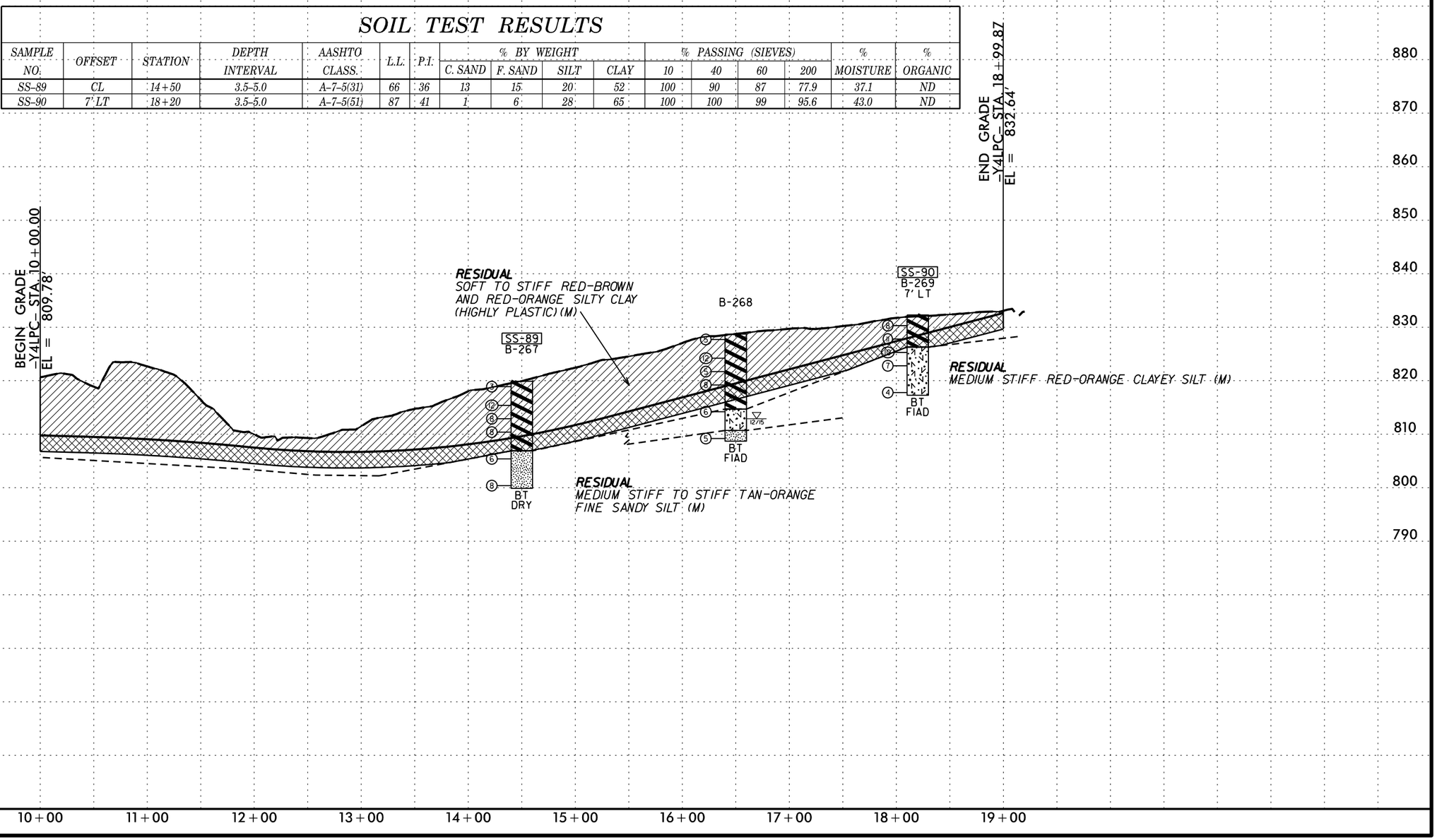
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y4LPC–

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS–89	CL	14+50	3.5–5.0	A–7–5(31)	66	36	13	15	20	52	100	90	87	77.9	37.1	ND
SS–90	7' LT	18+20	3.5–5.0	A–7–5(51)	87	41	1	6	28	65	100	100	99	95.6	43.0	ND



$$$$$$$$SYSTIME$$$$$
$$$$$$$$USERNAME$$$$$DGN$$$$$$$$$$$$$$$$$$$$

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

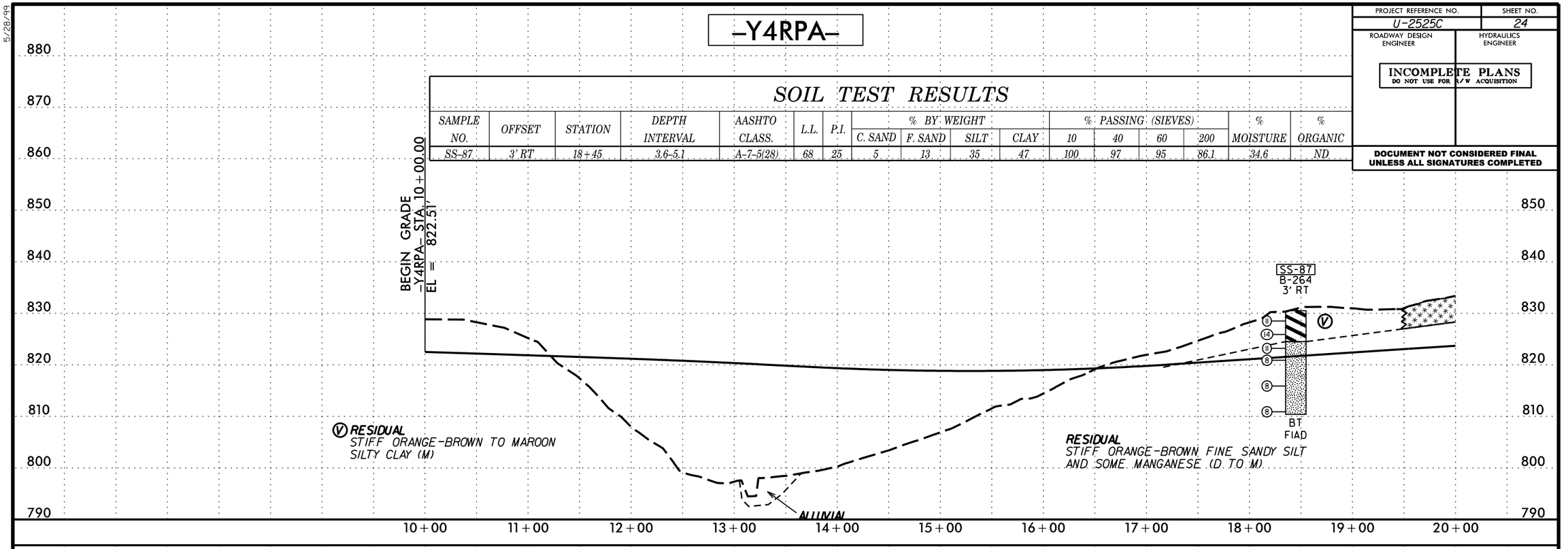
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y4RPA–

SOIL TEST RESULTS

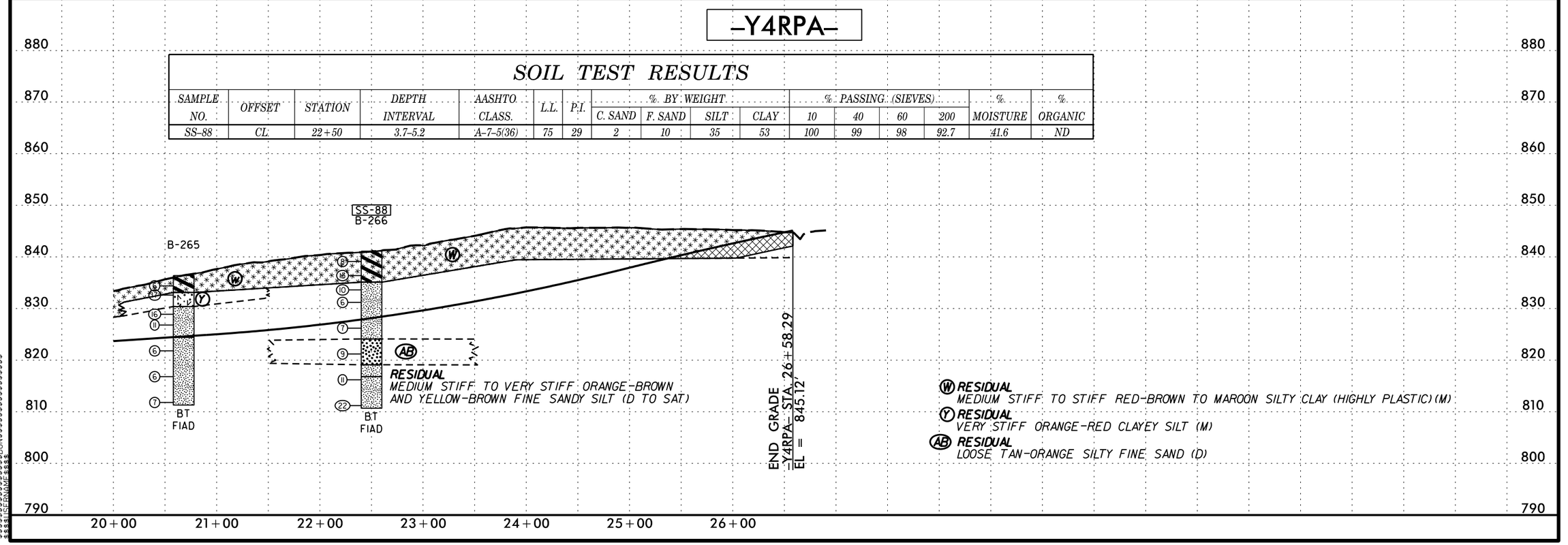
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-87	3' RT	18+45	3.6-5.1	A-7-5(28)	68	25	5	13	35	47	100	97	95	86.1	34.6	ND



–Y4RPA–

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-88	CL	22+50	3.7-5.2	A-7-5(36)	75	29	2	10	35	53	100	99	98	92.7	41.6	ND



$$$$$$$SYSTIME$$$$$
$$$$$$$

5/14/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

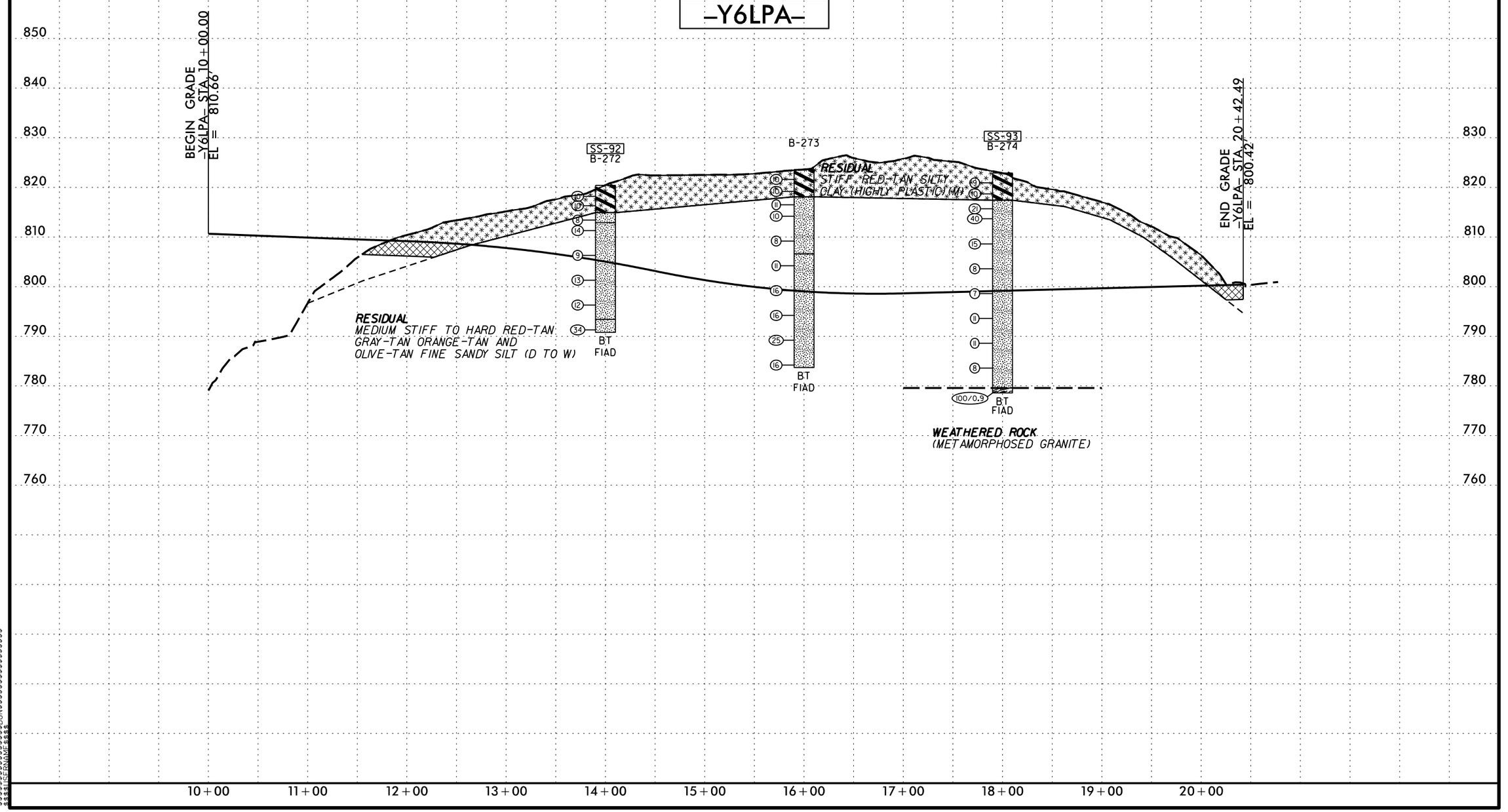
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-92	CL	14+00	3.1-4.6	A-7-5(40)	70	32	0	5	49	46	100	100	100	98.1	37.6	ND
SS-93	CL	18+00	3.2-4.7	A-7-5(25)	71	34	11	24	22	43	100	90	85	69.2	51.7	ND

-Y6LPA-



5/14/99

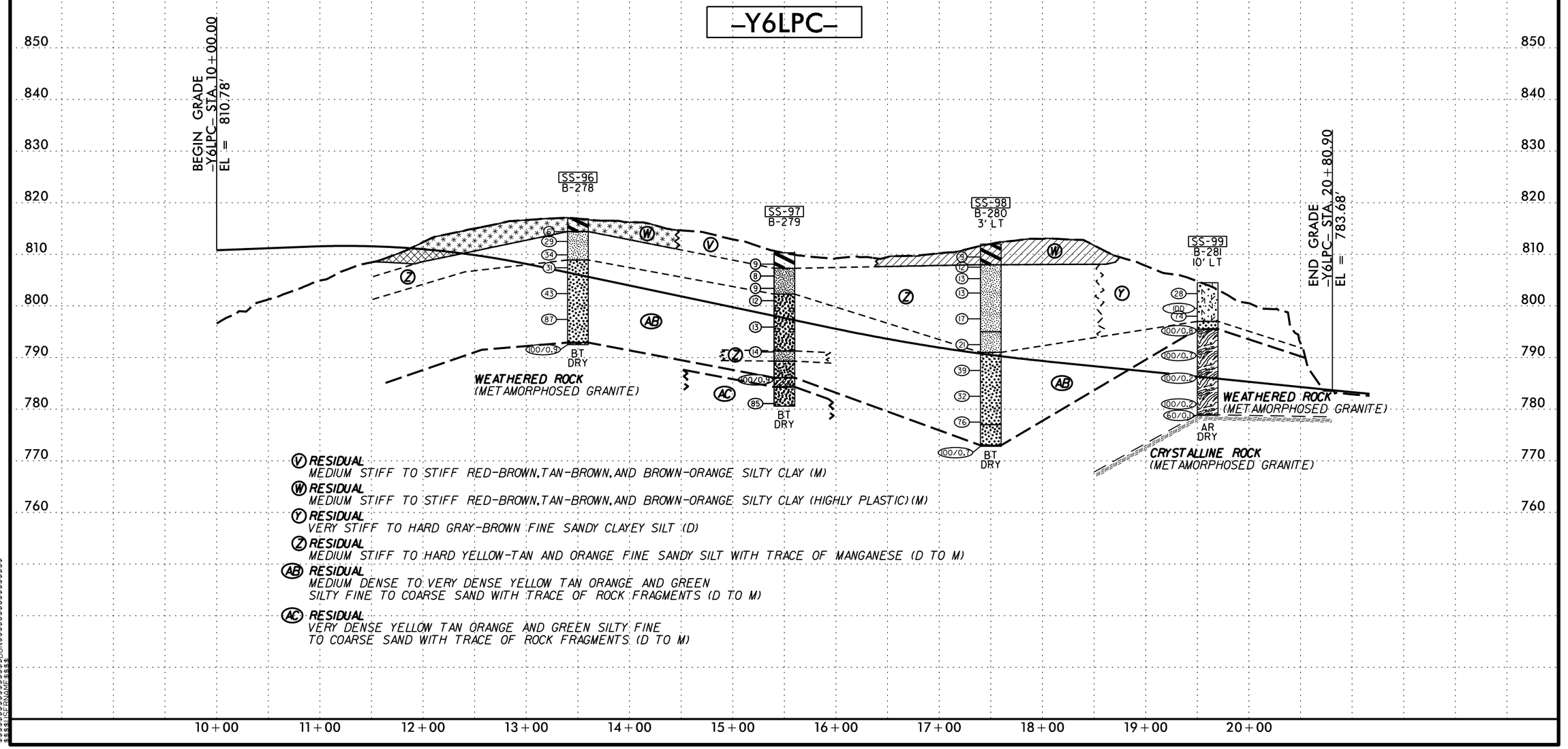
PROJECT REFERENCE NO.	SHEET NO.
U-2525C	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-96	CL	13+50	1.5-3.0	A-7-6(35)	58	31	0	9	46	45	100	100	100	96.9	34.3	ND
SS-97	CL	15+50	1.2-2.7	A-7-5(14)	54	13	4	27	34	35	99	96	95	80.6	37.9	ND
SS-98	3' LT	17+50	1.5-3.0	A-7-5(66)	97	53	1	4	20	75	100	100	99	97.8	55.4	ND
SS-99	10' LT	19+60	5.5-7.0	A-5(7)	44	9	3	42	38	17	100	99	97	68.6	15.7	ND



(V) RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN, TAN-BROWN, AND BROWN-ORANGE SILTY CLAY (M)

(W) RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN, TAN-BROWN, AND BROWN-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

(Y) RESIDUAL
VERY STIFF TO HARD GRAY-BROWN FINE SANDY CLAYEY SILT (D)

(Z) RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

(AB) RESIDUAL
MEDIUM DENSE TO VERY DENSE YELLOW TAN ORANGE AND GREEN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

(AC) RESIDUAL
VERY DENSE YELLOW TAN ORANGE AND GREEN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

$$$$$$$$SYSTIME$$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$ENGNAME$$$$

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	27

ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

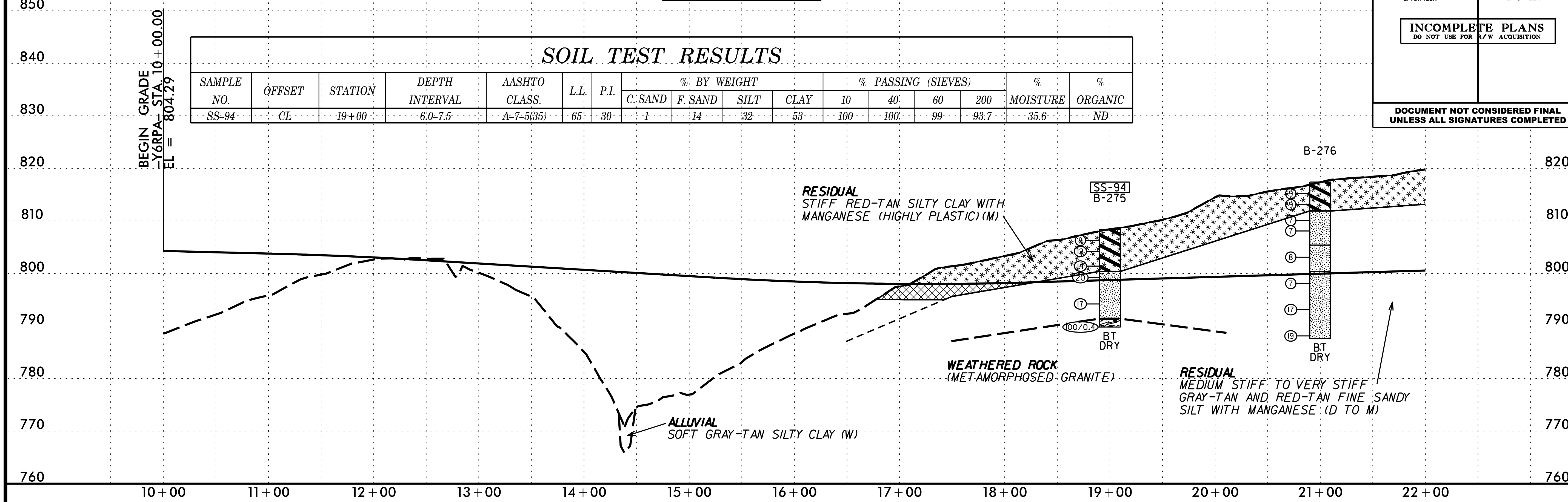
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

5/28/99

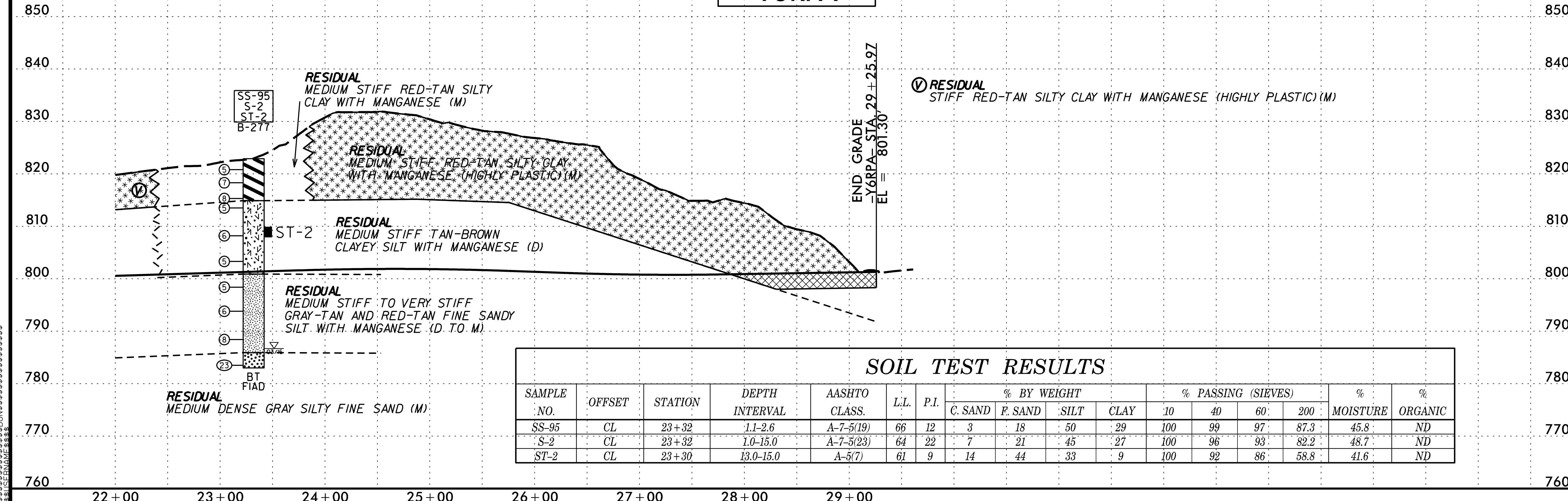
–Y6RPA–

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-94	CL	19+00	6.0-7.5	A-7-5(35)	65	30	1	14	32	53	100	100	99	93.7	35.6	ND



–Y6RPA–



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-95	CL	23+32	1.1-2.6	A-7-5(19)	66	12	3	18	50	29	100	99	97	87.3	45.8	ND
S-2	CL	23+32	1.0-15.0	A-7-5(23)	64	22	7	21	45	27	100	96	93	82.2	48.7	ND
ST-2	CL	23+30	13.0-15.0	A-5(7)	61	9	14	44	33	9	100	92	86	58.8	41.6	ND

$$$$$$SYSTIME$$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$$

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

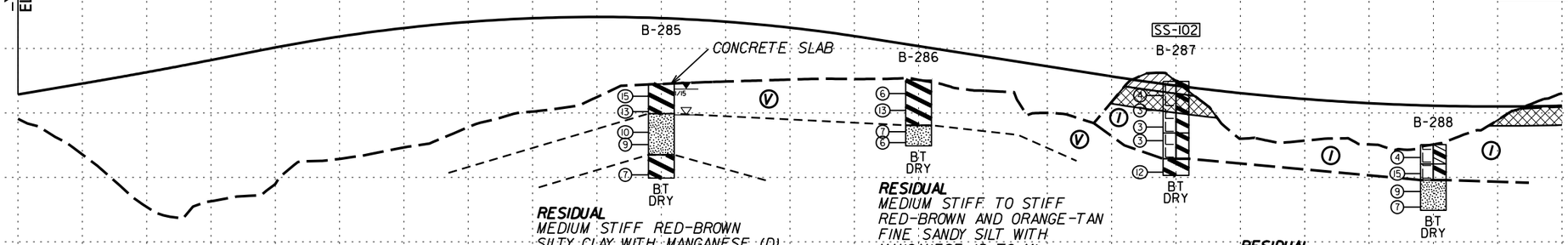
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y13RPA–

BEGIN GRADE
–Y13RPA– STA. 10+00.00
EL = 832.88'

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-102	CL	19+00	1.2-2.7	A-7-6(27)	62	39	15	17	15	53	98	89	83	70.5	35.0	ND



(I) **ROADWAY EMBANKMENT**
SOFT TO STIFF GRAY-BROWN BLACK RED TO GRAY-TAN
FINE SANDY TO SILTY CLAY WITH WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC)(M TO W)

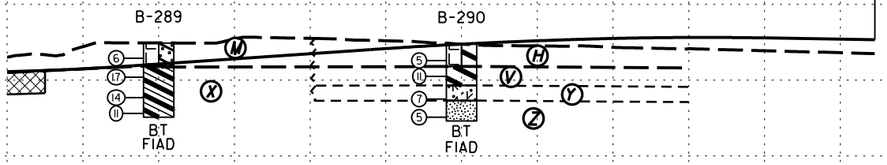
(V) **RESIDUAL**
MEDIUM STIFF TO STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

870 860 850 840 830 820 810 800 790 780

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00

–Y13RPA–

END GRADE
–Y13RPA– STA. 27+72.75
EL = 835.34'



(H) **ROADWAY EMBANKMENT**
MEDIUM STIFF RED SILTY CLAY WITH ROCK FRAGMENTS (M)

(M) **ROADWAY EMBANKMENT**
LOOSE GRAY-TAN CLAYEY FINE SAND (M)

(V) **RESIDUAL**
STIFF RED SILTY CLAY (M)

(X) **RESIDUAL**
STIFF TO VERY STIFF RED-TAN FINE SANDY CLAY (D TO M)

(Y) **RESIDUAL**
MEDIUM STIFF RED-TAN CLAYEY SILT (D)

(Z) **RESIDUAL**
MEDIUM STIFF RED-TAN FINE SANDY SILT WITH MANGANESE (D)

870 860 850 840 830 820 810 800 790 780

22+00 23+00 24+00 25+00 26+00 27+00 28+00

$$$$$$$SYSTIME$$$$$$
$$$$$$$

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-103	23+50	CL	1.1-2.6	A-7-6(38)	64	45	10	12	32	46	99	93	89	80.8	20.2	ND

–Y13RPD–

EL = 780.73'

ARTIFICIAL FILL
MEDIUM STIFF GREEN-ORANGE HIGHLY ORGANIC SILTY CLAY WITH ASPHALT DEBRIS (M)

ARTIFICIAL FILL
STIFF ORANGE-GRAY FINE SANDY SILT WITH TRACE OF ORGANICS (M)

ARTIFICIAL FILL
VERY SOFT TO SOFT BROWN GRAY FINE SANDY CLAY WITH TRACE OF ORGANICS AND GRAVEL (W TO SAT)

B-293 B-294 SS-103 B-297

RESIDUAL
STIFF RED-ORANGE FINE SANDY CLAY (M TO D)

RESIDUAL
DENSE TAN-GREEN SILTY FINE SAND (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

BT FIAD

BT DRY

(V) **RESIDUAL**
STIFF TAN-BROWN SILTY AND SANDY CLAY (M)

(Y) **RESIDUAL**
STIFF RED-ORANGE TO GREEN-GRAY CLAYEY SILT (M TO W)

(AB) **RESIDUAL**
DENSE TAN-GRAY SILTY FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

820 810 800 790 780 770 760 750 740

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-104	25+54	CL	1.2-2.7	A-7-6(47)	75	48	3	15	23	59	100	98	97	87.2	27.5	ND
SS-105	27+50	CL	3.5-5	A-4(3)	32	9	35	14	36	15	100	75	65	54.8	13.2	ND
SS-106	27+50	CL	1-2.5	A-7-6(23)	54	32	17	11	12	60	99	87	82	73.8	22.4	ND
SS-107	29+50	CL	1.1-2.6	A-7-6(47)	80	53	9	10	6	75	98	93	89	81.3	30.2	ND
SS-108	31+50	CL	1.2-2.7	A-7-6(18)	56	35	27	14	6	52	99	82	72	60.1	28.9	ND
SS-109	33+50	CL	1-2.5	A-7-6(10)	45	23	26	21	20	33	97	83	72	55.3	15.4	ND

–Y13RPD–

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

B-299 SS-105 SS-106 SS-107 B-300 SS-108 B-301 SS-109 B-302 SS-104 B-298

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN, TAN-ORANGE, AND GRAY GREEN SILT (SAT TO D)

AR FIAD BT DRY BT FIAD BT DRY

(U) **RESIDUAL**
MEDIUM STIFF GRAY SILTY CLAY (D)

(V) **RESIDUAL**
SOFT TO STIFF GRAY AND ORANGE SILTY CLAY (M)

(Y) **RESIDUAL**
STIFF GRAY-ORANGE CLAYEY SILT (M)

(Z) **RESIDUAL**
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

(AC) **RESIDUAL**
DENSE TAN-GRAY SILTY FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

(AB) **RESIDUAL**
MEDIUM DENSE TO VERY DENSE TAN-GRAY AND BROWN-ORANGE SILTY FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

END GRADE
–Y13RPD– STA. 38+32.74
EL = 825.80'

820 810 800 790 780 770

24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00 35+00 36+00 37+00 38+00

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$FILENAME$$$$

5/28/99

PROJECT REFERENCE NO.	SHEET NO.
U-2525C	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

–Y4DET–

BEGIN GRADE
–Y4DET– STA. 11+38.51
EL = 841.55'

END GRADE
–Y4DET– STA. 22+13.42
EL = 836.52'

B-303 — BT DRY

B-305 — BT FIAD — 07/15

B-307 — BT DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-TAN TO RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT
WITH MICA AND MANGANESE (M TO D)

Ⓨ **RESIDUAL**
MEDIUM STIFF RED-BROWN TO RED-TAN
CLAYEY SILT WITH MICA AND MANGANESE (M)

890 880 870 860 850 840 830 820 810 800

11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00

–Y5DET–

BEGIN GRADE
–Y5DET– STA. 10+89.44
EL = 860.20

END GRADE
–Y5DET– STA. 18+24.96
EL = 846.29'

B-308 — BT DRY

B-309 — BT FIAD

B-310 — BT DRY

RESIDUAL
MEDIUM STIFF TO VERY
STIFF RED TO ORANGE-BROWN SILTY
CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE SILT (M)

Ⓨ **RESIDUAL**
STIFF ORANGE-BROWN CLAYEY SILT (D)

910 900 890 880 870 860 850 840 830 820

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00

$$$$$$$SYSTIME$$$$$$
$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
U–2525C	31A

REFERENCE: U–2525C

PROJECT: 34821

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SECTION 1
CROSS SECTIONS
–L– LEFT

CROSS SECTIONS

LINE	***STATION***	***SHEETS***
-L- LEFT	281+00 - 282+50	31 - 32
-L- LEFT	287+00 - 299+00	33 - 43
-L- LEFT	301+00 - 304+00	44 - 46
-L- LEFT	314+00 - 316+00	46 - 48
-L- LEFT	330+50 - 332+00	48 - 50
-L- LEFT	339+00 - 343+00	51 - 59
-L- LEFT	358+00 - 361+00	60 - 66
-L- LEFT	373+00 - 374+50	67 - 68
-L- LEFT	407+50 - 416+00	69 - 76
-L- LEFT	430+00 - 464+00	77 - 107
-L- LEFT	466+00 - 468+00	107 - 109
-L- LEFT	471+00 - 482+00	109 - 120
-L- LEFT	493+00 - 495+00	121 - 125
-L- LEFT	517+00 - 520+00	126 - 130
-L- LEFT	524+50 - 535+00	130 - 139
-L- LEFT	538+50 - 548+15.23	140 - 148

DocuSigned by:
Stewart S. Laney, PE
75BB4AB1AB3B4CB...

5/30/2017

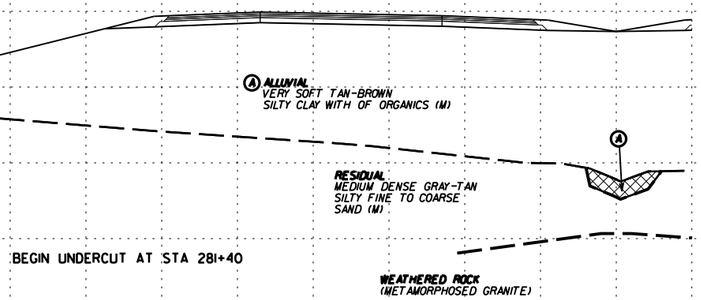
S&ME

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	31

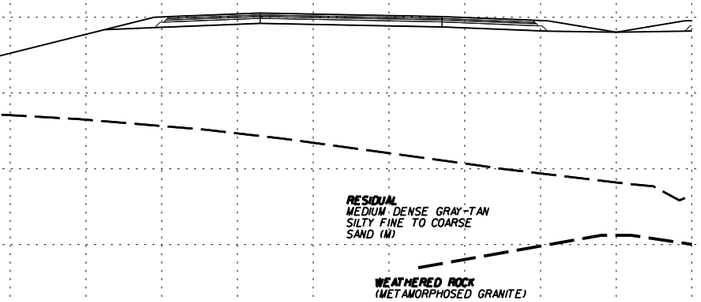
290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800 790 780



BEGIN UNDERCUT AT STA 281+40

281+50.00



281+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	32

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF GRAY
FINE SANDY CLAY (M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
GRAY-TAN SILTY FINE TO COARSE SAND
WITH TRACE OF ROCK FRAGMENTS (M)

282+50.00

840 830 820 810 800 790 780

END UNDERCUT STA 282+23

ALLUVIAL
VERY LOOSE DARK GRAY
SILTY SAND (M)

ALLUVIAL
VERY SOFT TAN-BROWN SILTY CLAY
WITH TRACE OF ORGANICS (M)

B-15
282+00

2 WOH/2 2 WOH/2 2 WOH/2

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	33

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810 800 790

RESIDUAL
STIFF TO VERY STIFF
RED-ORANGE-TAN
CLAYEY SILT (M TO D)

SP

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND
GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 287+25

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN
SILTY FINE TO COARSE SAND (M)

287+50.00

RESIDUAL
STIFF TO VERY STIFF
RED-ORANGE-TAN
CLAYEY SILT (M TO D)

SP

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND
GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN
SILTY FINE TO COARSE SAND (M)

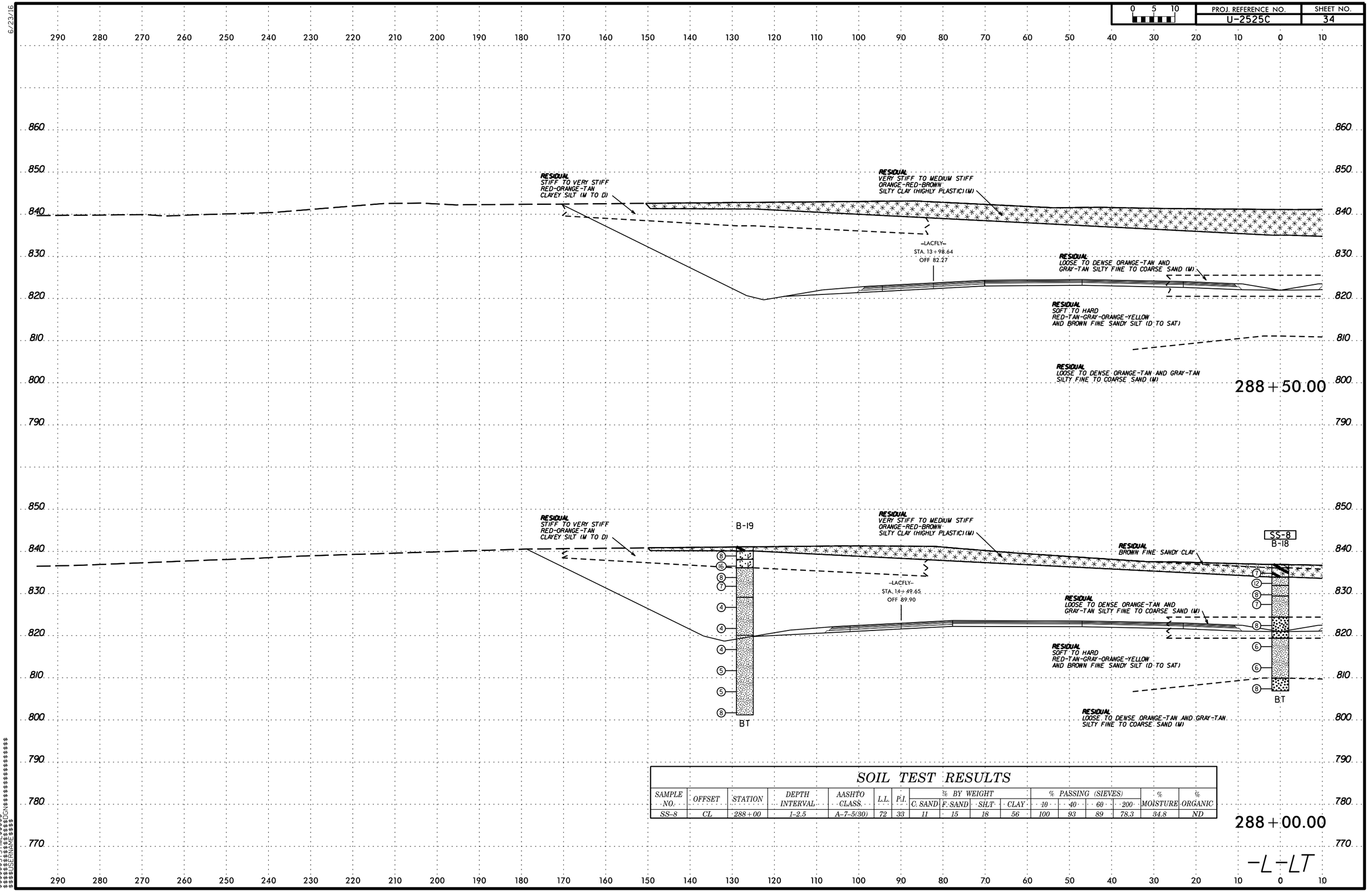
287+00.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	34



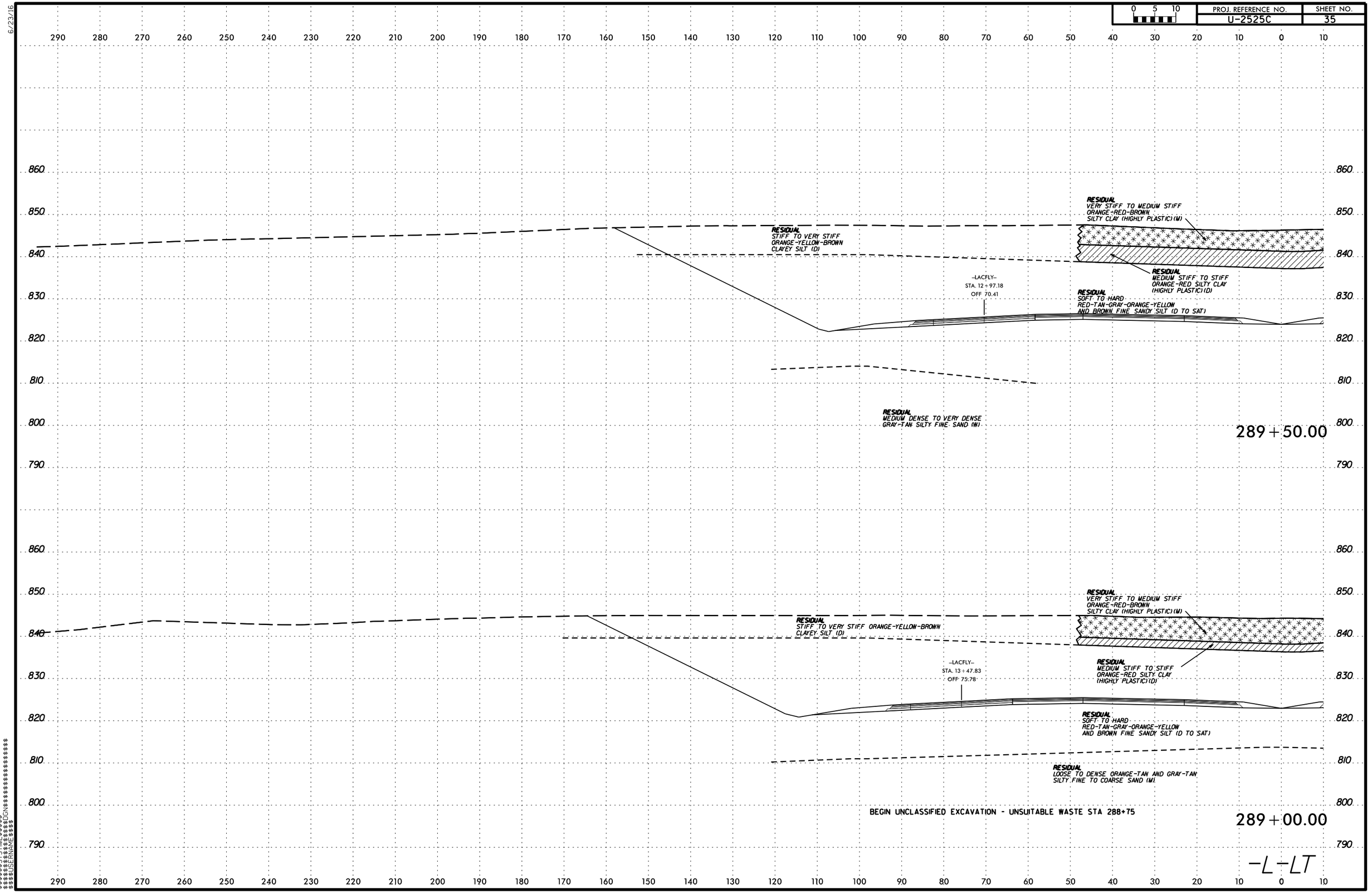
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-8	CL	288+00	1-2.5	A-7-5(30)	72	33	11	15	18	56	100	93	89	78.3	34.8	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	35



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	36

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810 800 790

RESIDUAL
STIFF TO VERY STIFF
ORANGE-YELLOW-BROWN
CLAYEY SILT (D)

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

-LACFLY-
STA. 11+96.24
OFF 63.01

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
GRAY-TAN SILTY FINE SAND (M)

290+50.00

B-22
290+05

14 16 9 8 8 7 4 7 26 27 49 91

BT

SS-10
B-21
290+07

14 21 16 12 9 6 5 4 10

BT
DRY

-LACFLY-
STA. 12+46.66
OFF 66.16

290+00.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	37

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810

RESIDUAL
STIFF TAN-BROWN
SILTY CLAY (D)

RESIDUAL
STIFF TO VERY STIFF
ORANGE-BROWN-RED-YELLOW-TAN
SILTY CLAY (D)

-LACFLY-
STA. 10+95.57
OFF 59.70

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
MEDIUM STIFF ORANGE-GRAY SILT (SAT)

291+50.00

880 870 860 850 840 830 820 810 800

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 291+00

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

RESIDUAL
STIFF TO VERY STIFF
ORANGE-YELLOW-BROWN
CLAYEY SILT (D)

-LACFLY-
STA. 11+45.88
OFF 60.92

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
GRAY-TAN SILTY FINE SAND (W)

291+00.00

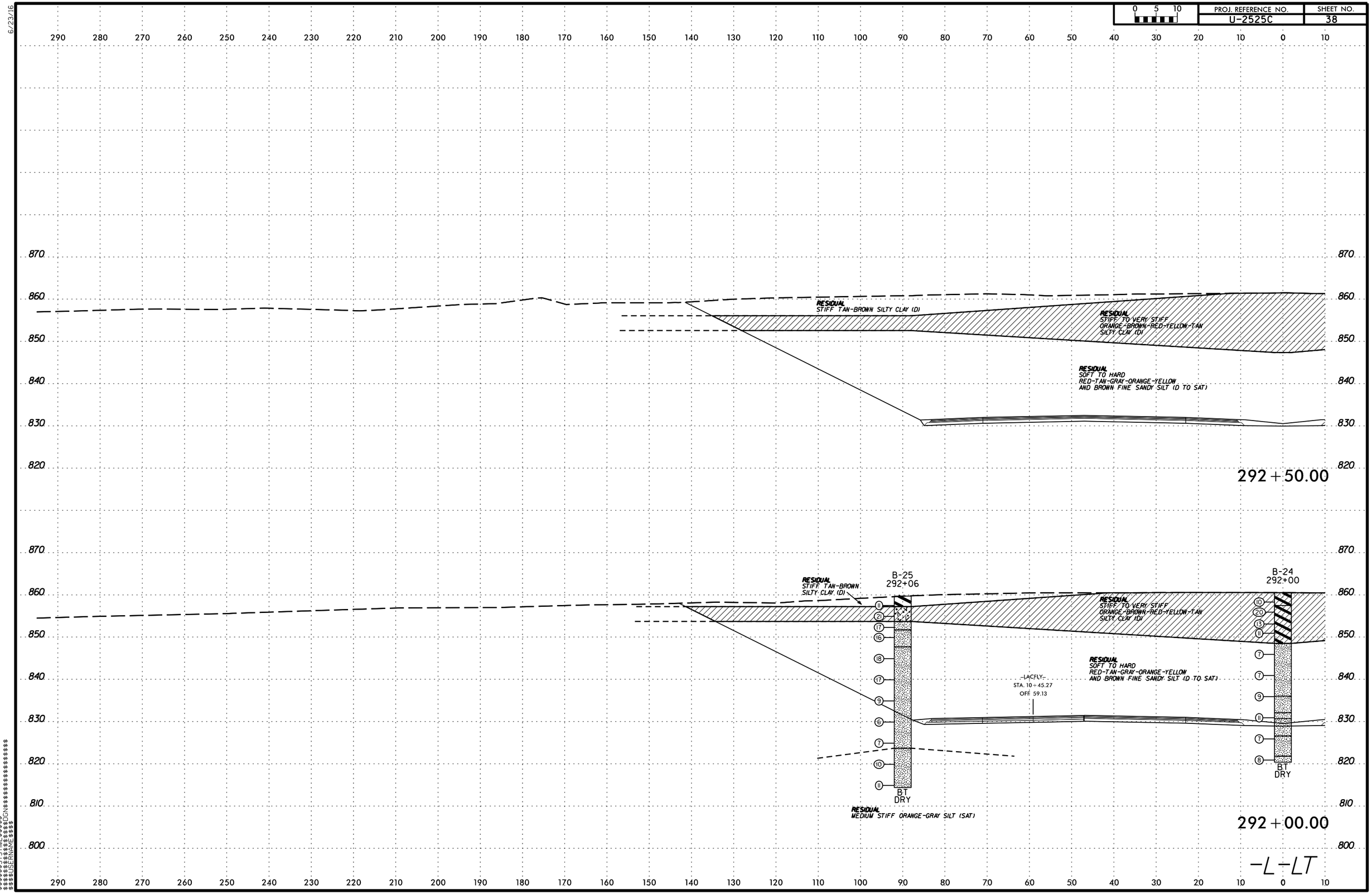
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	38



$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	39

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810 800

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
LOOSE WHITE SILTY SAND (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

293+50.00

870 860 850 840 830 820 810 800

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE WHITE SILTY SAND (M)

293+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	40

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE WHITE SILTY SAND (M)

294+50.00

870 860 850 840 830 820 810 800

B-28
294+00

5 WOH 11 7 6 16 51 83 100/0.1 35 100/0.8
BT
FIAD

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE WHITE SILTY SAND (M)

B-27
294+00

10 10 17 12 9 11 27 10 10
BT
FIAD

294+00.00

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	41

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810

B-30
296+00

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

8
22
12
5

BT
DRY

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

296+00.00

850 840 830 820

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

BEGIN UNDERCUT AT STA 295+40

295+50.00

860 850 840 830 820

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

295+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	42

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810

RESIDUAL
VERY SOFT TO VERY STIFF RED-BROWN-ORANGE
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

297+50.00

850 840 830 820

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

297+00.00

850 840 830 820

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 296+50

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

296+50.00

850 840 830 820

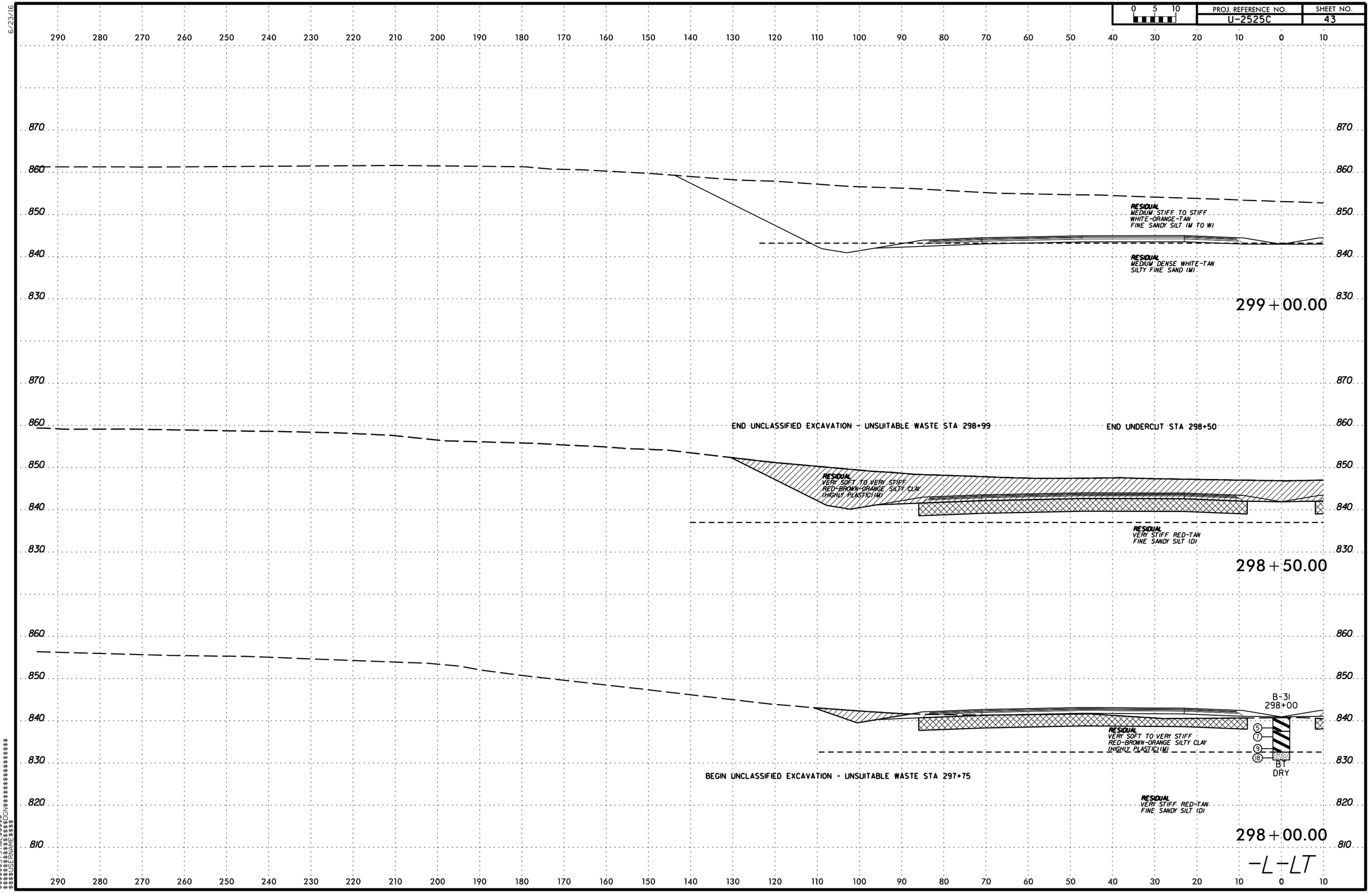
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	43



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	44

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810

RESIDUAL
SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

SS-13
B-33
302+10

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

4 6 5 5

11/15

BT

302+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-13	CL	302+00	1-2.5	A-7-6(35)	61	32	2	9	33	56	100	99	98	92.5	34.7	ND

870 860 850 840 830 820

RESIDUAL
SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

301+50.00

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 301+25

BEGIN UNDERCUT STA 301+25

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

301+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	45

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 303+50

END UNDERCUT STA 303+75

RESIDUAL SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL MEDIUM STIFF RED-TAN FINE SANDY SILT (M)

303+50.00

303+00.00

302+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	46

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

880 870 860 850 840 830 820 810 800

RESIDUAL
STIFF GRAY TAN SANDY CLAY LOW PLASTICITY (D)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE SAND (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY SOFT TO HARD RED-TAN-ORANGE FINE SANDY SILT (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

314+50.00

B-34
304+10

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY HIGHLY PLASTIC (M).

