**NOTE: SEE SHEET 1A FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION**

## CONTENTS

| LINE | STATION | PLAN | PROFILE | XSECT |
|---|---|---|---|---|
| -L- | 478+00.00 to 692+32.98 | 5-19 | 32-42 | 94-158 |
| -YI- | 10+00.00 to 54+00.00 | 20,5,21 | 43-44 | |
| -YILPA- | 10+00.00 to 21+64.89 | 5 | 45 | |
| -YILPD- | 10+00.00 to 22+21.40 | 5 | 46 | |
| -YIRPA- | 10+00.00 to 30+89.92 | 6,5 | 47 | |
| -YIRPD- | 10+00.00 to 32+81.06 | 6,5 | 48 | |
| -Y2- | 10+00.00 to 29+75.00 | 22,7,23 | 49 | -- |
| -Y4EB- | 26+80.00 to 143+00.00 | 24-27,16, 28-30 | 50-54 | 165-169 |
| -Y4WB- | 26+80.00 to 143+00.00 | 24-27,16, 28-30 | 55-59 | 159-164 |
| -Y4CD- | 10+00.00 to 95+97.99 | 14-19 | 60-65 | |
| -Y4LPA- | 10+00.00 to 24+20.62 | 16 | 66 | 181-186 |
| -Y4LPB- | 10+00.00 to 24+68.05 | 16 | 67 | |
| -Y4LPD- | 10+00.00 to 24+75.27 | 16 | 68 | |
| -Y4RPA- | 10+00.00 to 41+41.74 | 15,16,27 | 69-70 | 187-189 |
| -Y4RPB- | 10+00.00 to 32+80.81 | 15,16,28 | 71 | |
| -Y4RPBD- | 10+00.00 to 86+04.51 | 15,16,27 | 72-77 | |
| -Y4RPC- | 10+00.00 to 40+03.40 | 17,16,28 | 78-79 | |
| -Y4RPD- | 10+00.00 to 33+19.67 | 17,16,27 | 80-81 | |
| -Y5- | 16+00.00 to 33+30.00 | 27,16 | 82 | |
| -Y5A- | 54+00.00 to 81+25.00 | 28,29,31 | 83-85 | 170-176 |
| -YIDET- | 11+64.89 to 48+21.20 | 20,5,21 | 86-87 | |
| -Y5DET- | 11+59.72 to 30+81.57 | 27,16 | 88 | |
| -Y6- | 10+12.91 to 38+21.23 | 31,29,28 | 89-91 | 177-180 |
| -Y7- | 10+00.00 to 13+54.72 | 20 | 92 | 190-193 |

SAMPLE DATA

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

# ROADWAY SUBSURFACE INVESTIGATION

PROJ. REFERENCE NO. *34839.1.1 (U-2579B)* F.A. PROJ. *N/A*

COUNTY *FORSYTH*

PROJECT DESCRIPTION *WINSTON-SALEM NORTHERN BELTWAY (EASTERN SECTION) (FUTURE I-74) FROM US 158 TO I-40 BUS /US 421*

## INVENTORY

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| N.C. | U-2579B | 1 | 193 |

| STATE PROJ. NO. | F. A. PROJ. NO. | DESCRIPTION |
|---|---|---|
| 34839.1.1 | N/A | P.E. |
| | | R/W & UTIL. |

## 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) 250-4088. NEITHER THE SUBSURFACE PLANS AND REPORTS, NOR THE FIELD BORING LOGS, ROCK CORES, OR SOIL TEST DATA ARE PART OF THE CONTRACT.

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

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

PERSONNEL

*C.C. MURRAY*

*J.E. ESTEP*

*H.K. WISE*

INVESTIGATED BY *R.Q. CALLAWAY*

CHECKED BY *C.B. LITTLE*

SUBMITTED BY *C.B. LITTLE*

DATE *AUGUST 2008*

NORTH CAROLINA LICENSED SEAL 11043 GEOLOGIST CLINTON B. LITTLE

*8-18-10*

**CONTRACT: ID: U-2579B**

DRAWN BY: *J.K. McClure*

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

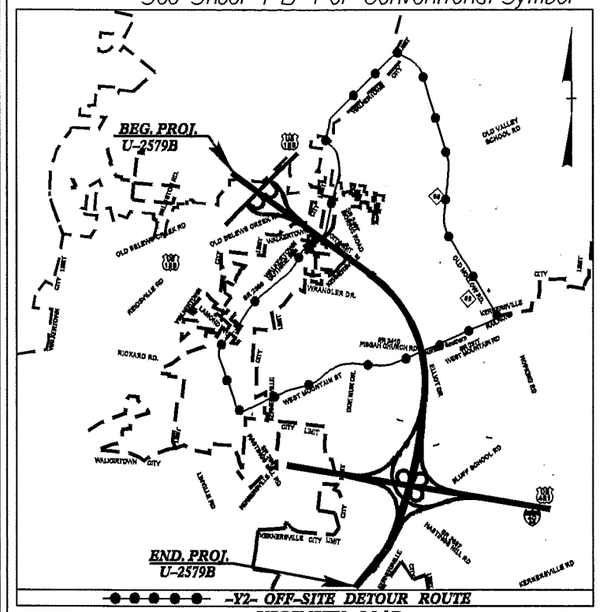
NOTE - BY HAVING REQUESTED THIS INFORMATION THE CONTRACTOR SPECIFICALLY WAIVES ANY CLAIMS FOR INCREASED COMPENSATION OR EXTENSION OF TIME BASED ON DIFFERENCES BETWEEN THE CONDITIONS INDICATED HEREIN AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

09/08/99

# TIP PROJECT: U-2579B

CONTRACT:

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




VICINITY MAP

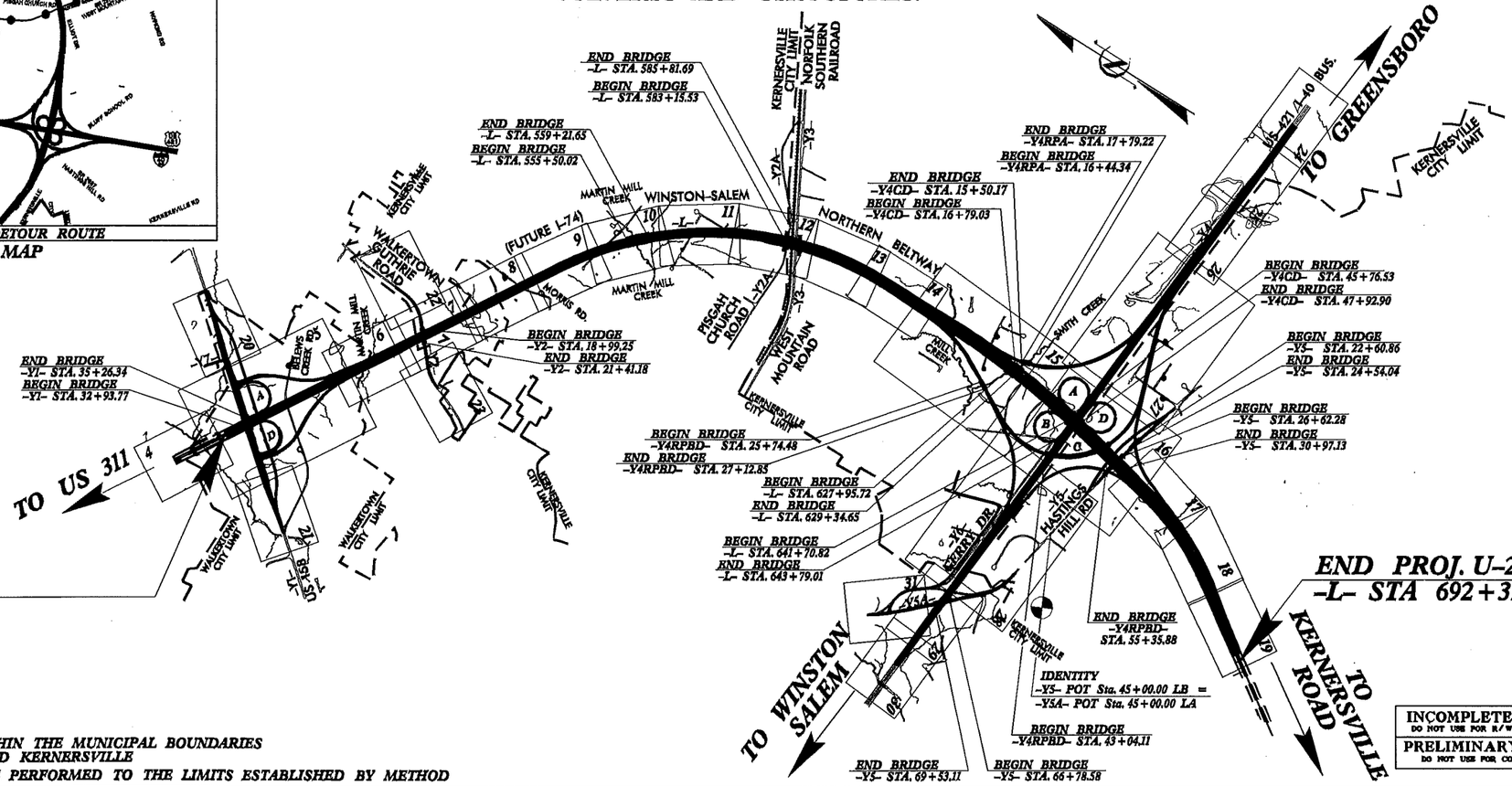
# STATE OF NORTH CAROLINA
# DIVISION OF HIGHWAYS

# FORSYTH COUNTY

| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|
| N.C. | U-2579B | 1A | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 34839.1.1 | N/A | PE | |

***LOCATION:*** *WINSTON SALEM NORTHERN BELTWAY (EASTERN SECTION) (FUTURE I-74) FROM US 158 TO I-40 BUS/US 421*

***TYPE OF WORK:*** *WIDENING, GRADING, PAVING, DRAINAGE, SIGNING, SIGNALS, CULVERTS AND STRUCTURES.*




*A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF WALKERTOWN AND KERNERSVILLE*

*CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD*

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

***GRAPHIC SCALES***

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

***DESIGN DATA***

ADT 2010 = 53,560
ADT 2030 = 79,880
DHV = 10 %
D = 60 %
T = 18 % *
V = 70 MPH

* TTST 6 % DUAL 12 %

***PROJECT LENGTH***

LENGTH OF ROADWAY PROJECT U-2579B = 3.87 Miles.
LENGTH OF STRUCTURE PROJECT U-2579B = 0.19 Miles.
TOTAL LENGTH OF PROJECT U-2579B = 4.06 Miles.

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

*2006 STANDARD SPECIFICATIONS*

*RIGHT OF WAY DATE:* SEPTEMBER 19, 2008

*LETTING DATE:* SEPTEMBER 21, 2010

TONY HOUSER, PE
*PROJECT ENGINEER*

LEE ANN MOORE
*PROJECT DESIGN ENGINEER*

*HYDRAULICS ENGINEER*

SIGNATURE:

*ROADWAY DESIGN ENGINEER*

SIGNATURE:

*DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA*

P.E.
*STATE HIGHWAY DESIGN ENGINEER*

28-JUL-2008 14:57
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jmcclure A1 GEH22410

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| 34839.1.1 (U-2579B) | 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 TO BE THE UNCONSOLIDATED, SEMI-CONSOLIDATED, OR WEATHERED EARTH MATERIALS THAT CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER, AND YIELD LESS THAN 100 BLOWS PER FOOT ACCORDING TO STANDARD PENETRATION TEST (AASHTO T206, ASTM D-1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM. BASIC DESCRIPTIONS GENERALLY SHALL INCLUDE: CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. EXAMPLE:

*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 | | | | | | | | | | | GRANULAR SOILS | SILT-CLAY SOILS | MUCK, PEAT |
| #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 | | | |
| LIQUID LIMIT | 6 MX | | NP | 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 |
| PLASTIC INDEX | | | | 10 MX | 10 MX | 11 MN | 11 MN | 10 MX | 10 MX | 11 MX | 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 A 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 | <4 | N/A |
| | LOOSE | 4 TO 10 | |
| | MEDIUM DENSE | 10 TO 30 | |
| | DENSE | 30 TO 50 | |
| | VERY DENSE | >50 | |
| GENERALLY SILT-CLAY MATERIAL (COHESIVE) | VERY SOFT | <2 | <0.25 |
| | SOFT | 2 TO 4 | 0.25 TO 0.50 |
| | MEDIUM STIFF | 4 TO 8 | 0.5 TO 1.0 |
| | STIFF | 8 TO 15 | 1 TO 2 |
| | VERY STIFF | 15 TO 30 | 2 TO 4 |
| | HARD | >30 | >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 | | |
| | - MOIST - (M) | SOLID; AT OR NEAR OPTIMUM MOISTURE |
| OM — OPTIMUM MOISTURE | | |
| SL — SHRINKAGE LIMIT | | |
| | - DRY - (D) | REQUIRES ADDITIONAL WATER TO ATTAIN OPTIMUM MOISTURE |

### PLASTICITY

| | PLASTICITY INDEX (PI) | DRY STRENGTH |
|---|---|---|
| NONPLASTIC | 0-5 | VERY LOW |
| LOW PLASTICITY | 6-15 | SLIGHT |
| MED. PLASTICITY | 16-25 | MEDIUM |
| HIGH PLASTICITY | 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.
UNIFORM - INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. (ALSO POORLY GRADED)
GAP-GRADED - INDICATES A MIXTURE OF UNIFORM PARTICLES 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 WHENEVER THEY ARE CONSIDERED OF SIGNIFICANCE.

### COMPRESSIBILITY

| | |
|---|---|
| SLIGHTLY COMPRESSIBLE | LIQUID LIMIT LESS THAN 31 |
| MODERATELY COMPRESSIBLE | LIQUID LIMIT EQUAL TO 31-50 |
| HIGHLY COMPRESSIBLE | LIQUID LIMIT GREATER THAN 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
- CPT / 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 W/ CORE
- SPT N-VALUE
- REF — SPT REFUSAL

### 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
$\gamma$ - UNIT WEIGHT
$\gamma_d$ - 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:
- [ ] MOBILE B-___
- [ ] BK-51
- [ ] CME-45C
- [X] CME-550
- [ ] PORTABLE HOIST
- [ ] _____
- [ ] _____

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

HAMMER TYPE:
- [X] AUTOMATIC [ ] MANUAL

CORE SIZE:
- [ ] -B_____
- [ ] -N_____
- [ ] -H_____

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

### ROCK DESCRIPTION

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

| | |
|---|---|
| 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 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 FELOSPAR 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 FELOSPARS 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 FELOSPARS 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 FELOSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, YIELDS SPT N VALUES > 100 BPF* |
| VERY SEVERE (V SEV.) | ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT THE MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE SUCH THAT ONLY MINOR VESTIGES OF THE ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, YIELDS SPT N VALUES < 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 FEET |
| 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 THE 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, 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: FT.

NOTES:
STRATIGRAPHY SHOWN ON THE PROFILES IS FROM BORING TO BORING.

THE ROCK LINE ON CROSS-SECTIONS IS CUT AT THE SECTION.
SOIL STRATIGRAPHY ON CROSS-SECTIONS IS FROM THE BORING.

REVISED 09/23/09

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

STATE PROJECT: 34839.1.1 (U-2579B)
FEDERAL PROJECT: N.A.
COUNTY: FORSYTH
DESCRIPTION: WINSTON SALEM NORTHERN BELTWAY (EASTERN SECTION) (FUTURE I-74) FROM US 158 TO I-40 BUS/US 421

SUBJECT: GEOTECHNICAL REPORT – Inventory

## PROJECT DESCRIPTION

The U-2579B project covers the eastern section of the Winston Salem Beltway, (about 20% of the total circumference). The two largest elements of this section are: 1.) an interchange between the future I-74 and the existing bus I-40, and 2.) approximately 4 miles of 6 lane interstate new construction. Besides these elements, a smaller interchange, numerous bridges, and widening of BusI-40 with associated retaining walls, etcetera, is included.

The –L- line appears to be on more fill than cut, but the profile is constrained by a railroad crossing and the grade separation with -Y4-, (Bus I-40). Most of the soil is low plasticity soil, A-2, with far lesser amounts of A-7 clayey soil, mostly from the surface. In places A-5 or A-4 appear as a transition layer.

The field investigation was conducted from July 7, 2007 to November 2007, using a CME-550 drill machine with an automatic hammer. Standard Penetration Tests, (SPT), were performed through hollow stem augers at selected locations. Additional borings that test proposed retaining wall foundations were completed and are posted on the plans and profiles. Representative soil samples were collected and forwarded to the Materials and Tests Unit laboratory for soil quality analysis, moisture content and ASTM classification. All available drill-holes are plotted on the plan view and also appear projected into the profiles. Additional borings that test proposed retaining wall foundations were completed and are posted on the plans and profiles.

**The following alignments, totaling 24.92 miles, were investigated.**

| Alignment | Station | to | Station | Length Feet |
|---|---|---|---|---|
| -L- | 478+00.00 | | 692+32.98 | 21,432.98 |
| -SRR- | 10+00.00 | | 57+26.59 | 4,726.59 |
| -Y1- | 10+00.00 | | 54+00.00 | 4,400. |
| -Y1DET- | 10+00.00 | | 49+80.00 | 3,980. |
| -Y1LPA- | 10+00.00 | | 22+03.90 | 1,203.9 |
| -Y1LPD- | 10+00.00 | | 22+06.41 | 1206.41 |
| -Y1RPA- | 10+00.00 | | 22+60.41 | 1260.41 |
| -Y1RPD- | 10+00.00 | | 33+20.22 | 2320.22 |
| -Y2- | 11+81.19 | | 29+75.00 | 1794. |
| -Y2A- | 10+00.00 | | 25+99.82 | 1599.82 |
| -Y3- | 10+00.00 | | 42+00.00 | 3200. |
| -Y4- | 10+00.00 | | 150+22.89 | 14022.89 |
| -Y4CD- | 10+00.00 | | 95+97.99 | 8597.99 |
| -Y4EB- | 10+00.00 | | 150+22.89 | 14022.89 |
| -Y4LPA- | 10+00.00 | | 24+20.62 | 1420.62 |
| -Y4LPB- | 10+00.00 | | 24+68.05 | 1468.05 |
| -Y4LPD- | 10+00.00 | | 24+75.27 | 1475.27 |
| -Y4RPA- | 10+00.00 | | 41+41.74 | 3141.74 |
| -Y4RPB- | 10+00.00 | | 32+80.81 | 2280.81 |
| -Y4RPBD- | 10+00.00 | | 86+04.51 | 7604.51 |
| -Y4RPC- | 10+00.00 | | 40+03.40 | 3003.4 |
| -Y4RPD- | 10+00.00 | | 33+19.67 | 2319.67 |
| -Y4WB- | 10+00.00 | | 150+22.89 | 14022.89 |
| -Y5A- | 54+00.00 | | 81+25.00 | 2725. |
| -Y5DET- | 10+00.00 | | 32+32.54 | 1232.54 |
| -Y5- | 16+00.00 | | 45+00.00 | 2900. |
| -Y6- | 10+00.00 | | 38+31.89 | 2831.89 |
| -Y7- | 10+00.00 | | 13+93.72 | 393.72 |
| -Y8- | 10+00.00 | | 20+02.70 | 1002.7 |

24.92 miles, or 131,590.9 feet.

## ITEMS OF SPECIAL GEOTECHNICAL INTEREST

**1.) Retaining Walls 1 – 3 on Y-4:**

Drilling on the highway shoulder found soft embankment and alluvial soil below these walls, with the water table at or above the planned base of the wall. These walls are currently under review.

**2.) Groundwater:**
**The 24 hr water level was found above grade in some borings for -L-, –Y1LPA- and –Y1LPD- and for –Y1RPA- and –Y1RPD- . The locations are posted on a table in the Physiography and Geology section below.**

**3.) All-weather spring fed seeps or streams:**

**There are numerous streams, seeps and water crossings within the boundaries of this project. The locations are posted on a table in the Physiography and Geology section below.**

**4.) Wet soil.**
Wet soil is anticipated adjacent to streams, adjacent to the existing embankments of –Y-4-, and in the cut sections of –Y1LPA- ,Y1LPD- , –Y1RPA- and –Y1RPD- where the water table is above planned grade.

**5.) Rock within 10' of grade, or above grade.**
Rock was found within 10' below grade, or above grade on the project. The locations are posted on a table in the Physiography and Geology section below.

## PHYSIOGRAPHY AND GEOLOGY

**Physiography**
The project is in the Piedmont Physiographic Province, between the Coastal Plain and the Blue Ridge Provinces. From the Blue Ridge Front to the Fall Line, the Piedmont physiographic province is characterized as a peneplane. This surface has been uplifted and is now being incised by the re-energized streams. The ridge tops are the remnants of the original planar surface that is continuous across the piedmont. The intervening valley floors' elevations show a lot more variation. The elevation extremes for –L- appear below. The ridge top elevations cluster around 940 foot elevation. Valley floor elevations are more erratic. Experience suggests that in the residual soil terrain of the piedmont, rock is more likely to be in the valleys than the ridge tops.

| Elevation | Position | Station | | Elevation | Position | Station |
|---|---|---|---|---|---|---|
| 945 | Ridge top | 490+50 | | 825 | Valley Floor | 616+00 |
| 870 | Valley Floor | 506+00 | | 865 | Tributary | 623+00 |
| 940 | Ridge top | 516+50 | | 820 | Valley Floor | 628+00 |
| 875 | Valley Floor | 527+50 | | 935 | Ridge top | 652+00 |
| 940 | Ridge top | 535+00 | | 840 | Valley Floor | 667+00 |
| 850 | Valley Floor | 558+00 | | 910 | Ridge top | 677+00 |
| 950 | Ridge top | 587+00 | | | | |

An inspection of the table above will find 100' of elevation difference in a half mile of lateral distance. Most of the ridges and valleys have a northeast – southwest trend, reflecting the "grain" of the underlying metamorphic rock. Kemer's Mill Creek valley, crossed by –L- at station 615+00, is an expression of this northeast – southwest topographic trend. Smith Creek Valley, crossed at –L- 627+00, runs counter to the dominant fabric with a west – northwest trend. The –L- alignment runs northwest – southeast from the beginning, (nearly perpendicular to the structural trend) to about –L- 549+00 where it turns to a north – south trend. The other main alignment, -Y4- (I-40) is easterly-westerly, all the way. Where the alignment is parallel to the geologic trend, (NE-SW) subsurface variability can be expected to be lessened. Where the trend of the alignment is normal to the trend of the geology, subsurface variability should be at a maximum.

**Geology**
Throughout North Carolina the geologic provinces run northeast – southwest and are divided on the basis of metamorphic grade or dominant rock type. According to the 1985 Geologic Map of North America, this project is entirely within the Milton Belt. The Winston-Salem Geologic quadrangle map does not delineate the Milton Belt, and places Winston Salem within the Charlotte Belt. In either case it is mapped as micaceous schist and gneiss. The Sauratown Mountains Anticlinorium is to the geologic belt to northwest, and the granitic rock of the Charlotte belt is to the southeast.

**Soil Properties**
The first subdivision in the classification of soil is naming it as residual, embankment fill, or alluvial soil. After that the AASHTO classification is partly based on grain size, but is also an attempt to predict the soil behavior as a construction material.

Residual soil is a product of in-place chemical destruction of the original rock. Chemical weathering usually reduces rock strength making it more susceptible to erosion, transport, and removal by natural physical processes. The residual soil thickness is influenced by original rock type and mechanical erosion. For example, the preliminary boring for the U.S.158 bridge over –L- at the –L- 482, elevation 910' found 70' of residual soil over rock. The borings at –L- 532+00, elevation 920', found rock within 20 feet of the surface. The dominant soil type encountered on the project was low plasticity A-2 micaceous sandy soil, the expected soil derived from weathering the gneiss and schist of this geologic province. Eventually, weathering processes produce the red A-7 cap clay that appears on the ridge tops.

Alluvial Soil: Soil grains that have been transported by a natural process, water or wind and deposited away from their original location forms alluvial soil. This process of transport and deposition leaves visible layering in the soil defined by a physical characteristic such as color, grain size, density, or sorting. Alluvial soil was found in this project only associated with floodplain areas. Generally it was sand, tending toward A-1 to A-2-4, the clays having been winnowed out.

Fill, Roadway Embankment, Artificial Fill Soil: Construction may require addition or excavation of soil to bring the natural ground surface to the desired elevation. When soil is transported to a new site and compacted it is fill soil. If it is handled under the standards of the NCDOT, it becomes Roadway Embankment. If some other entity is responsible for the fill placement, the fill is classed as Artificial Fill. On this project, particularly -Y4-, new travel lanes will tie-in to existing roadway embankment material, then extend over residual soil.

**Rock Properties**
This investigation is concerned with the depth to rock and the areal extent of rock at or above grade. Rock samples were not collected or analyzed in this investigation. Typically rock from this region is strongly foliated micaceous schist and gneiss.

All cross sections that contain a boring terminated on rock above grade, are included as part of this report. The depth to rock indicated by auger refusal is variable in cross section and profile.

**Rock was found less than 10' below grade, or above grade in the following locations, extracted from an examination of the profile.**

| Alignment | Station | to | Station | Location |
|---|---|---|---|---|
| -L- | 531+00 | | 540+00 | |
| -L- | 649+00 | | | Single point |
| -L- | 670+00 | | 682+50 | |
| -Y1RPA- | 22+50 | | | Single point |
| -Y4- | 29+50 | | | Single point |
| -Y4- | 39+00 | | | Single point |
| -Y4- | 49+00 | | 52+00 | Left Side |
| -Y4- | 55+00 | | 57+00 | Left Side |
| -Y4- | 61+00 | | | Left Side |
| -Y4- | 82+00 | | 84+50 | Left Side |
| -Y4- | 80+50 | | 84+50 | Right Side |
| -Y4CD- | 53+75 | | | Single point |
| -Y4CD- | 75+00 | | | Single point |
| -Y4CD- | 79+50 | | 86+50 | Left and Right |
| -Y4LPA- | 17+00.00 | | 21+00 | Left and Right |
| -Y4LPD- | 18+00.00 | | 21+50 | Left and Right |
| -Y4RPBD- | 85+50 | | | Single point |
| -Y4RPC- | 23+00 | | | Single point |
| -Y4RPD- | 22+50 | | 24+00 | Below grade |
| -Y5A- | 72+50 | | 79+00 | CL mostly |
| -Y6- | 10+00 | | 13+00 | At grade |

**Groundwater Properties**

**Water was found less than 10' below grade, or above grade in the following locations**

| Alignment | Station | to | Station | Location |
|---|---|---|---|---|
| -L- | 490+00 | | | Single point |
| -L- | 516+50 | | | Single point |
| -L- | 670+00 | | | Single point |
| -L- | 538+00 | | 548+00 | Above Grade |
| -L- | 682+50 | | 683+50 | Below Grade |
| -Y1- | 33+00 | | | Bridge Abutment |
| -Y1LPA- | 12+50 | | 15+50 | Above Grade |
| -Y1LPD- | 13+50 | | | Only Boring |
| -Y1RPA- | 22+50 | | | Single Point |
| -Y1LPD- | 24+00 | | | Only 1 Measured |
| -Y4WB- | 40+00 | | 70+00 | In Embankment[1] |

**All-weather spring fed seeps or streams:**

The stations in the table below record the location of springs seeps or streams, some which may not have year round flow.

| Line | Station | | | Size of stream: eg: 1st order[2]. |
|---|---|---|---|---|
| -L- | 501+49 | to | | 2nd order |
| -L- | 506+26 | | | 2nd order |
| -L- | 508+58 | to | 510+75 | 2nd order |
| -L- | 522+90 | | | 2nd order |
| -L- | 526+78 | | | 2nd order |
| -L- | 527+98 | | | 2nd order and lake on left. |
| -L- | 556+94 | | 557+00 | 3rd order stream Crossing (river?) Bridge |
| -L- | 559+85 | to | 559+97 | 3rd order stream Crossing (river?) Bridge |
| -L- | 569+65 | to | 572+66 | 2nd order stream under CL |
| -L- | 572+66 | to | 574+00 | Existing Culvert |
| -L- | 604+00 | to | 606+00 | 2nd order stream under leftside fill |
| -L- | 615+66 | to | 615+97 | 4th order stream Crossing (river?) |
| -L- | 628+46 | | 628+63 | 3rd order stream Crossing (river?) |
| -L- | 636+32 | | | 2nd order |
| -L- | 637+39 | | | 2nd order |
| -L- | 638+24 | to | 639+40 | 2nd order diagonal crossing |
| -L- | 663+27 | | | 2nd order |
| -L- | 667+05 | to | 667+10 | 3rd order last –L- |
| -Y1DET- | 17+13 | | | 1st order |
| -Y1DET- | 19+50 | | | 1st order |
| -Y1DET- | 26+20 | | | 1st order |
| -Y1DET- | 40+36 | | | 1st order |
| -Y1DET- | 40+58 | | | 1st order last –Y1Det- |
| -Y1- | 22+69 | | | 2nd order |
| -Y1- | 28+02 | | | 1st order |
| -Y1- | 41+65 | | | 2nd order |

[1] Water in I-40 embankment was found during investigation for retaining wall.
[2] A stream without tributaries is first order. Two first order streams converge to make a second order stream. A third order stream requires two second order streams as tributaries.

| | | | | |
|---|---|---|---|---|
| -Y1- | 54+52 | | | 3rd order trpl bx culvert last –Y1- |
| -Y1LPA- | 16+00 | to | 17+00 | 1st order crosses cut |
| -Y1LPA- | 17+00 | to | 2+00 | 1st order crosses fill to end of Loop |
| -Y1RPA- | 11+50 | | | 1st order crosses fill |
| -Y1RPD- | 18+00 | | | 1st order crosses fill |
| -Y1RPD- | 11+00 | | | 1st order crosses fill |
| -Y4RPBD | 16+29 | to | 16+86 | 3rd order stream |
| -Y4RPBD | 26+45 | to | 26+56 | 3rd or 4th order stream |
| -Y4RPBD | 81+76 | | | 1st order stream in culvert |
| -Y4RPB | 25+49 | | | 2nd order stream in 30" rcp |
| -Y4RPB | 27+26 | | | 1st order stream in 18" rcp |
| -Y4LPB- | 12+62 | to | 13+13 | pond |
| -Y4LPB- | 23+60 | | | 1st order stream in 24" rcp |
| Y4RMPC | 31+00 | | | 2nd order stream just below pond. |
| Y4RMPC | 33+30 | | | 1st order stream in 24" rcp |
| Y4RMPC | 36+09 | | | 1st order stream in 18" rcp |
| Y4RMPD | 10+00 | | | 1st order crosses fill |
| Y4RMPD | 20+98 | | | 1st order crosses fill |
| Y4LPD | 10+00 | | | Pond 100' to left under fill. |
| Y4LPD | 20+00 | | | Pond 100' to left under fill.(same one) |
| Y4LPA | 10+00 | to | 13+76 | First order creek under fill on rt, then crosses. |
| Y4RMPA | 16+96 | to | 17+30 | 3rd order creek |
| Y4RMPA | 37+27 | | | 2nd order creek in 30" RCP |
| Y4CD | 19+25 | to | 19+36 | 3rd order creek |
| Y4CD | 33+13 | to | 13+28 | 3rd order creek |
| Y4CD | 40+67 | | | 1st order creek |
| Y4CD | 45+19 | | | 1st order creek under fill |
| Y4CD | 48+15 | | | Pond 100' left, under fill |
| Y4CD | 69+63 | to | 71+27 | 1st order creek under fill |
| Y4CD | 71+27 | to | 71+34 | 3rd order stream, (under fill?) |
| Y5 | None | | | |
| Y6 | None | | | |
| Y8 | None | | | |
| Y5A | 59+72 | | | 1st order stream in 24" rcp |
| Y5DET | done | | | |
| Y4 | 32+83 | to | 33+84 | 1st order in 24" rcp, diagonal rt to left. |
| Y4 | 40+00 | to | 46+01 | 1st order, under right side fill |
| Y4 | 45+00 | to | 46+29 | Triple 8'x9' box, diagonal left to right. |
| Y4 | 46+29 | to | 55+00 | Fill indicated over 3rd order stream on rt. Side. |
| Y4 | 64+51 | | | 1st order stream in 30" rcp |
| Y4 | 73+09 | | | 1st order stream in 30" rcp |
| Y4 | 94+46 | | | 1st order stream in 24" rcp |
| Y4 | 104+80 | | | 1st order stream in 30" rcp |
| Y4 | 107+49 | | | 1st order stream in 24" rcp |
| Y4 | 109+41 | | | 1st order stream in 18" rcp |
| Y4 | 131+40 | | | 1st order stream in 24" rcp |

## GEOTECHNICAL DESCRIPTIVE ANALYSIS

**The project is broken into segments that are discussed in the following sections, so that it may be more easily digested. The segments are as follows:**

**Segment 1: The –L- alignment from –L- 478+00 to the end of the project at –L- 692+32, including Y alignments, stream crossings and bridges, except Y-4.**

**Segment 2: The interchange between -Y4-, (I-40) and (-L-) including ramps, loops and access roads.**

**Segment 3: -Y4-, (I-40) from -Y4-26+80 to -Y4-143+00, separate from interchange.**

**Segment 1: The –L- alignment from –L- 478+00 to the end of the project at –L- 692+32, including Y alignments, stream crossings and bridges, except Y-4.**

### Physical Description

This segment is 21,432' long, all new alignment, with the first 7600' mostly in cut, up to 40' thick, then 11,700' on fill, up to 70' thick, then 2200' mostly on cut up to 40' thick. Rock is encountered in some of the cut sections, as noted in the table below. There are numerous stream crossings.

**-L-**

This segment is mapped in plan on sheets 4 through 19, 20 and 21 and profile sheets 32 through 44.Cross sections were printed for areas of shallow rock. The –L- alignment begins at station –L-478+00, elevation 882 climbs to elevation 922 at station 510+00, and then descends to elevation 884 at station –L-549+00. From there, the road climbs back to elevation 982 at station 584+34, then drops to elevation 871' at station 621+00. A long climb, including the bridge over I-40 tops out at elevation 924.31 at station 647+00, where the grade drops down to elevation 855, station 675+00. From there, the grade climbs to the end of the project at elevation 891, and station 692+32.98.

**Cuts and Fills**

| Alignment | Station | to | Station | Note |
|---|---|---|---|---|
| -L- | 479+00 | | 499+50 | Cut, maximum 50' thick |
| -L- | 499+50 | | 513+25 | Fill, 20 to 50' thick |
| -L- | 513+25 | | 520+00 | Cut, one hill top. |
| -L- | 520+00 | | 530+00 | Fill 20' to 30' thick |
| -L- | 530+00 | | 554+00 | Cut 40' thick, about half rock |

| | | | | |
|---|---|---|---|---|
| -L- | 554+00 | | 646+50 | Fill 60' to 70' thick |
| -L- | 646+50 | | 657+50 | Cut, 15' mostly |
| -L- | 657+50 | | 670+50 | Fill 30' |
| -L- | 670+50 | | 685+50 | Cut 50' thick, 25% rock |
| -L- | 685+50 | | 690+00 | Fill |

**Geology**
This area is not only covered by the state geologic map, but was also included in the 1° x 2° quadrangle mapping. The mapping shows that the alignment is on Cambrian age metamorphic rocks of the Charlotte belt, northwest of a Pennsylvanian age granite body that intrudes the metamorphic rock.

**Soil**
Most of this project has residual soil at the surface, and most of the proposed excavation involves residual soil. The distribution of soil type for the 164 samples from –L- is as follows:

| alignment | AASHTO class | Number / total | percent | |
|---|---|---|---|---|
| -L- | A-1-b | 4 | 2.4% | Coarse Sand |
| -L- | A-2-4 | 32 | 19.5% | Sand |
| -L- | A-2-5 | 29 | 17.7% | Silty Sand |
| -L- | A-2-6 | 2 | 1.2% | Silty Sand with Clay |
| -L- | A-2-7 | 2 | 1.2% | Silty Clayey Sand |
| -L- | A-4 | 14 | 8.5% | Silt |
| -L- | A-5 | 32 | 19.5% | Silt with high LL |
| -L- | A-6 | 12 | 7.3% | Clayey Silt |
| -L- | A-7-5 | 27 | 16.5% | Clay |
| -L- | A-7-6 | 10 | 6.1% | Clay |
| | | 164 | 99.5% | |
| | | | | |

The relatively low plasticity of the clay yielded a small group of the A-2-6 and the A-2-7 samples. Even in the AASHTO classifications that require a minimum of 36% combined silt clay fraction, the relatively low PI pushed a lot samples into the A-4 or A-5 classification. No settlement issues are anticipated from the residual soil beneath the embankments. The alluvial soil that was encountered adjacent to stream crossings was thin, less than 10' thick, and either loose wet sand or very stiff clay.

**Rock**
Rock was found sporadically on this project. At –L- 490+20 a boring was carried to 60' depth and did not encounter rock. The soil samples indicate that soil grain size increasing with depth; clay at the surface, then silt, then sand. From –L-531 to –L- 543 rock is encountered in every boring, but depth to rock and elevation of rock both vary wildly. A similar occurrence was found from –L-670, to –L-686. It is sometimes tempting to assume continuity between borings, as if the layers of the earth were like an onion. This is not the case around Winston Salem.

**Groundwater**
Static water levels measured in several areas indicate that groundwater will be encountered during construction of this segment.

| alignment | Station | Grade Elevation | SWT[3] Elevation | |
|---|---|---|---|---|
| -L- | 490+20 | 896 | 903 | |
| -Y1- | 32+85 | 885 | 885 | = -L-482+00 |
| -Y1LPA- | 13+40 | 888 | 900 | |
| -Y1LPA- | 15+00 | 892 | 900 | |
| -Y1RMPA | 22+50 | 900 | 908 | |
| -Y1LPD- | 13+75 | 886 | 896 | |
| -Y1RMPD- | 24+00 | 892 | 900 | |
| -L- | 538+00 | 893 | 896 | |
| -L- | 540+00 | 891 | 893 | |
| -L- | 543+00 | 888 | 888 | |
| -L- | 545+50 | 887 | 889 | Artesian pressure |

In the cut from 532+50 to 538 the borings stopped above grade in rock. Water measurements were not taken. Water may exist at or above grade. From –L- 546+00 to the end of the cut at –L-553+00, no measurement was taken but water may be present.

**All-Weather Spring-Fed Seeps or Streams:**
The location of the water features is recorded in a table within the Physiography and Geology section above. Comments are made here regarding some particular topics.

**Pond at –L- 527+00**: A pond and small wetland will be covered by a roadway embankment. A 10' thickness of low plasticity silty sandy clay sediment should not pose any problems to construction.

**Martin Mill Creek at –L- 557+83**: The east and west branches of Martin Mill branch come together within a 500 foot wide flood plain with up to 10' of alluvial soil cover. PI and soil type are variable, but most of the feature will be traversed by bridge.

**Kemer's Mill Creek –L-616+00**: The drilling found a 7 foot thick alluvial mantle, on rock at this crossing. The alluvial soil is sandy and non plastic and should pose no challenge to construction.

**Smith Creek –L-628+50**: The alignment crosses a 400' wide floodplain with a 7 to 10 foot thick mantle of wet sandy soil. This is the other major creek of the project and shows a bridge crossing but the design is not finished. The soil should not be a problem.

**Segment 2: The interchange between -Y4-, (I-40) and (-L-) including ramps, loops and access roads, but not the -L- or -Y4- alignments.**

**Physical Description**
This segment of the job is the connecting roads and structures of the new interchange between existing interstate I-40, and planned interstate I-74. Plan sheets 15, 16, 24, 25, 26, 27, 28, and profile sheets 60 through 81 cover the segment. Alignments include -Y4CD-, -Y4LPA-, -Y4LPB-

[3] SWT: Static Water Table

, -Y4LPD-, -Y4RPA-, -Y4RPB-, -Y4RPBD-, -Y4RPC-, and, -Y4RPD-. The general function of these alignments follows.

-Y4CD- (Y4 Connector Distributor), with two northbound lanes, and no southbound lanes, runs parallel to –L- adjacent to the N. bound left side, and facilitates traffic ingress and egress by the various –Y4- alignments from N. bound –L- to E. and W. bound I-40.

At station -Y4CD- 10+00, Y4CD merges into N bound –L-.

At station -Y4CD -26+00, -Y4RMPA-merges into -Y4CD-, (W. bound I-40 to N. bound –L-).

At station -Y4CD - 45+00, traffic exits to -Y4 LPA-. (N bound -L- to W. bound I-40).

At station -Y4CD- 46+00, traffic enters -Y4CD- from -Y4LPD-, (E. bound I-40 to N. bound -L-).

At station -Y4CD- 71+00, traffic exits to -Y4RPD-, (N. bound –L- to E. bound I-40).

At station -Y4CD- 90+00, traffic bound for I-40 exits –L-.

**Cuts and Fills**

| Alignment | Station | to | Station | Note |
|---|---|---|---|---|
| -Y4CD- | 10+00 | | 51+00 | Fill: up to 65' thick |
| -Y4CD- | 51+00 | | 62+00 | Cut: up to 20' thick |
| -Y4CD- | 62+00 | | 74+00 | Fill: up to 30' thick |
| -Y4CD- | 74+00 | | 90+25 | Cut: up to 55' partially in rock |
| -Y4CD- | 90+25 | | 95+00 | Fill: up to 25' thick |
| -Y4CD- | 95+00 | | 96+00 (end) | Cut: up to 10' thick |
| -Y4LPA- | 10+00 | | 17+00 | Fill: up to 50' thick |
| -Y4LPA- | 17+00 | | 21+50 | Cut: rock at grade |
| -Y4LPB- | 10+00 | | 17+75 | Fill: up to 55' thick |
| -Y4LPB- | 17+75 | | 22+00 | Cut: up to 11' thick |
| -Y4LPD- | 10+00 | | 13+00 | Fill: up to 55' thick |
| -Y4LPD- | 14+50 | | 18+00 | Fill: up to 15' thick |
| -Y4LPD- | 18+00 | | 21+50 | Cut: up to 13' thick |
| -Y4RMPA- | 10+00 | | 27+00 | Fill: up to 55' thick |
| -Y4RMPA- | 27+00 | | 41+00 (end) | Final Grade within 10' of Ground Line. |
| -Y4RMPB- | 10+00 | | 15+50 | Fill: tapers from 43' to 0 |
| -Y4RMPB- | 15+50 | | 17+75 | Cut: within 10' of grade |
| -Y4RMPB- | 17+75 | | 29+00 | Fill:0 to 40' to 0, some over existing fill |
| -Y4RMPB- | 29+00 | | 32+50 | Final grade within 5' of Ground Line. |
| -Y4RPBD- | 10+00 | | 35+00 | Fill: 20' to 60' to 20' to 60' to ≤ 10' |
| -Y4RPBD- | 35+00 | | 38+00 | Fill: Less than 10' thick |
| -Y4RPBD- | 38+00 | | 41+00 | Fill: 10' thick |
| -Y4RPBD- | 41+00 | | 45+50 | Fill: Over I-40 10' to 45' to 25' (thick) |
| -Y4RPBD- | 45+50 | | 55+00 | Fill: 25' thick to 50' thick to 10' thick |
| -Y4RPBD- | 43+00 | | 55+00 | Bridge? |
| -Y4RPBD- | 55+00 | | 63+00 | Fill: 10' thick to 40' thick to 0 |
| -Y4RPBD- | 63+00 | | 68+00 | Cut: 0 to 10' to 0 |
| -Y4RPBD- | 68+00 | | 77+50 | Fill: 0 to 10 to 0 |
| -Y4RPBD- | 77+50 | | 84+00 | Fill: 0 to 15' (over alluvium) to 0 |
| -Y4RPBD- | 84+00 | | 86+00 | At grade: joins existing I-40. |
| -Y4RPC- | 10+00 | | 12+00 | Fill: 18' to 0 |
| -Y4RPC- | 12+00 | | 15+00 | Cut: 0 to 25 |
| -Y4RPC- | 15+00 | | 25+00 | Cut: 25' ± throughout |
| -Y4RPC- | 25+00 | | 29+50 | Cut: 25' to 0 |
| -Y4RPC- | 29+50 | | 35+50 | Fill: 0 to 20 to 15 to 20 to 0 |
| -Y4RPC- | 35+50 | | 40+00 | At grade: joins existing I-40. |
| -Y4RPD- | 10+00 | | 21+50 | Fill: 28+00 to 0 (gaining 75' elev.) |
| -Y4RPD- | 21+50 | | 25+50 | Cut: less than 8' |
| -Y4RPD- | 25+50 | | 30+00 | Fill: 0 to 35 to 0 |
| -Y4RPD- | 30+00 | | 33+50 | Cut: 10' (joins -Y4RPBD- at end) |

**Geology**

Except for stream crossings, this segment is on residual soil, developed by weathering of Charlotte Belt gneiss and schist.

**Soil**

Most of this segment will built on embankment fill over residual soil. No areas of unsuitably soft or wet soil were found in the borings. Most of the residual soil in the cut sections is silt or sand. PI values are typically less than 20 and commonly NP. No settlement issues are anticipated from the residual soil beneath the embankments.

**Rock**

Quasi continuous bodies of rock in areas to be excavated are shown in the table below:

| Alignment | Station | to | Station | Note |
|---|---|---|---|---|
| -Y4CD- | 79+50 | | 84+50 | Above grade, in cut |
| -Y4LPA- | 16+50 | | 21+00 | Above grade, in cut |

**All-Weather Spring-Fed Seeps or Streams:**

The location of the water features was recorded in a table within the Physiography and Geology section above. Comments are made here regarding some particular topics. Alluvium in flood plain is less than 10' thick and sandy.

| | | | |
|---|---|---|---|
| -Y4RPBD-16+00 | 17+25 | Kemer's Mill Creek | Crosses at old dam site. 6' deep channel in FP[4] |
| -Y4RPBD-17+25 | 21+00 | Kemer's Mill Creek | 300'wide FP, 8'deep channel |
| -Y4RPBD-25+74 | 27+12 | Smith Creek | Bridge |
| -Y4CD- 32+49 | 34+19 | Smith Creek | Bridge |
| -Y4RMPA-16+44 | 17+79 | Smith Creek | Bridge |

**Segment 3. : -Y4-, (I-40) from -Y4-26+80 to -Y4-143+00, separate from interchange.**

[4] FP = Flood Plain, with presumed alluvial soil.

**Physical Description**

-Y4- is existing I-40. The work includes widening of the Eastbound and Westbound sides, and the addition of 1 or 2 lanes at the entrance or exit of new ramps connecting to –L-. The widening is generally symmetrical relative to the I-40 median. Obviously, if the existing roadway required cut, the new work will be in cut, and existing embankments will require widening with fill. The right side of of existing –Y4WB- is being eroded in several places by the bordering stream. The plans do not detail how the embankment will be pushed out an additional 22'.

**Cuts and Fills**

| -Y4WB- | | | | |
|---|---|---|---|---|
| Station | to | Station | Note | Note: Includes paved shoulder. |
| 27+00 | | 32+00 | Cut | New shlder on left, 10' with cut on right |
| 32+00 | | 33+00 | On fill. | New shlder on left, 10' with fill on right |
| 33+00 | | 38+50 | Cut | New shlder left, 10' with cut on right |
| 38+50 | | 40+00 | On fill. | New shlder left, taper to 22' on fill at right |
| 40+00 | | 53+00 | On fill. | New shlder on left, 22' on fill at right |
| 53+00 | | 56+00 | On fill. | New shlder on left, taper to 36' on fill at right |
| 56+00 | | 68+50 | On fill. | New shlder on left, 36' on fill at right |
| 69+00 | | 69+00 | On fill. | New shlder on left, 16' on fill at right (typo?) |
| 69+50 | | 72+00 | On fill. | New shlder on left, taper to 49' on right, (1 Y4 lane + 2 Y4RPA lanes, plus shoulder. |
| 72+00 | | 77+00 | On fill. | New shlder left, 1 lane+taper to 12'paved shldr at right |
| 77+00 | | 86+50 | Cut rt. | New shlder left, 1 lane plus paved shoulder: 24' |
| 86+50 | | 88+00 | On fill. | New shlder left 1 lane plus paved shlder: 24'. merge Y4LPA- 2 lanes squeeze to 1 plus shoulder |
| 88+00 | | 93+00 | On fill. | New shlder on left, 36' right side (2 lane plus shldr) |
| 93+00 | | 94+00 | On fill. | New shlder on left, 12' right side, 1 lane on rt side for Y4LPB |
| 94+00 | | 95+50 | On fill. | New shlder on left, 1 new lane on right, Y4LPB widens to 2 lane plus 2 paved shoulders. |
| 95+50 | | 104+00 | On cut | New shlder on left 25'on right, 1 lane+paved shoulder |
| 104+00 | | 110+50 | On fill | New shlder on left 25'on right, 1 lane+paved shoulder Y4RPB merging from right. |
| 111+00 | | 118+50 | On Cut | New shlder on lt 25'on rt, 1 lane+ paved shldr. 2 Y4RPB lanes to1 and merge w/ Y4 |
| 118+50 | | 121+00 | On fill | New shlder on left, 2 new lanes on rt + shldr |
| 121+00 | | 126+00 | On Cut | New shlder on left, rt tapers to 1 new lane. |
| 126+00 | | 137+00 | On Cut | New shlder on left, new lane + shlder on Rt. |
| 137+00 | | 153+00 | On Fill | New shlder on left, new lane on right tapers to nothing, undercut for new paved shoulder. |
| **-Y4EB-** | | | | |
| Station | to | Station | Note | Note: Includes paved shoulder. |
| 27+00 | | 31+50 | Cut | New shlder at right, New paved shldr on left tapers to new lane on left + 10' paved shldr plus 6:1 slope |
| 31+50 | | 33+50 | Cut. | New Shldr at rt new lane plus paved shldr, left |
| 33+50 | | 35+50 | Fill | New Shldr at rt new lane plus paved shldr, left |
| 35+50 | | 39+00 | Cut | New Shldr at rt new lane plus paved shldr, left |
| 39+00 | | 45+00 | On fill. | New Shldr at rt new lane plus paved shldr, left |
| 45+00 | | 46+50 | On fill. | New Shldr at rt new lane tapers to 19.5' + paved shldr, |
| 46+50 | | 48+00 | On fill. | New Shldr at rt new lane tapers to 24' + paved shldr, |
| 48+00 | | 52+50 | On cut. | New Shldr at rt new two new lanes + paved shldr, on left |
| 52+50 | | 55+00 | On fill. | New Shldr at rt new two new lanes + paved shldr, on left |
| 55+00 | | 60+50 | On Cut. | New Shldr at rt new two new lanes + paved shldr, on left |
| 61+00 | | 63+00 | On fill | -Y4RPBD- 2 lanes separates to the left, on fill |
| 63+00 | | 66+00 | On fill. | Y4EB: 2 existing lanes, new shoulders on left and right |
| 66+00 | | 75+00 | On fill. | Y4EB: undercut for left and right shlders |
| 75+00 | | 85+50 | On cut. | Y4EB: undercut for left and right shlders |
| 85+50 | | 89+00 | On fill. | Y4LPD, 2 lanes, merges to 1, then with Y4EB 2 lanes |
| 89+00 | | 92+00 | On fill | Y4EB, 3 lanes 2 shoulders fill on fill. |
| 92+00 | | 100+50 | On Cut | Y4EB, 3 lanes 2 shoulders fill on fill. |
| 100+50 | | 104+00 | On Cut | Shldr rt and left, 34d lane tapers out, leaving 2. |
| 104+00 | | 108+00 | On fill | Y4RPC approaches Y4, each 2 lanes |
| 108+00 | | 114+00 | On Cut | Y4RPC merges to 1 lane then attaches to Y4 = 3 lanes |
| 114+00 | | 116+00 | On Cut | Y4EB narrows to two lanes, two shoulders |
| 116+00 | | 117+00 | On Cut | Y4EB 2 lanes, 2 shoulders |
| 117+00 | | 120+00 | On Fill | Shoulders upgraded |
| 120+00 | | 135+00 | On Cut | Shoulders upgraded |
| 135+00 | | 143+00 | On Fill | Shoulders upgraded |

**Geology**

This segment, like the rest of the project, is within the Charlotte Belt metamorphic terrain. The metamorphic "grain" runs northeast, southwest, with the direction of maximum variability at 90 degrees to that.

**Soil**

A summary table of the soil follows below. There is really not much difference between the eastbound and westbound sides, so they were not separated. The soil refers to what is below the –Y4- roadway fill.

| Alignment | Station | to | Station | Note |
|---|---|---|---|---|
| -Y4- | 27+00 | | 40+00 | Residual soil: silty sand. |
| -Y4- | 40+00 | | 48+00 | Alluvium (5' A-7 over A-2-4) over residual soil. |
| -Y4- | 48+00 | | 49+50 | Rock, EB side, Alluvium, WB side |
| -Y4- | 49+50 | | 65+50 | Rock EB side, Alluvium, WB side |
| -Y4- | | | | |

The –Y4- alignment was part of the earliest sections of I-40 in North Carolina, and was built in the late 1950's or early 1960's. In areas of alluvial soil, any settlement is long over. Though areas of erosion from water sheeting off the pavement and down embankment slopes were seen,

no embankment failures related to subgrade failures were identified. The alluvial soil may be a construction issue.

No settlement issues are anticipated from the residual soil beneath the embankments.

**Rock**
Because on this segment's construction is widening, existing cut slopes are pushed back. Rock is only anticipated in the limited areas that already have rock exposures. The sections with significant exposures of predicted rock are listed in the table, below.

| Alignment | Station | to | Station | Note |
|---|---|---|---|---|
| -Y4EB- | 48+50 | | 52+00 | Above grade, in cut |
| -Y4EB- | 55+00 | | 57+50 | Above grade, in cut |

Because it is Winston Salem, there will be other rock exposed during construction.

**All-Weather Spring-Fed Seeps or Streams:**
The location of the water features was recorded in a table within the Physiography and Geology section above. Comments are made here regarding some particular topics.

-Y4WB- 40+00 to –Y4WB-46+00: persistent stream on right side of alignment, portrayed as covered by the new embankment. Evidence of erosion of the toe of this slope was noticed.
-Y4WB- 50+00 to –Y4WB-55+00: 3rd order stream portrayed as covered by the new embankment. Evidence of the erosion of the toe of this slope was noticed.
-Y4WB- 55+00 to –Y4WB-66+00: 3rd order stream portrayed as intermittently covered by the new embankment. Evidence of erosion of the toe of this slope was noticed.
-Y4WB- 40+00 to –Y4WB-66+00: The road is on embankment, with the fill slope dropping to the edge of an unnamed stream, until –Y4WB-46+50, where Smith Creek comes under the road, and occupies a position adjacent to the toe of the fill slope. For this entire interval, a series of fish hatchery ponds, held back by 5' earthen dams or berms, have been constructed with water level elevations 9 feet above the stream elevation.
-Y4WB- 40+00 to –Y4WB-66+00: The stream is pinned against the roadway embankment in an unnatural location. It is my interpretation that the stream was moved to the present location prior to fish hatchery construction, with a dike on each side built of excavation spoil.

Respectfully Submitted

Roger Q Callaway, L.G.

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 4 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

-L-

| | | |
|---|---|---|
| PIs Sta 451+66.55 | PI Sta 458+53.53 | PIs Sta 465+27.69 |
| Θs = 4° 11' 32.5" | Δ = 21° 35' 01.1" (RT) | Θs = 4° 11' 32.5" |
| Ls = 420.00' | D = 1° 59' 46.9" | Ls = 420.00' |
| LT = 280.08' | L = 1,081.14' | LT = 280.08' |
| ST = 140.07' | T = 547.06' | ST = 140.07' |
| | R = 2,870.00' | |
| | SE = .07 | |

**FUTURE CONSTRUCTION**
**TIP PROJECT U-2579C**

MICHAEL WADE WESTMORELAND

-TI- 102 PINC 6+40.13
ELEV=861.93
12"SPIKE SET

FREDERICO B. MORETZ
SUSAN K. MORETZ

FREDERICO B. MORETZ
SUSAN K. MORETZ

-TI- 103 PINC 7+93.21
ELEV=860.71
12"SPIKE SET

-TI- 104 PINC 10+05.14
ELEV=860.18
12"SPIKE SET

-BL- 13 POT 5+00.00
(-L-STA. 473+26.06, 0.0718 LT.)
-TI- A13 PINC 11+36.89
ELEV=859.16
NCDOT BASELINE MAP

TOP=860.68
INV=846.68

TOWN OF WALKERTOWN
FORSYTH COUNTY

300' TAPER

128' FULL LANE

60' INC.
12'P.S.

12'P.S.

12'P.S.

12'P.S.

300' TAPER

1153' FULL LANE

MATCHLINE – L – STA. 475+00 SHEET 5

CS Sta. 463+87.62

-L- ST Sta. 468+07.62

JANE WHICKER
DAN WESTMORELAND

-TI- 105 PINC 12+99.10
ELEV=858.26
12"SPIKE SET

-TI- 106 PINC 14+24.09
ELEV=854.87
12"SPIKE SET

-TI- 107 PINC 15+05.64
ELEV=853.72
12"SPIKE SET

-TI- 108 PINC 16+67.05
ELEV=857.09
12"SPIKE SET

TOP=858.78
INV=846.48

KIM C. STREETMAN

TOWN OF WALKERTOWN
FORSYTH COUNTY

BETH C. DELFOSSE

PEGGY J. CHURCH

EIP

25' ACCESS EASEMENT
DB 889PG 653

WENDY C. SLOAN

TOWN OF WALKERTOWN
FORSYTH COUNTY

LOUISE FRANKLIN

12" RCP

NOTE :
FOR -L- PROFILE, SEE SHEET 32

28-JUL-2008 11:25
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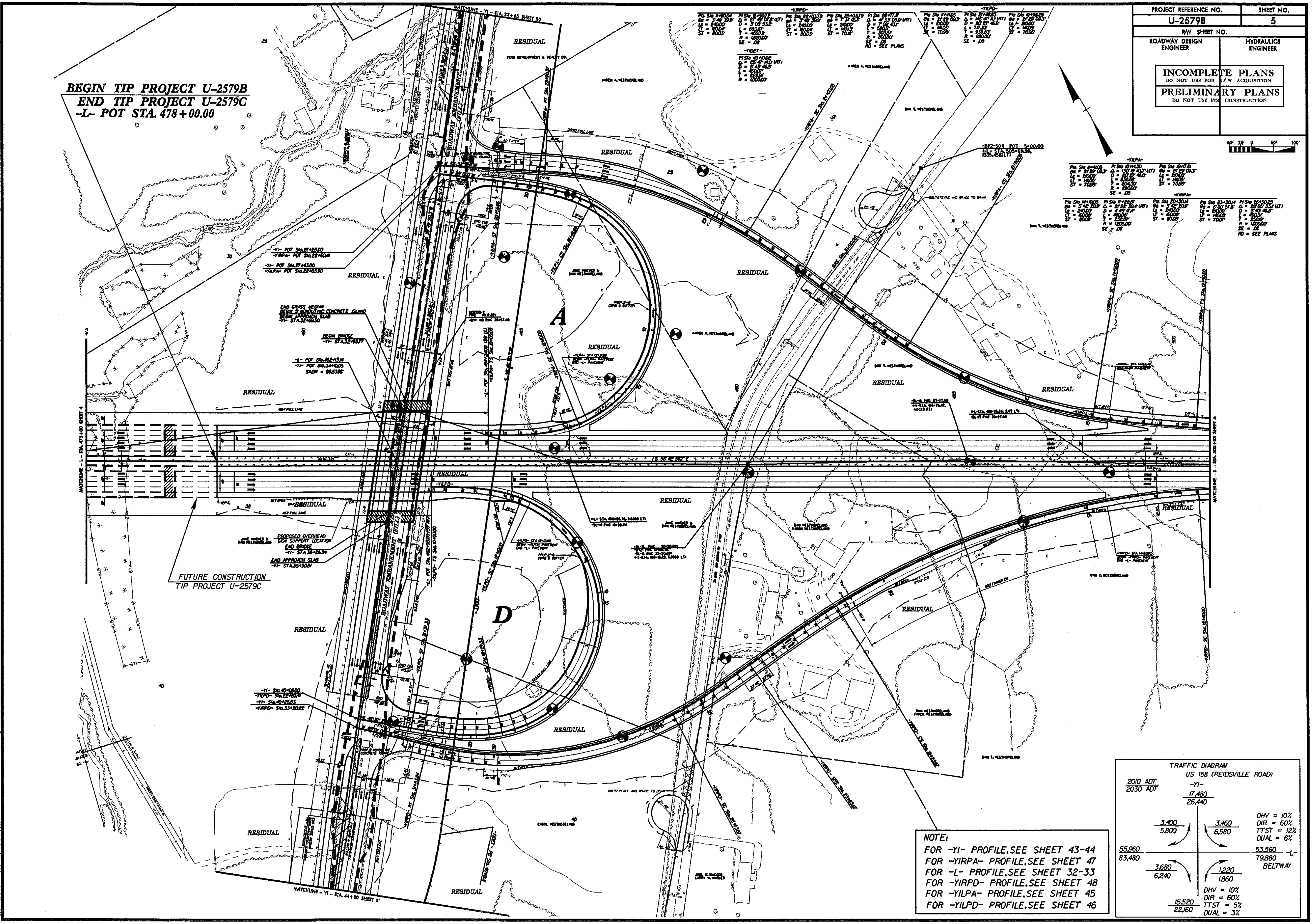
Preliminary Geotechnical Design File

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 5 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

**INCOMPLETE PLANS**
DO NOT USE FOR R/W ACQUISITION

**PRELIMINARY PLANS**
DO NOT USE FOR CONSTRUCTION



NOTE:
FOR -Y1- PROFILE, SEE SHEET 43-44
FOR -YIRPA- PROFILE, SEE SHEET 47
FOR -L- PROFILE, SEE SHEET 32-33
FOR -YIRPD- PROFILE, SEE SHEET 48
FOR -YILPA- PROFILE, SEE SHEET 45
FOR -YILPD- PROFILE, SEE SHEET 46

TRAFFIC DIAGRAM
US 158 (REIDSVILLE ROAD)

REVISIONS

8/17/99

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 6 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

REVISIONS

8/17/99

POND
W.E. 897.3

-L- POT Sta. 503+00.00 (59' LT)
-YIRPA- POT Sta. 10+00.00

-YIRPD-
PIs Sta 11+60.04
Θs = 3° 46' 39.9"
Ls = 240.00'
LT = 160.04'
ST = 80.03'

PI Sta 16+90.72
Δ = 27° 49' 07.8" (LT)
D = 3° 08' 53.2"
L = 883.67'
T = 450.72'
R = 1,820.00'
SE = 08

PIs Sta 22+03.70
Θs = 3° 46' 39.9"
Ls = 240.00'
LT = 160.04'
ST = 80.03'

505

510

TOWN OF WALKERTOWN
FORSYTH COUNTY

(-L- STA. 503+98.24, 11.17 LT)
-BL-18 PINC 36+00.54

PROPOSED OVERHEAD
SIGN SUPPORT LOCATION

GOSPEL LIGHT
BAPTIST CHURCH

-BL-19 PINC 42+23.21
(-L- STA. 510+20.67, 3.60 LT)

DAN T. WESTMORELAND

RESIDUAL

ALLUVIUM

GRAU-350

12"P.S.

N 54° 42' 58.7" W -YIRPA-

S 58° 42' 58.7" E

-L-

PROPOSED OVERHEAD
SIGN SUPPORT LOCATION
-YIRPD-

40' INC.

900' FULL LANE

RIPRAP
END OF STORM

FORSYTH COUNTY
TOWN OF WALKERTOWN

DAN WESTMORELAND
KAREN WESTMORELAND

ROBERT J. DILLON
ILENA B. DILLON

-YIRPD- TS Sta. 10+00.00
-L- POT Sta. 502+91.34 (59' Rt.)

NOTE:
FOR -YIRPA- PROFILE, SEE SHEET 47
FOR -YIRPD- PROFILE, SEE SHEET 48
FOR -L- PROFILE, SEE SHEET 33

MATCHLINE - L - STA. 500+83 SHEET 5

MATCHLINE - L - STA. 512+00 SHEET 7

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 7 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

MATCHLINE – Y2 – STA. 15+61 SHEET 22

GOSPEL LIGHT BAPTIST CHURCH

RESIDUAL

-Y2-PT Sta. 17+68.78

RICHARD N. HURST

-Y2-

PI Sta 14+90.64
Δ = 44° 24' 52.1" (RT)
D = 7° 33' 31.7"
L = 587.59'
T = 309.45'
R = 758.00'
SE = .08
RO = SEE PLANS

PI Sta 27+32.39
Δ = 27° 06' 16.2" (LT)
D = 7° 33' 31.7"
L = 358.58'
T = 182.71'
R = 758.00'
SE = .08
RO = SEE PLANS

ROBERT J. DILLON
ILENA B. DILLON

BEGIN APPROACH SLAB
-Y2- POT STA.18+74.00

BEGIN BRIDGE
-Y2- POT STA.18+99.25

-BL-21PINC 51+70.86
(-L-STA. 519+68.35, L40 LT)

(-L-STA. 516+47.43, 2.08 LT)
-BL-20 PINC 48+49.94=

RESIDUAL

-L-STA. 522+54.44, L5348 LT)
-BL-22 PINC 54+56.94

-BL-23 PINC 56+14.91
(-L-STA. 524+12.43, 2.9275 LT)

ALLUVIUM

RONALD H. WALKER
WILMA JEAN DILLON WALKER

12'P.S.

CAT-1

S 58° 42' 58" E

-L-

36'

12'P.S.

MATCHLINE – L – STA. 512+00 SHEET 6

MATCHLINE – L – STA. 524+62 SHEET 8

300' TAPER

RONALD H. WALKER
WILMA D. WALKER

-L- POT STA.516+31.30
-Y2- POT STA.20+20.21
SKEW = 108.0666°

FORSYTH COUNTY
TOWN OF WALKERTOWN

THE TABOR FAMILY TRUST

WE 8787 POND
12" RCP
12" RCP

PROPOSED OVERHEAD SIGN SUPPORT LOCATION

JAMES DAVID DILLON

ROBERT J. DILLON
ILENA B. DILLON

ROBERT JEFFREY BARBER

END BRIDGE
-Y2- POT STA.21+41.18

BEGIN APPROACH SLAB
-Y2- POT STA.21+66.42

MATCHLINE – Y2 – STA. 24+81 SHEET 23

NOTE:
FOR -Y2- PROFILE, SEE SHEET 49
FOR -L- PROFILE, SEE SHEET 33 – 34

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 8 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

MATCHLINE – L – STA. 524+62 SHEET 7

MATCHLINE – L – STA. 537+00 SHEET 9

525 530 535

RONALD H. WALKER
WILMA JEAN DILLON WALKER

TOWN OF WALKERTOWN
FORSYTH COUNTY

FORSYTH COUNTY
TOWN OF WALKERTOWN

JOSEPH R. DANIELS

MICHAEL L. MCCASKILL
SUSANNA L. MCCASKILL

HOWARD B. CHAMBERS
EILEEN P. CHAMBERS

THE TABOR
FAMILY TRUST

MILDRED C. GOFF
ELBERT S. GOFF

MILLARD AMBROSE HILTON
ELLEN JANE POPE HILTON

GWEN WELBORN-FAGE

(-L-STA. 531+22.01, 2.38 LT)
-BL-25 PINC 63+24.52

(-L-STA. 535+07.20, 7.08 RT)
-BL-26 PINC 67+09.68=

(-L-STA. 528+07.42, 0.93 RT)
-BL-24 PINC 60+09.94

OBLITERATE AND GRADE TO DRAIN

OBLITERATE AND GRADE TO DRAIN

WE 877.9' POND

WE 877.9' POND

POOL

POOL

ROCK WALL SPILLWAY RUINS

MORRIS RD

RESIDUAL

ALLUVIUM

ARTIFICIAL FILL

ESIDUAL

12" HDPE

12" RCP

12" P.S.

36" RCP

42" RCP

S 58° 42' 37" E

NOTE:
FOR -L- PROFILE, SEE SHEET 34

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 9 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

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microstation V8 (SELECTseries 1)

-L-

Pls Sta 543+50.33
$\Theta s$ = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

PI Sta 576+22.74
$\Delta$ = 58° 09' 46.4" (RT)
D = 0° 59' 53.5"
L = 5,826.87'
T = 3,192.41'
R = 5,740.00'
SE = .04
RO = SEE PLANS

Pls Sta 603+37.20
$\Theta s$ = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

(-L- STA. 538+01.29, 2.18 RT)
-BL-27 PINC 70+04.02

(-L- STA. 543+07.65, 2.91 RT)
-BL-29 PINC 75+10.34

(-L- STA. 539+70.32, 0.87 RT)
-BL-28 PINC 71+73.02

(-L- STA. 547+99.72, 3.23 LT)
-BL-30 PINC 80+02.40

MILDRED C. GOFF
ELBERT S. GOFF

WILLARD AMBROSE HILTON
ELLEN JANE POPE HILTON

DANNY T. CAUDILL

540

545

RESIDUAL

12"P.S.

35'

S 58° 42' 58.7" E

60' WC

-L- SSNA 541+90.33

-L- SCSNA 544+70.33

MATCHLINE - L - STA. 537+00 SHEET 8

MATCHLINE - L - STA. 549+39 SHEET 10

CHARLES LEWIS, ET AL

SR 2575 WESTON BROOK TRAIL

12' RCP

20' DRAINAGE/UTILITY EASEMENT PB 30 PG 144

-BY5-516 POT 14+39.23
(-L- STA. 547+52.60, 134.34 RT
CHARLES LEWIS, ET AL

RICHARD REYNOLDS
NINA REYNOLDS

POOL

OBLITERATE AND GRADE TO DRAIN

R= 42'

-BY5-514 POT 34+87.84
(-L- STA. 543+09.34, 565.9767 LT)

FORSYTH COUNTY

JUDGE KORNEGAY
GWENDOLYN KORNEGAY

RN-FAGERBERG

WRANGLER DR

WILLARD AMBROSE HILTON
ELLEN JANE POPE HILTON

NOTE:
FOR -L- PROFILE, SEE SHEET 34 - 35

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 10 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

8/17/99

REVISIONS

-L-

Pls Sta 543+50.33
Θs = 11° 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

PI Sta 576+22.74
Δ = 58° 09' 46.4" (RT)
D = 0° 59' 53.5"
L = 5,826.87'
T = 3,192.41'
R = 5,740.00'
SE = .04

Pls Sta 603+37.20
Θs = 11° 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

BEGIN BRIDGE
-L- POC STA 555+50.02

BEGIN APPROACH SLAB
-L- POC STA 555+26.02

-BL-31 PINC 82+83.93=
(-L- STA. 550+81.95, 17.05 RT)

BM #5
-BY5- STA 5+00.00 TO BM #5
N 739°20'37" E 145'
N = 870288
E = 1665137
ELEV. = 868.68

-BY5-515 POT 5+00.00
(-L- STA. 558+11.94, 357.26 LT)
-T2- A515 PINC 9+04.94
ELEV=859.34
NCDOT BASELINE CAP

-T2- 202 PINC 10+77.99
ELEV=848.37
12"SPIKE SET

-T3- 302 PINC 8+71.26
ELEV=852.04
12"SPIKE SET

-BL- POT 92+75.15 =
-T3- 304 PINC 10+92.60
ELEV=850.63
12"SPIKE SET

-BL-34 PINC 89+95.59
(-L- STA. 557+63.50, 3.19 LT)
-T2- A34 PINC 12+51.06
ELEV=847.26
NCDOT BASELINE CAP

(-L- STA. 555+60.33, 39.44 RT)
-BL-33 PINC 87+60.86

-T2- 203 PINC 13+96.39
ELEV=847.60
12"SPIKE SET

END BRIDGE
-L- POC STA 559+21.65

END APPROACH SLAB
-L- POC STA 559+45.65

-T2- 204 PINC 16+21.04
ELEV=846.38
12"SPIKE SET

-T3- 305 PINC 13+53.33
ELEV=849.98
12"SPIKE SET

-T3- 306 POT 16+02.39
ELEV=853.48
12"SPIKE SET

-T2- 205 POT 17+75.63
ELEV=845.58
12"SPIKE SET

(-L- STA. 553+63.25, 4.52 RT)
-BL-32 PINC 85+67.73

RESIDUAL
ALLUVIUM

DANNY CAUDILL
CHARLENE L. CAUDILL
DANNY T. CAUDILL
DAVID WHITE
MELISSA WHITE
CRAIG SMITH
KATHY SMITH
NC D.O.T.
(FORMERLY -
CHRISTOPHER WILSON
SUSAN WILSON)
MARGARET LUCINDA ROBBINS LINVILLE
CHARLES LEWIS, ET AL
SHUGART ENTERPRISES, LLC

WESTON BROOKE TRAIL
MARTIN MILL CREEK
MARTIN CREEK
WE 802 FORD
POOL
GRAU-350

OBLITERATE AND GRADE TO DRAIN
PROPOSED OVERHEAD SIGN SUPPORT LOCATION
20' DRAINAGE/UTILITY EASEMENT PB 30 PG 179
15' RCP
2-60"RCP
B-77
12'P.S.

