REFERENCE: R-5709C

PROJECT: 50205

SEE SHEET 3 FOR PLAN SHEET LAYOUT AT TIME OF INVESTIGATION

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

ROADWAY SUBSURFACE INVESTIGATION

COUNTY *HOKE*

PROJECT DESCRIPTION *NC 211 WIDENING FROM 0.4 MILES NORTH OF SR 1225 (ASHEMONT RD.) TO EAST OF SR 1244 (W. PALMER ST.) /SR 1311 (MOCKINGBIRD HILL RD.) IN RAEFORD*

INVENTORY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5709C	1	

CAUTION NOTICE

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

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INVESTIGATED BY *RK&K*

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	2

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
GEOTECHNICAL ENGINEERING UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

SOIL DESCRIPTION

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

SOIL LEGEND AND AASHTO CLASSIFICATION

GENERAL CLASS.	GRANULAR MATERIALS (≤ 35% PASSING #200)							SILT-CLAY MATERIALS (> 35% PASSING #200)				ORGANIC MATERIALS		
GROUP CLASS.	A-1		A-3	A-2				A-4	A-5	A-6	A-7	A-1, A-2 A-3	A-4, A-5 A-6, A-7	
	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				A-7-5, A-7-6			
SYMBOL														
% PASSING #10 #40 #200	50 MX 30 MX 15 MX	50 MX 25 MX	51 MN 10 MX	35 MX	35 MX	35 MX	35 MX	36 MN	36 MN	36 MN	36 MN	GRANULAR SOILS	SILT-CLAY SOILS	MUCK, PEAT
MATERIAL PASSING #40 LL PI	— 6 MX		— NP	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	40 MX 10 MX	41 MN 10 MX	40 MX 11 MN	41 MN 11 MN	SOILS WITH LITTLE OR MODERATE AMOUNTS OF ORGANIC MATTER		HIGHLY ORGANIC SOILS
GROUP INDEX	0		0	0		4 MX		8 MX	12 MX	16 MX	NO MX			
USUAL TYPES OF MAJOR MATERIALS	STONE FRAGS. GRAVEL, AND SAND		FINE SAND	SILTY OR CLAYEY GRAVEL AND SAND				SILTY SOILS		CLAYEY SOILS				
GEN. RATING AS SUBGRADE	EXCELLENT TO GOOD							FAIR TO POOR				FAIR TO POOR	POOR	UNSUITABLE

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

CONSISTENCY OR DENSENESS

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

TEXTURE OR GRAIN SIZE

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

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

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

SOIL MOISTURE - CORRELATION OF TERMS

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

PLASTICITY

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

COLOR

DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YELLOW-BROWN, BLUE-GRAY), MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.

GRADATION

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

ANGULARITY OF GRAINS

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

MINERALOGICAL COMPOSITION

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

COMPRESSIBILITY

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

PERCENTAGE OF MATERIAL

ORGANIC MATERIAL	GRANULAR SOILS	SILT - CLAY SOILS	OTHER MATERIAL	
TRACE OF ORGANIC MATTER	2 - 3%	3 - 5%	TRACE	1 - 10%
LITTLE ORGANIC MATTER	3 - 5%	5 - 12%	LITTLE	10 - 20%
MODERATELY ORGANIC	5 - 10%	12 - 20%	SOME	20 - 35%
HIGHLY ORGANIC	> 10%	> 20%	HIGHLY	35% AND ABOVE

GROUND WATER

- WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING
- STATIC WATER LEVEL AFTER 24 HOURS
- PW — PERCHED WATER, SATURATED ZONE, OR WATER BEARING STRATA
- SPRING OR SEEP

MISCELLANEOUS SYMBOLS

- ROADWAY EMBANKMENT (RE) WITH SOIL DESCRIPTION
- SOIL SYMBOL
- ARTIFICIAL FILL (AF) OTHER THAN ROADWAY EMBANKMENT
- INFERRED SOIL BOUNDARY
- INFERRED ROCK LINE
- ALLUVIAL SOIL BOUNDARY
- 25/025 — DIP & DIP DIRECTION OF ROCK STRUCTURES
- SPT, DPT, DMT, VST, PMT — TEST BORING
- AUGER BORING
- CORE BORING
- MW — MONITORING WELL
- PIEZOMETER INSTALLATION
- SLOPE INDICATOR INSTALLATION
- CONE PENETROMETER TEST
- SOUNDING ROD
- TEST BORING WITH CORE
- SPT N-VALUE

RECOMMENDATION SYMBOLS

- UNDERCUT
- SHALLOW UNDERCUT
- UNCLASSIFIED EXCAVATION - UNSUITABLE WASTE
- UNCLASSIFIED EXCAVATION - ACCEPTABLE DEGRADABLE ROCK
- UNCLASSIFIED EXCAVATION - ACCEPTABLE, BUT NOT TO BE USED IN THE TOP 3 FEET OF EMBANKMENT OR BACKFILL

ABBREVIATIONS

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

SAMPLE ABBREVIATIONS

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

EQUIPMENT USED ON SUBJECT PROJECT

DRILL UNITS:
- [ ] CME-45C
- [ ] CME-55
- [ ] CME-550
- [ ] VANE SHEAR TEST
- [ ] PORTABLE HOIST
- [X] CME-550X
- [X] CME-45B

ADVANCING TOOLS:
- [ ] CLAY BITS
- [ ] 6" CONTINUOUS FLIGHT AUGER
- [X] 2¼" HOLLOW AUGERS
- [ ] HARD FACED FINGER BITS
- [ ] TUNG.-CARBIDE INSERTS
- [ ] CASING [ ] W/ ADVANCER
- [ ] TRICONE _____" STEEL TEETH
- [ ] TRICONE _____" TUNG.-CARB.
- [ ] CORE BIT
- [X] 2 5/8 " DRAG BIT

HAMMER TYPE:
- [X] AUTOMATIC [ ] MANUAL

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

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

ROCK DESCRIPTION

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

WEATHERED ROCK (WR)	NON-COASTAL PLAIN MATERIAL THAT WOULD YIELD SPT N VALUES > 100 BLOWS PER FOOT IF TESTED.
CRYSTALLINE ROCK (CR)	FINE TO COARSE GRAIN IGNEOUS AND METAMORPHIC ROCK THAT WOULD YIELD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE, GNEISS, GABBRO, SCHIST, ETC.
NON-CRYSTALLINE ROCK (NCR)	FINE TO COARSE GRAIN METAMORPHIC AND NON-COASTAL PLAIN SEDIMENTARY ROCK THAT WOULD YEILD SPT REFUSAL IF TESTED. ROCK TYPE INCLUDES PHYLLITE, SLATE, SANDSTONE, ETC.
COASTAL PLAIN SEDIMENTARY ROCK (CP)	COASTAL PLAIN SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD SPT REFUSAL. ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED SHELL BEDS, ETC.

WEATHERING

FRESH	ROCK FRESH, CRYSTALS BRIGHT, FEW JOINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER HAMMER IF CRYSTALLINE.
VERY SLIGHT (V SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CRYSTALS ON A BROKEN SPECIMEN FACE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF OF A CRYSTALLINE NATURE.
SLIGHT (SLI.)	ROCK GENERALLY FRESH, JOINTS STAINED AND DISCOLORATION EXTENDS INTO ROCK UP TO 1 INCH. OPEN JOINTS MAY CONTAIN CLAY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR CRYSTALS ARE DULL AND DISCOLORED. CRYSTALLINE ROCKS RING UNDER HAMMER BLOWS.
MODERATE (MOD.)	SIGNIFICANT PORTIONS OF ROCK SHOW DISCOLORATION AND WEATHERING EFFECTS. IN GRANITOID ROCKS, MOST FELDSPARS ARE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS DULL SOUND UNDER HAMMER BLOWS AND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED WITH FRESH ROCK.
MODERATELY SEVERE (MOD. SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL AND DISCOLORED AND A MAJORITY SHOW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH AND CAN BE EXCAVATED WITH A GEOLOGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK. *IF TESTED, WOULD YIELD SPT REFUSAL*
SEVERE (SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED IN STRENGTH TO STRONG SOIL. IN GRANITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME EXTENT. SOME FRAGMENTS OF STRONG ROCK USUALLY REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES > 100 BPF*
VERY SEVERE (V SEV.)	ALL ROCK EXCEPT QUARTZ DISCOLORED OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT MASS IS EFFECTIVELY REDUCED TO SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK REMAINING. SAPROLITE IS AN EXAMPLE OF ROCK WEATHERED TO A DEGREE THAT ONLY MINOR VESTIGES OF ORIGINAL ROCK FABRIC REMAIN. *IF TESTED, WOULD YIELD SPT N VALUES < 100 BPF*
COMPLETE	ROCK REDUCED TO SOIL. ROCK FABRIC NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND SCATTERED CONCENTRATIONS. QUARTZ MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS ALSO AN EXAMPLE.

ROCK HARDNESS

VERY HARD	CANNOT BE SCRATCHED BY KNIFE OR SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES SEVERAL HARD BLOWS OF THE GEOLOGIST'S PICK.
HARD	CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED TO DETACH HAND SPECIMEN.
MODERATELY HARD	CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE EXCAVATED BY HARD BLOW OF A GEOLOGIST'S PICK. HAND SPECIMENS CAN BE DETACHED BY MODERATE BLOWS.
MEDIUM HARD	CAN BE GROOVED OR GOUGED 0.05 INCHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT. CAN BE EXCAVATED IN SMALL CHIPS TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE POINT OF A GEOLOGIST'S PICK.
SOFT	CAN BE GROVED OR GOUGED READILY BY KNIFE OR PICK. CAN BE EXCAVATED IN FRAGMENTS FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN PIECES CAN BE BROKEN BY FINGER PRESSURE.
VERY SOFT	CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY FINGERNAIL.

FRACTURE SPACING

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

BEDDING

TERM	THICKNESS
VERY THICKLY BEDDED	4 FEET
THICKLY BEDDED	1.5 - 4 FEET
THINLY BEDDED	0.16 - 1.5 FEET
VERY THINLY BEDDED	0.03 - 0.16 FEET
THICKLY LAMINATED	0.008 - 0.03 FEET
THINLY LAMINATED	< 0.008 FEET

INDURATION

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

FRIABLE	RUBBING WITH FINGER FREES NUMEROUS GRAINS; GENTLE BLOW BY HAMMER DISINTEGRATES SAMPLE.
MODERATELY INDURATED	GRAINS CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; BREAKS EASILY WHEN HIT WITH HAMMER.
INDURATED	GRAINS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; DIFFICULT TO BREAK WITH HAMMER.
EXTREMELY INDURATED	SHARP HAMMER BLOWS REQUIRED TO BREAK SAMPLE; SAMPLE BREAKS ACROSS GRAINS.

TERMS AND DEFINITIONS

ALLUVIUM (ALLUV.) - SOILS THAT HAVE BEEN TRANSPORTED BY WATER.

AQUIFER - A WATER BEARING FORMATION OR STRATA.

ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.

ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, SUCH AS SHALE, SLATE, ETC.

ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL AT WHICH IT IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE GROUND SURFACE.

CALCAREOUS (CALC.) - SOILS THAT CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.

COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM OF SLOPE.

CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT ROCKS OR CUTS MASSIVE ROCK.

DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE HORIZONTAL.

DIP DIRECTION (DIP AZIMUTH) - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.

FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.

FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.

FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM PARENT MATERIAL.

FLOOD PLAIN (FP) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.

FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN THE FIELD.

JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.

LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO ITS LATERAL EXTENT.

LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.

MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.

PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN INTERVENING IMPERVIOUS STRATUM.

RESIDUAL (RES.) SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.

ROCK QUALITY DESIGNATION (RQD) - A MEASURE OF ROCK QUALITY DESCRIBED BY TOTAL LENGTH OF ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.

SAPROLITE (SAP.) - RESIDUAL SOIL THAT RETAINS THE RELIC STRUCTURE OR FABRIC OF THE PARENT ROCK.

SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, THAT HAS BEEN EMPLACED PARALLEL TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS.

SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR SLIP PLANE.

STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR BPF) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS PENETRATION EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS.

STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.

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

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

BENCH MARK:

ELEVATION: FEET

NOTES:

BOREHOLE ELEVATIONS DETERMINED FROM PROVIDED .TIN FILE

TIN FILE: R5709_ls.tin DATE: 1/24/2023

ABBREVIATIONS:

F.I.A.D. - FILLED IMMEDIATELY AFTER DRILLING

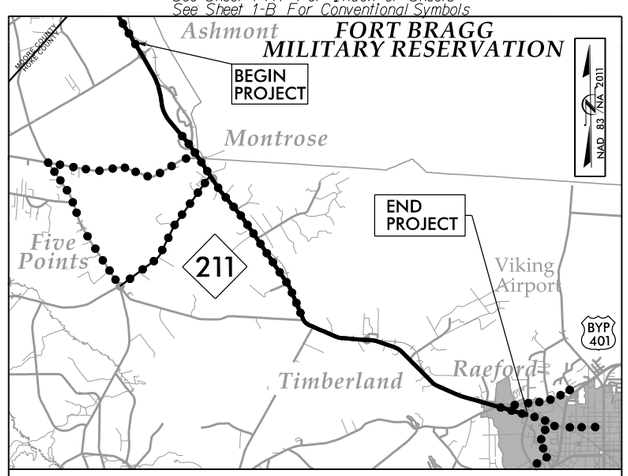
DATE: 8-15-14

09/08/99

TIP PROJECT: R-5709C

CONTRACT: C204934

See Sheet 1-A1 For Index of Sheets
See Sheet 1-B For Conventional Symbols



STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

HOKE COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5709C	3	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50205.1.4		PE
50205.2.1		ROW
50205.2.2		UTILITIES
50205.3.4		CONSTRUCTION

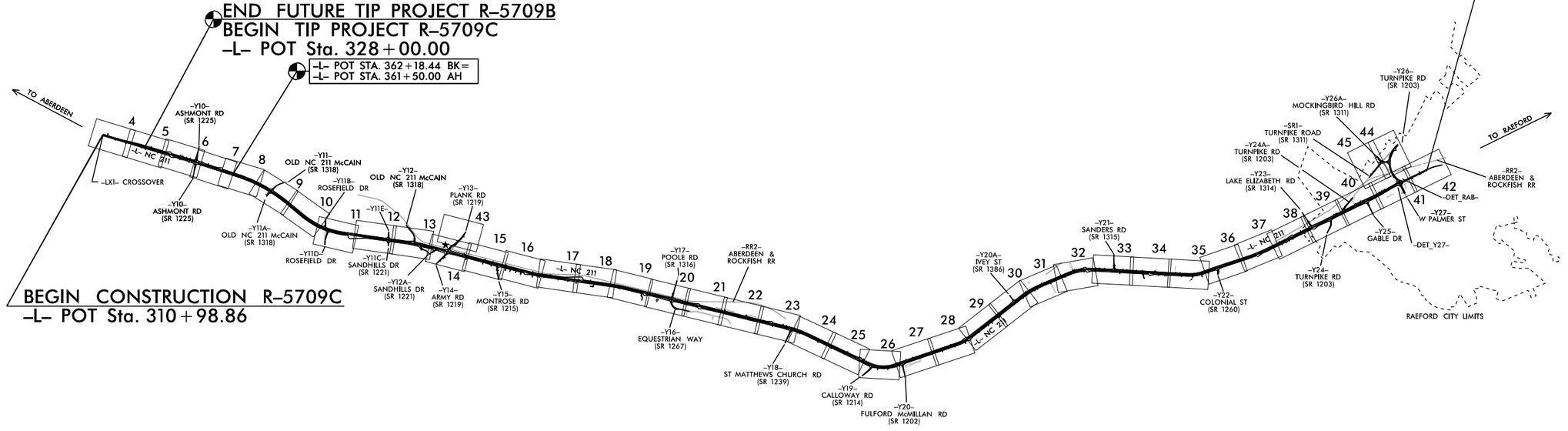
LOCATION: *NC 211 FROM 0.40 MILES NORTH OF SR 1225 (ASHEMONT ROAD) TO EAST OF SR 1244 (WEST PALMER STREET)/SR 1311 (MOCKINGBIRD HILL ROAD) IN RAEFORD.*

TYPE OF WORK: *GRADING, DRAINAGE, PAVING, AND SIGNALS*

END FUTURE TIP PROJECT R-5709B
BEGIN TIP PROJECT R-5709C
-L- POT Sta. 328+00.00

-L- POT STA. 362+18.44 BK=
-L- POT STA. 361+50.00 AH

END TIP PROJECT R-5709C
-L2B- POC Sta. 835+30.00



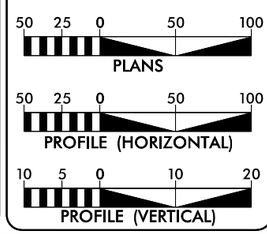
BEGIN CONSTRUCTION R-5709C
-L- POT Sta. 310+98.86

NOTE:
1. THIS IS A PARTIAL CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO POINTS AS SHOWN ON THE PLANS.

★ PROPOSED SIGNAL

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

GRAPHIC SCALES



DESIGN DATA

ADT 2024 = 16,400
ADT 2044 = 23,400
K = 9%
D = 60%
T = 21% *
V = 60 MPH
* TTST = 16% DUAL 5%
FUNC CLASS = MINOR ARTERIAL
REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-5709C..... 9.608 miles
LENGTH STRUCTURE TIP PROJECT R-5709C..... 0.000 miles
TOTAL LENGTH OF PROJECT R-5709C..... 9.608 miles

NCDOT CONTACT

Terry E. Farr, PE
PROJECT MANAGER

PLANS PREPARED BY:

RK&K
FOR NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

8601 Six Forks Road, Forum 1 Suite 700
RALEIGH, NORTH CAROLINA 27615-3960
NC LICENSE NO. F-0112
1-888-521-4455 OR 919-878-9560

2024 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
APRIL 23, 2021

LETTING DATE:
JANUARY 21, 2025

Brandon McInnis, PE
PROJECT ENGINEER

Mary Mays Yahl, PE
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 51640 ENGINEER COURTLAND A. HOFMANN

P.E.

SIGNATURE:

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 040878 ENGINEER MARY E. MAYS YAHL

P.E.

SIGNATURE:

STATE OF NORTH CAROLINA • DEPARTMENT OF TRANSPORTATION •

9/3/2024
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mmerry

September 3, 2024

WBS Number: 50205.1.1
TIP Number: R-5709C
County: Hoke
Description: NC 211 Widening from 0.4 miles north of SR 1225 (Ashemont Road) to east of SR 1244 (West Palmer Street) / SR 1311 (Mockingbird Hill Road) in Raeford

Subject: Roadway Subsurface Inventory Report

PROJECT DESCRIPTION

The proposed project consists of improvements to NC-211, including widening, grading, drainage, resurfacing, and signals. The proposed project is approximately 9.6 miles in length. It begins 0.4 miles north of SR 1225 (Ashemont Road) and ends east of SR 1244 (West Palmer Street) / SR 1311 (Mockingbird Hill Road) in Hoke County, NC.

The geotechnical investigation for R-5709C was performed during December 2019 and May & June 2020. During this time, a total of 280 Standard Penetration Test (SPT) borings, and 8 auger probe borings were drilled. The SPT borings were advanced with an ATV mounted CME 550X drill rig and a trailer mounted CME 45B drill rig, both equipped with automatic hammers. Auger probe borings were advanced using a hand auger. Representative soil samples were collected from the split spoon and soil cuttings for field visual classification and laboratory testing.

The following alignments were investigated. Selected cross sections of these alignments are included in this report.

Line	Stations (±)
-L-	310+99 – 824+26
-LX1-	10+00 – 26+19
-L2B-	824+26 – 835+30
-RAB_L2-	10+00 – 14+02
-Y10-	12+92 – 19+75
-Y11-	10+00 – 12+45
-Y11A-	10+25 – 12+66
-Y11B-	10+00 – 13+25
-Y11C-	10+15 – 12+33
-Y11D-	10+00 – 15+73
-Y11E-	10+00 – 13+00
-Y12-	10+00 – 12+00
-Y12A-	9+98 – 18+31
-Y13-	10+00 – 19+15
-Y14-	10+95 – 16+23
-Y15-	11+75 – 15+69
-Y16-	14+50 – 19+33
-Y17-	10+00 – 13+25
-Y18-	12+25 – 15+77
-Y19-	10+75 – 15+48
-Y20-	12+85 – 15+89
-Y20A-	10+00 – 11+25
-Y21-	10+00 – 12+75
-Y22-	10+50 – 12+58
-Y23-	10+00 – 12+25
-Y24-	11+65 – 15+83
-Y25-	14+00 – 15+99
-Y26-	10+00 – 26+00
-Y26A-	9+99 – 15+50
-Y27-	10+00 – 13+86
-SR1-	15+00 – 17+77
-DR7-	10+50 – 12+42
-DR8-	10+60 – 12+62
-DR10-	10+00 – 13+22

PHYSIOGRAPHY AND GEOLOGY

The proposed project is located in the Coastal Plain Physiographic Province. The terrain within and around the project is flat to gently rolling hills. The land surrounding the proposed roadway is typically agricultural or forested, but there are a few locations with swamps on one or both sides of the existing roadway. Topographic relief along the length of the project alignment ranges in elevation from 277.2 feet to 507.2 feet.

The proposed project is underlain by the Cretaceous-age Middendorf Formation and Tertiary-age Pinehurst Formation. The Middendorf Formation consists of cross-bedded sands, sandstones, and mudstones. The Pinehurst Formation consists of unconsolidated, cross-bedded sands with rhythmic bands of clayey sand. Local surficial soils in the project area are typically classified as undivided coastal plain soils.

A typical soil profile consists of a loose/soft upper layer of sand or clay underlain by more stiff/dense material of the formational Coastal Plain soils. The formational Coastal Plain soils are typically composed of sands and clays. An increase in stiffness/density usually differentiates between undivided Coastal Plain and the underlying formational Coastal Plain soils.

GROUNDWATER PROPERTIES

Some borings were backfilled immediately upon their completion because of safety concerns related to leaving the borings open overnight, but 24-hour stabilized groundwater measurements were taken at the majority of borings. Groundwater was measured at elevations ranging from 279.4’ to 436.0’. It should be noted that the groundwater levels fluctuate depending upon seasonal factors such as precipitation and temperature. As such, soil moisture and groundwater conditions at other times may vary or be different from those described in this report. Small intermittent channels exist throughout the project providing drainage during heavy rainfall events. Some channels are spring fed while others appear to be artificial from construction of the existing roadway.

SOIL PROPERTIES

Soils encountered during the geotechnical investigation are separated into five categories based on origin. The origins consist of roadway embankment, artificial fill, alluvial soils, undivided coastal plain, and Coastal Plain.

Materials interpreted as roadway embankment were encountered within the limits of the existing NC 211 alignment and intersecting roads. The roadway embankment consists of very loose to dense, non-plastic silty to moderately plastic (PI = 4-18) clayey fine to coarse SAND (A-2-4, A-2-5, A-2-6, A-2-7, A-3) and medium stiff to very stiff, sandy to silty moderately to highly plastic (PI = 17-29) CLAY (A-6, A-7-5, A-7-6). Encountered roadway embankment was up to 32 feet thick.

Materials interpreted as artificial fill were encountered within the proposed project. Encountered artificial fill was up to 3 feet thick and consisted of loose, non-plastic, silty fine to coarse SAND (A-2-4).

Alluvial soils were encountered in the proposed project. They are composed of very loose, silty fine to coarse SAND (A-2-4); very soft, non-plastic, fine to coarse sandy SILT (A-4); and very soft, fine to coarse sandy to clayey MUCK with 13.9 to 30.8 percent organic matter. Encountered alluvial soils were up to 12 feet thick.

Soils classified as undivided coastal plain are located throughout the project and generally consist of very loose to dense, non-plastic silty to moderately plastic (PI = 5-25) clayey fine to coarse SAND (A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-3); very soft to very stiff, non-plastic fine to coarse sandy to slightly plastic (PI = 4-10) clayey SILT (A-4, A-5); and soft to hard, fine sandy to silty slightly to highly plastic (PI = 11-36) CLAY (A-6, A-7-5, A-7-6). The encountered undivided coastal plain soils were up to 18 feet thick.

Formational Coastal Plain soils are located throughout the project and generally consist of very loose to dense, non-plastic silty to moderately plastic (PI = 4-16) clayey fine to coarse SAND (A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-3); soft to stiff, fine sandy to clayey SILT (A-4, A-5); and soft to hard, fine to coarse sandy to silty slightly to moderately plastic (PI = 7-23) CLAY (A-6, A-7-5, A-7-6). The encountered undivided coastal plain soils were up to 35 feet thick.

AREAS OF SPECIAL GEOTECHNICAL INTEREST

Alluvial Soils: The following areas contain alluvial soils:

Line	Stations (±)	Offset
-L-	418+50 – 419+25	RT
-L-	498+80 – 499+69	RT
-L-	557+75 – 559+75	LT & RT
-L-	559+75 – 561+25	RT
-L-	564+75 – 565+50	RT
-L-	565+50 – 566+75	LT & RT
-L-	566+75 – 567+05	RT
-L-	731+19 – 733+43	RT
-L-	737+81 – 739+69	RT
-L-	740+02 – 741+59	RT

Artificial Fill: The following areas contain artificial fill:

Line	Stations (±)	Offset
-L-	434+10 – 435+48	RT
-L-	436+54 – 437+21	LT
-L-	450+67 – 451+85	LT & RT
-Y12A-	11+55 – 12+69	LT & RT
-Y12A-	15+60 – 17+74	LT & RT

Highly Plastic Soils: The following areas contain soils with plasticity indices (PI) greater than 20 within proposed cut sections and within 3-ft of subgrade:

Line	Stations (±)	Offset
-L-	429+75 – 431+25	LT
-L-	653+75 – 655+50	LT & RT
-L-	655+50 – 658+25	LT
-L-	693+25 – 698+25	LT & RT
-L-	700+25 – 705+25	RT
-L-	756+25 – 767+25	LT & RT
-L-	778+25 – 784+25	LT & RT
-L-	811+25 – 821+25	LT & RT
-L-	827+25 – 830+25	LT & RT
-Y24-	12+50 – 14+25	LT & RT
-Y26-	21+25 – 25+50	LT & RT
-Y26A-	11+25 – 14+25	LT & RT

Organic Soils: The following areas contain moderately to highly organics soils associated with wetlands or alluvial deposits. These soils have the potential to cause embankment/subgrade and/or slope stability problem during construction.

Line	Stations (±)	Offset
-L-	557+75 – 559+75	LT & RT
-L-	559+75 – 561+25	RT
-L-	564+75 – 565+50	RT
-L-	565+50 – 566+75	LT & RT
-L-	566+75 – 567+05	RT

Groundwater: Groundwater was encountered within **six (6) feet** of proposed subgrade at the following locations:

Line	Stations (±)	Offset
-L-	676+75 – 686+50	LT & RT
-L-	686+55 – 690+50	LT
-L-	690+50 – 693+00	LT & RT
-L-	693+00 – 695+00	RT
-L-	695+00 – 708+00	LT & RT
-L-	708+00 – 709+75	RT

Line	Stations (±)	Offset
-L-	709+75 – 726+25	LT & RT
-L-	727+75 – 731+50	LT & RT
-L-	731+50 – 733+25	RT
-L-	735+75 – 742+25	LT & RT
-L-	742+25 – 748+50	LT & RT
-L-	751+75 – 758+25	LT & RT
-L-	769+75 – 772+25	LT & RT
-Y17-	10+75 – 11+50	LT & RT
-Y17-	11+50 – 12+50	LT & RT
-Y18-	12+25 – 15+50	LT & RT
-Y21-	10+75 – 12+75	LT & RT
-Y24-	11+65 – 15+83	LT & RT
-Y25-	14+00 – 15+50	LT & RT

Ponds: A pond is located near the proposed embankment at the following location:

Line	Stations (±)	Offset
-L-	666+37 – 666+59	RT

Water Wells: Water wells are located near the proposed embankment at the following locations:

Line	Station	Offset (ft)
-L-	336+34	225’ RT
-L-	454+06	74 RT
-L-	576+88	122’ LT
-L-	742+56	88 RT

Prepared by,

Maxime Metry

Digitally signed by Maxime Metry
DN: C=US, E=mmetry@rkk.com, O=RKK, OU=Raleigh, CN=Maxime Metry
Date: 2024.09.03 14:22:42-04'00'

Maxime Metry, PE
Project Engineer I, Geotechnical
Registered, North Carolina 056190

Atefeh Asoudeh

Atefeh Asoudeh, PE
Project Manager, Geotechnical

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

BEGIN CONSTRUCTION
-L- Sta. 310+98.86

-LX1- PC Sta.10+06.00=
-L- POT Sta.311+82.88 (31.46' RT)

-LX1- PRC Sta.18+23.87

BEGIN GRADE
-LX1- POC Sta.14+93.46

ROADWAY EMBANKMENT

COASTAL PLAIN

WOODS

ISBK BUS

MTR

W/LT

SOIL

MTL

-L-

L 311+00

310+00

10+00

L 313+00

L 315+00

315+00

15+00

L 317+33

EXISTING R/W

L 319+00

-LX1-

320+00

L 321+33

20+00

8" PVC

T FO

TV

W

RUINS

BM #17
N=382.33'
483,945
1,891,532
A 300+18.99
.97' RIGHT
IKE IN BASE
20" GUM

PD

SF

SUMMIT

Sr

2SFD

S

OHP

MATCHLINE -L- STA. 322+00.00
SEE SHEET 5

8/29/2024
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mmartin

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

END FUTURE TIP PROJECT R-5709B (TO BE CONSTRUCTED BY OTHERS)
BEGIN TIP PROJECT R-5709C
-LX1- PT Sta. 26+18.97=
-LX1RT- POT Sta. 15+32.80=
-L- POT Sta. 328+00.00 (35.00' LT)

NAD 83 / NA 2011

MATCHLINE -L- STA. 322+00.00
SEE SHEET 4

MATCHLINE -L- STA. 335+00.00
SEE SHEET 6

EXISTING RR R/W
ABERDEEN & ROCKFISH RR
ROADWAY EMBANKMENT
COASTAL PLAIN
WOODS
L 323+33
L 325+33
L 327+00
L 329+33
L 331+33
L 333+33
L 335+00
25+00
325+00
-LX1-
10+00
15+00
330+00
335+00
S 31°22'47.3" E
8" PVC
T FO
T
SOIL
GR
ISFD
2SBKD
POOL
LT
MTL
S
G
-LX1RT- PC Sta. 10+00.00=
-LX1- POC Sta. 20+83.11 (49.92' RT)
-L- POT Sta. 322+67.23 (29.95' RT)
-LX1RT- PRC Sta. 12+48.10
-LX1RT- PT Sta. 14+61.08