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

4 9 8 5 TT

BT

304+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	47

END UNDERCUT AT STA 315+66

B-44

ALLUVIAL
VERY SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
MEDIUM DENSE GRAY-TAN SILTY FINE TO COARSE SAND (W)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

0
14
100/0.1'
60/0.1'
AR
FIAD

315+50.00

ALLUVIAL
VERY SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE SAND (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY SOFT TO HARD RED-TAN-ORANGE FINE SANDY SILT (W TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT AT STA 314+90 (LT)

315+00.00

-L-LT

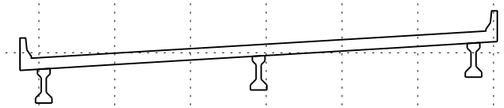
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	48

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

910 900 890 880 870 860



RESIDUAL
SOFT TO HARD RED-TAN SILT (D TO SAT)

330+50.00

880 870 860 850 840 830 820 810 800

B-45

8
27
100/0.7
100/0.4
100/0.3

B.T
FIAD

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN SILTY CLAY (M)

RESIDUAL
VERY STIFF GRAY-TAN FINE SANDY CLAY (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

316+00.00

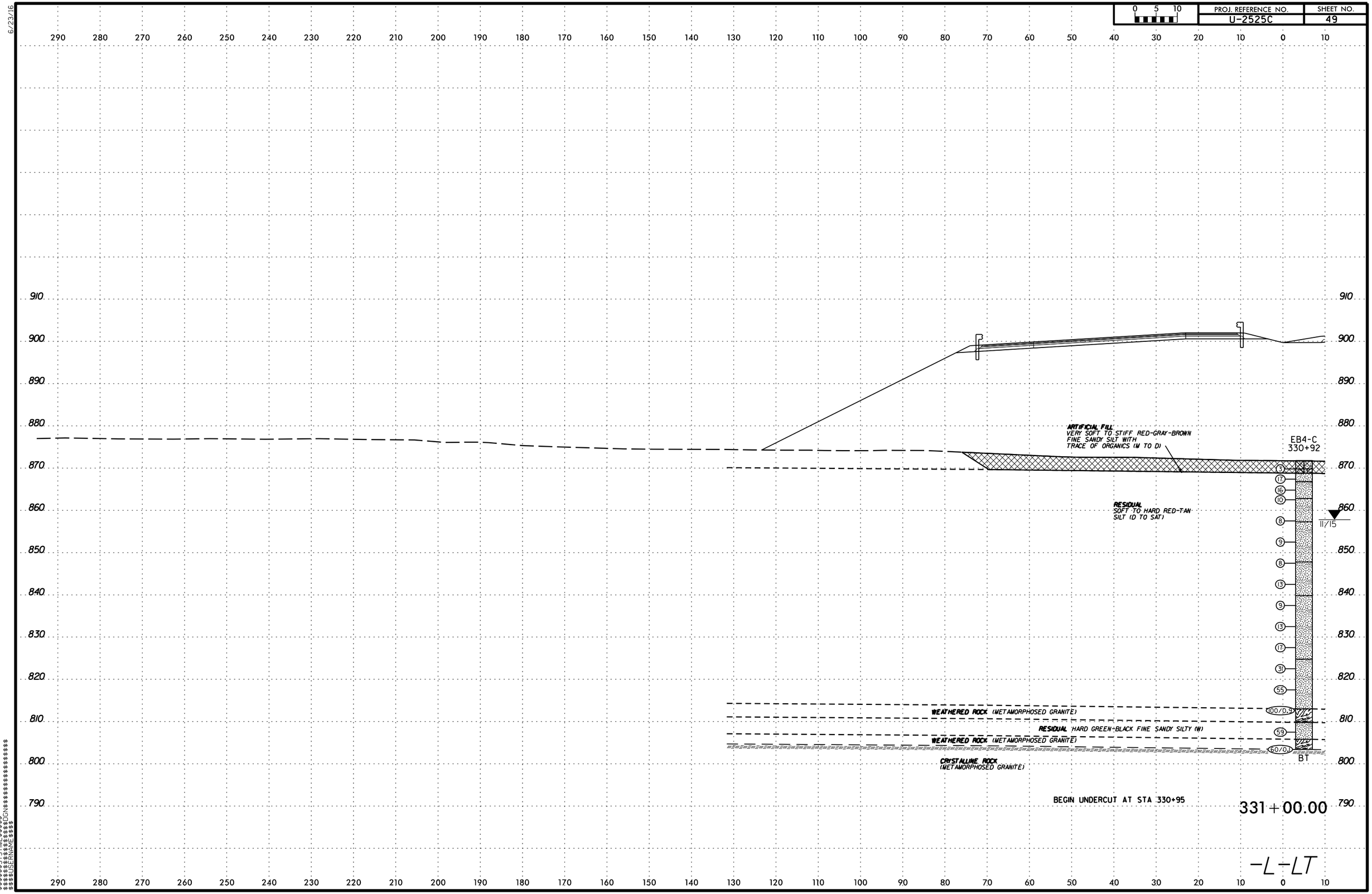
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	49



$$$$$$SYSTIME$$$$$$
$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	50

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

910 900 890 880 870 860 850

RESIDUAL
STIFF TO VERY STIFF BROWN-RED-TAN
CLAYEY SILT (W TO D)

RESIDUAL
SOFT TO HARD RED-TAN
SILT (D TO SAT)

332+00.00

920 910 900 890 880 870 860 850

END UNDERCUT STA 331+65

ARTIFICIAL FILL
VERY SOFT TO STIFF RED-GRAY-BROWN
FINE SANDY SILT WITH
TRACE OF ORGANICS (M TO D)

RESIDUAL
SOFT TO HARD RED-TAN
SILT (D TO SAT)

331+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	51

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

900
890
880
870
860
850
840
830
820
810
800
790

RESIDUAL
VERY STIFF GRAY-TAN
FINE TO COARSE SILTY CLAY (M)

RESIDUAL
LOOSE TO VERY DENSE
GRAY-TAN SILTY FINE
SAND (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

339+00.00

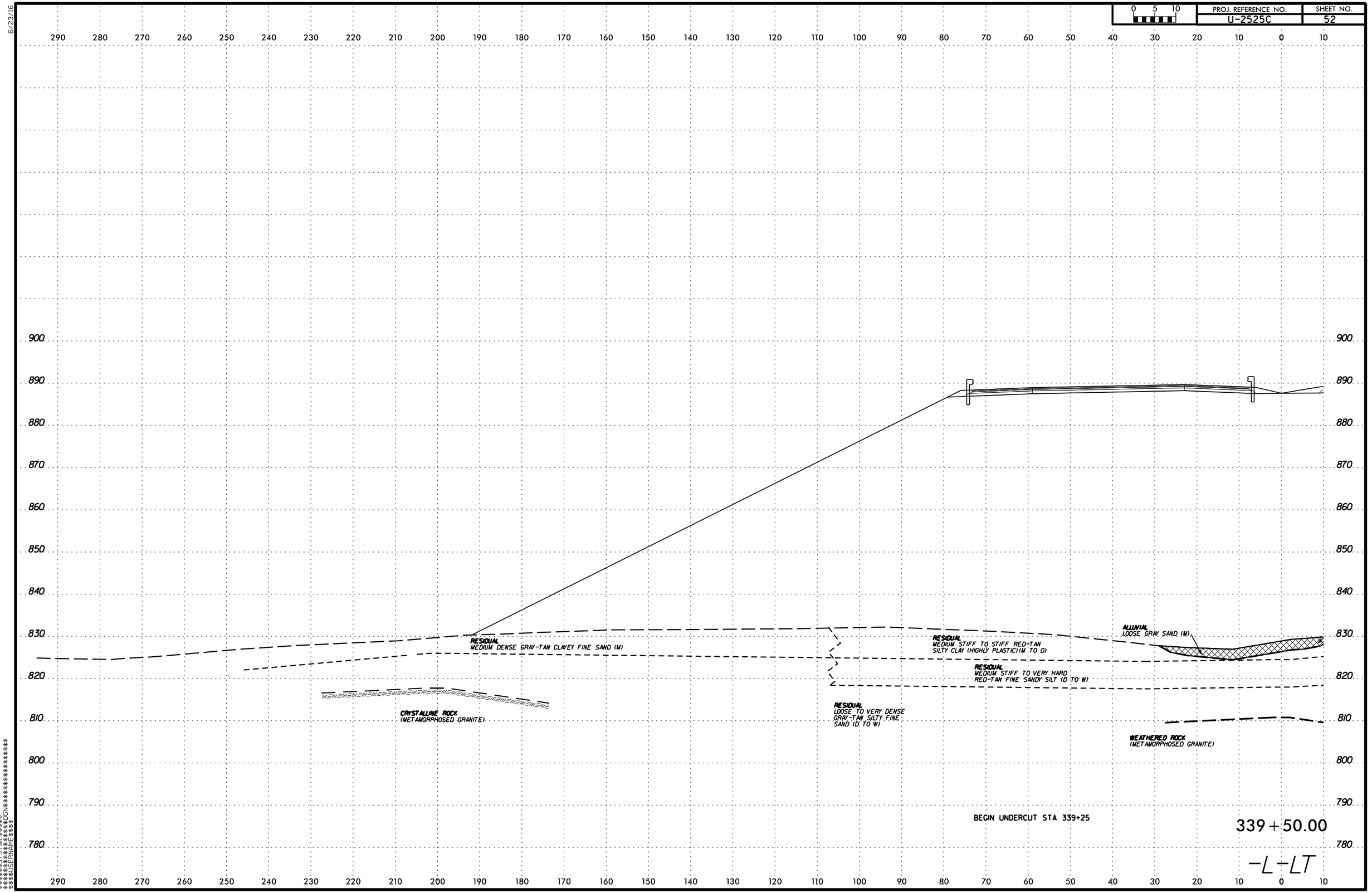
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

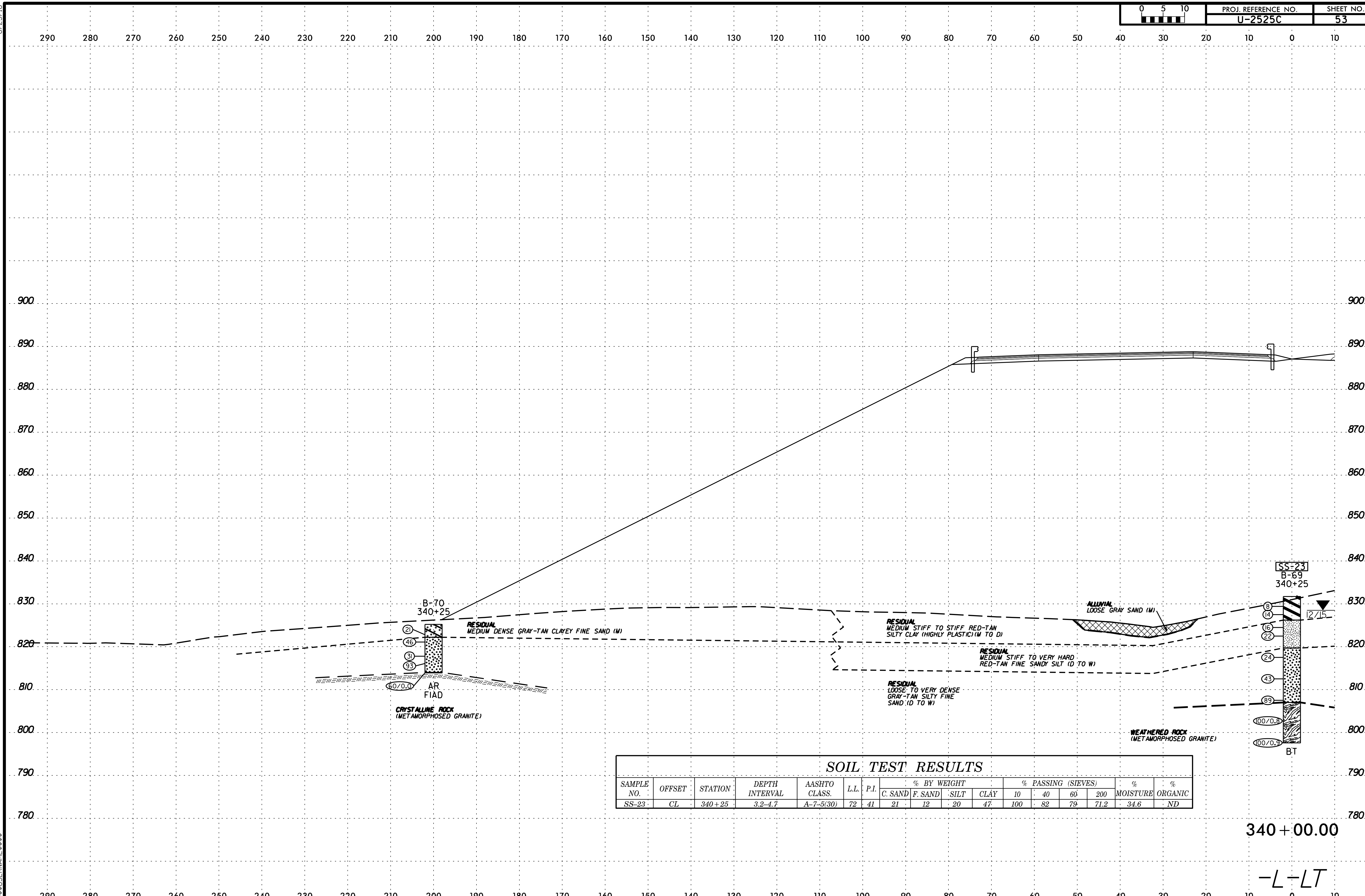
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	52



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	53



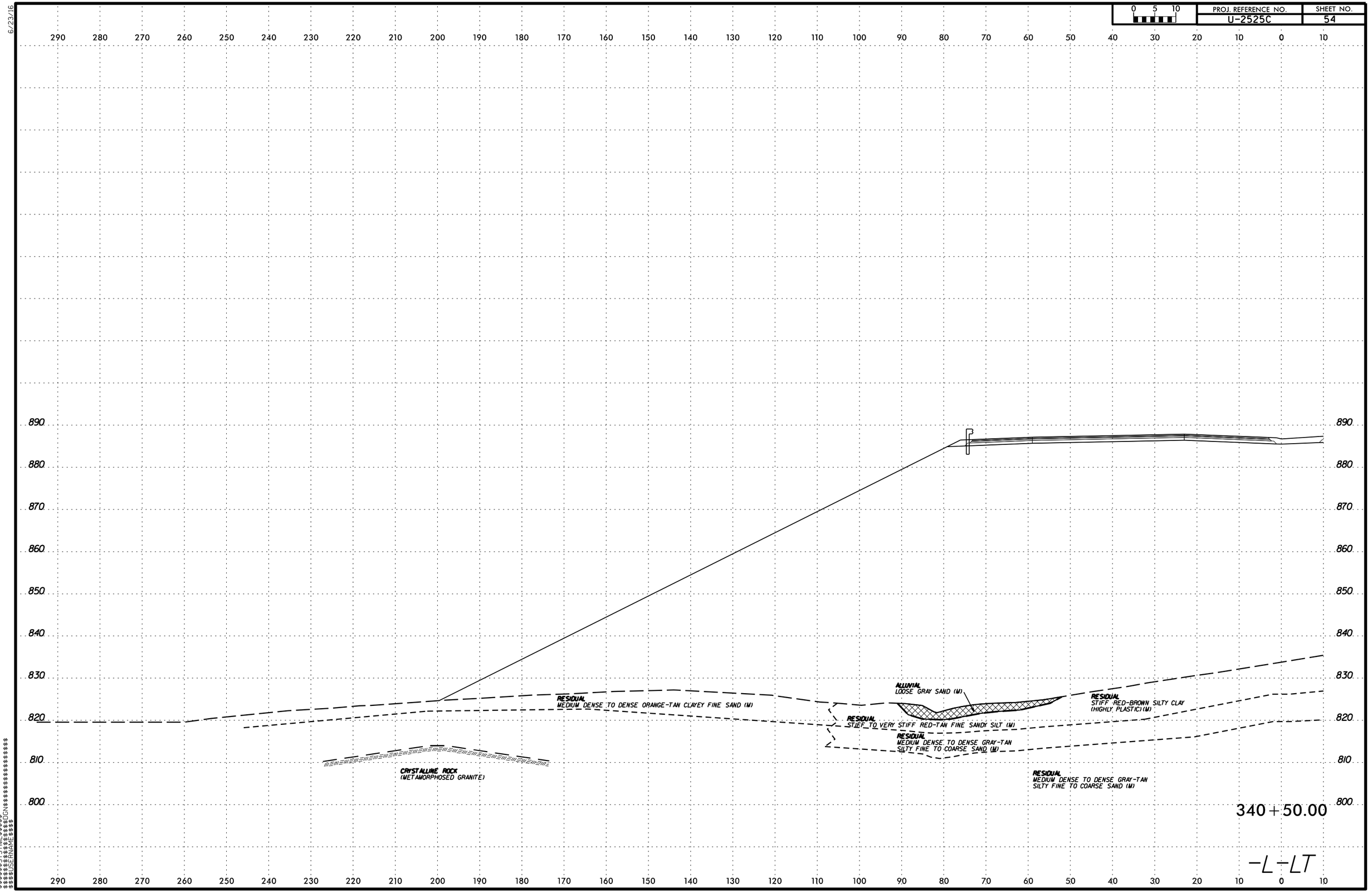
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-23	CL	340+25	3.2–4.7	A-7-5(30)	72	41	21	12	20	47	100	82	79	71.2	34.6	ND

$$$$$SYSTIME$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

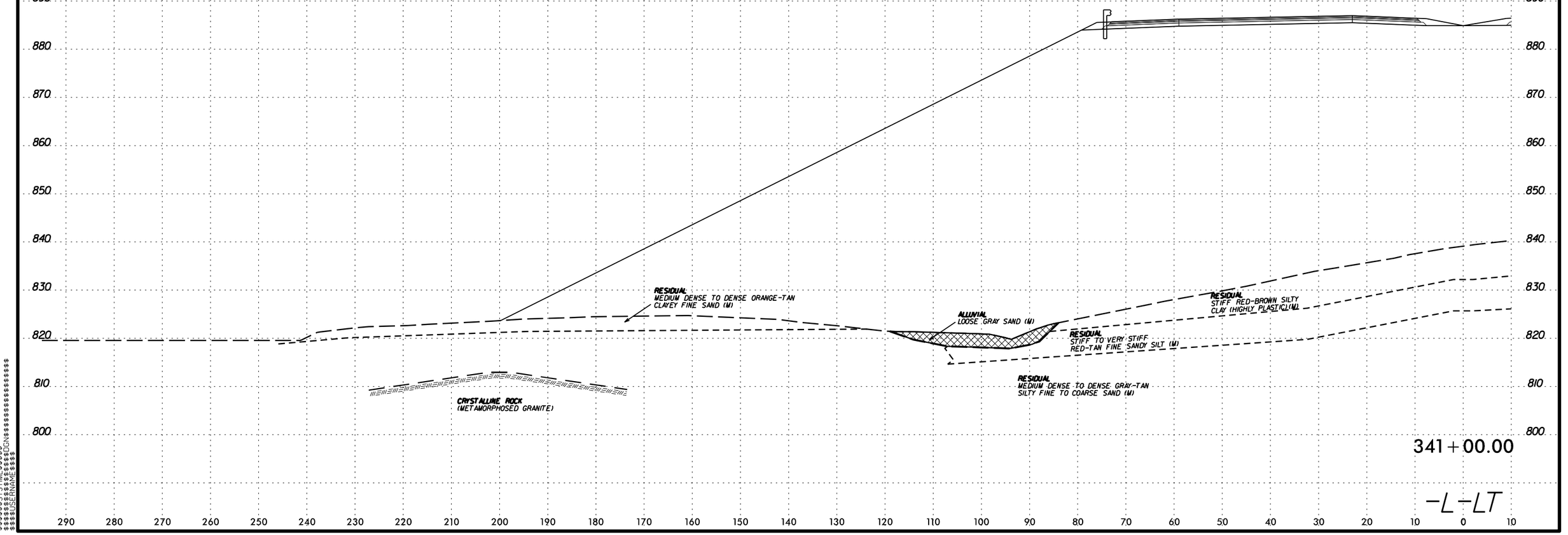
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	54



$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	55



$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	56

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

890 880 870 860 850 840 830 820 810 800 790 780

ALLUVIAL
LOOSE GRAY SAND (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY HARD RED-TAN FINE SANDY SILT (D TO W)

RESIDUAL
LOOSE TO VERY DENSE GRAY-TAN SILTY FINE SAND (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

341+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	57

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

890 880 870 860 850 840 830 820 810 800 790 780 770

B-73
342+25

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M TO D)

10 13 19 23 100/0.7 100/0.6 50/0.0

BT

ALLUVIAL
LOOSE GRAY SAND (M)

RESIDUAL
LOOSE TO VERY DENSE
GRAY-TAN SILTY FINE
SAND (D TO W)

B-72
342+25

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY HARD
RED-TAN FINE SANDY SILT (D TO W)

14 13 9 9 9 10 17 16 19 24 34 44 100/0.9 100/0.8

12/15

BT

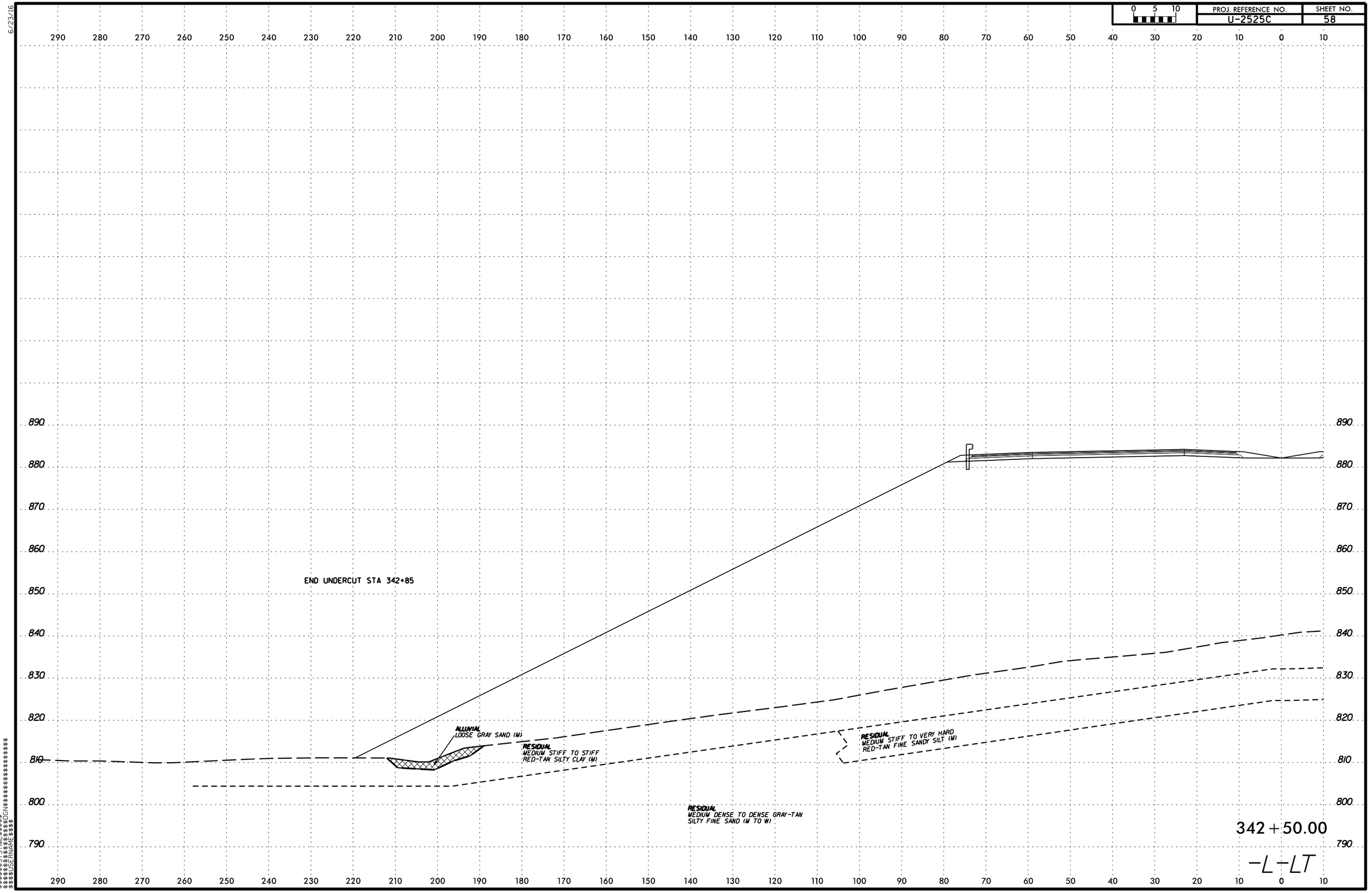
WEATHERED ROCK
(METAMORPHOSED GRANITE)

342+00.00
-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	58



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	59

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

890
880
870
860
850
840
830
820
810
800
790

ALLUVIAL

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN SILTY CLAY (M)

RESIDUAL
MEDIUM DENSE TO DENSE GRAY-TAN
SILTY FINE SAND (M TO W)

RESIDUAL
MEDIUM STIFF TO VERY HARD
RED-TAN FINE SANDY SILT (M)

343+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	60

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800 790 780 770 760 750

ALLUVIAL
SOFT GRAY BROWN SILTY CLAY
WITH ROOTLETS (M TO W)

RESIDUAL
VERY SOFT TO MEDIUM STIFF
RED-ORANGE-TAN SILTY CLAY
(HIGHLY PLASTIC) (M TO D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY SOFT TO MEDIUM STIFF
RED-ORANGE-TAN SILTY CLAY
(HIGHLY PLASTIC) (M TO D)

RESIDUAL
SOFT TO HARD TAN-BROWN
FINE SANDY SILT (M TO D)

358+00.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	61

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800 790 780 770 760 750

ALLUVIAL
SOFT GRAY BROWN SILTY CLAY WITH ROOTLETS (M TO W)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF BROWN-ORANGE AND GRAY-BLACK FINE SANDY CLAY WITH TRACE TO SOME ORGANICS (M TO W)

B-96
358+35

7
3
70
74
73
60/0.1

02/16

AR

RESIDUAL
VERY DENSE TO MEDIUM DENSE GRAY-TAN SILTY FINE SAND (M TO D)

BEGIN UNDERCUT AT STA 358+05

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

358+50.00

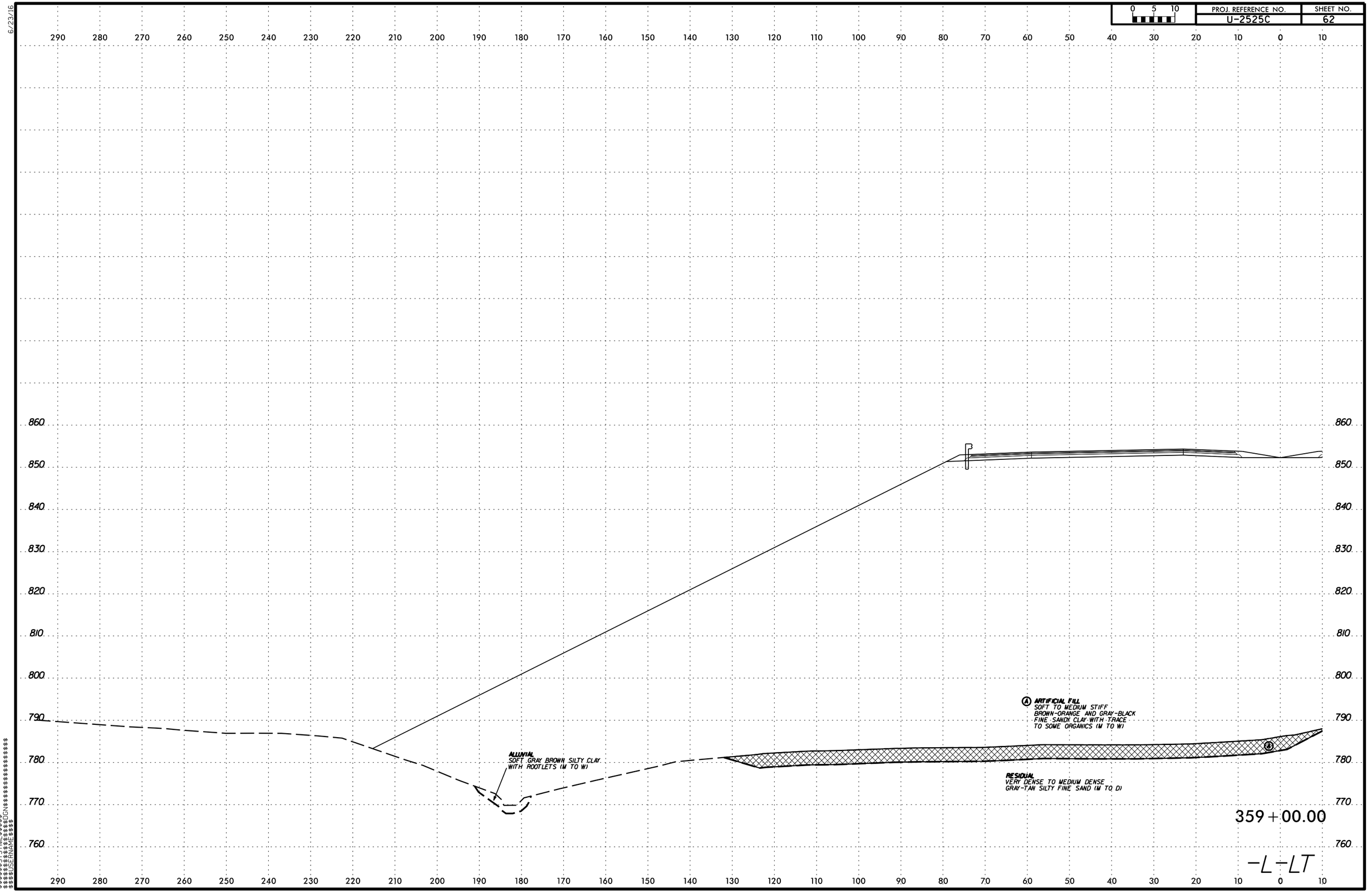
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

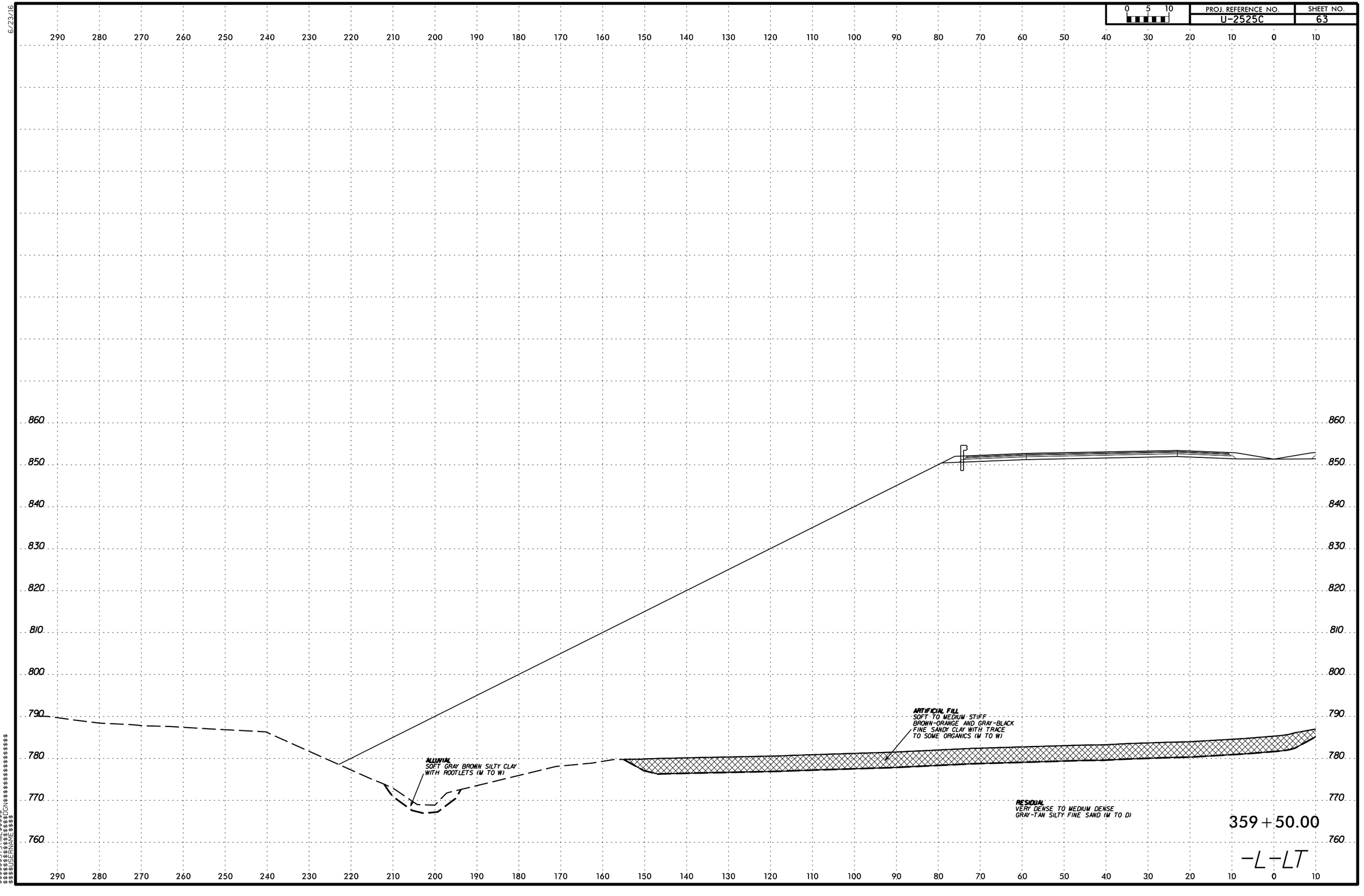
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	62



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	63



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	64

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800 790 780 770 760 750

B-100
360+25

15 22 15 21

100/0.1

50/0.9

AR
FIAD

ARTIFICIAL FILL
STIFF TO VERY STIFF
BROWN-BLACK CLAYEY SILT (M)

RESIDUAL
STIFF TO VERY STIFF
TAN-BROWN CLAYEY SILT (M)

ALLUVIAL
SOFT, GRAY, BROWN, SILTY CLAY
WITH ROOTLETS (M TO W)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF
BROWN-ORANGE AND GRAY-BLACK
FINE SANDY CLAY WITH TRACE
TO SOME ORGANICS (M TO W)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF ORANGE-GRAY
FINE SANDY SILT WITH TRACE ORGANICS (M)

RESIDUAL
HARD TAN-GREEN SILT (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE TO MEDIUM DENSE
GRAY-TAN SILTY FINE SAND (M TO D)

B-99
360+25

8 4 8 71

50/0.4

20

50/0.1

AR

360+00.00

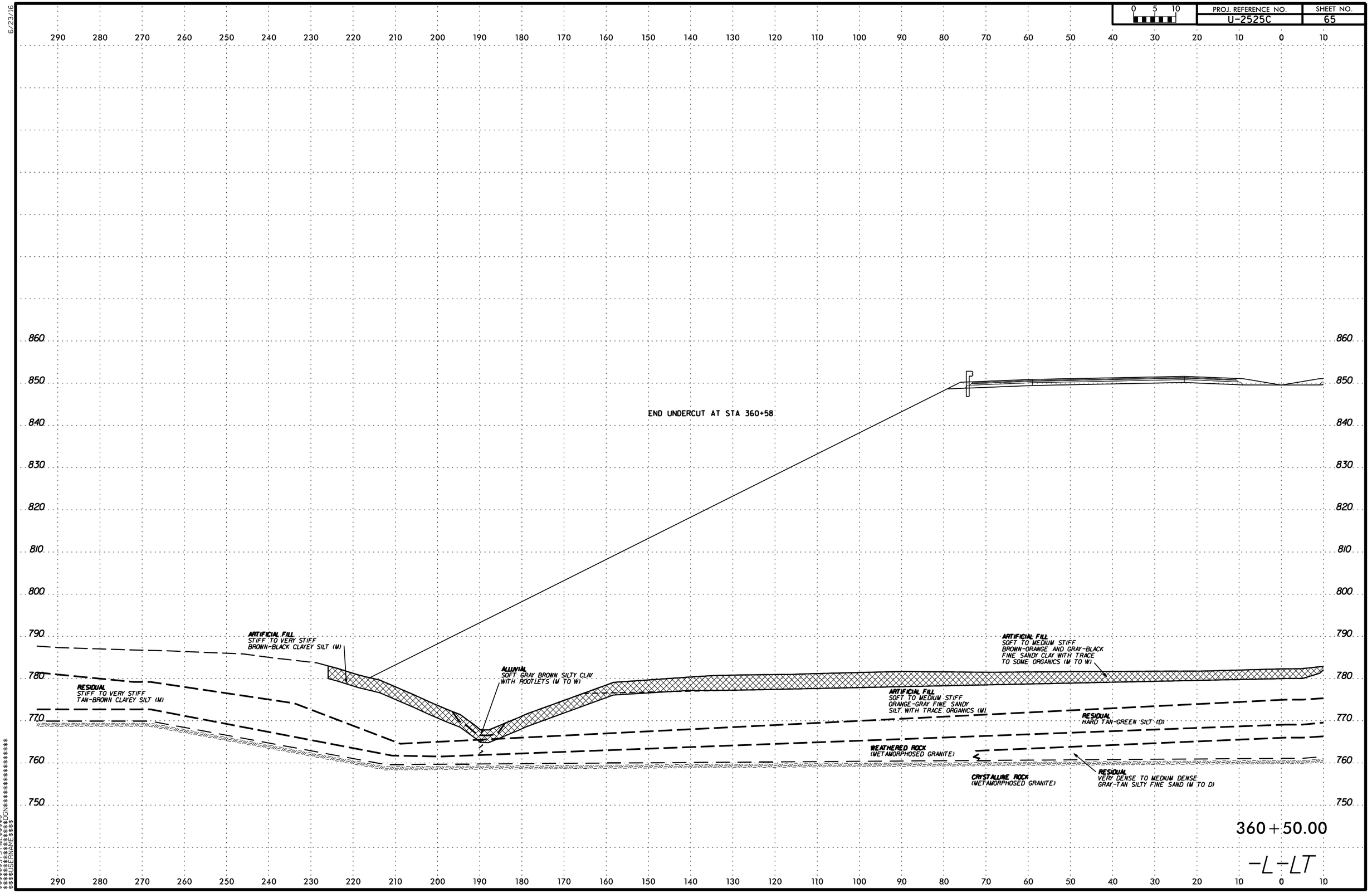
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

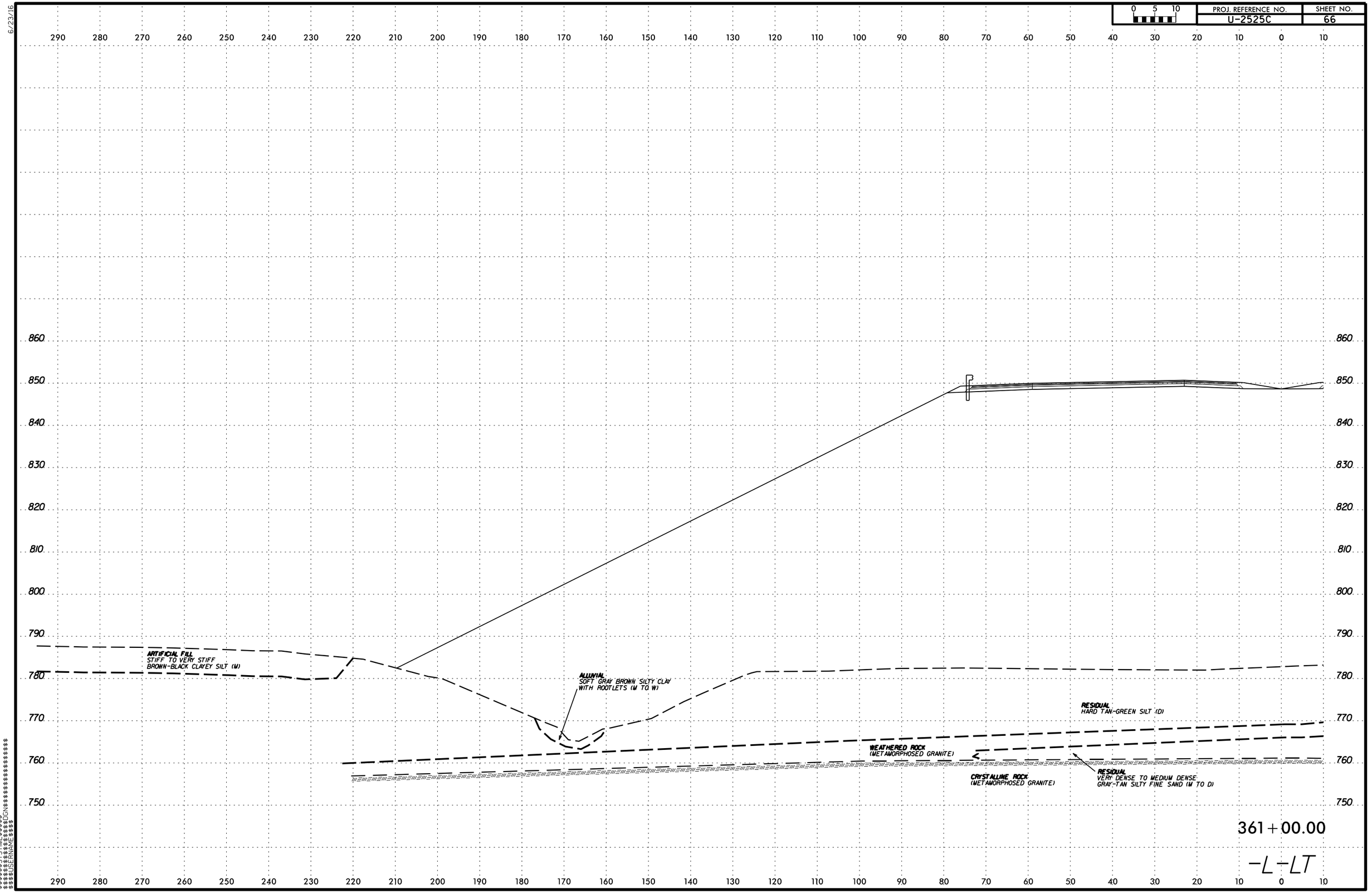
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	65



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	66



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	67

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770 760

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

RESIDUAL
MEDIUM DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT STA 373+14

373+50.00

750 760 770 780 790 800 810 820 830

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

RESIDUAL
MEDIUM DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

373+00.00

760 770 780 790 800 810 820 830

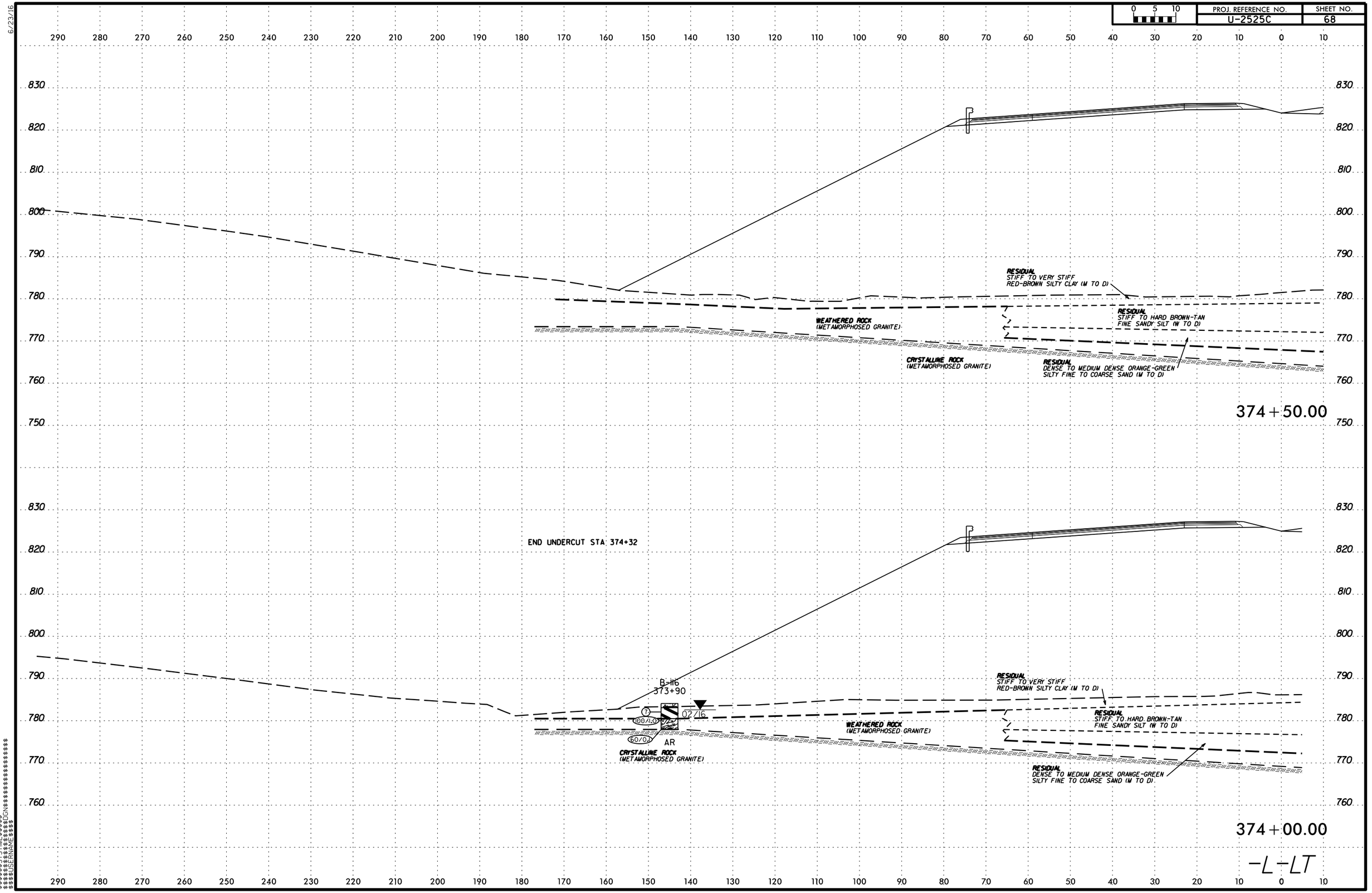
290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

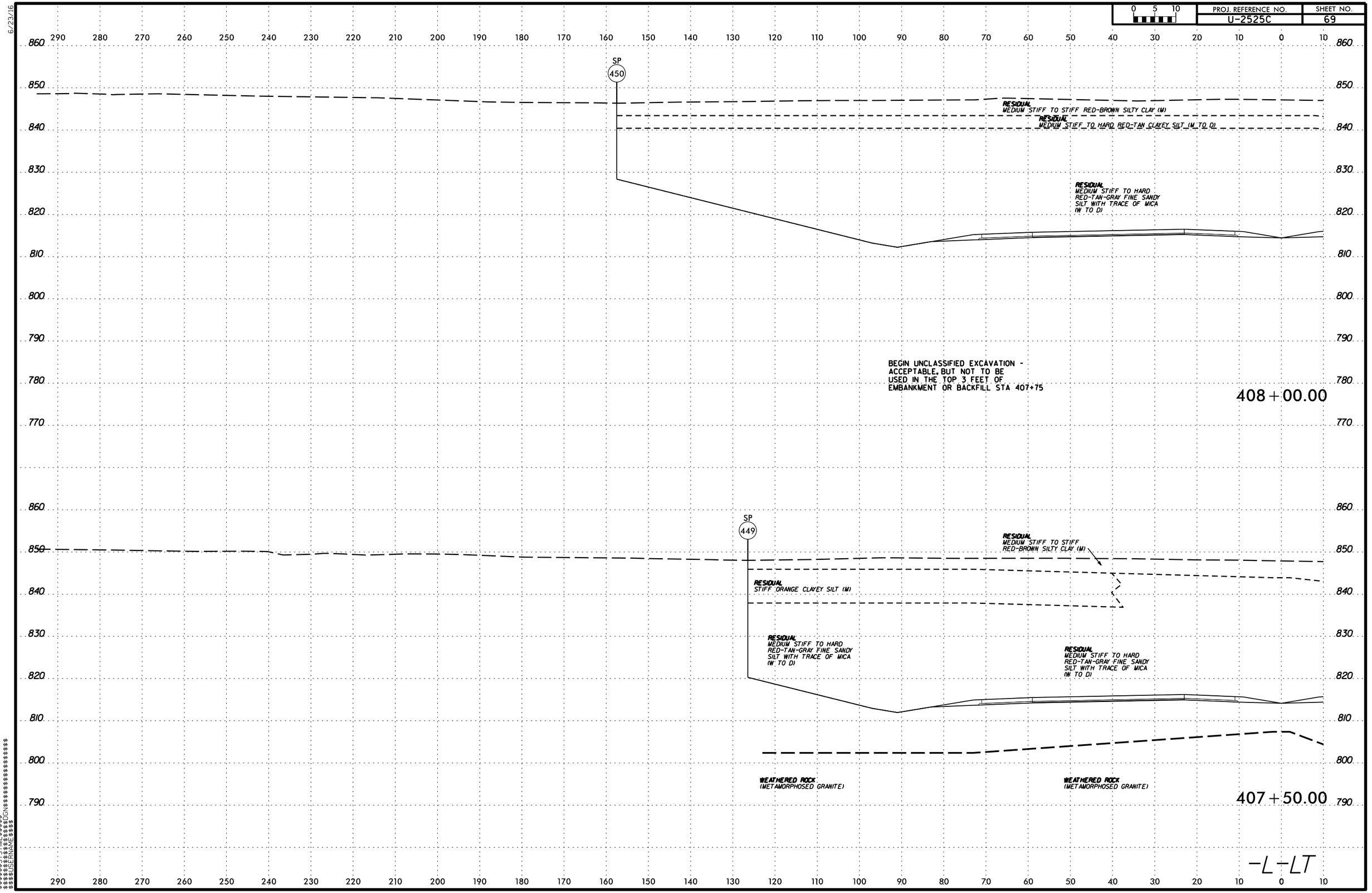
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	68



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	69



$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	70

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810

SP 452

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(M TO D)

409+00.00

SP 451

SS-37
B-145

7 15 11 8 12 15 10 12 14 18 72

BT
FIAD

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(M TO D)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-37	6' RT	408+30	3.6-5.1	A-7-5(18)	62	14	2	24	30	44	100	99	98	83.7	34.2	ND

408+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	71

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800 790

SP 454

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD GRAY-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

410+00.00

SP 453

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD GRAY-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

409+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	72

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810 800 790

SP
456

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

411+00.00

860 850 840 830 820 810 800 790 780 770

SP
455

SS-38
SS-39
SS-40
SS-42
B-148
STA 410+30

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD GRAY-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

9 17 11 10 9 9 12 36 39 100/0.9

BT
DRY

410+50.00

-L-LT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-38	CL	410+30	18.5-20	A-5(9)	56	10	6	44	45	5	100	98	94	66.3	24.5	ND
SS-39	CL	410+30	28.5-30	A-4(4)	37	4	6	38	48	8	100	98	94	73.6	15.4	ND
SS-40	CL	410+30	33.5-35	A-5(8)	52	8	3	44	42	11	100	98	97	70.7	35.5	ND
SS-42	CL	410+30	8.5-10	A-7-5(35)	75	29	2	12	32	54	100	99	98	90.8	47.1	ND

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	73

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850
840
830
820
810

SP
458

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

412 + 00.00

SP
457

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

411 + 50.00

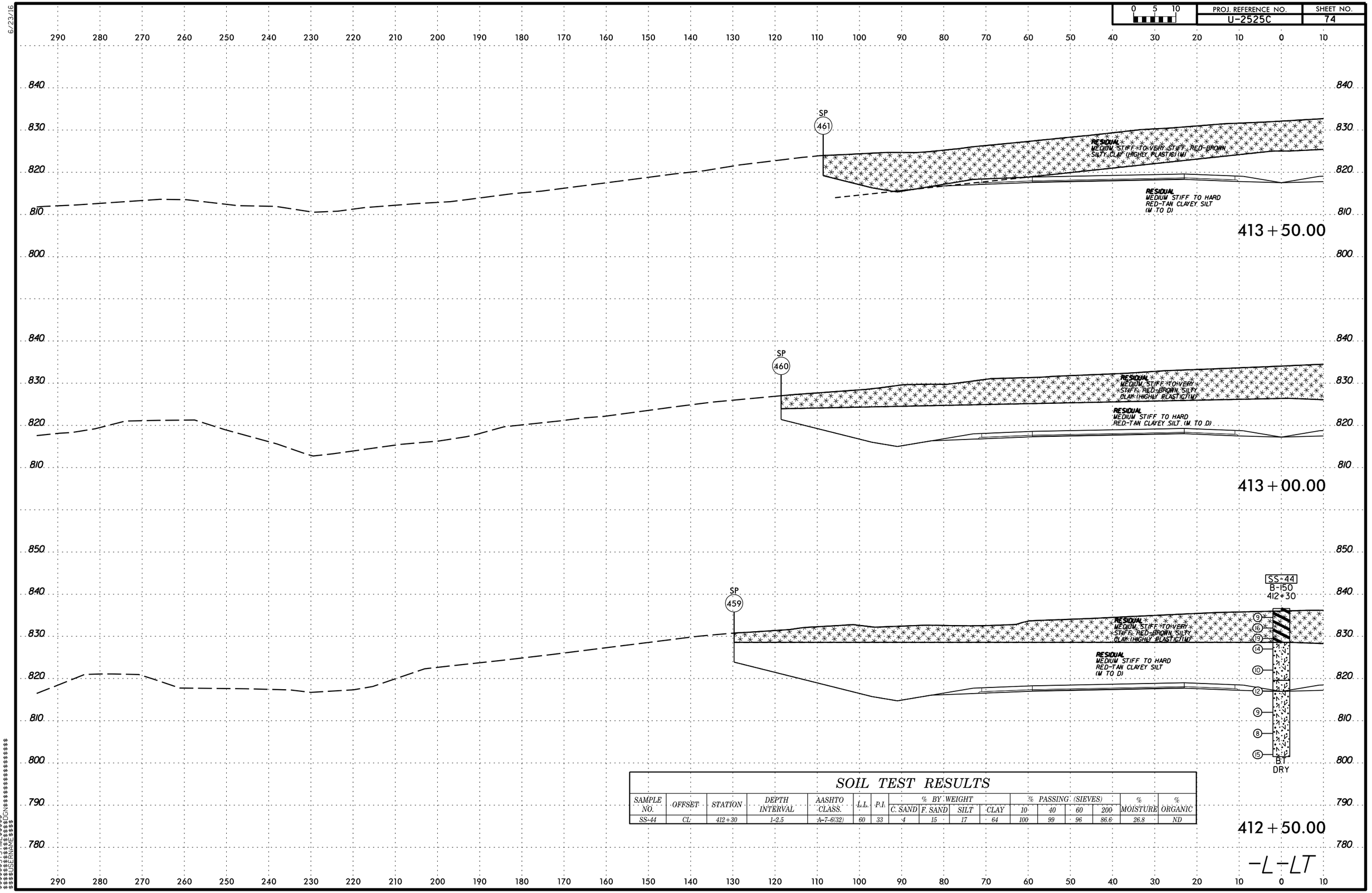
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	74



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-44	CL	412+30	1-2.5	A-7-6(32)	60	33	4	15	17	64	100	99	96	86.6	26.8	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$
$$$$$$$USERNAME$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	75

END UNDERCUT STA 415+25

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 415+25

SP 464

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

415+00.00

SP 463

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

414+50.00

B-152
414+15

SP 462

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

7
11
18
15
30
12

BT
DRY

BEGIN UNDERCUT STA 413+75

414+00.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	76

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800 790

SP 466

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

416+00.00

SP 465

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

415+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	77

RESIDUAL
MEDIUM STIFF TO VERY STIFF
TAN-ORANGE FINE CLAYEY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

430+00.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	78

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840
830
820
810
800
790
780
770
760
750
740

ALLUVIAL
SOFT ORANGE-BROWN SILTY CLAY
WITH TRACE OF ORGANICS (SAT.)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
TAN-ORANGE FINE CLAYEY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT AT STA 430+38

430+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	79

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840
830
820
810
800
790
780
770
760
750

ALLUVIAL
SOFT ORANGE-BROWN SILTY CLAY WITH TRACE OF ORGANICS (SAT)

RESIDUAL
MEDIUM STIFF TO VERY STIFF TAN-ORANGE FINE SANDY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

431+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	80

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD RED-TAN
CLAYEY SILT WITH TRACE
OF MANGANESE (M)

432+00.00

END UNDERCUT AT STA 431+64

ALLUVIAL
STIFF ORANGE-BROWN SILTY
CLAY TRACE OF ORGANICS (M)

ALLUVIAL
STIFF GRAY-BROWN FINE SANDY
SILT WITH TRACE OF ORGANICS (M)

RESIDUAL
MEDIUM DENSE GRAY-TAN
SILTY FINE SAND (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CVII-L
431+60

12 100/0.8 78 17 100/0.4 87 100/0.3 60/0.1 AR

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE SAND (D)

RESIDUAL
VERY STIFF TAN-YELLOW FINE SANDY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE BROWN-TAN SILTY
FINE TO COARSE SAND (D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM STIFF TO HARD
ORANGE-TAN FINE SANDY
SILT WITH MANGANESE
TRACE MICA ROCK ROCK
FRAGMENTS (D TO SAT)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

ALLUVIAL
SOFT ORANGE-BROWN SILTY CLAY
WITH TRACE OF ORGANICS (SAT)

ALLUVIAL
LOOSE ORANGE-GRAY SILTY
FINE TO COARSE SAND (SAT)

CVI2-C
431+27

5 4 5 9 9 31 100/0.6 60/0.1 AR

ALLUVIAL
SOFT TO MEDIUM STIFF
GRAY-BROWN SILTY CLAY WITH
TRACE OF ORGANICS (M TO SAT)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

431+50.00
-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	81

END UNDERCUT STA 433+75

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF TAN CLAYEY SILT
WITH MANGANESE, SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE, SAPROLITE (M TO D)

433+50.00

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF BROWN CLAYEY SILT
WITH MANGANESE SAPROLITE (M TO D)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 432+75