MATCHLINE - L - STA. 549+39 SHEET 9
MATCHLINE - L - STA. 561+61 SHEET 11

NOTE:
FOR -L- PROFILE, SEE SHEET 35

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 11 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-L-
Pls Sta 543+50.33
θs = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

Pl Sta 576+22.74
Δ = 58° 09' 46.4" (RT)
D = 0° 59' 53.5"
L = 5,826.87'
T = 3,192.41'
R = 5,740.00'
SE = .04

Pls Sta 603+37.20
θs = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

WINSTON-SALEM/FORSYTH COUNTY BOARD OF EDUCATION

CHARLIE MARTIN

-T3- 301 POT 5+00.00
ELEV=855.45
12"SPIKE SET

SECRETARY OF VETERANS AFFAIRS

DAVID KEITH MCDUFFIE
EMILY EBERT MCDUFFIE

TOWN OF KERNERSVILLE
FORSYTH COUNTY

WILLIE LEAK
KEYA LEAK

ALLUVIUM

20' SANITARY SEWER EASEMENT

8" VC

-T3- 302 PINC 6+86.76
ELEV=855.13
12"SPIKE SET

STANLEY STIGALL

565

570

(-L- STA. 566+30.04, 357.90 RT)
BY6-517 POT 5+00.00

CHARLES AARON MATHIS, JR.
ELLEN COLETTE MATHIS

(-L- STA. 573+57.45, 3.99 LT)
-BL-37 PINC 105+68.16=

R.R. ROBBINS
MABEL S. ROBBINS

RESIDUAL

ROBBINS PERCH CT

20' BST

15" RCP

ROBBINS PERCH TRAIL 20' BST

ARTIFICIAL FILL

300' TAPER

18" RCP

SHUGART ENTERPRISES, LLC

(-L- STA. 563+86.69, 4.09 LT)
-BL-35 PINC 95+98.84

(-L- STA. 568+06.22, 0.83 LT)
-BL-36 PINC 100+11.79

RICHARD KEVIN WOOD
MELINDA ANDERSON WOOD

RICHARD R. ROBBINS
BONNIE M. ROBBINS

12' P.S.

36'

48'

-L-

CAT-I

GRAN-350

MATCHLINE -L- STA. 561+61 SHEET 10

MATCHLINE -L- STA. 574+36 SHEET 12

RESIDUAL

ALLUVIUM

EES

60" RCP

CMC HW

KAYE ROBBINS FULP
MELODY ROBBINS ANDERSON

STANLEY STIGALL

EDWARD RICHARDSON

OBLITERATE AND GRADE TO DRAIN

R=20'

30'

BM #6
-BY8- STA 20+78.55 TO BM #6
N 66°59'34" E 56'
N = 869271
E = 1665048
ELEV. = 900.49

SHUGART ENTERPRISES, LLC

ELLSWORTH MESSERSMITH, JR.
AMY MESSERSMITH

RONALD L. SCOTT, JR.
KIMBERLY D. SCOTT

-BY8-521 POT 20+78.55
(-L- STA. 585+03.89, 104.36 LT)

ROBBINS PERCH WEST CT

18" RCP

18" BST

SCOTTY DOUGLAS BLEDSOE
MELISSA MARSHALL BLEDSOE

CLAY M. HOWARD
NICOLE A. HOWARD

BOBBY D. HOLLOWAY
LISA HOLLOWAY

AFTON PARK DR TO PARK

DAVID SCOTT THOMAS &
TAMMY THOMAS

CECIL K. ANDERSON
MELODY R. ANDERS

NOTE:
FOR -L- PROFILE SEE SHEET 35 - 36

REVISIONS

8/17/99

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 12 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

R.R. ROBBINS
MABEL S. ROBBINS

PISGAH METHODIST CHURCH

STANLEY STIGALL

WENDELL BROADNAX
GLENDA BROADNAX

RICHARD R. ROBBINS
BONNIE M. ROBBINS

EDWARD RICHARDSON

BRIAN K. PETERSON

RONNIE DEAN INGLE, JR.
LOLITA MONTES INGLE

RICHARD HERRICK
MYRA DALLMAN

JOSEPH SMITH
REBECCA SMITH

ROBERT SHIPLEY
MONETTE SHIPLEY

LARRY JONES
ROBIN JONES

NC D.O.T.
(FORMERLY - JOHN BRISON
HEIR BRINSON)

GARY WILSON
MARY WILSON

STANLEY RUSSELL STIGALL

RESIDUAL

-Y2A- PT Sta. 15+18.49

BEGIN BRIDGE
-L- POC STA. 583+15.53

BEGIN APPROACH SLAB
-L- POC STA. 582+91.49

-SRR- POT Sta. 35+12.32
-L- POC Sta. 584+36.24

-Y2A- PC Sta. 20+69.92

-Y2A- PT Sta. 23+82.82

-Y3- POT Sta. 22+74.08
-L- POC Sta. 585+06.99

END APPROACH SLAB -L- POC STA. 585+94.85

END BRIDGE -L- POC STA. 585+70.25

(-L- STA. 579+45.33, 88.71 LT)
-BL-38 PINC 111+48.61

(-L- STA. 585+16.87, 191.58 RT)
-BL-39 PINC 116+98.16=
-BY7- PINC 19+25.46 =
-BY9- POT 5+00.00 =
-BY10- PINC 26+00.69=
-BY10C- POT 11+92.53

-L-

| | | |
|---|---|---|
| PIs Sta 543+50.33 | PI Sta 576+22.74 | PIs Sta 603+37.20 |
| Θs = 1° 11' 52.2" | Δ = 58° 09' 46.4" (RT) | Θs = 1° 11' 52.2" |
| Ls = 240.00' | D = 0° 59' 53.5" | Ls = 240.00' |
| LT = 160.00' | L = 5,826.87' | LT = 160.00' |
| ST = 80.00' | T = 3,192.41' | ST = 80.00' |
| | R = 5,740.00' | |
| | SE = .04 | |

NOTE :
FOR -L- PROFILE, SEE SHEET 36 - 37

MATCHLINE - L - STA. 574+36 SHEET 11

MATCHLINE - L - STA. 587+00 SHEET 13

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 13 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

REVISIONS

8/17/99

BRIAN GRAY
TAMERA GRAY

EARLINE M. SAPP

-L-

Pls Sta 543+50.33
Øs = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

Pl Sta 576+22.74
Δ = 58° 09' 46.4" (RT)
D = 0° 59' 53.5"
L = 5,826.87'
T = 3,192.41'
R = 5740.00'
SE = .04

Pls Sta 603+37.20
Øs = 1° 11' 52.2"
Ls = 240.00'
LT = 160.00'
ST = 80.00'

24" RCP

ROBERT SHIPLEY
MONETTE SHIPLEY

W/LT

590

GARY WILSON
MARY WILSON

595

DALE V. WILSON
ANN H. WILSON

300' TAPER

LARRY JONES
ROBIN JONES

RESIDUAL

12' P.S.

1300' FULL LANE

MATCHLINE – L – STA. 587+00 SHEET 12

MATCHLINE – L – STA. 599+00 SHEET 14

ACCESS EASEMENT DB 1660 PG 2202

2800' FULL LANE

GARY WILSON
MARY WILSON

LARRY Z. WHITE
SUE JAMES WHITE

DALE V. WILSON
ANN H. WILSON

-BL-40 PINC 123+20.23
(-Y3-STA. 27+29.04, 134.10 RT.)

DB 1660 PG 2202

30' ACCESS EASEMENT DB 1660 PG 2202

PHYLLIS E. LONG

MARY M. CUMMINGS

DAVID S. ELLIOTT
ANNE T. ELLIOTT

POOL

(-L-STA. 597+02.04, 347.95' LT)
-BL-41 PINC 132+66.85

FOR -L- PROFILE, SEE SHEET 37

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 14 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

DALE V. WILSON
ANN H. WILSON

600

605

(-L- STA. 605+99.88, 0.39 LT)
-BL-42 PINC 141+67.03

-Y4CD- PC Sta. 10+00.00
-L- STA. 606+00.00 (59' LT)

300' TAPER

RESIDUAL

12' P.S.

60'

72'

04 03 02 01 00 01

-Y4CD-

36'

48'

GRAD=3.50

CAT=1

S 1° 50' 32.0" W

S 1° 58' 32.0" W

-L-

60' IMP

2800' FULL LANE

MATCHLINE -L- STA. 599+00 SHEET 13

MATCHLINE -L- STA. 609+52 SHEET 15

HELEN ELLIOTT

-L- CSSta. 602+57.20

-L- ST Sta. 604+97.20

34, 347.95' LT)
66.85

-L-

| | | |
|---|---|---|
| PIs Sta 543+50.33 | PI Sta 576+22.74 | PIs Sta 603+37.20 |
| Θs = 1° 11' 52.2" | Δ = 58° 09' 46.4" (RT) | Θs = 1° 11' 52.2" |
| Ls = 240.00' | D = 0° 59' 53.5" | Ls = 240.00' |
| LT = 160.00' | L = 5,826.87' | LT = 160.00' |
| ST = 80.00' | T = 3,192.41' | ST = 80.00' |
| | R = 5,740.00' | |
| | SE = 0.04 | |

-Y4CD-

PI Sta 13+57.81
Δ = 3° 24' 57.0" (LT)
D = 0° 28' 38.9"
L = 715.41'
T = 357.81'
R = 12,000.00'

NOTE :
FOR -L- PROFILE, SEE SHEET 36 - 37
FOR -Y4CD- PROFILE, SEE SHEET 54
FOR -Y4RPBD- PROFILE, SEE SHEET 65

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 15 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/09


X4SD

| | | |
|---|---|---|
| PI Sta 13+91.18 | PI Sta 29+78.68 | PI Sta 45+08.60 |
| Δ = 2°47'05" (LT) | Δ = 8°11'48" (RT) | Δ = 6°04'22.8" (RT) |
| D = 1°29'34.5" | D = 1°29'34.5" | D = 12°00'45" |
| Lt = 166.68' | Lt = 1,000.68' | Lt = 473.08' |
| T = 83.39' | T = 500.77' | T = 236.70' |
| R = 3,833.00' | R = 3,833.00' | R = 954.00' |
| SE = NC | SE = NC | SE = NC |

T4MPA

| | | |
|---|---|---|
| PI Sta 7+33.10 | PI Sta 37+02.26 | PI Sta 42+08.43 |
| Δ = 6°56'39.6" | Δ = 8°24'46" (LT) | Δ = 1°56'39.6" |
| D = 1°29'34.5" | D = 1°29'34.5" | D = 1°29'34.5" |

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 16 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

MATCHLINE -Y4LPA- STA.24+56 SHEET 27

MATCHLINE -Y4- STA.82+76 SHEET 27

MATCHLINE -Y4RPD- STA.43+00.00 SHEET 27

MATCHLINE -Y4- STA.118+00.00 SHEET 27

RESIDUAL

ALLUVIUM

A

B

C

D

ROADWAY EMBANKMENT (FILL)

ARTIFICIAL FILL (ENGINEERED)

MATCHLINE -L- STA.52+74 SHEET 15

MATCHLINE -L- STA.55+50 SHEET 17

MATCHLINE -Y4- STA.102+90 SHEET 28

MATCHLINE -Y5- STA.38+60 SHEET 28

END CONSTRUCTION
-Y5- POT STA. 33+30.00

PROPOSED OVERHEAD SIGN SUPPORT LOCATION

Y4LPA

Y4LPB

Y4LPD

Y4RPA

Y4RPB

Y4RPC

Y4RPD

Y4RPBD

Y5

| TRAFFIC DIAGRAM | | | |
|---|---|---|---|
| 2010 ADT / 2030 ADT | 47,720 / 61,160 | | |
| DHV = 10% | | | |
| DIR = 60% | 32,600 | | 5,360 |
| TTST = 12% | 43,800 | | 7,280 |
| DUAL = 6% | | | |
| | 53,560 | | 24,660 |
| | 79,980 | | 36,980 |
| -L- BELTLINE | 6,600 | | 4,940 |
| | 11,800 | | 5,420 |
| DHV = 10% | | | |
| DIR = 60% | | | |
| TTST = 6% | | | 21,300 |
| DUAL = 5% | | | 27,300 |

-Y4- (US 421/I-40 BUS.)

NOTE:
FOR -L- PROFILE, SEE SHEET 38 - 39
FOR -Y4 - EXISTING GROUND PROFILE, SEE SHEET 50,51
FOR -Y4CD - PROFILE, SEE SHEET 55-56
FOR -Y4LPA - PROFILE, SEE SHEET 59
FOR -Y4LPB - PROFILE, SEE SHEET 60
FOR -Y4LPD - PROFILE, SEE SHEET 61
FOR -Y4RPA - PROFILE, SEE SHEET 62-63
FOR -Y4RPBD - PROFILE, SEE SHEET 66 - 69
FOR -Y4RPC - PROFILE, SEE SHEET 71-72
FOR -Y4RPD - PROFILE, SEE SHEET 73-74
FOR -Y5 - PROFILE, SEE SHEET 77

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User:ZIMPSON
Plan:Plan For U2579B_GEO_RDWY_FORSYTH
Y4CADD_GEOTECH\PlanProfU2579B_GEO_rdwy_016_sh16.dgn

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 17 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS 8/17/99

**Y4RPC**
Pls Sta 11+60.08
Es = 5° 43' 46.5"
Ls = 240.00'
LT = 160.08'
ST = 80.08'

Pl Sta 23+02.72
Δ = 83° 03' 22.8" (LT)
D = 4° 46' 28.7"
L = 1,739.53'
T = 1,062.72'
R = 1,200.00'
SE = 08

Pls Sta 30+59.60
Es = 5° 43' 46.5"
Ls = 240.00'
LT = 160.08'
ST = 80.08'

**Y4RPD**
Pls Sta 17+45.29
Es = 5° 43' 46.5"
Ls = 240.00'
LT = 160.08'
ST = 80.08'

Pl Sta 22+28.62
Δ = 37° 09' 46.4" (RT)
D = 4° 46' 28.7"
L = 778.34'
T = 403.41'
R = 1,200.00'
SE = 08

Pls Sta 26+83.62
Es = 5° 43' 46.5"
Ls = 240.00'
LT = 160.08'
ST = 80.08'

**L**
Pls Sta 661+50.31
Es = 1° 52' 13.3"
Ls = 300.00'
LT = 200.01'
ST = 100.01'

Pl Sta 633+75.85
Δ = 11° 06' 38.0" (RT)
D = 0° 20' 57.7"
L = 3,180.22'
T = 1,595.11'
R = 16,400.00'
SE = NC

Pls Sta 677+38.67
Es = 1° 52' 13.3"
Ls = 300.00'
LT = 200.01'
ST = 100.01'

Pl Sta 669+49.81
Δ = 17° 18' 41.9" (RT)
D = 1° 14' 48.9"
L = 1,388.36'
T = 699.51'
R = 4,595.00'
SE = 05

**Y4RPD**
Pls Sta 65+57.81
Es = 1° 42' 08.4"
Ls = 280.00'
LT = 186.68'
ST = 93.34'

**Y4CD**
Pl Sta 75+48.93
Δ = 21° 34' 30.0" (RT)
D = 1° 12' 57.4"
L = 1,774.33'
T = 897.80'
R = 4,712.00'
SE = 04

Pls Sta 85+18.80
Es = 1° 42' 08.4"
Ls = 280.00'
LT = 186.68'
ST = 93.34'

-Y4RPD- SC Sta. 18+25.20
-Y4CD- TS Sta. 63+71.14
-Y4RPD- TS Sta. 15+85.20
-Y4CD- SC Sta. 66+51.14
-Y4RPD- STA.13+97.64
BEGIN -Y4RPD- PAVEMENT
END -Y4CD- PAVEMENT
PROPOSED OVERHEAD SIGN SUPPORT LOCATION
-L- STA 644+73.00, OFFSET 82' LT
BEGIN SPECIAL MEDIAN GRADING
-L- STA 656+87.00 OFFSET 82' LT
END SPECIAL MEDIAN GRADING
-L- POT STA.659+03.90 (59' RT)
-Y4RPC- SC Sta. 12+40.00
-Y4RPC- TS Sta. 10+00.00
-L- SCSta. 662+50.30
-L- TSSta. 659+50.30
-BL-56 PINC 198+88.73
(-L- STA. 661+69.89, 7.40 LT)
-BL-57 PINC 202+36.11
(-L- STA. 665+17.86, 12.43 RT)
-BL- POT 204+03.49 =
-T6- 604 PINC 10+03.23
ELEV=841.05
12"SPIKE SET
-T6- 606 PINC 13+93.46
ELEV=856.17
12"SPIKE SET
-T6- 601 POT 5+00.00
ELEV=843.11
12"SPIKE SET
-T6- 602 PINC 6+76.14
ELEV=841.22
12"SPIKE SET
-BL-58 PINC 204+84.70
(-L- STA. 667+69.97, 51.64 RT)
-Y4RPD- POT Sta. 10+00.00
-Y4CD- POC Sta. 70+00.00
(12' LT)
-T6- 605 PINC 8+55.73
ELEV=841.10
12"SPIKE SET
-T6- 605 PINC 11+86.26
ELEV=841.63
12"SPIKE SET

RESIDUAL
ALLUVIUM
KENNETH ANDREW HOLDER
REX L. PEDDYCORD
FAYE G. PEDDYCORD
BOBBY F. GORDON
BETSY GORDON
GLENN D. HAFF
GROUP GCK, LLC
CITY OF WINSTON-SALEM
FORSYTH COUNTY
CHARLES SPENCER LADD JR.
REBECCA WHITLEY LADD
PAVE TO FACE OF GUARDRAIL
ATTENUATOR TYPE-350
GRAU-350
CAT-I
8:1 TAPER
30' ACCESS EASEMENT DB 1538 PG 142
20' SANITARY SEWER EASEMENT

MATCHLINE -L- STA.656+51 SHEET 16
MATCHLINE -L- STA.668+17 SHEET 18

NOTE :
FOR -L- PROFILE, SEE SHEET 39,40
FOR -Y4CD- PROFILE, SEE SHEET 56-57
FOR -Y4RPC- PROFILE, SEE SHEET 71-72
FOR -Y4RPD- PROFILE, SEE SHEET 73-74

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User: REHRENBACH

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 18 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

**-L-**
PI Sta 661+50.31
Θs = 1° 52' 13.3"
Ls = 300.00'
LT = 200.01'
ST = 100.01'

PI Sta 669+49.81
Δ = 17° 18' 41.9" (RT)
D = 1° 14' 48.9"
L = 1,388.36'
T = 699.51'
R = 4,595.00'
SE = 05

PI Sta 677+38.67
Θs = 1° 52' 13.3"
Ls = 300.00'
LT = 200.01'
ST = 100.01'

**-Y4CD**
PI Sta 75+48.93
Δ = 21° 34' 30.0" (RT)
D = 1° 12' 57.4"
L = 1,774.33'
T = 897.80'
R = 4,712.00'
SE = 04

PI Sta 85+18.80
Θs = 1° 42' 08.4"
Ls = 280.00'
LT = 186.68'
ST = 93.34'

PI Sta 87+98.80
Θs = 0° 20' 03.2"
Ls = 140.00'
LT = 93.33'
ST = 46.67'

PI Sta 92+21.85
Δ = 3° 35' 35.0" (LT)
D = 0° 28' 38.9"
L = 752.53'
T = 376.39'
R = 12,000.00'

CITY OF WINSTON-SALEM
FORSYTH COUNTY

-BL-59 PINC 207+78.12
(-L-STA. 670+66.12, 103.90 RT)

-BL-60 PINC 211+81.87
(-L-STA. 674+83.04, 208.20 RT)

-BL-61 PINC 216+86.62
(-L-STA. 681+09.72, 519.54 RT)

GLENN D. HART

WILLIAM LEWIS WEAVIL
REBECCA HINE WEAVIL

RESIDUAL

ALLUVIUM

ROCK OUTCROP

-L- STA 668+93.00
OFFSET 82' LT
END SPECIAL MEDIAN GRADING

720' TRANSITION

PAVE TO EASE ON GUARDRAIL

GRAU-350 8' TAPER

10' P.S.

4' P.S.

12' P.S.

8' TAPER 10' P.S.

-Y4CD-

-L- PI Sta 675+00.00
BL-59 PINC 207+78.12

-L- PI Sta 684+07.48
BL-60 PINC 211+81.87

-L- PI Sta 684+25.46
-Y4CD- PI Sta 85+18.80

BL-21 PINC
12+21.12

S 47° 18' 29.7" W

S 24° 31' 46.6" W

S 34° 59' 34.0" W 86.6'

60' INC.

-L- CS Sta. 676+38.66

-L- ST Sta. 679+38.66

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR THE CURRENT "U2579C-1" PROJECT WITH NAD 1983/95 STATE PLANE GRID COORDINATES OF NORTHING: 826419.286(ft) EASTING: 1651391.602(ft)
THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT "GROUND TO GRID) IS: 0.99995483
THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "U2579C-1" TO -L- STATION 15
ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
VERTICAL DATUM USED IS NAVD 88

NOTE :
FOR -Y4CD- PROFILE, SEE SHEET 57
FOR -Y4CD- PROFILE, SEE SHEET 57
FOR -L- PROFILE, SEE SHEET 40

MATCHLINE -L- STA.668+17 SHEET 17

MATCHLINE -L- STA.681+04 SHEET 19

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Microstation V8 (DEHNERT)

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 19 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS
8/17/99

Y4CD
PI Sta 75+48.93
Δ = 21° 34' 30.0" (RT)
D = 1° 12' 57.4"
L = 1,774.33'
T = 897.80'
R = 4,712.00'

PIs Sta 85+18.80
θs = 1° 42' 08.4"
Ls = 280.00'
LT = 186.68'
ST = 93.34'

PIs Sta 87+98.80
θs = 0° 20' 03.2"
Ls = 140.00'
LT = 93.33'
ST = 46.67'

PI Sta 92+21.85
Δ = 3° 35' 35.0" (LT)
D = 0° 28' 38.9"
L = 752.53'
T = 376.39'
R = 12,000.00'
SE = NC

-BL-62 POT 220+66.56
(-L- STA. 683+08.30, 521.29 RT)

RANDY NELSON WEAVIL
MARCIA S. WEAVIL

HANDY NELSON WEAVIL
MARCIA S WEAVIL

-Y4CD- STA. 85+65.67
END -Y4CD- PAVEMENT
BEGIN -L- PAVEMENT

-Y4CD- SRS Sta. 87+09.46

-Y4CD- SC Sta. 88+45.46

PATTY WEAVIL MABE
GLENDA JUNE COCKERHAM

RESIDUAL

ROCK OUTCROP

PROPOSED OVERHEAD SIGN SUPPORT LOCATION

70' INC.

8' TAPER

-Y4CD-

-L- 12+20.74

-L- 12+52.87

-L- 12+59.22

-L- 21+23.20

-L- 25+23.46

-L- 27+15.67

-L- 27+04.14

-L- 14+87.62

-L- 9+06.52

-L- 9+97.99

-L- 20234 5+00.00 POT
ELEV=867.89
IRON ROD SET

-TI- 20090
ELEV=864.04
IRON ROD SET

-TI- 20127 7+69.25 PINC
ELEV=862.18
IRON ROD SET

-TI- 9950
ELEV=869.30
NAIL SET

-TI- 9952
ELEV=869.22
NAIL SET

SHELBA J. TALLEY
JONAH R. MOTSINGER

ARTIFICIAL FILL (DAM)

ALLUVIUM

ARTIFICIAL FILL

POND W.E.= 860.5'

POND W.E.= 845'

GRAU-350

GRAU-350BKD

12'P.S.

35' ELEC

-TSS Sta. 693+45.98

BL-22 PINC

BL-23 PINC

BL-24 PINC

BL-25 PINC

N 46° 02' 21.7" W

N 4° 54' 36.3" E

N 6° 36' 39.5" E

N 80° 46' 00.2" W

S 32° 42' 15.8" W

S 34° 00' 18.5" W

S 37° 56' 01.9" W

S 27° 04' 14.8" W

S 35° 58' 09.1" W

S 6° 34' 41.8" W

690

695

685

90

95

END TIP PROJECT U-2579B
BEGIN TIP PROJECT U-2579AB
-L- POT STA. 692+32.98

MATCHLINE -L- STA. 681+04 SHEET 18

NOTE :
FOR -L- PROFILE, SEE SHEET 40-41
FOR -Y4CD- PROFILE, SEE SHEET 57-58

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 20 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-DRI-
PI Sta 10+14.44
Δ = 10° 59' 53.6" (LT)
D = 38° 11' 49.9"
L = 287.79'
T = 144.44'
R = 150.00'

-Y1-

| PI Sta 16+19.17 | PI Sta 20+57.40 |
|---|---|
| Δ = 3° 08' 19.0" (RT) | Δ = 3° 08' 19.0" (LT) |
| D = 0° 42' 58.3" | D = 0° 42' 58.3" |
| L = 438.23' | L = 438.23' |
| T = 219.11' | T = 219.11' |
| R = 8,000.00' | R = 8,000.00' |
| SE = NC | SE = NC |
| RO = 0 | RO = 0 |

-YIDET-

| PI Sta 12+30.02 | PI Sta 16+82.19 |
|---|---|
| Δ = 25° 54' 27.3" (LT) | Δ = 25° 54' 27.3" (RT) |
| D = 5° 43' 46.5" | D = 5° 43' 46.5" |
| L = 452.17' | L = 452.17' |
| T = 230.02' | T = 230.02' |
| R = 1,000.00' | R = 1,000.00' |

**BEGIN CONSTRUCTION**
**-Y1-POT Sta. 10+00.00**

-YIDET- PC Sta. 10+00.00
-Y1- POT Sta. 11+88.83

-Y1-PRC Sta. 18+38.23
-Y1- POC Sta. 18+88.07
-DR2- POT Sta. 11+90.74
(-Y1-STA. 21+98.03, 49.83 RT)
-BY1-501 PINC 24+67.64
-YIDET- PT Sta. 19+04.35

-Y1-PC Sta. 14+00.00
-Y1- POC Sta. 17+44.58
-DR3- POT Sta. 14+72.16

-YIDET- PRC Sta. 14+52.17

-Y1- POC Sta. 22+31.99
-Y7- POT Sta. 13+93.72
END CONSTRUCTION

-Y7- POT Sta. 10+00.00
BEGIN CONSTRUCTION

-DRI- PT Sta. 10+28.79

-DRI- PC Sta. 10+00.00

-DR3- POT Sta. 10+00.00

-DR2- POT Sta. 10+00.00

-DRI- POT Sta. 11+02.70
N 49° 22' 56.9" E
-Y7- POT Sta. 12+30.57

-Y1-PT
Sta. 22+76.47

-Y1- STA. 23+65 SHEET 5
MATCHLINE

S 79° 36' 04.1" E

S 69° 30' 22.1" E

S 39° 49' 20.3" W

CAROL JONES MITCHELL
BILLY RAY MITCHELL

DONALD ROBER JONES

REBECCA W. FREEMAN

REBECCA ANN FREEMAN

PEGG DEVELOPMENT & REALTY CO.

ALVIN L. LINDSAY

JAMES R. MYERS, III
MARY MYERS

JAMES R. MYERS III &
MARY B. MYERS

JAMES N. WHICKER
FRANCES B. WHICKER

WAYNE E. PHILLIPS, JR.
MARY ANN PHILLIPS

TERRY K. CUSTER
JACQUELINE CUSTER

KEITH E. STRAUSS
REBECCA C. STRAUSS

MARSHALL S. BROWN

RAMOND E. HARDY
MEARL LEASE HARDY, TRUSTEES

RESIDUAL
ALLUVIUM
ARTIFICIAL FILL

ROADWAY EMBANKMENT (FILL)

550' TRANSITION LT OUTSIDE LANE
400' TRANSITION RT OUTSIDE LANE
675' MEDIAN TRANSITION LT. SIDE
675' MEDIAN TRANSITION RT. SIDE
100' TAPER
8' TAPER

TOWN OF WALKERTOWN
FORSYTH COUNTY

BEGIN MEDIAN PAVEMENT MARKINGS
-Y1- STA. 14+32.71

END PAVEMENT MARKINGS
BEGIN RAISED GRASS MEDIAN
-Y1- STA. 21+71.59

PAVE TO TOWN OF WALKERTOWN
GUARDRAIL SPECIFICATIONS

4 P.S.
20' R
15' R
7.5' R
8.5' R
GRAD. 350
18" RCP
24" RCP
30" RCP
42" RCP
47" RCP
60" RCP
72" RCP
W/LT
W/RT
-DR2-
-DR3-
-DRI-
-Y1-
-Y7-

NOTE:
FOR -Y1- PROFILE, SEE SHEET 43
FOR -Y7- PROFILE, SEE SHEET 92
FOR -DRI- PROFILE, SEE SHEET 93
FOR -DR2- PROFILE, SEE SHEET 93
FOR -DR3- PROFILE, SEE SHEET 93

REVISIONS
8/17/99

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 21 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y1-

REVISIONS

8/17/99

MATCHLINE - Y1 - STA. 44+00 SHEET 5

SR 2405 (OLD BELEWS CREEK RD)

6.2 m BST

15" CMP

18" CONC. PIPE

18" CLAY

-Y1-PCSta. 44+26.47

-Y1-PRCSta. 48+64.70

-Y1-PTSta. 53+02.93

-YIDET- PRC Sta. 45+31.18

-YIDET- PT Sta. 49+80.05

-Y1- POC Sta.51+09.25(41.8LT)

-YIDET-
PI Sta 43+10.02
Δ = 25° 47' 14.0" (RT)
D = 5° 43' 46.5"
L = 450.07'
T = 228.91'
R = 1,000.00'

-YIDET-
PI Sta 47+59.46
Δ = 25° 43' 04.9" (LT)
D = 5° 43' 46.5"
L = 448.86'
T = 228.28'
R = 1,000.00'

PI Sta 50+83.87
Δ = 3° 08' 19.0" (RT)
D = 0° 42' 58.3"
L = 438.23'
T = 219.17'
R = 8,000.00'
SE = NC
RO = 0

PI Sta 46+45.64
Δ = 3° 08' 19.0" (LT)
D = 0° 42' 58.3"
L = 438.23'
T = 219.17'
R = 8,000.00'
SE = NC
RO = 0

12"SPIKE SET
ELEV=849.71
-TI- 116 POT 35+44.92

(-Y1-STA. 52+60.24, 92.11 RT)
-BY2-506 POT 35+65.73

JANE WHICKER
DAN WESTMORELAND

CAROL WESTMORELAND

RESIDUAL

675' MEDIAN TRANSITION LT.SIDE

100' TAPER

500' TRANSITION LT OUTSIDE LANE

RESURFACE EXISTING INTERSECTION WITH 3.0" OF S9.5B SURFACE COURSE

PROP. PAVEMENT MARKINGS

ROADWAY EMBANKMENT (FILL)

RANDY L. DOUGLAS
ANGIE L. DOUGLAS

W.L. BRADLEY HEIRS

THOMAS E. LAWS

S 39° 49' 20.3" W

US 158 (28 BST)

18" RCP

15" RCP

GUY

END PAVEMENT MARKINGS
-Y1- STA. 49+00.00

675' MEDIAN TRANSITION RT.SIDE

500' TRANSITION RT OUTSIDE LANE

(-Y1-STA. 46+73.17, 2.60 RT)
-BY10-502 PINC 49+43.85

JANE WHICKER &
DAN WESTMORELAND

12"SPIKE SET
ELEV=854.96
-TI- 112 PINC 25+46.02

12"SPIKE SET
ELEV=855.21
-TI- 111 PINC 23+58.24

20' SANITARY SEWER EASEMENT

LOUISE FRANKLIN

PAUL JOHN SKOTCHER
KATHLEEN SKOTCHER

12"SPIKE SET
ELEV=852.43
-TI- 113 PINC 28+23.06

12"SPIKE SET
ELEV=847.78
-TI- 114 PINC 30+64.22

(NOT SET)
-TI- POT 32+85.96
-BY1- POT / 57+13.85 =

12"SPIKE SET
ELEV=862.88
-TI- 115 PINC 32+61.42

END CONSTRUCTION
-Y1-POT Sta. 54+00.00

ROBERT A. TOMPKINS
LISA N. TOMPKINS

THOMAS ALLEN BLEVINS

ARTHUR CROSBY CHURCH

LOUISE FRANKLIN

NOTE:
FOR -Y1- PROFILE, SEE SHEET 44

23-JUL-2008 15:36
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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 22 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

-Y2-
PI Sta 14+90.64
Δ = 44° 24' 52.1" (RT)
D = 7° 33' 31.7"
L = 587.59'
T = 309.45'
R = 758.00'
SE = .08
RO = SEE PLANS

-BY4-512 POT 5+00.00

BEGIN CONSTRUCTION
-Y2-POTSta. 10+00.00

(-Y2-STA. 14+76.55, 39.26 RT)
-BY3-508 PINC 17+58.36

(-L-STA.473+53.45, 4,279.35 RT)
-BY3-507 POT 5+00.00

ROBERT WAYNE BIBY
LOUISE BEESON BIBY

RICHARD N. HU

POOL

ROBERT W. BIBY
MARGARET B. BIBY

ROBERT W. BIBY

GOSPEL LIGHT BAPTIST CHURCH

JEFFREY KYLE JOHNSON
STEPHANIE L. JOHNSON

FORSYTH COUNTY
TOWN OF WALKERTOWN

SR 2515 WALKERTOWN / GUTHRIE RD

RESIDUAL

-Y2-PCSta. 11+81.19

MATCHLINE – Y2 – STA. 15+61 SHEET 7

NOTE ;
FOR -Y2- PROFILE, SEE SHEET 49

28-JUL-2008 14:56
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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 23 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y2-
PI Sta 27+32.39
Δ = 27° 06' 16.2" (LT)
D = 7° 33' 31.7"
L = 358.58'
T = 182.71'
R = 758.00'
SE = .08
RO = SEE PLANS

REVISIONS

8/17/99

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-Y2-PCSta. 25+49.68

(-Y2-STA. 38+03.10, 6,184.92 LT)
-BY3-509 PINC 30+63.25=

-Y2- STA. 24+81 SHEET 7

-Y2-

-Y2- STA. 29+94.90, 41.0375 LT
-BY3B-511 POT 5+00.00

-Y2- POT STA. 29+75.00
END CONSTRUCTION
-Y2-POTSta. 30+30.91

S 22° 14' 44.8" W

ROBERT JEFFREY BARBER

S DAVID DILLON

PAMELA GAIL SOLOMAN

DANNY STIDHAM

SR 2350 CARBINE RD (SR 2350)

FORSYTH COUNTY
TOWN OF WALKERTOWN

W. LANE IDOL, JR.
KAYE C. IDOL

W. L. IDOL, JR.
BRENDA CECILE IDOL

RESIDUAL

SR 3185 WALKERTOWN / BETHANIA RD (SR 3185)

50' TAPER TO EXIST

2 P.S.

12" INC

ELIZABETH STEWART GORDON

TOWN OF WALKERTOWN
FORSYTH COUNTY

FRANCES REAVIS HEIRS
-Y2-PTSta. 29+08.26

DAVID M. GULLION
LORETTA GULLION

NOTE :
FOR -Y2- PROFILE, SEE SHEET 49

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 24 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

-T7- 701 POT 5+00.00
ELEV=863.41
12"SPIKE SET

-T7- 3 PINC 9+00.72
ELEV=875.68
12"SPIKE SET

ARNOLD G. KING
HELEN H. PRINCE

-T7- 702 PINC 6+88.16
ELEV=865.60
12"SPIKE SET

ARNOLD G. KING
HELEN H. PRINCE

-T7- A5 PINC 11+49.53
ELEV=918.90

U2579B-5
-BY16- POT 5+00.00
-Y4- STA. 22+52.16 02.9072 RT.

ROSS D. WALL
PATRICIA O. WALL

TOWN OF KERNERSVILLE
FORSYTH COUNTY

FORSYTH COUNTY
TOWN OF KERNERSVILLE

300' TAPER

-T7- 704 PINC 10+61.18
ELEV=920.22
12"SPIKE SET

-Y4EB-
-Y4-
-Y4WB-

I-40 BUS EBL US 421 SBL 26' BST
I-40 BUS WBL US 421 NBL 26' BST
I-40 BUS EBL US 421 SBL 24' BST
I-40 BUS WBL US 421 NBL 24' BST

N 85°33'45.8"W

ROADWAY EMBANKMENT (FILL)

RESIDUAL

50:1 TRANSITION
PROP. MEDIAN GUARDRAIL
TIE TO EXISTING

10' P.S.

20' INC.

15" RCP

-T7- 705 PINC 12+64.02
ELEV=920.12
12"SPIKE SET

-T7- 706 PINC 14+12.03
ELEV=888.04
12"SPIKE SET

-T7- 707 PINC 15+58.72
ELEV=887.68
12"SPIKE SET

-T7- 708 POT 16+89.36
ELEV=892.71
12"SPIKE SET

-Y4EB-POT Sta. 26+80.00
-Y4WB-POT Sta. 26+80.00
BEGIN CONSTRUCTION

TOWN OF KERNERSVILLE

ROSS D. WALL
PATRICIA O. WALL

THOMAS W. PRINCE
ARNOLD G. KING

NOTE :
1. FOR - Y4EB - PROFILE SEE SHEET 49
2. FOR - Y4WB - PROFILE SEE SHEET 54

MATCHLINE -Y4EB/Y4WB STA. 30+50 SHEET 25

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imerrell GEOPAK 10

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 25 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS 8/17/99

MATCHLINE -Y4- STA. 30+50 SHEET 24

MATCHLINE -Y4- STA. 43+65 SHEET 26

-T8- 802 PINC 7+07.18
ELEV=863.21
12"SPIKE SET

-T8- 803 PINC 9+50.29
ELEV=851.60
12"SPIKE SET

U2579B-6
-BY16- PINC 17+17.11 =
-Y4- STA. 34+69.27, 4.1302 RT

ARNOLD G. KING
HELEN H. PRINCE

LINDA MAYES HOPKINS

FORSYTH COUNTY
TOWN OF KERNERSVILLE

20' SANITARY SEWER EASEMENT

300' TAPER

1300' FULL LANE

RESIDUAL

ALLUVIUM

-Y4EB-

-Y4WB-

I-40 BUS EBL US 421 SBL 26' BST

I-40 BUS WBL US 421 NBL 26' BST

N 85° 33' 45.8" W

ROADWAY EMBANKMENT (FILL)

GRAU-350

CAT-1

10' P.S.

4' P.S.

18" RCP

24" RCP

30" RCP

36"

24"

30"

THOMAS W. PRINCE
ARNOLD G. KING

HA T. DAM

W.W.M.

THEODORE R. MEAD
AMY J. MEAD

DAVID D. WEAVER

TIMOTHY A. KUBIAK
SUSAN E. KUBIAK

CHARLES LEO RECORD
KRISTIR. RECORD

POND
W.E. 8597
FISH HATCHERY

20' STORM SEWER EASEMENT

30" C&G

LT

NOTE :
FOR - Y4EB - PROFILE SEE SHEET 49
FOR - Y4WB - PROFILE SEE SHEET 54

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 26 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/98

MATCHLINE -Y4- STA. 43+65 SHEET 25

MATCHLINE -Y4- STA.56+61 SHEET 27

POND W.E. 855.6

-T8- 804 PINC 11+02.12
ELEV=851.81
12"SPIKE SET

POND W.E. 852.8

HAROLD DAVID HOPKINS, JR.

LINDA MAYES HOPKINS

HAROLD D. CRANFILL
PATTIE CRANFILL

JERRY M. PEGRAM
NANCY B. PEGRAM

RESIDUAL

ALLUVIUM

300' TAPER

1300' FULL LANE

(-Y4-STA. 46+07.18, 4.2184 LT)
-BY16-545 PINC 28+55.02

-T8- PINC 14+24.45
ELEV=860.50

-Y4EB-

-Y4WB-

N 85°33'45.8"W

I-40 BUS EBL US 421 SBL 26' BST

I-40 BUS WBL US 421 NBL 26' BST

ROADWAY EMBANKMENT (FILL)

B-1 B-2 B-3 B-4 B-5 B-6 B-7 B-8 B-9

10' P.S.

4' P.S.

24" RCP

-T8- 805 PINC 13+10.10
ELEV=863.02
12"SPIKE SET

LYNN ANGEL BERRY
JAMES LEON BERRY

WD PIER

PIER

POND W.E. 847.2 FISH HATCHERY

RONALD LEE ANGEL SR.

20' STORM SEWER EASEMENT PB 42 PG 67

20' SANITARY SEWER EASEMENT

36" CONC

NOTE :
1. FOR -Y4EB- PROFILE SEE SHEET 49 & 50
2. FOR -Y4WB- PROFILE SEE SHEET 55

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mmcgee1 (jr. GEIP) 20347

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 27 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

BEGIN CONSTRUCTION
-Y6- POT STA. 14+00.00

RESIDUAL

ALLUVIUM

ROADWAY EMBANKMENT (FILL)

ROCK OUTCROP

MATCHLINE -Y6- STA.56+43 SHEET 26

MATCHLINE -Y6- STA.54+90 SHEET 16

MATCHLINE -Y6- STA.61+25 SHEET 16

-Y6- STA. 57+18.17, 3.5317 LT
-STR- 548 PRC 39+58.04

(-RPBD/Y4-STA.78+59.96, 12.3968 LT)
-STR-564 POT 20+83.33

(-Y6-STA. 71+67.77, 3.2735 LT)
-STR-547 PRC 54+15.64

(-RPBD/Y4-STA.78+59.88, 333.9008 RT)
-STR-563 PRC 17+97.00

NOTE :
FOR -Y4EB- PROFILE, SEE SHEET 48-51
FOR -Y4WB- PROFILE, SEE SHEET 55 & 56
FOR -Y4RPA- PROFILE, SEE SHEET 63
FOR -Y4RPBD- PROFILE, SEE SHEET 68-70
FOR -Y4RPD- PROFILE, SEE SHEET 74

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 28 |
| R/W SHEET NO. | |

| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
|---|---|

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS

8/17/99

BEGIN CONSTRUCTION
-YSA- POT STA. 54+00.00

END CONSTRUCTION
-Y6- POC STA. 38+81.93

RESIDUAL

ROADWAY EMBANKMENT (FILL)

SEE INSET THIS SHEET

INSET

NOTE :
FOR -Y1SB- PROFILE SEE SHEET 54 & 55
FOR -Y1WB- PROFILE SEE SHEET 56 & 57
FOR -Y1PB- PROFILE SEE SHEET 64
FOR -Y1RC- PROFILE SEE SHEET 71-72
FOR -Y5- PROFILE SEE SHEET 68-70

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USER: rdavis
PW: PWDGN410

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 29 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

REVISIONS
8/17/99

MATCHLINE -Y5A- STA.63+00 SHEET 28

MATCHLINE -Y4- STA.125+34 SHEET 28

MATCHLINE -Y6- STA.23+30 SHEET 28

MATCHLINE -Y4- STA.137+32 SHEET 30

MATCHLINE -Y5- STA 73+00 SHEET 31

MATCHLINE -Y6- STA 18+30 SHEET 31

SHANNON WILSON NELSON
JILL WHITE NELSON

POPE L. E. BUILDING CO. INC.

JAMES O. SELLARS
RUTH C. SELLARS

FEDERAL HOME LOAN MORTGAGE CORPORATION

SARAH M. JOHNSON

LARRY D. THOMPSON
JANET THOMPSON

RACHEL L. PAYNE

TOWN OF KERNERSVILLE
CITY OF WINSTON-SALEM

TIMOTHY A. MONTGOMERY
CINDY B. MONTGOMERY

DENNIS W. CARTER
SUSAN CARTER

ROADWAY EMBANKMENT (FILL)

RESIDUAL

ALLUVIUM

-BY16- POT 110+01.31
-BY17- POT 64+22.70
(NOT SET)

BEGIN APPROACH SLAB
-Y5A- POT STA.66+42.33

BEGIN BRIDGE
-Y5A- POT STA.66+78.58

(-Y4-STA. 129+24.59, 1.98 LT)
-BY16-550 PINC 111+79.55

-Y4- POT STA.129+64.51

-Y5A- POT STA.68+06.51

-Y4EB- POT STA.129+34.00
-Y5A- POT STA.67+55.72

-Y4WB- POT STA.129+95.14
-Y5A- POT STA.68+47.29

-BY15-420 POT 46+86.95
(-Y4-STA. 129+79.12, 210.07 LT)
-BY17-559 PINC 65+22.91=

-BY15B-422 POT 5+00.00
(-Y6-STA. 23+37.76, 15.137 LT)
-BY15-542 PINC 44+45.13=

-Y6- PT Sta. 16+46.82
S 36° 55' 34.8" E

END BRIDGE
-Y5A- POT STA.69+53.11

END APPROACH SLAB
-Y5A- POT STA.69+89.36

N 85° 33' 45.8" W

N 44° 06' 33.7" W

I-40 BUS EAST US 421 SOUTH 24' BST

I-40 BUS WEST US 421 NORTH 24' BST

Y6
PI Sta 21+34.27
Δ = 48° 34' 21.9" (LT)
D = 10° 44' 58.8"
L = 451.85'
T = 240.51'
R = 533.00'
SE = 0.06
RO = SEE PLANS

NOTE :
FOR -Y4EB- PROFILE, SEE SHEET 52-53
FOR -Y4WB- PROFILE, SEE SHEET 57-58
FOR -Y5- PROFILE, SEE SHEET 76-77
FOR -Y6- PROFILE, SEE SHEET 89-91

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 30 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

REVISIONS

8/17/99

GERALD W. MCGEE

OLD WOOD LANE 20' BST

CURB BST

12" RCP

MACK D. WILLIAMS
JENNIFER WILLIAMS

W/LT

FRANK J. PERRY JR.
CAROL PERRY

140

NORMAN G. MORRELL
LINDA M. MORRELL

TOMMY MILLS GUNN
PEGGY PAULINE GUNN

(-Y4- STA. 139+03.24, 2.45 LT)
-BY16-55| PINC 121+58.94

30' SANITARY SEWER EASEMENT

30' TYPE I UNKNOWN

145

ALLUVIUM

CITY OF WINSTON-SALEM

SALEM CREEK

-T9- 902 PINC 6+81.79
ELEV=803.52
12"SPIKE SET

-T9- 903 POT 8+47.11
ELEV=804.93
12"SPIKE SET

U2579B-9
-BY16- PINC 128+79.75 =
-Y4- STA. 139+04.09, 2.45 LT.

RESIDUAL

ALLUVIUM

RESIDUAL

ALLUVIUM

ALLUVIUM

ALLUVIUM

10' P.S.

50' TRANSITION
PROP. GUARDRAIL
TIE TO EXISTING

-T9- 904 PINC 11+20.34
ELEV=822.34
12"SPIKE SET
I-40 BUS EAST US 421 SOUTH 24' BST

-Y4EB-

N 85° 33' 45.8" W

ROADWAY EMBANKMENT (FILL)

-Y4-

-Y4WB-

I-40 BUS WEST US 421 NORTH 24' BST

ROADWAY EMBANKMENT (FILL)

GRAU-350

18" CMP

18" RCP

-T9- 905 PINC 12+27.76
ELEV=822.56
12"SPIKE SET

300' TAPER

-Y4EB-POT Sta. 143+00.00
-Y4WB-POT Sta. 143+00.00
END CONSTRUCTION

G.P. SNISHER HEIRS

30' TYPE I UNKNOWN

CITY OF WINSTON-S
TOWN OF KERNER

-T9- POT 11+70.50
(NOT SET)
-BY16- POT 129+65.46 =
THE FORSYTH COUNTY BOARD OF EDUCATION

-T9- 906 PINC 14+49.97
ELEV=804.28
12"SPIKE SET

-T9- 907 PINC 16+34.43
ELEV=804.14
12"SPIKE SET
CITY OF WINSTON-SALEM

TOWN OF KERNERSVILLE
CITY OF WINSTON-SALEM

-T9- 908 POT 17+50.64
ELEV=804.74
12"SPIKE SET

NOTE :
1. FOR -Y4EB- PROFILE, SEE SHEET 53
2. FOR -Y4WB- PROFILE, SEE SHEET 58

MAYCHINE -Y4- STA.137+22 SHEET 29

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 31 |
| R/W SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y6-
PI Sta 13+91.60
Δ = 71° 04' 40.0" (RT)
D = 11° 48' 48.8"
L = 601.66'
T = 346.44'
R = 485.00'
SE = 06
RO = SEE PLANS

-Y5A-
PI Sta 77+45.60
Δ = 8° 32' 22.4" (RT)
D = 1° 28' 22.4"
L = 579.78'
T = 290.43'
R = 3,890.00'
SE = 03
RO = SEE PLANS

-BY17-561 POT 72+86.82
(-Y6-STA. 14+04.78, 20.78 LT)

-BY17-560 PINC 68+81.37
(-Y6-STA. 18+10.11, 15.74 LT)

-Y6- PC Sta. 10+45.16

-Y5A-PT Sta. 80+34.95

-Y5A-PC Sta. 74+45.17

-Y6- PC Sta. 10+45.16

END CONSTRUCTION
-Y5A- STA. 81+25.00

KENDALL N. CHAMBERS
PATTI J. CHAMBERS

TIMOTHY A. MONTGOMERY
CINDY G. MONTGOMERY

CHRISTOPHER DECOSKEY
CARLA J. DEOSKEY
DB 2553 PG 877

G.P. SWISHER HEIRS

CITY OF WINSTON-SALEM

ALLUVIUM

RESIDUAL

ROADWAY EMBANKMENT (FILL)

S 36° 55' 34.8" E

N 35° 34' 11.3" W
SR 2667 HASTINGS HILL RD

N 44° 06' 33.7" W

N 71° 59' 45.2" E

-Y5A- POC STA 77+81.41 =
-Y6- POT STA 10+00.00

100' TAPER TO EXIST. RT. & LT. SIDE

MATCHLINE -Y6- STA 18+30 SHEET 29

MATCHLINE -Y5A- STA 73+00 SHEET 29

NOTE :
FOR -Y5A- PROFILE, SEE SHEET 77-78
FOR -Y6- PROFILE, SEE SHEET 89-91

REVISIONS

8/17/99

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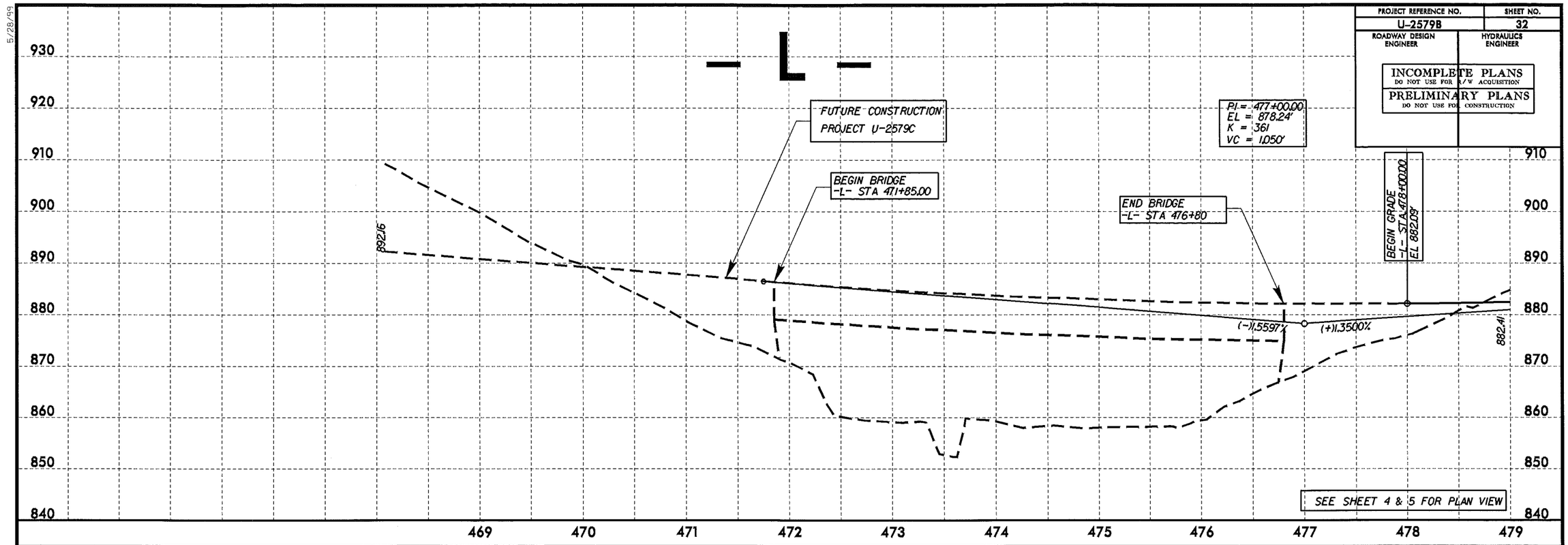
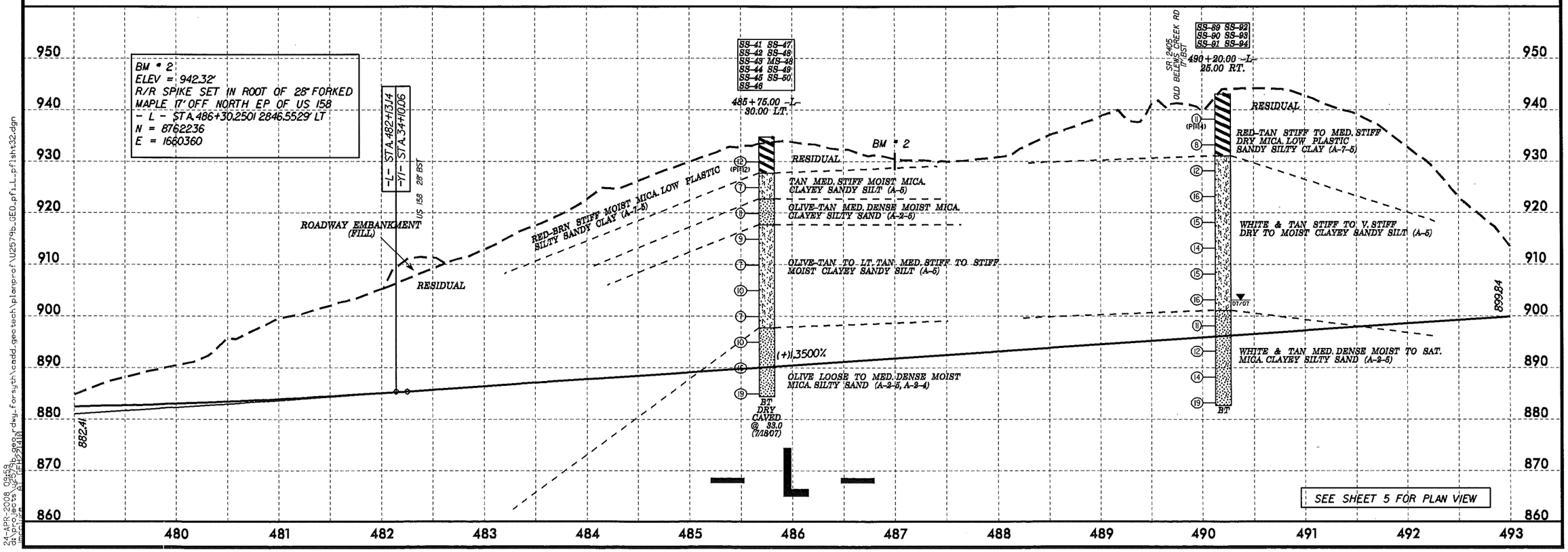
5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 32 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

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A-CFH221410

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 33 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

940 930 920 910 900 890 880 870 860 850

493+00 494+00 495+00 496+00 497+00 498+00 499+00 500+00 501+00 502+00 503+00 504+00 505+00 506+00 507+00

SS-108
SS-109
MS-109
SS-110
495+30.00 -L-
CL

RESIDUAL
RED TO RED-BRN & TAN STIFF MOIST MED. TO LOW PLASTIC SILTY SANDY CLAY (A-7-5)

OLIVE STIFF MOIST V. MICA. SANDY SILT (A-5)

BT
NM
(7/26/07)

SS-111
SS-112
MS-112
SS-113
496+52.48 -L-
136.95 RT.
=
16+50 -Y1RPD-

RESIDUAL
RED-BRN TO RED-TAN STIFF MOIST MED. TO LOW PLASTIC SILTY SANDY CLAY (A-7-5)

TAN STIFF MOIST V. MICA SANDY SILT (A-4)

BT
NM
(7/26/07)

SS-11
MS-116
ST-4
RT-4
SS-115
498+50.00 -L-
25.00 RT.

RED TO RED-BRN STIFF TO MED. STIFF MOIST MICA LOW PLASTIC SILTY SANDY CLAY (A-7-5) ST-4

OLIVE LOOSE TO MED. DENSE MOIST V. MICA. SILTY SAND (A-2-5)

BT
NM
(7/26/07)

(+)1.3500%

RESIDUAL

CREEK

RESIDUAL

SS-116
502+90.00 -L-
160.00 RT.

RESIDUAL
DARK BRN TO OLIVE MED. DENSE MOIST TO WET V. MICA. SAND (A-2-4)

BT
NM
(7/26/07)

504+00.00 -L-
75.00 LT.

RESIDUAL
OLIVE V. DENSE MOIST SLI. MICA. SAND (A-2-4)

BT
NM
(7/26/07)

RESIDUAL

SS-117
SS-118
505+50.00 -L-
CL
ALLUVIUM
GRAY-BLACK TO GRAY V. LOOSE MOIST LOW PLASTIC SILTY CLAYEY SAND (A-2-6)

RESIDUAL

CREEK

RESIDUAL
OLIVE MED. DENSE MOIST SLI. MICA. SILTY SAND (A-2-4)

SEE SHEET 5 & 6 FOR PLAN VIEW

950 940 930 920 910 900 890 880 870 860

507+00 508+00 509+00 510+00 511+00 512+00 513+00 514+00 515+00 516+00 517+00 518+00 519+00 520+00 521+00

BM = 3
R/R SPIKE SET IN CONC CURB AND GUTTER IN ENTRANCE TO GOSPEL LIGHT BAPTIST CHURCH 14' OFF WEST EP OF WALKERTOWN GUTHRIE RD
- L - STA. 513+19.0497 1433.3052 LT
N = 873632
E = 1661924
ELEV. = 953.40'

PI = 510+00.00
EL = 922.79'
K = 250
VC = 600'
SSD = 750'

(+)1.3500%
(-)1.0500%

SS-119
SS-120
510+60.00 -L-
60.00 RT.

RESIDUAL
RED-BRN STIFF MOIST LOW TO MED. PLASTIC SILTY SANDY CLAY (A-6, A-7-6)

BT
DRY
(7/29/07)

WEST WALTER KOHN

RESIDUAL

CREEK

RESIDUAL

ALLUVIUM

SS-121
SS-122
513+50.00 -L-
25.00 RT.

RESIDUAL
RED-BRN TO OLIVE & OLIVE-RED TO BRN MED. DENSE TO V. DENSE MOIST SILTY SAND (A-2-4) TO CLAYEY SILTY SAND (A-2-5)

BT
DRY
(7/30/07)

-L- STA. 516+31.30
-Y2- STA. 20+20.21

SS-138 SS-137
SS-134 SS-138
SS-135 SS-139
SS-136
516+41.71 -L-
112.59 LT.
=
19+10 -Y2-
25.00 RT.

SR 2385
WALKERTOWN / GUTHRIE RD
23' BST

ROADWAY EMBANKMENT (FILL)

RESIDUAL
RED & WHITE-TAN STIFF MOIST MED. TO LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-5)

BRN-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-5)

OLIVE & TAN MED. DENSE V. MICA. CLAYEY SILTY SAND (A-2-5)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

BT CRYSTALLINE ROCK

SS-130
SS-131
SS-132
518+50.00 -L-
25.00 LT.

RESIDUAL

BT
NM
(7/31/07)

SS-123
MS-133
SS-134
520+00.00 -L-
50.00 RT.

RESIDUAL

BT
DRY
(8/1/07)

BORING DESCRIPTIONS

(A) RED STIFF MOIST MICA LOW PLASTIC SILTY SANDY CLAY (A-7-6) (RESIDUAL)

(B) TAN LOOSE TO MED. DENSE MOIST LOW PLASTIC CLAYEY SILTY SAND (A-2-7) (RESIDUAL)

(C) OLIVE-TAN TO OLIVE MED. DENSE MOIST TO DRY MICA. SILTY SAND (A-2-5) (RESIDUAL)

(D) RED V. STIFF MOIST HIGH PLASTIC SANDY CLAY (A-7-5) (RESIDUAL)

(E) RED & TAN V. STIFF MOIST CLAYEY SANDY SILT (A-5) (RESIDUAL)

SEE SHEET 6 & 7 FOR PLAN VIEW

30-MAY-2008 08:04
dgn: Projects\2579b_geo_rdwy_forsyth\eadd_geotech\plan\prof\u2579b_geo_pf1_pfish33.dgn
dgn: Projects\2579b_geo_rdwy_forsyth\eadd_geotech\plan\prof\u2579b_geo_pf1_pfish10.dgn

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 34 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM = 4
R/R SPIKE SET IN BASE OF 24" OAK
12' OFF WEST EP OF MORRIS RD
- L - STA. 523+21.7237 123.5.608 LT
N = 87.2942
E = 1662678
ELEV. = 935.13'

BORING DESCRIPTIONS
- (A) RED-BRN LOOSE MOIST CLAYEY SAND (A-2-4) (ALLUVIUM)
- (B) TAN STIFF TO MED. STIFF WET MED. PLASTIC SANDY CLAY (A-7-6) (ALLUVIUM)

BORING DESCRIPTIONS
- (C) TAN STIFF MOIST CLAYEY SANDY SILT (A-4) (RESIDUAL)
- (D) RED MED. STIFF TO STIFF MOIST SANDY SILTY CLAY (A-7) (RESIDUAL)
- (E) BRN STIFF MOIST SANDY SILTY CLAY (A-7) (RESIDUAL)
- (F) RED-BRN STIFF MOIST CLAYEY SANDY SILT (A-5) (RESIDUAL)
- (G) BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (H) RED MED. STIFF MOIST MICA SANDY SILTY CLAY (A-7) (ARTIFICIAL FILL)
- (I) BRN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (J) RED TO PINK & BRN LOOSE TO DENSE MOIST SILTY CLAYEY SAND (A-2-4) (RESIDUAL)
- (K) PINK & BRN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-4) (RESIDUAL)
- (L) PINK & BRN LOOSE TO MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4) (RESIDUAL)
- (M) RED-TAN MED. STIFF MOIST SANDY SILTY CLAY (A-7) (RESIDUAL)
- (N) OLIVE-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)

960 950 940 930 920 910 900 890 880 870

521 522 523 524 525 526 527 528 529 530 531 532 533 534 535

91.24

SS-125 SS-126 SS-127
522+50.00 -L- 10.00 RT.
RESIDUAL
OLIVE & TAN MED. DENSE WET SILTY SAND (A-2-5)
ALLUVIUM
BT NM (8/07)
CREEK
BM = 4
SS-128 SS-129
524+00.00 -L- 100.00 RT.
RESIDUAL
RED & TAN TO WHITE & TAN MED. STIFF MOIST TO WET MED. TO LOW PLASTIC SILTY SANDY CLAY (A-7-6, A-7-5)
BT NM (8/07)
(-)1.0500%
ALLUVIUM
BRN MED. STIFF MOIST TO WET LOW PLASTIC SILTY SANDY CLAY (A-6)
SS-140 SS-141
528+00.00 -L- CL
RESIDUAL
POND
ALLUVIUM
RESIDUAL
SS-142
529+00.00 -L- CL
RESIDUAL
RED-BRN TO RED & OLIVE-TAN-WHITE STIFF MOIST MED. PLASTIC MICA SILTY SANDY CLAY (A-7-5)
BT DRY (8/07)
RED & BRN TO TAN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-5)
SS-143 SS-144 SS-145 SS-146
531+60.00 -L- CL
591+10.00 -L- 26.00 LT.
OLIVE & WHITE DENSE MOIST V. MICA. SILTY SAND (A-2-5)
BT NM (8/07)
BRN & BRN-TAN STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-4)
532+40.00 -L- 50.00 LT.
532+00.00 -L- CL
RESIDUAL
533+50.00 -L- 30.00 LT.
534+00.00 -L- 10.00 RT.
534+75.00 -L- 50.00 LT.
BRN-OLIVE & BRN DENSE MOIST CLAYEY SILTY SAND (A-2-4)
SS-147 SS-148 SS-149 SS-150
534+50.00 -L- 25.00 LT.
OLIVE-TAN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK STREAKS AT BASE
AR NM (8/07)
CR
WR
SEE SHEET 7 & 8 FOR PLAN VIEW

950 940 930 920 910 900 890 880 870 860

535 536 537 538 539 540 541 542 543 544 545 546 547 548 549

SR 2407 MORRIS RD
RED-TAN MED. STIFF MOIST SANDY SILTY CLAY (A-7)
OLIVE-BRN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-4)
535+25.00 -L- 50.00 RT.
OLIVE-GREEN DENSE MOIST SILTY SAND (A-2)
536+50.00 -L- CL
RESIDUAL
RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)
TAN & ORANGE TO GRAY & WHITE & OLIVE DENSE TO LOOSE MOIST TO DRY SLI. MICA. TO MICA. CLAYEY SILTY SAND & SILTY SAND (A-2)
CRYSTALLINE ROCK
OLIVE-TAN MED. STIFF TO HARD MOIST SILTY SANDY CLAY (A-7)
538+00.00 -L- CL
ORANGE & RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)
539+00.00 -L- CL
RESIDUAL
RED-BRN & BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK
(-)1.0500%
BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)
540+00.00 -L- CL
SS-154 SS-155 SS-156 SS-157A
541+00.00 -L- 75.00 RT.
RESIDUAL
RED-TAN TO RED-BRN STIFF & V. STIFF MOIST MED. PLASTIC SANDY SILTY CLAY & SILTY SANDY CLAY (A-6 & A-7-5)
TAN TO OLIVE LOOSE MOIST TO WET MICA. SILTY SAND (A-2-5)
SS-157 SS-158 SS-159
543+00.00 -L- 60.00 RT.
RESIDUAL
BRN MED STIFF TO STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)
TAN MED. STIFF MOIST CLAYEY SANDY SILT (A-4)
OLIVE & TAN LOOSE TO MED. DENSE WET V. MICA. CLAYEY SILTY SAND (A-2-4)
BRN MED. STIFF MOIST SANDY SILTY CLAY (A-6)
SS-160 SS-161 SS-162 SS-163
545+50.00 -L- 35.00 LT.
WHITE & BRN TO OLIVE-TAN & OLIVE MED. DENSE TO V. DENSE DRY TO WET MICA. SILTY SAND (A-2-4, A-2-5)
SS-164 SS-165 SS-166 SS-167 SS-168 SS-169
547+50.00 -L- 75.00 LT.
RESIDUAL
RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)
RED-TAN STIFF MOIST CLAYEY SANDY SILT (A-5)
OLIVE LOOSE TO MED. DENSE MOIST MICA. CLAYEY SILTY SAND (A-2-5, A-2-4)
OLIVE V. STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)
OLIVE DENSE TO MED. DENSE WET MICA. SAND (A-2-5)
BT NM (8/07)
SEE SHEET 8 & 9 FOR PLAN VIEW

24-APR-2008 10:00
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microstation V8 DGN 29410

5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 35 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

BM #5
R/R SPIKE SET IN BASE OF 42" FORKED OAK 19' OFF OF NORTH EP
WESTON LAKE TL
-L- STA 557+11.9417 427.3050 LT
N = 870288
E = 1665137
ELEV. = 866.68'

-L-

980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

549 550 551 552 553 554 555 556 557 558 559 560 561 562 563

ROADWAY EMBANKMENT (FILL)

SR 2575 WESTON BROOKE TRAIL 2" BST

SS-170
SS-171
SS-172

551+25.00 -L- 100.00 RT.

RED TO RED-TAN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)

RESIDUAL

10 (PI=19)
10
18
24
18

RED-TAN STIFF TO V. STIFF MOIST V. MICA. TO SLI MICA. CLAYEY SANDY SILT (A-5, A-4)

OLIVE & WHITE MED. DENSE MOIST MICA. SILTY SAND (A-2)

BT NM (8/1507)

88412

(-)11.0500%

(+)3.9665%

PI = 553+19.00
EL = 877.44'
K = 319
VC = 1,600'

RESIDUAL

RED & BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

19 (PI=19)
16
100/0.1

OLIVE & BRN MED. DENSE MOIST V. MICA. SILTY CLAYEY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

BT DRY (8/1507)

SPT REFUSAL

RESIDUAL

RESIDUAL
RED-TAN TO RED STIFF TO V. STIFF MOIST HIGH PLASTIC SILTY SANDY CLAY (A-7-6)

SS-173
SS-174

555+60.00 -L- 40.00 LT.

BEGIN BRIDGE
-L- STA 555+50.02

END BRIDGE
-L- STA 559+21.65

916.35

ALLUVIUM

ALLUVIUM
RED-TAN TO RED MED. STIFF MOIST SILTY SANDY CLAY (A-7-6)

BM #5

18 (PI=29)
11
10 (PI=19)
11
11
11
8
10
15
10
27

RESIDUAL
RED-TAN STIFF MOIST CLAYEY SANDY SILT (A-5)

RED-TAN STIFF MOIST MED. PLASTIC SANDY SILTY CLAY (A-7-5)

TAN & OLIVE-TAN TO OLIVE-WHITE-TAN STIFF TO V. STIFF MOIST TO WET CLAYEY SANDY SILT (A-5)

08/07

SS-194
SS-195
SS-196
SS-197
SS-198
SS-199
SS-200

558+50.00 -L- 20.00 LT.

SS-175
SS-176
SS-177

559+05.00 -L- 60.00 RT.

ALLUVIUM
TAN-GRAY SOFT MOIST MICA. CLAYEY SANDY SILT (A-4)

4
1
89
100/.8
78

BT NM (8/1507)

ALLUVIUM
GRAY & WHITE V. LOOSE & LOOSE WET SILTY CLAYEY SAND & CLAYEY SAND (A-2-4)

RESIDUAL
OLIVE & WHITE HARD MOIST CLAYEY SANDY SILT (A-4) WITH SEV. WEATH. CRYSTALLINE ROCK SEAM @ 13.6

ALLUVIUM
BRN V. SOFT TO SOFT MOIST CLAYEY SANDY SILT (A-4)

SS-178
SS-179
SS-180
SS-181

560+50.00 -L- 200.00 RT.

4
5
1
3
60

BT

RESIDUAL

OLIVE V. LOOSE TO V. DENSE WET MICA. CLAYEY SILTY SAND (A-2-5)

SS-182
SS-183

563+00.00 -L- 150.00 LT.

RESIDUAL
RED STIFF MOIST SANDY SILTY CLAY (A-7)

12
8

BT DRY (8/1507)

TAN STIFF MOIST CLAYEY SANDY SILT (A-6)

SEE SHEET 9 & 10 FOR PLAN VIEW

24-APR-2008 10:05
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5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 36 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM #6
R/R SPIKE SET IN BASE OF 18" OAK
38' OFF OF NORTH EP ROBBINS PERCH TRAIL
- L - STA. 564+11.4525 311.3424 RT
N = 869271
E = 1665048
ELEV. = 900.49'

(+)3.9665%

916.35

970.65

SS-182
SS-183
563+00.00 -L-
150.00 LT.

RED STIFF MOIST SANDY SILTY CLAY (A-7)

TAN STIFF MOIST CLAYEY SANDY SILT (A-5)

BT DRY (8/1507)

BM #6

RESIDUAL

SS-184
SS-185
567+00.00 -L-
130.00 LT.

RESIDUAL
RED-BRN MED. DENSE MOIST CLAYEY SAND (A-2-4)

RED V. STIFF MOIST HIGH PLASTIC MICA SANDY CLAY (A-7-5)

BT DRY (8/1607)

RESIDUAL

SS-186
SS-187
SS-188
570+35.00 -L-
140.00 LT.

RESIDUAL
RED-BRN MED. STIFF TO STIFF MOIST LOW PLASTIC SANDY CLAY (A-6) TO RED & TAN STIFF TO MED. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)

BT DRY (8/1607)

CREEK

CREEK

ARTIFICIAL FILL
TAN LOOSE MOIST CLAYEY SILTY SAND (A-2)

RED-TAN STIFF MOIST CLAYEY SANDY SILT (A-5)

RED-TAN LOOSE MOIST LOW PLASTIC SILTY CLAYEY SAND (A-2-7)

SS-188A
SS-189
573+10.00 -L-
130.00 LT.

ROBBINS PERCH TRAIL
20' BST

BT DRY (8/1607)

ROADWAY EMBANKMENT (FILL)

RESIDUAL

SS-190
SS-191
577+00.00
10.00 LT.

