STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3615B (34962.1.1)	1	52

CONTRACT: ID: U-3615B

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

CONTENTS

LINE	STATION	PLAN	PROFILE	XSECT
-L-	165+50 to 220+50	4-8	18-20	
-L-	220+50 to 223+50	8	20	27,28
-L-	223+50 to 348+16	8,9	20	
-L-	233+50 to 234+50	9	20,21	30
-L-	234+50 to 254+50	9-11	21	
-L-	254+50 to 258+50	11	21	31,32
-L-	258+50 to 288+00	11-13	21,22	
-L-	288+50 to 301+50	13,14	22,23	33-37
-L-	301+50 to 307+50	14	23	
-L-	307+50 to 313+00	14,15	23	38-40
-L-	318+00 to 331+00	15,16	24	41-45
-L-	331+00 to 348+41	16,17	24,25	
-Y30-	10+00 to 25+50	5	26	
-Y36-	10+00 to 18+00	11	26	
-Y43N-	11+50 to 12+00	13		46
-Y43S-	11+00 to 11+50	13		47
-Y45N-	12+00 to 12+50	15		48
-Y45S-	10+50 to 11+00	15		49
CONE PENTROMETER TEST RESULTS			50-52	

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

ROADWAY SUBSURFACE INVESTIGATION

PROJ. REFERENCE NO. 34962.1.1 (U-3616B) F.A. PROJ. STP-1820(2)

COUNTY GUILFORD

PROJECT DESCRIPTION SR 1820 (SKEET CLUB ROAD) FROM WEST OF SR 1818 (JOHNSON STREET) TO NC 68 (EAST CHESTER DRIVE)

INVENTORY

CAUTION NOTICE

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

N.C.D.O.T. PERSONNEL

N.D. MOHS

D.W. DIXON

E.A. POPE

M.L. REEDER

TRIGON PERSONNEL

G. LICAYAN

C. HEUN

W. WHICHARD

INVESTIGATED BY T.P. MOOREFIELD

CHECKED BY N.T. ROBERSON

SUBMITTED BY N.T. ROBERSON

DATE MARCH 2007

NORTH CAROLINA LICENSED SEAL 1301 GEOLOGIST THOMAS P. MOOREFIELD 3/8/2007

DRAWN BY: T.T. WALKER, T.P. MOOREFIELD

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.

PROJECT REFERENCE NO.	SHEET NO.
U-3615B (34962.1.1)	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	35 MX	36 MN	36 MN	36 MN	36 MN	36 MN	36 MN	36 MN			
LIQUID LIMIT				40 MX	41 MN	40 MX	41 MN	40 MX	40 MX	41 MN	40 MX	41 MN				SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
PLASTIC INDEX	6 MX		NP	10 MX	10 MX	11 MN	11 MN	11 MN	10 MX	10 MX	11 MN	11 MN						
GROUP INDEX	0		0	0		4 MX			8 MX	12 MX	16 MX	No MX						
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND					SILTY SOILS		CLAYEY SOILS							
GEN. RATING AS 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 LOOSE MEDIUM DENSE DENSE VERY DENSE	<4 4 TO 10 10 TO 30 30 TO 50 >50	N/A
GENERALLY SILT-CLAY MATERIAL (COHESIVE)	VERY SOFT SOFT MEDIUM STIFF STIFF VERY STIFF HARD	<2 2 TO 4 4 TO 8 8 TO 15 15 TO 30 >30	<0.25 0.25 TO 0.50 0.5 TO 1.0 1 TO 2 2 TO 4 >4

TEXTURE OR GRAIN SIZE

U.S. STD. SIEVE SIZE	4	10	40	60	200	270
OPENING (MM)	4.76	2.00	0.42	0.25	0.075	0.053

BOULDER (BLDR.)	COBBLE (COB.)	GRAVEL (GR.)	COARSE SAND (CSE. SD.)	FINE SAND (F SD.)	SILT (SL.)	CLAY (CL.)

GRAIN SIZE	MM	305	75	2.0	0.25	0.05	0.005
	IN.	12	3				

SOIL MOISTURE - CORRELATION OF TERMS

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

PLASTICITY

	PLASTICITY INDEX (PI)	DRY STRENGTH
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
- SOUNDING ROD
- SPT CPT SPT DMT VST PMT TEST BORING
- AUGER BORING
- CORE BORING
- MW MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- SPT N-VALUE
- REF SPT REFUSAL

SAMPLE DESIGNATIONS
- S - BULK SAMPLE
- SS - SPLIT SPOON SAMPLE
- ST - SHELBY TUBE SAMPLE
- RS - ROCK SAMPLE
- RT - RECOMPACTED TRIAXIAL SAMPLE
- CBR - CALIFORNIA BEARING RATIO SAMPLE

ABBREVIATIONS

AR - AUGER REFUSAL	HI. - HIGHLY	w - MOISTURE CONTENT
BT - BORING TERMINATED	MED. - MEDIUM	V - VERY
CL. - CLAY	MICA. - MICACEOUS	VST - VANE SHEAR TEST
CPT - CONE PENETRATION TEST	MOD. - MODERATELY	WEA. - WEATHERED
CSE. - COARSE	NP - NON PLASTIC	γ - UNIT WEIGHT
DMT - DILATOMETER TEST	ORG. - ORGANIC	γ_d - DRY UNIT WEIGHT
DPT - DYNAMIC PENETRATION TEST	PMT - PRESSUREMETER TEST	
e - VOID RATIO	SAP. - SAPROLITIC	
F - FINE	SD. - SAND, SANDY	
FOSS. - FOSSILIFEROUS	SL. - SILT, SILTY	
FRAC. - FRACTURED, FRACTURES	SLI. - SLIGHTLY	
FRAGS. - FRAGMENTS	TCR - TRICONE REFUSAL	

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- [x] MOBILE B-57
- [ ] BK-51
- [x] CME-45C
- [ ] CME-550
- [ ] PORTABLE HOIST
- [ ] _____
- [ ] _____

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

HAMMER TYPE:
- [x] AUTOMATIC
- [x] 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 BLOWS IF OF A CRYSTALLINE NATURE.
SLIGHT (SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
MODERATE (MOD.)	SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
MODERATELY SEVERE (MOD. SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. *IF TESTED, WOULD YIELD SPT REFUSAL*
SEVERE (SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, 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:

REVISED 02/23/06

09/08/99

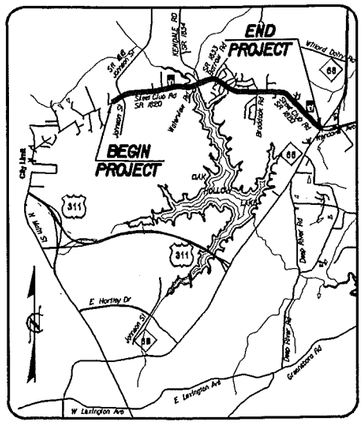
TIP: U-3615B

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3615B	2A	52
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34962.1.1	STP-1820(2)	P.E.	

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUILFORD COUNTY

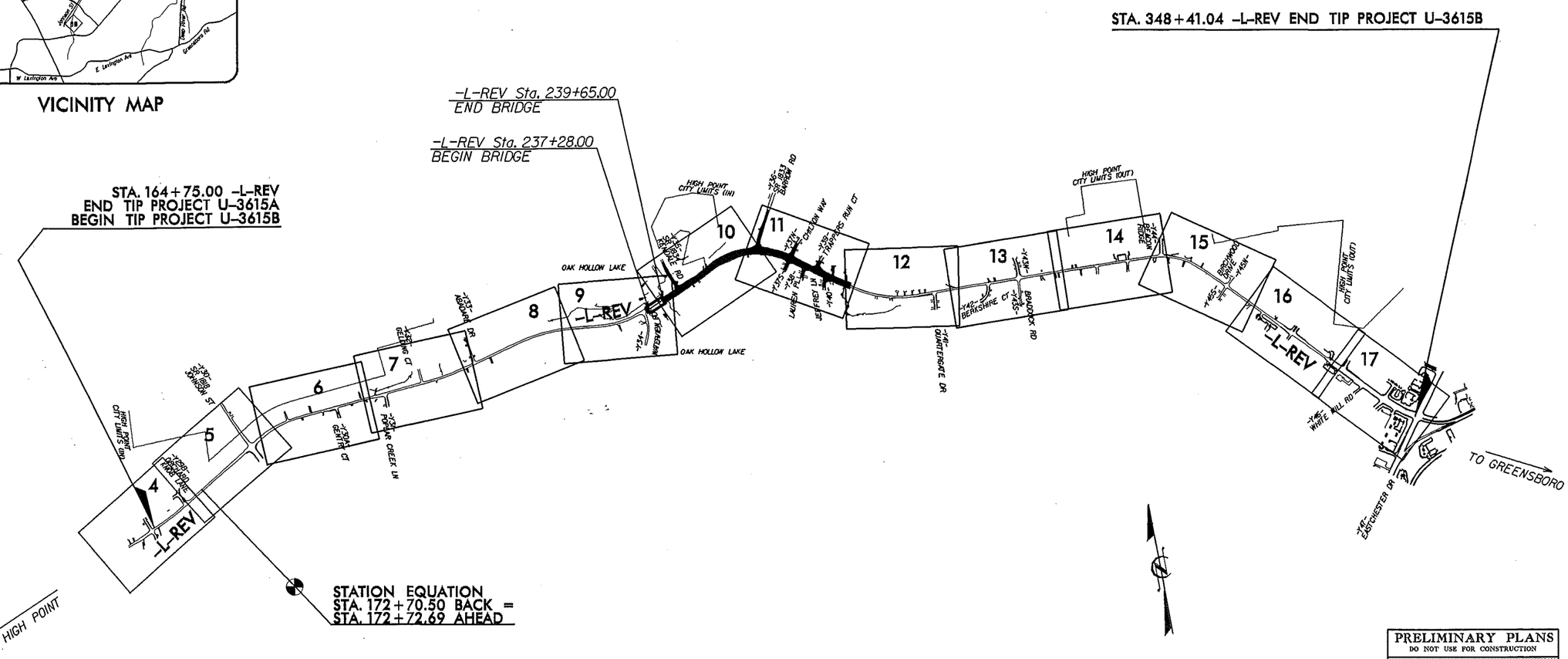
See Sheet 1-A For Index of Sheets
See Sheet 1-B For Conventional Symbols



VICINITY MAP

LOCATION: SR 1820 (SKEET CLUB ROAD) FROM WEST OF SR 1818 (JOHNSTON STREET) TO NC 68 (EAST CHESTER DRIVE).

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



A PORTION OF THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF CITY OF HIGH POINT

NCDOT CONTACT: CATHY HOUSER, P.E., PROJECT ENGINEER - ROADWAY DESIGN UNIT

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

CONTRACT:

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 2007 = 9250-22600
ADT 2030 = 18100-40400
DHV = 10 %
D = 60 %
T = 5 %
V = 50 MPH
TTST 2% DUAL 3%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-3615B = 3.433 MI
LENGTH STRUCTURE TIP PROJECT U-3615B = 0.045 MI
TOTAL LENGTH OF TIP PROJECT U-3615B = 3.478 MI

Prepared In the Office of:
WANG ENGINEERING COMPANY, INC.
CARY, N.C.
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

2002 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: JULY 21, 2006

LETTING DATE:

GREG S. PURVIS, P. E.
PROJECT ENGINEER

SCOTT L. KENNEDY
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
SIGNATURE: P.E.

ROADWAY DESIGN ENGINEER
SIGNATURE: P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
STATE DESIGN ENGINEER P.E.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

07-MAR-2007 15:07
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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

Michael F. Easley
GOVERNOR

P.O. BOX 25201, RALEIGH, N.C. 27611-5201

Lyndo Tippett
SECRETARY

March 8, 2007

STATE PROJECT:	34962.1.1 (U-3615B)
FEDERAL PROJECT:	STP-1820(2)
COUNTY:	Guilford
DESCRIPTION:	SR 1820 (Skeet Club Rd.) from west of SR 1818 (Johnson St.) to NC 68 (East Chester Dr.)
SUBJECT:	Geotechnical Report – Inventory

Project Description

This project consists of widening Skeet Club Rd. (SR 1820, -L- Sta. 165+00 to Sta. 348+16) from two lanes to four lanes with medians and turn lanes. The project begins just west of the intersection of Skeet Club Rd. (SR 1820) and Johnson St. (SR 1818). The widening generally is proposed to the right of the existing roadway. The existing bridge over Oak Hollow Lake will be replaced (see Plan Sheet No. 9).

The geotechnical field investigation was conducted during the period of June through September, 2005. The Geotechnical Engineering Unit's drill crew was used to drill, sample, and log the majority of the borings in this report. The Geotechnical Engineering Unit used an ATV-mounted CME-45C with an automatic hammer during the investigation. Trigon Engineering was contracted to drill, sample, and log a small portion of the project. Trigon used an ATV-mounted B-57 drill machine with a manual hammer. Standard Penetration Tests were performed in selected borings and additional borings were advanced using continuous flight augers. Representative soil samples were collected for visual classification in the field and for laboratory analysis by the Materials and Tests Unit.

The following alignments, totaling 3.7 miles, were investigated. Subsurface soil profiles, or cross-sections, of these alignments are included in this report.

Line	Station		
-L-	165+00	to	348+16
-Y30-	13+36	to	21+55
-Y36-	12+00	to	18+38

Areas of Special Geotechnical Interest

1) Highly Plastic Clay Soils: Occurrences of highly plastic clay soil are noted below:

Alignment	Station	Offset
-L-	193+50	50 LT
-L-	208+50	45 LT
-L-	223+00	65 LT
-L-	255+50	45 RT
-L-	290+30	47 RT
-L-	293+00	40 LT
-L-	296+00	35 LT
-L-	302+25	46 RT
-L-	305+00	40 RT
-L-	311+00	47 RT
-L-	312+85	60 RT
-L-	314+55	50 RT
-L-	319+00	40 RT
-L-	324+00	40 LT
-L-	334+00	40 RT
-L-	341+50	60 RT

2) Crystalline Rock: Crystalline rock was encountered in the following borings:

Alignment	Station	Offset
-L-	171+50	70 RT
-L-	180+00	50 LT
-L-	183+00	50 LT
-L-	188+50	14 LT
-L-	192+00	38 LT
-L-	193+50	50 LT
-L-	203+50	10 LT
-L-	208+50	45 LT
-L-	210+00	50 RT
-L-	214+88	48 RT
-L-	240+40	90 RT
-L-	265+90	52 RT

Physiography and Geology

The project is located in the Piedmont area of North Carolina. A mixture of single-family homes, apartments, churches, businesses, and wooded areas are located along the project corridor. The terrain is slightly rolling. Geologically, the project is located within the Carolina Slate Belt. Soils are derived from the weathering of the underlying bedrock which is composed of granite, gabbro, and diorite intrusions

which have been metamorphosed. These rock units are generally foliated, and trend in a northeasterly direction.

Soil Properties

Soils encountered at the project site include roadway embankment soils, artificial fill soils, alluvial sediments, and residual soils.

Roadway embankment soil occurs in several locations on the project. The existing embankments are generally three to five feet in height.

Artificial fill soil occurs in a soil dam right of -L- Sta. 333+00. The soil consists of up to four feet of brown and gray, stiff, moist, highly plastic silty clay (AASHTO classification of A-7-6). The fill soil overlies residual silty clay soil (A-7-6).

Alluvial soils occur in narrow stream channels which cross the -L- alignment, and beneath the adjacent roadway embankments. Alluvial soils also occur as sediment deposits in Oak Hollow Lake. The alluvial soils are approximately 3 to 6 feet thick, and consist of very soft to medium stiff, wet, sandy silt (A-4) and sandy clay (A-6), and very loose, silty sand (A-2-4).

The residual soils are derived from the in-place weathering of the underlying metamorphosed granite, gabbro, and diorite bedrock. Clay soil is the most common soil in the project area. These clay soils are generally medium stiff to stiff and consist of sandy clay and silty clay (A-6, A-7-5, and A-7-6). Significant amounts of medium stiff to hard, moist, sandy silt (A-4) are also present.

Residual, highly plastic "cap" clays occur at the ground surface over several areas of the project. Areas containing highly plastic soils (plasticity indices of greater than 25) are listed above in the section "Areas of Special Geotechnical Interest".

Rock Properties

Weathered rock and crystalline rock occur in several areas of the project. The weathered rock is derived from the underlying Carolina Slate Belt bedrock and ranges from 3 to 6 feet in thickness. The crystalline bedrock consists mostly of metamorphosed diorite.

Groundwater

Groundwater was encountered in numerous borings. When present in residual soil, groundwater was determined to be 3 to 13 feet below the ground surface. Groundwater is shallow in alluvial floodplain soils, generally occurring 2 to 3 feet below the ground surface. Surface water elevation in Oak Hollow Lake varied from approximately 800 to 802' during this investigation. Based on this investigation, groundwater is not anticipated to cause problems during construction.

Prepared by,

Thomas P. Moorefield
Project Geological Engineer

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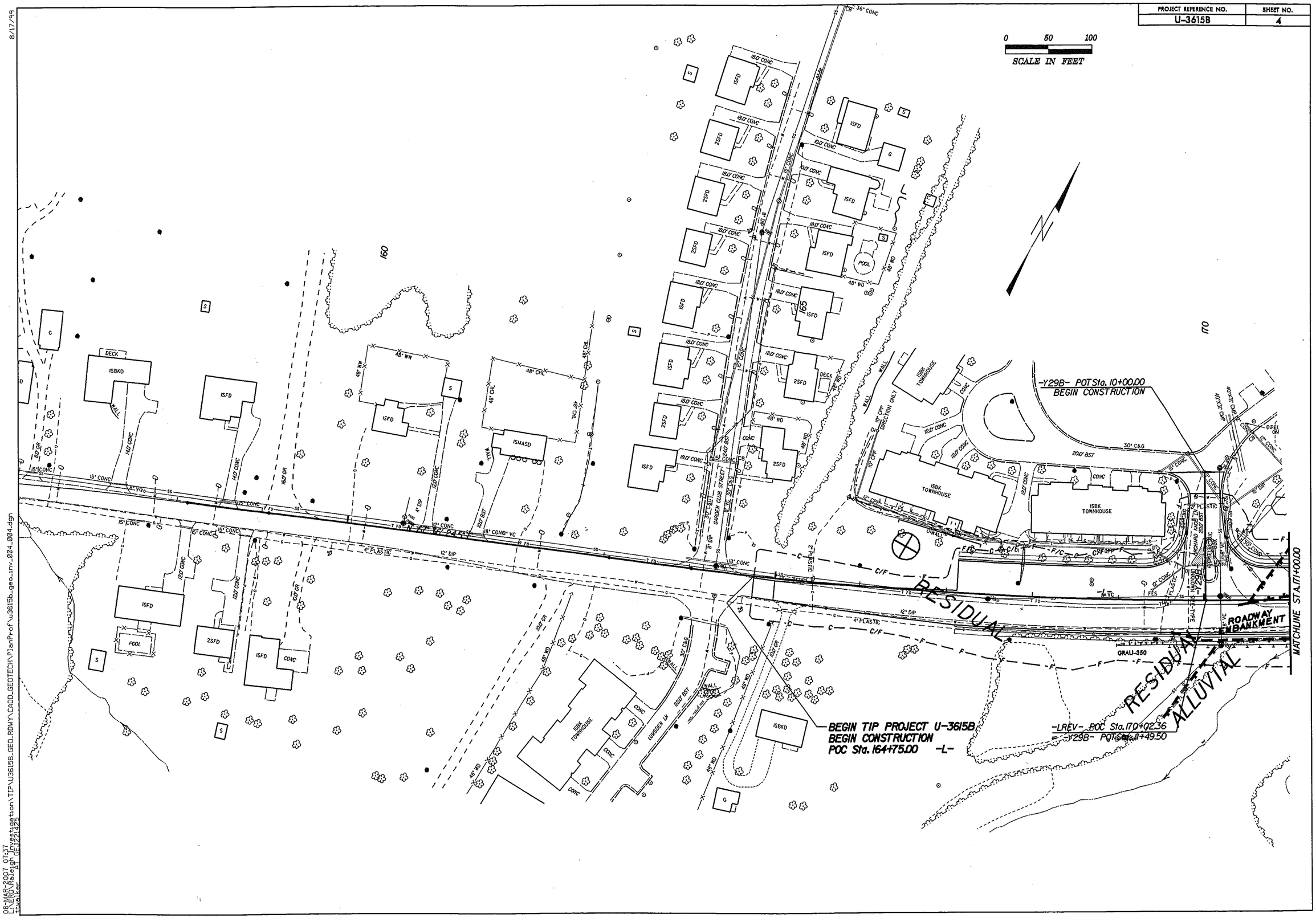
U-3615B	4



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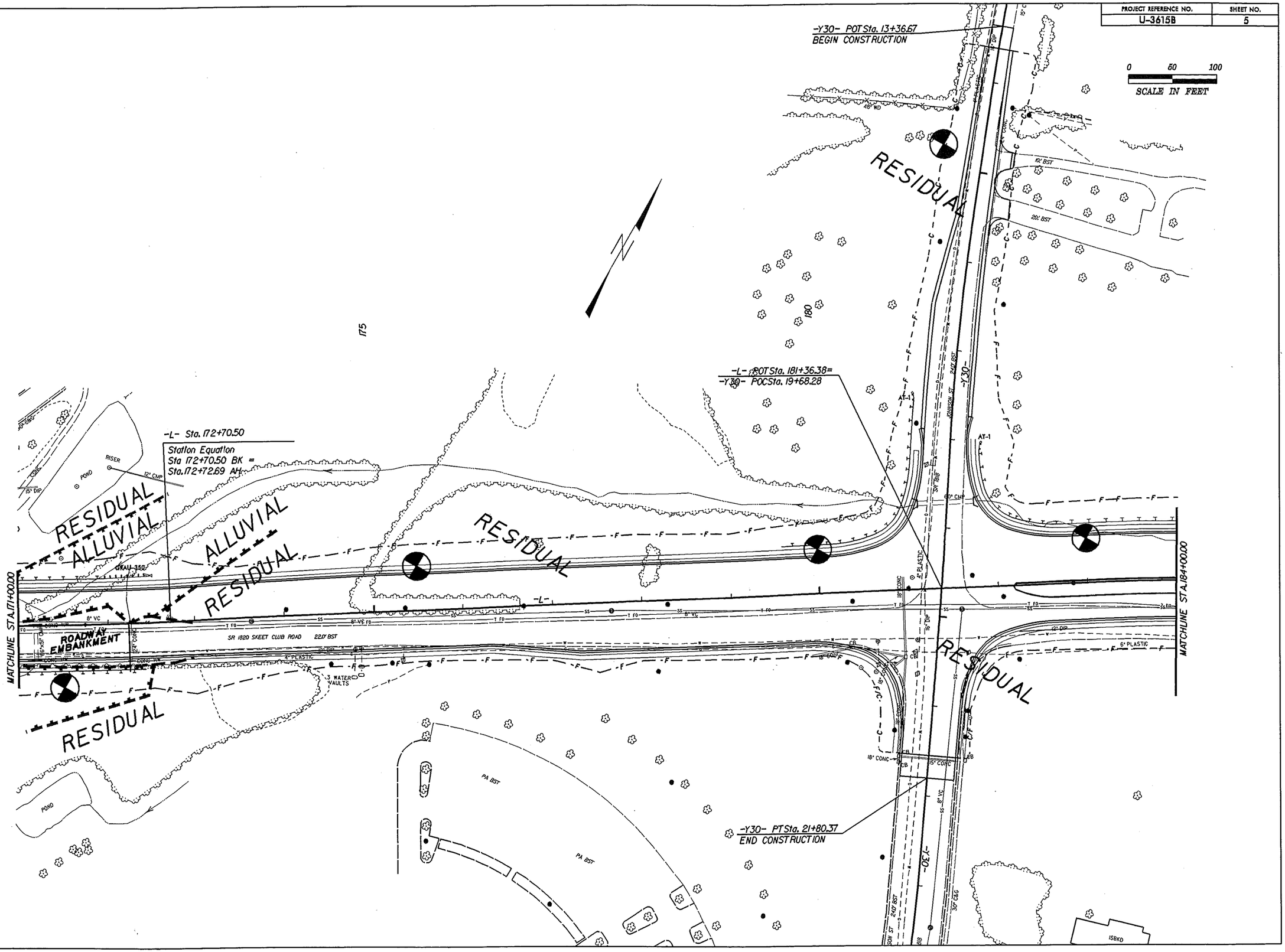

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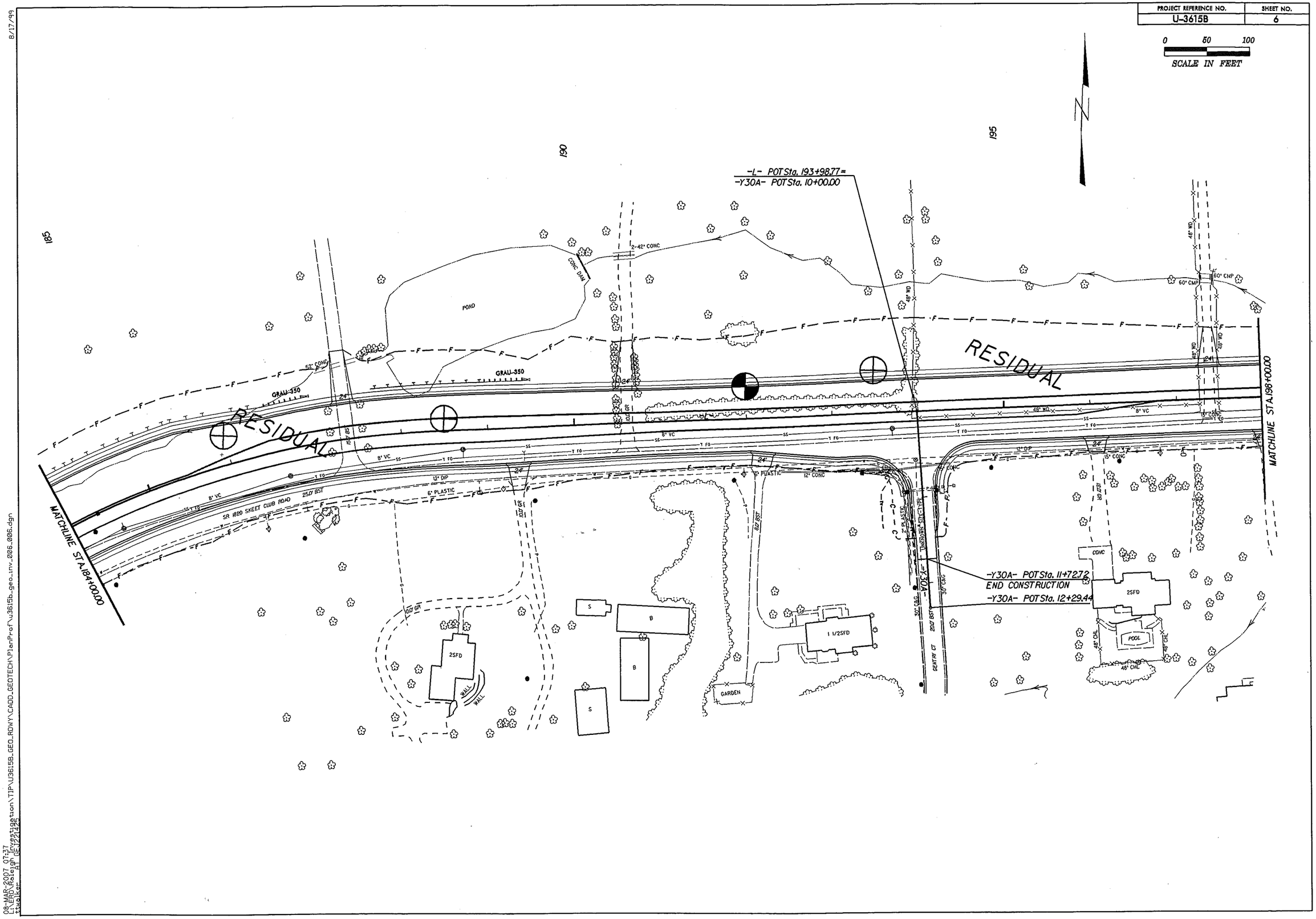