BEGIN UNDERCUT STA 432+75

433+00.00

B-162
432+60

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

7
10
11
10
31

432+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	82

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

435+00.00

B-163
434+60

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

17 14 11 13 11 16

BT
FIAD

434+50.00

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

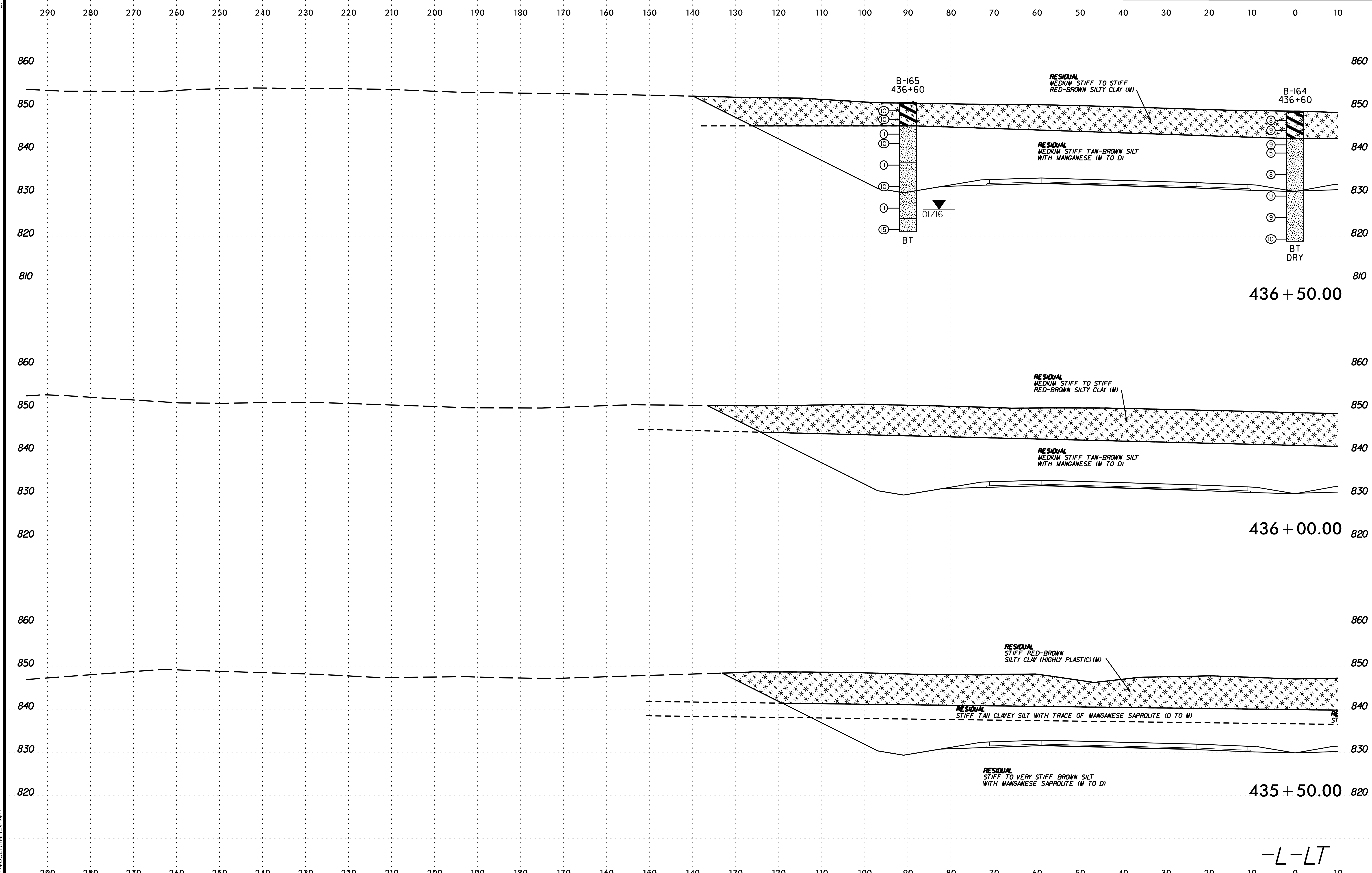
434+00.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	83



$$$$$SYSTIME$$$$$
$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	84

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

438+00.00

860 850 840 830 820 810

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

437+50.00

860 850 840 830 820 810

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN SANDY
SILT WITH MANGANESE (M TO D)

437+00.00

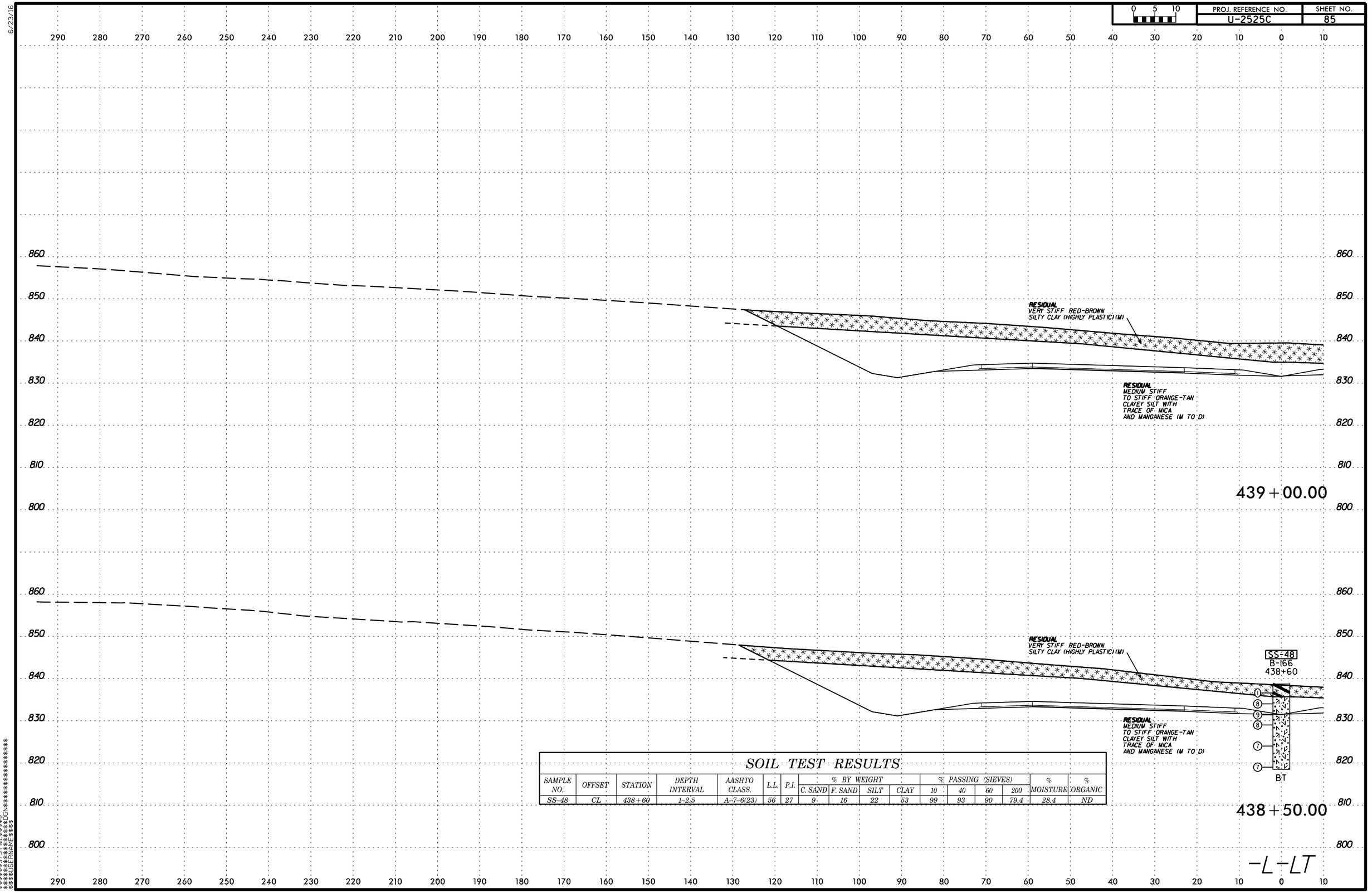
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	85



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-48	CL	438+60	1-2.5	A-7-6(23)	56	27	9	16	22	53	99	93	90	79.4	28.4	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	86

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860
850
840
830
820
810

RESIDUAL
MEDIUM STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

BEGIN UNDERCUT AT STA 439+75 (LT)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE
SANDY SILT WITH MANGANESE AND MICA (D)

440+00.00

860
850
840
830
820
810

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

439+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	87

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE SHOWN MAY BE REFERENCING POND SURFACE ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED BY PRELIMINARY POND ELEVATION

ALLUVIAL
LOOSE ORANGE-GRAY SILTY FINE SAND (SAT)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT WITH MANGANESE AND MICA (D)

441+00.00

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 440+75

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

B-167

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT WITH MANGANESE AND MICA (D)

7 9 8 6
BT
DRY

440+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	88

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810

B-168
442+60

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

7
9
8
7
BT

442+50.00

860 850 840 830 820 810

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE SHOWN MAY BE REFERENCING POND SURFACE ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED BY PRELIMINARY POND ELEVATION.

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 442+15

END UNDERCUT AT STA 442+22 (LT)

PRELIMINARY POND ELEVATION

ALLUVIAL
LOOSE ORANGE-GRAY SILTY FINE SAND (SAT)

442+00.00

860 850 840 830 820 810

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE SHOWN MAY BE REFERENCING POND SURFACE ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED BY PRELIMINARY POND ELEVATION

ALLUVIAL
LOOSE ORANGE-GRAY SILTY FINE SAND (SAT)

PRELIMINARY POND ELEVATION

441+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	89

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

444+00.00

850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

443+50.00

850 840 830 820

END UNDERCUT AT STA 443+40

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

BEGIN UNDERCUT AT STA 442+75 (LT)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

443+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	90

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 445+04

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

445+00.00

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 444+23

SS-49
B-170
444+60

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

BT
FIAD

444+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-49	90' LT	444+60	1-2.5	A-7-5(35)	65	35	4	13	19	64	100	98	96	87.9	30.5	ND

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	91

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN-GRAY FINE SANDY SILT
WITH MANGANESE AND MICA (D TO W)

446+00.00

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

445+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	92

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810 800 790

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN-GRAY FINE SANDY SILT
WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF
RED-BROWN SILTY CLAY WITH
TRACE OF QUARTZ ROCK (M)

447+00.00

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN-GRAY FINE SANDY SILT
WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF
RED-BROWN SILTY CLAY WITH
TRACE OF QUARTZ ROCK (M)

SS-50
B-172
446+60

10 12 11 10 7 11 11 9 20

01/16

BT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-50	CL	446+60	6-7.5	A-5(3)	50	4	12	41	32	15	100	94	88	59.5	27.7	ND

446+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	93

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 448+05

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 448+05

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

ASPHALT

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY WITH TRACE OF QUARTZ ROCK (M)

448+00.00

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY WITH TRACE OF QUARTZ ROCK (M)

447+50.00

-L-LT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	94

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

449+00.00

B-175
448+60

8 15 12 8 6 5 6 5 8 7 12

BT
FIAD

448+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	95

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870
860
850
840
830
820

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

450+00.00

870
860
850
840
830
820

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

449+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	96

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810 800 790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO SAT)

451+00.00

SS-54
B-178
450+60

10 19 14 10 5 6 7 13 10 21 11
BT

01/16

B-177
450+60

7 16 20 14 5 4 5 13 11 13 14
BT
DRY

450+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-54	90' LT	450+60	1-2.5	A-7-5(47)	74	42	2	8	21	69	100	99	98	93.9	30.1	ND

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	97

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

452+00.00

880 870 860 850 840 830 820

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 451+75

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 451+75

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

451+50.00

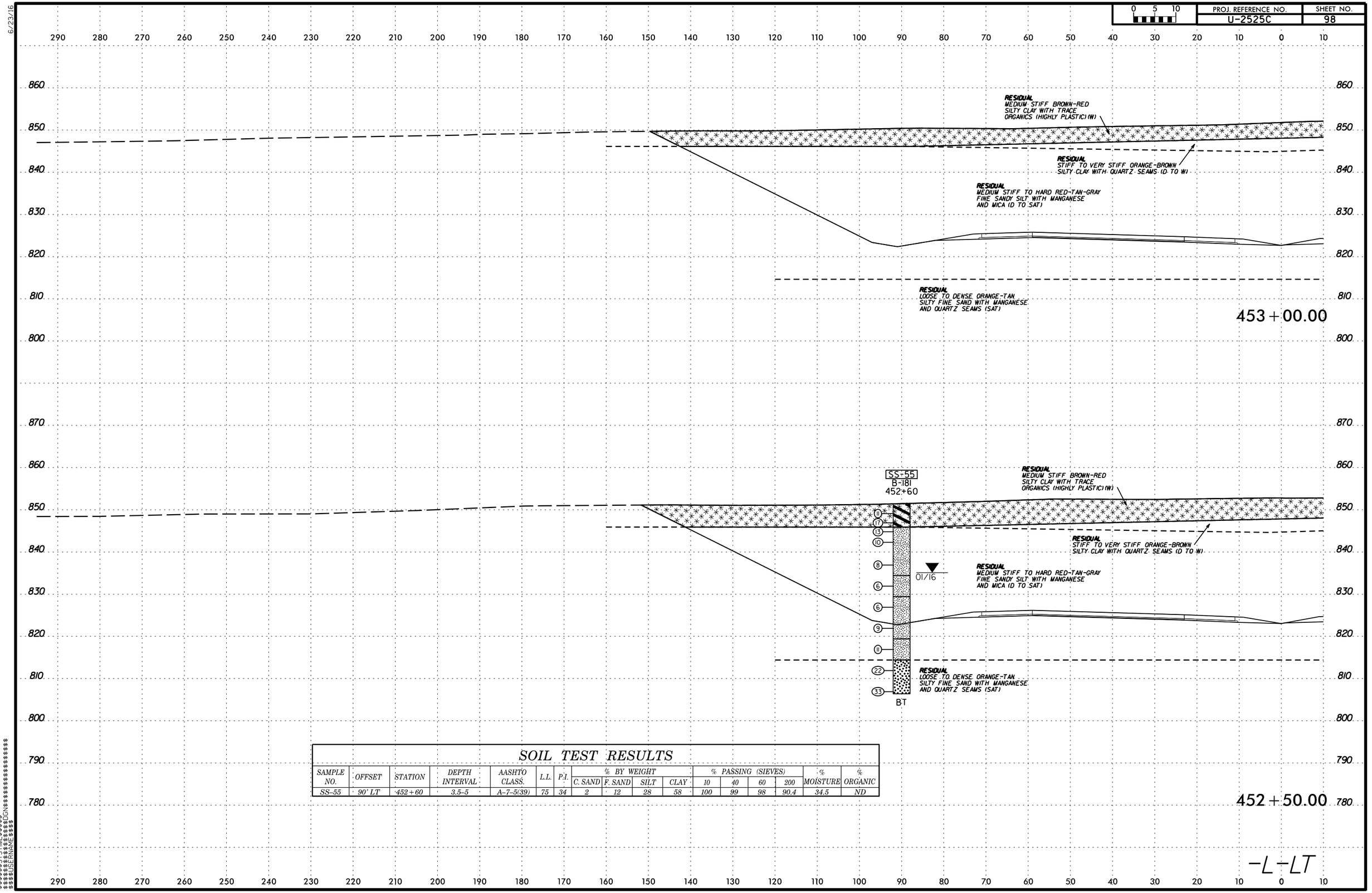
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	98



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-55	90' LT	452+60	3.5-5	A-7-5(39)	75	34	2	12	28	58	100	99	98	90.4	34.5	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	99

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

453+75.00

860 850 840 830 820 810 800

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

453+50.00

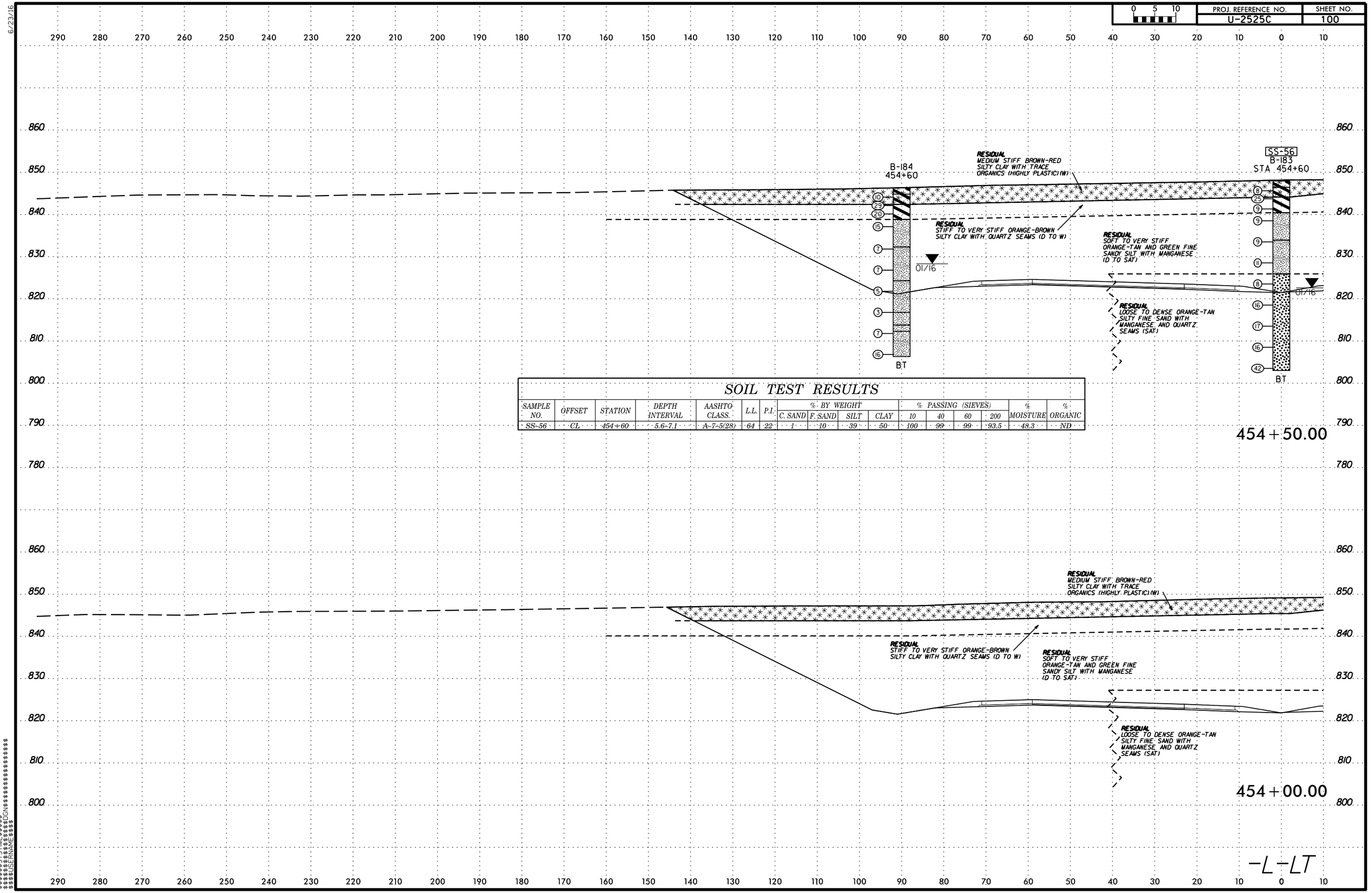
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	100



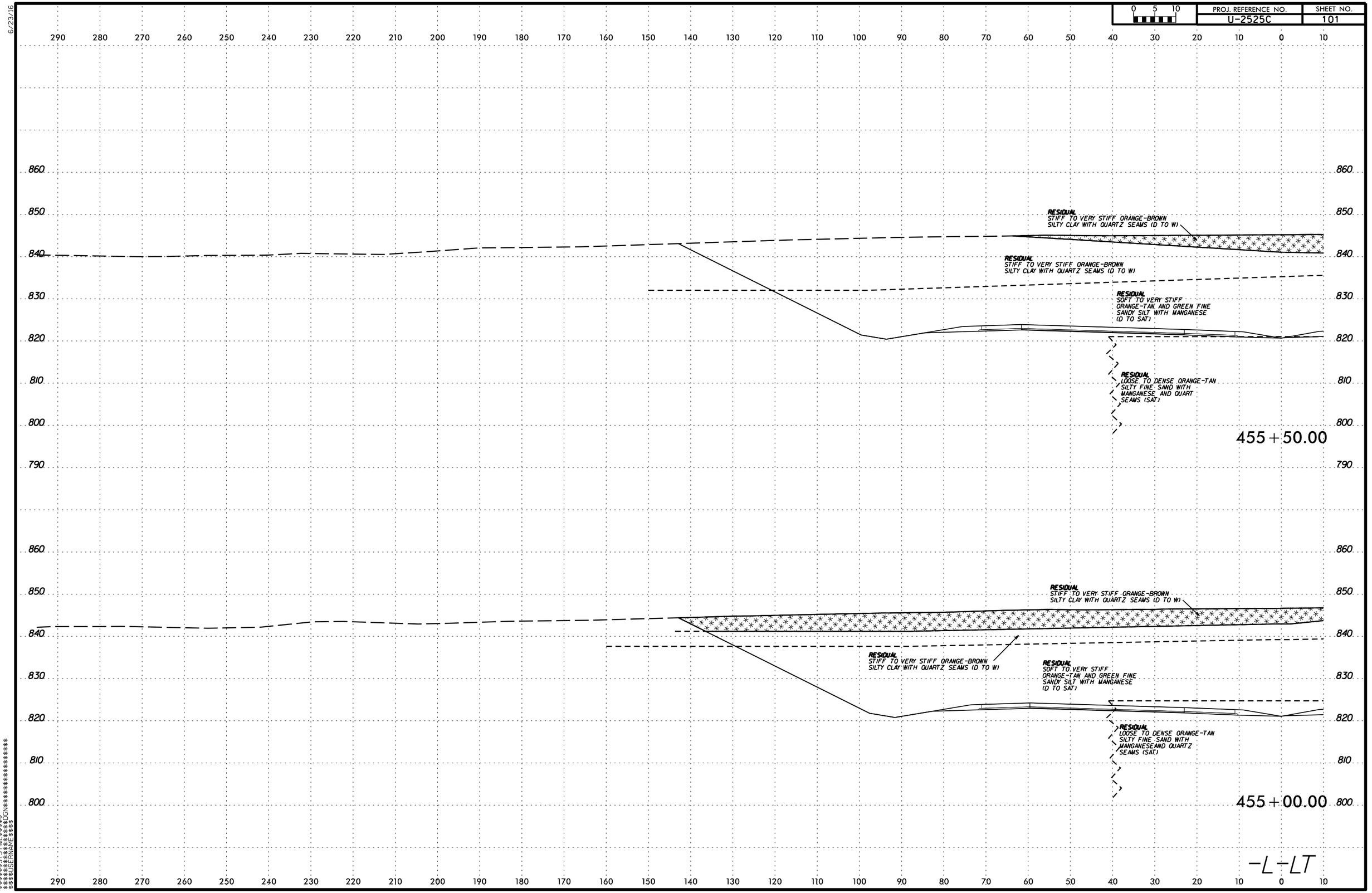
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-56	CL	454+60	5.6-7.1	A-7-5(28)	64	22	1	10	39	50	100	99	99	93.5	48.3	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

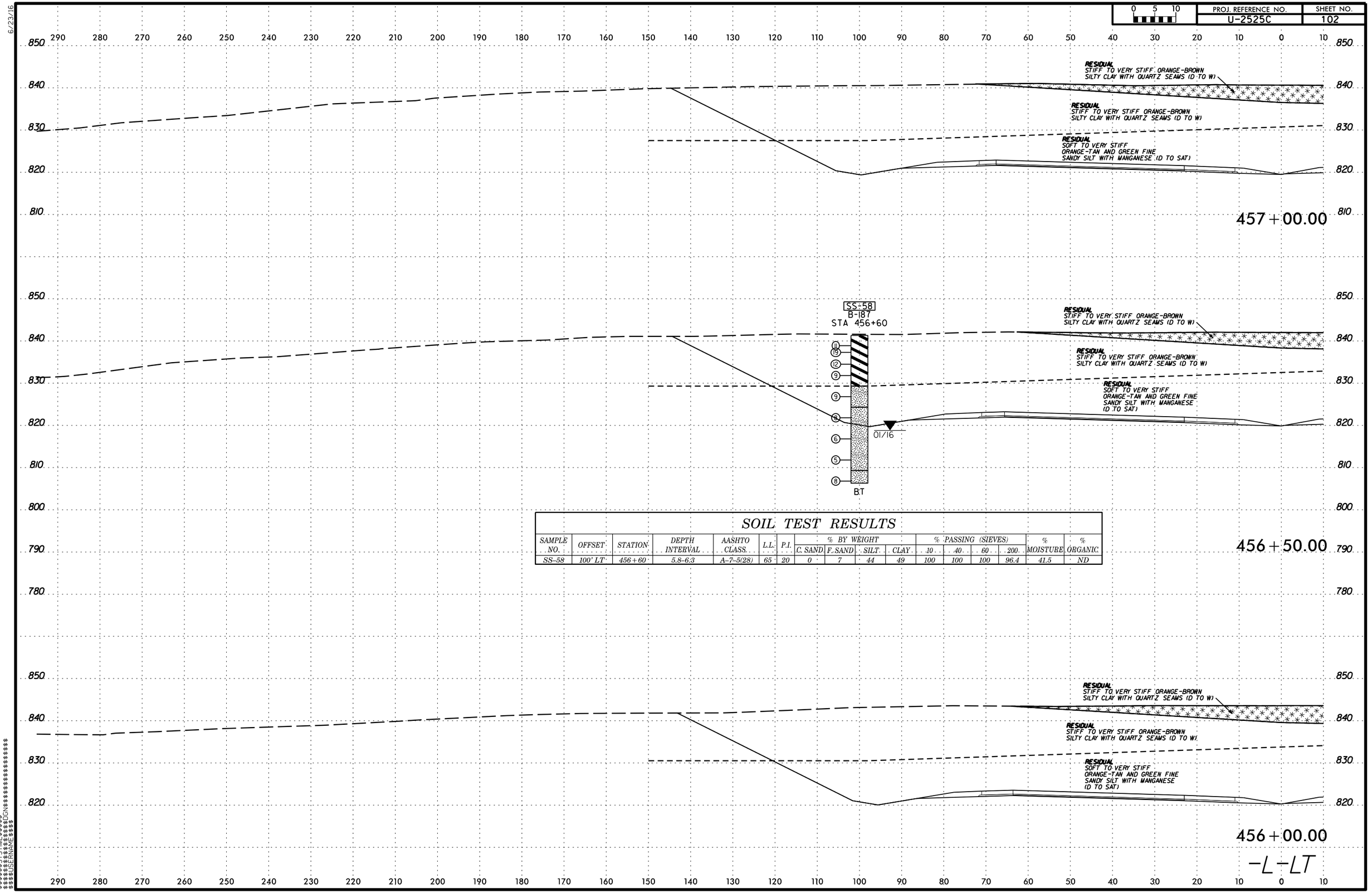
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	101



$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	102



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-58	100' LT	456+60	5.8-6.3	A-7-5(28)	65	20	0	7	44	49	100	100	100	96.4	41.5	ND

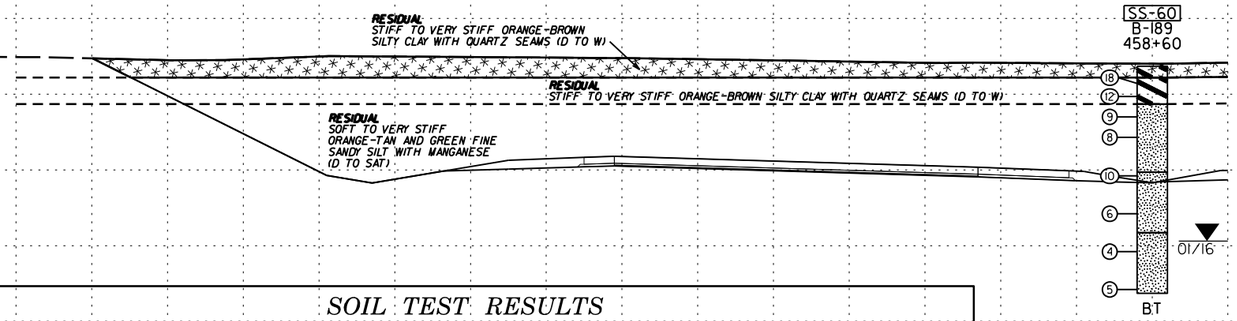
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	103

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

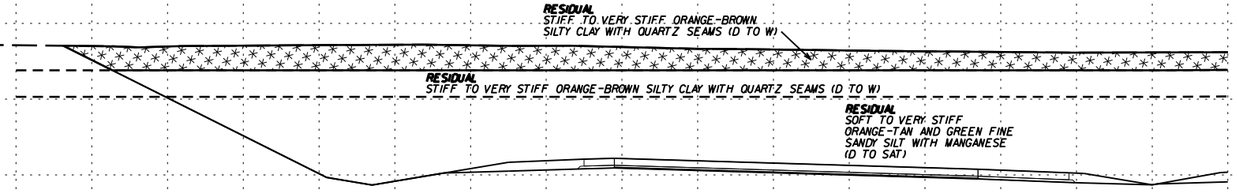
850 840 830 820 810 800 790



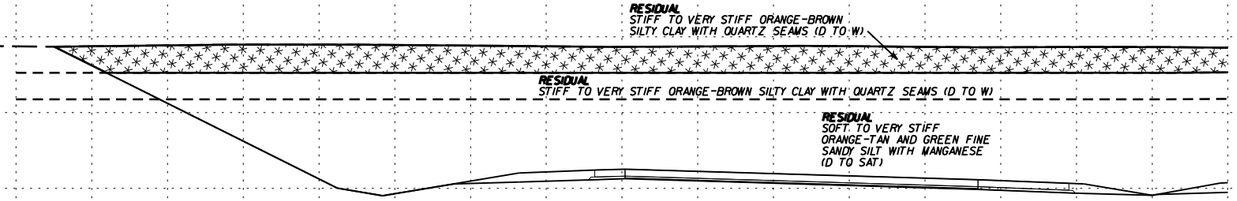
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-60	CL	458+60	3-4.5	A-7-5(31)	61	25	1	6	40	53	100	100	99	96.8	31.7	ND

458+50.00



458+00.00



457+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	104

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840
830
820
810
800

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN
SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF
YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
ORANGE-TAN AND GREEN FINE
SANDY SILT WITH MANGANESE
(D TO SAT)

460+00.00

840
830
820
810

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN
SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF
ORANGE-TAN AND GREEN FINE
SANDY SILT WITH MANGANESE
(D TO SAT)

459+50.00

840
830
820
810

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN
SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE
SANDY SILT WITH MANGANESE (D TO SAT)

459+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	105

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

461+50.00

840 830 820 810 800

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

461+00.00

840 830 820 810 800

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

SS-61
B-191
460+55

11 17 14 12 8 8

NX-72

BT
DRY

460+50.00

790

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-61	CL	460+55	1.5-3.0	A-7-5(31)	65	32	8	9	24	59	96	90	88	83.0	27.6	ND

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	106

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

BEGIN UNDERCUT AT STA 462+75

463+00.00

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

B-192
462+60

15 15 18 12 8

BT
DRY

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

462+50.00

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

462+00.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	107

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 466+05

BEGIN UNDERCUT AT STA 466+05

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

466+00.00

RESIDUAL
VERY DENSE GREEN-TAN SILTY FINE TO COARSE SAND (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

464+00.00

840 830 820 810 800 790

END UNDERCUT AT STA 463+55

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 463+55

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

463+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	108

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770 760

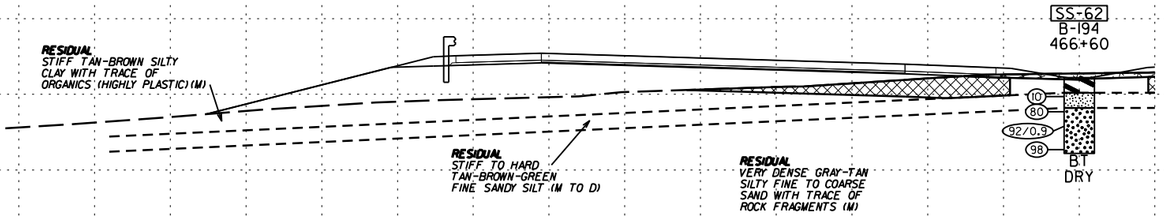
END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 467+25

RESIDUAL STIFF TAN-BROWN SILTY CLAY WITH TRACE OF ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL STIFF TO HARD TAN-BROWN-GREEN FINE SANDY SILT (M TO D)

RESIDUAL VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

467+00.00



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-62	CL	466+60	1.5-3	A-7-6(26)	53	30	9	14	39	38	100	94	91	83.2	31.1	ND

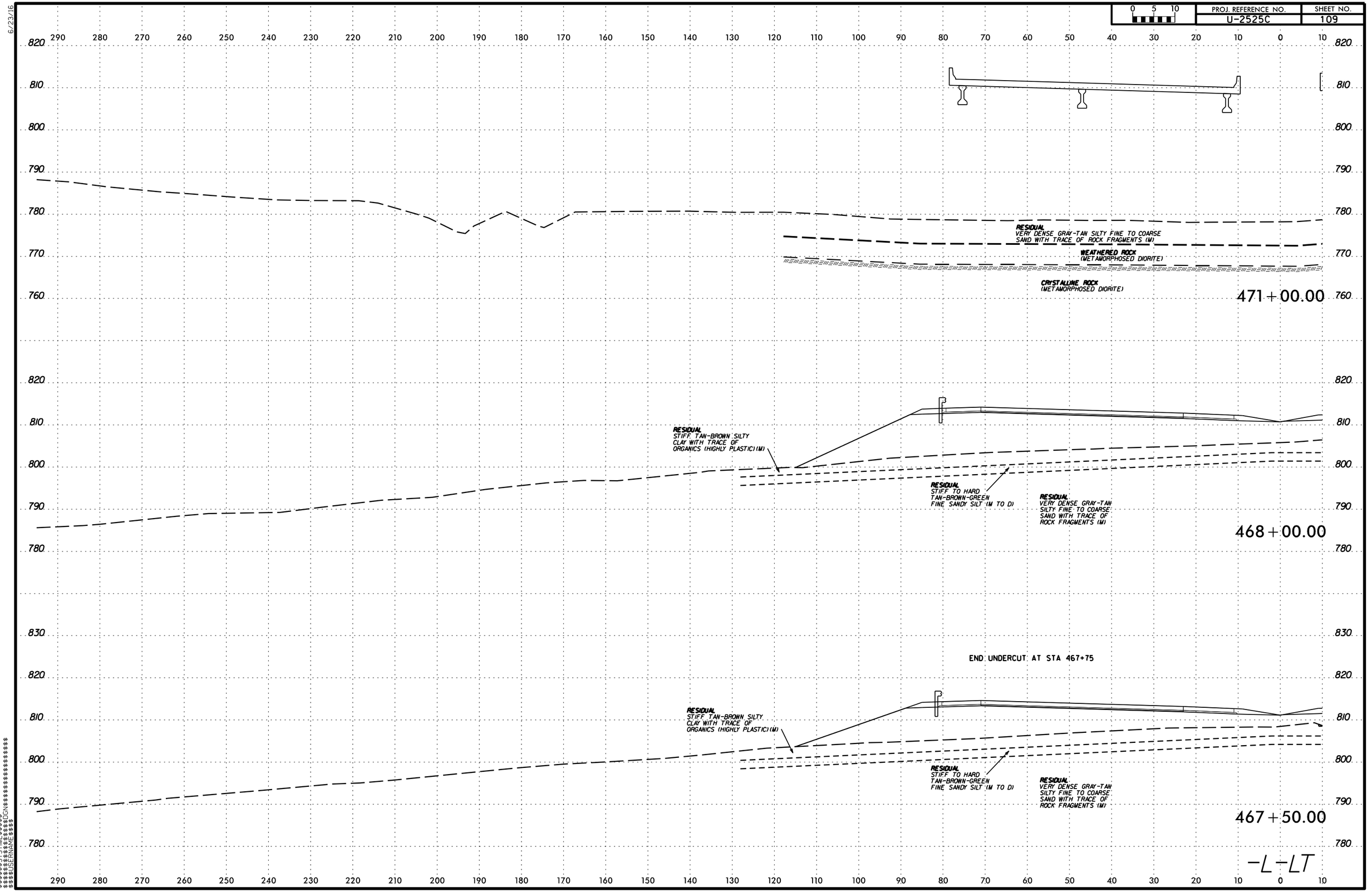
466+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	109



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	110

SP 646

ALLUVIAL
MEDIUM STIFF TO VERY STIFF GRAY-BROWN SILTY CLAY WITH WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF TO HARD GRAY-TAN FINE SANDY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED DIORITE)

472+05.24

CVI4-L
471+41

CVI5-C
471+72

3 100/0.1 60/0.0 AR

20 100/0.1 60/0.0 AR

Ⓐ **ALLUVIAL**
SOFT TO VERY STIFF GRAY-BROWN SILTY CLAY WITH WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC) (M TO W)

BEGIN UNDERCUT AT STA 471+50

CRYSTALLINE ROCK
(METAMORPHOSED DIORITE)

WEATHERED ROCK
(METAMORPHOSED DIORITE)

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

471+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770 760 750 740 730

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	111

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770 760

SP 648

END UNDERCUT STA 473+26

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC)(M TO D)

473+00.00

SP 647

(A) **ALLUVIAL**
MEDIUM STIFF TO VERY STIFF
GRAY-BROWN SILTY CLAY WITH
WOOD AND ROCK FRAGMENTS
(HIGHLY PLASTIC)(M TO W)

RESIDUAL
STIFF TO HARD GRAY-TAN
FINE SANDY SILT (M TO D)

472+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	112

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770

SP
650

B-196
474+20

9
17
11
9

BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC)(M TO D)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 473+80

BEGIN UNDERCUT AT STA 473+80

474+00.00

SP
649

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC)(M TO D)

473+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	113

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790

SP 652

END UNDERCUT AT STA 475+45

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

475+00.00

830 820 810 800 790

SP 651

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

474+50.00

780 770

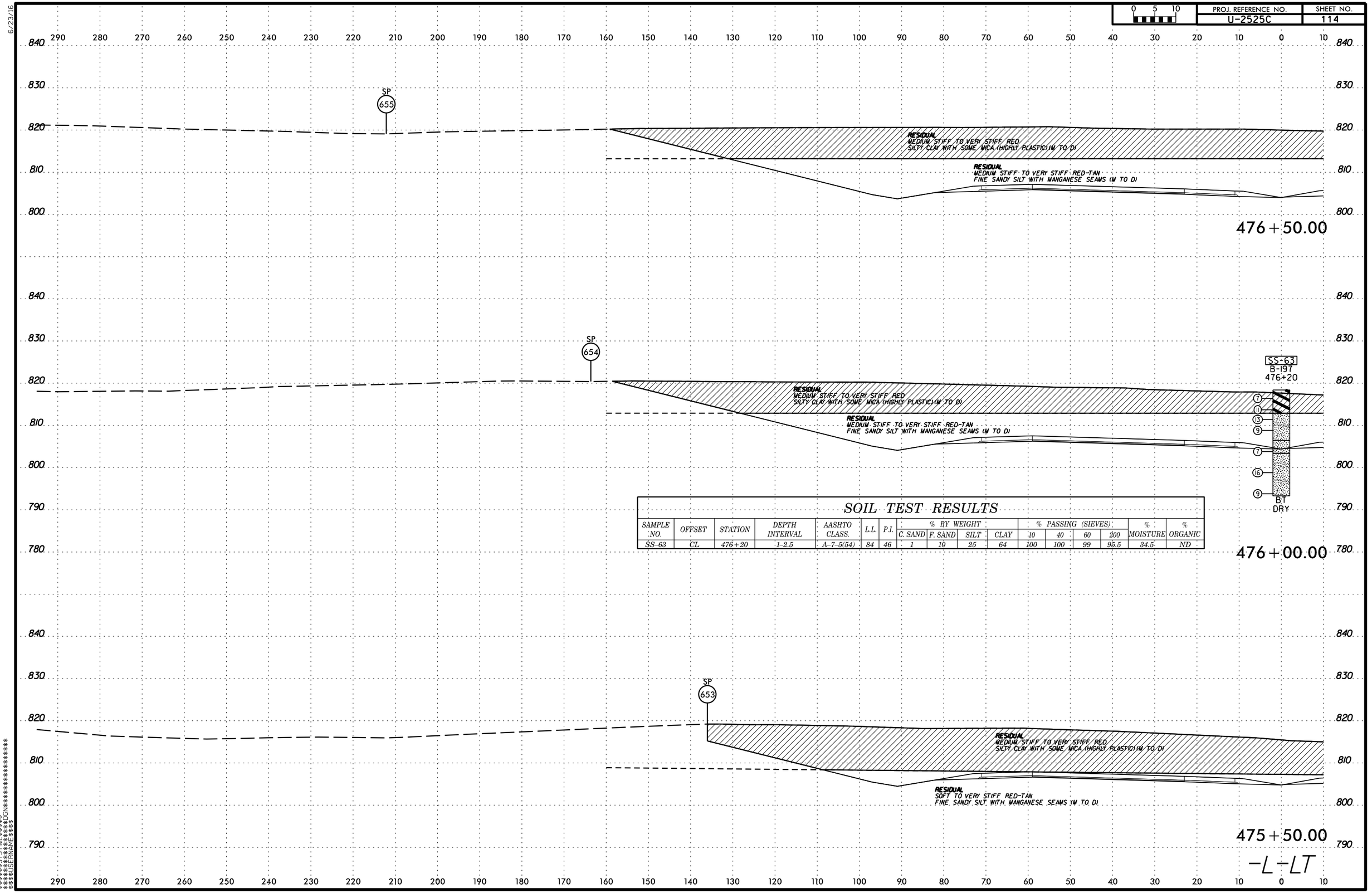
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	114

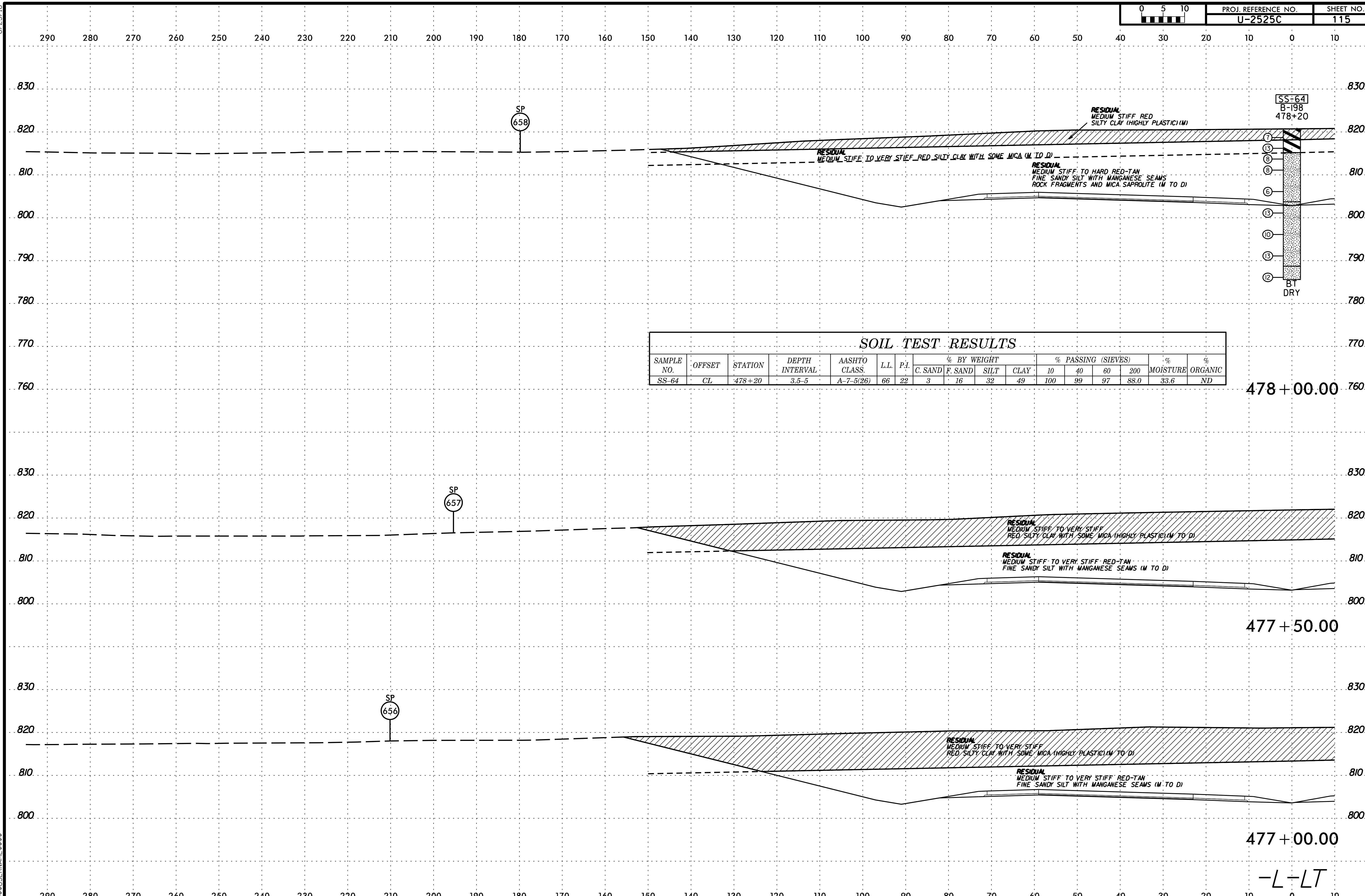


SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-63	CL	476+20	1-2.5	A-7-5(54)	84	46	1	10	25	64	100	100	99	95.5	34.5	ND

$$$$$$$$SYSTIME$$$$$
$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-64	CL	478+20	3.5-5	A-7-5(26)	66	22	3	16	32	49	100	99	97	88.0	33.6	ND

$$$$$SYSTIME$$$$
$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	116

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790

SP 661

RESIDUAL
MEDIUM STIFF RED SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

479+50.00

840 830 820 810 800

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 479+05

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 479+05

SP 660

RESIDUAL
MEDIUM STIFF RED SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

479+00.00

830 820 810 800

SP 659

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

478+50.00

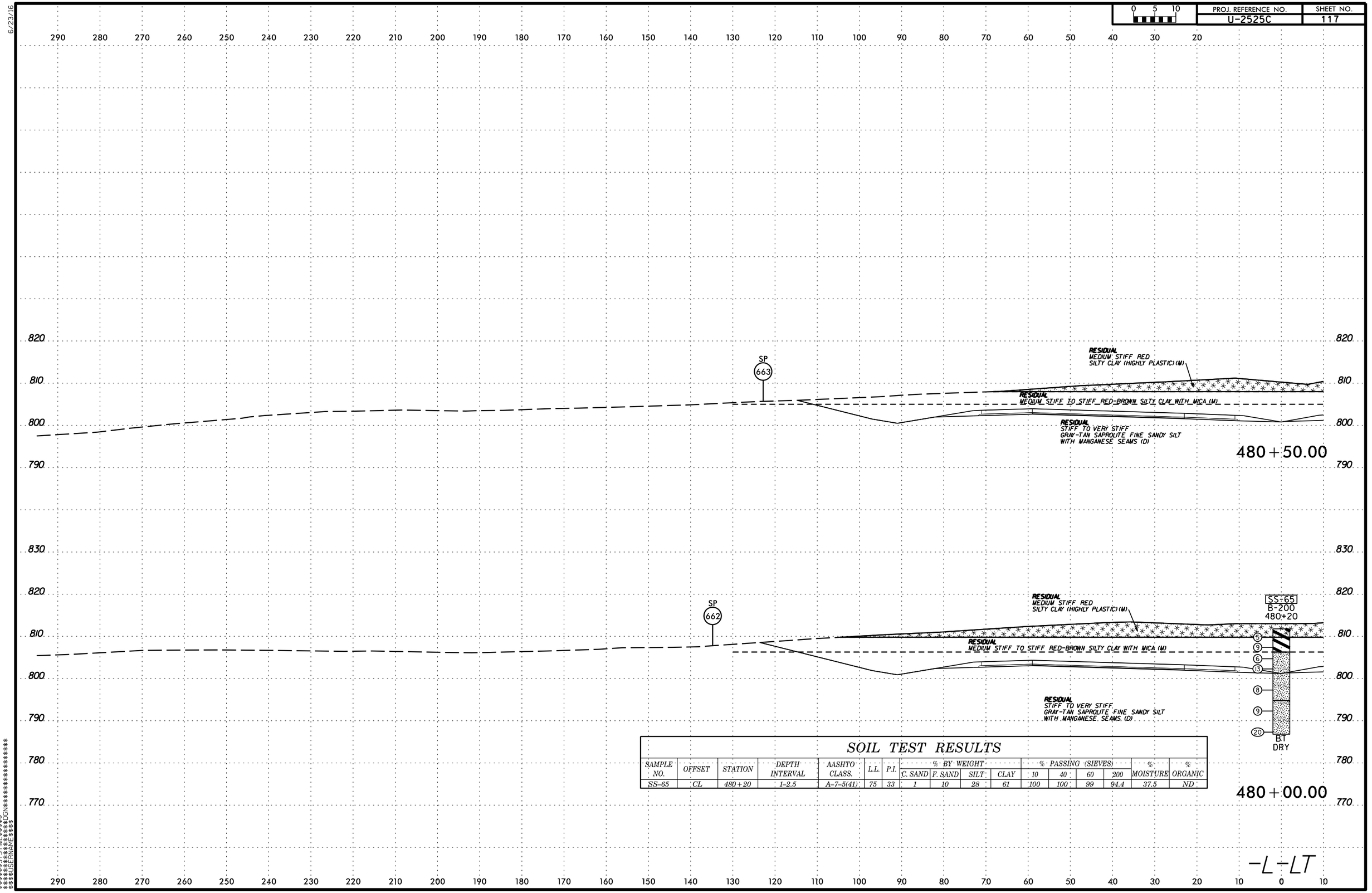
290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	117



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-65	CL	480+20	1-2.5	A-7-5(41)	75	33	1	10	28	61	100	100	99	94.4	37.5	ND

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	118

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 481+30

SP 664

RESIDUAL
MEDIUM STIFF RED SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
STIFF TO VERY STIFF GRAY-TAN SAPROLITE FINE SANDY SILT WITH MANGANESE SEAMS (D)

481+00.00

-L-LT

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	119

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

810
800
790
780
770
760
750
740
730
720

SP
665

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
GRAY-TAN SAPROLITE FINE SANDY SILT
WITH MANGANESE SEAMS (D)

481+50.00

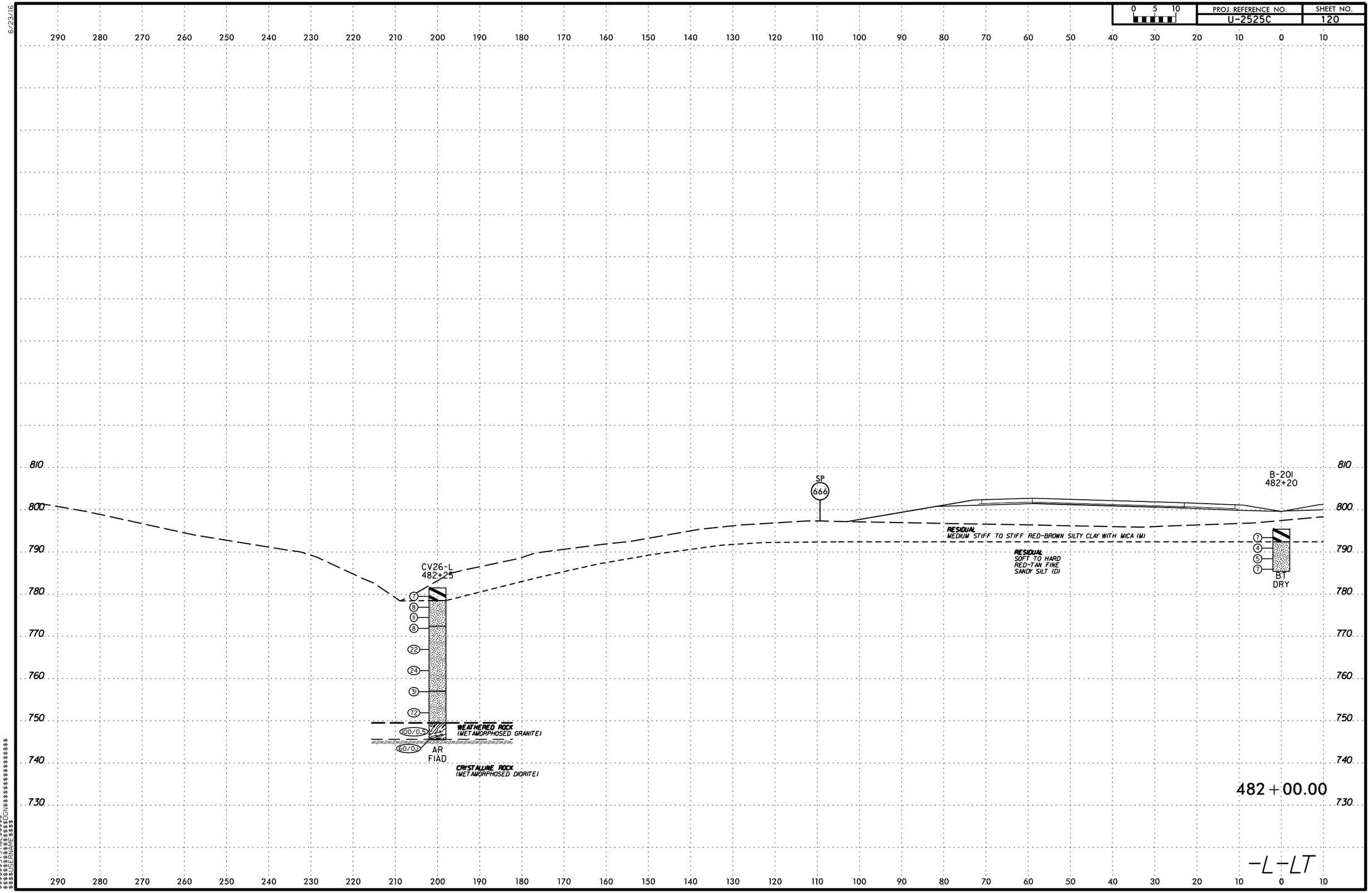
-L-LT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	120