RED-TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)

RESIDUAL

RED-TAN V. STIFF MOIST CLAYEY SANDY SILT (A-5)

BT DRY (8/1607)

SEE SHEET 11 & 12 FOR PLAN VIEW

1020 1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820

564 565 566 567 568 569 570 571 572 573 574 575 576 577

24-APR-2008 10:07
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Microstation V8 DGN
Imagelink AT DEH22110

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 37 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM # 7
SE PAINTED BOLT IN R/R CROSS BAR ON WEST SIDE OF BAGLEY RD @ INTERSECTION W/WEST MOUNTAIN ST
- L - STA. 582+17.0627 12157.045 LT
N = 868295
E = 1667303
ELEV. = 958.89'

(+)3.9665%

(-)13.9704%

PI = 584+34.00
EL = 1,001.00'
K = 247
VC = 1,962'
SSD = 730'

97.65

97.55

-L- STA. 583+49.61
-Y2A- STA. 18+29.06
SR 2440 PISGAH CHURCH RD 18' BST

-L- STA. 584+36.24
-SRR- STA. 35+12.32

PI EST STA. 585+07.00
WEST MOUNTAIN ST
24' BST STA. 22+74.08

SS-190
SS-191
577+00.00 -L-
10.00 LT.
RED-TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)
RED-TAN V. STIFF MOIST CLAYEY SANDY SILT (A-5)
BT DRY (8/16/07)

RESIDUAL

SS-192
SS-193
579+75.00 -L-
60.00 RT.
(10) (PI=20)
RED-TAN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)
(9)
WHITE LOOSE MOIST SILTY SAND (A-2-4)
BT DRY (8/16/07)

BM # 7

RESIDUAL

RESIDUAL

SS-201
SS-202
589+25.00 -L-
CL
BRN-RED STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6)
(14) (PI=16)
BRN-RED STIFF MOIST CLAYEY SANDY SILT (A-6)
(12)
BT DRY (8/17/07)

SEE SHEET 12 & 13 FOR PLAN VIEW

SS-203
SS-204
592+00.00 -L-
CL
(11) (PI=8)
(18) (PI=27)
BT DRY (8/17/07)
RED-BRN TO RED STIFF TO V. STIFF DRY TO MOIST LOW TO HIGH PLASTIC SILTY SANDY CLAY (A-6, A-7-5)

RESIDUAL

SS-206
SS-206
595+00.00 -L-
40.00 RT.
(25) (PI=20)
(17)
BRN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)
OLIVE & BRN V. STIFF MOIST CLAYEY SANDY SILT (A-4)
BT DRY (8/17/07)

RESIDUAL

SS-207
SS-208
598+25.00 -L-
110.00 RT.
(10) (PI=30)
(12) (PI=12)
RED-TAN STIFF MOIST HIGH TO LOW PLASTIC SILTY SANDY CLAY (A-7-6, A-7-5)
BT DRY (8/17/07)

(-)13.9704%

RESIDUAL

SS-209
SS-210
601+00.00 -L-
50.00 LT.
(10) (PI=13)
(11) (PI=22)
BRN-TAN TO RED-BRN STIFF MOIST LOW TO MED. PLASTIC SILTY SANDY CLAY (A-6, A-7-6)
BT DRY (8/17/07)

SEE SHEET 13 & 14 FOR PLAN VIEW

SS-211
SS-212
604+00.00 -L-
60.00 RT.
RESIDUAL
BRN-TAN STIFF MOIST SILTY SANDY CLAY (A-6)
(10)
(25)
RED-BRN V. STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-4)
BT DRY (8/17/07)
RESIDUAL

91.97

30-MAY-2008 08:08
dt: \projects \ 2579410

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 38 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM #8
R/R SPIKE SET IN BASE OF 24" BURCH 24' OFF OF NORTH EP OF REGENTS PARK RD
- L - STA 616+13.7518 483.3262 LT
N = 864512
E = 1666936
ELEV. = 881.42'

- L -

916.91

(-)13.9704%

871.52

SS-220
SS-221
608+00.00 -L-
70.00 RT.
RESIDUAL
RED-BRN TO TAN STIFF MOIST NON MICA. TO SLI. MICA. HIGH TO LOW PLASTIC SILTY SANDY CLAY (A-7-6, A-7-5)
(15) (PI=27)
(12) (PI=11)
BT
NM
(8/22/07)

SS-213
SS-214
611+00.00 -L-
CL
RESIDUAL
RED-BRN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
(16) (PI=24)
(19)
RED-BRN V. STIFF MOIST CLAYEY SANDY SILT (A-5)
BT
DRY
(8/27/07)

SS-219
612+74.64 -L-
77.98 LT.
=
16+75 -Y4CD-
CL
RESIDUAL
RESIDUAL
RED V. STIFF MOIST SILTY SANDY CLAY (A-6)
(17)
WHITE-TAN MED. DENSE MOIST SILTY SAND (A-2)
(100/.9)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
AR
NM
(8/21/07)
CRYSTALLINE ROCK
RESIDUAL

614+99.32 -L-
90.01 LT.
=
19+00 -Y4CD-
CL
ALLUVIUM
TAN LOOSE DRY SAND (A-2)
CR AR
NM
(8/21/07)
WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

SS-222
616+50.00 -L-
10.00 RT.
RESIDUAL
BM #8
ALLUVIUM
ARTIFICIAL FILL
GRAY LOOSE MOIST CLAYEY SILTY SAND (A-2)
(4)
ALLUVIUM
GRAY LOOSE MOIST CLAYEY SILTY SAND (A-2-4)
CRYSTALLINE ROCK
AR
DRY (8/22/07) CR

SEE SHEET 14 & 15 FOR PLAN VIEW

PI = 619+51.00
EL = 861.36'
K = 182
VC = 1190'

871.52

(-)13.9704% (+)2.5694%

LONG WALK DR. TO EST

SS-249
SS-250
619+75.00 -L-
CL
(11) (PI=31)
(11) (PI=11)
RESIDUAL
RED-BRN STIFF MOIST SLI. MICA. TO MICA. HIGH TO LOW PLASTIC SANDY CLAY (A-7-5)
BT
DRY
(8/24/07)

619+85.00 -L-
60.00 RT.
SS-460
SS-461
PROFILE -L-
60.00 RT.
GROUND SURFACE
ALLUVIUM
RED-BRN MED. STIFF MOIST MICA. SILTY SANDY CLAY (A-6)
(8)
11/07
RESIDUAL
RED-BRN V. LOOSE TO LOOSE WET MICA. SILTY SAND (A-2-6)
(4)
BT

SS-232
625+00.00 -L-
150.00 RT.
RESIDUAL
TAN & OLIVE MED. DENSE MOIST CLAYEY SAND (A-2-4) WITH CRUSTY SEAM @ 2.0
(23)
WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)
AR
NM
(9/9/99)
CRYSTALLINE ROCK

BEGIN BRIDGE
-L- STA 627+95.72

END BRIDGE
-L- STA 629+34.65

896.02

SS-233
627+55.00 -L-
15.00 RT.
RESIDUAL
ARTIFICIAL FILL
RED-BRN V. LOOSE TO LOOSE MOIST CLAYEY SILTY SAND (A-2)
(SS. LINE BACKFILL)
CREEK
(4)
(7)
08/07
ALLUVIUM
GRAY V. LOOSE TO LOOSE MOIST TO WET CLAYEY SAND (A-2-4) (WITH GRAVEL AT BASE)
RESIDUAL
RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
BT
ALLUVIUM

ROADWAY EMBANKMENT (FILL)
SR 2827 HAMMOND ST 11' EST
SS-253
631+60.00 -L-
50.00 LT.
ARTIFICIAL FILL
BRN LOOSE MOIST SAND & GRAVEL (A-2)
(GRAVEL DRIVE)
RESIDUAL
RESIDUAL
RED TO RED-BRN LOOSE TO MED. DENSE MOIST SILTY CLAYEY SAND (A-2-4)
BT
DRY
(8/30/07)

SEE SHEET 15 FOR PLAN VIEW

28-JUL-2008 15:20
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5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 39 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

BM # 9
R/R SPIKE SET IN PAVEMENT OF RACHEL ST @ INTERSECTION OF GERRY ST
- L - STA 637+57.8462 702.3544 RT
N = 862500
E = 1665571
ELEV. = 899.76'

-L- STA 642+54.27 -Y4WB- STA 9+23.70

-L- STA 643+08.58 -Y4EB- STA 9+29.51

-L- STA 642+81.42 -Y4- STA 9+26.58

(+)2.569%

89602

924.31

SS-360
SS-361
SS-362
SS-363
SS-364

644+60.00 -L- 75.00 RT.

I-40 EBS WBL US 42 NBL 25 BST

I-40 BUS EBL US 42 SBL 24 BST

RESIDUAL

TAN TO GRAY & WHITE (SALT & PEPPER) TO LT. TAN LOOSE TO DENSE DRY TO WET SILTY SAND (A-2-4, A-2-5)

ROADWAY EMBANKMENT (FILL)

SS-258
SS-259
SS-260
SS-261

641+70.00 -L- 90.00 RT.

RESIDUAL
RED-BRN TO BRN-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6)

RESIDUAL

SS-276

640+43.37 -L- 287.00 LT.
=
44+60 -Y4CD- 170.00 LT.

WEATHERED ROCK
WHITE & GRAY HARD THIN BANDED MICA GNEISS
(SEV. WEATH. CRYSTALLINE ROCK)

OLIVE TO TAN & WHITE MED. DENSE TO DENSE DRY TO WET CLAYEY SILTY SAND (A-2-4)

BT
CRYSTALLINE ROCK
SPT REFUSAL

TAN STIFF MOIST HIGH PLASTIC SANDY CLAY (A-7-6)

RESIDUAL

AR CRYSTALLINE ROCK

ALLUVIUM

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

ARTIFICIAL FILL

GRAVEL RD

DAM

BM # 9

ALLUVIUM

W.E. 852.7' POND

SS-271
SS-272
SS-273
SS-274
SS-275

RESIDUAL

635+00.00 -L- 200.00 LT.

GROUND SURFACE

ALLUVIUM
BRN MED. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-6)

ALLUVIUM
GRAY V. LOOSE WET TO SAT. CLAYEY SAND (A-2-4) WITH SILTY SANDY CLAY LAYERS & GRAVEL @ 6.3-8.5

ALLUVIUM

RESIDUAL

GRAY-GREEN SOFT SAT. MICA. MED. PLASTIC SILTY SANDY CLAY (A-6)

RESIDUAL

GRAY-GREEN TO TAN SOFT TO MED. STIFF SAT. CLAYEY SANDY SILT (A-4) WITH WHITE SPECKS

BT

SEE SHEET 15 & 16 FOR PLAN VIEW

980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

634 635 636 637 638 639 640 641 642 643 644 645 646 647

5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 40 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM #10
R/R SPIKE SET IN ROOT OF
30" WILLOW OAK 10' OFF OF
EAST EP OF HASTING HILL RD
- L - STA 653+15.4381 1683.5581' LT
N = 860489
E = 1667600
ELEV. = 935.89'

PI = 648+93.00
EL = 936.95'
K = 248
VC = 1,620'
SSD = 731'

-L- STA 651+54.57
-Y5DET- STA 23+67.72

-L- STA 652+78.47
-Y5- STA 28+50.16

SR 2667
HASTINGS HILL RD
20' BST

RESIDUAL
TAN TO WHITE & GRAY
MED. DENSE TO V. DENSE
DRY CLAYEY SILTY SAND
(A-2-4)

649+50.00 -L-
75.00 LT.

650+50.00 -L-
75.00 LT.

651+68.14 -L-
131.67 RT.
=
25+00 -Y5DET-
CL

654+00.00 -L-
CL

657+00.00 -L-
CL

660+50.00 -L-
50.00 LT.

SS-359

SS-368

SS-365
SS-366
SS-367

SS-368

SS-369
SS-370

(+)2.5694%

(-)3.9666%

648+25.00 -L-
70.00 RT.

OLIVE & TAN MED. DENSE DRY
SILTY CLAYEY SAND (A-2-4)

RESIDUAL

924.31

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

AR
DRY (9/20/07)
CRYSTALLINE ROCK

WR

AR
NM
(9/21/07)
CRYSTALLINE ROCK

WHITE & GRAY
MED. DENSE DRY
CLAYEY SILTY SAND
(A-2-4)

BT
NM
(9/21/07)

RESIDUAL

RED-TAN TO TAN
LOOSE TO MED. DENSE MOIST
CLAYEY SILTY SAND (A-2-4)

BT
DRY
(9/21/07)

BRN-TAN TO OLIVE-TAN
MED. DENSE TO V. DENSE
MOIST SILTY CLAYEY SAND
(A-2-4)

BM #10

RESIDUAL
RED V. STIFF MOIST LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

TAN TO OLIVE STIFF TO V. STIFF
MOIST MICA CLAYEY SANDY SILT (A-5)

BT
DRY
(9/21/07)

RED-TAN V. STIFF MOIST MED. PLASTIC
SILTY SANDY CLAY (A-7-5)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

BT
NM
(9/21/07)

808.98

RESIDUAL

TAN STIFF MOIST LOW PLASTIC
MICA SILTY SANDY CLAY (A-7-5)

TAN MED. DENSE MOIST
SILTY SAND (A-2-5)

BT
DRY
(9/21/07)

-L- STA 649+19.79
-Y4RPBD- STA 52+94.28

SEE SHEET 16 & 17 FOR PLAN VIEW

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5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 41 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

SBS08

663+11.46 -L- 116.54 LT. = 67+40 -Y4CD- CL

RESIDUAL TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

CRYSTALLINE ROCK

AR NM (9/2007)

CREEK

CREEK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK) POSSIBLE BOULDER @ 2.5

SS-371 SS-372 S-373

666+13.92 -L- 155.73 LT. = 70+50 -Y4CD- 40.00 LT.

ALLUVIUM BRN MED. STIFF MOIST SANDY SILTY CLAY (A-6)

GRAY V. SOFT WET TO SAT. CLAYEY SANDY SILT (A-4)

RESIDUAL GRAY & WHITE MED. DENSE SAT. MICA SILTY SAND (A-1-B)

BT

SS-407 SS-408 SS-409 SS-410

667+75.00 -L- CL

ALLUVIUM

RESIDUAL GRAY & WHITE BANDED GNEISS LOOSE TO V. LOOSE WET SILTY SAND (A-2-5)

BT

SS-415

669+00.00 -L- CL

RESIDUAL TAN TO OLIVE & WHITE MED. DENSE MOIST SLI. MICA SILTY CLAYEY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR DRY (10/2007)

CRYSTALLINE ROCK

RESIDUAL GRAY & WHITE LOOSE WET V. MICA SILTY SAND (A-2)

BT

SS-416 SS-417

670+52.81 -L- 114.67 LT. = 75+00 -Y4CD- CL

RESIDUAL RED-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

672+00.00 -L- 100.00 RT.

WR

AR DRY (10/2007)

CR

673+00.00 -L- CL

RESIDUAL RED-TAN MED. STIFF TO STIFF MOIST SANDY SILTY CLAY (A-7)

TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (OLIVE SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR DRY (10/2007)

674+49.12 -L- 32.24 RT.

RESIDUAL TAN & OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

WR

AR DRY (10/2007)

CR

(-13.9666%)

(+)2.0948%

OLIVE MED. TO V. DENSE MOIST V. MICA. SILTY SAND (A-2)

855.95

PI = 671+50.00
EL = 847.43'
K = 185
VC = 1,120'

SEE SHEET 17 & 18 FOR PLAN VIEW

BORING DESCRIPTIONS

(A) GRAY SOFT MOIST MICA LOW PLASTIC SANDY SILTY CLAY (A-7-6) (ALLUVIUM)

(B) GRAY V. SOFT WET CLAYEY SANDY SILT (A-4) (ALLUVIUM)

(C) GRAY LOOSE SAT. SLI. MICA. SAND (A-1-B) (ALLUVIUM)

(D) TAN & GRAY V. SOFT WET TO SAT. MICA. CLAYEY SANDY SILT (A-4) WITH GRAVEL AT BASE (ALLUVIUM)

661+00 662+00 663+00 664+00 665+00 666+00 667+00 668+00 669+00 670+00 671+00 672+00 673+00 674+00 675+00

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| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 42 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

RESIDUAL
TAN MED. DENSE DRY CLAYEY SILTY SAND (A-2)
675+25.98 -L- 34.04 RT.

RED-TAN & BRN-TAN MED. DENSE MOIST V. MICA. CLAYEY SILTY SAND (A-2)
676+20.21 -L- 16.83 RT.
677+24.93 -L- 9.54 RT.

TAN TO OLIVE-TAN & OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
678+19.34 -L- 14.43 RT.
679+17.07 -L- 19.92 RT.

RED-BRN TO RED-TAN & OLIVE-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
680+24.68 -L- 18.50 RT.
681+16.54 -L- 72.42 LT.

SS-423
RT-3
SS-424
SS-425
MS-425
ST-3
SS-426
MS-426
RED-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-5)
681+92.21 -L- 20.07 RT.

SS-423
MS-423
682+77.05 -L- 13.51 RT.
683+31.36 -L- 4.61 RT.

684+13.04 -L- 122.87 LT.
=
88+76.76 -Y4CD- 42.28 LT.

SS-430
SS-431
686+00.00 -L- 115.00 RT.

SS-432
688+45.00 -L- 96.00 RT.

OLIVE-TAN, DENSE TO V. DENSE DRY MICA, CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

WITH SEV. WEATH. CRYSTALLINE ROCK SEAMS @ 21.5

WITH SEV. WEATH. CRYSTALLINE ROCK LAYER @ 8.0-9.0

WITH SEV. WEATH. CRYSTALLINE RK. LAYER @ 18.5-19.5

(+)20.948%

RED-TAN TO TAN & OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND & SILTY SAND (A-2) WITH LAYERS OF SEV. WEATH. CRYSTALLINE ROCK

TAN STIFF TO V. STIFF WET V. MICA. CLAYEY SANDY SILT (A-5)

RESIDUAL
RED-TAN MED. DENSE MOIST SLI. MICA, LOW PLASTIC SILTY CLAYEY SAND (A-2-6)

OLIVE MED. DENSE TO DENSE MOIST SILTY SAND (A-2-4)

ARTIFICIAL FILL
GRAY MOIST TO WET V. LOOSE TO LOOSE SAND (A-1-B) WITH GRAVEL OR POSSIBLE BOULDER @ BASE

RESIDUAL
GRAY & WHITE MED. DENSE WET MICA. CLAYEY SILTY SAND (A-2)

BORING DESCRIPTIONS

(A) OLIVE LOOSE TO V. DENSE MOIST V. MICA. CLAYEY SILTY SAND TO SILTY SAND (A-2-5) (RESIDUAL)

(B) RED-TAN TO TAN & OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND & SILTY SAND (A-2) (RESIDUAL)

SEE SHEET 18 & 19 FOR PLAN VIEW

END GRADE
-L- STA. 692+32.98
ELEV. 891.06

884.08
891.06

RESIDUAL

SEE SHEET 19 FOR PLAN VIEW

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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 43 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y1 –

BEGIN GRADE
-Y1- STA. 10+00
ELEV. 929.56

929.56

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

RESIDUAL
RED-BRN STIFF MOIST
CLAYEY SANDY SILT (A-6)

SS-27
SS-28
16+40.00 -Y1-
60.00 LT.

RESIDUAL
WHITE & RED MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2-4)
WITH SEV. WEATH. CRYSTALLINE ROCK
LAYERS @ 6.0-8.5

13
14
80
BT
DRY
(7/18/07)

PI = 19+05.00
EL = 910.26'
K = 100
VC = 390'

(-)12.329%
(+)1.7815%

917.52

SS-25
SS-26
18+33.83 -Y1-
157.59 LT.
=
16+75 -YIDET-
30.00 RT.

ARTIFICIAL FILL
RED-BRN MED. STIFF MOIST
SILTY SANDY CLAY (A-6)

ARTIFICIAL FILL
GRAY V. LOOSE WET
SAND (A-2)

6
2
3
07/07
BT

RESIDUAL
OLIVE-TAN V. LOOSE
WET SILTY SAND (A-2-6)

SS-23
SS-24
20+00.00 -Y1-
120.00 LT.

RESIDUAL
WHITE LOOSE TO MED. DENSE DRY
LOW PLASTIC CLAYEY SAND (A-2-6)
WITH QTZ. GRAVEL

10
(PI=15)
3
3
07/07
BT

OLIVE-TAN V. LOOSE MOIST
CLAYEY SILTY SAND (A-2-6)

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SEE SHEET 20 FOR PLAN VIEW

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

930 920 910 900 890 880 870 860

# – Y1 –

PI = 25+00.00
EL = 920.86'
K = 288
VC = 800'
SSD = 789'

917.52

(+)1.7815%
(-)0.9920%

SS-17
SS-18
MS-18
SS-19
SS-20
30+00.00 -Y1-
30.00 RT.

RESIDUAL
RED STIFF MOIST
SLI. MICA. MED. PLASTIC
SILTY SANDY CLAY (A-7-5)

SS-7 SS-11
MS-7 SS-12
SS-8 SS-13
SS-9 SS-15
SS-10 SS-16
32+85.00 -Y1-
20.00 RT.

SS-21
SS-22
27+00.00 -Y1-
60.00 LT.

RESIDUAL
RED-BRN MED. STIFF
MOIST SLI. MICA.
CLAYEY SANDY SILT (A-6)

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

RESIDUAL
WHITE & TAN LOOSE MOIST TO DRY
CLAYEY SILTY SAND (A-2-6)

6
6
8
BT
DRY
(7/18/07)

RESIDUAL
(PI=24)
9
9
7
8
BT
DRY
(7/18/07)

RED-TAN MED. STIFF MOIST
MICA. CLAYEY SANDY SILT (A-6)

OLIVE-TAN LOOSE MOIST
MICA. SILTY SAND (A-2-6)

RED-TAN LOOSE MOIST MICA.
SILTY CLAYEY SAND (A-2-5)

RESIDUAL
RED-BRN V. STIFF MOIST
MICA. MED. PLASTIC
SILTY SANDY CLAY (A-7-5)

19
(PI=23)
9
9
8
10
07/07
12
9
16
10
19
15
24
AR

RED-TAN TO TAN
MED. STIFF TO STIFF
MOIST TO WET MICA.
CLAYEY SANDY SILT (A-6)

WHITE & TAN STIFF TO V. STIFF
WET NON MICA. TO SLI. MICA.
CLAYEY SANDY SILT (A-4)

CRYSTALLINE ROCK

907.96

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SEE SHEET 5 FOR PLAN VIEW

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

930 920 910 900 890 880 870 860 850 840

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GEOPAK (ecos) AT DELL229410

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 44 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y1 –

PI = 46+11.00
EL = 899.92'
K = 206
VC = 800'
SSD = 667'

907.96

(-)0.9920%

(-)4.8729%

871.22

SS-5
SS-6

40+00.00 -Y1-
80.00 LT.

RESIDUAL
RED-BRN SOFT MOIST MICA. CLAYEY SANDY SILT (A-5)

RED-BRN STIFF MOIST MICA. MED. PLASTIC SILTY SANDY CLAY (A-7-6)

BT
DRY
(7/11/07)

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SS-3
SS-4

45+00.00 -Y1-
50.00 LT.

RESIDUAL
RED-BRN MED. STIFF DRY SLI. MICA. CLAYEY SANDY SILT (A-5)

RESIDUAL
OLIVE-TAN LOOSE MOIST SILTY SAND (A-2-4)

BT
DRY
(7/11/07)

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SS-10
SS-11

48+35.35 -Y1-
54.75 LT.
=
47+00 -Y1DET-
CL

RESIDUAL
RED-BRN LOOSE TO MED. DENSE MOIST SLI. MICA. LOW PLASTIC CLAYEY SILTY SAND (A-2-7)

RESIDUAL
RED-BRN. MED. DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2-5)

BT
DRY
(7/28/07)

SS-1
SS-2

50+00.00 -Y1-
50.00 RT.

RESIDUAL
RED-BRN MED. STIFF DRY SLI. MICA. MED. PLASTIC SILTY SANDY CLAY (A-7-6)

RESIDUAL
RED-BRN STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)

BT
DRY
(7/11/07)

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

871.22

SEE SHEET 21 FOR PLAN VIEW

– Y1 –

END GRADE
-Y1- STA. 52+85
ELEV. 867.07

867.07

US 158
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SEE SHEET 21 FOR PLAN VIEW

# – Y1LPA –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 45 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810

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

SS-41 SS-47
SS-42 SS-48
SS-43 MS-48
SS-44 SS-49
SS-45 SS-50
SS-46

11+44.70 -Y1LPA-
38.17 RT.
=
485+75 -L-
30.00 LT.

RED-BRN STIFF MOIST MICA. LOW PLASTIC SILTY SANDY CLAY (A-7-5)

RESIDUAL

(12) (P=12)
(7)
(10)
(9)
(7)
(10)
(7)
(10)
(16)
(19)

TAN MED. STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)

OLIVE-TAN MED. DENSE MOIST MICA. CLAYEY SILTY SAND (A-2-5)

OLIVE-TAN TO LT. TAN MED. STIFF TO STIFF MOIST CLAYEY SANDY SILT (A-5)

OLIVE LOOSE TO MED. DENSE MOIST MICA. SILTY SAND (A-2-5, A-2-4)

(+)1.3500%

(-)0.4896%

887.27

BT DRY CAVED @ 93.0 (7/18/07)

SS-31 SS-37
SS-32 SS-38
SS-33 SS-39
SS-34 SS-40
SS-35 SS-41
SS-36

13+40.00 -Y1LPA-
45.00 LT.

(12)
(9)
(10)
(16)
(16)
(17)
(14)
(13)
(31)
(44)
(100/9) (P=12)
(82)

RED-BRN STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-5)

TAN LOOSE TO DENSE MOIST MICA. SILTY SAND TO CLAYEY SILTY SAND (A-2-5, A-2-4)

07/07

(-)0.4896%

TAN HARD MOIST MICA. LOW PLASTIC SILTY SANDY CLAY (A-7-5) WITH SEV. WEATH. CRYSTALLINE ROCK SEAM @ 53.9

BT

SS-72
SS-73
SS-74
SS-75
SS-76
SS-77
SS-78

15+00.00 -Y1LPA-
50.00 RT.

RESIDUAL

RED-BRN & TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)

LT. TAN STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-5)

(11) (P=10)
(10)
(12)
(13)
(11)
(10)
(16)
(36)

OLIVE & TAN MED. DENSE TO DENSE MOIST TO WET SLI. TO V. MICA. CLAYEY SILTY SAND TO SILTY SAND (A-2-5, A-2-4)

07/07

(+)4.6142%

BT NM (7/21/07)

BEGIN GRADE
-Y1LPA- STA. 10+00
ELEV. 887.27

PI = 11+30.00
EL = 889.02'
K = 87
VC = 160'
SSD = 667'

PI = 14+00.00
EL = 887.70'
K = 59
VC = 300'

PI = 19+50.00
EL = 913.08'
K = 74
VC = 200'
SSD = 501'

END GRADE
-Y1LPA- STA. 21+64.89
ELEV. 917.21

SS-468
SS-469

19+00.00 -Y1LPA-
OL
(+)4.6142%

RED-TAN TO GRAY-TAN MED. STIFF TO STIFF MOIST MED. PLASTIC SLI. MICA SILTY SANDY CLAY (A-7-5)

(8) (P=19)
(4)

RESIDUAL

GRAY-TAN LOOSE MOIST V. MICA SILTY SAND (A-2-5)

BT DRY (11/7/07)

SS-466
SS-467

20+77.55 -Y1LPA-
77.94 RT.
=
30+00 -Y1RPA-
50.00 RT.

(+)11.9248%

SS-91
SS-92

917.21

RED & TAN STIFF TO MED. STIFF MOIST MICA. TO V. MICA. CLAYEY SANDY SILT (A-5)

(15)
(8)
(7)

BT DRY (11/7/07)

21+42.59 -Y1LPA-
41.12 RT.
=
27+00 -Y1-
60.00 LT.

US 158

RESIDUAL
RED-BRN MED. STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-5)

(6)
(6)
(8)

ROADWAY EMBANKMENT (FILL)

RESIDUAL
WHITE & TAN LOOSE MOIST TO DRY CLAYEY SILTY SAND (A-2-5)

BT DRY (7/18/07)

SEE SHEET 5 FOR PLAN VIEW

5/14/99

28-APR-2008 14:04
S:\Geotech\projects\U2579B_GEO_pf1_Y1LPA_PFLSHT45.dgn
$$USER: AF DEH22410

5/14/99

# - Y1LPD -

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 46 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

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

SS-51 SS-56
SS-52 SS-57
SS-53 SS-58
SS-54 SS-59
SS-55

13+75.00 -Y1LPD- CL

RESIDUAL

RED STIFF MOIST SLI. MICA. MED. PLASTIC SANDY CLAY (A-7-6)

OLIVE & WHITE STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-5)

OLIVE & WHITE LOOSE TO DENSE MOIST V. MICA. TO SLI. MICA. SILTY SAND (A-2-5, A-2-4)

07/07

OLIVE & WHITE HARD MOIST SLI. MICA. CLAYEY SANDY SILT (A-4)

BT

885.50

(+)11.3500% (+)0.7599% (-)0.6790% (-)0.6790% (+)3.5076%

BEGIN GRADE
-Y1LPD- STA.10+00
ELEV.885.50

PI = 10+75.00
EL = 886.51'
K = 153
VC = 90'
SSD = 187.3'

PI = 11+70.00
EL = 887.23'
K = 69
VC = 100'
SSD = 800'

PI = 14+75.00
EL = 885.16'
K = 72
VC = 300'

SS-62
SS-63
SS-64
SS-65

18+00.00 -Y1LPD- CL

RED-BRN STIFF MOIST TO DRY SLI. MICA. CLAYEY SANDY SILT (A-5)

OLIVE LOOSE TO MED. DENSE, DRY V. MICA. SILTY SAND (A-2-5)

BT
DRY
(7/12/07)

(+)3.5076% (+)2.0260%

PI = 18+00.00
EL = 896.56'
K = 135
VC = 200'
SSD = 828'

END GRADE
-Y1LPD- STA.22+21.40
ELEV.905.10

905.10

SS-6
SS-6

RESIDUAL

21+80.56 -Y1LPD- 7.70 RT. = 40+00 -Y1- 80.00 LT.

RESIDUAL
RED-BRN SOFT MOIST MICA. CLAYEY SANDY SILT (A-5)

US 158

ROADWAY EMBANKMENT (FILL)

RESIDUAL
RED-BRN STIFF MOIST MICA. MED. PLASTIC SILTY SANDY CLAY (A-7-6)

BT
DRY
(7/11/07)

SEE SHEET 5 FOR PLAN VIEW

29-APR-2008 08:47
01-APR-2008 16:08
imcguire
\\Dfs01\pdp\Projects\U2579B_geo_rdwy_forsyth\cadd_geotech\plan\prof\U2579B_GEO_prf_Y1LPD_PFLSHT46.dgn

5/28/99

# – Y1RPA –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 47 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

960 950 940 930 920 910 900 890 880 870

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

PI = 13+90.00
EL = 906.76'
K = 188
VC = 200'
SSD = 1113'

SS-11
MS-115
ST-4
RT-4
SS-115

14+35.99 -Y1RPA-
119.12 LT.
=
498+50 -L-
25.00 RT.

BEGIN GRADE
-Y1RPA- STA. 10+00
ELEV. 912.59

912.59

RESIDUAL

RED TO RED-BRN
STIFF TO MED. STIFF
MOIST MICA. LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

(P=13) 11 6 ST-4 8 9 20

BT
NM
(7/2607)

(-)11.4953%

(-)2.5607%

OLIVE LOOSE TO MED. DENSE
MOIST V. MICA. SILTY SAND (A-2-5)

RESIDUAL

RESIDUAL

CREEK

SS-104
SS-106
SS-108
SS-107

18+00.00 -Y1RPA-
CL

RED-BRN STIFF MOIST SLI. MICA.
CLAYEY SANDY SILT (A-5)
TO OLIVE MED. STIFF TO STIFF
MOIST CLAYEY SANDY SILT (A-4)

10 7 10 20 10 31 12 11

RESIDUAL

WHITE MED. DENSE MOIST
SILTY SAND (A-1-B)
(VEIN OF QUARTZ)

(-)12.5607%

(+)2.0144%

OLIVE LOOSE TO DENSE MOIST
V. MICA. SILTY SAND (A-2-4)
(QUARTZ VEIN @ 29.5)

BT
NM
(7/2607)

PI = 19+08.00
EL = 893.50'
K = 175
VC = 800'

RESIDUAL

22+50.00 -Y1RPA-
CL

SR 2405
OLD BELMONT CREEK RD
(T-1551)

SS-84
SS-85
SS-86
SS-87
SS-88

RED-BRN TO RED & OLIVE TO TAN
MED. DENSE TO DENSE MOIST TO DRY
MICA. TO V. MICA. SILTY CLAYEY SAND
(A-2-5, A-2-4)

12 13 15 20 18 13 21 37 60/1

07/07

AR

903.31

RESIDUAL

CRYSTALLINE ROCK

SEE SHEET 5 FOR PLAN VIEW

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

940 930 920 910 900 890 880 870 860 850

SS-79
SS-80
SS-81
SS-82
SS-83

25+50.00 -Y1RPA-
85.00 RT.

RESIDUAL
RED-BRN TO OLIVE & TAN
MED. STIFF MOIST LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

(P=13) 6 15 11 10 18

BT
DRY
(7/2007)

RESIDUAL

903.31

OLIVE & TAN MED. DENSE
MOIST TO DRY V. MICA.
SILTY SAND (A-2-5, A-2-4)

SS-458
SS-459

28+25.89 -Y1RPA-
47.67 LT.
=
19+00 -Y1LPA-
CL

(P=9) 8 4

BT
DRY
(11/7/07)

RESIDUAL

GRAY-TAN LOOSE MOIST
V. MICA SILTY SAND (A-2-5)

RED-TAN TO GRAY-TAN
MED. STIFF TO STIFF MOIST
MED. PLASTIC SLI. MICA
SILTY SANDY CLAY (A-7-5)

END GRADE
-Y1RPA- STA. 30+89.92
ELEV. 917.62

SS-456
SS-457

30+00.00 -Y1RPA-
50.00 RT.

917.31

SS-21
SS-22

30+67.21 -Y1RPA-
17.29 RT.
=
27+00 -Y1-
60.00 LT.

15 8 7

BT
DRY
(11/7/07)

RESIDUAL
RED & TAN STIFF TO MED. STIFF
MOIST MICA. TO V. MICA.
CLAYEY SANDY SILT (A-5)

US 158

RESIDUAL
RED-BRN MED. STIFF
MOIST SLI. MICA.
CLAYEY SANDY SILT (A-5)

ROADWAY EMBANKMENT
(FILL)

6 6 8

RESIDUAL
WHITE & TAN LOOSE MOIST TO DRY
CLAYEY SILTY SAND (A-2-5)

BT
DRY
(7/2607)

SEE SHEET 5 & 6 FOR PLAN VIEW

– Y1RPA –

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 4B |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BEGIN GRADE
-Y1RPD ST.A.10+00
ELEV. 912.53

PI = 11+65.00
EL = 910.32'
K = 319
VC = 180'
SSD = 200'

912.53

(-)1.3370%

(-)1.9012%

SS-116

10+05.00 -Y1RPD-
101.00 LT.
=
502+90 -L-
160.00 RT.

CREEK

CREEK

RESIDUAL

20
25
BT
NM
(7/2807)

RESIDUAL

DARK BRN TO OLIVE MED. DENSE
MOIST TO WET V. MICA. SAND (A-2-4)

SS-11
MS-115
ST-4
RT-4
SS-116

14+35.63 -Y1RPD-
63.57 RT.
=
498+50 -L-
25.00 RT.

11 (PI=13)
6
8
9
20
ST-4
BT
NM
(7/2607)

RED TO RED-BRN
STIFF TO MED. STIFF
MOIST MICA. LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

OLIVE LOOSE TO
MED. DENSE, MOIST
V. MICA. SILTY SAND
(A-2-5)

PI = 15+50.00
EL = 903.00'
K = 488
VC = 200'

SS-111
SS-112
MS-112
SS-113

16+50.00 -Y1RPD-
CL

RESIDUAL

10 (PI=22)
11 (PI=15)
9
13
BT
NM
(7/2607)

RED-BRN TO RED-TAN STIFF
MOIST MED. TO LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

TAN STIFF MOIST
V. MICA. SANDY
SILT (A-4)

(-)1.9012%

(-)1.4914%

RESIDUAL

CREEK

-Y1RPD-

SEE SHEET 5 FOR PLAN VIEW

SS-95
SS-96
SS-97
SS-98
SS-99

24+00.00 -Y1RPD-
45.00 RT.

RESIDUAL

RED MED. STIFF TO STIFF
MOIST SLI. MICA. LOW PLASTIC
SANDY SILTY CLAY (A-7-5)

SR 2405
OLD BELEWS
RD.

9 (PI=13)
9
12
9
11
12
12
14
43
BT

RESIDUAL

OLIVE & TAN LOOSE TO DENSE
MOIST TO WET V. TO SLI. MICA.
CLAYEY SILTY SAND (A-2-5)
TO SILTY SAND (A-2-4)

CAVED
07/07

RESIDUAL

SS-66
SS-67
SS-68
SS-69
SS-70
SS-71

27+00.00 -Y1RPD-
CL

TAN MED. STIFF
MOIST HIGH PLASTIC
SILTY SANDY CLAY (A-7-5)

6 (PI=26)
9
10
9
15
18
BT
NM
(10/1907)

RESIDUAL

TAN & OLIVE LOOSE TO MED. DENSE
MOIST V. MICA. SILTY SAND (A-2-5)

(-)1.4914%

(+)2.1233%

PI = 25+15.00
EL = 888.61'
K = 194
VC = 700'

SS-52
SS-53
SS-54
SS-55

28+52.53 -Y1RPD-
97.81 RT.
=
18+00 -Y1LPD-
CL

10
8
13
18
BT
DRY
(7/2907)

RESIDUAL

RED-BRN STIFF MOIST TO DRY
SLI. MICA. CLAYEY SANDY SILT (A-5)

OLIVE LOOSE TO MED. DENSE
DRY V. MICA. SILTY SAND (A-2-5)

RESIDUAL

END GRADE
-Y1RPD ST.A. 32+81.06
ELEV. 904.87

904.87

SS-5
SS-6

32+42.88 -Y1RPD-
33.09 RT.
=
40+00 -Y1-
80.00 LT.

RED-BRN. SOFT MOIST MICA.
CLAYEY SANDY SILT (A-5)

US 158

ROADWAY EMBANKMENT
(FILL)

4
10 (PI=18)
BT
DRY
(7/11/07)

RED-BRN. STIFF MOIST
MICA. MED. PLASTIC
SILTY SANDY CLAY (A-7-6)

-Y1RPD-

SEE SHEET 5 & 6 FOR PLAN VIEW

940 930 920 910 900 890 880 870 860 850

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

21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00

30-MAY-2008 08:2
d:\projects\2579b_geo_rdwy_forsyth\cadd_geotech\planprof\U2579B_GEO_pf1_Y1RPD_pf1sh148.dgn
User: GEH2410

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 49 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# – Y2 –

BEGIN GRADE
-Y2- STA.10+00
ELEV.946.23

946.23

SR 2385 WALKERTOWN / GUTHRIE RD 20' BST

(-)1.1831% (+)0.3000% (+)0.3000% (-)1.2169%

ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

PI = 10+75.00
EL = 945.34'
K = 101
VC = 150'

PI = 12+25.00
EL = 945.79'
K = 99
VC = 150'
SSD = 786'

PI = 16+60.00
EL = 940.50'
K = 155
VC = 250'

SS-133
SS-134
SS-135
SS-136
SS-137
SS-138
SS-139

19+10.00 -Y2-
25.00 RT.

(-)1.2169% (+)0.4000%

SR 2385 WALKERTOWN / GUTHRIE RD 20' BST

ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

943.46

(10) (PI=19) RED & WHITE-TAN STIFF MOIST MED. TO LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-6)
(9) (PI=14)
(10) BRN-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-5)
(10)
(13)
(14) CAVED 08/07
(11) OLIVE & TAN MED. DENSE V. MICA. CLAYEY SILTY SAND (A-2-5)
(10)
(12)
(14)
(23)

100/.6 AR CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

SEE SHEET 22 & 7 FOR PLAN VIEW

960 950 940 930 920 910 900 890 880 870

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

# – Y2 –

END GRADE
-Y2- STA.29+75.00
ELEV.942.74

943.46

(+)0.4000% (+)0.3655%

942.74

SR 2385 WALKERTOWN / GUTHRIE RD 20' BST

ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

PI = 25+80.00
EL = 944.18'
K = 523
VC = 400'
SSD = 1610'

SEE SHEET 23 FOR PLAN VIEW

980 970 960 950 940 930 920 910 900 890

24+00 25+00 26+00 27+00 28+00 29+00 30+00

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 50 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4EB –

BEGIN GRADE
-Y4EB- STA. 26+80.00
ELEV. 912.80

PI = 27+95.00
EL = 911.00'
K = 280
VC = 230'
SSD = 1430'

PI = 32+55.00
EL = 900.05'
K = 1323
VC = 690'
SSD = 2414'

912.80

27+50.00 -Y4EB-
50.00 LT.

29+50.00 -Y4EB-
50.00 LT.

31+50.00 -Y4EB-
50.00 LT.

33+50.00 -Y4EB-
60.00 LT.

895.69

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

(-)11.5609%

(-)12.3815%

(-)12.9030%

RESIDUAL
OLIVE MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

BT
DRY
(11/7/07)

AR
DRY
(11/7/07)

RESIDUAL
OLIVE MED DENSE TO V DENSE
MOIST CLAYEY SILTY SAND (A-2)

BT
NM
(11/6/07)

RESIDUAL
BRN-TAN & OLIVE MED DENSE
MOIST CLAYEY SILTY SAND (A-2)

AR
DRY
(11/7/07)

ROCK SURFACE 50.00 LT.
CRYSTALLINE ROCK

WEATHERED ROCK
(REV. WEATH. CRYSTALLINE ROCK)

WEATHERED ROCK
(REV. WEATHERED
CRYSTALLINE ROCK)

ROCK SURFACE 50.00 LT.
CRYSTALLINE ROCK

SEE SHEET 24 FOR PLAN VIEW

# – Y4EB –

895.69

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

36+00.00 -Y4EB-
50.00 LT.

38+00.00 -Y4EB-
50.00 LT.

39+00.00 -Y4EB-
60.00 LT.

PI = 39+63.00
EL = 879.50'
K = 763
VC = 210'

RESIDUAL
RED-BRN & OLIVE MED. DENSE
MOIST CLAYEY SILTY SAND (A-2)

BT
NM
(11/6/07)

BT
NM
(11/6/07)

RESIDUAL
RED MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)

AR
NM
(11/6/07)

(100.7)

2.9030%

(-)12.6278%

CRYSTALLINE ROCK

ROCK SURFACE 50.00 LT.

CRYSTALLINE ROCK

SS-453
SS-454
SS-455

42+00.00 -Y4EB-
70.00 LT.

SS-438
SS-439

46+30.00 -Y4EB-
110.00 LT.

856.30

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

RESIDUAL

ALLUVIUM (PI=33)

RED-BRN STIFF MOIST
HIGH PLASTIC SANDY SILTY CLAY (A-7-6)
TO GRAY & GRAY-BLACK SOFT MOIST
LOW PLASTIC SILTY SANDY CLAY (A-6)

GRAY MED. DENSE
WET SAND (A-1-B)

RESIDUAL
TAN LOOSE WET
CLAYEY SILTY SAND (A-2)

BT

CREEK

ALLUVIUM (PI=23)

RESIDUAL
GRAY STIFF MOIST MED. PLASTIC
SILTY SANDY CLAY (A-7-6)

RESIDUAL

AR
NM
(11/7/07)

CRYSTALLINE ROCK

Ⓐ GRAY-BRN TO OLIVE-GRAY MED. STIFF TO STIFF
MOIST MED. PLASTIC SILTY CLAY (A-7-6)
TO SILTY SANDY CLAY (A-7-6) (ALLUVIUM)

SEE SHEET 25-26 FOR PLAN VIEW

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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 51 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4EB –

PI = 53+05.00
EL = 844.23'
K = 333
VC = 1,410'

SS-436
SS-437
49+60.00 -Y4EB-
116.00 LT.
50+25.00 -Y4EB-
116.00 LT.
51+75.00 -Y4EB-
116.00 LT.
52+75.00 -Y4EB-
116.00 LT.
53+75.00 -Y4EB-
116.00 LT.
SS-440
SS-441
SS-443
SS-443
55+25.00 -Y4EB-
116.00 LT.
SS-449
56+00.00 -Y4EB-
116.00 LT.
SS-448
60+00.00 -Y4EB-
116.00 LT.
61+00.00 -Y4EB-
116.00 LT.

RESIDUAL
RED-TAN STIFF MOIST CLAYEY SANDY SILT (A-4)
RESIDUAL
RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
RESIDUAL
RED-BRN MED DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2)
BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
RESIDUAL
RED-BRN TO RED-TAN V. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)
RESIDUAL
RED-BRN MED. STIFF SILTY SANDY CLAY (A-7) TO OLIVE-GRAY MED. STIFF TO STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)
RESIDUAL
RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)
TAN LOOSE TO MED. DENSE MICA TO V. MICA SILTY SAND (A-2-5)

858.30
860.23

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
WR SEV.WEATH. CRYSTALLINE ROCK
CRYSTALLINE ROCK
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)
ROCK SURFACE 115.00 LT. CRYSTALLINE ROCK

AR DRY (11/2/07)
AR NM (11/1/07)
BT NM (11/2/07)
AR NM (11/2/07)
BT DRY (11/2/07)
BT DRY (9/7/07)

(-)2.67%
(+)7.81%
(+)1.87%
(+)18.65%

BORING DESCRIPTIONS
(A) GRAY-TAN & GRAY-BLACK V SOFT TO SOFT MOIST TO WET MICA CLAYEY SANDY SILT (A-4) (ALLUVIUM)
(B) RED-TAN MED DENSE WET SILTY SAND (A-2-5) (RESIDUAL)

SEE SHEET 26-27 FOR PLAN VIEW

# – Y4EB –

PI = 67+25.00
EL = 869.61'
K = 2118
VC = 210'

SS-449
SS-447
62+07.33 -Y4EB-
70.30 LT.
=
84+50 -Y4RPBD-
45.00 RT.
SS-444
SS-445
65+51.27 -Y4EB-
89.29 LT.
=
81+00 -Y4RPBD-
30.00 RT.
SS-279
SS-280
SS-281
70+84.09 -Y4EB-
181.44 RT.
=
89+40 -Y4RPA-
100.00 LT.

860.23
885.95

RESIDUAL
TAN TO OLIVE & WHITE MED. DENSE MOIST SILTY SAND (A-2-5, A-2-4)
ALLUVIUM
RESIDUAL
OLIVE & WHITE LOOSE WET CLAYEY SILTY SAND (A-2-4)
RESIDUAL
TAN-RED STIFF TO V. STIFF MOIST LOW TO HIGH PLASTIC SILTY SANDY CLAY (A-6, A-7-6)
RED-TAN MED. STIFF MOIST TO WET CLAYEY SANDY SILT (A-6)

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

BT NM (11/2/07)
BT NM (11/1/07)
BT DRY (9/7/07)

(+)1.78%
(+)18.65%

BORING DESCRIPTIONS
(A) GRAY V. SOFT MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-6) (ALLUVIUM)
(B) GRAY V. LOOSE WET CLAYEY SILTY SAND (A-2-4) (ALLUVIUM)

SEE SHEET 27 FOR PLAN VIEW

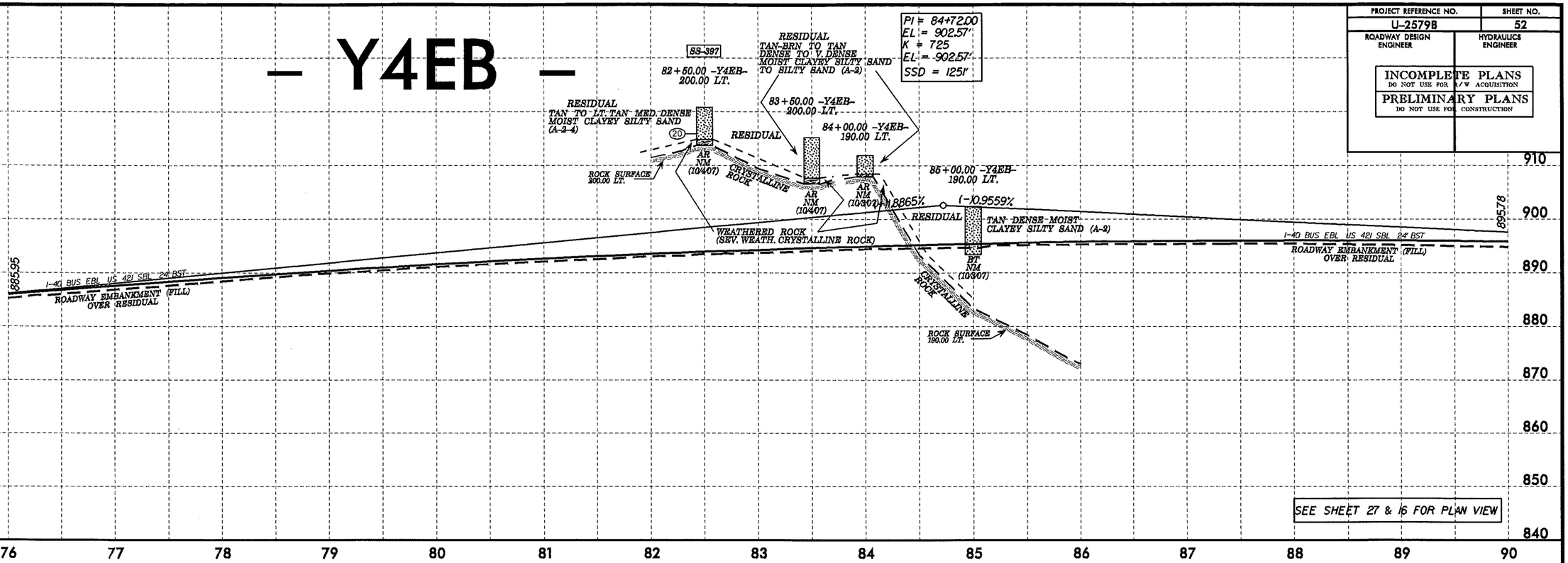
5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 52 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

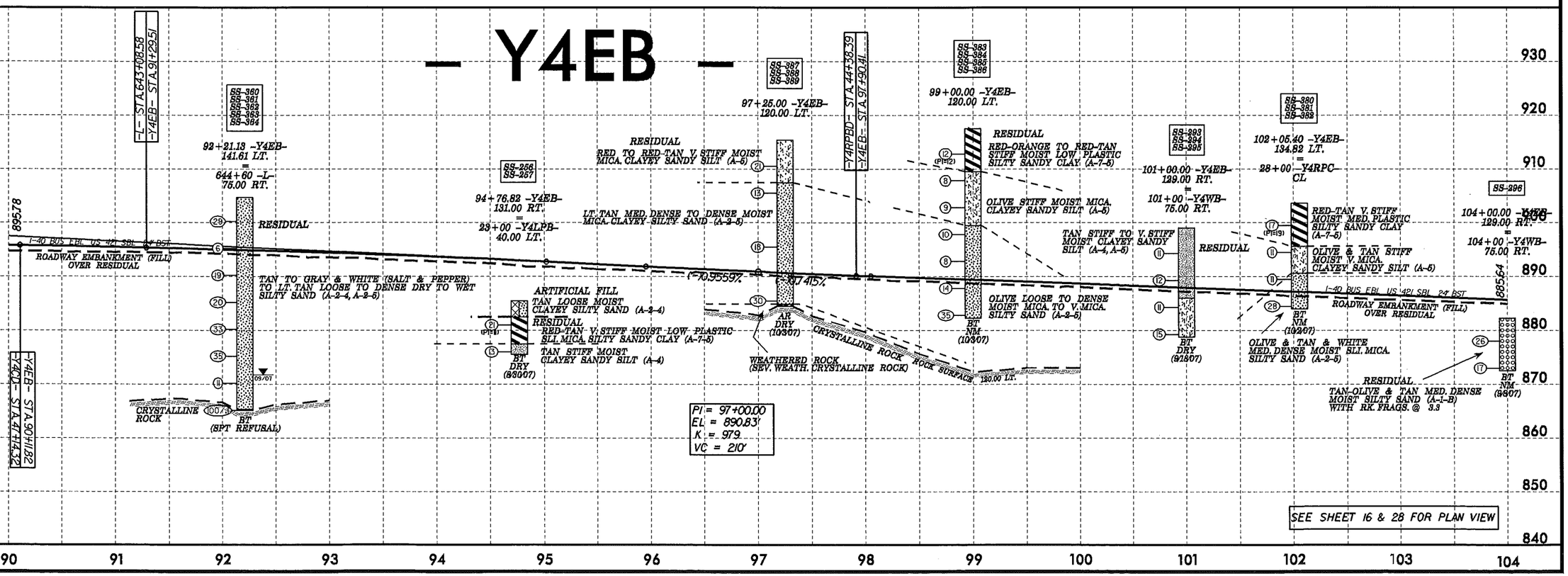
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4EB –




SEE SHEET 27 & 16 FOR PLAN VIEW

# – Y4EB –




SEE SHEET 16 & 28 FOR PLAN VIEW

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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 53 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4EB –

PI = 106+40.00
EL = 883.86'
K = 185
VC = 410'

SS-296

106+00.00 –Y4EB– 129.00 RT.
=
104+00 –Y4WB– 75.00 RT.

SS-376
SS-379

106+51.92 –Y4EB– 114.49 LT.
=
32+50 –Y4RPC– 50.00 LT.

SS-336
SS-339

109+52.93 –Y4EB– 118.45 LT.
=
35+50 –Y4RPC– 75.00 LT.

SS-340
SS-341
SS-342

112+53.25 –Y4EB– 112.48 LT.
=
38+50 –Y4RPC– 90.00 LT.

SS-343
SS-344
SS-345
SS-346

115+50.00 –Y4EB– 110.00 LT.

885.64

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

(–)0.7415%

(+)1.4775%

RESIDUAL
TAN-OLIVE & TAN MED. DENSE MOIST SILTY SAND (A-1-B) WITH RX. FRAGS. @ 3.3
BT NM (9/2/07)

RESIDUAL
OLIVE STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)
14 (PI=13)
4
TAN LOOSE MOIST CLAYEY SILTY SAND (A-2-4)
BT NM (10/2/07)

RESIDUAL
22 (PI=20)
13 (PI=14)
RED V. STIFF TO STIFF MOIST SLI. MICA, MED. TO LOW PLASTIC SILTY SANDY CLAY (A-7-6)
BT DRY (9/19/07)

RESIDUAL
RED V. STIFF MOIST MED. PLASTIC SLI. MICA SILTY SANDY CLAY (A-7-6)
17 (PI=25)
13
OLIVE STIFF MOIST CLAYEY SANDY SILT (A-6)
17
OLIVE MED. DENSE MOIST MICA. CLAYEY SILTY SAND (A-2-6)
22
BT NM (9/28/07)

RESIDUAL
RED TO RED-BRN & TAN STIFF MOIST LOW TO MED. PLASTIC SILTY SANDY CLAY (A-7-6)
11 (PI=15)
I-40 BUS EBL US 421 SBL 24' BST
11 (PI=19)
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
898.29
17
TAN V. STIFF MOIST CLAYEY SANDY SILTY (A-5)
16 (PI=18)
TAN V. STIFF WET LOW PLASTIC SILTY SANDY CLAY (A-7-6)
17
BT NM (9/21/07)

SEE SHEET 28 FOR PLAN VIEW

# – Y4EB –

SS-347
SS-348

118+10.00 –Y4EB– 110.00 LT.

(+)1.4775%

SS-349
SS-350
SS-351

121+00.00 –Y4EB– 110.00 LT.

SS-315

122+75.00 –Y4EB– 129.00 RT.
=
122+75 –Y4WB– 75.00 RT.

SS-316
SS-317

125+00.00 –Y4EB– 129.00 RT.
=
125+00 –Y4WB– 75.00 RT.

SS-333
SS-334
SS-335
SS-336
SS-337

126+25.00 –Y4EB– 115.00 LT.

SS-356
SS-357

128+09.79 –Y4EB– 109.71 LT.
=
66+00 –Y5A– CL

–Y5– STA.67+65.72
–Y4EB– STA.129+34.00

SS-354
SS-355

130+50.00 –Y4EB– 115.00 LT.

863.29

I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

RESIDUAL
BRN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)
13 (PI=4)
16
BRN V. STIFF MOIST CLAYEY SANDY SILT (A-5)
BT DRY (9/19/07)

RESIDUAL
RED MED. STIFF TO V. STIFF MOIST MED. PLASTIC SLI. MICA SANDY SILTY CLAY (A-7-6)
17 (PI=17)
9
RED STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-5)
10
OLIVE & TAN MED. DENSE MOIST V. MICA. SILTY SAND (A-2-5)
15
BT DRY (9/21/07)

RESIDUAL
OLIVE-TAN TO RED-BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
(–)4.0060%
25 (PI=20)
63
GRAY & WHITE V. DENSE MOIST SAND (A-2) WITH RX. FRAGS.
BT DRY (9/21/07)

RESIDUAL
RED-BRN TO RED V. STIFF MOIST HIGH TO LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-6)
10 (PI=17)
28
A
B
C
AR NM (9/21/07)
LR – CR
21 (PI=30)
2 (PI=3)
34
38
OLIVE DENSE TO MED. DENSE MOIST SILTY SAND (A-2-5)
29
BT DRY (9/19/07)
ROCK SURFACE 115.00 LT.
CRYSTALLINE ROCK

PI = 121+45.00
EL = 906.10'
K = 264
VC = 1,445'
SSD = 754'

BORING DESCRIPTIONS
(A) RED-TAN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6) (RESIDUAL)
(B) OLIVE-WHITE & TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4) (RESIDUAL)
(C) WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL
BRN & GRAY TO RED-TAN STIFF TO V. STIFF MED. PLASTIC SILTY SANDY CLAY (A-7-6)
17 (PI=11)
13
OLIVE-TAN STIFF MOIST CLAYEY SANDY SILT (A-6)
BT DRY (9/20/07)

RESIDUAL
BRN & GRAY STIFF TO HARD MOIST TO DRY MICA. LOW PLASTIC SILTY SANDY CLAY (A-6) WITH CRUSTY LAYER @ 5.0
I-40 BUS EBL US 421 SBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
863.78
31 (PI=12)
13
GRAY MED. DENSE DRY SAND (A-2-4)
BT DRY (9/20/07)
ROCK SURFACE 115.00 LT.
CRYSTALLINE ROCK

SEE SHEET 28-29 FOR PLAN VIEW

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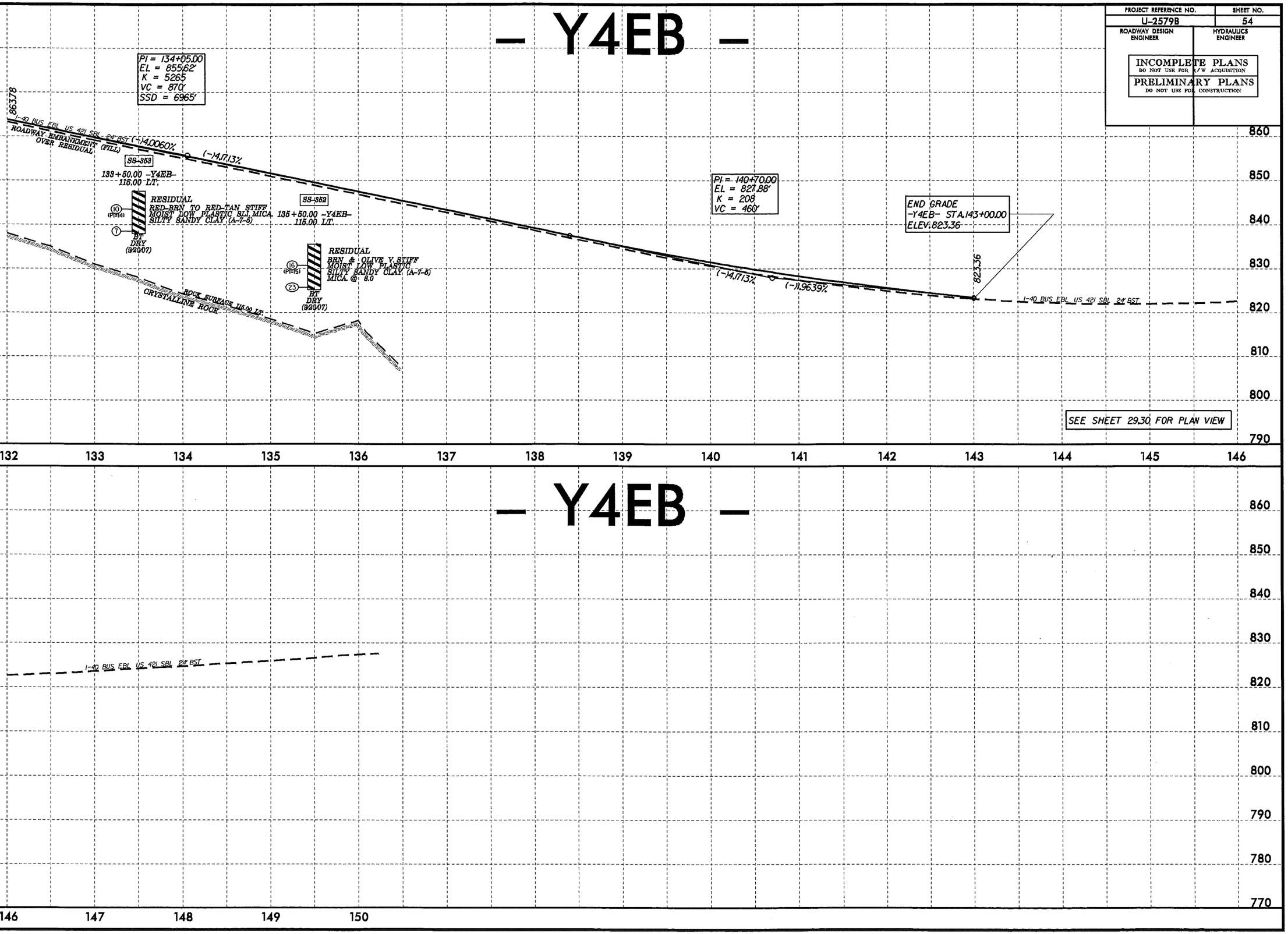
5/28/99

# — Y4EB —

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 54 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION




— Y4EB —

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User:jeffrey.adcock
Plotted: 08-JUL-2008

5/28/99

# – Y4WB –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 55 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

940 930 920 910 900 890 880 870 860 850

20+00 21+00 22+00 23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00

I-40 BUS WBL US 421 NBL 24' BST

BEGIN GRADE
-Y4WB- STA. 26+80.00
ELEV. 912.47

912.47

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

PI = 29+35.00
EL = 908.67'
K = 370
VC = 510'
SSD = 1038'

(-)11.4906%

(-)12.8688%

I-40 BUS WBL - US 421 NBL 24' BST

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

895.33

SEE SHEET 60 (PROFILE -Y4EB-) FOR SOIL DESCRIPTIONS

SEE SHEET 24 FOR PLAN VIEW

– Y4WB –

920 910 900 890 880 870 860 850 840 830

34+00 35+00 36+00 37+00 38+00 39+00 40+00 41+00 42+00 43+00 44+00 45+00 46+00 47+00 48+00

895.33

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

PI = 39+63.00
EL = 879.18'
VC = 210'
K = 952

(-)12.8688%

(-)12.6481%

ROADWAY EMBANKMENT (FILL)

BORING DESCRIPTIONS

- (A) RED-BRN-GRAY-WHITE LOOSE MOIST, MICA, CLAYEY SAND (A-2-6) (ROADWAY EMBANKMENT FILL)
- (B) RED-BRN-TAN MED STIFF TO STIFF MOIST MICA CLAYEY SANDY SILT (A-4) ROCK @ 6.8 (ROADWAY EMBANKMENT FILL)
- (C) RED-BRN STIFF & MED. STIFF MOIST MICA, LOW PLASTIC SILTY SANDY CLAY (A-7-5) (ROADWAY EMBANKMENT FILL)
- (D) GRAY MED. STIFF MOIST TO WET MICA, SILTY SANDY CLAY, (A-6) (ROADWAY EMBANKMENT FILL)
- (E) RED-BRN-GRAY MED. STIFF TO HARD MOIST TO WET MICA, MED. PLASTIC SILTY, SANDY CLAY (A-7-6) W/ORGANICS (WOOD) & RX FRAGS. (ALLUVIUM)
- (F) GRAY MED. STIFF MOIST TO WET MICA, SILTY SANDY CLAY (A-6) (ALLUVIUM)
- (G) GRAY LOOSE MOIST V. MICA, SAND (A-1-B) W/QUARTZ GRAVEL (18.0-19.1) (ALLUVIUM)
- (H) RED-BRN-GRAY HARD MOIST TO WET MICA, SILTY SANDY CLAY (A-7) ROCK IN RES. (RESIDUAL)
- (I) GRAY MED. DENSE MOIST V. MICA, SAND (A-1) TO TAN-ORANGE-WHITE DENSE MOIST MICA, SAND (A-2-4) (RESIDUAL)

RETAINING WALL #1
BORINGS B-1 THRU B-3

SS-1 SS-4
MS-1 MS-4
SS-2 SS-5
MS-2 MS-5
SS-3
MS-3

B-1
46+44 -Y4WB-
14.50 RT.

SS-6
MS-6
SS-7
MS-7

B-2
47+04 -Y4WB-
17.50 RT.

B-3
47+64 -Y4WB-
17.50 RT.

857.61

I-40 BUS WBL US 421 NBL 24' BST

ROADWAY EMBANKMENT (FILL)

ROCK IN FILL (3.0-4.0)

ROCK FRAGS. @ 3.5'

ALLUVIUM

RESIDUAL

WEATHERED ROCK (SEV. WEATHERED NON-CRYSTALLINE ROCK)

NON-CRYSTALLINE ROCK

SEE SHEET 60 (PROFILE -Y4EB-) FOR SOIL DESCRIPTIONS

SEE SHEET 25-26 FOR PLAN VIEW

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 56 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4WB –

**BORING DESCRIPTIONS**

(A) TAN-ORANGE-GRAY LOOSE TO MED. DENSE MOIST MICA. SILTY CLAYEY SAND (A-2-4) (ROADWAY EMBANKMENT FILL)

(B) TAN-ORANGE STIFF MOIST MICA MED. PLASTIC SANDY CLAY (A-7-6) ROCK IN FILL (ROADWAY EMBANKMENT FILL)

(C) TAN-ORANGE-GRAY-WHITE V. STIFF MOIST MED. PLASTIC SANDY CLAY (A-7-6) (RESIDUAL)

(D) GRAY MED. STIFF MOIST MICA CLAYEY SANDY SILT (A-4) (ALLUVIUM)

(E) TAN-ORANGE-GRAY-WHITE LOOSE MOIST TO WET CLAYEY SAND (A-2-4) (ALLUVIUM)

(F) GRAY-TAN-ORANGE LOOSE TO MED. DENSE MOIST SAND (A-2-4) (RESIDUAL)

**BORING DESCRIPTIONS**

(G) TAN-ORANGE-GRAY TO RED BRN. LOOSE MOIST MICA SILTY CLAYEY SAND (A-2-4) (ROADWAY EMBANKMENT FILL)

(H) GRAY V. LOOSE & LOOSE MOIST TO SATURATED SAND (A-1-B) (ALLUVIUM)

(I) GRAY SOFT MOIST SILTY SANDY CLAY (A-6) (ALLUVIUM)

(J) TAN-ORANGE-BRN TO TAN-ORANGE-GRAY-WHITE LOOSE TO VERY DENSE MOIST MICA SAND (A-2-6) & SILTY SAND (A-2-4) (RESIDUAL)

(K) RED-BRN LOOSE MOIST MICA CLAYEY SILTY SAND (A-2-5) & SILTY CLAYEY SAND (A-2-4) (ROADWAY EMBANKMENT FILL)

(L) RED-BRN LOOSE MICA MOIST CLAYEY SILTY SAND (A-2) (ROADWAY EMBANKMENT FILL)

RETAINING WALL #2
BORINGS B-4 THRU B-9

PI = 53+20.00
EL = 843.24'
K = 318
VC = 1430'

B-4 49+53 -Y4WB- 17.00 RT.
B-5 50+53 -Y4WB- 16.00 RT.
B-6 51+53 -Y4WB- 15.50 RT.
B-7 52+53 -Y4WB- 15.70 RT.
B-8 53+53 -Y4WB- 15.50 RT.
B-9 54+53 -Y4WB- 15.60 RT.

857.51
859.53

I-40 BUS WBL US 421 NBL 24' BST

ROADWAY EMBANKMENT (FILL)
ROCK IN FILL @ 3.0-4.0
RESIDUAL
NON-CRYSTALLINE ROCK
WEATHERED ROCK (SEV. WEATHERED NON-CRYSTALLINE ROCK)
ALLUVIUM
ROCK IN FILL @ (0.0-4.5)
ROADWAY EMBANKMENT (FILL)
(+)12.648i%
(+)11.851i%
ROCK FILL @ (4.0-8.1)
GRAY-RED-BRN V. LOOSE TO LOOSE MOIST MICA SILTY CLAYEY SAND (A-2-4)
GRAY TO GRAY-WHITE LOOSE SAT. TO DRY SILTY CLAYEY SAND (A-2-4) TO SAND (A-2-4)
GRAY-WHITE MED. DENSE DRY SAND (A-3)
NON-CRYSTALLINE ROCK
WEATHERED ROCK (SEV. WEATHERED NON-CRYSTALLINE ROCK)

SEE SHEET 26-27 FOR PLAN VIEW

48+00 49+00 50+00 51+00 52+00 53+00 54+00 55+00 56+00 57+00 58+00 59+00 60+00 61+00 62+00

# – Y4WB –

RETAINING WALL #3
BORINGS B-10 & B-11

B-10 64+29 -Y4WB- 15.00 RT.
B-11 64+69 -Y4WB- 14.00 RT.
70+84.09 -Y4WB- 127.44 RT. = 39+40 -Y4RPA- 100.00 LT.

859.53
885.35

I-40 BUS WBL US 421 NBL 24' BST

ROADWAY EMBANKMENT (FILL)
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
ALLUVIUM
GRAY LOOSE MOIST CLAYEY SAND (A-2-4) (W/BURIED WOOD)
RESIDUAL GRAY-BRN LOOSE MOIST MICA SILTY SAND (A-2-5)
TAN-ORANGE & GRAY-WHITE STIFF MICA MOIST CLAYEY SANDY SILT (A-6)
GRAY-WHITE DENSE TO MED. DENSE MOIST MICA SAND (A-2-4)
RED-BRN V. DENSE TO MED. DENSE MOIST MICA SILTY CLAYEY SAND (A-2) W/ROCK IN FILL
GRAY SOFT TO MED. STIFF MOIST ALLUVIUM MED. PLASTIC SILTY SANDY CLAY (A-7-6)
GRAY LOOSE MOIST CLAYEY SAND (A-2)
GRAY-BRN V. LOOSE MOIST RESIDUAL MICA SILTY SAND (A-2)
BLUE-GRAY TO TAN-BRN-GRAY-WHITE MED. STIFF TO STIFF MOIST MICA CLAYEY SANDY SILT (A-5) (SOME QUARTZ ROCK)
GRAY-WHITE-YELLOW TO BRN-WHITE MED. DENSE MOIST MICA SAND (A-2)
RESIDUAL TAN-RED STIFF TO V. STIFF MOIST LOW TO HIGH PLASTIC SILTY SANDY CLAY (A-6, A-7-6)
RED-TAN MED. STIFF MOIST TO WET CLAYEY SANDY SILT (A-6)

SEE SHEET 27 FOR PLAN VIEW

62+00 63+00 64+00 65+00 66+00 67+00 68+00 69+00 70+00 71+00 72+00 73+00 74+00 75+00 76+00

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 57 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# – Y4WB –

PI = 84+45.00
EL = 901.09'
K = 715
VC = 1,920'
SSD = 1242'

82+25.00 -Y4WB- 160.00 RT.
81+75.00 -Y4WB- 160.00 RT.
82+75.00 -Y4WB- 170.00 RT.
83+00.00 -Y4WB- 160.00 RT.
80+85.00 -Y4WB- 160.00 RT.
84+00.00 -Y4WB- 160.00 RT.
84+89.72 -Y4WB- 175.45 RT.
=
20+40 -Y4LPA- 25.00 RT.

SS-278
SS-277

RESIDUAL
RED-TAN TO WHITE & OLIVE MED. DENSE TO V. DENSE DRY SILTY SAND (A-2-4)

(-)0.8511%
(-)0.8334% RESIDUAL

TAN V. STIFF TO HARD DRY CLAYEY SANDY SILTY (A-4)

885.35
895.32

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR DRY (9/7/07)
AR NM (9/7/07)
AR DRY (9/7/07)
AR DRY (9/7/07)
AR DRY (9/7/07)
AR DRY (9/6/07)
CR

48
26
38

BORING DESCRIPTIONS

- (A) TAN MED. DENSE TO DENSE DRY TO MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (B) RED-TAN TO WHITE & OLIVE DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (C) TAN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (D) TAN V. DENSE MOIST CLAYEY SILTY SAND (A-2) (RESIDUAL)
- (E) WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

SEE SHEET 27 & 16 FOR PLAN VIEW

# – Y4WB –

-Y4CD- STA.46+60.00
-Y4WB- STA.90+06.05

-L- STA.642+54.27
-Y4WB- STA.91+23.70

-Y4RPBD- STA.43+79.20
-Y4WB- STA.98+14.65

SS-262
SS-263
SS-264
SS-265
SS-266
SS-267
SS-268

98+08.35 -Y4WB- 65.45 RT.
=
43+20 -RPBD- 30.00 LT.

SS-293
SS-294
SS-295

101+00.00 -Y4WB- 75.00 RT.

SS-296

104+00.00 -Y4WB- 75.00 RT.

SS-258
SS-259
SS-260
SS-261

92+04.58 -Y4WB- 92.84 RT.
=
641+70 -L- 90.00 RT.

SS-256
SS-257

94+76.82 -Y4WB- 77.00 RT.
=
23+00 -Y4LPB- 40.00 LT.