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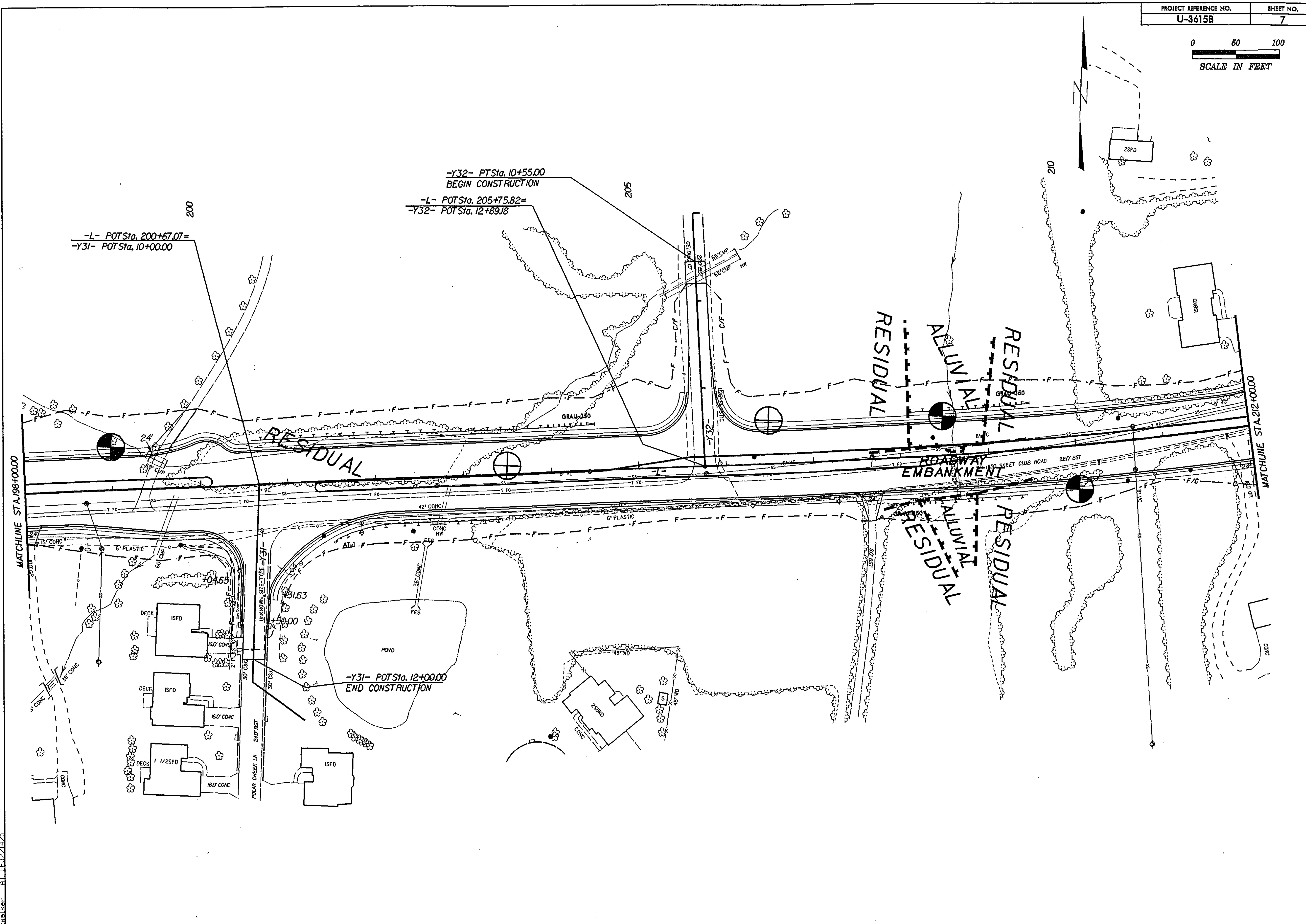

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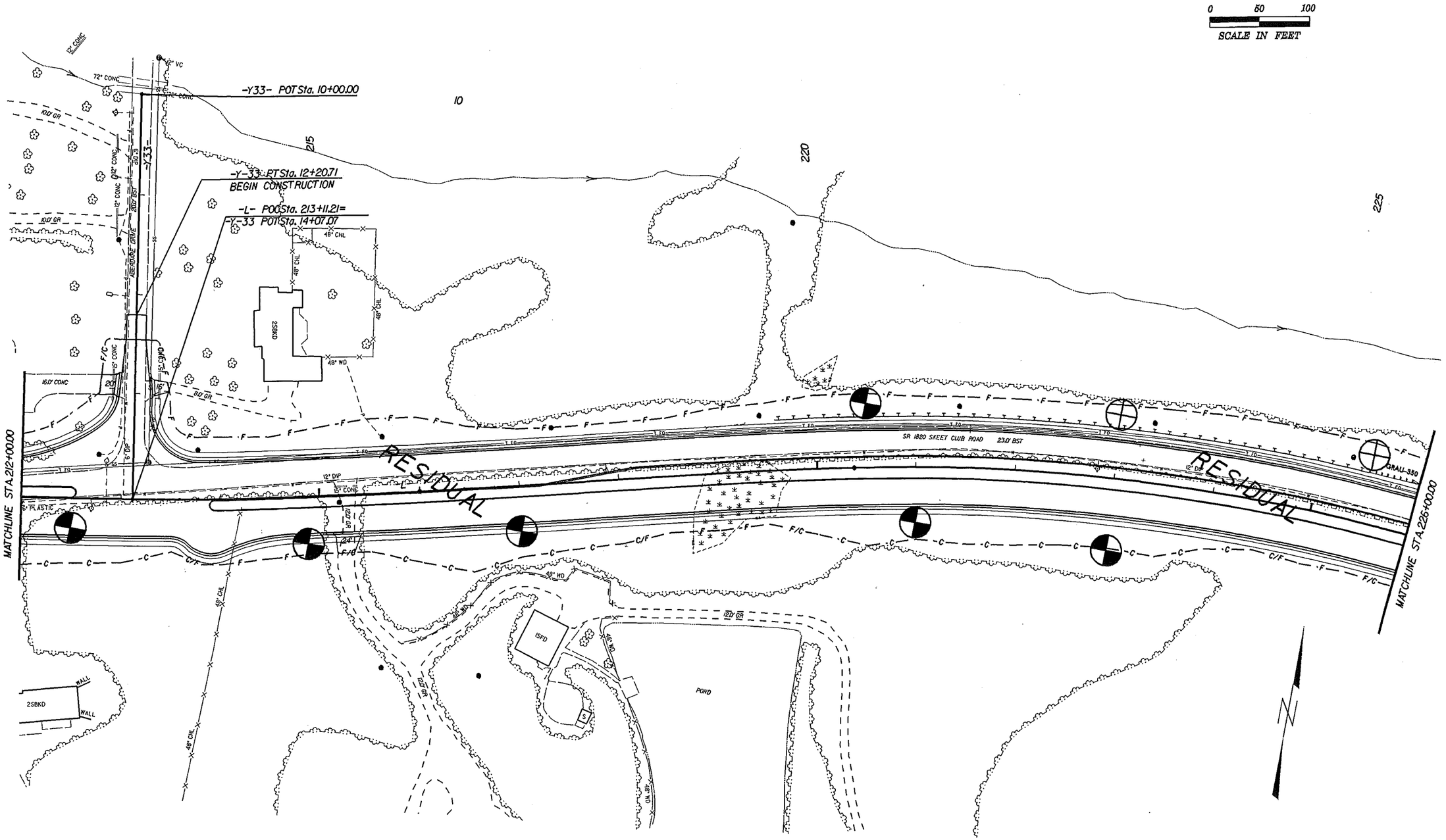

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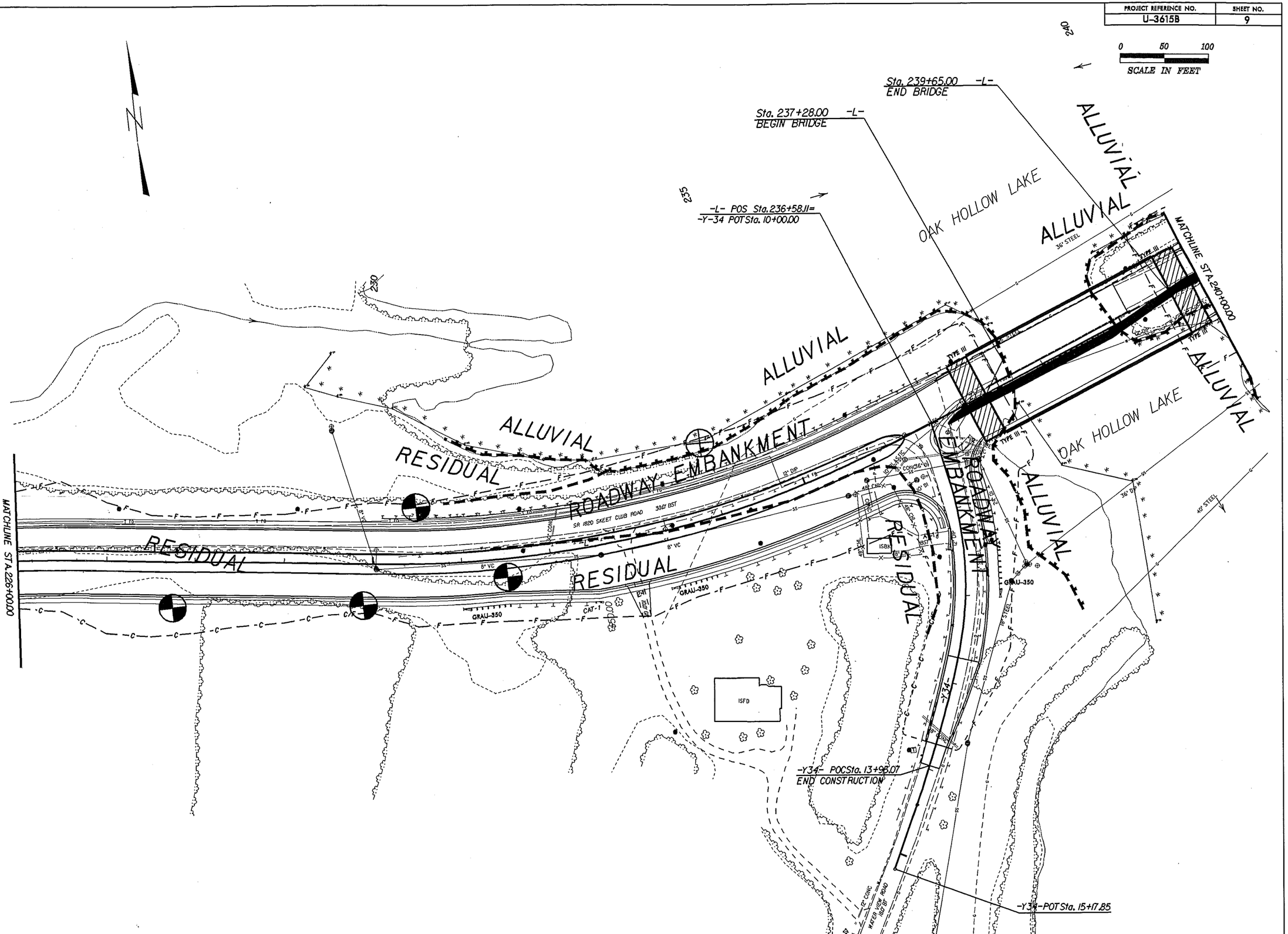

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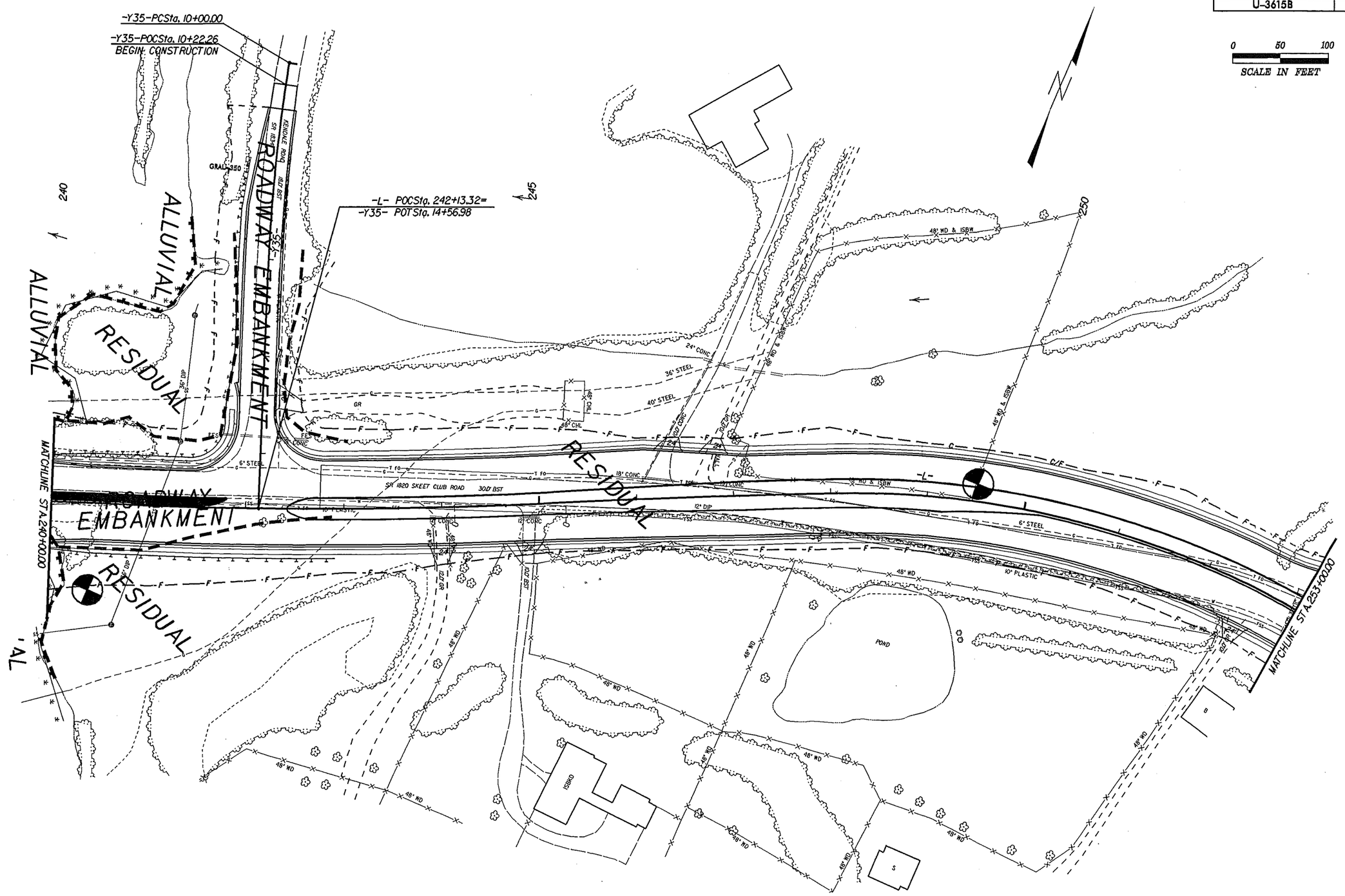

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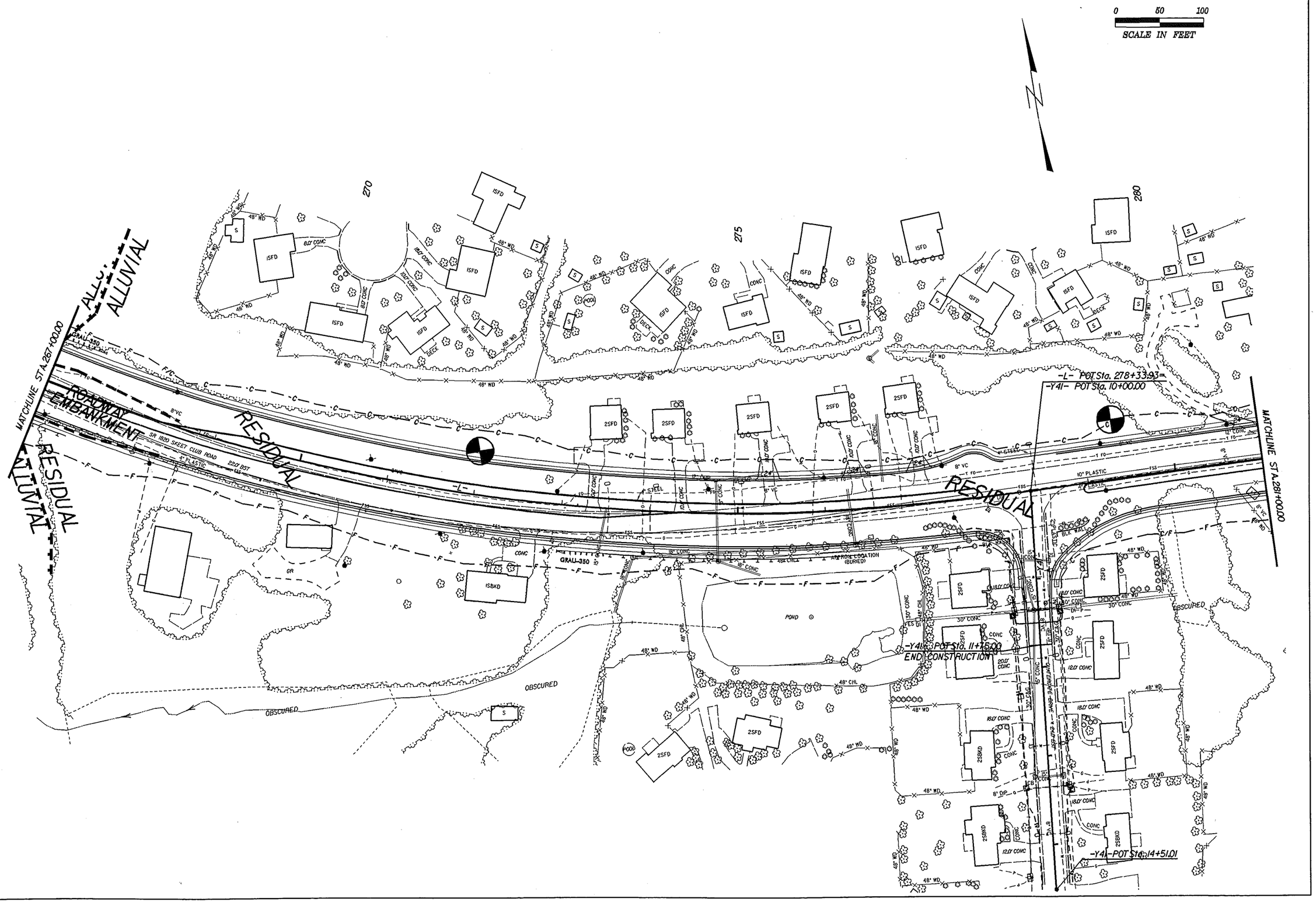

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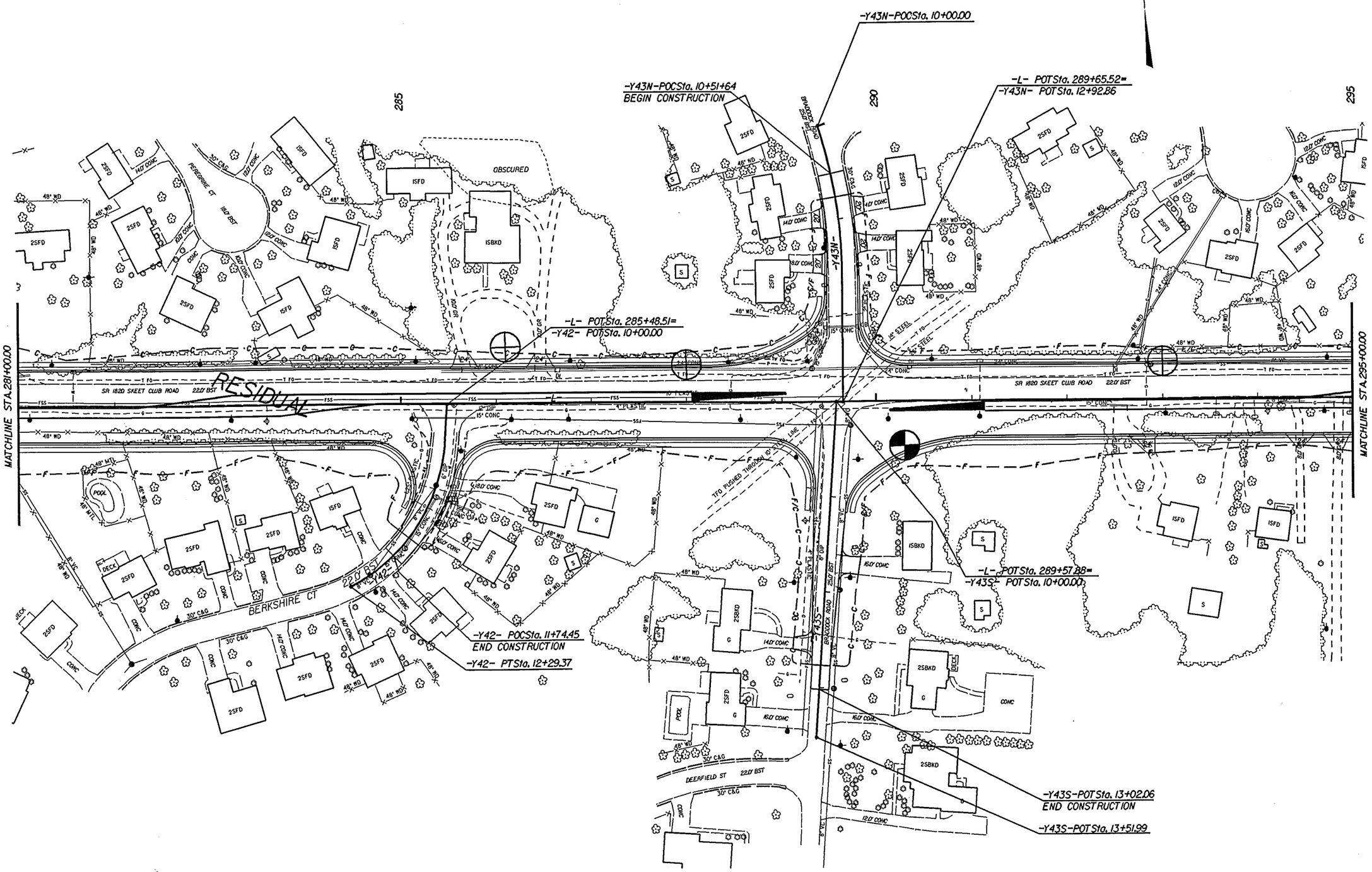

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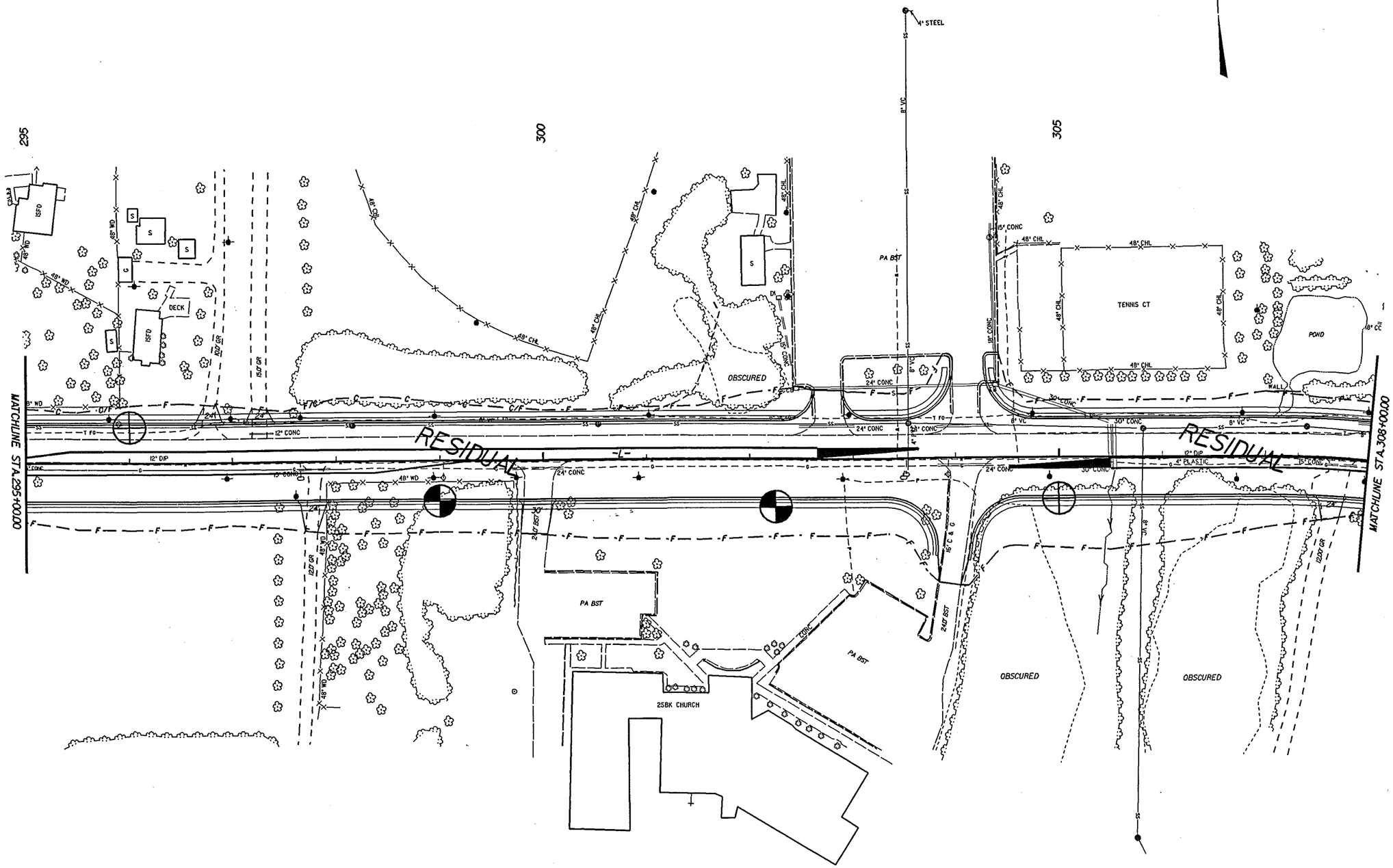

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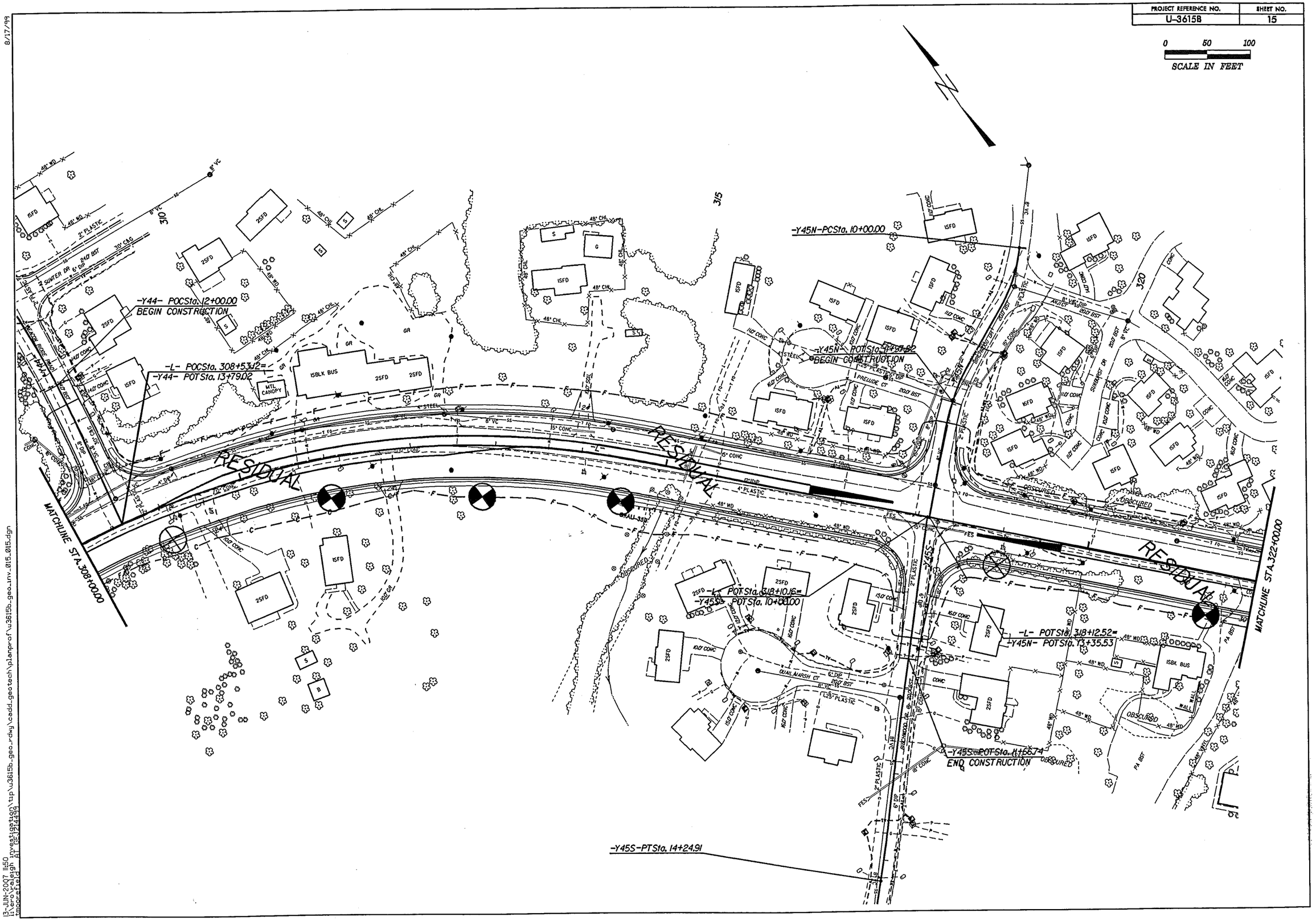