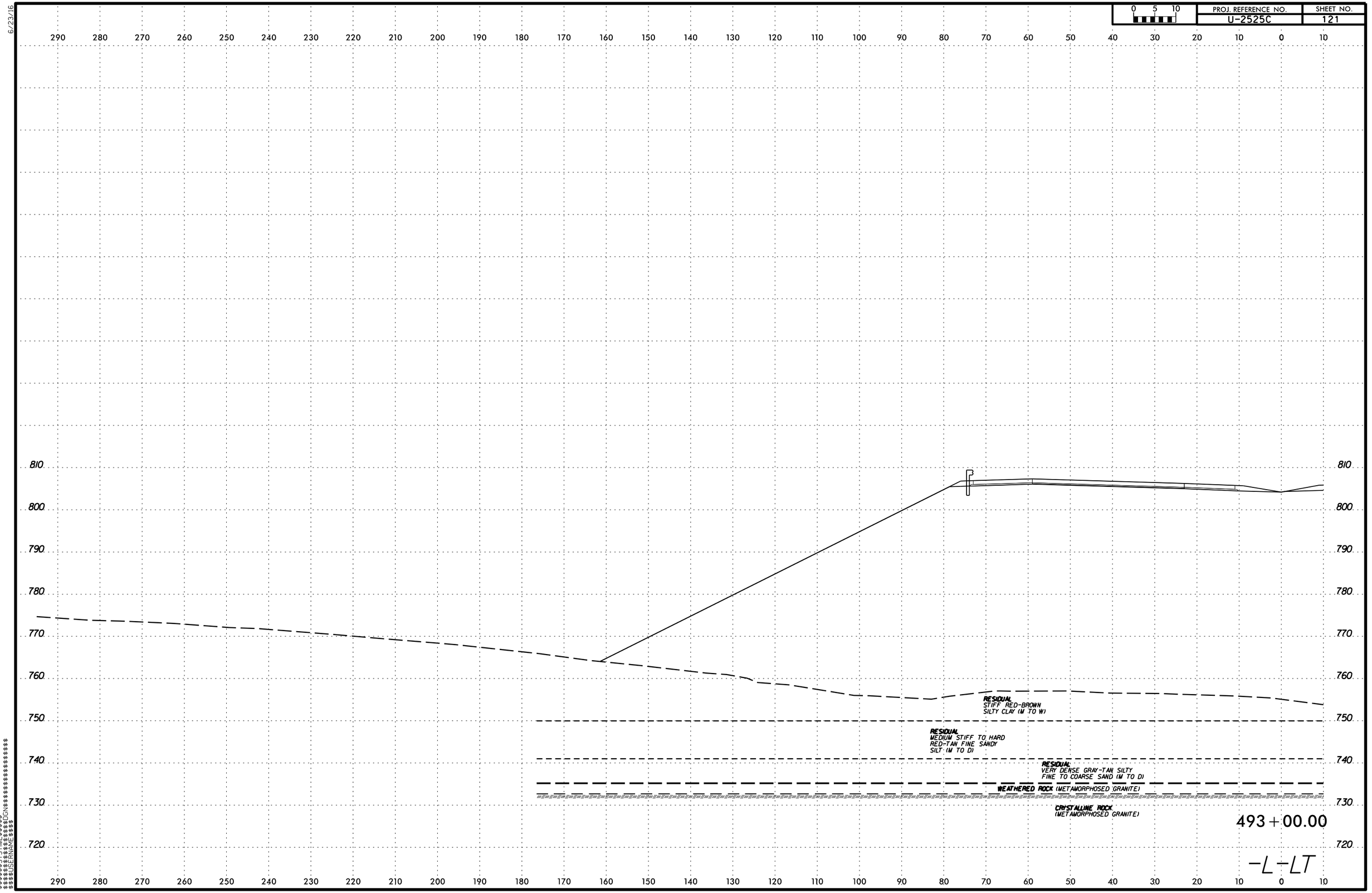


$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	121



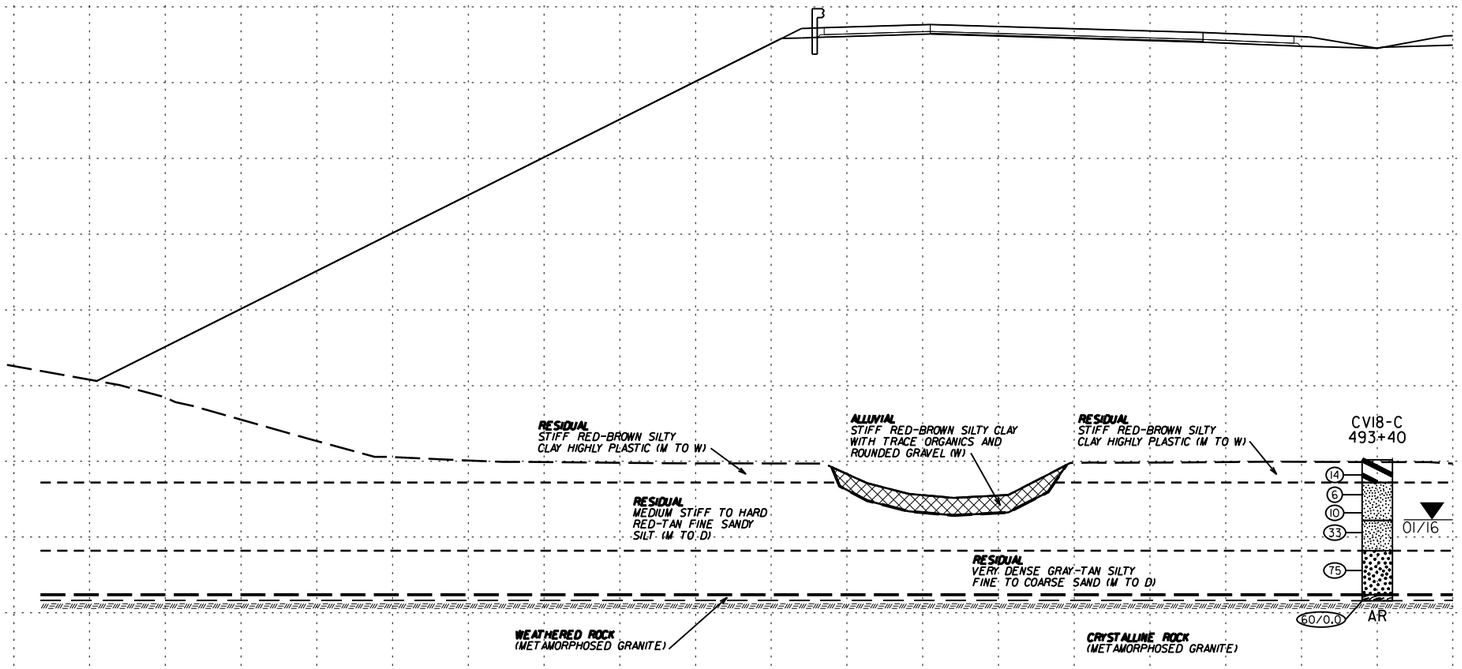
$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	122

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

810
800
790
780
770
760
750
740
730
720
710



BEGIN UNDERCUT AT STA 493+44

493+50.00

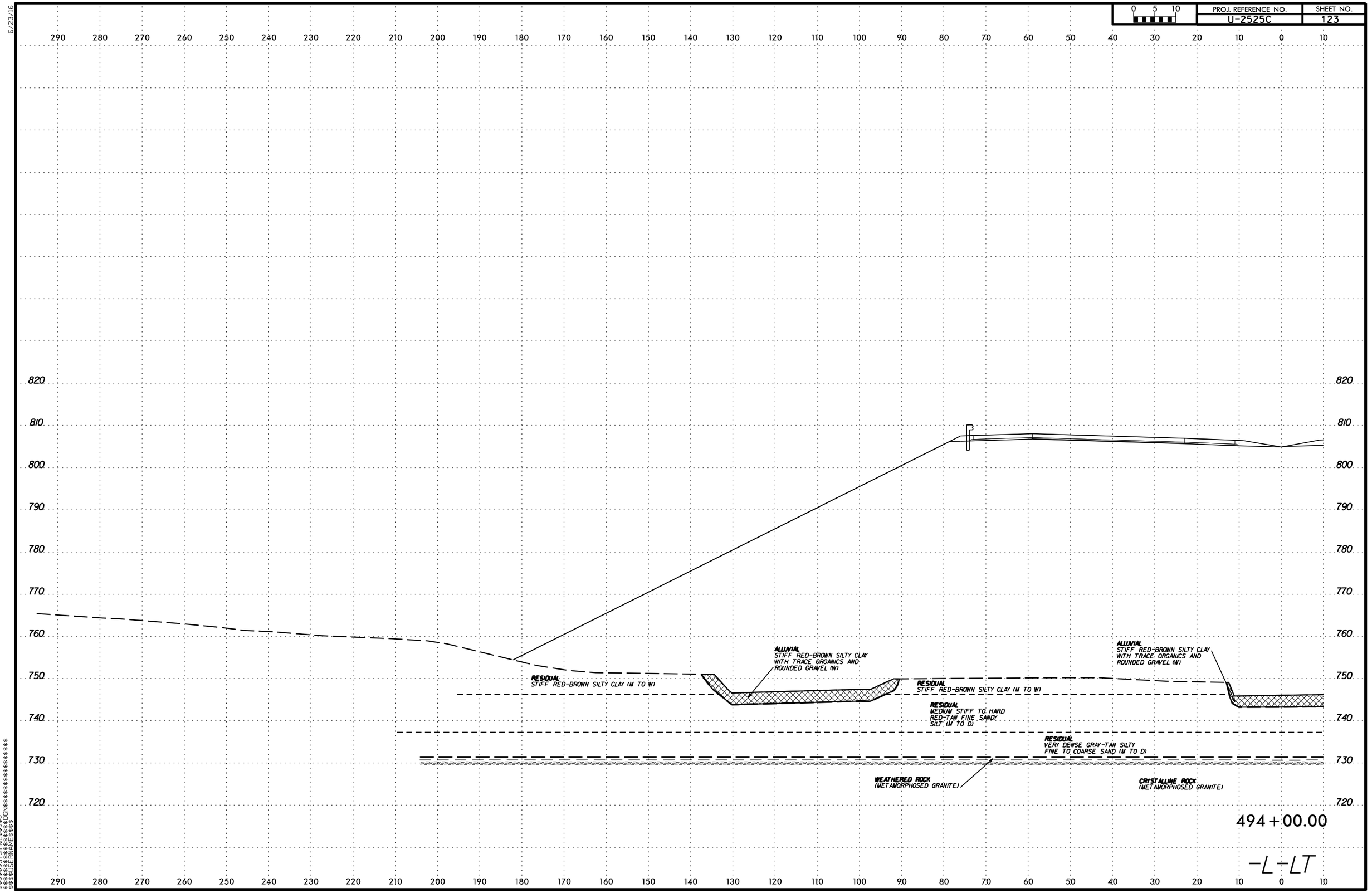
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	123



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	124

END UNDERCUT AT STA 494+72

ALLUVIAL
SOFT RED-BROWN SILTY CLAY WITH TRACE OF ORGANICS (W)

CVI7-L
494+45

01/16

3
19
26
100/0.6
50/0.0
AR

RESIDUAL
VERY STIFF BROWN GRAY SILTY CLAY (M).

RESIDUAL
MEDIUM DENSE GRAY-BROWN FINE SANDY SILT (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

494+50.00

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	125

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY HIGHLY PLASTIC (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN FINE SANDY SILT MANGANESE SEAMS,QUARTZ (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

495+00.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	126

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850
840
830
820
810
800
790

RESIDUAL
SOFT TO VERY STIFF
RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY
FINE SANDY SILT WITH
MANGANESE (D TO W).

RESIDUAL
MEDIUM DENSE, TAN-BROWN
SILTY FINE SAND WITH
MANGANESE (D)

517+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	127

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850
840
830
820
810
800
790

RESIDUAL
MEDIUM STIFF BROWN FINE SANDY CLAY (M)

RESIDUAL
VERY STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY
FINE SANDY SILT WITH
MANGANESE (D TO W)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 517+05

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 517+05

517+50.00

850
840
830
820
810
800

517+00.00

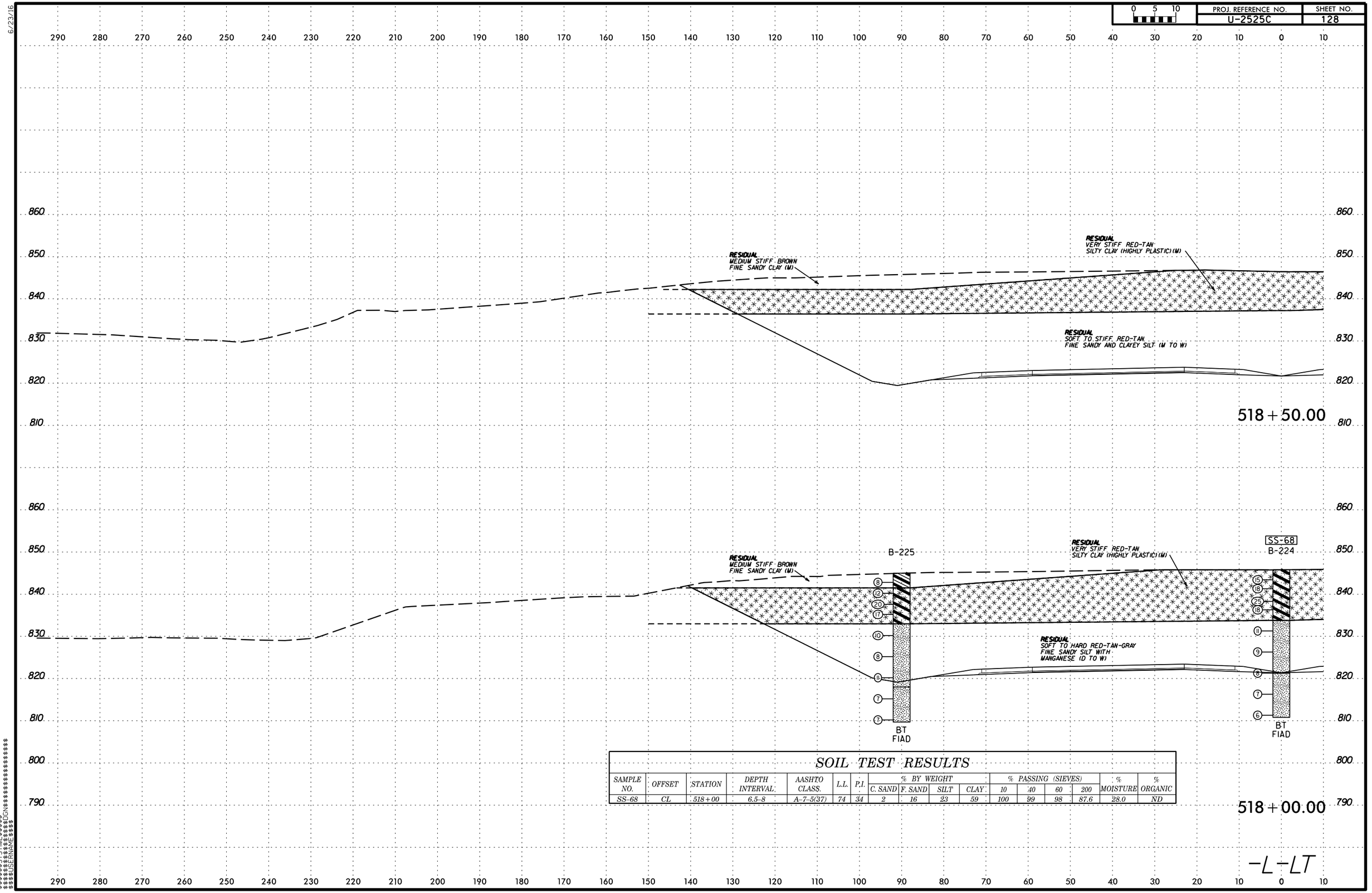
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	128



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-68	CL	518+00	6.5-8	A-7-5(37)	74	34	2	16	23	59	100	99	98	87.6	28.0	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	129

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 519+75

RESIDUAL
VERY STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO STIFF RED-TAN FINE SANDY AND CLAYEY SILT (M TO W)

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 519+25

519+50.00

RESIDUAL
MEDIUM STIFF BROWN FINE SANDY CLAY (M)

RESIDUAL
VERY STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO STIFF RED-TAN FINE SANDY AND CLAYEY SILT (M TO W)

519+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

870 860 850 840 830 820 810

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	130

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

RESIDUAL
STIFF RED-TAN FINE
SANDY SILTY CLAY (M)

524+50.00

B-228

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (M)

16 16 8 8 8 9 11

RESIDUAL
LOOSE TO MEDIUM DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (M TO D)

11/15

RESIDUAL
MEDIUM STIFF TO
STIFF RED-TAN
CLAYEY SILT
(M TO D)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (M)

29 46 48

RESIDUAL
DENSE TAN-BROWN SILTY FINE
SAND WITH QUARTZ SEAMS
AND SAPORLITE (M TO D)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (M TO D)

BT

520+00.00

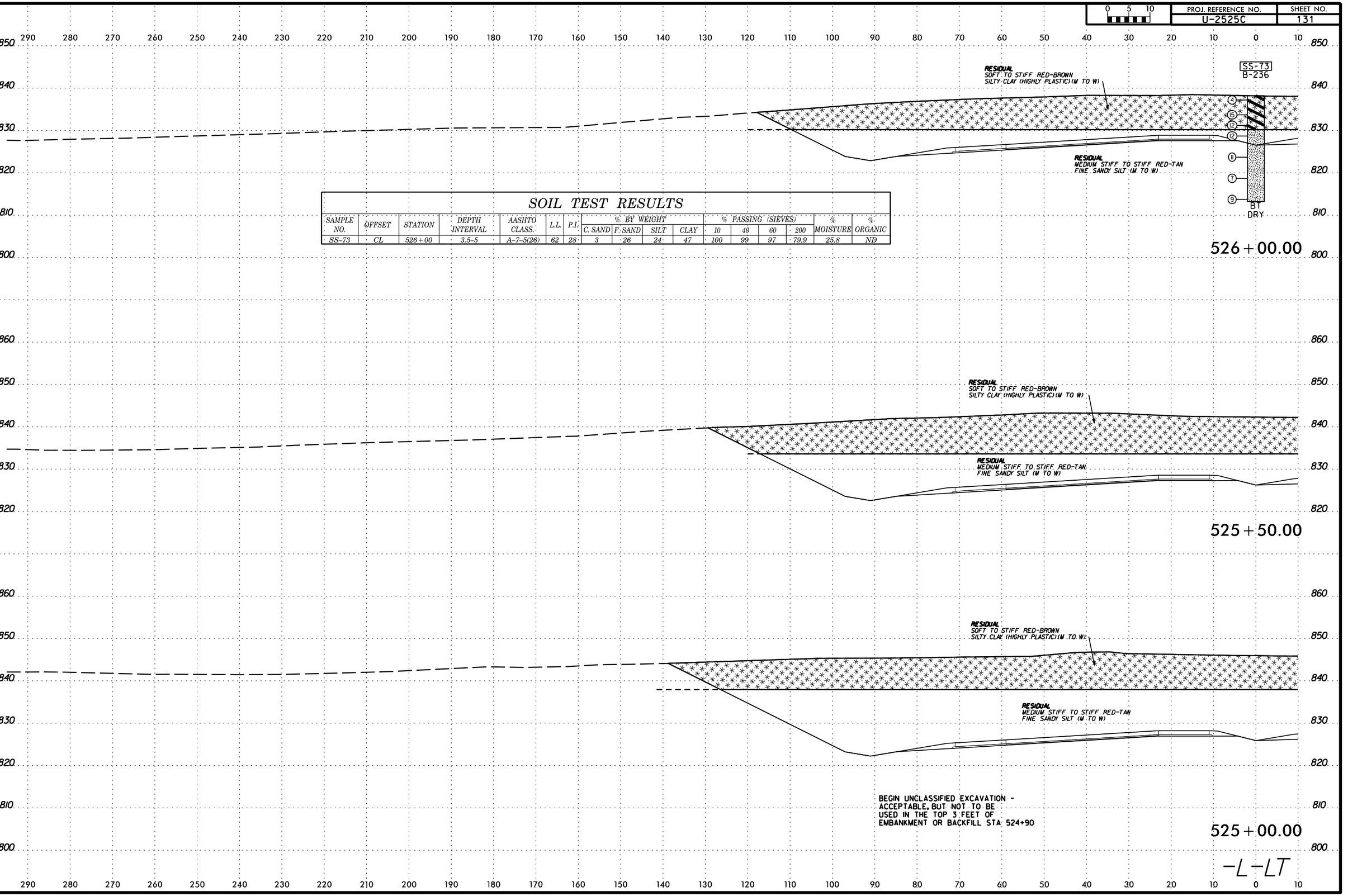
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	131



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-73	CL	526+00	3.5-5	A-7-5(26)	62	28	3	26	24	47	100	99	97	79.9	25.8	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	132

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 527+75

RESIDUAL
SOFT TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT (M TO W)

527+50.00

RESIDUAL
SOFT TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT (M TO W)

527+00.00

RESIDUAL
SOFT TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

BEGIN UNDERCUT AT STA 526+25

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT (M TO W)

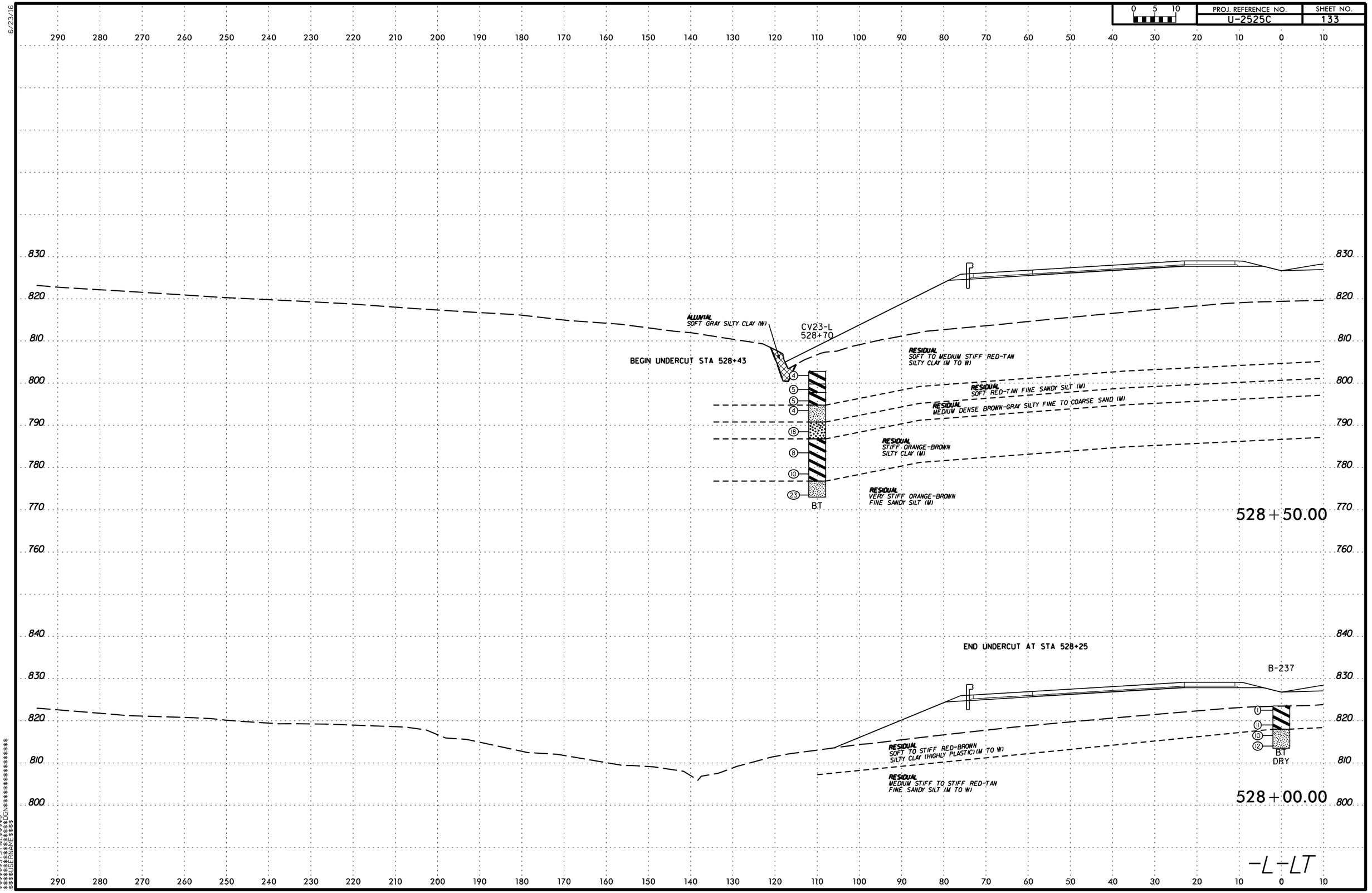
526+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	133



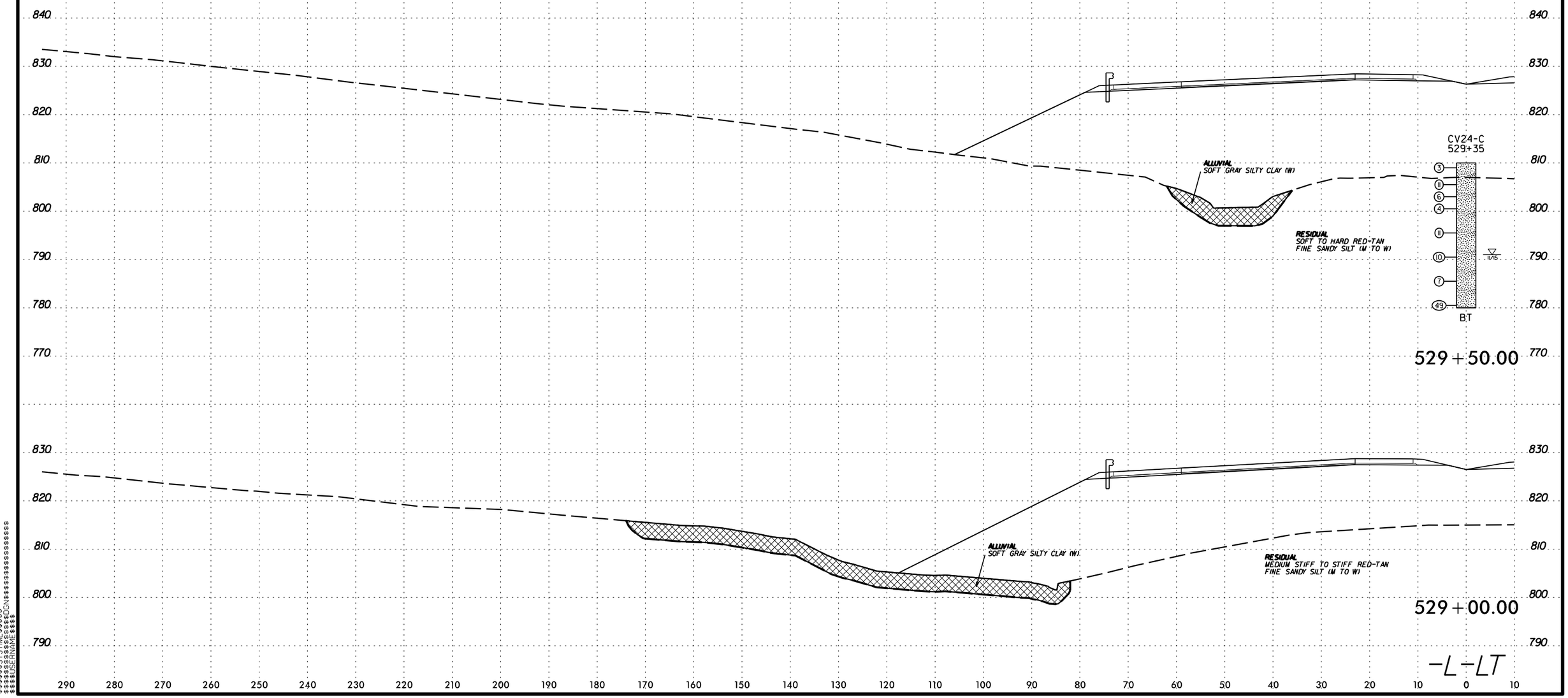
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	134

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800 790 780 770



$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	135

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810 800 790 780

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

530+50.00

840 830 820 810 800 790

RESIDUAL
SOFT TO HARD RED-TAN
FINE SANDY SILT (M TO W)

530+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	136

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800 790

B-238
531+35

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

2
7
13
11
BT
DRY

BEGIN UNDERCUT AT STA 531+25

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 531+25

531+50.00

END UNDERCUT STA 531+05

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

531+00.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	137

END UNDERCUT AT STA 532+75

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

532+50.00

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

532+00.00

-L-LT

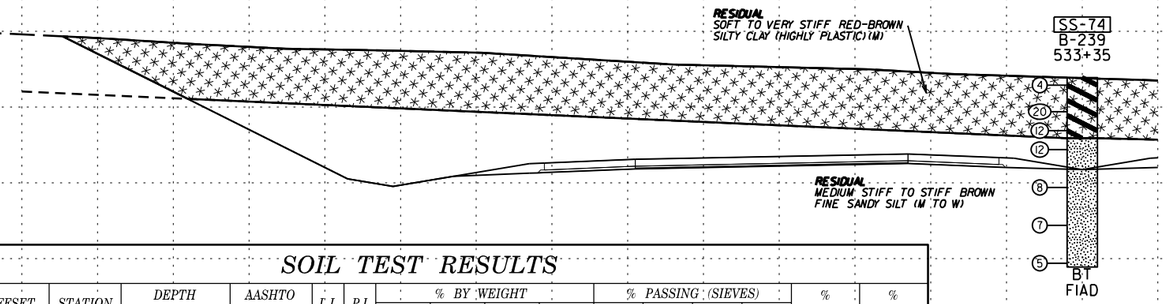
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	138

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800

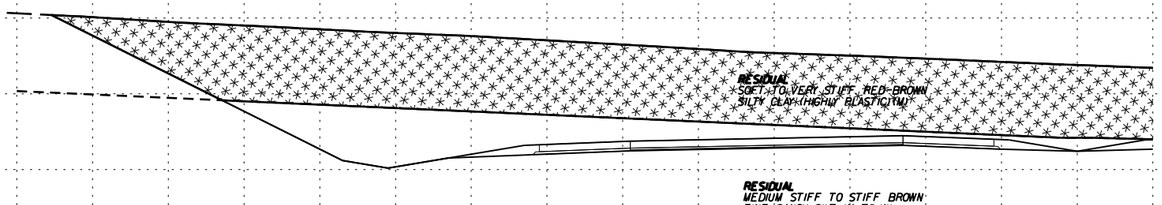


SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-74	CL	533+35	3.5-5	A-7-5(43)	78	33	0	5	24	71	100	100	100	97.2	33.1	ND

533+50.00

860 850 840 830 820 810 800



533+00.00

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	139

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

535+00.00

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 534+58

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

534+50.00

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

534+00.00

-L-LT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	140

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850
840
830
820
810

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

539+00.00

850
840
830
820
810

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 538+75

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

538+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	141

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

850 840 830 820 810 800 790 780 770

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF, RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF
BROWN CLAYEY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

540+00.00

SS-76
B-243
539+35

RESIDUAL
MEDIUM STIFF TO
STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF, RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF
BROWN CLAYEY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

5 13 12 11 10 9 7 9 9

BT
DRY

539+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-76	90' LT	539+35	23.5-25	A-5(7)	44	7	1	40	42	17	100	100	99	74.2	32.5	ND

-L-LT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	142

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840
830
820
810
800

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
STIFF RED-BROWN SILTY CLAY (M)

541+00.00

840
830
820
810
800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF
BROWN CLAYEY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

540+50.00

790

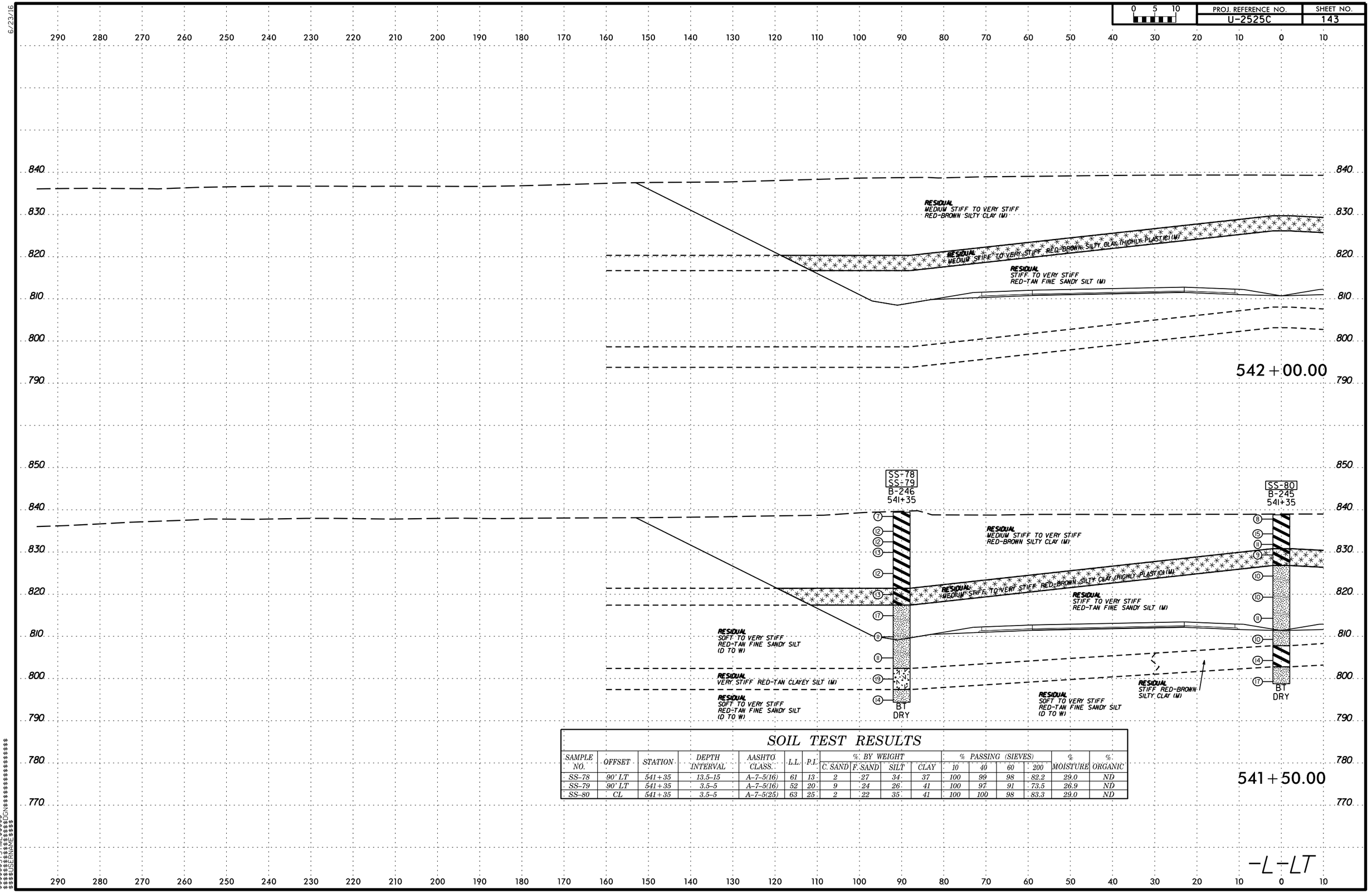
-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	143



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-78	90' LT	541+35	13.5-15	A-7-5(16)	61	13	2	27	34	37	100	99	98	82.2	29.0	ND
SS-79	90' LT	541+35	3.5-5	A-7-5(16)	52	20	9	24	26	41	100	97	91	73.5	26.9	ND
SS-80	CL	541+35	3.5-5	A-7-5(25)	63	25	2	22	35	41	100	100	98	83.3	29.0	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	144

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

543+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

542+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	145

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

860 850 840 830 820 810 800

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
SOFT, ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
DENSE TO VERY DENSE TAN
SILTY FINE SAND (M TO D)

544+00.00

860 850 840 830 820 810 800 790 780

Ⓐ **RESIDUAL**
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

Ⓑ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN
SANDY CLAY (M)

B-249
543+35
4
19
59
40
28
31
42
64
67
64
75
BT
DRY

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
TAN SILTY SAND (D)

543+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	146

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

840 830 820 810 800 790

B-252
545+35

6 12 23 19 21 43 56 39
BT
DRY

B-251
545+35

3 13 22 20 19 20 29
BT
DRY

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
DENSE TO VERY DENSE TAN
SILTY FINE SAND (M TO D)

545+50.00

850 840 830 820 810 800

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
DENSE TO VERY DENSE TAN
SILTY FINE SAND (M TO D)

545+00.00

850 840 830 820 810 800

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
DENSE TO VERY DENSE TAN
SILTY FINE SAND (M TO D)

544+50.00

-L-LT

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

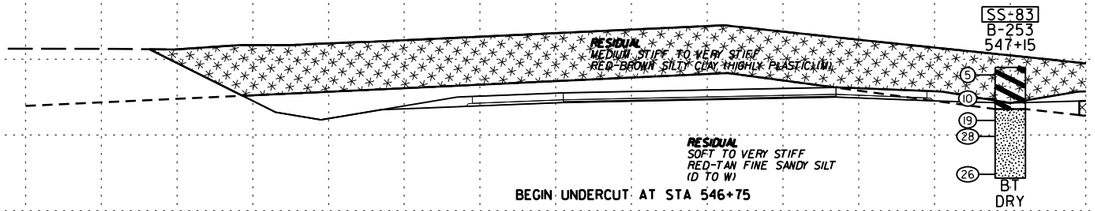
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	147

290 280 270 260 250 240 230 220 210 200 190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10

830 820 810 800 790 780 770

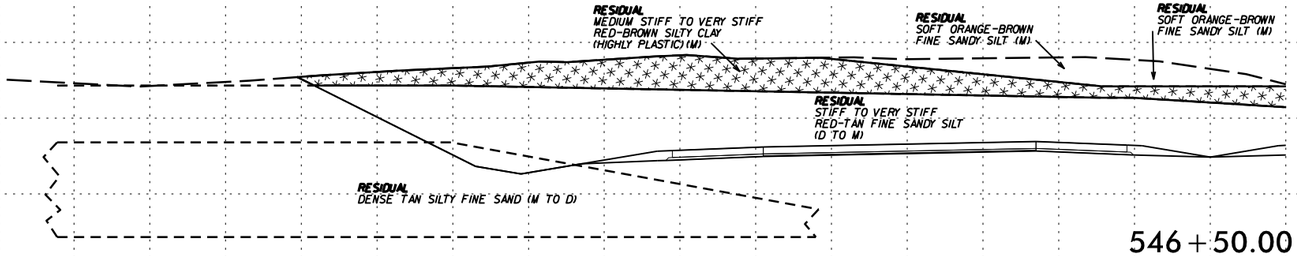


BEGIN UNDERCUT AT STA 546+75

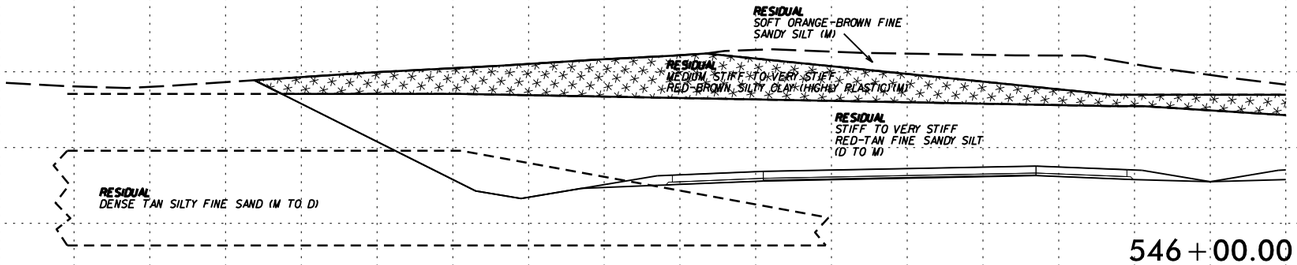
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-83	CL	547+15	3.1-4.6	A-7-5(33)	72	27	2	12	29	57	100	99	98	90.1	51.4	ND

547+00.00



546+50.00



546+00.00

-L-LT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	148

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 548+15

END UNDERCUT AT STA 548+15

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN FINE SANDY SILT (D TO W)

548+15.23

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN FINE SANDY SILT (D TO W)

548+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN FINE SANDY SILT (D TO W)

547+50.00

-L-LT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
U–2525C	149A

REFERENCE: U–2525C

PROJECT: 34821

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SECTION 2
CROSS SECTIONS
–L– RIGHT

CROSS SECTIONS

LINE	***STATION***	***SHEETS***
-L- RIGHT	281+00 - 282+50	149 - 150
-L- RIGHT	287+00 - 299+00	151 - 161
-L- RIGHT	301+00 - 304+00	162 - 166
-L- RIGHT	314+00 - 316+00	167 - 171
-L- RIGHT	330+50 - 332+00	172 - 175
-L- RIGHT	339+00 - 340+00	176 - 178
-L- RIGHT	358+00 - 361+00	179 - 185
-L- RIGHT	373+00 - 374+50	186 - 189
-L- RIGHT	407+50 - 416+00	190 - 197
-L- RIGHT	430+00 - 464+00	198 - 229
-L- RIGHT	466+00 - 468+00	229 - 230
-L- RIGHT	471+00 - 482+00	231 - 239
-L- RIGHT	492+00 - 495+50	239 - 245
-L- RIGHT	507+50 - 511+50	245 - 251
-L- RIGHT	517+00 - 520+00	251 - 254
-L- RIGHT	524+50 - 535+00	255 - 264
-L- RIGHT	538+50 - 548+15.23	264 - 272

DocuSigned by:
Stewart S. Laney, PE
75BB4AB1AB3B4CB...

5/30/2017

S&ME

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	149

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780

-LCD-
STA. 50+23.47
OFF 76.40'

Ⓐ **ALLUVIAL**
VERY SOFT TAN-BROWN
SILTY CLAY WITH OF ORGANICS (M)

ALLUVIAL
VERY SOFT TAN-BROWN
SILTY CLAY WITH OF ORGANICS (M)

RESIDUAL
MEDIUM DENSE GRAY-TAN
SILTY FINE TO COARSE
SAND (M)

BEGIN UNDERCUT AT STA 281+40

WEATHERED ROCK
(METAMORPHOSED GRANITE)

281+50.00

-LCD-
STA. 49+73.84
OFF 77.74'

RESIDUAL
MEDIUM DENSE GRAY-TAN
SILTY FINE TO COARSE
SAND (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

281+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	150

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790 780

–LCD–
STA. 51+22.77
'OFF 73.57'

RESIDUAL
MEDIUM STIFF GRAY FINE SANDY CLAY (M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

282+50.00

840 830 820 810 800 790 780

–LCD–
STA. 50+73.12
OFF 74.97'

END UNDERCUT STA 282+23

B-15
282+00

2 WH 5 5 23 100/0.1 BT

ALLUVIAL
VERY SOFT TAN-BROWN SILTY CLAY WITH TRACE OF ORGANICS (M)

RESIDUAL
MEDIUM STIFF GRAY FINE SANDY CLAY (M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

ALLUVIAL
VERY LOOSE DARK GRAY SILTY SAND (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

282+00.00

–L–RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	151

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 56+19.55
OFF 61.41'

–Y13RPD–
STA. 35+81.94
OFF 96.25'

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND
GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN
SILTY FINE TO COARSE SAND (M)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA. 287+25

287+50.00

840
830
820
810
800
790

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND
GRAY-TAN SILTY FINE TO COARSE SAND (M)

–LCD–
STA. 55+69.85
OFF 62.47'

–Y13RPD–
STA. 35+31.80
OFF 104.21'

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND
GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN
SILTY FINE TO COARSE SAND (M)

287+00.00

–L–RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	152

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810 800

RESIDUAL
VERY STIFF TO MEDIUM STIFF ORANGE-RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY-ORANGE-YELLOW AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN SILTY FINE TO COARSE SAND (M)

288+50.00

ECD
STA. 57+18.97
OFF 59.38'

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT (M TO W)

FYISRPD
STA. 36+81.60
OFF 85.84

SS-8
B-18

RESIDUAL
BROWN FINE SANDY CLAY

RESIDUAL
VERY STIFF TO MEDIUM STIFF ORANGE-RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN SILTY FINE TO COARSE SAND (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY-ORANGE-YELLOW AND BROWN FINE SANDY SILT (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN AND GRAY-TAN SILTY FINE TO COARSE SAND (M)

BT

ECD
STA. 56+69.26
OFF 60.38'

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT (M TO W)

FYISRPD
STA. 36+31.85
OFF 90.13

B-20

11/15

BT

288+00.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							G. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-8	CL	288+00	1-2.5	A-7-5(30)	72	33	11	15	18	56	100	93	89	78.3	34.8	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	153

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

–LCD–
STA. 58+18.41
OFF 57.48'

–Y13RPD–
STA. 37+80.87
OFF 81.59

RESIDUAL
STIFF TO VERY STIFF
TAN-ORANGE CLAYEY SILT (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

289+50.00

860 850 840 830 820

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

–LCD–
STA. 57+68.69
OFF 58.41'

–Y13RPD–
STA. 37+31.25
OFF 83.16

RESIDUAL
STIFF TO VERY STIFF
TAN-ORANGE CLAYEY SILT (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

820 810 800 790

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 288+75

289+00.00

–L–RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	154

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 59+17.85
OFF 55.73'

RESIDUAL
STIFF TO VERY STIFF
TAN-ORANGE CLAYEY SILT (D)

290+50.00

860 850 840 830 820 810 800 790 780

SS-10
B-21
290+07

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 58+68.13
OFF 56.59'

–Y12RPD–
STA. 38+30.47
OFF 80.59

SS-9
B-23
290+00

RESIDUAL
STIFF TO VERY STIFF
TAN-ORANGE CLAYEY SILT (D)

11/15

BT
DRY

BT

290+00.00

–L–RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-9	110' RT	290+00	1.2-2.7	A-7-5(44)	84	51	15	8	15	62	100	91	85	78.4	34.2	ND
SS-10	3' RT	290+07	3.5-5.0	A-7-5(19)	56	23	13	14	22	51	100	95	87	75.6	26.7	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	155

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800

RESIDUAL
STIFF TO VERY STIFF
ORANGE-BROWN-RED-YELLOW-TAN
SILTY CLAY (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 60+17.32
OFF 54.10'

RESIDUAL
MEDIUM DENSE YELLOW-TAN SILTY FINE SAND (W)

291+50.00

870 860 850 840 830 820 810 800

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 291+00

RESIDUAL
VERY STIFF TO MEDIUM STIFF
ORANGE-RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF
ORANGE-RED SILTY CLAY
(HIGHLY PLASTIC) (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 59+67.59
OFF 54.90'

RESIDUAL
STIFF TO VERY STIFF
TAN-ORANGE CLAYEY SILT (D)

291+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	156

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820

RESIDUAL
STIFF TO VERY STIFF
ORANGE-BROWN-RED-YELLOW-TAN
SILTY CLAY (D)

ARTIFICIAL FILL
MEDIUM STIFF ORANGE-TAN CLAYEY SILT (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

-LCD-
STA. 61+16.80
OFF 52.62'

292+50.00

B-24
292+00

B-26
292+00

ARTIFICIAL FILL
MEDIUM STIFF ORANGE-TAN
CLAYEY SILT (M)

RESIDUAL
STIFF TO VERY STIFF
ORANGE-BROWN-RED-YELLOW-TAN
SILTY CLAY (D)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

-LCD-
STA. 60+67.06
OFF 53.34'

BT
DRY

BT

RESIDUAL
MEDIUM DENSE YELLOW-TAN SILTY FINE SAND (W)

292+00.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	157

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870
860
850
840
830
820
810
800

293+50.00

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC)(M)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 62+16.29
OFF 61.26'

RESIDUAL
LOOSE WHITE SILTY SAND (M)

RESIDUAL
STIFF TO VERY STIFF
BROWN SILTY CLAY (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

293+00.00

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC)(M)

RESIDUAL
SOFT TO HARD
RED-TAN-GRAY-ORANGE-YELLOW
AND BROWN FINE SANDY SILT (D TO SAT)

–LCD–
STA. 61+66.54
OFF 51.92'

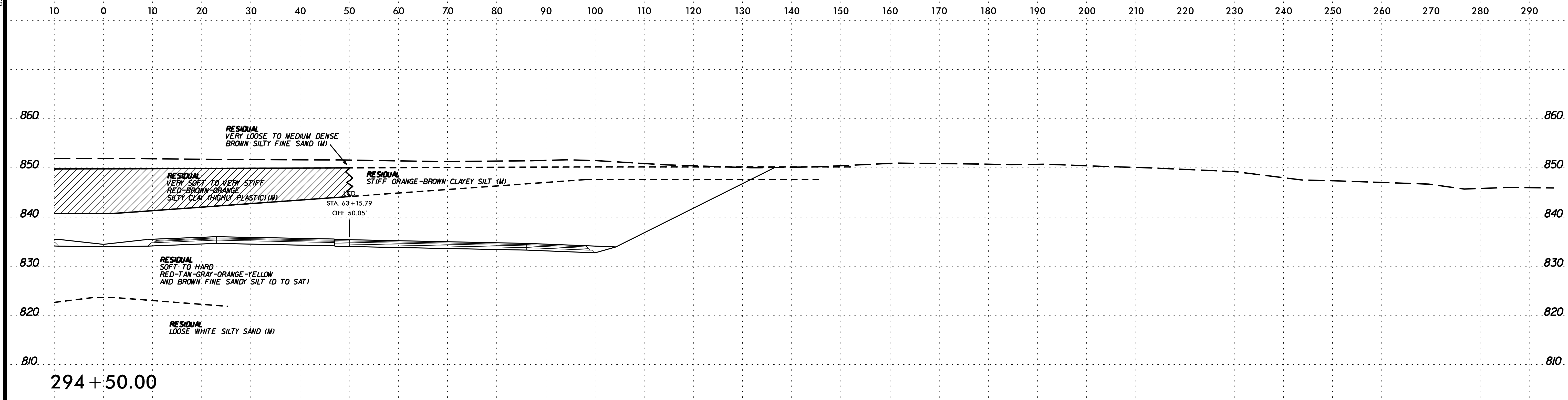
RESIDUAL
LOOSE WHITE SILTY SAND (M)

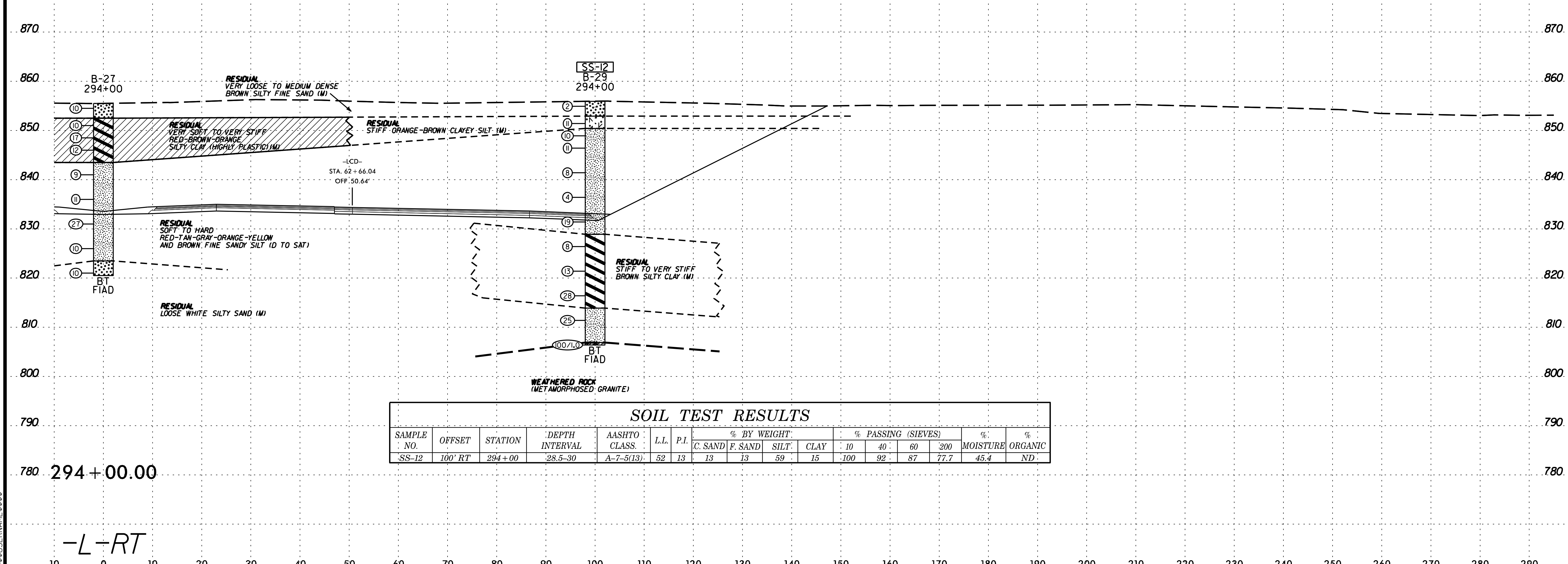
-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	158





SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-12	100' RT	294+00	28.5-30	A-7-5(13)	52	13	13	13	59	15	100	92	87	77.7	45.4	ND

$$$$$$SYSTIME$$$$
$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	159

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810 860

B-30
296+00
8
22
12
5
BT
DRY

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

296+00.00

–LCD–
STA. 64+56.06
OFF 48.48'

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE
SILTY CLAY
(HIGHLY PLASTIC) (M)

–LCD–
STA. 61+15.30
OFF 48.97'

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

BEGIN UNDERCUT STA 295+40

295+50.00

RESIDUAL
VERY LOOSE TO MEDIUM DENSE
BROWN SILTY FINE SAND (M)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

LCD
STA. 63+66.54
OFF 49.49'

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

295+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	160

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810

–LCD–
STA. 66+14.42
OFF 47.27'

RESIDUAL
VERY SOFT TO VERY STIFF RED-BROWN-ORANGE SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (D)

297+50.00

–LCD–
STA. 65+64.59
OFF 47.61'

RESIDUAL
VERY SOFT TO VERY STIFF RED-BROWN-ORANGE SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (D)

297+00.00

–LCD–
STA. 65+14.82
OFF 48.03'

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 296+50

RESIDUAL
VERY SOFT TO VERY STIFF RED-BROWN-ORANGE SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
VERY STIFF RED-TAN FINE SANDY SILT (D)

296+50.00

–L–RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	161

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870
860
850
840
830

RESIDUAL
MEDIUM STIFF TO STIFF
WHITE-ORANGE-TAN
FINE SANDY SILT (M TO W)

RESIDUAL
MEDIUM DENSE WHITE-TAN
SILTY FINE SAND (M)

299+00.00

END UNDERCUT AT STA 298+50

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 298+99

-LCD-
STA. 67+14.26
OFF 47.00'

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

298+50.00

-LCD-
STA: 66+64.31
OFF 47.06'

B-31
298+00

5
7
9
18

BT
DRY

RESIDUAL
VERY SOFT TO VERY STIFF
RED-BROWN-ORANGE SILTY CLAY
(HIGHLY PLASTIC) (M)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 297+75

RESIDUAL
VERY STIFF RED-TAN
FINE SANDY SILT (D)

298+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	162

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820

SS-13
B-33
302+10

(4) (6) (5) (5) 11/15

BT

RESIDUAL
SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

302 + 00.00

860 850 840 830 820

RESIDUAL
SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 301+25

301 + 50.00

870 860 850 840 830 820

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

301 + 00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

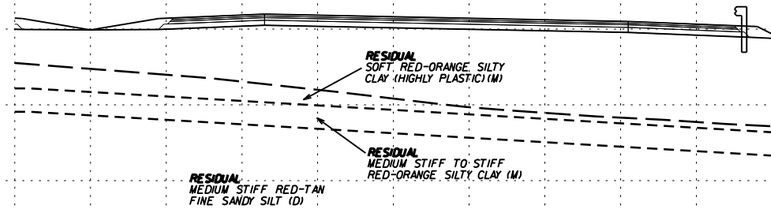
$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	163

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820



302 + 50.00

-L-RT

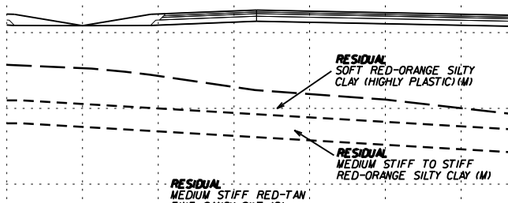
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	164

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820



303+00.00

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	165

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870
860
850
840
830
820

END UNDERCUT STA 303+75

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 303+50

RESIDUAL
SOFT RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-ORANGE SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF RED-TAN FINE SANDY SILT (D)

303+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	166

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820

B-34
304+10

4
9
8
5

BT

11/15

RESIDUAL
MEDIUM STIFF TO STIFF
RED-ORANGE SILTY CLAY
HIGHLY PLASTIC (M)

RESIDUAL
MEDIUM STIFF, RED-TAN, FINE, SANDY, SILT (D)

304+00.00

-L-RT

860
850
840
830
820

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	167

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

880 870 860 850 840 830 820 810 800 790 780

B-41

13 58 61 100/0.8 95 50/0.1

11/15

AR

RESIDUAL
STIFF GRAY TAN SANDY CLAY LOW PLASTICITY (D)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE SAND (D)

RESIDUAL
VERY SOFT TO HARD RED-TAN-ORANGE FINE SANDY SILT (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY STIFF TO HARD GRAY-TAN SILTY FINE SANDY SILT (D)

SS-16
B-43

22 43 100/0.8 100/0.3 100/0.5

11/15

BT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-16	190' RT	314+00	3.4-4.9	A-4(6)	39	9	12	31	42	15	100	92	88	67.5	13.2	ND