BM #18
ELEV=450.54'
N 481,853
E 1,892,530
BL STA 324+79.39
33.18' RIGHT
RR SPIKE IN BASE
OF 15" PINE

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mrgray

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

END CONSTRUCTION
-Y10- POT Sta. 19+75.00

END GRADE
-Y10- POT Sta. 19+50.00

ROADWAY EMBANKMENT

-Y10- Sta. 20+00 N 52°59'33" E

COASTAL PLAIN

COASTAL PLAIN

COASTAL PLAIN

-L- PC Sta. 344+00.28

-L- POT Sta. 347+74.38=
-Y10- POT Sta. 16+71.07

BEGIN GRADE
-Y10- POT Sta. 14+00.00

BEGIN CONSTRUCTION
-Y10- POT Sta. 12+92.00

N 53°35'05" E

MATCHLINE -L- STA. 335+00.00
SEE SHEET 5

MATCHLINE -L- STA. 349+00.00
SEE SHEET 7

L 335+00 | L 337+00 | L 339+00 | L 341+00 | L 342+50 | L 345+00 | L 346+75 | L 349+00

335+00 | 340+00 | 345+00

Y10 19+00 | Y10 14+00

2SBKD | ISBKD | ISFD | ISBLKD | ISBLK BUS | 2SFD | WOODS | W/LT | EXISTING R/W

8" PVC

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 / NA 2011

MATCHLINE -L- STA. 349+00.00
SEE SHEET 6

MATCHLINE -L- STA. 359+00.00
SEE SHEET 8

RUINS

ISMTL BUS

WOODS

COASTAL PLAIN

L 349+00

350+00

L 351+00

L 353+00

355+00

L 355+33

L 357+00

L 359+00

EXISTING R/W

COASTAL PLAIN

WOODS

ROADWAY EMBANKMENT

WOODS

-L- PT Sta. 354+05.60

BM #19
ELEV=485.35'
N 480,098
E 1,993,359
BL STA 345+73.97
236.68' RIGHT
RR SPIKE IN BASE
OF 14" PINE

8/29/2024
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mmeng

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 359+00.00 SEE SHEET 7

ROADWAY EMBANKMENT

COASTAL PLAIN

WOODS

–L– POT Sta. 362+18.44 BK=
–L– POT Sta. 361+50.00 AH

L 359+00

L 361+25

360+00

S 29° 56' 23.2" E

S 29° 56' 23.2" E

L 363+50

365+00

L 365+75

L 368+00

L 370+00

MATCHLINE –L– STA. 371+00.00 SEE SHEET 9

–L– SC Sta. 363+62.58

–L– TS Sta. 362+42.58

EXISTING R/W

MON

DATUR

48 FO

6 FO

8" PVC

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mrose

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 371+00.00 SEE SHEET 8

MATCHLINE -L- STA. 385+00.00 SEE SHEET 10

COASTAL PLAIN

ROADWAY EMBANKMENT

COASTAL PLAIN

WOODS

FALLOW

EXISTING R/W

MON

L 372+50

L 375+00

L 377+00

L 379+00

L 381+00

L 383+00

375+00 -L-

380+00

-YII- PC Sta. 11+57.49

-YII- PT Sta. 15+72.92

END CONSTRUCTION
-YII- POC Sta. 12+45.00

END GRADE
-YII- POC Sta. 12+20.00

YII 12+00

-L- POC Sta. 376+87.34=
-YII- POT Sta. 10+00.00

-L- POC Sta. 376+86.70=
-YIIA- POT Sta. 12+66.07

-YIIA- PT Sta. 11+44.05

-L- CS Sta. 384+03.99

YIIA 10+50

BEGIN GRADE
-YIIA- POT Sta. 10+50.00
-YIIA- PC Sta. 10+46.92

BEGIN CONSTRUCTION
-YIIA- POT Sta. 10+15.00
-YIIA- POT Sta. 10+00.00

HIGH PRESSURE GAS 2" STEEL

8" PVC

6" FO

84 FO

TV FO

T FO

N 84°07'46"E 1486.38'

BM #20
ELEV=488.02'
N 478,097
E 1,894,932
BL STA 368+35.13
319.47' RIGHT
RR SPIKE IN BASE
OF 13" PINE

LINE LOCATED PER VERBAL EVIDENCE FROM
JAMES SCHIELER, DPS MAINTENANCE TECHICIAN

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 385+00.00 SEE SHEET 9

MATCHLINE –L– STA. 399+00.00 SEE SHEET 11

COASTAL PLAIN

BEGIN WILDLIFE FENCE STA. 390+00 101.87' LT

BEGIN WILDLIFE FENCE STA. 390+00 105.66' RT

–L– TS Sta. 390+69.02

–L– SC Sta. 392+69.02

–L– ST Sta. 385+23.99

L 385+25

L 387+50

S 8°12'48.5" E

L 389+75

L 390+00

L 392+00

L 394+33

L 395+00

L 396+67

L 399+00

ROADWAY EMBANKMENT

EXISTING R/W

GREU TL-3

WOODS

LINE LOCATED PER VERBAL EVIDENCE FROM JAMES SCHELL OF DOT'S MAINTENANCE DEPARTMENT

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mgray

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	11
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

-YIIB- POT Sta. 13+61.71
END CONSTRUCTION
-YIIB- POT Sta. 13+35.00
END GRADE
-YIIB- POT Sta. 13+00.00

N 44° 27' 21.4" E

YIIB 12+50

-YIIB- PT Sta. 11+32.35

-YIIB- PC Sta. 10+47.54

YIIB 11+50

END WILDLIFE FENCE STA. 14+30 106.43' LT

-L- CS Sta. 407+45.51

-L- ST Sta. 409+45.51

COASTAL PLAIN

MATCHLINE -L- STA. 399+00.00 SEE SHEET 10

MATCHLINE -L- STA. 413+00.00 SEE SHEET 12

L 399+00

400+00

401+00

L 403+00

405+00

ROADWAY EMBANKMENT

L 405+50

L 407+00

L 409+00

410+00

L 411+00

L 413+00

S 39° 48' 38.5" E

N 60° 31' 16.1" E

N 60° 56' 50.7" E

-L- POC Sta. 402+74.71=
-YIID- POT Sta. 15+72.90

-L- POC Sta. 401+18.38=
-YIIB- POT Sta. 10+00.00

END WILDLIFE FENCE STA. 11+17.53 166.30' RT

-YIID- PT Sta. 12+53.05

YIID 12+50

APPROX. LOCATION OF EOP BASED ON PLANNING SURVEY

LINE LOCATED PER VERBAL EVIDENCE FROM JAMES SCHIELER, DPS MAINTENANCE TECHICIAN

YIID 10+50

-YIID- PC Sta. 10+48.01

BEGIN GRADE
-YIID- POT Sta. 10+25.00

N 37° 27' 04.2" E

BEGIN CONSTRUCTION
-YIID- POT Sta. 10+00.00

23' SOIL

WOODS

FALLOW

EXISTING R/W

8' CLAY

GREU TL-3

8" PVC

CAT. 1

MON

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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 413+00.00 SEE SHEET 11

MATCHLINE -L- STA. 427+00.00 SEE SHEET 13

COASTAL PLAIN

ALLUVIAL

COASTAL PLAIN

ROADWAY EMBANKMENT

FALLOW

WOODS

EXISTING R/W

L 413+00

L 415+00

L 417+25

L 419+50

L 421+75

L 424+00

L 426+33

415+00

420+00

425+00

S 39° 48' 38.5" E

BM #22
ELEV=426.88'
N 474,463
E 1,836,517
BL STA 408+45.56
188.90' RIGHT
RR SPIKE IN BASE
OF 8" PINE

-YIIE- PT Sta. 13+12.14

END CONSTRUCTION
-YIIE- POC Sta. 13+00.00

END GRADE
-YIIE- POC Sta. 12+75.00

-YIIE- PC Sta. 12+29.71

-L- POT Sta. 425+40.59=
-YIIE- POT Sta. 10+00.00
-YIIC- POT Sta. 12+32.73

YIIE 11+80

-YIIC- PT Sta. 11+81.47

-YIIC- PC Sta. 10+73.57

YIIC 10+27

BEGIN GRADE
-YIIC- POT Sta. 10+40.00

BEGIN CONSTRUCTION
-YIIC- POT Sta. 10+15.00

N 43° 03' 43.0" E

-YIIC- POT Sta. 10+00.00

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	13
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

-Y12- PT Sta. 14+25.81

N 25° 54' 57" E

END CONSTRUCTION
-Y12- POC Sta. 12+25.00

END GRADE
-Y12- POC Sta. 12+00.00

BM #23
ELEV=499.57'
N 473,217
E 1,898,179
BL STA 428+44.34
309.78' LEFT.
RR SPIKE IN BASE
30" OAK

-Y12- PC Sta. 10+98.42

LINE LOCATED PER VERBAL EVIDENCE FROM JAMES SCHELER DPS MAINTENANCE TECHICIAN

-Y12- POC Sta. 437+50.86=
-Y12A- POT Sta. 18+37.41

ROADWAY EMBANKMENT

COASTAL PLAIN

ROADWAY EMBANKMENT

MATCHLINE -L- STA. 427+20.00 SEE SHEET 12

MATCHLINE -L- STA. 441+00.00 SEE SHEET 14

-L- POC Sta. 434+95.94=
-Y12- POT Sta. 10+00.00

-L- SC Sta. 432+27.31

-L- TS Sta. 431+47.31

-Y12A-PT Sta. 17+40.88

S 39° 48' 38.5" E

M 26° 45' 57.8" W

-Y12A- PC Sta. 16+57.84

BEGIN GRADE
-Y12A- POT Sta. 16+15.00

BEGIN CONSTRUCTION
-Y12A- POT Sta. 16+10.00

-Y12A- PT Sta. 15+34.62

-Y12A- PC Sta. 14+08.56

ARTIFICIAL FILL

COASTAL PLAIN

Y12A 17+00

L 428+67 · L 430+00 · L 431+00 · L 433+00 · L 435+00 · L 436+00 · L 437+00 · L 439+00 · L 440+00 · L 441+00

15-00 · 15+00

8" CLAY · 8" PVC · 84 FO · 6 FO · 12 FO · 24 FO · 48 FO · 96 FO

WOODS · GUARD TOWER · ABOVE GROUND STEAM · 45' BUS · MTR · EXPANSION JOINT · LINE ENTERS GROUND · RUINS · SOIL · EXISTING R/W · ABERDEEN & ROCKFISH RR · EXISTING RR R/W · 26BK

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -Y13- STA. 15+00.00 SEE SHEET 43

MATCHLINE -L- STA. 441+00.00 SEE SHEET 13

MATCHLINE -L- STA. 455+00.00 SEE SHEET 15

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

ARTIFICIAL FILL

ARTIFICIAL FILL

COASTAL PLAIN

-L- POT Sta. 443+22.29=
-Y12A- POT Sta. 9+97.87

-Y13- PC Sta. 10+77.26

-L- POT Sta. 447+69.88=
-Y13- POT Sta. 10+00.00
-Y14- POT Sta. 16+23.19

-L- CS Sta. 441+03.80

-L- ST Sta. 441+83.80

-Y12A- PC Sta. 10+46.85

-Y13- PRC Sta. 13+09.08

Y13 13+00

Y14 15+00

Y12A 12+00

Y14 12+60

-Y14- PC Sta. 14+77.09

-Y12A- PT Sta. 11+24.47

N 78° 52' 04.1" W

END GRADE
-Y12A- POC Sta. 12+00.00

-Y12A- PC Sta. 12+15.50

END CONSTRUCTION
-Y12A- POC Sta. 12+30.00

-Y12A- PT Sta. 13+15.98

N 2° 07' 22.1" E

BEGIN GRADE
-Y14- POT Sta. 11+20.00

TIE TO EXISTING
-Y14- POT Sta. 10+95.00

BEGIN CONSTRUCTION
-Y14- POT Sta. 10+40.00

N 86° 12' 25.1" E

-Y14- PT Sta. 15+70.45

L 441+00

L 443+15

L 445+00

L 446+50

L 449+00

L 451+10

L 453+00

L 455+00

S 33° 19' 58.0" E

WOODS

GRASS

DATUR

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

EXISTING R/W

ISMTL BUS

ISFD

HTR

HTR BUS

ISBLK BUS

MTL CAN

CONC

RUINS

GR

W/LT

8" PVC
456+00
48 FO

8" PVC
450+00
48 FO

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

BM #24
ELEV=463.83'
N 471,517
E 1,899,374
BL STA 449+26.38
310.12' LEFT
RR SPIKE IN BASE
OF 15" OAK

MATCHLINE -L- STA. 455+00.00 SEE SHEET 14

MATCHLINE -L- STA. 469+00.00 SEE SHEET 16

ROADWAY EMBANKMENT

COASTAL PLAIN

COASTAL PLAIN

FALLOW

WOODS

RUINS

HTR

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

MILEPOST 9

ELLERBEE CREEK

PARKS AVENUE

COX RD

UNOPENED STREET

EXISTING R/W

L 455+00

L 457+00

L 459+00

L 461+00

L 463+00

L 464+70

L 465+00

L 467+20

L 469+00

Y15 13+00

-L- POT Sta. 467+05.58=
-Y15- POT Sta. 15+68.60

-Y15- PT Sta. 15+05.09

-Y15- PC Sta. 13+63.69

BEGIN GRADE
-Y15- POT Sta. 12+00.00

BEGIN CONSTRUCTION
-Y15- POT Sta. 11+75.00

S 33° 19' 58.0" E

N 35° 20' 52.2" E

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 (NA 2011)

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

EXISTING RR R/W

WOODS

WOODS

WOODS

WOODS

WOODS

WOODS

ABAND POOL

1.5 SBKD

ISFD

ISFD

ISBKD

ISFD

ISFD

HTR

HTR

HTR

HTR

-L- SC Sta. 478+83.93

-L- TS Sta. 477+63.93

L 479+00

L 471+00

L 475+00

L 473+00

L 477+00

L 481+25

469+00

470+00

475+00

480+00

EXISTING R/W

EXISTING R/W

EXISTING R/W

EXISTING R/W

UNOPENED STREET

BM #25
ELEV=439.24'
N 469,970
E 1,899,696
BL STA 463+76.31
291.75' RIGHT
RR SPIKE IN BASE
OF 28" OAK

MATCHLINE -L- STA. 469+00.00 SEE SHEET 15

MATCHLINE -L- STA. 483+00.00 SEE SHEET 17

COASTAL PLAIN

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 (NA 2011)

MATCHLINE –L– STA. 483+00.00 SEE SHEET 16

MATCHLINE –L– STA. 497+00.00 SEE SHEET 18

-L- CS Sta. 483+30.30

-L- ST Sta. 484+50.30

COASTAL PLAIN

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

EXISTING R/W

GR SMALL FOUNDERSOL GR

WOODS

ISBLK CH

2SBLK

ISBKD

2SFD

POOL

S

B

W/LT

L 483+50

L 485+75

L 488+00

L 490+33

L 492+67

L 495+00

485+00

490+00

495+00

BM #26
ELEV=447.20'
N 468,552
E 1,900,699
BL STA 480+90.76
262.27' RIGHT
RR SPIKE IN BASE
OF 12" PINE

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	18
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

BM #27
ELEV=453.48'
N 467,453
E 1,902,351
BL STA 500+07.91
272.85' LEFT
RR SPIKE IN BASE
OF 14" PINE

MATCHLINE -L- STA. 497+00.00 SEE SHEET 17

MATCHLINE -L- STA. 510+00.00 SEE SHEET 19

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

WOODS

L 500+00

L 504+00

L 508+00

L 510+00

L 497+50

L 502+00

L 506+00

500+00

505+00

S 39° 43' 14.5" E

GREU TL-3

CAT-1

ALLUVIAL

COASTAL PLAIN

COASTAL PLAIN

PASTURE

PASTURE

WOODS

CLEARSPRINGS DR

DOROTHY DR

10+00

S 39° 42' 46.4" E

-DR8- TSBKD

-L- PT Sta. 503+25.00

-DR8- PT Sta. 12+61.60

-DR8- PT Sta. 11+47.13

-DR8- POT Sta. 10+00.00

BEGIN CONSTRUCTION

-DR8- POT Sta. 10+85.00

-DR8- PC Sta. 11+00.00

-L- TS Sta. 508+44.05

-L- SC Sta. 509+64.05

W/LT

8" PVC

MTL

T FO

TV

S

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

ROADWAY EMBANKMENT

APPROXIMATE MP LOCATION BASED ON OVERLAID RR VAL MAPS

MILEPOST 10

WOODS

COASTAL PLAIN

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

L 510+00

L 512+10

L 514+00

515+00

-L- L 516+00

S 34°09'37" E

L 518+00

520+00

L 520+25

L 522+40

-DRIO- PRC Sta.13+21.50

-DRIO- RT Sta. 12+22.42

-DRIO- PRC Sta. 11+59.35

-DRIO- PC Sta. 10+96.29

BEGIN CONSTRUCTION
-DRIO- PRC Sta. 10+60.00

-DRIO- POT Sta. 10+00.00

N 55° 50' 25.3" E

10+00

-L- CS Sta. 514+19.61

-L- ST Sta. 515+39.61

CHORD

W/LT

ISFBUS

2SFD

ISFD

MTL STORAGE CONTAINER

S&G

8" PVC

6 FO

8 FO

48

MATCHLINE -L- STA. 510+00.00 SEE SHEET 18

MATCHLINE -L- STA. 524+00.00 SEE SHEET 20

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	20
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

BM #28
ELEV=446.13'
N 466,037
E 1,907,389
BL STA 517+25.00
289.60' LEFT
RR SPIKE IN BASE
OF 12" PINE

-Y17- PT Sta. 13+98.98

END CONSTRUCTION
-Y17- POT Sta.13+65.00

END GRADE
-Y17- POT Sta.13+00.00

-Y17- PC Sta. 12+36.09

-L- POT Sta. 532+76.00=
-Y17- POT Sta. 10+00.00

Y17 11+80

ROADWAY EMBANKMENT

COASTAL PLAIN

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

L 524+75

L 529+00

L 537+00

L 524+00

L 527+00

L 530+00

L 531+00

L 533+35

L 535+00

N 34° 09' 34" E

N 54° 39' 00" E

-L- POT Sta. 532+59.57=
-Y16- POT Sta. 19+32.62

-Y16- PT Sta. 18+58.18

Y16 16+50

-Y16- PRC Sta. 14+35.42

BEGIN GRADE
-Y16- POC Sta. 14+25.00

BEGIN CONSTRUCTION
-Y16- POC Sta. 13+45.00

-Y16- PC Sta. 12+78.64

ISFD
ISMTLBUS
ISMTLBUS
PUMP
GRASS
ROCK WALL
WOODS
WOODS
2SFD
2SFD
2SFD
2SBK&FD
EXISTING RR R/W
EXISTING R/W
EXISTING R/W
EXISTING

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 / NA 2011

MATCHLINE –L– STA. 538+00.00 SEE SHEET 20

MATCHLINE –L– STA. 552+00.00 SEE SHEET 22

WOODS

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

COASTAL PLAIN

ROADWAY EMBANKMENT

L 539+00

L 541+00

L 543+00

L 545+00

L 547+33

L 549+67

L 552+00

540+00

548+00

560+00

S 34°09'34" E

N 34°03'43.3" W

GREU TL-3

CAT-1

W/LT

ISBKD

2SFD

ISFD

EXISTING R/W

-Y16- POT Sta. 10+00.00

BM #29
ELEV=374.23'
N 463,859
E 1,903,963
BL STA 538+50.03
423.11' RIGHT
RR SPIKE IN BASE
OF 15" PINE

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mmeyer

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	22
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

EXISTING RR R/W

COASTAL PLAIN

ALLUVIAL

WOODS

2SFD

L 552+00

L 554+00

L 556+00

L 558+00

L 558+00_HA1

L 558+00_HA2

L 558+00_HA3

L 558+00_HA4

L 558+00_HA5

L 560+00

L 562+00

L 564+00

L 566+00

L 566+00_HA1

L 566+00_HA2

S 34° 09' 34.7" E

ROADWAY EMBANKMENT

EXISTING R/W

GREU TL-3

CAT-1

MATCHLINE –L– STA. 552 + 00.00 SEE SHEET 21

MATCHLINE –L– STA. 566 + 00.00 SEE SHEET 23

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mmeade

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	23
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 566+00.00 SEE SHEET 22

MATCHLINE -L- STA. 580+00.00 SEE SHEET 24

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

ALLUVIAL

ALLUVIAL

COASTAL PLAIN

-L- POC Sta. 578+53.30=
-Y18- POT Sta. 15+76.81

-L- SC Sta. 577+85.14

-L- TS Sta. 576+25.14

BEGIN GRADE
-Y18- POT Sta. 12+50.00

BEGIN CONSTRUCTION
-Y18- Sta. 11+65.00

L 568+00

L 569+80

570+00

L 572+00

L 573+50

575+00

L 575+40

L 577+20

L 579+00

Y18 13+20

S 34° 09' 34.7" E

N 66° 55' 30.18" E

BM #30
ELEV=384.78'
N 461,941
E 1,905,516
BL STA 563+09.88
214.68' RIGHT
RR SPIKE IN BASE
OF 15" PINE

EXISTING R/W

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

WOODS

RUINS

ISFD

ISFCH

CHORD

MON

8" PVC

48 FO

6" PVC

GREU TL3

CAT-1

W/LT

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mmccoy

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	24
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

BM #31
ELEV=386.75'
N 460,856
L 906,748
BL STA 578+56.98
270.87' LEFT
RR SPIKE IN BASE
OF 12" PINE

COASTAL PLAIN

ROADWAY EMBANKMENT

WOODS

ABERDEEN & ROCKFISH RR

L 585+00

L 587+00

L 589+00

L 591+00

L 593+00

L 583+00

L 580+90

585+00

590+00

8" PVC

48" FO

EXISTING R/W

PASTURE

S 22°17'48.0" E

-L- CS Sta. 584+42.98

-L- ST Sta. 586+02.98

MATCHLINE -L- STA. 580+00.00 SEE SHEET 23

MATCHLINE -L- STA. 593+50.00 SEE SHEET 25

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	25
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

-L- STA. 593+50.00 SEE SHEET 24

MATCHLINE -L- STA. 607+00.00 SEE SHEET 26

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

WOODS

WOODS

WOODS

WOODS

WOODS

ISMTL

MTL

GR

L 595+20

L 597+00

-L- L 599+00 600+00

L 601+20

L 603+00

L 605+00

L 607+00

595+00

605+00

S 22° 17' 48.0" E

EXISTING R/W

6 FO

48 FO

ISFD

WOODS

PASTURE

COASTAL PLAIN

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mmeyer

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	26
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MATCHLINE -L- STA. 607+00.00 SEE SHEET 25

MATCHLINE -L- STA. 621+50.00 SEE SHEET 27

NAD 83 /NA 2011

BM #32
ELEV=382.57'
N 458,861
E 1,907,555
BL 31A 600+14.15
232.82' LEFT
RR SPIKE IN BASE
OF 18" PINE

-L- TS Sta. 608+47.25

-L- SC Sta. 610+87.25

-L- CS Sta. 618+79.67

APPROXIMATE MP LOCATION BASED ON OVERLAID RR VAL MAPS

-L- ST Sta. 621+19.67

-L- POC Sta. 611+27.80=
-Y19- POT Sta. 15+48.35

-Y19- PC Sta. 13+47.97

-Y19- PT Sta. 14+89.16

BEGIN GRADE
-Y19- POT Sta. 11+00.00

BEGIN CONSTRUCTION
-Y19- POT Sta. 10+75.00

-Y19- POT Sta. 10+00.00

L 607+00

L 609+00

610+00

L 611+00

613+00

L 615+00

615+00

L 617+25

620+00

L 619+50

Y19 14+50

Y19 12+20

S 86°51'20.56" E

ABERDEEN & ROCKFISH RR

MILEPOST 19
ABERDEEN & ROCKFISH RR

COASTAL PLAIN

ROADWAY EMBANKMENT

WOODS

PASTURE

CHORD

EXISTING R/W

ISBKD

8" PVC

48" FO

84" FO

6 FO

24 FO

SOIL

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	27
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 621+50.00 SEE SHEET 26

MATCHLINE -L- STA. 635+00.00 SEE SHEET 28

BM #33
ELEV=377.98'
N 457,860
E 1,908,748
BL STA 618+15.98
243.58' LEFT
RR SPIKE IN BASE
OF 22" PINE

ISBKD

ISFBUS

WOODS

ROADWAY EMBANKMENT

-L- POT Sta. 622+73.61=
-Y20- POT Sta. 15+88.68

ABERDEEN & ROCKFISH RR

COASTAL PLAIN

L 621+75

L 624+00

L 626+33

L 628+67

L 631+00

L 633+25

625+00

630+00

-L- S 66° 46' 22.3" E

EXISTING R/W

GRASS

PASTURE

6 FO

24" PR

8" PVC

-Y20- 15+00

Y20 13+50

I S F & BK BUS

BEGIN GRADE
-Y20- POT Sta.13+10.00

BEGIN CONSTRUCTION
-Y20- POT Sta.12+85.00

N 29° 13' 46" E

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	28
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

MATCHLINE -L- STA. 635+00.00 SEE SHEET 27

MATCHLINE -L- STA. 649+00.00 SEE SHEET 29

ROADWAY EMANKMENT

RUINS

GR

ABERDEEN, CAROLINA & WESTERN RAILWAY

ABERDEEN & ROCKFISH RR

HENDERSON ST

WOODS

COASTAL PLAIN

-L- TS Sta. 643+34.49

-L- SC Sta. 645+74.49

L 635+50

L 637+75

L 640+00

L 642+00

L 644+50

L 647+00

L 649+00

640+00 24" FO

645+00

-L 48" FO

S 86°46'22.3" E

MTL

EXISTING R/W

PASTURE

25' GR

6" FO

8" PVC

CHORD

2SBKD

1SBKD

POOL

HTR

S

W/LT

1" FO

-L- CS Sta. 648+48.62

BM
ELEV=
N 45
E 1,91
STA: 6
27L3F
RR SPIKE
OF 22

BL

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	29
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

ROADWAY EMBANKMENT

-L- ST Sta. 650+88.62

ROADWAY EMBANKMENT

COASTAL PLAIN

COASTAL PLAIN

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

WOODS

L 649+00

L 651+00

L 653+00

L 655+00

L 657+00

L 659+00

L 661+00

L 663+00

650+00

660+00

-L- S 85° 46' 38.6" E

MATCHLINE -L- STA. 649+00.00 SEE SHEET 28

MATCHLINE -L- STA. 663+00.00 SEE SHEET 30

EXISTING R/W

W/LT

HTR

48" FO

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	30
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 663+00.00 SEE SHEET 29

MATCHLINE -L- STA. 676+50.00 SEE SHEET 31

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

COASTAL PLAIN

COASTAL PLAIN

-Y20A- PC Sta.10+53.62

END GRADE
-Y20A- P01 Sta.11+25.00

END CONSTRUCTION
-Y20A- P01 Sta.11+60.00

-Y20A- PT Sta.13+31.35

-L- P01 Sta.670+86.30=
-Y20A- P01 Sta.10+00.00

-L- TS Sta.673+20.06

-L- SC Sta.674+80.06

BM #35
ELEV=39.31'
N 456,873
E 1,912,788
BL STA 664+22.65
247.36' LT
RR SPIKE IN BASE
OF 12" PINE

MILEPOST 13

S 85° 46' 38.6" E

N 17° 26' 09" E

S 6° 33' 09" E

L 663+00

L 665+00

665+00

L 667+00

L 669+00

670+00

L 671+00

L 673+00

675+00

L 675+00

ISFD

HTR

GAZEBO

2SFD

WOODS

EXISTING R/W

EXISTING RR R/W

8" PVC

48" FO

96" FO

6 FO

1 FO

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	31
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 676+50.00 SEE SHEET 30

MATCHLINE -L- STA. 690+00.00 SEE SHEET 32

COASTAL PLAIN

ROADWAY EMBANKMENT

COASTAL PLAIN

WOODS

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

EXISTING R/W

EXISTING ROAD R/W

HTR

ISF&BKD

ISBKD

IS GARAGE

IS BKD

GRASS

GRASS GATE

POND

ABAND

W/LT

POSSIBLE JUNCTION

L 677+00

L 679+00

680+00

L 681+25

L 683+50

-L- 685+00

L 685+75

L 688+00

S 70° 53' 53.9" E

-L- CS Sta. 682+09.49

-L- ST Sta. 683+69.49

BM #36
ELEV=347.56'
N 455,832
E 1,914,646
BL STA. 681+69.42
359.35' RIGHT
RR SPIKE IN BASE
OF 18" PINE

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	32
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

L 690+33

L 692+35

L 695+00

L 697+00

L 699+00

L 701+00

L 703+00

700+00

S 70 53 53.9 E

-L- SC Sta. 694+61.94

-L- TS Sta. 692+21.94

-L- CS Sta. 701+35.92

MATCHLINE -L- STA. 690+00.00 SEE SHEET 31

MATCHLINE -L- STA. 703+00.00 SEE SHEET 33

ISMTLBUS

ISMTLBUS

HTR

WOODS

GRASS

GR

EXISTING RR R/W

EXISTING R/W

DIANE LN

24" FO

48" FO

96" FO

8" PVC

38" GR

T FO

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	33
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83/NA 2011

MATCHLINE -L- STA. 703+00.00 SEE SHEET 32

MATCHLINE -L- STA. 717+00.00 SEE SHEET 34

BM #37
ELEV = 351.62'
N 455,212
E 1,916,766
BYIS STA 7+42.81
82.90' LEFT
RR SPIKE IN BASE
OF 12" PINE

-L- ST Sta. 703+75.92

-L- PC Sta. 14+26.17

END CONSTRUCTION
-Y2I- POT Sta. 12+75.00

END GRADE
-Y2I- POT Sta. 12+50.00

-L- POT Sta. 710+73.36=
-Y2I- POT Sta. 10+00.00

Y2 112+75

L 703+00

L 705+00

L 707+00

L 709+00

L 711+20

L 713+33

L 715+67

N 39° 15' 27.6" E

S 44° 42' 52.7" E

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

COASTAL PLAIN

COASTAL PLAIN

ALLUVIAL

ALLUVIAL

CUTOVER

WOODS

EXISTING R/W

6" PVC

8" PVC

6 FO

96 FO

PASTURE

GR

GREU TL-3

CAT-1

BLK S

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	34
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 / NA 2011

COASTAL PLAIN

WOODS

ROADWAY EMBANKMENT

APPROXIMATE MP LOCATION BASED ON OVERLAID RR VAL MAPS

MILEPOST 74

EXISTING RR R/W

60' EASEMENT SL 204 PG 79

FAITH DR GR

RANCH DR GR

ABERDEEN & ROCKFISH RR

EXISTING R/W

L 724+75

L 729+33

720+00

725+00

730+00

L 720+25

L 722+50

L 727+00

L 718+00

S 44° 42' 52.7" E

N 45° 17' 07.3" E

-L- POT Sta. 721+47.50=
-DR7- POT Sta. 12+41.59

-DR7- PT Sta. 11+48.51

-DR7- PC Sta. 11+07.82

BEGIN GRADE
-DR7- POT Sta. 10+60.00

BEGIN CONSTRUCTION
-DR7- POT Sta. 10+50.00

N 21° 58' 01.2" E
-DR7- POT Sta. 10+00.00

SOIL

GR

MON

W/LT

HTR

S

EXIST. 50' PRIVATE R/W

SHEPPARD LN

MATCHLINE -L- STA. 717+00.00 SEE SHEET 33

MATCHLINE -L- STA. 731+00.00 SEE SHEET 35

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	35
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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NAD 83 /NA 2011

MATCHLINE -L- STA. 731+00.00 SEE SHEET 34

MATCHLINE -L- STA. 745+00.00 SEE SHEET 36

60' EASEMENT SL 204 PG 79

ISBK CHURCH

SHED

ISBKD

-L- TS Sta. 736+80.10

-L- SC Sta. 739+20.10

-L- CS Sta. 742+76.18

CUTOVER

EXISTING RR R/W

WOODS

COASTAL PLAIN

ROADWAY EMBANKMENT

ABERDEEN & ROCKFISH RR

L 734+00

L 736+00

L 738+00

L 740+00

L 742+00

L 744+25

731+67

735+00

740+00

W/LT

-L- S 44° 42' 52.7" E

PINE FOREST MHP

SOIL

HTR

GR

ALLUVIAL

COASTAL PLAIN

ISFD

ISBKD

CONC

BKG

EXISTING R/W

20' SEPTIC SUPPLY EASEMENT SL 3.9 MAP 7

BM #38
ELEV=334.07'
N 463,331
E 1,917,707
BL STA. 723+60.35
268.30' RIGHT
RR SPIKE IN BASE
OF 12" PINE

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mmccoy

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	36
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 745+00.00 SEE SHEET 35

MATCHLINE –L– STA. 759+00.00 SEE SHEET 37

BM #39
ELEV=295.85'
N 452,696
E 1,919,678
BL STA 743+99.59
27.40' LEFT
RR SPIKE IN BASE
OF 12" ELM

-L- PT Sta. 749+05.02

-L- POT Sta. 749+34.50=℄
-Y22- POT Sta. 12+57.92

CUTOVER

EXISTING RR R/W

COASTAL PLAIN

ROADWAY EMBANKMENT

WOODS

ABERDEEN & ROCKFISH RR

L 748+75

L 753+00

L 751+00

L 757+00

750+00

L 755+00

L 746+50

L 759+00

S 66°16'46.2" E

EXISTING R/W

-Y22- PT Sta. 12+10.72

Y22 10+50

-L- SC Sta. 745+16.18

BEGIN CONSTRUCTION
-Y22- POC Sta. 10+15.00

-Y22- PC Sta. 10+00.00

25FD

ISFD

CB

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	37
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -L- STA. 759+00.00 SEE SHEET 36

MATCHLINE -L- STA. 772+00.00 SEE SHEET 38

WOODS

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

MILEPOST 150

APPROXIMATE MP LOCATION BASED ON OVERLAID RR MAPS

-L- TS Sta. 760+53.57

-L- SC Sta. 761+73.57

-L- CS Sta. 768+86.38

-L- ST Sta. 770+06.38

ROADWAY EMBANKMENT

COASTAL PLAIN

760+00 S 66°16'46.2" E

L 759+00

L 761+00

L 763+00

L 765+00

L 767+00

L 769+00

L 771+00

EXISTING R/W

6" FO

C F TV

RW

CA

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	38
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 772+00.00 SEE SHEET 37