895.32
884.80

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

RESIDUAL
RED-BRN TO BRN-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6)

WEATHERED ROCK
WHITE & GRAY HARD THIN BANDED MICA GNEISS (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE TO TAN & WHITE MED. DENSE TO DENSE DRY TO WET CLAYEY SILTY SAND (A-2-4)

08/07

BT

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

ARTIFICIAL FILL
TAN LOOSE MOIST CLAYEY SILTY SAND (A-2-4)

RESIDUAL
RED-TAN V. STIFF MOIST LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-5)

BT DRY (8/30/07)

TAN STIFF MOIST CLAYEY SANDY SILT (8/30/07) (A-4)

RESIDUAL
TAN MED. DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2-5)

OLIVE & TAN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)

OLIVE & TAN STIFF MOIST TO WET CLAYEY SANDY SILT (A-6)

OLIVE MED. DENSE TO DENSE MOIST TO WET CLAYEY SILTY SAND (A-2-5) TO SILTY SAND (A-2-4)

08/07

CRYSTALLINE ROCK

AR

RESIDUAL
TAN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-4, A-5)

BT DRY (9/3/07)

RESIDUAL
TAN-OLIVE & TAN MED. DENSE MOIST SILTY SAND (A-1-B) WITH RK. FRAGS. @ 3.3

BT NM (9/3/07)

SEE SHEET 16 & 28 FOR PLAN VIEW

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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 58 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# – Y4WB –

PI = 106+25.00
EL = 882.92'
K = 183
VC = 420'

SS-296
104+00.00 -Y4WB- 75.00 RT.
884.30

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) (-)0.8334% (+)1.4659%
OVER RESIDUAL

RESIDUAL
TAN-OLIVE & TAN MED. DENSE MOIST SILTY SAND (A-1-B) WITH RK. FRAGS. @ 3.3
BT NM (9/8/07)

SS-305 SS-306
106+65.00 -Y4WB- 166.07 RT.
=
25+00 -Y4RPB- CL

RESIDUAL
TAN V. STIFF MED. PLASTIC SILTY SANDY CLAY (A-7-5)
(26) (PT-20)
(19)
BT NM (9/11/07)
TAN & GRAY MED. DENSE WET CLAYEY SAND (A-1-B) WITH QTZ. VEIN

SS-297 SS-298 SS-299
109+47.98 -Y4WB- 67.92 RT.
=
28+00 -Y4RPB- CL

RESIDUAL
TAN TO OLIVE MED. DENSE MOIST MICA. TO V. MICA. SILTY SAND (A-2-5)
SS-326 CBR-1 SS-326
110+86.18 -Y4WB- 128.14 RT.
=
37+75 -Y6- 25.00 RT.
(10) (13)
BT DRY (9/24/07)

111+66.93 -Y4WB- 168.15 RT.
=
37+00 -Y6- 25.00 LT.
BT DRY (9/19/07)

ROADWAY EMBANKMENT (FILL)
(9) (PT-12)
(18) (PT-18)
(17)
TAN TO GRAY STIFF TO V. STIFF MOIST LOW TO MED. PLASTIC SILTY SANDY CLAY (A-7-5)
RESIDUAL
OLIVE & TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2-5)
BT NM (9/20/07)

RESIDUAL
RED-TAN TO OLIVE & TAN MED. DENSE MOIST NON MICA. TO V. MICA. CLAYEY SILTY SAND (A-2)

115+14.15 -Y4WB- 136.21 RT.
=
33+50 -Y6- CL

SS-327 SS-328 SS-329 ST-1 SS-330 MS-330 SS-331 SS-332

(10) (12) (14) ST-1 (17) (16) (17)
RESIDUAL
RED-BRN TO OLIVE MED. DENSE MOIST SLI. TO V. MICA. SILTY SAND (A-2-5)
BT DRY (9/18/07)

SS-307 SS-308 SS-309
118+00.00 -Y4WB- 76.00 RT.
I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
RESIDUAL
ORANGE-TAN TO OLIVE-TAN STIFF MOIST CLAYEY SANDY SILT (A-5)
OLIVE-TAN MED. DENSE MOIST SILTY SAND (A-2-5)
(9) (9) (13)
BT DRY (9/12/07)

SEE SHEET 28 FOR PLAN VIEW

# – Y4WB –

PI = 121+65.00
EL = 905.50'
K = 252
VC = 1,400'
SSD = 738'

SS-307 SS-308 SS-309
118+00.00 -Y4WB- 76.00 RT.
897.32

I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
RESIDUAL
ORANGE-TAN TO OLIVE-TAN STIFF MOIST CLAYEY SANDY SILT (A-5)
OLIVE-TAN MED. DENSE MOIST SILTY SAND (A-2-5)
BT DRY (9/12/07)

SS-310 SS-311 SS-312 SS-313 SS-314
120+25.00 -Y4WB- 76.00 RT.
(+)1.4659% (-)4.0810%

ROADWAY EMBANKMENT (FILL)
(11) (PT-12)
(1) (PT-10)
(17) (PT-14)
(15) (PT-12)
(A) (B)
RESIDUAL
OLIVE-TAN TO RED-BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
OLIVE-TAN V. DENSE WET V. MICA. SILTY CLAYEY SAND (A-2-5)
(62)
BT DRY (9/12/07)

SS-316
122+75.00 -Y4WB- 75.00 RT.
RESIDUAL
OLIVE-TAN TO RED-BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
(25) (PT-20)
(63)
GRAY & WHITE V. DENSE MOIST SAND (A-2) WITH RK. FRAGS.
BT DRY (9/12/07)

SS-316 SS-317
125+00.00 -Y4WB- 75.00 RT.
RESIDUAL
RED-TAN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
(10) (PT-17)
(28)
AR NM (9/13/07)
CRYSTALLINE ROCK
WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)
RESIDUAL
OLIVE-WHITE & TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

SR 2667 HASTINGS HILL RD
-Y5- STA.68+47.29
-Y4WB- STA.129+95.14

SS-318 SS-319 SS-320 SS-321 SS-322 SS-323
131+34.96 -Y4WB- 110.15 RT.
=
70+45 -Y5A- 10.00 LT.
I-40 BUS WBL US 421 NBL 24' BST
ROADWAY EMBANKMENT (FILL) OVER RESIDUAL
RESIDUAL
LT. BRN TO WHITE-TAN & OLIVE MED. DENSE MOIST V. MICA. SILTY SAND (A-2-5)
RESIDUAL
ORANGE & OLIVE STIFF TO V. STIFF MOIST MICA. SANDY SILT (A-5)
OLIVE-TAN TO OLIVE MED. DENSE TO DENSE MOIST TO WET V. MICA. SILTY SAND (A-2-5, A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK SEAM @ 23.0
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK
(11) (13) (15) (14) (12) (32)
09/07
AR NM (9/13/07)
863.26

BORING DESCRIPTIONS
(A) RED-BRN & RED STIFF MOIST TO WET LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-5) (ROADWAY EMBANKMENT FILL)
(B) GRAY V. STIFF WET LOW PLASTIC SILTY SANDY CLAY (A-6) WITH ROOTS @ 13.8 (ALLUVIUM)

SEE SHEET 28-29 FOR PLAN VIEW

18-JUL-2008 11:35
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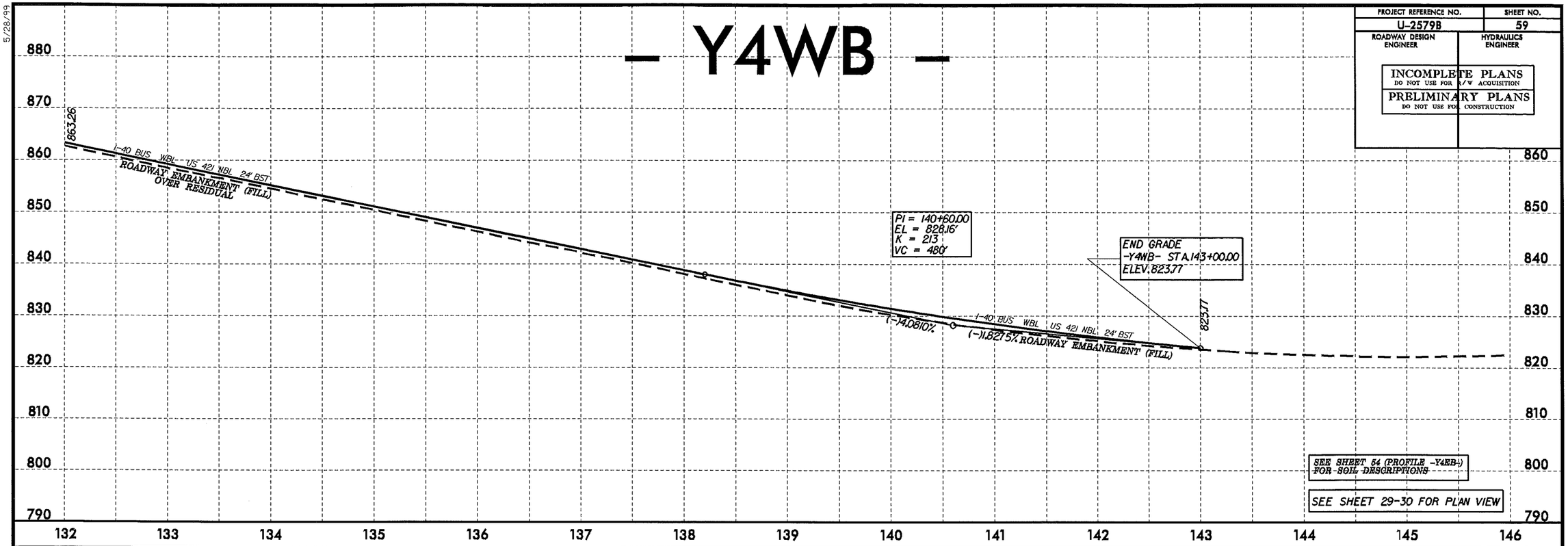
# – Y4WB –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 59 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

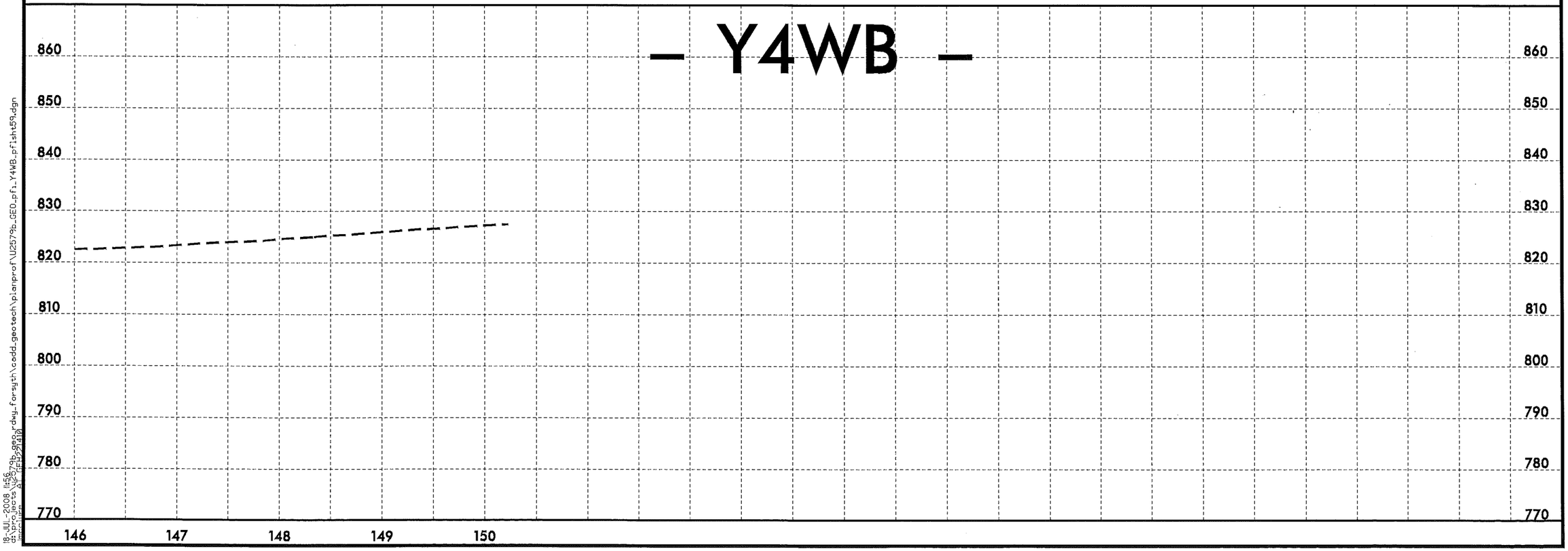
INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION





# – Y4WB –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mpowell

5/14/99

# - Y4CD -

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 60 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM # 8

R/R SPIKE SET IN BASE OF 24" BURCH 24' OFF OF NORTH EP OF REGENTS PARK RD
- Y4CD - STA. 10+29.7473 386.9908' LT
N = 864511.9812
E = 1666935.9813
ELEV. = 881.42'

BEGIN GRADE
-Y4CD- STA. 10+00
ELEV. 914.39

PI = 15+34.58
EL = 892.82'
K = 5257
VC = 200'
SSD = 284.61'

PI = 23+24.15
EL = 860.57'
K = 169
VC = 112.0'

SS-220
SS-221
11+97.85 -Y4CD-
130.65 RT.
=
680+00 -L-
70.00 RT.
(15) (PI=27)
(12) (PI=11)
BT
NM
(8/22/07)
RESIDUAL
RED-BRN TO TAN STIFF MOIST NON MICA TO SLI. MICA. HIGH TO LOW PLASTIC SILTY SANDY CLAY (A-7-6, A-7-5)

(-)4.034%

SS-313
SS-314
14+97.27 -Y4CD-
69.36' RT.
=
611+00 -L-
CL
RESIDUAL
RED-BRN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)
(15) (PI=24)
(19)
BT
DRY
(8/7/07)
RED-BRN V. STIFF MOIST CLAYEY SANDY SILT (A-5)

(-)4.072%

SS-219
16+75.00 -Y4CD-
CL
RESIDUAL
RED V. STIFF MOIST SILTY SANDY CLAY (A-6)
WHITE-TAN MED. DENSE MOIST SILTY SAND (A-2)
(7)
100/.3
AR
NM
(8/21/07)
CRYSTALLINE ROCK
WEATHERED ROCK (SEV WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK

19+00.00 -Y4CD-
CL
ALLUVIUM
TAN LOOSE DRY SAND (A-3)
CREEK
RESIDUAL
AR
NM
(8/21/07)
CR

SS-230
SS-231
22+00.00 -Y4CD-
20.00 LT.
869.57
(-)4.072%

SS-249
SS-250
23+74.95 -Y4CD-
104.06 RT.
=
619+75 -L-
CL
RESIDUAL
(9)
(14)
BT
NM
(8/23/07)
BRN-TAN LOOSE TO MED. DENSE CLAYEY SAND (A-2-4)

RESIDUAL
RED-BRN STIFF MOIST SLI. MICA. TO MICA. HIGH TO LOW PLASTIC SANDY CLAY (A-7-5)
(10) (PI=33)
(11) (PI=11)
BT
DRY
(8/24/07)

SEE SHEET 14 & 15 FOR PLAN VIEW

02-MAY-2008 10:07
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5/14/99

# – Y4CD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 61 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

960
950
940
930
920
910
900
890
880
870
860
850
840
830
820
810
800
790
780
770

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

869.57

LONG WALK DR 20' BST

(+)2.5694%

RESIDUAL

RESIDUAL

BEGIN BRIDGE
-Y4CD- STA. 32+49.05

END BRIDGE
-Y4CD- STA. 33+92.90

898.59

SS-227
SS-228
SS-229

32+25.00 -Y4CD-
CL

RESIDUAL

BRN TO RED-BRN MED. STIFF MOIST TO WET SLI. MICA. CLAYEY SANDY SILT (A-5)

6
4
5
4
13
17
82

08/07

ALLUVIUM

ALLUVIUM

RESIDUAL

BRN LOOSE TO V. DENSE WET V. MICA. SILTY SAND (A-2-4)

BT

SR 2327
HARMONY ST

SS-253

35+60.17 -Y4CD-
66.96 RT.
=
631+50 -L-
50.00 LT.

ARTIFICIAL FILL
BRN LOOSE MOIST SAND & GRAVEL (A-2)
(GRAVEL DRIVE)

ARTIFICIAL FILL

RESIDUAL

RESIDUAL
RED TO RED-BRN LOOSE TO MED. DENSE MOIST SILTY CLAYEY SAND (A-2-4)

RT
DRY
(8/3007)

SEE SHEET 15 FOR PLAN VIEW

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5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 62 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# – Y4CD –

-Y4CD- STA.46+87.16
-Y4- STA.90+08.91

-Y4CD- STA.46+60.00
-Y4WB- STA.90+06.05

-Y4CD- STA.47+14.31
-Y4EB- STA.90+11.82

SS-360
SS-361
SS-362
SS-363
SS-364

48+79.60 -Y4CD-
192.00 RT.
=
644+60 -L-
75.00 RT.

SS-358
SS-359
SS-360
SS-361

45+87.53 -Y4CD-
207.00 RT.
=
641+70 -L-
90.00 RT.

SS-276

44+60.00 -Y4CD-
170.00 LT.

SS-271
SS-272
SS-273
SS-274
SS-275

39+12.75 -Y4CD-
83.00 LT.
=
635+00 -L-
200.00 LT.

I-40 BUS WBL US 421 NBL
23' BST

I-40 BUS EBL US 421 SBL
24' BST

GRAVEL RD

W.E.8527
POND

W.E.8527
POND

898.59

924.19

RESIDUAL

ALLUVIUM
BRN MED. STIFF MOIST LOW PLASTIC
SILTY SANDY CLAY (A-7-6)

GRAY V. LOOSE WET TO SAT. CLAYEY SAND (A-2-4)
WITH SILTY SANDY CLAY LAYERS & GRAVEL @ 6.3-6.5

RESIDUAL
GRAY-GREEN SOFT SAT. MICA. MED. PLASTIC
SILTY SANDY CLAY (A-6)

GRAY-GREEN TO TAN
SOFT TO MED. STIFF SAT.
CLAYEY SANDY SILT (A-4)
WITH WHITE SPECKS

BT

DAM
ARTIFICIAL FILL

ALLUVIUM

RESIDUAL

RED-BRN TO BRN-TAN
V. STIFF MOIST MED. PLASTIC
SILTY SANDY CLAY (A-6)

ROADWAY EMBANKMENT
(FILL)

WEATHERED ROCK
WHITE & GRAY HARD THIN
BANDED MICA GNEISS
(SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL
TAN STIFF
MOIST HIGH PLASTIC
SANDY CLAY (A-7-6)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

OLIVE TO TAN & WHITE
MED. DENSE TO DENSE
DRY TO WET CLAYEY
SILTY SAND (A-2-4)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

BT

RESIDUAL

TAN TO GRAY & WHITE
(SALT & PEPPER) TO LT. TAN
LOOSE TO DENSE DRY TO WET
SILTY SAND (A-2-4, A-2-5)

CRYSTALLINE ROCK
BT. OR SPT REFUSAL

SEE SHEET 15 & 16 FOR PLAN VIEW

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5/14/99

# – Y4CD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 63 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820

52 53 54 55 56 57 58 59 60 61 62 63 64 65 66

PI = 52+93.00
EL = 936.95'
K = 248
VC = 1,620'
SSD = 731'

-Y4CD- STA. 53+77.69
-Y4RPBD- STA. 54+16.42

-Y4CD- STA. 55+70.84
-Y5DET- STA. 22+50.51

-Y4CD- STA. 57+01.14
-Y5- STA. 27+33.16

SS-359

52+47.20 -Y4CD-
187.00 RT.
=
648+25 -L-
70.00 RT.

(+)2.5694%

(-)3.9666%

TAN TO WHITE & GRAY MED. DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2-4)

53+73.09 -Y4CD-
42.00 RT
=
649+50 -L-
75.00 LT.

54+73.17 -Y4CD-
42.00 RT.
=
650+50 -L-
75.00 LT.

ROADWAY EMBANKMENT (FILL)

SR 2657 HASTINGS HILL RD 22' RST

RESIDUAL

RED-TAN TO TAN LOOSE TO MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

OLIVE & TAN MED. DENSE DRY SILTY CLAYEY SAND (A-2-4)

53 14 WR

13 WR 100/.1 AR DRY (9/20/07) CRYSTALLINE ROCK

AR NM (9/21/07) CRYSTALLINE ROCK

10 14 ET NM (9/21/07)

WHITE & GRAY MED. DENSE DRY CLAYEY SILTY SAND (A-2-4)

SS-365
SS-366
SS-367

58+23.17 -Y4CD-
117.00 RT.
=
654+00 -L-
CL

RESIDUAL
RED V. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)

18 (PI=12) 17 16 14 17 BT DRY (9/21/07)

TAN TO OLIVE STIFF TO V. STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)

PI = 62+08.00
EL = 900.66'
K = 196
VC = 210'

SS-368

61+23.17 -Y4CD-
117.00 RT.
=
657+00 -L-
CL

RESIDUAL

15 (PI=20) 100/.8 BT NM (9/21/07)

(-)3.9666%

RED-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

(-)2.8973%

(-)2.8973%

(-)3.8031%

887.65

PI = 64+18.00
EL = 894.57'
K = 232
VC = 210'
SSD = 1296'

SS-369
SS-370

64+73.62 -Y4CD-
66.98 RT.
=
660+50 -L-
50.00 LT.

RESIDUAL

14 (PI=2) 10 BT DRY (9/21/07)

TAN STIFF MOIST LOW PLASTIC MICA. SILTY SANDY CLAY (A-7-5)

TAN, MED. DENSE MOIST SILTY SAND (A-2-5)

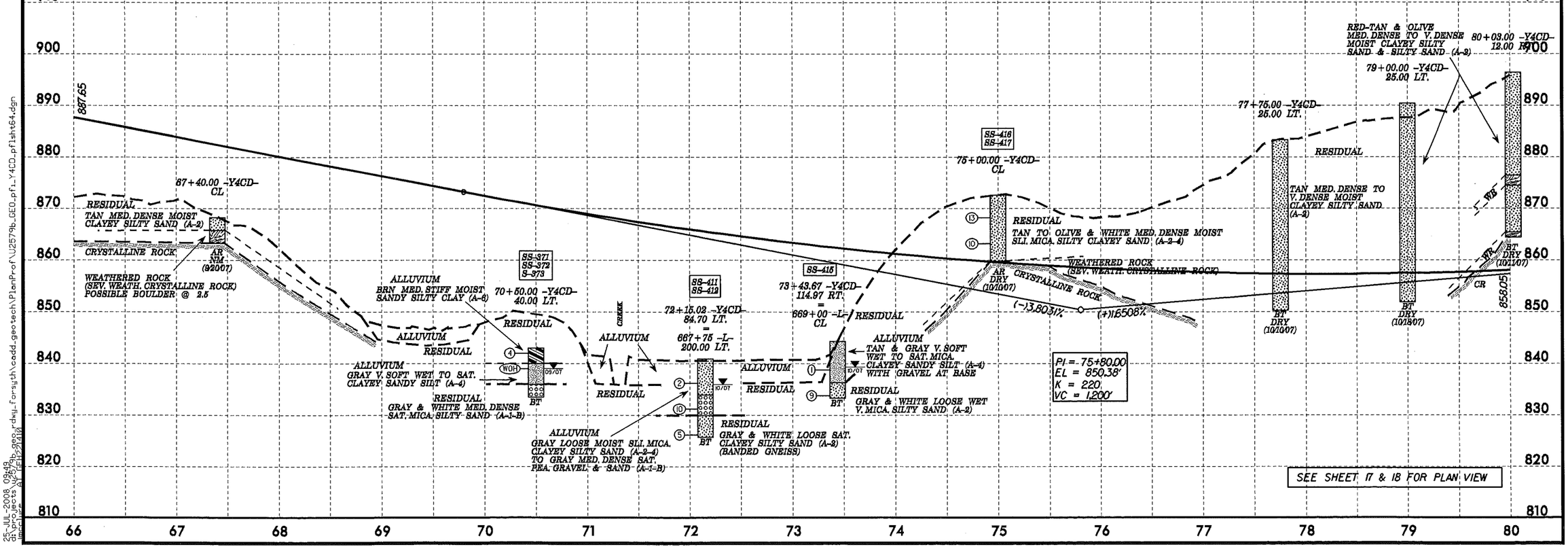
SEE SHEET 16 & 17 FOR PLAN VIEW

5/14/99

# – Y4CD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 64 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

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$$CELL_LIBRARY$$

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 65 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# — Y4CD —

RED-BRN. MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

81+48.00 -Y4CD- 3.00 RT.

RED-TAN TO TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

80+67.00 -Y4CD- 15.00 RT.

80+03.00 -Y4CD- 2.00 RT.

RESIDUAL

WR

AR NM (101807)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

ET DRY (101707)

856.05

82+42.00 -Y4CD- 4.00 LT.

RESIDUAL

AR DRY (101807)

CR

RED-TAN TO OLIVE-TAN & TAN MED. DENSE TO DENSE MOIST SLI. MICA. & V. MICA. CLAYEY SILTY SAND (A-2)

ORANGE-TAN TO OLIVE MED. DENSE TO V. DENSE MOIST V. MICA. CLAYEY SILTY SAND (A-2)

83+46.00 -Y4CD- 8.00 LT.

WR

AR DRY (101807)

CRYSTALLINE ROCK

RED-TO OLIVE-TAN MED. DENSE TO V. DENSE MOIST V. MICA. CLAYEY SILTY SAND (A-2)

84+46.00 -Y4CD- 24.00 LT.

ET DRY (92807)

TAN-ORANGE & OLIVE MED. DENSE TO V. DENSE MOIST MICA. CLAYEY SILTY SAND (A-2) WITH LAYER OF SEV. WEATH. CRYSTALLINE ROCK @ 46.0

84+92.00 -Y4CD- 35.00 LT.

ET DRY (101807)

L_45

85+84.41 -Y4CD- 28.03 RT.

=

681+16.54 -L- 72.42 LT.

AR DRY (102407)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

RED-TAN TO TAN-OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

(+)1.6508%

(+)2.1583%

RESIDUAL

883.97

ARTIFICIAL FILL DAM

POND W.E.= 860.9'

RESIDUAL

PI = 87+00.00
EL = 868.87'
K = 355
VC = 180'

SEE SHEET 18 & 19 FOR PLAN VIEW

930 920 910 900 890 880 870 860 850 840

80 81 82 83 84 85 86 87 88 89 90 91 92 93 94

# — Y4CD —

PI = 95+46.00
EL = 887.12'
K = 848
VC = 100'
SSD = 920.5'

END GRADE
-Y4CD- STA. 95+97.99
ELEV. 888.18

883.97

(+)2.1573%

(+)2.0394%

888.18

RESIDUAL

RESIDUAL

SEE SHEET 19 FOR PLAN VIEW

930 920 910 900 890 880 870 860 850 840

94 95 96 97

02-MAY-2008 11:37
dc:\projects\2579b_geo_rdwy_forsyth\caadd_geotech\plan\prof\U2579B_GEO_pf1_Y4CD_PFL.SHT65.dgn
microstation V8 DEH27410

# – Y4LPA –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 66 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

PI = 11+20.00
EL = 911.80'
K = 98
VC = 160'

914.90

(-)12.5839%

(-)4.2225%

BEGIN GRADE
-Y4LPA- STA.10+00
ELEV.914.90

17+00.00 -Y4LPA-
CL

16+50.00 -Y4LPA-
26.00 LT.

TAN & TAN-ORANGE LOOSE TO MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

TAN DENSE MOIST CLAYEY SILTY SAND (A-2-4)

(+)4.2225%

CR

AR NM (9507)

(+)1.8548%

CRYSTALLINE ROCK

AR NM (9507)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

19+25.00 -Y4LPA-
CL

100'/-4

AR NM (9507)

SS-277

20+40.00 -Y4LPA-
26.00 RT.

26

38

AR DRY (9607)

CR

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

PI = 23+15.90
EL = 895.09'
K = 66
VC = 123'

TAN V. STIFF TO HARD DRY CLAYEY SANDY SILT (A-4)

(+)1.8548%

I-40 BUS WBL US 421 NBL
26' BST

(-)10.0144%

895.07

ROADWAY EMBANKMENT (FILL)

RESIDUAL

RESIDUAL

ROCK SURFACE
CRYSTALLINE ROCK

GRAVEL DRIVE

14+50.00 -Y4LPA-
CL

ARTIFICIAL FILL
RED & TAN LOOSE TO DENSE MOIST CLAYEY SILTY SAND & GRAVEL (A-2-4)

41

RESIDUAL

CRYSTALLINE ROCK

AR NM (9507)

W.E.8527 POND

ALLUVIUM

RESIDUAL

PI = 17+60.00
EL = 884.78'
K = 99
VC = 600'

SEE SHEET 16 FOR PLAN VIEW

END GRADE
-Y4LPA- STA.24+20.62
ELEV.895.07

895.07

895.07

I-40 BUS WBL US 421 NBL
26' BST

ROADWAY EMBANKMENT (FILL)

RESIDUAL

SEE SHEET 16 FOR PLAN VIEW

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

930 920 910 900 890 880 870 860 850 840

5/28/99

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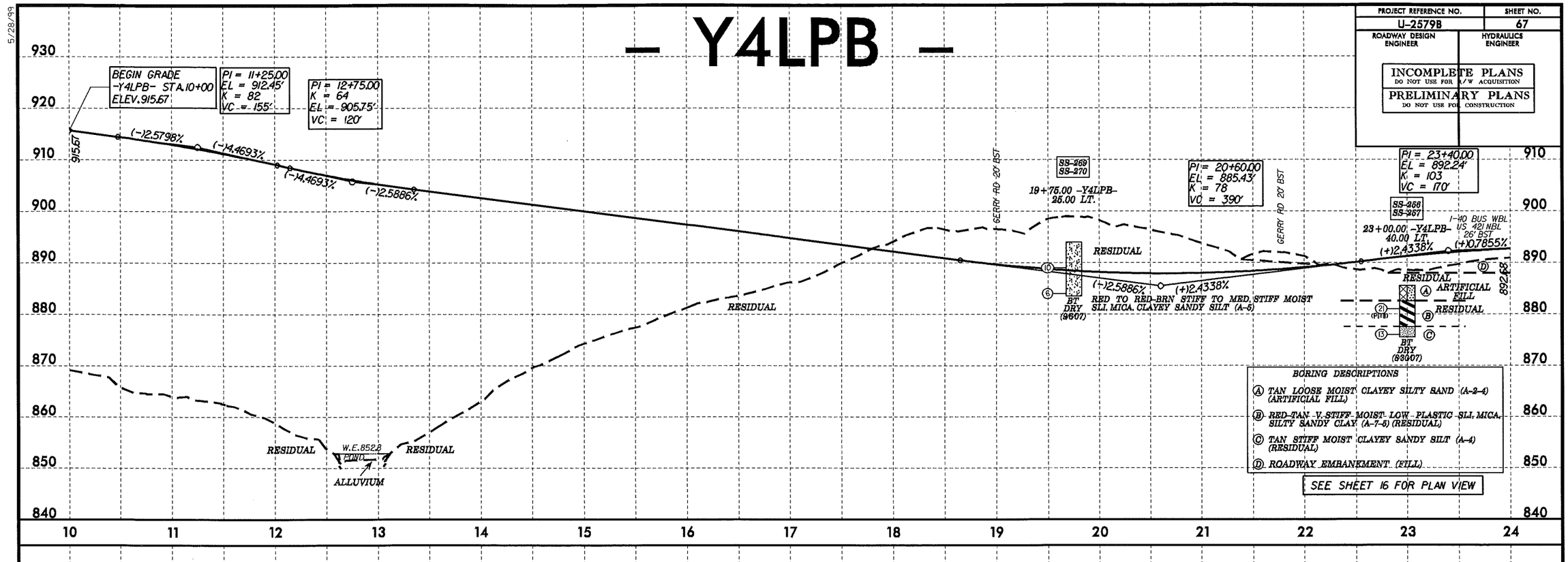
5/28/99

# – Y4LPB –

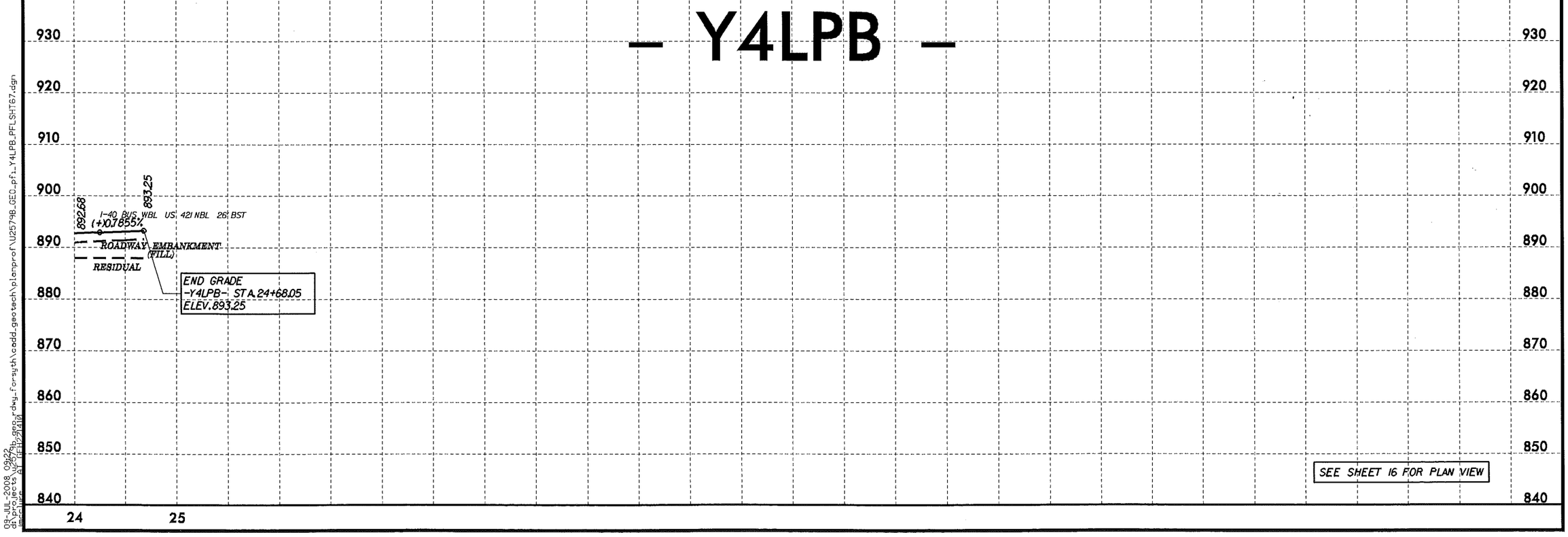
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 67 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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





# – Y4LPB –

5/28/99

# – Y4LPD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 68 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BEGIN GRADE
-Y4LPD- STA.10+00.00
ELEV.922.71

PI = 10+90.00
EL = 923.56'
K = 78
VC = 120'
SSD = 757'

PI = 12+25.00
EL = 922.75'
K = 43
VC = 150'
SSD = 383'

(+)0.9480% (−)0.6000% (−)0.6000% (−)4.1053%

RESIDUAL

SS-399
SS-400

14+75.00 -Y4LPD-
50.00 LT.

RESIDUAL
RED-BRN MED. STIFF TO STIFF
LOW PLASTIC MICA
SILTY SANDY CLAY (A-7-5)

8 (PI=15)
4

BT NM (10/4/07)

LT. TAN LOOSE MOIST MICA
SILTY SAND (A-2-5)

SS-398

18+50.00 -Y4LPD-
CL

TAN DENSE MOIST
SAND (A-2-4)

100/.8
100/0.1

AR NM (10/3/07)

CRYSTALLINE
ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

PI = 20+30.00
EL = 889.70'
K = 64
VC = 390'

20+00.00 -Y4LPD-
40.00 RT.

20+46.51 -Y4LPD-
14.64 RT.

85+00 -Y4EB-
190.00 LT.

RESIDUAL
TAN DENSE MOIST
CLAYEY SILTY SAND
(A-2-4)

BT NM (10/3/07)

AR NM (10/3/07)

(−)4.1053%

(+)2.0172%

RESIDUAL

ROCK SURFACE -Y4LPD- CL
CRYSTALLINE
ROCK

I-40 BUS EBL US 421 SBL 26 BST

(+)2.0172%

(+)0.5205% (+)0.

ROADWAY EMBANKMENT
(FILL)

RESIDUAL

895.43

PI = 23+05.00
EL = 895.25'
K = 107
VC = 160'
SSD = 801'

SEE SHEET 16 FOR PLAN VIEW

– Y4LPD –

END GRADE
-Y4LPD- STA.24+75.27
ELEV.895.76

895.76

I-40 BUS EBL US 421 SBL 26 BST

5205% (−)0.3071%

ROADWAY EMBANKMENT
(FILL)

895.43

RESIDUAL

PI = 24+30.00
EL = 895.90'
K = 109
VC = 90'
SSD = 1349'

SEE SHEET 16 FOR PLAN VIEW

5/14/99

# – Y4RPA –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 69 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

BEGIN GRADE
-Y4RPA- STA.10+00
ELEV.870.57

870.57

LONG WALK DR
20' BST

PI = 10+90.00
EL = 871.65'
K = 230
VC = 180'

(+)1.2000%

(+)1.9823%

RESIDUAL

ADJUSTED GROUND LINE

PI = 14+50.00
EL = 878.78'
K = 189
VC = 300'
SSD = 831'

(+)1.9823%

(+)0.3984%

BEGIN BRIDGE
-Y4RPA- STA.16+44.34

END BRIDGE
-Y4RPA- STA.17+79.22

882.57

SS-223
SS-224
SS-225
SS-226

16+50.00 -Y4RPA- CL

ARTIFICIAL FILL
BRN V. SOFT MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)

CREEK

ALLUVIUM

GRAY V. LOOSE WET SAND & GRAVEL (A-1-B)

RESIDUAL

GRAY & TAN TO WHITE SOFT TO HARD WET SLI. TO V. MICA CLAYEY SANDY SILT (A-4)

(P#1) 2 3 3 5 13 11 10 26 21 76/.1 BT

08/07

SS-289
SS-291
SS-292

19+58.91 -Y4RPA- 108.89 LT.

ALLUVIUM
A 6 6 (P#5)
B

RESIDUAL

OLIVE-TAN MED. DENSE WET BT V. MICA SILTY SAND (A-2-4)

SS-286
SS-287
SS-288

21+76.98 -Y4RPA- 98.98 LT.

ARTIFICIAL FILL C 12
ALLUVIUM D (P#6) 12 (P#9)

RESIDUAL 4 50/.1 BT NM (9/7/07)

TAN MED STIFF WET SANDY SILT (A-5)

BORING DESCRIPTIONS

(A) BRN TO TAN MED. STIFF MOIST LOW PLASTIC SANDY SILTY CLAY (A-7-6) (ALLUVIUM)

(B) GRAY MED. STIFF WET CLAYEY SANDY SILT (A-4) WITH GRAVEL @ BASE (ALLUVIUM)

(C) BRN MED. STIFF DRY SILTY SANDY CLAY (A-6) (ARTIFICIAL FILL)

(D) BRN-TAN TO RED-TAN STIFF MOIST SLI. MICA, MED. PLASTIC SILTY SANDY CLAY (A-6) (ALLUVIUM)

SEE SHEET 15 & 16 FOR PLAN VIEW

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

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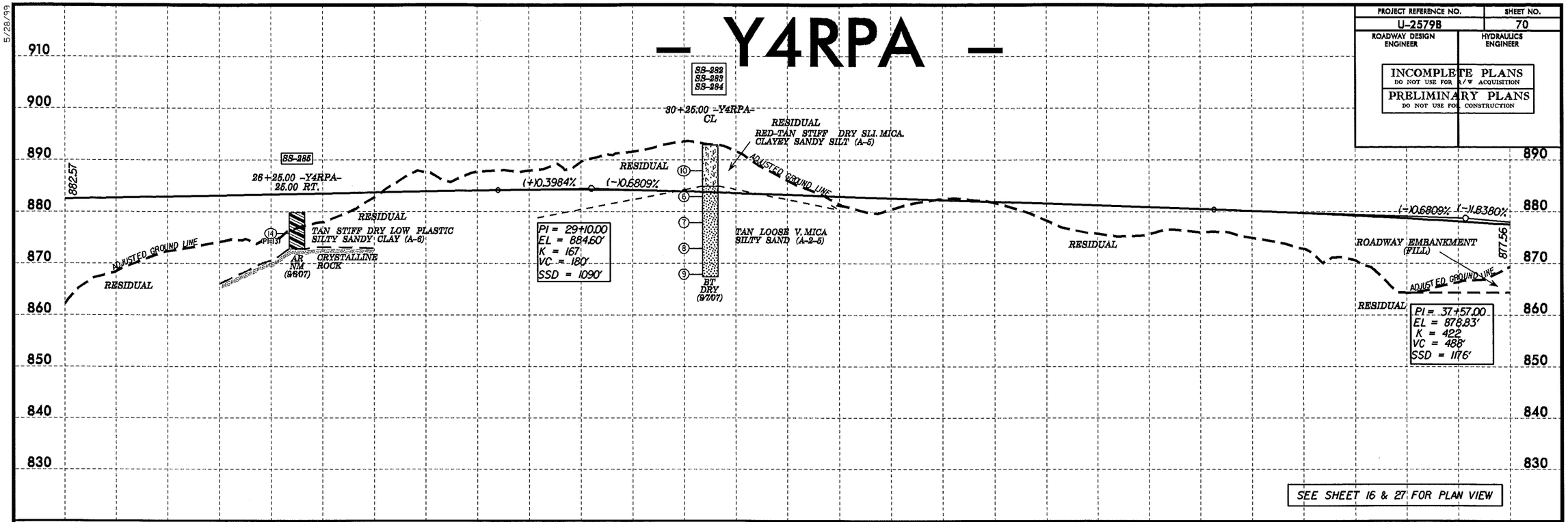
projects at DEP2941A

5/28/99

# – Y4RPA –

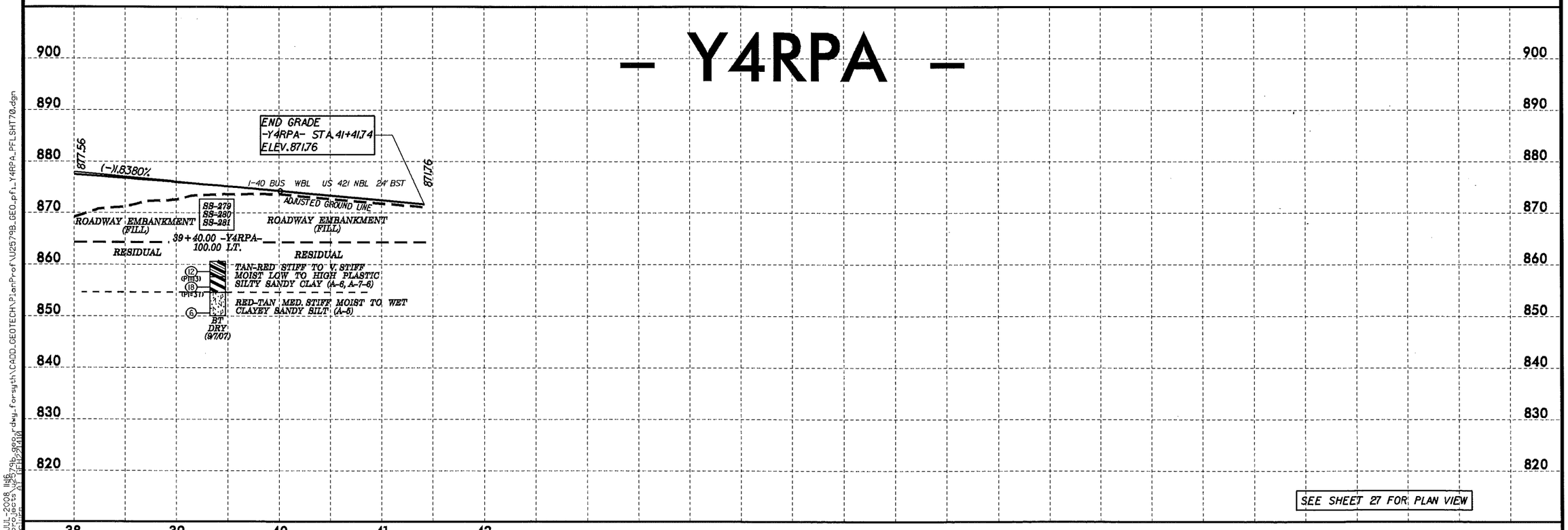
| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 70 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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





# – Y4RPA –

5/28/99

# – Y4RPB –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 71 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

930 920 910 900 890 880 870 860 850 840

BEGIN GRADE
-Y4RPB- STA.10+00
ELEV.891.77

PI = 12+00.00
EL = 898.23'
VC = 150'
K = 405

(+)3.2300%

(+)3.6001%

ROADWAY EMBANKMENT (FILL)

RESIDUAL

SR 2827 HAMMOND ST - 17' BST

SS-264
SS-265

14+46.06 -Y4RPB-
57.98' LT.

36+00 -Y4RPBD-
CL

GERRY RD 20' BST

ROADWAY EMBANKMENT (FILL)

PI = 17+36.00
EL = 917.53'
VC = 870'
K = 115

(+)3.6001%

SS-300
SS-301
SS-302

17+75.00 -Y4RPB-
26.00 RT.

(-)3.9969%

RESIDUAL

RESIDUAL
RED-TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-6)

(10) (PI=13)

(10)

TAN LOOSE TO MED. DENSE MOIST V. MICA. SILTY SAND (A-2-5)

BT
DRY
(9/30/07)

ARTIFICIAL FILL
RED-TAN MED. STIFF MOIST SILTY SANDY CLAY (A-7)

(16)

RED V. STIFF MOIST CLAYEY SANDY SILT (A-6)

(5)

OLIVE & TAN LOOSE TO MED DENSE MOIST V. MICA. SILTY SAND (A-2-5)

(11)

BT
NM
(9/11/07)

RESIDUAL

SS-303
SS-304

22+00.00 -Y4RPB-
CL

891.60

RESIDUAL

(12) (PI=18)

(13) (PI=14)

RED STIFF MOIST SLI. MICA MED. PLASTIC SILTY SANDY CLAY (A-7-5)

BT
NM
(9/11/07)

SEE SHEET 15,16 & 28 FOR PLAN VIEW

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

– Y4RPB –

920 910 900 890 880 870 860 850 840 830

PI = 26+25.00
EL = 881.99'
K = 115
VC = 68'

GERRY RD 20' BST

SS-325
CBR-1
SS-326

29+27.60 -Y4RPB-
85.82 RT.

37+75 -Y6-
26.00 RT.

END GRADE
-Y4RPB- STA.32+80.81
ELEV.894.1544

894.15

I-40 BUS WBL US 42 WBL 23' BST

(+)1.4745%

(+)1.9750%

ROADWAY EMBANKMENT (FILL)

SS-297
SS-298
SS-299

28+00.00 -Y4RPB
CL

RESIDUAL

(10)

(13)

TAN TO OLIVE MED. DENSE MOIST MICA. TO V. MICA. SILTY SAND (A-2-5)

BT
DRY
(9/14/07)

RESIDUAL

PI = 31+22.75
EL = 891.82'
K = 120
VC = 60'

891.60

(-)3.9969%

(+)1.9750%

RESIDUAL
TAN V. STIFF MED. PLASTIC SILTY SANDY CLAY (A-7-5)

SS-305
SS-306

25+00.00 -Y4RPB-
CL

ROADWAY EMBANKMENT (FILL)

TAN TO GRAY STIFF TO V. STIFF MOIST LOW TO MED. PLASTIC SILTY SANDY CLAY (A-7-5)

(9) (PI=12)

(18) (PI=18)

(17)

OLIVE & TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2-5)

BT
NM
(9/14/07)

RESIDUAL

RESIDUAL

CREEK

(26) (PI=20)

(19)

BT
NM
(9/14/07)

TAN & GRAY MED. DENSE WET CLAYEY SAND (A-1-B) WITH QTZ. VEIN

SEE SHEET 28 FOR PLAN VIEW

24 25 26 27 28 29 30 31 32 33

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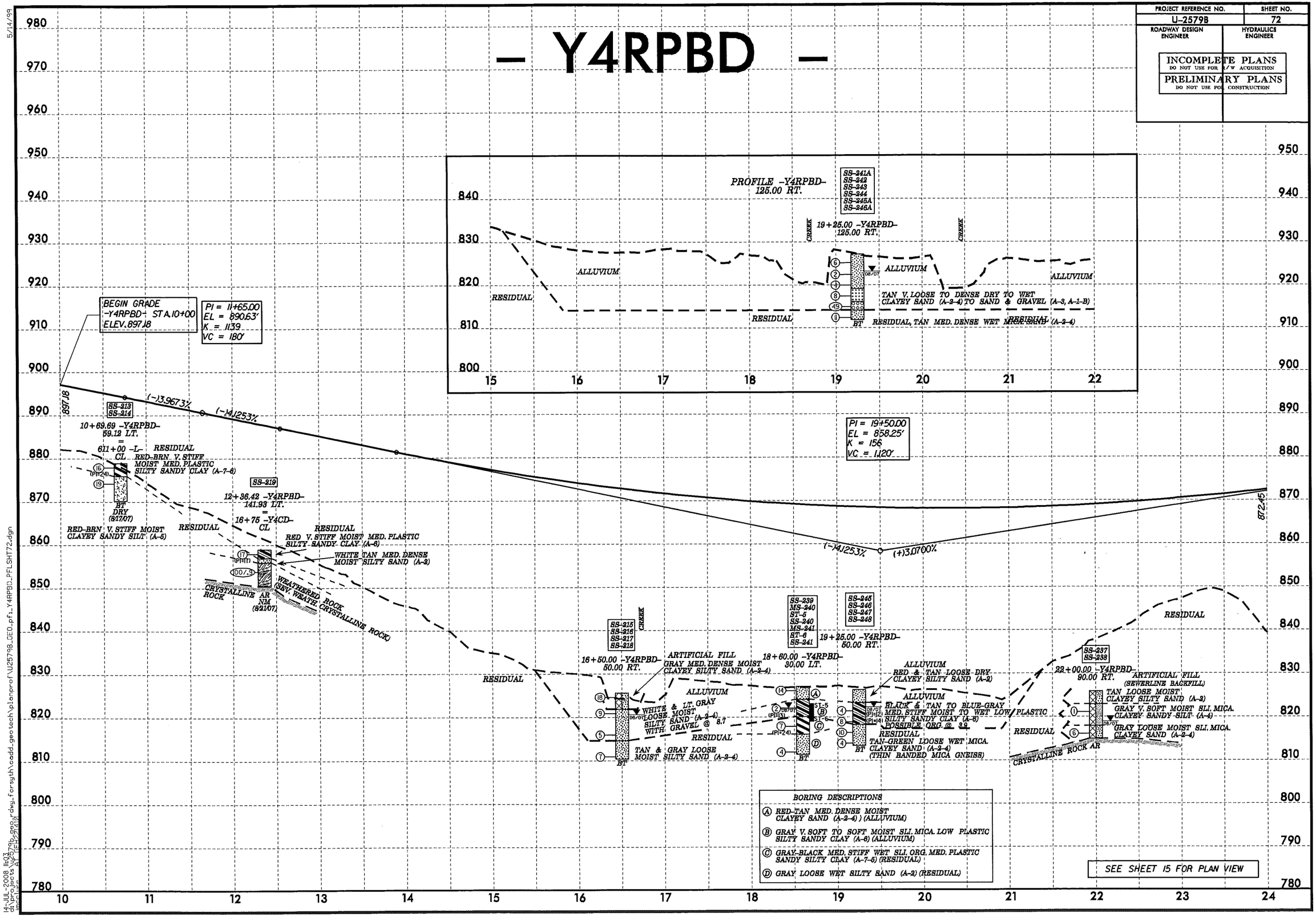
User:rtaylor

# – Y4RPBD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 72 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

5/14/99

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mcarter
21.0.0.2210

5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 73 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4RPBD –

BM #9
R/R SPIKE SET IN PAVEMENT
OF RACHEL ST @
INTERSECTION OF GERRY ST
- Y4RPBD - STA. 28+35.4684 93.5171' LT
N = 862499.9813
E = 1665570.9813
ELEV. = 899.76'

BEGIN BRIDGE
-Y4RPBD- STA. 25+74.48

END BRIDGE
-Y4RPBD- STA. 27+12.85

872.45

SR 2827, HAMMOND ST

GERRY RD 20' BST

PUMP STATION RD 12' BST

SS-234
SS-235
SS-236

25+00.00 -Y4RPBD-
50.00 RT.

RESIDUAL

12 A ALLUVIUM

12 (PI=23) B

6 (PI=14) BT NM (9/23/07)

RESIDUAL
TAN MED. STIFF WET
V. MICA LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

ALLUVIUM

ALLUVIUM

SS-251
SS-252

ARTIFICIAL FILL
BRN SOFT MOIST SLI. MICA.
CLAYEY SANDY SILT (A-5)

28+25.00 -Y4RPBD-
50.00 RT.

BM #9

RESIDUAL

4

RESIDUAL

10 (PI=12) BT DRY (8/30/07)

BRN STIFF MOIST LOW PLASTIC
SILTY SANDY CLAY (A-6)

RESIDUAL

RESIDUAL

SS-254
SS-255

35+00.00 -Y4RPBD-
CL

ARTIFICIAL FILL
RED-TAN MED. STIFF MOIST
SILTY SANDY CLAY (A-7)

10 (PI=15)

RED-TAN STIFF
MOIST LOW PLASTIC
SILTY SANDY CLAY (A-7-5)

10 BT DRY (8/30/07)

TAN LOOSE TO MED. DENSE MOIST
V. MICA SILTY SAND (A-2-5)

SS-300
SS-301
SS-302

37+52.83 -Y4RPBD-
205.64 RT.

915.04

17+75 -Y4RPBD-
25.00 RT.

RESIDUAL
RED V. STIFF MOIST
CLAYEY SANDY SILT (A-5)

16

5

11 BT NM (9/21/07)

OLIVE & TAN LOOSE TO MED. DENSE
MOIST V. MICA SILTY SAND (A-2-5)

BORING DESCRIPTIONS

(A) RED-TAN STIFF MOIST CLAYEY SANDY SILT (A-4) (ALLUVIUM)

(B) WHITE STIFF MOIST MED. PLASTIC SANDY SILTY CLAY (A-7-6) (ALLUVIUM)

SEE SHEET 15 & 16 FOR PLAN VIEW

980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780

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

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Microstation V8 (SELECTseries 2)

5/14/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 74 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y4RPBD –

-Y4RPBD- STA.44+08.64
-Y4- STA.98+02.89

-Y4RPBD- STA.43+79.19
-Y4WB- STA.98+14.65

-Y4RPBD- STA.44+38.39
-Y4EB- STA.97+90.41

915.04

949.58

SS-394

SS-859

SS-395
SS-396

SS-387
SS-388
SS-389

SS-262
SS-263
SS-264
SS-265
SS-266
SS-267
SS-268

GERRY RD 20' BST

I-40 BUS WBL 42' BST

I-40 BUS EBL 42' SBL 24' BST

43+20.00 -Y4RPBD- 30.00 LT.

45+76.14 -Y4RPBD- 0.46 LT. = 97+25 -Y4EB- 120.00 LT.

47+49.55 -Y4RPBD- 194.41 RT. = 23+00 -Y4RPC- CL

49+66.90 -Y4RPBD- 201.77 RT. = 20+50 -Y4RPC- CL

51+91.88 -Y4RPBD- 62.09 LT. = 648+25 -L- 70.00 RT.

RESIDUAL

TAN MED. DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2-5)

OLIVE & TAN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-5)

OLIVE & TAN STIFF MOIST TO WET CLAYEY SANDY SILT (A-5)

OLIVE MED. DENSE TO DENSE MOIST TO WET CLAYEY SILTY SAND (A-2-5) TO SILTY SAND (A-2-4)

ROADWAY EMBANKMENT (FILL)

RESIDUAL

RED TO RED-TAN V. STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)

LT. TAN MED. DENSE TO DENSE MOIST MICA. CLAYEY SILTY SAND (A-2-5)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

RESIDUAL

TAN & OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK) WITH A CRYSTALLINE ROCK SEAM @ 13.7

AR NM (10/3/07)

CRYSTALLINE ROCK

RESIDUAL

OLIVE & TAN MED. DENSE DRY SILTY CLAYEY SAND (A-2-4)

RESIDUAL

RED-BRN & TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)

TAN LOOSE TO MED. DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2-5)

AR NM (10/3/07)

CRYSTALLINE ROCK

AR DRY (9/20/07)

WEATHERED ROCK (SEV. WEATHDERED CRYSTALLINE ROCK)

AR DRY (10/3/07)

CRYSTALLINE ROCK

AR

SEE SHEET 16 FOR PLAN VIEW

1040 1030 1020 1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840

38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

25-JUL-2008 13:48
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5/14/99

# – Y4RPBD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 75 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

-Y4RPBD- STA.52+94.28
-L- STA.649+19.79

-Y4RPBD- STA.54+16.42
-Y40D- STA.53+77.69

PI = 53+90.00
EL = 963.86'
K = 250
VC = 1,680'

(+)3.0700%

(-)3.6445%

94.58

919.76

53+74.74 -Y4RPBD-
6.31 RT.
=
649+50 -L-
76.00 LT.

55+00.00 -Y4RPBD-
CL

59+00.00 -Y4RPBD-
CL

63+00.00 -Y4RPBD-
CL

RESIDUAL
TAN TO WHITE & GRAY
V. DENSE TO MED. DENSE DRY
CLAYEY SILTY SAND (A-2-4)

RESIDUAL

WEATHERED ROCK
(SEV. WEATHERED
CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(92107)

AR
NM
(10407)

TAN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

SS-402
SS-403

TAN TO LT. TAN
STIFF TO MED. STIFF
MOIST TO DRY SLI. MICA.
CLAYEY SANDY SILT (A-5)

BT
DRY
(10407)

RESIDUAL

SS-401

RESIDUAL

TAN TO RED STIFF MOIST MICA.
CLAYEY SANDY SILT (A-5)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(10407)

SEE SHEET 16 FOR PLAN VIEW

5/14/99

# – Y4RPBD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 76 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770

66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

SS-452

66+75.00 -Y4RPBD- 160.00 LT.

ARTIFICIAL FILL
RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)

HEDGE MORE DR 20' BST

RESIDUAL

OLIVE STIFF MOIST MED. PLASTIC MICA SILTY SANDY CLAY (A-5)

(PI=19)

AR NM (11/2/07)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

919.76

RESIDUAL

FAST CREST DR 20' BST

BLUFF SCHOOL RD 20' BST

SS-450
SS-451

75+85.00 -Y4RPBD- 80.00 LT.

ROADWAY EMBANKMENT (FILL)
GRAY LOOSE MOIST GRAVEL (A-1-B)

ROADWAY EMBANKMENT (FILL)

RESIDUAL

RESIDUAL

RED MED. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

(5) PI=26

(8) RED MED. STIFF TO STIFF MOIST MICA CLAYEY SANDY SILT (A-6)

BT NM (10/2/07)

868.82

RESIDUAL

SEE SHEET 16 & 28 FOR PLAN VIEW

10-FEB-2010 09:00
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microstation v8 (10.02.02.27)

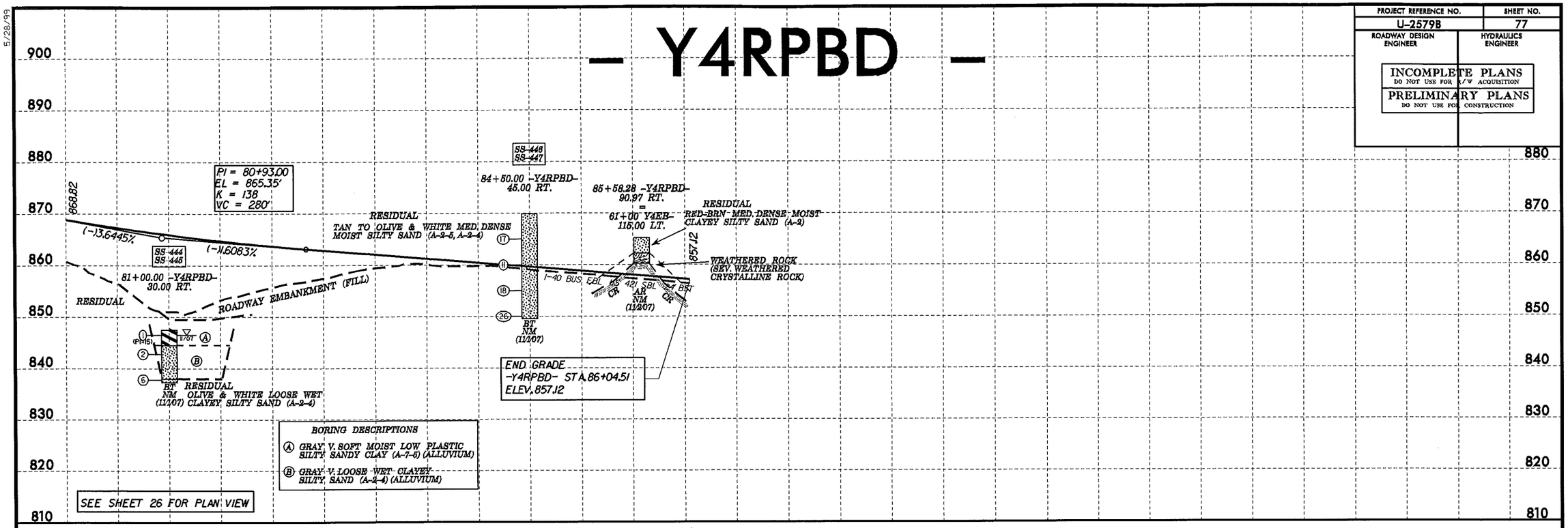
5/28/99

# – Y4RPBD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 77 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

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microstation v8 (07.11.07.16)

5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 78 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# – Y4RPC –

BEGIN GRADE -Y4RPC- STA.10+00 ELEV.896.11

SS-365 SS-366

11+99.59 -Y4RPC- 63.75 RT. = 657+00 -L- CL

RESIDUAL RED-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

16 (PI=20) 100/.8 BT NM (9/21/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

896.11

SS-365 SS-366 SS-367

14+74.66 -Y4RPC- 118.15 RT. = 654+00 -L- CL

RESIDUAL RED V. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-6)

18 (PI=12) 17 16 14 17

TAN TO OLIVE STIFF TO V. STIFF MOIST MICA. CLAYEY SANDY SILT (A-6)

BT DRY (9/21/07)

(+)3.9381% (-)1.7869%

PI = 15+50.00 EL = 917.76' K = 152 VC = 870'

-Y5- STA.30+21.54 -Y4RPC- STA.16+38.67

HASTINGS 217 BST SR 2657

SS-374 SS-375 SS-376 SS-377

16+88.83 -Y4RPC- 66.29 LT. = 31+02 -Y5- 17.00 RT.

10 (PI=14) 10 14 11

RESIDUAL RED-TAN STIFF MOIST LOW PLASTIC SLI. MICA. SANDY SILTY CLAY (A-7-6)

RED-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-6)

14 14 15 100/.1

RED-TAN MED. DENSE TO DENSE MOIST V. MICA. SILTY SAND (A-2-6)

CRYSTALLINE ROCK

AR DRY (10/3/07)

SS-395 SS-396

20+50.00 -Y4RPC- CL

RESIDUAL

13 (PI=13) 5 5 11

TAN LOOSE TO MED. DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2-6)

BT NM (10/3/07)

RED-BRN & TAN STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-6)

TAN & OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

11 100/.9 100/.1 100/.3

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK) WITH A SEAM @ 13.1'

CRYSTALLINE ROCK

AR NM (10/3/07)

SS-394

23+00.00 -Y4RPC- CL

RESIDUAL

902.52

SEE SHEET 17 & 16 FOR PLAN VIEW

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

940 930 920 910 900 890 880 870

# – Y4RPC –

SS-390 SS-391 SS-392 SS-393

25+00.00 -Y4RPC- CL

PI = 26+00.00 EL = 899.00' K = 488 VC = 550'

RESIDUAL RED STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

13 (PI=15) 9 10 13 22 9

RED & OLIVE LOOSE TO MED. DENSE MOIST SILTY SAND (A-2-4, A-2-5)

BT NM (10/3/07)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

902.52

(-)1.7869% (-)2.9136%

SS-380 SS-381 SS-382

28+00.00 -Y4RPC- CL

RESIDUAL

17 (PI=19) 11 11 28

RED-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

OLIVE & TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-6)

OLIVE & TAN & WHITE MED. DENSE MOIST SLI. MICA. SILTY SAND (A-2-6)

BT NM (10/3/07)

CREEK

(-)2.9136% (+)1.6239%

OLIVE STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-6)

RESIDUAL

CRYSTALLINE ROCK

PI = 32+50.00 -Y4RPC- 50.00 LT.

14 (PI=15) 4

BT NM (10/2/07)

TAN LOOSE MOIST CLAYEY SILTY SAND (A-2-4)

RESIDUAL

SS-378 SS-379

PI = 31+94.00 EL = 881.69' K = 141 VC = 638'

SS-338 SS-339

35+50.00 -Y4RPC- 75.00 LT.

22 (PI=20) 13 (PI=14)

BT DRY (9/21/07)

RED V. STIFF TO STIFF MOIST SLI. MICA. MED. TO LOW PLASTIC SILTY SANDY CLAY (A-7-5)

CREEK

ROADWAY EMBANKMENT (FILL)

RESIDUAL

891.54

SEE SHEET 16 & 28 FOR PLAN VIEW

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

940 930 920 910 900 890 880 870 860 850

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5/28/99

# – Y4RPC –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 79 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

940
930
920
910
900
890
880
870
860
850

SS-340
SS-341
SS-342

38+50.00 -Y4RPC-
90.00 LT.

RESIDUAL

(17) (PI=25)
(13)
(17)
(22)

A
B
C

89.54

I-40 BUS EBL US 42 SBL 24' BST
(+)11.6239%

894.84

END GRADE
-Y4RPC- STA 40+03.40
ELEV. 894.84

ROADWAY EMBANKMENT (FILL)

BT
NM
(9/1907)

RESIDUAL

BORING DESCRIPTIONS

(A) RED V. STIFF MOIST MED. PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-6) (RESIDUAL)

(B) OLIVE STIFF MOIST CLAYEY SANDY SILT (A-5) (RESIDUAL)

(C) OLIVE MED. DENSE MOIST MICA. CLAYEY SILTY SAND (A-2-5) (RESIDUAL)

SEE SHEET 28 FOR PLAN VIEW

38 39 40

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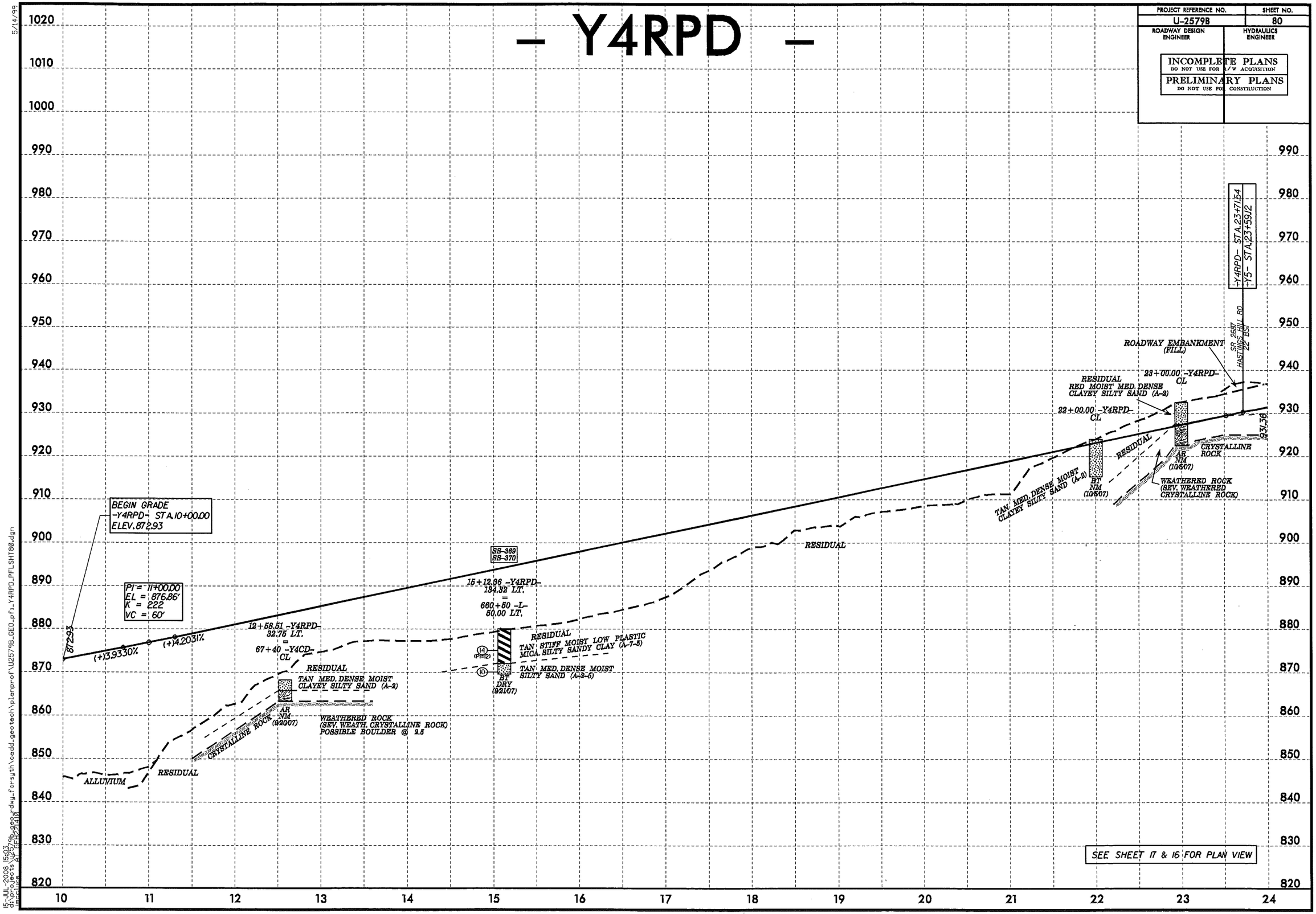
User: cfinley

# – Y4RPD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 80 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION




SEE SHEET 17 & 16 FOR PLAN VIEW

5/14/99

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mpowell
dgn lib: GEOTECH
cell lib: GEOPROF

5/14/99

# – Y4RPD –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 81 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

BM #10
R/R SPIKE SET IN ROOT OF
30" WILLOW OAK 10' OFF OF
EAST EP OF HASTING HILL RD
– Y4RPD – STA 23+01.2571 685.0972' RT
N = 860488.9812
E = 1667599.9812
ELEV. = 935.89'

PI = 26+92.00
EL = 943.77'
VC = 680'
K = 84

PI = 32+00.00
EL = 924.04'
K = 1529
VC = 80'

SB-401
30+08.61 –Y4RPD– 27.62' LT.
=
63+00 –Y4RPBD– CL

SB-404
SB-405
27+00.00 –Y4RPD– CL

(+)4.203%
(–)13.8850%
(–)13.9373%

RESIDUAL
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK
931.36
RED-BRN V. STIFF TO STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6, A-7-6)
(17) (P#6)
(11) (P#25)
BT NM (10407)
TAN TO RED STIFF MOIST MICA CLAYEY SANDY SILT (A-5)
(12)
1007.9
AR NM (10407)
WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)
919.33
BM #10

END GRADE
–Y4RPD– STA 33+19.67
ELEV. 919.33

SEE SHEET 16 & 28 FOR PLAN VIEW

1030 1020 1010 1000 990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830

24 25 26 27 28 29 30 31 32 33 34

30-JUL-2008 11:50
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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 82 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

# – Y5 –

BEGIN GRADE
-Y5- STA. 16+00.00
ELEV. 939.96

PI = 18+23.00
EL = 944.65'
K = 210
VC = 190'

PI = 23+78.00
EL = 961.36'
K = 88
VC = 568'

939.96

(+)2.1057%

(+)3.0101%

(+)3.0101%

956.70

SR 2687 HASTINGS HILL RD 22' BST

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

-Y5- STA. 23+59.12
-Y4RPD- STA. 23+71.54

SEE SHEET 27.16 FOR PLAN VIEW

# – Y5 –

-Y5- STA. 27+33.16
-Y4CD- STA. 57+01.4

-Y5- STA. 28+50.16
-L- STA. 652+78.47

-Y5- STA. 30+21.54
-Y4RPC- STA. 16+38.67

13.4477%

956.70

SS-406
24+50.00 -Y5-
30.00 RT.

RESIDUAL
TAN TO BRN MED. STIFF
MOIST MED. PLASTIC
SILTY SANDY CLAY (A-7-6)

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

8
(PI=24)

AR
NM
(10507)

CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

SS-358
29+78.51 -Y5-
112.24 RT.
=
25+00 -Y5DET-
CL

RESIDUAL
BRN-TAN TO OLIVE-TAN
MED. DENSE TO V. DENSE
MOIST SILTY CLAYEY SAND
(A-2-4)

25
75

BT
DRY
(9/2007)

SS-374
SS-375
SS-376
SS-377
31+02.00 -Y5-
17.00 RT.

10
(PI=14)

RESIDUAL
RED-TAN STIFF MOIST LOW PLASTIC
SLI. MICA. SANDY SILTY CLAY (A-7-6)

10

14

RED-TAN STIFF MOIST V. MICA.
CLAYEY SANDY SILT (A-6)

11

14

RED-TAN MED. DENSE TO DENSE
MOIST V. MICA. SILTY SAND (A-2-6)

14

15

100/.1

CRYSTALLINE ROCK

AR
DRY
(10307)

END GRADE
-Y5- STA. 33+30.00
ELEV. 928.54

928.54

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SEE SHEET 16 FOR PLAN VIEW

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5/28/99

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 83 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

# - Y5 -

# - Y5A -

IDENTITY
-Y5- STA. 45+00.00 -LB-=
-Y5A- STA. 45+00.00 LA.