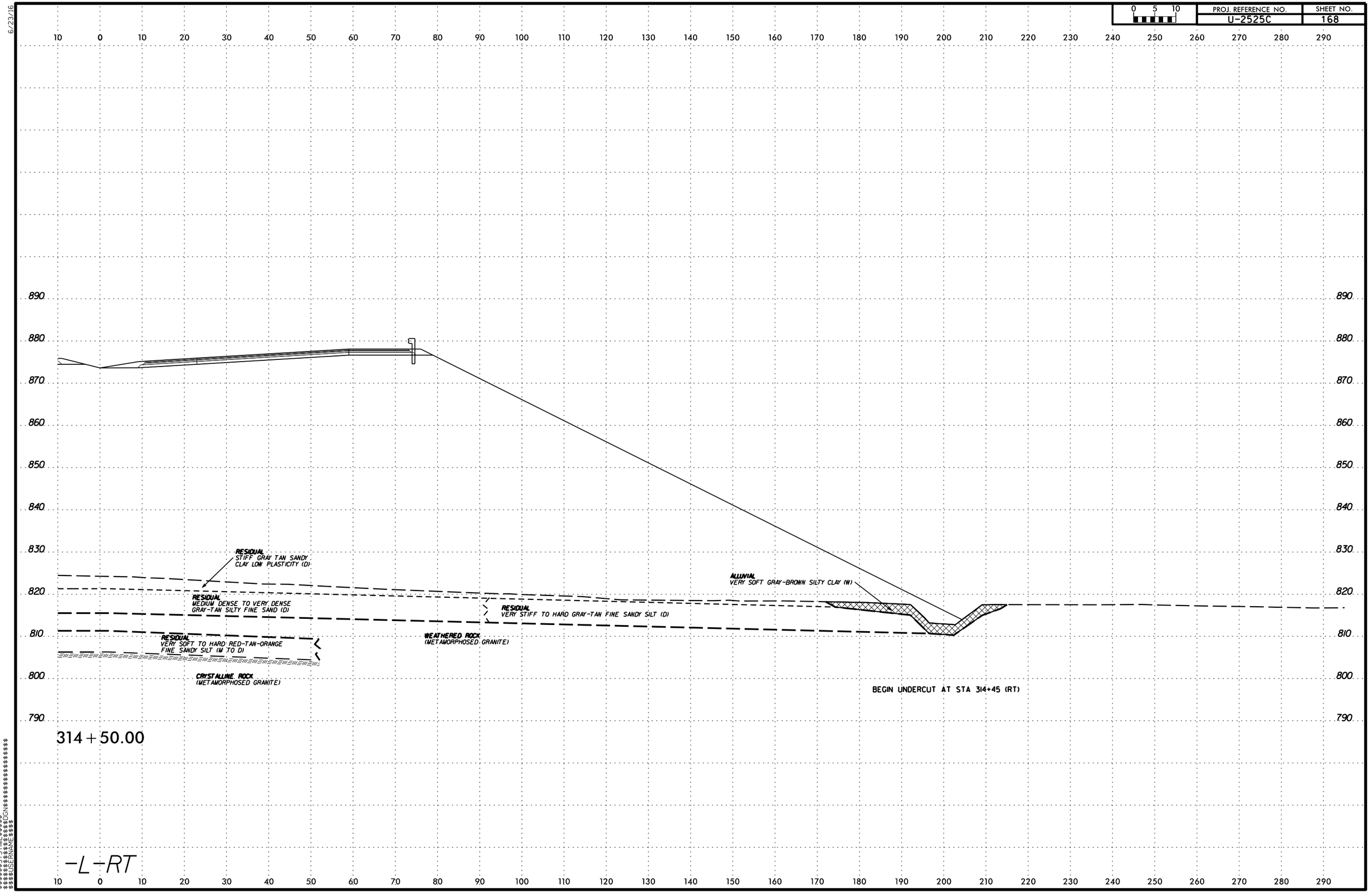
314+00.00

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	168



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$DDCN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	169

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890
880
870
860
850
840
830
820
810
800
790

ALLUVIAL
VERY SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
GRAY-TAN SILTY FINE SAND (D)

RESIDUAL
VERY STIFF TO HARD GRAY-TAN FINE SANDY SILT (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY SOFT TO HARD RED-TAN-ORANGE
FINE SANDY SILT (W TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

315+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	170

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890
880
870
860
850
840
830
820
810
800

END UNDERCUT AT STA 315+66

B-44

(1)
(14)
100/0.7
50/0.1

AR
FIAD

ALLUVIAL
(VERY SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
MEDIUM DENSE GRAY-TAN SILTY FINE TO COARSE SAND (W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

315+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	171

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890
880
870
860
850
840
830
820
810
800

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN SILTY CLAY (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

316+00.00

-L-RT

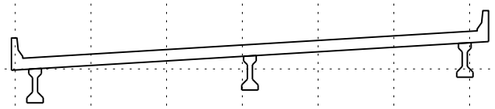
$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	172

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

910
900
890
880
870
860



RESIDUAL
SOFT TO HARD RED-TAN
SILT (D TO SAT)

330+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	173

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

900 890 880 870 860 850 840 830 820 810 800 790 780 770 760

EB4-C
330+92

ARTIFICIAL FILL
VERY SOFT TO STIFF RED-GRAY-BROWN
FINE SANDY SILT WITH
TRACE OF ORGANICS (M TO D)

3 17 16 10 8 9 8 13 9 13 17 31 55 100/0.9 59 60/0.1

11/15

RESIDUAL
SOFT TO HARD RED-TAN
SILT (D TO SAT)

BT

WEATHERED ROCK (METAMORPHOSED GRANITE)

RESIDUAL HARD GREEN-BLACK FINE SANDY SILTY (M)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT AT STA 330+95

331+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	174

END UNDERCUT AT STA 331+65

ARTIFICIAL FILL
VERY SOFT TO STIFF RED-GRAY-BROWN FINE SANDY SILT WITH TRACE OF ORGANICS (M TO D)

RESIDUAL
SOFT TO HARD RED-TAN SILT (D TO SAT)

331+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	175

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

920
910
900
890
880
870
860
850
840
830

RESIDUAL
STIFF TO VERY STIFF BROWN-RED-TAN CLAYEY SILT (W TO D)

RESIDUAL
SOFT TO HARD RED-TAN SILT (D TO SAT)

332+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	176

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890 880 870 860 850 840 830 820 810 800 790 780 770 760 750

RESIDUAL
VERY STIFF GRAY-TAN
FINE TO COARSE SILTY CLAY (M)

RESIDUAL
LOOSE TO VERY DENSE
GRAY-TAN SILTY FINE
SAND (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

339+00.00
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	177

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890 880 870 860 850 840 830 820 810 800 790 780 770 760 750

END UNDERCUT AT STA 339+66

ALLUVIAL
LOOSE GRAY SAND (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC)(M TO D)

RESIDUAL
MEDIUM STIFF TO VERY HARD RED-TAN FINE SANDY SILT (D TO W)

RESIDUAL
LOOSE TO VERY DENSE GRAY-TAN SILTY FINE SAND (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

BEGIN UNDERCUT AT STA 339+25

RESIDUAL
VERY STIFF BROWN-GRAY SILTY CLAY (M)

339+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	178

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

890 880 870 860 850 840 830 820 810 800 790 780 770 760 750

SS-23
B-69
340+25

(8) (14) (16) (22) (24) (43) (89) (100/0.8) (100/0.3)

12/5

BT

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC)(M TO D)

RESIDUAL
MEDIUM STIFF TO VERY HARD
RED-TAN FINE SANDY SILT (D TO W)

RESIDUAL
LOOSE TO VERY DENSE
GRAY-TAN SILTY FINE
SAND (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

SS-24
B-71
340+25

(9) (27) (18) (15) (12) (13) (12) (19) (47) (20) (21) (40) (26) (34) (74) (97)

BT
FIAD

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
VERY STIFF BROWN-GRAY
SILTY CLAY (M)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-23	CL	340+25	3.2–4.7	A-7-5(30)	72	41	21	12	20	47	100	82	79	71.2	34.6	ND
SS-24	160' RT	340+25	43.3–44.8	A-7-5(3)	45	12	32	28	34	6	95	73	65	45.8	25.1	ND

340+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	179

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810
800
790
780
770
760
750

RESIDUAL
VERY SOFT TO MEDIUM STIFF
RED-ORANGE-TAN SILTY CLAY
(HIGHLY PLASTIC) (M TO D)

RESIDUAL
SOFT TO HARD
TAN-BROWN
FINE SANDY SILT
(M TO D)

RESIDUAL
VERY STIFF TAN-BLACK
FINE TO COARSE SANDY SILT (M)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

358+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

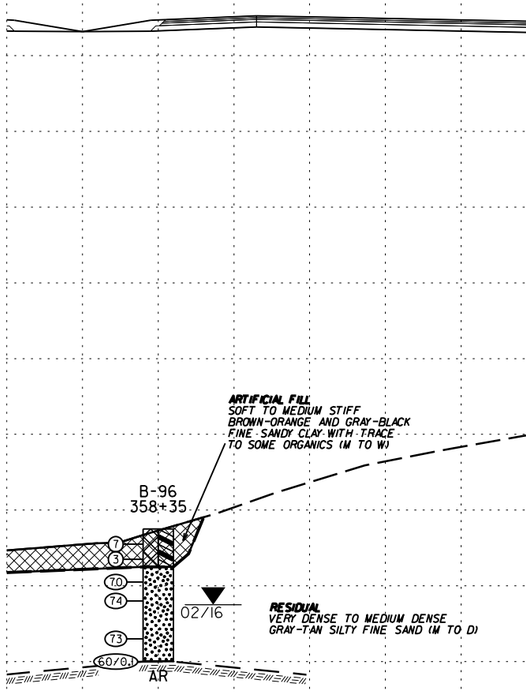
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	180

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810
800
790
780
770
760
750



ARTIFICIAL FILL
SOFT TO MEDIUM STIFF BROWN-ORANGE AND GRAY-BLACK FINE SANDY CLAY WITH TRACE TO SOME ORGANICS (M TO W)

RESIDUAL
VERY DENSE TO MEDIUM DENSE GRAY-TAN SILTY FINE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

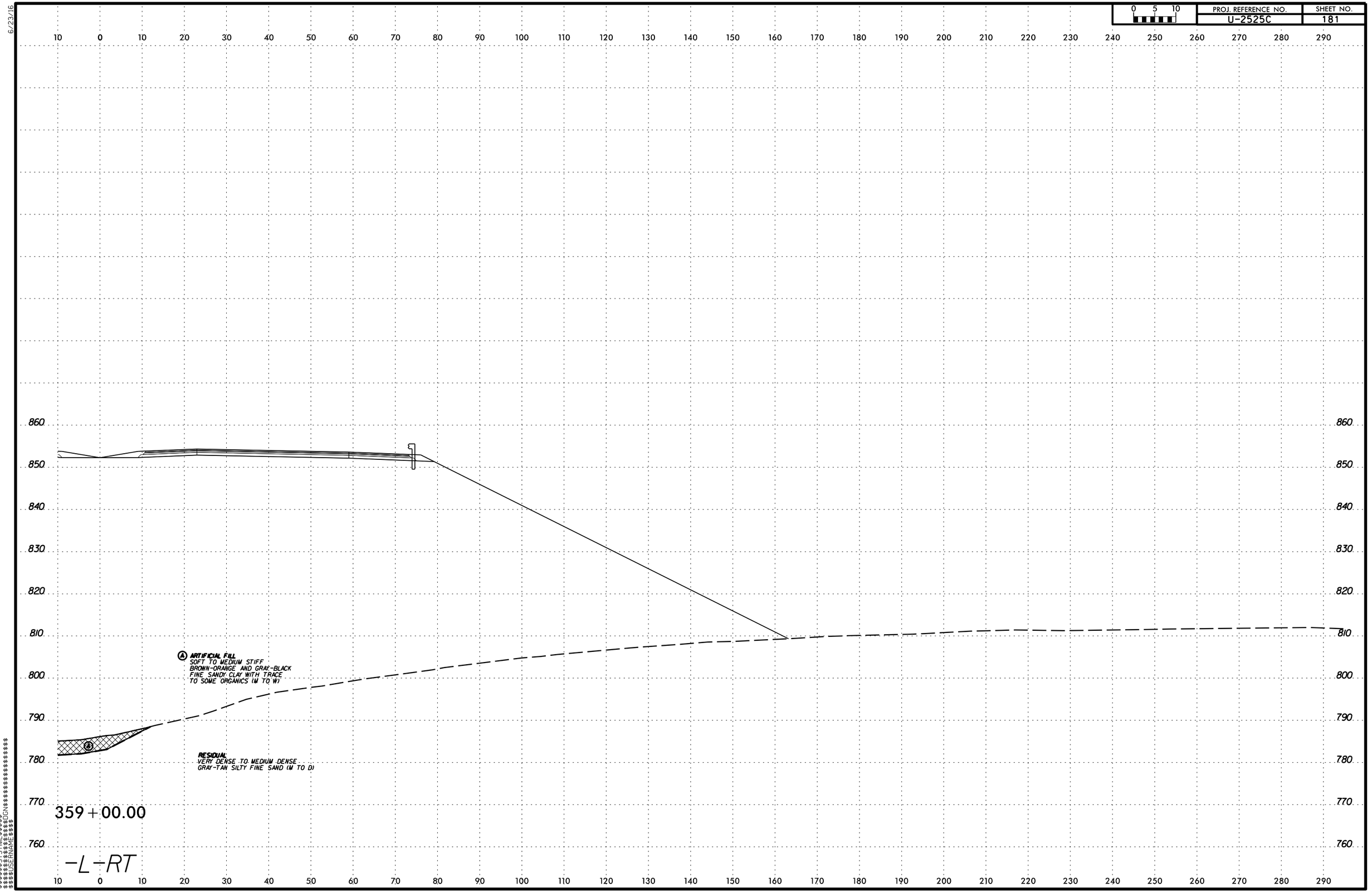
BEGIN UNDERCUT AT STA 358+05

358+50.00
-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	181



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	182

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810
800
790
780
770
760

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF BROWN-ORANGE AND GRAY-BLACK FINE SANDY CLAY WITH TRACE TO SOME ORGANICS (M TO W)

RESIDUAL
VERY DENSE TO MEDIUM DENSE GRAY-TAN SILTY FINE SAND (M TO D)

359+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

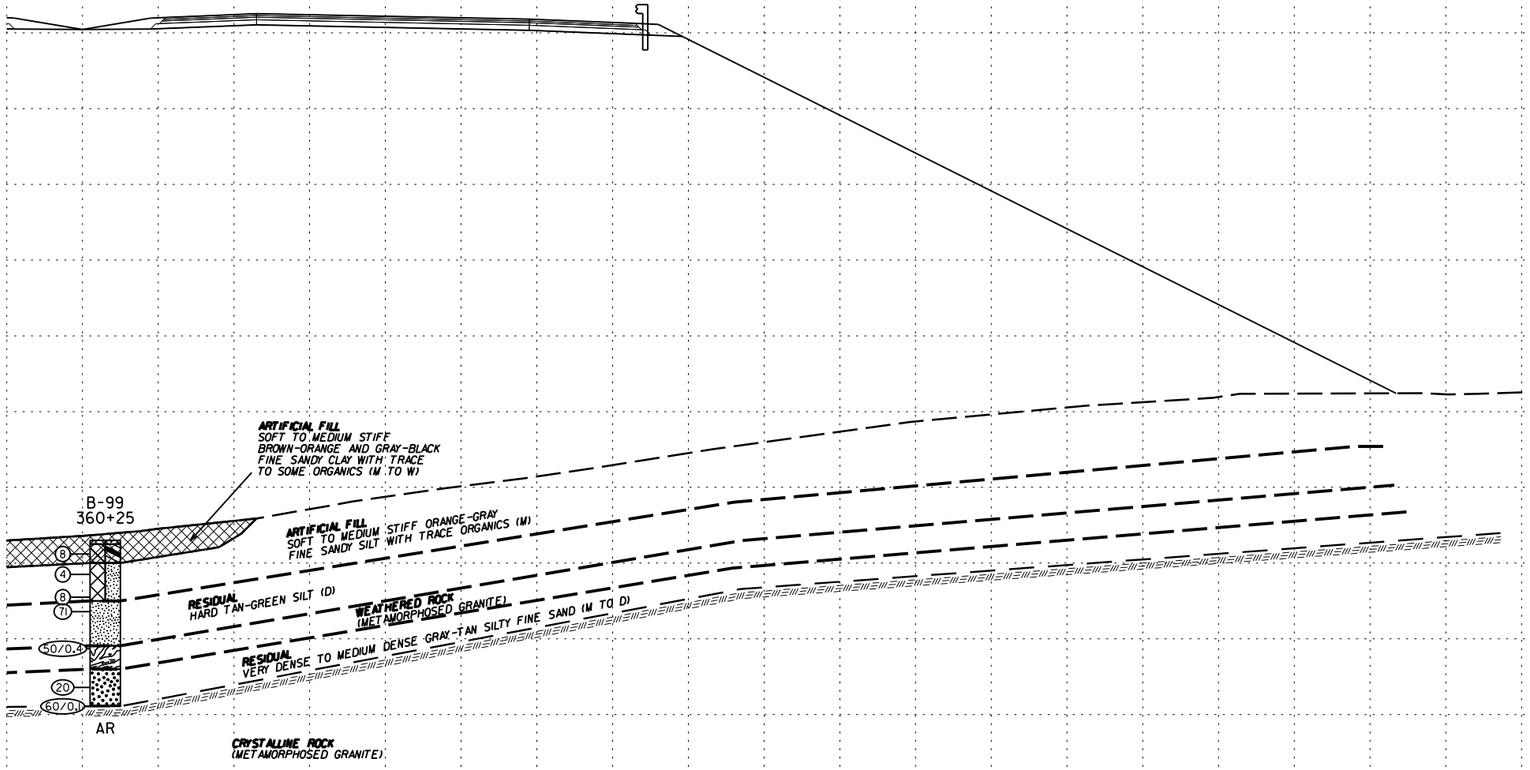
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	183

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810
800
790
780
770
760
750



360+00.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	184

END UNDERCUT AT STA 360+58

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF
BROWN-ORANGE AND GRAY-BLACK
FINE SANDY CLAY WITH TRACE
TO SOME ORGANICS (M TO W)

ARTIFICIAL FILL
SOFT TO MEDIUM STIFF ORANGE-GRAY
FINE SANDY SILT WITH TRACE ORGANICS (M)

RESIDUAL
HARD TAN-GREEN SILT (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE TO MEDIUM DENSE
GRAY-TAN SILTY FINE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

360+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	185

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810
800
790
780
770
760
750

RESIDUAL
HARD TAN-GREEN SILT (D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE TO MEDIUM DENSE
GRAY-TAN SILTY FINE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

361+00.00

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	186

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM DENSE GRAY-TAN SILTY FINE TO COARSE SAND (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

373+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	187

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760
750

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (M)

ARTIFICIAL FILL
SOFT RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM DENSE GRAY-TAN SILTY FINE TO COARSE SAND (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT STA 373+14

373+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	188

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760
750

END UNDERCUT STA 374+32

B-115

12
10
20
31
100/0.1'
60/0.0'
AR
FIAD

RESIDUAL
STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M TO D)

RESIDUAL
STIFF TO HARD
BROWN-TAN FINE
SANDY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
DENSE TO MEDIUM DENSE ORANGE-GREEN
SILTY FINE TO COARSE SAND (M TO D)

B-117

3
4
13
9
23
60/0.0'
AR
02/16

ARTIFICAL FILL
SOFT RED-BROWN SILTY CLAY (W)

ALLUVIAL
SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
DENSE TO MEDIUM DENSE ORANGE-GREEN
SILTY FINE TO COARSE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

374+00.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	189

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760
750

RESIDUAL
STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M TO D)

STIFF TO HARD
BROWN-TAN FINE
SANDY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
DENSE TO MEDIUM DENSE ORANGE-GREEN
SILTY FINE TO COARSE SAND (M TO D)

ARTIFICIAL FILL
SOFT RED-BROWN SILTY CLAY (W)

ALLUVIAL
SOFT GRAY-BROWN SILTY CLAY (W)

RESIDUAL
DENSE TO MEDIUM DENSE ORANGE-GREEN
SILTY FINE TO COARSE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

374+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	190

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800 790 780 770

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY
#HIGHLY PLASTIC(M).

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(W TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT (M)

RESIDUAL
HARD GREEN-GRAY SANDY SILT (D)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 407+75

408+00.00

860 850 840 830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(W TO D)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(W TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

407+50.00

-L-RT

860 850 840 830 820 810 800 790 780

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	191

409+00.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN-GRAY FINE SANDY
SILT WITH TRACE OF MICA
(W TO D)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT (M)

RESIDUAL
HARD GREEN-GRAY SANDY SILT (D)

SS-37
B-145

SS-35
SS-36
B-146
408+30

BT
FIAD

BT
DRY

408+50.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-35	105' RT	408+30	3.5-5	A-7-5(26)	60	26	5	15	29	51	100	98	95	83.8	29.9	ND
SS-36	105' RT	408+30	28.5-30	A-5(9)	51	6	7	21	58	14	100	95	93	81.9	41.5	ND
SS-37	6' RT	408+30	3.6-5.1	A-7-5(18)	62	14	2	24	30	44	100	99	98	83.7	34.2	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	192

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850
840
830
820
810
800
790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD GRAY-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TAN-BROWN FINE SANDY SILT (M TO D)

410+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD GRAY-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TAN-BROWN FINE SANDY SILT (M TO D)

409+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	193

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810 800 790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
STIFF TAN-BROWN FINE SANDY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE OF MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

411+00.00

860 850 840 830 820 810 800 790 780 770

SS-38
SS-39
SS-40
SS-42
B-148
STA 410+30

(9) (17) (11) (10) (9) (9) (12) (36) (39) 100/0.5

BT
DRY

SS-41
B-149
410+30

(8) (14) (12) (12) (12) (13) (10) (7) (13) (16)

BT
DRY

410+50.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-38	CL	410+30	18.5-20	A-5(9)	56	10	6	44	45	5	100	98	94	66.3	24.5	ND
SS-39	CL	410+30	28.5-30	A-4(4)	37	4	6	38	48	8	100	98	94	73.6	15.4	ND
SS-40	CL	410+30	33.5-35	A-5(8)	52	8	3	44	42	11	100	98	97	70.7	35.5	ND
SS-41	100' RT	410+30	6-7.5	A-7-5(22)	63	18	4	13	43	40	100	99	96	87.7	31.2	ND
SS-42	CL	410+30	8.5-10	A-7-5(35)	75	29	2	12	32	54	100	99	98	90.8	47.1	ND

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	194

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

412 + 00.00

850
840
830
820
810
800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

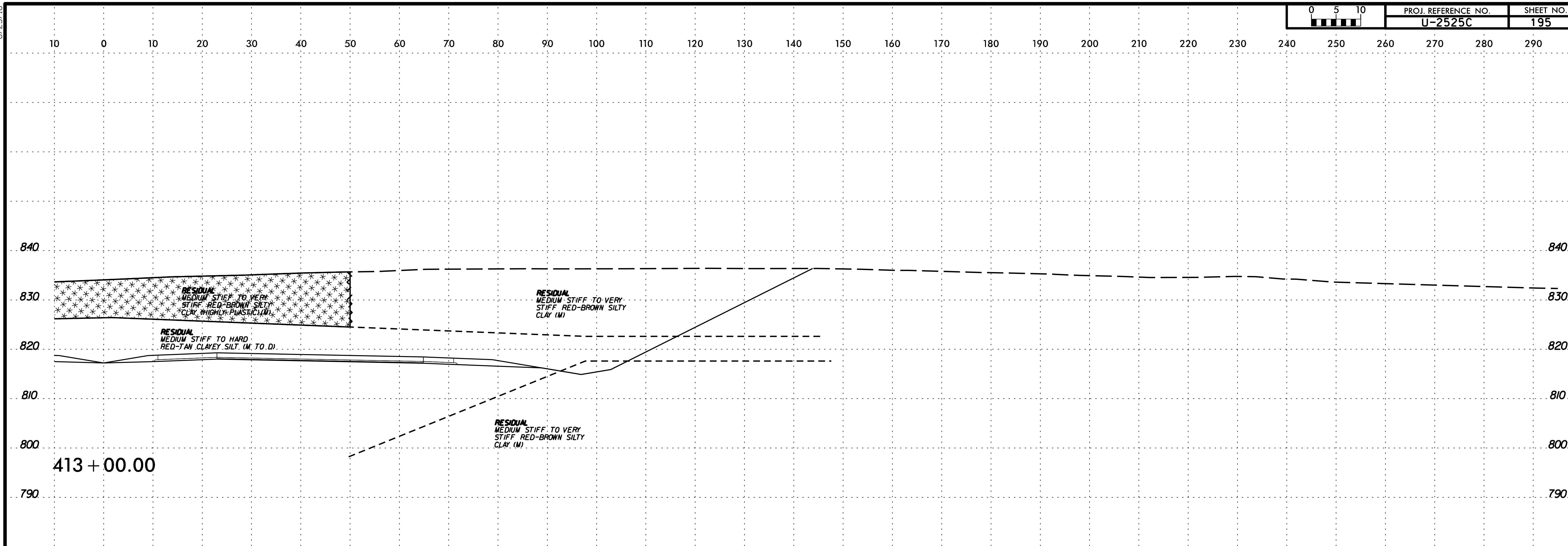
RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

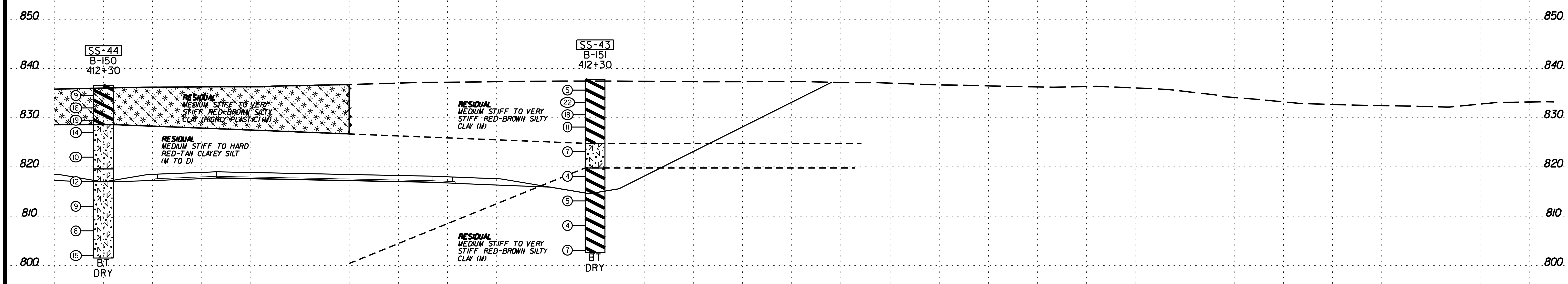
411 + 50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$





SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-43	100' RT	412+30	23.5-25	A-7-5(33)	82	21	1	12	57	30	100	99	99	93.8	70.2	ND
SS-44	CL	412+30	1.1-2.6	A-7-6(32)	60	33	4	15	17	64	100	99	96	86.6	26.8	ND

790
780
770

412 + 50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$SYSTIME$$$$
$$$$$$$$$$$$$$$$$$$$$$$$$$DGN$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	196

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

414 + 50.00

840 830 820 810 800

B-152
414+15

7
11
18
15
30
12

BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

BEGIN UNDERCUT STA 413+75

414 + 00.00

840 830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

413 + 50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	197

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

416+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

415+50.00

850 840 830 820 810 800 790

END UNDERCUT STA 415+25

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 415+25

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN CLAYEY SILT
(M TO D)

415+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	198

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760

RESIDUAL
MEDIUM STIFF TO VERY STIFF
TAN-ORANGE FINE CLAYEY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

430+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	199

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770
760
750
740

ALLUVIAL
SOFT ORANGE-BROWN SILTY CLAY
WITH TRACE OF ORGANICS (SAT)

ALLUVIAL
MEDIUM STIFF GRAY-BROWN SILTY CLAY (M)

CVI3-R
430+60

5 6 20 13 16 100/0.8 100/0.7

BT

RESIDUAL
MEDIUM STIFF TO VERY STIFF
TAN-ORANGE FINE CLAYEY SILT (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT AT STA 430+38

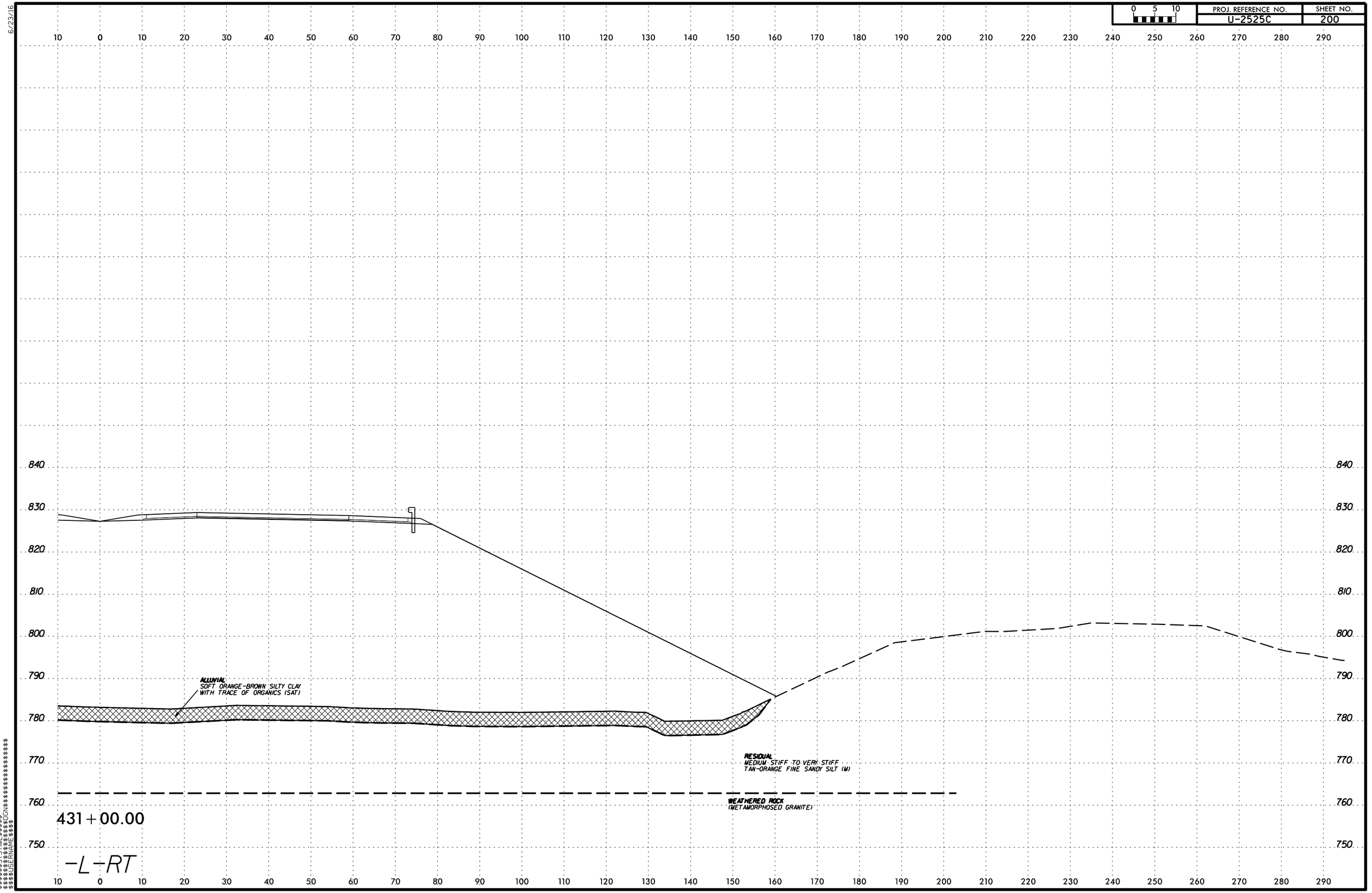
430+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	200



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	201

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD RED-TAN
CLAYEY SILT WITH TRACE
OF MANGANESE (M)

432+00.00

840 830 820 810 800 790 780 770 760 750

END UNDERCUT AT STA 431+64

ALLUVIAL
SOFT ORANGE-BROWN SILTY CLAY
WITH TRACE OF ORGANICS (SAT)

ALLUVIAL
LOOSE ORANGE-GRAY SILTY
FINE TO COARSE SAND (SAT)

ALLUVIAL
SOFT TO MEDIUM STIFF
GRAY-BROWN SILTY CLAY WITH
TRACE OF ORGANICS (W TO SAT)

CVI2-C
431+27

(5) (4) (5) (9) (9) (31) (100/0.6) (60/0.1)

AR

RESIDUAL
MEDIUM STIFF TO HARD
ORANGE-TAN FINE SANDY
SILT WITH MANGANESE
TRACE MICA ROCK ROCK
FRAGMENTS (D TO SAT)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

431+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	202

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810 800

END UNDERCUT STA 433+75

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF TAN CLAYEY SILT
WITH MANGANESE. SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE. SAPROLITE (M TO D)

433+50.00

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF BROWN CLAYEY SILT
WITH MANGANESE SAPROLITE (M TO D)

BEGIN UNDERCUT STA 432+75

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 432+75

433+00.00

B-162
432+60

7 10 11 10 31

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

432+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	203

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

435+00.00

850
840
830
820
810

B-163
434+60

(12) (14) (11) (13) (11) (16)

BT
FIAD

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

434+50.00

840
830
820
810

RESIDUAL
STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

434+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	204

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810

B-164
436+60

8 9 9 5 8 9 9 10

BT
DRY

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN SILT
WITH MANGANESE (M TO D)

436+50.00

860 850 840 830 820

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN SILT
WITH MANGANESE (M TO D)

436+00.00

860 850 840 830 820

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TAN CLAYEY SILT WITH TRACE OF MANGANESE SAPROLITE (D TO M)

RESIDUAL
STIFF TO VERY STIFF BROWN SILT
WITH MANGANESE SAPROLITE (M TO D)

435+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	205

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

438+00.00

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

437+50.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN SANDY
SILT WITH MANGANESE (M TO D)

437+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	206

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800

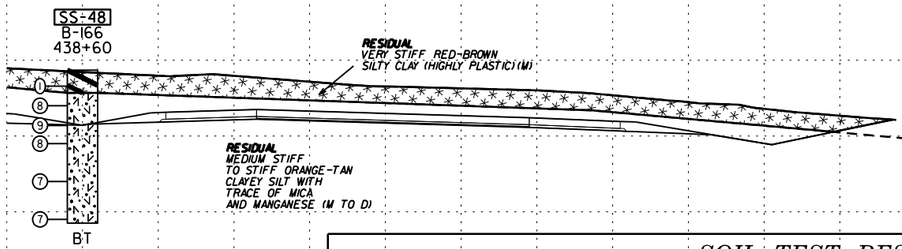
RESIDUAL
VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF ORANGE-TAN CLAYEY SILT WITH TRACE OF MICA AND MANGANESE (M TO D)

439+00.00

SS-48
B-166
438+60

BT



438+50.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-48	CL	438+60	1-2.5	A-7-6(23)	56	27	9	16	22	53	99	93	90	79.4	28.4	ND

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	207

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810

RESIDUAL
MEDIUM STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE
SANDY SILT WITH MANGANESE AND MICA (D)

440+00.00

RESIDUAL
VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF
TO STIFF ORANGE-TAN
CLAYEY SILT WITH
TRACE OF MICA
AND MANGANESE (M TO D)

BEGIN UNDERCUT AT STA 439+25 (RT)

439+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN
$$$$$USERNAME$$$$

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

6/23/16

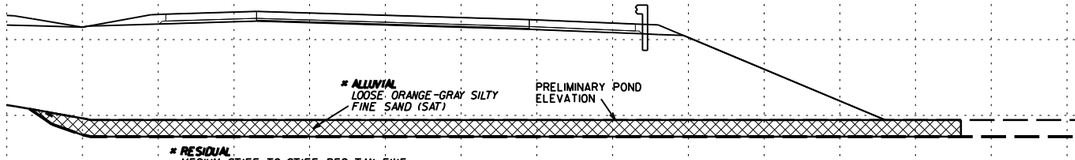
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	208

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE
SHOWN MAY BE REFERENCING POND SURFACE
ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED
BY PRELIMINARY POND ELEVATION

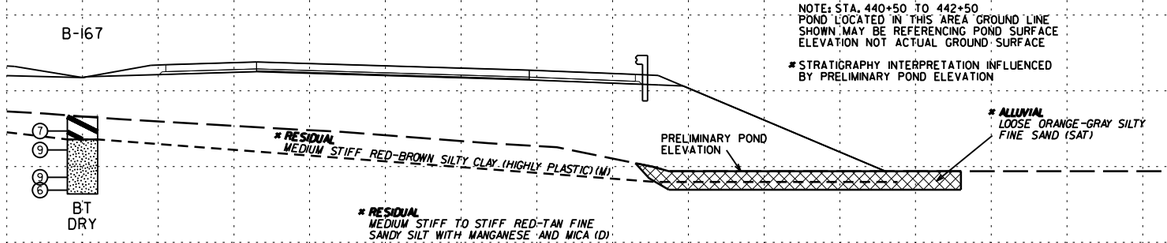


441+00.00

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 440+75

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE
SHOWN MAY BE REFERENCING POND SURFACE
ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED
BY PRELIMINARY POND ELEVATION



440+50.00

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	209

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810

END UNDERCUT AT STA 442+75 (RT)

B-168
442+60

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

7
9
8
7

BT

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

BEGIN UNDERCUT AT STA 442+50 (RT)

442+50.00

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE SHOWN MAY BE REFERENCING POND SURFACE ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED BY PRELIMINARY POND ELEVATION

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 442+15

END UNDERCUT AT STA 442+22

 # ALLUVIAL
LOOSE ORANGE-GRAY SILTY FINE SAND (SAT)

442+00.00

NOTE: STA. 440+50 TO 442+50
POND LOCATED IN THIS AREA GROUND LINE SHOWN MAY BE REFERENCING POND SURFACE ELEVATION NOT ACTUAL GROUND SURFACE

STRATIGRAPHY INTERPRETATION INFLUENCED BY PRELIMINARY POND ELEVATION

 # ALLUVIAL
LOOSE ORANGE-GRAY SILTY FINE SAND (SAT)

PRELIMINARY POND ELEVATION

441+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	210

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF
RED-TAN-GRAY FINE SANDY SILT
WITH MANGANESE AND MICA (D TO W)

444+00.00

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY
FINE SANDY SILT WITH MANGANESE AND
MICA (D TO W)

443+50.00

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN GRAY
FINE SANDY SILT WITH MANGANESE AND
MICA (D TO W)

443+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	211

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 445+04

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

ARTIFICIAL FILL
SOFT RED-BROWN AND TAN SILTY CLAY WITH ROCK FRAGMENTS (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

445+00.00

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 444+23

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

ARTIFICIAL FILL
SOFT RED-BROWN AND TAN SILTY CLAY WITH ROCK FRAGMENTS (M)

B-171
444+60

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

03/16

BT

444+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	212

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820
810

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

446+00.00

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

445+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	213

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY WITH TRACE OF QUARTZ ROCK (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

447+00.00

SS-50
B-172
446+60

B-173
446+60

01/16

BT

BT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-50	CL	446+60	6-7.5	A-5(3)	50	4	12	41	32	15	100	94	88	59.5	27.7	ND

446+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	214

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 448+05

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 448+05

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY WITH TRACE OF QUARTZ ROCK (M)

448+00.00

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

ASPHALT

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO W)

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY WITH TRACE OF QUARTZ ROCK (M)

447+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	215

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

449+00.00

SS-51
ST-1
S-1
B-176
448+60

7 19 15 8 4 4 5 7 6 8

ST-1

B.T.
FIAD

448+50.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-51	100' RT	448+60	0.9-2.4	A-7-5(45)	73	39	2	7	19	72	100	99	98	94.1	32.7	ND
ST-1	100' RT	448+63	12.0-14.0	A-7-5(20)	59	20	7	20	40	33	100	97	93	80.7	38.2	ND
S-1	100' RT	448+60	1.0-1.5	A-7-5(31)	68	28	4	13	34	49	100	98	96	88.2	44.6	ND

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	216

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870
860
850
840
830
820
810

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

450+00.00

870
860
850
840
830
820
810

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D)

449+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	217

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D TO M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

451+00.00

B-177
450+60

7 18 20 14 5 4 5 13 11 13 14

BT
DRY

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D TO M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

B-179
450+60

7 7 14 9 8 18 73 100/0.4 98 28 24

BT

450+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	218

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810 800

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D TO M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

452+00.00

880 870 860 850 840 830 820 810 800

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 451+75

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 451+75

RESIDUAL
MEDIUM STIFF BROWN-RED
SILTY CLAY WITH TRACE
ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
CLAYEY SILT WITH TRACE OF MANGANESE (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN
SILTY FINE TO COARSE SAND (D TO M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN-GRAY
FINE SANDY SILT WITH MANGANESE
AND MICA (D TO SAT)

451+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	219

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810 800

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN CLAY SILT (M)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN-GRAY FINE SANDY SILT WITH MANGANESE AND MICA (D TO SAT.)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

453+00.00

B-182
452+60

16 23 14 12 9 9 13 13 10 20 30 100/0.7

01/16

BT

452+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	220

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

870 860 850 840 830 820 810 800

SP 601

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

453+75.00

RESIDUAL
MEDIUM STIFF BROWN-RED SILTY CLAY WITH TRACE ORGANICS (HIGHLY PLASTIC) (W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

453+50.00

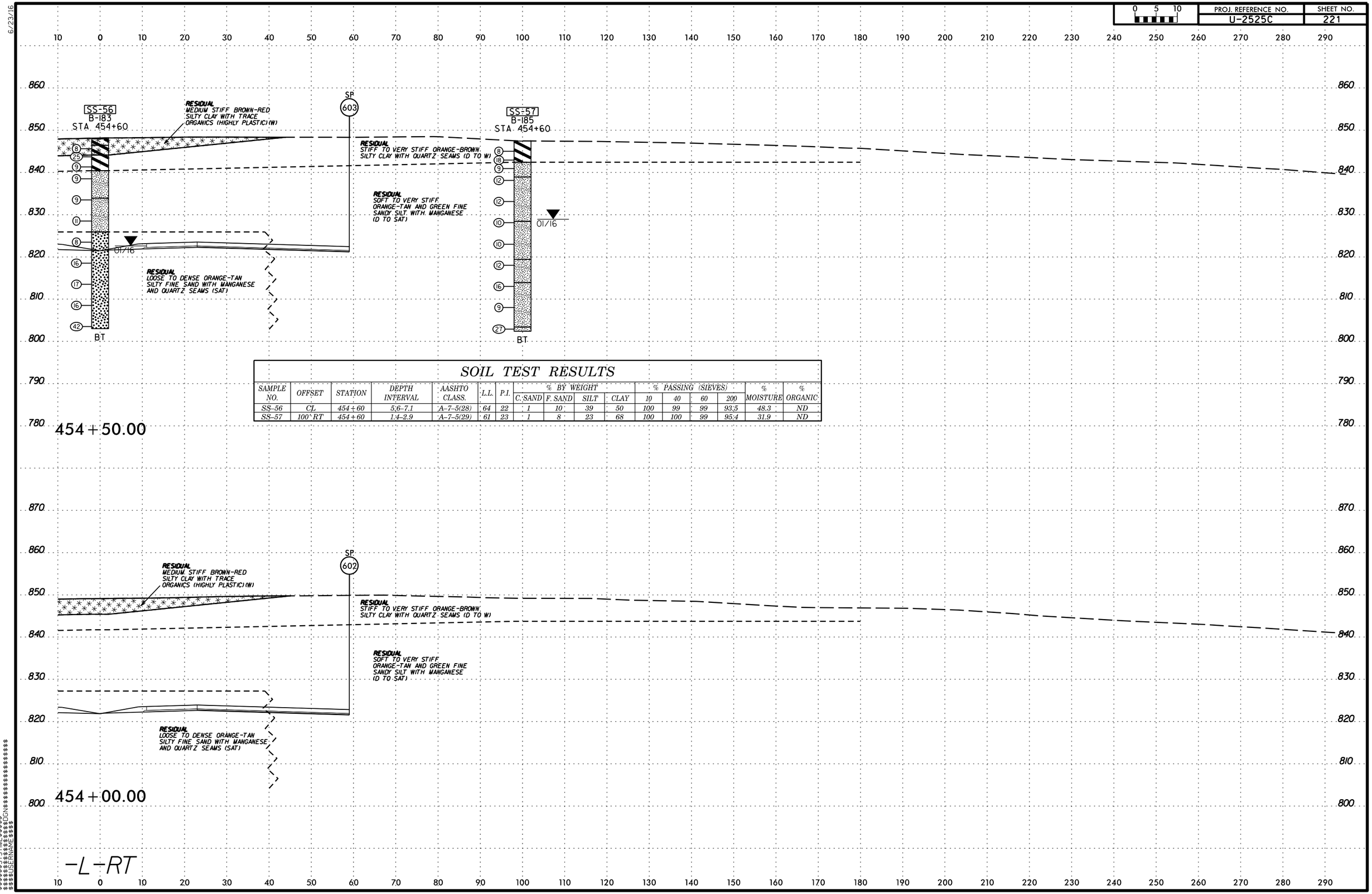
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	221



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-56	CL	454+60	5.6-7.1	A-7-5(28)	64	22	1	10	39	50	100	99	99	93.5	48.3	ND
SS-57	100' RT	454+60	1.4-2.9	A-7-5(29)	61	23	1	8	23	68	100	100	99	95.4	31.9	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	222

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800 790

SP 605

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN CLAYEY SILT (M)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

455+50.00

SP 604

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
LOOSE TO DENSE ORANGE-TAN SILTY FINE SAND WITH MANGANESE AND QUARTZ SEAMS (SAT)

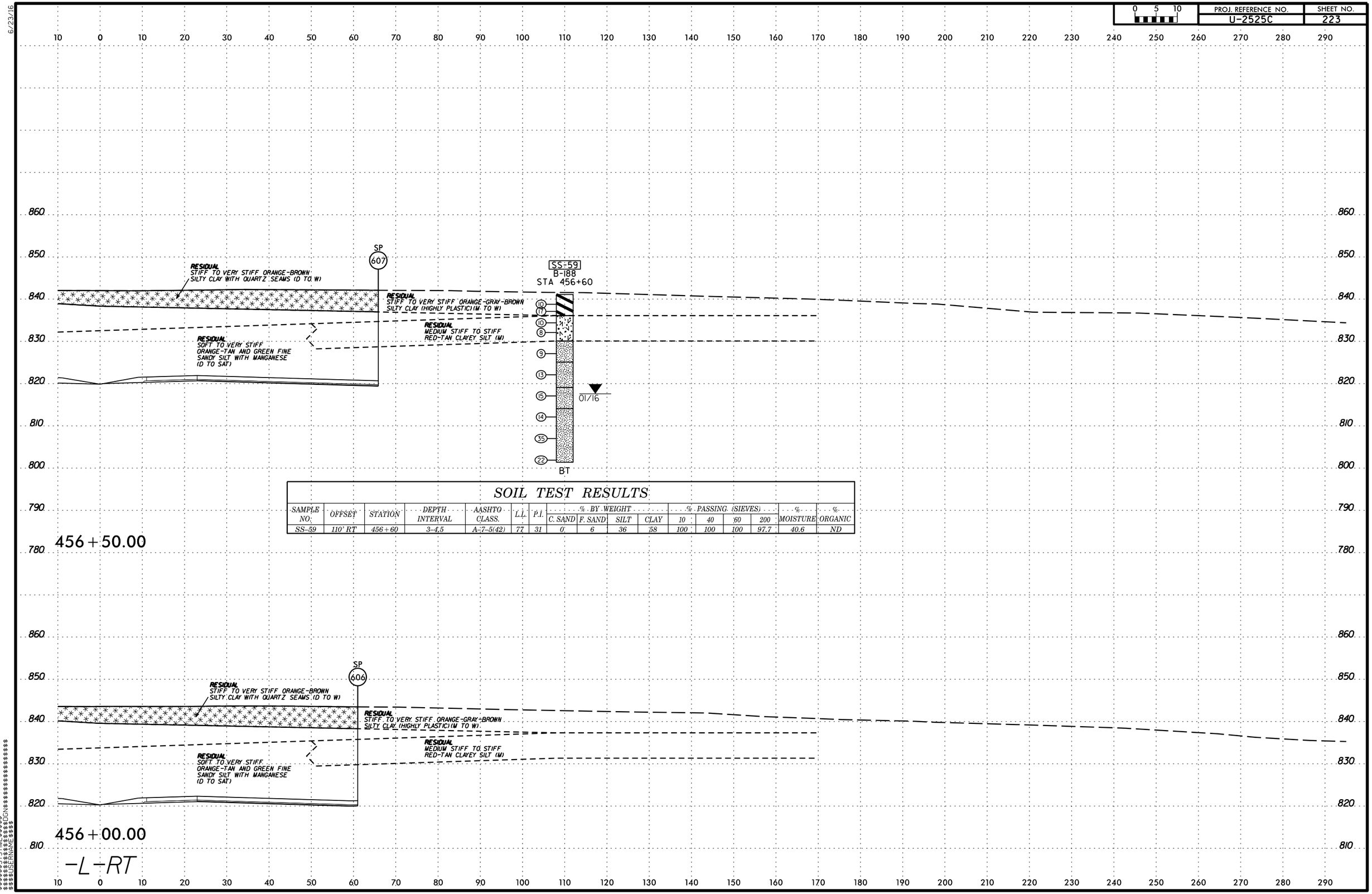
455+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	223



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-59	110' RT	456+60	3-4.5	A-7-5(42)	77	31	0	6	36	58	100	100	100	97.7	40.6	ND

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	224

458+00.00

SP 610

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC)(M TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

RESIDUAL
LOOSE GRAY-TAN SILTY FINE TO COARSE SAND (SAT)

457+50.00

SP 609

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC)(M TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

RESIDUAL
LOOSE GRAY-TAN SILTY FINE TO COARSE SAND (SAT)

457+00.00

SP 608

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC)(M TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN CLAYEY SILT (M)

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	225

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810

SP 612

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

459+00.00

850 840 830 820 810 800

SS-60
B-189
458+60

18 12 9 8 10 6 4 5

01/16

BT

SP 611

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

B-190
STA 458+55

8 10 9 8 8 7 7 4

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

RESIDUAL
LOOSE GRAY-TAN SILTY FINE TO COARSE SAND (SAT)

BT
DRY

850 840 830 820 810 800

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-60	CL	458+60	3-4.5	A-7-5(31)	61	25	1	6	40	53	100	100	99	96.8	31.7	ND

790 780

458+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	226

SS-61
B-191
460+55

SP 615

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

11 17 14 12 8 8

BT
DRY

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-61	CL	460+55	1.5-3.0	A-7-5(31)	65	32	8	9	24	59	96	90	88	83.0	27.6	ND

460+50.00

SP 614

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

460+00.00

SP 613

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-GRAY-BROWN SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
SOFT TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (M)

459+50.00

-L-RT

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	227

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800

SP 618

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

462+00.00

SP 617

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

461+50.00

SP 616

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

461+00.00

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	228

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800

END UNDERCUT AT STA 463+55

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 463+55

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

SP 621

463+50.00

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

SP 620

463+00.00

BEGIN UNDERCUT AT STA 462+75

B-192
462+60

13 13 18 12 8

BT
DRY

RESIDUAL
STIFF TO VERY STIFF ORANGE-BROWN SILTY CLAY WITH QUARTZ SEAMS (D TO W)

RESIDUAL
STIFF TO VERY STIFF YELLOW-BROWN CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-TAN AND GREEN FINE SANDY SILT WITH MANGANESE (D TO SAT)

SP 619

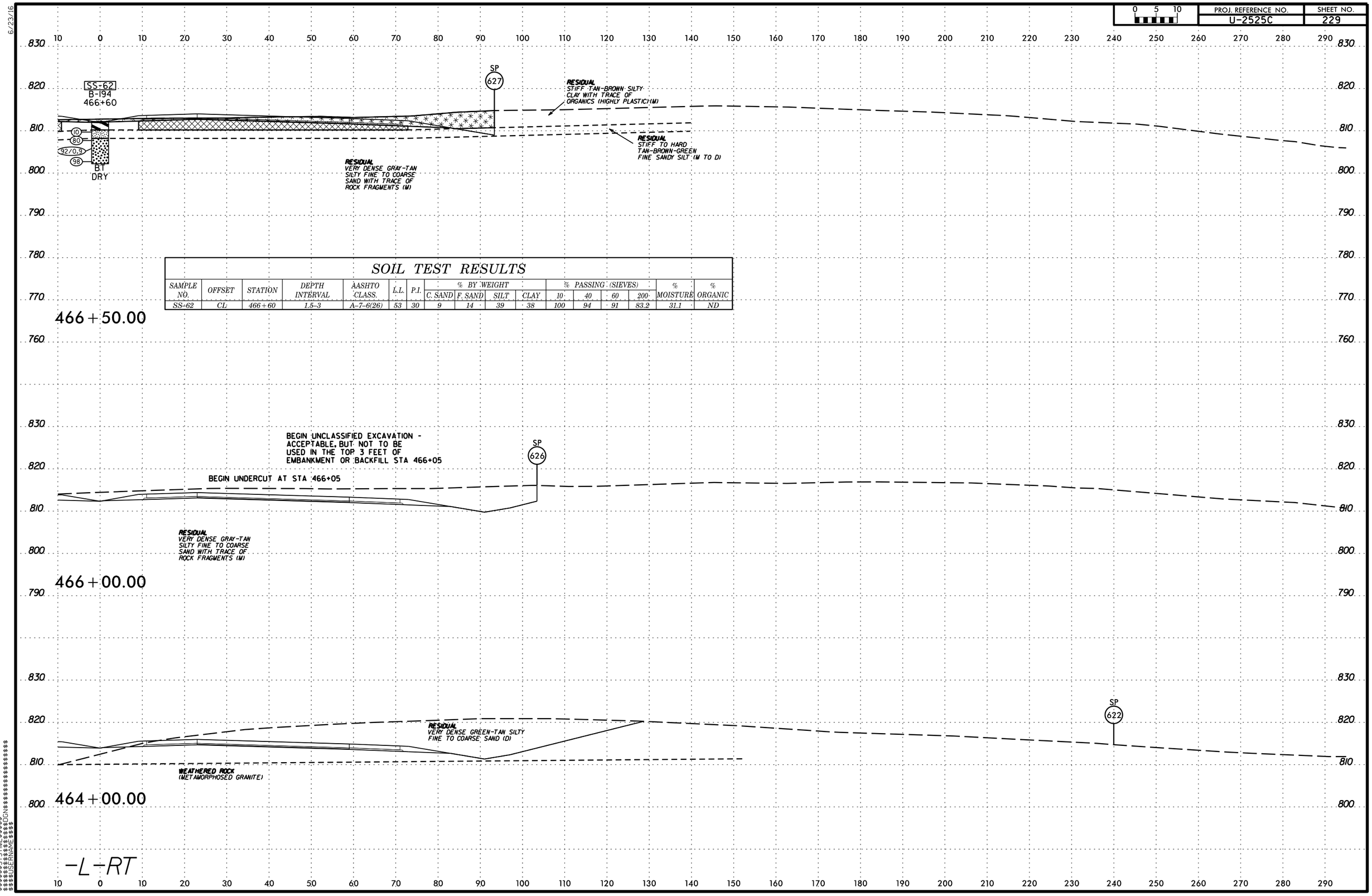
462+50.00

-L-RT

$$$$USERNAME$$$$ $$$$SYSTIME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	229



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-62	CL	466+60	1.5-3	A-7-6(26)	53	30	9	14	39	38	100	94	91	83.2	31.1	ND

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	230

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790 780

SP 630

RESIDUAL STIFF TAN-BROWN SILTY CLAY WITH TRACE OF ORGANICS (HIGHLY PLASTIC)(M)

RESIDUAL STIFF TO HARD TAN-BROWN-GREEN FINE SANDY SILT (M TO D)

RESIDUAL VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

468+00.00

END UNDERCUT AT STA 467+75

SP 629

RESIDUAL STIFF TAN-BROWN SILTY CLAY WITH TRACE OF ORGANICS (HIGHLY PLASTIC)(M)