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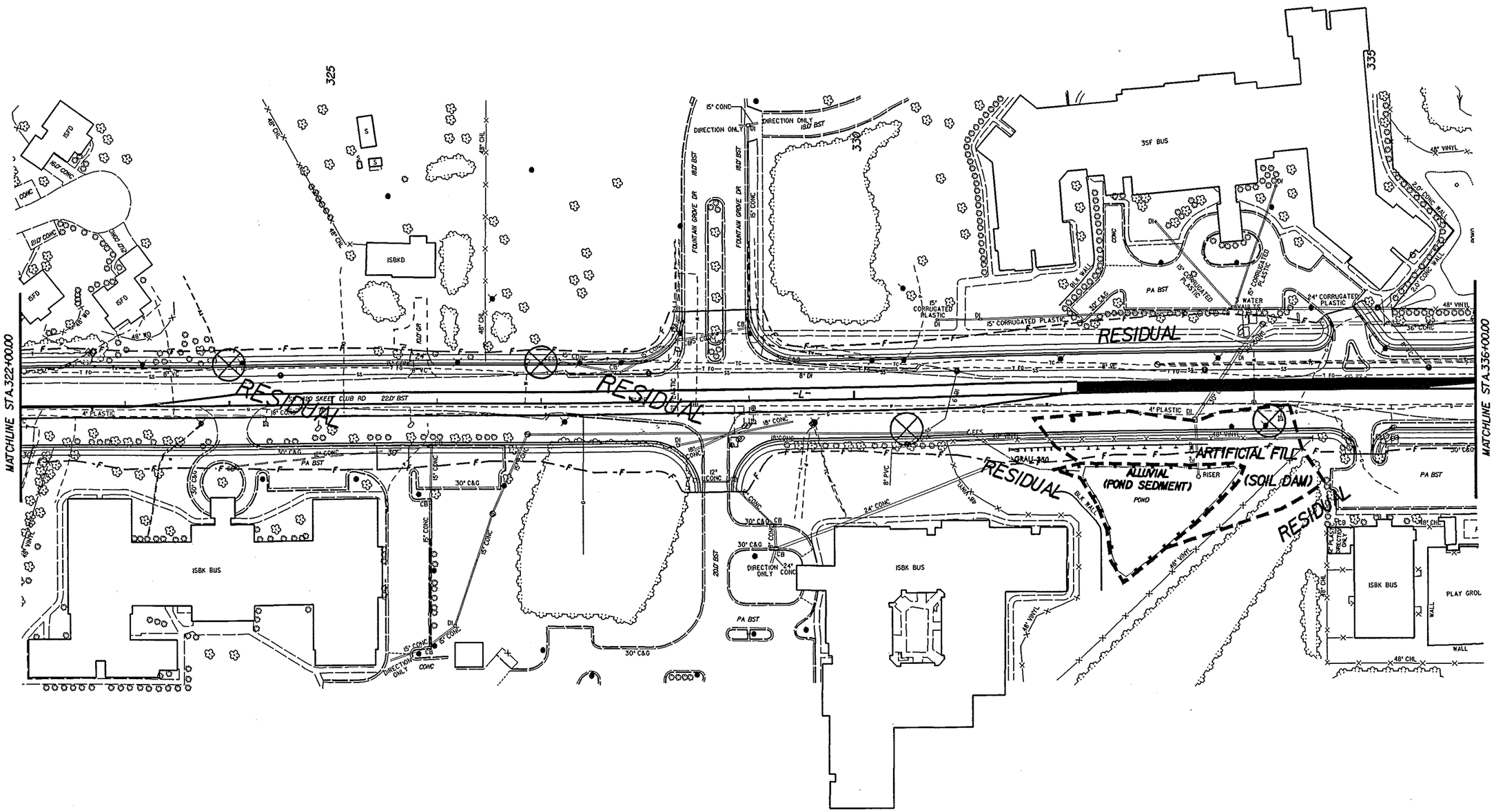

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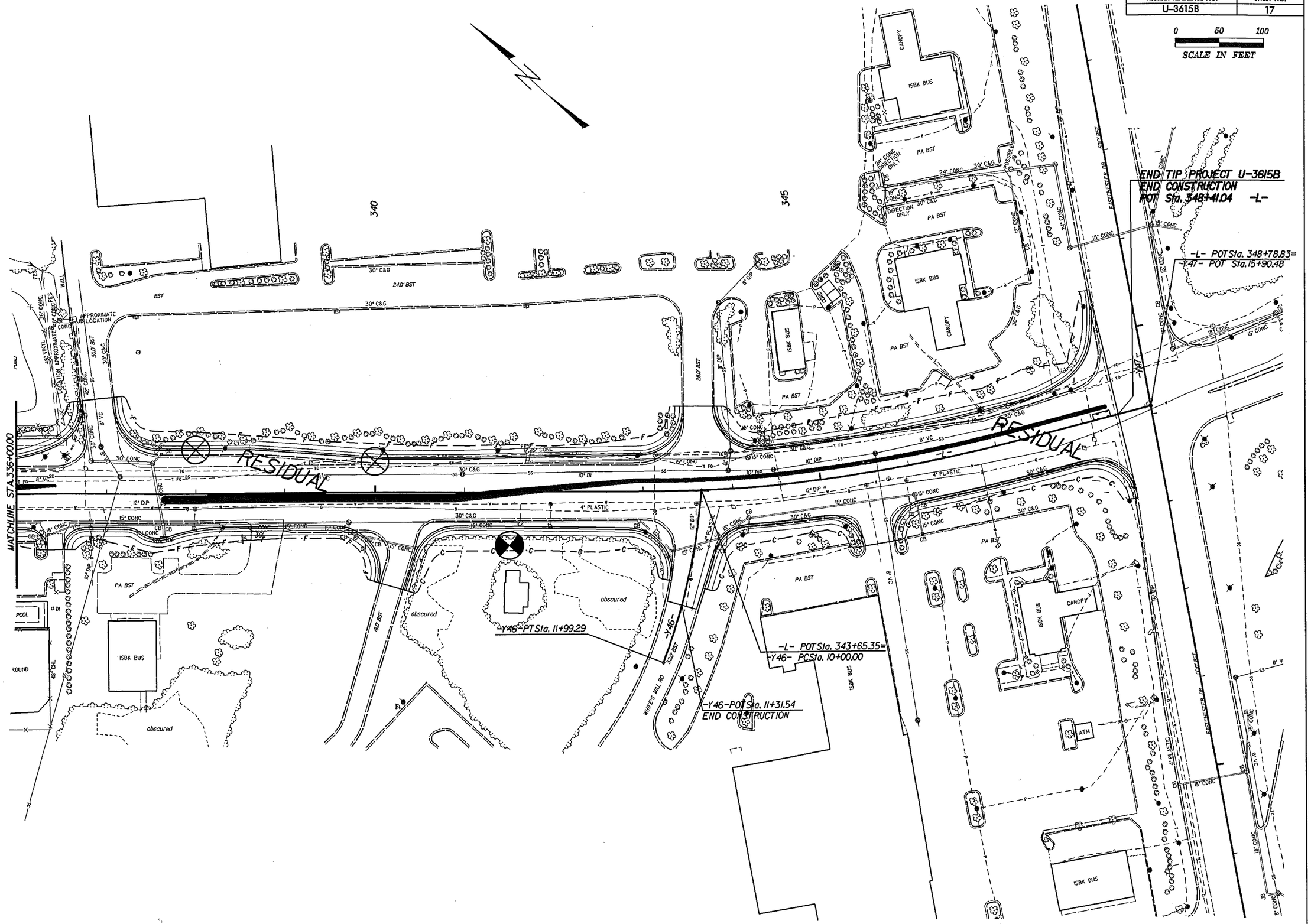

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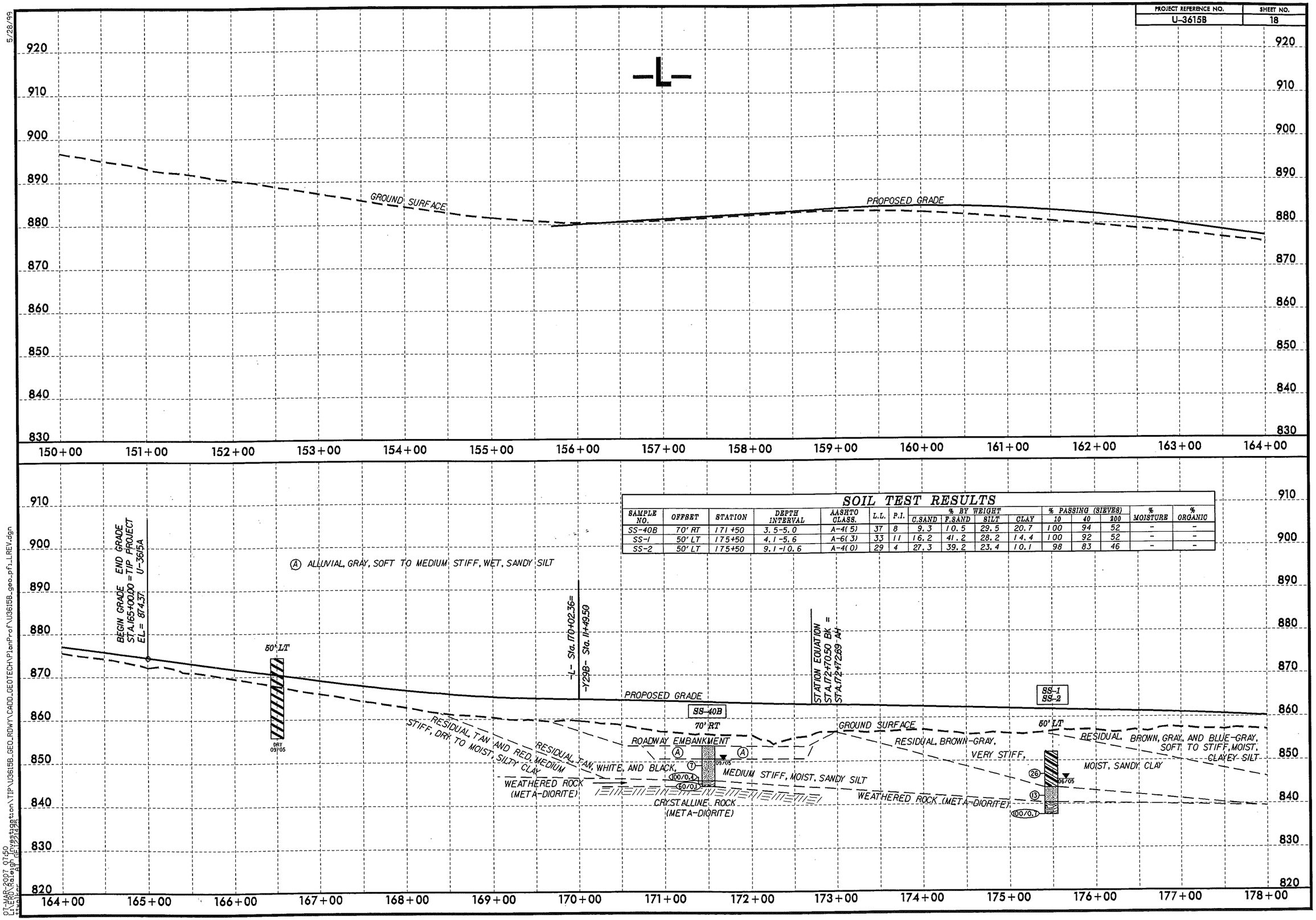

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-40B	70' RT	171+50	3.5-5.0	A-4(5)	37	8	9.3	10.5	29.5	20.7	100	94	52	-	-
SS-1	50' LT	175+50	4.1-5.6	A-6(3)	33	11	16.2	41.2	28.2	14.4	100	92	52	-	-
SS-2	50' LT	175+50	9.1-10.6	A-4(0)	29	4	27.3	39.2	23.4	10.1	98	83	46	-	-

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SOIL TEST RESULTS

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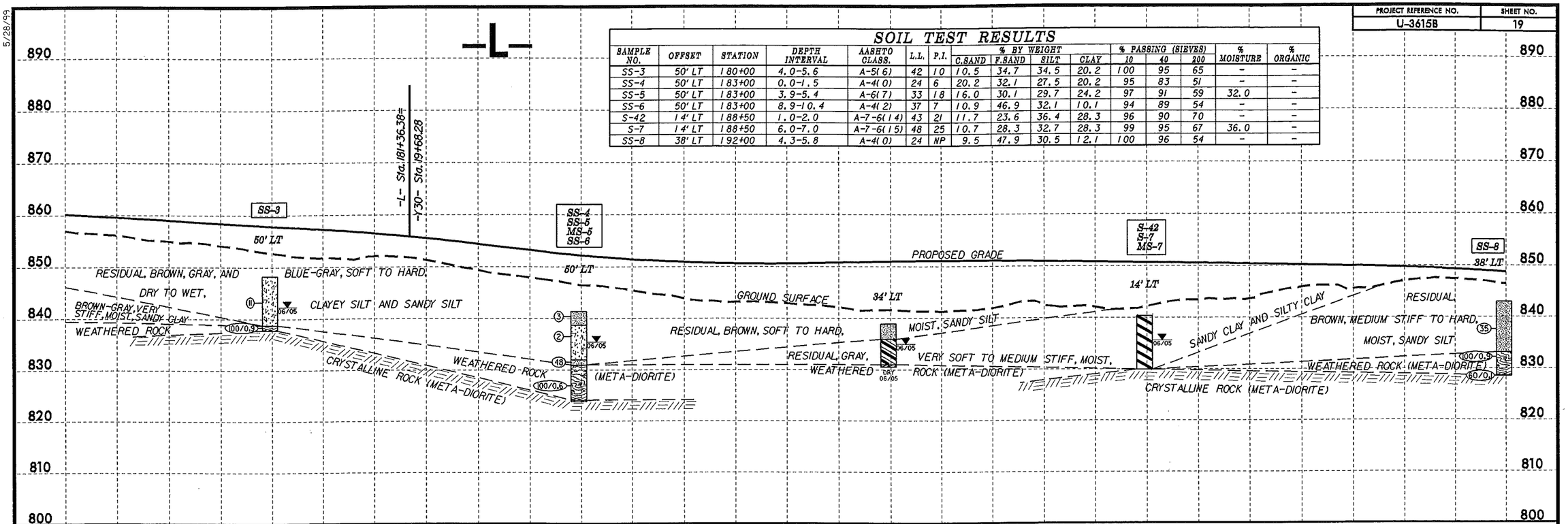
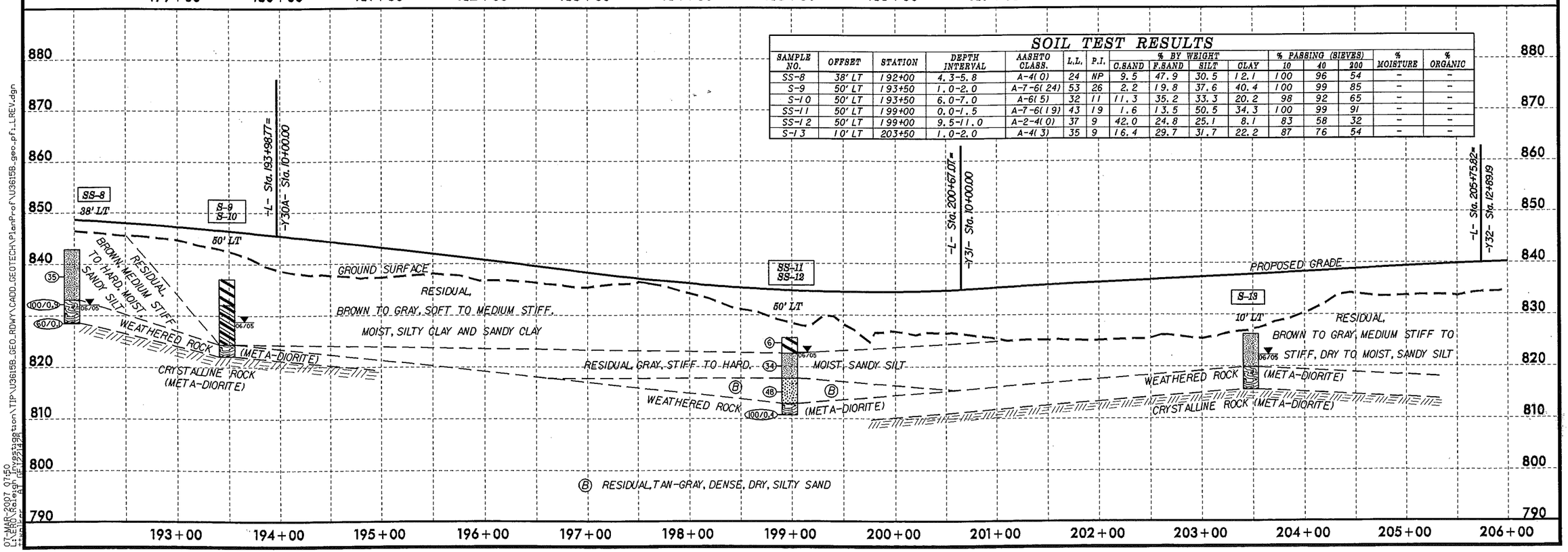
SS-3	50' LT	180+00	4.0-5.6	A-5(6)	42	10	10.5	34.7	34.5	20.2	100	95	65	-	-
SS-4	50' LT	183+00	0.0-1.5	A-4(0)	24	6	20.2	32.1	27.5	20.2	95	83	51	-	-
SS-5	50' LT	183+00	3.9-5.4	A-6(7)	33	18	16.0	30.1	29.7	24.2	97	91	59	32.0	-
SS-6	50' LT	183+00	8.9-10.4	A-4(2)	37	7	10.9	46.9	32.1	10.1	94	89	54	-	-
S-42	14' LT	188+50	1.0-2.0	A-7-6(14)	43	21	11.7	23.6	36.4	28.3	96	90	70	-	-
S-7	14' LT	188+50	6.0-7.0	A-7-6(15)	48	25	10.7	28.3	32.7	28.3	99	95	67	36.0	-
SS-8	38' LT	192+00	4.3-5.8	A-4(0)	24	NP	9.5	47.9	30.5	12.1	100	96	54	-	-



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
SS-8	38' LT	192+00	4.3-5.8	A-4(0)	24	NP	9.5	47.9	30.5	12.1	100	96	54	-	-
S-9	50' LT	193+50	1.0-2.0	A-7-6(24)	53	26	2.2	19.8	37.6	40.4	100	99	85	-	-
S-10	50' LT	193+50	6.0-7.0	A-6(5)	32	11	11.3	35.2	33.3	20.2	98	92	65	-	-
SS-11	50' LT	199+00	0.0-1.5	A-7-6(19)	43	19	1.6	13.5	50.5	34.3	100	99	91	-	-
SS-12	50' LT	199+00	9.5-11.0	A-2-4(0)	37	9	42.0	24.8	25.1	8.1	83	58	32	-	-
S-13	10' LT	203+50	1.0-2.0	A-4(3)	35	9	16.4	29.7	31.7	22.2	87	76	54	-	-



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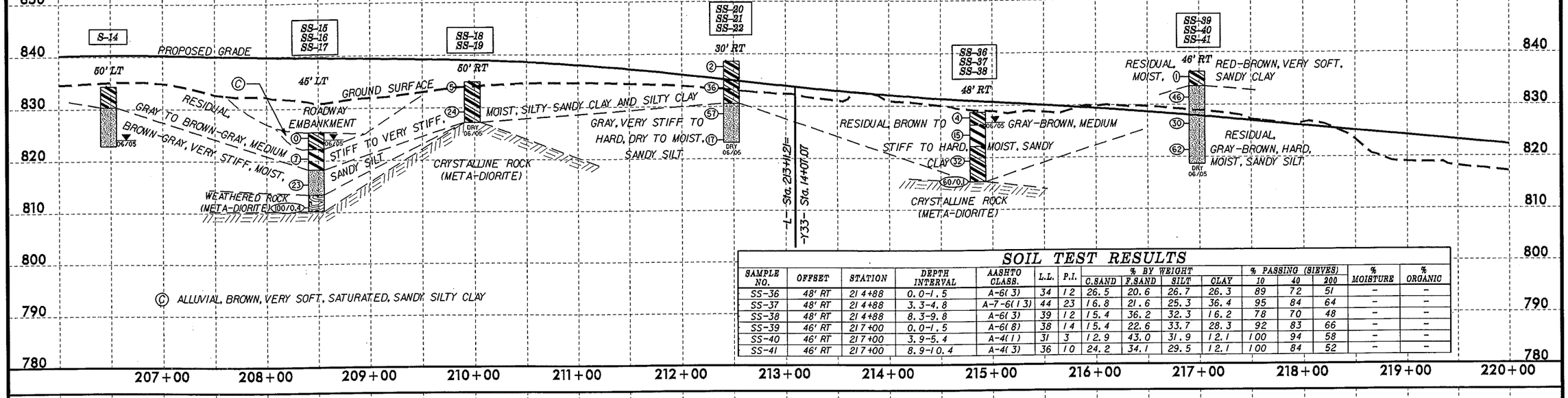
SOIL TEST RESULTS

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
S-14	50' LT	206+50	1.0-2.0	A-6(10)	34	15	8.7	25.7	37.4	28.3	100	95	76	-	-
SS-15	45' LT	208+50	0.0-1.5	A-6(7)	36	14	19.2	21.2	35.4	24.2	95	81	62	-	-
SS-16	45' LT	208+50	4.0-5.5	A-7-6(19)	52	35	13.5	21.2	24.8	40.4	90	83	63	-	-
SS-17	45' LT	208+50	9.0-10.5	A-4(4)	39	10	16.6	30.3	39.0	14.1	87	77	56	-	-
SS-18	50' RT	210+00	0.0-1.5	A-6(10)	40	19	19.6	22.0	28.1	30.3	95	82	62	-	-
SS-19	50' RT	210+00	4.7-6.2	A-6(11)	36	11	24.0	34.1	29.7	12.1	77	65	39	-	-
SS-20	30' RT	212+50	0.0-1.5	A-6(3)	30	11	25.1	22.0	26.7	26.3	88	71	51	-	-
SS-21	30' RT	212+50	4.0-5.5	A-6(5)	38	14	23.6	20.6	25.5	30.3	88	73	53	-	-
SS-22	30' RT	212+50	9.0-10.5	A-4(0)	26	NP	15.8	40.4	37.8	6.1	99	89	58	-	-

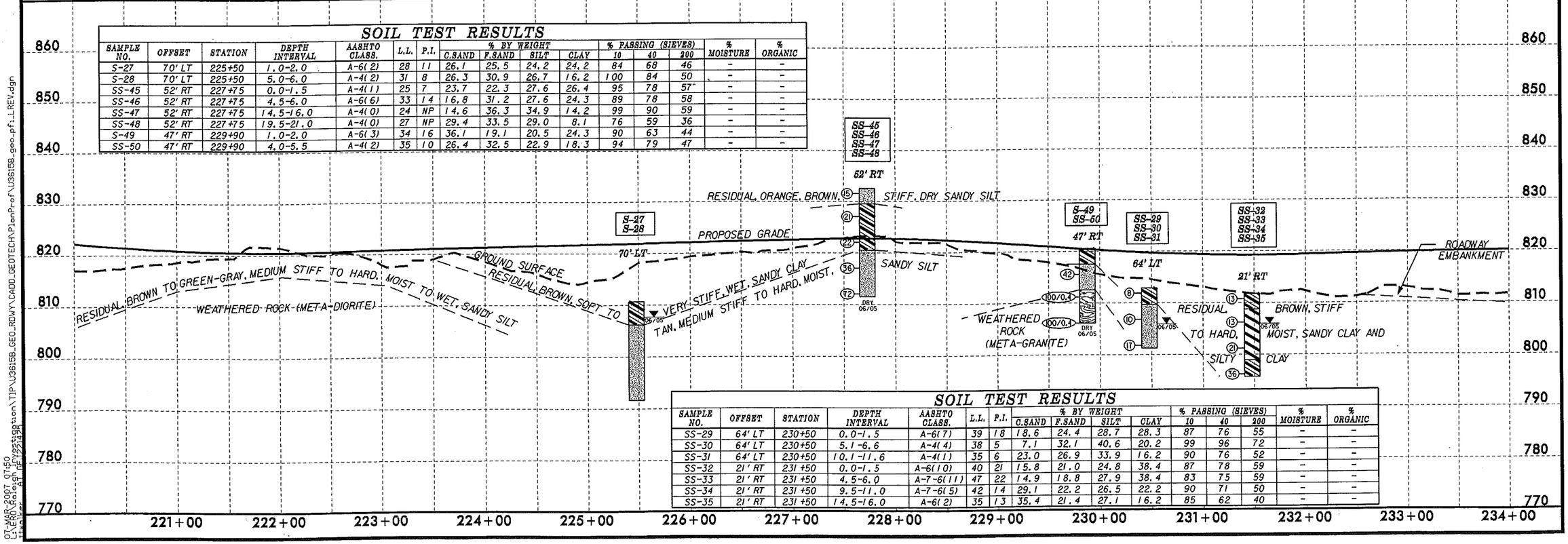


SOIL TEST RESULTS

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
SS-36	48' RT	214+88	0.0-1.5	A-6(3)	34	12	26.5	20.6	26.7	26.3	89	72	51	-	-
SS-37	48' RT	214+88	3.3-4.8	A-7-6(13)	44	23	16.8	21.6	25.3	36.4	95	84	64	-	-
SS-38	48' RT	214+88	8.3-9.8	A-6(3)	39	12	15.4	36.2	32.3	16.2	78	70	48	-	-
SS-39	46' RT	217+00	0.0-1.5	A-6(8)	38	14	15.4	22.6	33.7	28.3	92	83	66	-	-
SS-40	46' RT	217+00	3.9-5.4	A-4(1)	31	3	12.9	43.0	31.9	12.1	100	94	58	-	-
SS-41	46' RT	217+00	8.9-10.4	A-4(3)	36	10	24.2	34.1	29.5	12.1	100	84	52	-	-

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
S-27	70' LT	225+50	1.0-2.0	A-6(2)	28	11	26.1	25.5	24.2	24.2	84	68	46	-	-
S-28	70' LT	225+50	5.0-6.0	A-4(2)	31	8	26.3	30.9	26.7	16.2	100	84	50	-	-
SS-45	52' RT	227+75	0.0-1.5	A-4(1)	25	7	23.7	22.3	27.6	26.4	95	78	57	-	-
SS-46	52' RT	227+75	4.5-6.0	A-6(6)	33	14	16.8	31.2	27.6	24.3	89	78	58	-	-
SS-47	52' RT	227+75	14.5-16.0	A-4(0)	24	NP	14.6	36.3	34.9	14.2	99	90	59	-	-
SS-48	52' RT	227+75	19.5-21.0	A-4(0)	27	NP	29.4	33.5	29.0	8.1	76	59	36	-	-
S-49	47' RT	229+90	1.0-2.0	A-6(3)	34	16	36.1	19.1	20.5	24.3	90	63	44	-	-
SS-50	47' RT	229+90	4.0-5.5	A-4(2)	35	10	26.4	32.5	22.9	18.3	94	79	47	-	-



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
SS-29	64' LT	230+50	0.0-1.5	A-6(7)	39	18	18.6	24.4	28.7	28.3	87	76	55	-	-
SS-30	64' LT	230+50	5.1-6.6	A-4(4)	38	5	7.1	32.1	40.6	20.2	99	96	72	-	-
SS-31	64' LT	230+50	10.1-11.6	A-4(1)	35	6	23.0	26.9	33.9	16.2	90	76	52	-	-
SS-32	21' RT	231+50	0.0-1.5	A-6(10)	40	21	15.8	21.0	24.8	38.4	87	78	59	-	-
SS-33	21' RT	231+50	4.5-6.0	A-7-6(11)	47	22	14.9	18.8	27.9	38.4	83	75	59	-	-
SS-34	21' RT	231+50	9.5-11.0	A-7-6(5)	42	14	29.1	22.2	26.5	22.2	90	71	50	-	-
SS-35	21' RT	231+50	14.5-16.0	A-6(2)	35	13	35.4	21.4	27.1	16.2	85	62	40	-	-