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SR 2657 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

960 950 940 930 920 910 900 890 880 870

38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

# - Y5A -

BEGIN GRADE
-Y5A- STA. 54+00
ELEV. 913.04

913.04

PI = 58+57.00
EL = 892.37'
K = 80
VC = 600'

SR 2657 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

(-)4.523%

(+)3.000 3%

(+)3.000 3%

RESIDUAL

906.24

SS-356
SS-357

66+00.00 -Y5A-
CL

RESIDUAL
BRN & GRAY TO RED-TAN
STIFF TO V. STIFF MED. PLASTIC
SILTY SANDY CLAY (A-7-6)

OLIVE-TAN STIFF MOIST
CLAYEY SANDY SILT (A-5)

17
42 (41)
13

BT
DRY
(9/2007)

SEE SHEET 28 FOR PLAN VIEW

960 950 940 930 920 910 900 890 880 870

52 53 54 55 56 57 58 59 60 61 62 63 64 65 66

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$$$$USERNAME

# – Y5A –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 84 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

PI = 66+50.00
EL = 916.16'
VC = 800'
K = 73

(+)3.0003%

(-)7.9985%

906.24

-Y5- STA 67+65.72
-Y4EB- STA 129+34.00

-Y5- STA 68+06.51
-Y4- STA 129+64.57

-Y5- STA 68+47.29
-Y4WB- STA 129+95.14

I-40 BUS EAST
US 421 SOUTH
24' BST

I-40 BUS WEST US 421 NORTH
24' BST

SS-356
SS-357

66+00.00 -Y5A- CL

RESIDUAL
BRN & GRAY TO RED-TAN STIFF TO V. STIFF MED. PLASTIC SILTY SANDY CLAY (A-7-5)

ROADWAY EMBANKMENT (FILL)

BT

DRY OLIVE-TAN STIFF MOIST CLAYEY SANDY SILT (A-5) (9/2007)

RESIDUAL
LT. BRN TO WHITE-TAN & OLIVE MED. DENSE MOIST V. MICA. SILTY SAND (A-2-5)

ORANGE & OLIVE STIFF TO V. STIFF MOIST MICA. SANDY SILT (A-5)

OLIVE-TAN TO OLIVE MED DENSE TO DENSE MOIST TO WET V. MICA. SILTY SAND (A-2-5, A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK SEAM @ 23.0

10
18
15
14
12
32

08/07

AR NM (9/1307)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

SS-318
SS-319
SS-320
SS-321
SS-322
SS-323

70+25.00 -Y6A- 10.00 LT.

RESIDUAL

RED-TAN TO OLIVE-TAN DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

72+75.00 -Y6A- CL

AR NM (9/1407)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

74+00.00 -Y6A- CL

RESIDUAL
TAN. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

AR NM (9/1407)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

75+00.00 -Y6A- CL

RESIDUAL
TAN DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2)

AR NM (9/1407)

RESIDUAL

76+00.00 -Y6A- CL

RESIDUAL
TAN-BRN DENSE TO V. DENSE DRY TO MOIST CLAYEY SILTY SAND (A-2)

AR NM (9/1307)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

PI = 78+87.72
EL = 817.16'
K = 69
VC = 440'

77+50.00 -Y6A- 10.00 RT.

RESIDUAL
RED-TAN DENSE MOIST CLAYEY SILTY SAND (A-2)

AR NM (9/1307)

ROADWAY EMBANKMENT (FILL)

816.13

(-)11.6626%

(-)7.9985% CRYSTALLINE ROCK

RESIDUAL

SEE SHEET 29 & 31 FOR PLAN VIEW

970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770

66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

5/14/99

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User:#

5/14/99

# - Y5A -

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 85 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790 780 770

END GRADE
-Y5A- STA.81+25
ELEV. 813.22

816.13

813.22

SALEM CREEK

SR 2667 HASTINGS HILL RD 20' BST
ROADWAY EMBANKMENT (FILL)
OVER ALLUVIUM

SR 2667 HASTINGS HILL RD 20' BST
ROADWAY EMBANKMENT (FILL)
OVER ALLUVIUM

SR 2667 HASTINGS HILL RD 20' BST
ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

SEE SHEET 31 FOR PLAN VIEW

80 81 82 83 84 85 86 87 88 89 90 91 92 93 94

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5/28/99

# – Y1DET –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 86 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

BEGIN GRADE -Y1DET- STA. 11+64.89 ELEV. 921.45

PI = 12+95.00
EL = 917.73'
K = 111
VC = 200'
SSD = 699'

921.45

ROADWAY EMBANKMENT (FILL)

(-)12.855% (-)1.465807

RESIDUAL

SS-27
SS-28

14+47.51 -Y1DET- 46.70 RT.
=
16+40.00 -Y1- 60.00 LT.

RESIDUAL

RED-BRN STIFF MOIST CLAYEY SANDY SILT (A-5)

WHITE & RED MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK LAYERS @ 6.0-8.5

BT DRY (7/18/07)

SS-25
SS-26

CREEK

ALLUVIUM

16+76.00 -Y1DET- 30.00 RT.

ALLUVIUM

RESIDUAL OLIVE-TAN V. LOOSE WET SILTY SAND (A-3-5)

BT

PI = 19+15.00
EL = 888.85'
K = 101
VC = 710'

SS-23
SS-24

18+38.96 -Y1DET- 98.37 RT.
=
20+00 -Y1- 120.00 LT.

RESIDUAL

WHITE LOOSE TO MED. DENSE DRY LOW PLASTIC CLAYEY SAND (A-2-6) WITH QTZ. GRAVEL

CREEK

RESIDUAL

(-)1.465807 (+)2.391%

ALLUVIUM

RESIDUAL

BT

OLIVE-TAN V. LOOSE MOIST CLAYEY SILTY SAND (A-2-5)

RESIDUAL

900.49

BORING DESCRIPTIONS

(A) RED-BRN MED. STIFF MOIST SILTY SANDY CLAY (A-6) (ARTIFICIAL FILL)

(B) GRAY V. LOOSE WET SAND (A-3) (ARTIFICIAL FILL)

SEE SHEET 20 & 5 FOR PLAN VIEW

SEE SHEET 2J & 2K FOR PLAN VIEW

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

PI = 31+30.00
EL = 918.00'
K = 119
SSD = 513'
VC = 433'

31+67.89 -Y1DET- 128.40 LT.
=
485+75 -L- 30.00 LT.

SS-41 SS-47
SS-42 SS-48
SS-43 MS-48
SS-44 SS-49
SS-45 SS-50
SS-46

RESIDUAL

RED-BRN STIFF STIFF MOIST MICA, LOW PLASTIC SILTY SANDY CLAY (A-7-5)

TAN MED. STIFF MOIST MICA CLAYEY SANDY SILT (A-5)

RESIDUAL

(+)2.391% (-)1.465807

OLIVE-TAN MED. DENSE MOIST MICA CLAYEY SILTY SAND (A-2-5)

RESIDUAL

909.69

OLIVE-TAN TO LT. TAN MED. STIFF TO STIFF MOIST CLAYEY SANDY SILT (A-5)

OLIVE LOOSE TO MED. DENSE MOIST MICA SILTY SAND (A-2-5, A-2-4)

BT DRY CAVED @ 39.0 (7/18/07)

SS-56
SS-57

25+02.39 -Y1DET- 101.14 RT.
=
30+00 -Y1RPA- 50.00 RT.

RESIDUAL

RED & TAN STIFF TO MED. STIFF MOIST MICA, TO V. MICA, CLAYEY SANDY SILT (A-5)

BT DRY (11/7/07)

SS-58
SS-59

25+85.62 -Y1DET- 78.41 LT.
=
19+00 -Y1LPA- CL

RESIDUAL

RED-TAN TO GRAY-TAN MED. STIFF TO STIFF MOIST MED. PLASTIC SLI. MICA SILTY SANDY CLAY (A-7-5)

CREEK

BT DRY (11/7/07)

GRAY-TAN LOOSE MOIST V. MICA SILTY SAND (A-2-5)

900.49

SS-29
MS-29
SS-30

27+50.00 -Y1DET- 50.00 RT.

RESIDUAL

RED-BRN STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6) TO RED-BRN V. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)

BT DRY (7/17/07)

SS-60
SS-61

36+75.00 -Y1DET- CL

RESIDUAL

RED-BRN STIFF MOIST SLI. MICA, HIGH TO MED. PLASTIC SILTY SANDY CLAY (A-7-6)

BT DRY (7/19/07)

SEE SHEET 5 FOR PLAN VIEW

SEE SHEET 2K & 2L FOR PLAN VIEW

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

– Y1DET –

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# – Y1DET –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 87 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

PI = 43+50.31
EL = 902.86'
K = 116
SSD = 526'
VC = 366'

SS-100
SS-101
44+00.00 -Y1DET-
CL

909.69

SS-5
SS-6
38+41.23 -Y1DET-
146.00 RT.
=
40+00 -Y1-
80.00 LT.

RESIDUAL
RED-BRN SOFT MOIST MICA CLAYEY SANDY SILT (A-5)

RESIDUAL

RED-BRN STIFF MOIST MICA, MED. PLASTIC SILTY SANDY CLAY (A-7-6)
BT
DRY
(7/1/07)

(-)1.240%

WEATHERED ROCK
(TAN SEV. WEATHERED CRYSTALLINE ROCK)

(-)4.389%

TAN TO GRAY V. DENSE MOIST TO DRY CLAYEY SILTY SAND & SILTY SAND (A-2-4)
BT
DRY
(7/26/07)

RESIDUAL
RED MED. STIFF MOIST SANDY SILTY CLAY (A-6)

END GRADE
-Y1DET- STA. 48+21.20
ELEV. 882.19

882.19

SS-102
SS-103
47+00.00 -Y1DET-
CL

RED-BRN LOOSE TO MED. DENSE MOIST SLI. MICA, LOW PLASTIC CLAYEY SILTY SAND (A-2-7)

RED-BRN MED. DENSE MOIST SLI. MICA CLAYEY SILTY SAND (A-2-6)

RESIDUAL

BT
DRY
(7/26/07)

US 158

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

SS-1
SS-2
48+79.10 -Y1DET-
63.07 RT.
=
50+00 -Y1
60.00 RT.

RESIDUAL
RED-BRN MED. STIFF DRY SLI. MICA, MED. PLASTIC SILTY SANDY CLAY (A-7-6)

RED-BRN STIFF MOIST MICA CLAYEY SANDY SILT (A-5)
BT
DRY
(7/1/07)

SEE SHEET 5 AND 21 FOR PLAN VIEW
SEE SHEET 2L AND 2M FOR PLAN VIEW

38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

940 930 920 910 900 890 880 870 860 850

920 910 900 890 880 870 860 850 840 830

– Y1DET –

5/28/99

# – Y5DET –

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 88 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

980 970 960 950 940 930 920 910 900 890

PI = 17+00.00
EL = 945.30'
K = 246
VC = 600'

BEGIN GRADE
STA. 11+59.72
ELEV. 940.42

940.42

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)

RESIDUAL

(+)0.9035%

(–)1.5330%

SS-404
SS-405
16+49.91 –Y5DET– 122.87 RT.
=
27+00 –Y4RPD– CL

RESIDUAL
RED-BRN V. STIFF TO STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-6, A-7-6)

17 (PI=16)
11 (PI=25)
BT NM (10407)

RESIDUAL
TAN TO BRN MED. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

8 (PI=24)
AR NM (10607)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

SS-406
19+60.08 –Y5DET– 100.29 LT.
=
24+50 –Y5– 30.00 RT.

RESIDUAL
TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

21+67.22 –Y5DET– 173.69 RT.
=
55+00 –Y4RPBD– CL

AR NM (10407)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

CRYSTALLINE ROCK

22+87.45 –Y5DET– 99.45 RT.
=
650+50 –L– 75.00 LT.

10
14
BT NM (92107)

RESIDUAL

RESIDUAL
RED-TAN TO TAN LOOSE TO MED. DENSE MOIST CLAYEY SILTY SAND (A-2-4)

934.57

SEE SHEET 27 AND 16 FOR PLAN VIEW

~~SEE SHEET 2L FOR PLAN VIEW~~

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

# – Y5DET –

970 960 950 940 930 920 910 900 890 880

PI = 27+00.00
EL = 929.97'
K = 482
VC = 400'

SS-374
SS-375
SS-376
SS-377

26+35.97 –Y5DET– 79.16 LT.
=
31+02 –Y5– 17.00 RT.

934.57

SS-368
18' BST
25+00.00 –Y5DET– CL

RESIDUAL

25
75
BT DRY (92007)

BRN-TAN TO OLIVE-TAN MED. DENSE TO V. DENSE MOIST SILTY CLAYEY SAND (A-2-4)

(+)1.8330%

(–)12.3622%

10 (PI=4)
10
14
11
14
14
15
100/1"

RESIDUAL
RED-TAN STIFF MOIST LOW PLASTIC SLI. MICA. SANDY SILTY CLAY (A-7-6)

RED-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-6)

RED-TAN MED. DENSE TO DENSE MOIST V. MICA. SILTY SAND (A-2-6)

CRYSTALLINE ROCK

AR DRY (10307)

RESIDUAL

END GRADE
STA. 30+81.57
ELEV. 920.96

920.96

SR 2687 HASTINGS HILL RD 22' BST
ROADWAY EMBANKMENT (FILL)

SEE SHEET 16 FOR PLAN VIEW

~~SEE SHEET 2M FOR PLAN VIEW~~

24 25 26 27 28 29 30 31 32

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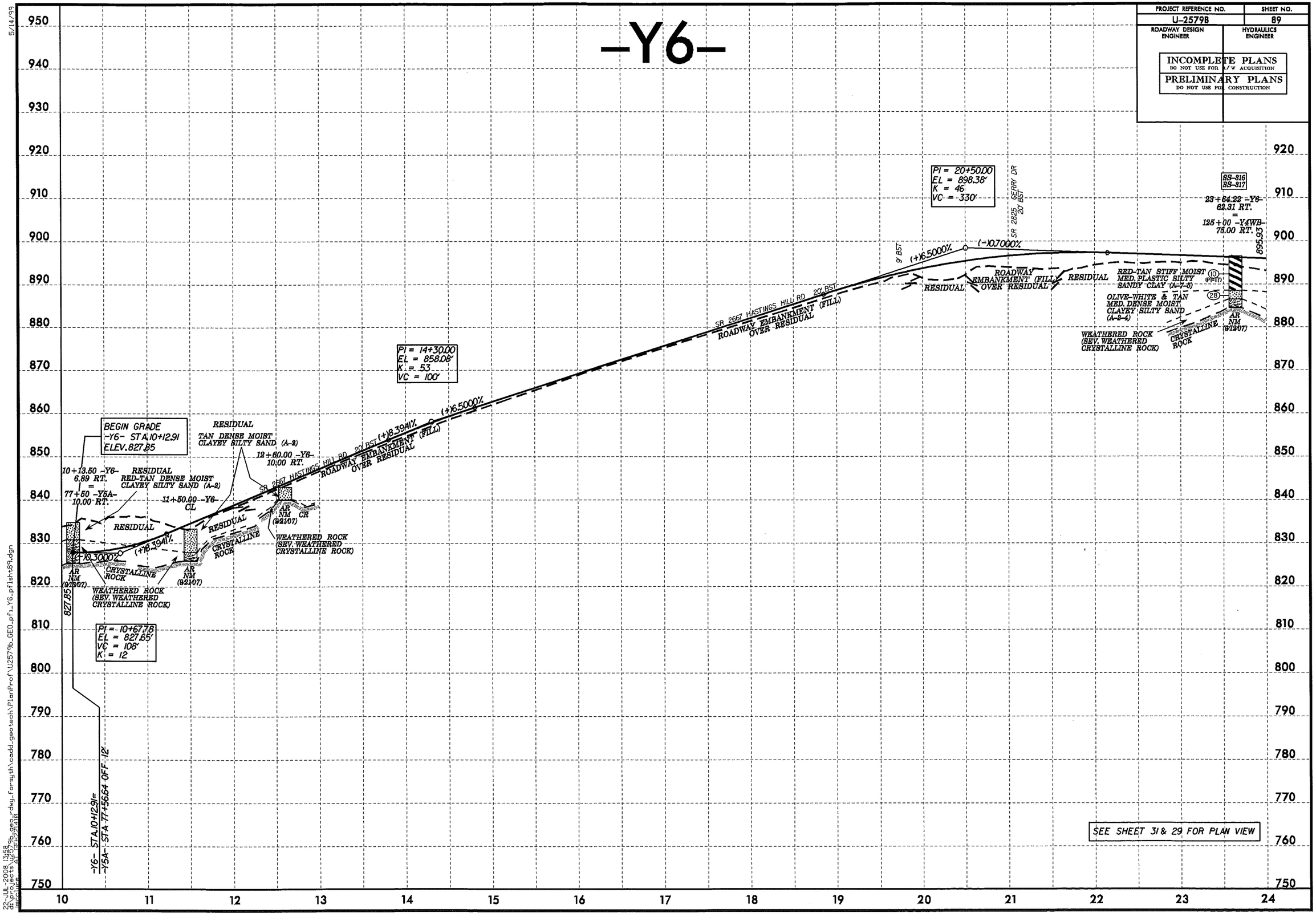
# -Y6-

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 89 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

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mwatson

5/14/99

# -Y6-

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 90 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

990 980 970 960 950 940 930 920 910 900 890 880 870 860 850 840 830 820 810 800 790

PI = 31+96.00
EL = 914.00'
K = 47
VC = 482'

PI = 27+30.00
EL = 893.62'
K = 89
VC = 450'

PI = 36+20.00
EL = 888.85'
K = 65
VC = 366'

DEER RUN DR - 2" BST

ST-1

895.93

SS-315
25+89.22 -Y6- 62.06 RT.
=
122+75 -Y4WB- 75.00 RT.

SS-310
SS-311
SS-312
SS-313
SS-314
28+39.22 -Y6- 61.78 RT.
=
120+25 -Y4WB- 75.00 RT.

SS-307
SS-308
SS-309
30+64.22 -Y6- 61.53 RT.
=
118+00 -Y4WB- 75.00 RT.

SS-327
SS-328
SS-329
ST-1
SS-330
MS-330
SS-331
SS-332
33+60.00 -Y6- CL

SS-325
CBR-1
SS-326
37+00.00 -Y6- 26.00 LT.
37+75.00 -Y6- 26.00 RT.

(-)0.7000%
(+)4.3739%
(-)15.9310%
(-)0.3105%

RESIDUAL — OLIVE-TAN TO RED-BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

25 (PI=20) 63 BT DRY (9/12/07)

RESIDUAL — GRAY & WHITE V. DENSE MOIST SAND (A-3) WITH RK. FRAGS.

ROADWAY EMBANKMENT (FILL)

11 (PI=12) A
11 (PI=11)
17 (PI=14) B
15 (PI=12)
62 BT DRY (9/12/07)

RESIDUAL — OLIVE-TAN V. DENSE WET V. MICA. SILTY CLAYEY SAND (A-2-6)

RESIDUAL — ORANGE-TAN TO OLIVE-TAN STIFF MOIST CLAYEY SANDY SILT (A-6)

9 9 13 BT DRY (9/12/07)

OLIVE-TAN MED. DENSE MOIST SILTY SAND (A-2-6)

RESIDUAL — RED-BRN TO OLIVE MED. DENSE MOIST SLI. TO V. MICA. SILTY SAND (A-2-6)

10 12 14 17 16 17 BT DRY (9/12/07)

RESIDUAL — RED-TAN TO OLIVE & TAN MED. DENSE MOIST NON MICA. TO V. MICA. CLAYEY SILTY SAND (A-2)

BT DRY (9/12/07)

RESIDUAL

10 13 BT DRY (9/14/07)

TAN TO OLIVE MED. DENSE MOIST MICA. TO V. MICA. SILTY SAND (A-2-6)

**BORING DESCRIPTIONS**

(A) RED-BRN. & RED STIFF MOIST TO WET LOW PLASTIC SLI. MICA. SILTY SANDY CLAY (A-7-6) (ROADWAY EMBANKMENT FILL)

(B) GRAY V. STIFF WET LOW PLASTIC SILTY SANDY CLAY (A-6) WITH ROOTS @ 13.8 (ALLUVIUM)

SEE SHEET 28 FOR PLAN VIEW

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

5/14/99

# -Y6-

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 91 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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

1010
1000
990
980
970
960
950
940
930
920
910
900
890
880
870
860
850
840
830
820
810

888.23
DEER RUN DR 21' RST

END GRADE
-Y6- STA.38+21.23
ELEV.888.23

888.34

RESIDUAL

CREEK

RESIDUAL

SEE SHEET 28 FOR PLAN VIEW

38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

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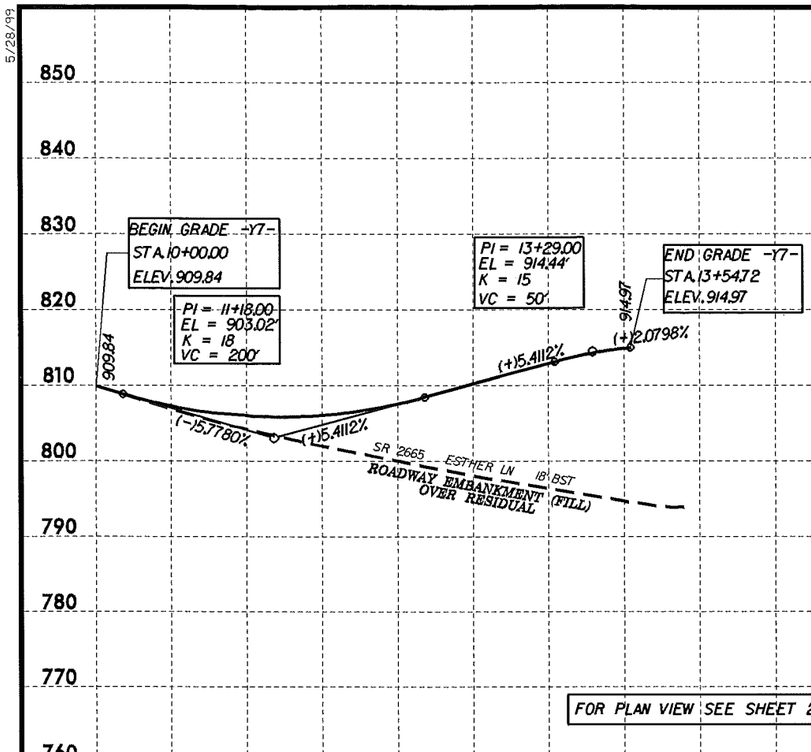
# -Y7-

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | 92 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

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



8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-4 |

93

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

940 930 920 910 900 890 880 870

10' BST

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

10' BST

RESIDUAL

S.S. 919.063

2:1

CRYSTALLINE ROCK

532+00.00 -L- CL

920.04

RESIDUAL BRN STIFF MOIST SANDY SILTY CLAY (A-7)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

BRN-RED STIFF MOIST CLAYEY SANDY SILT (A-5)

BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

0.021

6:1

6:1

6:1

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

892.300

AR NM (8/2/07)

D.P. 897.388

532+00.00

RESIDUAL

CRYSTALLINE ROCK

531+60.00 -L- CL

10' BST

S.S. 914.346

2:1

RESIDUAL

RED-MED. STIFF TO STIFF MOIST SANDY SILTY CLAY (A-7)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

0.021

6:1

6:1

6:1

895.908

OLIVE-TAN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK STREAKS AT BASE

D.P. 897.913

BT NM (8/2/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

NO ROCK

531+50.00

-L-

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

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mcclure
AT DEL=22410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-5 |

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

940 930 920 910 900 890

RESIDUAL

CRYSTALLINE ROCK

B.S. 924.187

RESIDUAL

CRYSTALLINE ROCK

2:1

RESIDUAL

924.76

CRYSTALLINE ROCK

6:1 0.021 6:1 6:1

894.333

D.P. 896.338

533+00.00

880

940 930 920 910 900 890

RESIDUAL

CRYSTALLINE ROCK

B.S. 922.321

RESIDUAL

CRYSTALLINE ROCK

2:1

532+40.00 -L-
50.00 LT.

BRN STIFF MOIST CLAYEY SANDY SILT (A-4)

BRN-OLIVE DENSE MOIST
CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

922.37

CRYSTALLINE ROCK

6:1 0.021 6:1 6:1

894.858

D.P. 896.863

532+50.00
-L-

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

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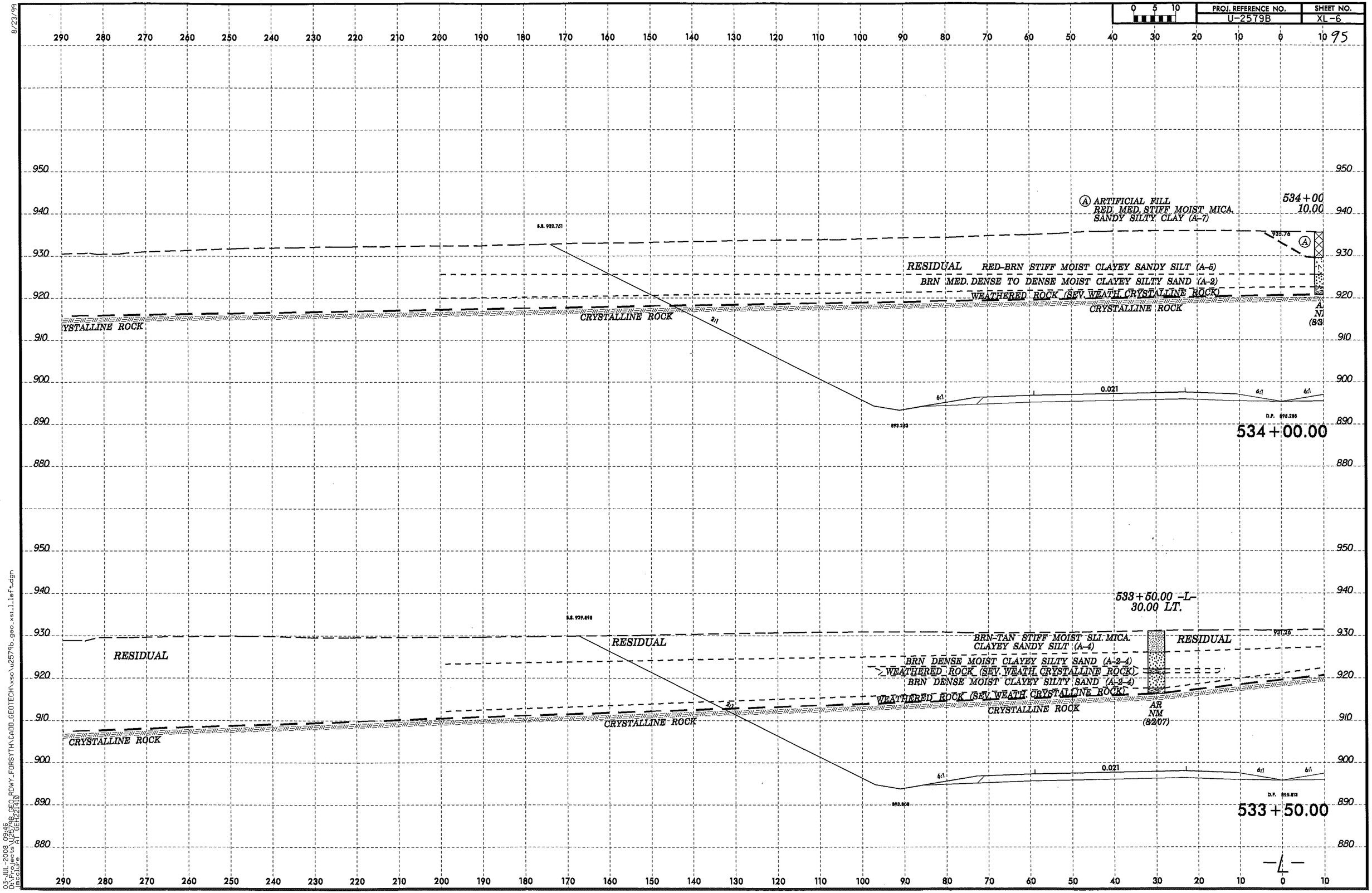
mosslure
CE222412

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-6 |

95

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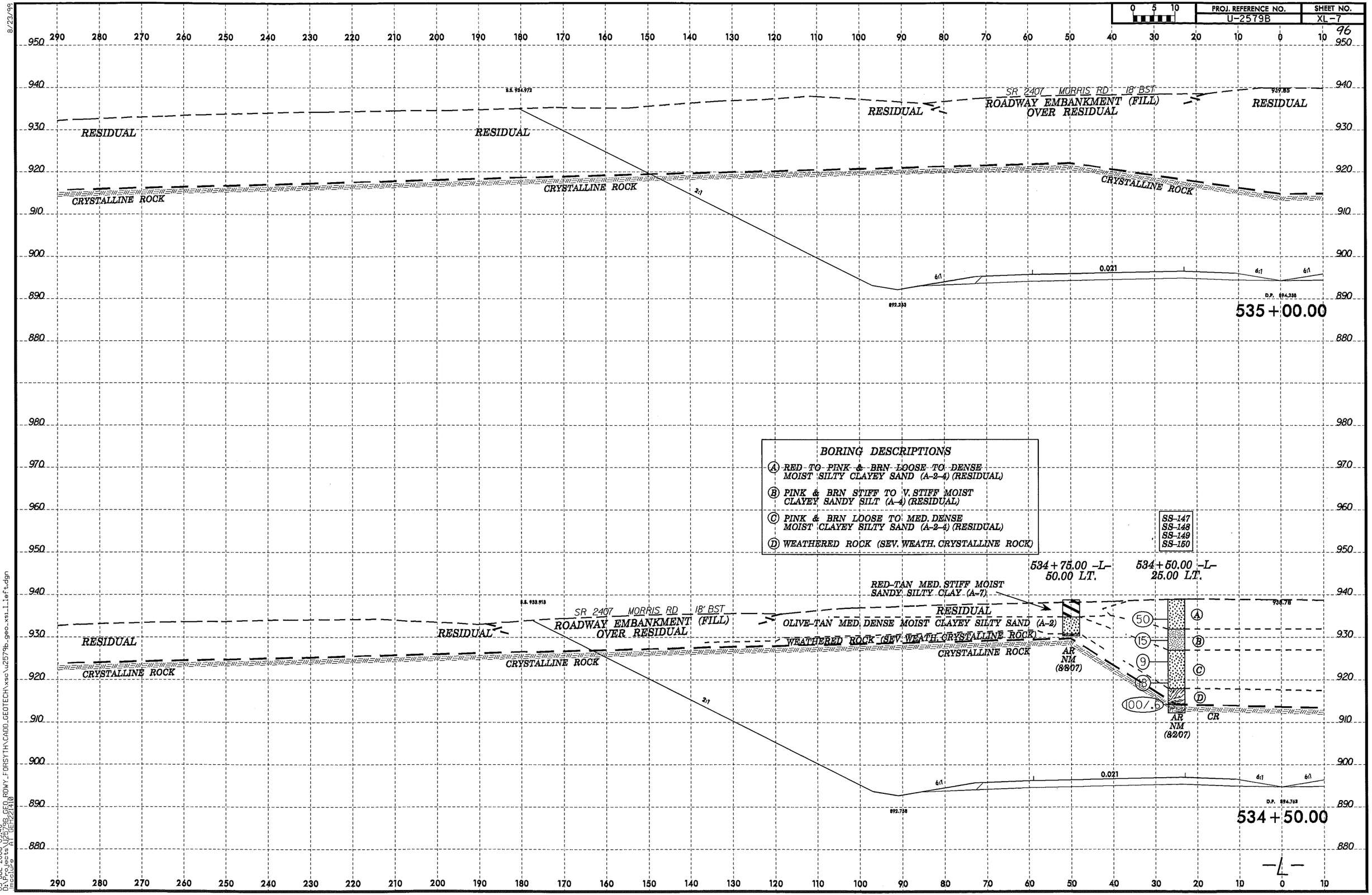
mcclure
AT 1"=2'-0"

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-7 |

96

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mosulive

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-8 |

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

940 930 920 910 900 890 880

RESIDUAL

CRYSTALLINE ROCK

B.S. 931.877

2:1

891.183

RESIDUAL

CRYSTALLINE ROCK

0.021

6:1 6:1

D.P. 893.186

934.75

RESIDUAL

CRYSTALLINE ROCK

536+00.00

B.S. 934.053

RESIDUAL

CRYSTALLINE ROCK

2:1

891.708

RESIDUAL

CRYSTALLINE ROCK

0.021

6:1 6:1

D.P. 893.713

937.89

RESIDUAL

CRYSTALLINE ROCK

535+50.00

—4—

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

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mcclure
41 CE122710

8/23/99

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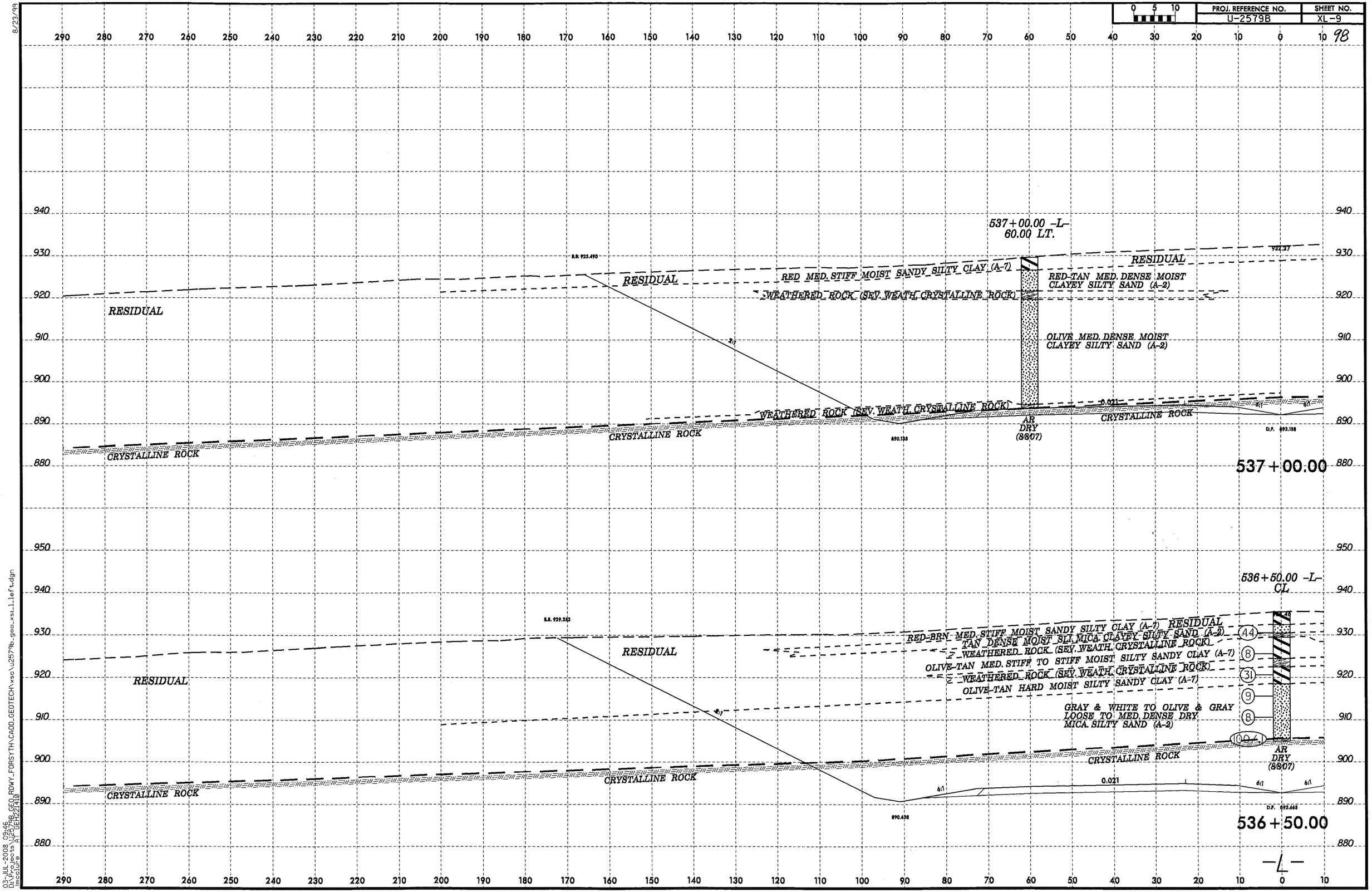
| | U-2579B | XL-9 |

98

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8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-10 |

99

940
930
920
910
900
890
880

538+00.00 -L- CL

RESIDUAL

RESIDUAL

ORANGE MED. STIFF MOIST SANDY SILTY CLAY (A-7) RESIDUAL

ORANGE TO TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

B/OT AR

538+00.00

RESIDUAL

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

0.021

537+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

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8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-11 |

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 /60

940 930 920 910 900 890 880

RESIDUAL

CRYSTALLINE ROCK

B.B. 913.472

RESIDUAL

2:1

CRYSTALLINE ROCK

888.033

RED. MED. STIFF MOIST SANDY SILTY CLAY (A-7) RESIDUAL

RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 6:1

539+00.00 -L- CL

AR NM (8/07)

8/07 0.021

D.F. 890.038

539+00.00

940 930 920 910 900 890 880

RESIDUAL

CRYSTALLINE ROCK

B.B. 916.074

RESIDUAL

2:1

CRYSTALLINE ROCK

885.537

RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 6:1 6:1

538+50.00 -L- 50.00 LT.

925.07

AR NM (8/07)

8/07 0.021

D.F. 890.563

538+50.00

-L-

940 930 920 910 900 890 880 870

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

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mesclure
Active Cell: 22x10

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-12 |

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 /01

930 920 910 900 890 880 870 860

RESIDUAL

RESIDUAL

B.S. 910.350

2:1

886.933

RESIDUAL

BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

0.021

6:1

4:1

6:1

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

D.P. 886.788

BT

NM (8/07)

540+00.00 -L- CL

540+00.00

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

930 920 910 900 890 880 870 860

RESIDUAL

RESIDUAL

B.S. 911.033

2:1

887.508

539+50.00 -L- 100.00 LT.

8/07

BRN TO TAN STIFF TO HARD MOIST CLAYEY SANDY SILT (A-4) WITH SEV. WEATH. CRYSTALLINE ROCK SEAMS @ 10.0-11.0

Y21.35

RESIDUAL

6:1

0.021

6:1

6:1

TAN MED. DENSE MOIST SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

D.P. 889.215

BT

CRYSTALLINE ROCK

CRYSTALLINE ROCK

539+50.00

-L-

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

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8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
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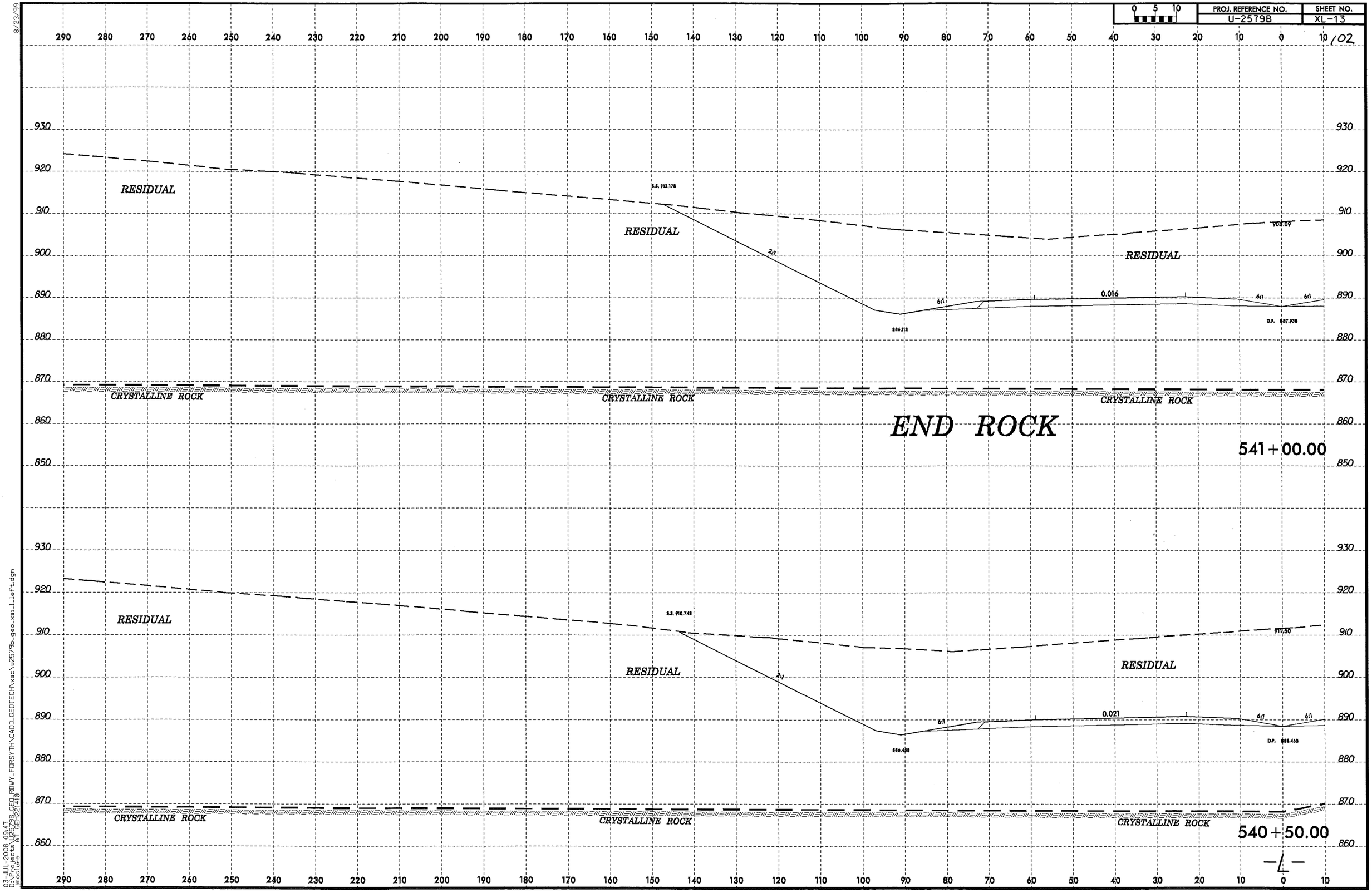
| | U-2579B | XL-13 |



8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-20 |

10/03

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

950 940 930 920 910 900 890

– Y4CD –
STA 52+22.024347

S.S. 926.131

4:1 6:1

920.861

RESIDUAL

0.021 0.021

D.P. 921.463

RESIDUAL

0.021

926.67

D.P. 921.888

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

NO ROCK

648+00.00

– Y4LPD –
STA 13+48.4459

S.P. 915.603

9.573

0.079 0.080

6:1 2:1

RESIDUAL

– Y4CD –
STA 51+71.667641

4:1 6:1

920.831

RESIDUAL

0.021 0.021

D.P. 921.599

RESIDUAL

0.021

926.73

D.P. 921.899

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

NO ROCK

647+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

950 940 930 920 910 900 890 880

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AT DELETED

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-21 |

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

960 950 940 930 920 910 900 890

- Y4CD -
STA 53+22.737759

S.S. 934.027

RESIDUAL

2:1

6:1

920.261

CRYSTALLINE ROCK

RESIDUAL

0.021 0.021

6:1 6:1

D.F. 920.823

CRYSTALLINE ROCK

RESIDUAL

0.021

6:1 6:1

929.07

D.F. 921.368

CRYSTALLINE ROCK

649+00.00

- Y4CD -
STA 52+72.381053

S.S. 930.429

RESIDUAL

3:1

6:1

920.422

CRYSTALLINE ROCK

RESIDUAL

0.021 0.021

6:1 6:1

D.F. 921.230

CRYSTALLINE ROCK

RESIDUAL

0.021

6:1 6:1

929.85

D.F. 921.676

CRYSTALLINE ROCK

648+50.00

—L—

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

960 950 940 930 920 910 900 890

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msclure
41 CELL: 2.718

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-22 |

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

960 950 940 930 920 910 900 890 880

- Y4CD -
STA 54+23.172630

S.S. 939.040

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1

919.286

RESIDUAL

0.021 0.021

6:1 6:1

D.P. 919.916

CRYSTALLINE ROCK

RESIDUAL

0.021

6:1 6:1

929.05

D.P. 920.434

CRYSTALLINE ROCK

650+00.00

649+72.03 -L-
198.71 LT.
=
55+00 -Y4RPBD-
CL

S.S. 937.437

RESIDUAL

TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(10/4/07)

2:1

6:1

919.798

- Y4CD -
STA 53+73.094465

WHITE & GRAY MED. DENSE DRY CLAYEY SILTY SAND (A-2-4)

CRYSTALLINE ROCK

0.021 0.021

6:1 6:1

649+50.00 -L-
75.00 LT.

RESIDUAL

(53)

(14)

TAN TO WHITE & GRAY MED. DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

928.68

6:1 6:1

D.P. 920.48

AR
NM
(9/21/07)

CRYSTALLINE ROCK

649+50.00
-L-

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

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mcclure
41 CENTER 410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-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

910 900 890 880 870 860 850 840

SS-416
SS-417

670+52.81 -L-
114.57 LT.
=
75+00 -Y4CD-
CL
- Y4CD -
STA. 74+97.115642

S.S. 886.367

RESIDUAL

CRYSTALLINE ROCK

2:1

887.499

RESIDUAL

13
10

TAN TO OLIVE & WHITE MED. DENSE MOIST SLI. MICA. SILTY CLAYEY SAND (A-2-4)

0.040 0.040

6:1

AR
DRY
(10/10/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

D.P. 857.219

6:1 6:1

0.050

859.69

7:1 6:1

RESIDUAL

D.P. 855.047

CRYSTALLINE ROCK

670+50.00

910 900 890 880 870 860 850 840 830

- Y4CD -
STA. 74+45.868047

S.S. 880.368

RESIDUAL

2:1

858.218

6:1

0.040 0.040

D.P. 856.013

6:1 6:1

0.050

855.63

7:1 6:1

RESIDUAL

D.P. 855.854

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

670+00.00
-L-

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

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8/23/99

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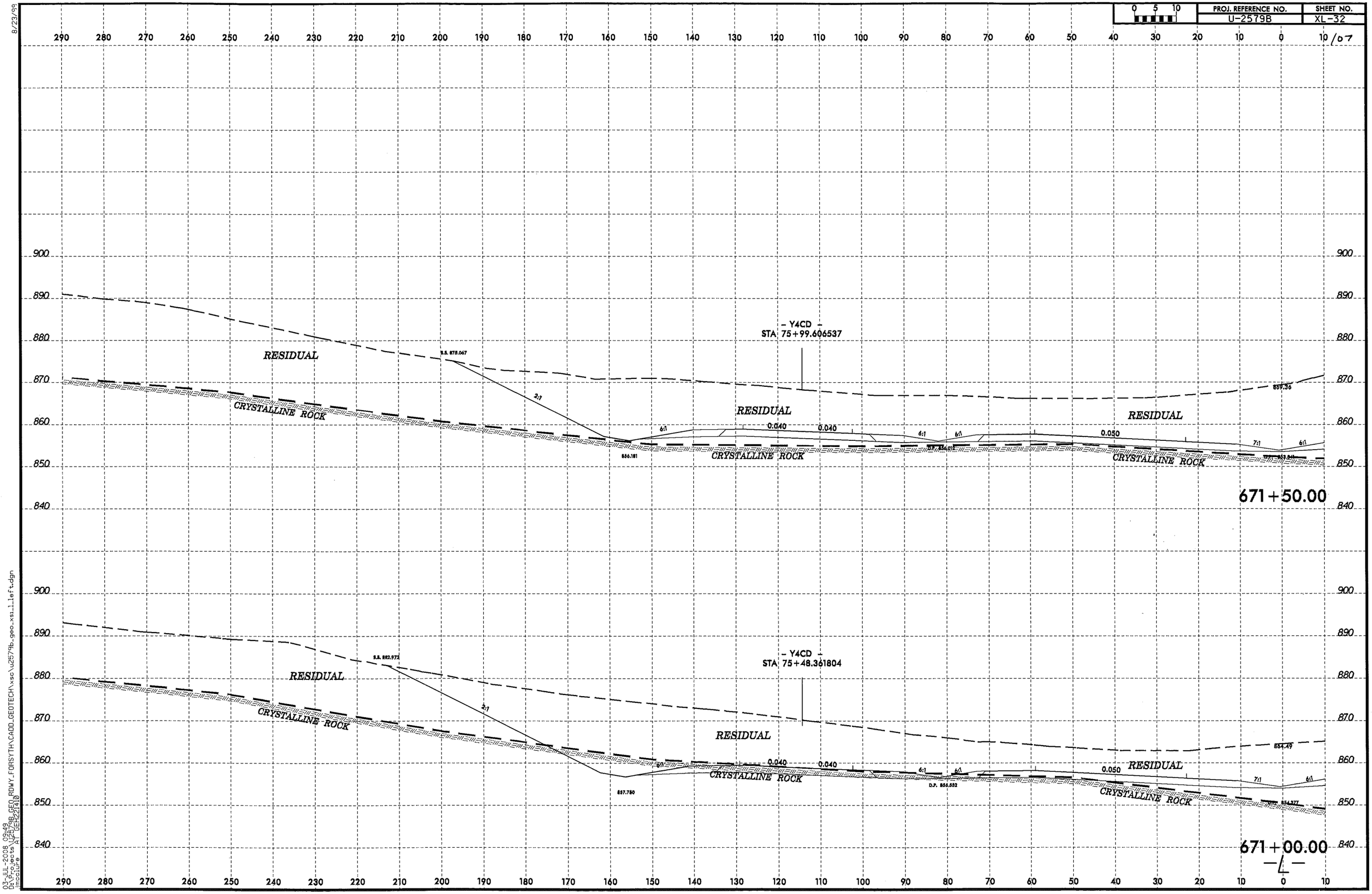
| | U-2579B | XL-32 |

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Active DGN: U2579B_GEO

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-33 |

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

900 890 880 870 860 850 840

– Y4CD –
STA 77+02.091729

S.S. 879.488

RESIDUAL

2:1

6:1 0.040 0.040 6:1 6:1 0.050 7:1 6:1

D.P. 855.315

856.339

RESIDUAL

RESIDUAL

881.89

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

D.P. 853.176

672+50.00

– Y4CD –
STA 76+50.849845

S.S. 874.639

RESIDUAL

2:1

6:1 0.040 0.040 6:1 6:1 0.050 7:1 6:1

D.P. 853.400

855.700

RESIDUAL

RESIDUAL

878.53

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

D.P. 853.241

672+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

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mcguire
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8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-34 |

0 5 10

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

910 900 890 880 870 860 850 840 830

– Y4CD –
STA 78+04.571246

E.S. 887.270

887.70

RESIDUAL

RESIDUAL

RESIDUAL

2:1

6:1 0.040 0.040 6:1 6:1 0.050 7:1 6:1

855.032

D.P. 855.127

D.P. 853.052

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

673+50.00

673+21.21 –L–
138.86 LT.
=
77+75 –Y4CD–
25.00 LT.

– Y4CD –
STA 77+53.332195

673+00.00 –L–
CL

E.S. 883.363

RESIDUAL

RESIDUAL

RED-TAN MED. STIFF TO STIFF
MOIST SANDY SILTY CLAY (A-7)

TAN MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)

TAN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

2:1

6:1 0.040 0.040 6:1 6:1 0.050 7:1 6:1

WEATHERED ROCK
(OLIVE SEV. WEATH. CRYSTALLINE ROCK)

855.120

D.P. 855.157

BT
DRY
(101007)

AR
DRY
(101007)

D.P. 853.046

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

673+00.00

–L–

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8/23/99

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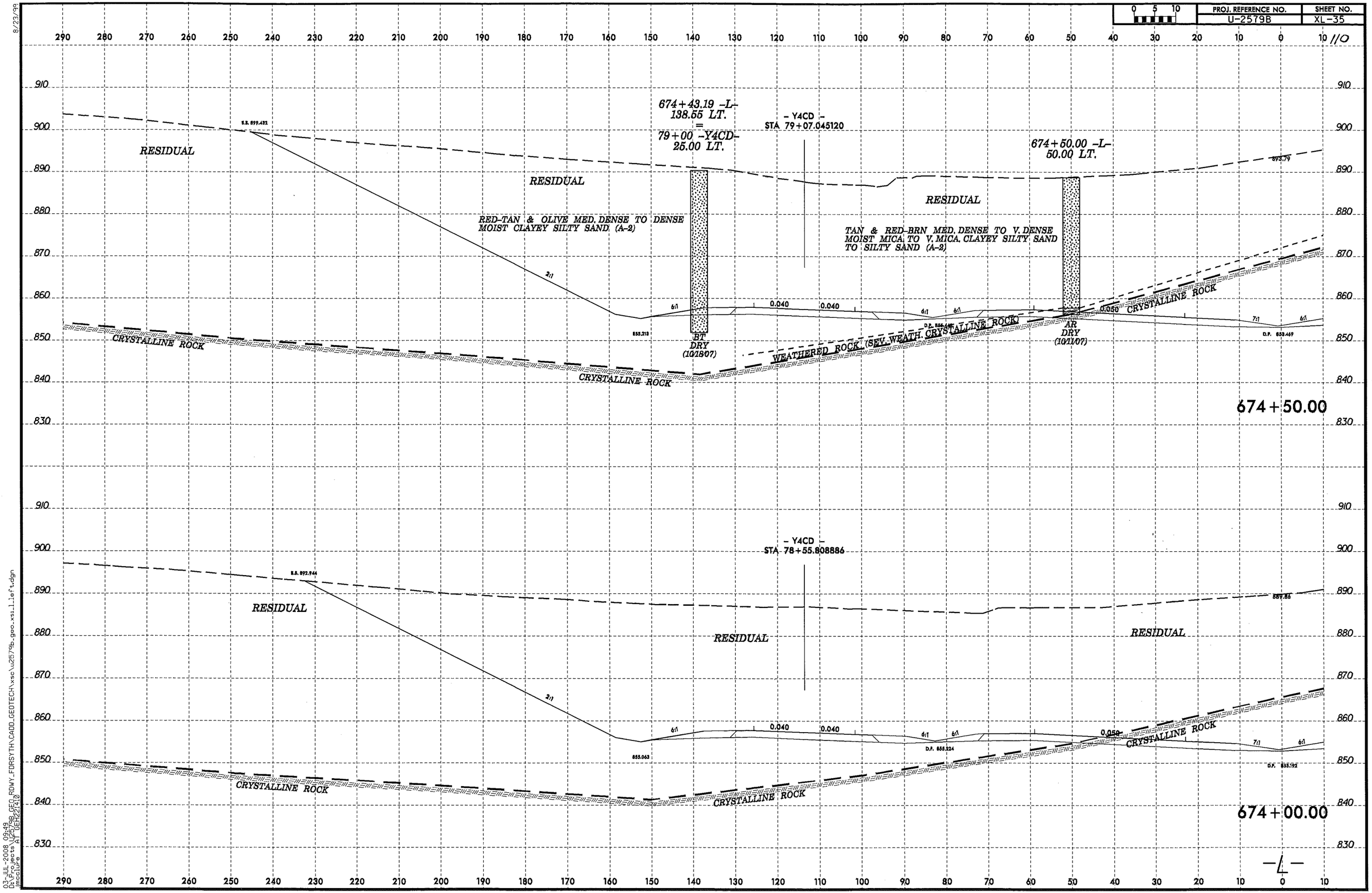
|---|---|---|
| | U-2579B | XL-35 |

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mcsimure
XL_GEO_2710

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-36 |

0 5 10

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 ///

910 900 890 880 870 860 850 840 830

Y.S. 905.308

RESIDUAL

– Y4CD –
STA 79+58.279951

RESIDUAL

RESIDUAL

876.81

CRYSTALLINE ROCK

2:1

8A

0.040

0.040

6:1

6:1

CRYSTALLINE ROCK

0.050

7:1

6:1

855.483

D.P. 853.799

D.P. 853.890

675+00.00

–L–

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mcclure

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-37 |

112

675+40.86 -L-
173.30 LT.
=
80+00 -Y4CD-
60.00 LT.

675+43.98 -L-
101.40 LT.
=
80+03 -Y4CD-
12.00 RT.

- Y4CD -
STA 80+09.513385

RESIDUAL

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RED-TAN MED. DENSE DRY CLAYEY SILTY SAND (A-2)

AR DRY (10/18/07)

RESIDUAL

CRYSTALLINE ROCK

TAN & RED TO OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND TO SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE DENSE TO V. DENSE MOIST SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR DRY (10/11/07)

894.34

2:1

6:1

0.040

0.040

6:1

6:1

0.050

7:1

6:1

D.P. 856.276

D.P. 854.427

675+50.00
-L-

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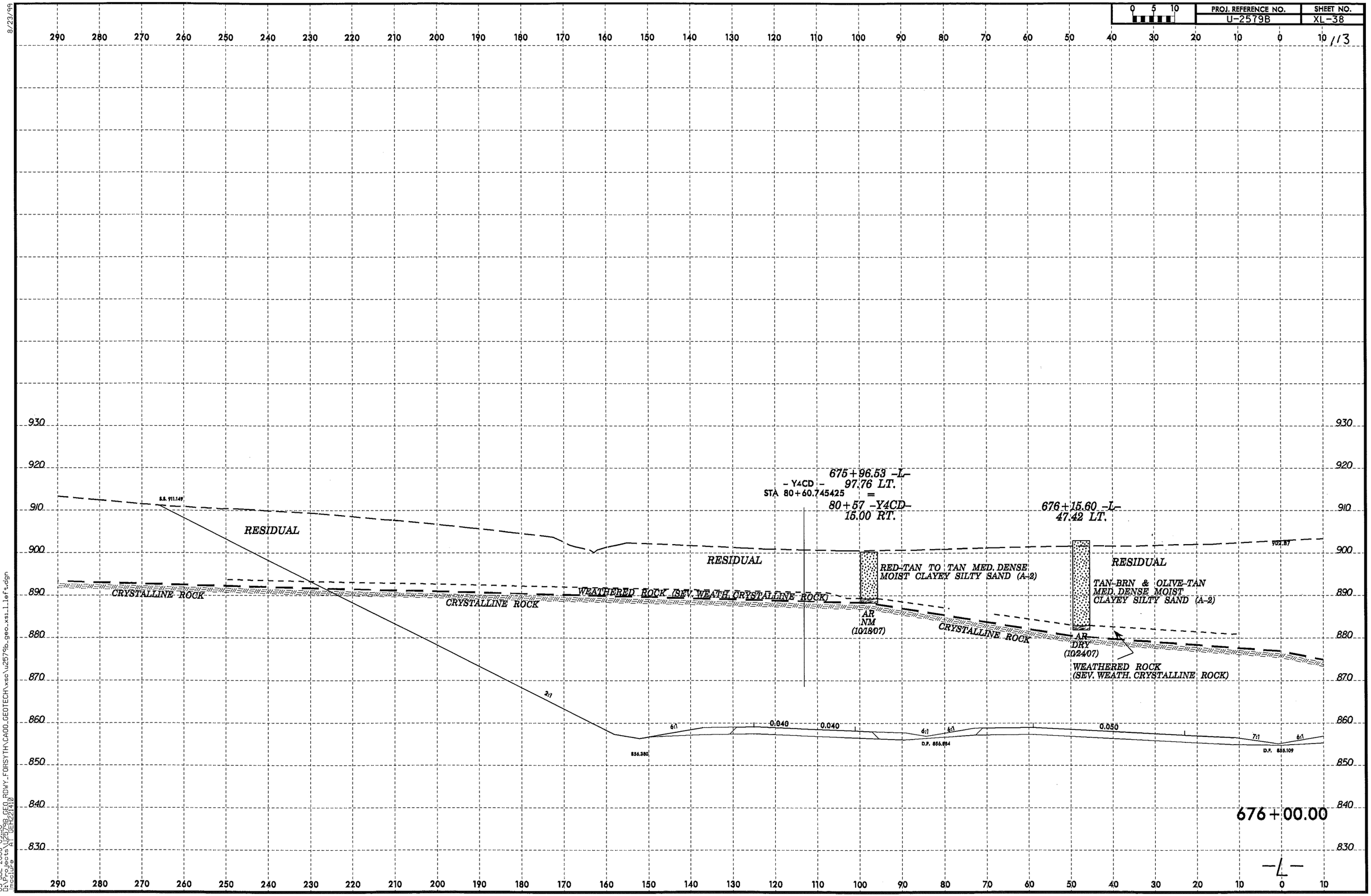
mcguire

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-38 |



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Closure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-39 |

10/14

676+38.55 -L-
213.05 LT.
=
81+00 -Y4CD-
100.00 LT.

- Y4CD -
STA 81+11.970805

706.02

RESIDUAL

RED-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE DENSE MOIST MICA CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(101807)

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1 0.040 0.040 6:1 6:1 0.048 7:1 6:1

857.008

D.P. 857.672

D.P. 856.928

676+50.00

-L-

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mcclure

8/23/99

0 5 10

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-40 |

115

676+85.11 -L-
109.76 LT.
=
81+48 -Y4CD-
3.00 RT.

- Y4CD -
STA 81+63.051205

677+00.77 -L-
46.25 LT.

677+24
9.54

677+00.00
-L-

B.B. 920.533

RESIDUAL

RESIDUAL

RED-BRN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

RED-TAN & OLIVE MED. DENSE
MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

907.94

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(101807)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(102407)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

2:1

4:1

0.040

0.040

6:1

6:1

0.040

7:1

6:1

867.702

D.P. 858.233

D.P. 856.877

940
930
920
910
900
890
880
870
860
850
840
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

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mcclure
APPROVED

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-41 |

1/6

940
930
920
910
900
890
880
870
860
850
840
830

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

- Y4CD: -
STA 82+13.925692

RED-BRN & OLIVE MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)

CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

677+54.31 -L-
62.32 LT.
AR
DRY
(102407)

RESIDUAL

CRYSTALLINE ROCK

2:1
6:1
0.040
0.040
6:1
6:1
0.031
7:1
6:1

D.P. 858.993
D.P. 857.886

677+50.00
-L-

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

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microstation V8 (SELECTseries 2)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-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 //7

960 950 940 930 920 910 900 890 880 870 860 850 840 830

| | |
|---|---|
| SS-418 | SS-420 |
| SS-419 | MS-420 |
| MS-419 | ST-2 |
| RT-2 | SS-421 |

677+98.31 -L-
196.09 LT.
=
82+62 -Y4CD-
84.00 LT.

677+78.18 -L-
116.55 LT.
=
82+42.50 -Y4CD-
4.00 LT.

678+01.63 -L-
33.84 LT.

RESIDUAL

22 20 34 22 13 17

TAN & OLIVE MED. DENSE & DENSE NON MICA. TO SLI. MICA. SILTY SAND (A-2-4, A-2-5)

ST-2

AR
DRY
(10/1/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

-Y4CD -
STA. 82+64.595078

RED-TAN TO OLIVE-TAN & TAN MED. DENSE TO DENSE MOIST SLI. MICA. & V. MICA. CLAYEY SILTY SAND (A-2)

AR
DRY
(10/8/07)

RED-BRN & OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

AR
NM
(10/23/07)

903.43

2:1

6:1 0.040 0.040 6:1 6:1 0.023 7:1 6:1

859.430

D.P. 859.778

D.P. 858.891

678+00.00

-L-

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mcclure
AT DELL2241U

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-43 |

0 5 10

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 11B

940 930 920 910 900 890 880 870 860 850 840

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

678+27.84 -L-
89.86 LT.

678+57.76 -L-
41.39 LT.

- Y4CD -
STA 83+15.061692

TAN TO OLIVE MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

RED-BRN TO OLIVE
MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)
WITH SEV. WEATH. CRYSTALLINE
ROCK SEAMS @ 17.5-20.0

AR
DRY
(10/19/07)

AR
DRY
(10/24/07)

CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

900.82

2:1

6:1 0.040 0.040 6:1 6:1 0.015 6:1 6:1

860.252

D.P. 860.610

D.P. 859.786

678+50.00
-L-

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Projects Admin
GEOPAK 22.10

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-44 |

How is this Rock Outcrop determined? There are not enough data points (Sheet No. 18)

STA 83+75 -Y4CD- 126.00 LT. = 679+13 -L- 236.00 LT. +/-

678+80.68 -L- 118.30 LT. = 83+45.80 -Y4CD- 8.00 LT.

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

- Y4CD - STA 83+65.330478

ORANGE-TAN TO OLIVE MED. DENSE TO V. DENSE MOIST V. MICA. CLAYEY SILTY SAND (A-2)

AR DRY (071807)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1 0.040 0.040 6:1 6:1 0.040 6:1 6:1

861.060

D.F. 861.493

840.838

876.82

679+00.00

-L-

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mcclure
CENTERLINE

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-45 |



940

679+68.93 -L-
183.94 LT.
=
84+31 -Y4CD-
76.00 LT.

679+27.73 -L-
60.85 LT.

- Y4CD -
STA 84+15.415155

929.819

RESIDUAL

RESIDUAL

ORANGE-TAN & OLIVE-TAN MED. DENSE TO V. DENSE
MOIST SLI. MICA. CLAYEY SILTY SAND (A-2)
WITH LAYERS OF SEV. WEATH. CRYSTALLINE ROCK @ 34-35

RESIDUAL

TAN TO OLIVE MED. DENSE MOIST
V. MICA CLAYEY SILTY SAND (A-2)

896.54

CRYSTALLINE ROCK

BT
DRY
(101807)

CRYSTALLINE ROCK

6:1 0.039 0.039 6:1 6:1

AR
DRY
(102407)

WEATHERED ROCK
(SEV. WEATH CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 6:1

861.903

D.P. 862.412

D.P. 861.860

679+50.00
-L-

940 930 920 910 900 890 880 870 860 850 840

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

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Microstation V8 DGN 22x10

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-46 |

0 5 10

10 /2/

RESIDUAL

RESIDUAL

679+81.15 -L-
131.87 LT.
=
84+45.5 -Y4CD-
24.00 LT.

-Y4CD -
STA 84+65.459251

679+95.07 -L-
70.10 LT.

RESIDUAL

RED TO OLIVE-TAN MED. DENSE TO V. DENSE
MOIST V. MICA. CLAYEY SILTY SAND (A-2)

RED-TAN & OLIVE MED. DENSE MOIST
MICA. TO V. MICA. CLAYEY SILTY SAND (A-2)

2:1

6:1

0.034 0.033 0.040 0.054 0.011

6:1 6:1

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

BT
DRY
(9/18/07)

AR
DRY
(10/23/07)

680+00.00
-L-

03-JUL-2008 09:50
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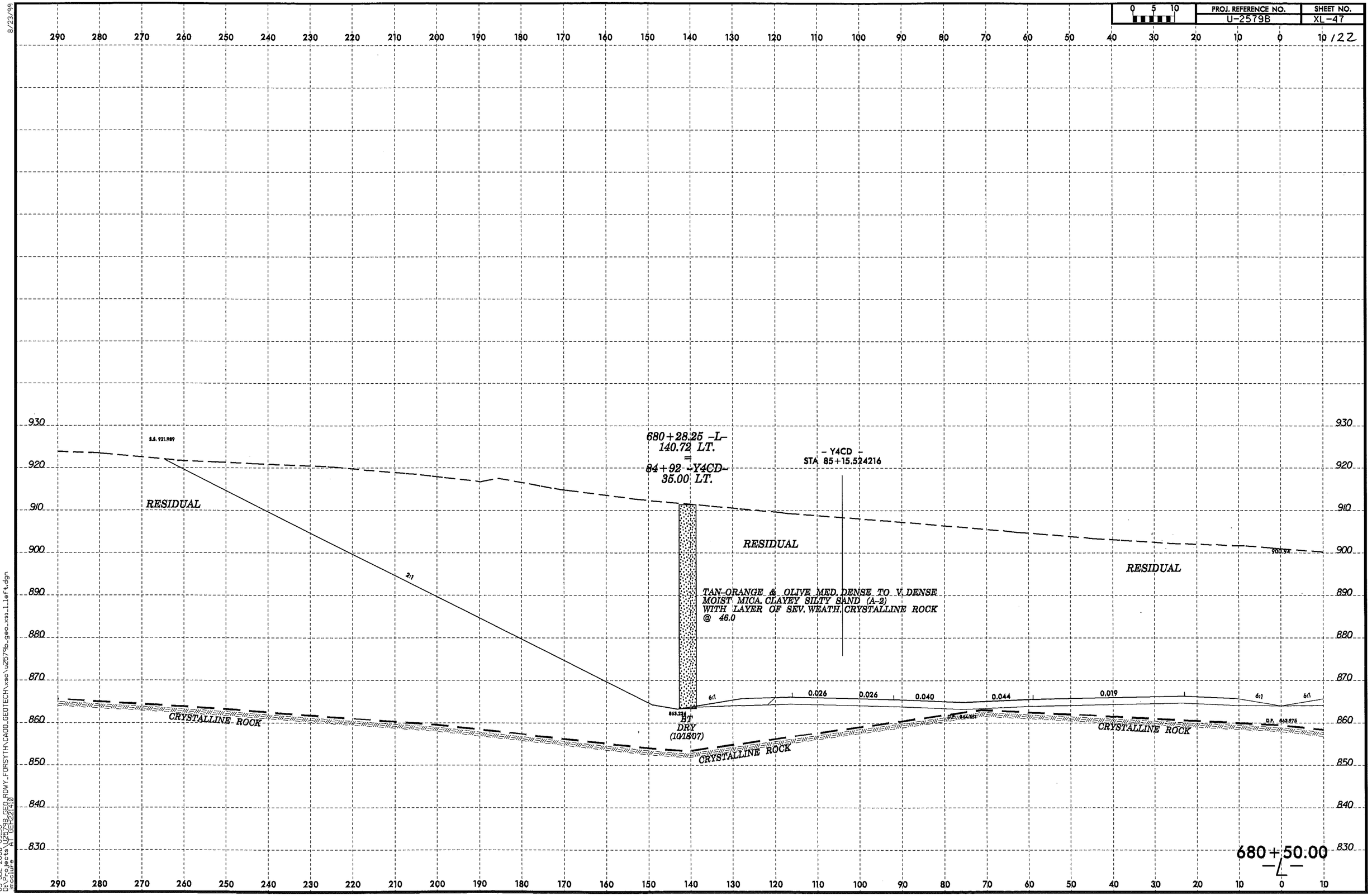
mcguire

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-47 |

10/22

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mscoture

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-48 |

10 / 23

ROCK OUTCROP
STA. 85+85 -Y4CD-
20.00 LT.
=
681+21 -L-
120.16 LT.

- Y4CD -
STA 85+65.609073

681+16.54 -L-
72.42 LT.

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

RED-TAN TO TAN-OLIVE MED. DENSE
MOIST CLAYEY SILTY SAND (A-2)

CRYSTALLINE ROCK

AR
DRY
(102407)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

681+00.00
-L-

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mosture A1 CE1240317

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-49 |

10/24

682+24.62 -L-
139.31 LT.
=
86+87 -Y4CD-
46.00 LT.

- Y4CD -
STA 86+65.822048

681+78.60 -L-
84.14 LT.

B.S. 912.843

RESIDUAL

TAN V. DENSE MOIST
CLAYEY SILTY SAND (A-2)

AR
NM
(10/12/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

RED-TAN TO TAN & OLIVE MED. DENSE
MOIST NON MICA TO V. MICA
CLAYEY SILTY SAND (A-2)

902.35

RED-TAN STIFF MOIST V. MICA
CLAYEY SANDY SILT (A-6)

RESIDUAL

6:1 0.005 0.004 0.040 0.072 0.021 6:1 6:1

864.844

AR
DRY
(10/24/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

D.P. 847.117

682+00.00

681+34.41 -L-
153.23 LT.
=
85+97 -Y4CD-
54.00 LT.

- Y4CD -
STA 86+15.709953

B.S. 915.862

RESIDUAL

RED-TAN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)
WITH WHITE CLAY SEAM
@ 11.0-11.5

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(10/12/07)

CRYSTALLINE ROCK

RESIDUAL

RESIDUAL

903.91

2:1 6:1 0.012 0.012 0.040 0.060 0.021 6:1 6:1

864.061

CRYSTALLINE ROCK

D.P. 844.061

681+50.00
-L-

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

930 920 910 900 890 880 870 860 850

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default
XL GEN 24x36

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-50 |

10/25

683+03.38 -L-
140.57 LT.
=
87+65.87 -Y4CD-
53.00 LT.

- Y4CD -
STA 87+66.055317

682+13

RESIDUAL

CRYSTALLINE ROCK

S.S. 906.122

RESIDUAL
RED-TAN MED. DENSE TO DENSE
MOIST CLAYEY SILTY SAND (A-2)

AR
NM
(10/2/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

RESIDUAL

896.49

866.624

0.010 0.020 0.021

D.P. 869.212

WB

CRYSTALLINE ROCK

683+00.00

- Y4CD -
STA 87+15.939216

S.S. 909.345

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

899.62

863.699

0.003 0.003 0.020 0.021

D.P. 868.165

682+50.00

-L-

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mcclure
A. CENTER

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-51 |

684+13.04 -L-
122.87 LT.
=
88+76.78 -Y4CD-
42.00 LT.