MATCHLINE –L– STA. 786+00.00 SEE SHEET 39

COASTAL PLAIN

COASTAL PLAIN

ROADWAY EMBANKMENT

ROADWAY EMBANKMENT

L 773+00

L 775+00

L 777+00

L 778+90

L 780+00

L 781+00

L 783+00

L 785+20

ABERDEEN & ROCKFISH RR

EXISTING RR R/W

EXISTING R/W

CITY OF RAEFORD

WOODS

ISFD

ISBLKD

ISBLK BUS

ISBKCH

HTR

BK STEPS & PORCH

W/LT

LT

MON

SOIL

GR

S 74° 08' 02.5" E

BM #40
ELEV=309.40'
N 451,360
E 1,921,643
BL STA 766+50.54
261.63' RIGHT
RR SPIKE IN BASE
OF 12" PINE

8/29/2024
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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	39
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 786+00.00 SEE SHEET 38

MATCHLINE –L– STA. 800+00.00 SEE SHEET 40

BM #41
ELEV=298.50'
N 451,316
E 1,924,071
BL STA 790+03.18
310.07' LEFT
RR SPIKE IN BASE
OF 14" PINE

END CONSTRUCTION
-Y23- POT Sta.12+87.00

END GRADE
-Y23- POT Sta.12+00.00

Y23 12+00

ROADWAY EMBANKMENT

COASTAL PLAIN

L 789+00

L 791+00

L 793+00

L 795+00

L 797+00

L 799+00

L 787+00

Y24 15+00

Y24 13+00

-L- POT Sta. 787+54.76=
-Y23- POT Sta. 10+00.00

-L- POT Sta. 794+86.96=
-Y24- POT Sta. 15+83.06

-Y24- PT Sta. 15+27.50

-Y24- PCC Sta. 13+38.08

BEGIN GRADE
-Y24- POT Sta.12+20.00

-Y24- PC Sta. 11+97.41

BEGIN CONSTRUCTION
-Y24- POC Sta. 11+65.00

-Y24- POT Sta. 10+00.00

S 74° 08' 02.5" E -L-

N 70° 19' 12.6" E -Y24-

EXISTING RR R/W

ABERDEEN & ROCKFISH RR

CITY OF RAEFORD

WOODS END LN

JEWEL DR

N 8° 37' 02.0" E -Y23-

EXISTING R/W

EXISTING EOP

EXISTING EOS

EXISTING R/W

EXISTING EOP

EXISTING EOS

EXISTING R/W

EXISTING EOP

EXISTING EOS

EXISTING R/W

EXISTING EOP

EXISTING EOS

GREENHOUSE

ISFBUS

ISBKBUS

MTU CAN

CONC

WOODS

CULTIVATED

ISFBUS

SIG BOX

SIG ARM

HTR

6 FO

8" PVC

8" PVC

8" PVC

8/17/99

MATCHLINE A SEE INSET A SHEET 45

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	40
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –L– STA. 800+00.00 SEE SHEET 39

MATCHLINE –L– STA. 814+00.00 SEE SHEET 41

-Y24A- PC Sta. 10+75.52

-Y24A- PT Sta. 11+26.87

END GRADE
BEGIN OVERLAY
-Y24A- POT Sta. 12+75.00

END OVERLAY
-Y24A- POT Sta. 16+00.00

-Y24A- POT Sta. 16+50.30

REMOVE TURNPIKE ROAD ACROSS EXISTING RR CROSSING

-L- POT Sta. 810+03.66
-Y25- POT Sta. 15+98.93

-L- PC Sta. 811+11.21

N 81° 14' 41.3" E

S 74° 08' 02.5" E

N 15° 58' 26.1" E

-L- POT Sta. 801+04.34=
-Y24A- POT Sta. 10+00.00

BEGIN CONSTRUCTION
-Y25- POT Sta. 13+65.00

COASTAL PLAIN

ALLUVIAL

COASTAL PLAIN

ROADWAY EMBANKMENT

SM

L 801+00

L 803+00

L 805+00

L 807+00

L 809+00

L 811+00

L 813+00

Y25 14+00

805+00

810+00

ISMYLBUS

ISBKBUS

MTL CAN

ELE. BOX

CITY OF RAEFORD

WOODS

EXISTING R/W

EXISTING RR R/W

8" PVC

6 FO

W/LT

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	41
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE –Y26– STA. 14+50.00 SEE SHEET 44

MATCHLINE –L– STA. 814+00.00 SEE SHEET 40

MATCHLINE –L2B– STA. 828+00.00 SEE SHEET 42

CITY OF RAEFORD

COASTAL PLAIN

ROADWAY EMBANKMENT

ISBLK BUS

ISMTL BUS

ISF BUS

WOODS

EXISTING R/W

L 815+00

815+00

820+00

L 817+33

L 819+67

L 822+00

L 824+10

L 826+60

Y26 12+00

-Y26- PC Sta.11+26.51

-L- POT Sta.824+25.70=
-RAB_L2- POC Sta.13+46.82 (44.0' RT)

S 80° 06' 10.0" E
-L- PT Sta.822+67.55

-DET_RAB-

-Y26- POT Sta.10+00.00=
-RAB_L2- POC Sta.10+24.47 (44.0' RT)

BEGIN -RAB_L2- PC 10+00.00=
END -RAB_L2- PC 14+02.12

BM #42
ELEV=287.44'
N 450,497
E 1,926,645
BY24 STA 8+44.43
133.04' LEFT
RR SPIKE IN BASE
OF 21" PINE

N 8° 41' 10.2" W

-L2B- S 74° 17' 50.0" E

POSSIBLE JUNCTION

-L2B- POT Sta.824+25.70
-RAB_L2- POC Sta.11+52.09 (44.0' RT)

-Y27-

N 16° 32' 18.1" E

BEGIN GRADE
-Y27- POT Sta.10+50.00

-Y27- PT Sta.10+43.46

BEGIN CONSTRUCTION
-Y27- PC Sta.9+50.00

10' PVC

12" PVC

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	42
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

END TIP PROJECT R-5709C -L2B- POC Sta. 835+30.00

MATCHLINE -L2B- STA. 828+00.00 SEE SHEET 41

COASTAL PLAIN

ROADWAY EMBANKMENT

COASTAL PLAIN

WOODS

CLEARED

BM #43
ELEV=278.31'
N 450,048
E 1,927,866
BRG=N 23°56'14" E
DIST=157.20 FROM BL-87
RR SPIKE IN BASE OF 20" PINE

END TIP PROJECT - R-5709
-L- PT Sta.835+30.00

END CONSTRUCTION
-L2B- Sta.838+98.00

-L2B- PCC Sta.837+00.90

-L2B- PT Sta.839+32.37

-L2B- POT Sta.841+37.81

-L2B- PC Sta.835+22.44

L 828+75

L 831+00

L 833+00

L 834+50

830+00

835+00

840+00

S 74° 17' 50.0" E

S 59° 21' 37.5" E

INV. IN=266.61'
TOP=273.65'

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	43
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

-Y13- PT Sta. 20+23.08

END CONSTRUCTION
-Y13- POC Sta. 19+15.00

END GRADE
-Y13- POC Sta. 18+90.00

-Y13- PCC Sta. 18+79.68

20' TOB

F

WOODS

Y13 17+67

COASTAL PLAIN

WOODS

Y13 15+33

GR

MATCHLINE -Y13- STA. 15+00.00 SEE SHEET 14

BM #24
ELEV=463.83'
N 471,517
E 1,899,374
BL STA 449+26.38
310.12' LEFT
RR SPIKE IN BASE
OF 15" OAK

ISMTL
BUS

S

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mmorris

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PROJECT REFERENCE NO.	SHEET NO.
R-5709C	44
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NAD 83 /NA 2011

MATCHLINE -SR1- STA. 16+50.00 SEE SHEET 45

MATCHLINE -Y26- STA. 14+50.00 SEE SHEET 41

-SR1- PC Sta. 16+54.14

Y26A 14+60

N 10° 39' 29.7" W

END CONSTRUCTION
-Y26A- POT Sta. 15+50.22

END GRADE
-Y26A- POT Sta. 15+25.22

-Y26A- PT Sta. 14+19.38

-SR1- PT Sta. 17+25.76

N 76° 35' 56.4" E

-SR1- POT Sta. 17+77.03=
-Y26A- POC Sta. 12+73.19

N 53° 25' 09.4" W

-Y26A- PC Sta. 10+96.78

-Y26- POC Sta. 18+86.94=
-Y26A- POT Sta. 9+99.38

Y26 14+39

Y26A 12+30

Y26 16+32

Y26 18+54

Y26 20+14

Y26 22+72

Y26 25+00

Y26 27+00

APPROXIMATE MP LOCATION BASED ON OVERLAID RR VAL MAPS

WOODS

CITY OF RAEFORD

COASTAL PLAIN

COASTAL PLAIN

-Y26- PT Sta. 25+03.33

END GRADE
-Y26- PT Sta. 25+50.00

END CONSTRUCTION
-Y26- PT Sta. 26+00.00

N 86° 00' 54.5" E

-Y26- POT Sta. 26+22.84

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MATCHLINE B SEE INSET A THIS SHEET

Milepost 15.83

Turnpike Road

GRADE TO DRAIN

-SRI- POT Sta. 10+00.00

BEGIN OVERLAY
-SRI- POC Sta. 10+75.00

COASTAL PLAIN

CITY OF RAEFORD

EXISTING RW R/W

CITY OF RAEFORD

+25.00
29.98'
50.00'

+75.00
29.98'
50.00'

+50.00
29.97'
50.00'

+90.00
29.96'
50.00'

+90.00
30.06'

333
WILLIAM F. WRIGHT
AND WIFE,
ANNE S. WRIGHT
DB 950 PG 365

PHILLIP R. TAYLOR
DB 956 PG 370

412C

412A
NORTH RAEFORD
FIRE DEPARTMENT, INC.
DB 143 PG 218
MB 3 SL 390

RALPH D. CURRIE
AND WIFE,
BETTY H. CURRIE
MB 3 SL 390
DB 143 PG 218

FRANKLIN HINSON
DB 96E PG 28
DB 99 PG 581
MB 3 SL 390

WOODS

-SRI- PC Sta. 14+93.78

END OVERLAY
BEGIN GRADE
-SRI- POC Sta. 15+00.00

-SRI- PT Sta. 16+06.29

N 82°27'40" E

OFFSET =2'

R=320'

MATCHLINE -SRI- STA. 16+50.00 SEE SHEET 44

Milepost 15.91

NAD 83 /NA 2011

MATCHLINE A SEE SHEET 40

GRADE TO DRAIN

MATCHLINE B THIS SHEET

INSET A

PROJECT REFERENCE NO.	SHEET NO.
R-5709C	45
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	46

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

450 / 440 / 430 / 420 / 410

(A) ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 317+33
317+33

LX1
15+67.40

Existing Ground

4:1

4:1

4
3
8

BT
FIAD

UNDIVIDED COASTAL PLAIN: Brown to orange-brown, very loose to loose, clayey and silty SAND (A-2-4, A-2-7), little gravel, moist

317+50.00

440 / 430 / 420 / 410

(A) ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 315+00

Pavement

Existing Ground

4:1

4:1

15
8
22

BT
FIAD

UNDIVIDED COASTAL PLAIN: Brown to orange-brown, loose to medium dense, clayey and silty SAND (A-2-4, A-2-7), little gravel, moist

315+00.00

430 / 420 / 410 / 400 / 390 / 380

(A) ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 313+00

Pavement

Existing Ground

3:1

3:1

4:1

25
9
9

BT
FIAD

UNDIVIDED COASTAL PLAIN: Brown to tan-orange, loose, clayey and silty SAND (A-2-4, A-2-7), moist

313+00.00

—℄—

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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mmerry

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	47

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

460 450 440 430 420

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

LX1
21+68.80 L 323+33
323+33

LX1RT
10+82.77

Existing Ground

4:1 4:1 5:1 6:1 6:1 4:1

④ ③ ⑩ BT DRY 06/20

UNDIVIDED COASTAL PLAIN: Tan to tan-orange, very loose to loose, silty fine SAND (A-2-4), moist

Red-tan, stiff, sandy CLAY (A-6), trace mica, moist (Middendorf Formation)

323+50.00

450 440 430 420

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 321+33 LX1
19+68.46
321+33

Existing Ground

4:1 4:1 4:1

S.S. 435.09

④ ③ ⑥ BT DRY 06/20

UNDIVIDED COASTAL PLAIN: Tan and brown, very loose to loose, silty fine to coarse SAND (A-2-4), trace roots, trace gravel, moist

321+50.00

450 440 430 420 410

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

LX1
17+17.72
L 319+00

Existing Ground

4:1 4:1

② ③ Ⅱ BT DRY 12/19

UNDIVIDED COASTAL PLAIN Tan to tan-grey, very loose to medium dense, clayey silty fine to coarse SAND (A-2-4), moist

319+00.00

—L—

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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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	48

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

470 460 450 440 430

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 329+33
329+33

Existing Ground

4:1 4:1 6:1 6:1 6:1 6:1

UNDIVIDED COASTAL PLAIN: Tan-brown to red, very loose to loose, clayey silty and silty fine to coarse SAND (A-2-4, A-2-5), moist to wet

③ ⑤ ⑥

BT
DRY
06/20

329+50.00

460 450 440 430

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

LX1
25+18.97

LX1RT
14+32.80

L 327+00

Existing Ground

4:1 4:1 6:1 6:1 6:1 4:1

UNDIVIDED COASTAL PLAIN Tan, very loose to loose, silty fine to coarse SAND (A-2-4), moist

Tan-orange, medium stiff, coarse sandy CLAY (A-6), moist

② ④ ⑦

BT
DRY
12/19

327+00.00

460 450 440 430 420

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

LX1
23+68.94

L 325+33
325+33

LX1RT
12+82.79

Existing Ground

4:1 4:1 6:1 6:1 6:1 4:1

③ ② ⑨

UNDIVIDED COASTAL PLAIN: Tan-brown, very loose, silty fine to coarse SAND (A-2-4), moist

COASTAL PLAIN: Tan-brown, loose, clayey silty fine to coarse SAND (A-2-5), trace gravel, clay balls, moist (Middendorf Formation)

BT
DRY
06/20

325+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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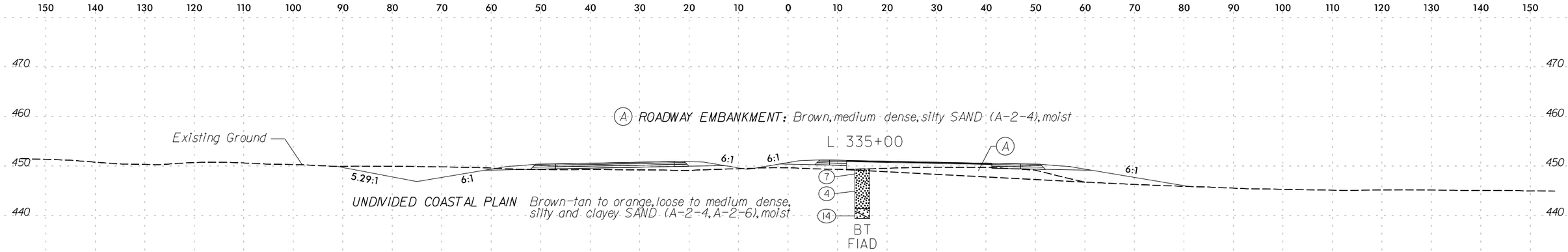
mmcfa

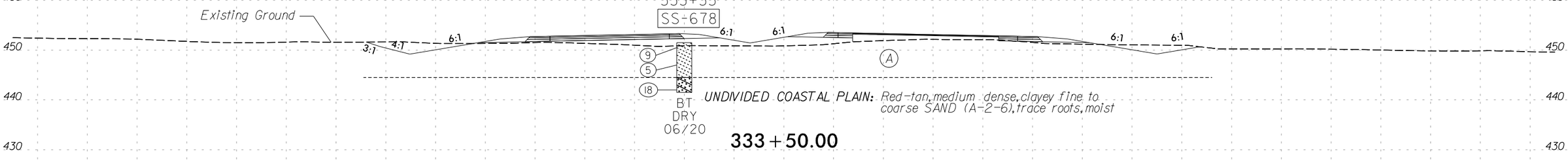
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	49



335+00.00

SOIL TEST RESULTS

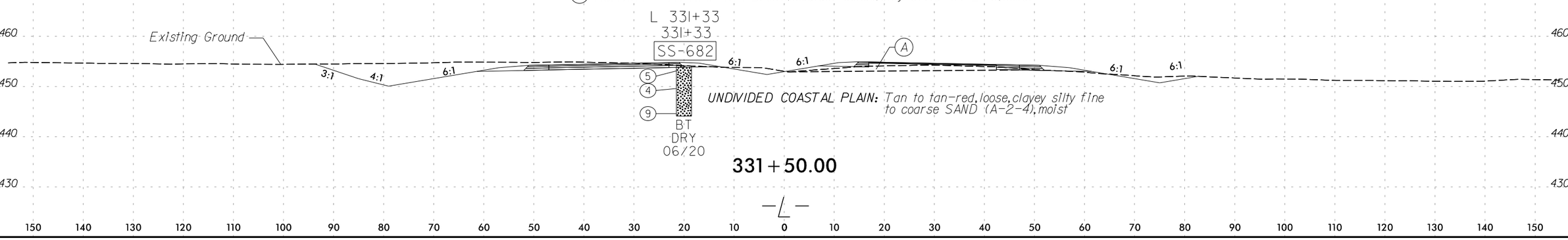
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-678	333+33	20 LT	0.0 - 1.5	A-3	17	NP	72	21	4	2	100	62	7	3	4



333+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-682	331+33	20 LT	3.5 - 5.0	A-2-4	21	5	47	30	2	20	99	77	25	17	ND



331+50.00

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	50

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

480 470 460 450 440

Ⓐ ROADWAY EMBANKMENT: Tan-orange, dense, silty SAND (A-2-4), moist

L 341+00
340+82

Existing Ground

Pavement

3:1 4:1 6:1 6:1 6:1 6:1 6:1

UNDIVIDED COASTAL PLAIN: Tan to orange, loose to medium dense, silty clayey and silty SAND (A-2-4, A-2-6), moist

30 8 10

BT
FIAD

341+00.00

470 460 450 440 430

Ⓐ ROADWAY EMBANKMENT: Brown and orange, medium dense, clayey silty SAND (A-2-5), moist

L 339+00

Existing Ground

Pavement

4:1 6:1 6:1 6:1 3.05:1

UNDIVIDED COASTAL PLAIN: Brown and orange-brown, very loose to loose, silty SAND (A-2-4), moist

19 4 3

Orange, stiff, sandy CLAY (A-6), moist

14

BT
FIAD

339+00.00

470 460 450 440 430 420

Ⓐ ROADWAY EMBANKMENT: Brown, medium dense, silty SAND (A-2-4), moist

L 337+00

Existing Ground

Pavement

4:1 6:1 6:1 6:1 6:1 6:1

UNDIVIDED COASTAL PLAIN: Orange-brown, loose, clayey and silty SAND (A-2-4, A-2-7), moist to wet

18 5 7

BT
FIAD

337+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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mmeyer

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	51

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

490
480
470
460

Existing Ground

4.04:1 6:1 6:1 6:1 6:1

Ⓐ ROADWAY EMBANKMENT: Tan-brown, loose, silty fine SAND (A-2-4), moist

UNDIVIDED COASTAL PLAIN: Brown-tan to tan, loose, silty fine SAND (A-2-4), moist

L 346+75
346+75

(5) (4) (5)

BT
DRY
06/20

346+50.00

490
480
470
460

Ⓐ ROADWAY EMBANKMENT: Tan-brown, loose, silty fine SAND (A-2-4), moist

Existing Ground

6:1 6:1 6:1 6:1 4.46:1

L 345+00
Pavement

(5) (8) (3)

UNDIVIDED COASTAL PLAIN: Light brown, very loose to loose, silty fine SAND (A-2-4), wet

BT
FIAD

345+00.00

470
460
450
440
430

Ⓐ ROADWAY EMBANKMENT: Tan-orange, dense, silty SAND (A-2-4), moist

Existing Ground

4.57:1 6:1 6:1 6:1 6:1

L 342+50

(1) (3) (9)

UNDIVIDED COASTAL PLAIN Tan to tan-orange, very loose to loose, silty fine SAND (A-2-4), moist

BT
DRY
12/19

342+50.00

—L—

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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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	52

0 5 10

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

530 520 510 500 490 480 470 460

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-491	353+00	25 RT	1.3 - 2.8	A-2-6	30	12	59	15	3	22	94	60	25	ND	ND

(A) *ROADWAY EMBANKMENT: Orange-brown, medium dense, silty slightly plastic clayey SAND (A-2-6), trace mica, moist*

L 353+00
SS-491
Pavement
Existing Ground
3:1 4:1 6:1 6:1 6:1 6:1 6:1
(10) (5) (12)
BT
FIAD
UNDIVIDED COASTAL PLAIN: Brown, loose to medium dense, silty SAND (A-2-4), moist to wet

353+00.00

(A) *ROADWAY EMBANKMENT: Orange-brown, medium dense, silty slightly plastic clayey SAND (A-2-6), trace mica, moist*

L 351+00
Existing Ground
3:1 4:1 6:1 6:1 6:1 6:1 6:1 4:1
(4) (3) (6)
BT
DRY
12/19
UNDIVIDED COASTAL PLAIN Tan-brown to tan, very loose to loose, silty fine SAND (A-2-4), moist

351+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-672	349+00	35 LT	0.0 - 1.5	A-2-4	15	NP	61	29	4	6	100	67	12	5	ND

(A) *ROADWAY EMBANKMENT: Tan-brown, loose, silty fine SAND (A-2-4), moist*

L 349+00
SS-672
Existing Ground
3:1 4:1 6:1 6:1 6:1 6:1 6:1 4:1
(11) (6) (18)
BT
DRY
06/20
UNDIVIDED COASTAL PLAIN: Brown-tan to tan, loose to medium dense, silty fine SAND (A-2-4), moist

349+00.00

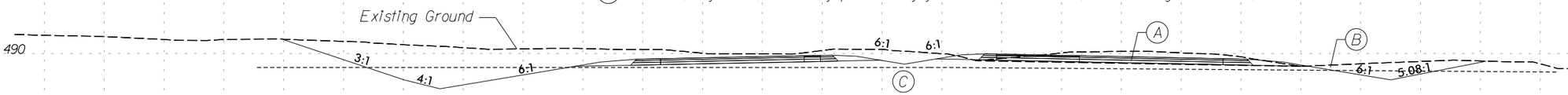
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	53

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

520 / 510 / 500 / 490 / 480

(A) ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist
(B) UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine SAND (A-2-4), moist
(C) Red-tan, very loose, moderately plastic clayey fine SAND (A-2-6), trace of organic matter, moist

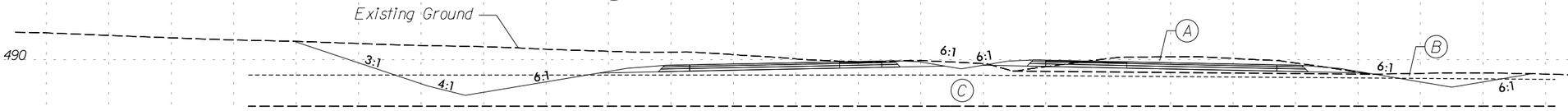


COASTAL PLAIN: Gray-red-tan, very stiff, silty CLAY (A-7-6), trace mica, moist (Pinehurst Formation)

354+50.00

510 / 500 / 490 / 480 / 470 / 460

(A) ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist
(B) UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine SAND (A-2-4), moist
(C) Red-tan, very loose, moderately plastic clayey fine SAND (A-2-6), trace of organic matter, moist

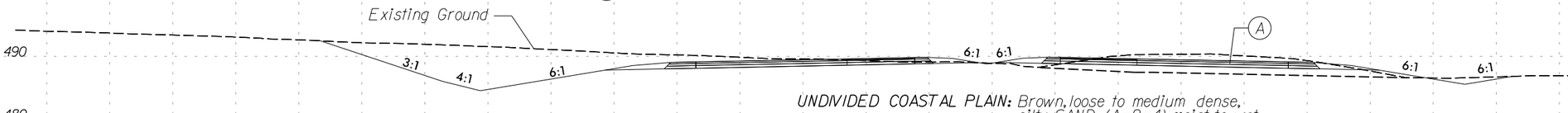


COASTAL PLAIN: Gray-red-tan, very stiff, silty CLAY (A-7-6), trace mica, moist (Pinehurst Formation)

354+00.00

500 / 490 / 480 / 470

(A) ROADWAY EMBANKMENT: Orange-brown, medium dense, silty slightly plastic clayey SAND (A-2-6), trace mica, moist



UNDIVIDED COASTAL PLAIN: Brown, loose to medium dense, silty SAND (A-2-4), moist to wet

353+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	54

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

550 540 530 520 510 500 490 480 470

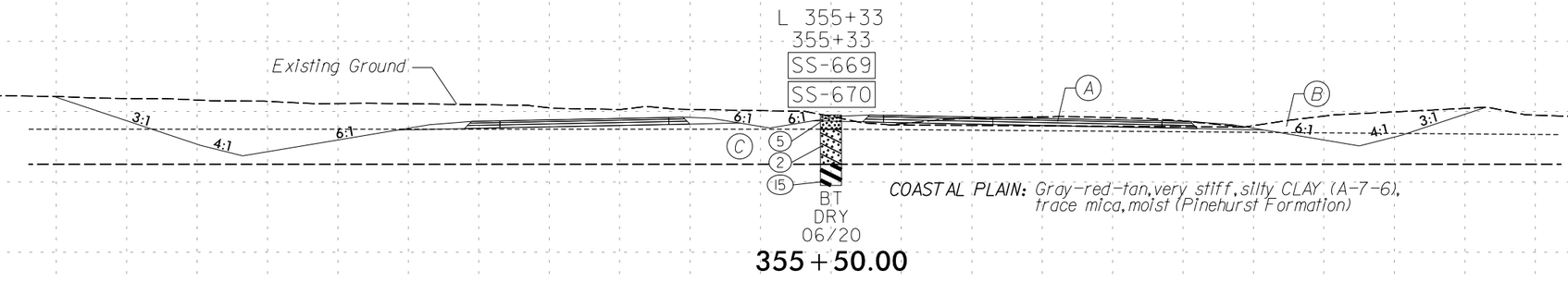
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-669	355+33	0 CL	0.0 - 1.5	A-2-4	15	NP	65	20	5	10	98	54	17	3	ND
SS-670	355+33	0 CL	3.5 - 5.0	A-2-6	40	16	57	13	2	28	98	54	31	18	ND

(A) *ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist*

(B) *UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine SAND (A-2-4), moist*

(C) *Red-tan, very loose, moderately plastic clayey fine SAND (A-2-6), trace of organic matter, moist*

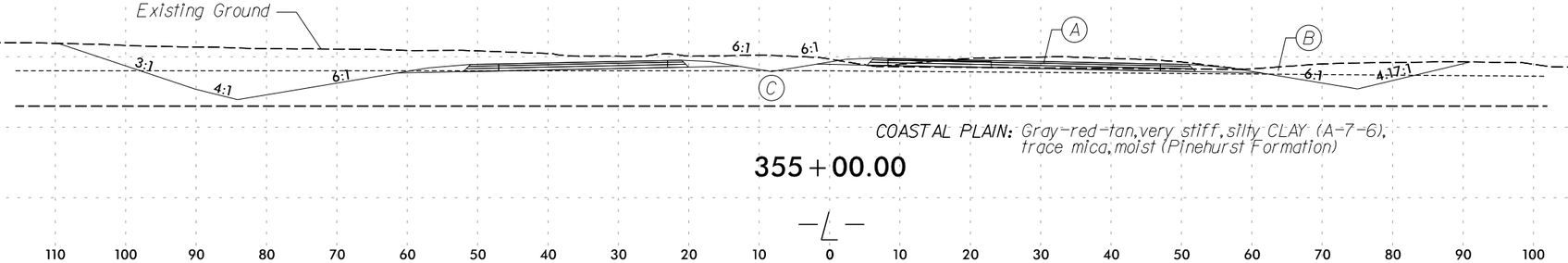


355+50.00

(A) *ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist*

(B) *UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine SAND (A-2-4), moist*

(C) *Red-tan, very loose, moderately plastic clayey fine SAND (A-2-6), trace of organic matter, moist*



355+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	55

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

510
500
490
480
470

Ⓐ ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist

Ⓑ UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine to coarse SAND (A-2-4), moist

Existing Ground

3:1 4:1 6:1 6:1 6:1 6:1 4:1 3:1

Ⓐ Ⓑ

COASTAL PLAIN: Tan-orange, loose, clayey silty and silty fine SAND (A-2-4, A-2-5), trace mica, red-orange mottling, wet (Middendorf Formation)

356+50.00

520
510
500
490
480
470
460

Ⓐ ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist

Ⓑ UNDIVIDED COASTAL PLAIN: Tan, loose, silty fine SAND (A-2-4), moist

Ⓒ Red-tan, very loose, moderately plastic clayey fine SAND (A-2-6), trace of organic matter, moist

Existing Ground

3:1 4:1 6:1 6:1 6:1 6:1 4:1 3:1

Ⓐ Ⓑ Ⓒ

COASTAL PLAIN: Gray-red-tan, very stiff, silty CLAY (A-7-6), trace mica, moist (Pinehurst Formation)

356+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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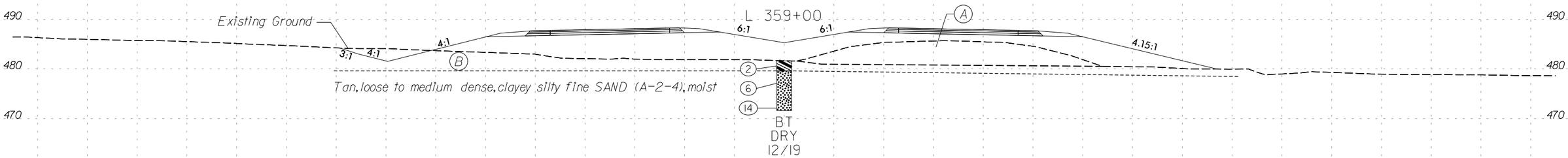
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	56

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

510
500
490
480
470
460

(A) *ROADWAY EMBANKMENT:* Orange-brown, medium dense, silty slightly plastic clayey SAND (A-2-6), trace mica, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown-tan, soft, fine sandy CLAY (A-6), moist



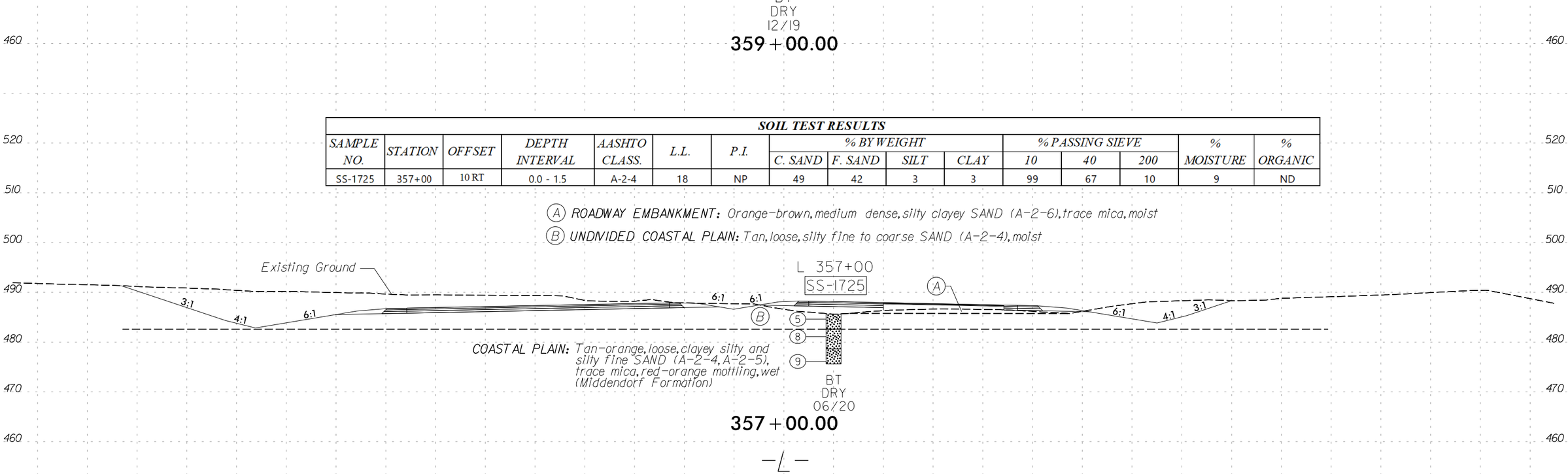
BT
DRY
12/19

359+00.00

SOIL TEST RESULTS															
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1725	357+00	10 RT	0.0 - 1.5	A-2-4	18	NP	49	42	3	3	99	67	10	9	ND