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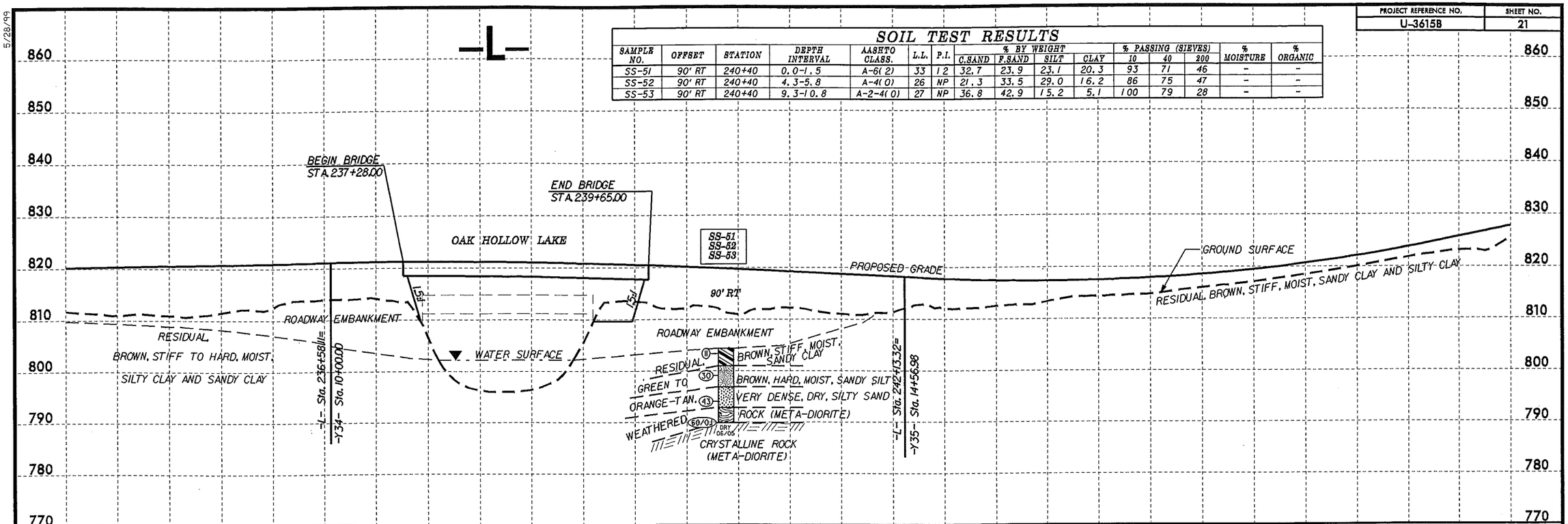
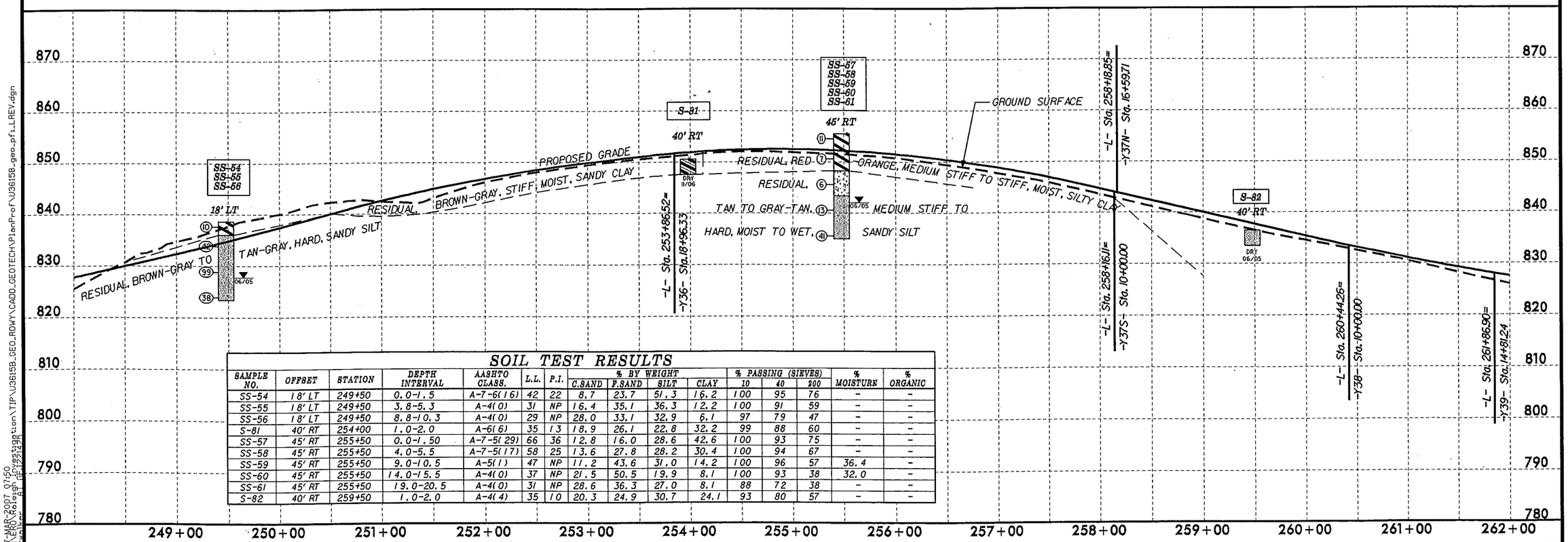
PROJECT REFERENCE NO.	SHEET NO.
U-3615B	21

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
SS-51	90' RT	240+40	0.0-1.5	A-6(2)	33	12	32.7	23.9	23.1	20.3	93	71	46	-	-
SS-52	90' RT	240+40	4.3-5.8	A-4(0)	26	NP	21.3	33.5	29.0	16.2	86	75	47	-	-
SS-53	90' RT	240+40	9.3-10.8	A-2-4(0)	27	NP	36.8	42.9	15.2	5.1	100	79	28	-	-





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
SS-54	18' LT	249+50	0.0-1.5	A-7-6(16)	42	22	8.7	23.7	51.3	16.2	100	95	76	-	-
SS-55	18' LT	249+50	3.8-5.3	A-4(0)	31	NP	16.4	35.1	36.3	12.2	100	91	59	-	-
SS-56	18' LT	249+50	8.8-10.3	A-4(0)	29	NP	28.0	33.1	32.9	6.1	97	79	47	-	-
S-81	40' RT	254+00	1.0-2.0	A-6(6)	35	13	18.9	26.1	22.8	32.2	99	88	60	-	-
SS-57	45' RT	255+50	0.0-1.50	A-7-5(29)	66	36	12.8	16.0	28.6	42.6	100	93	75	-	-
SS-58	45' RT	255+50	4.0-5.5	A-7-5(17)	58	25	13.6	27.8	28.2	30.4	100	94	67	-	-
SS-59	45' RT	255+50	9.0-10.5	A-5(11)	47	NP	11.2	43.6	31.0	14.2	100	96	57	36.4	-
SS-60	45' RT	255+50	14.0-15.5	A-4(0)	37	NP	21.5	50.5	19.9	8.1	100	93	38	32.0	-
SS-61	45' RT	255+50	19.0-20.5	A-4(0)	31	NP	28.6	36.3	27.0	8.1	88	72	38	-	-
S-82	40' RT	259+50	1.0-2.0	A-4(4)	35	10	20.3	24.9	30.7	24.1	93	80	57	-	-

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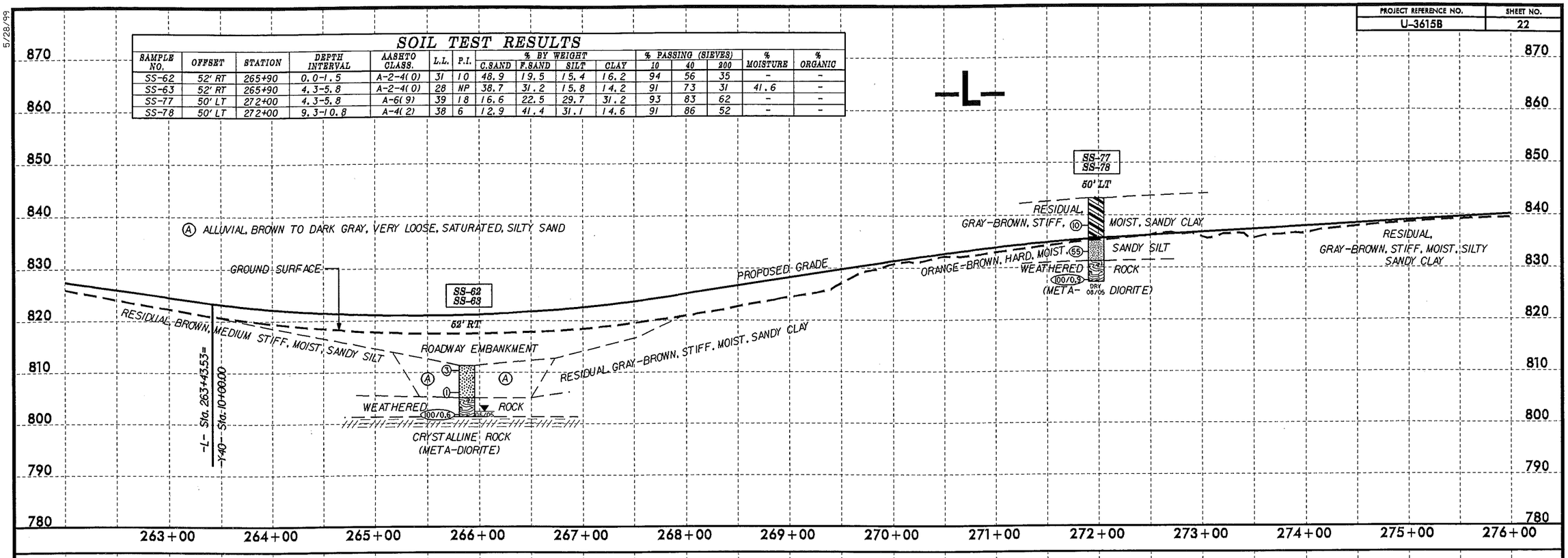
PROJECT REFERENCE NO.	SHEET NO.
U-3615B	22

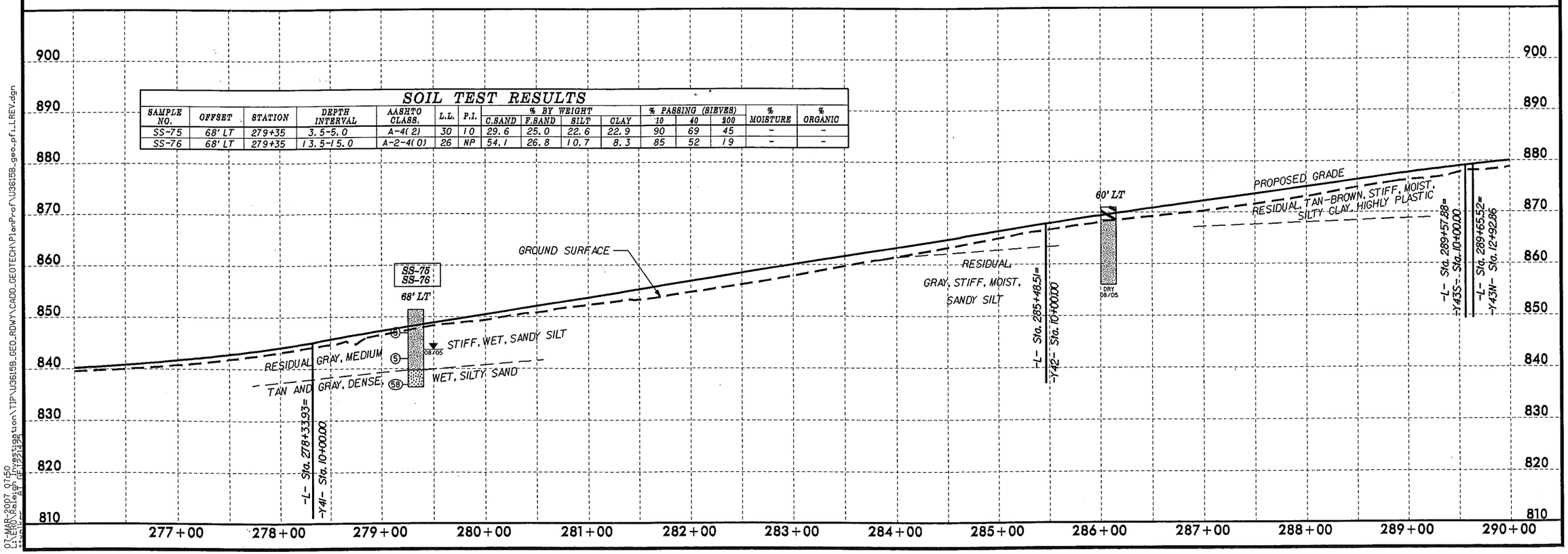
SOIL TEST RESULTS

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
SS-62	52' RT	265+90	0.0-1.5	A-2-4(0)	31	10	48.9	19.5	15.4	16.2	94	56	35	-	-
SS-63	52' RT	265+90	4.3-5.8	A-2-4(0)	28	NP	38.7	31.2	15.8	14.2	91	73	31	41.6	-
SS-77	50' LT	272+00	4.3-5.8	A-6(9)	39	18	16.6	22.5	29.7	31.2	93	83	62	-	-
SS-78	50' LT	272+00	9.3-10.8	A-4(2)	38	6	12.9	41.4	31.1	14.6	91	86	52	-	-



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
SS-75	68' LT	279+35	3.5-5.0	A-4(2)	30	10	29.6	25.0	22.6	22.9	90	69	45	-	-
SS-76	68' LT	279+35	13.5-15.0	A-2-4(0)	26	NP	54.1	26.8	10.7	8.3	85	52	19	-	-



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PROJECT REFERENCE NO.	SHEET NO.
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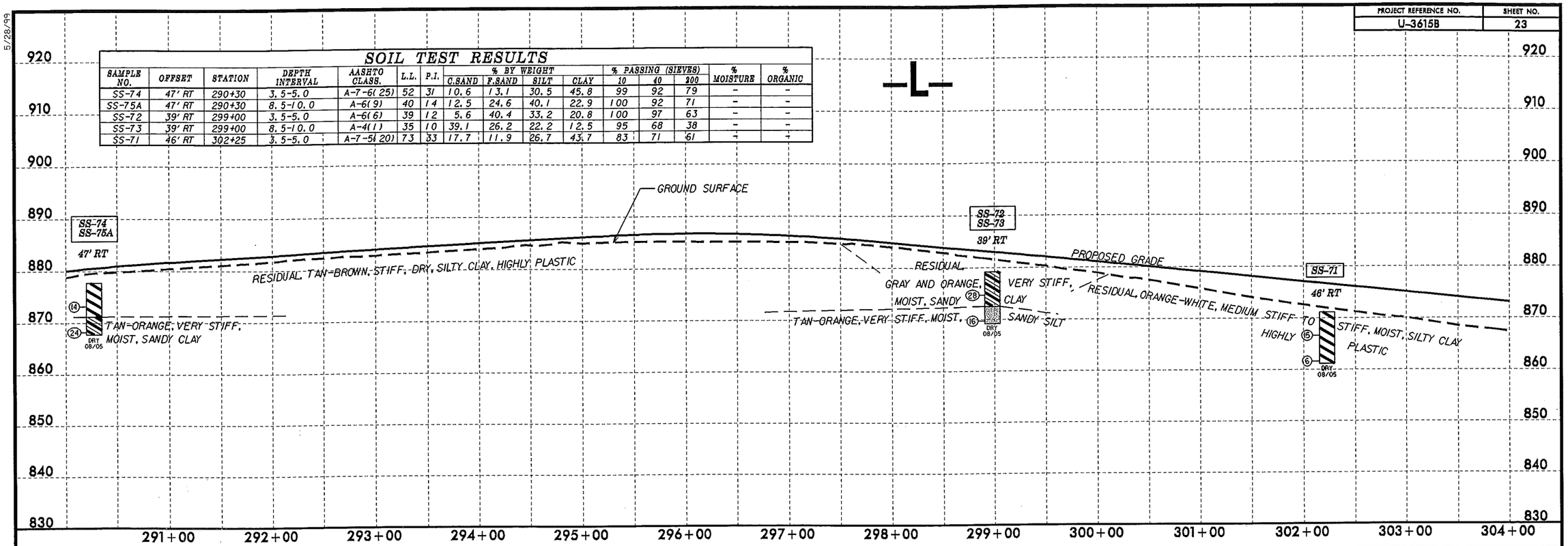
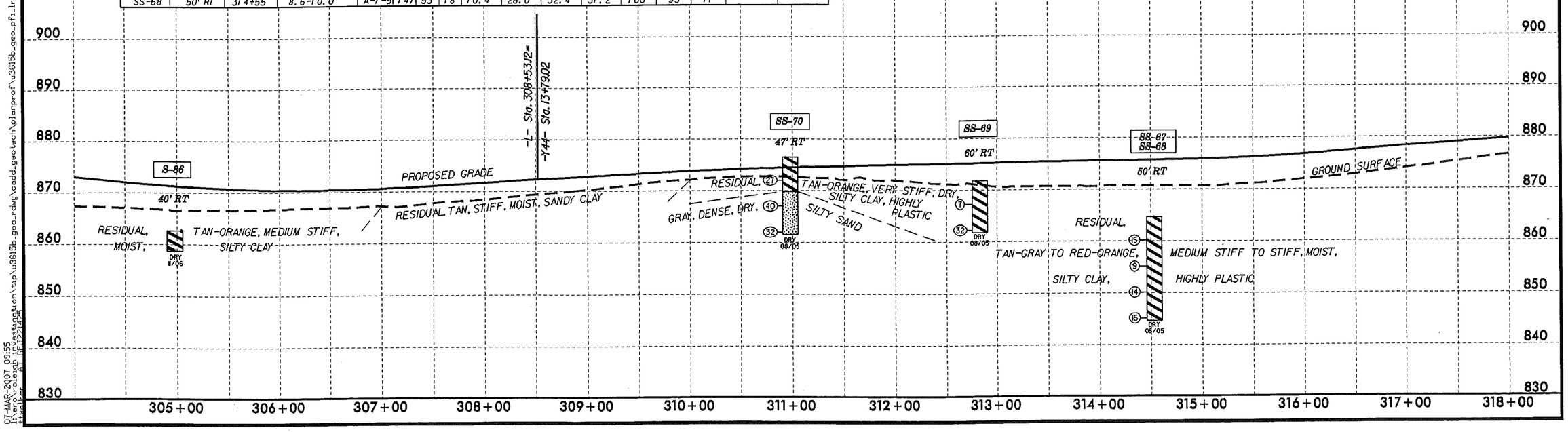
SOIL TEST RESULTS

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
SS-74	47' RT	290+30	3.5-5.0	A-7-6(25)	52	31	10.6	13.1	30.5	45.8	99	92	79	-	-
SS-75A	47' RT	290+30	8.5-10.0	A-6(9)	40	14	12.5	24.6	40.1	22.9	100	92	71	-	-
SS-72	39' RT	299+00	3.5-5.0	A-6(6)	39	12	5.6	40.4	33.2	20.8	100	97	63	-	-
SS-73	39' RT	299+00	8.5-10.0	A-4(1)	35	10	39.1	26.2	22.2	12.5	95	68	38	-	-
SS-71	46' RT	302+25	3.5-5.0	A-7-5(20)	73	33	17.7	11.9	26.7	43.7	83	71	61	-	-



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
S-86	40' RT	305+00	2.0-3.0	A-7-6(52)	80	55	5.8	7.2	28.6	58.3	97	93	86	-	-
SS-70	47' RT	311+00	8.5-10.0	A-2-4(0)	31	4	39.8	29.6	18.2	12.5	89	64	33	-	-
SS-69	60' RT	312+85	3.5-5.0	A-7-6(8)	45	26	31.4	16.2	12.8	39.5	86	66	47	-	-
SS-67	50' RT	314+55	3.5-5.0	A-7-6(24)	67	41	20.2	15.6	14.3	49.9	92	78	62	-	-
SS-68	50' RT	314+55	8.6-10.0	A-7-5(14)	53	18	10.4	26.0	32.4	31.2	100	95	71	-	-



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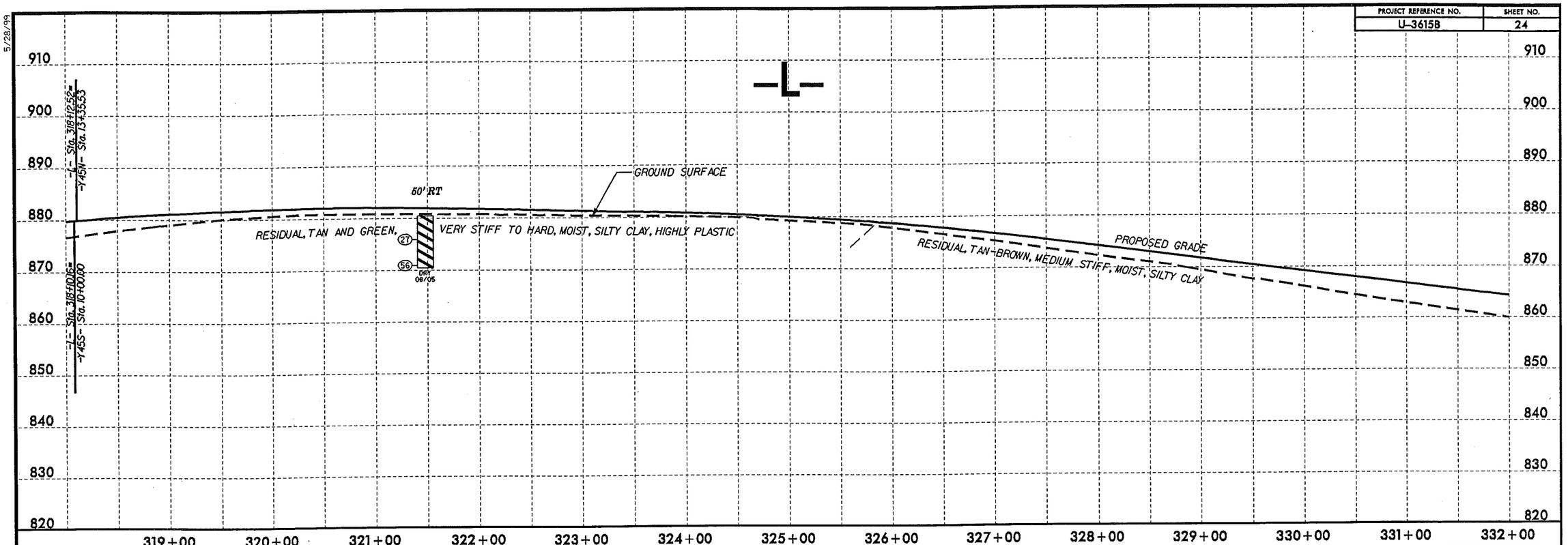
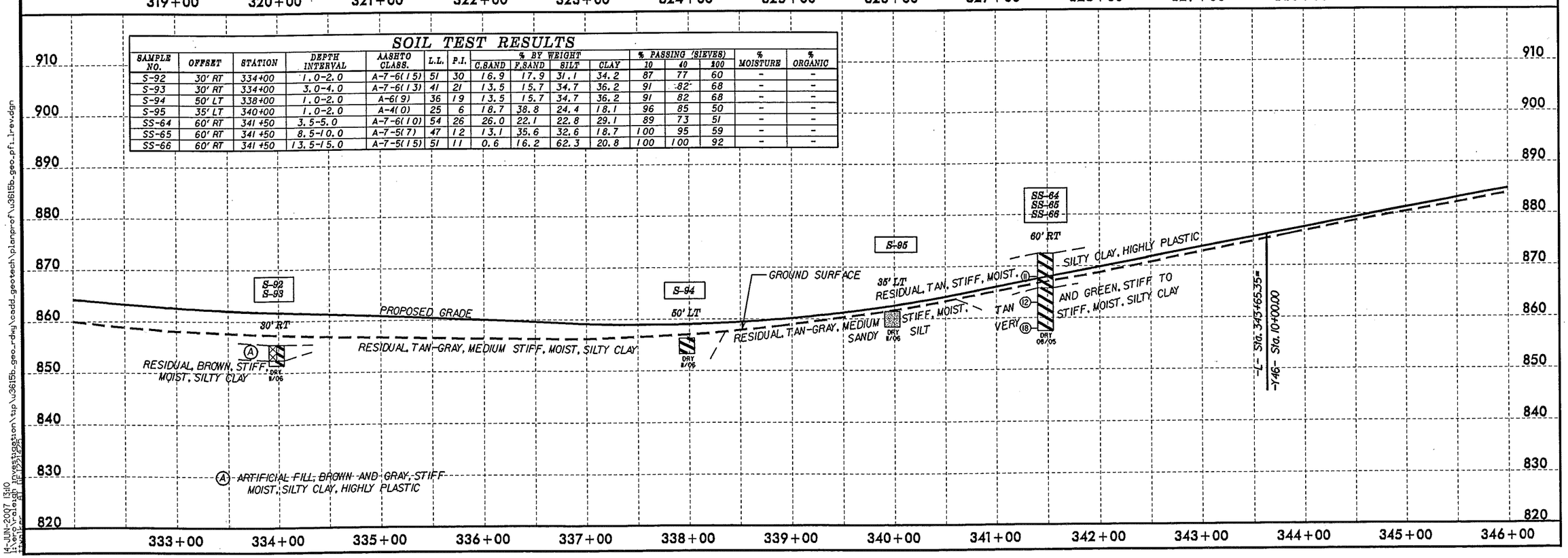


SOIL TEST RESULTS

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
S-92	30' RT	334+00	1.0-2.0	A-7-6(15)	51	30	16.9	17.9	31.1	34.2	87	77	60	-	-
S-93	30' RT	334+00	3.0-4.0	A-7-6(13)	41	21	13.5	15.7	34.7	36.2	91	82	68	-	-
S-94	50' LT	338+00	1.0-2.0	A-6(9)	36	19	13.5	15.7	34.7	36.2	91	82	68	-	-
S-95	35' LT	340+00	1.0-2.0	A-4(0)	25	6	18.7	38.8	24.4	18.1	96	85	50	-	-
SS-64	60' RT	341+50	3.5-5.0	A-7-6(10)	54	26	26.0	22.1	22.8	29.1	89	73	51	-	-
SS-65	60' RT	341+50	8.5-10.0	A-7-5(7)	47	12	13.1	35.6	32.6	18.7	100	95	59	-	-
SS-66	60' RT	341+50	13.5-15.0	A-7-5(15)	51	11	0.6	16.2	62.3	20.8	100	100	92	-	-



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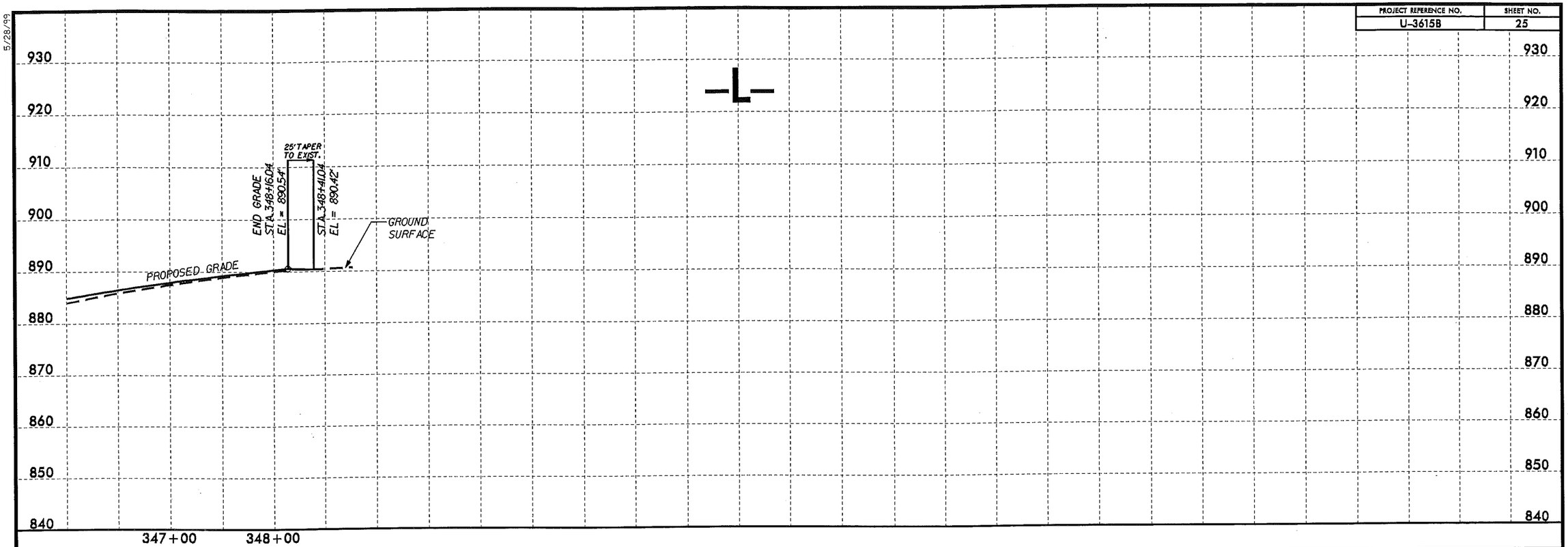