- Y4CD -
STA 88+65.264917

B.S. 900.384

RESIDUAL

2:1

RESIDUAL

RED-TAN TO TAN & OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND & SILTY SAND (A-2) WITH LAYERS OF SEV. WEATH. CRYSTALLINE ROCK

868.681

6:1 0.022 0.022 0.014 0.021 6:1 6:1

D.F. 871.984

RESIDUAL

890.44

BT
DRY
(101607)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

684+00.00

683+51.13 -L-
82.31 LT.
=
88+17.43 -Y4CD-
2.00 RT.
- Y4CD -
STA 88+16.165542

SS-422
MS-422

683+31.36 -L-
4.61 RT.

B.S. 903.492

RESIDUAL

2:1

RESIDUAL

RED-TAN TO OLIVE-TAN MED DENSE TO DENSE MOIST CLAYEY SILTY SAND TO SILTY SAND (A-2)

867.606

6:1 0.018 0.018 0.017 0.021 6:1 6:1

D.F. 870.330

RESIDUAL

RED-TAN TO TAN & OLIVE DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2) WITH SEV. WEATH. CRYSTALLINE ROCK LAYER @ 18.5-19.0

893.31

10/07

BT

TAN STIFF TO V. STIFF WET V. MICA. CLAYEY SANDY SILT (A-5)

BT

CRYSTALLINE ROCK

CRYSTALLINE ROCK

683+50.00

-L-

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

920 910 900 890 880 870 860 850 840 830

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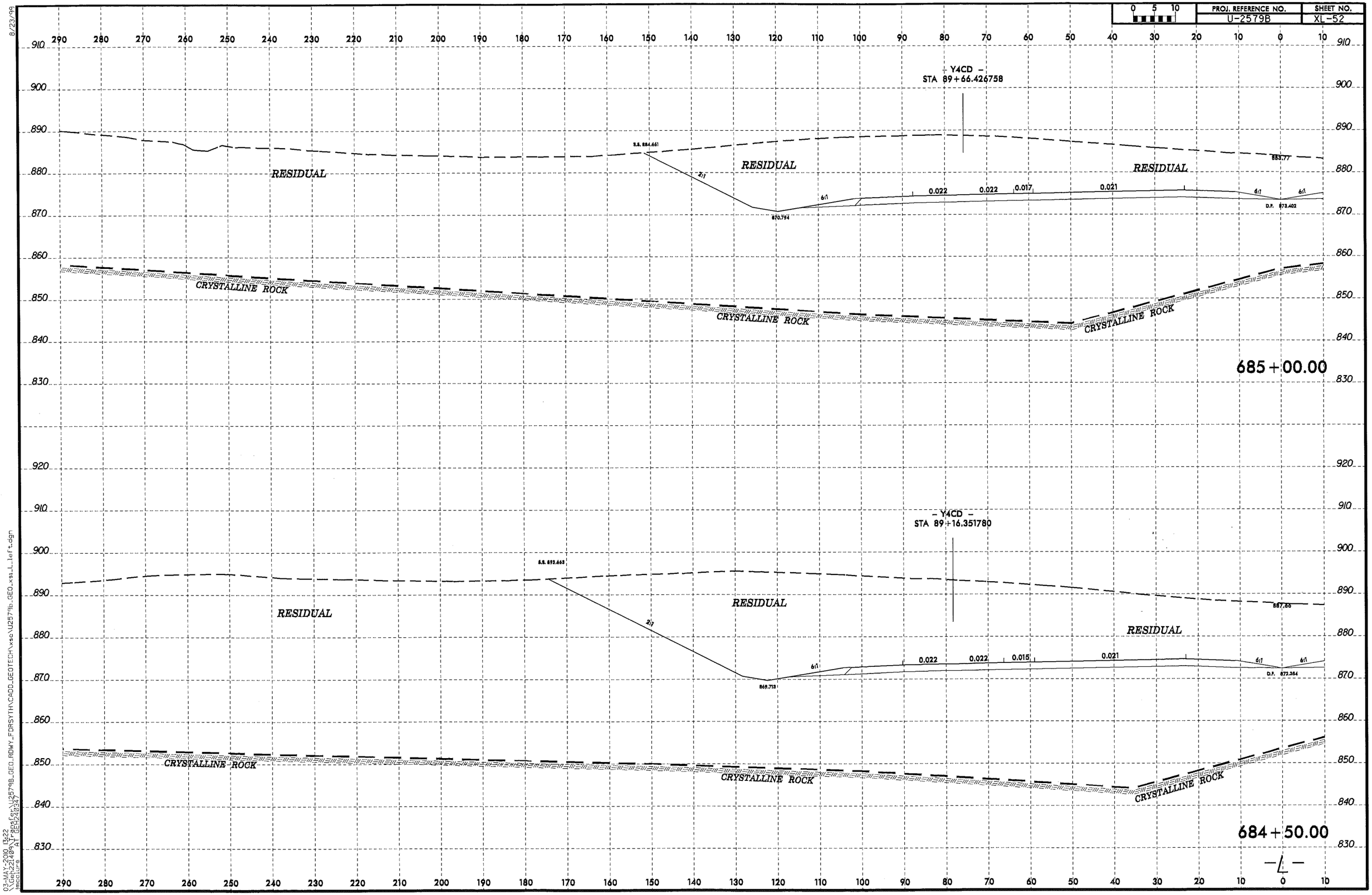
msclure
NT GEN 2x42

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XL-52 |

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mesmure 41 GEH220347

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-4 |

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

940 930 920 910 900 890 880 870

BRN STIFF MOIST SANDY SILTY CLAY (A-7)

BRN-RED STIFF MOIST CLAYEY SANDY SILT (A-5)

532+00.00 -L- CL

532+00.00 -L- 50.00 RT.

920.04

RESIDUAL

RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

RESIDUAL

S.S. 914.083

RESIDUAL

BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

2:1

6:1 6:1 0.021 6:1

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

AR NM (8/3/07)

D.P. 897.388

AR NM (8/3/07)

895.383

532+00.00

531+60.00 -L- CL

910.636

RESIDUAL

RED MED. STIFF TO STIFF MOIST SANDY SILTY CLAY (A-7)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

RESIDUAL

6:1 6:1 0.021 6:1

OLIVE-TAN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2-4) WITH SEV. WEATH. CRYSTALLINE ROCK STREAKS AT BASE

D.P. 897.213

895.908

BT NM (8/2/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

531+50.00

-L-

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

940 930 920 910 900 890 880 870 860

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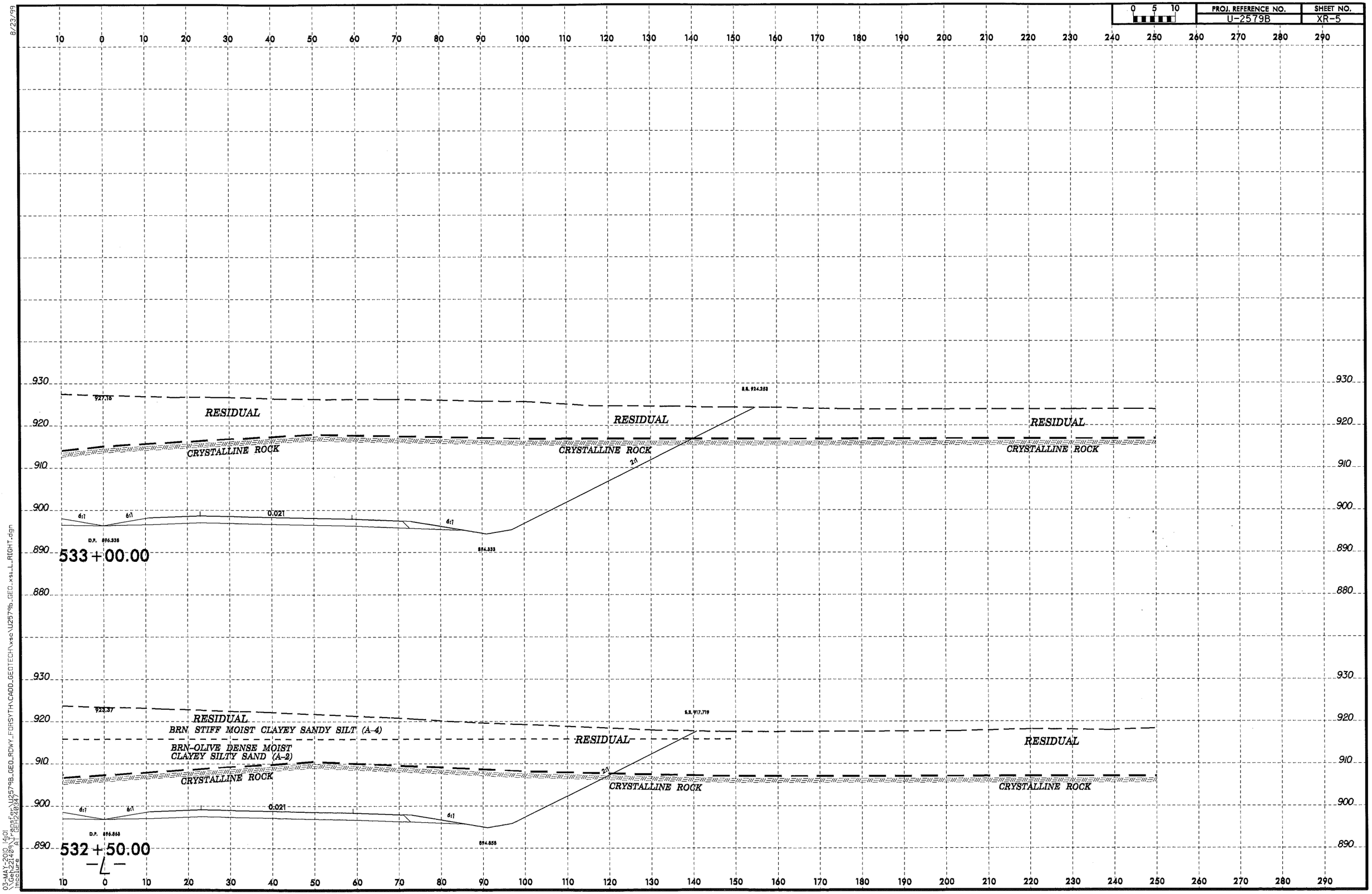
microstation

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-5 |

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Bentley MicroStation V8 (SELECTseries 2)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-6 |

534+00.00 -L-
10.00 RT.

Ⓐ ARTIFICIAL FILL
RED MED. STIFF MOIST MICA. SANDY SILTY CLAY (A-7)

935.76

RED-BRN STIFF MOIST CLAYEY SANDY SILT (A-5) — RESIDUAL

BRN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(8/8/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

S.S. 932.797

2:1

6:1 6:1 0.02↑ 6:1

D.P. 895.286

893.283

534+00.00

BRN-TAN STIFF MOIST SLI. MICA. CLAYEY SANDY SILT (A-4)

533+50.00 -L-
65.00 RT.

RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)

931.26

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(8/8/07)

CRYSTALLINE ROCK

BRN DENSE MOIST CLAYEY SILTY SAND (A-2-4)

S.S. 930.996

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1 6:1 0.02↑ 6:1

D.P. 895.813

893.506

533+50.00

—L—

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Microstation

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-7 |

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

950 940 930 920 910 900 890 880

939.85

RESIDUAL

CRYSTALLINE ROCK

6:1 6:1 0.02↑ 6:1

D.P. 894.238

892.233

535+00.00

B.S. 937.969

RESIDUAL

CRYSTALLINE ROCK

2:1

RESIDUAL

CRYSTALLINE ROCK

936.78

RESIDUAL

RED TO PINK & BRN LOOSE TO DENSE MOIST SILTY CLAYEY SAND (A-2-4)

PINK & BRN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-4)

PINK & BRN LOOSE TO MED. DENSE
MOIST CLAYEY SILTY SAND (A-2-4) (RESIDUAL)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 6:1 0.02↑ 6:1

D.P. 894.768

892.768

534+50.00

B.S. 935.405

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XR-8 |

0 5 10

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

960 950 940 930 920 910 900 890 880

536+00.00 -L-
75.00 RT.

ROADWAY EMBANKMENT (FILL)

SR 2407 MORRIS RD 18' BST

936.78

RESIDUAL

RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

RESIDUAL

OLIVE-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

S.S. 939.447

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

2:1

6:1 6:1 0.021 6:1

D.P. 893.188

891.183

CRYSTALLINE ROCK

AR
DRY
(8/8/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

536+00.00

535+25.00 -L-
50.00 RT.

ROADWAY EMBANKMENT (FILL)

SR 2407 MORRIS RD 18' BST

937.89

RESIDUAL

RED-TAN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE-BRN STIFF TO V. STIFF MOIST CLAYEY SANDY SILT (A-4)

OLIVE-GREEN DENSE MOIST SILTY SAND (A-2)

S.S. 938.820

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

2:1

CRYSTALLINE ROCK

AR
NM
(8/8/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1

D.P. 893.713

891.708

535+50.00

-L-

03-MAY-2010 13:58
Z:\U2579B_DAU_RDM\Y_FORSYTH\CADD_GEOTECH\xso\U2579b_GEO_xsL_RIGHT.dgn
microstation (V8) RDM-240837

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-9 |

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

950 940 930 920 910 900 890 880

932.27

RESIDUAL

RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)

RESIDUAL

ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

E.S. 935.243

SR 2407 MORRIS RD 18' BST

RESIDUAL

RED-TAN & OLIVE MED. DENSE
MOIST CLAYEY SILTY SAND (A-2)

2:1

6:1 6:1 0.021 6:1

CRYSTALLINE ROCK

D.P. 892.138

890.133

CRYSTALLINE ROCK

CRYSTALLINE ROCK

537+00.00

536+50.00 -L-
CL

RESIDUAL RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)
TAN DENSE MOIST SLI. MICA CLAYEY SILTY SAND (A-2)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
OLIVE-TAN MED. STIFF TO STIFF MOIST SILTY SANDY CLAY (A-7)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
OLIVE-TAN HARD MOIST SILTY SANDY CLAY (A-7)

GRAY & WHITE TO OLIVE & GRAY
LOOSE TO MED. DENSE DRY
MICA. SILTY SAND (A-2)

44 8 31 9 8 9

AR
DRY
(8/8/07)

CRYSTALLINE ROCK

RESIDUAL

ROADWAY EMBANKMENT (FILL)
OVER RESIDUAL

E.S. 938.887

SR 2407 MORRIS RD 18' BST

RESIDUAL

RESIDUAL

2:1

CRYSTALLINE ROCK

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1

D.P. 892.863

890.656

536+50.00

-L-

03-MAY-2010 14:08
User:224807 - BEHRENS, AMY
Pw:\\Mcdot1pw\Projects\U2579B_GEO_ROWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-10 |

538+00.00 -L- CL

RESIDUAL ORANGE MED. STIFF MOIST SANDY SILTY CLAY (A-7)

ORANGE TO TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR

D.P. 891.088

538+00.00

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

S.S. 931.181

889.083

537+25.00 -L- 50.00 RT.

RESIDUAL ORANGE MED. STIFF MOIST SANDY SILTY CLAY (A-7)

ORANGE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

ORANGE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR

DRY (8/8/07)

CRYSTALLINE ROCK

928.11

S.S. 932.387

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

SR 2407 MORRIS RD 18" BST

D.P. 891.613

889.406

537+50.00

-L-

03-MAY-2010 14:10
\\Geh22140\c\Projects\U2579b_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xs_L_RIGHT.dgn
User: ahenegar

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-11 |

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

940 930 920 910 900 890 880

539+00.00 -L- CL

RESIDUAL RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)

RED-BRN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR NM (8/8/07)

6:1 6:1 0.021 6:1 2:1

D.P. 890.038

539+00.00

S.S. 929.877

888.033

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

950 940 930 920 910 900 890 880 870

RESIDUAL

RED-BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

538+25.00 -L- 50.00 RT.

925.07

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

TAN TO OLIVE MED. DENSE DRY CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR NM (8/8/07)

CRYSTALLINE ROCK

S.S. 930.421

RESIDUAL

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1 2:1

D.P. 890.558

889.558

538+50.00

-L-

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

03-MAY-2019 14:12
\\Geh-224891\T_Reg\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn
mcguire

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XR-12 |

0 5 10

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

930 920 910 900 890 880 870 860

540+00.00 -L-
CL

RESIDUAL
BRN MED. STIFF MOIST SANDY SILTY CLAY (A-7)

BRN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

WEATHERED ROCK 0.02'
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 2:1 6:1

D.P. 886.986

BT
NM
(8/9/07)

886.983

S.S. 924.312

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

540+00.00

539+50.00 -L-
75.00 RT.

924.36

RESIDUAL

RED MED. STIFF MOIST SANDY SILTY CLAY (A-7)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RED-BRN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(8/9/07)

CRYSTALLINE ROCK

S.S. 927.002

RESIDUAL

CRYSTALLINE ROCK

6:1 6:1 0.02' 4:1

D.P. 889.

887.508

539+50.00

-L-

940 930 920 910 900 890 880 870 860

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

03-MAY-2010 14:14
User:22140 Pltsetup:
Microstation V8 - REDIRECT

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-13 |

SS-154
SS-155
SS-156
SS-157A

541+00.00 -L-
75.00 RT.

RESIDUAL

908.09

RED-TAN TO RED-BRN STIFF TO V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY & SANDY SILTY CLAY (A-7-5, A-6)

(25)
(P=7)
(11)
(P=7)
(9)
(8)
(8)
(7)
(8)
BT

6:1 6:1 0.021 6:1

D.P. 887.938

8.07

TAN TO OLIVE LOOSE MOIST TO WET MICA, SILTY SAND (A-2-5)

885.938

2:1

S.S. 918.532

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

541+00.00

911.50

RESIDUAL

RESIDUAL

RESIDUAL

2:1

S.S. 923.031

6:1 6:1 0.021 6:1

D.P. 888.468

886.468

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

540+50.00

-L-

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

940 930 920 910 900 890 880 870 860 850

03-MAY-2016 14:15
User:rzapfe
Model: 22240 A1
\\Engfs\proj\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xsi_L_RIGHT.dgn

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-14 |

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

930 920 910 900 890 880 870 860 850

926.98

RESIDUAL

RESIDUAL

SR 2575 WESTON BROOKE TRAIL 21' BST

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

S.S. 914.650

RESIDUAL

RESIDUAL

2:1

7:1 6:1 0.040 6:1

D.P. 882.056

879.130

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

548+00.00

926.24

RESIDUAL

RESIDUAL

SR 2575 WESTON BROOKE TRAIL 21' BST

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

S.S. 914.353

RESIDUAL

2:1

7:1 6:1 0.040 6:1

D.P. 881.180

879.253

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

547+50.00

—L—

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

930 920 910 900 890 880 870 860 850

03-MAY-2010 14:17
User:e2140
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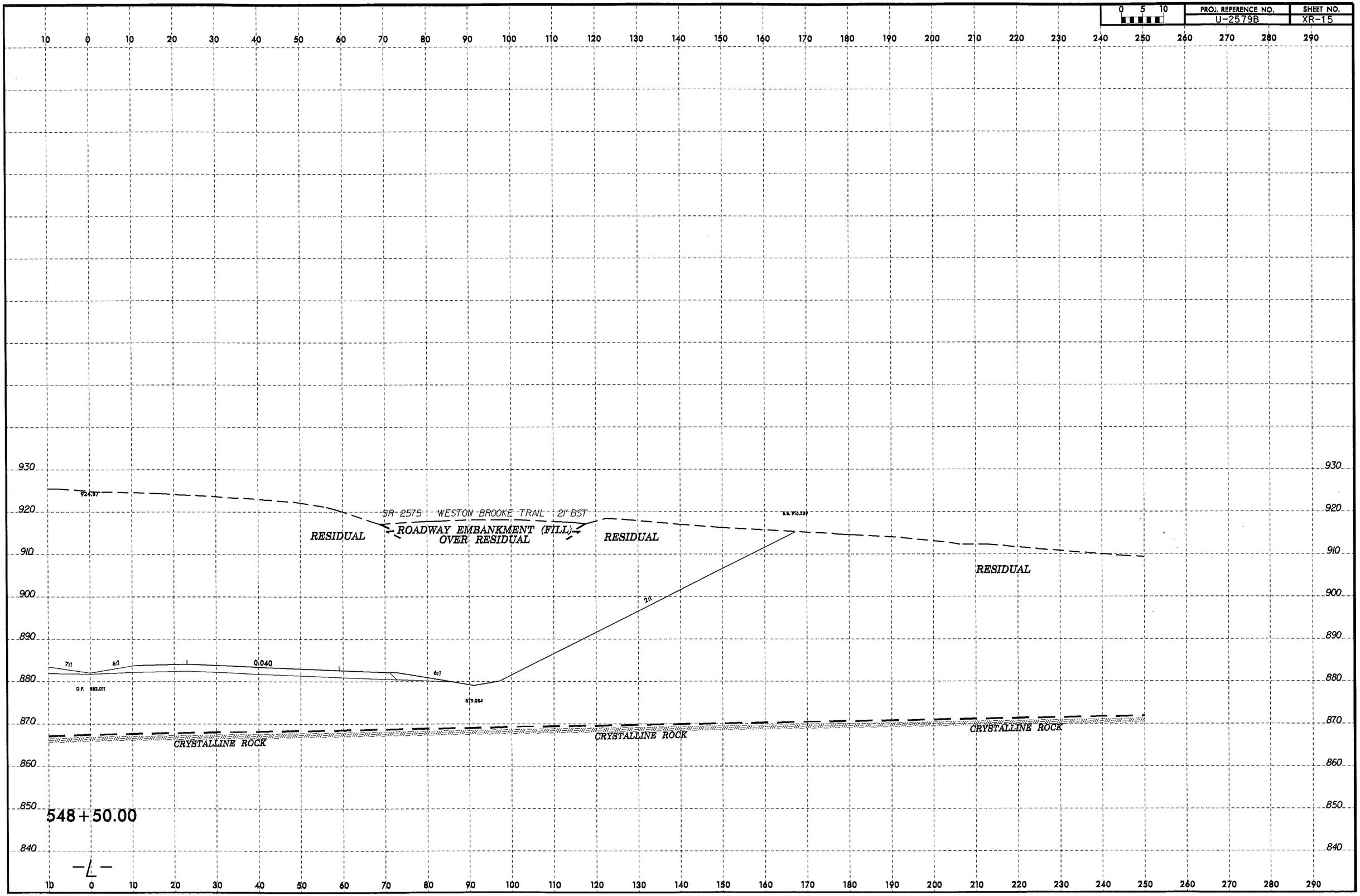
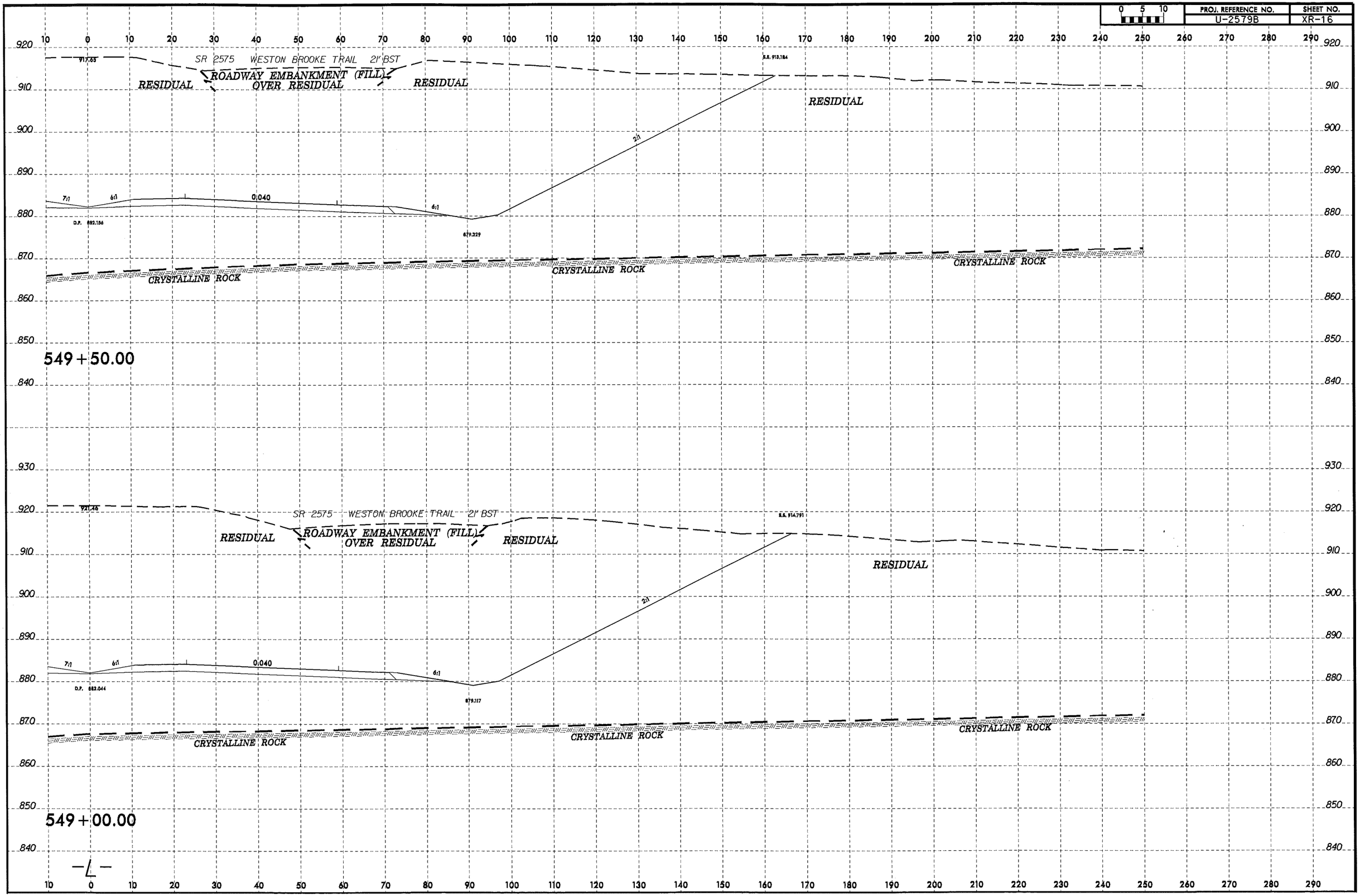
| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-15 |



| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-16 |



8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-17 |

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

WE 908.83

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

RESIDUAL

S.S. 908.595

RESIDUAL

2:1

7:1 6:1 0.040 6:1

D.P. 882.614

879.687

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

550+50.00

SR 2575 WESTON BROOKE TRAIL 21' BST

910.978

ROADWAY EMBANKMENT (FILL) OVER RESIDUAL

RESIDUAL

S.S. 910.598

RESIDUAL

2:1

7:1 6:1 0.040 6:1

D.P. 882.345

879.419

CRYSTALLINE ROCK

CRYSTALLINE ROCK

550+00.00

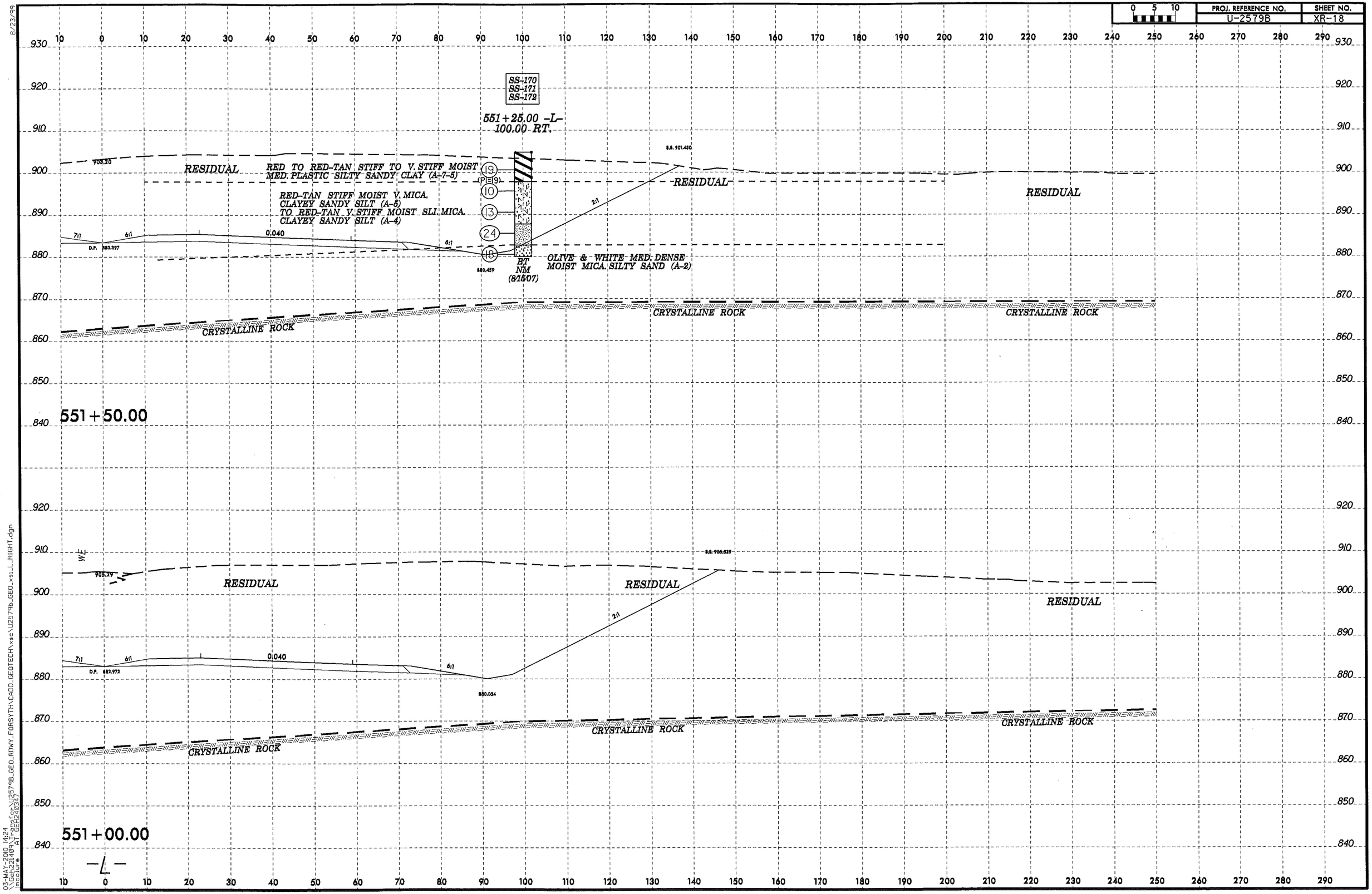
—L—

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

03-MAY-2010 14:22
\\Gen221499\NT_RDS_6\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn
$USER$

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-18 |




03-MAY-2010 14:24
\\Geo\21409\T\BRIDGE\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn
measure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-19 |

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

940
930
920
910
900
890
880

SS-359

648+25.00 -L-
70.00 RT.

BST

929.82

6:1 6:1 RESIDUAL 0.021

D.P. 921.888

919.633

6:1 6:1

S.S. 922.076

RESIDUAL

13

90

AR
DRY
(9/2007)

OLIVE & TAN MED. DENSE DRY SILTY CLAYEY SAND (A-2-4)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

20' BST

RESIDUAL

CRYSTALLINE ROCK

648+00.00

928.73

6:1 6:1 RESIDUAL 0.021

D.P. 921.999

919.743

6:1 6:1

S.S. 923.078

RESIDUAL

20' BST

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

647+50.00
-L-

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

940
930
920
910
900
890
880

03-MAY-2010 14:26
User:rpeterson
Plotted: 03-MAY-2010 14:26
Data: ...\U2579B_GEO_RDWY_FORSYTH\CADD\GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-20 |

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

940 930 920 910 900 890

**649+50.00**

929.68 — 6:1 — 6:1 — 0.021 — *RESIDUAL* — 6:1 — S.S. 920.919 — 6:1 — *18' BST* — *RESIDUAL*

D.P. 920.919 — *CRYSTALLINE ROCK* — 918.694 — *CRYSTALLINE ROCK* — *CRYSTALLINE ROCK*

940 930 920 910 900 890

**649+00.00**

929.09 — 6:1 — 6:1 — 0.021 — *RESIDUAL* — 6:1 — S.S. 920.773 — 6:1 — *18' BAT* — *RESIDUAL*

D.P. 921.363 — *CRYSTALLINE ROCK* — 919.106 — *CRYSTALLINE ROCK* — *CRYSTALLINE ROCK*

940 930 920 910 900 890

**648+50.00**

929.86 — 6:1 — 6:1 — 0.021 — *RESIDUAL* — 6:1 — S.S. 920.826 — 6:1 — *18' BST* — *RESIDUAL*

D.P. 921.676 — *CRYSTALLINE ROCK* — 919.421 — *CRYSTALLINE ROCK* — *CRYSTALLINE ROCK*

—℄—

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

03-MAY-2000 14:27
User:22408 N:\GEM\proj\U2579B_GEO_RDWY_FORSYTH\C40D_GEOTECH\xsc\U2579b_GEO_xs1_L_RIGHT.dgn
Includes: N:\GEM\2034

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-21 |

650+50.00

930.02

RESIDUAL

6:1 6:1 0.021 4:1 4:1

D.P. 919.819

917.864

RESIDUAL

18' BST

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

650+00.00

929.05

RESIDUAL

6:1 6:1 0.021 6:1 4.45:1

D.P. 920.434

S.S. 921.330

918.180

RESIDUAL

18' BST

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

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

940 930 920 910 900 890 880

03-MAY-2016 14:29
\\Gen22140\projects\U2579b_GEO_RDWY_FORSYTH\CADD_GEOTECH\xes\U2579b_GEO_xes_L_RIGHT.dgn
Recouvre
AT_DEFAULT

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-22 |

SS-368

651+68.14 -L-
131.57 RT.
=
25+00 -Y5DET-
CL

18' BST

930.13

RESIDUAL

6:1 6:1 0.021 0.021 6:1 4:1

D.P. 918.285

915.078

25 75

BT
DRY
(9/2007)

SP I26
-L- STA. 651+50.0000
-Y4RPC- STA. 11+38.0000
ELEV. 923.580

RESIDUAL

BRN-TAN TO OLIVE-TAN MED. DENSE TO V. DENSE
MOIST SILTY CLAYEY SAND (A-2-4)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

651+50.00

930.42

RESIDUAL

6:1 6:1 0.021 0.021 6:1 4:1

D.P. 919.211

914.956

18' BST

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

650+92.88

-L-

03-MAY-2010 14:30
\\Geo22146\T\BERGER\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsi_L_RIGHT.dgn
Measure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-23 |

652+50.00 -L-

652+00.00 -L-

SS-374
SS-375
SS-376
SS-377

652+66.43 -L- 252.30 RT.
=
31+02 -Y5- 17.00 RT.

18' BST

933.95

RESIDUAL

6:1 6:1 0.021 0.021 6:1 4:1 4:1

D.P. 916.348

914.223

SP 128
-L- STA. 652+50.0000
-Y4RPC- STA. 16+46.0000
ELEV. 916.179

RESIDUAL

RESIDUAL
RED-TAN STIFF MOIST LOW PLASTIC (PI=14)
SLI. MICA. SANDY SILTY CLAY (A-7-5)

RED-TAN STIFF MOIST V. MICA.
CLAYEY SANDY SILT (A-5)

RED-TAN MED. DENSE TO DENSE MOIST
V. MICA. SILTY SAND (A-2-5)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

10 10 14 11 14 14 15 50/1"

AR
DRY
(10/07)

934.79

RESIDUAL

6:1 6:1 0.021 0.021 6:1 4:1 4:1

D.P. 917.367

918.301

SP 127
-L- STA. 652+00.0000
-Y4RPC- STA. 16+93.0000
ELEV. 919.474

18' BST

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

970 960 950 940 930 920 910 900 890 880

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

03-MAY-2010 14:32
\\Gen22140\p_1\88552\ncs\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xs_L_RIGHT.dgn
measure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-24 |

653+50.00

653+00.00

RESIDUAL

CRYSTALLINE ROCK

- Y4RPC -
STA 15+63.9981

SP 129
-L- STA. 653+00.0000
-Y4RPC- STA. 15+98.0000
ELEV. 913.298

D.P. 914.007
D.P. 909.241
907.343
913.145
D.P. 913.228
930.47
932.364
932.26

6:1
0.021
0.071
6.43:1
6.45:1
2.15:1
4:1

03-MAY-2010 14:34
User:221407
File:f:\projects\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xs_L_RIGHT.dgn
Figure A1-REB2010347

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-25 |

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

940 930 920 910 900 890 880

927.51

RESIDUAL

6:1 6:1 0.021 6:1 6.25:1 0.072 0.072 6.25:1

D.P. 911.363

909.741

905.987

- Y4RPC -
STA 14+58.4042

RESIDUAL

2.08:1

S.S. 926.927

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

654+50.00

L 65400
L
654+00.00 R 1
0.0000

18 17 16 14 17

RESIDUAL

RESIDUAL, RED V. STIFF MOIST LOW (PI=12) PLASTIC SILTY SANDY CLAY (A-7-5)

6:1 6:1 6:1 6.34:1 0.071 0.071 6.38:1

906.991

906.533

- Y4RPC -
STA 15+18.3284

RESIDUAL

3.12:1

S.S. 930.812

RESIDUAL

RESIDUAL, TAN TO OLIVE STIFF TO V. STIFF MOIST MICA. CLAYEY SANDY SILT (A-5)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

653+92.88

—L—

950 940 930 920 910 900 890 880

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

03-MAY-2016 14:35
\\Gen-22140\...\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsLL_RIGHT.dgn
Microstation V8 (SELECTseries 3)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-26 |

656+00.00

912.60 6:1 6:1 D.P. 906.390 RESIDUAL 0.021 0.075 0.075 – Y4RPC – STA 13+04.6647 6.07:1 901.950 RESIDUAL 2.00:1 S.S. 913.184 RESIDUAL

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

655+50.00

918.01 6:1 6:1 D.P. 908.118 RESIDUAL 0.021 – Y4RPC – STA 13+55.4444 0.074 0.074 6.12:1 903.248 RESIDUAL 2.04:1 S.S. 917.748 RESIDUAL

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

655+00.00

924.15 6:1 6:1 D.P. 909.740 RESIDUAL 0.021 6:1 6.17:1 – Y4RPC – STA 14+06.6552 0.073 0.073 6.18:1 904.988 RESIDUAL 2.04:1 S.S. 922.142 RESIDUAL

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

03-MAY-2010 14:36
\\Gen22140^A\Proj\Forsyth\U2579B_GEO_RDWY_FORSYTHYCADD_GEOTECH\xsec\U2579b_GEO_xs_L_RIGHT.dgn
Microstation V8 (SELECTseries 2)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-27 |

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

930
920
910
900
890
880
870

SS-368

657+00.00 -L-
CL

- Y4RPC -
STA 12+04.0033

RESIDUAL

0.021

0.069

6:1

3.33:1

B.S. 908.526

RESIDUAL

RESIDUAL

RED-TAN V. STIFF MOIST MED. PLASTIC SILTY SANDY CLAY (A-7-6)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

BT
NM
(9/21/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

657+00.00

908.18

6:1

6:1

0.021

0.076

0.076

6.04:1

2.01:1

B.S. 907.954

D.P. 904.564

900.455

RESIDUAL

RESIDUAL

RESIDUAL

- Y4RPC -
STA 12+54.2164

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

656+50.00

-L-

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

03-MAY-2010 14:38
\\Gen22\140\71\RDWY_Eng\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsl_L_RIGHT.dgn
Microstation J [REDACTED]

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-28 |

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

7:1 6:1 0.050 4:1

D.F. 856.795

850.01

S.S. 849.642

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

669+50.00

SS-415

669+00.00 -L- CL

7:1 6:1 0.050 2:1

D.F. 857.872

844.41

10/07

ALLUVIUM

TAN & GRAY V. SOFT WET TO SAT. MICA. CLAYEY SANDY SILT (A-4) WITH GRAVEL AT BASE

RESIDUAL

GRAY & WHITE LOOSE WET V. MICA. SILTY SAND (A-2)

BT

S.S. 840.111

ALLUVIUM

RESIDUAL

ALLUVIUM

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

669+00.00 -L-

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

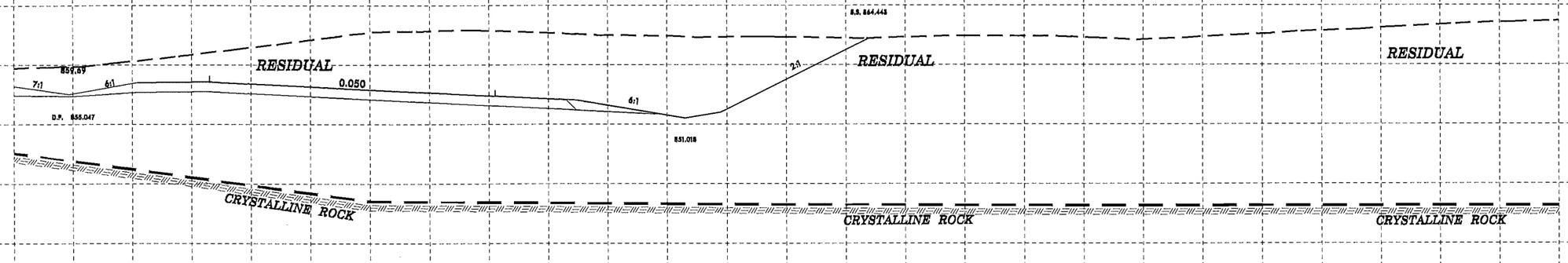
03-MAY-2016 14:40
\\Gen22140\...\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xs_L_RIGHT.dgn
Acrobat Distiller 10.0.0 (Windows)

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-29 |

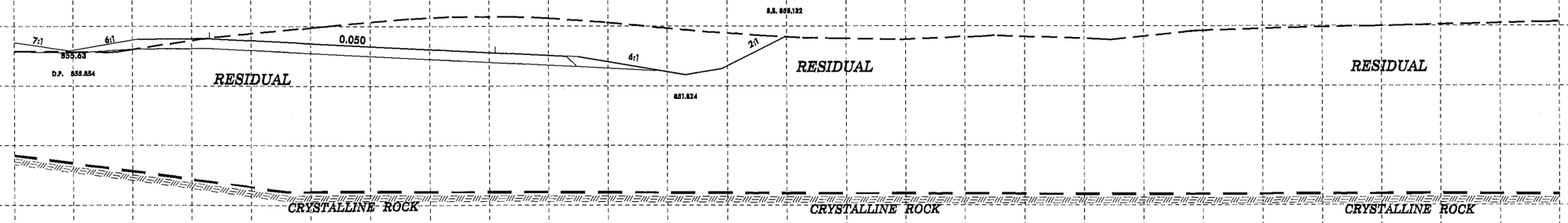
10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290

880 870 860 850 840 830

**670+50.00**




820 870 860 850 840 830




820 810

**670+00.00**

—L—

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

8/23/99

03-MAY-2010 14:43
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$USER
$DESIGN

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-30 |

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

RESIDUAL
RESIDUAL
RESIDUAL
CRYSTALLINE ROCK
CRYSTALLINE ROCK
CRYSTALLINE ROCK
7:1
6:1
0.050
6:1
2:1
849.812
669.34
671+50.00

RESIDUAL
RESIDUAL
RESIDUAL
CRYSTALLINE ROCK
CRYSTALLINE ROCK
CRYSTALLINE ROCK
7:1
6:1
0.050
6:1
2:1
850.347
654.49
671+00.00

830

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XR-31 |

0 5 10

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

**672+50.00**

881.89

*RESIDUAL*

D.P. 853.176

7:1 6:1

0.050

*CRYSTALLINE ROCK*

6:1

849.146

*RESIDUAL*

2:1

E.S. 887.939

*CRYSTALLINE ROCK*

*RESIDUAL*

*CRYSTALLINE ROCK*

**672+00.00 –L– 100.00 RT.**

878.53

*RESIDUAL*

*RED-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)*

*WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)*

*OLIVE MED. TO V. DENSE MOIST V. MICA. SILTY SAND (A-2)*

2:1

E.S. 882.147

*RESIDUAL*

7:1 6:1

0.050

6:1

D.P. 852.441

*CRYSTALLINE ROCK*

AR 849.411
DRY
(10/10/07)

*CRYSTALLINE ROCK*

*CRYSTALLINE ROCK*

**672+00.00**
**–L–**

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-32 |

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

910 900 890 880 870 860 850 840 830

687.70

RESIDUAL

CRYSTALLINE ROCK

7:1 6:1 D.P. 853.052 0.050 4:1 849.022

RESIDUAL

CRYSTALLINE ROCK

2:1 E.S. 898.936

RESIDUAL

CRYSTALLINE ROCK

673+50.00

673+21.92 -L-
124.35 RT.

E.S. 894.198

RESIDUAL

RED-BRN & OLIVE MED. DENSE TO V. DENSE MOIST CLAYEY SILTY SAND TO SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR DRY (10/11/07)

CRYSTALLINE ROCK

RESIDUAL

673+00.00 -L-
CL

RED-TAN MED. STIFF TO STIFF MOIST SANDY SILTY CLAY (A-7)

RESIDUAL

TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (OLIVE SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR DRY (10/10/07) D.P. 853.046

7:1 6:1 0.050 6:1 849.017

673+00.00

-L-

03-MAY-2010 15:16
N:\Geol\224\proj\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579B_GEO_xs_LL_RIGHT.dgn
$USER$

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-33 |

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

674+49.12 -L-
32.24 RT.

674+30.97 -L-
150.54 RT.

674+50.00

RESIDUAL

TAN & OLIVE MED DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

RED-TAN TO OLIVE MED DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND TO SILTY SAND (A-2)

S.S. 902.425

892.79

AR
DRY
(10/1/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

2:1

7:1 6:1 0.050 6:1

D.P. 853.469

849.439

BT
DRY
(10/1/07)

CRYSTALLINE ROCK

674+00.00
-L-

RESIDUAL

RESIDUAL

S.S. 901.007

889.86

CRYSTALLINE ROCK

2:1

CRYSTALLINE ROCK

7:1 6:1 0.050 6:1

D.P. 853.192

849.163

CRYSTALLINE ROCK

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

03-MAY-2010 15:17
\\Cen2240\P_Proj\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xs\U2579b_GEO_xsLL_RIGHT.dgn
Microstation V8 - PERP240342

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-34 |

674+88.93 -L-
82.28 RT.

RESIDUAL

TAN TO OLIVE MED. DENSE TO DENSE MOIST SLI. MICA. CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE DENSE MOIST MICA CLAYEY SILTY SAND (A-2)

AR
NM

WEATHERED ROCK (101607)
(SEV. WEATH. CRYSTALLINE ROCK)
OVER CRYSTALLINE ROCK

RESIDUAL

876.81

RESIDUAL

E.R. 900.062

CRYSTALLINE ROCK

7:1

6:1

0.050

D.P. 853.880

6:1

849.881

7:1

CRYSTALLINE ROCK

CRYSTALLINE ROCK

675+00.00
-L-

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

03-MAY-2000 15:19
\Geo\224867\T_SEP\224867_GEO_RDWY_FORSYTH\CADD_GEOTECH\xs\U2579b_GEO_xs1_L_RIGHT.dgn
Microstation V8 SELECTseries 1 (08.01.03.43)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-35 |

675+25.98 -L-
34.04 RT

675+32.28 -L-
130.45 RT.

RESIDUAL

TAN MED. DENSE DRY CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

OLIVE-TAN DENSE TO V. DENSE DRY MICA CLAYEY SILTY SAND (A-2)

AR

NM

(10/1607) WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

894.34

E.P. 897.664

RESIDUAL

TAN & OLIVE MED. DENSE TO V. DENSE MOIST V. MICA CLAYEY SILTY SAND (A-2) (SEV. WEATH. CRYSTALLINE ROCK @ 16.0–17.0 & 37.0–39.0)

2:1

10/07

7:1

6:1

0.050

6:1

D.P. 854.427

850.398

AR

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

675+50.00
-L-

920 910 900 890 880 870 860 850 840 830

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

03-MAY-2010 15:20
\\den-2148\...\RIGHT.dgn
Enclosure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-36 |

676+20.21 -L-
16.83 RT.

902.87

RESIDUAL

RED-TAN TO BRN-TAN MED. DENSE MOIST V. MICA. CLAYEY SILTY SAND (A-2)

CRYSTALLINE ROCK

AR
DRY
(10/1907) WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)
OVER CRYSTALLINE ROCK

7:1 6:1 D.P. 885.109 0.050 6:1 851.080

2:1

894.656

RESIDUAL

CRYSTALLINE ROCK

676+00.00

-L-

03-MAY-2010 15:21
\\Gen\22140\01-REPL\ap\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsL_L_RIGHT.dgn
mcclure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-37 |

SS-427
SS-428
SS-429

676+51.52 -L-
45.71 RT.

676+62.85 -L-
115.61 RT.

906.02

RESIDUAL

(13)
(PI=5)
(10)
(11)
(20)
(17)

RED-TAN TO OLIVE STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5)

OLIVE MED. DENSE MOIST SILTY SAND (A-2-5)

CRYSTALLINE ROCK

AR
DRY
(10/7/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

TAN TO OLIVE-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

S.S. 892.435

OLIVE-TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

10/07

7:1
6:1
0.048
6:1
D.P. 855.928
852.012

AR
DRY
(10/19/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

676+50.00
-L-

03-MAY-2010 15:22
\\Den22140\...\PROJECTS\U2579B_GEO_ROW_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xs_L_RIGHT.dgn
Measure

6/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-38 |

677+42.42 -L-
109.28 RT.

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

TAN TO OLIVE MED. DENSE MOIST
CRUSTY CLAYEY SILTY SAND (A-2)

RESIDUAL

CRYSTALLINE ROCK

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
DRY
(101907)

677+50.00

677+24.93 -L-
9.54 RT.

677+01.78 -L-
53.07 RT.

RESIDUAL

RED-TAN MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)

AR
NM
(101807)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

TAN & OLIVE MED. DENSE TO V. DENSE
MOIST CLAYEY SILTY SAND (A-2)
WITH SEV. WEATH. CRYSTALLINE ROCK
SEAMS FROM 17.0-45.0

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

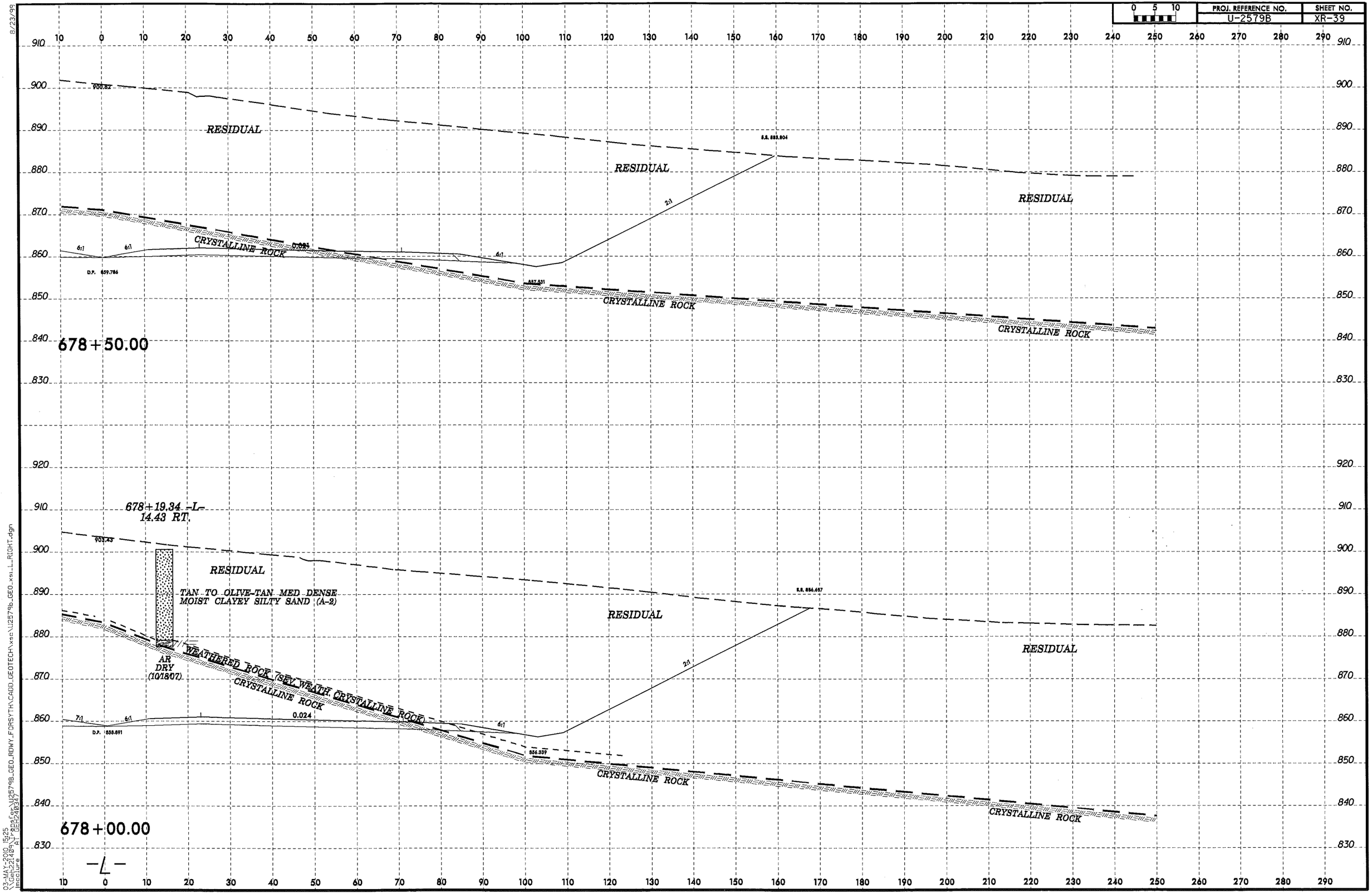
AR
NM
(102407)

677+00.00

-L-

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-39 |

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\Geo122409\Projects\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xsL_RIGHT.dgn
mcclure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-40 |

679+38.53 -L-
87.48 RT.

RESIDUAL

RESIDUAL

RED-TAN TO OLIVE-TAN MED. DENSE TO V. DENSE
MOIST SLI. MICA. TO V. MICA. CLAYEY SILTY SAND (A-2)

RESIDUAL

6:1 6:1 0.021 6:1

D.P. 861.650

AR
DRY
(10/1907)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

679+50.00

RESIDUAL
TAN & OLIVE MED. DENSE MOIST
CLAYEY SILTY SAND (A-2)
WITH SEV. WEATH. CRYSTALLINE
ROCK SEAMS @ 21.5

679+17.07 -L-
19.92 RT.

679+12.79 -L-
49.34 RT.

RESIDUAL
TAN TO OLIVE MED. DENSE
MOIST CLAYEY SILTY SAND (A-2)

AR
NM
(10/1907)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1 2:1

RESIDUAL

AR
DRY
(10/1907)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

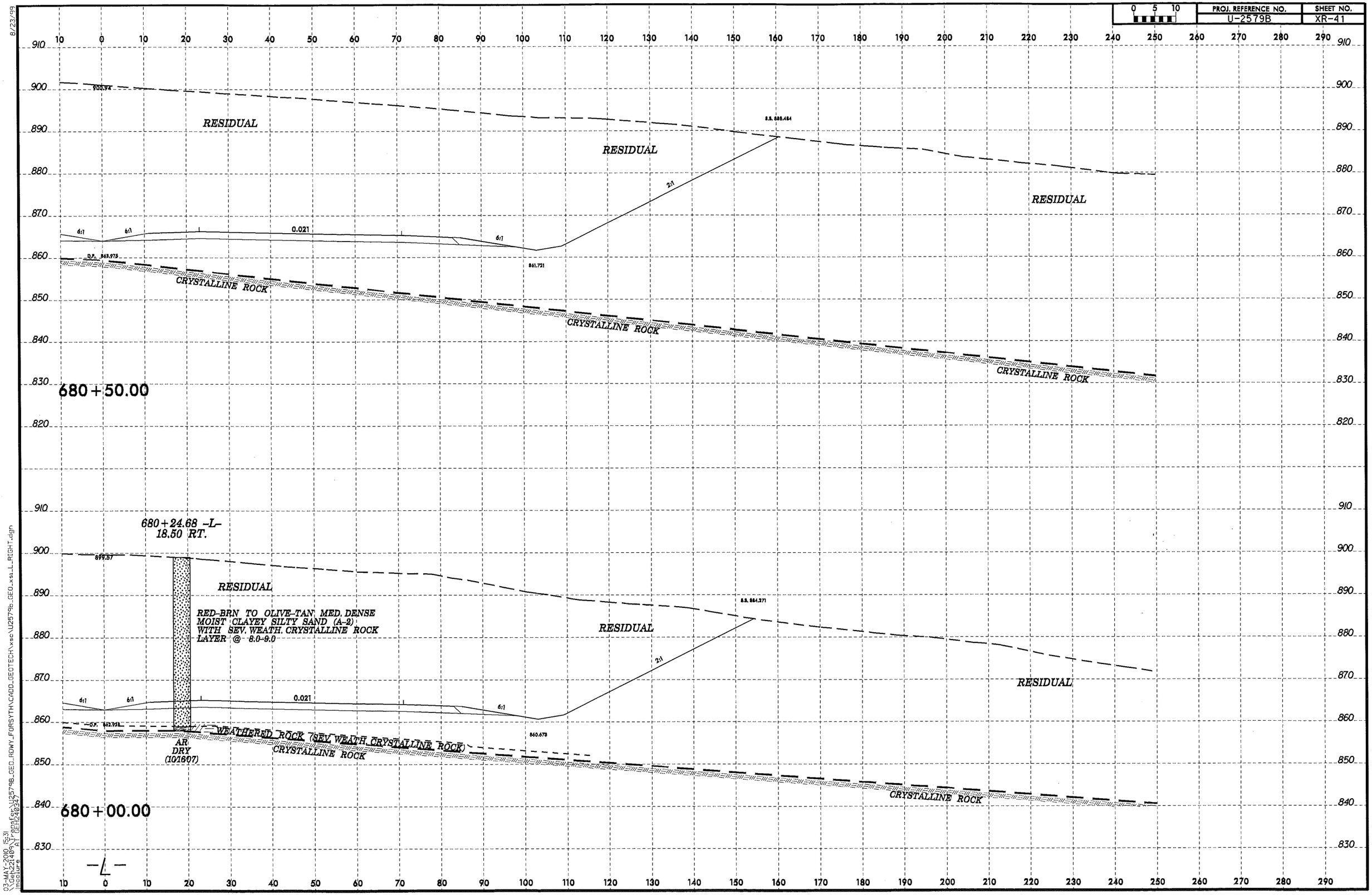
679+00.00
-L-

03-MAY-2010 15:29
\Geo\22148\XT\EPE240347
Roadway: FT: EPE240347

I:\Geo\22148\XT\EPE240347\Roadway\FORSYTH\CADD_GEOTECH\xsc\U2579B_GEO_RDWY_FORSYTH_xsL_RIGHT.dgn

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-41 |




03-MAY-2010 15:31
\Geh221409\pf_eng\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsc\U2579b_GEO_xsl_L_RIGHT.dgn
Measure All Elements

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-42 |

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

681+57.19 -L-
107.63 RT.

903.91

RESIDUAL

RESIDUAL
RED-BRN & OLIVE MED. DENSE MOIST
V. MICA. CLAYEY SILTY SAND (A-2)

E.S. 878.175

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

AR
DRY
(102307)

d:1 d:1 0.021 d:1

D.P. 866.070

843.815

681+50.00

910 900 890 880 870 860 850 840 830 820

681+08.05 -L-
97.36 RT.

902.62

RESIDUAL

RESIDUAL

E.S. 891.218

RED-TAN TO OLIVE MED. DENSE MOIST
V. MICA. CLAYEY SILTY SAND (A-2)

RESIDUAL

d:1 d:1 0.021 d:1

D.P. 865.023

CRYSTALLINE ROCK

852.768

BT
DRY
(102507)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

681+00.00

-L-

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

03-MAY-2010 15:32
\\Geh2214\P_RDS_proj\U2579B_GEO_RDWY_FORSYTH\CADD_GEOTECH\xsec\U2579b_GEO_xsL_RIGHT.dgn
Microstation V8 (1 RDS 2010342)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-43 |

682+50.00 -L-
100.00 RT.

RESIDUAL

899.62

RED-TAN TO OLIVE-TAN & OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
DRY
(10/25/07)

S.S. 899.476

RESIDUAL

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1

D.F. 868.165

865.910

682+50.00

SS-423 MS-425
RT-3 ST-3
SS-424 SS-426
SS-425 MS-426

681+92.21 -L-
20.07 RT.

902.35

RESIDUAL

RED-TAN STIFF MOIST V. MICA. CLAYEY SANDY SILT (A-5)

OLIVE LOOSE TO V. DENSE MOIST V. MICA. CLAYEY SILTY SAND TO SILTY SAND (A-2-5)

ST-3

CRYSTALLINE ROCK

AR
DRY
(10/7/07)

681+91.72 -L-
81.93 RT.

RED-TAN TO TAN MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(10/25/07)

S.S. 897.795

RESIDUAL

CRYSTALLINE ROCK

6:1 6:1 0.021 6:1 2:1

D.F. 867.117

864.863

682+00.00
-L-

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

920 910 900 890 880 870 860 850 930

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mroslure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-44 |

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

SS-422
MS-422

683+31.36 -L-
4.61 RT.

893.51

RESIDUAL

RED-TAN TO TAN & OLIVE DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2) WITH SEV. WEATH. CRYSTALLINE ROCK LAYER @ 18.5-19.0

6:1 6:1 0.021 6:1

D.P. 870.380

10/07

TAN STIFF TO V. STIFF WET V. MICA. CLAYEY SANDY SILT (A-5)

BT

CRYSTALLINE ROCK

683+50.00

683+46.55 -L-
93.28 RT.

RED-TAN TO OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

AR
NM
(102507)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

868.008

S.S. 897.377

RESIDUAL

CRYSTALLINE ROCK

682+77.05 -L-
13.51 RT.

876.49

RESIDUAL

RED-TAN TO OLIVE MED. DENSE TO DENSE NON MICA. TO V. MICA. MOIST CLAYEY SILTY SAND (A-2)

6:1 6:1 0.021 6:1

D.P. 869.212

10/07

WR

BT

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

683+00.00 -L-
50.00 RT.

RED-TAN TO OLIVE MED. DENSE MOIST NON MICA. TO V. MICA. CLAYEY SILTY SAND (A-2) WITH CRUSTY LAYERS @ 3.5-3.8

BT
DRY
(102507)

CRYSTALLINE ROCK

683+07.49 -L-
101.54 RT.

RED-TAN TO OLIVE MED. DENSE MOIST NON MICA. TO V. MICA. CLAYEY SILTY SAND (A-2)

2:1

894.256

BT
DRY
(102507)

S.S. 878.409

RESIDUAL

CRYSTALLINE ROCK

683+00.00
-L-

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-45 |

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

887.66

RESIDUAL

6:1 6:1 0.021 6:1

D.P. 872.354

CRYSTALLINE ROCK

870.100

S.S. 893.612

RESIDUAL

2:1

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

684+50.00

910 900 890 880 870 860 850 840

684+00.00 -L-
130.39 RT.

S.S. 876.414

RED-TAN TO OLIVE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(1025/07)

890.44

RESIDUAL

6:1 6:1 0.021 6:1

D.P. 871.984

869.052

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

684+00.00

-L-

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

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Microstation

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8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | XR-46 |

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

S.S. 880.924

6:1 876.62 6:1 0.021 6:1 2:1

D.P. 874.449

RESIDUAL

873.075

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

685+50.00

900 890 880 870 860 850 840

S.S. 886.341

883.77

RESIDUAL

6:1 6:1 0.021 6:1 2:1

D.P. 873.402

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

685+00.00

—L—

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

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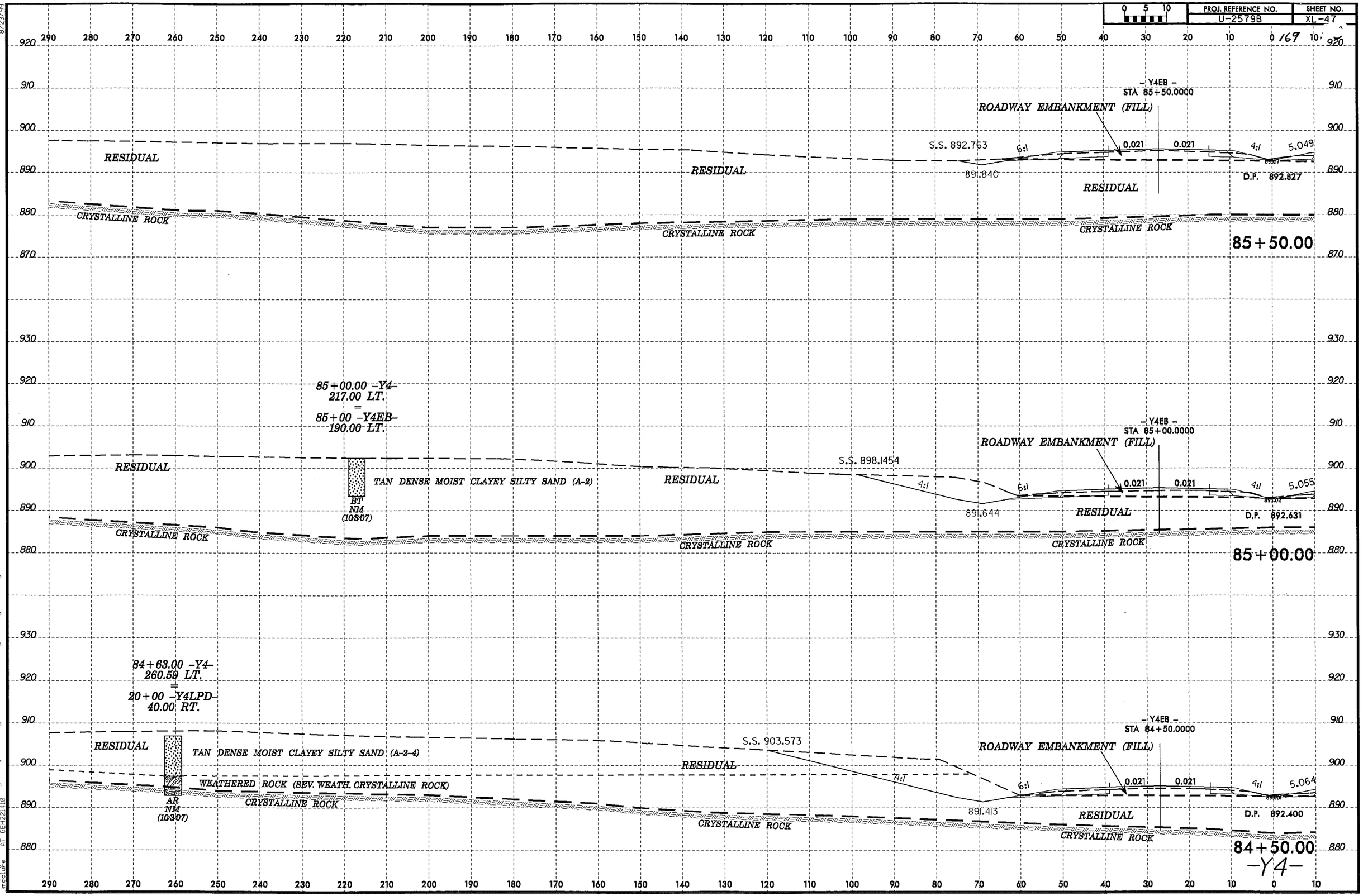
mecclure

8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | XL-47 |

0 5 10

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microstation V8 (SELECTseries)

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-1 |

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 170 150

910 900 890 880 870 860 850 840

72+75.00 -Y5A-
CL

889.67

S.S. 883.132

S.S. 891.268

RESIDUAL

RED-TAN TO OLIVE-TAN DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

RESIDUAL

2:1

6:1

0.021

0.021

6:1

2:1

863.238

863.238

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

AR
NM
(9/14/07)

72+66.00

71+90.00 -Y5A-
25.00 LT.

72+25.00 -Y5A-
25.00 RT.

889.26

S.S. 883.082

S.S. 891.889

RESIDUAL

RED TO TAN-OLIVE DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

RESIDUAL

2:1

2:1

6:1

0.021

0.021

6:1

867.397

867.397

BT
NM
(9/13/07)

BT
NM
(9/14/07)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

CRYSTALLINE ROCK

BEGIN ROCK
72+14.00
-Y5A-

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

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mcclure
AT GEI 2410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-2 |

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 /7/ 150

900 890 880 870 860 850

73+75.00 -Y5A-
50.00 LT.

S.S. 886.299

890.11

RESIDUAL

TAN TO OLIVE DENSE TO V. DENSE
DRY CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

RESIDUAL

2:1

AR
NM
(91407)

CRYSTALLINE ROCK

6:1 0.016 0.020 6:1

854.981 854.925

73+70.00

S.S. 890.600

RESIDUAL

CRYSTALLINE ROCK

910 900 890 880 870 860 850

73+00.00 -Y5A-
50.00 RT.

S.S. 885.658

890.64

RESIDUAL

RED-TAN DENSE MOIST
CLAYEY SILTY SAND (A-2)

S.S. 890.654

RESIDUAL

2:1

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

6:1 0.021 0.021 6:1

AR
NM
(91407)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

859.079 859.079

73+18.00

-Y5A-

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

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mcclure
41 GEOPAK 10

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-3 |



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

890 880 870 860 850 840

S.S. 873.228

879.35

S.S. 882.532

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1

0.027 0.027

847.263

846.575

**74+73.00**

900 890 880 870 860 850 840

74+00.00 -Y5A-
CL

74+00.00 -Y5A-
60.00 RT.

RESIDUAL

TAN DENSE TO V.DENSE MOIST CLAYEY SILTY SAND (A-2) WITH SEV. WEATH. CRYSTALLINE ROCK SEAMS @ 3.5

887.50

S.S. 879.959

S.S. 887.071

TAN DENSE TO V.DENSE MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR NM (9/14/07)

AR NM (9/14/07)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1

0.006 0.020

851.087

850.773

**74+22.00**

-Y5A-

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

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Imperial AT GEN22.rsc

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-4 |

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140/73 150

880 870 860 850 840 830

S.S. 863.178

869.03

S.S. 872.867

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1

0.030 0.030

841.135

840.375

75+50.00

890 880 870 860 850 840 830

75+25.00 -Y5A-
25.00 LT.

75+00.00 -Y5A-
CL

S.S. 868.132

S.S. 876.680

RED-TAN TO OLIVE DENSE TO V. DENSE MOIST CLAYEY SILTY SAND (A-2)

WR

AR NM (9/1407)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

TAN DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATHERED CRYSTALLINE ROCK)

843.935

843.175

75+15.00

-Y5A-

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

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mcclure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-5 |



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

880 870 860 850 840 830 820 810 800

SS-324

76+50.00 -Y5A-
90.00 RT.

S.S. 852.031

76+75.00 -Y5A-
25.00 RT.

S.S. 846.597

849.81

RESIDUAL

TAN TO OLIVE DENSE TO V. DENSE DRY CLAYEY SILTY SAND TO SILTY SAND (A-2)

RED-BRN STIFF TO V. STIFF MOIST LOW PLASTIC SILTY SANDY CLAY (A-7-5) (PI=11)

27

RESIDUAL

CRYSTALLINE ROCK

2:1

6:1

0.030

0.030

CRYSTALLINE ROCK

833.137

832.377

AR
NM
(9/13/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(9/13/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

RESIDUAL

CRYSTALLINE ROCK

76+50.00

76+00.00 -Y5A-
40.00 LT.

76+00.00 -Y5A-
CL

76+00.00 -Y5A-
60.00 RT.

S.S. 854.929

860.48

S.S. 864.659

RESIDUAL

TAN DENSE TO V. DENSE DRY CLAYEY SILTY SAND (A-2)

BRN-TAN DENSE TO V. DENSE DRY TO MOIST CLAYEY SILTY SAND (A-2)

BRN-TAN DENSE TO V. DENSE DRY TO MOIST CLAYEY SILTY SAND (A-2)

RESIDUAL

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

WR (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

CRYSTALLINE ROCK

AR
NM
(9/13/07)

AR
NM
(9/13/07)

AR
NM
(9/13/07)

2:1

6:1

0.030

0.030

6:1

837.136

836.376

76+00.00

-Y5A-

880 870 860 850 840 830 820 810

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

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mcclure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-6 |



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

S.S. 826.876
3.36:1
6:1
829.05
0.030 0.030
RESIDUAL
6:1
822.399
CRYSTALLINE ROCK
821.639
S.S. 825.777
3.19:1
SR 2667
HASTINGS HILL RD
20' BST
RESIDUAL
CRYSTALLINE ROCK
RESIDUAL
CRYSTALLINE ROCK

78+00.00

850 840 830 820 810

77+50.00 -Y5A-
10.00 RT.
S.S. 832.621
834.74
RED-TAN DENSE MOIST CLAYEY SILTY SAND (A-2)
RESIDUAL
2:1
6:1
0.030 0.030
822.074
CRYSTALLINE ROCK
AR
NM
(9/13/07)
6:1 WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)
824.866
S.S. 833.706
2:1
SR 2667
HASTINGS HILL RD
20' BST
RESIDUAL
CRYSTALLINE ROCK
RESIDUAL
CRYSTALLINE ROCK

77+50.00

860 850 840 830 820 810 800

77+00.00 -Y5A-
35.00 LT.
S.S. 838.694
2:1
840.93
RESIDUAL
TAN TO OLIVE-GRAY DENSE TO V.DENSE DRY
CLAYEY SILTY SAND TO SILTY SAND (A-2)
6:1
0.030 0.030
6:1
2:1
S.S. 841.593
RESIDUAL
TAN DENSE MOIST CLAYEY SILTY SAND (A-2)
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK
828.765
AR
NM
(9/14/07)
RESIDUAL
WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)
CRYSTALLINE ROCK
76+93.67 -Y5A-
134.00 RT.
=
11+50 -Y6-
CL
AR
NM
(9/21/07)

77+00.00
-Y5A-

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

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A1 GEN22410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-7 |

176

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

NO ROCK

SR 2667 HASTINGS HILL RD 20' BST

S.S. 814.947 6:1 0.030 0.030 6:1 S.S. 814.556

817.12

814.878 RESIDUAL 814.118

ALLUVIUM RESIDUAL RESIDUAL ALLUVIUM ALLUVIUM

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

79+50.00

S.S. 817.838

819.22

S.S. 816.056 816.265

RESIDUAL RESIDUAL RESIDUAL ALLUVIUM

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

79+00.00

78+25.00 -Y5A-
50.00 LT.