520
510
500
490
480
470
460

(A) *ROADWAY EMBANKMENT:* Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist
(B) *UNDIVIDED COASTAL PLAIN:* Tan, loose, silty fine to coarse SAND (A-2-4), moist



BT
DRY
06/20

357+00.00

—L—

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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6/23/16

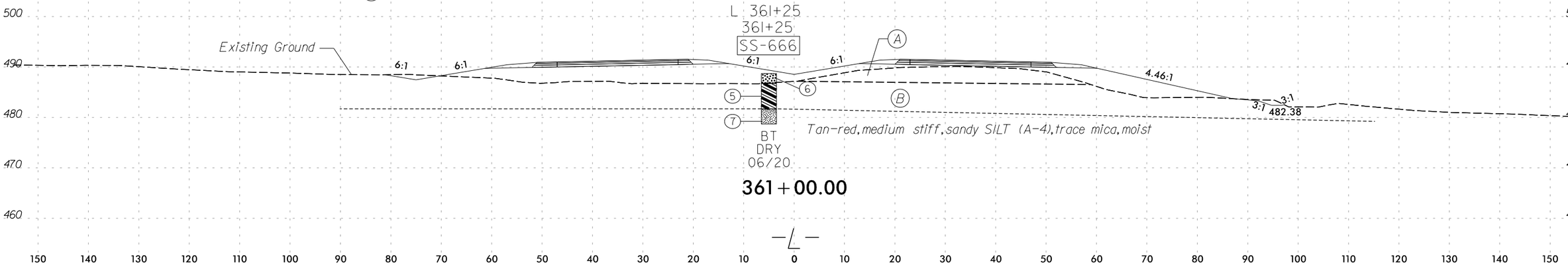
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	57

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-666	361+25	5 LT	0.0 - 1.5	A-2-4	18	NP	61	27	3	10	100	64	15	5	ND

(A) ROADWAY EMBANKMENT: Orange-brown, medium dense, silty clayey SAND (A-2-6), trace mica, moist

(B) COASTAL PLAIN: Tan-brown, medium stiff, sandy CLAY (A-6), trace mica, moist (Middendorf Formation)



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6/23/16

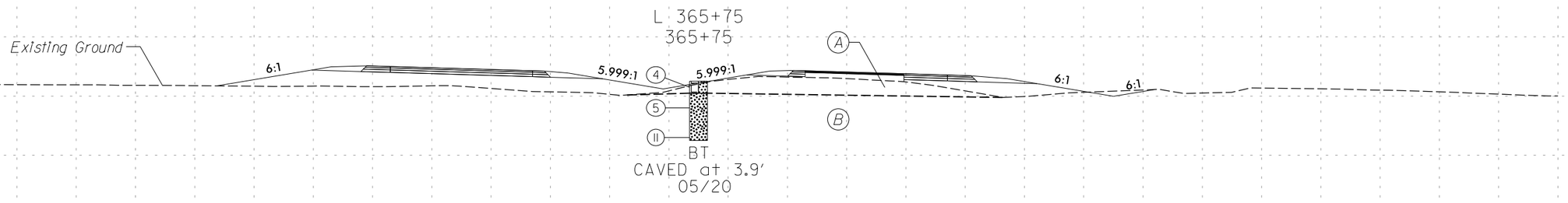
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	58

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

530 520 510 500 490 480 470

Ⓐ *ROADWAY EMBANKMENT* Brown-black, loose, silty fine to coarse SAND (A-2-4), moist

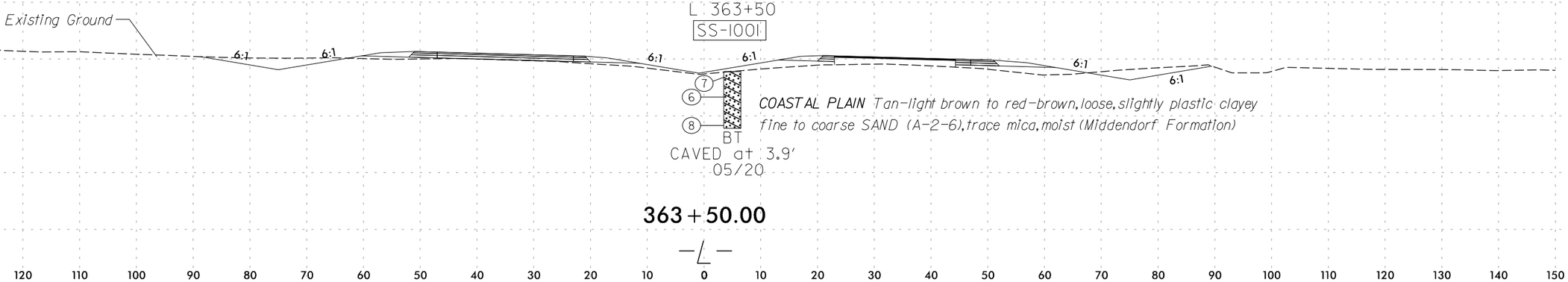
Ⓑ *COASTAL PLAIN* Red-tan, loose to medium dense, clayey silty coarse SAND (A-2-5), trace mica, white lenses of clay, trace of organic matter, moist (Middendorf Formation)



365 + 50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1001	363+50	5' RT	3.5 - 5.0	A-2-6 (0)	32	14	61.0	14.0	1.0	24.0	97.0	52.0	25.0	20.0	ND



COASTAL PLAIN Tan-light brown to red-brown, loose, slightly plastic clayey fine to coarse SAND (A-2-6), trace mica, moist (Middendorf Formation)

363 + 50.00

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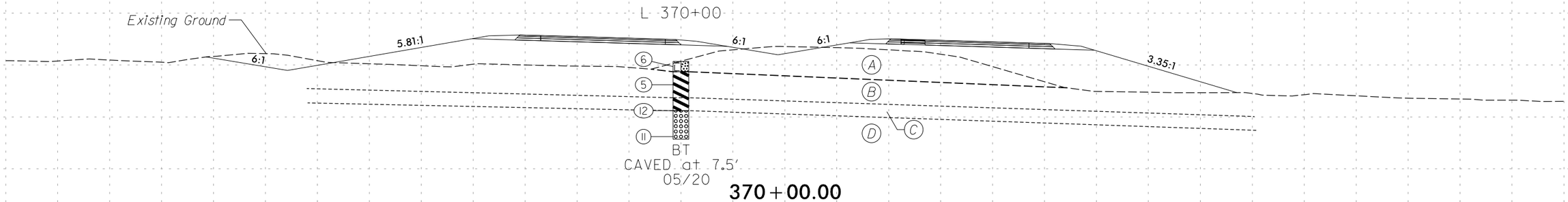
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	59

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

530 520 510 500 490 480 470

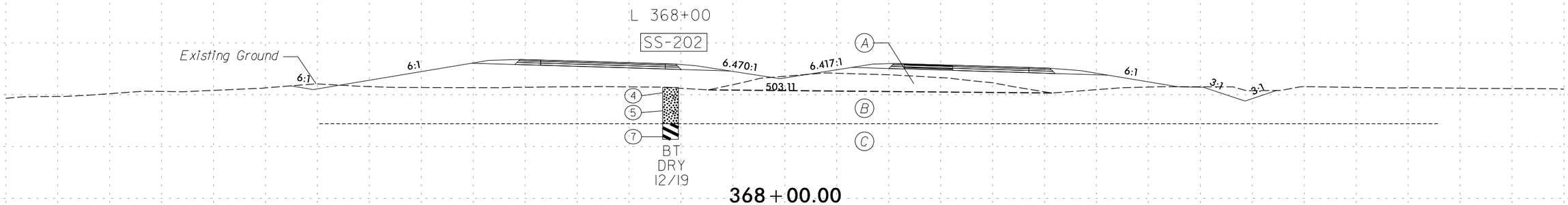
(A) *ROADWAY EMBANKMENT* Brown-red, loose, clayey silty coarse SAND (A-2-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown-red, loose, clayey silty coarse SAND (A-2-5), moist
(C) *COASTAL PLAIN* White, stiff, silty CLAY (A-7-6), trace mica, moist (Middendorf Formation)
(D) Tan-orange to white, medium dense, coarse SAND (A-1-b), lenses of clay, moist



370+00.00

SOIL TEST RESULTS															
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-202	368+00	22' LT	3.5 - 5.0	A-2-4	34	8	44.0	30.0	2.0	24.0	99.0	76.0	27.0	16.5	ND

(A) *ROADWAY EMBANKMENT* Brown-red, loose, clayey silty coarse SAND (A-2-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist
(C) Tan-brown, medium stiff, fine to coarse sandy silty CLAY (A-7-6), moist



368+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	60

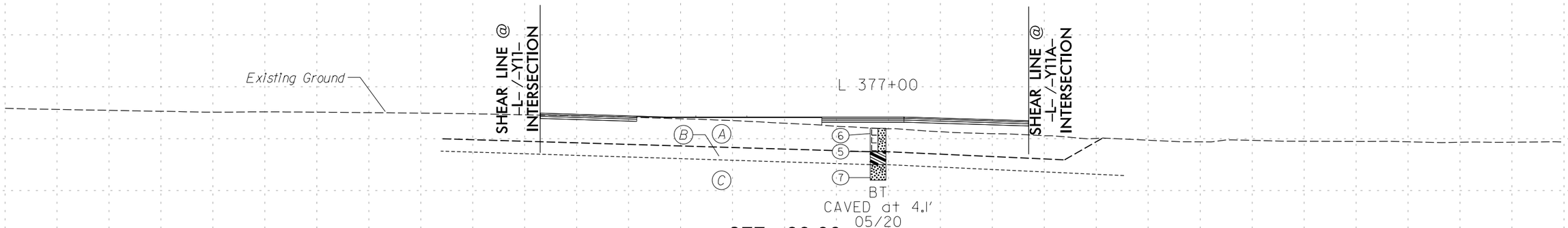
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

530 520 510 500 490 480 470

(A) *ROADWAY EMBANKMENT* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist

(B) *COASTAL PLAIN* Tan-orange, medium stiff, fine to coarse sandy CLAY (A-6), trace gravel, moist (Middendorf Formation)

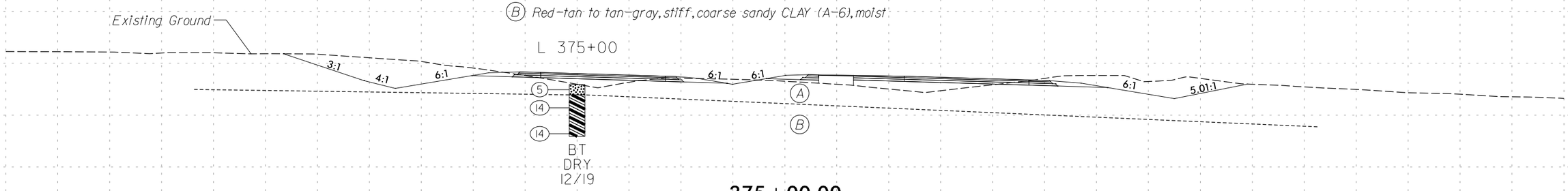
(C) Orange, loose, silty fine to coarse SAND (A-2-4), lenses of clay, moist



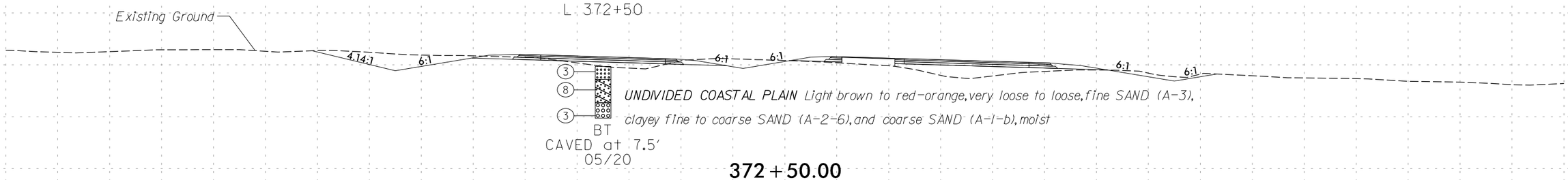
377+00.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-tan, loose, silty fine to coarse SAND (A-2-4), moist

(B) Red-tan to tan-gray, stiff, coarse sandy CLAY (A-6), moist



375+00.00



UNDIVIDED COASTAL PLAIN Light brown to red-orange, very loose to loose, fine SAND (A-3), clayey fine to coarse SAND (A-2-6), and coarse SAND (A-1-b), moist

372+50.00

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mgray

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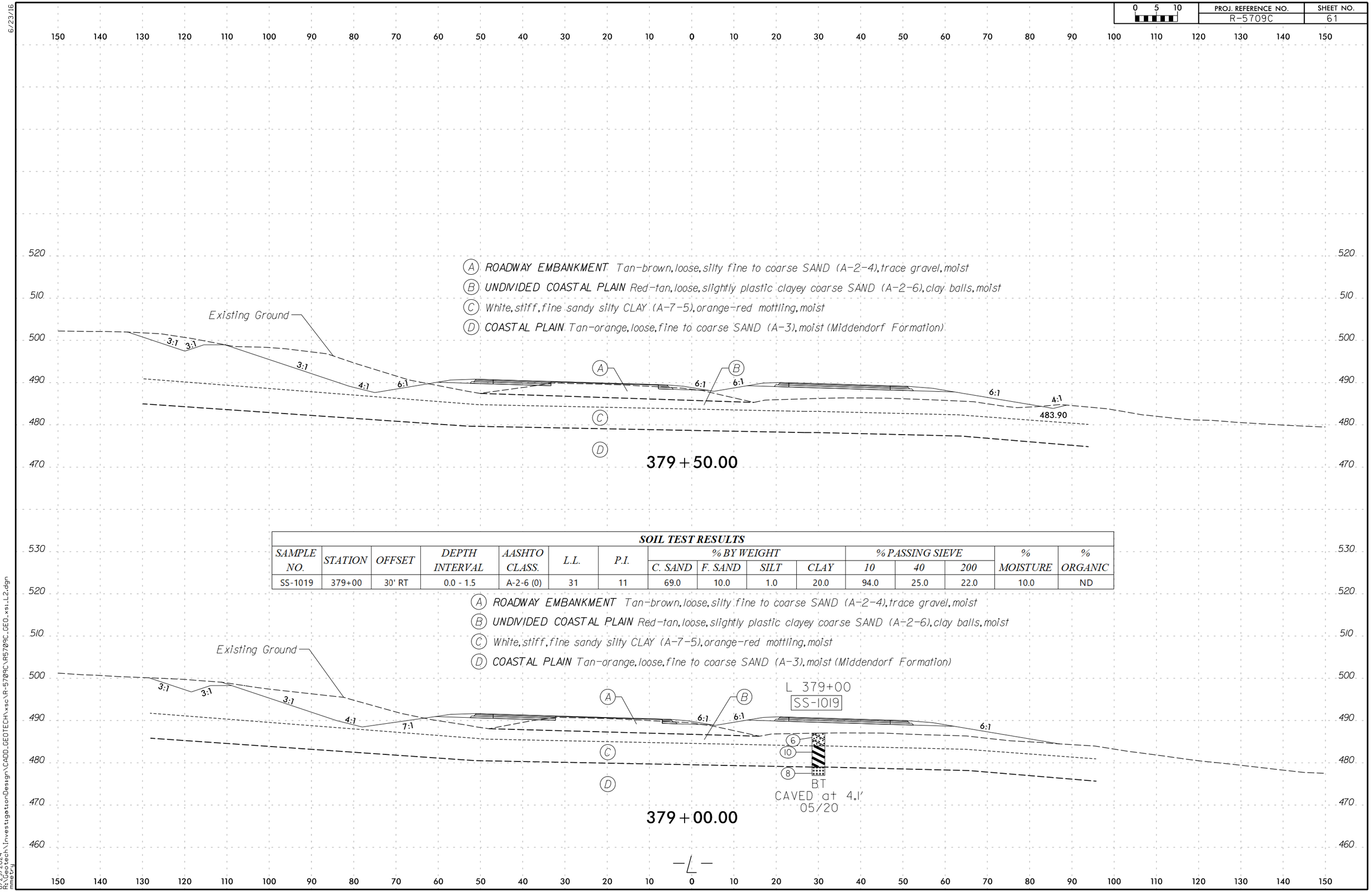
	R-5709C	61



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1019	379+00	30' RT	0.0 - 1.5	A-2-6 (0)	31	11	69.0	10.0	1.0	20.0	94.0	25.0	22.0	10.0	ND

A ROADWAY EMBANKMENT Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist
B UNDIVIDED COASTAL PLAIN Red-tan, loose, slightly plastic clayey coarse SAND (A-2-6), clay balls, moist
C White, stiff, fine sandy silty CLAY (A-7-5), orange-red mottling, moist
D COASTAL PLAIN Tan-orange, loose, fine to coarse SAND (A-3), moist (Middendorf Formation)

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mmesay

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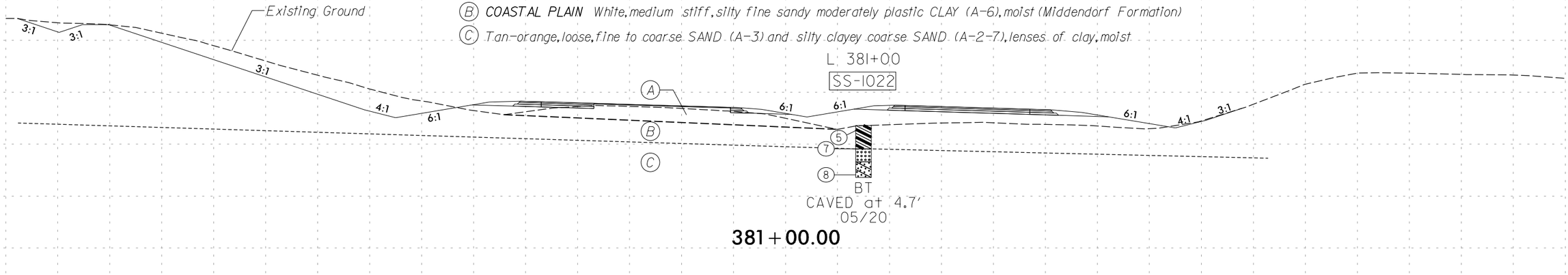
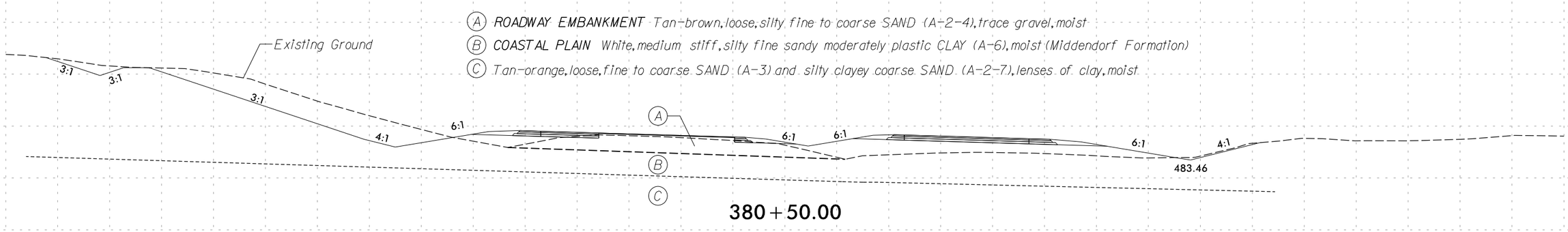
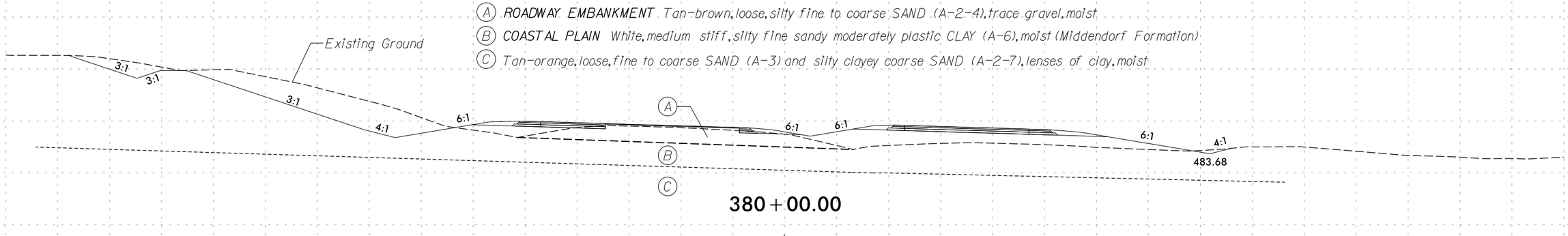
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	62

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1022	381+00	15' RT	0.0 - 1.5	A-6 (8)	40	16	23.0	17.0	20.0	40.0	100.0	86.0	60.0	18.0	ND







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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	63

170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

500 490 480 470

3:1 3:1 3:1 4:1 6:1 6:1 6:1 6:1 6:1 4:1 3:1

Existing Ground

(A) *ROADWAY EMBANKMENT* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-orange to gray-tan-white, very loose to medium dense, slightly plastic clayey silty coarse SAND (A-2-4), moist

382+50.00

500 490 480 470

3:1 3:1 3:1 4:1 6:1 6:1 6:1 6:1 6:1 4:1 3:1

Existing Ground

(A) *ROADWAY EMBANKMENT* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist

(B) *COASTAL PLAIN* White, medium stiff, silty fine sandy moderately plastic CLAY (A-6), moist (Middendorf Formation)

(C) Tan-orange, loose, fine to coarse SAND (A-3) and silty clayey coarse SAND (A-2-7), lenses of clay, moist

382+00.00

510 500 490 480 470

3:1 3:1 3:1 4:1 6:1 6:1 6:1 6:1 6:1 4:1 3:1

Existing Ground

(A) *ROADWAY EMBANKMENT* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist

(B) *COASTAL PLAIN* White, medium stiff, silty fine sandy moderately plastic CLAY (A-6), moist (Middendorf Formation)

(C) Tan-orange, loose, fine to coarse SAND (A-3) and silty clayey coarse SAND (A-2-7), lenses of clay, moist

381+50.00 ℄

170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	64

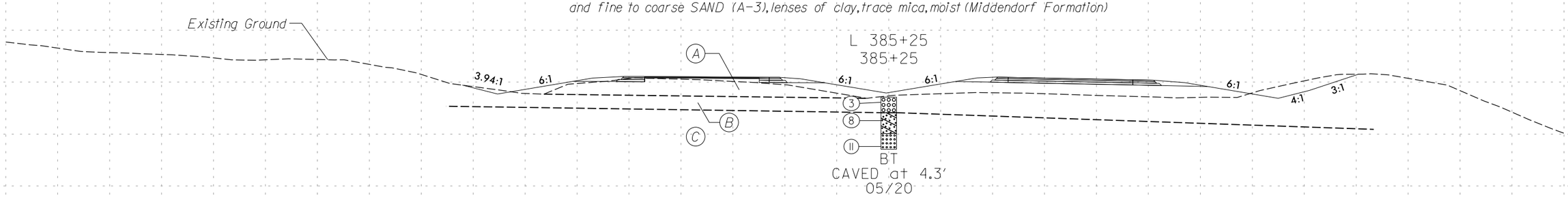
170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

510 500 490 480 470 460 450

Ⓐ *ROADWAY EMBANKMENT* *Tan, medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), little mica, little gravel, moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Tan-orange, very loose, coarse SAND (A-1-b), moist*

Ⓒ *COASTAL PLAIN* *Red-orange to tan-orange, loose to medium dense, clayey coarse SAND (A-2-7), moist and fine to coarse SAND (A-3), lenses of clay, trace mica, moist (Middendorf Formation)*



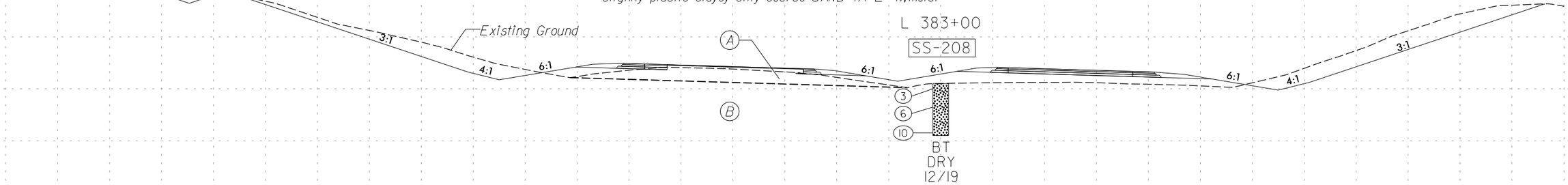
385+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-208	383+00	10' RT	3.5 - 5.0	A-2-4	23	6	56.0	21.0	3.0	20.0	99.0	58.0	23.2	17.5	ND

Ⓐ *ROADWAY EMBANKMENT* *Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Tan-orange to gray-tan-white, very loose to medium dense, slightly plastic clayey silty coarse SAND (A-2-4), moist*



383+00.00

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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	65

0 5 10

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

510 500 490 480 470 460 450 440

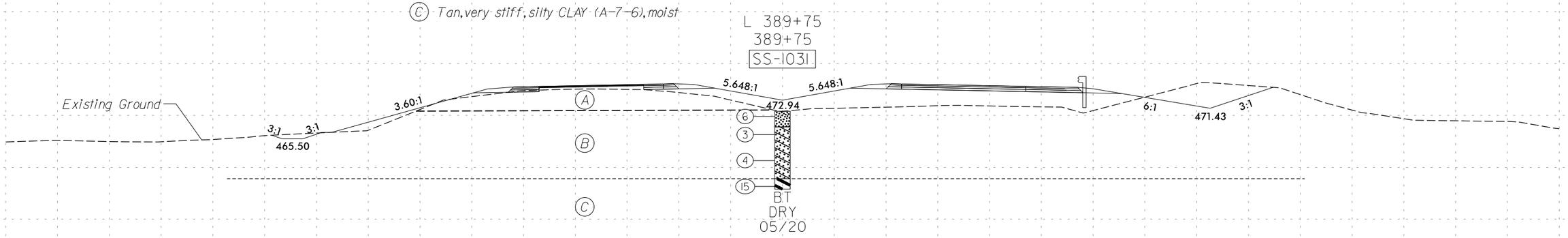
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1031	389+75	0' CL	0 - 1.5	A-2-4	22	NP	35.0	45.0	2.0	18.0	100.0	94.0	21.0	11.0	ND

(A) ROADWAY EMBANKMENT Tan, medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), little mica, little gravel, moist

(B) COASTAL PLAIN Tan-orange, very loose to loose, clayey fine to coarse SAND (A-2-6), moist (Middendorf Formation)

(C) Tan, very stiff, silty CLAY (A-7-6), moist



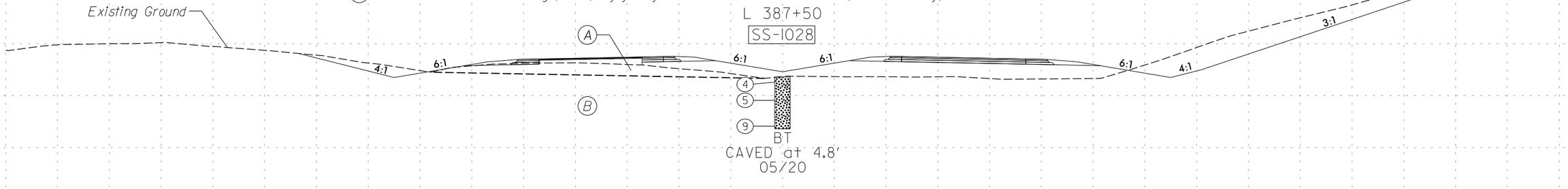
389+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1028	387+50	0' CL	0.0 - 1.5	A-2-4	20	NP	53.0	29.0	8.0	10.0	98.0	71.0	18.0	12.0	ND

(A) ROADWAY EMBANKMENT Tan, medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), little mica, little gravel, moist

(B) COASTAL PLAIN Tan-orange, loose, clayey silty fine to coarse SAND (A-2-4), lenses of clay, moist to wet (Middendorf Formation)



387+50.00

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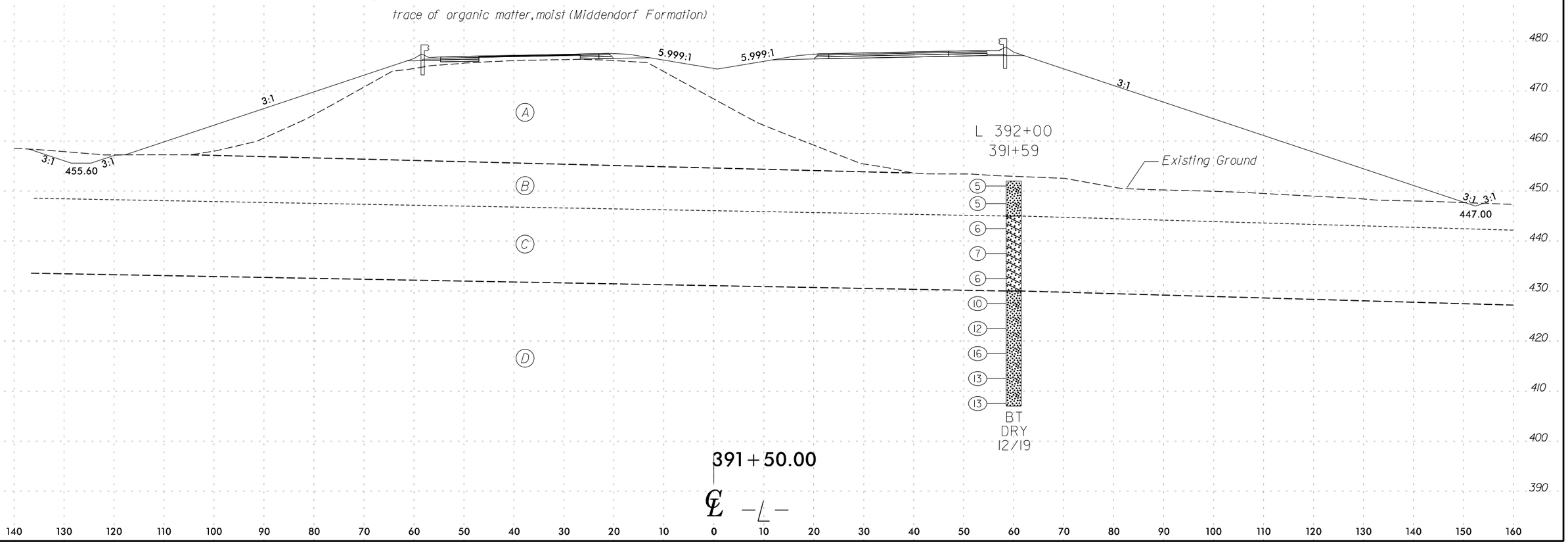
Ⓐ ROADWAY EMBANKMENT Tan, medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), little mica, little gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Black-tan-brown, loose, silty fine SAND (A-2-5), trace of organic matter, moist

Ⓒ Red-tan, loose, silty clayey coarse SAND (A-2-6), trace of organic matter, moist

Ⓓ COASTAL PLAIN White-tan-orange to red-orange-white, medium dense, clayey silty fine to coarse SAND (A-2-5), trace of organic matter, moist (Middendorf Formation)



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0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	67

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-11	394+33	27' LT	33.5 - 35.0	A-6 (1)	36	13	46.0	15.0	8.2	30.4	99.0	64.0	38.6	19.8	5.7