RESIDUAL STIFF TO HARD TAN-BROWN-GREEN FINE SANDY SILT (M TO D)

RESIDUAL VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

467+50.00

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 467+25

SP 628

RESIDUAL STIFF TAN-BROWN SILTY CLAY WITH TRACE OF ORGANICS (HIGHLY PLASTIC)(M)

RESIDUAL STIFF TO HARD TAN-BROWN-GREEN FINE SANDY SILT (M TO D)

RESIDUAL VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (M)

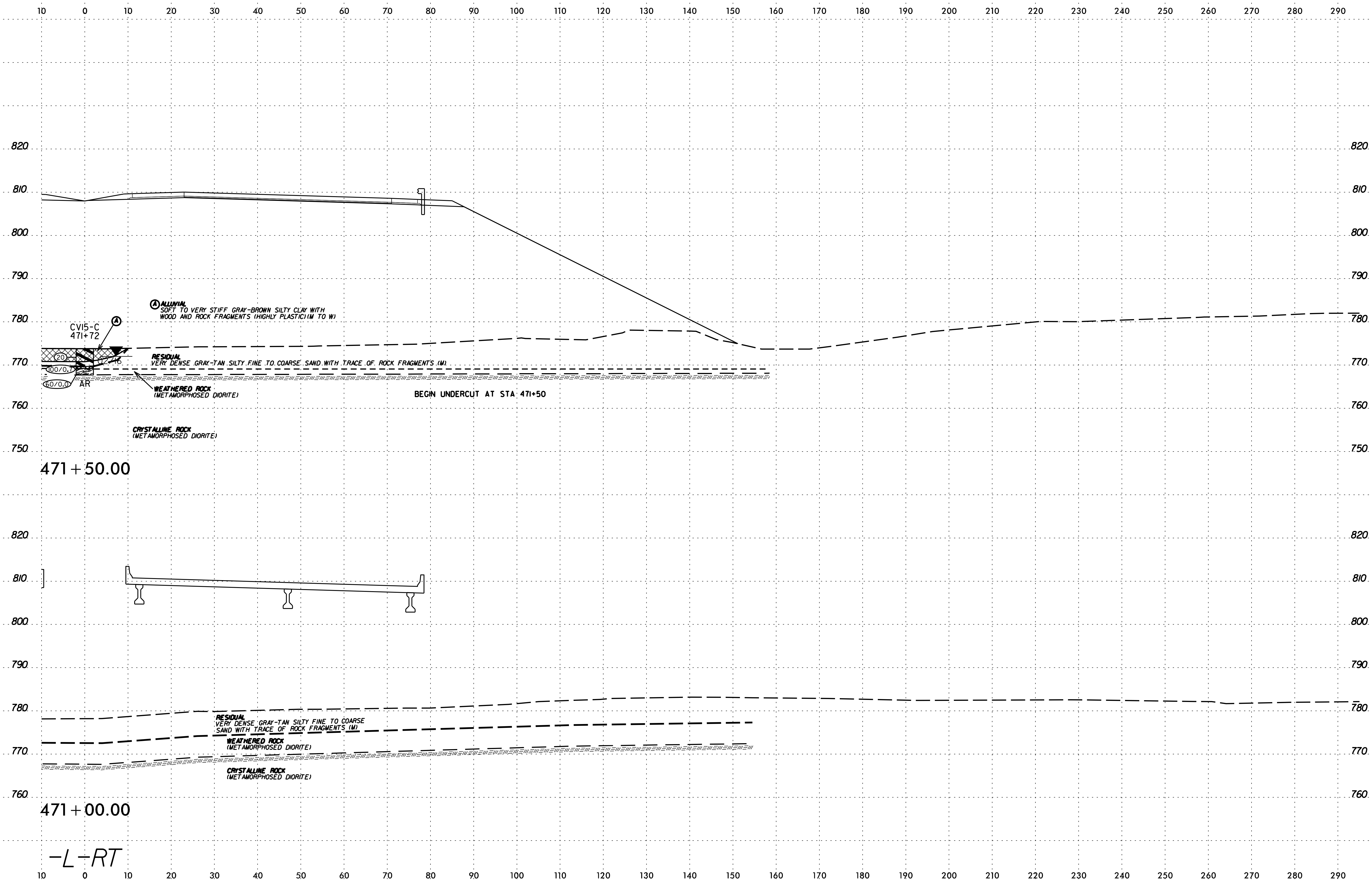
467+00.00

-L-RT

$$$$USERNAME$$$$ $$$$SYSTIME$$$$ $$$$DGN$$$$

6/23/16

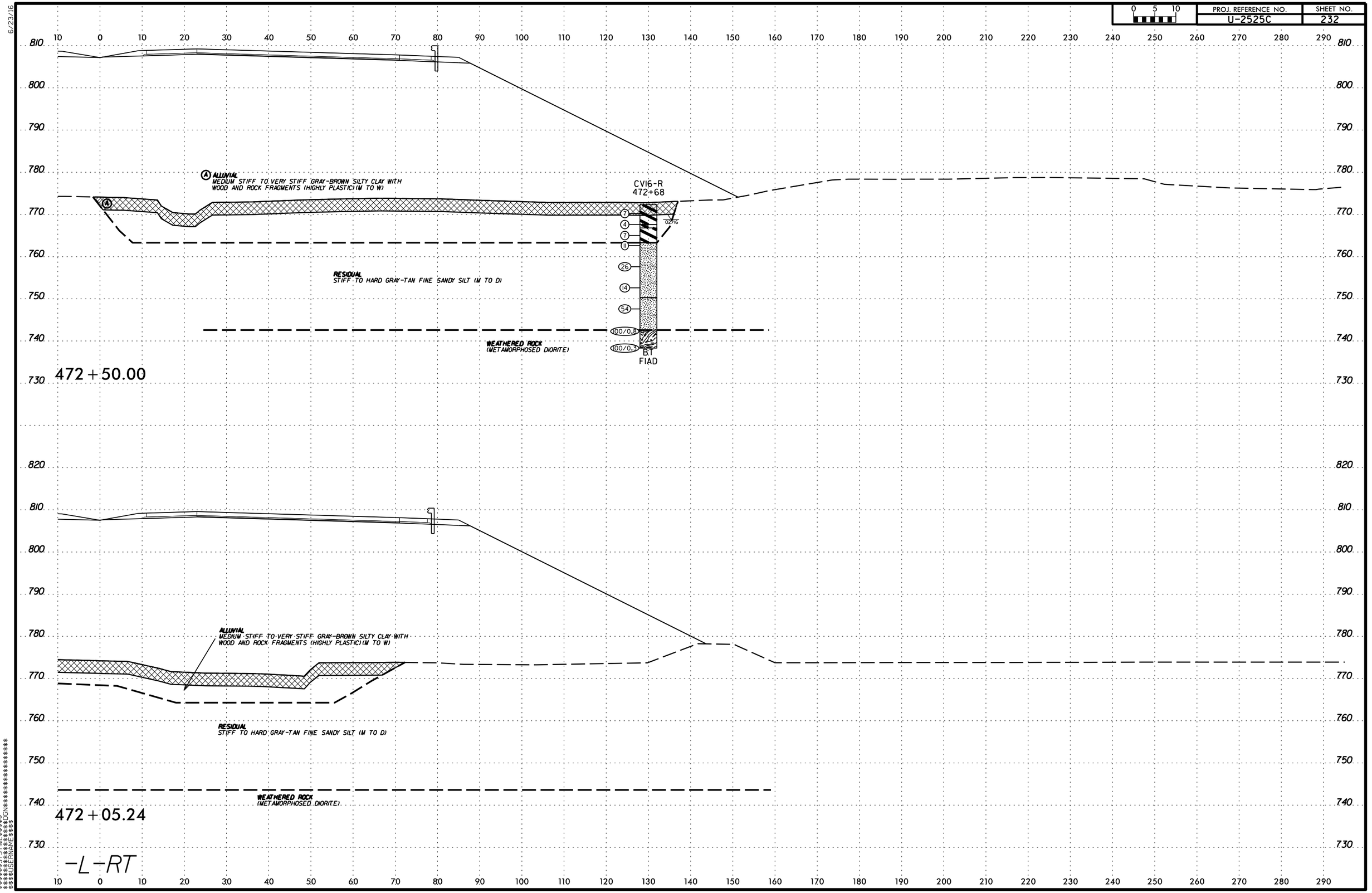
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	231



$$$$SYSTIME$$$$
$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	232



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	233

B-196
474+20
9
17
11
9
BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 473+80

BEGIN UNDERCUT AT STA 473+80

474+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

473+50.00

END UNDERCUT STA 473+26

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

ALLUVIAL
MEDIUM STIFF TO VERY STIFF
GRAY-BROWN SILTY CLAY WITH
WOOD AND ROCK FRAGMENTS
(HIGHLY PLASTIC) (M TO W)

473+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	234

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

820
810
800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED
SILTY CLAY WITH SOME MICA (HIGHLY PLASTIC) (M TO D)

RESIDUAL
SOFT TO VERY STIFF RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS (M TO D)

475+50.00

830
820
810
800

END UNDERCUT AT STA 475+45

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

475+00.00

820
810
800
790

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA
(HIGHLY PLASTIC) (M TO D)

474+50.00

780
770

-L-RT

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	235

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS (M TO D)

477+00.00

830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED
SILTY CLAY WITH SOME MICA (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS (M TO D)

476+50.00

830 820 810 800 790 780

SS-63
B-197
476+20

7 11 13 9 7 16 9

BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED
SILTY CLAY WITH SOME MICA (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS (M TO D)

476+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-63	CL	476+20	1-2.5	A-7-5(54)	84	46	1	10	25	64	100	100	99	95.5	34.5	ND

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	236

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

478+50.00

830 820 810 800 790 780 770 760

SS-64
B-198
478+20

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

7 13 8 8 6 13 10 13 12
BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED SILTY CLAY WITH SOME MICA (M TO D)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS
ROCK FRAGMENTS AND MICA SAPROLITE (M TO D)

B-199
478+20

7 11 10 17 11 21 20 33 24 51
BT
DRY

RESIDUAL
SOFT TO HARD
RED-TAN FINE SANDY SILT (D)

478+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-64	CL	478+20	3.5-5	A-7-5(26)	66	22	3	16	32	49	100	99	97	88.0	33.6	ND

830 820 810 800 790 780 770 760

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED SILTY CLAY WITH SOME MICA (HIGHLY PLASTIC) (M TO D)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-TAN
FINE SANDY SILT WITH MANGANESE SEAMS (M TO D)

477+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$SYSTIME$$$$$$
$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	237

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790 780 770

SS-65
B-200
480+20

5 9 6 13 8 9 20

BT
DRY

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
STIFF TO VERY STIFF
GRAY-TAN SAPROLITE FINE SANDY SILT
WITH MANGANESE SEAMS (D)

480+00.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-65	CL	480+20	1-2.5	A-7-5(41)	75	33	1	10	28	61	100	100	99	94.4	37.5	ND

820 810 800 790

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

479+50.00

840 830 820 810 800 790

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 479+05

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 479+05

820 810 800 790

RESIDUAL
MEDIUM STIFF RED SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT (D)

479+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	238

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

820 810 800 790 780

481+50.00

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
GRAY-TAN SAPROLITE FINE SANDY SILT
WITH MANGANESE SEAMS (D)

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 481+30

830 820 810 800 790 780

RESIDUAL
MEDIUM STIFF RED SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN
SILTY CLAY WITH MICA (M)

RESIDUAL
STIFF TO VERY STIFF
GRAY-TAN SAPROLITE FINE SANDY SILT
WITH MANGANESE SEAMS (D)

481+00.00

820 810 800 790 780

RESIDUAL
MEDIUM STIFF RED
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY WITH MICA (M)

RESIDUAL
STIFF TO VERY STIFF
GRAY-TAN SAPROLITE FINE SANDY SILT
WITH MANGANESE SEAMS (D)

480+50.00

820 810 800 790

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	239

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

810 800 790 780 770 760 750 740 730 720

B-207
492+20

10 12 12 25 74 100/0.1 50/0.1

AR
FIAD

492 + 00.00

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
SOFT TO STIFF RED-BROWN SILTY CLAY (M TO W)

RESIDUAL
STIFF TO VERY STIFF RED-TAN
FINE SANDY CLAY (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
GRAY-TAN SILTY FINE SAND (M)

B-201
482+20

7 4 5 7

BT
DRY

482 + 00.00

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN
SILTY CLAY WITH MICA (M)

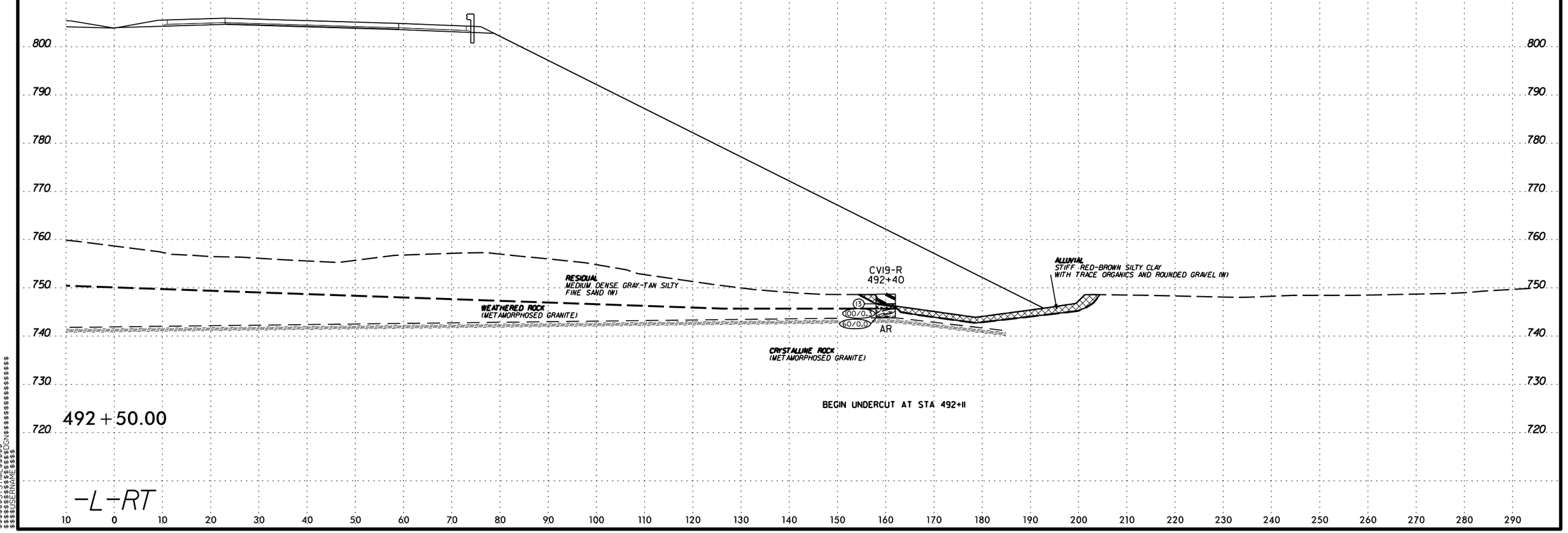
RESIDUAL
SOFT TO HARD
RED-TAN FINE
SANDY SILT (D)

-L-RT

$$$$$$$SYSTIME$$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	240



$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	241

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

810
800
790
780
770
760
750
740
730
720

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (M TO W)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY
SILT (M TO D)

RESIDUAL
VERY DENSE GRAY-TAN SILTY
FINE TO COARSE SAND (M TO D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

ALLUVIAL
STIFF RED-BROWN SILTY CLAY
WITH TRACE ORGANICS AND
ROUNDED GRAVEL (W)

493+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	242

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

810
800
790
780
770
760
750
740
730
720
710

CV18-C
493+40

14
6
10
33
01/16

75

50/0.0
AR

RESIDUAL
STIFF RED-BROWN SILTY CLAY HIGHLY PLASTIC (M TO W)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN FINE SANDY SILT (M TO D)

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND (M TO D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

ALLUVIAL
STIFF RED-BROWN SILTY CLAY WITH TRACE ORGANICS AND ROUNDED GRAVEL (W)

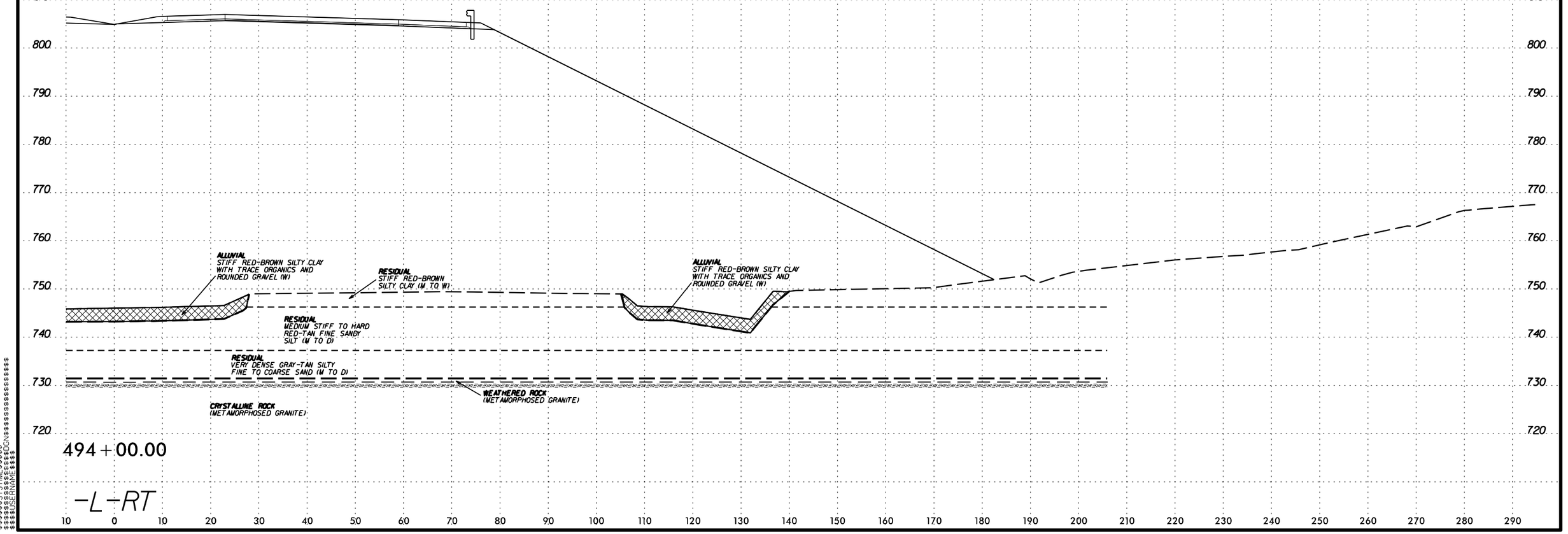
493+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	243



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	244

END UNDERCUT AT STA 494+72

RESIDUAL
VERY STIFF BROWN GRAY
SILTY CLAY (M)

RESIDUAL
MEDIUM DENSE GRAY-BROWN FINE SANDY SILT (D)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

494+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	245

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

820 810 800 790 780 770 760 750

RESIDUAL
STIFF TO VERY STIFF
BROWN-OLIVE FINE
SANDY SILT (D TO W).

WEATHERED ROCK
(METAMORPHOSED GRANITE)

507+50.00

820 810 800 790 780 770 760 750 740 730 720

RESIDUAL
MEDIUM STIFF TO VERY
STIFF RED-BROWN SILTY
CLAY. HIGHLY PLASTIC (M)

RESIDUAL
MEDIUM STIFF TO HARD
RED-TAN FINE SANDY SILT
MANGANESE SEAMS,QUARTZ (M TO D)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

RESIDUAL
VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND (M).

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

495+00.00

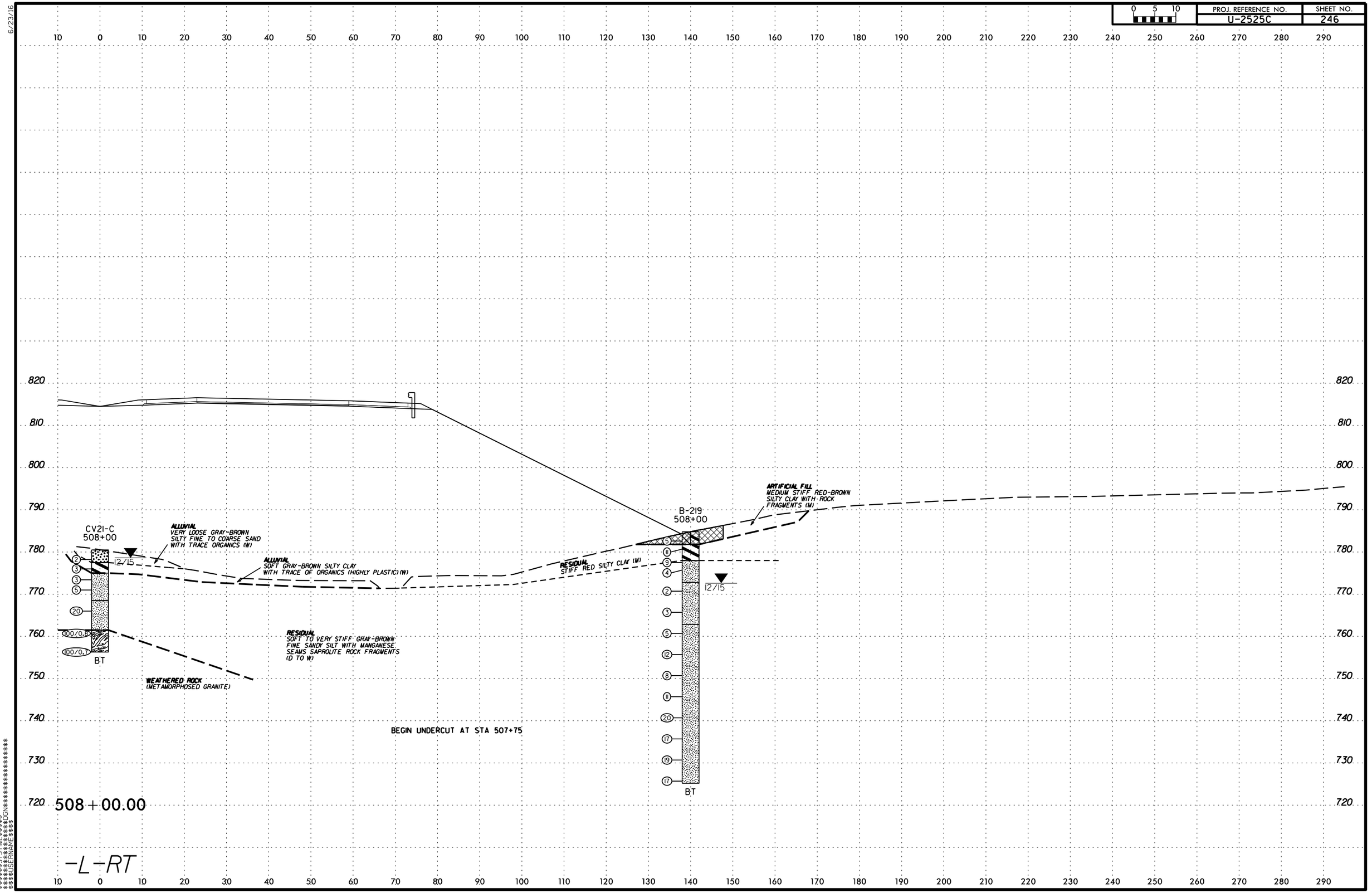
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	246



$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	247

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

820 810 800 790 780 770 760

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN SILTY CLAY WITH ROCK FRAGMENTS (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO VERY STIFF GRAY-BROWN FINE SANDY SILT WITH MANGANESE SEAMS SAPROLITE ROCK FRAGMENTS (D TO W)

509+00.00

820 810 800 790 780 770 760 750

ALLUVIAL
VERY LOOSE GRAY-BROWN SILTY FINE TO COARSE SAND WITH TRACE ORGANICS (W)

RESIDUAL
SOFT TO VERY STIFF GRAY-BROWN FINE SANDY SILT WITH MANGANESE SEAMS SAPROLITE ROCK FRAGMENTS (D TO W)

ALLUVIAL
SOFT GRAY-BROWN SILTY CLAY WITH TRACE OF ORGANICS (HIGHLY PLASTIC)(W)

RESIDUAL
STIFF RED SILTY CLAY (M)

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN SILTY CLAY WITH ROCK FRAGMENTS (M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

508+50.00

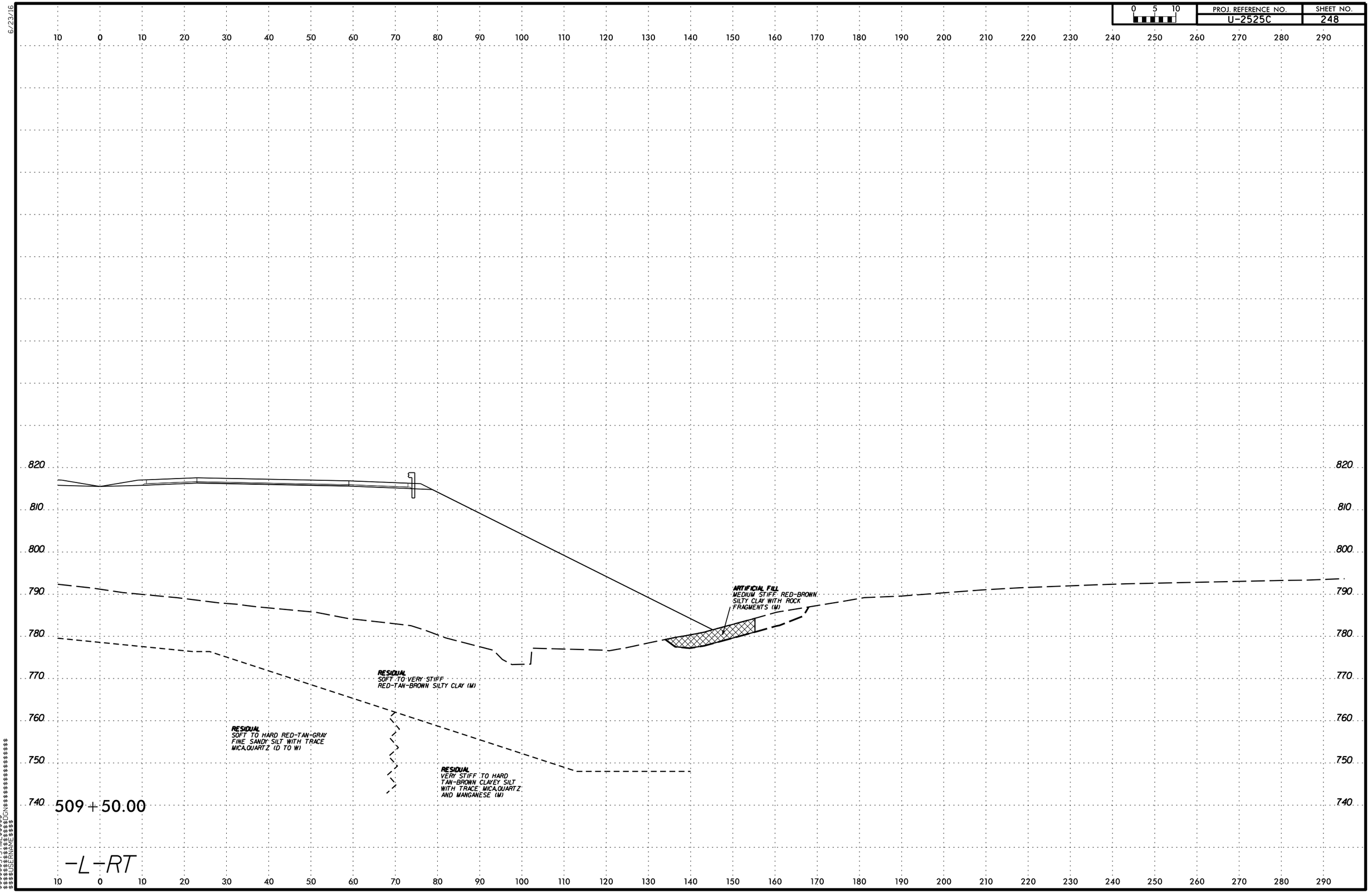
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	248



$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	249

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

820 810 800 790 780 770 760 750 740 730 720 710

SS-66
B-220
509+80

(5) (7) (4) (4) (9) (11) (12) (14) (12)

BT

RESIDUAL
SOFT TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE MICA,QUARTZ (D TO W)

RESIDUAL
SOFT TO VERY STIFF RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
VERY STIFF TO HARD TAN-BROWN CLAYEY SILT WITH TRACE MICA,QUARTZ AND MANGANESE (M)

CV22-R
510+15

12/15

(3) (4) (5) (5) (8) (11) (7) (20) (53) (63) (80) (75)

BT

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN SILTY CLAY WITH ROCK FRAGMENTS (M)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-66	24' RT	509+80	1.2-2.7	A-7-6(22)	52	23	5	14	29	52	97	94	92	85.1	26.4	ND

510+00.00

-L-RT

$$$$USERNAME$$$$
$$$$SYSTIME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	250

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830
820
810
800
790
780
770

END UNDERCUT AT STA 511+45

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN SILTY CLAY WITH ROCK FRAGMENTS (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE MICA,QUARTZ (D TO W)

511+00.00

830
820
810
800
790
780
770

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN SILTY CLAY WITH ROCK FRAGMENTS (M)

RESIDUAL
SOFT TO VERY STIFF RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY FINE SANDY SILT WITH TRACE MICA,QUARTZ (D TO W)

510+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	251

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850
840
830
820
810
800

RESIDUAL
SOFT TO VERY STIFF
RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY
FINE SANDY SILT WITH
MANGANESE (D TO W)

RESIDUAL
MEDIUM DENSE TAN-BROWN
SILTY FINE SAND WITH
MANGANESE (D)

517 + 00.00

840
830
820
810
800
790
780
770

ARTIFICIAL FILL
MEDIUM STIFF RED-BROWN
SILTY CLAY WITH ROCK
FRAGMENTS (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN-BROWN SILTY CLAY (M)

RESIDUAL
SOFT TO HARD RED-TAN-GRAY
FINE SANDY SILT WITH TRACE
MICA,QUARTZ (D TO W)

511 + 50.00

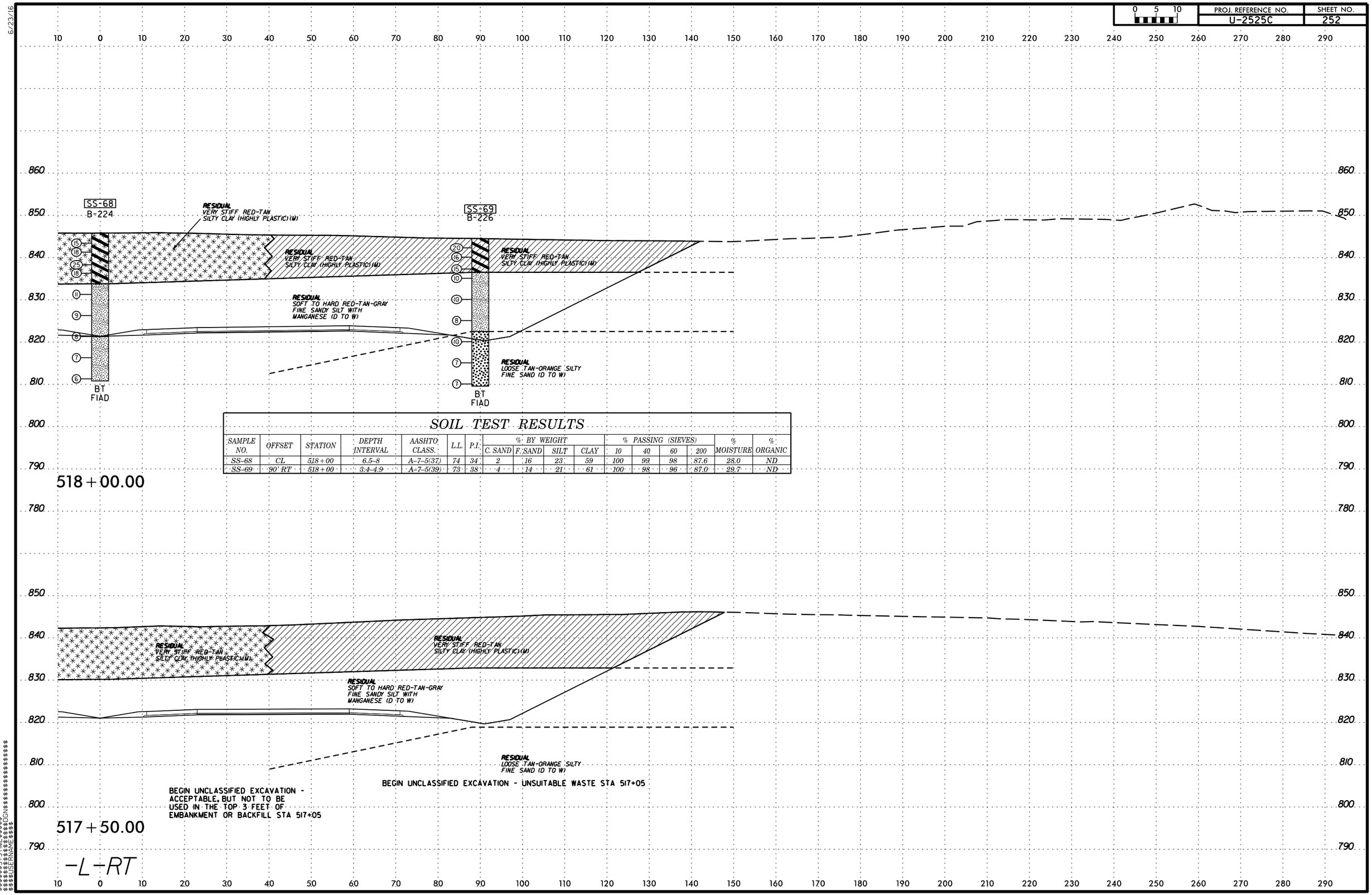
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	252



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-68	CL	518+00	6.5-8	A-7-5(37)	74	34	2	16	23	59	100	99	98	87.6	28.0	ND
SS-69	90' RT	518+00	3.4-4.9	A-7-5(39)	73	38	4	14	21	61	100	98	96	87.0	29.7	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	253

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860
850
840
830
820

RESIDUAL
VERY STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO STIFF RED-TAN
FINE SANDY AND CLAYEY SILT (M TO W)

RESIDUAL
LOOSE TAN-ORANGE SILTY
FINE SAND (D TO W)

519+00.00

860
850
840
830
820
810

RESIDUAL
VERY STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY STIFF RED-TAN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO STIFF RED-TAN
FINE SANDY AND CLAYEY SILT (M TO W)

RESIDUAL
LOOSE TAN-ORANGE SILTY
FINE SAND (D TO W)

518+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	254

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810

SS-70
B-229

(9) (11) (9) (9) (10) (7) (7) (7) (6)

BT
FIAD

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN CLAYEY SILT (M TO D)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT WITH MANGANESE (M TO D)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-70	90' RT	520+00	23.9-25.4	A-4(1)	37	5	31	31	30	8	100	76	69	47.2	26.6	ND

520+00.00

860 850 840 830 820 810

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 519+75

RESIDUAL
VERY STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO STIFF RED-TAN FINE SANDY AND CLAYEY SILT (M TO W)

RESIDUAL
LOOSE TAN-ORANGE SILTY FINE SAND (D TO W)

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 519+25

519+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	255

525+50.00

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

525+00.00

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 524+90

524+50.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

RESIDUAL
STIFF RED-TAN FINE
SANDY SILTY CLAY (M)

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	256

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

527+00.00

850 840 830 820 810

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

BEGIN UNDERCUT AT STA 526+25

526+50.00

850 840 830 820 810

SS-73
B-236

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M TO W)

4 15 12 12 11 7 9

BT
DRY

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

526+00.00

850 840 830 820 810 800

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-73	CL	526+00	3.5-5	A-7-5(26)	62	28	3	26	24	47	100	99	97	79.9	25.8	ND

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	257

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800

END UNDERCUT AT STA 528+25

B-237

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

I
II
10
12
BT
DRY

528+00.00

850 840 830 820 810

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 527+75

RESIDUAL
SOFT TO STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN
FINE SANDY SILT (M TO W)

527+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	258

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790
780
770

RESIDUAL
MEDIUM STIFF TO STIFF RED-TAN FINE SANDY SILT (M TO W)

529+00.00

RESIDUAL
SOFT TO MEDIUM STIFF RED-TAN SILTY CLAY (M TO W)

RESIDUAL
SOFT RED-TAN FINE SANDY SILT (M)

RESIDUAL
MEDIUM DENSE BROWN-GRAY SILTY FINE TO COARSE SAND (M)

RESIDUAL
STIFF ORANGE-BROWN SILTY CLAY (M)

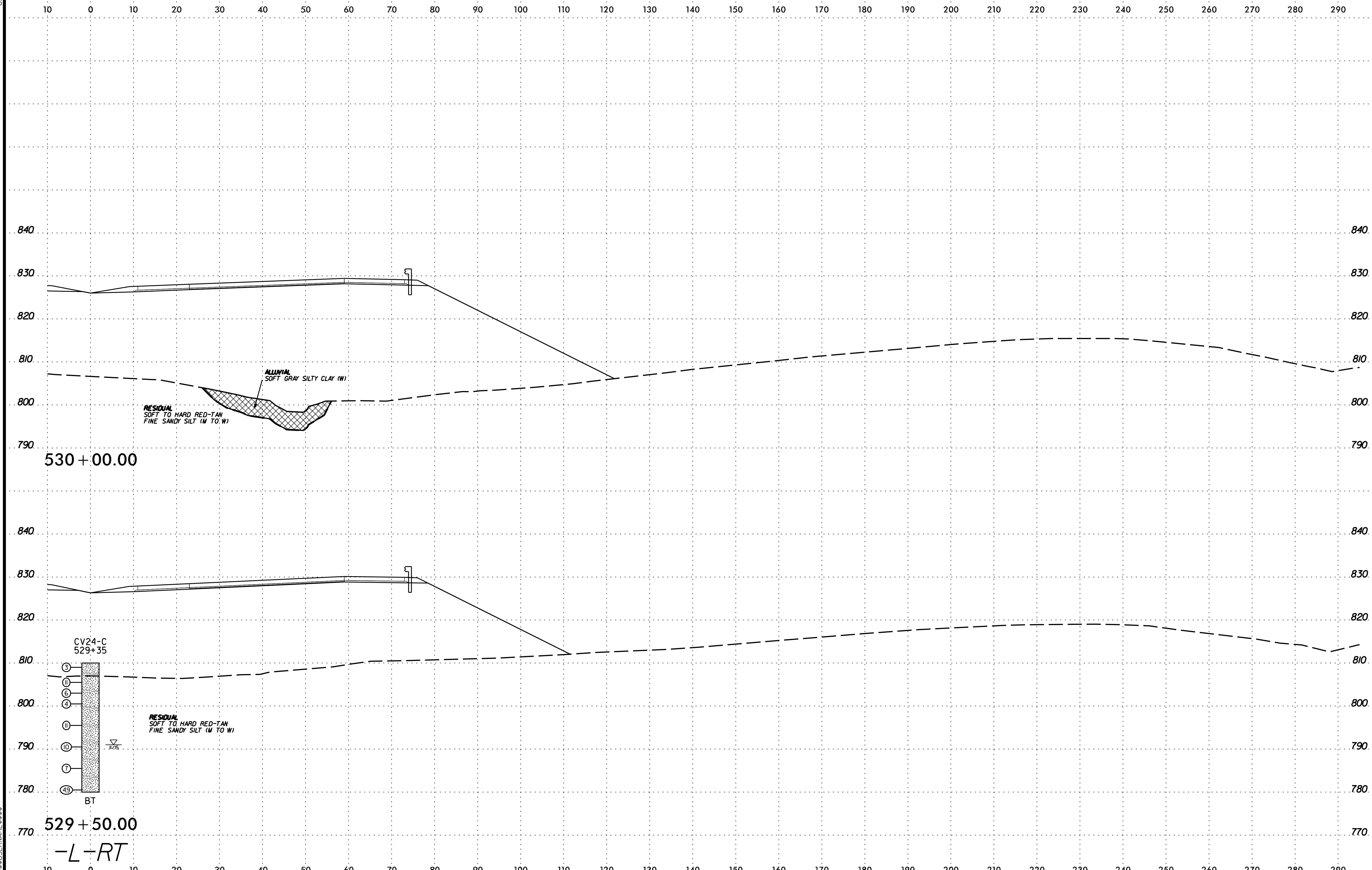
RESIDUAL
VERY STIFF ORANGE-BROWN FINE SANDY SILT (M)

528+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	259



6/23/16

$$$$$$SYSTIME$$$$ $$$$$$$$DGN$$$$$$$$$$$$$$$$$$ $$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	260

END UNDERCUT STA 531+05

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

ALLUVIAL
SOFT BROWN CLAYEY SILT (W)

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

531+00.00

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

ALLUVIAL
SOFT BROWN CLAYEY SILT (W)

CV25-R
530+70

3
18
18
14
27
52
100/0.5
100/0.3

B.T

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

RESIDUAL
STIFF TO HARD BROWN
FINE SANDY SILT (M TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

530+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	261

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800 790

RESIDUAL
SOFT TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN FINE SANDY SILT (M TO W)

532+00.00

B-238
531+35

2 7 13 11
BT
DRY

RESIDUAL
SOFT TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN FINE SANDY SILT (M TO W)

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 531+25

531+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	262

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

533+00.00

END UNDERCUT AT STA 532+75

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

532+50.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	263

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

534+00.00

860 850 840 830 820 810 800 790

SS-74
B-239
533+35

RESIDUAL
SOFT TO VERY STIFF RED-BROWN
SILTY CLAY (HIGHLY PLASTIC) (M)

4 20 12 12 8 7 5

BT
FIAD

RESIDUAL
MEDIUM STIFF TO STIFF BROWN
FINE SANDY SILT (M TO W)

533+50.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-74	CL	533+35	3.5-5	A-7-5(43)	78	33	0	5	24	71	100	100	100	97.2	33.1	ND

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	264

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 538+75

RESIDUAL
MEDIUM STIFF TO STIFF BROWN FINE SANDY SILT (M TO W)

538+50.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN FINE SANDY SILT (M TO W)

535+00.00

860 850 840 830 820 810

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 534+58

RESIDUAL
SOFT TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF BROWN FINE SANDY SILT (M TO W)

534+50.00

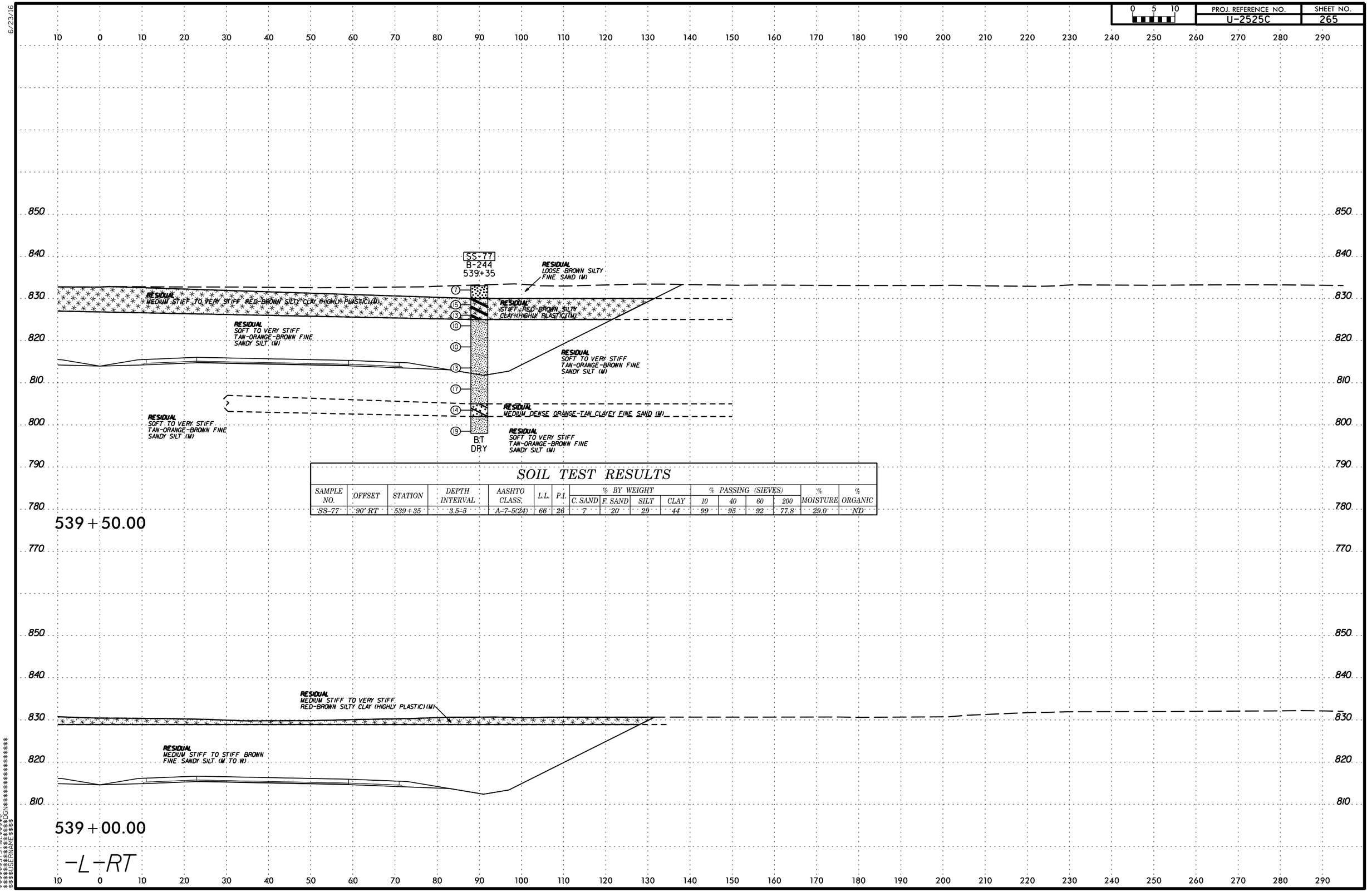
-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	265



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-77	90' RT	539+35	3.5-5	A-7-5(24)	66	26	7	20	29	44	99	95	92	77.8	29.0	ND

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	266

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840
830
820
810
800
790

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
MEDIUM DENSE ORANGE-TAN CLAYEY FINE SAND (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

540+50.00

850
840
830
820
810
800
790

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
LOOSE BROWN SILTY
FINE SAND (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
MEDIUM DENSE ORANGE-TAN CLAYEY FINE SAND (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

540+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$$SYSTIME$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	267

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

850 840 830 820 810 800 790 780 770

SS-80
B-245
541+35

(8) (15) (11) (9) (10) (10) (11) (10) (14) (17)

BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

RESIDUAL
STIFF RED-BROWN
SILTY CLAY (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

SS-81
B-247
541+35

(7) (20) (15) (14) (12) (10) (14) (12) (12) (12) (12)

BT
DRY

RESIDUAL
MEDIUM STIFF TO
VERY STIFF RED-BROWN
SILTY CLAY (M)

RESIDUAL
STIFF RED-TAN CLAYEY SILT (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-80	CL	541+35	3.5-5.0	A-7-5(25)	63	25	2	22	35	41	100	100	98	83.3	29.0	ND
SS-81	90' RT	541+35	28.5-30.0	A-5(13)	50	10	1	30	43	26	100	100	99	87.0	33.7	ND

541+50.00

850 840 830 820 810 800 790 780 770

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
TAN-ORANGE-BROWN FINE
SANDY SILT (M)

RESIDUAL
STIFF RED-BROWN SILTY CLAY (M)

541+00.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	268

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

543+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

542+50.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT (M)

542+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	269

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

860 850 840 830 820 810 800

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

544+00.00

MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF ORANGE-BROWN
SANDY CLAY (M)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN
SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
MEDIUM DENSE
TAN SILTY SAND (D)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE
TAN SILTY SAND (D)

SS-82
B-250
543+35

4 9 10 16 19 20 22 31 32 38 76

BT
DRY

543+50.00

-L-RT

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-82	90' RT	543+35	0.0-1.5	A-6(12)	38	17	8	25	29	38	99	94	91	74.3	27.6	ND

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	270

B-25I
545+35

3 13 22 20 19 20 29

BT
DRY

RESIDUAL
SOFT ORANGE-BROWN FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY SILT (D TO M)

545+50.00

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT ORANGE-BROWN FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY SILT (D TO M)

545+00.00

Ⓐ **RESIDUAL**
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
SOFT ORANGE-BROWN FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY SILT (D TO M)

544+50.00

-L-RT

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

840 830 820 810 800 790 850

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	271

10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

830 820 810 800 790 780 770

SS-83
B-253
547+15
5
10
19
28
26
BT
DRY

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

BEGIN UNDERCUT AT STA 546+75

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-83	CL	547+15	3.1-4.6	A-7-5(33)	72	27	2	12	29	57	100	99	98	90.1	51.4	ND

547+00.00

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO
VERY STIFF RED-BROWN
SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

546+50.00

RESIDUAL
SOFT ORANGE-BROWN
FINE SANDY SILT (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO M)

546+00.00

-L-RT

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	272

END UNDERCUT AT STA 548+15

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 548+15

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

548+15.23

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

548+00.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN SILTY CLAY
(HIGHLY PLASTIC) (M)

RESIDUAL
SOFT TO VERY STIFF
RED-TAN FINE SANDY SILT
(D TO W)

547+50.00

-L-RT

$$$$$$$SYSTIME$$$$$$
$$$$$$$

PROJECT REFERENCE NO.	SHEET NO.
U–2525C	273A

REFERENCE: U–2525C

PROJECT: 34821

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SECTION 3
CROSS SECTIONS
–Y– LINES

CROSS SECTIONS

LINE	***STATION***	***SHEETS***
-Y4LPA-	14+50 - 17+50	273 - 275
-Y4LPC-	10+00 - 18+22.17	276 - 283
-Y4RPA-	19+45 - 25+94.29	284 - 289
-Y6LPA-	11+44.92 - 19+35.43	290 - 297
-Y6LPC-	11+16.78 - 19+00	298 - 304
-Y6RPA-	16+09.49 - 28+22.65	305 - 315
-Y13RPA-	18+00 - 22+50	316 - 319
-Y13RPD-	14+88 - 18+88	320 - 322
-Y13RPD-	21+38 - 32+88	323 - 331
-Y4DET-	11+38.51 - 22+13.42	332 - 343
-Y5DET-	10+89.44 - 18+24.96	344 - 351

DocuSigned by:
Stewart S. Laney, PE
75BB4AB1AB3B4CB...