RESIDUAL
TAN LOOSE DRY SAND (A-2)

S.S. 822.444

824.54

S.S. 821.853

AR NM (9/1/07)

819.532

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

818.772

RESIDUAL RESIDUAL RESIDUAL

CRYSTALLINE ROCK CRYSTALLINE ROCK CRYSTALLINE ROCK

78+50.00

-Y5A-

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AI 0614224.10

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-1 |

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140/77 150

890 880 870 860 850 840 830 820 810 800

SS-324

11+37.00 -Y6-
59.88 RT.
=
76+50 -Y5A-
90.00 RT.

11+40.96 -Y6-
117.27 RT.
=
76+00 -Y5A-
60.00 RT.

RESIDUAL
RED-BRN STIFF TO V. STIFF MOIST
LOW PLASTIC SILTY SANDY CLAY
(A-7-6)

RESIDUAL
BRN-TAN DENSE TO
V. DENSE DRY TO MOIST
CLAYEY SILTY SAND (A-2)

S.S. 853.452

RESIDUAL

(PI=11)

AR
NM
(913/07)

WEATHERED ROCK
(SEV. WEATHERED
CRYSTALLINE ROCK)

CRYSTALLINE ROCK

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

SR 2667
HASTINGS HILL RD
20' BST

11+50.00 -Y6-
CL

S.S. 831.154

4:1

0.042 0.042

4:1

RESIDUAL

ROADWAY EMBANKMENT (FILL)

TAN DENSE MOIST CLAYEY SILTY SAND (A-2)

828.534

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

AR
NM
(921/07)

829.829

RESIDUAL

CRYSTALLINE ROCK

11+25.00

10+57.51 -Y6-
70.13 RT.
=
76+75 -Y5A-
25.00 RT.

S.S. 845.780

RESIDUAL

TAN TO OLIVE DENSE TO V. DENSE DRY
CLAYEY SILTY SAND TO SILTY SAND (A-2)

CRYSTALLINE ROCK

2.02:1

836J3

SR 2667
HASTINGS HILL RD
20' BST

S.S. 828.166

4:1

4:1

0.061 0.062

4.04:1

RESIDUAL

ROADWAY EMBANKMENT (FILL)

825.027

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK 826.881

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

AR
NM
(913/07)

BEGIN ROCK
10+75.00
-Y6-

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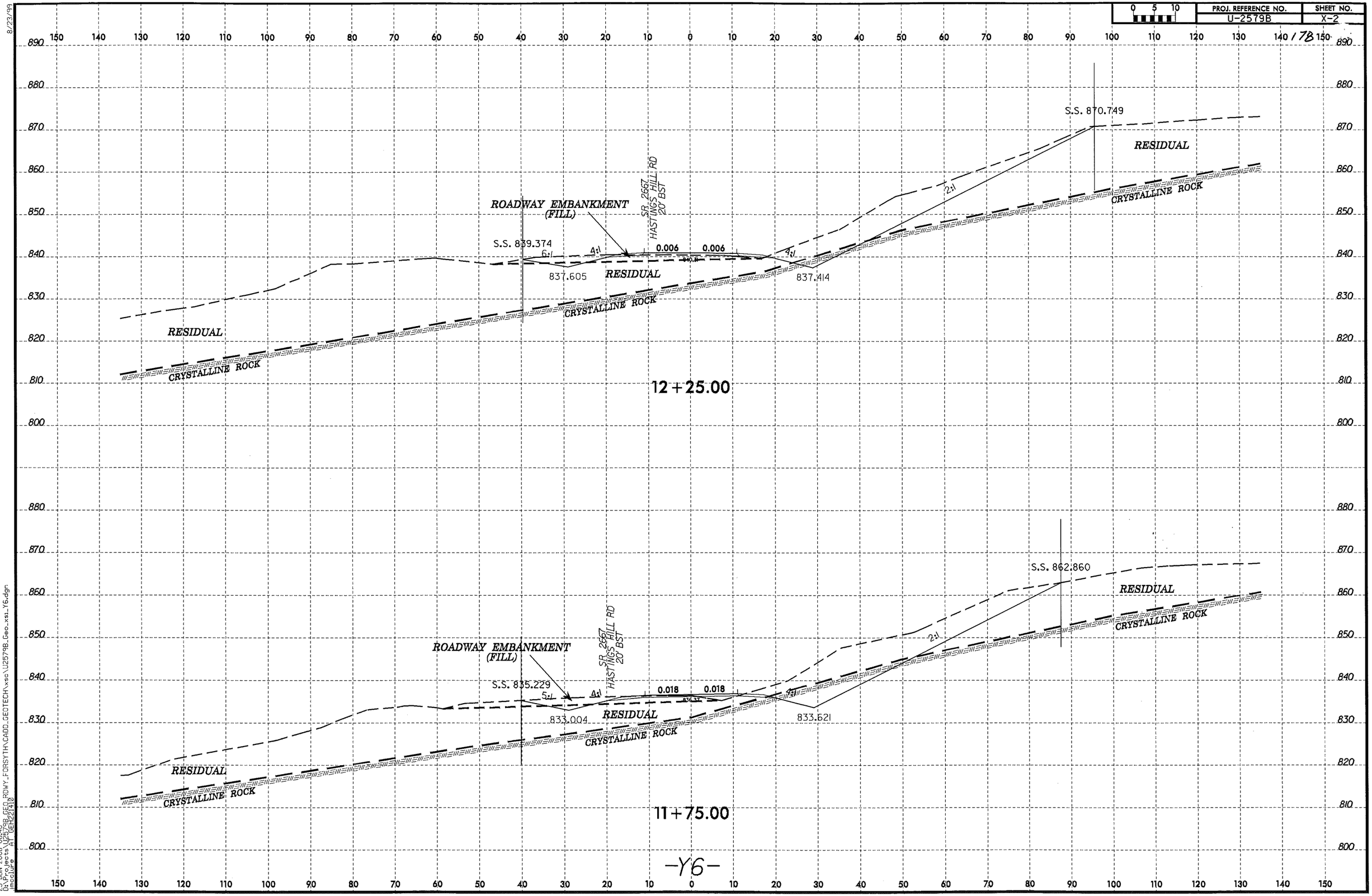
mcclure
$cell_scale 1 $cell_angle 0

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

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-2 |






-Y6-

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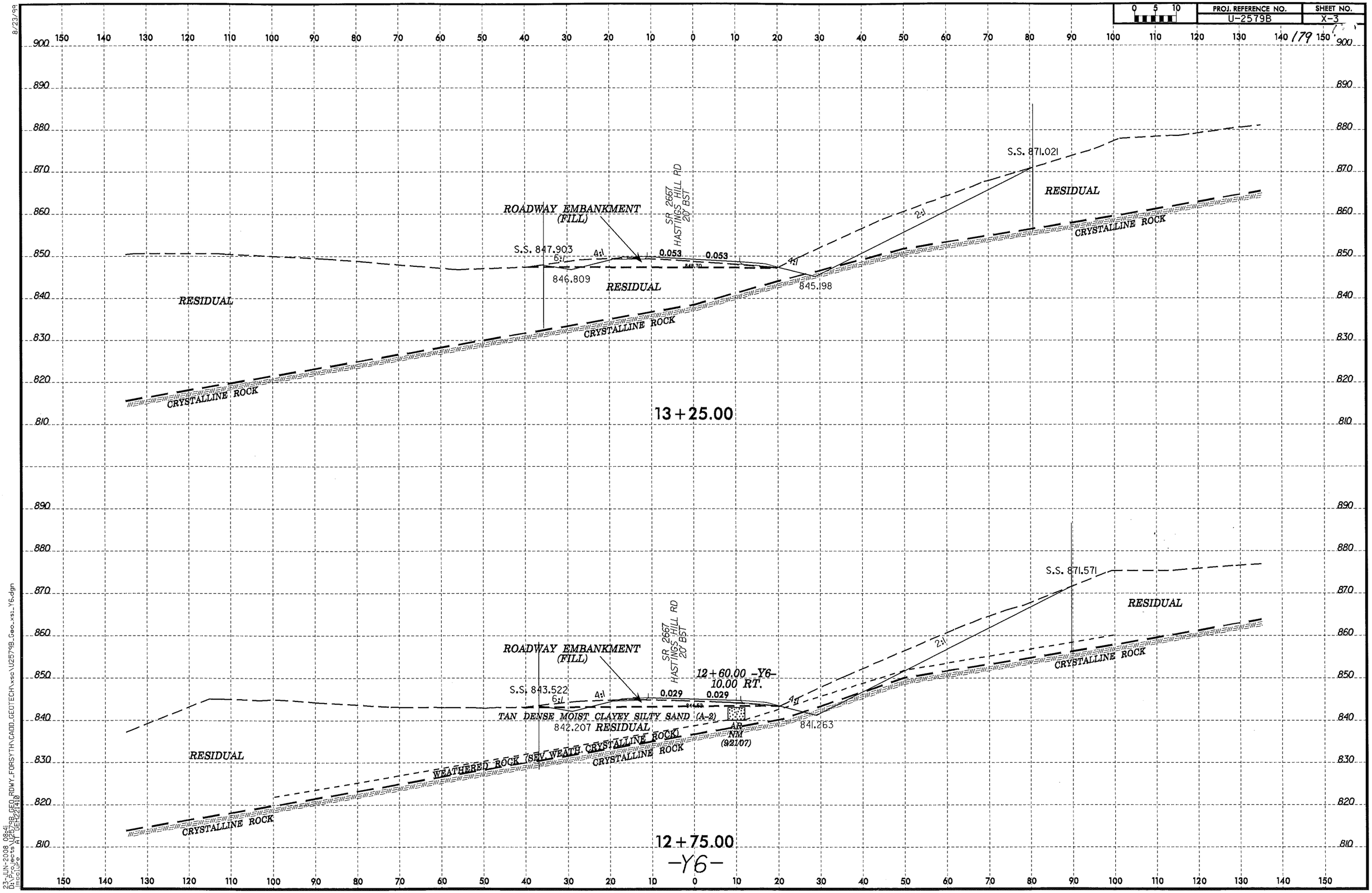
|---|---|---|
| | U-2579B | X-3 |



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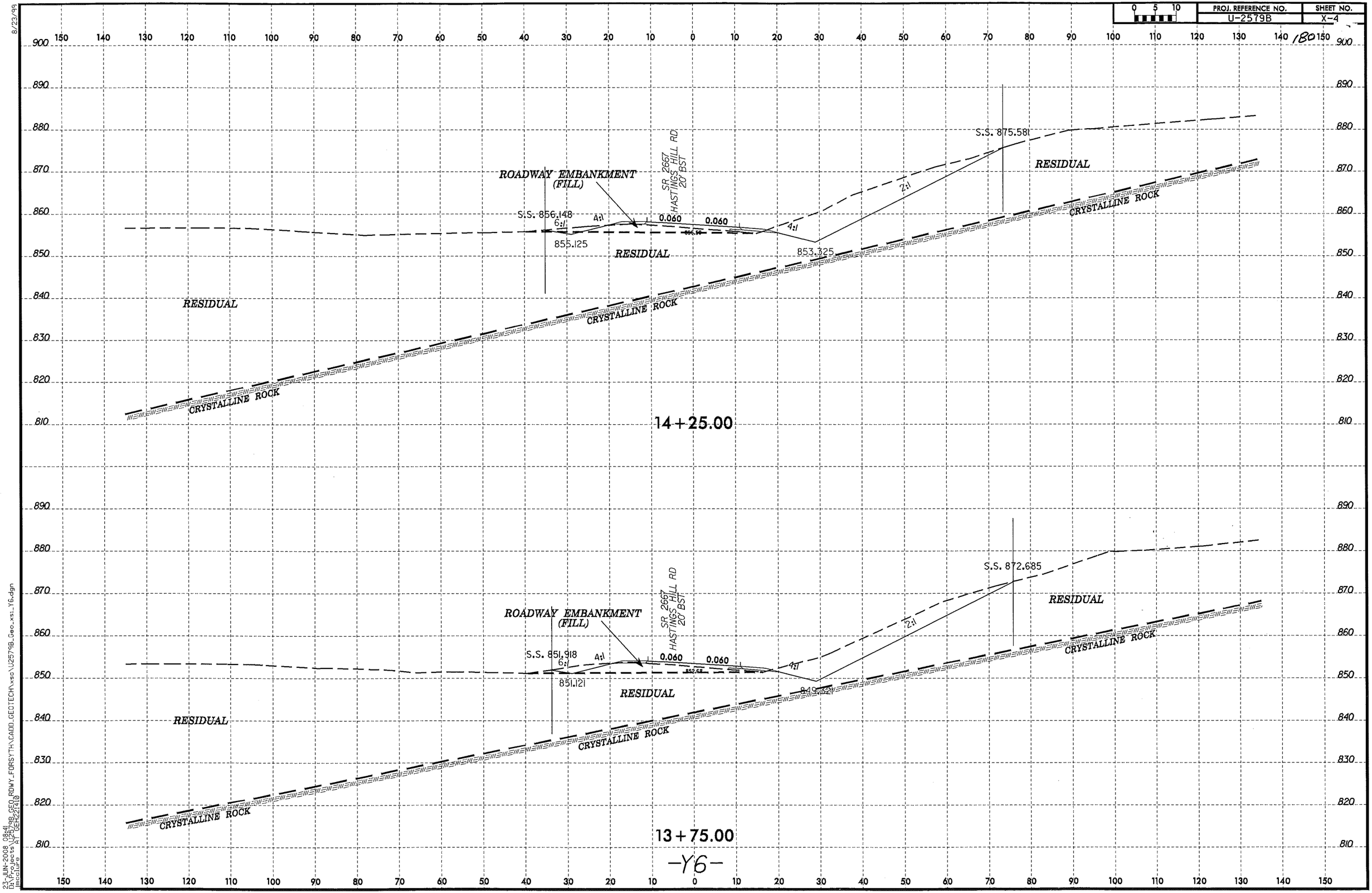
|---|---|---|
| | U-2579B | X-4 |

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8/23/99

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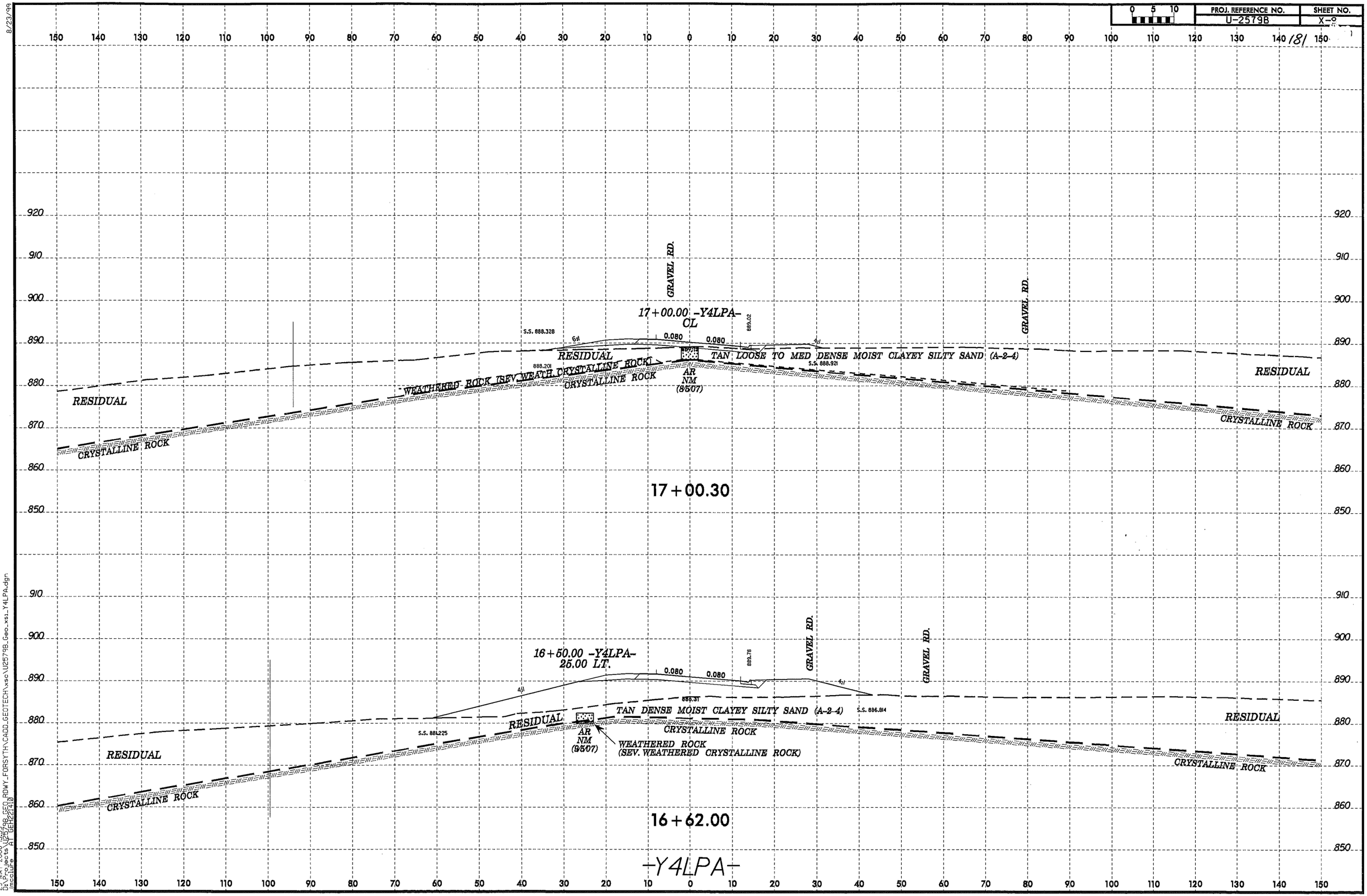
| | U-2579B | X-9 |

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AT 08142210

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-10 |

182

17+75.00

S.S. 892.526

S.S. 893.797

GRAVEL RD.

GRAVEL RD.

GRAVEL RD.

2.28d RESIDUAL 6H

894.31

887.57

0.080

0.080

RESIDUAL 4H

RESIDUAL

TAN STIFF DRY SILTY SANDY CLAY (A-6)

887.148

CRYSTALLINE ROCK

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

17+39.00

BEGIN ROCK

S.S. 889.869

S.S. 891.902

GRAVEL RD.

GRAVEL RD.

6H

6H

888.40

0.080

0.080

4H

RESIDUAL

RESIDUAL

887.585

CRYSTALLINE ROCK

RESIDUAL

RESIDUAL

CRYSTALLINE ROCK

CRYSTALLINE ROCK

-Y4LPA-

930 920 910 900 890 880 870 860

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

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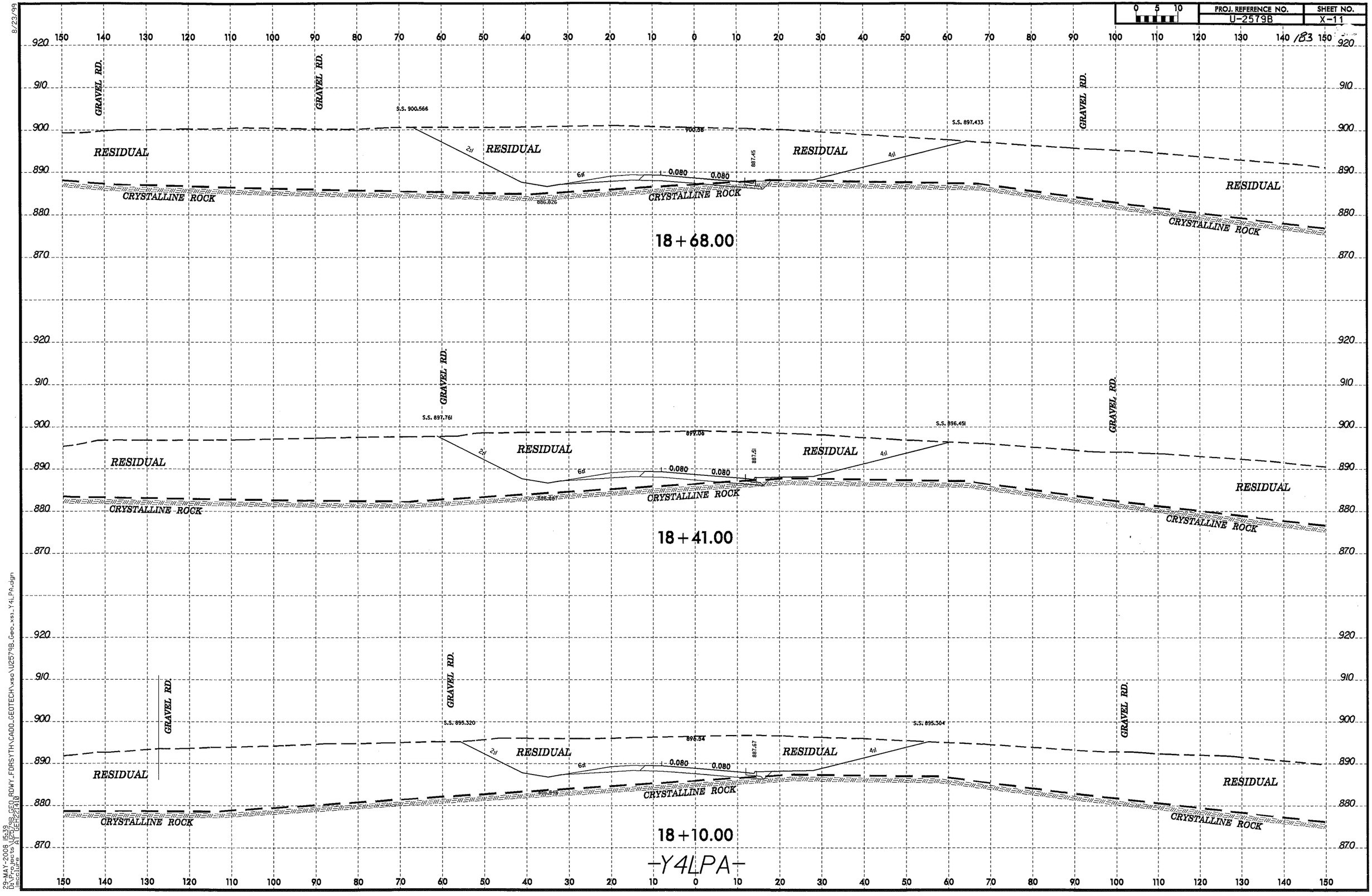
AT DEH22410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-11 |



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8/23/99

| PROJ. REFERENCE NO. | SHEET NO. |
|---|---|
| U-2579B | X-12 |

184

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

930 920 910 900 890 880 870

GRAVEL LOT

RESIDUAL

CRYSTALLINE ROCK

S.S. 907.535

GRAVEL RD.

2H

19+25.00 -Y4LPA-
CL

RESIDUAL

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK) 100/.4

CRYSTALLINE ROCK

6H

0.080

0.080

887.71

AR
NM
(8/5/07)

886.893

TAN-ORANGE MED. DENSE MOIST CLAYEY SILTY SAND (A-2)

S.S. 898.971

4H

RESIDUAL

CRYSTALLINE ROCK

19+50.00

GRAVEL LOT

S.S. 904.003

RESIDUAL

2H

902.10

RESIDUAL

6H

0.080

0.080

887.47

CRYSTALLINE ROCK

886.649

4H

S.S. 898.323

GRAVEL RD.

RESIDUAL

CRYSTALLINE ROCK

19+00.00

-Y4LPA-

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mscollure

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-13 |

185

20+14.84 -Y4LPA-
62.06 LT.
=
84+00 -Y4WB-
160.00 RT.

S.P. 89
-Y4WB- 83+50.0000
-Y4LPA- 20+21.0000
ELEV. 908.028

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

TAN MED. DENSE TO DENSE MOIST CLAYEY SILTY SAND (A-2)

901.56

WEATHERED ROCK
(WHITE & GRAY SEV. WEATH. CRYSTALLINE ROCK)

888.49

TAN V. DENSE MOIST CLAYEY SILTY SAND (A-2)

887.614

AR
DRY
(9/7/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

0.080

0.080

S.S. 898.347

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

20+21.00

GRAVEL LOT

S.S. 907.859

RESIDUAL RED-TAN TO WHITE & OLIVE
DENSE TO V. DENSE DRY
CLAYEY SILTY SAND (A-2)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

CRYSTALLINE ROCK

RESIDUAL

902.74

888.03

887.214

0.080

0.080

S.S. 898.799

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

19+85.00

-Y4LPA-

930
920
910
900
890
880
870

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

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8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-14 |



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

900
890
880
870

*END ROCK*

I-40 BUS WBL, US 421 NBL 26' BST

*RESIDUAL*

S.P. 92
-Y4WB- 85+00.0000
-Y4LPA- 21+34.0000
ELEV. 891.158

4:1 6:1

889.693

0.080 0.080

893.97

890.58

S.S. 891.557

4:1

*RESIDUAL*

*CRYSTALLINE ROCK*

*CRYSTALLINE ROCK*

*RESIDUAL*

*CRYSTALLINE ROCK*

**21+34.00**

910
900
890
880
870

*RESIDUAL*

*CRYSTALLINE ROCK*

S.P. 91
-Y4WB- 84+50.0000
-Y4LPA- 20+92.0000
ELEV. 895.617

4:1 6:1

888.914

898.88

889.73

0.080 0.080

890.514

S.S. 895.052

4:1

*RESIDUAL*

*CRYSTALLINE ROCK*

*RESIDUAL*

*CRYSTALLINE ROCK*

**20+92.00**

920
910
900
890
880
870
860

*RESIDUAL*

*CRYSTALLINE ROCK*

S.P. 90
-Y4WB- 84+00.0000
-Y4LPA- 20+57.0000
ELEV. 900.868

4:1 6:1

888.265

*RESIDUAL*

900.82

889.09

0.080 0.080

S.S. 897.185

*RESIDUAL*

*TAN V. STIFF TO HARD DRY CLAYEY SANDY SILTY (A-4)*

*WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)*

*CRYSTALLINE ROCK*

*RESIDUAL*

*CRYSTALLINE ROCK*

SS-277

*20+40.00 -Y4LPA- 25.00 RT.*

26 38

AR
DRY
(9607)

**20+57.00**

*-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

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Active Cell: GENERIC

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-2 |



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

920 910 900 890 880 870

S.S. 907.662

RESIDUAL

CRYSTALLINE ROCK

4:1

897.94

0.080 0.080

6:1

4:1

S.S. 894.788

RESIDUAL

CRYSTALLINE ROCK

897.125

RESIDUAL

CRYSTALLINE ROCK

BEGIN ROCK
18+00.00

900.00

0.080 0.080

6:1

S.S. 897.173

893.91

RESIDUAL

CRYSTALLINE ROCK

4:1

S.S. 888.252

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

NO ROCK
17+50.00

902.05

0.080 0.080

4:1

SP 119
-Y4LPD- STA. 17+00.0000
-Y4RPBD- STA. 59+50.0000
ELEV. 896.848

887.81

RESIDUAL

CRYSTALLINE ROCK

4:1

S.S. 882.867

RESIDUAL

CRYSTALLINE ROCK

RESIDUAL

CRYSTALLINE ROCK

NO ROCK
17+00.00

-Y4LPD-

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41 GEN22416

8/23/99

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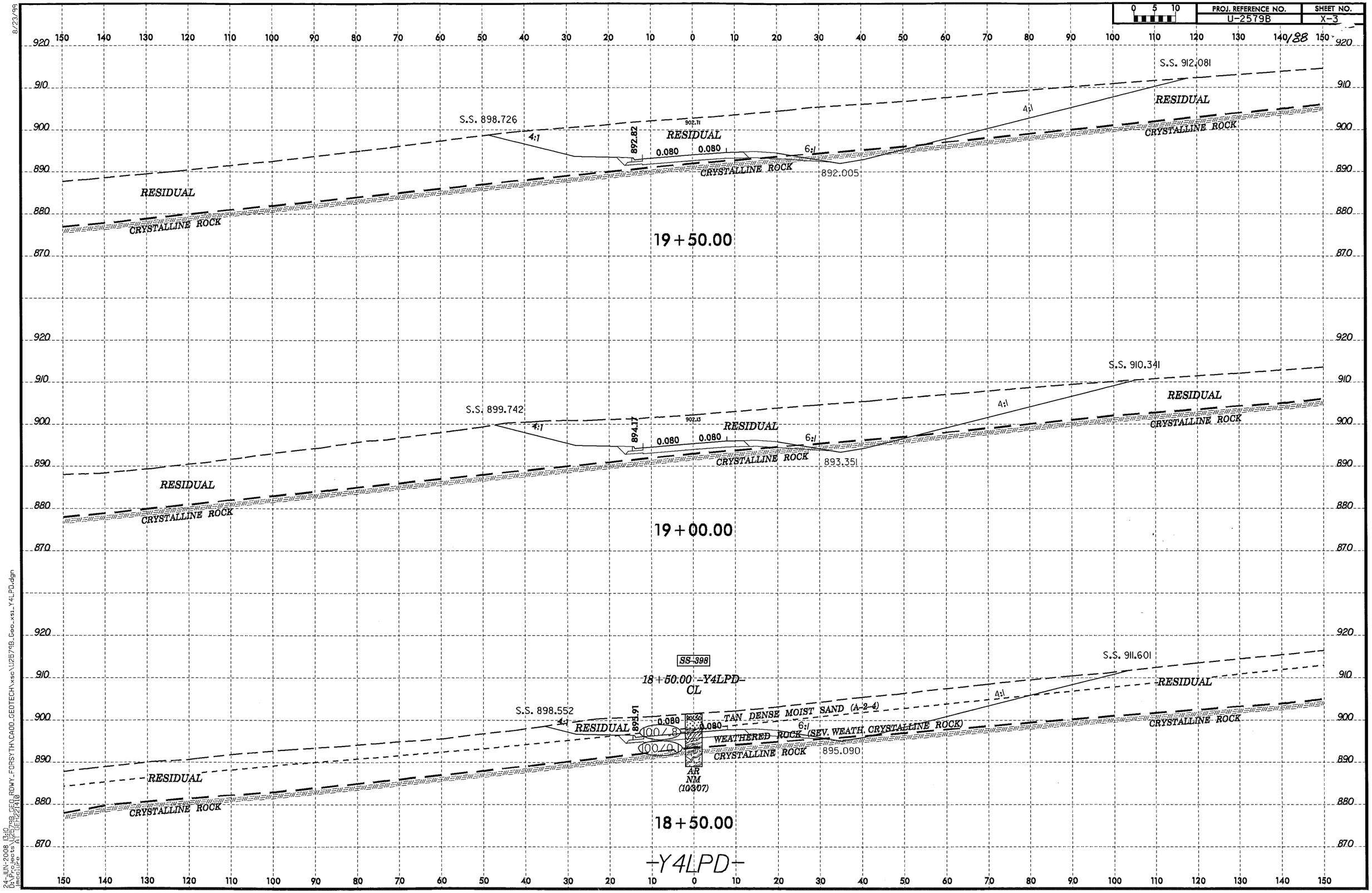
|---|---|---|
| | U-2579B | X-3 |



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Alt: GEN22410

8/23/99

| 0 5 10 | PROJ. REFERENCE NO. | SHEET NO. |
|---|---|---|
| | U-2579B | X-4 |

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

920 910 900 890 880 870 860 940 930 920 910 900 890 880 870

20+46.51 -Y4LPD-
14.64 RT.
=
85+00 -Y4EB-
190.00 LT.

S.S. 896.105

4:1

891.31

900.73

0.080 0.080

RESIDUAL
TAN DENSE MOIST CLAYEY SILTY SAND (A-2)

6:1

4:1

S.S. 910.711

RESIDUAL
CRYSTALLINE ROCK

BT
NM
(10/3/07)

890.490

RESIDUAL
CRYSTALLINE ROCK

20+50.00

20+23.36 -Y4LPD-
110.54 RT.
=
84+00 -Y4EB-
190.00 LT.

S.S. 913.892

20+00.00 -Y4LPD-
40.00 RT.

S.S. 897.440

4:1

891.87

902.73

RESIDUAL TAN DENSE MOIST CLAYEY SILTY SAND (A-2-4)

0.080 0.080

6:1

TAN DENSE MOIST CLAYEY SILTY SAND (A-2)

4:1

RESIDUAL
CRYSTALLINE ROCK

AR
NM
(10/3/07)

WEATHERED ROCK
(SEV. WEATH. CRYSTALLINE ROCK)

WEATHERED ROCK (SEV. WEATH. CRYSTALLINE ROCK)

AR
891.051 NM
(10/3/07)

RESIDUAL
CRYSTALLINE ROCK

20+00.00
-Y4LPD-

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

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mcclure

# 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 | 200 | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SS-1 | 50'RT | 50+00 | 0.00-1.50 | A-7-6(9) | 49 | 21 | 29.1 | 17.0 | 11.5 | 42.4 | 98 | 78 | 54 | - | - | Y1 |
| SS-2 | 50'RT | 50+00 | 3.80-5.30 | A-5(1) | 56 | 10 | 34.3 | 30.7 | 14.7 | 20.2 | 99 | 78 | 39 | - | - | Y1 |
| SS-3 | 50'LT | 45+00 | 0.00-1.50 | A-5(0) | 41 | NP | 33.3 | 34.5 | 16.0 | 16.2 | 95 | 77 | 36 | - | - | Y1 |
| SS-4 | 50'LT | 45+00 | 3.70-5.20 | A-2-4(0) | 35 | NP | 41.4 | 42.0 | 12.5 | 4.0 | 99 | 79 | 22 | - | - | Y1 |
| SS-5 | 80'LT | 40+00 | 0.00-1.50 | A-5(3) | 42 | 10 | 31.1 | 23.4 | 13.1 | 32.3 | 97 | 77 | 47 | - | - | Y1 |
| SS-6 | 80'LT | 40+00 | 3.70-5.20 | A-7-6(9) | 47 | 18 | 22.8 | 23.0 | 17.8 | 36.4 | 99 | 84 | 57 | - | - | Y1 |
| MS-7 | 20 RT | 32+85 | 3.50-5.00 | | | | | | | | | | | 24.5 | - | Y1 |
| SS-7 | 20'RT | 32+85 | 3.50-5.00 | A-7-5(10) | 55 | 23 | 26.9 | 22.2 | 12.5 | 38.4 | 98 | 81 | 53 | - | - | Y1 |
| SS-8 | 20'RT | 32+85 | 8.50-10.00 | A-5(1) | 46 | 7 | 30.3 | 35.4 | 22.2 | 12.1 | 100 | 80 | 43 | - | - | Y1 |
| SS-9 | 20'RT | 32+85 | 13.50-15.00 | A-5(1) | 41 | 6 | 24.8 | 38.0 | 23.0 | 14.1 | 98 | 83 | 44 | - | - | Y1 |
| SS-10 | 20'RT | 32+85 | 18.50-20.00 | A-5(1) | 41 | 5 | 19.6 | 45.3 | 27.1 | 8.1 | 100 | 89 | 45 | - | - | Y1 |
| SS-11 | 20'RT | 32+85 | 23.50-25.00 | A-5(0) | 42 | 3 | 30.5 | 37.4 | 22.0 | 10.1 | 97 | 78 | 38 | - | - | Y1 |
| SS-12 | 20'RT | 32+85 | 28.50-30.00 | A-4(1) | 39 | 8 | 30.5 | 31.7 | 25.7 | 12.1 | 98 | 79 | 45 | - | - | Y1 |
| SS-13 | 20'RT | 32+85 | 33.50-35.00 | A-4(0) | 35 | 7 | 26.3 | 40.6 | 21.0 | 12.1 | 100 | 84 | 40 | - | - | Y1 |
| SS-15 | 20'RT | 32+85 | 48.50-50.00 | A-4(0) | 30 | 5 | 29.7 | 35.6 | 20.6 | 14.1 | 93 | 67 | 38 | - | - | Y1 |
| SS-16 | 20'RT | 32+85 | 53.50-55.50 | A-4(0) | 34 | 5 | 28.1 | 41.4 | 20.4 | 10.1 | 98 | 84 | 38 | - | - | Y1 |
| SS-17 | 30'RT | 30+00 | 0.00-1.50 | A-7-5(14) | 62 | 24 | 24.2 | 18.0 | 13.3 | 44.4 | 99 | 82 | 60 | - | - | Y1 |
| MS-18 | 30 RT | 30+00 | 3.40-4.90 | | | | | | | | | | | 22.7 | - | Y1 |
| SS-18 | 30'RT | 30+00 | 3.40-4.90 | A-2-5(0) | 55 | NP | 36.4 | 36.8 | 10.7 | 16.2 | 100 | 78 | 32 | - | - | Y1 |
| SS-19 | 30'RT | 30+00 | 8.40-9.90 | A-5(0) | 62 | 7 | 33.7 | 32.9 | 13.1 | 20.2 | 98 | 74 | 38 | - | - | Y1 |
| SS-20 | 30'RT | 30+00 | 13.40-14.90 | A-2-5(0) | 48 | NP | 39.4 | 42.8 | 11.7 | 6.1 | 97 | 74 | 23 | - | - | Y1 |
| SS-21 | 60'LT | 27+00 | 0.00-1.50 | A-5(2) | 52 | 8 | 21.2 | 42.2 | 14.3 | 22.2 | 100 | 87 | 44 | - | - | Y1 |
| SS-22 | 60'LT | 27+00 | 3.50-5.00 | A-2-5(0) | 45 | 3 | 41.2 | 31.7 | 14.9 | 12.1 | 96 | 66 | 32 | - | - | Y1 |
| SS-23 | 120 LT | 20+00 | 0.00-1.50 | A-2-6(0) | 33 | 15 | 66.9 | 13.8 | 3.1 | 16.2 | 50 | 23 | 10 | - | - | YI |
| SS-24 | 120'LT | 20+00 | 3.60-5.10 | A-2-5(0) | 69 | 9 | 35.6 | 38.6 | 15.8 | 10.1 | 99 | 76 | 31 | - | - | Y1 |
| SS-25 | 30'RT | 16+75 | 0.00-1.50 | A-6(2) | 34 | 13 | 38.4 | 23.8 | 13.5 | 24.2 | 98 | 74 | 40 | - | - | Y1 DET |
| SS-26 | 30'RT | 16+75 | 8.50-10.00 | A-2-5(0) | 47 | NP | 30.1 | 41.8 | 20.0 | 8.1 | 100 | 84 | 34 | - | - | Y1 DET |
| SS-27 | 60'LT | 16+40 | 0.00-1.50 | A-5(3) | 52 | 10 | 25.8 | 29.8 | 14.1 | 30.2 | 98 | 82 | 47 | - | - | Y1 |
| SS-28 | 60'LT | 16+40 | 3.50-5.00 | A-2-4(0) | 34 | 7 | 51.5 | 23.2 | 13.1 | 12.1 | 78 | 47 | 23 | - | - | Y1 |
| MS-29 | 50 RT | 27+50 | 0.00-1.50 | | | | | | | | | | | 16.1 | - | Y1DET |
| SS-29 | 50'RT | 27+50 | 0.00-1.50 | A-6(6) | 37 | 17 | 31.7 | 18.0 | 13.9 | 36.4 | 99 | 78 | 52 | - | - | Y1DET |
| SS-30 | 50'RT | 27+50 | 4.00-5.50 | A-7-5(4) | 52 | 15 | 30.7 | 21.6 | 17.4 | 30.3 | 87 | 68 | 45 | - | - | Y1DET |
| SS-31 | 45'LT | 13+40 | 3.90-5.40 | A-5(4) | 62 | 10 | 26.5 | 26.9 | 14.3 | 32.3 | 97 | 79 | 49 | - | - | Y1LPA |
| SS-32 | 45'LT | 13+40 | 8.90-10.40 | A-2-5(0) | 41 | NP | 32.1 | 44.4 | 17.4 | 6.1 | 97 | 83 | 27 | - | - | Y1LPA |
| SS-33 | 45'LT | 13+40 | 13.90-15.40 | A-2-5(0) | 43 | NP | 37.6 | 39.8 | 16.6 | 6.1 | 95 | 78 | 25 | - | - | Y1LPA |
| SS-34 | 45'LT | 13+40 | 18.90-20.40 | A-2-5(0) | 45 | NP | 36.2 | 43.4 | 14.3 | 6.1 | 96 | 80 | 24 | - | - | Y1LPA |
| SS-35 | 45'LT | 13+40 | 23.90-25.40 | A-2-4(0) | 38 | NP | 30.5 | 43.0 | 20.4 | 6.1 | 97 | 81 | 31 | - | - | Y1LPA |
| SS-36 | 45 LT | 13+40 | 28.90-30.40 | A-2-5(0) | 48 | NP | 41.1 | 38.9 | 13.9 | 6.1 | 95 | 72 | 23 | - | - | YILPA |
| SS-37 | 45'LT | 13+40 | 33.90-35.40 | A-2-5(0) | 41 | NP | 43.6 | 35.4 | 14.9 | 6.1 | 97 | 71 | 24 | - | - | Y1LPA |
| SS-38 | 45'LT | 13+40 | 38.90-40.40 | A-2-4(0) | 38 | NP | 37.8 | 37.2 | 14.9 | 10.1 | 97 | 75 | 29 | - | - | Y1LPA |
| SS-39 | 45'LT | 13+40 | 43.90-45.40 | A-2-4(0) | 31 | NP | 41.4 | 41.0 | 9.5 | 8.1 | 96 | 78 | 22 | - | - | Y1LPA |
| SS-40 | 45'LT | 13+40 | 48.90-50.40 | A-2-4(0) | 31 | NP | 37.7 | 48.2 | 10.1 | 4.0 | 94 | 79 | 18 | - | - | Y1LPA |
| SS-41 | 45'LT | 13+40 | 53.90-55.40 | A-7-5(5) | 59 | 12 | 27.0 | 26.4 | 16.3 | 30.2 | 94 | 76 | 49 | - | - | Y1LPA |
| SS-42 | 30'LT | 485+75 | 8.80-10.30 | A-5(0) | 43 | 5 | 29.8 | 32.7 | 21.4 | 16.1 | 98 | 77 | 44 | - | - | -L- |
| SS-43 | 30'LT | 485+75 | 13.80-15.30 | A-2-5(0) | 46 | 7 | 31.5 | 42.7 | 15.7 | 10.1 | 98 | 85 | 31 | - | - | -L- |
| SS-44 | 30'LT | 485+75 | 18.80-20.30 | A-5(0) | 48 | 3 | 30.8 | 36.9 | 20.2 | 12.1 | 96 | 79 | 36 | - | - | -L- |
| SS-45 | 30'LT | 485+75 | 23.80-25.30 | A-5(1) | 43 | 5 | 25.0 | 35.1 | 27.8 | 12.1 | 96 | 81 | 47 | - | - | -L- |
| SS-46 | 30'LT | 485+75 | 28.80-30.30 | A-5(0) | 43 | 2 | 28.6 | 34.9 | 24.4 | 12.1 | 97 | 79 | 42 | - | - | -L- |
| SS-47 | 30'LT | 485+75 | 33.80-35.30 | A-5(2) | 46 | 9 | 34.1 | 27.5 | 24.2 | 14.1 | 97 | 73 | 44 | - | - | -L- |
| MS-48 | 30 LT | 485+75 | 38.80-40.30 | | | | | | | | | | | 27.3 | - | L |
| SS-48 | 30'LT | 485+75 | 38.80-40.30 | A-2-5(0) | 44 | NP | 32.7 | 44.2 | 17.1 | 6.0 | 97 | 81 | 27 | - | - | -L- |
| SS-49 | 30'LT | 485+75 | 43.80-45.30 | A-2-5(0) | 41 | NP | 41.5 | 37.9 | 14.5 | 6.0 | 95 | 73 | 24 | - | - | -L- |
| SS-50 | 30'LT | 485+75 | 48.80-50.30 | A-2-4(0) | 38 | NP | 32.9 | 45.4 | 13.7 | 8.1 | 98 | 85 | 26 | - | - | -L- |
| SS-51 | CL | 13+75 | 3.90-5.40 | A-7-5(10) | 56 | 18 | 21.1 | 22.1 | 8.2 | 48.6 | 99 | 88 | 59 | - | - | YILPA |
| SS-52 | CL | 13+75 | 8.90-10.40 | A-5(2) | 46 | 9 | 28.6 | 25.7 | 25.4 | 20.3 | 93 | 78 | 45 | - | - | YILPD |
| SS-53 | CL | 13+75 | 13.90-15.40 | A-2-5(0) | 42 | NP | 34.7 | 45.8 | 13.5 | 6.1 | 99 | 84 | 23 | - | - | YILPD |
| SS-54 | CL | 13+75 | 18.90-20.40 | A-2-5(0) | 46 | NP | 48.2 | 30.8 | 14.9 | 6.1 | 92 | 60 | 23 | - | - | YILPD |
| SS-55 | CL | 13+75 | 23.90-25.40 | A-2-5(0) | 43 | NP | 49.0 | 30.8 | 14.1 | 6.1 | 96 | 65 | 23 | - | - | YILPD |
| SS-56 | CL | 13+75 | 28.90-30.40 | A-2-4(0) | 36 | NP | 48.0 | 33.8 | 12.1 | 6.1 | 97 | 66 | 22 | - | - | Y1LPD |
| SS-57 | CL | 13+75 | 33.90-35.40 | A-2-4(0) | 36 | NP | 41.5 | 37.9 | 14.5 | 6.1 | 96 | 68 | 25 | - | - | Y1LPD |
| SS-58 | CL | 13+75 | 38.90-40.40 | A-2-4(0) | 36 | NP | 36.7 | 39.8 | 17.4 | 6.1 | 95 | 75 | 26 | - | - | Y1LPD |
| SS-59 | CL | 13+75 | 43.90-45.40 | A-4(0) | 35 | 7 | 17.2 | 46.9 | 23.7 | 12.2 | 96 | 87 | 42 | - | - | Y1LPD |
| SS-60 | CL | 36+75 | 0.50-1.50 | A-7-6(12) | 54 | 27 | 31.4 | 14.3 | 8.0 | 46.3 | 99 | 77 | 55 | - | - | YIDET |
| SS-61 | CL | 36+75 | 4.20-5.70 | A-7-6(5) | 50 | 21 | 41.6 | 15.1 | 9.1 | 34.2 | 97 | 67 | 44 | - | - | YIDET |
| SS-62 | CL | 18+00 | 3.70-5.20 | A-5(1) | 56 | 7 | 31.2 | 29.2 | 17.5 | 22.1 | 97 | 81 | 41 | - | - | YILPD |
| SS-63 | CL | 18+00 | 8.70-10.20 | A-2-5(0) | 50 | NP | 47.1 | 30.8 | 16.1 | 6.0 | 96 | 70 | 23 | - | - | YILPD |
| SS-64 | CL | 18+00 | 13.70-15.20 | A-2-5(0) | 46 | NP | 53.3 | 26.6 | 14.1 | 6.0 | 93 | 61 | 21 | - | - | YILPD |
| SS-65 | CL | 18+00 | 18.70-20.20 | A-2-5(0) | 42 | NP | 48.1 | 35.2 | 12.7 | 4.0 | 96 | 69 | 20 | - | - | YILPD |
| SS-66 | CL | 27+00 | 4.00-5.50 | A-7-5(13) | 62 | 26 | 28.2 | 16.3 | 13.3 | 42.3 | 97 | 78 | 56 | - | - | Y1RPD |
| SS-67 | CL | 27+00 | 9.00-10.50 | A-2-5(0) | 49 | NP | 34.0 | 40.4 | 17.5 | 8.0 | 95 | 76 | 30 | - | - | Y1RPD |
| SS-68 | CL | 27+00 | 14.00-15.50 | A-2-5(0) | 51 | NP | 45.1 | 37.4 | 11.5 | 6.0 | 98 | 69 | 22 | - | - | Y1RPD |
| SS-69 | CL | 27+00 | 19.00-20.50 | A-2-5(0) | 50 | NP | 40.2 | 33.6 | 18.1 | 8.0 | 98 | 72 | 31 | - | - | Y1RPD |
| SS-70 | CL | 27+00 | 24.00-25.50 | A-2-5(0) | 43 | NP | 46.5 | 34.6 | 12.9 | 6.0 | 95 | 64 | 23 | - | - | Y1RPD |
| SS-71 | CL | 27+00 | 29.00-30.50 | A-2-5(0) | 43 | NP | 39.0 | 41.6 | 15.3 | 4.0 | 99 | 76 | 26 | - | - | Y1RPD |

# 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 | 200 | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SS-72 | 50 RT | 15+00 | 3.90-5.40 | A-7-5(1) | 53 | 11 | 37.2 | 29.9 | 18.7 | 14.2 | 98 | 72 | 37 | - | - | YILPA |
| SS-73 | 50 RT | 15+00 | 8.90-10.40 | A-5(2) | 51 | 10 | 34.5 | 27.5 | 21.9 | 16.1 | 96 | 72 | 41 | - | - | YILPA |
| SS-74 | 50 RT | 15+00 | 13.90-15.40 | A-2-5(0) | 43 | 7 | 34.3 | 32.3 | 21.3 | 12.0 | 96 | 76 | 35 | - | - | YILPA |
| SS-75 | 50 RT | 15+00 | 3.90-5.40 | A-2-5(0) | 47 | 4 | 44.4 | 27.9 | 19.7 | 8.0 | 97 | 67 | 32 | - | - | YILPA |
| SS-76 | 50 RT | 15+00 | 23.90-25.40 | A-2-5(0) | 45 | 2 | 42.2 | 31.7 | 20.1 | 6.0 | 96 | 68 | 30 | - | - | YILPA |
| SS-77 | 50 RT | 15+00 | 28.90-30.40 | A-2-5(0) | 45 | NP | 47.4 | 33.1 | 15.5 | 4.0 | 97 | 66 | 24 | - | - | YILPA |
| SS-78 | 50 RT | 15+00 | 33.90-35.40 | A-2-4(0) | 39 | 4 | 48.6 | 31.7 | 15.7 | 4.0 | 97 | 64 | 24 | - | - | YILPA |
| SS-79 | 85 RT | 25+50 | 3.70-5.20 | A-7-5(1) | 60 | 13 | 28.9 | 38.6 | 16.5 | 16.1 | 95 | 82 | 36 | - | - | YIRPA |
| SS-80 | 85 RT | 25+50 | 8.70-10.20 | A-2-5(0) | 44 | NP | 47.4 | 34.9 | 13.7 | 4.0 | 96 | 66 | 21 | - | - | YIRPA |
| SS-81 | 85 RT | 25+50 | 13.70-15.20 | A-2-4(0) | 39 | NP | 50.8 | 33.3 | 11.8 | 4.0 | 97 | 62 | 20 | - | - | YIRPA |
| SS-82 | 85 RT | 25+50 | 18.70-20.20 | A-2-5(0) | 46 | 7 | 32.9 | 38.2 | 22.9 | 6.0 | 100 | 84 | 33 | - | - | YIRPA |
| SS-83 | 85 RT | 25+50 | 23.70-25.20 | A-2-5(0) | 49 | NP | 49.4 | 33.3 | 13.3 | 4.0 | 99 | 68 | 20 | - | - | YIRPA |
| SS-84 | CL | 22+50 | 3.50-5.00 | A-2-5(0) | 49 | 7 | 46.1 | 28.8 | 11.1 | 14.1 | 93 | 62 | 28 | - | - | YIRPA |
| SS-85 | CL | 22+50 | 8.50-10.00 | A-2-5(0) | 46 | NP | 47.7 | 33.0 | 13.3 | 6.0 | 95 | 64 | 24 | - | - | YIRPA |
| SS-86 | CL | 22+50 | 18.50-20.00 | A-2-4(0) | 38 | NP | 54.5 | 30.3 | 5.1 | 10.1 | 88 | 54 | 18 | - | - | YIRPA |
| SS-87 | CL | 22+50 | 23.50-25.00 | A-2-5(0) | 46 | NP | 41.0 | 38.1 | 8.8 | 12.1 | 93 | 69 | 25 | - | - | YIRPA |
| SS-88 | CL | 22+50 | 38.50-40.00 | A-2-5(0) | 42 | NP | 47.8 | 35.5 | 6.6 | 10.1 | 90 | 59 | 20 | - | - | YIRPA |
| SS-89 | 25'RT | 490+20 | 3.90-5.40 | A-7-5(6) | 51 | 14 | 32.9 | 18.1 | 20.8 | 28.2 | 98 | 74 | 52 | - | - | -L- |
| SS-90 | 25'RT | 490+20 | 13.90-15.40 | A-5(0) | 55 | 8 | 36.9 | 28.2 | 20.8 | 14.1 | 96 | 69 | 38 | - | - | -L- |
| SS-91 | 25'RT | 490+20 | 23.90-25.40 | A-5(2) | 47 | 9 | 31.7 | 29.4 | 24.8 | 14.1 | 97 | 75 | 44 | - | - | -L- |
| SS-92 | 25'RT | 490+20 | 33.90-35.40 | A-5(0) | 43 | 5 | 33.1 | 32.1 | 24.8 | 10.1 | 98 | 76 | 41 | - | - | -L- |
| SS-93 | 25'RT | 490+20 | 43.90-45.40 | A-2-5(0) | 45 | NP | 34.3 | 39.1 | 16.5 | 10.1 | 98 | 77 | 33 | - | - | -L- |
| SS-94 | 25'RT | 490+20 | 48.90-50.40 | A-2-5(0) | 42 | NP | 45.6 | 29.8 | 14.5 | 10.1 | 90 | 60 | 26 | - | - | -L- |
| SS-95 | 45'RT | 24+00 | 3.50-5.00 | A-7-5(4) | 63 | 13 | 32.3 | 27.4 | 14.1 | 26.2 | 98 | 75 | 44 | - | - | Y1RPD |
| SS-96 | 45'RT | 24+00 | 3.50-5.00 | A-2-5(0) | 56 | NP | 36.3 | 34.9 | 12.7 | 16.1 | 95 | 73 | 33 | - | - | Y1RPD |
| SS-97 | 45'RT | 24+00 | 13.50-15.00 | A-2-5(0) | 55 | NP | 39.1 | 32.9 | 17.9 | 10.1 | 97 | 76 | 31 | - | - | Y1RPD |
| SS-98 | 45'RT | 24+00 | 23.50-25.00 | A-2-4(0) | 36 | NP | 32.3 | 43.8 | 15.9 | 8.1 | 97 | 81 | 28 | - | - | Y1RPD |
| SS-99 | 45'RT | 24+00 | 33.50-35.00 | A-2-4(0) | 38 | NP | 43.8 | 32.3 | 15.9 | 8.1 | 94 | 66 | 27 | - | - | Y1RPD |
| SS-100 | CL | 44+00 | 3.70-5.20 | A-2-4(0) | 27 | NP | 36.1 | 40.0 | 13.9 | 10.0 | 77 | 61 | 23 | - | - | Y1DET |
| SS-101 | CL | 44+00 | 8.70-10.20 | A-2-4(0) | 34 | NP | 45.5 | 34.8 | 12.7 | 7.0 | 92 | 67 | 23 | - | - | Y1DET |
| SS-102 | CL | 47+00 | 3.70-5.20 | A-2-7(0) | 54 | 11 | 37.3 | 30.9 | 21.7 | 10.0 | 93 | 74 | 33 | - | - | Y1DET |
| SS-103 | CL | 47+00 | 8.70-10.20 | A-2-5(0) | 50 | 8 | 32.7 | 35.9 | 21.3 | 10.0 | 97 | 82 | 34 | - | - | Y1DET |
| SS-104 | CL | 18+00 | 4.50-6.00 | A-5(0) | 51 | 7 | 32.3 | 35.5 | 20.1 | 12.0 | 97 | 79 | 37 | - | - | YIRPA |
| SS-105 | CL | 18+00 | 9.50-11.00 | A-4(0) | 37 | NP | 27.1 | 39.4 | 23.5 | 10.0 | 100 | 89 | 38 | - | - | YIRPA |
| SS-106 | CL | 18+00 | 19.50-21.00 | A-1-b(0) | 29 | 3 | 56.6 | 21.9 | 13.5 | 8.0 | 70 | 38 | 18 | - | - | YIRPA |
| SS-107 | CL | 18+00 | 24.50-26.00 | A-2-4(0) | 39 | NP | 24.7 | 45.6 | 21.7 | 8.0 | 100 | 90 | 35 | - | - | YIRPA |
| SS-108 | CL | 495+30 | 3.30-4.80 | A-7-5(7) | 62 | 18 | 24.1 | 32.9 | 18.9 | 24.1 | 99 | 83 | 48 | - | - | L |
| MS-109 | CL | 495+30 | 8.30-9.80 | | | | | | | | | | | 32.6 | - | -L- |
| SS-109 | CL | 495+30 | 8.30-9.80 | A-7-5(5) | 50 | 11 | 19.5 | 31.9 | 32.5 | 16.1 | 99 | 88 | 55 | - | - | L |
| SS-110 | CL | 495+30 | 13.30-14.80 | A-5(0) | 42 | NP | 24.1 | 44.8 | 23.1 | 8.0 | 97 | 86 | 38 | - | - | L |
| SS-111 | CL | 16+50 | 3.50-5.00 | A-7-5(12) | 56 | 22 | 23.1 | 19.7 | 11.0 | 46.2 | 99 | 86 | 58 | - | - | YIRPD |
| MS-112 | CL | 16+50 | 8.50-10.00 | | | | | | | | | | | 20.6 | - | YI RPD |
| SS-112 | CL | 16+50 | 8.50-10.00 | A-7-5(5) | 49 | 15 | 25.5 | 32.1 | 20.3 | 22.1 | 98 | 82 | 47 | - | - | YIRPD |
| SS-113 | CL | 16+50 | 13.50-15.00 | A-4(1) | 39 | 6 | 18.6 | 46.2 | 27.1 | 8.1 | 100 | 93 | 48 | - | - | YIRPD |
| SS-114 | 25 RT | 498+50 | 4.10-5.60 | A-7-5(3) | 60 | 13 | 28.7 | 34.0 | 21.1 | 16.2 | 99 | 80 | 43 | - | - | L |
| MS-115 | 25 RT | 498+50 | 9.00-9.40 | | | | | | | | | | | 18.9 | - | L |
| SS-115 | 25 RT | 498+50 | 14.10-15.60 | A-2-5(0) | 48 | NP | 34.9 | 43.8 | 17.3 | 4.1 | 97 | 78 | 25 | - | - | L |
| SS-116 | 160 RT | 502+90 | 4.00-5.50 | A-2-4(0) | 31 | NP | 79.6 | 9.0 | 8.3 | 3.0 | 100 | 70 | 16 | - | - | L |
| SS-117 | CL | 505+50 | 4.00-5.50 | A-2-6(0) | 32 | 11 | 38.8 | 30.4 | 12.6 | 18.2 | 92 | 70 | 32 | - | - | L |
| SS-118 | CL | 505+50 | 9.00-10.50 | A-2-4(0) | 26 | NP | 44.8 | 37.3 | 13.9 | 4.1 | 98 | 73 | 23 | - | - | L |
| SS-119 | 60 RT | 510+50 | 3.60-5.10 | A-6(2) | 36 | 15 | 39.3 | 20.5 | 13.9 | 26.3 | 94 | 68 | 40 | - | - | L |
| SS-120 | 60 RT | 510+50 | 8.60-10.10 | A-7-6(5) | 43 | 17 | 34.4 | 19.3 | 13.9 | 32.4 | 96 | 73 | 46 | - | - | L |
| SS-121 | 25 RT | 513+50 | 3.60-5.10 | A-2-4(0) | 36 | NP | 53.6 | 26.1 | 12.2 | 8.0 | 92 | 57 | 22 | - | - | L |
| SS-122 | 25 RT | 513+50 | 8.60-10.10 | A-2-5(0) | 45 | 3 | 48.2 | 27.0 | 14.7 | 10.1 | 93 | 62 | 26 | - | - | L |
| MS-123 | 50 RT | 520+00 | 3.70-5.20 | | | | | | | | | | | 17.9 | - | -L- |
| SS-123 | 50 RT | 520+00 | 3.70-5.20 | A-7-5(18) | 68 | 29 | 22.5 | 14.2 | 8.6 | 54.7 | 96 | 81 | 62 | - | - | L |
| SS-124 | 50 RT | 520+00 | 8.70-10.20 | A-5(4) | 50 | 9 | 33.9 | 16.5 | 25.3 | 24.3 | 98 | 87 | 54 | - | - | L |
| SS-125 | 10 RT | 522+50 | 0.00-1.50 | A-2-4(0) | 26 | 7 | 39.8 | 28.0 | 9.9 | 22.3 | 85 | 63 | 29 | - | - | L |
| SS-126 | 10 RT | 522+50 | 4.20-5.70 | A-7-6(2) | 46 | 17 | 40.4 | 19.3 | 9.9 | 30.4 | 89 | 65 | 38 | - | - | L |
| SS-127 | 10 RT | 522+50 | 9.70-10.70 | A-2-5(0) | 48 | NP | 33.3 | 46.5 | 16.2 | 4.1 | 97 | 78 | 33 | - | - | L |
| SS-128 | 100 RT | 524+00 | 4.20-5.70 | A-7-6(4) | 45 | 22 | 34.7 | 22.3 | 10.5 | 32.5 | 91 | 70 | 41 | - | - | L |
| SS-129 | 100 RT | 524+00 | 9.20-10.70 | A-7-5(3) | 41 | 11 | 32.7 | 25.8 | 27.4 | 14.2 | 97 | 75 | 46 | - | - | L |
| SS-130 | 25 LT | 518+50 | 3.10-4.60 | A-7-5(4) | 55 | 13 | 29.6 | 26.6 | 21.5 | 22.3 | 94 | 76 | 47 | - | - | L |
| SS-131 | 25 LT | 518+50 | 8.10-9.60 | A-2-7(0) | 52 | 11 | 49.3 | 12.8 | 21.7 | 16.2 | 90 | 62 | 35 | - | - | L |
| SS-132 | 25 LT | 518+50 | 18.10-19.60 | A-2-5(0) | 53 | 8 | 35.1 | 36.5 | 20.3 | 8.1 | 95 | 73 | 33 | - | - | L |
| SS-133 | 25 RT | 19+10 | 3.80-5.30 | A-7-5(6) | 61 | 19 | 33.9 | 20.9 | 18.9 | 26.4 | 92 | 68 | 46 | - | - | Y2 |
| SS-134 | 25 RT | 19+10 | 8.80-10.30 | A-7-5(4) | 51 | 14 | 31.8 | 26.8 | 25.2 | 16.2 | 97 | 78 | 46 | - | - | Y2 |
| SS-135 | 25 RT | 19+10 | 13.80-15.30 | A-5(0) | 53 | 9 | 34.2 | 34.0 | 21.6 | 10.1 | 96 | 73 | 37 | - | - | Y2 |
| SS-136 | 25 RT | 19+10 | 18.80-20.30 | A-2-5(0) | 56 | 6 | 37.9 | 31.4 | 18.5 | 12.2 | 93 | 68 | 33 | - | - | Y2 |
| SS-137 | 25 RT | 19+10 | 23.80-25.30 | A-2-5(0) | 53 | 8 | 37.1 | 36.7 | 20.1 | 6.1 | 94 | 70 | 31 | - | - | Y2 |
| SS-138 | 25 RT | 19+10 | 28.80-30.30 | A-2-5(0) | 49 | 8 | 37.3 | 32.3 | 22.3 | 8.1 | 94 | 69 | 35 | - | - | Y2 |
| SS-139 | 25 RT | 19+10 | 33.80-35.30 | A-2-5(0) | 48 | 5 | 41.6 | 35.1 | 17.2 | 6.1 | 89 | 65 | 25 | - | - | Y2 |
| SS-140 | CL | 528+00 | 3.10-4.60 | A-6(2) | 31 | 13 | 35.9 | 22.3 | 13.4 | 28.4 | 100 | 76 | 44 | - | - | L |
| SS-141 | CL | 528+00 | 8.10-9.60 | A-7-5(2) | 46 | 11 | 32.0 | 29.8 | 19.9 | 18.3 | 94 | 75 | 41 | - | - | L |

# 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 | 200 | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SS-142 | CL | 529+00 | 3.80-5.30 | A-7-5(14) | 55 | 18 | 19.3 | 15.0 | 17.0 | 48.7 | 100 | 87 | 69 | - | - | L |
| SS-143 | 25 LT | 531+10 | 3.60-5.10 | A-5(4) | 41 | 8 | 16.0 | 27.6 | 28.0 | 28.4 | 99 | 91 | 61 | - | - | L |
| SS-144 | 25 LT | 531+10 | 13.60-15.10 | A-5(2) | 43 | 6 | 22.5 | 27.2 | 30.0 | 20.3 | 91 | 79 | 50 | - | - | L |
| SS-145 | 25 LT | 531+10 | 18.60-20.10 | A-4(0) | 33 | 5 | 23.7 | 32.3 | 25.8 | 18.3 | 97 | 85 | 48 | - | - | L |
| SS-146 | 25 LT | 531+10 | 23.60-25.10 | A-2-5(0) | 45 | NP | 35.1 | 34.9 | 21.9 | 8.1 | 98 | 79 | 35 | - | - | L |
| SS-147 | 50 LT | 534+50 | 3.70-5.20 | A-2-4(0) | 34 | 5 | 42.6 | 26.6 | 14.6 | 16.2 | 88 | 62 | 30 | - | - | L |
| SS-148 | 50 LT | 534+50 | 8.70-10.20 | A-4(0) | 32 | 5 | 35.3 | 26.6 | 17.8 | 20.3 | 95 | 73 | 39 | - | - | L |
| SS-149 | 50 LT | 534+50 | 13.70-15.20 | A-2-4(0) | 36 | 3 | 43.2 | 27.0 | 17.6 | 12.2 | 93 | 65 | 31 | - | - | L |
| SS-150 | 25 LT | 534+50 | 18.70-20.20 | A-2-4(0) | 34 | 6 | 33.6 | 31.6 | 22.7 | 12.1 | 79 | 61 | 32 | - | - | L |
| SS-154 | 75 RT | 541+00 | 4.00-5.50 | A-6(6) | 40 | 17 | 27.1 | 23.1 | 13.4 | 36.4 | 98 | 82 | 52 | - | - | L |
| SS-155 | 75 RT | 541+00 | 9.00-10.50 | A-7-5(6) | 61 | 17 | 30.6 | 25.3 | 21.9 | 22.3 | 99 | 84 | 48 | - | - | L |
| SS-156 | 75 RT | 541+00 | 14.00-15.50 | A-2-5(0) | 43 | 4 | 33.4 | 40.1 | 18.4 | 8.1 | 99 | 80 | 32 | - | - | L |
| SS-157A | 75 RT | 541+00 | 24.00-25.50 | A-2-5(0) | 44 | NP | 30.0 | 48.4 | 19.6 | 2.0 | 98 | 83 | 29 | - | - | L |
| SS-157 | 50 RT | 543+00 | 3.60-5.10 | A-6(5) | 38 | 15 | 34.8 | 17.0 | 19.8 | 28.3 | 100 | 75 | 51 | - | - | L |
| SS-158 | 50 RT | 543+00 | 8.60-10.10 | A-4(0) | 29 | 7 | 38.3 | 24.1 | 17.4 | 20.2 | 97 | 71 | 39 | - | - | L |
| SS-159 | 50 RT | 543+00 | 13.60-15.10 | A-2-4(0) | 31 | 4 | 38.5 | 34.0 | 17.4 | 10.1 | 97 | 74 | 30 | - | - | L |
| SS-160 | 35 LT | 545+50 | 3.70-5.20 | A-2-4(0) | 27 | 2 | 45.5 | 31.4 | 15.0 | 8.1 | 100 | 71 | 27 | - | - | L |
| SS-161 | 35 RT | 545+50 | 8.70-10.20 | A-2-4(0) | 30 | NP | 40.5 | 34.8 | 16.6 | 8.1 | 96 | 73 | 29 | - | - | L |
| SS-162 | 35LT | 545+50 | 23.70-25.20 | A-2-4(0) | 38 | NP | 47.6 | 34.0 | 16.4 | 2.0 | 93 | 62 | 22 | - | - | L |
| SS-163 | 35 LT | 545+50 | 33.70-35.20 | A-2-5(0) | 46 | NP | 27.7 | 45.1 | 23.1 | 4.0 | 98 | 85 | 32 | - | - | L |
| SS-164 | 75LT | 547+50 | 3.60-5.10 | A-5(1) | 45 | 6 | 26.7 | 37.2 | 13.9 | 22.2 | 99 | 84 | 44 | - | - | L |
| SS-165 | 75 LT | 547+50 | 8.60-10.10 | A-2-5(0) | 45 | NP | 32.4 | 45.5 | 10.0 | 12.1 | 100 | 81 | 30 | - | - | L |
| SS-166 | 75 LT | 547+50 | 18.60-20.10 | A-2-5(0) | 42 | NP | 68.1 | 17.2 | 6.6 | 8.1 | 99 | 72 | 16 | - | - | L |
| SS-167 | 75 LT | 547+50 | 28.60-30.10 | A-2-4(0) | 37 | NP | 31.7 | 49.7 | 8.4 | 10.1 | 98 | 83 | 24 | - | - | L |
| SS-168 | 75 LT | 547+50 | 38.60-40.10 | A-5(0) | 46 | NP | 34.2 | 37.8 | 15.9 | 12.1 | 99 | 81 | 36 | - | - | L |
| SS-169 | 75 LT | 547+50 | 48.60-50.10 | A-2-5(0) | 41 | NP | 42.7 | 41.3 | 8.0 | 8.1 | 97 | 73 | 21 | - | - | L |
| SS-170 | 100 RT | 551+25 | 3.20-4.70 | A-7-5(11) | 62 | 19 | 19.0 | 29.4 | 15.1 | 36.5 | 100 | 88 | 58 | - | - | L |
| SS-171 | 100 RT | 551+25 | 8.20-9.70 | A-5(0) | 55 | 7 | 22.9 | 46.1 | 12.8 | 18.2 | 99 | 88 | 39 | - | - | L |
| SS-172 | 100 RT | 551+25 | 18.20-19.70 | A-4(0) | 40 | 1 | 19.8 | 40.6 | 25.4 | 14.2 | 100 | 89 | 48 | - | - | L |
| SS-173 | 40 LT | 555+60 | 4.00-5.50 | A-7-6(6) | 48 | 19 | 23.9 | 34.2 | 11.6 | 30.3 | 98 | 84 | 47 | - | - | L |
| SS-174 | 40 LT | 555+60 | 9.00-10.50 | A-2-4(0) | 35 | NP | 29.3 | 47.9 | 10.6 | 12.1 | 97 | 83 | 29 | - | - | L |
| SS-175 | 60 RT | 559+05 | 1.00-2.50 | A-4(3) | 33 | 8 | 17.4 | 29.1 | 23.2 | 30.3 | 98 | 89 | 57 | - | - | L |
| SS-176 | 60 RT | 559+05 | 3.80-5.30 | A-2-4(0) | 28 | 9 | 39.0 | 30.3 | 10.4 | 20.2 | 96 | 71 | 33 | - | - | L |
| SS-177 | 60 RT | 559+05 | 18.80-20.30 | A-4(0) | 22 | NP | 25.7 | 45.3 | 18.9 | 10.1 | 95 | 83 | 36 | - | - | L |
| SS-178 | 200 RT | 560+50 | 0.00-1.50 | A-4(0) | 31 | 6 | 21.4 | 37.8 | 16.5 | 24.3 | 98 | 87 | 46 | - | - | L |
| SS-179 | 200 RT | 560+50 | 3.50-5.00 | A-2-4(0) | 27 | 3 | 47.7 | 33.8 | 4.3 | 14.2 | 76 | 52 | 17 | - | - | L |
| SS-180 | 200 RT | 560+50 | 8.50-10.00 | A-2-5(0) | 55 | NP | 31.7 | 44.7 | 13.4 | 10.1 | 90 | 74 | 27 | - | - | L |
| SS-181 | 200 RT | 560+50 | 13.50-15.00 | A-2-5(0) | 44 | NP | 33.8 | 47.9 | 10.2 | 8.1 | 100 | 84 | 24 | - | - | L |
| SS-182 | 150 LT | 563+00 | 3.40-4.90 | A-5(2) | 47 | 10 | 28.7 | 31.3 | 15.7 | 24.3 | 95 | 77 | 44 | - | - | L |
| SS-183 | 150 LT | 563+00 | 8.40-9.90 | A-5(0) | 46 | NP | 30.9 | 35.6 | 13.2 | 20.2 | 97 | 79 | 39 | - | - | |
| SS-184 | 130 LT | 567+00 | 3.40-4.90 | A-2-4(0) | 21 | 3 | 41.7 | 29.9 | 6.2 | 22.2 | 92 | 67 | 29 | - | - | L |
| SS-185 | 130 LT | 567+00 | 8.40-4.90 | A-7-5(23) | 78 | 31 | 18.2 | 18.0 | 9.2 | 54.6 | 98 | 86 | 66 | - | - | L |
| SS-186 | 140 LT | 570+35 | 0.00-1.50 | A-6(4) | 36 | 15 | 29.7 | 23.3 | 8.6 | 38.4 | 94 | 76 | 47 | - | - | L |
| SS-187 | 140 LT | 570+35 | 3.80-5.30 | A-7-5(11) | 51 | 21 | 24.7 | 17.4 | 9.4 | 48.5 | 97 | 82 | 59 | - | - | L |
| SS-188 | 140 LT | 570+35 | 8.80-10.30 | A-7-5(10) | 54 | 22 | 27.5 | 19.4 | 10.6 | 42.5 | 97 | 78 | 55 | - | - | L |
| SS-188A | 130 LT | 573+10 | 1.00-2.50 | A-5(2) | 46 | 7 | 28.7 | 28.5 | 14.5 | 28.3 | 97 | 78 | 46 | - | - | L |
| SS-189 | 130 LT | 573+10 | 3.50-5.00 | A-2-7(0) | 49 | 11 | 42.3 | 23.7 | 15.9 | 18.2 | 94 | 66 | 35 | - | - | L |
| SS-190 | 10 LT | 577+00 | 0.00-1.50 | A-6(2) | 34 | 11 | 34.4 | 21.0 | 20.3 | 24.3 | 98 | 75 | 46 | - | - | L |
| SS-191 | 10 LT | 577+00 | 4.00-5.50 | A-5(4) | 48 | 9 | 20.4 | 35.0 | 26.4 | 18.2 | 100 | 90 | 53 | - | - | L |
| SS-192 | 50 RT | 579+75 | 0.00-1.50 | A-7-5(13) | 57 | 20 | 16.6 | 23.5 | 21.5 | 38.4 | 100 | 90 | 64 | - | - | L |
| SS-193 | 50 RT | 579+75 | 4.00-5.50 | A-2-4(0) | 40 | 3 | 37.2 | 36.6 | 22.1 | 4.0 | 97 | 72 | 31 | - | - | L |
| SS-194 | 20 LT | 558+50 | 3.50-5.00 | A-7-5(22) | 62 | 29 | 16.6 | 16.6 | 26.4 | 40.4 | 100 | 88 | 71 | - | - | EB2-B |
| SS-195 | 20 LT | 558+50 | 8.50-10.00 | A-5(4) | 48 | 8 | 29.5 | 21.6 | 30.6 | 18.2 | 96 | 75 | 54 | - | - | EB2B |
| SS-196 | 20 LT | 558+50 | 13.50-15.00 | A-7-5(13) | 56 | 19 | 22.2 | 15.6 | 33.9 | 28.3 | 99 | 84 | 66 | - | - | EB2B |
| SS-197 | 20 LT | 558+50 | 23.50-25.00 | A-5(2) | 43 | 8 | 25.9 | 34.4 | 29.6 | 10.1 | 99 | 82 | 48 | - | - | EB2B |
| SS-198 | 20 LT | 558+50 | 33.50-35.00 | A-5(0) | 43 | 4 | 22.2 | 44.9 | 26.8 | 6.1 | 100 | 88 | 42 | - | - | EB2B |
| SS-199 | 20 LT | 558+50 | 43.50-45.00 | A-5(1) | 43 | 6 | 24.5 | 38.8 | 28.6 | 8.1 | 99 | 86 | 44 | - | - | EB2B |
| SS-200 | 20 LT | 558+50 | 53.50-55.50 | A-5(1) | 45 | 6 | 24.5 | 39.6 | 29.8 | 6.1 | 100 | 86 | 43 | - | - | EB2B |
| SS-201 | CL | 589+25 | 3.90-5.40 | A-6(5) | 35 | 16 | 25.7 | 24.1 | 17.9 | 32.4 | 99 | 83 | 52 | - | - | L |
| SS-202 | CL | 589+25 | 8.90-10.40 | A-5(3) | 45 | 10 | 29.1 | 27.7 | 29.0 | 14.2 | 100 | 80 | 48 | - | - | L |
| SS-203 | CL | 592+00 | 0.00-1.50 | A-6(0) | 27 | 11 | 41.1 | 23.3 | 11.4 | 24.3 | 98 | 73 | 37 | - | - | L |
| SS-204 | CL | 592+00 | 4.00-5.50 | A-7-5(23) | 69 | 27 | 14.4 | 13.1 | 13.9 | 58.6 | 100 | 90 | 74 | - | - | L |
| SS-205 | 40 RT | 595+00 | 0.00-1.50 | A-7-5(9) | 51 | 21 | 16.0 | 32.0 | 15.7 | 36.4 | 95 | 88 | 53 | - | - | L |
| SS-206 | 40 RT | 595+00 | 2.20-3.70 | A-4(0) | 32 | 3 | 21.4 | 48.1 | 14.3 | 16.2 | 100 | 90 | 36 | - | - | L |
| SS-207 | 110 RT | 598+25 | 0.00-1.50 | A-7-6(18) | 59 | 30 | 23.3 | 14.4 | 17.9 | 44.5 | 97 | 82 | 63 | - | - | L |
| SS-208 | 110 RT | 598+25 | 4.00-5.50 | A-7-5(4) | 58 | 12 | 33.0 | 24.9 | 21.9 | 20.2 | 98 | 75 | 45 | - | - | L |
| SS-209 | 50 LT | 601+00 | 0.00-1.50 | A-6(4) | 38 | 13 | 29.1 | 22.0 | 22.5 | 26.3 | 95 | 77 | 49 | - | - | L |
| SS-210 | 50 LT | 601+00 | 4.10-5.60 | A-7-5(13) | 58 | 22 | 16.8 | 27.1 | 17.7 | 38.4 | 99 | 89 | 60 | - | - | L |
| SS-211 | 60 RT | 604+00 | 0.00-1.50 | A-6(2) | 30 | 12 | 34.4 | 23.5 | 17.9 | 24.3 | 95 | 76 | 43 | - | - | L |
| SS-212 | 60 RT | 604+00 | 3.90-5.40 | A-4(0) | 38 | 7 | 29.1 | 31.3 | 17.3 | 22.2 | 88 | 72 | 39 | - | - | L |
| SS-213 | CL | 611+00 | 0.00-1.50 | A-7-6(10) | 46 | 24 | 22.0 | 24.5 | 15.1 | 38.4 | 97 | 84 | 55 | - | - | L |
| SS-214 | CL | 611+00 | 3.70-5.20 | A-5(0) | 46 | 6 | 27.7 | 35.8 | 16.3 | 20.2 | 99 | 82 | 41 | - | - | L |
| SS-215 | 50 RT | 16+50 | 0.00-1.50 | A-2-4(0) | 28 | 5 | 41.7 | 28.9 | 15.3 | 14.2 | 94 | 70 | 31 | - | - | Y4RPBD |
| SS-216 | 50 RT | 16+50 | 3.70-5.20 | A-2-4(0) | 25 | NP | 57.7 | 27.1 | 7.1 | 8.1 | 95 | 59 | 16 | - | - | Y4RPBD |