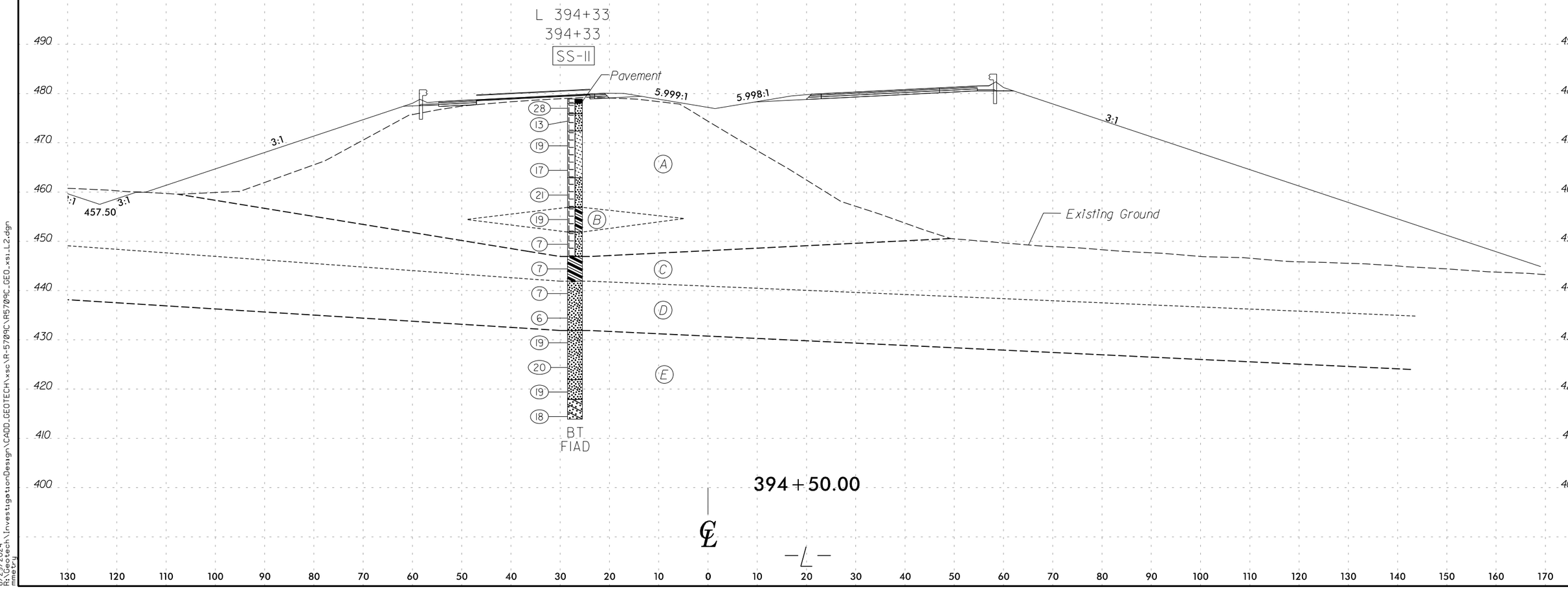
(A) ROADWAY EMBANKMENT Tan to red to gray, loose to medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5) and silty clayey fine to coarse SAND (A-2-7), little mica, little gravel, little wood fragments, moist

(B) Brown-gray, very stiff, sandy CLAY (A-6), trace of organic matter, moist

(C) UNDIVIDED COASTAL PLAIN Brown, medium stiff, silty sandy slightly plastic CLAY (A-6), little wood fragments, moist

(D) Brown-orange, loose, silty SAND (A-2-4), trace mica, moist

(E) COASTAL PLAIN Tan-white, orange-tan, and light gray, medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5) and clayey coarse SAND (A-2-7), trace mica, trace to little gravel, moist (Middendorf Formation)



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	68

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

500 490 480 470 460

Ⓐ *UNDIVIDED COASTAL PLAIN* *Red-tan-gray, loose, clayey silty fine SAND (A-2-4), lenses of clay, moist*

Ⓑ *Gray, very stiff, coarse sandy silty CLAY (A-7-6), moist*

Existing Ground

3:1

477.72

6:1

5.872:1

5.850:1

479.60

L 399+00

6:1

3:1

4:1

Ⓐ

Ⓑ

4
8
19

BT
DRY
12/19

399+00.00

Ⓐ *ROADWAY EMBANKMENT* *Red-brown and black, very loose to loose, clayey silty fine to coarse SAND (A-2-5), moist*

Ⓑ *COASTAL PLAIN* *Tan-orange and white-orange, loose to medium dense, clayey fine SAND (A-2-6) and silty fine to coarse SAND (A-2-4), trace mica, moist (Middendorf Formation)*

L 396+67
396+67

Existing Ground

4.48:1

6:1

6:1

3:1

Ⓐ

Ⓑ

6
2
4
11
9
10
12
12

BT
DRY
12/19

396+50.00

500 490 480 470 460 450 440 430 420

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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mmoya

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	69

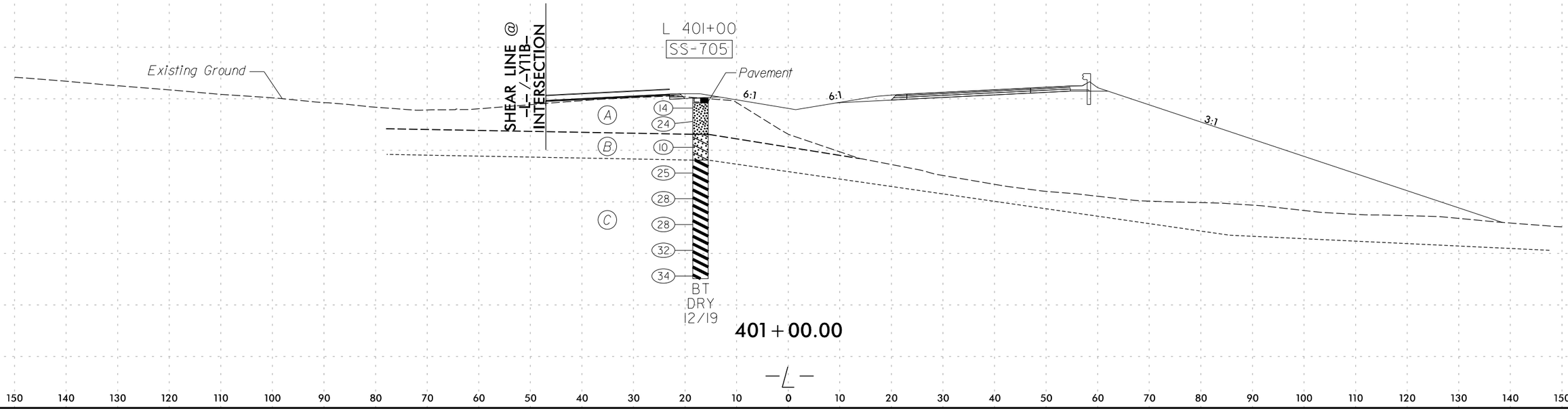
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-705	401+00	35' RT	13.5 - 15.0	A-7-5(20)	23	7	0.4	7.3	11.8	80.5	100.0	100.0	92.3	17.5	ND

(A) *UNDIVIDED COASTAL PLAIN Tan-orange, medium dense, silty fine SAND (A-2-4), lenses of clay, moist*

(B) *COASTAL PLAIN Red-orange, medium dense, clayey fine to coarse SAND (A-2-6), lenses of clay, moist (Middendorf Formation)*

(C) *Tan-gray-purple, very stiff to hard, silty highly plastic CLAY (A-7-5), moist*



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	70

(A) *ROADWAY EMBANKMENT* Orange-gray to tan-orange to red to brown, medium dense, silty clayey fine to coarse SAND (A-2-6, A-2-7) and silty SAND (A-2-4), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Light brown-brown, loose, silty SAND (A-2-4), trace of organic matter, moist

(C) Light gray, stiff, fine sandy CLAY (A-6), moist

(D) White, medium dense, silty clayey SAND (A-2-6), moist

L 403+00

Pavement

Existing Ground

3:1

3:1

3:1

459.15

5.999:1

5.999:1

20

23

21

24

13

5

6

10

12

A

B

C

D

BT

FIAD

SHEAR LINE @ -L- /-Y11D- INTERSECTION

403+00.00

-L-

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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	71

SOIL TEST RESULTS

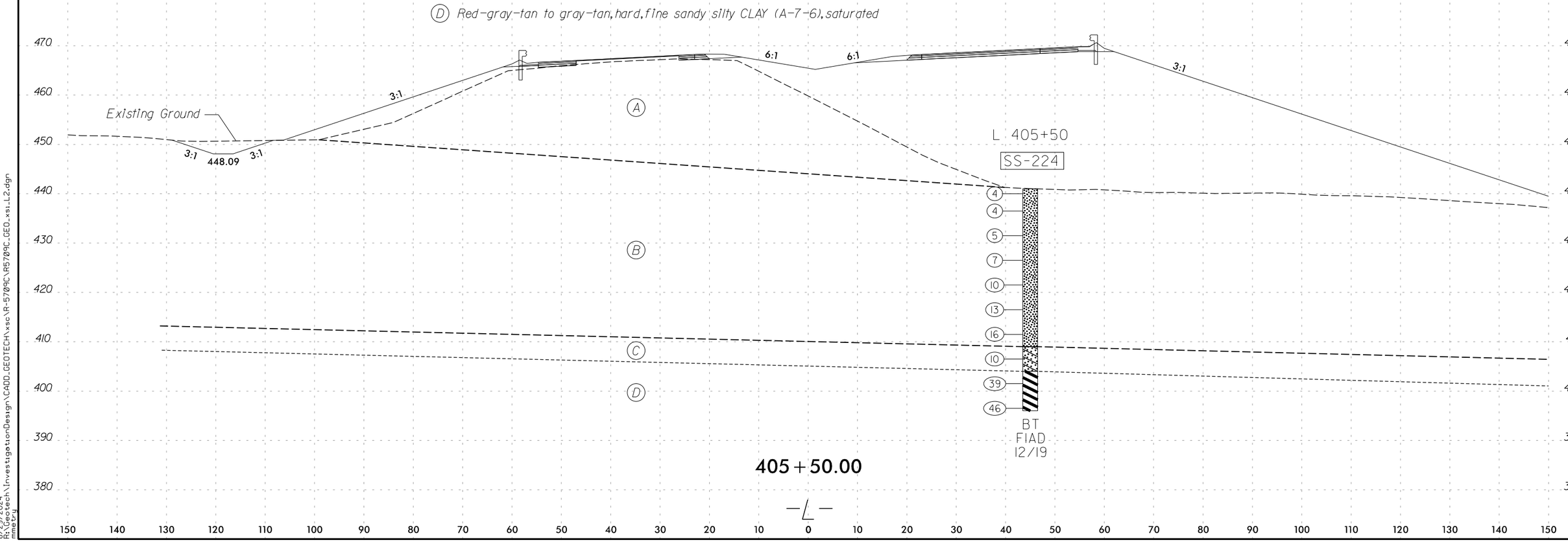
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-224	405+50	45' RT	3.5 - 5.0	A-2-4	36	10	54.0	14.0	8.0	24.0	100.0	60.0	32.0	14.2	ND

Ⓐ *ROADWAY EMBANKMENT Orange-gray to tan-orange to red to brown, medium dense, silty clayey fine to coarse SAND (A-2-6, A-2-7) and silty SAND (A-2-4), little gravel, moist*

Ⓑ *UNDIVIDED COASTAL PLAIN Brown-tan to red-tan to tan-orange-white, loose to medium dense, silty slightly plastic clayey fine to coarse SAND (A-2-4), moist*

Ⓒ *COASTAL PLAIN Purple-white-orange, medium dense, clayey silty fine to coarse SAND (A-2-6), moist (Middendorf Formation)*

Ⓓ *Red-gray-tan to gray-tan, hard, fine sandy silty CLAY (A-7-6), saturated*



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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	72

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

490

480

470

460

450

440

430

420

410

400

390

(A) *ROADWAY EMBANKMENT* Orange-gray to tan-orange to red to brown, medium dense, silty clayey fine to coarse SAND (A-2-6, A-2-7) and silty SAND (A-2-4), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose, clayey silty fine to coarse SAND (A-2-5), trace of organic matter, wet

(C) *COASTAL PLAIN* Orange to gray to tan-orange-white, loose to medium dense, silty clayey fine to coarse SAND (A-2-7) and silty fine to coarse SAND (A-2-4), red to orange mottling, clay balls, iron concretions, trace to little gravel, wet to saturated (Middendorf Formation)

Existing Ground

3:1

3:1

3:1

443.99

5.999:1

5.999:1

3:1

(A)

(B)

(C)

L 407+00

4
4
8
10
9
11
11
11

BT
DRY
06/20

407+00.00

—L—

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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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	73

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

Ⓐ *ROADWAY EMBANKMENT* Brown-orange, medium dense to dense, slightly plastic clayey fine to coarse SAND (A-2-6), moist

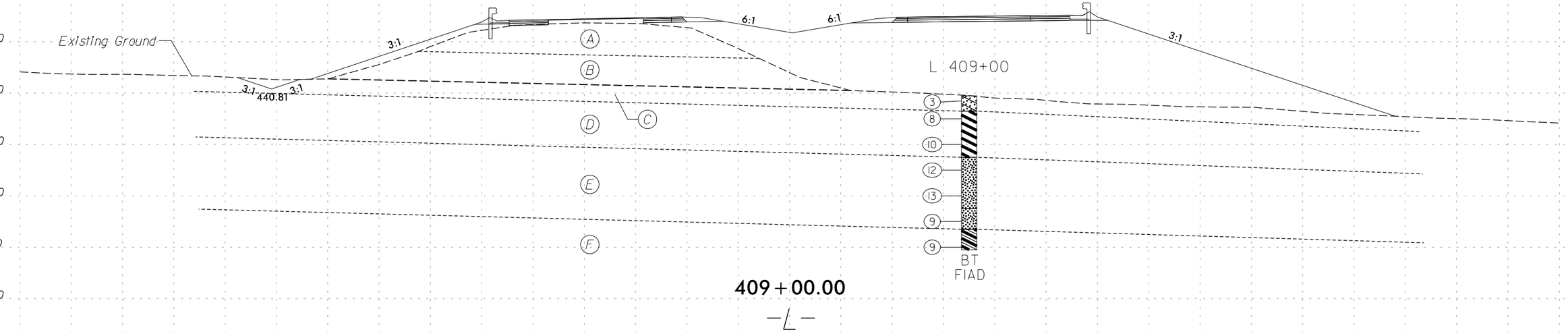
Ⓑ Brown, stiff, sandy silty CLAY (A-7-5), moist

Ⓒ *COASTAL PLAIN* Red-orange, very loose, clayey fine to coarse SAND (A-2-6), clay balls, trace gravel, wet (Middendorf Formation)

Ⓓ Gray, stiff, sandy silty CLAY (A-7-6), orange mottling, trace mica, lenses of coarse sand, wet

Ⓔ Tan-orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), clay balls, lenses of clay, iron concretions, trace gravel, wet

Ⓕ Tan-gray, stiff, sandy CLAY (A-6), orange mottling, lenses of clay, wet



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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	74

SOIL TEST RESULTS

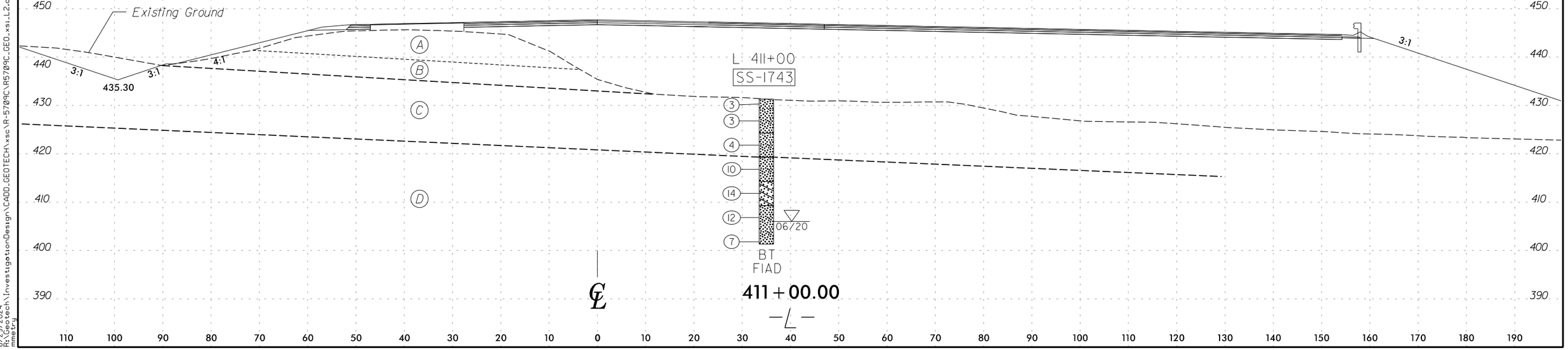
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1743	411+00	35' RT	0.0 -1.5	A-2-4	23	7	50.0	25.0	3.0	22.0	100.0	69.0	26.6	17.5	ND

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense to dense, slightly plastic clayey fine to coarse SAND (A-2-6), moist

(B) Brown, stiff, sandy silty CLAY (A-7-5), moist

(C) *UNDIVIDED COASTAL PLAIN* Dark brown to brown-red to red, very loose to loose, slightly plastic clayey silty fine to coarse SAND (A-2-4) and clayey silty fine SAND (A-2-5), trace gravel, moist to wet

(D) *COASTAL PLAIN* Tan-orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5) and silty clayey coarse SAND (A-2-7), clay balls, trace to little gravel, wet to saturated



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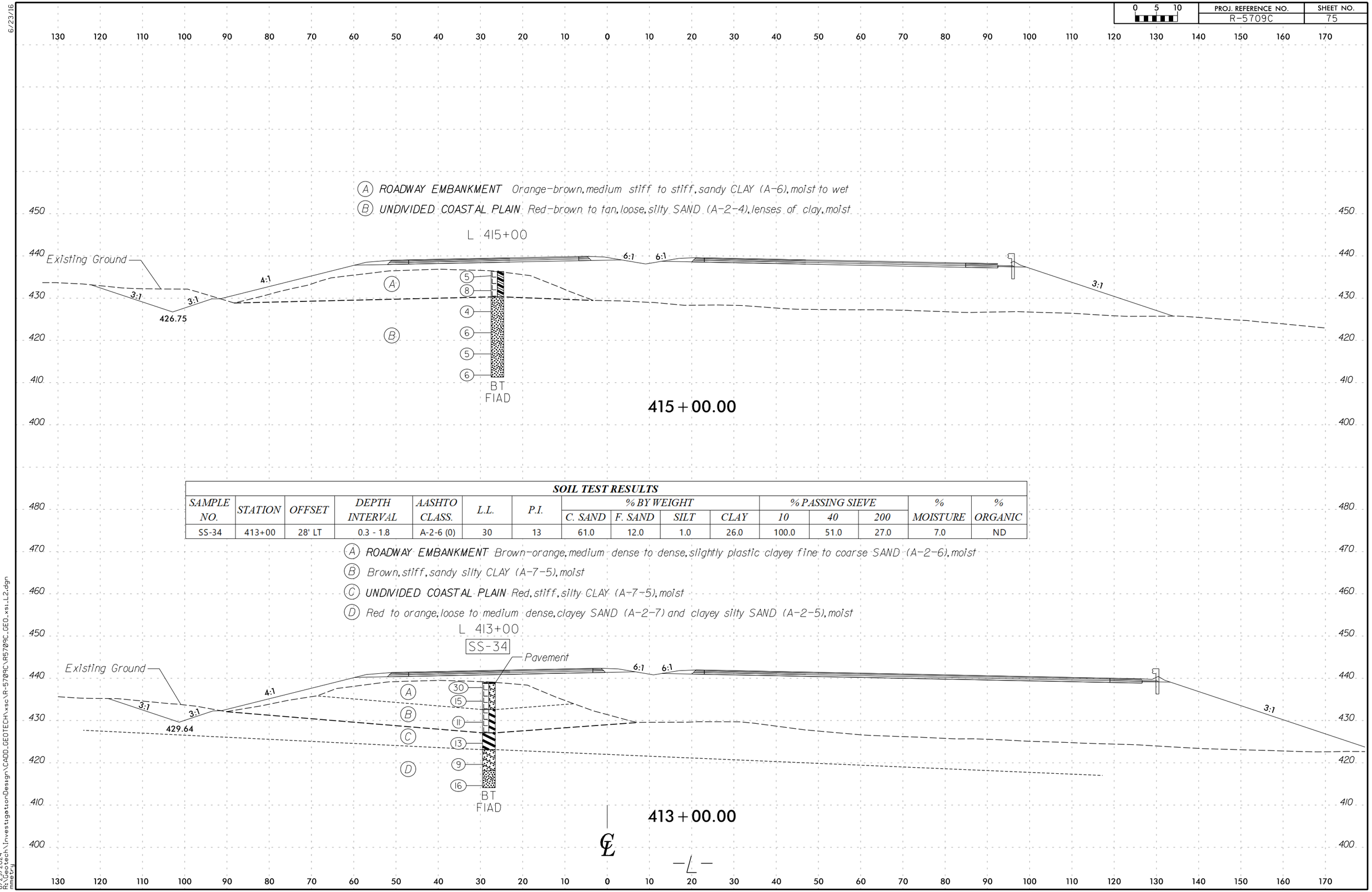
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	75



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	76

SOIL TEST RESULTS

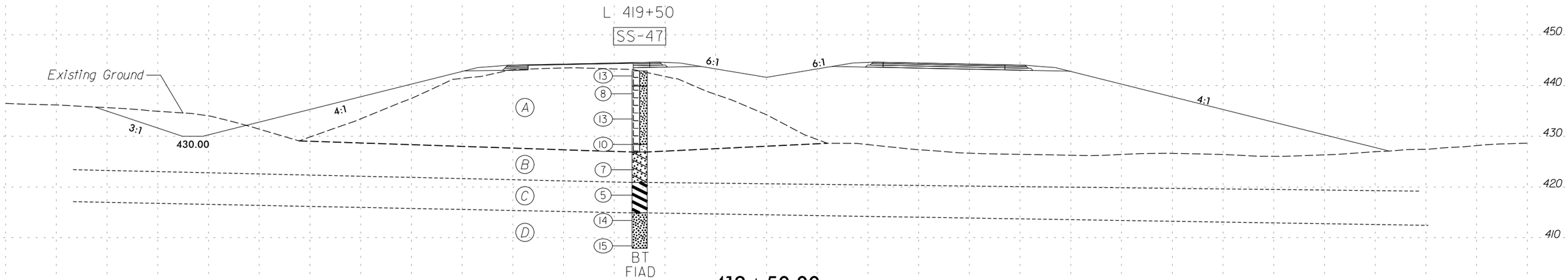
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-47	419+50	25' LT	14.5 - 15.0	A-2-4	33	8	46.3	26.3	9.1	18.2	97.0	66.0	27.0	56.0	7.0

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moderately organic, (wood fragments), moist

(B) *UNDIVIDED COASTAL PLAIN* Gray to orange, loose, clayey SAND (A-2-6), moist

(C) Light gray to orange, medium stiff, silty CLAY (A-7-6), trace mica, moist

(D) White to orange, medium dense, clayey silty SAND (A-2-5), moist

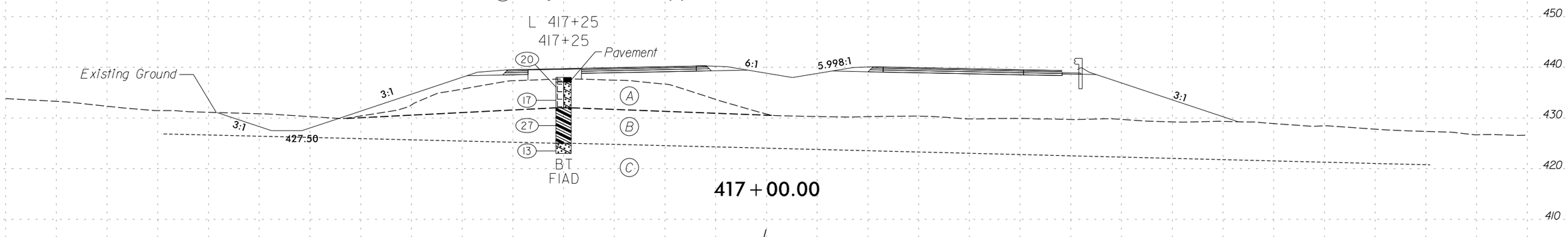


419+50.00

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, clayey SAND (A-2-7), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Light gray-orange, very stiff, fine sandy CLAY (A-6), moist

(C) Orange, medium dense, clayey SAND (A-2-7), moist



417+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	77

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

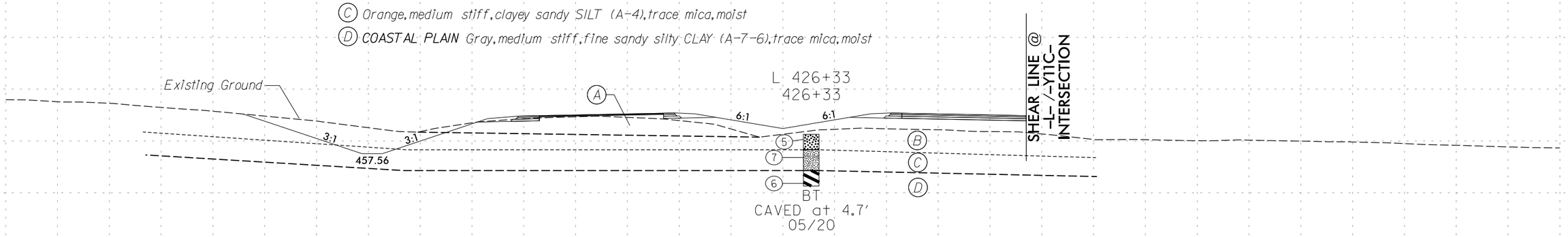
490 480 470 460 450 440 430

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty fine to coarse SAND (A-2-5), trace of organic matter, moist

(C) Orange, medium stiff, clayey sandy SILT (A-4), trace mica, moist

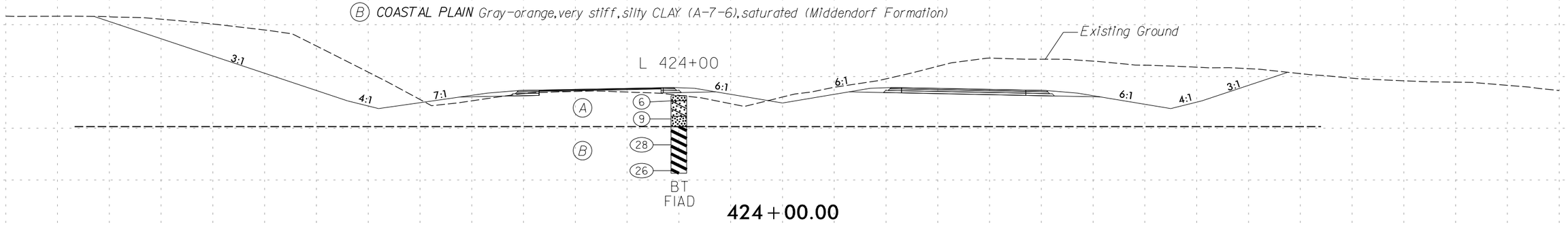
(D) *COASTAL PLAIN* Gray, medium stiff, fine sandy silty CLAY (A-7-6), trace mica, moist



426+50.00

(A) *UNDIVIDED COASTAL PLAIN* Tan-orange to gray to orange to orange, loose, silty SAND (A-2-4) and clayey fine SAND (A-2-7), moist

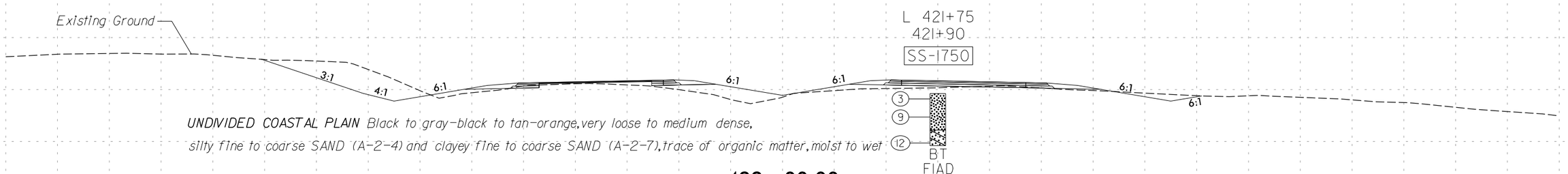
(B) *COASTAL PLAIN* Gray-orange, very stiff, silty CLAY (A-7-6), saturated (Middendorf Formation)



424+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1750	421+90	30' RT	0.0 - 1.5	A-2-4	30	NP	36.1	42.4	9.4	12.1	100.0	76.0	21.5	32.1	2.5



UNDIVIDED COASTAL PLAIN Black to gray-black to tan-orange, very loose to medium dense, silty fine to coarse SAND (A-2-4) and clayey fine to coarse SAND (A-2-7), trace of organic matter, moist to wet

422+00.00

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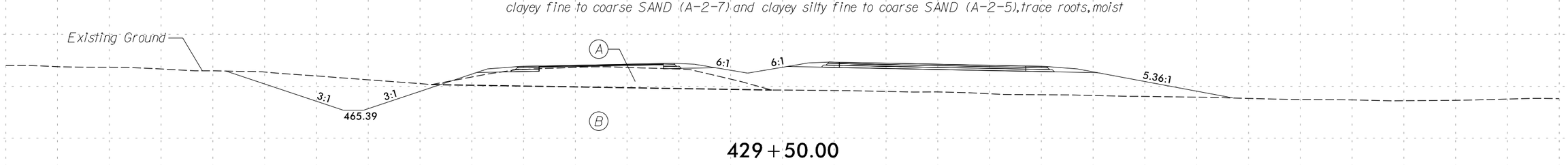
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	78

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

500 490 480 470 460 450

Ⓐ *ROADWAY EMBANKMENT* *Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist*

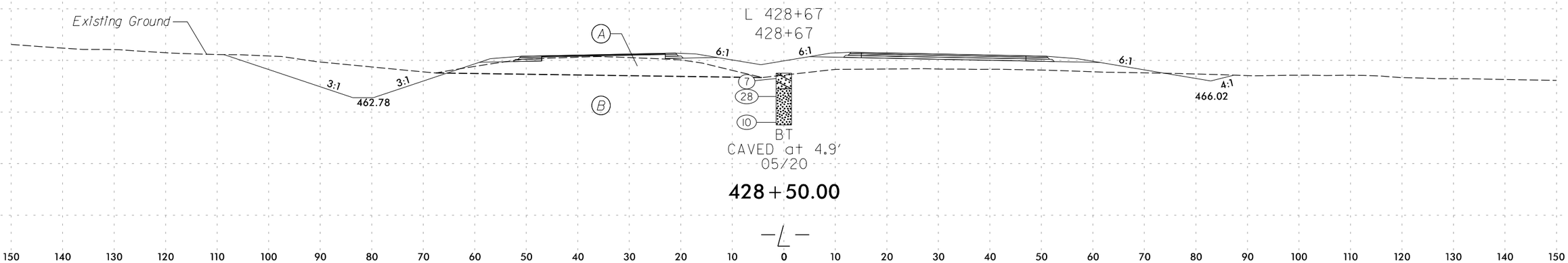
Ⓑ *UNDIVIDED COASTAL PLAIN* *Brown-orange to red, loose to medium dense, clayey fine to coarse SAND (A-2-7) and clayey silty fine to coarse SAND (A-2-5), trace roots, moist*



429+50.00

Ⓐ *ROADWAY EMBANKMENT* *Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Brown-orange to red, loose to medium dense, clayey fine to coarse SAND (A-2-7) and clayey silty fine to coarse SAND (A-2-5), trace roots, moist*



428+50.00

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	79

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

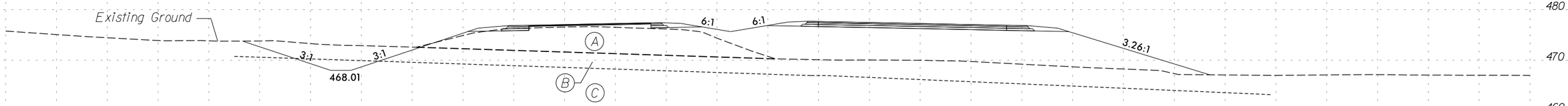
500 490 480 470 460 450

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty coarse SAND (A-2-4), moist

(C) Gray-tan-brown, stiff, coarse sandy silty moderately plastic CLAY (A-7-5), lenses of sand, moist

(D) White-tan, loose, silty coarse SAND (A-2-4), moist



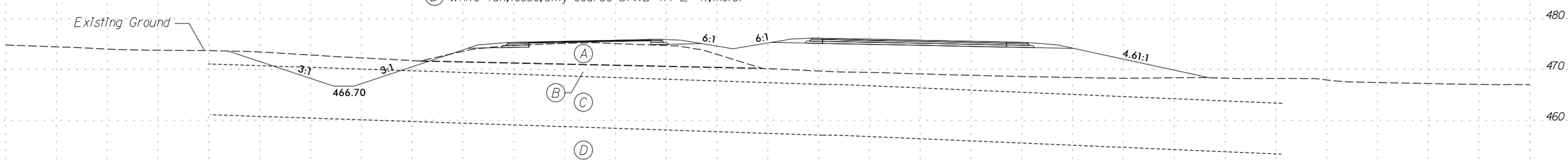
430+50.00

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty coarse SAND (A-2-4), moist