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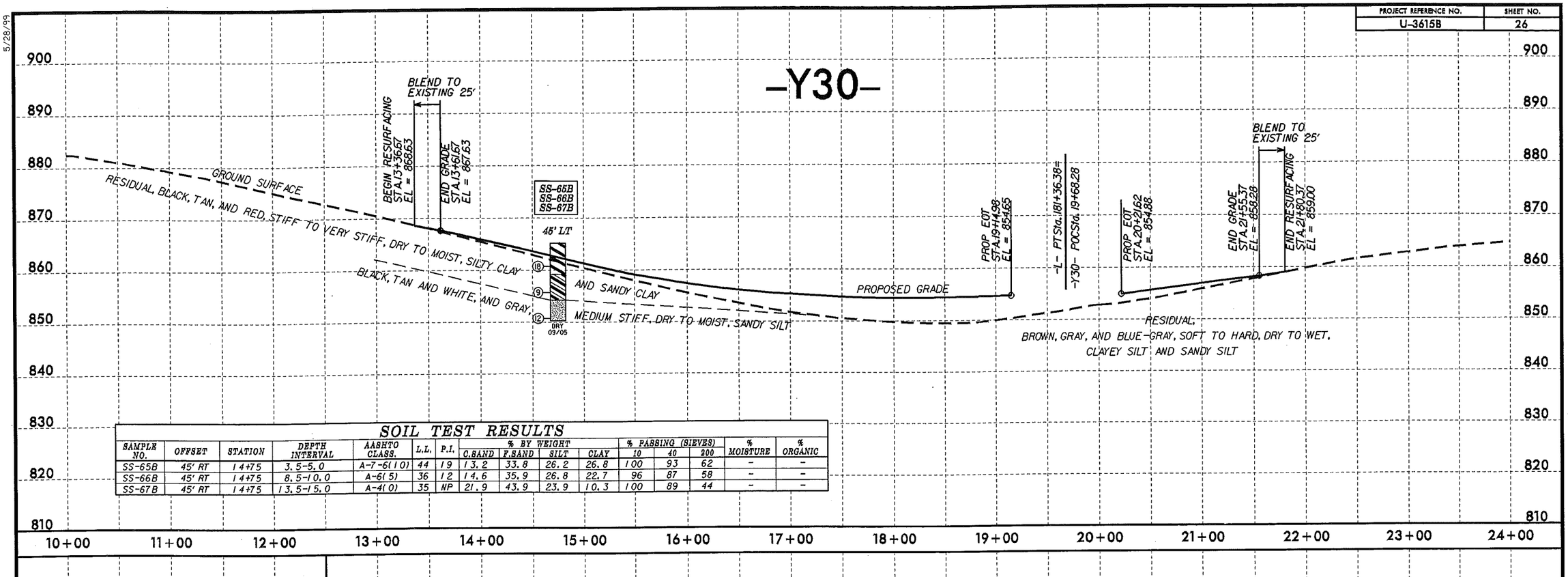
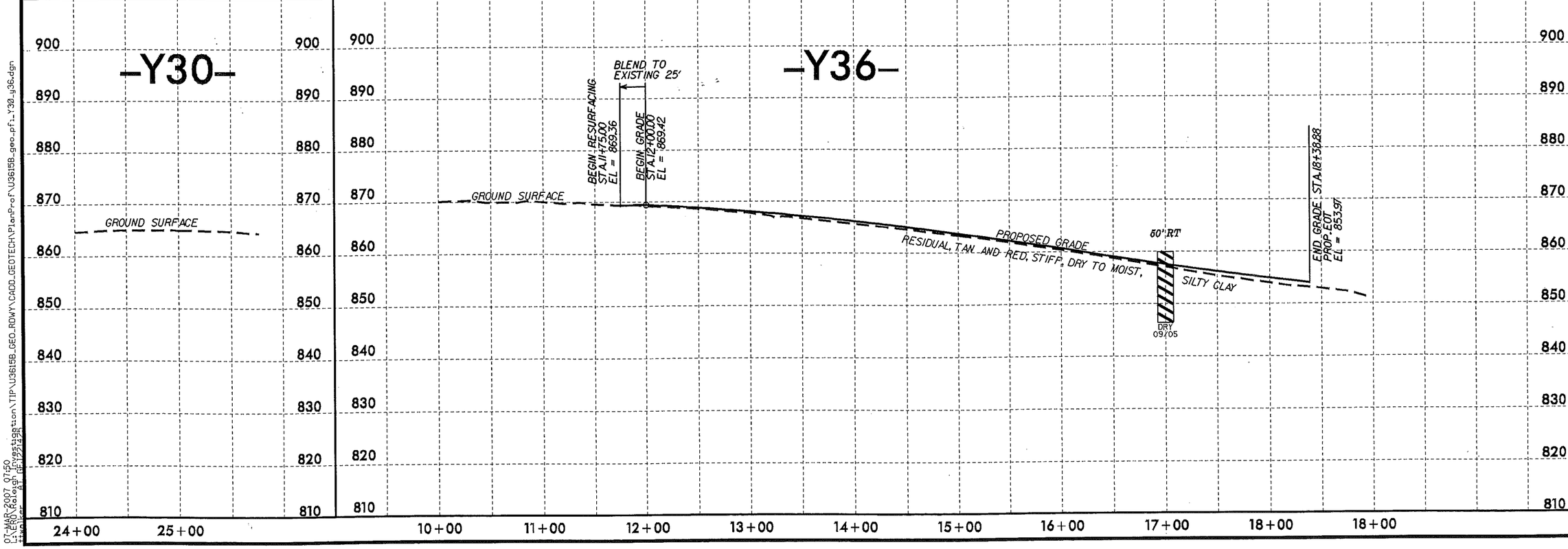


SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
SS-65B	45' RT	14+75	3.5-5.0	A-7-6(10)	44	19	13.2	33.8	26.2	26.8	100	93	62	-	-
SS-66B	45' RT	14+75	8.5-10.0	A-6(5)	36	12	14.6	35.9	26.8	22.7	96	87	58	-	-
SS-67B	45' RT	14+75	13.5-15.0	A-4(0)	35	NP	21.9	43.9	23.9	10.3	100	89	44	-	-



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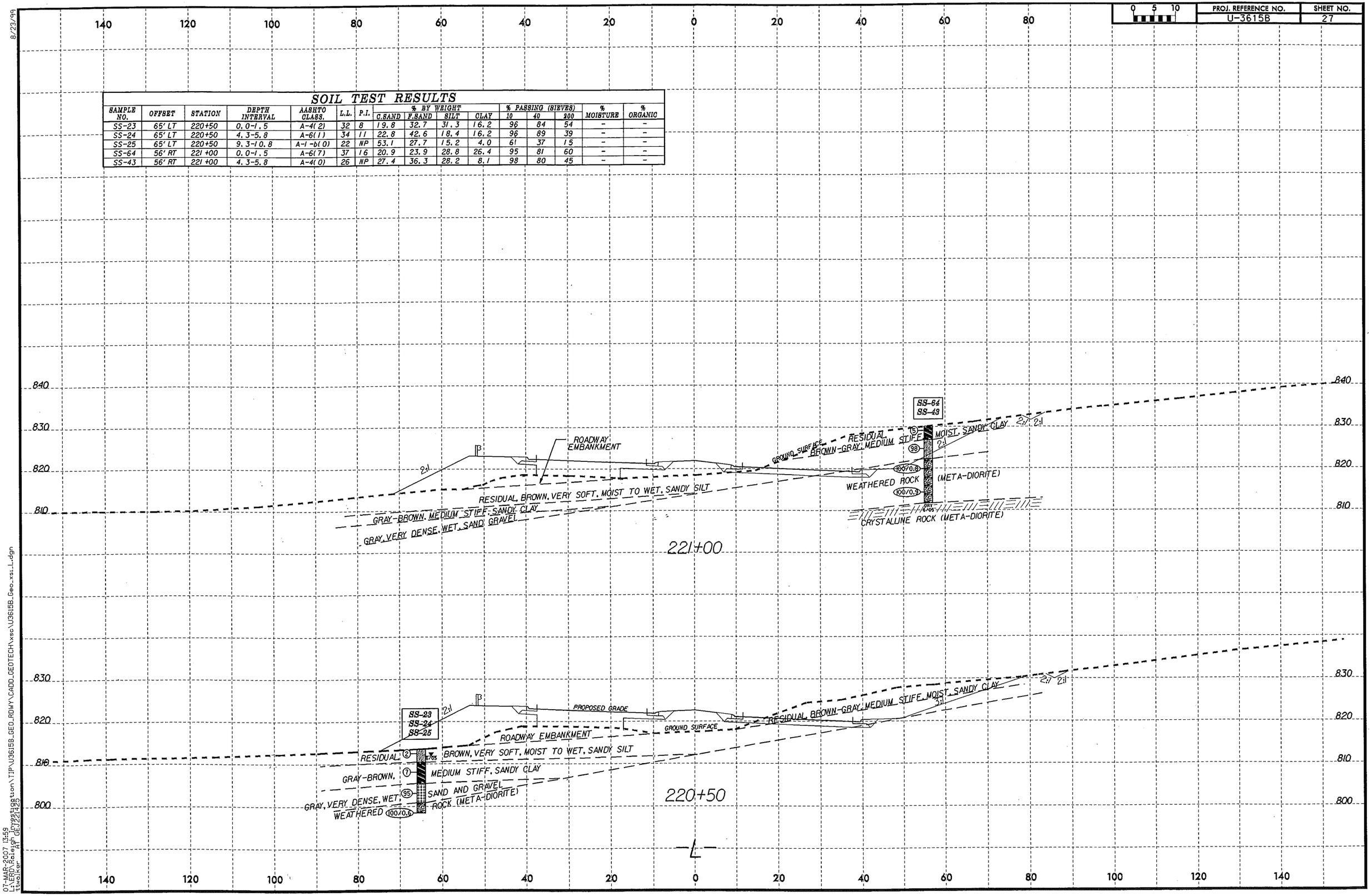
U-3615B	27

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
SS-23	65' LT	220+50	0.0-1.5	A-4(2)	32	8	19.8	32.7	31.3	16.2	96	84	54	-	-
SS-24	65' LT	220+50	4.3-5.8	A-6(11)	34	11	22.8	42.6	18.4	16.2	96	89	39	-	-
SS-25	65' LT	220+50	9.3-10.8	A-1-b(0)	22	NP	53.1	27.7	15.2	4.0	61	37	15	-	-
SS-64	56' RT	221+00	0.0-1.5	A-6(7)	37	16	20.9	23.9	28.8	26.4	95	81	60	-	-
SS-43	56' RT	221+00	4.3-5.8	A-4(0)	26	NP	27.4	36.3	28.2	8.1	98	80	45	-	-



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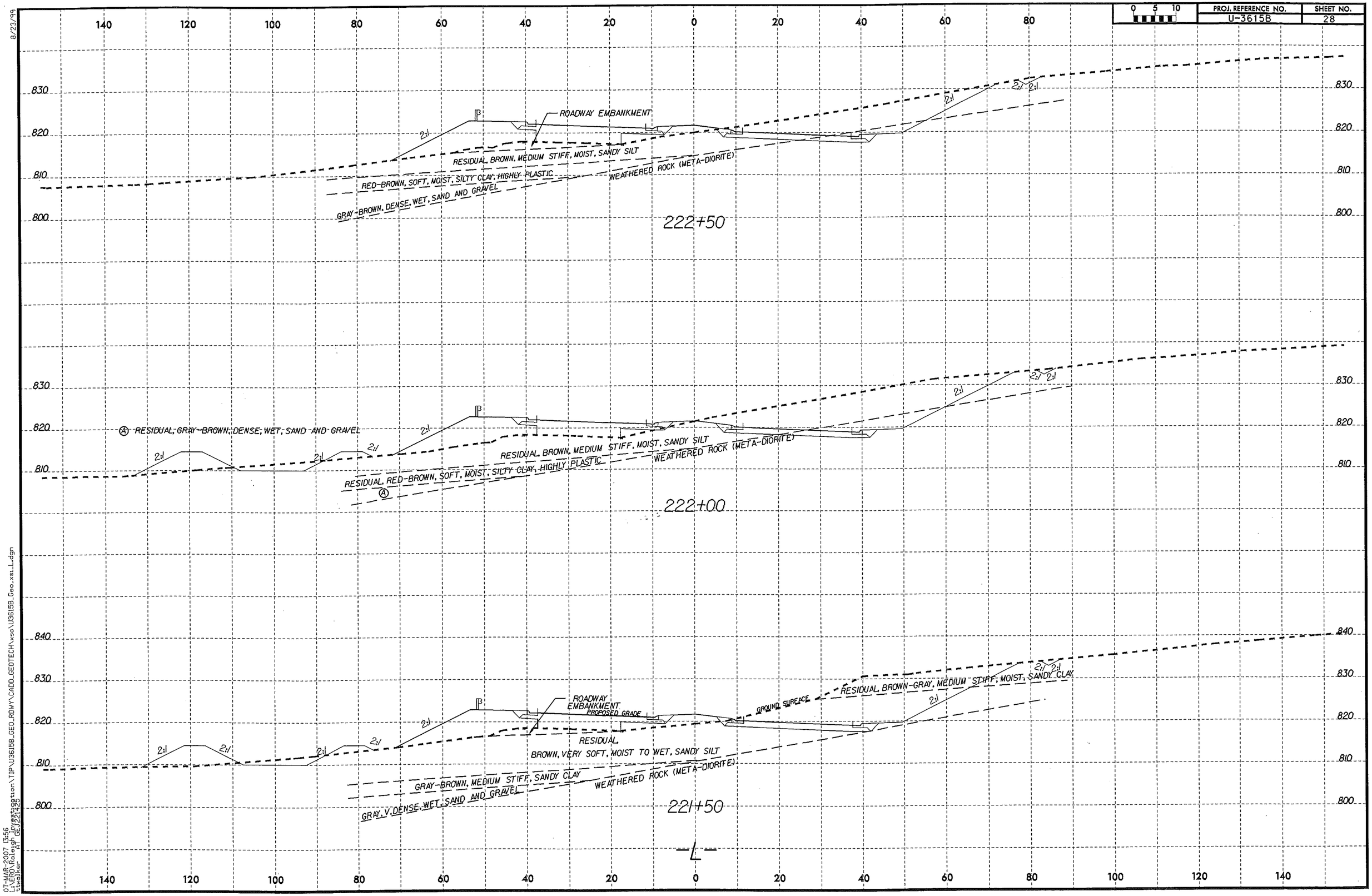

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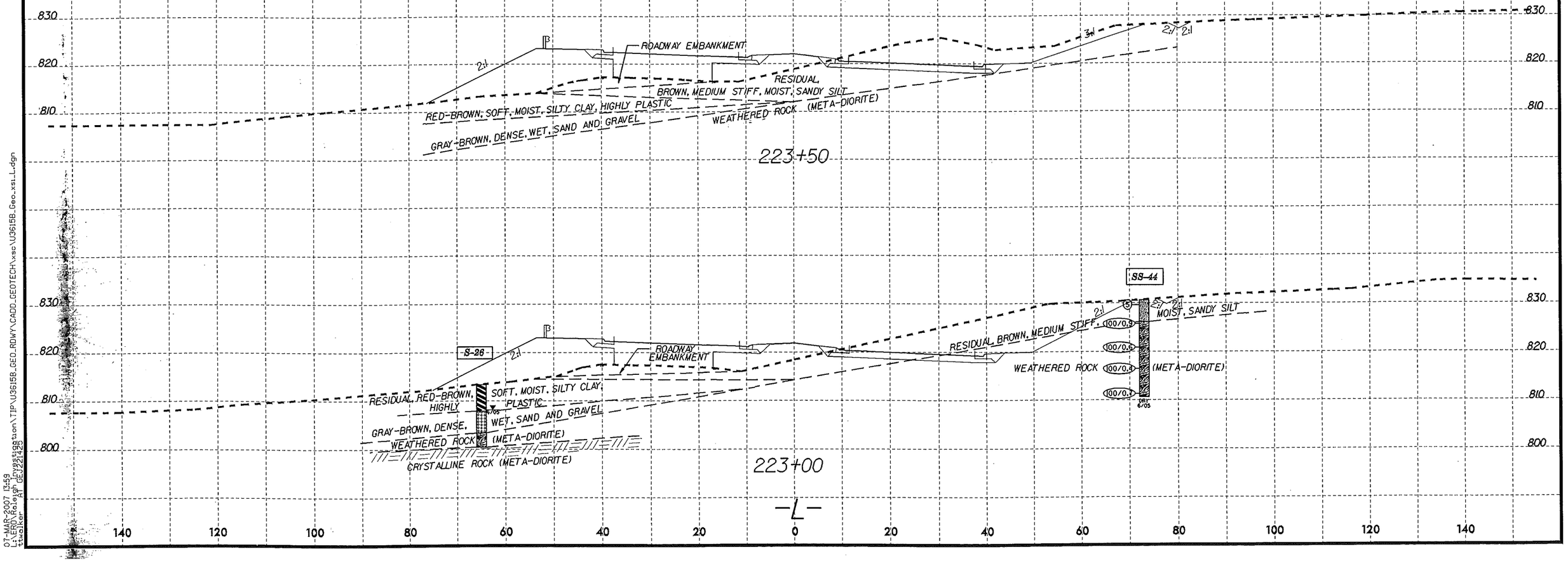
tlwalker AT GEO221425

PROJ. REFERENCE NO.	SHEET NO.
U-3615B	29

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
SS-44	73' RT	223+00	0.0-1.5	A-4(3)	29	9	24.1	23.1	26.4	26.4	95	78	57	-	-
S-26	65' LT	223+00	1.0-2.0	A-7-5(26)	59	27	3.6	20.6	29.3	46.5	100	99	83	-	-



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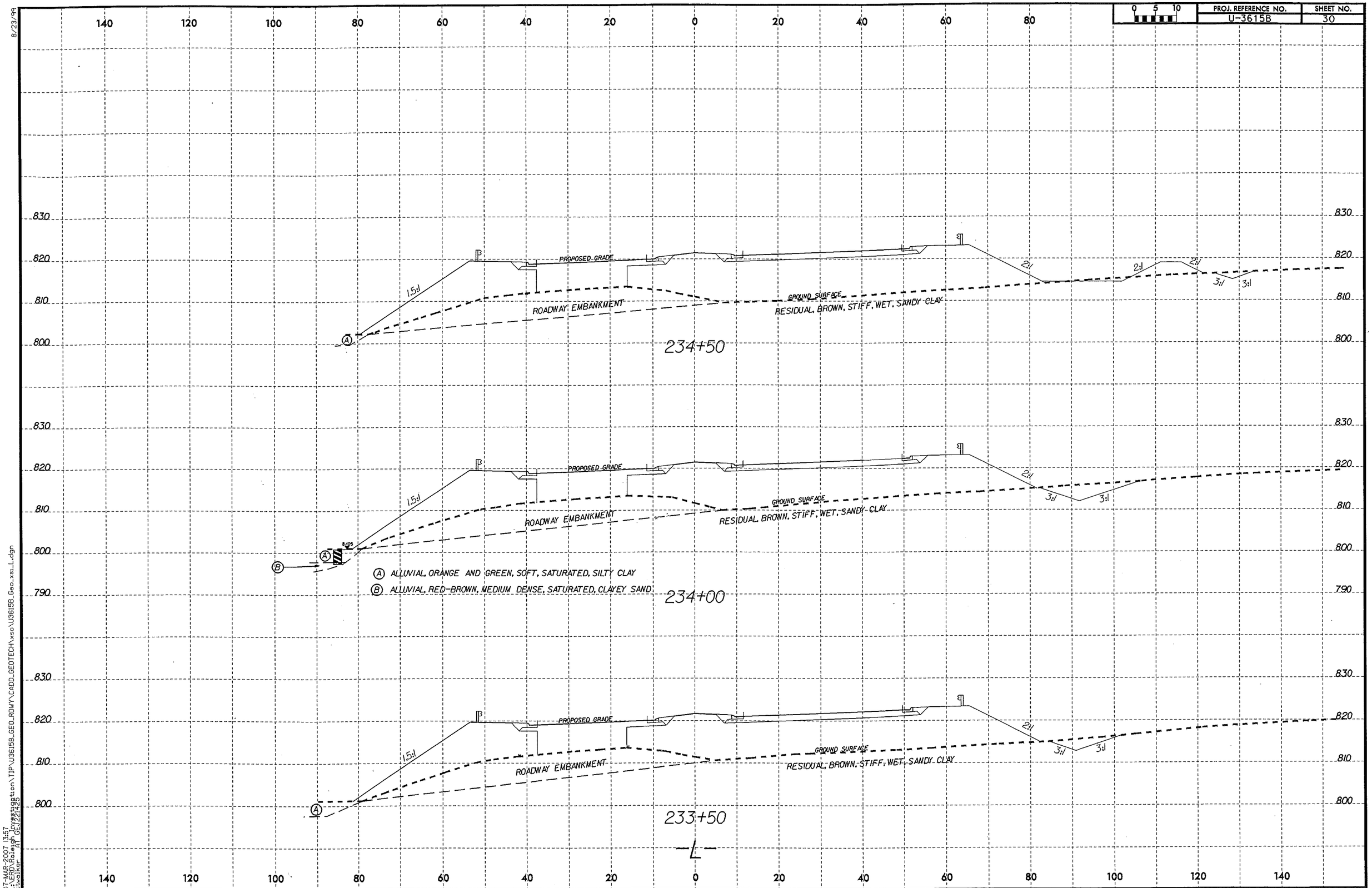
Lewicker GEV22/1425

PROJ. REFERENCE NO.	SHEET NO.
U-3615B	30



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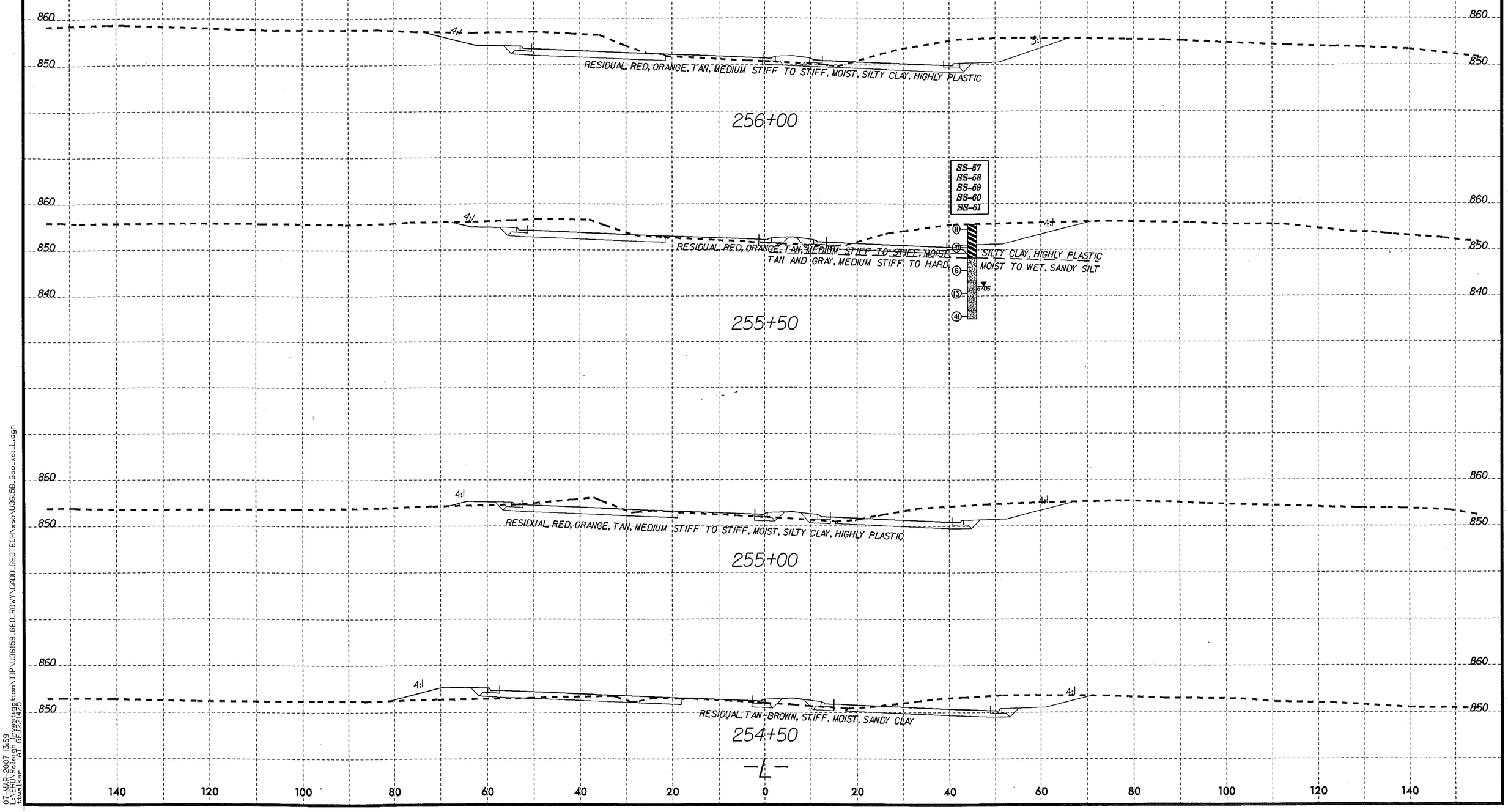
tsweiker

PROJ. REFERENCE NO.	SHEET NO.
U-3615B	31

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
SS-57	45' RT	255+50	0.0-1.5	A-7-5(29)	66	36	12.8	16.0	28.6	42.6	100	93	75	-	-
SS-58	45' RT	255+50	4.0-5.5	A-7-5(17)	58	25	13.6	27.8	28.2	30.4	100	94	67	-	-
SS-59	45' RT	255+50	9.0-10.5	A-5(1)	47	NP	11.2	43.6	31.0	14.2	100	96	57	36.4	-
SS-60	45' RT	255+50	14.0-15.5	A-4(0)	37	NP	21.5	50.5	19.9	8.1	100	93	38	32.0	-
SS-61	45' RT	255+50	19.0-20.5	A-4(0)	31	NP	28.6	36.3	27.0	8.1	88	72	38	-	-