# 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 | 200 | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SS-217 | 50 RT | 16+50 | 8.70-10.20 | A-2-4(0) | 22 | NP | 49.1 | 32.5 | 10.3 | 8.1 | 93 | 66 | 20 | - | - | Y4RPBD |
| SS-218 | 50 RT | 16+50 | 13.70-15.20 | A-2-4(0) | 30 | NP | 42.7 | 37.0 | 16.3 | 4.0 | 98 | 74 | 26 | - | - | Y4RPBD |
| SS-219 | CL | 16+75 | 0.00-1.50 | A-6(7) | 40 | 17 | 25.1 | 22.5 | 13.3 | 39.1 | 99 | 83 | 55 | - | - | Y4CD |
| SS-220 | 70 RT | 608+00 | 0.00-1.50 | A-7-6(16) | 56 | 27 | 18.9 | 21.6 | 18.2 | 41.2 | 99 | 90 | 62 | - | - | L |
| SS-221 | 70 RT | 608+00 | 3.80-5.30 | A-7-5(3) | 44 | 11 | 19.5 | 39.3 | 23.0 | 18.2 | 100 | 92 | 46 | - | - | L |
| SS-222 | 10 RT | 616+50 | 4.10-5.60 | A-2-4(0) | 24 | NP | 28.8 | 41.8 | 14.9 | 14.4 | 98 | 84 | 32 | - | - | L |
| SS-223 | CL | 16+50 | 0.00-1.50 | A-6(1) | 31 | 11 | 34.6 | 28.0 | 14.7 | 22.7 | 100 | 81 | 40 | - | - | Y4RPA |
| SS-224 | CL | 16+50 | 3.50-5.00 | A-1-b(0) | 21 | NP | 76.3 | 15.1 | 3.4 | 5.1 | 99 | 42 | 11 | - | - | Y4RPA |
| SS-225 | CL | 16+50 | 8.50-10.00 | A-4(1) | 35 | 6 | 16.1 | 41.2 | 20.1 | 22.7 | 100 | 93 | 48 | - | - | Y4RPA |
| SS-226 | CL | 16+50 | 18.50-20.00 | A-4(1) | 38 | 10 | 30.9 | 33.8 | 25.0 | 10.3 | 98 | 80 | 39 | - | - | Y4RPA |
| SS-227 | CL | 32+25 | 3.60-5.10 | A-5(5) | 53 | 8 | 10.7 | 39.1 | 27.5 | 22.7 | 98 | 94 | 58 | - | - | Y4CD |
| SS-228 | CL | 32+25 | 8.60-10.10 | A-5(0) | 48 | NP | 28.8 | 40.0 | 16.8 | 14.4 | 95 | 81 | 36 | - | - | Y4CD |
| SS-229 | CL | 32+25 | 13.60-15.10 | A-2-4(0) | 36 | NP | 36.7 | 36.9 | 20.3 | 6.2 | 99 | 79 | 30 | - | - | Y4CD |
| SS-230 | 20 LT | 22+00 | 3.70-5.20 | A-2-4(0) | 34 | NP | 44.9 | 38.1 | 0.6 | 16.4 | 95 | 70 | 22 | - | - | Y4CD |
| SS-231 | 20 LT | 22+00 | 8.70-10.20 | A-2-4(0) | 30 | NP | 40.2 | 40.6 | 7.0 | 12.3 | 96 | 73 | 25 | - | - | Y4CD |
| SS-232 | 150 RT | 625+00 | 4.00-5.50 | A-2-4(0) | 32 | NP | 55.1 | 30.3 | 4.3 | 10.2 | 91 | 58 | 16 | - | - | L |
| SS-233 | 15 RT | 627+55 | 4.00-5.50 | A-2-4(0) | 21 | NP | 54.3 | 32.4 | 1.0 | 12.3 | 93 | 61 | 15 | - | - | L |
| SS-234 | 50 RT | 25+00 | 0.00-1.50 | A-4(1) | 35 | 10 | 30.3 | 27.7 | 15.4 | 26.6 | 96 | 80 | 43 | - | - | Y4RPD |
| SS-235 | 50 RT | 25+00 | 3.70-5.20 | A-7-6(23) | 52 | 23 | 4.3 | 11.3 | 25.0 | 59.4 | 100 | 97 | 88 | - | - | Y4RPD |
| SS-236 | 50 RT | 25+00 | 8.70-10.20 | A-7-5(2) | 44 | 14 | 34.4 | 29.3 | 11.7 | 24.6 | 91 | 68 | 39 | - | - | Y4RPD |
| SS-237 | 90 RT | 22+00 | 3.80-5.30 | A-4(2) | 32 | 10 | 28.7 | 26.2 | 12.3 | 32.8 | 96 | 79 | 46 | - | - | Y4RPBD |
| SS-238 | 90 RT | 22+00 | 8.89-10.30 | A-2-4(0) | 23 | 5 | 46.9 | 33.6 | 1.0 | 18.4 | 91 | 68 | 20 | - | - | Y4RPBD |
| SS-239 | 30 LT | 18+60 | 0.00-1.50 | A-2-4(0) | 28 | 9 | 52.3 | 23.2 | 2.0 | 22.5 | 97 | 61 | 26 | - | - | Y4RPBD |
| MS-240 | 30 LT | 18+60 | 3.90-4.00 | | | | | | | | | | | 22.4 | - | Y4RPBD |
| SS-240 | 30 LT | 18+60 | 4.20-5.70 | A-6(8) | 39 | 13 | 16.4 | 18.2 | 22.3 | 43.0 | 100 | 89 | 68 | - | 4.3 | Y4RPBD |
| MS-241 | 30 LT | 18+60 | 6.00-6.10 | | | | | | | | | | | 23.1 | - | Y4RPBD |
| SS-241 | 30 LT | 18+60 | 8.20-9.70 | A-7-5(19) | 57 | 24 | 14.1 | 15.2 | 27.7 | 43.0 | 100 | 91 | 74 | - | 7.3 | Y4RPBD |
| SS-241A | 125 RT | 19+25 | 1.00-2.50 | A-2-4(0) | 26 | 5 | 46.3 | 33.4 | 5.9 | 14.3 | 98 | 73 | 24 | - | - | Y4RPBD |
| SS-242 | 125 RT | 19+25 | 3.70-5.20 | A-2-4(0) | 22 | NP | 32.8 | 55.1 | 1.8 | 10.2 | 100 | 90 | 16 | - | - | Y4RPBD |
| SS-243 | 125 RT | 19+25 | 6.20-7.70 | A-2-4(0) | 22 | NP | 48.4 | 42.4 | 3.1 | 6.1 | 100 | 79 | 11 | - | - | Y4RPBD |
| SS-244 | 125 RT | 19+25 | 8.70-10.20 | A-3(0) | 21 | NP | 66.8 | 25.6 | 1.4 | 6.1 | 93 | 51 | 9 | - | - | Y4RPBD |
| SS-245A | 125 RT | 19+25 | 11.20-12.70 | A-1-b(0) | 18 | NP | 73.2 | 20.7 | 2.0 | 4.1 | 66 | 30 | 6 | - | - | Y4RPBD |
| SS-246A | 125 RT | 19+25 | 13.70-15.20 | A-2-4(0) | 33 | NP | 52.3 | 33.4 | 6.1 | 8.2 | 95 | 60 | 18 | - | - | Y4RPBD |
| SS-245 | 50 RT | 19+25 | 3.90-5.40 | A-6(1) | 32 | 12 | 18.4 | 47.1 | 7.8 | 26.6 | 100 | 96 | 41 | - | - | Y4RPBD |
| SS-246 | 50 RT | 19+25 | 6.40-7.90 | A-6(4) | 31 | 14 | 13.5 | 42.8 | 10.9 | 32.8 | 100 | 97 | 49 | - | - | Y4RPBD |
| SS-247 | 50 RT | 19+25 | 8.90-10.40 | A-2-4(0) | 26 | 6 | 50.2 | 28.5 | 2.9 | 18.4 | 82 | 55 | 20 | - | - | Y4RPBD |
| SS-248 | 50 RT | 19+25 | 11.40-12.90 | A-2-4(0) | 30 | NP | 46.5 | 39.3 | 3.9 | 10.2 | 100 | 68 | 20 | - | - | Y4RPBD |
| SS-249 | 50 RT | 619+75 | 0.00-1.50 | A-7-5(20) | 67 | 33 | 19.3 | 21.5 | 5.9 | 53.3 | 100 | 87 | 62 | - | - | L |
| SS-250 | CL | 619+75 | 3.60-5.10 | A-7-5(2) | 47 | 11 | 23.8 | 35.9 | 5.5 | 34.8 | 100 | 88 | 44 | - | - | L |
| SS-251 | 50 RT | 28+25 | 4.00-5.50 | A-5(1) | 44 | 10 | 31.5 | 32.3 | 16.0 | 20.2 | 94 | 77 | 38 | - | - | Y4RPBD |
| SS-252 | 50 RT | 28+25 | 9.00-10.50 | A-6(2) | 35 | 12 | 32.1 | 26.9 | 16.8 | 24.2 | 97 | 78 | 44 | - | - | Y4RPBD |
| S-253 | 50 LT | 631+50 | 4.00-5.50 | A-2-4(0) | 26 | 9 | 38.2 | 30.9 | 10.7 | 20.2 | 96 | 73 | 33 | - | - | L |
| SS-254 | CL | 35+00 | 3.00-4.50 | A-7-5(3) | 56 | 13 | 31.1 | 29.9 | 14.7 | 24.2 | 98 | 78 | 42 | - | - | Y4RPBD |
| SS-255 | CL | 35+00 | 8.00-9.50 | A-2-5(0) | 44 | NP | 31.1 | 46.5 | 16.4 | 6.1 | 96 | 81 | 25 | - | - | Y4RPBD |
| SS-256 | 40 LT | 23+00 | 3.50-5.00 | A-7-5(4) | 51 | 11 | 24.4 | 28.3 | 19.0 | 28.3 | 99 | 87 | 51 | - | - | Y4LPD |
| SS-257 | 40 LT | 23+00 | 8.50-10.00 | A-4(0) | 39 | NP | 20.8 | 43.0 | 22.0 | 14.1 | 100 | 90 | 44 | - | - | Y4LPB |
| SS-258 | 90 RT | 641+70 | 3.70-5.20 | A-6(4) | 37 | 17 | 36.8 | 20.6 | 12.3 | 30.3 | 99 | 75 | 45 | - | - | L |
| SS-259 | 90 RT | 641+70 | 13.70-15.20 | A-2-4(0) | 30 | 5 | 42.8 | 30.3 | 16.8 | 10.1 | 98 | 71 | 30 | - | - | L |
| SS-260 | 90 RT | 641+70 | 18.70-20.20 | A-2-4(0) | 34 | 8 | 53.7 | 16.8 | 15.4 | 14.1 | 100 | 72 | 31 | - | - | L |
| SS-261 | 90 RT | 641+70 | 28.70-30.20 | A-2-4(0) | 30 | NP | 49.1 | 32.7 | 16.2 | 2.0 | 92 | 63 | 21 | - | - | L |
| SS-262 | 30 LT | 43+20 | 3.00-4.50 | A-2-5(0) | 48 | 6 | 31.5 | 44.8 | 13.5 | 10.1 | 98 | 81 | 30 | - | - | Y4RPBD |
| SS-263 | 30 LT | 43+20 | 8.60-10.10 | A-2-5(0) | 51 | 1 | 23.8 | 50.5 | 15.6 | 10.1 | 99 | 89 | 32 | - | - | Y4RPBD |
| SS-264 | 30 LT | 43+20 | 13.60-15.10 | A-7-5(5) | 59 | 17 | 19.8 | 41.6 | 22.4 | 16.2 | 97 | 85 | 46 | - | - | Y4RPBD |
| SS-265 | 30 LT | 43+20 | 18.60-20.10 | A-5(6) | 62 | 10 | 10.1 | 43.4 | 28.3 | 18.2 | 99 | 95 | 55 | - | - | Y4RPBD |
| SS-266 | 30 LT | 43+20 | 23.60-29.10 | A-5(4) | 51 | 10 | 12.9 | 43.4 | 29.5 | 14.1 | 100 | 96 | 50 | - | - | Y4RPBD |
| SS-267 | 30 LT | 43+20 | 28.60-30.10 | A-2-5(0) | 49 | 7 | 22.0 | 49.3 | 18.6 | 10.1 | 100 | 92 | 35 | - | - | Y4RPBD |
| SS-268 | 30 LT | 43+20 | 38.60-40.10 | A-2-4(0) | 39 | 2 | 31.7 | 47.7 | 16.6 | 4.0 | 97 | 84 | 25 | - | - | Y4RPBD |
| SS-269 | 25 LT | 19+75 | 4.00-5.50 | A-5(1) | 54 | 7 | 26.1 | 37.6 | 18.2 | 18.2 | 99 | 85 | 41 | - | - | Y4LPB |
| SS-270 | 25 LT | 19+75 | 9.00-10.50 | A-5(0) | 44 | 2 | 21.4 | 47.1 | 21.4 | 10.1 | 100 | 91 | 37 | - | - | Y4LPB |
| SS-271 | 200 LT | 635+00 | 0.00-1.50 | A-7-6(7) | 41 | 14 | 23.6 | 18.8 | 29.3 | 28.3 | 98 | 83 | 59 | - | - | L |
| SS-272 | 200 LT | 635+00 | 4.00-5.50 | A-2-4(0) | 22 | 2 | 52.1 | 29.5 | 7.3 | 11.1 | 95 | 64 | 20 | - | - | L |
| SS-273 | 200 LT | 635+00 | 6.50-8.00 | A-6(1) | 33 | 14 | 38.8 | 27.3 | 13.7 | 20.2 | 98 | 74 | 37 | - | - | L |
| SS-274 | 200LT | 635+00 | 9.00-10.50 | A-4(0) | 39 | 5 | 27.9 | 35.4 | 26.7 | 10.1 | 97 | 78 | 44 | - | - | L |
| SS-275 | 200LT | 635+00 | 14.00-15.50 | A-4(0) | 36 | 5 | 25.1 | 37.2 | 27.7 | 10.1 | 97 | 82 | 45 | - | - | L |
| SS-276 | 70 LT | 44+60 | 3.30-4.80 | A-7-6(12) | 48 | 29 | 30.5 | 17.6 | 9.5 | 42.4 | 100 | 79 | 54 | - | - | Y4CD |
| SS-277 | 25 RT | 20+40 | 3.70-5.20 | A-4(0) | 28 | 8 | 35.1 | 33.3 | 13.4 | 18.3 | 100 | 77 | 37 | - | - | Y4LPA |
| SS-278 | 160 RT | 80+65 | 9.00-10.50 | A-2-4(0) | 30 | NP | 46.7 | 34.1 | 14.2 | 5.1 | 99 | 72 | 23 | - | - | Y4WB |
| SS-279 | 100 RT | 39+40 | 1.00-2.50 | A-6(2) | 33 | 13 | 35.4 | 23.1 | 15.2 | 26.3 | 94 | 71 | 42 | - | - | Y4 RPA |
| SS-280 | 100 RT | 39+40 | 4.00-5.50 | A-7-6(18) | 64 | 37 | 29.4 | 15.8 | 16.4 | 38.5 | 99 | 79 | 57 | - | - | Y4 RPA |
| SS-281 | 100 RT | 39+40 | 9.00-10.50 | A-5(2) | 50 | 7 | 29.4 | 31.4 | 27.1 | 12.1 | 100 | 81 | 47 | - | - | Y4 RPA |
| SS-282 | CL | 30+25 | 4.00-5.50 | A-5(1) | 50 | 8 | 31.6 | 30.6 | 19.6 | 18.2 | 100 | 82 | 43 | - | - | Y4 RPA |
| SS-283 | CL | 30+25 | 9.00-10.50 | A-2-5(0) | 50 | 9 | 43.3 | 33.0 | 17.6 | 6.1 | 100 | 73 | 29 | - | - | Y4 RPA |
| SS-284 | CL | 30+25 | 14.00-15.50 | A-2-5(0) | 48 | 6 | 41.1 | 32.8 | 20.0 | 6.1 | 99 | 73 | 31 | - | - | Y4 RPA |
| SS-285 | 25 RT | 26+25 | 3.00-4.50 | A-6(1) | 33 | 13 | 42.7 | 20.6 | 12.3 | 24.3 | 98 | 69 | 39 | - | - | Y4 RPA |

# SOIL TEST RESULTS

| SAMPLE NO. | OFFSET | STATION | DEPTH INTERVAL | AASHTO CLASS. | L.L. | P.I. | % BY WEIGHT | | | | % PASSING (SIEVES) | | | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | C.SAND | F.SAND | SILT | CLAY | 10 | 40 | 200 | | | |
| SS-286 | 98.98 LT | 21+79 | 1.00-2.50 | A-6(4) | 37 | 16 | 34.0 | 22.1 | 11.5 | 32.4 | 99 | 77 | 46 | - | - | Y4 RPA |
| SS-287 | 98.98 LT | 21+79 | 4.00-5.50 | A-6(4) | 40 | 19 | 23.9 | 36.6 | 13.2 | 26.3 | 97 | 86 | 42 | - | - | Y4 RPA |
| SS-288 | 98.98 LT | 21+79 | 9.00-10.50 | A-5(1) | 43 | 7 | 23.3 | 41.1 | 27.5 | 8.1 | 96 | 84 | 41 | - | - | Y4 RPA |
| SS-289 | 108.83 LT. | 19+59 | 1.00-2.50 | A-7-6(13) | 43 | 15 | 4.5 | 21.1 | 32.0 | 42.5 | 99 | 97 | 79 | - | - | Y4 RPA |
| SS-291 | 108.83 LT. | 19+59 | 3.90-5.40 | A-4(1) | 28 | 10 | 17.6 | 44.7 | 19.4 | 18.2 | 100 | 93 | 44 | - | - | Y4 RPA |
| SS-292 | 108.83 LT. | 19+59 | 8.90-10.40 | A-2-4(0) | 35 | NP | 35.6 | 48.8 | 13.6 | 2.0 | 79 | 67 | 17 | - | - | Y4 RPA |
| SS-293 | 75 RT | 101+00 | 3.70-5.20 | A-4(0) | 39 | 6 | 25.7 | 37.9 | 26.3 | 10.1 | 97 | 83 | 42 | - | - | Y4WB |
| SS-294 | 75 RT | 101+00 | 8.70-10.20 | A-4(2) | 39 | 7 | 18.2 | 42.1 | 27.5 | 12.1 | 100 | 92 | 49 | - | - | Y4WB |
| SS-295 | 75 RT | 101+00 | 13.70-15.20 | A-5(3) | 44 | 7 | 14.6 | 38.5 | 32.8 | 14.2 | 100 | 95 | 56 | - | - | Y4WB |
| SS-296 | 75 RT | 104+00 | 3.30-4.80 | A-1-b(0) | 30 | NP | 40.9 | 33.2 | 19.8 | 6.1 | 60 | 42 | 20 | - | - | Y4WB |
| SS-297 | CL | 28+00 | 3.50-5.00 | A-7-5(5) | 52 | 12 | 24.7 | 28.3 | 22.7 | 24.3 | 97 | 82 | 50 | - | - | Y4 RPB |
| SS-298 | CL | 28+00 | 8.50-10.00 | A-7-5(6) | 52 | 18 | 31.0 | 19.6 | 15.0 | 34.4 | 93 | 72 | 48 | - | - | Y4 RPB |
| SS-299 | CL | 28+00 | 13.50-15.00 | A-2-5(0) | 50 | 8 | 56.1 | 11.9 | 21.9 | 10.1 | 91 | 71 | 30 | - | - | Y4 RPB |
| SS-300 | 25 RT | 17+75 | 3.50-5.00 | A-5(1) | 47 | 8 | 24.3 | 40.1 | 17.4 | 18.2 | 100 | 90 | 40 | - | - | Y4 RPB |
| SS-301 | 25 RT | 17+75 | 8.50-10.00 | A-2-5(0) | 50 | NP | 68.4 | 14.4 | 15.2 | 2.0 | 99 | 67 | 18 | - | - | Y4 RPB |
| SS-302 | 25 RT | 417+75 | 14.00-15.50 | A-2-5(0) | 49 | NP | 27.5 | 50.4 | 18.0 | 4.0 | 98 | 86 | 28 | - | - | Y4 RPB |
| SS-303 | CL | 22+00 | 4.00-5.50 | A-7-5(8) | 54 | 18 | 25.5 | 19.4 | 20.6 | 34.4 | 89 | 74 | 53 | - | - | Y4 RPB |
| SS-304 | CL | 22+00 | 9.00-10.50 | A-7-5(8) | 49 | 14 | 21.5 | 22.5 | 29.8 | 26.3 | 97 | 84 | 60 | - | - | Y4 RPB |
| SS-305 | CL | 25+00 | 3.30-4.80 | A-7-5(6) | 51 | 20 | 40.9 | 9.9 | 12.8 | 36.4 | 95 | 71 | 47 | - | - | Y4 RPB |
| SS-306 | CL | 25+00 | 8.30-9.80 | A-1-b(0) | 29 | 6 | 48.2 | 30.0 | 9.7 | 12.1 | 59 | 40 | 14 | - | - | Y4 RPB |
| SS-307 | 75 RT | 118+00 | 3.90-5.40 | A-5(4) | 46 | 9 | 19.6 | 27.7 | 30.4 | 22.3 | 95 | 84 | 56 | - | - | Y4WB |
| SS-308 | 75 RT | 118+00 | 8.90-10.40 | A-5(0) | 43 | 5 | 21.7 | 45.2 | 20.9 | 12.3 | 100 | 91 | 42 | - | - | Y4WB |
| SS-309 | 75 RT | 118+00 | 13.90-15.40 | A-2-5(0) | 45 | 4 | 28.6 | 48.7 | 14.5 | 8.2 | 93 | 78 | 29 | - | - | Y4WB |
| SS-310 | 75 RT | 120+25 | 3.80-5.30 | A-7-5(2) | 49 | 12 | 28.2 | 34.8 | 14.5 | 22.5 | 98 | 80 | 42 | - | - | Y4WB |
| SS-311 | 75 RT | 120+25 | 8.80-10.30 | A-7-5(2) | 53 | 11 | 50.1 | 10.2 | 15.1 | 24.5 | 99 | 70 | 40 | - | - | Y4WB |
| SS-312 | 75 RT | 120+25 | 13.80-15.30 | A-6(3) | 35 | 14 | 31.9 | 21.9 | 19.6 | 26.6 | 96 | 77 | 47 | - | - | Y4WB |
| SS-313 | 75 RT | 120+25 | 18.80-20.30 | A-6(1) | 35 | 12 | 43.8 | 21.7 | 12.1 | 22.5 | 97 | 67 | 36 | - | - | Y4WB |
| SS-314 | 75 RT | 120+25 | 23.80-25.30 | A-2-5(0) | 47 | 10 | 40.9 | 30.1 | 12.7 | 16.4 | 99 | 73 | 32 | - | - | Y4WB |
| SS-315 | 75 RT | 122+75 | 8.90-10.40 | A-7-6(9) | 48 | 20 | 22.7 | 19.0 | 11.2 | 47.0 | 93 | 79 | 56 | - | - | Y4WB |
| SS-316 | 75 RT | 125+00 | 3.20-4.70 | A-7-5(4) | 59 | 17 | 32.9 | 30.7 | 26.2 | 10.2 | 100 | 80 | 41 | - | - | Y4WB |
| SS-317 | 75 RT | 125+00 | 8.20-9.70 | A-2-4(0) | 31 | NP | 18.0 | 55.6 | 16.2 | 10.2 | 100 | 95 | 33 | - | - | Y4WB |
| SS-318 | 10 LT | 70+25 | 3.30-4.80 | A-2-5(0) | 47 | 5 | 24.3 | 44.8 | 24.8 | 6.1 | 100 | 89 | 35 | - | - | Y5A |
| SS-319 | 10 LT | 70+25 | 8.30-9.80 | A-2-5(0) | 46 | 6 | 45.6 | 30.5 | 19.8 | 4.1 | 100 | 69 | 28 | - | - | Y5A |
| SS-320 | 10 LT | 70+25 | 13.30-14.80 | A-5(0) | 44 | 5 | 34.8 | 30.7 | 26.4 | 8.2 | 98 | 77 | 39 | - | - | Y5A |
| SS-321 | 10 LT | 70+25 | 18.30-19.80 | A-2-5(0) | 51 | 5 | 50.3 | 32.3 | 13.3 | 4.1 | 99 | 65 | 21 | - | - | Y5A |
| SS-322 | 10 LT | 70+25 | 23.30-24.80 | A-2-5(0) | 43 | 6 | 42.7 | 38.2 | 14.9 | 4.1 | 83 | 60 | 21 | - | - | Y5A |
| SS-323 | 10 LT | 70+25 | 28.30-29.80 | A-2-4(0) | 36 | 1 | 38.2 | 34.4 | 23.3 | 4.1 | 75 | 54 | 25 | - | - | Y5A |
| SS-324 | 90 RT | 76+50 | 3.00-4.50 | A-7-5(1) | 47 | 11 | 32.3 | 30.3 | 10.8 | 26.6 | 98 | 81 | 40 | - | - | Y5A |
| SS-325 | 25 RT | 37+75 | 3.70-5.20 | A-2-5(0) | 52 | 8 | 36.8 | 38.9 | 18.2 | 6.1 | 99 | 75 | 29 | - | - | Y6 |
| SS-326 | 25 RT | 37+75 | 8.70-10.20 | A-2-5(0) | 49 | 8 | 37.4 | 37.2 | 19.2 | 6.1 | 98 | 76 | 29 | - | - | Y6 |
| SS-327 | CL | 33+50 | 3.70-5.20 | A-2-5(0) | 56 | 9 | 26.2 | 50.5 | 11.2 | 12.2 | 98 | 87 | 30 | - | - | Y6 |
| SS-328 | CL | 33+50 | 8.70-10.20 | A-2-5(0) | 49 | 7 | 34.1 | 43.4 | 16.4 | 6.1 | 98 | 79 | 28 | - | - | Y6 |
| SS-329 | CL | 33+50 | 13.70-15.20 | A-2-5(0) | 52 | 5 | 42.0 | 42.4 | 9.5 | 6.1 | 97 | 71 | 21 | - | - | Y6 |
| SS-330 | CL | 33+50 | 18.70-20.20 | A-2-5(0) | 45 | 6 | 29.6 | 47.9 | 16.4 | 6.1 | 98 | 81 | 30 | - | - | Y6 |
| MS-330 | CL | 33+50 | 18.70-20.20 | | | | | | | | | | | 16.2 | - | Y6 |
| SS-331 | CL | 33+50 | 23.70-25.20 | A-2-5(0) | 44 | 4 | 43.6 | 38.3 | 14.0 | 4.1 | 97 | 71 | 23 | - | - | Y6 |
| SS-332 | CL | 33+50 | 28.70-30.20 | A-2-5(0) | 48 | 6 | 36.5 | 41.0 | 18.5 | 4.1 | 99 | 77 | 27 | - | - | Y6 |
| SS-333 | 115 LT | 126+25 | 3.60-5.10 | A-7-5(19) | 61 | 31 | 21.3 | 16.4 | 11.6 | 50.7 | 100 | 86 | 64 | - | - | Y4EB |
| SS-334 | 115 LT | 126+25 | 8.60-10.10 | A-7-5(3) | 50 | 13 | 20.3 | 40.0 | 17.4 | 22.3 | 100 | 92 | 45 | - | - | Y4EB |
| SS-335 | 115 LT | 126+25 | 13.60-15.10 | A-2-5(0) | 45 | 5 | 29.4 | 45.6 | 16.8 | 8.1 | 98 | 83 | 30 | - | - | Y4EB |
| SS-336 | 115 LT | 126+25 | 18.60-20.10 | A-2-5(0) | 47 | 9 | 34.9 | 44.2 | 14.8 | 6.1 | 99 | 83 | 27 | - | - | Y4EB |
| SS-337 | 115 LT | 126+25 | 23.60-25.10 | A-2-5(0) | 54 | 8 | 31.8 | 46.2 | 13.8 | 8.1 | 100 | 84 | 27 | - | - | Y4EB |
| SS-338 | 75 LT | 35+50 | 3.70-5.20 | A-7-5(11) | 70 | 21 | 27.8 | 20.3 | 17.4 | 34.5 | 99 | 80 | 54 | - | - | Y4RPC |
| SS-339 | 75 LT | 35+50 | 8.70-10.20 | A-7-5(2) | 65 | 14 | 30.2 | 34.9 | 18.7 | 16.2 | 98 | 79 | 39 | - | - | Y4RPC |
| SS-340 | 90 LT | 38+50 | 3.00-4.50 | A-7-5(15) | 67 | 25 | 23.5 | 17.8 | 18.1 | 40.6 | 98 | 83 | 60 | - | - | Y4RPC |
| SS-341 | 90 LT | 38+50 | 8.00-9.50 | A-5(3) | 56 | 9 | 24.5 | 35.5 | 21.7 | 18.3 | 99 | 86 | 45 | - | - | Y4RPC |
| SS-342 | 90 LT | 38+50 | 13.00-14.50 | A-2-5(0) | 45 | 9 | 33.1 | 40.6 | 16.2 | 10.1 | 100 | 83 | 28 | - | - | Y4RPC |
| SS-343 | 110 LT | 115+50 | 4.00-5.50 | A-7-5(4) | 57 | 13 | 23.5 | 35.3 | 24.9 | 16.2 | 100 | 85 | 47 | - | - | Y4EB |
| SS-344 | 110 LT | 115+50 | 9.00-10.50 | A-7-5(8) | 63 | 19 | 20.1 | 35.3 | 28.4 | 16.2 | 99 | 89 | 50 | - | - | Y4EB |
| SS-345 | 110 LT | 115+50 | 14.00-15.50 | A-5(1) | 48 | 9 | 28.8 | 36.5 | 24.5 | 10.1 | 95 | 77 | 40 | - | - | Y4EB |
| SS-346 | 110 LT | 115+50 | 19.00-20.50 | A-7-5(0) | 50 | 11 | 31.4 | 38.9 | 21.5 | 8.1 | 97 | 77 | 36 | - | - | Y4EB |
| SS-347 | 110 LT | 118+10 | 1.00-2.50 | A-6(3) | 40 | 14 | 33.3 | 24.3 | 14.0 | 28.4 | 96 | 74 | 44 | - | - | Y4EB |
| SS-348 | 110 LT | 118+10 | 3.60-5.10 | A-5(1) | 52 | 9 | 37.5 | 27.6 | 12.6 | 22.3 | 100 | 77 | 39 | - | - | Y4EB |
| SS-349 | 110 LT | 121+00 | 3.90-5.40 | A-7-5(7) | 57 | 17 | 30.8 | 19.3 | 23.5 | 26.4 | 96 | 74 | 51 | - | - | Y4EB |
| SS-350 | 110 LT | 121+00 | 8.90-10.40 | A-5(0) | 53 | 8 | 25.4 | 45.2 | 17.2 | 12.2 | 98 | 83 | 36 | - | - | Y4EB |
| SS-351 | 110 LT | 121+00 | 13.90-15.40 | A-2-5(0) | 49 | 8 | 25.4 | 50.3 | 16.2 | 8.1 | 100 | 84 | 32 | - | - | Y4EB |
| SS-352 | 115 LT | 135+50 | 3.80-5.30 | A-7-5(5) | 55 | 15 | 30.0 | 26.0 | 15.6 | 28.4 | 98 | 79 | 47 | - | - | Y4EB |
| SS-353 | 115 LT | 133+50 | 3.10-4.60 | A-7-5(3) | 49 | 14 | 35.1 | 28.8 | 17.8 | 18.3 | 100 | 76 | 41 | - | - | Y4EB |
| SS-354 | 115 LT | 130+50 | 3.60-5.10 | A-6(1) | 40 | 12 | 20.9 | 43.6 | 11.2 | 24.3 | 95 | 86 | 38 | - | - | Y4EB |
| SS-355 | 115 LT | 130+50 | 8.60-10.10 | A-2-4(0) | 31 | NP | 54.6 | 33.5 | 7.9 | 4.1 | 90 | 57 | 14 | - | - | Y4EB |
| SS-356 | CL | 66+00 | 3.60-5.10 | A-7-5(7) | 54 | 17 | 19.5 | 30.2 | 19.9 | 30.4 | 94 | 84 | 52 | - | - | Y5A |
| SS-357 | CL | 66+00 | 8.60-10.10 | A-5(2) | 45 | 8 | 15.6 | 48.9 | 25.4 | 10.1 | 100 | 94 | 45 | - | - | Y5A |
| SS-358 | CL | 25+00 | 4.00-5.50 | A-2-4(0) | 31 | 2 | 43.0 | 31.4 | 11.4 | 14.2 | 100 | 73 | 30 | - | - | Y5DET |
| SS-359 | 70 RT | 648+25 | 3.80-5.30 | A-2-4(0) | 29 | 5 | 44.2 | 30.2 | 11.4 | 14.2 | 98 | 70 | 29 | - | - | L |

# SOIL TEST RESULTS

| SAMPLE NO. | OFFSET | STATION | DEPTH INTERVAL | AASHTO CLASS. | L.L. | P.I. | % BY WEIGHT | | | | % PASSING (SIEVES) | | | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | C.SAND | F.SAND | SILT | CLAY | 10 | 40 | 200 | | | |
| SS-360 | 75 RT | 644+60 | 3.50-5.00 | A-2-4(0) | 28 | NP | 52.1 | 33.1 | 10.8 | 4.1 | 99 | 69 | 20 | - | - | L |
| SS-361 | 75 RT | 644+60 | 8.50-10.00 | A-2-5(0) | 48 | 7 | 35.9 | 35.1 | 20.9 | 8.1 | 100 | 79 | 35 | - | - | L |
| SS-362 | 75 RT | 644+60 | 13.50-15.00 | A-2-4(0) | 26 | NP | 44.1 | 39.0 | 12.8 | 4.0 | 99 | 75 | 23 | - | - | L |
| SS-363 | 75 RT | 644+60 | 23.50-25.00 | A-2-4(0) | 26 | NP | 46.6 | 39.0 | 10.4 | 4.0 | 100 | 73 | 20 | - | - | L |
| SS-364 | 75 RT | 644+60 | 33.50-35.00 | A-2-5(0) | 44 | NP | 37.2 | 36.7 | 20.1 | 6.1 | 99 | 77 | 32 | - | - | L |
| SS-365 | CL | 654+00 | 3.80-5.30 | A-7-5(7) | 52 | 12 | 24.2 | 21.8 | 25.7 | 28.3 | 100 | 83 | 58 | - | - | L |
| SS-366 | CL | 654+00 | 8.80-10.30 | A-5(3) | 51 | 10 | 31.7 | 26.9 | 23.2 | 18.2 | 100 | 81 | 47 | - | - | L |
| SS-367 | CL | 654+00 | 13.80-15.30 | A-5(1) | 49 | 8 | 32.1 | 31.5 | 24.2 | 12.1 | 100 | 80 | 42 | - | - | L |
| SS-368 | CL | 657+00 | 3.50-5.00 | A-7-6(6) | 46 | 20 | 30.9 | 26.3 | 10.5 | 32.3 | 99 | 80 | 46 | - | - | L |
| SS-369 | 50 LT | 660+50 | 4.00-5.50 | A-7-5(1) | 44 | 12 | 35.4 | 29.3 | 13.1 | 22.2 | 99 | 77 | 39 | - | - | L |
| SS-370 | 50 LT | 660+50 | 9.00-10.50 | A-2-5(0) | 41 | NP | 47.0 | 35.6 | 11.4 | 6.1 | 98 | 71 | 23 | - | - | L |
| SS-371 | 40 LT | 70+50 | 0.00-1.50 | A-6(3) | 38 | 11 | 28.9 | 23.6 | 25.3 | 22.2 | 99 | 79 | 51 | - | - | Y4RPCD |
| SS-372 | 40 LT | 70+50 | 3.00-4.50 | A-4(0) | 28 | 7 | 39.8 | 25.7 | 16.4 | 18.2 | 99 | 73 | 38 | - | - | Y4RPCD |
| S-373 | 40 LT | 70+50 | 8.00-9.50 | A-1-b(0) | 39 | NP | 58.6 | 24.8 | 10.5 | 6.1 | 88 | 48 | 17 | - | - | Y4RPCD |
| SS-374 | 17 RT | 31+02 | 4.00-5.50 | A-7-5(6) | 48 | 14 | 27.1 | 22.6 | 28.0 | 22.2 | 96 | 77 | 53 | - | - | Y5 |
| SS-375 | 17 RT | 31+02 | 14.00-15.50 | A-5(1) | 47 | 8 | 36.8 | 27.5 | 25.6 | 10.1 | 99 | 75 | 41 | - | - | Y5 |
| SS-376 | 17 RT | 31+02 | 24.00-25.50 | A-2-5(0) | 41 | 5 | 42.9 | 34.6 | 16.5 | 6.1 | 99 | 72 | 28 | - | - | Y5 |
| SS-377 | 17 RT | 31+02 | 34.00-35.50 | A-2-5(0) | 41 | 4 | 48.3 | 29.5 | 16.1 | 6.1 | 96 | 66 | 26 | - | - | Y5 |
| SS-378 | 50 RT | 32+50 | 3.70-5.20 | A-6(1) | 35 | 13 | 36.8 | 27.9 | 13.0 | 22.2 | 98 | 74 | 38 | - | - | Y4RPC |
| SS-379 | 50 RT | 32+50 | 8.70-10.20 | A-2-4(0) | 36 | 4 | 29.7 | 41.5 | 18.7 | 10.1 | 99 | 86 | 33 | - | - | Y4RPC |
| SS-380 | CL | 28+00 | 3.10-4.60 | A-7-5(12) | 52 | 19 | 14.8 | 27.5 | 19.3 | 38.4 | 100 | 92 | 63 | - | - | Y4RPC |
| SS-381 | CL | 28+00 | 8.10-9.60 | A-5(0) | 52 | 9 | 31.1 | 39.6 | 17.1 | 12.1 | 99 | 82 | 36 | - | - | Y4RPC |
| SS-382 | CL | 28+00 | 13.10-14.60 | A-2-5(0) | 56 | 4 | 27.7 | 45.3 | 18.9 | 8.1 | 98 | 84 | 32 | - | - | Y4RPC |
| SS-383 | 120 LT | 99+00 | 3.70-5.20 | A-7-5(5) | 52 | 12 | 25.1 | 29.1 | 17.5 | 28.3 | 100 | 86 | 50 | - | - | Y4EB |
| SS-384 | 120 LT | 99+00 | 8.70-10.20 | A-5(0) | 51 | 4 | 40.4 | 28.1 | 17.3 | 14.2 | 99 | 72 | 36 | - | - | Y4EB |
| SS-385 | 120 LT | 99+00 | 18.70-20.20 | A-2-5(0) | 50 | 5 | 43.3 | 32.4 | 16.3 | 8.1 | 100 | 75 | 29 | - | - | Y4EB |
| SS-386 | 120 LT | 99+00 | 28.70-30.20 | A-2-5(0) | 43 | NP | 49.8 | 30.0 | 16.1 | 4.1 | 97 | 67 | 23 | - | - | Y4EB |
| SS-387 | 120 LT | 97+25 | 3.90-5.40 | A-5(3) | 63 | 10 | 33.8 | 25.3 | 16.7 | 24.3 | 97 | 74 | 43 | - | - | Y4EB |
| SS-388 | 120 LT | 97+25 | 8.90-10.40 | A-2-5(0) | 53 | 7 | 47.9 | 26.3 | 15.7 | 10.1 | 95 | 61 | 28 | - | - | Y4EB |
| SS-389 | 120 LT | 97+25 | 18.90-20.20 | A-2-5(0) | 51 | 5 | 42.5 | 25.7 | 19.7 | 12.1 | 98 | 71 | 35 | - | - | Y4EB |
| SS-390 | CL | 25+00 | 3.50-5.00 | A-7-5(8) | 63 | 19 | 30.1 | 23.3 | 18.3 | 28.3 | 98 | 79 | 50 | - | - | Y4RPC |
| SS-391 | CL | 25+00 | 8.50-10.00 | A-2-4(0) | 36 | NP | 43.1 | 34.2 | 14.7 | 8.1 | 80 | 59 | 21 | - | - | Y4RPC |
| SS-392 | CL | 25+00 | 13.50-15.00 | A-2-5(0) | 57 | NP | 42.9 | 27.9 | 21.1 | 8.1 | 97 | 69 | 32 | - | - | Y4RPC |
| SS-393 | CL | 25+00 | 23.50-25.00 | A-2-5(0) | 47 | NP | 59.0 | 28.1 | 8.8 | 4.0 | 97 | 62 | 16 | - | - | Y4RPC |
| SS-394 | CL | 23+00 | 3.70-5.20 | A-2-4(0) | 30 | NP | 44.7 | 31.5 | 11.6 | 12.1 | 100 | 73 | 27 | - | - | Y4RPC |
| SS-395 | CL | 20+50 | 4.00-5.50 | A-7-5(5) | 48 | 13 | 30.5 | 21.2 | 19.9 | 28.3 | 100 | 79 | 51 | - | - | Y4RPC |
| SS-396 | CL | 20+50 | 9.00-10.50 | A-2-5(0) | 51 | NP | 42.5 | 31.7 | 17.7 | 8.1 | 100 | 74 | 30 | - | - | Y4RPC |
| SS-397 | 200 LT | 82+50 | 3.90-5.40 | A-2-4(0) | 27 | NP | 44.7 | 33.6 | 11.6 | 10.1 | 99 | 74 | 26 | - | - | Y4EB |
| SS-398 | CL | 18+50 | 3.00-4.50 | A-2-4(0) | 27 | NP | 51.2 | 30.9 | 9.8 | 8.1 | 98 | 66 | 21 | - | - | Y4LPD |
| SS-399 | 50 LT | 14+75 | 3.00-4.50 | A-7-5(5) | 50 | 15 | 27.1 | 30.1 | 16.6 | 26.3 | 100 | 83 | 48 | - | - | Y4LPD |
| SS-400 | 50 LT | 14+75 | 8.00-9.50 | A-2-5(0) | 49 | NP | 40.8 | 39.6 | 13.5 | 6.1 | 100 | 77 | 25 | - | - | Y4LPD |
| SS-401 | CL | 63+00 | 3.10-4.60 | A-5(4) | 61 | 10 | 25.9 | 30.5 | 21.4 | 22.2 | 100 | 85 | 49 | - | - | Y4RPBD |
| SS-402 | CL | 59+00 | 3.50-9.00 | A-5(3) | 55 | 9 | 27.9 | 30.1 | 23.8 | 18.2 | 100 | 84 | 48 | - | - | Y4RPBD |
| SS-403 | CL | 59+00 | 8.50-10.00 | A-5(1) | 43 | 8 | 32.5 | 34.9 | 24.4 | 8.1 | 100 | 79 | 42 | - | - | Y4RPBD |
| SS-404 | CL | 27+00 | 2.50-4.00 | A-6(2) | 33 | 16 | 36.4 | 26.3 | 11.1 | 26.3 | 100 | 79 | 40 | - | - | Y4RPD |
| SS-405 | CL | 27+00 | 7.50-9.00 | A-7-6(12) | 52 | 25 | 24.4 | 20.2 | 14.9 | 40.4 | 100 | 85 | 58 | - | - | Y4RPD |
| SS-406 | 30 RT | 24+50 | 3.50-5.00 | A-7-6(10) | 46 | 24 | 27.7 | 21.4 | 12.5 | 38.4 | 100 | 85 | 54 | - | - | Y5 |
| SS-407 | CL | 667+75 | 0.00-1.50 | A-7-5(14) | 46 | 14 | 1.8 | 21.6 | 40.2 | 36.4 | 100 | 100 | 83 | - | - | L |
| SS-408 | CL | 667+75 | 4.00-5.50 | A-4(3) | 33 | 9 | 11.7 | 38.4 | 23.6 | 26.3 | 100 | 94 | 56 | - | - | L |
| SS-409 | CL | 667+75 | 6.50-8.00 | A-1-b(0) | 19 | NP | 74.4 | 19.1 | 2.4 | 4.0 | 73 | 31 | 6 | - | - | L |
| SS-410 | CL | 667+75 | 11.50-13.00 | A-2-5(0) | 49 | NP | 36.4 | 45.7 | 11.9 | 6.1 | 100 | 85 | 23 | - | - | L |
| SS-411 | 200 LT | 667+75 | 3.70-5.20 | A-2-4(0) | 25 | NP | 21.4 | 50.7 | 15.8 | 12.1 | 99 | 92 | 33 | - | - | L |
| SS-412 | 200 LT | 667+75 | 8.70-10.20 | A-1-b(0) | 27 | NP | 71.4 | 20.5 | 4.0 | 4.0 | 74 | 33 | 7 | - | - | L |
| SS-413 | 75 RT | 667+75 | 4.00-5.50 | A-4(0) | 26 | NP | 18.2 | 48.5 | 13.1 | 20.2 | 100 | 96 | 38 | - | - | L |
| SS-414 | 75 RT | 667+75 | 9.00-10.50 | A-1-b(0) | 25 | NP | 75.6 | 18.8 | 2.6 | 3.0 | 74 | 29 | 5 | - | - | L |
| SS-415 | CL | 669+00 | 4.50-6.00 | A-4(3) | 40 | 8 | 6.7 | 47.1 | 18.0 | 28.3 | 100 | 99 | 54 | - | - | L |
| SS-416 | CL | 75+00 | 3.40-4.90 | A-2-4(0) | 39 | 6 | 35.4 | 33.5 | 10.9 | 20.2 | 100 | 81 | 35 | - | - | Y4CD |
| SS-417 | CL | 75+00 | 8.40-9.90 | A-2-4(0) | 36 | NP | 54.9 | 28.7 | 9.3 | 7.1 | 96 | 60 | 19 | - | - | Y4CD |
| SS-418 | 84 LT | 82+62 | 3.50-5.00 | A-2-4(0) | 32 | NP | 45.8 | 34.2 | 10.9 | 9.1 | 97 | 74 | 23 | - | - | Y4CD |
| MS-419 | 84 LT | 82+62 | 13.50-15.00 | | | | | | | | | | | 19.7 | - | Y4CD |
| SS-419 | 84 LT | 82+62 | 13.50-15.00 | A-2-4(0) | 28 | NP | 45.1 | 37.2 | 13.7 | 4.0 | 94 | 73 | 21 | - | - | Y4CD |
| MS-420 | 84 LT | 82+62 | 23.50-25.00 | | | | | | | | | | | 16.4 | - | Y4CD |
| SS-420 | 84 LT | 82+62 | 23.50-25.00 | A-2-5(0) | 51 | 7 | 35.6 | 43.2 | 15.2 | 6.1 | 100 | 83 | 26 | - | - | Y4CD |
| SS-421 | 84 LT | 82+62 | 28.50-30.00 | A-2-4(0) | 40 | NP | 30.7 | 43.0 | 18.2 | 8.1 | 100 | 83 | 33 | - | - | Y4CD |
| S-422 | 5.0 RT | 683+31 | 30.00-38.50 | A-5(2) | 48 | 9 | 29.9 | 31.9 | 22.2 | 16.0 | 100 | 83 | 43 | - | - | L |
| MS-422 | 5.0 RT | 683+31 | 30.00-38.50 | | | | | | | | | | | 43.6 | - | L |
| SS-423 | 20 RT | 681+92 | 3.80-5.30 | A-5(1) | 61 | 6 | 28.3 | 39.3 | 18.2 | 14.2 | 100 | 83 | 40 | - | - | L |
| SS-424 | 20 RT | 681+92 | 8.80-10.30 | A-2-5(0) | 52 | 4 | 30.9 | 40.5 | 18.6 | 10.0 | 100 | 82 | 34 | - | - | L |
| SS-425 | 20 RT | 681+92 | 13.80-15.30 | A-2-5(0) | 63 | 6 | 36.9 | 37.3 | 19.8 | 6.0 | 99 | 75 | 32 | - | - | L |
| MS-425 | 20 RT | 681+92 | 13.80-15.30 | | | | 0.0 | 0.0 | 0.0 | 0.0 | | 0 | 0 | 22.1 | - | L |
| SS-426 | 20 RT | 681+92 | 20.30-21.80 | A-2-5(0) | 43 | 2 | 48.5 | 31.3 | 16.2 | 4.0 | 87 | 56 | 22 | - | - | L |
| MS-426 | 20 RT | 681+92 | 20.30-21.80 | | | | | | | | | | | 9.5 | - | L |
| SS-427 | 46 RT | 676+52 | 3.70-5.20 | A-7-5(6) | 60 | 15 | 28.9 | 24.7 | 18.0 | 28.3 | 98 | 82 | 49 | - | - | L |
| SS-428 | 46 RT | 676+52 | 18.70-20.20 | A-2-5(0) | 43 | NP | 32.1 | 45.1 | 14.8 | 8.0 | 100 | 86 | 27 | - | - | L |

# SOIL TEST RESULTS

| SAMPLE NO. | OFFSET | STATION | DEPTH INTERVAL | AASHTO CLASS. | L.L. | P.I. | % BY WEIGHT | | | | % PASSING (SIEVES) | | | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | C.SAND | F.SAND | SILT | CLAY | 10 | 40 | 200 | | | |
| SS-429 | 46 RT | 676+52 | 23.70-25.20 | A-2-5(0) | 41 | NP | 32.5 | 42.1 | 19.4 | 6.0 | 98 | 81 | 30 | - | - | L |
| SS-430 | 115 RT | 686+00 | 3.10-4.60 | A-2-6(1) | 36 | 13 | 40.8 | 29.3 | 13.8 | 16.1 | 100 | 76 | 34 | - | - | L |
| SS-431 | 115 RT | 686+00 | 8.10-9.60 | A-2-4(0) | 28 | NP | 45.2 | 37.5 | 11.2 | 6.1 | 99 | 74 | 22 | - | - | L |
| SS-432 | 95 RT | 688+45 | 4.00-5.50 | A-1-b(0) | 19 | NP | 77.2 | 17.5 | 3.3 | 2.0 | 85 | 39 | 5 | - | - | L |
| SS-433 | CL | 90+25 | 3.50-5.00 | A-7-5(11) | 53 | 22 | 22.2 | 22.4 | 11.0 | 44.4 | 100 | 87 | 58 | - | - | Y4CD |
| SS-434 | CL | 90+25 | 8.50-10.00 | A-2-4(0) | 35 | 4 | 42.4 | 29.4 | 11.1 | 17.2 | 99 | 74 | 32 | - | - | Y4CD |
| SS-435 | CL | 90+25 | 23.50-25.00 | A-2-4(0) | 36 | NP | 42.3 | 37.9 | 13.7 | 6.1 | 100 | 76 | 24 | - | - | Y4CD |
| SS-436 | 115 LT | 49+60 | 3.90-5.40 | A-4(0) | 39 | 3 | 25.0 | 42.6 | 14.2 | 18.2 | 99 | 87 | 36 | - | - | Y4EB |
| SS-437 | 115 LT | 49+60 | 8.90-10.40 | A-2-5(0) | 47 | NP | 35.7 | 48.2 | 12.0 | 4.0 | 96 | 80 | 19 | - | - | Y4EB |
| SS-438 | 110 LT | 45+30 | 0.00-1.50 | A-7-5(25) | 55 | 23 | 5.2 | 5.9 | 26.3 | 62.6 | 100 | 96 | 91 | - | - | Y4EB |
| SS-439 | 110 LT | 45+30 | 4.00-5.50 | A-7-6(8) | 42 | 25 | 27.4 | 24.6 | 11.6 | 36.3 | 93 | 79 | 49 | - | - | Y4EB |
| SS-440 | 115 LT | 53+75 | 3.80-5.30 | A-4(0) | 35 | 9 | 35.9 | 26.6 | 21.3 | 16.1 | 96 | 71 | 39 | - | - | Y4EB |
| SS-441 | 115 LT | 53+75 | 3.80-5.30 | A-4(1) | 28 | 7 | 27.0 | 24.0 | 22.7 | 26.2 | 96 | 78 | 51 | - | - | Y4EB |
| SS-442 | 115 LT | 53+75 | 8.80-10.30 | A-4(0) | 35 | 8 | 38.7 | 24.6 | 20.5 | 16.1 | 99 | 70 | 40 | - | - | Y4EB |
| SS-443 | 115 LT | 53+75 | 13.80-15.30 | A-2-5(0) | 43 | 4 | 44.0 | 34.3 | 15.6 | 6.1 | 87 | 61 | 24 | - | - | Y4EB |
| SS-444 | 30 RT | 81+00 | 0.00-1.50 | A-7-5(5) | 45 | 15 | 32.5 | 20.4 | 22.9 | 24.2 | 97 | 74 | 49 | - | - | Y4RPBD |
| SS-445 | 30 RT | 81+00 | 3.70-5.20 | A-2-4(0) | 30 | 8 | 51.7 | 19.4 | 14.8 | 14.1 | 97 | 62 | 30 | - | - | Y4RPBD |
| SS-446 | 45 RT | 84+50 | 3.90-5.40 | A-2-5(0) | 46 | NP | 48.2 | 35.1 | 14.6 | 2.0 | 98 | 65 | 21 | - | - | Y4RPBD |
| SS-447 | 45 RT | 84+50 | 13.90-15.40 | A-2-4(0) | 28 | NP | 37.1 | 41.1 | 16.8 | 5.0 | 100 | 87 | 28 | - | - | Y4RPBD |
| SS-448 | 115 LT | 60+00 | 9.00-10.50 | A-6(1) | 38 | 12 | 34.5 | 30.9 | 18.5 | 16.1 | 99 | 81 | 39 | - | - | Y4EB |
| SS-449 | 115 LT | 56+00 | 3.60-5.10 | A-7-5(2) | 44 | 12 | 34.7 | 25.8 | 13.2 | 26.2 | 100 | 76 | 43 | - | - | Y4EB |
| SS-450 | 80 LT | 75+85 | 3.70-5.20 | A-7-6(7) | 42 | 21 | 23.4 | 27.6 | 14.7 | 34.3 | 97 | 74 | 49 | - | - | Y4RPBD |
| SS-451 | 80 LT | 75+85 | 8.70-10.20 | A-5(1) | 60 | 10 | 34.9 | 31.7 | 21.4 | 12.1 | 98 | 75 | 38 | - | - | Y4RPBD |
| SS-452 | 150 LT | 66+75 | 3.40-4.90 | A-6(4) | 38 | 19 | 38.1 | 22.6 | 13.1 | 26.2 | 100 | 79 | 42 | - | - | Y4RPBD |
| SS-453 | 70 LT | 42+00 | 0.00-1.50 | A-7-6(32) | 62 | 33 | 9.9 | 6.0 | 21.6 | 62.5 | 100 | 93 | 85 | - | - | Y4EB |
| SS-454 | 70 LT | 42+00 | 3.50-5.00 | A-6(2) | 40 | 11 | 28.6 | 31.3 | 15.9 | 24.2 | 100 | 88 | 42 | - | - | Y4EB |
| SS-455 | 70 LT | 42+00 | 8.50-10.00 | A-1-b(0) | 22 | NP | 82.3 | 12.7 | 0.0 | 5.0 | 74 | 22 | 5 | - | - | Y4EB |
| SS-456 | 50 RT | 30+00 | 3.00-4.50 | A-5(0) | 52 | 5 | 26.0 | 41.7 | 14.1 | 18.1 | 99 | 83 | 39 | - | - | YIRPA |
| SS-457 | 50 RT | 30+00 | 8.00-9.50 | A-5(0) | 48 | 3 | 22.8 | 46.8 | 18.3 | 12.1 | 99 | 87 | 37 | - | - | YIRPA |
| SS-458 | CL | 19+00 | 3.80-5.30 | A-7-5(9) | 53 | 19 | 28.8 | 19.6 | 17.3 | 34.3 | 99 | 79 | 54 | - | - | YILPA |
| SS-459 | CL | 19+00 | 8.80-10.30 | A-2-5(0) | 46 | 5 | 45.4 | 30.8 | 19.8 | 4.0 | 97 | 70 | 28 | - | - | YILPA |
| SS-460 | 60 RT | 619+85 | 3.60-5.10 | A-6(2) | 35 | 13 | 38.7 | 21.8 | 17.3 | 22.2 | 98 | 72 | 41 | - | - | L |
| SS-461 | 60 RT | 619+85 | 8.60-10.10 | A-2-5(0) | 55 | NP | 48.8 | 34.1 | 15.1 | 2.0 | 96 | 69 | 20 | - | - | L |
| | | | | | | | | | | | | | | | | |
| CBR#1 | 25 RT | 37+75 | 4.00-6.00 | A-7-5(6) | 52 | 15 | 26.4 | 26.0 | 17.3 | 30.3 | 98 | 80 | 50 | - | - | Y6 |
| RT-2 | 84 LT | 82+62 | 15.00-23.00 | A-2-4(0) | 38 | 6 | 31.7 | 41.4 | 14.8 | 12.1 | 96 | 81 | 32 | - | - | Y4CD |
| RT-3 | 20 RT | 681+92 | 8.00-15.00 | A-5(0) | 48 | 2 | 23.1 | 45.0 | 17.8 | 14.1 | 99 | 89 | 37 | - | - | L |
| RT-4 | 25 RT | 498+50 | 11.50-15.00 | A-5(3) | 44 | 10 | 25.6 | 29.7 | 24.3 | 20.4 | 99 | 82 | 50 | - | - | L |
| ST-1 | CL | 33+50 | 14.70-16.70 | A-2-5(0) | 52 | NP | 24.7 | 57.1 | 14.2 | 4.0 | 94 | 82 | 24 | - | - | Y6 |
| ST-2 | 84 LT | 82+62 | 25.10-27.10 | A-2-5(0) | 41 | NP | 37.7 | 37.6 | 17.7 | 7.1 | 98 | 79 | 29 | - | - | Y4CD |
| ST-3 | 20 RT | 681+92 | 18.80-20.30 | A-5(2) | 45 | 9 | 31.0 | 28.6 | 28.3 | 12.2 | 98 | 77 | 43 | - | - | L |
| ST-4 | 25 RT | 498+50 | 9.50-11.50 | A-2-5(0) | 51 | NP | 35.7 | 49.8 | 8.4 | 6.1 | 100 | 84 | 20 | - | - | L |
| ST-5 | 30 LT | 18+60 | 2.00-4.00 | A-2-4(0) | 28 | 7 | 45.9 | 24.7 | 17.4 | 12.0 | 97 | 59 | 30 | - | - | Y4RPBD |
| ST-6#1 | 30 LT | 18+60 | 6.10-8.10 | A-6(4) | 33 | 11 | 27.8 | 19.4 | 21.9 | 30.9 | 99 | 77 | 55 | - | - | Y4RPBD |
| ST-6#2&3 | 30 LT | 18+60 | 6.10-8.10 | A-6(10) | 38 | 14 | 16.3 | 13.8 | 30.8 | 39.1 | 100 | 88 | 73 | - | - | Y4RPBD |
| | | | | | | | | | | | | | | | | |
| RETAINING WALL 1 | | | | | | | | | | | | | | | | |
| B-1 | | | | | | | | | | | | | | | | |
| SS-1 | 14.5 RT | 46+44 | 4.60-5.60 | A-2-5(0) | 42 | 10 | 39.2 | 32.9 | 9.6 | 18.3 | 87 | 66 | 29 | 19 | - | Y4WB |
| SS-2 | 14.5 RT | 46+44 | 9.60-10.60 | A-7-5(4) | 48 | 15 | 30.7 | 27.2 | 13.6 | 28.5 | 100 | 80 | 47 | 27 | - | Y4WB |
| SS-3 | 14.5 RT | 46+44 | 17.10-18.10 | A-7-6(13) | 46 | 20 | 12.2 | 17.1 | 24.0 | 46.7 | 90 | 84 | 67 | 41 | - | Y4WB |
| SS-4 | 14.5 RT | 46+44 | 19.60-20.60 | A-1-b(0) | 38 | NP | 52.8 | 37.6 | 3.5 | 6.1 | 67 | 44 | 9 | 15 | - | Y4WB |
| SS-5 | 14.5 RT | 46+44 | 24.60-25.60 | A-2-4(0) | 35 | NP | 53.3 | 36.4 | 6.3 | 4.1 | 88 | 57 | 13 | 16 | - | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-2 | | | | | | | | | | | | | | | | |
| SS-6 | 17.5 RT | 47+64 | 4.70-5.70 | A-4(0) | 40 | 6 | 33.5 | 32.7 | 13.4 | 20.3 | 94 | 75 | 36 | 23 | | Y4WB |
| SS-7 | 17.5 RT | 47+64 | 9.70-10.70 | A-6(1) | 30 | 12 | 39.0 | 26.6 | 10.0 | 24.4 | 95 | 70 | 36 | 23 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| RETAINING WALL 2 | | | | | | | | | | | | | | | | |
| B-4 | | | | | | | | | | | | | | | | |
| SS-8 | 17 RT | 49+53 | 5.00-6.00 | A-2-4(0) | 32 | 10 | 33.3 | 33.3 | 11.0 | 22.4 | 92 | 74 | 35 | 19 | | Y4WB |
| SS-9 | 17 RT | 49+53 | 10.00-11.00 | A-7-6(6) | 51 | 25 | 37.2 | 24.0 | 6.3 | 32.5 | 100 | 75 | 42 | 46 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-5 | | | | | | | | | | | | | | | | |
| SS-10 | 16 RT | 50+53 | 9.40-10.40 | A-4(0) | 24 | 7 | 34.1 | 26.2 | 17.3 | 22.4 | 94 | 73 | 41 | 18 | | Y4WB |
| SS-11 | 16 RT | 50+53 | 14.40-15.40 | A-2-4(0) | 23 | 3 | 56.1 | 24.8 | 4.9 | 14.2 | 89 | 56 | 19 | 20 | | Y4WB |
| SS-12 | 16 RT | 50+53 | 19.40-20.40 | A-2-4(0) | 38 | NP | 54.5 | 30.9 | 6.5 | 8.1 | 84 | 52 | 16 | 45 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-6 | | | | | | | | | | | | | | | | |
| SS-13 | 15.5 RT | 51+53 | 9.40-10.40 | A-2-4(0) | 30 | 4 | 32.1 | 42.5 | 11.2 | 14.2 | 87 | 73 | 26 | 12 | | Y4WB |
| SS-14 | 15.5 RT | 51+53 | 14.40-15.40 | A-1-b(0) | 23 | NP | 67.3 | 21.3 | 3.3 | 8.1 | 76 | 34 | 10 | 25 | | Y4WB |
| SS-15 | 15.5 RT | 51+53 | 19.40-20.40 | A-6(2) | 36 | 12 | 22.4 | 37.4 | 15.9 | 24.4 | 99 | 86 | 45 | 31 | | Y4WB |

# SOIL TEST RESULTS

| SAMPLE NO. | OFFSET | STATION | DEPTH INTERVAL | AASHTO CLASS. | L.L. | P.I. | % BY WEIGHT | | | | % PASSING (SIEVES) | | | % MOISTURE | % ORGANIC | Line or Boring ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | C.SAND | F.SAND | SILT | CLAY | 10 | 40 | 200 | | | |
| SS-16 | 15.5 RT | 51+53 | 24.40-25.40 | A-2-5(0) | 44 | NP | 35.4 | 50.4 | 8.1 | 6.1 | 98 | 80 | 20 | 39 | | Y4WB |
| SS-17 | 15.5 RT | 51+53 | 26.90-27.90 | A-2-4(0) | 30 | NP | 49.8 | 36.0 | 10.2 | 4.1 | 93 | 63 | 18 | 17 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-7 | | | | | | | | | | | | | | | | |
| SS-18 | 15.7 RT | 52+53 | 4.50-5.50 | A-2-5(0) | 44 | 3 | 37.4 | 35.6 | 14.8 | 12.2 | 99 | 76 | 32 | 23 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-9 | | | | | | | | | | | | | | | | |
| SS-19 | 15.7 RT | 52+53 | 9.30-10.30 | A-2-4(0) | 37 | 7 | 32.7 | 36.8 | 12.2 | 18.3 | 95 | 78 | 34 | 30 | | Y4WB |
| SS-20 | 15.6 RT | 54+53 | 14.30-15.30 | A-2-4(0) | 24 | NP | 14.6 | 61.2 | 10.0 | 14.2 | 98 | 94 | 29 | 40 | | Y4WB |
| SS-21 | 15.6 RT | 54+53 | 16.80-17.80 | A-2-4(0) | 23 | NP | 47.8 | 43.7 | 2.4 | 6.1 | 96 | 66 | 12 | 31 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| RETAINING WALL 3 | | | | | | | | | | | | | | | | |
| B-10 | | | | | | | | | | | | | | | | |
| SS-22 | 15 RT | 64+29 | 9.30-10.30 | A-2-4(0) | 35 | NP | 38.6 | 34.6 | 12.6 | 14.2 | 83 | 63 | 27 | 12 | | Y4WB |
| SS-23 | 15 RT | 64+29 | 19.30-20.30 | A-7-6(6) | 51 | 23 | 35.6 | 20.5 | 11.4 | 32.5 | 96 | 72 | 45 | 26 | | Y4WB |
| SS-24 | 15 RT | 64+29 | 21.80-22.80 | A-2-4(0) | 40 | 5 | 43.7 | 34.8 | 9.3 | 12.2 | 96 | 67 | 25 | 42 | | Y4WB |
| SS-25 | 15 RT | 64+29 | 26.80-27.80 | A-2-5(0) | 48 | 6 | 36.4 | 42.3 | 13.2 | 8.1 | 97 | 78 | 28 | 51 | | Y4WB |
| SS-26 | 15 RT | 64+29 | 31.80-32.80 | A-5(0) | 42 | 6 | 26.2 | 40.7 | 23.0 | 10.2 | 100 | 85 | 41 | 30 | | Y4WB |
| SS-27 | 15 RT | 64+29 | 44.30-45.30 | A-2-4(0) | 37 | NP | 46.3 | 37.0 | 8.5 | 8.1 | 100 | 71 | 21 | 20 | | Y4WB |
| | | | | | | | | | | | | | | | | |
| B-11 | | | | | | | | | | | | | | | | |
| SS-28 | 14 RT | 64+69 | 29.20-30.20 | A-5(1) | 44 | 10 | 20.9 | 38.6 | 28.3 | 12.2 | 79 | 70 | 40 | 40 | | Y4WB |
| SS-29 | 14 RT | 64+69 | 34.20-35.20 | A-5(1) | 44 | 8 | 34.8 | 29.7 | 23.4 | 12.2 | 100 | 74 | 43 | 32 | | Y4WB |
| SS-30 | 14 RT | 64+69 | 39.20-40.20 | A-5(0) | 45 | 4 | 25.2 | 46.1 | 20.5 | 8.1 | 100 | 86 | 38 | 42 | | Y4WB |
| | | | | | | | | | | | | | | | | |