(C) Gray-tan-brown, stiff, coarse sandy silty moderately plastic CLAY (A-7-5), lenses of sand, moist

(D) White-tan, loose, silty coarse SAND (A-2-4), moist



430+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	80

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

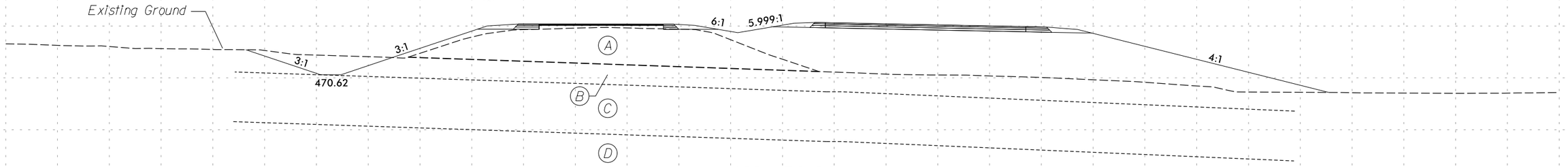
500 490 480 470 460 450

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty coarse SAND (A-2-4), moist

(C) Gray-tan-brown, stiff, coarse sandy silty moderately plastic CLAY (A-7-5), lenses of sand, moist

(D) White-tan, loose, silty coarse SAND (A-2-4), moist



431+50.00

520 510 500 490 480 470 460 450 440

SOIL TEST RESULTS

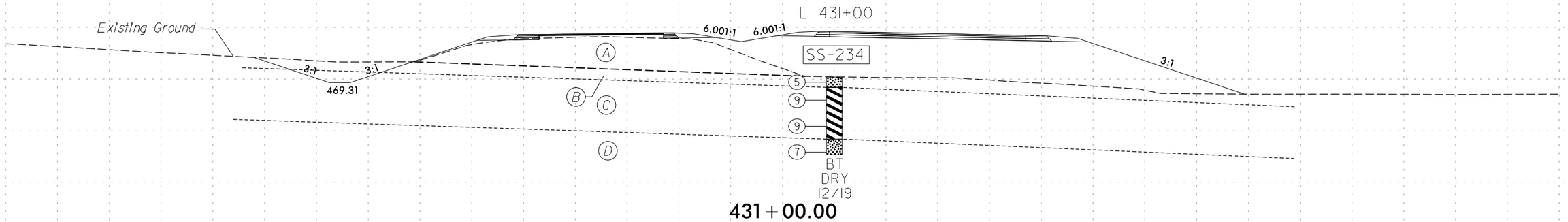
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-234	431+00	10' RT	3.5 - 5.0	A-7-5(20)	59	25	2.0	2.0	31.0	65.0	100.0	99.0	96.6	27.5	ND

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty coarse SAND (A-2-4), moist

(C) Gray-tan-brown, stiff, coarse sandy silty moderately plastic CLAY (A-7-5), lenses of sand, moist

(D) White-tan, loose, silty coarse SAND (A-2-4), moist



431+00.00

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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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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	81

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

510 500 490 480 470 460 450

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *ARTIFICIAL FILL* Tan-brown, loose, silty fine to coarse SAND (A-2-4), moist

(C) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty clayey fine to coarse SAND (A-2-6), moist

(D) *COASTAL PLAIN* White, stiff, clayey fine sandy SILT (A-4), trace mica, moist (Middendorf Formation)

Existing Ground

SHEAR LINE @ -L- /-Y12_ INTERSECTION

L 435+00

3:1

(A) (B) (C) (D)

5 4 6 9

BT
CAVED at 7.2'
05/20

435+00.00

(A) *ROADWAY EMBANKMENT* Light orange to orange to brown-dark brown, loose to medium dense, slightly plastic clayey silty SAND (A-2-4), trace mica, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown to red-tan to white-orange, loose to medium dense, silty fine to coarse SAND (A-2-4) and fine to coarse SAND (A-3), little gravel, partially cemented, iron staining, clay balls, trace mica, moist

Existing Ground

3.56:1 6.003:1 6.002:1 4:1

L 433+00

(A) (B)

4 23 9 11

BT
DRY
05/20

433+00.00

-L-

8/29/2024
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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	82

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

520 510 500 490 480 470 460

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *ARTIFICIAL FILL* Brown-black, loose, silty fine to coarse SAND (A-2-4), trace of organic matter, trace gravel, moist
(C) *UNDIVIDED COASTAL PLAIN* Red, very loose, clayey silty fine to coarse SAND (A-2-5), moist
(D) *COASTAL PLAIN* White-orange, medium stiff, clayey fine sandy SILT (A-4), moist (Pinehurst Formation)

3:1 6:1 488.22 6.116:1 6.106:1 488.46

SHEAR LINE @ -L- / -Y12A- INTERSECTION

Existing Ground

Y12A 17+00
437+77

(5) (WOH) (5)

BT
DRY
05/20

438+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *ARTIFICIAL FILL* Brown-black, loose, silty fine to coarse SAND (A-2-4), trace of organic matter, moist
(C) *UNDIVIDED COASTAL PLAIN* Orange, loose, clayey silty fine to coarse SAND (A-2-5) and coarse SAND (A-1-b), moist
(D) *COASTAL PLAIN* Orange, loose, clayey silty coarse SAND (A-2-5), lenses of clay, moist (Middendorf Formation)

L 437+00
436+93

(B) (5) (4) (5) (10)

4:1 6:1 487.80 6:1 6:1

SHEAR LINE @ -L- / -Y12A- INTERSECTION

Existing Ground

BT
DRY
05/20

437+00.00

-L-

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	83

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

510 500 490 480 470 460

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

9:1 6:1 6:1 3.37:1

COASTAL PLAIN Tan to orange, loose to medium dense, moderately plastic clayey fine to coarse SAND (A-2-6) and silty fine to coarse SAND (A-2-4), red mottling, moist (Pinehurst Formation)

440+00.00

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

8:1 6:1 6:1 3.39:1

UNDIVIDED COASTAL PLAIN Tan-brown to gray-tan-orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-4), trace wood fragments, trace mica, trace clay, moist

439+50.00

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Tan-brown to gray-tan-orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-4), trace wood fragments, trace mica, trace clay, moist

L 439+00

6:1 6:1 6:1 3.49:1 Existing Ground

④ ⑥ ⑩ ⑪

BT
DRY
12/19

439+00.00

8/29/2024
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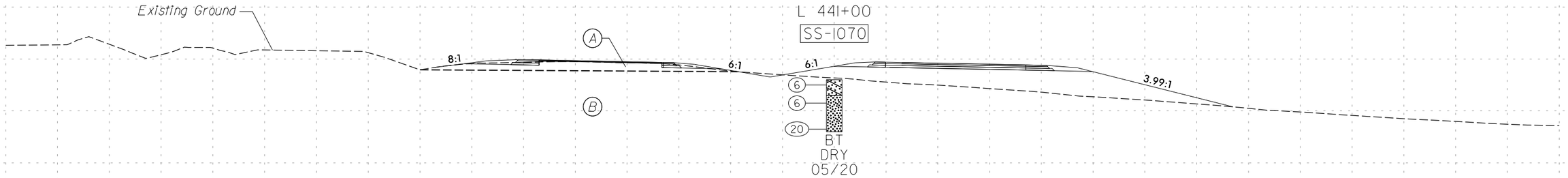
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	84

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1070	441+00	10' RT	0.0 - 1.5	A-2-6 (1)	36	16	44.4	29.1	0.3	26.1	100.0	62.0	26.4	16.0	ND

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *COASTAL PLAIN* Tan to orange, loose to medium dense, moderately plastic clayey fine to coarse SAND (A-2-6) and silty fine to coarse SAND (A-2-4), red mottling, moist (Pinehurst Formation)



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	85

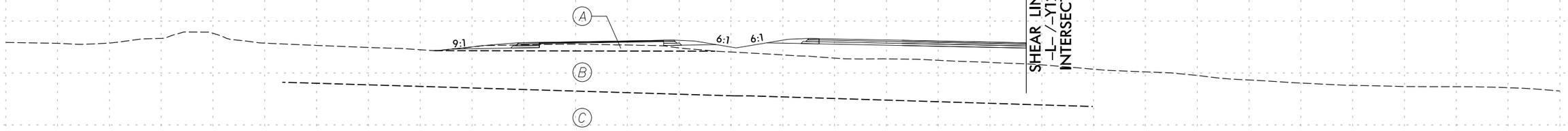
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

500 490 480 470 460 450 510

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

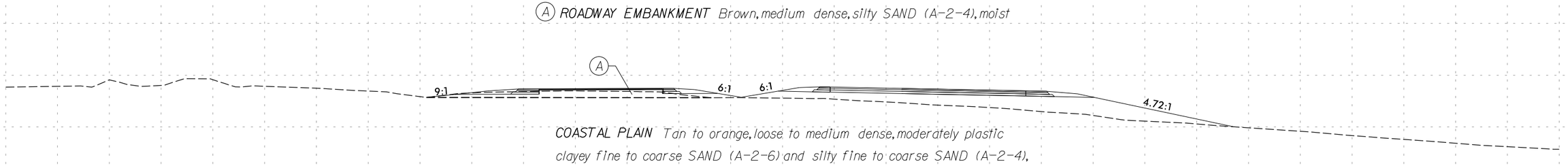
(B) *UNDIVIDED COASTAL PLAIN* Brown-black, very loose, clayey silty SAND (A-2-5), trace of organic matter, moist

(C) *COASTAL PLAIN* Orange, loose, fine to coarse SAND (A-3), moist (Pinehurst Formation)



442 + 50.00

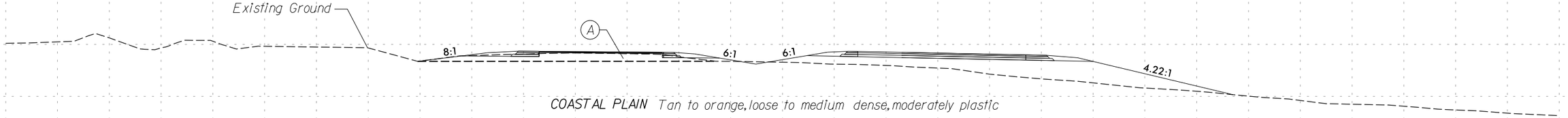
(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist



COASTAL PLAIN Tan to orange, loose to medium dense, moderately plastic clayey fine to coarse SAND (A-2-6) and silty fine to coarse SAND (A-2-4), red mottling, moist (Pinehurst Formation)

442 + 00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist



COASTAL PLAIN Tan to orange, loose to medium dense, moderately plastic clayey fine to coarse SAND (A-2-6) and silty fine to coarse SAND (A-2-4), red mottling, moist (Pinehurst Formation)

441 + 50.00

—L—

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

500 490 480 470 460 510

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	86

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

500
490
480
470
460
450
440

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown to orange, very loose to loose, clayey silty fine to coarse SAND (A-2-4), coarse SAND (A-1-b), and clayey fine to coarse SAND (A-2-7), trace of organic matter, moist

L 445+00

Existing Ground

5:1 6:1 6:1 4.54:1

(A)
(B)

6
2
WOH
WOH
5

BT
DRY
05/20

445+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown-black, very loose, clayey silty SAND (A-2-5), trace of organic matter, moist

(C) *COASTAL PLAIN* Orange, loose, fine to coarse SAND (A-3), moist (Pinehurst Formation)

L 443+15
443+15

Existing Ground

8:1 6:1 6:1

SHEAR LINE @ -L- /-Y12A- INTERSECTION

(A)
(B)
(C)

2
WOH
8

BT
DRY
05/20

443+00.00

-L-

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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mmercy

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	87

0 5 10

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

480 470 460 450 500 490 480 470 460 450 440 500 490 480 470 460 450 440

Existing Ground

3:1 4:1 6:1

L 449+00

Pavement

6:1 6:1

3.26:1

18
7
11
6

BT
FIAD

UNDIVIDED COASTAL PLAIN Brown to tan-orange-purple, loose to medium dense, silty SAND (A-2-4), little gravel, trace mica, moist

449+00.00

(A) ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Tan to brown, medium dense, silty fine to coarse SAND (A-2-4), trace mica, moist

Existing Ground

SHEAR LINE @ -L- /-Y13- INTERSECTION

A

B

SHEAR LINE @ -L- /-Y14- INTERSECTION

Y14 15+00
447+43

Pavement

21
11
12

BT
FIAD

447+50.00

(A) ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Tan, very loose, silty fine to coarse SAND (A-2-4), moist

(C) Tan-brown, medium stiff, fine to coarse sandy CLAY (A-6), moist

(D) Tan-brown to tan-white, loose, silty fine SAND (A-2-4), moist

Existing Ground

A

3:1 6:1 6:1

3:1 471.56

B

L 446+50

4:1

C

D

2
5
8
9

BT
DRY
12/19

446+50.00

-L-

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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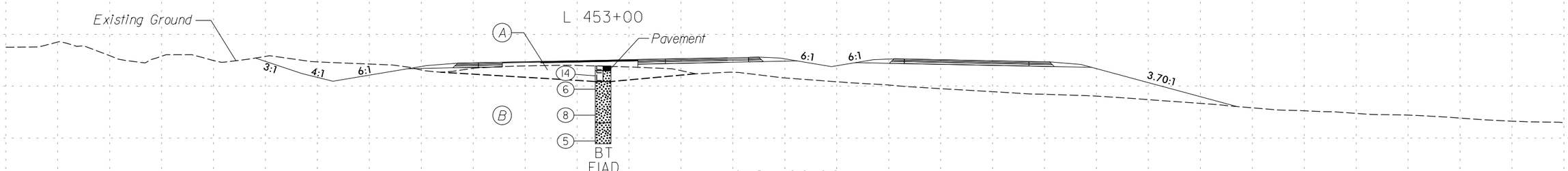
mmercy

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	88

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

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-orange, loose, clayey silty SAND (A-2-4, A-2-5), trace mica, moist to saturated



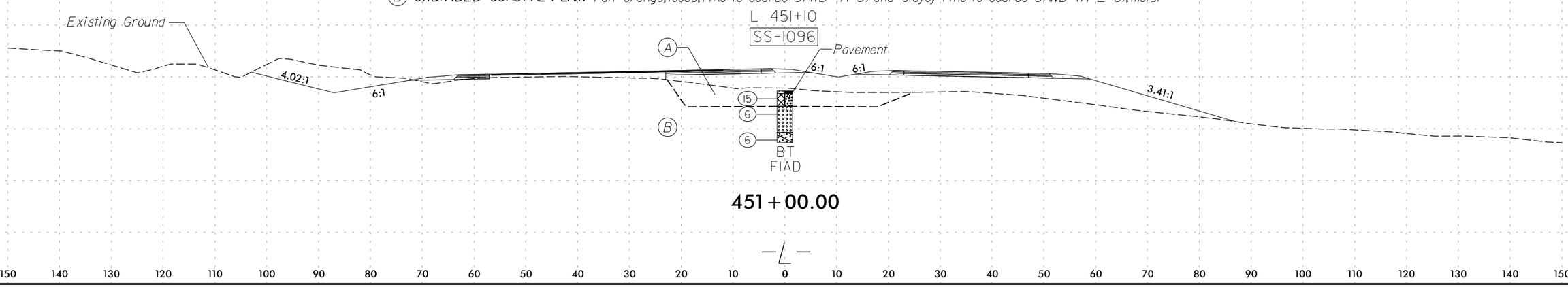
453+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS - 1096	451+10	0' CL	0.0 - 2.0	A-2-4	19	NP	66.0	24.0	2.0	8.0	99.0	52.0	10.9	5.8	ND

(A) *ARTIFICIAL FILL* Tan-brown, medium dense, silty fine to coarse SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-orange, loose, fine to coarse SAND (A-3) and clayey fine to coarse SAND (A-2-6), moist



451+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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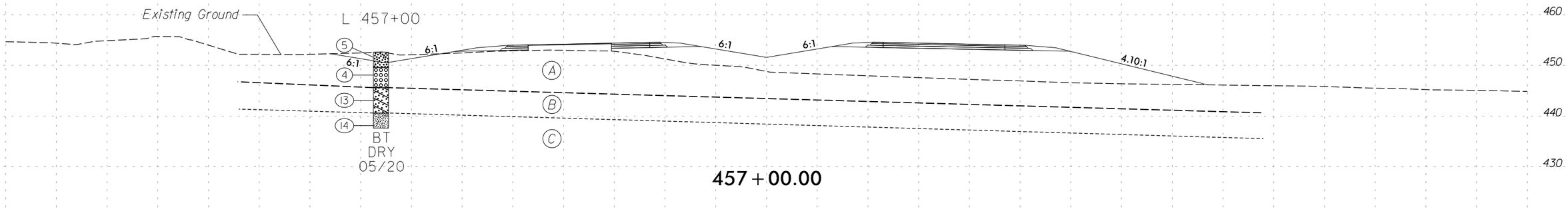
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	89

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

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, clayey silty fine to coarse SAND (A-2-5) and coarse SAND (A-1-b), trace organic matter, trace gravel, moist

Ⓑ *COASTAL PLAIN* Orange, medium dense, clayey coarse SAND (A-2-7), little gravel, clay balls, moist (Pinehurst Formation)

Ⓒ Red-orange, stiff, fine sandy SILT (A-4), trace gravel, iron concretions, mottled, moist



457+00.00

SOIL TEST RESULTS

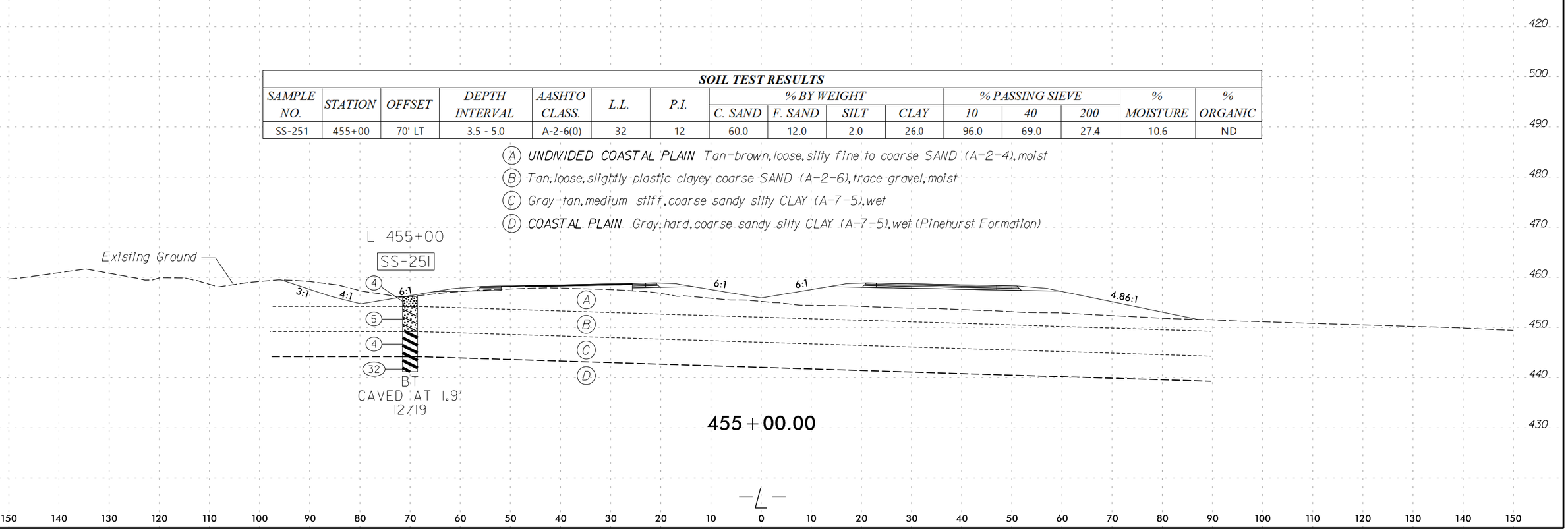
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-251	455+00	70' LT	3.5 - 5.0	A-2-6(0)	32	12	60.0	12.0	2.0	26.0	96.0	69.0	27.4	10.6	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, silty fine to coarse SAND (A-2-4), moist

Ⓑ Tan, loose, slightly plastic clayey coarse SAND (A-2-6), trace gravel, moist

Ⓒ Gray-tan, medium stiff, coarse sandy silty CLAY (A-7-5), wet

Ⓓ *COASTAL PLAIN* Gray, hard, coarse sandy silty CLAY (A-7-5), wet (Pinehurst Formation)



455+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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mmsley

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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	90

0 5 10

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

460 450 440 430 470 420

Existing Ground

L 464+70

464+70

5 5 6

451.60

6:1

5.998:1 6:1 5:1

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN Dark brown to tan-orange, loose, silty fine to coarse SAND (A-2-4) and clayey fine to coarse SAND (A-2-7), trace of organic matter, mottled, moist

464+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-tan to red, loose, silty coarse SAND (A-2-4), trace gravel, moist

(B) Tan-brown-orange, stiff, coarse sandy CLAY (A-7-5), moist

Existing Ground

L 463+00

6 6 10

3:1 4:1 6:1

5.998:1 6:1 6:1

A

B

BT
DRY
12/19

463+00.00

Existing Ground

L 461+00

6:1 6:1 6:1 6:1 4.50:1

4 3 3

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN Tan-orange to red, very loose to loose, fine to coarse SAND (A-3) and silty fine to coarse SAND (A-2-5), moist

461+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to orange-brown, loose to medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

L 459+00

Pavement

A 22 7 10

6:1 448.51 6:1

6.002:1 6.002:1

450.14

4:1

B

BT
FIAD

459+00.00

—L—

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	91

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

470
460
450
440
430
420
410

(A) *UNDIVIDED COASTAL PLAIN* Tan-orange, very loose to loose, fine SAND (A-3) and silty clayey fine to coarse SAND (A-2-7), trace gravel, moist

(B) *COASTAL PLAIN* Orange-white, very loose to medium dense, silty fine to coarse SAND (A-2-4), trace gravel, clay balls, mottled, moist (Middendorf Formation)

Existing Ground

L 469+00

3:1 4:1 6:1 6:1 6:1 4.53:1

(A) (B)

(2) (4) (3) (13)

BT
DRY
05/20

469+00.00

(A) *COASTAL PLAIN* Tan, loose, clayey coarse SAND (A-2-6), moist (Pinehurst Formation)

(B) Tan-orange to white, stiff, silty CLAY (A-7-6), lenses of sand, iron concretions, moist

(C) Red-orange to white, medium dense, silty coarse SAND (A-1-b), moist

Existing Ground

5.45:1 6:1

L 467+20
467+20

SHEAR LINE @ -L-/-Y15- INTERSECTION

(A) (B) (C)

(7) (11) (13)

BT
DRY
05/20

467+00.00

—L—

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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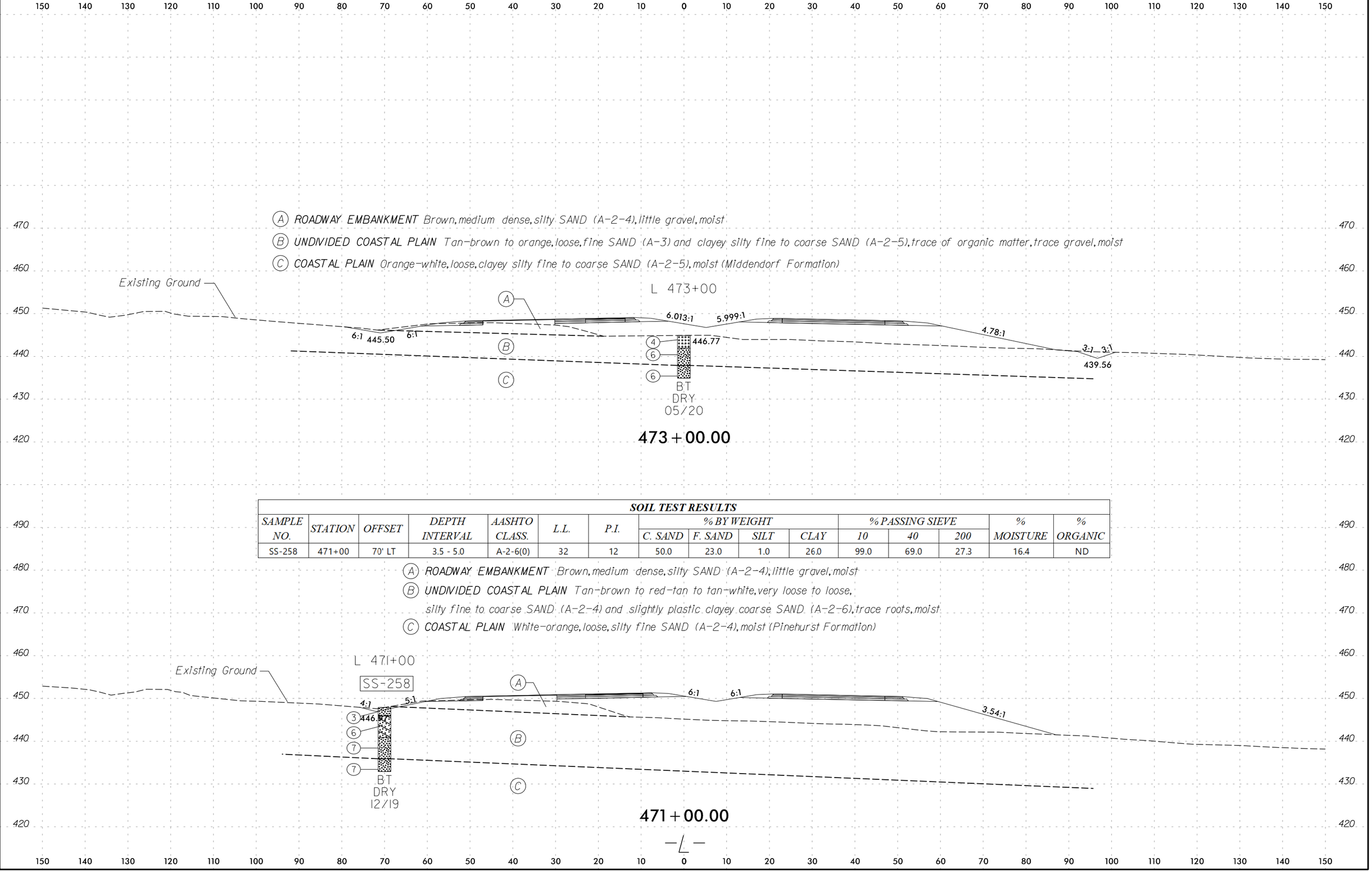
mmoy

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	92



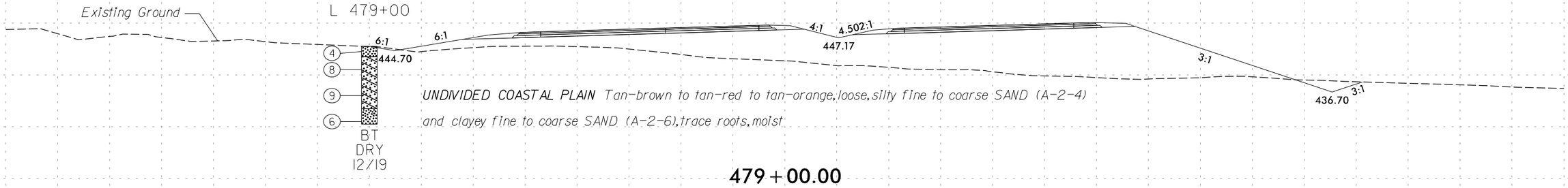
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-258	471+00	70' LT	3.5 - 5.0	A-2-6(0)	32	12	50.0	23.0	1.0	26.0	99.0	69.0	27.3	16.4	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	93

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

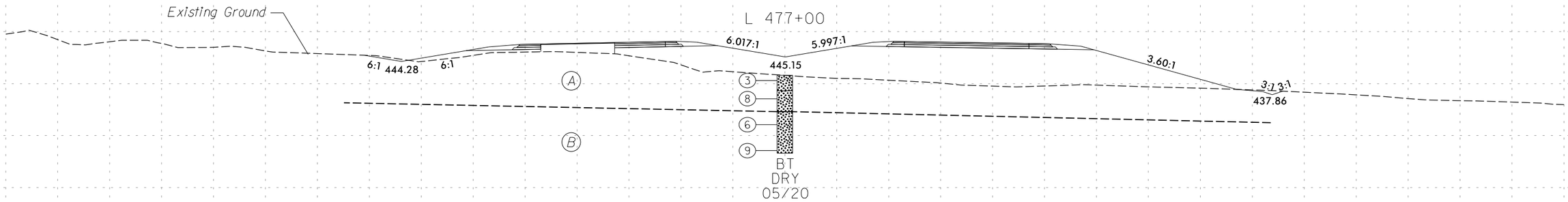


UNDIVIDED COASTAL PLAIN *Tan-brown to tan-red to tan-orange, loose, silty fine to coarse SAND (A-2-4) and clayey fine to coarse SAND (A-2-6), trace roots, moist*

479+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* *Tan-orange, very loose to loose, clayey silty fine to coarse SAND (A-2-4, A-2-5), trace gravel, moist*

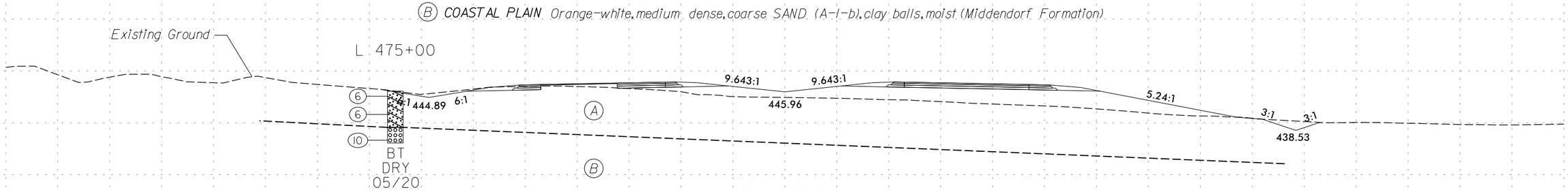
Ⓑ *COASTAL PLAIN* *Orange-white, loose, silty fine SAND (A-2-4), mottled, moist (Middendorf Formation)*



477+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* *Tan-orange to white, loose, silty clayey fine to coarse SAND (A-2-6), red iron concretions, moist*

Ⓑ *COASTAL PLAIN* *Orange-white, medium dense, coarse SAND (A-1-b), clay balls, moist (Middendorf Formation)*



475+00.00

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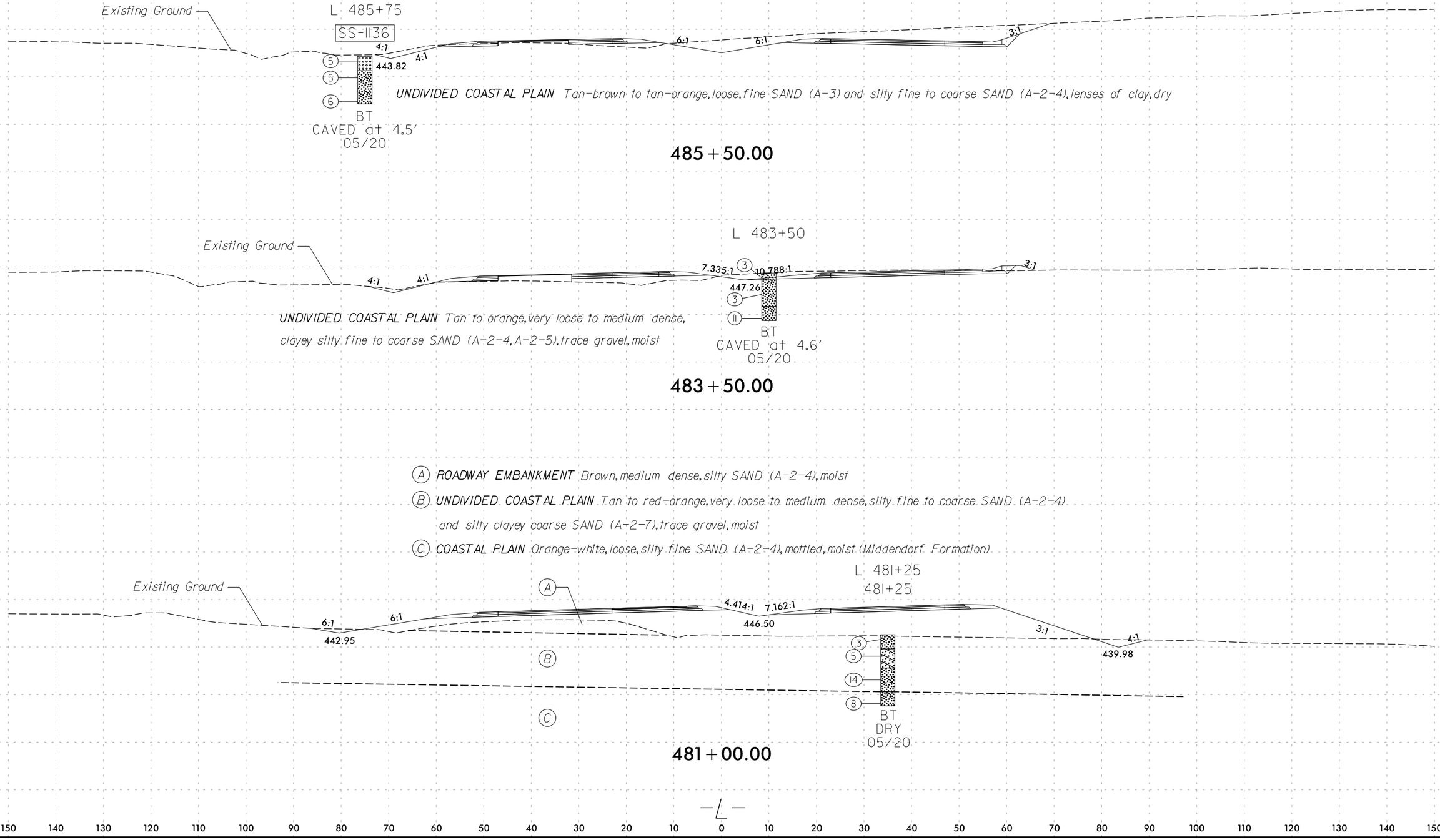
mmeng