5/30/2017

S&ME

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	273

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860 850 840 830 820 810

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

SP 476

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE AND YELLOW FINE SANDY SILT WITH LITTLE MICA AND MANGANESE (M TO D)

RESIDUAL
MEDIUM DENSE TO VERY DENSE OLIVE GRAY SILTY FINE SAND (M)

15+00.00

870 860 850 840 830 820 810 800

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 14+95

SP 475

RESIDUAL
SOFT TO VERY STIFF RED SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE AND YELLOW FINE SANDY SILT WITH LITTLE MICA AND MANGANESE (M TO D)

RESIDUAL
MEDIUM DENSE TO VERY DENSE OLIVE GRAY SILTY FINE SAND (M)

14+50.00

-Y4LPA-

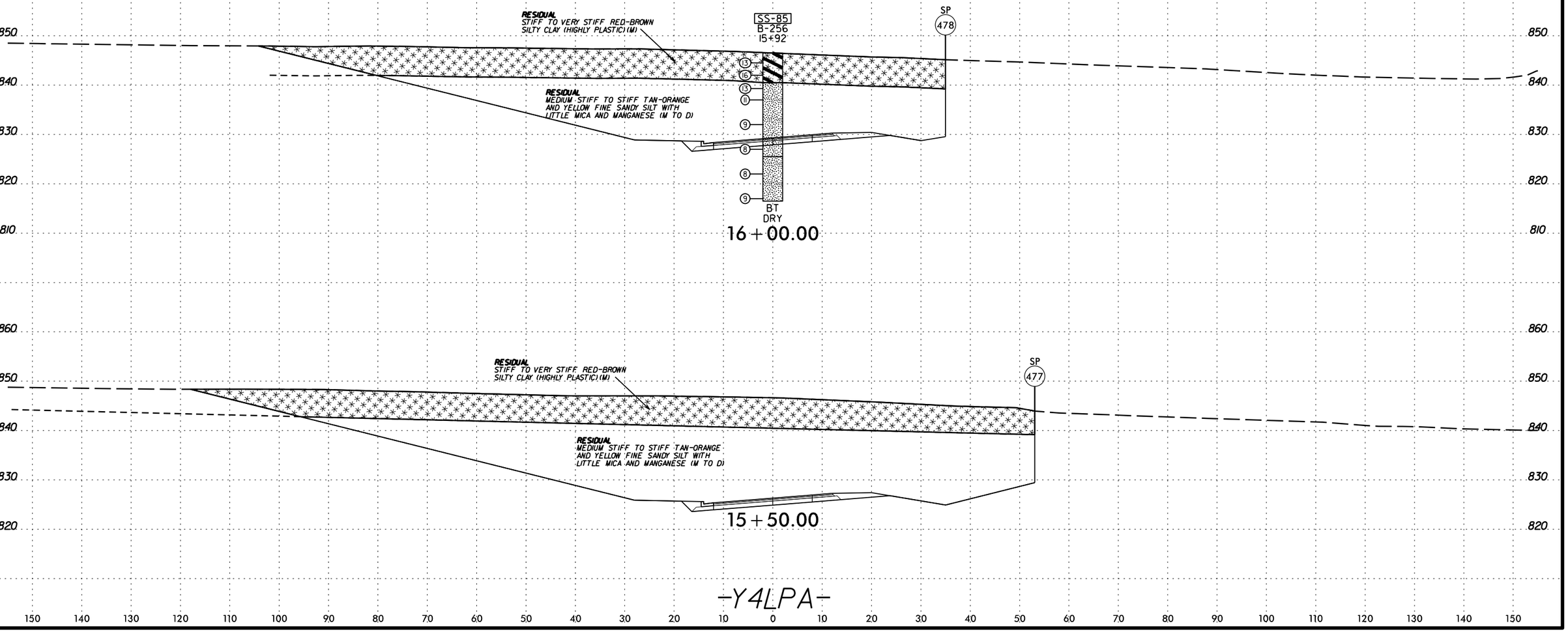
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	274

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-85	CL	15+92	3.5-5	A-7-5(42)	79	31	0	5	29	66	100	100	100	97.7	36.9	ND



-Y4LPA-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	275

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830

SP 481

RESIDUAL
STIFF RED-BROWN SILTY CLAY (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE AND YELLOW FINE SANDY SILT WITH LITTLE MICA AND MANGANESE (M TO D)

17+50.00

870
860
850
840
830
820

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 17+05

SP 480

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE AND YELLOW FINE SANDY SILT WITH LITTLE MICA AND MANGANESE (M TO D)

17+00.00

860
850
840
830
820

SP 479

RESIDUAL
STIFF TO VERY STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE AND YELLOW FINE SANDY SILT WITH LITTLE MICA AND MANGANESE (M TO D)

16+50.00

-Y4LPA-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	276

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810
800
790

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

10+26.52

840
830
820
810
800
790

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 10+00

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

BEGIN UNDERCUT STA 10+00

10+00.00

840
830
820
810
800
790

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	277

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

11+75.87

830 820 810 800 790

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

11+25.65

830 820 810 800 790 780

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

10+76.45

780

-Y4LPC-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	278

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

13+09.29

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

12+67.10

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

12+20.28

-Y4LPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	279

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790

SP 432

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

14+00.00

SP 422

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

13+80.00

SP 423

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

13+50.00

-Y4LPC-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	280

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810
800

SP 434

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

15+00.00

850
840
830
820
810
800
790

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-89	CL	14+50	3.5-5	A-7-5(31)	66	36	13	15	20	52	100	90	87	77.9	37.1	ND

SS-89
B-267
14+50

SP 433

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

3 12 8 8 6 8

BT
DRY

14+50.00

-Y4LPC-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	281

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

850 840 830 820 810 800

SP 437

B-268
16+50

(5) (12) (5) (8) (6) (5)

12/15

RESIDUAL
MEDIUM STIFF TO STIFF
RED-BROWN AND RED-ORANGE
SILTY CLAY TRACE ROCK
FRAGMENTS TRACE MANGANESE
(HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-ORANGE
CLAYEY SILT (M)

BT
FIAD

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE
FINE SANDY SILT TRACE MANGANESE
TRACE MICA (M)

16+50.00

SP 436

RESIDUAL
SOFT TO STIFF RED-BROWN
AND RED-ORANGE SILTY CLAY
TRACE ROCK FRAGMENTS TRACE
MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE
FINE SANDY SILT TRACE MANGANESE
TRACE MICA (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE
FINE SANDY SILT (M)

16+00.00

SP 435

RESIDUAL
SOFT TO STIFF RED-BROWN
AND RED-ORANGE SILTY CLAY
TRACE ROCK FRAGMENTS TRACE
MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE
FINE SANDY SILT TRACE MANGANESE
TRACE MICA (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE
FINE SANDY SILT (M)

15+50.00

790

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$$$$$$$$$$$$$$$USERNAME$$$$

-Y4LPC-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	282

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

850 840 830 820 810

SP 440

RESIDUAL
SOFT TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE CLAYEY SILT (M)

18+00.00

SP 439

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS TRACE MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-ORANGE CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

17+50.00

SP 438

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN AND RED-ORANGE SILTY CLAY TRACE ROCK FRAGMENTS TRACE MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-ORANGE CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF TAN-ORANGE FINE SANDY SILT TRACE MANGANESE TRACE MICA (M)

17+00.00

-Y4LPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

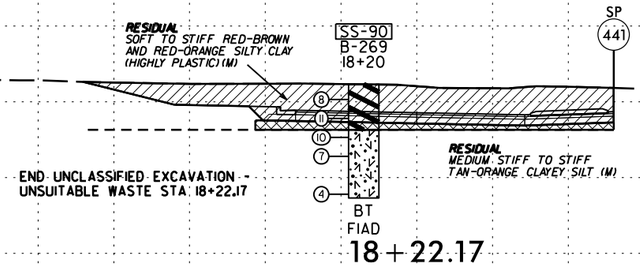
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	283

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-90	7' LT	18+20	3.5-5	A-7-5(51)	87	41	1	6	28	65	100	100	99	95.6	43.0	ND

END UNDERCUT STA 18+22.17



870 860 850 840 830 820 810

-Y4LPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	284

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830
820
810
800

SP
454

RESIDUAL
MEDIUM STIFF ORANGE-BROWN
TO MAROON SILTY CLAY (M)

RESIDUAL VERY STIFF ORANGE-RED CLAYEY SILT (M)

RESIDUAL
MEDIUM STIFF TO STIFF ORANGE-BROWN
FINE SANDY SILT WITH MANGANESE AND
QUARTZ SEAMS (D TO M)

BEGIN UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 19+50

19+95.00

SP
455

RESIDUAL
STIFF ORANGE-BROWN
TO MAROON SILTY CLAY (M)

RESIDUAL
STIFF ORANGE-BROWN
FINE SANDY CLAY AND
SOME MANGANESE (D TO M)

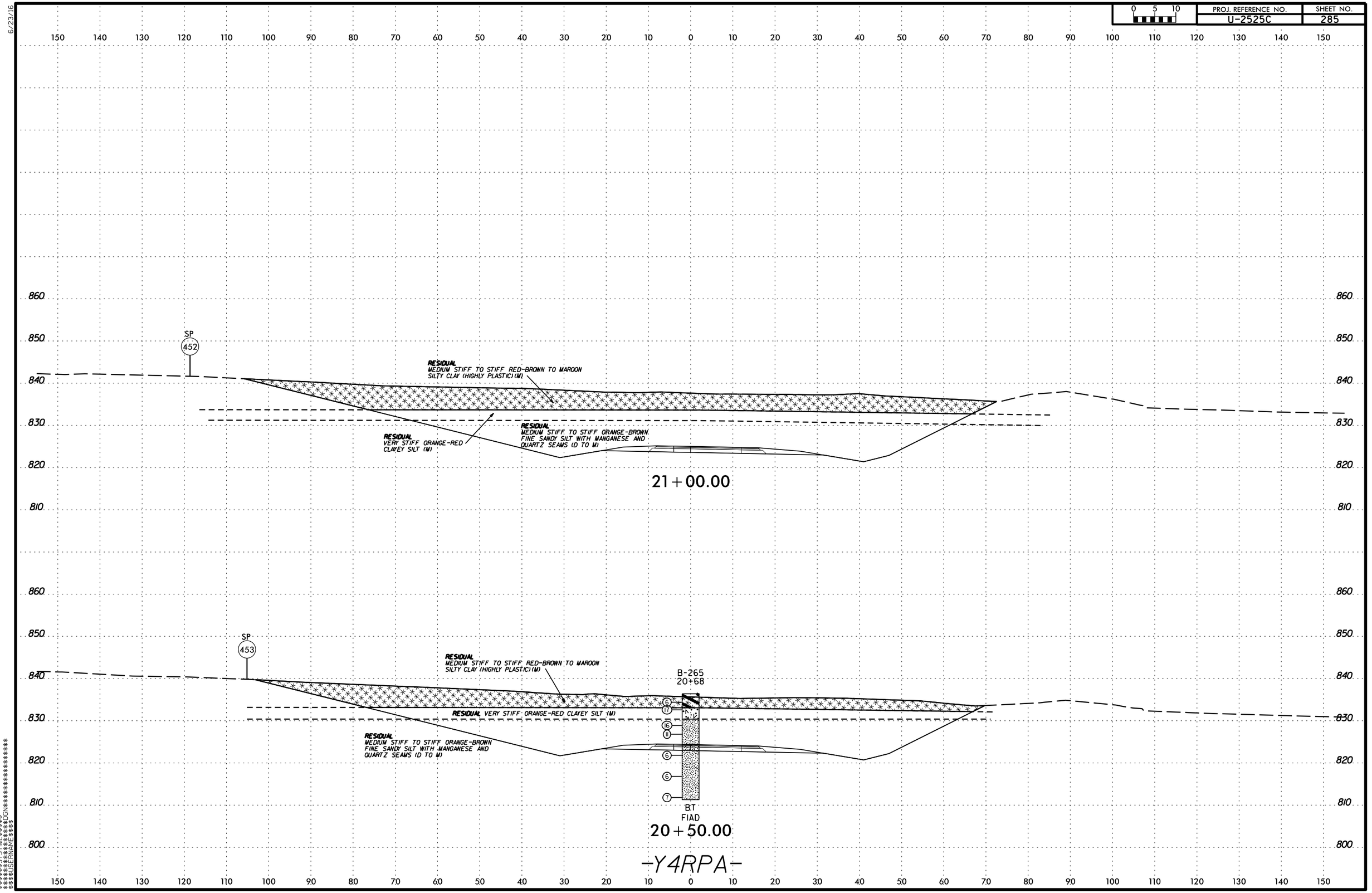
19+45.00

-Y4RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	285



-Y4RPA-

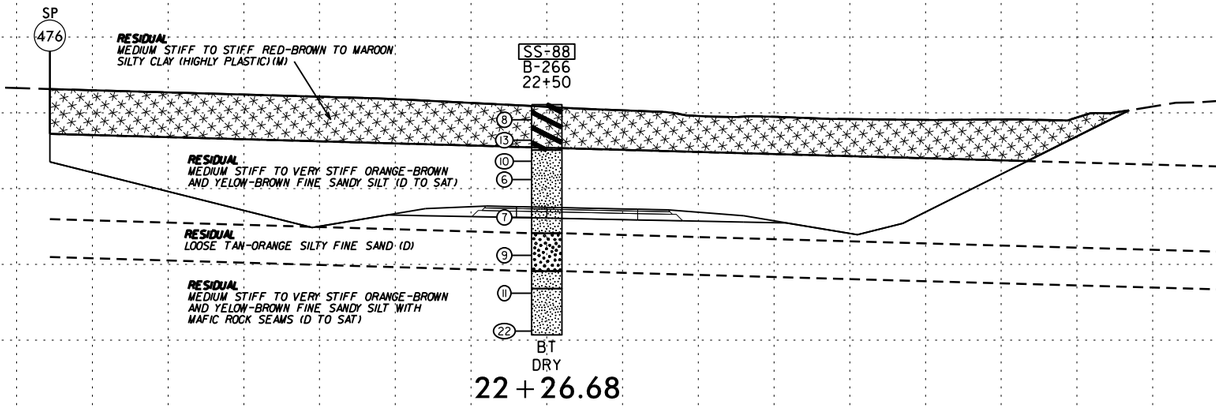
$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

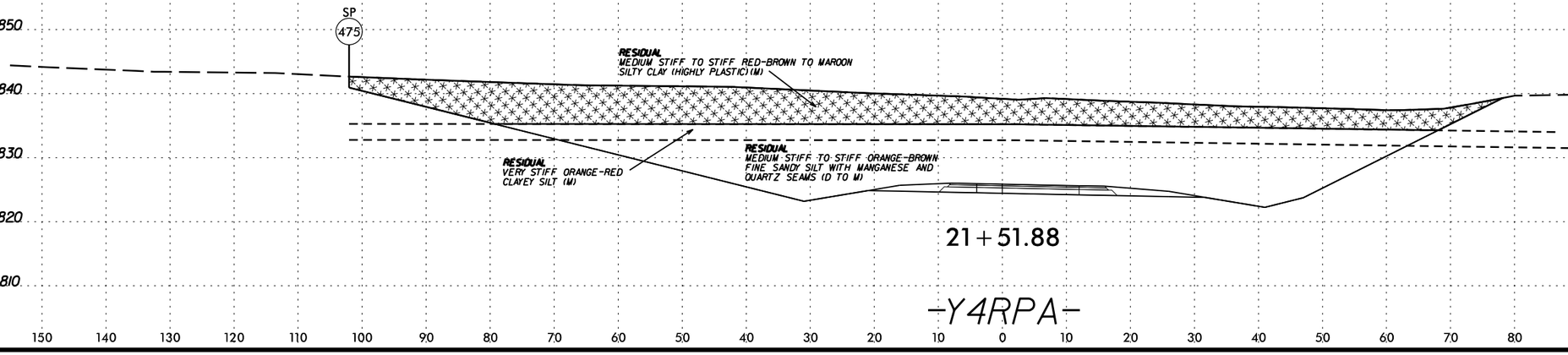
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	286

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-88	CL	22+50	3.7-5.2	A-7-5(36)	75	29	2	10	35	53	100	99	98	92.7	41.6	ND



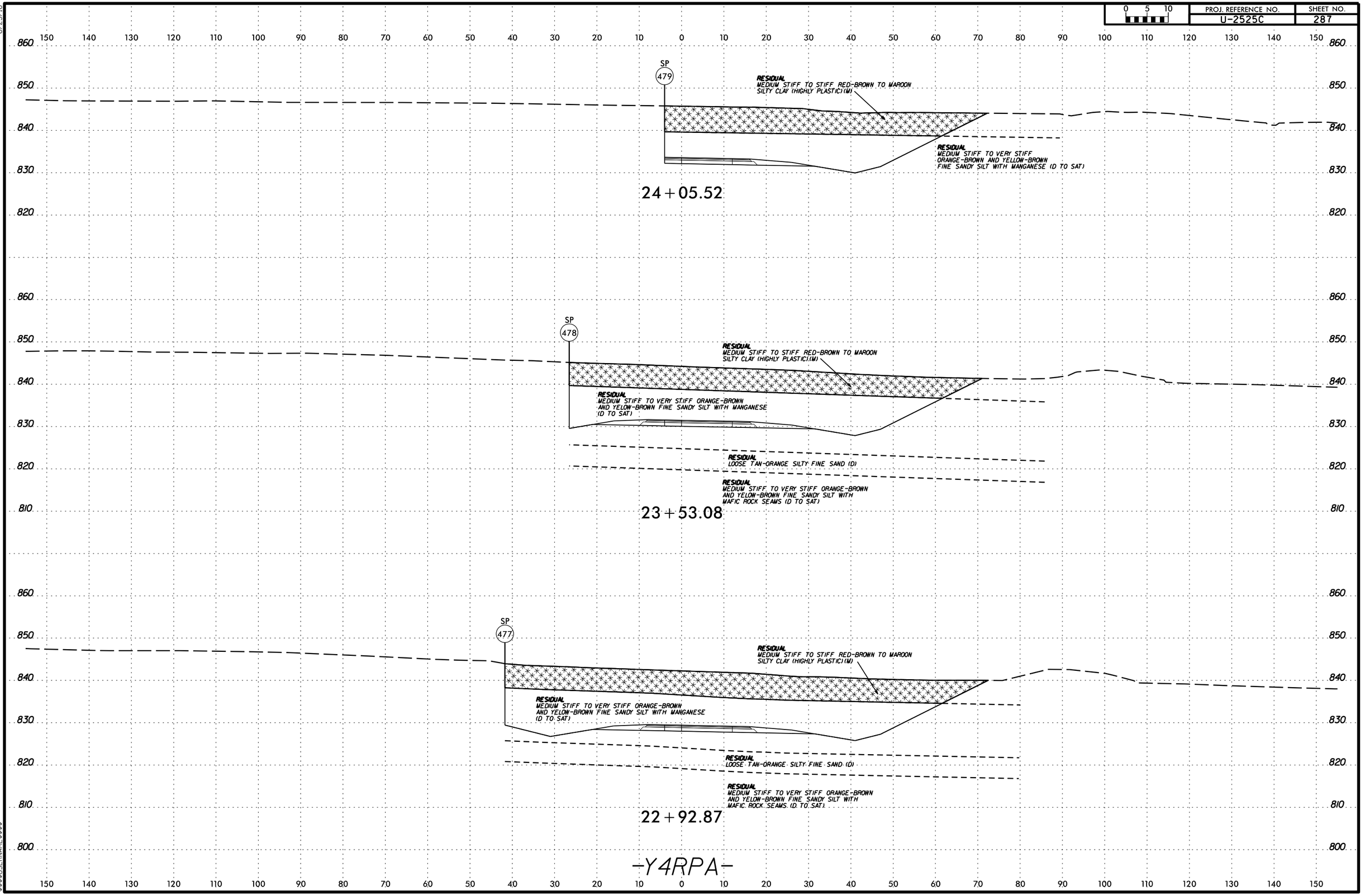


-Y4RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	287



-Y4RPA-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	288

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830

SP
482

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN TO MAROON
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
ORANGE-BROWN AND YELLOW-BROWN
FINE SANDY SILT WITH MANGANESE (D TO SAT)

25+64.04

SP
481

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN TO MAROON
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
ORANGE-BROWN AND YELLOW-BROWN
FINE SANDY SILT WITH MANGANESE (D TO SAT)

25+13.35

SP
480

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN TO MAROON
SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF
ORANGE-BROWN AND YELLOW-BROWN
FINE SANDY SILT WITH MANGANESE (D TO SAT)

24+60.97

-Y4RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	289

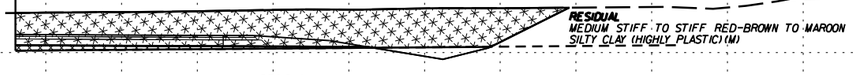
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

870
860
850
840
830

END UNDERCUT AT STA 26+58.29

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 26+50

SP 483



RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN TO MAROON SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF ORANGE-BROWN AND YELLOW-BROWN FINE SANDY SILT WITH MANGANESE (D TO SAT)

25+94.29

BEGIN UNDERCUT AT STA 25+65

-Y4RPA-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	290

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820
810
800
790
780
770

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN, ORANGE-TAN, AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS (D TO W)

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 11+82

11+97.06

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN, ORANGE-TAN, AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS (D TO W)

BEGIN UNDERCUT STA 11+44.92

11+44.92

-Y6LPA-

$$$$USERNAME$$$$
$$$$SYSTIME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	291

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840 830 820 810 800

SP 653

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN, ORANGE-TAN, AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS (D TO W)

13+25.64

830 820 810 800

SP 652

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN, ORANGE-TAN, AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS (D TO W)

12+85.73

790 820 810 800

END UNDERCUT STA 12+36.40

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN, ORANGE-TAN, AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS (D TO W)

12+36.40

790 780 770

-Y6LPA-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

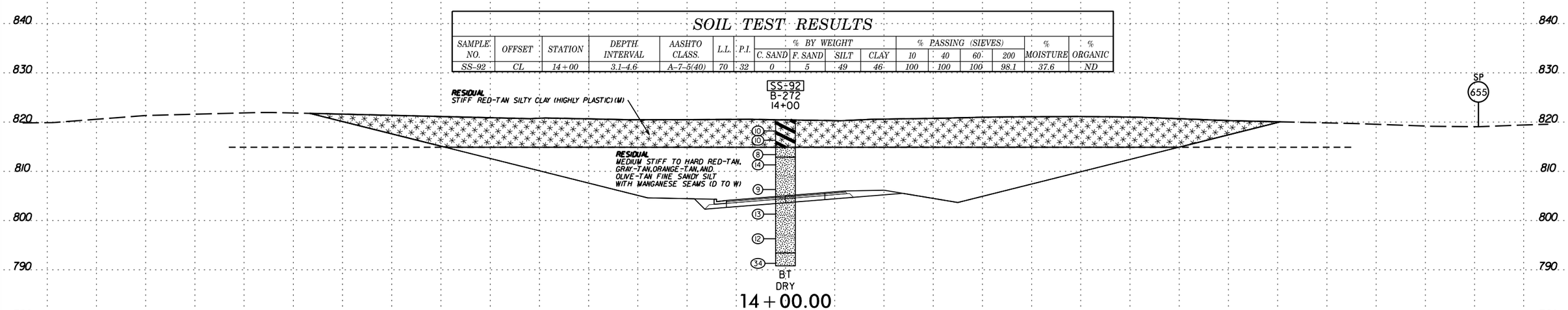
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

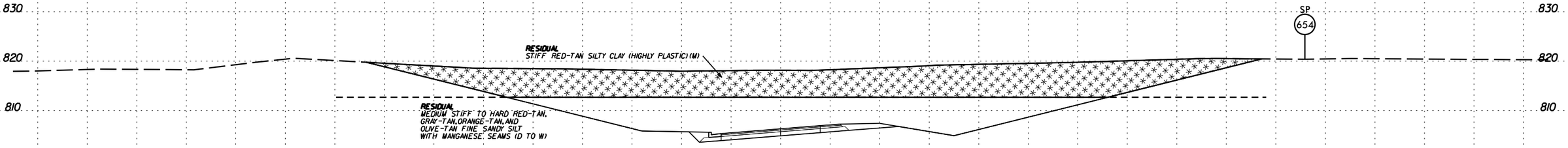
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	292

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-92	CL	14+00	3.1-4.6	A-7-5(40)	70	32	0	5	49	46	100	100	100	98.1	37.6	ND



14+00.00



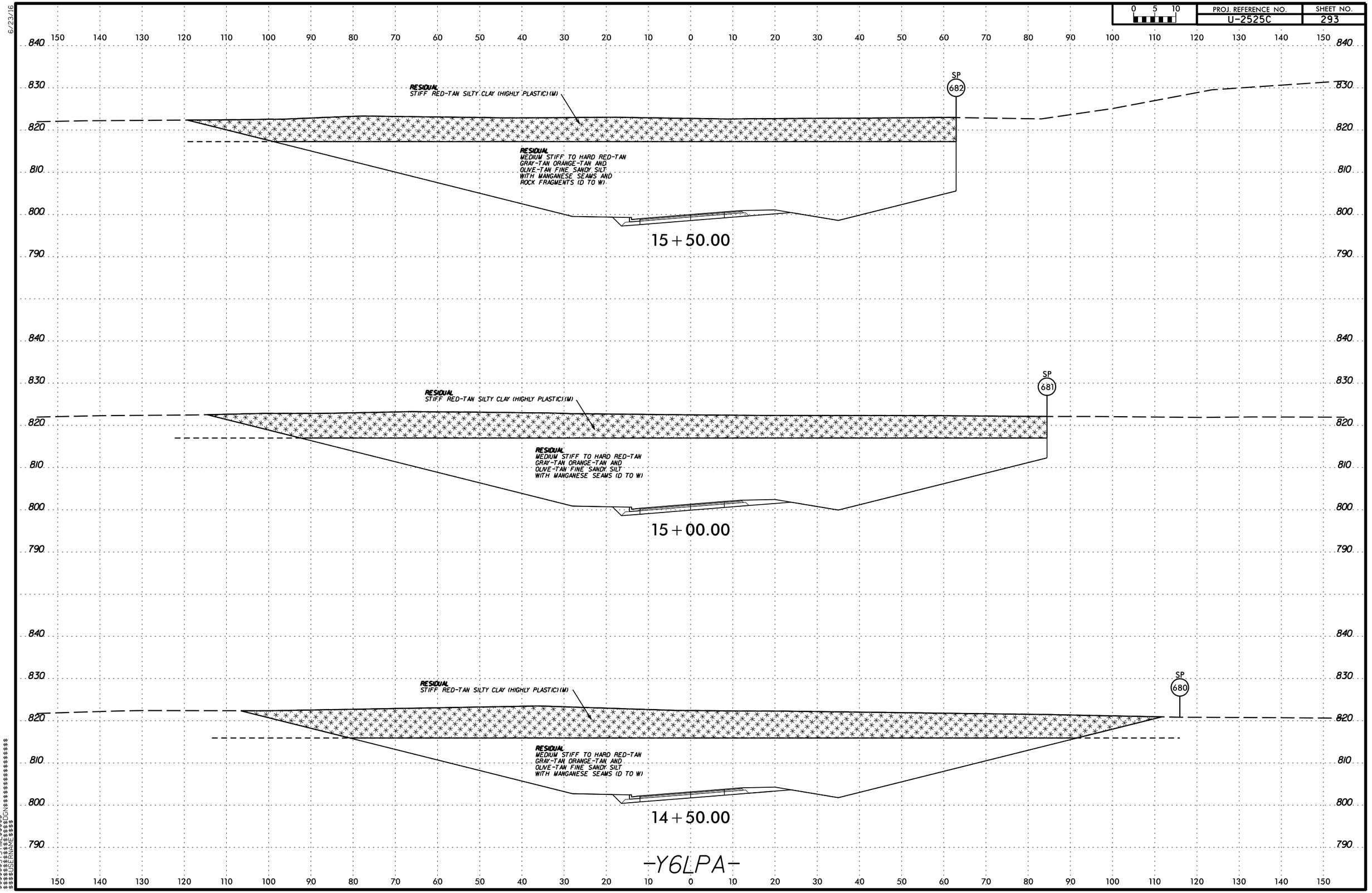
13+60.00

-Y6LPA-

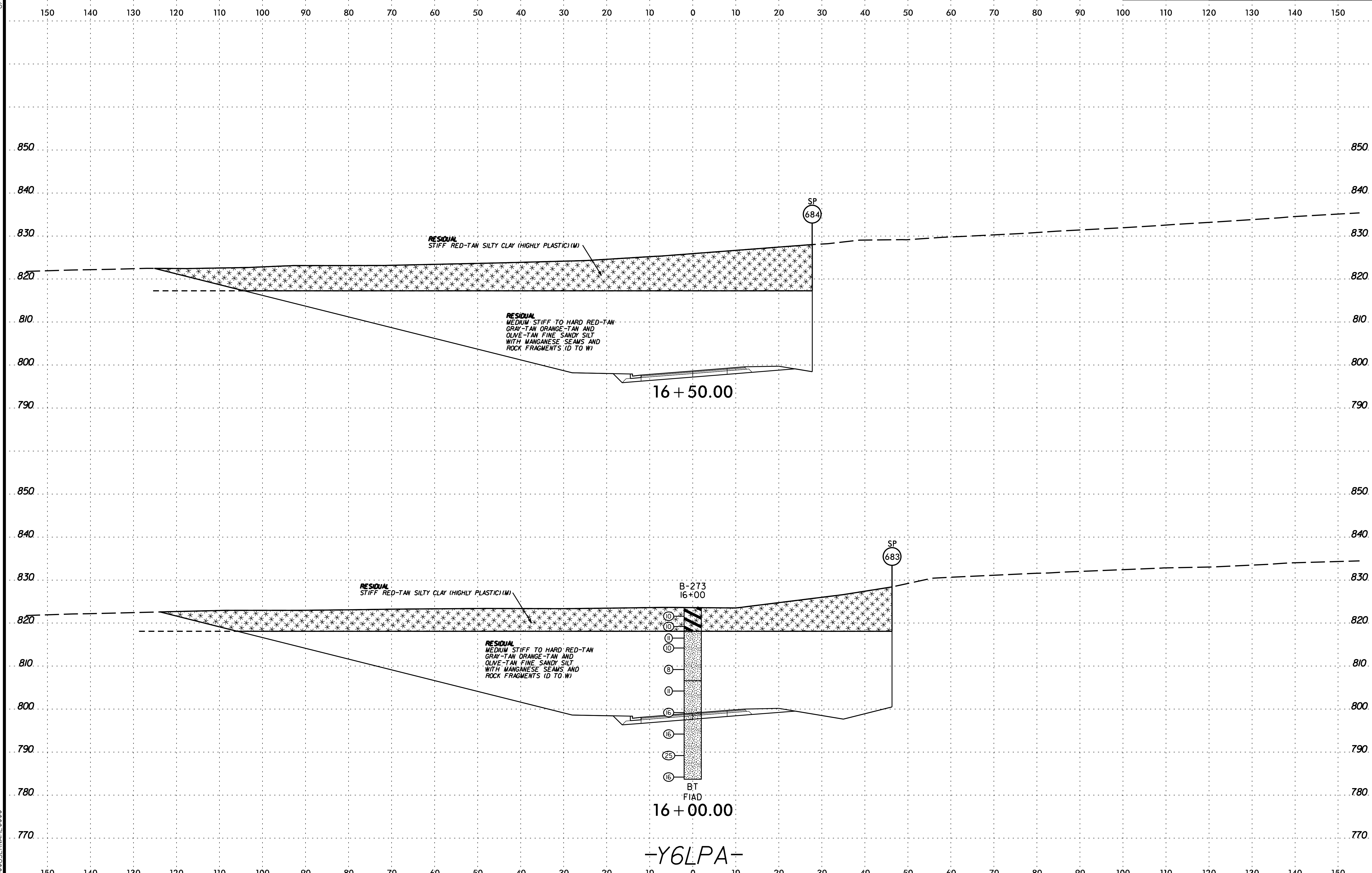
$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	293



$$$$$$$SYSTIME$$$$$$
$$$$$$$



-Y6LPA-

6/23/16

$$$$$SYSTIME$$$$$
$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	295

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810
800
790

SP
686

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS AND ROCK FRAGMENTS (D TO W)

17 + 50.00

SP
685

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT WITH MANGANESE SEAMS AND ROCK FRAGMENTS (D TO W)

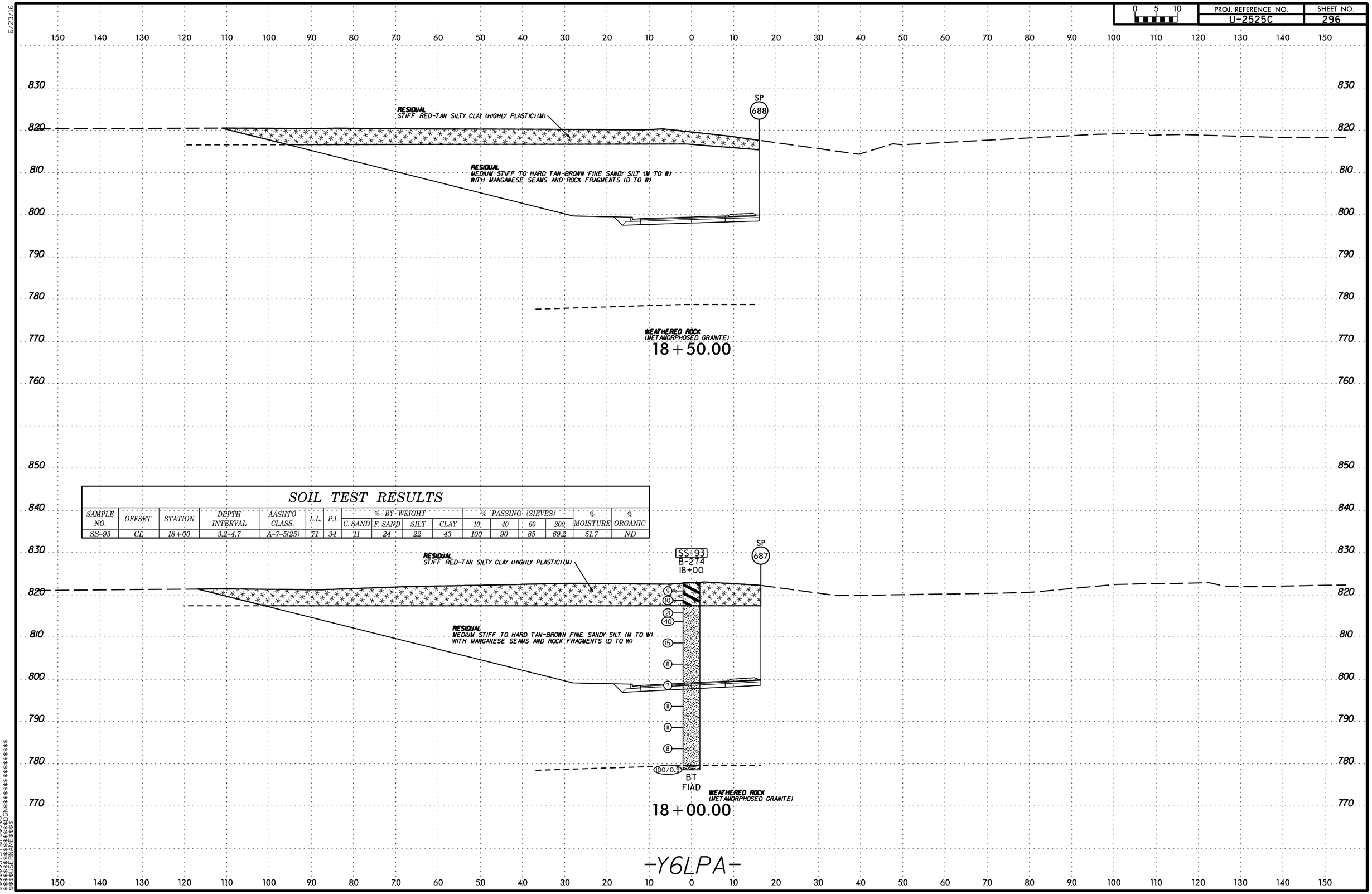
17 + 00.00

-Y6LPA-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	296



SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-93	CL	18+00	3.2-4.7	A-7-5(25)	71	34	11	24	22	43	100	90	85	69.2	51.7	ND

-Y6LPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	297

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810
800
790

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 19+35.43

SP 690

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD TAN-BROWN FINE SANDY SILT (M TO W) WITH MANGANESE SEAMS AND ROCK FRAGMENTS (D TO W)

19+35.43

SP 689

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD TAN-BROWN FINE SANDY SILT (M TO W) WITH MANGANESE SEAMS AND ROCK FRAGMENTS (D TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

19+00.00

-Y6LPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	298

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790 780

END UNDERCUT STA 12+38

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

12+15.80

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

BEGIN UNDERCUT STA 11+52

11+65.99

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 11+40

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

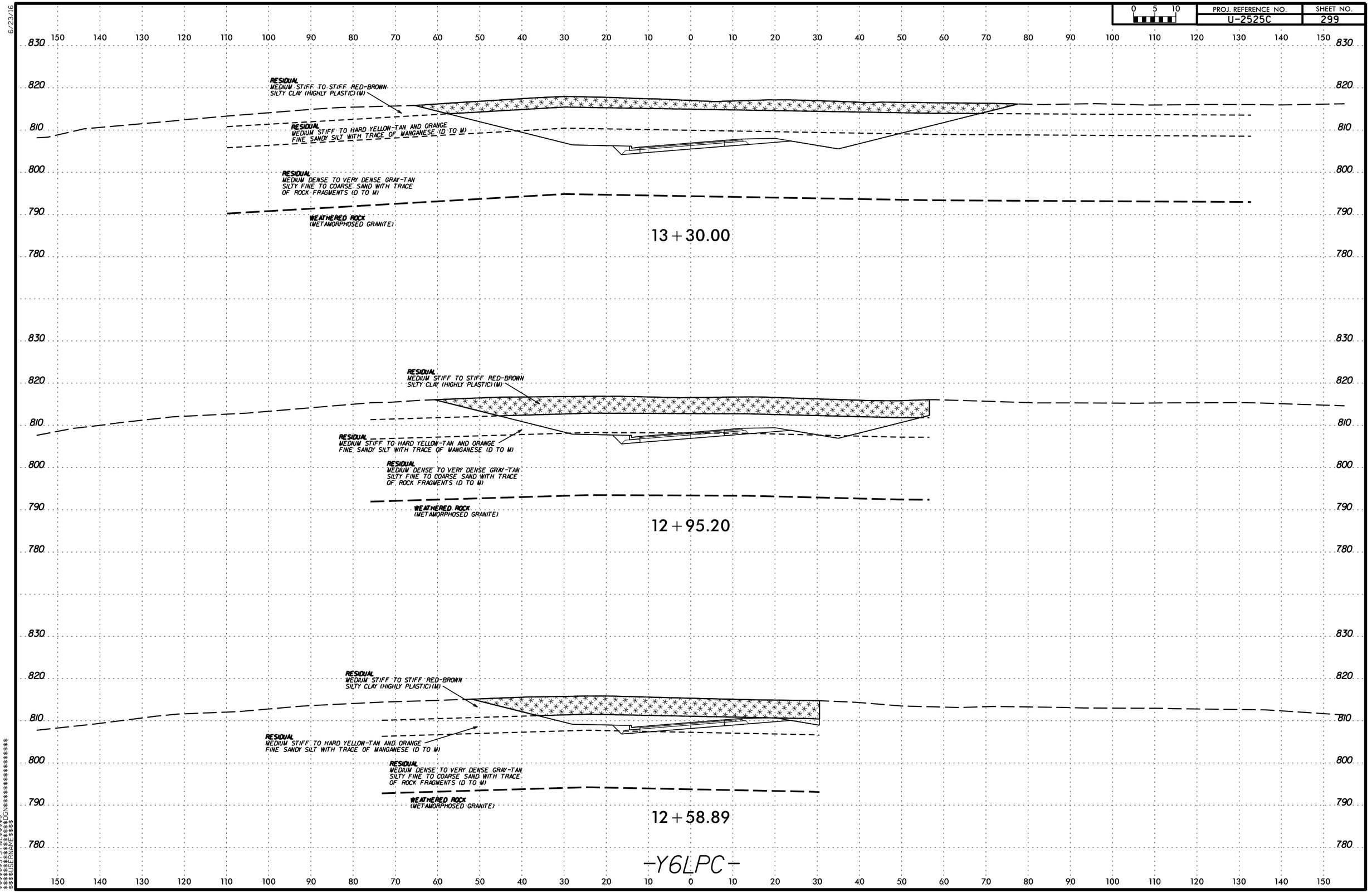
11+16.78

-Y6LPC-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	299



-Y6LPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	300

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840 830 820 810 800 790 780

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 14+45

SP 623

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE ROCK FRAGMENTS (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE MANGANESE (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

14 + 00.00

SS-96
B-278
13+50

6
29
34
31
43
87
100/0.9

BT
DRY

SP 624

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE ROCK FRAGMENTS (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE MANGANESE (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

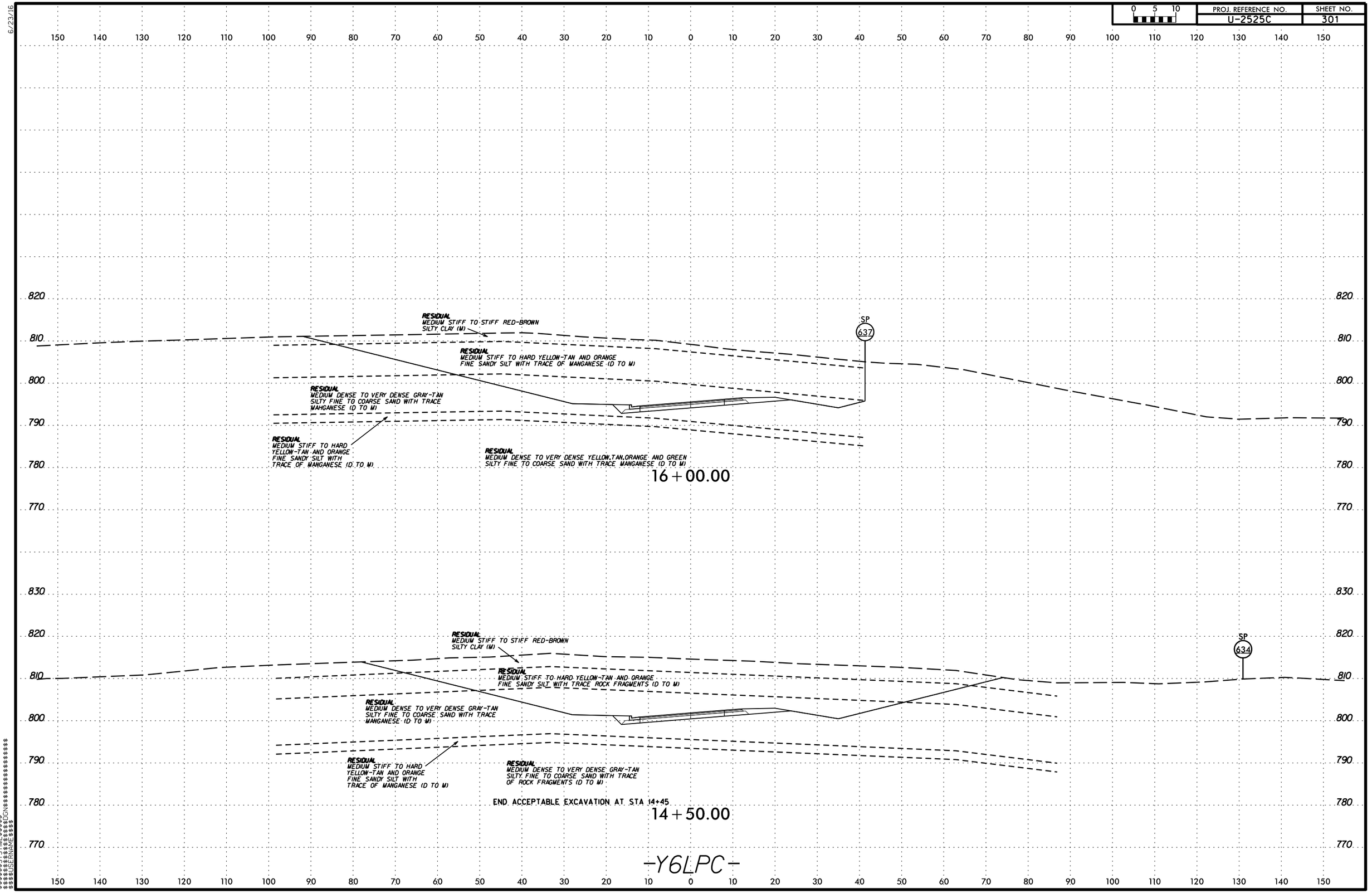
13 + 50.00

-Y6LPC-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	301



-Y6LPC-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
U-2525C	302

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790 780 770 760

SP 639

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

17+00.00

SP 638

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE MANGANESE (D TO M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE YELLOW,TAN,ORANGE AND GREEN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 16+40

16+50.00

-Y6LPC-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	303

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790 780 770

SP 641

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

18+00.00

840 830 820 810 800 790 780 770 760

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-98	3' LT	17+50	1.5-3	A-7-5(66)	97	53	1	4	20	75	100	100	99	97.8	55.4	ND

SP 640

SS-98
B-280
17+50

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

9 12 13 13 17 21 39 32 76 100/0.7

BT
DRY

17+50.00

-Y6LPC-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	304

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820 810 800 790 780 770

SP 643

RESIDUAL
VERY STIFF TO HARD GRAY-BROWN FINE SANDY CLAYEY SILT (D)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

19+00.00

840 830 820 810 800 790 780 770 760

END UNCLASSIFIED EXCAVATION -
UNSUITABLE WASTE STA 18+75

SP 642

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO HARD YELLOW-TAN AND ORANGE FINE SANDY SILT WITH TRACE OF MANGANESE (D TO M)

RESIDUAL
MEDIUM DENSE TO VERY DENSE GRAY-TAN SILTY FINE TO COARSE SAND WITH TRACE OF ROCK FRAGMENTS (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

18+50.00

-Y6LPC-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	305

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820
810
800
790
780
770

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 16+50

BEGIN UNDERCUT STA 16+50

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

16+60.00

820
810
800
790
780
770

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

16+09.49

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y6RPA-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	306

END UNDERCUT STA 18+00

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

18+05.00

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

17+55.00

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

17+05.00

-Y6RPA-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	307

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840 830 820 810 800 790 780

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-94	CL	19+00	6-7.5	A-7-5(35)	65	30	1	14	32	53	100	100	99	93.7	35.6	ND

SP 661

SS-94
B-275
19+00

8 12 14 20 17 100/0.4

BT
DRY

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE. (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M).

WEATHERED ROCK
(METAMORPHOSED GRANITE)

19 + 00.00

SP 662

RESIDUAL
STIFF RED-TAN SILTY CLAY WITH MANGANESE. (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN AND RED-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

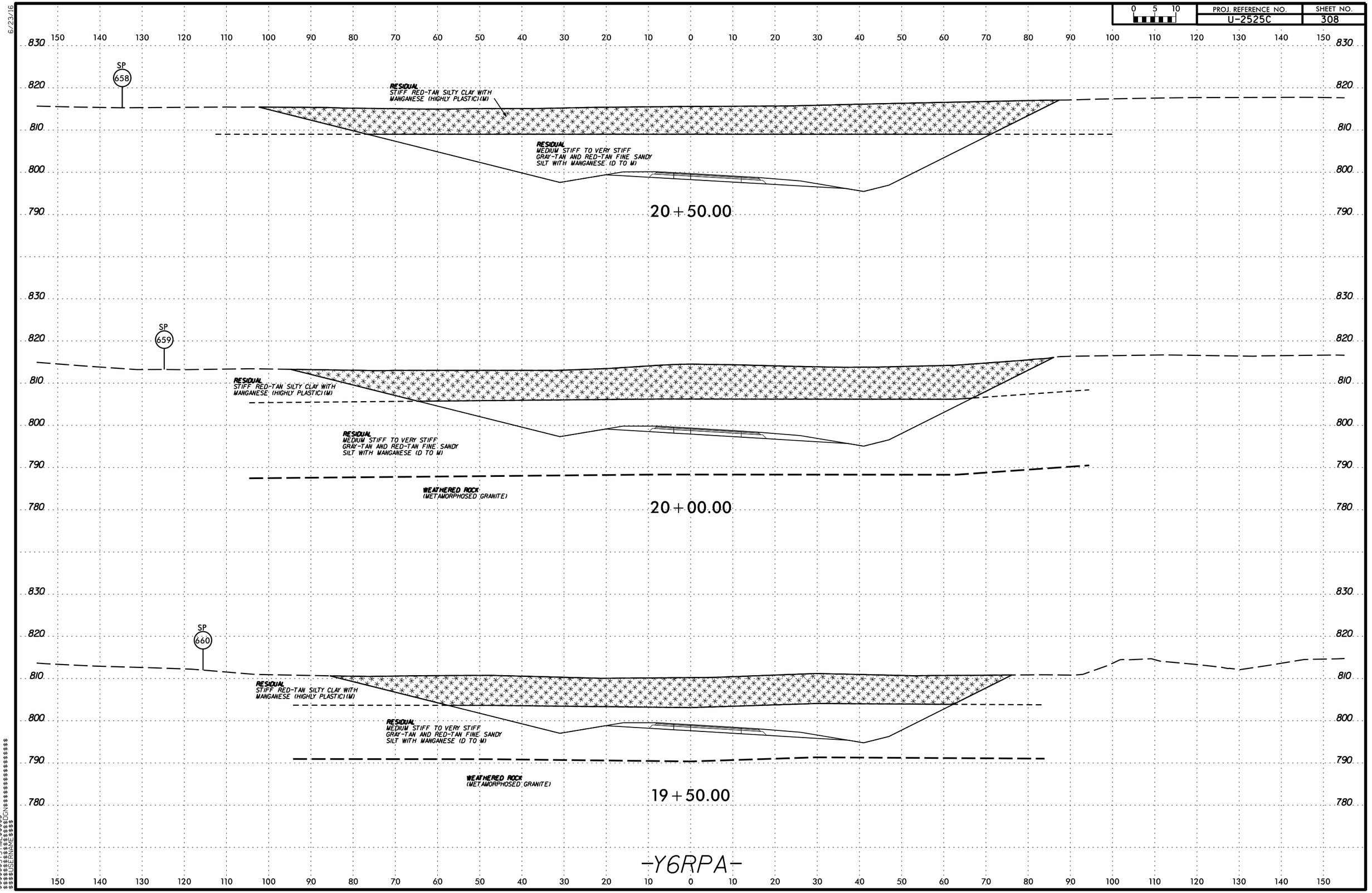
18 + 55.00

-Y6RPA-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

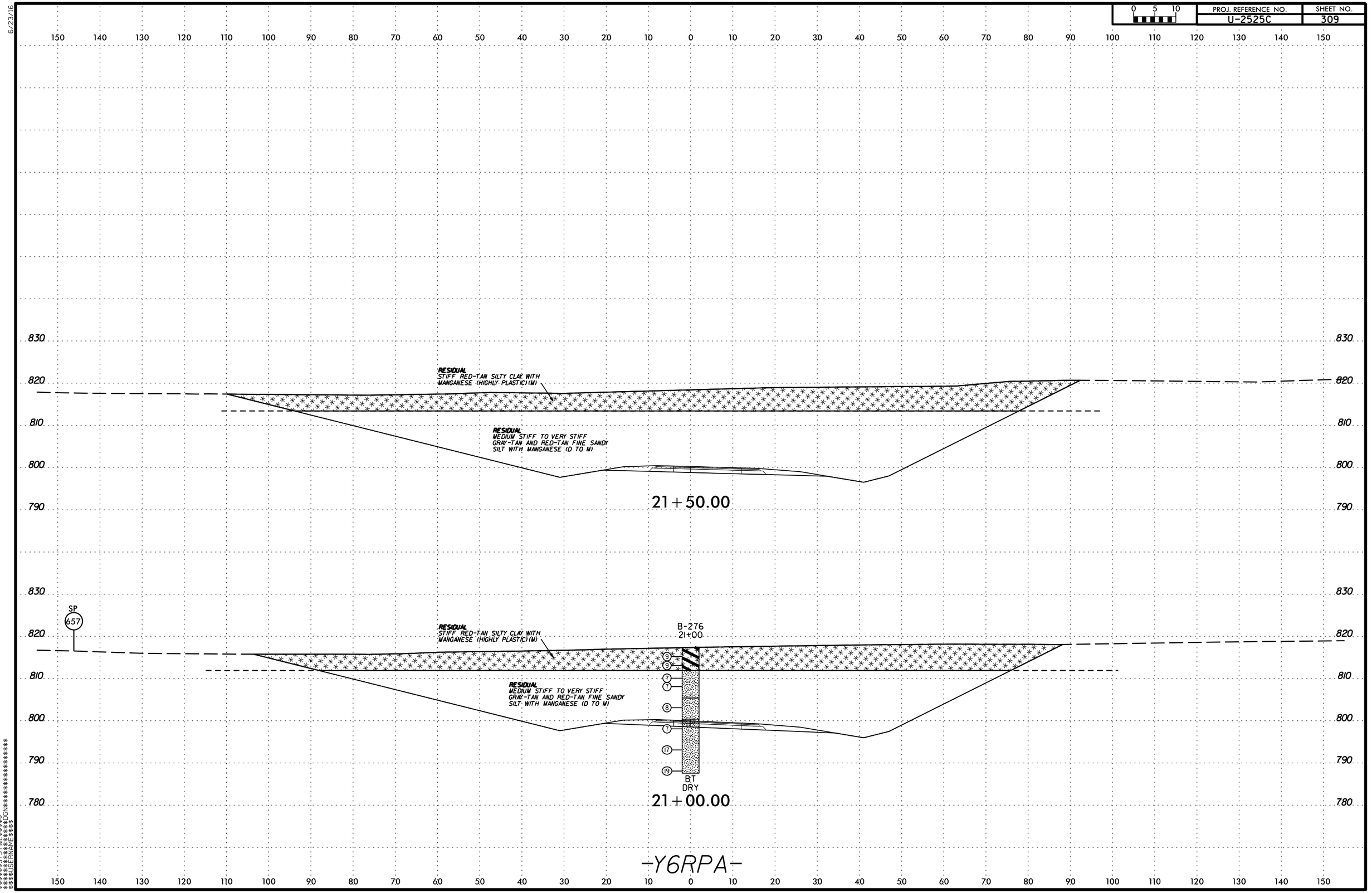
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	308



$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	309



-Y6RPA-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	310

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810
800
790
780
770

SP
680

RESIDUAL
MEDIUM STIFF RED-TAN SILTY
CLAY WITH MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN
CLAYEY SILT WITH MANGANESE (D)

RESIDUAL
MEDIUM STIFF TAN-GRAY
FINE SANDY SILT WITH MANGANESE (W)

RESIDUAL
MEDIUM DENSE GRAY SILTY FINE SAND (M)

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 22+40

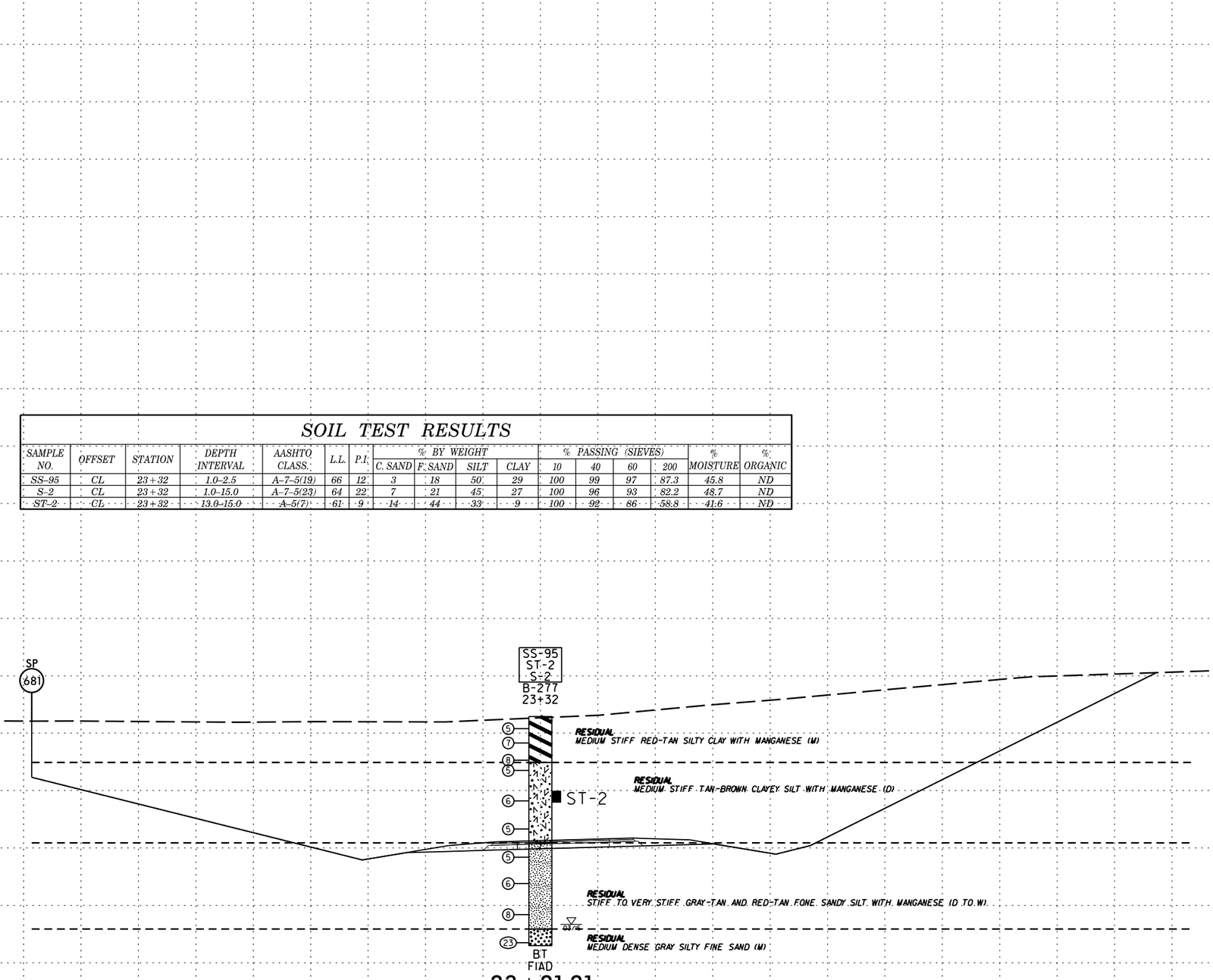
22+50.00

-Y6RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-95	CL	23+32	1.0-2.5	A-7-5(19)	66	12	3	18	50	29	100	99	97	87.3	45.8	ND
S-2	CL	23+32	1.0-15.0	A-7-5(23)	64	22	7	21	45	27	100	96	93	82.2	48.7	ND
ST-2	CL	23+32	13.0-15.0	A-5(7)	61	9	14	44	33	9	100	92	86	58.8	41.6	ND



-Y6RPA-

$$$$$$SYSTIME$$$$$$
$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	312

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

850 840 830 820 810 800 790 780 770

SP 683

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT (D TO W)

24+53.63

SP 682

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT (D TO W)

RESIDUAL
MEDIUM STIFF TO VERY STIFF GRAY-TAN RED-TAN FINE SANDY SILT WITH MANGANESE (D TO W)

RESIDUAL
MEDIUM DENSE GRAY SILTY FINE SAND (M)

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 23+85

23+88.74

-Y6RPA-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	313

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840 830 820 810 800 790

SP 685

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT (D TO W)

25+74.60

850 840 830 820 810 800 790

SP 684

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF TO HARD RED-TAN, GRAY-TAN ORANGE-TAN AND OLIVE-TAN FINE SANDY SILT (D TO W)

25+17.12

-Y6RPA-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

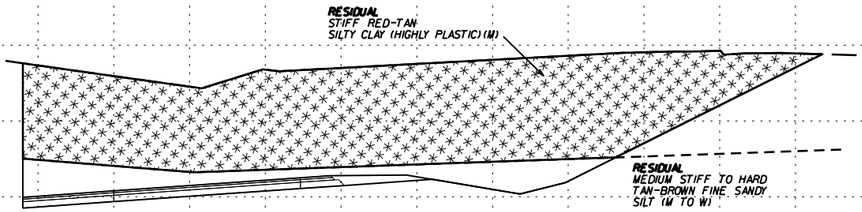
$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

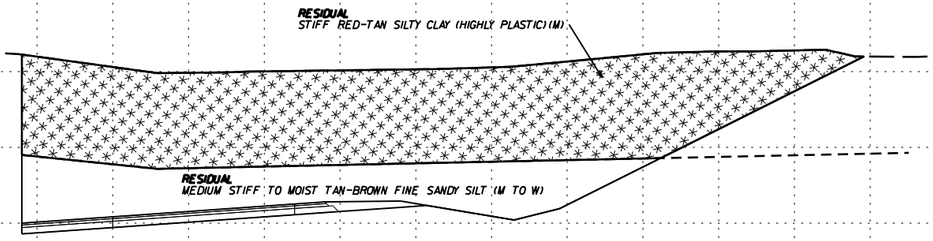
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	314

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790

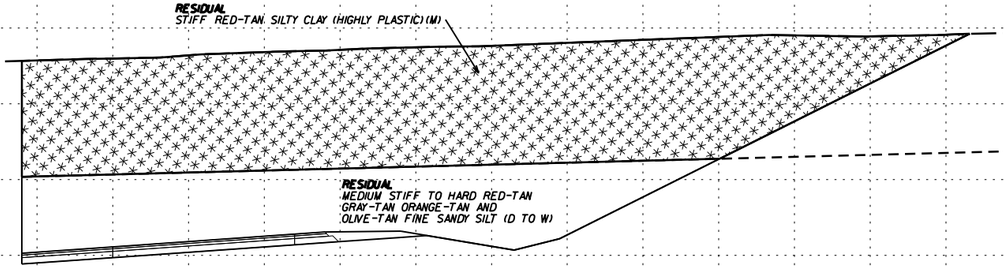


27+35.34



26+82.65

840 830 820 810 800 790



26+28.60

-Y6RPA-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	315

END UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 28+23

END UNDERCUT STA 28+23

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO HARD TAN-BROWN FINE SANDY SILT (M TO W)