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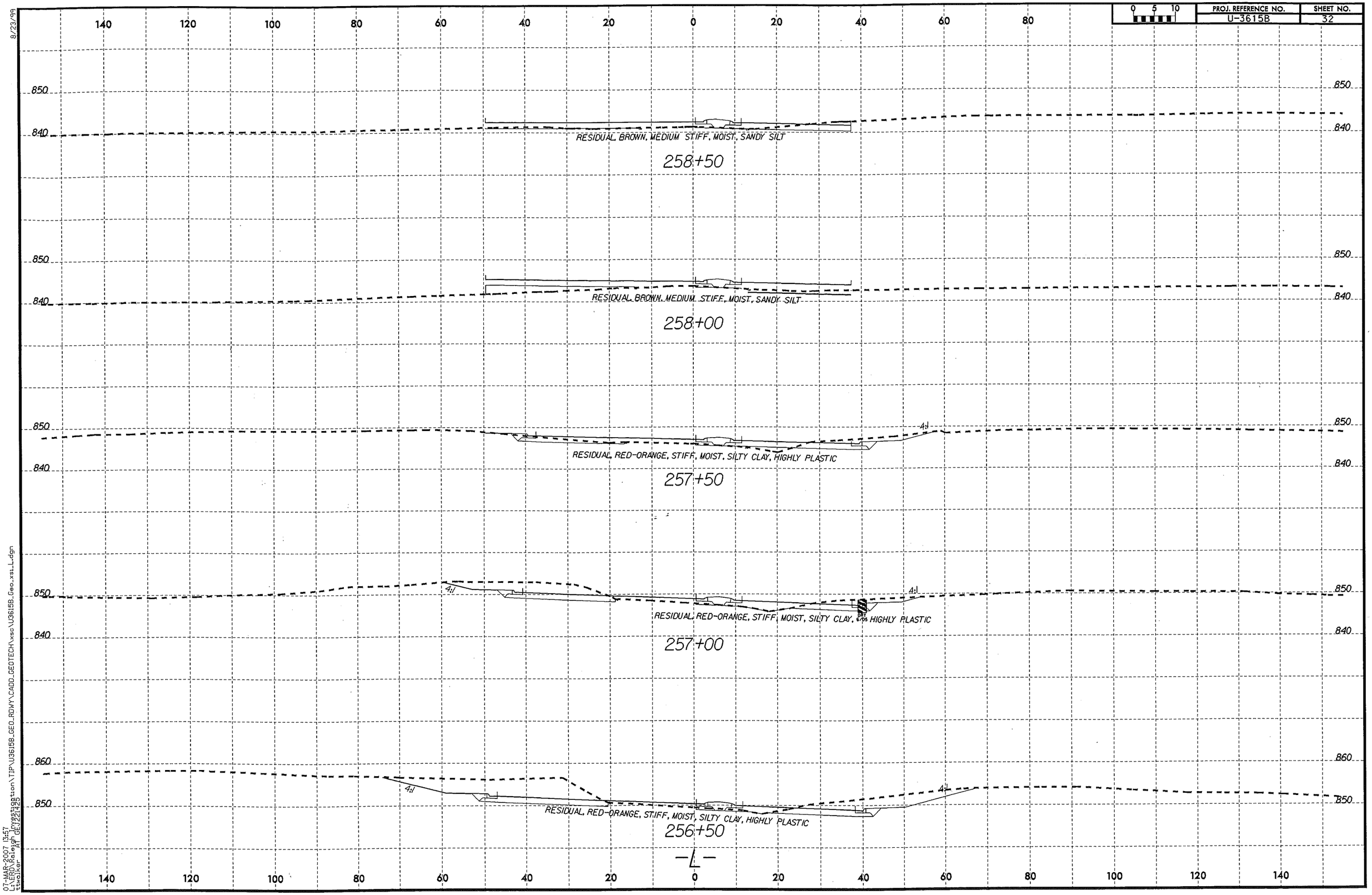
AT GEU22142B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32
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850
840
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258+50
RESIDUAL, BROWN, MEDIUM STIFF, MOIST, SANDY SILT
258+00
4:1
RESIDUAL, RED-ORANGE, STIFF, MOIST, SILTY CLAY, HIGHLY PLASTIC
257+50
RESIDUAL, RED-ORANGE, STIFF, MOIST, SILTY CLAY, HIGHLY PLASTIC
257+00
860
RESIDUAL, RED-ORANGE, STIFF, MOIST, SILTY CLAY, HIGHLY PLASTIC
256+50
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PROJ. REFERENCE NO.	SHEET NO.
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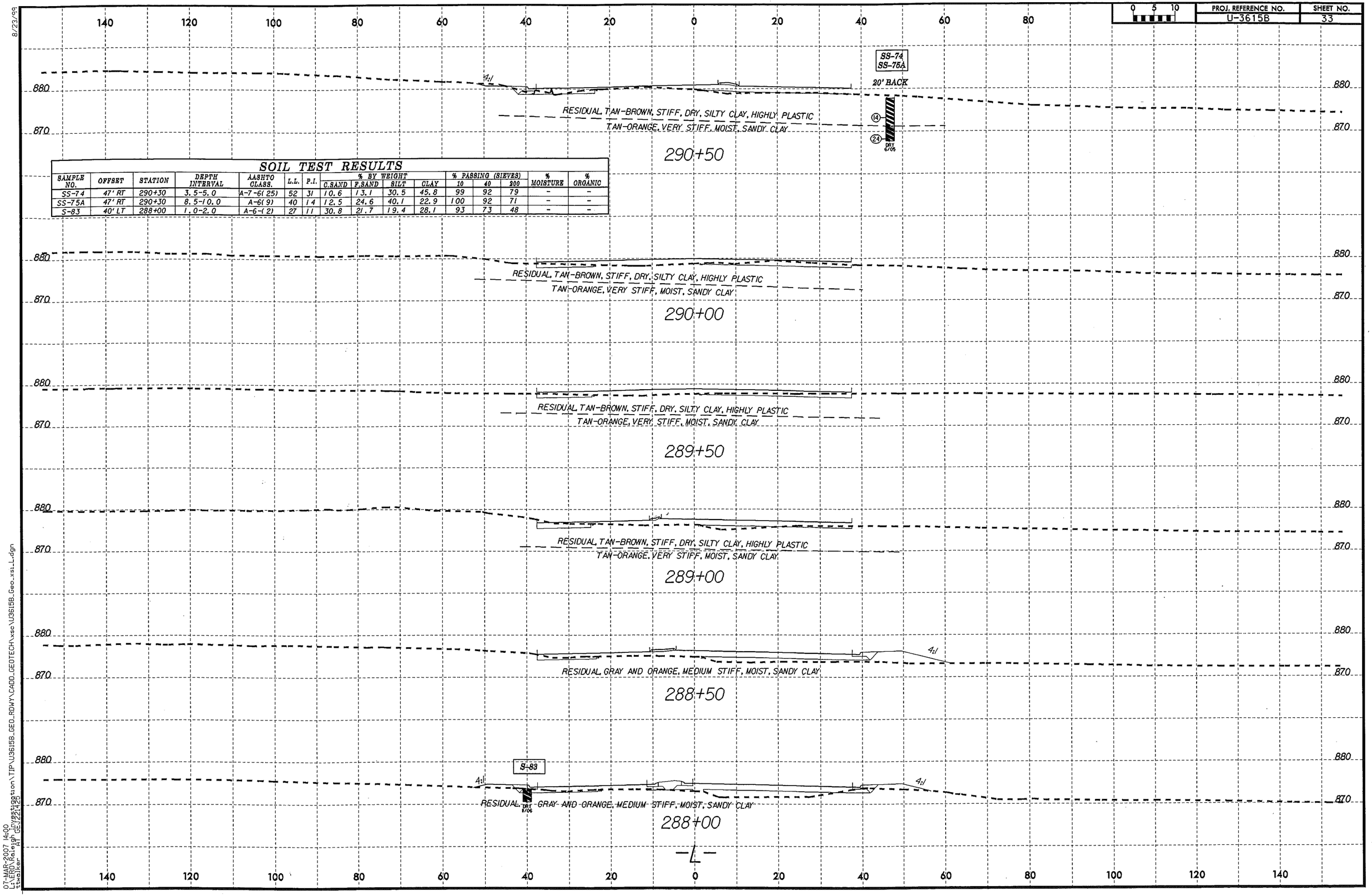

SOIL TEST RESULTS

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
SS-74	47' RT	290+30	3.5-5.0	A-7-6(25)	52	31	10.6	13.1	30.5	45.8	99	92	79	-	-
SS-75A	47' RT	290+30	8.5-10.0	A-6(9)	40	14	12.5	24.6	40.1	22.9	100	92	71	-	-
S-83	40' LT	288+00	1.0-2.0	A-6-(2)	27	11	30.8	21.7	19.4	28.1	93	73	48	-	-

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ttwalker AT GEU221430

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PROJ. REFERENCE NO.	SHEET NO.
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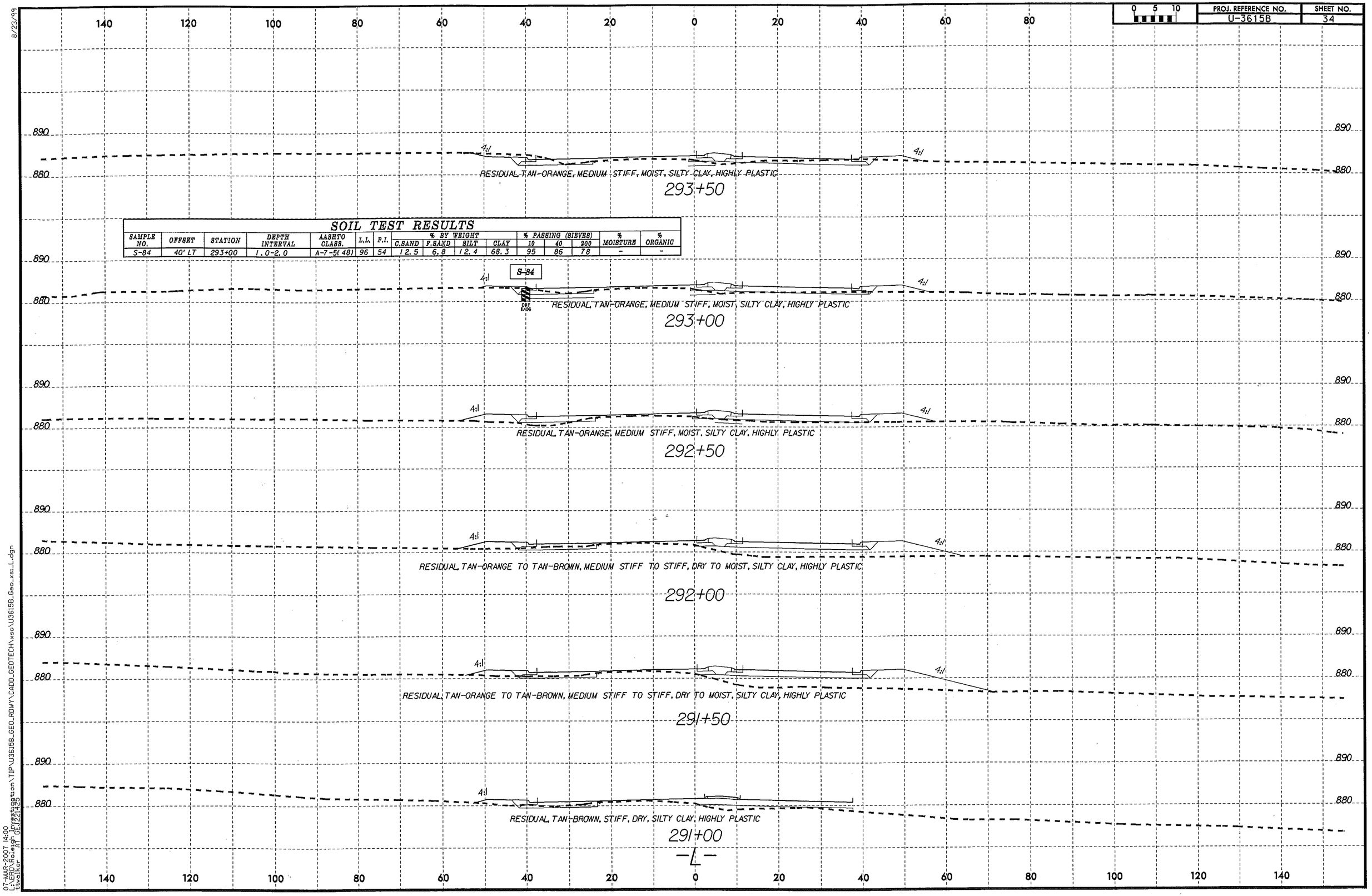

SOIL TEST RESULTS

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
S-84	40' LT	293+00	1.0-2.0	A-7-5(48)	96	54	12.5	6.8	12.4	68.3	95	86	78	-	-

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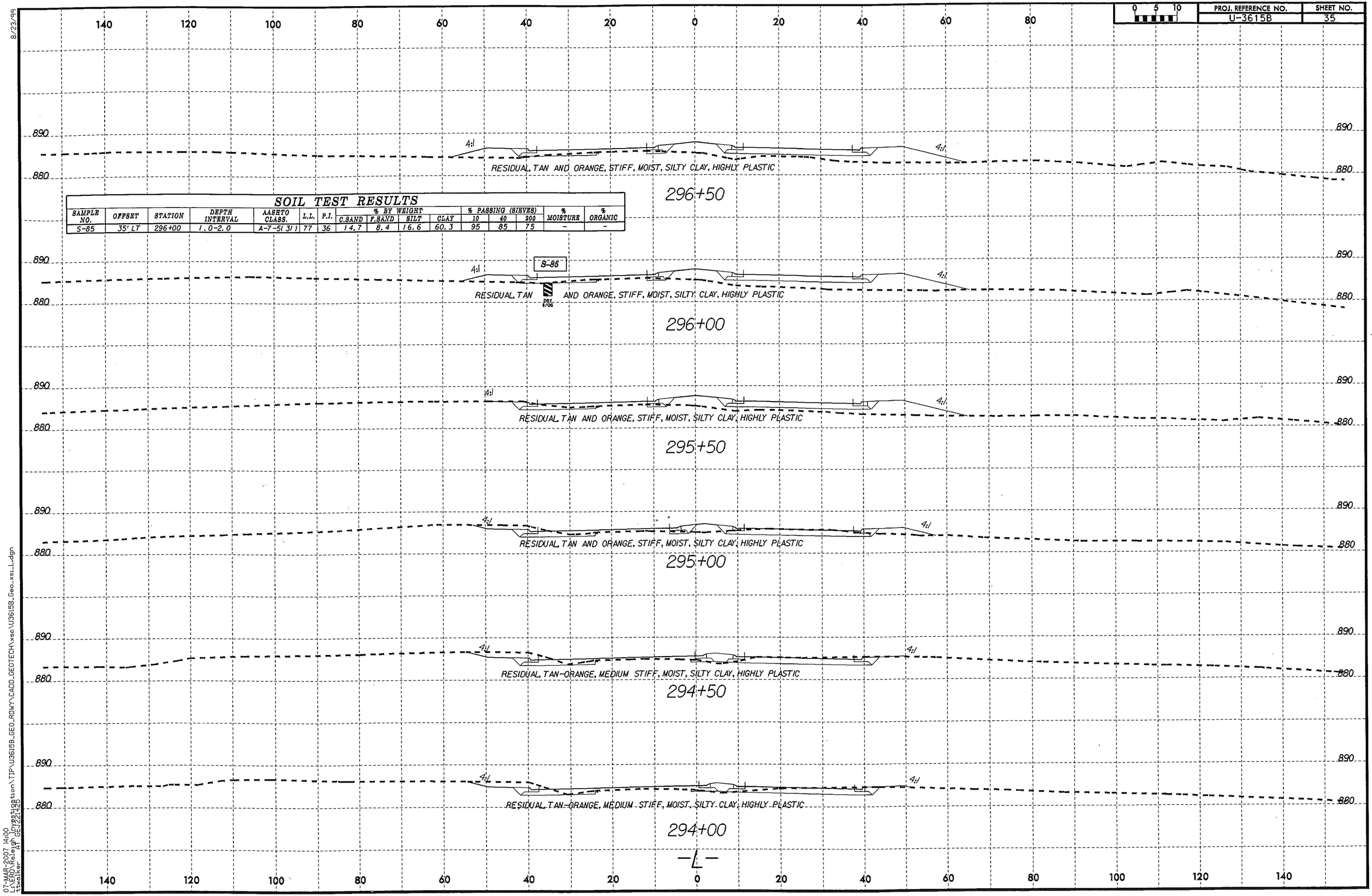

SOIL TEST RESULTS

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
S-85	35' LT	296+00	1.0-2.0	A-7-5(31)	77	36	14.7	8.4	16.6	60.3	95	85	75	-	-

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U-3615B	36

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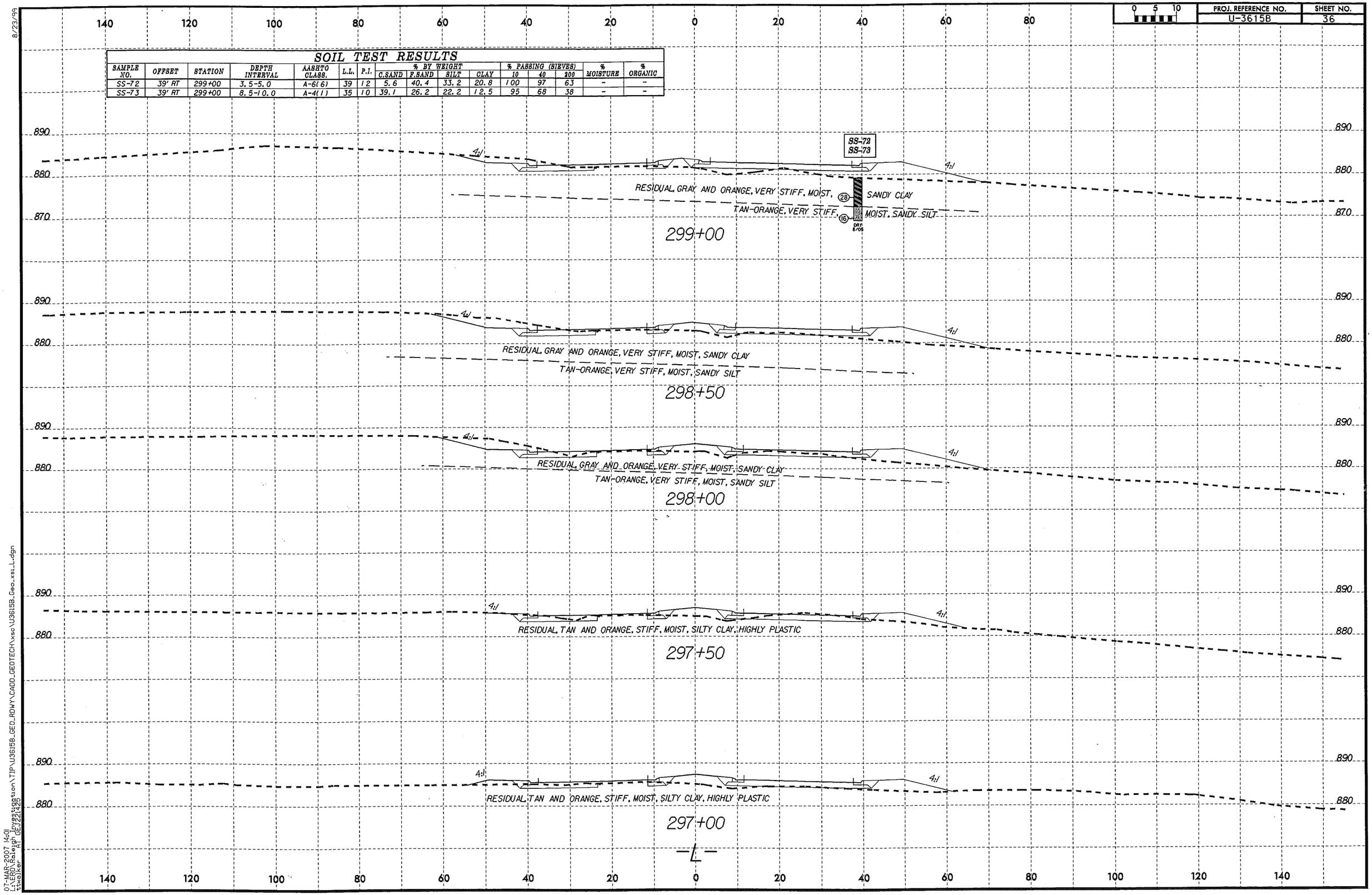
SOIL TEST RESULTS

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
SS-72	39' RT	299+00	3.5-5.0	A-6(6)	39	12	5.6	40.4	33.2	20.8	100	97	63	-	-
SS-73	39' RT	299+00	8.5-10.0	A-4(1)	35	10	39.1	26.2	22.2	12.5	95	68	38	-	-



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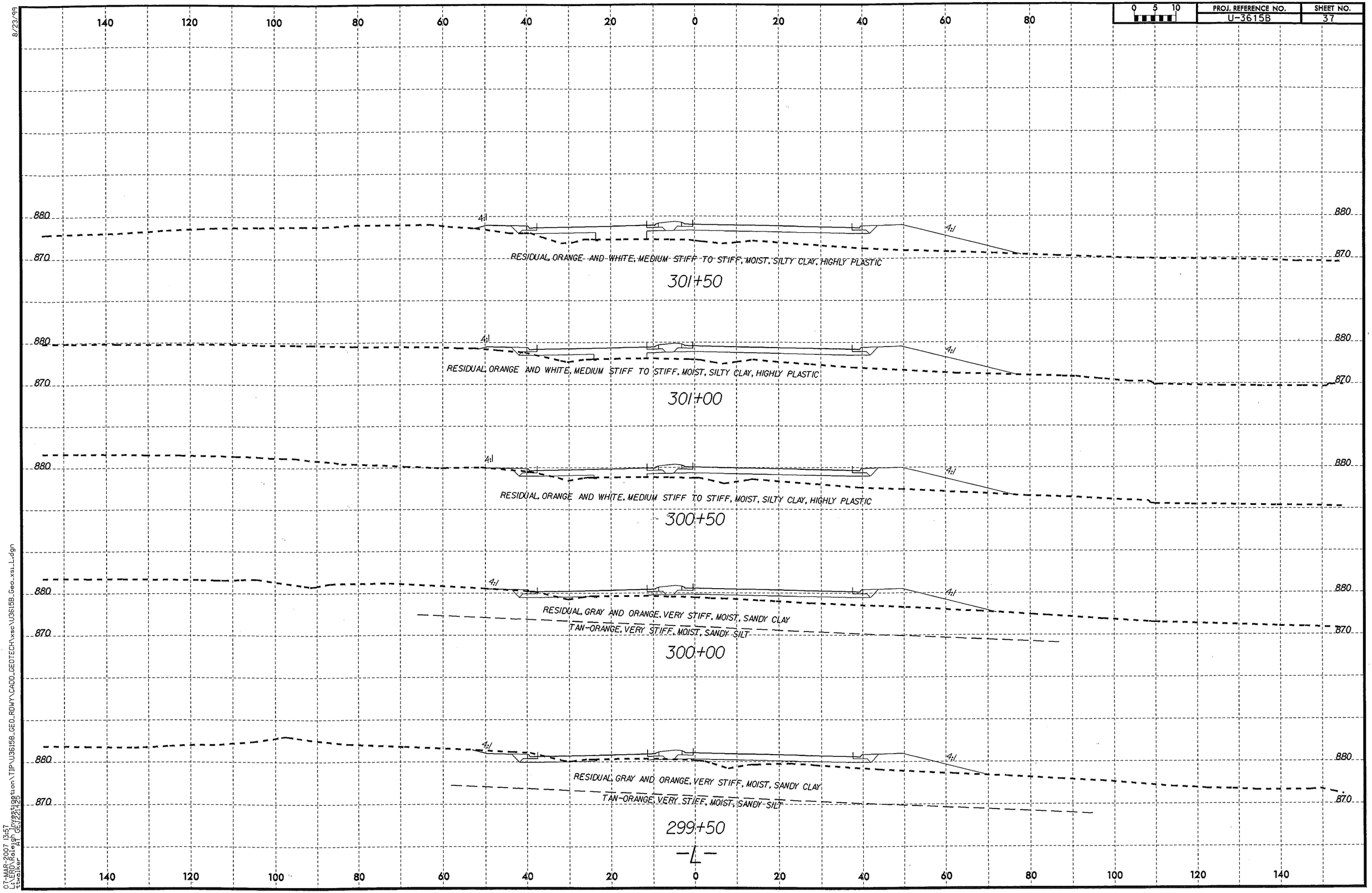

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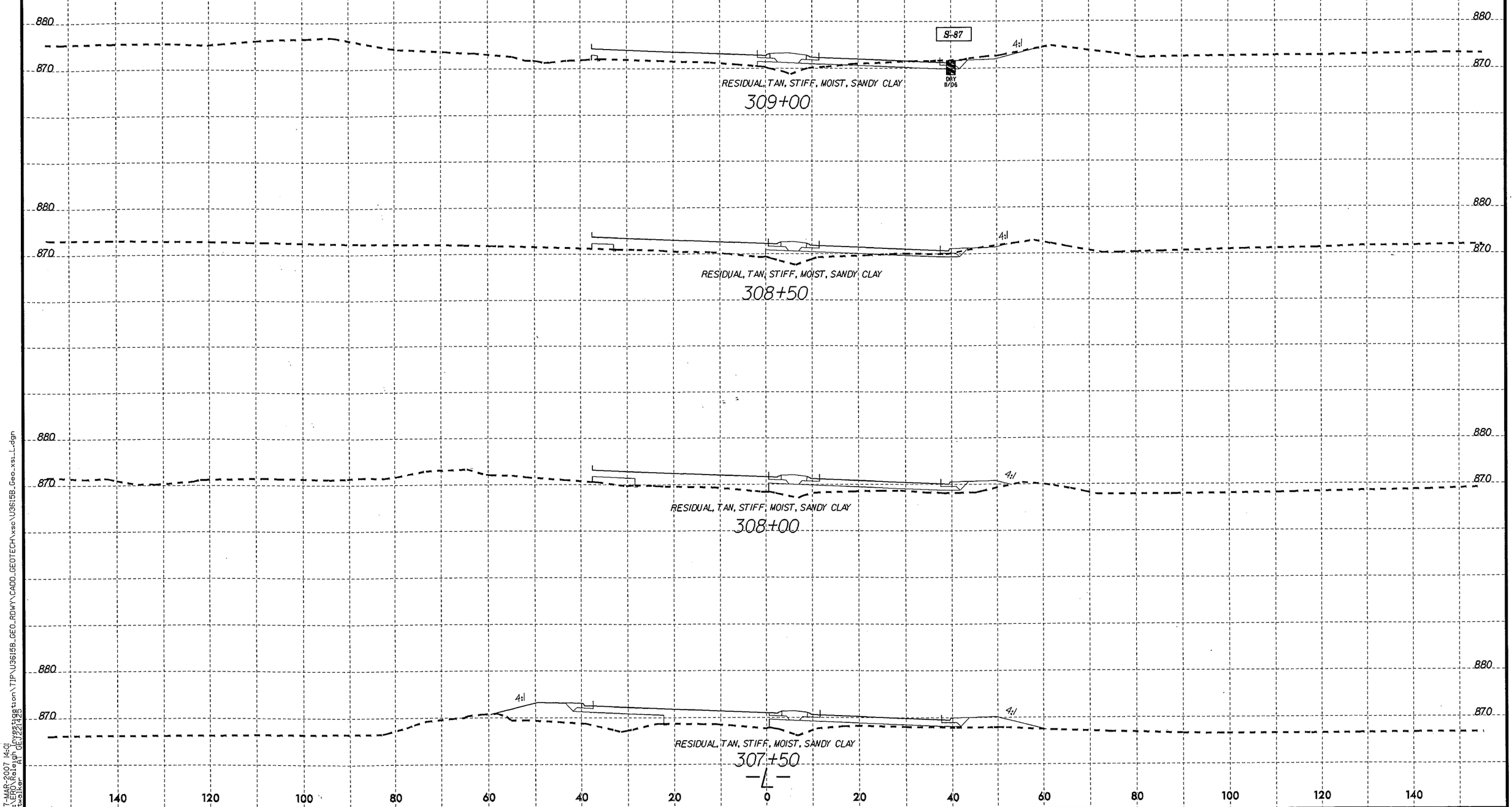
twolker

PROJ. REFERENCE NO.	SHEET NO.
U-3615B	38

0 5 10

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
S-87	40' RT	309+00	1.0-2.0	A-6(3)	31	13	34.4	16.1	19.4	30.2	93	69	49	-	-



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PROJ. REFERENCE NO.	SHEET NO.
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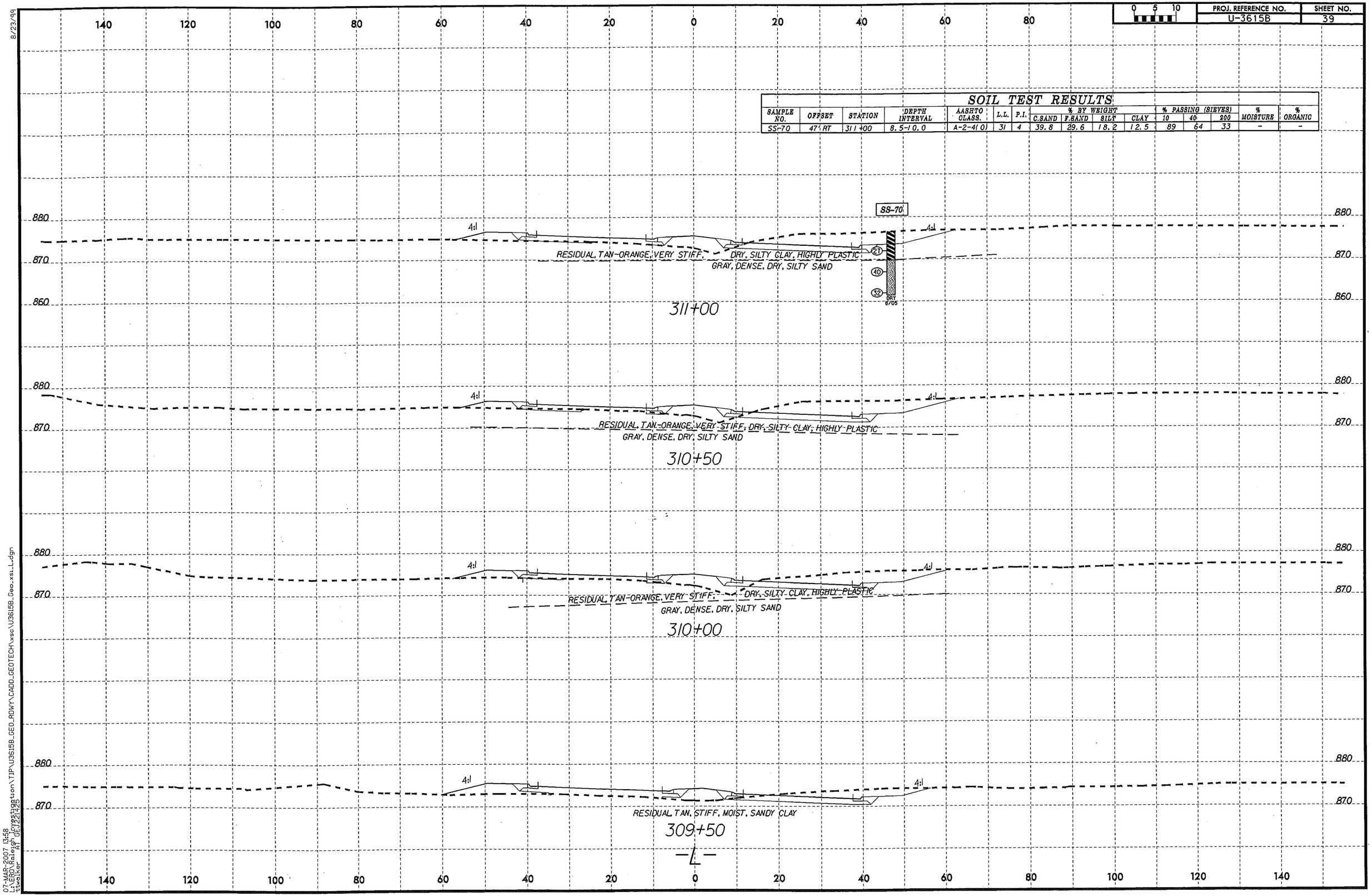
SOIL TEST RESULTS

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
SS-70	47' RT	311+00	8.5-10.0	A-2-4(0)	31	4	39.8	29.6	18.2	12.5	89	64	33	-	-