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	94

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS - 1136	485+75	75' LT	0.0 - 1.5	A-3	16	NP	71.0	22.0	1.0	6.0	100.0	58.0	8.1	3.9	ND



6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	95

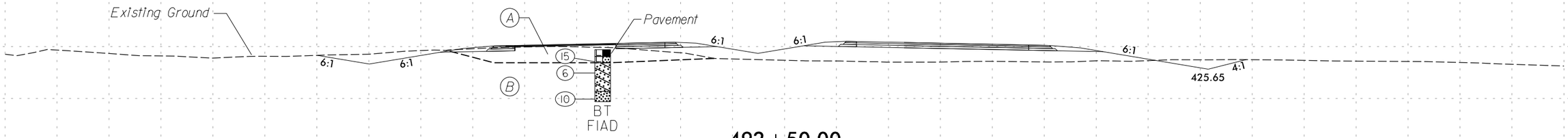
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

450
440
430
420
410

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Orange-brown, loose to medium dense, silty clayey SAND (A-2-6) and silty SAND (A-2-4), moist

L 492+67

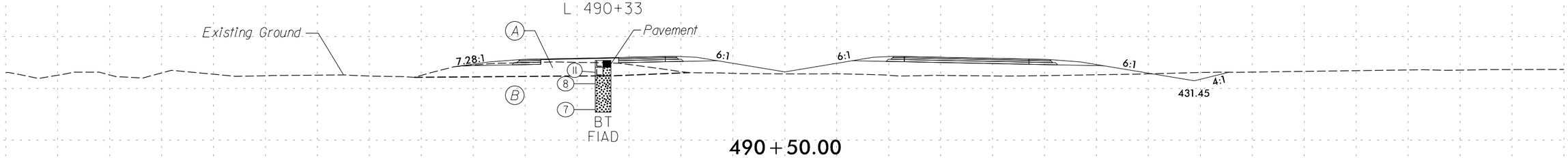


492+50.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

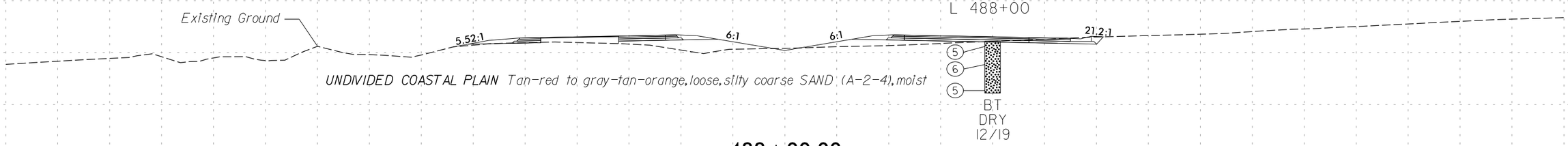
(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose, clayey silty SAND (A-2-5), little gravel, moist

L 490+33



490+50.00

L 488+00



UNDIVIDED COASTAL PLAIN Tan-red to gray-tan-orange, loose, silty coarse SAND (A-2-4), moist

488+00.00

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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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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	96

180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120

440 430 420 410 400 390 380

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown to red, loose to medium dense, clayey silty fine to coarse SAND (A-2-4), trace of organic matter, trace gravel, dry to moist

(C) *COASTAL PLAIN* Red-orange, very stiff, sandy CLAY (A-6), mottled, moist (Middendorf Formation)

L 497+50

Existing Ground

3:1 6:1 414.58 6:1 6:1 3:1 4:1 409.84

(A) (B) (C)

5 20 17 17

BT
DRY
05/20

497+50.00

(A) *UNDIVIDED COASTAL PLAIN* Light brown-brown, loose to medium dense, silty SAND (A-2-4), moist

(B) Red, stiff, fine to coarse sandy silty CLAY (A-7-5), moist

L 495+00

Existing Ground

Pavement

3:1 6:1 6:1 6:1 3:1 4:1 418.40

15 5 11

(A) (B)

BT
FIAD

495+00.00

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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	97

0 5 10

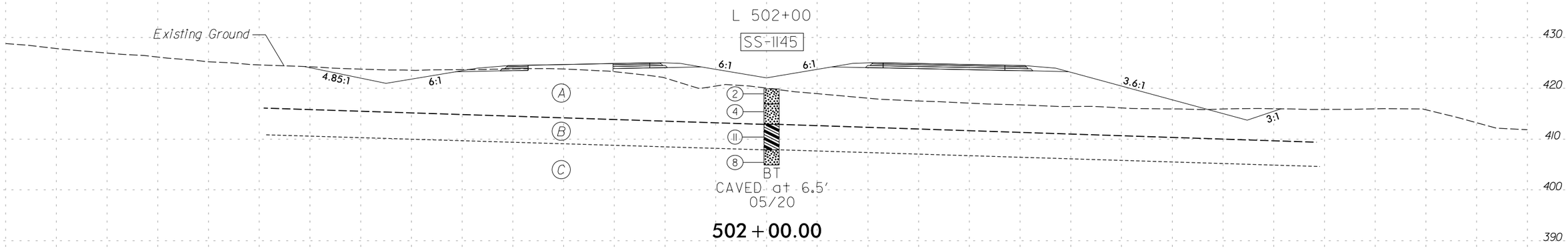
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1145	502+00	1' RT	8.5 - 10.0	A-6 (2)	36	15	39.0	24.0	4.0	34.0	100.0	81.0	38.0	17.0	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown to orange, very loose to loose, clayey silty fine to coarse SAND (A-2-4, A-2-5), trace gravel, trace of organic matter, dry to moist

Ⓑ *COASTAL PLAIN* Red-orange, stiff, sandy slightly plastic CLAY (A-6), moist (Middendorf Formation)

Ⓒ Tan-orange, loose, silty fine to coarse SAND (A-2-4), clay balls, mottled, moist

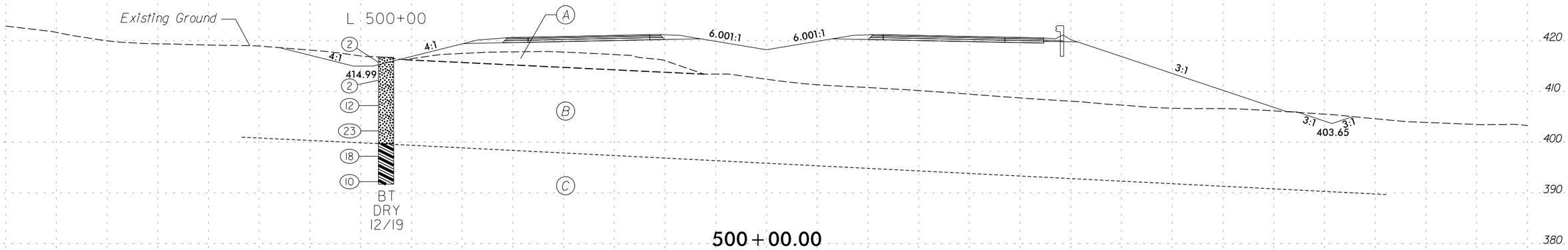


502+00.00

Ⓐ *ROADWAY EMBANKMENT* Brown, loose, clayey SAND (A-2-7), little gravel, wet

Ⓑ *UNDIVIDED COASTAL PLAIN* Tan to red-orange, very loose to medium dense, silty fine to coarse SAND (A-2-4), trace gravel, moist

Ⓒ Tan-red, stiff to very stiff, coarse sandy CLAY (A-6), moist



500+00.00

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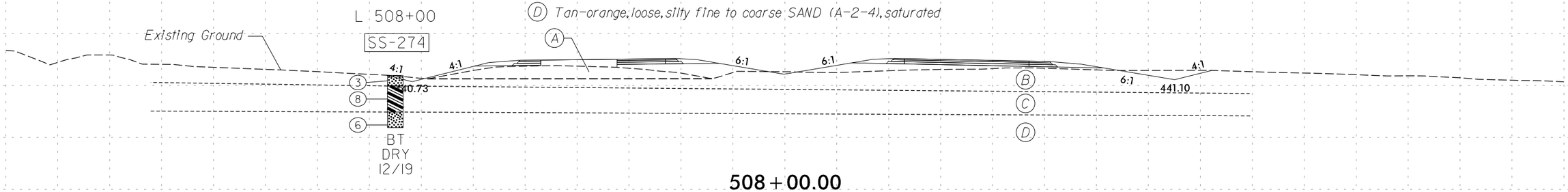
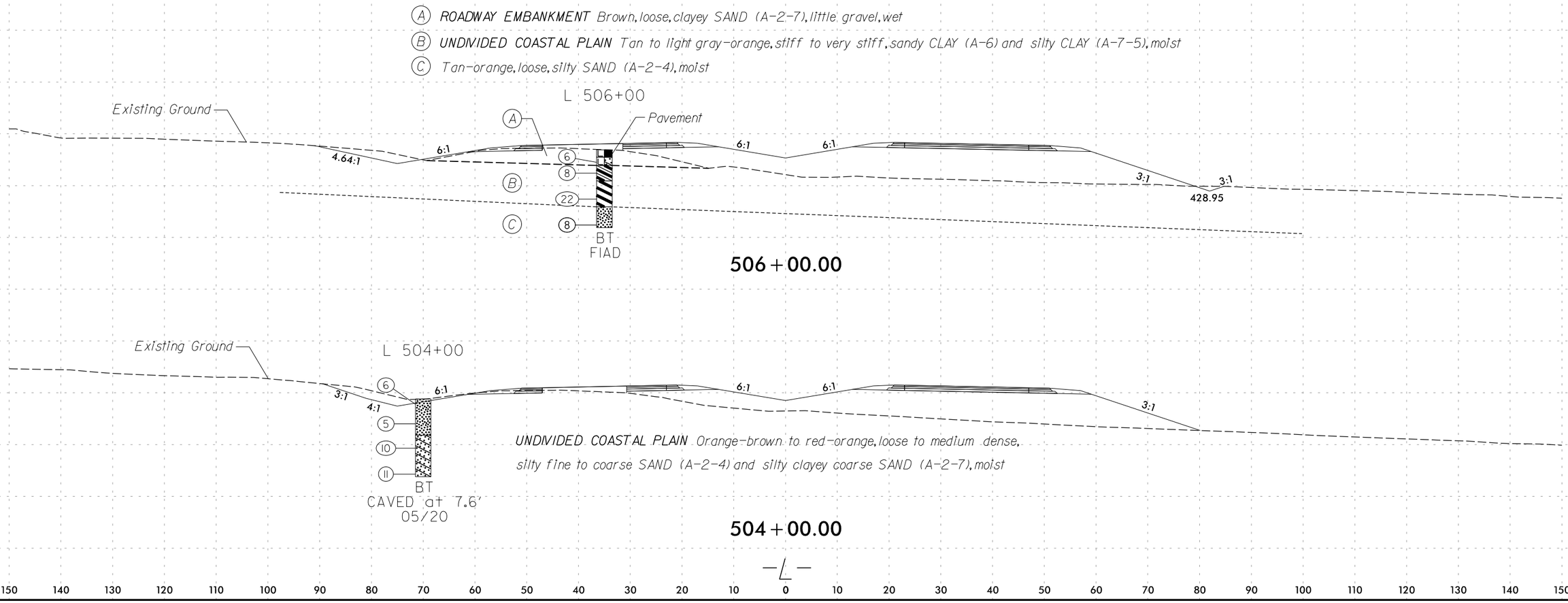
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	98

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-274	508+00	75' LT	0 - 1.5	A-2-4	16	NP	63.0	22.0	9.0	6.0	100.0	56.0	14.8	12.3	ND





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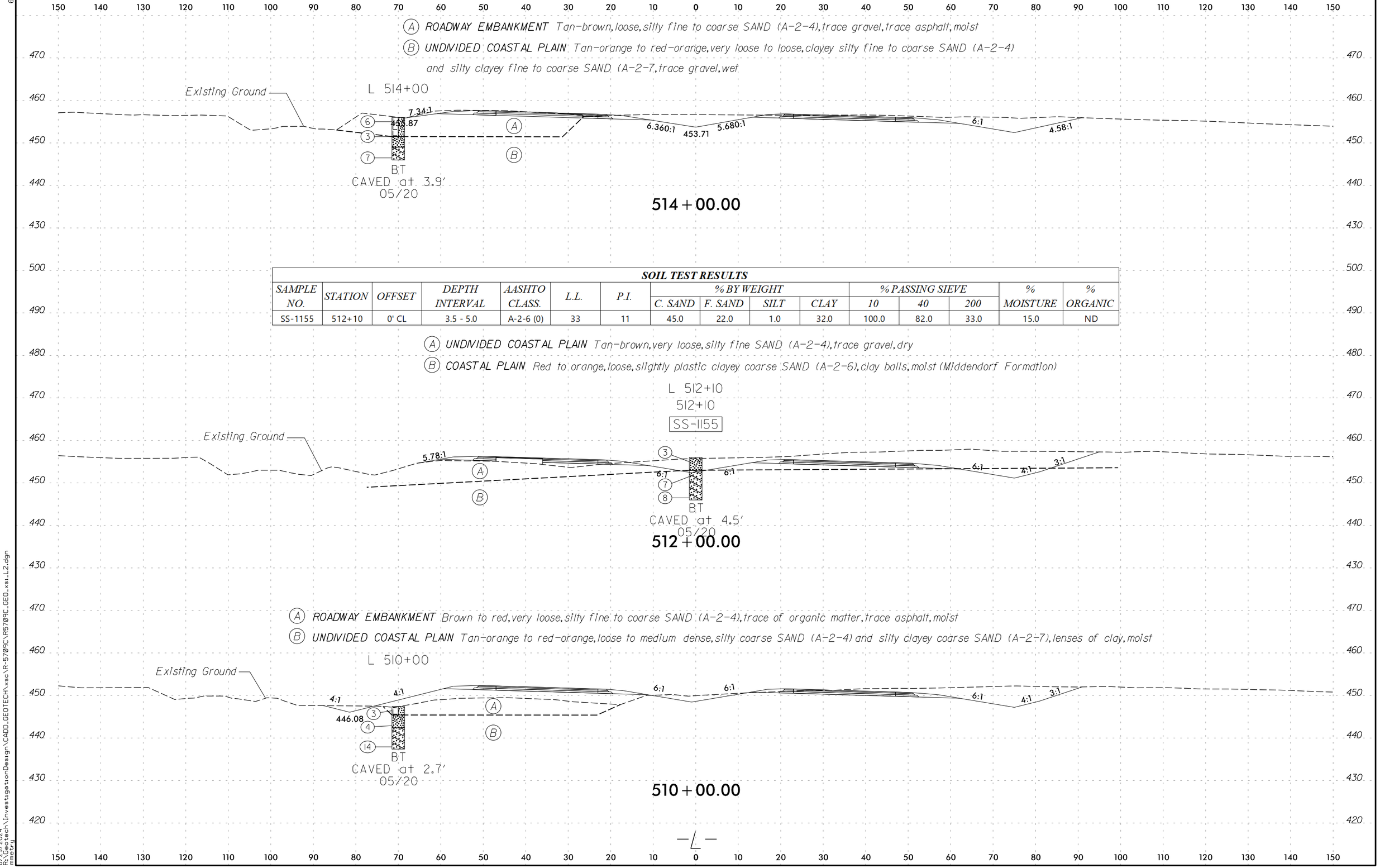
mlang

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	99



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1155	512+10	0' CL	3.5 - 5.0	A-2-6 (0)	33	11	45.0	22.0	1.0	32.0	100.0	82.0	33.0	15.0	ND

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	100

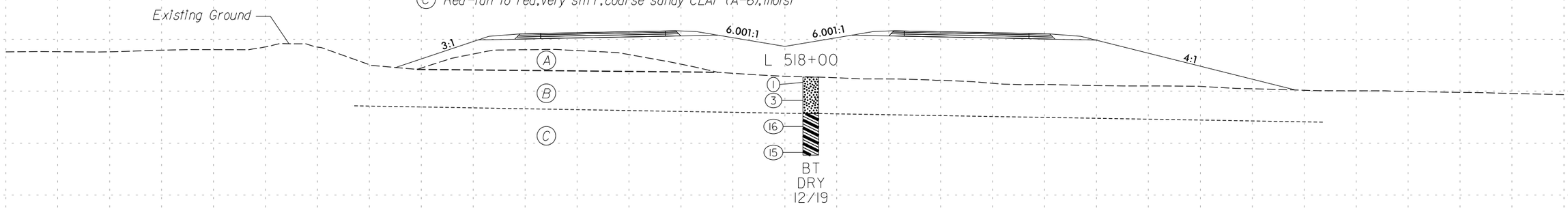
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

470 460 450 440 430 420 410

(A) *ROADWAY EMBANKMENT* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace gravel, trace asphalt, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-black to tan, very loose, silty fine to coarse SAND (A-2-4), trace wood, moist

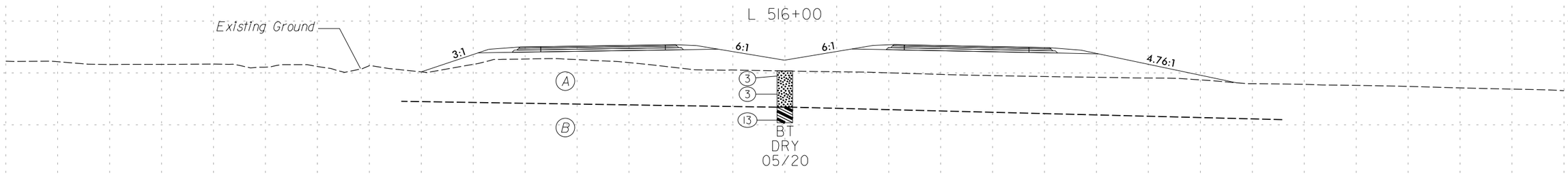
(C) Red-tan to red, very stiff, coarse sandy CLAY (A-6), moist



518+00.00

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown, very loose, silty fine to coarse SAND (A-2-4), trace of organic matter, moist

(B) *COASTAL PLAIN* Tan-red, stiff, fine sandy CLAY (A-6), mottled, moist (Middendorf Formation)



516+00.00

470 460 450 440 430 420

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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mlecroy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	101

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

460 450 440 430 420

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, silty clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey SAND (A-2-7), moist

(C) Light gray, stiff, silty CLAY (A-7-6), moist

L 524+75

524+75

Existing Ground

Pavement

4:1 4:1 5.963:1 5.985:1 6:1 4:1

440.83

(A) (17) (B) (5) (C) (13)

BT

FIAD

524+50.00

L 522+40

522+34

Existing Ground

6:1 6:1

(2) (3) (12)

BT

DRY

05/20

UNDIVIDED COASTAL PLAIN Tan-orange, very loose to medium dense, silty fine SAND (A-2-4) and silty clayey coarse SAND (A-2-6), trace gravel, moist

522+50.00

480 470 460 450 440 430 420

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1164	520+25	70' LT	3.5 - 5.0	A-7-6 (3)	41	17	36.0	23.0	7.0	34.0	99.0	83.0	41.0	19.0	ND

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown, loose, silty fine SAND (A-2-4), trace of organic matter, trace gravel, dry

(B) *COASTAL PLAIN* Red-orange, stiff, fine sandy silty moderately plastic CLAY (A-7-6), moist (Middendorf Formation)

(C) Tan-orange, loose, silty clayey coarse SAND (A-2-7) and fine SAND (A-3), moist

L 520+25

520+25

SS-1164

Existing Ground

6.2:1 6:1 6:1 4.83:1

(4) (8) (9) (6) (A) (B) (C)

BT

DRY

05/20

520+00.00

—L—

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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mmsley

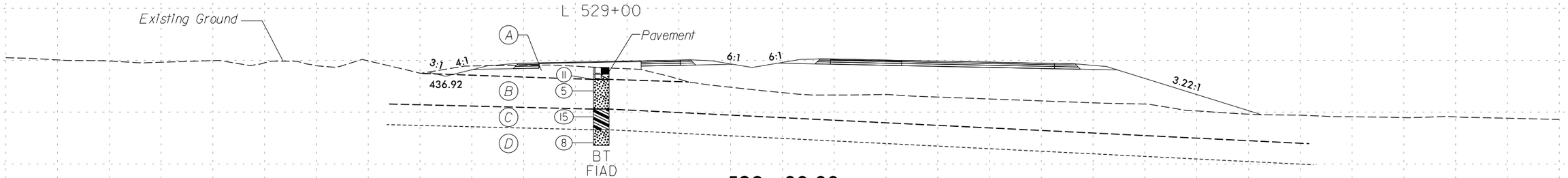
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	102

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

470 460 450 440 430 420 410

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, silty clayey SAND (A-2-6), little gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist
(C) *COASTAL PLAIN* Orange, very stiff, silty fine sandy CLAY (A-6), moist (Pinehurst Formation)
(D) Light tan, loose, silty SAND (A-2-4), moist



529+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-282	527+00	40' RT	3.5 - 5.0	A-2-4	20	NP	47.0	33.0	5.0	14.0	100.0	76.0	19.4	13.5	ND

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, silty clayey SAND (A-2-6), little gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Black-brown to gray-tan, loose, silty coarse SAND (A-2-4), moist
(C) Red-tan, stiff, fine to coarse sandy CLAY (A-6), moist

527+00.00

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mmcfa

6/23/16

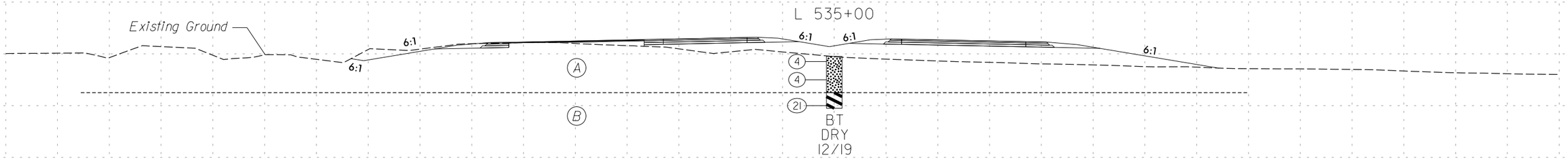
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	103

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

450 440 430 420 410 400

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown to light tan-orange, loose, silty fine to coarse SAND (A-2-4), moist

(B) Gray-red, very stiff, coarse sandy silty CLAY (A-7-5), moist

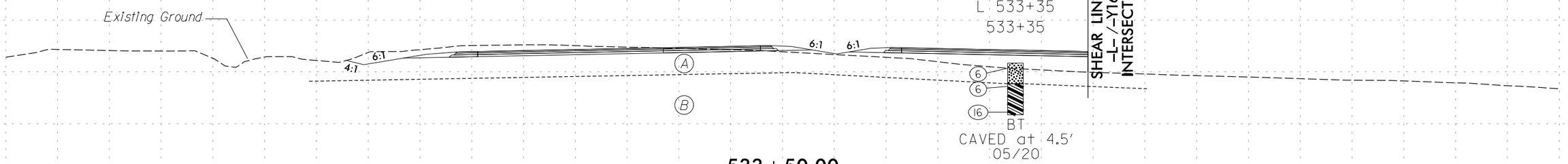


L 535+00

535+00.00

(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist

(B) Brown to orange, medium stiff to very stiff, sandy CLAY (A-6), moist



L 533+35

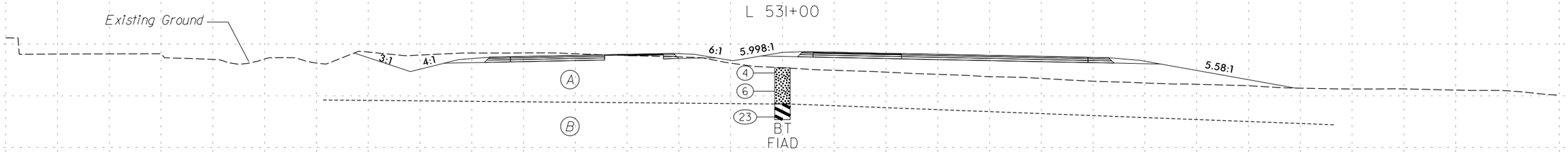
533+35

SHEAR LINE @ -L-/-Y16- INTERSECTION

533+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist to saturated

(B) Light gray to orange, very stiff, silty fine sandy CLAY (A-7-5), moist



L 531+00

531+00.00

-L-

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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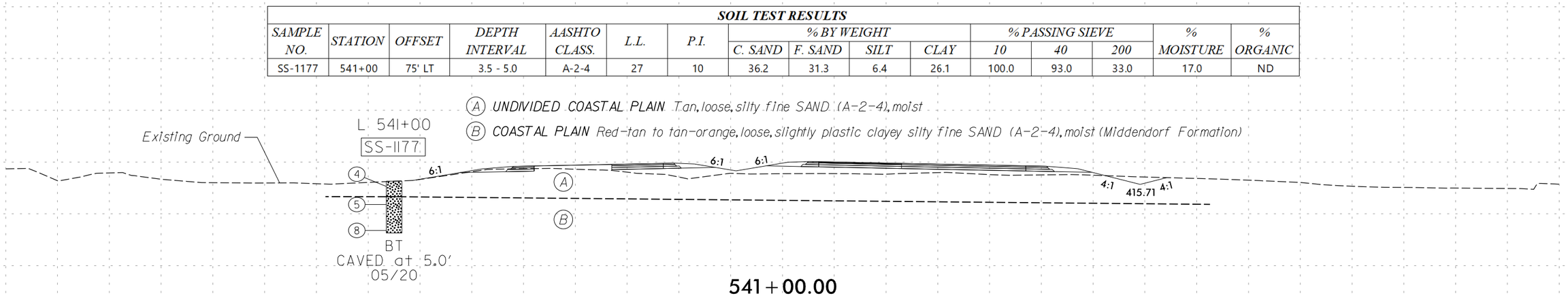
mmercy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	104

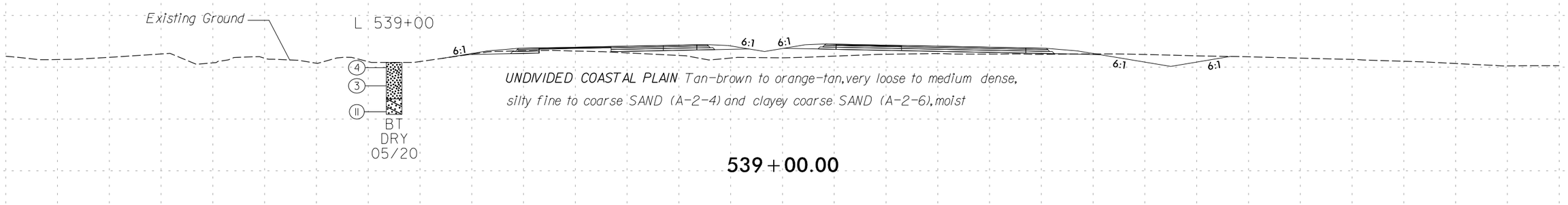
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1177	541+00	75' LT	3.5 - 5.0	A-2-4	27	10	36.2	31.3	6.4	26.1	100.0	93.0	33.0	17.0	ND



A UNDIVIDED COASTAL PLAIN Tan, loose, silty fine SAND (A-2-4), moist

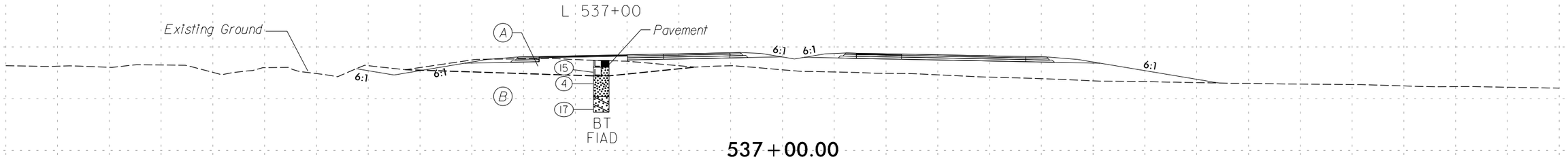
B COASTAL PLAIN Red-tan to tan-orange, loose, slightly plastic clayey silty fine SAND (A-2-4), moist (Middendorf Formation)



UNDIVIDED COASTAL PLAIN Tan-brown to orange-tan, very loose to medium dense, silty fine to coarse SAND (A-2-4) and clayey coarse SAND (A-2-6), moist

A ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), trace gravel, moist

B UNDIVIDED COASTAL PLAIN Brown-orange, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), little gravel, moist



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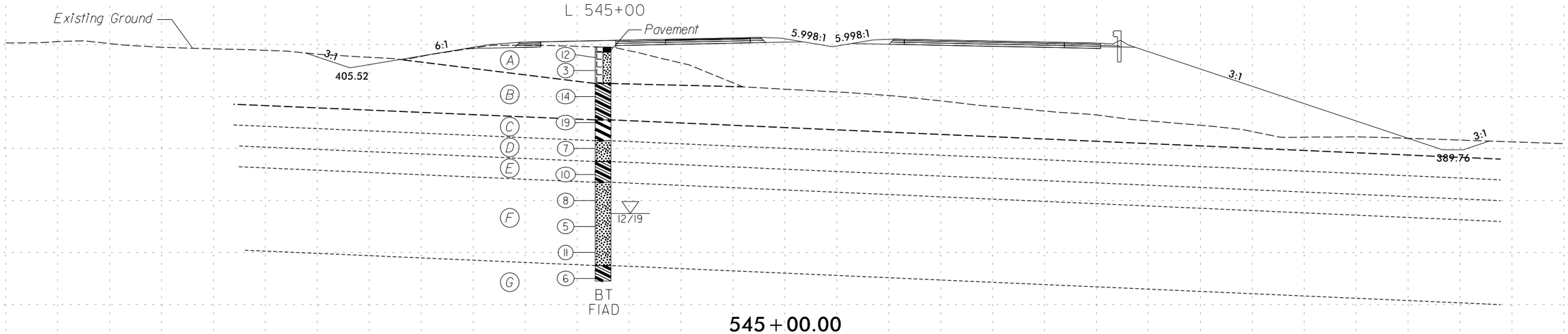
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	105

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

450 440 430 420 410 400 390 380 370 360 350

(A) *ROADWAY EMBANKMENT* Tan-brown, very loose to medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Orange, stiff, sandy CLAY (A-6), moist
(C) *COASTAL PLAIN* Orange-gray, very stiff, fine sandy silty CLAY (A-7-5), moist (Middendorf Formation)
(D) Tan-orange, loose, silty SAND (A-2-4), moist
(E) Orange-gray, stiff, sandy CLAY (A-6), moist
(F) Light orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-4), wet to saturated
(G) Light orange-gray, medium stiff, sandy CLAY (A-6), saturated