28+22.65

RESIDUAL
STIFF RED-TAN SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
MEDIUM STIFF TO HARD TAN-BROWN FINE SANDY SILT (M TO W)

27+87.09 BEGIN UNDERCUT STA 27+87

-Y6RPA-

$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	316

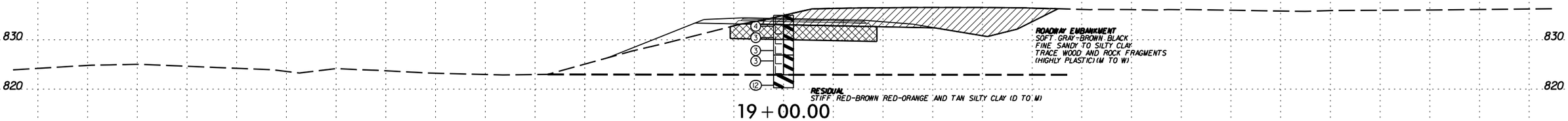
SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-102	CL	19+00	1.2-2.7	A-7-6(27)	62	39	15	17	15	53	98	89	83	70.5	35.0	ND

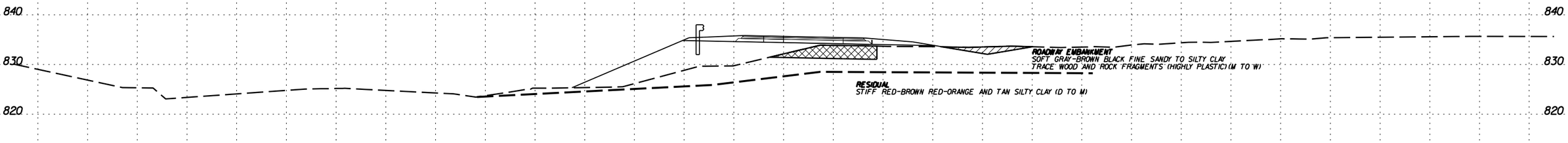
SS-102
B-287

END UNDERCUT STA 19+40

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 19+40



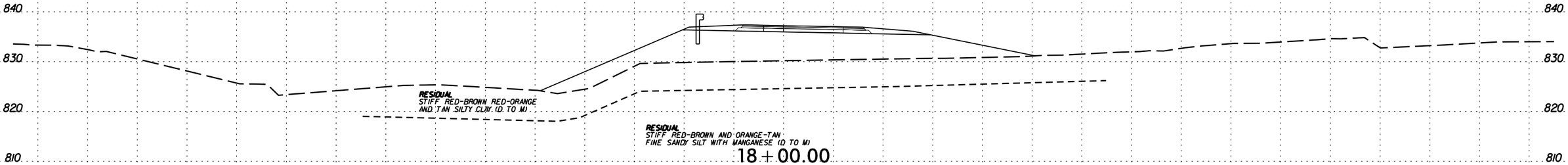
19+00.00



BEGIN UNDERCUT STA 18+43

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 18+43

18+50.00



18+00.00

-Y13RPA-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	317

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820
810

ROADWAY EMBANKMENT
SOFT GRAY-BROWN BLACK
FINE SANDY TO SILTY CLAY
TRACE WOOD AND ROCK FRAGMENTS
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

20+50.00

ROADWAY EMBANKMENT
SOFT GRAY-BROWN BLACK
FINE SANDY TO SILTY CLAY
TRACE WOOD AND ROCK FRAGMENTS
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

BEGIN UNDERCUT STA 19+75

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 19+75

20+00.00

ROADWAY EMBANKMENT
SOFT GRAY-BROWN BLACK
FINE SANDY TO SILTY CLAY
TRACE WOOD AND ROCK FRAGMENTS
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

19+50.00

-Y13RPA-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	318

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860 850 840 830 820 810

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 22+25

END UNDERCUT STA 22+25

ROADWAY EMBANKMENT
LOOSE GRAY-TAN CLAYEY FINE SAND (M)

ROADWAY EMBANKMENT
SOFT TO STIFF GRAY-BROWN BLACK RED TO GRAY-TAN FINE SANDY TO SILTY CLAY WITH WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC) (M TO W)

RESIDUAL
MEDIUM STIFF TO STIFF RED-BROWN AND ORANGE-TAN FINE SANDY SILT WITH MANGANESE (D TO M)

22+00.00

ROADWAY EMBANKMENT
SOFT GRAY-BROWN BLACK FINE SANDY TO SILTY CLAY TRACE WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

21+50.00

B-288

4
15
9
7

ROADWAY EMBANKMENT
SOFT GRAY-BROWN BLACK FINE SANDY TO SILTY CLAY TRACE WOOD AND ROCK FRAGMENTS (HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-BROWN RED-ORANGE AND TAN SILTY CLAY (D TO M)

21+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	319

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

850
840
830
820

ARTIFICIAL FILL
LOOSE GRAY-TAN CLAYEY FINE SAND (M)

RESIDUAL
STIFF TO VERY STIFF RED-TAN FINE SANDY CLAY (D TO M)

22+50.00

-Y13RPA-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	320

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

800
790
780
770
760

ARTIFICIAL FILL
MEDIUM STIFF GREEN-ORANGE SILTY CLAY WITH ASPHALT DEBRIS (HIGHLY ORGANIC) (M)

RESIDUAL
VERY STIFF TO HARD RED-ORANGE SANDY CLAY (M TO D)

RESIDUAL
STIFF RED-ORANGE TO GREEN GRAY CLAYEY SILT (M TO W)

15 + 88.00

SP

B-293
15+50

ARTIFICIAL FILL
MEDIUM STIFF GREEN-ORANGE SILTY CLAY WITH ASPHALT DEBRIS (HIGHLY ORGANIC) (M)

6
5
12
14
36

BT
FIAD

RESIDUAL
VERY STIFF TO HARD RED-ORANGE SANDY CLAY (M TO D)

RESIDUAL
DENSE TAN-GREEN SILTY FINE SAND (D)

RESIDUAL
STIFF RED-ORANGE TO GREEN-GRAY CLAYEY SILT (M TO W)

BEGIN UNDERCUT STA 15+13

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 15+13

15 + 38.00

ARTIFICIAL FILL
MEDIUM STIFF GREEN-ORANGE SILTY CLAY WITH ASPHALT DEBRIS (HIGHLY ORGANIC) (M)

RESIDUAL
STIFF RED-ORANGE TO GREEN-GRAY CLAYEY SILT (M TO W)

RESIDUAL
VERY STIFF TO HARD RED-ORANGE SANDY CLAY (M TO D)

14 + 88.00

$$$$$$$SYSTIME$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	321

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

800
790
780
770
760

B-294
17+50.00 R I

ARTIFICIAL FILL
STIFF ORANGE-GRAY FINE SANDY SILT WITH TRACE ORGANICS (M)

ARTIFICIAL FILL
VERY SOFT TO STIFF BROWN-GRAY FINE SANDY CLAY WITH TRACE OF ORGANICS AND GRAVEL (W TO SAT)

RESIDUAL STIFF RED-ORANGE TO GREEN-GRAY CLAYEY SILT (W TO W)

100/0.5

BT

WEATHERED ROCK
(METAMORPHOSED GRANITE)

FIAD
17+38.00

ARTIFICIAL FILL
STIFF GREEN-ORANGE SILTY CLAY WITH ASPHALT DEBRIS (HIGHLY ORGANIC) (M)

RESIDUAL
VERY STIFF TO HARD RED-ORANGE SANDY CLAY (M TO D)

RESIDUAL
STIFF RED-ORANGE TO GREEN GRAY CLAYEY SILT (M TO W)

16+88.00

ARTIFICIAL FILL
MEDIUM STIFF GREEN-ORANGE SILTY CLAY WITH ASPHALT DEBRIS (HIGHLY ORGANIC) (M)

RESIDUAL STIFF RED-ORANGE TO GREEN GRAY CLAYEY SILT (M TO W)

RESIDUAL
VERY STIFF TO HARD RED-ORANGE SANDY CLAY (M TO D)

16+38.00

-Y13RPD-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	322

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

800
790
780
770

RESIDUAL
STIFF RED-ORANGE TO GREEN-GRAY CLAYEY SILT (M TO W)

WEATHERED ROCK
(METAMORPHOSED GRANITE)

18+88.00

END UNDERCUT STA 18+73

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 18+73

820
810
800
790
780
770

ARTIFICIAL FILL
STIFF ORANGE-GRAY FINE SANDY SILT WITH TRACE ORGANICS (M)

ARTIFICIAL FILL
VERY SOFT TO STIFF BROWN-GRAY FINE SANDY CLAY WITH TRACE OF ORGANICS AND GRAVEL (W TO SAT)

18+38.00

800
790
780
770

ARTIFICIAL FILL
STIFF ORANGE-GRAY FINE SANDY SILT WITH TRACE ORGANICS (M)

ARTIFICIAL FILL
VERY SOFT TO STIFF BROWN-GRAY FINE SANDY CLAY WITH TRACE OF ORGANICS AND GRAVEL (W TO SAT)

17+88.00

-Y13RPD-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	323

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820 810 800 790 780 770 760 750

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY DENSE TAN-GRAY
AND BROWN-ORANGE SILTY
FINE TO COURSE SAND
WITH TRACE OF ROCK FRAGMENTS (D)

WEATHERED ROCK
METAMORPHOSED GRANITE

BEGIN UNDERCUT STA 21+60

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 21+60

21+88.00

B-296
21+50

5
3
13
9

BT

ARTIFICAL FILL
ASPHALT DEBRIS (SAT)

ARTIFICAL FILL
SOFT TAN-GREEN SILT (W)

RESIDUAL
MEDIUM STIFF ORANGE-GRAY
FINE SANDY SILT (M)

RESIDUAL
LOOSE WHITE SILTY FINE SAND (M)

RESIDUAL
VERY DENSE TAN-GRAY AND BROWN-ORANGE SILTY
FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

21+38.00

820 810 800 790 780 770 760

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

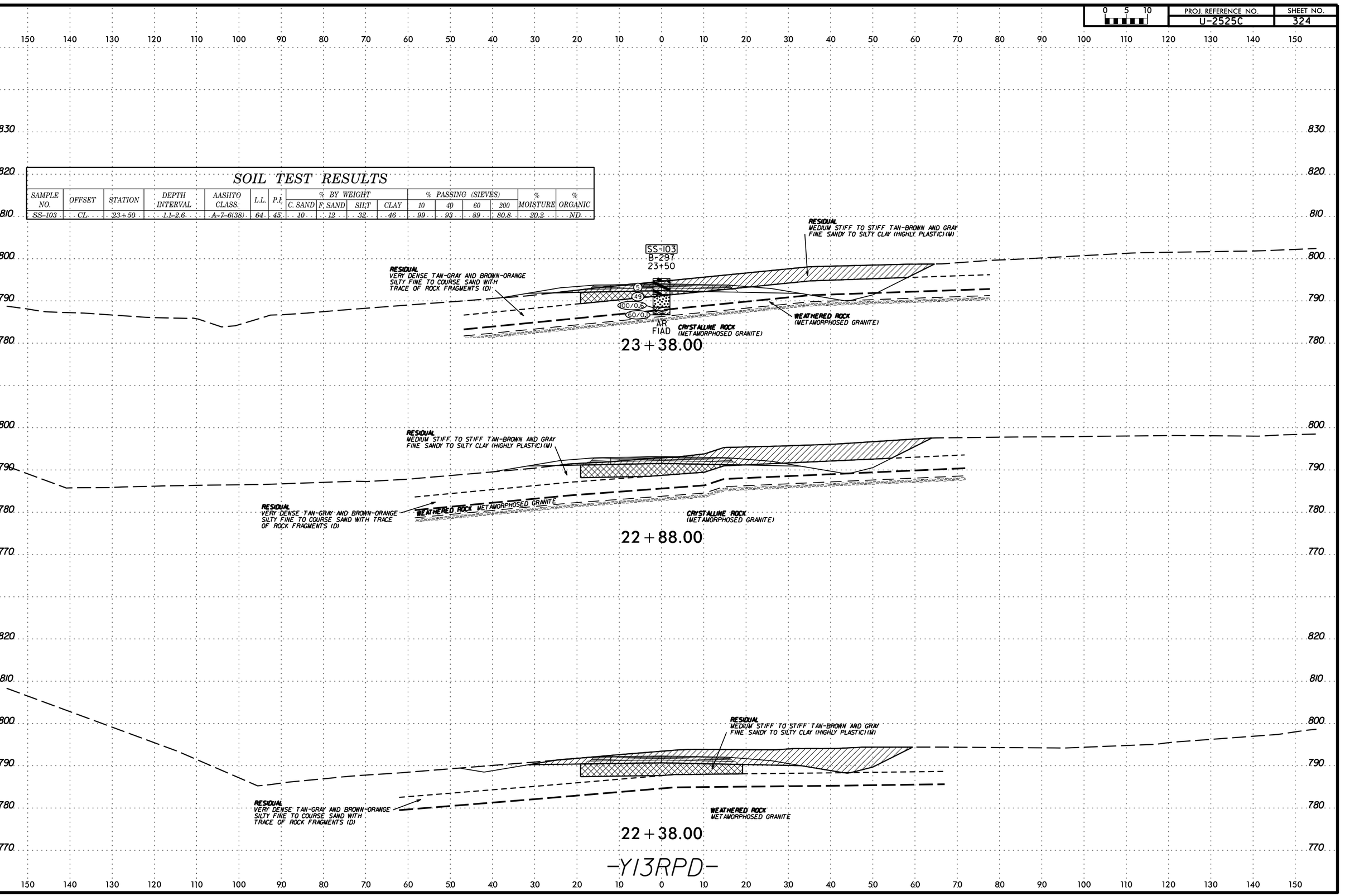
-YI3RPD-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	324

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C. SAND	F. SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	60	200	% MOISTURE	% ORGANIC
SS-103	CL	23+50	1.1-2.6	A-7-6(38)	64	45	10	12	32	46	99	93	89	80.8	20.2	ND



$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

-Y13RPD-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	325

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820 810 800 790 780 770

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

24+88.00

END UNDERCUT STA 24+60

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY DENSE TAN-GRAY AND BROWN-ORANGE SILTY
FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

24+38.00

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
VERY DENSE TAN-GRAY AND BROWN-ORANGE SILTY
FINE TO COURSE SAND WITH TRACE OF ROCK FRAGMENTS (D)

WEATHERED ROCK (METAMORPHOSED GRANITE)

CRYSTALLINE ROCK
(METAMORPHOSED GRANITE)

23+88.00

-Y13RPD-

$$$$$$$SYTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	326

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

820
810
800
790

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

26+38.00

820
810
800
790

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

25+88.00

820
810
800
790
780

SS-104
B-298
25+54

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

7
15
13
8
10
10
BT
FIAD

RESIDUAL
STIFF ORANGE-TAN FINE SANDY SILT (M TO D)

25+38.00

770

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-104	CL	25+54	1.2-2.7	A-7-6(47)	75	48	3	15	23	59	100	98	97	87.2	27.5	ND

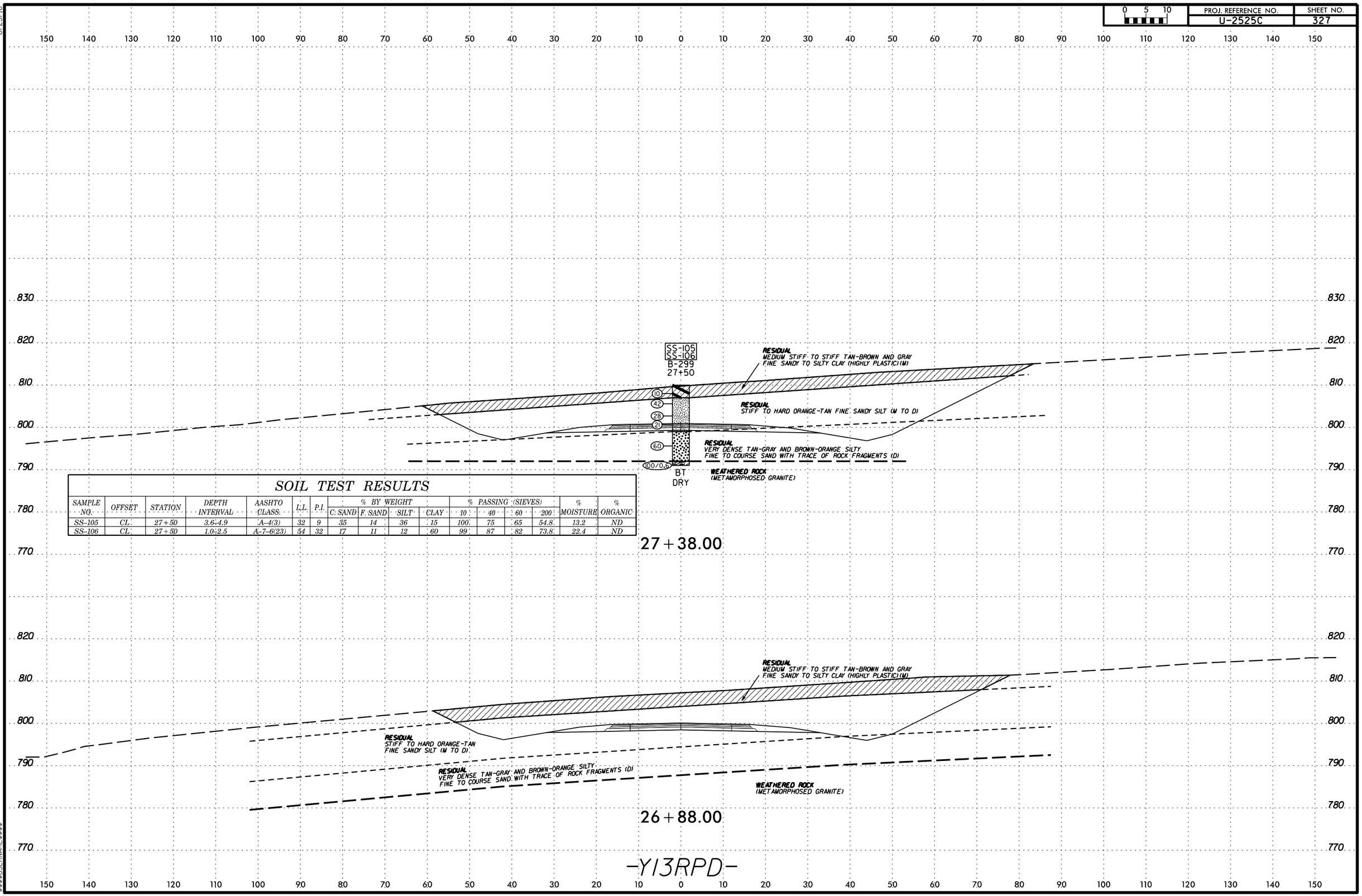
-Y13RPD-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	327



SOIL TEST RESULTS

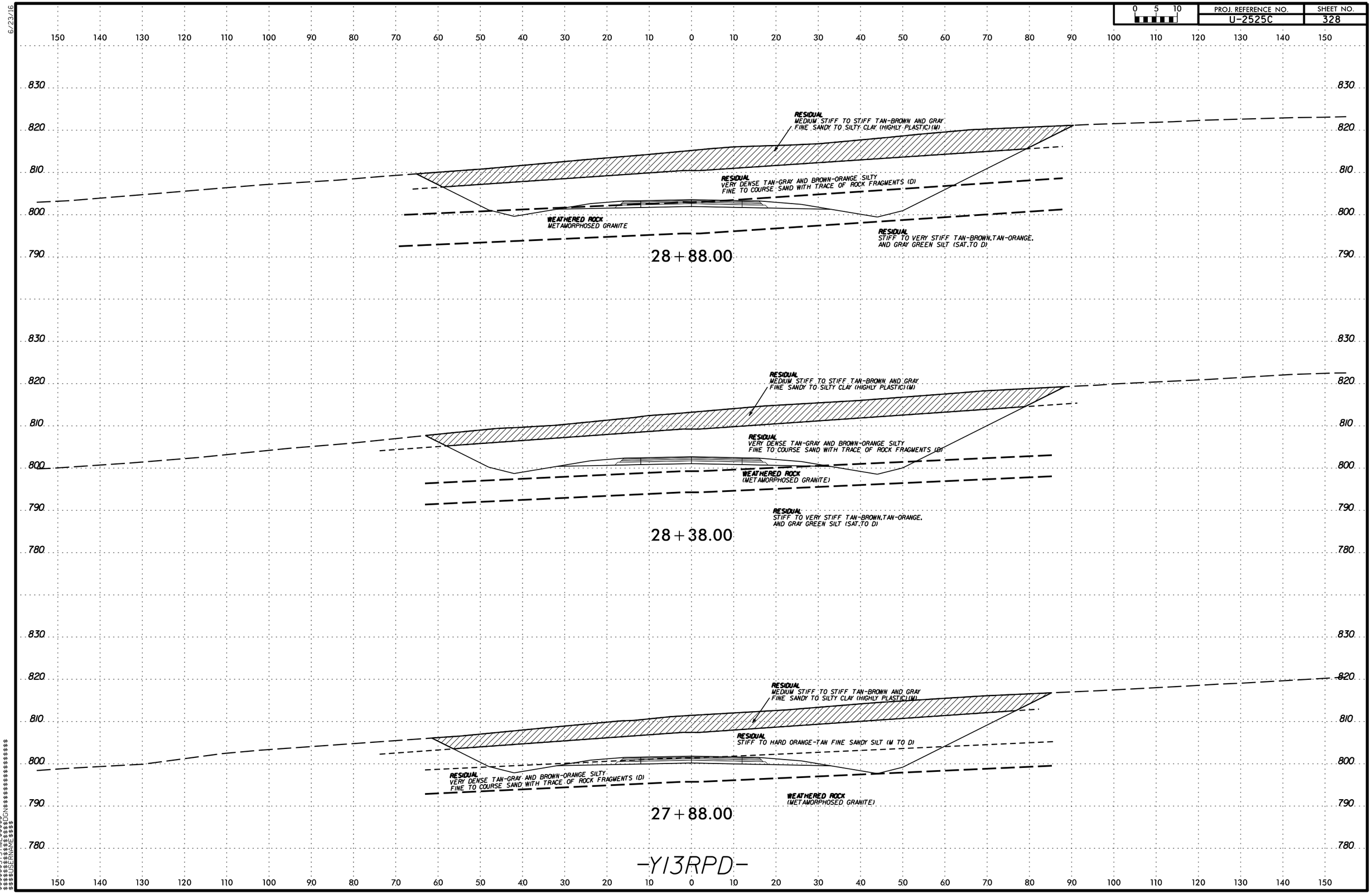
SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-105	CL	27+50	3.6-4.9	A-4(3)	32	9	35	14	36	15	100	75	65	54.8	13.2	ND
SS-106	CL	27+50	1.0-2.5	A-7-6(23)	54	32	17	11	12	60	99	87	82	73.8	22.4	ND

-Y13RPD-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	328

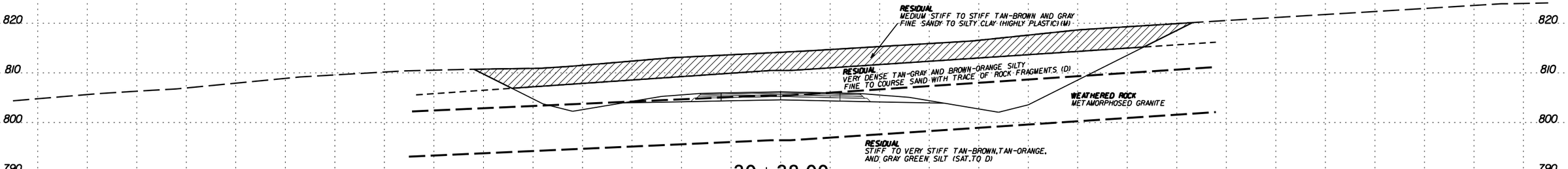


$$$$$$$SYSTIME$$$$$$
$$$$$$$

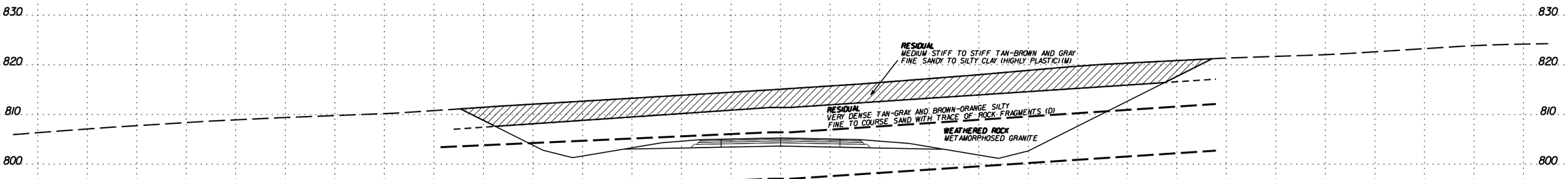
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	329

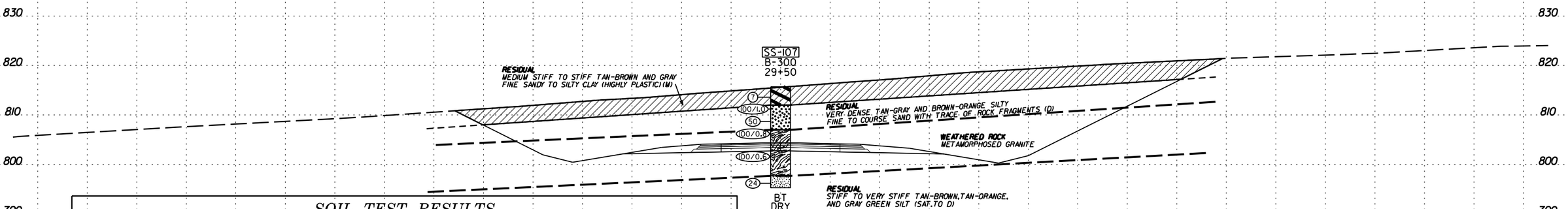
END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 30+75



30+38.00



29+88.00



29+38.00

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-107	CL	29+50	1.1-2.6	A-7-6(47)	80	53	9	10	6	75	98	93	89	81.3	30.2	ND

-Y13RPD-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	330

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

830 820 810 800 790 780

SS-108
B-301
31+50

6 13 12 10 9 27

BT
DRY

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

RESIDUAL
SOFT TO STIFF GRAY AND ORANGE SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN, TAN-ORANGE, AND GRAY GREEN SILT (SAT. TO D)

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING (SIEVES)				% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	60	200		
SS-108	CL	31+50	1.2-2.7	A-7-6(18)	56	35	27	14	6	52	99	82	72	60.1	28.9	ND

31+38.00

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE SANDY SILT (M TO D)

RESIDUAL
SOFT TO STIFF GRAY AND ORANGE SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN, TAN-ORANGE, AND GRAY GREEN SILT (SAT. TO D)

BEGIN UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL STA 30+75

30+88.00

-Y13RPD-

$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	331

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840 830 820 810 800 790

SP

RESIDUAL
SOFT TO STIFF GRAY-ORANGE
SILTY CLAY (M)

RESIDUAL
STIFF GRAY-ORANGE CLAYEY SILT (M)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN,TAN-ORANGE,
AND GRAY GREEN SILT (SAT.TO D)

32+88.00

END UNCLASSIFIED EXCAVATION -
ACCEPTABLE, BUT NOT TO BE
USED IN THE TOP 3 FEET OF
EMBANKMENT OR BACKFILL STA 32+55

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE SANDY TO SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE
SANDY SILT (M TO D)

RESIDUAL
SOFT TO STIFF GRAY AND ORANGE SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN,TAN-ORANGE,
AND GRAY GREEN SILT (SAT.TO D)

32+38.00

RESIDUAL
MEDIUM STIFF TO STIFF TAN-BROWN AND GRAY
FINE, SANDY TO SILTY CLAY (HIGHLY PLASTIC)(M)

RESIDUAL
STIFF TO HARD ORANGE-TAN FINE
SANDY SILT (M TO D)

RESIDUAL
SOFT TO STIFF, GRAY AND ORANGE SILTY CLAY (M)

RESIDUAL
STIFF TO VERY STIFF TAN-BROWN,TAN-ORANGE,
AND GRAY GREEN SILT (SAT.TO D)

31+88.00

-Y13RPD-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	332

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

12+25.00

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

11+95.19

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

BEGIN UNDERCUT STA 11+38.51

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE 11+38.51

11+38.51

860 850 840 830 820

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y4DET-

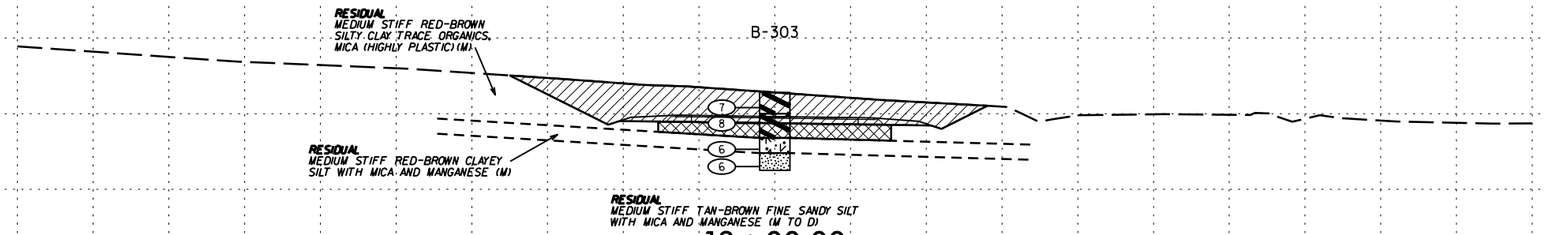
$$$$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

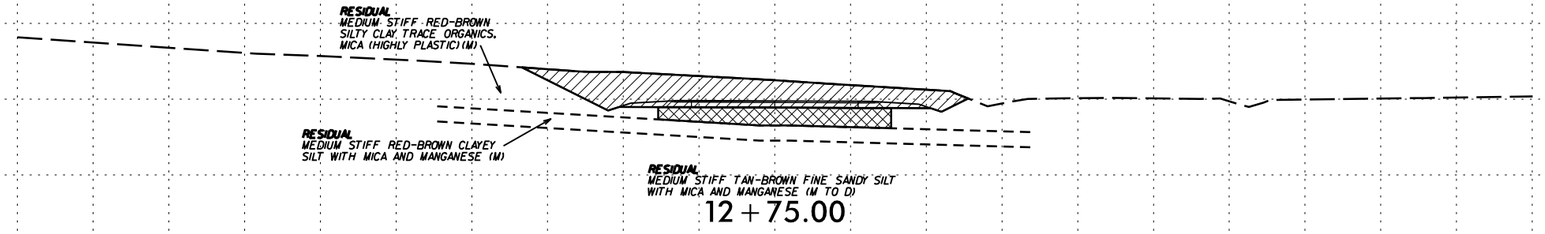
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	333

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

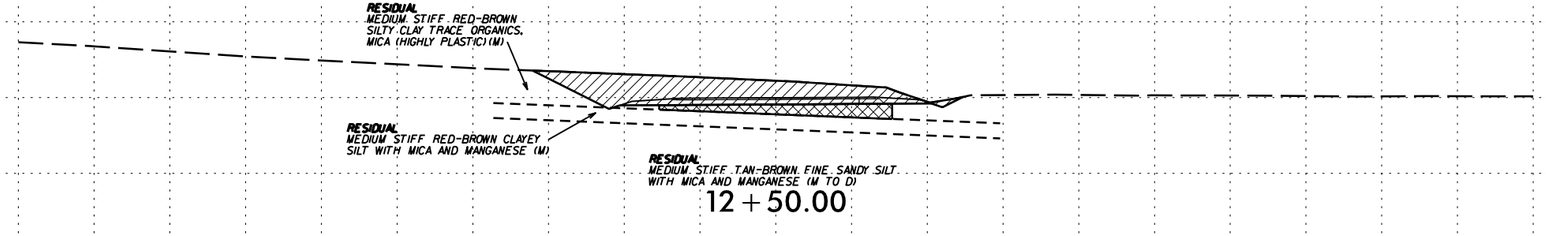
860
850
840
830
820



13 + 00.00



12 + 75.00



12 + 50.00

-Y4DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	334

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

13+75.00

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

13+50.00

860 850 840 830 820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

13+25.00

860 850 840 830 820

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y4DET-

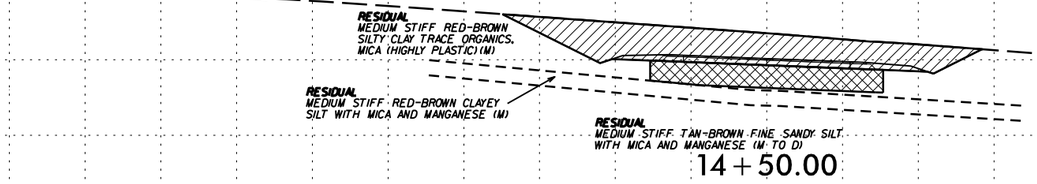
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

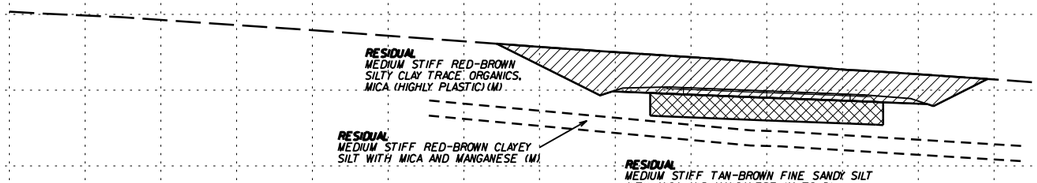
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	335

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

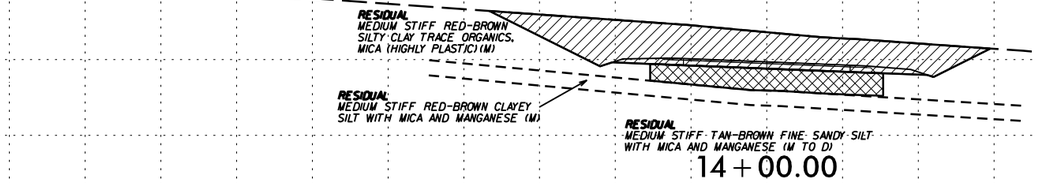
860
850
840
830
820



14+50.00



14+25.00



14+00.00

-Y4DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	336

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830
820

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

15+11.85

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

15+00.00

RESIDUAL
MEDIUM STIFF RED-BROWN SILTY CLAY TRACE ORGANICS, MICA (HIGHLY PLASTIC) (M)

RESIDUAL
MEDIUM STIFF RED-BROWN CLAYEY SILT WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT WITH MICA AND MANGANESE (M TO D)

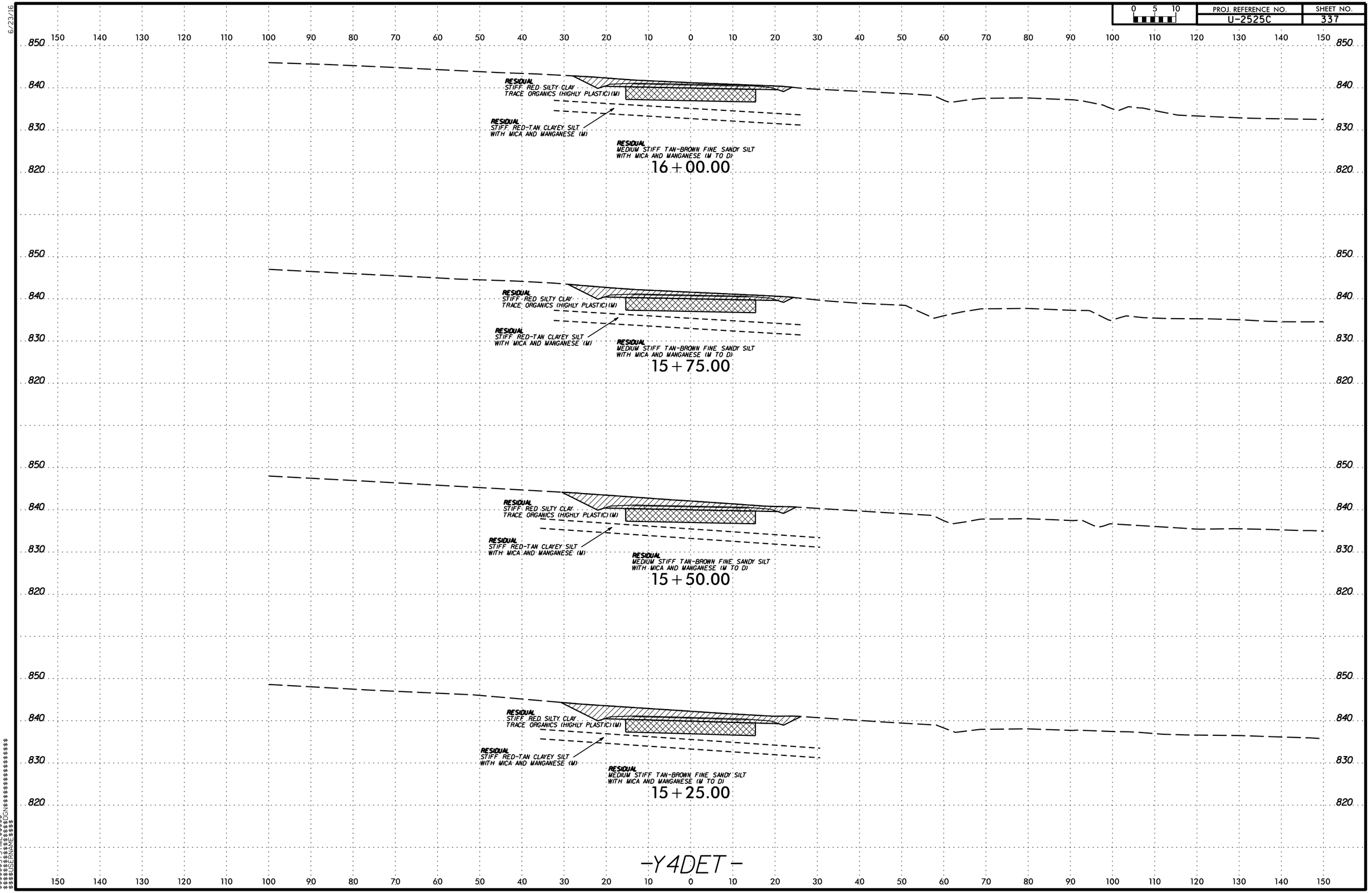
14+75.00

-Y4DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	337

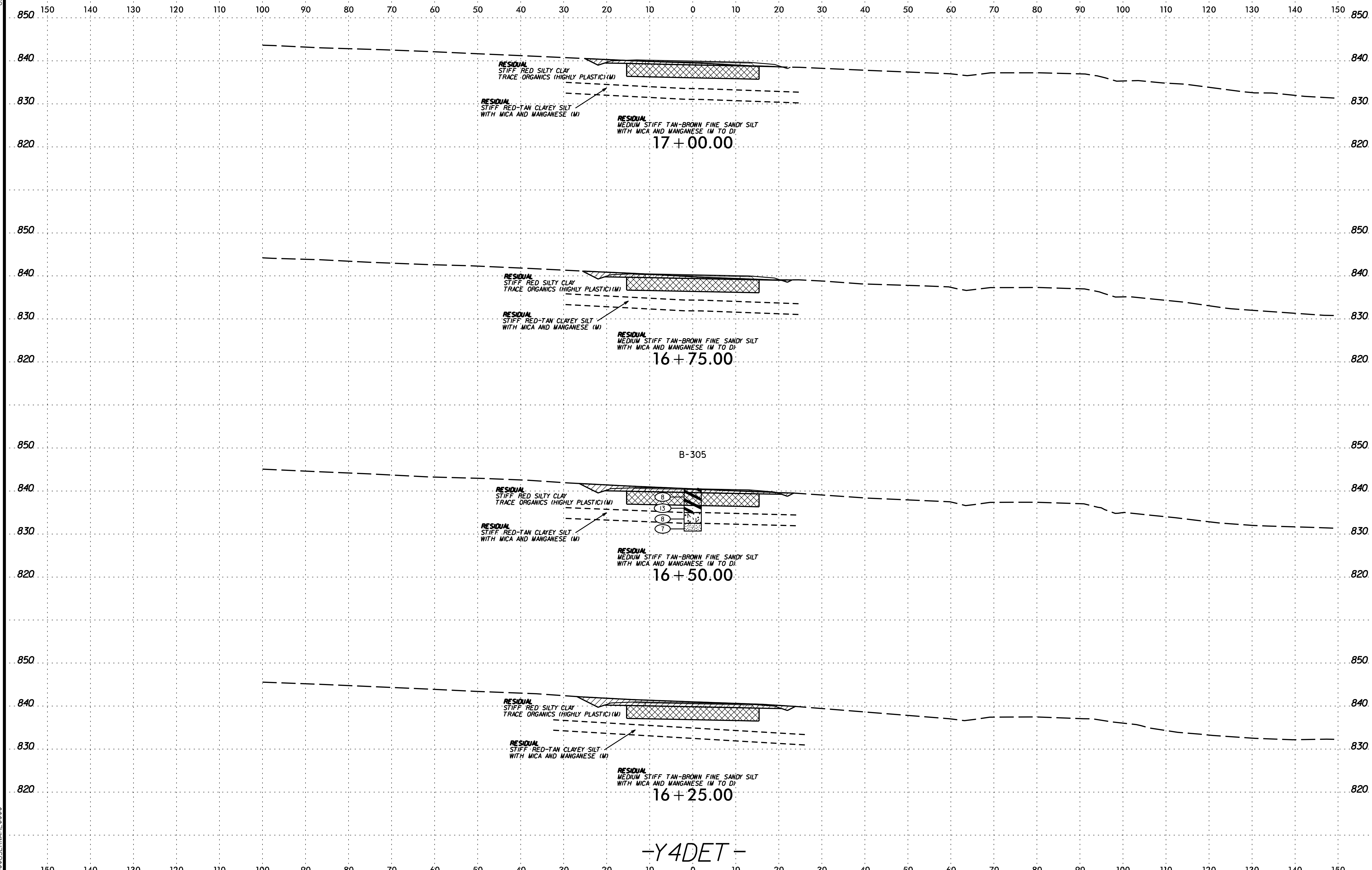


-Y4DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

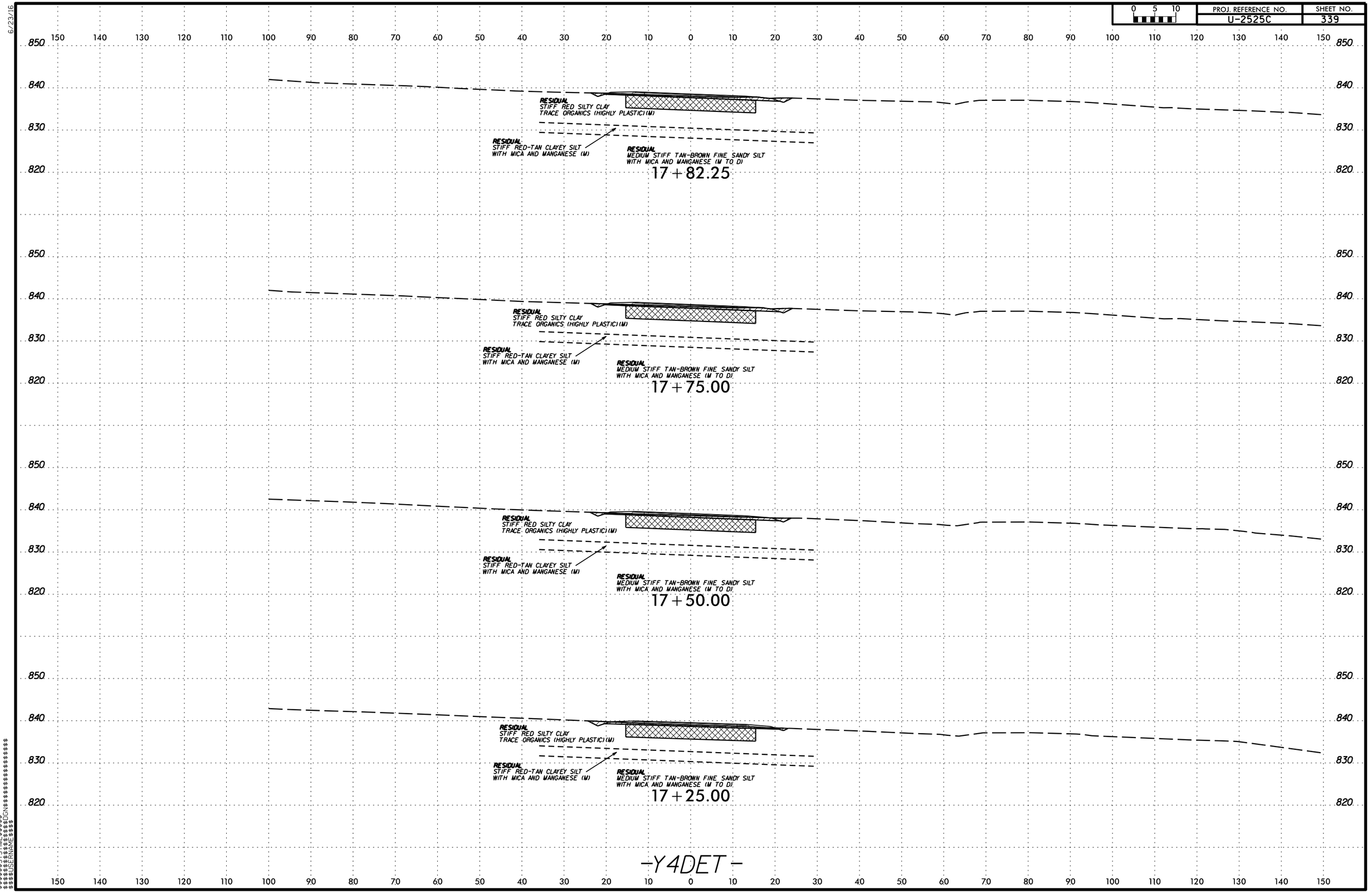
PROJ. REFERENCE NO.	SHEET NO.
U-2525C	338



$$$$SYSTIME$$$$
$$$$$$$DGN$$$$$$$$$$$$$$$$$$$
$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	339



-Y4DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	340

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

850
840
830
820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

18+75.00

840
830
820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

18+50.00

840
830
820

RESIDUAL
STIFF RED SILTY CLAY
TRACE ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF RED-TAN CLAYEY SILT
WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT
WITH MICA AND MANGANESE (M TO D)

18+25.00

850
840
830
820
810

RESIDUAL
STIFF RED SILTY CLAY
TRACE ORGANICS (HIGHLY PLASTIC) (M)

RESIDUAL
STIFF RED-TAN CLAYEY SILT
WITH MICA AND MANGANESE (M)

RESIDUAL
MEDIUM STIFF TAN-BROWN FINE SANDY SILT
WITH MICA AND MANGANESE (M TO D)

18+00.00

-Y4DET-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

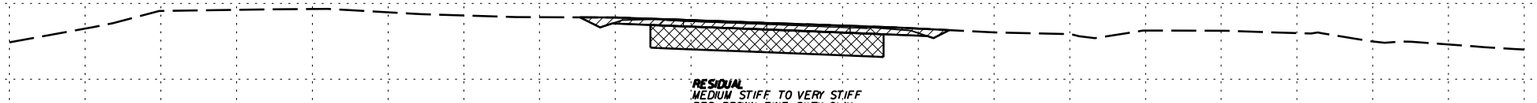
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	341

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

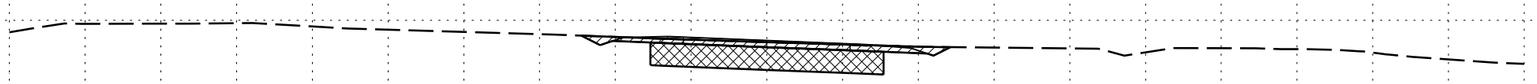
840
830
820



RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

19 + 75.00

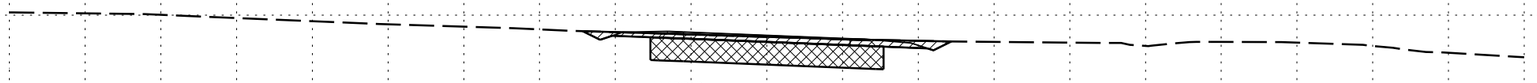
840
830
820



RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

19 + 50.00

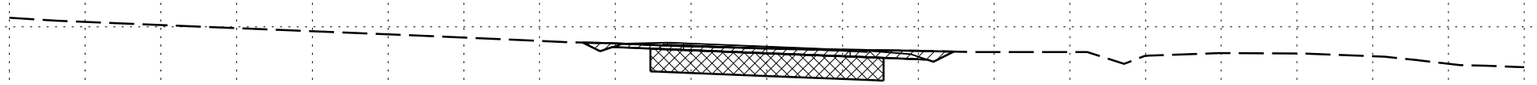
850
840
830
820



RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

19 + 25.00

850
840
830
820



RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

19 + 00.00

-Y4DET-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	342

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

840
830
820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

20+75.00

840
830
820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

20+50.00

840
830
820

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

20+25.00

850
840
830
820
810

B-307

7
22
12
9

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

20+00.00

-Y4DET-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	343

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830
820

END UNDERCUT STA 22+13.42

END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 22+13.42

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

22+13.42

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

21+54.62

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

21+25.00

RESIDUAL
MEDIUM STIFF TO VERY STIFF
RED-BROWN FINE SILTY CLAY
TRACE MANGANESE (M)

21+00.00

-Y4DET-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	344

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

870
860
850
840

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

11+50.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

11+25.99

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

11+00.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

BEGIN UNDERCUT STA 10+89.44

10+89.44

830

-Y5DET-

$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	345

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

12+50.00

860
850
840

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

12+25.00

870
860
850
840

B-308

7
13
12
9

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

12+00.00

870
860
850
840
830

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

BEGIN UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE 11+70

11+75.00

-Y5DET-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	346

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC)(M TO W)

13 + 75.00

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC)(M TO W)

13 + 50.00

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC)(M TO W)

13 + 25.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC)(M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

13 + 00.00

RESIDUAL
MEDIUM STIFF TO STIFF
RED SILTY CLAY
(HIGHLY PLASTIC)(M TO W)

RESIDUAL
STIFF RED-TAN FINE SANDY SILT (D)

12 + 75.00

-Y5DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	347

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

14+75.00

860
850
840

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

14+50.00

860
850
840

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

14+25.00

870
860
850
840

B-309

8
17
15
10

RESIDUAL
STIFF TO VERY STIFF
RED SILTY CLAY
(HIGHLY PLASTIC) (M TO W)

14+00.00

-Y5DET-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

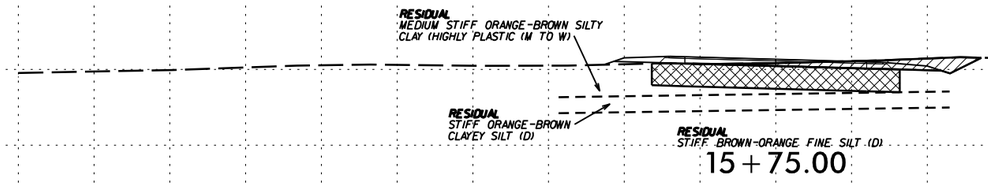
$$$$$$$$SYSTIME$$$$$$
$$$$$$$$

6/23/16

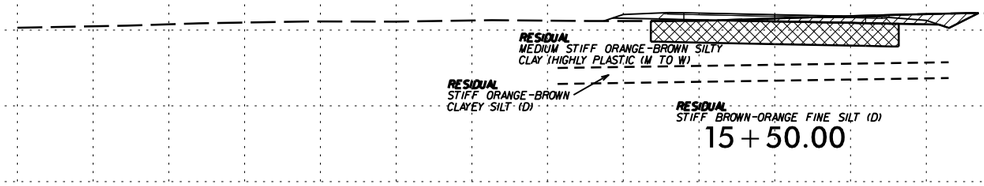
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	348

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

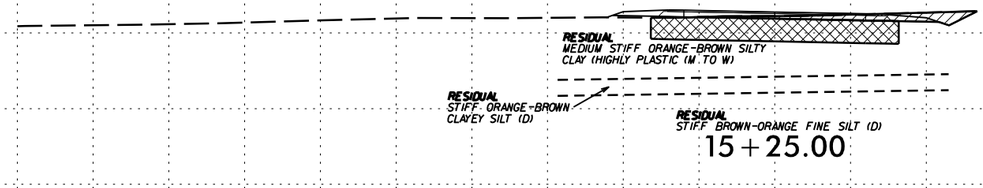
860 850 840 830



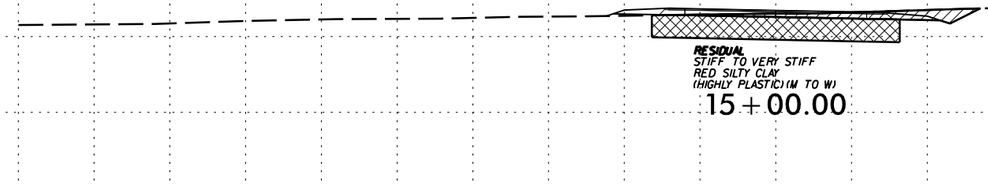
15+75.00



15+50.00



15+25.00



15+00.00

-Y5DET-

$$$$$$$SYSTIME$$$$$$
$$$$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	349

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860 850 840 830

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

16 + 75.00

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

16 + 50.00

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

16 + 25.00

B-310

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

8
15
11
8

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

16 + 00.00

-Y5DET-

$$$$$$$$SYSTIME$$$$$$$$
$$$$$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$$USERNAME$$$$

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	350

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

860
850
840
830

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

17+75.00

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

17+50.00

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

17+25.00

RESIDUAL
MEDIUM STIFF ORANGE-BROWN SILTY CLAY (HIGHLY PLASTIC (M TO W)

RESIDUAL
STIFF ORANGE-BROWN CLAYEY SILT (D)

RESIDUAL
STIFF BROWN-ORANGE FINE SILT (D)

17+00.00

-Y5DET-

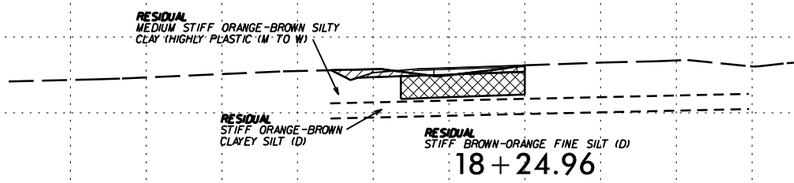
$$$$$$$SYSTIME$$$$$$
$$$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$

6/23/16

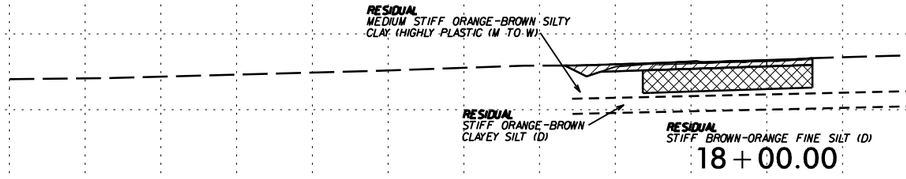
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	U-2525C	351

END UNDERCUT STA 18+24.96

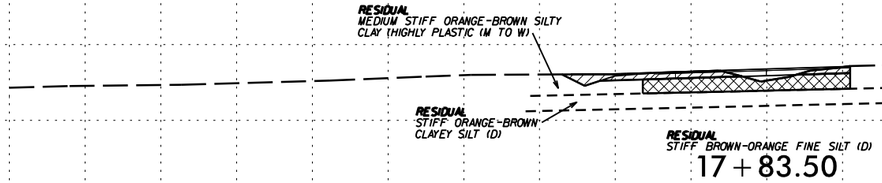
END UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE STA 18+24.96



18+24.96



18+00.00



17+83.50

-Y5DET-

$$$$$$$$SYSTIME$$$$$$
$$$$$$$$