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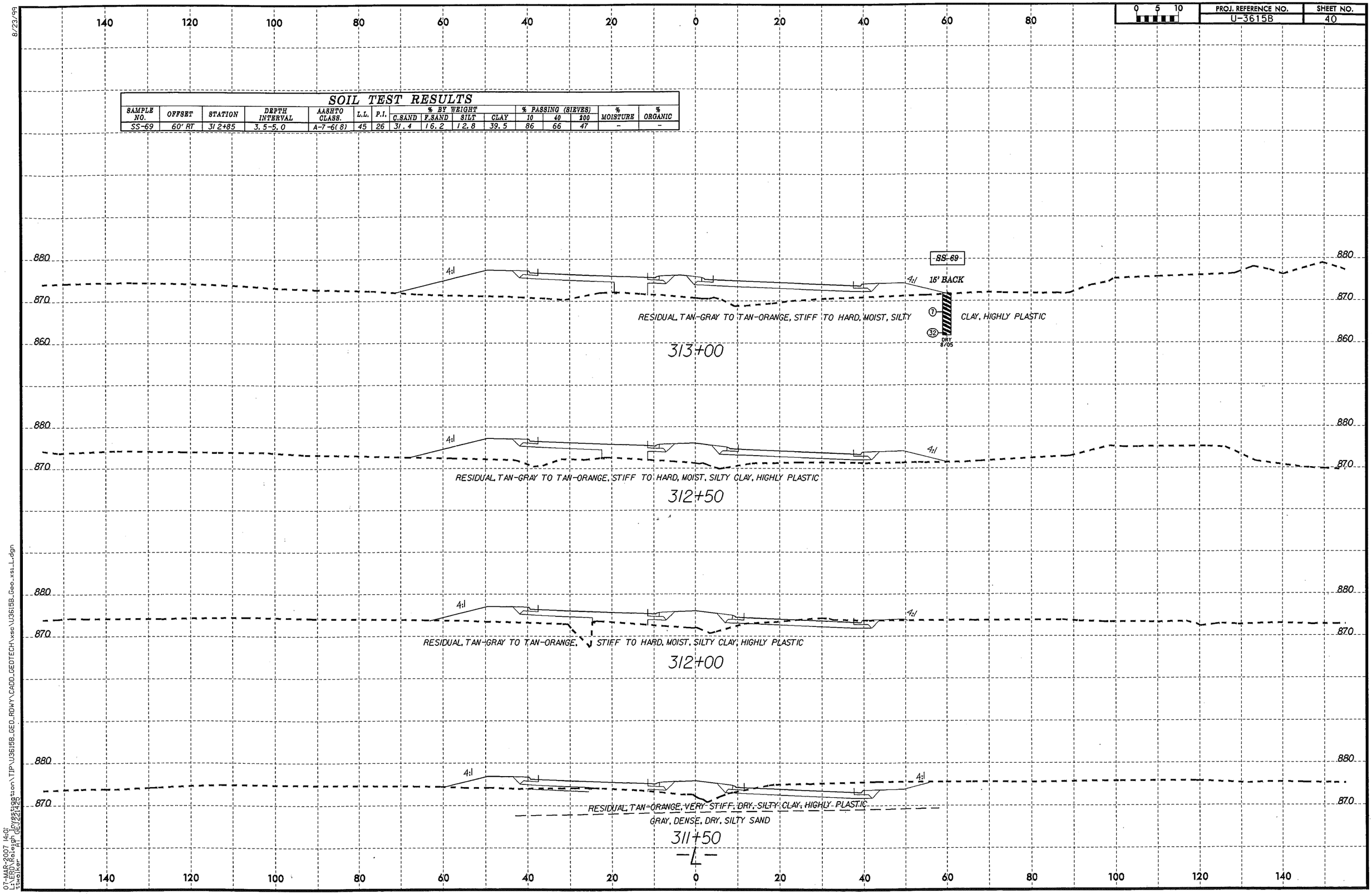
PROJ. REFERENCE NO.	SHEET NO.
U-3615B	40

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
SS-69	60' RT	312+85	3.5-5.0	A-7-6(8)	45	26	31.4	16.2	12.8	39.5	86	66	47	-	-



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PROJ. REFERENCE NO.	SHEET NO.
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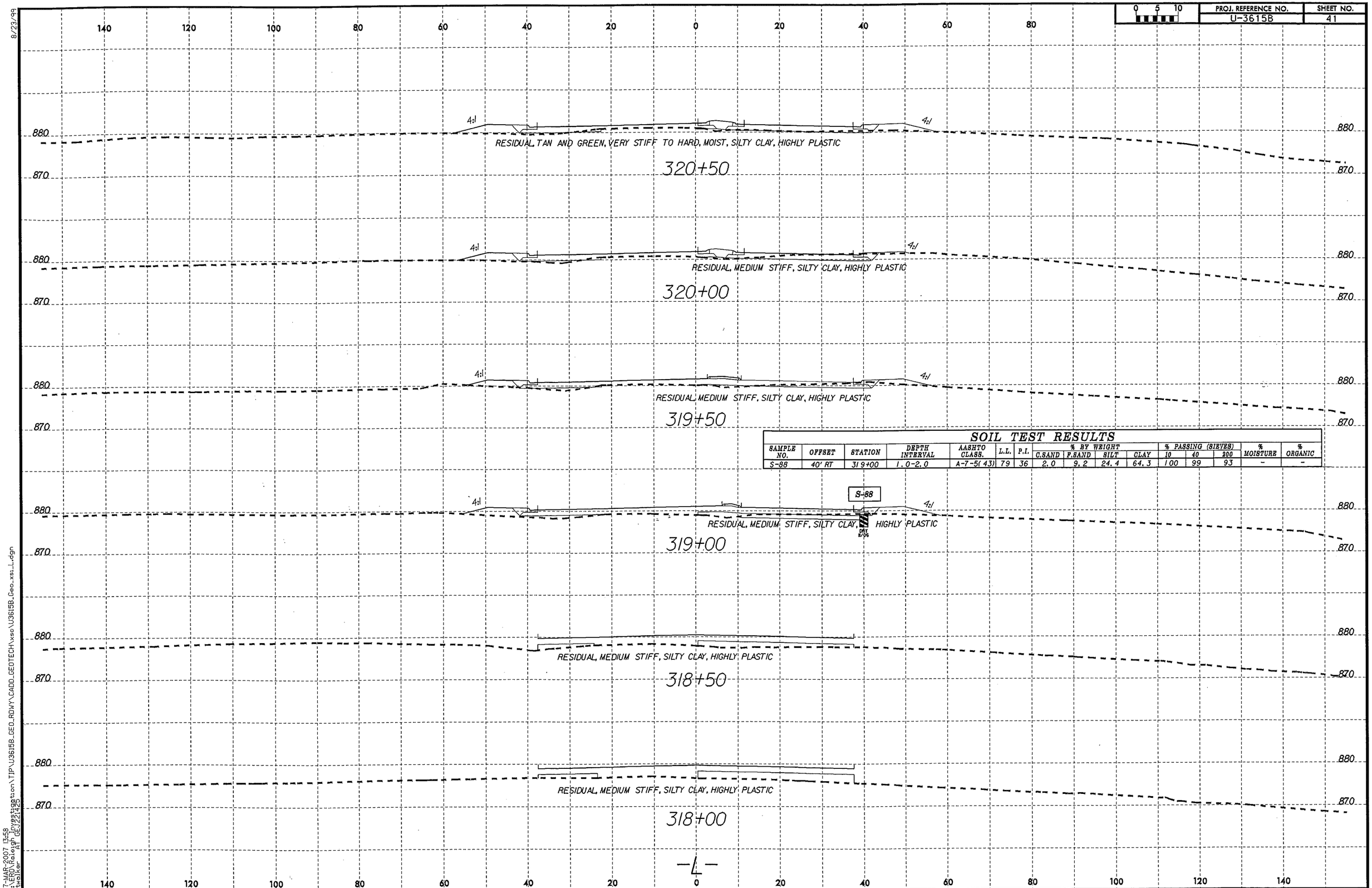

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	% BY WEIGHT F.SAND	% BY WEIGHT SILT	% BY WEIGHT CLAY	% PASSING (SIEVES) 10	% PASSING (SIEVES) 40	% PASSING (SIEVES) 200	% MOISTURE	% ORGANIC
S-88	40' RT	319+00	1.0-2.0	A-7-5(43)	79	36	2.0	9.2	24.4	64.3	100	99	93	-	-

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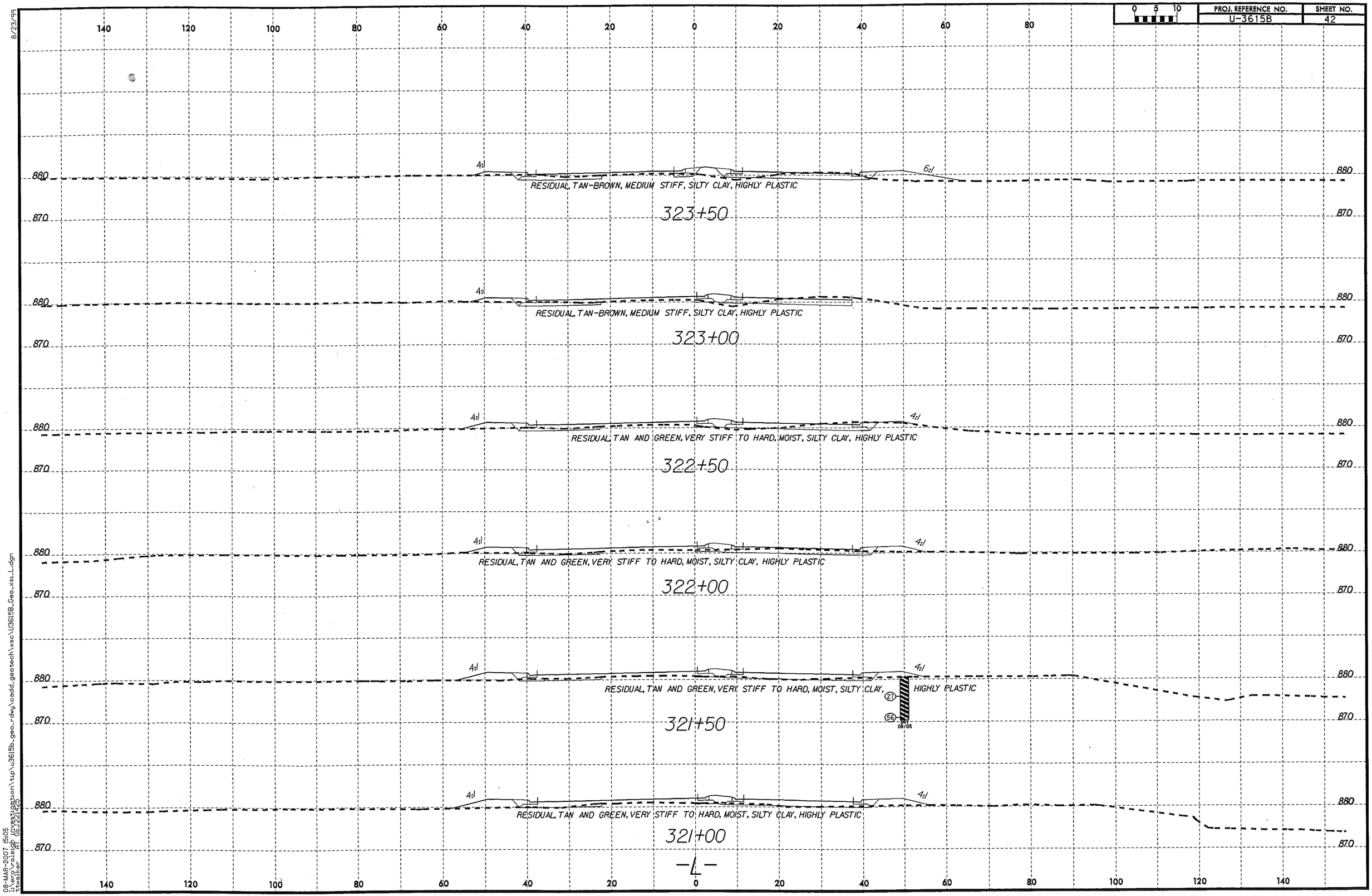

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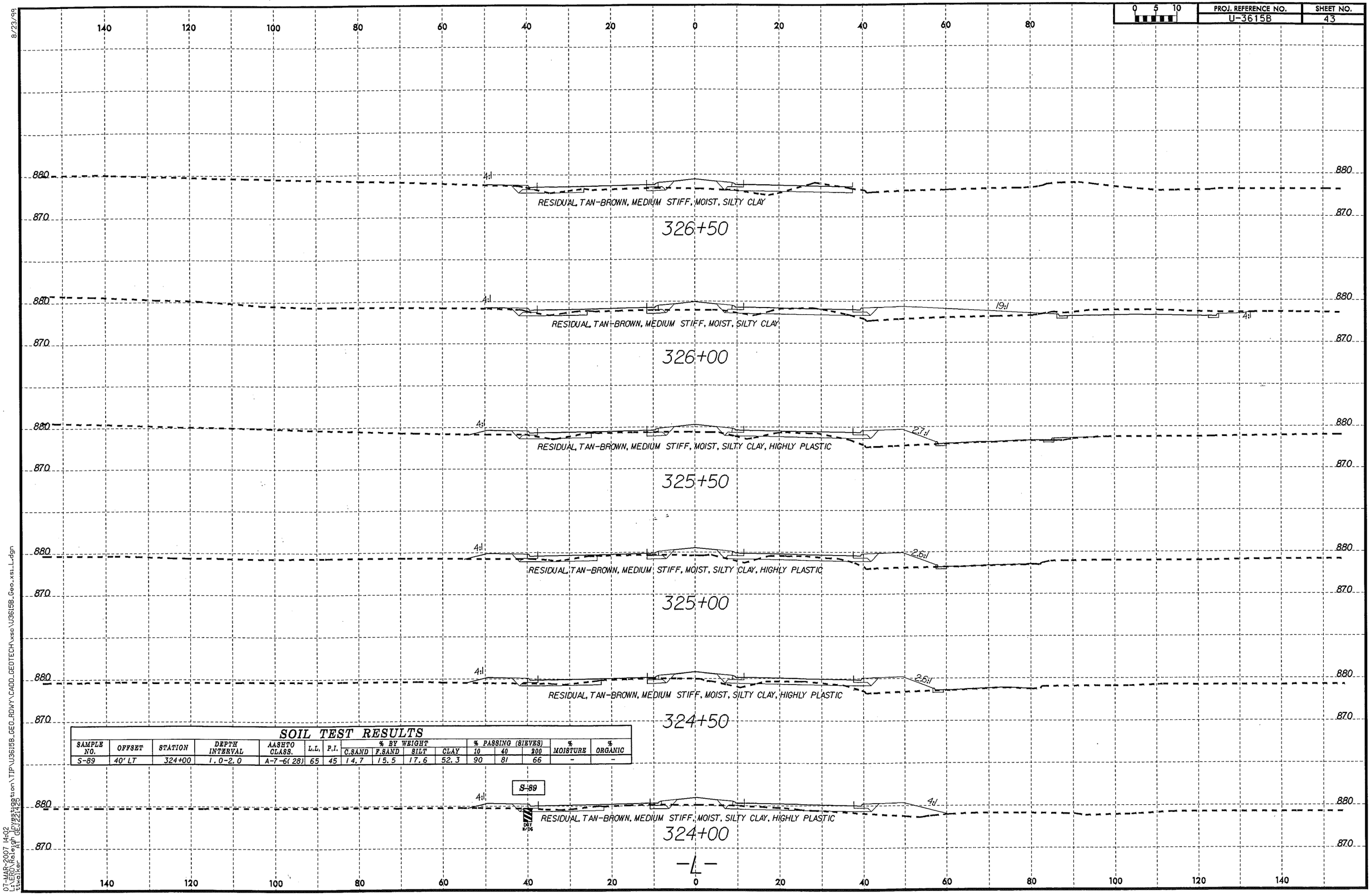

SOIL TEST RESULTS

SAMPLE NO.	OFFSET	STATION	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT C.SAND	F.SAND	SILT	CLAY	% PASSING (SIEVES) 10	40	200	% MOISTURE	% ORGANIC
S-89	40' LT	324+00	1.0-2.0	A-7-6(28)	65	45	14.7	15.5	17.6	52.3	90	81	66	-	-

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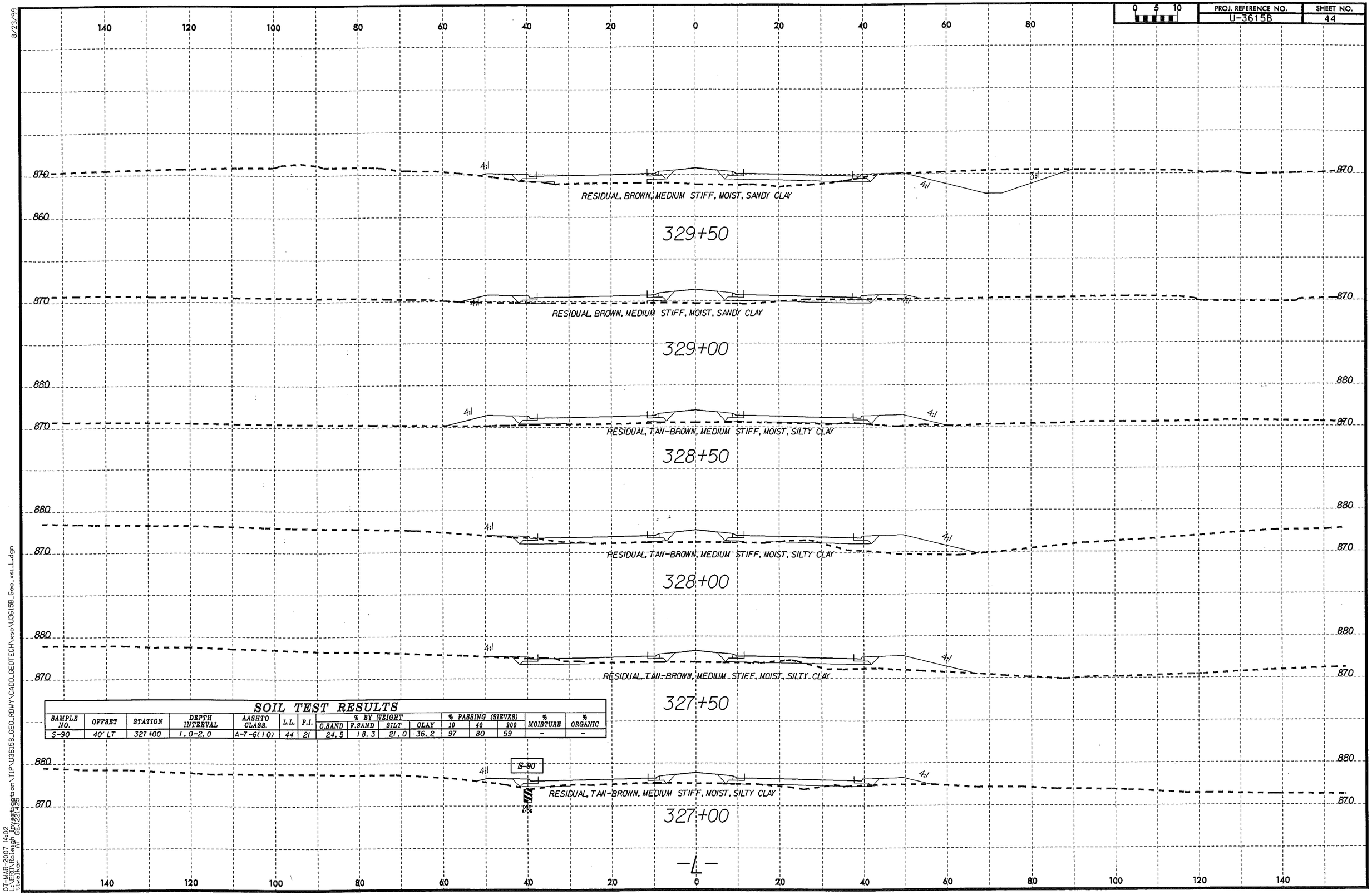

SOIL TEST RESULTS

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
S-90	40' LT	327+00	1.0-2.0	A-7-6(10)	44	21	24.5	18.3	21.0	36.2	97	80	59	-	-

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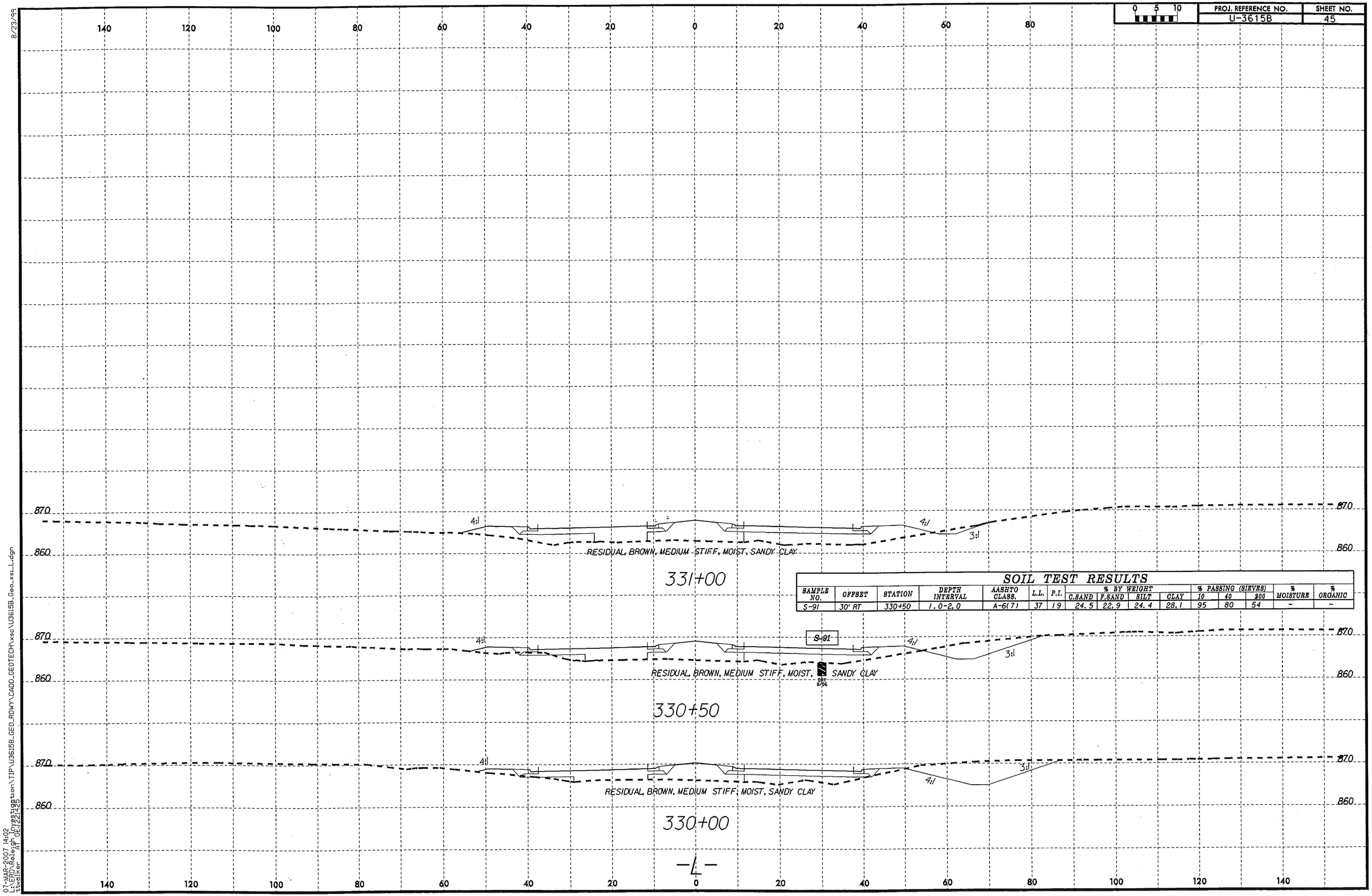

SOIL TEST RESULTS

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
S-91	30' RT	330+50	1.0-2.0	A-6(7)	37	19	24.5	22.9	24.4	28.1	95	80	54	-	-

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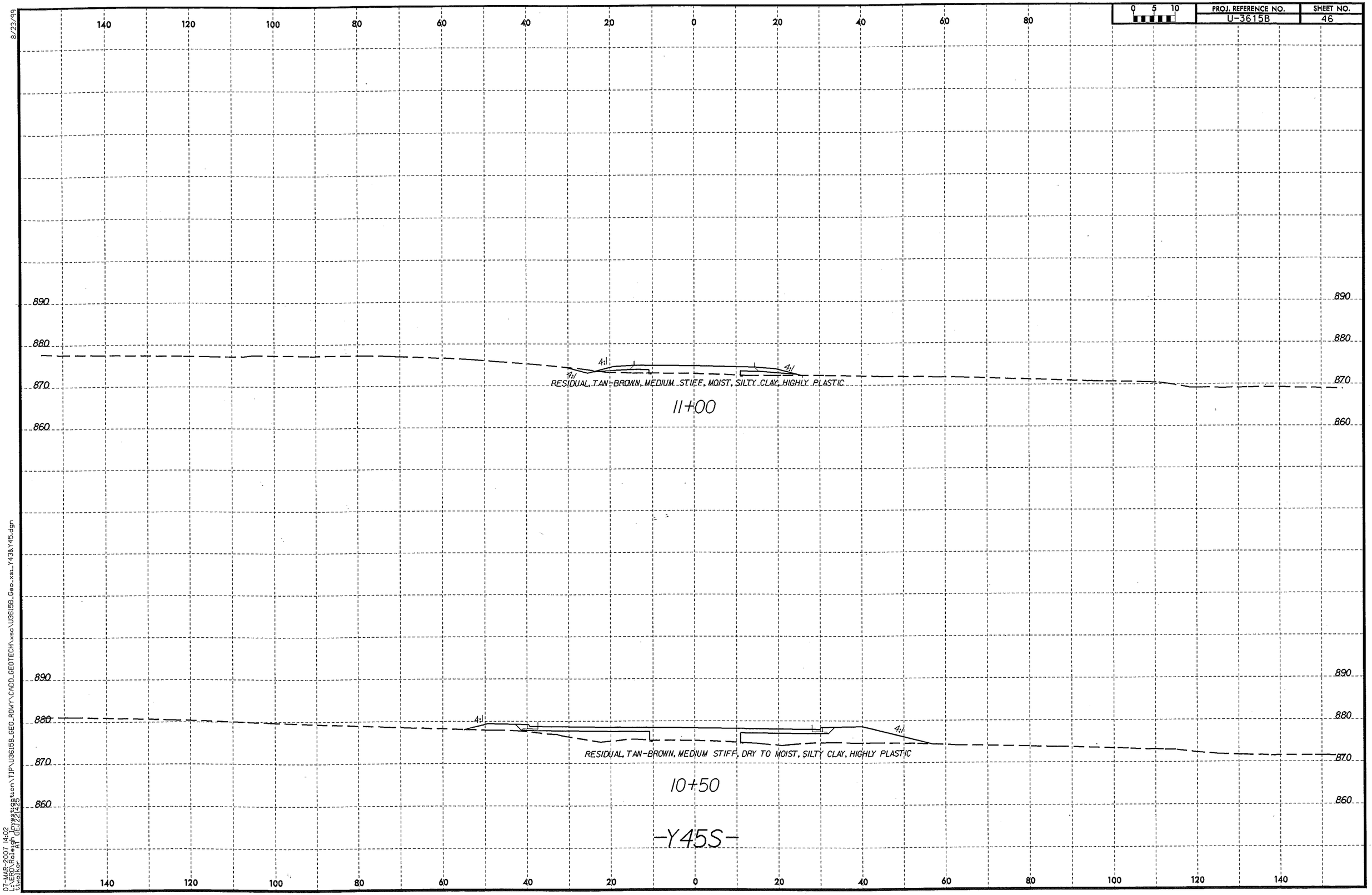

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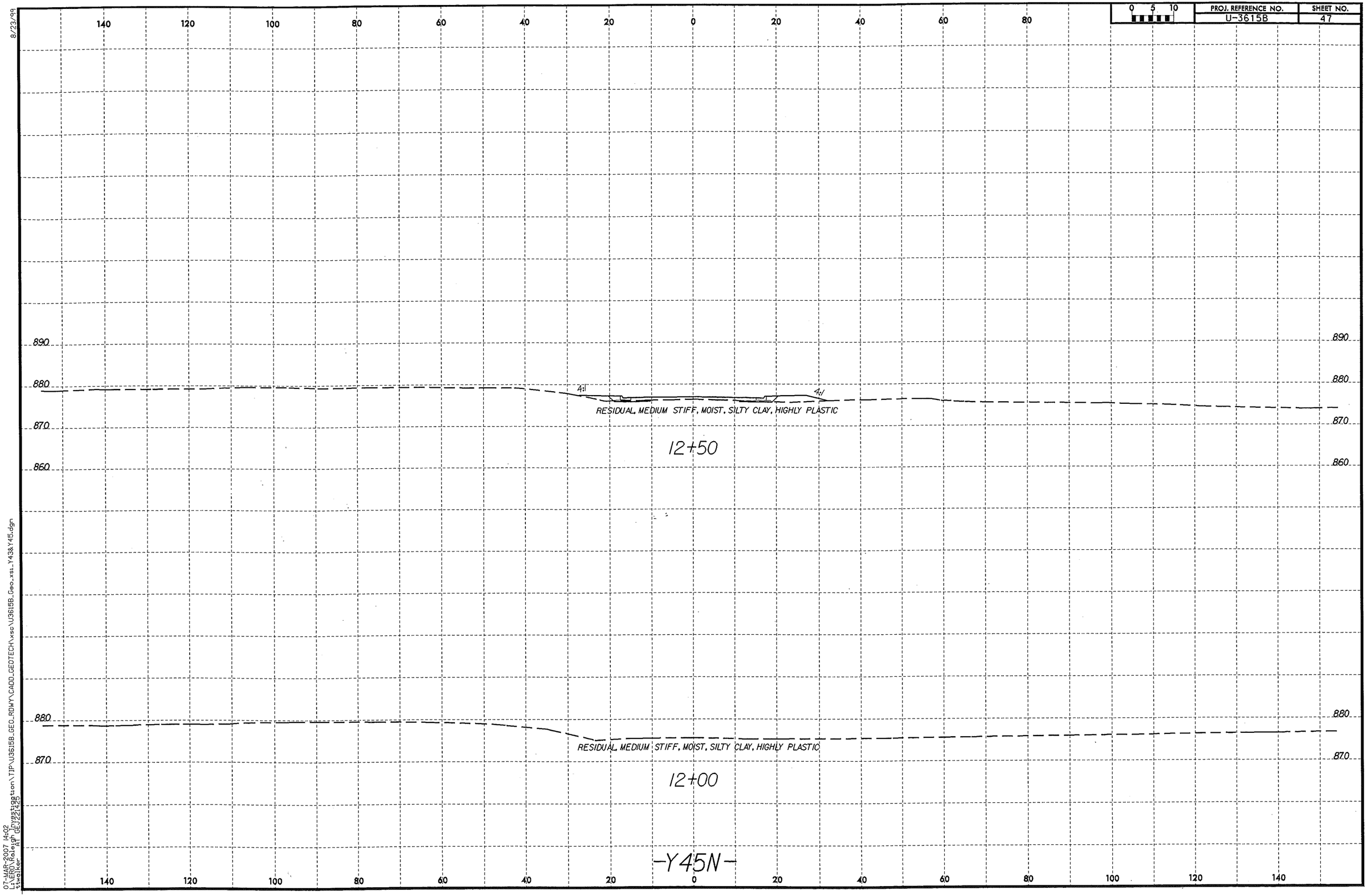

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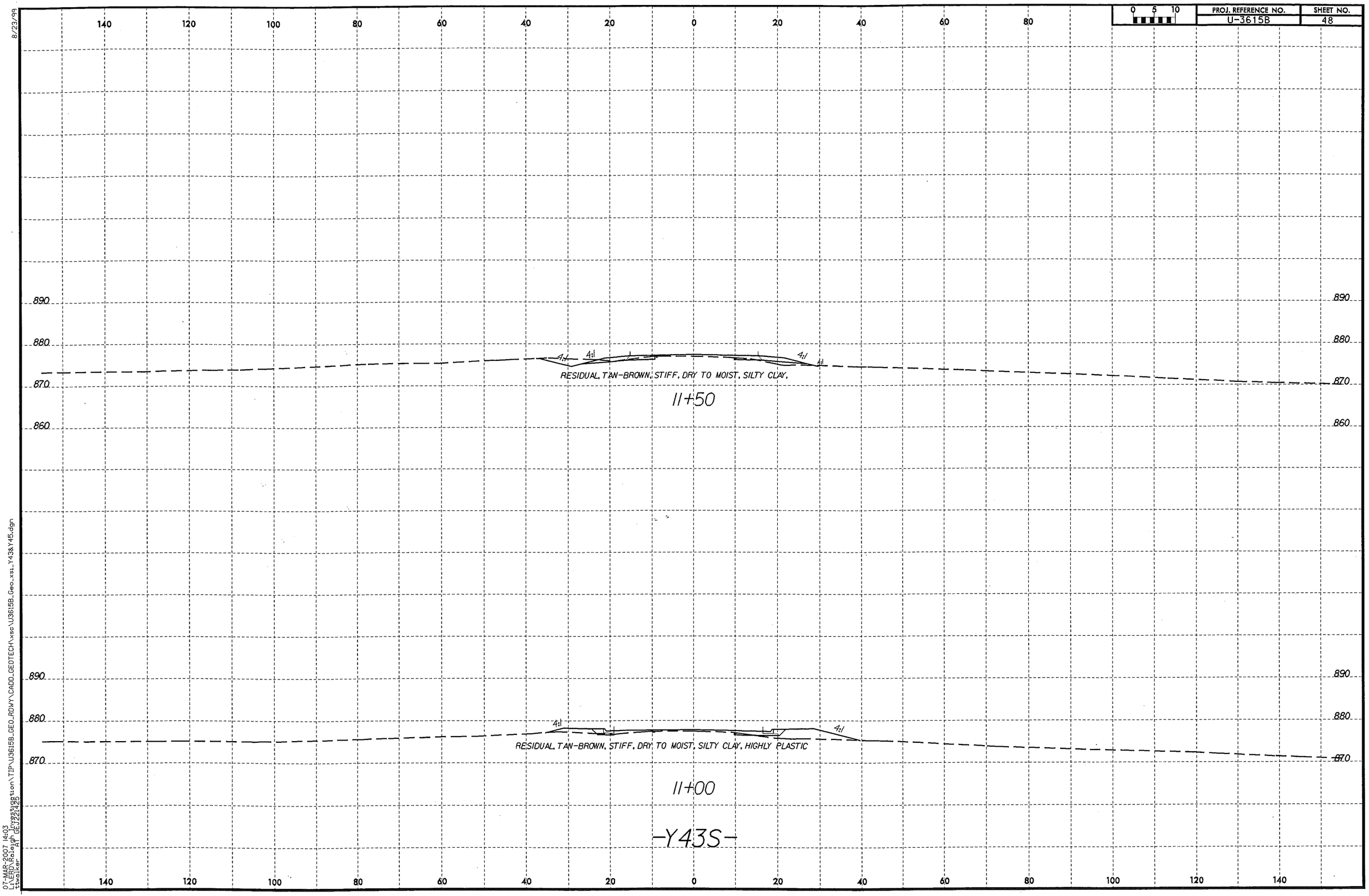
PROJ. REFERENCE NO.	SHEET NO.
U-3615B	48



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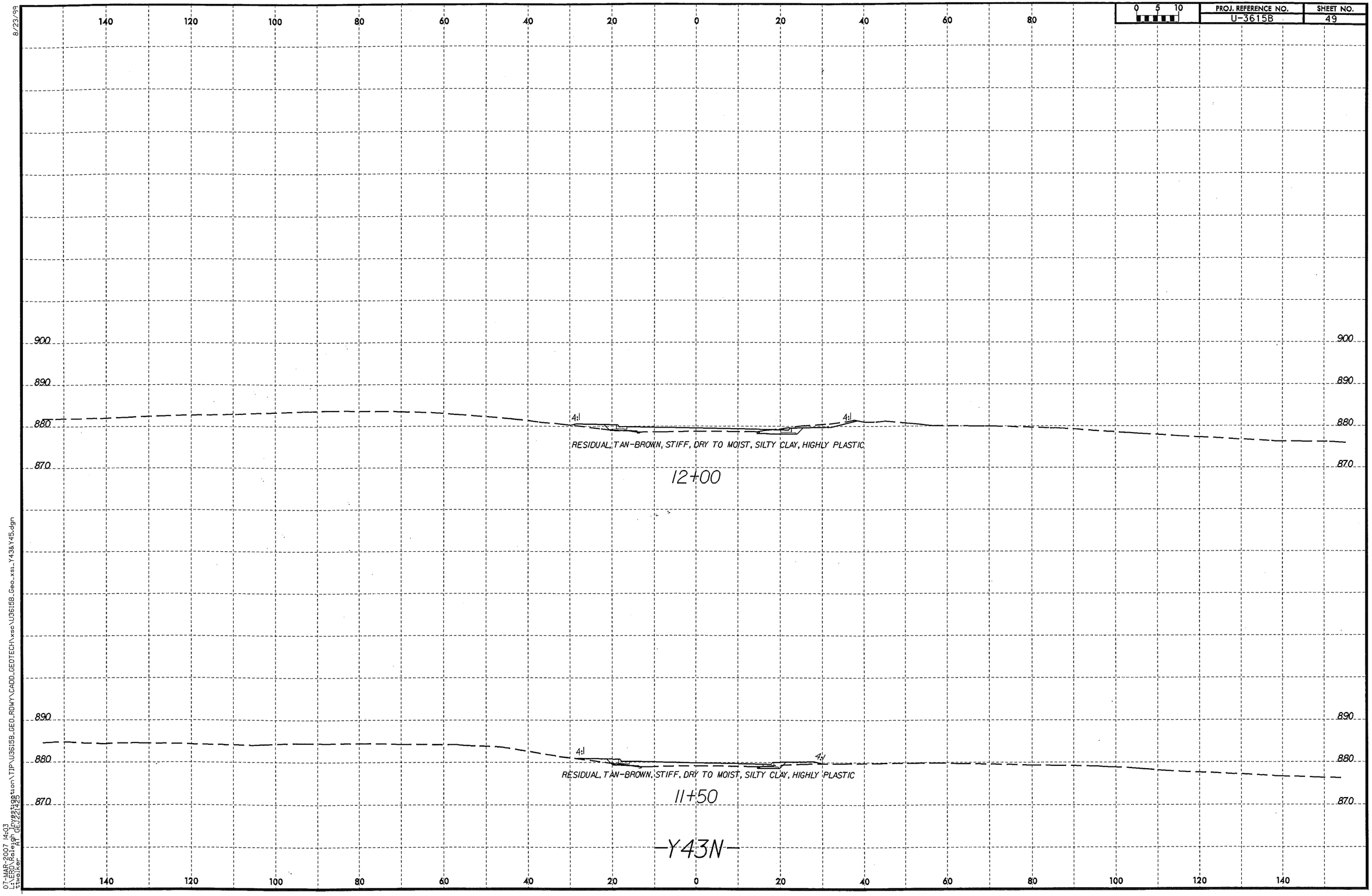
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U-3615B
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12+00
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Lendner, Eric GEOPAK120

CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
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COUNTY	Guilford

GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

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Datum = 0 11/29/06

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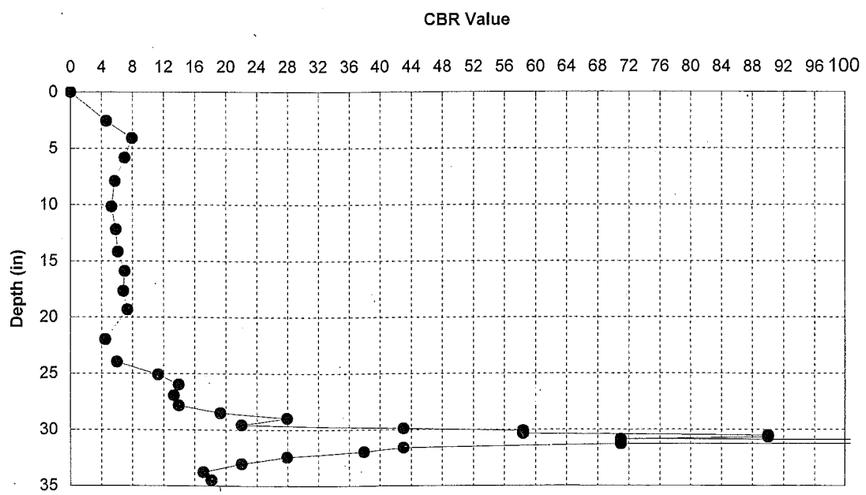
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

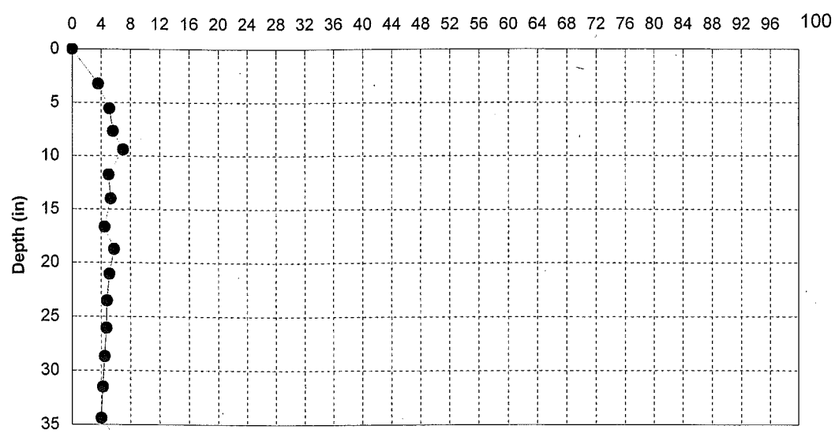
Interval 0.0 to 39.7	
# of Values	43
Avg CBR	36.6
Wghtd Avg.	13.7
Max CBR	100+
Min CBR	4.5



257+00 RAW 2
40' RT 3' CUT
Datum = 0 11/29/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 36.4	
# of Values	15
Avg CBR	5.0
Wghtd Avg.	4.9
Max CBR	7.0
Min CBR	3.6



CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
ROUTE	Skeet Club Rd.
COUNTY	Guilford

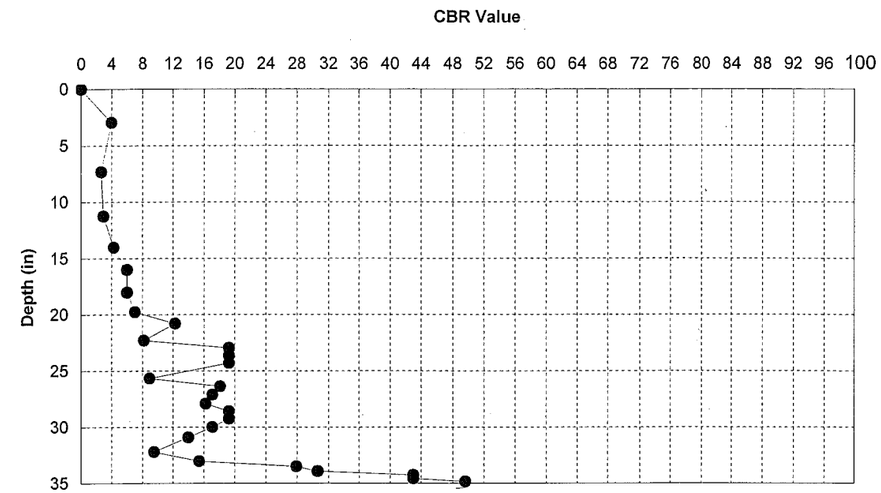
GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

259+50 RAW 3
40' RT 2' CUT
Datum = 0 11/29/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

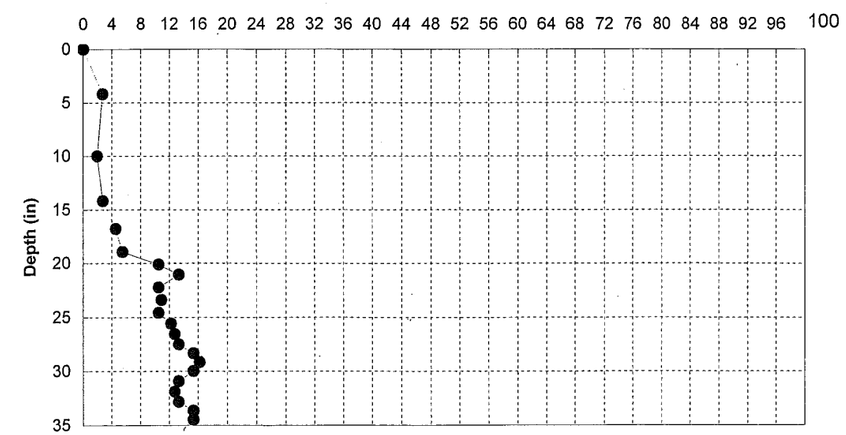
Interval 0.0 to 37.3	
# of Values	34
Avg CBR	21.8
Wghtd Avg.	11.4
Max CBR	49.6
Min CBR	2.6



288+00 RAW 4
40' LT 1' CUT
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 37.8	
# of Values	25
Avg CBR	11.6
Wghtd Avg.	8.1
Max CBR	18.1
Min CBR	1.9



CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
ROUTE	Skeet Club Rd.
COUNTY	Guilford

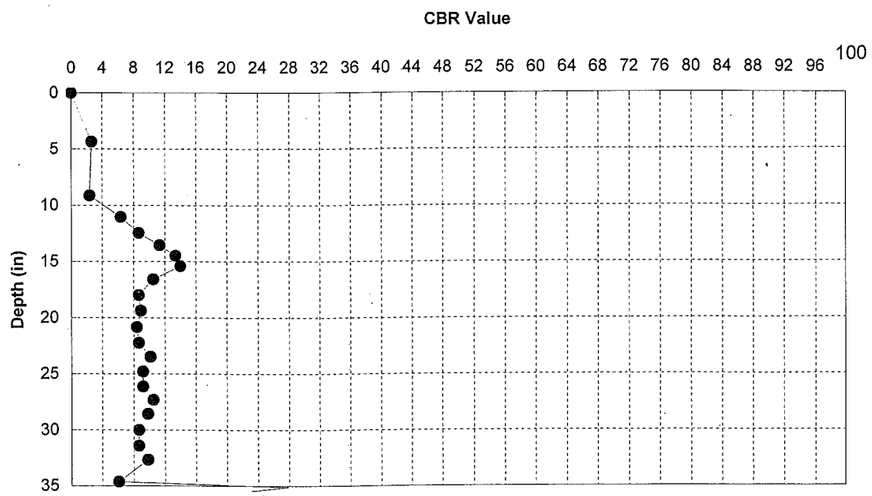
GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

293+00 RAW 5
40' LT 2' CUT
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

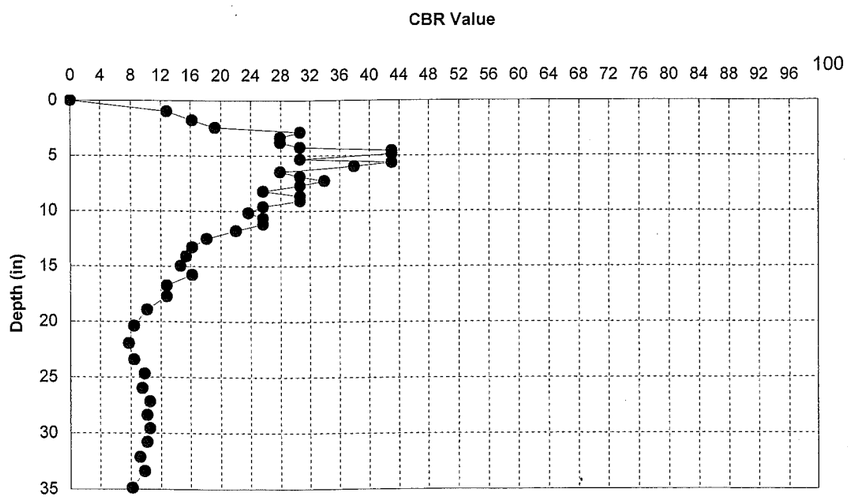
Interval 0.0 to 39.1	
# of Values	25
Avg CBR	9.7
Wghtd Avg.	7.8
Max CBR	27.9
Min CBR	2.4



296+00 RAW 6
35' LT 2' FILL
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 40.0	
# of Values	48
Avg CBR	20.1
Wghtd Avg.	15.3
Max CBR	43.0
Min CBR	7.7



CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
ROUTE	Skeet Club Rd.
COUNTY	Guilford

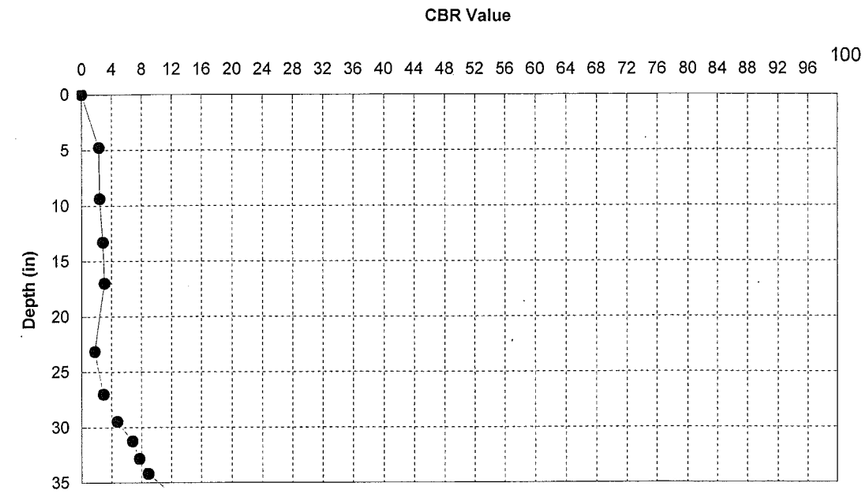
GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

305+00 RAW 7
40' RT 8' FILL
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

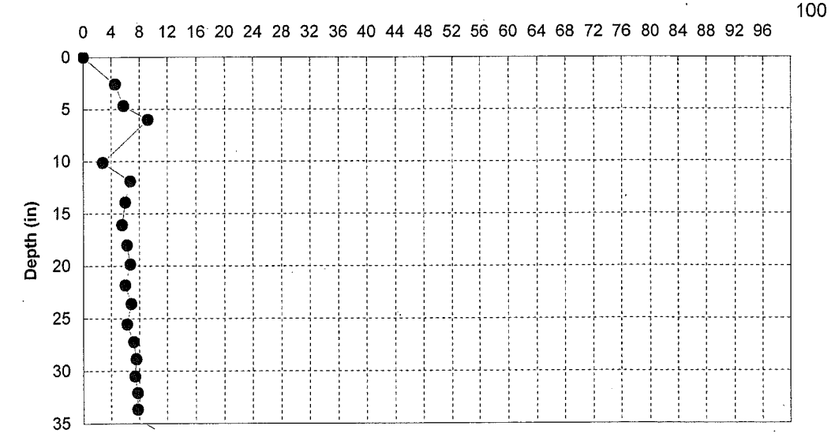
Interval 0.0 to 37.4	
# of Values	13
Avg CBR	6.1
Wghtd Avg.	4.1
Max CBR	12.8
Min CBR	1.8



309+00 RAW 8
40' RT 1' CUT
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 38.6	
# of Values	20
Avg CBR	6.8
Wghtd Avg.	6.2
Max CBR	11.8
Min CBR	2.8



CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
ROUTE	Skeet Club Rd.
COUNTY	Guilford

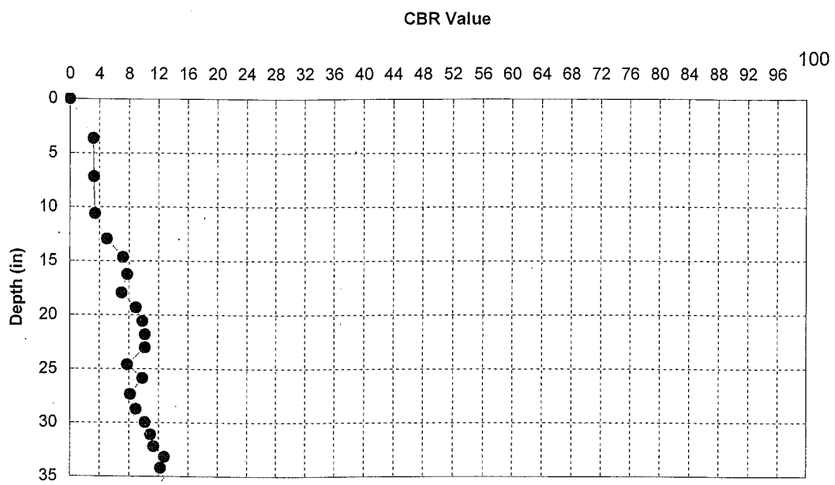
GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

319+00 RAW 9
40'RT Grade
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

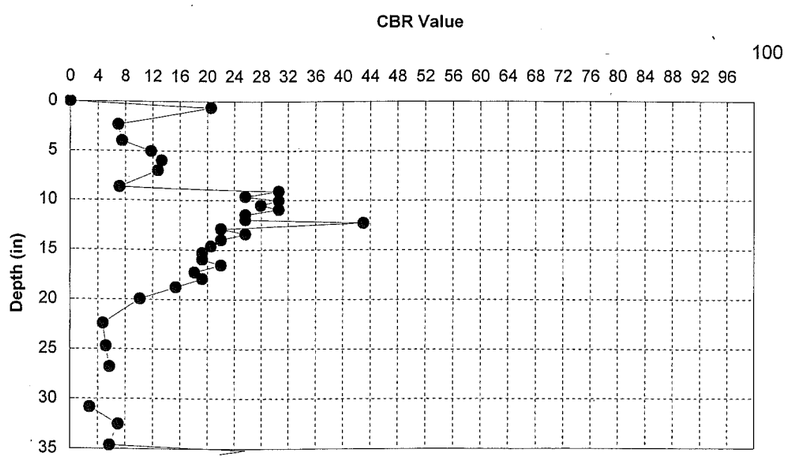
Interval 0.0 to 38.0	
# of Values	24
Avg CBR	9.2
Wghtd Avg.	7.7
Max CBR	15.4
Min CBR	3.2



324+00 RAW 10
40'LT Grade
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 41.5	
# of Values	36
Avg CBR	17.1
Wghtd Avg.	10.8
Max CBR	43.0
Min CBR	2.8



CONE PENETROMETER RESULTS
NC - DOT, GEOTECHNICAL UNIT, SOILS SECTION

PROJECT NO.	34962.1.1
PROJECT ID	U-3615B
ROUTE	Skeet Club Rd.
COUNTY	Guilford

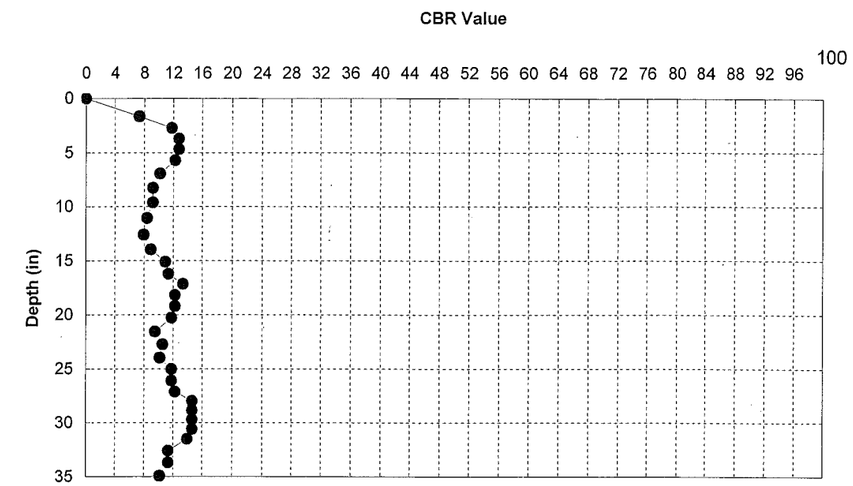
GEOLOGIST	N. D. Mohs
GEOTECHS	0.0

FILE	0.0

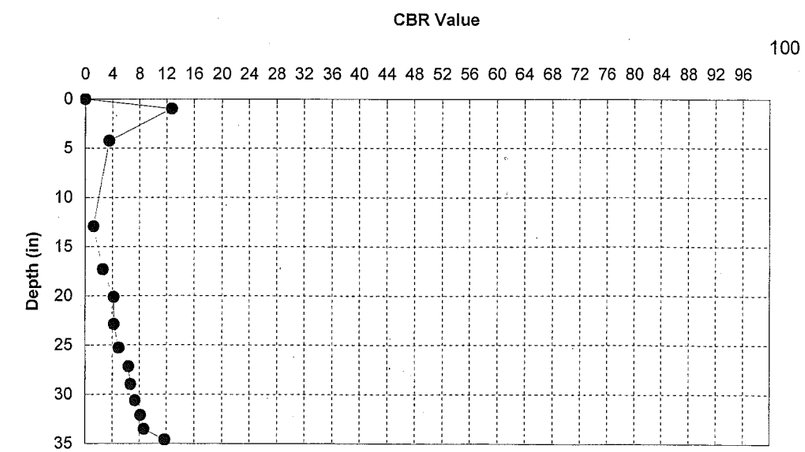
327+00 RAW 11
40'LT Grade
Datum = 0 11/30/06

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 39.4	
# of Values	34
Avg CBR	11.1
Wghtd Avg.	10.7
Max CBR	14.6
Min CBR	7.3



338+00 RAW 12
50'LT 2' Fill
Datum = 0 01/00/00

Interval 0.0 to 0.0	
# of Values	0
Avg CBR	#DIV/0!
Wghtd Avg.	#DIV/0!
Max CBR	0.0
Min CBR	0.0

Interval 0.0 to 37.9	
# of Values	16
Avg CBR	7.3
Wghtd Avg.	5.0
Max CBR	12.8
Min CBR	1.2