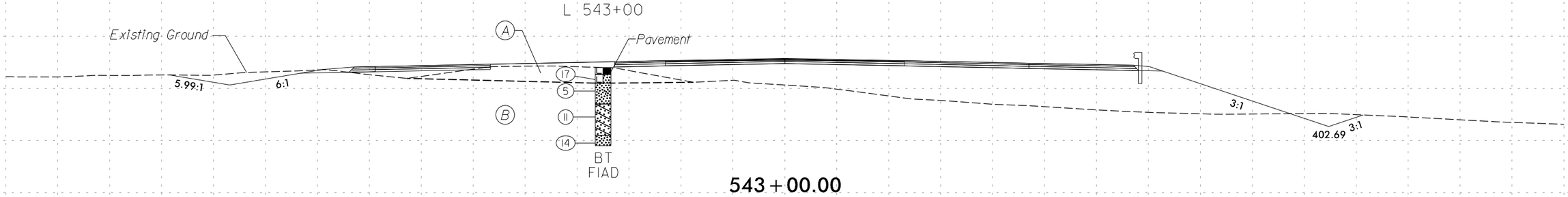
L 545+00



545+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to orange-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), trace gravel, moist

L 543+00



543+00.00

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mmccoy

0 5 10

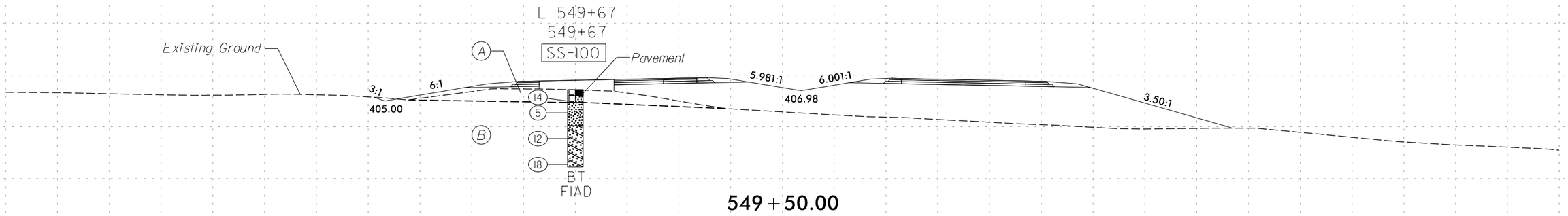
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	106

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-100	549+67	40' LT	1.2 - 2.7	A-2-4	25	7	49.0	23.0	0.0	28.0	100.0	75.0	29.0	13.0	ND

(A) *ROADWAY EMBANKMENT* Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist

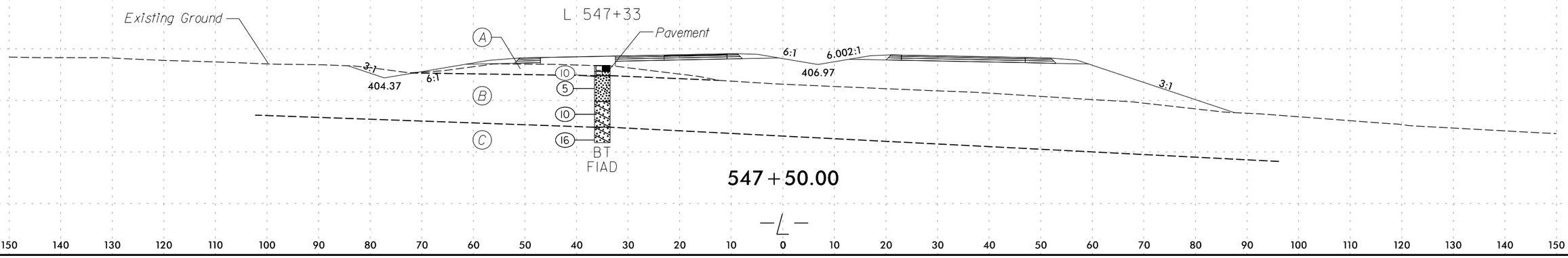
(B) *UNDIVIDED COASTAL PLAIN* Light brown to orange, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), moist



(A) *ROADWAY EMBANKMENT* Brown-gray to orange-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown-gray to orange-brown, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), trace gravel, moist

(C) *COASTAL PLAIN* Tan, medium dense, clayey SAND (A-2-7), trace mica, moist (Pinehurst Formation)



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	107

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

410 400 390 380 370 430 420

(A) *UNDIVIDED COASTAL PLAIN* Orange, medium dense, clayey SAND (A-2-7) and silty SAND (A-2-4), moist

(B) *COASTAL PLAIN* Light gray, stiff, fine sandy CLAY (A-6), trace mica, moist (Pinehurst Formation)

Existing Ground

L 556+00

Pavement

5.98:1 6:1 6.001:1 6.001:1 6:1 5.97:1

16 10 9

A B

BT
FIAD

556+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-104	554+00	34' LT	1.2 - 2.7	A-2-6 (0)	32	14	61.0	14.0	1.0	24.0	97.0	52.0	25.0	8.0	ND

Existing Ground

L 554+00

SS-104

Pavement

3:1 4:1 6:1 6:1 6:1 6:1 4:1 3:1

14 16 8

BT
FIAD

UNDIVIDED COASTAL PLAIN Brown-orange to white, loose to medium dense, slightly plastic clayey fine to coarse SAND (A-2-6) and clayey silty SAND (A-2-5), moist

554+00.00

(A) *UNDIVIDED COASTAL PLAIN* Tan-orange, very loose to loose, silty fine SAND (A-2-4), moist

(B) Red-tan to gray, stiff to very stiff, coarse sandy silty CLAY (A-7-5), moist

Existing Ground

L 552+00

5 3 10 21 16

403.75 6:1 6:1 6:1 6:1 4.32:1

A B

BT
DRY
12/19

552+00.00

8/29/2024
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mlong

6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	108

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

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-292	558+00	40' RT	0 - 1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	87.8	13.9

(A) ROADWAY EMBANKMENT Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist

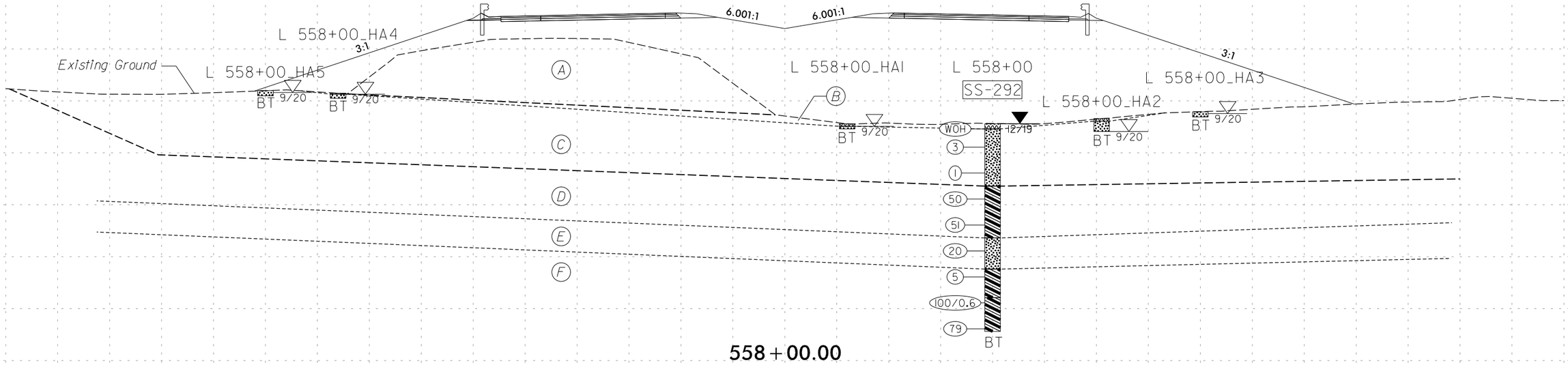
(B) ALLUVIAL Black, very soft, clayey fine to coarse sandy MUCK, highly organic, saturated

(C) Black-gray, very loose, silty fine to coarse SAND (A-2-4), trace to little organic matter, saturated

(D) COASTAL PLAIN Gray-orange-black, hard, fine to coarse sandy CLAY (A-6), saturated (Pinehurst Formation)

(E) Gray-tan-orange, medium dense, silty fine to coarse SAND (A-2-4), saturated

(F) Gray-orange to gray-red, medium stiff to hard, coarse sandy CLAY (A-6), saturated (SANDSTONE)



558+00.00

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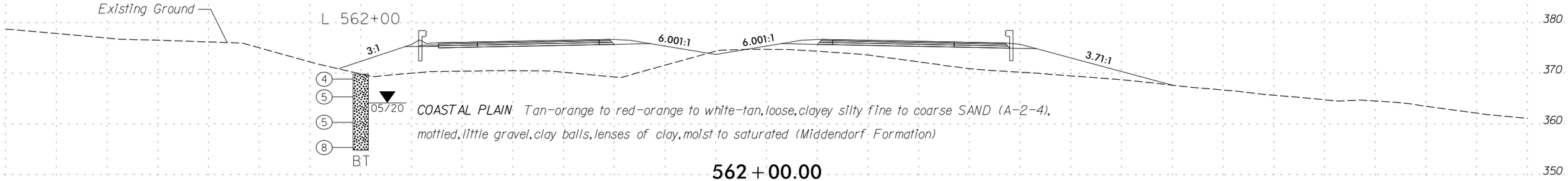
mmccoy

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	109



COASTAL PLAIN Tan-orange to red-orange to white-tan, loose, clayey silty fine to coarse SAND (A-2-4), mottled, little gravel, clay balls, lenses of clay, moist to saturated (Middendorf Formation)

562+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1191	560+00	0' CL	0.0 - 1.5	A-2-4	23	NP	48.5	27.4	10.0	14.2	100.0	75.0	24.0	27.0	ND

(A) ROADWAY EMBAKMENT Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist

(B) ALLUVIAL Black, very soft, clayey fine to coarse sandy MUCK, highly organic, saturated

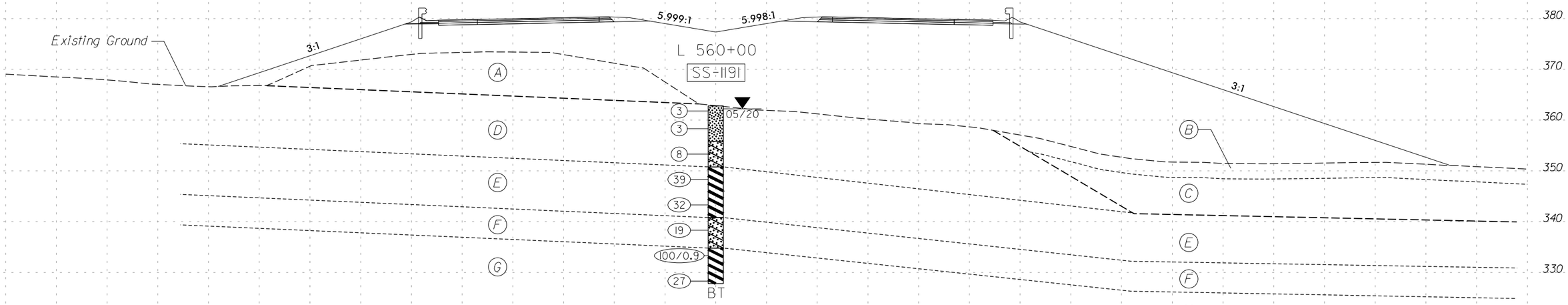
(C) Black-gray, very loose, silty fine to coarse SAND (A-2-4), trace to little organic matter, saturated

(D) COASTAL PLAIN Gray-black to tan, very loose to loose, silty SAND (A-2-4) and silty clayey coarse SAND (A-2-6), little gravel, wet to saturated (Middendorf Formation)

(E) Gray to orange, hard, fine sandy silty CLAY (A-7-6), purple and orange mottling, saturated

(F) Gray, medium dense, silty clayey fine SAND (A-2-6), purple and orange mottling, saturated

(G) Gray, very stiff to hard, fine sandy silty CLAY (A-7-6), trace mica, saturated (MUDSTONE)



560+00.00

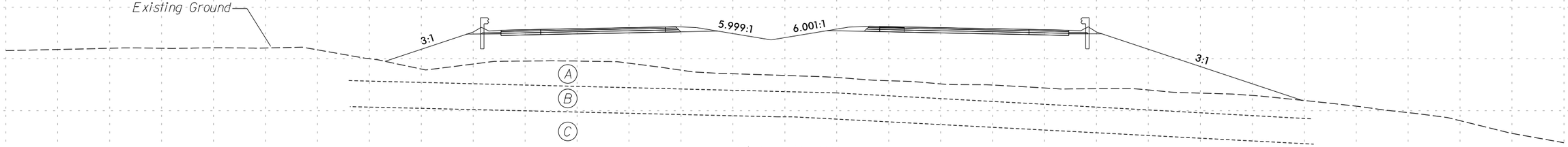
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	110

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

400
390
380
370
360
350

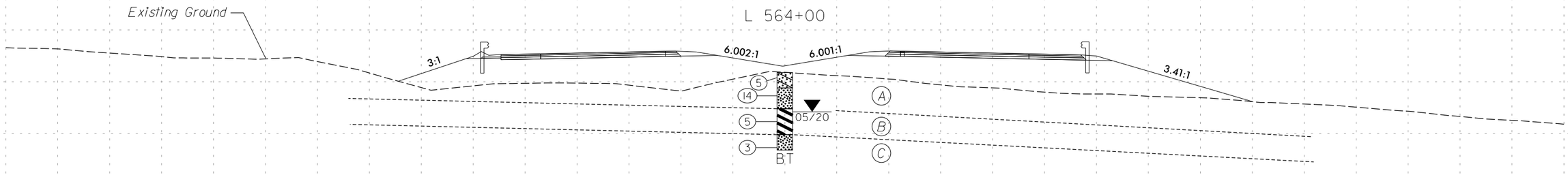
(A) COASTAL PLAIN Orange, loose to medium dense, clayey fine to coarse SAND (A-2-7) and clayey silty coarse SAND (A-2-5), little gravel, moist (Middendorf Formation)
(B) Red-orange, medium stiff, sandy silty CLAY (A-7-6), mottled, saturated
(C) White-tan, very loose, clayey silty coarse SAND (A-2-5), red mottling, saturated



564+50.00

(A) COASTAL PLAIN Orange, loose to medium dense, clayey fine to coarse SAND (A-2-7) and clayey silty coarse SAND (A-2-5), little gravel, moist (Middendorf Formation)
(B) Red-orange, medium stiff, sandy silty CLAY (A-7-6), mottled, saturated
(C) White-tan, very loose, clayey silty coarse SAND (A-2-5), red mottling, saturated

L 564+00



564+00.00

340

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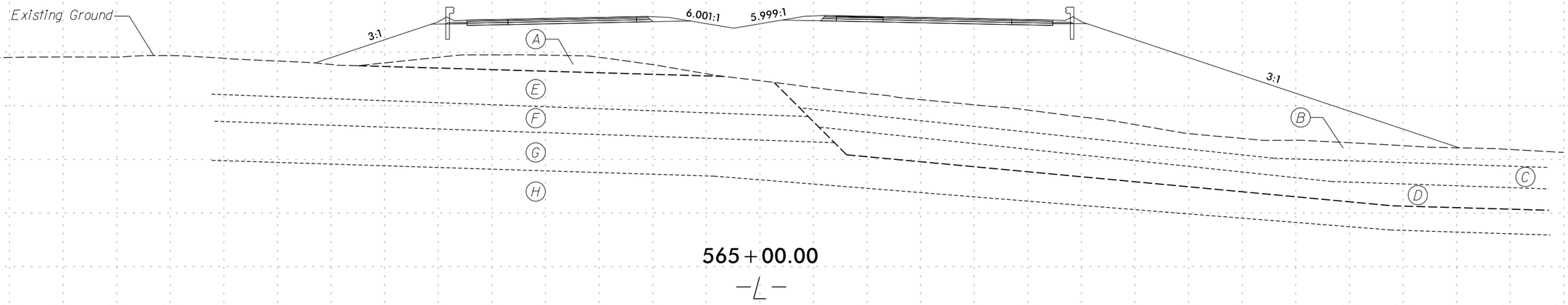
mmay

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	111

(A) *ROADWAY EMBANKMENT* Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist
(B) *ALLUVIAL* Tan-orange-brown, very loose, silty fine to coarse SAND (A-2-4), wet
(C) Black, very soft, clayey MUCK, highly organic, saturated
(D) White-gray, loose, silty coarse SAND (A-2-4), saturated
(E) *COASTAL PLAIN* Orange, loose to medium dense, clayey fine to coarse SAND (A-2-7) and clayey silty coarse SAND (A-2-5), little gravel, moist (Pinehurst Formation)
(F) Red-orange, medium stiff, sandy silty CLAY (A-7-6), mottled, saturated
(G) Gray-brown-red to white-tan, very loose to medium dense, silty fine to coarse SAND (A-2-4, A-2-5), red mottline, saturated
(H) Gray-purple to gray-tan-red, very stiff to hard, fine to coarse sandy CLAY (A-6), (SANDSTONE), saturated



565+00.00

—L—

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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	112

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-302	566+00	15' RT	3.5 - 5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	191.8	30.8

(A) ROADWAY EMBANKMENT Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist

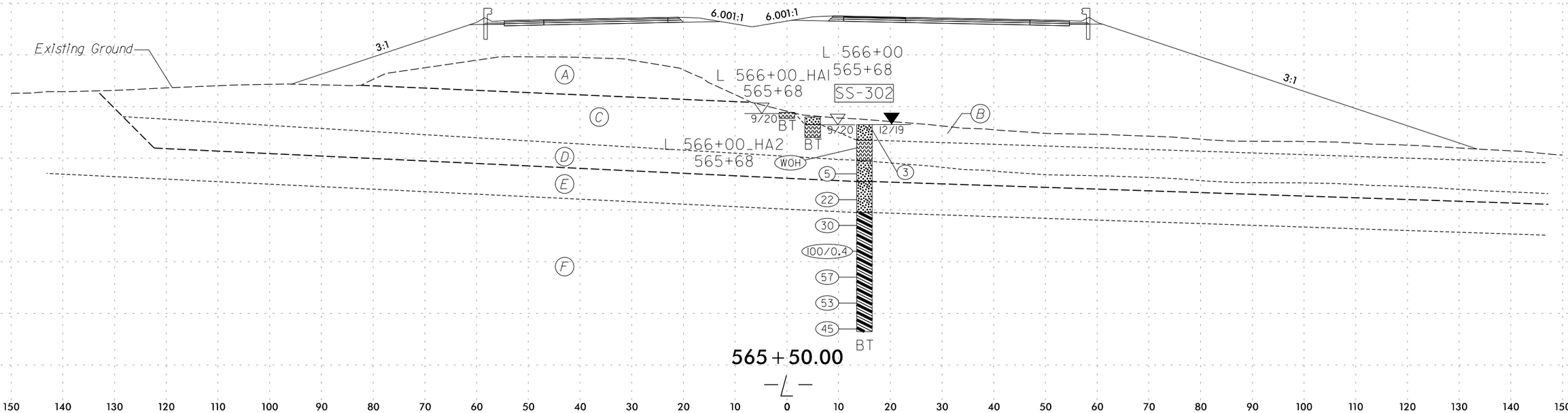
(B) ALLUVIAL Tan-orange-brown, very loose, silty fine to coarse SAND (A-2-4), wet

(C) Black, very soft, clayey MUCK, highly organic, saturated

(D) White-gray, loose, silty coarse SAND (A-2-4), saturated

(E) COASTAL PLAIN Gray-brown-red, medium dense, silty fine to coarse SAND (A-2-4), saturated (Pinehurst Formation)

(F) Gray-purple to gray-tan-red, very stiff to hard, fine to coarse sandy CLAY (A-6), (SANDSTONE), saturated



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mesteg

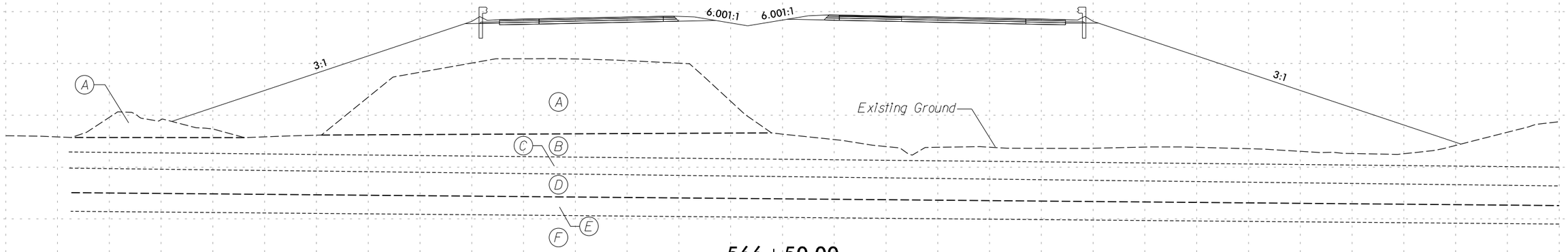
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	113

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

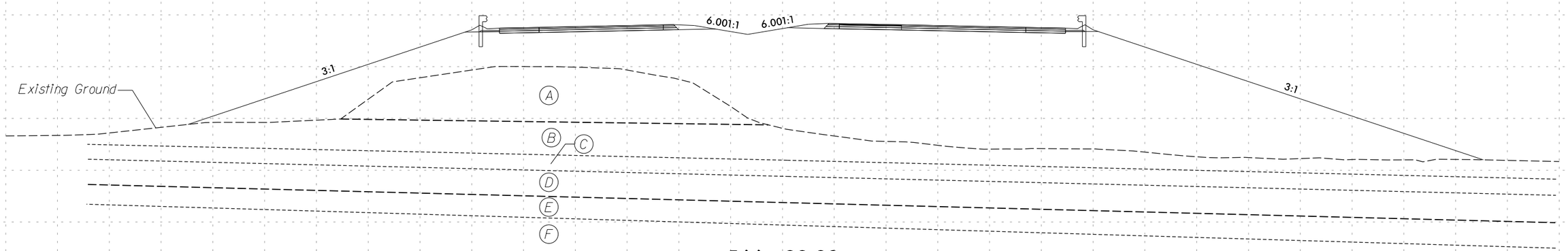
400 390 380 370 360 350 340 330

(A) *ROADWAY EMBANKMENT* Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist
(B) *ALLUVIAL* Tan-orange-brown, very loose, silty fine to coarse SAND (A-2-4), wet
(C) Black, very soft, clayey MUCK, highly organic, saturated
(D) White-gray, loose, silty coarse SAND (A-2-4), saturated
(E) *COASTAL PLAIN* Gray-brown-red, medium dense, silty fine to coarse SAND (A-2-4), saturated (Pinehurst Formation)
(F) Gray-purple to gray-tan-red, very stiff to hard, fine to coarse sandy CLAY (A-6), (SANDSTONE), saturated



566+50.00

(A) *ROADWAY EMBANKMENT* Orange-tan, medium dense, slightly plastic clayey silty fine to coarse SAND (A-2-4), moist
(B) *ALLUVIAL* Tan-orange-brown, very loose, silty fine to coarse SAND (A-2-4), wet
(C) Black, very soft, clayey MUCK, highly organic, saturated
(D) White-gray, loose, silty coarse SAND (A-2-4), saturated
(E) *COASTAL PLAIN* Gray-brown-red, medium dense, silty fine to coarse SAND (A-2-4), saturated (Pinehurst Formation)
(F) Gray-purple to gray-tan-red, very stiff to hard, fine to coarse sandy CLAY (A-6), (SANDSTONE), saturated



566+00.00

410 400 390 380 370 360 350 340 330

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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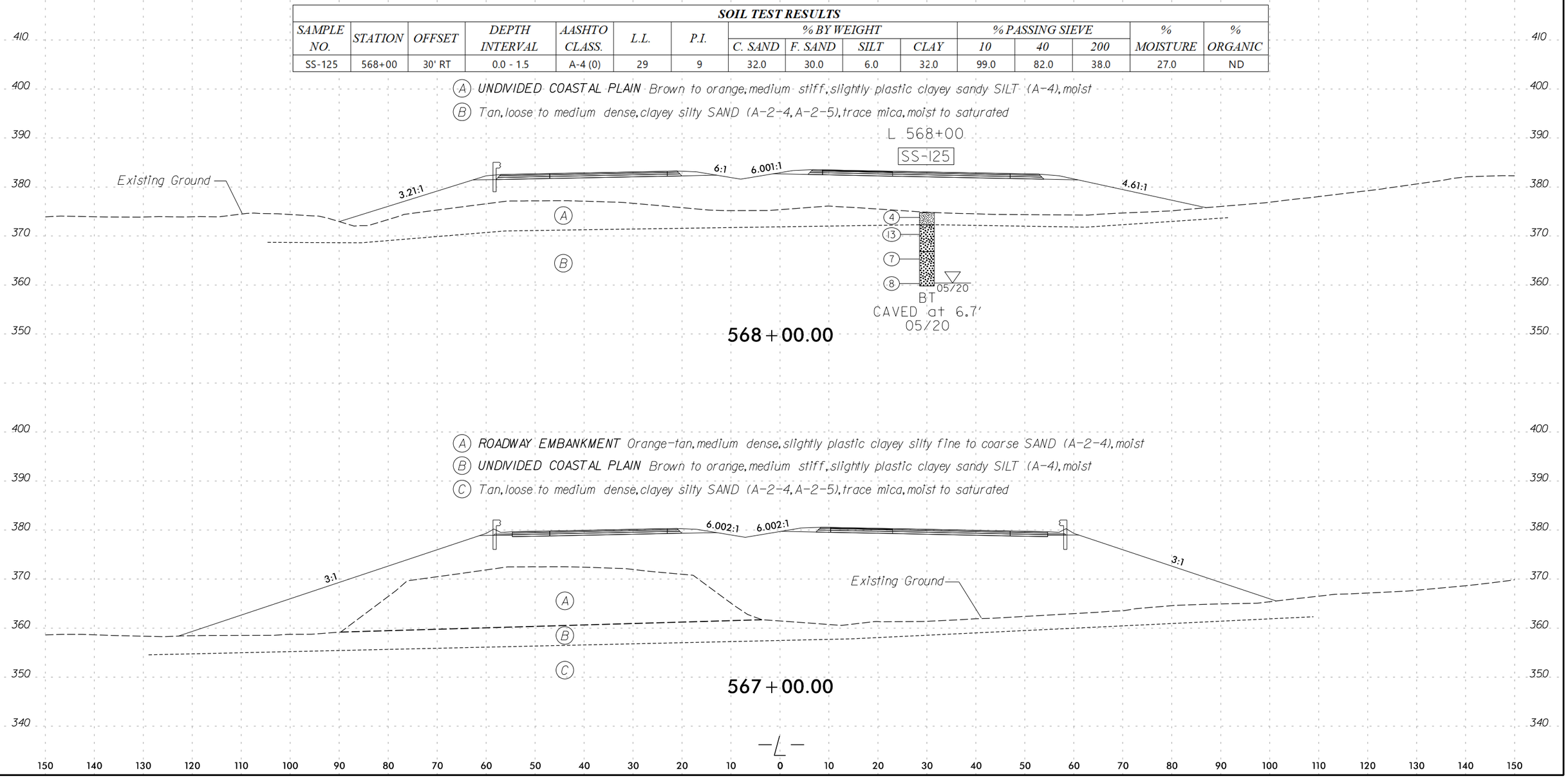
mmccoy

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	114

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-125	568+00	30' RT	0.0 - 1.5	A-4 (0)	29	9	32.0	30.0	6.0	32.0	99.0	82.0	38.0	27.0	ND



6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	115

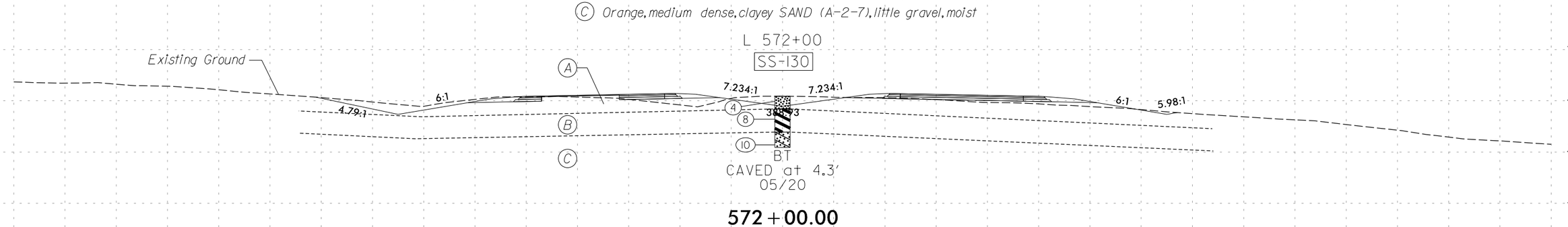
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-130	572+00	0' CL	3.5 - 5.0	A-7-6 (9)	45	24	29.0	19.0	12.0	40.0	100.0	85.0	52.0	17.0	ND

(A) UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), moist

(B) Red-orange, stiff, sandy silty moderately plastic CLAY (A-7-6), moist

(C) Orange, medium dense, clayey SAND (A-2-7), little gravel, moist



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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	116

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

410 400 390 380 370 360

(A) *ROADWAY EMBANKMENT* Brown, loose, silty fine SAND (A-2-4), trace of organic matter, moist
(B) *UNDIVIDED COASTAL PLAIN* Tan, very loose to loose, silty fine to coarse SAND (A-2-4), moist
(C) *COASTAL PLAIN* Tan-orange, stiff, fine to coarse sandy CLAY (A-6), moist (Middendorf Formation)

L 575+40
575+48

Existing Ground

4:1 4:1 383.50 6:1 5.971:1 5.957:1 387.88 3:1 3:1 3:1 378.80

5 2 5 12

BT
DRY
05/20

(A) (B) (C)

575+50.00

420 410 400 390 380 370 360 350 340

(A) *ROADWAY EMBANKMENT* Brown, loose, silty fine SAND (A-2-4), trace of organic matter, moist
(B) *UNDIVIDED COASTAL PLAIN* Tan, very loose, silty fine SAND (A-2-4), moist
(C) Brown-red, medium stiff, fine to coarse sandy CLAY (A-6), wet
(D) Brown-red, medium dense, clayey fine to coarse SAND (A-2-6), wet
(E) White-tan, very loose to loose, silty fine to coarse SAND (A-2-4), wet to saturated

Existing Ground

L 573+50

4:1 3 6:1 5.366:1 5.366:1 388.48 3:1

(A) (B) (C) (D) (E)

6 10 10 7 2 6

BT
DRY
12/19

573+50.00

—L—

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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mmesa

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	117

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

410 / 400 / 390 / 380 / 370

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown to tan-orange, very loose, silty fine SAND (A-2-4), dry

Ⓑ *COASTAL PLAIN* Red-orange to gray, stiff, fine sandy silty CLAY (A-7-6), mottled, moist (Middendorf Formation)

L 580+90
580+90

Existing Ground

6:1 6:1 6:1 3:1 3:1

387.13

Ⓐ Ⓑ ② ③ Ⅱ

BT
DRY
05/20

581+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown to orange, very loose to loose, silty fine SAND (A-2-4), dry to moist

Ⓑ *COASTAL PLAIN* Orange, loose, silty clayey fine to coarse SAND (A-2-6), clay balls, moist (Middendorf Formation)

L 579+00

Existing Ground

④ ③ ⑦ 6:1 6:1 6:1 6:1

389.24

SHEAR LINE @ -L- /-Y18- INTERSECTION

Ⓐ Ⓑ

BT
DRY
05/20

579+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown to tan-orange, very loose, silty fine SAND (A-2-4), moist

Ⓑ *COASTAL PLAIN* Orange, loose, clayey coarse SAND (A-2-7), clay balls, moist (Middendorf Formation)

L 577+20
577+20

Existing Ground

6:1 6:1 6:1 6:1 5:1

③ ③ ⑦ Ⓐ Ⓑ

BT
CAVED at 5.0'
05/20

577+00.00

-L-

360

8/29/2024
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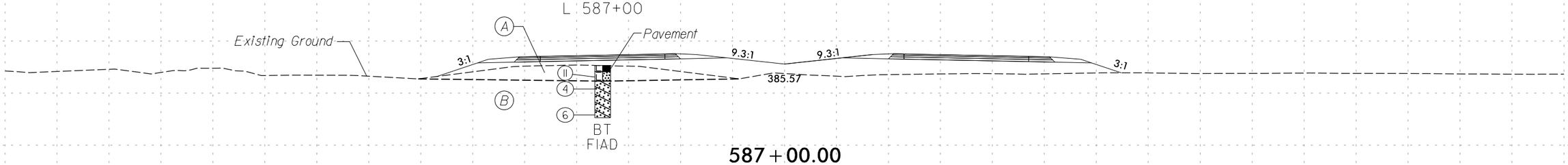
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	118

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

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown-orange to tan, loose, clayey SAND (A-2-7), moist

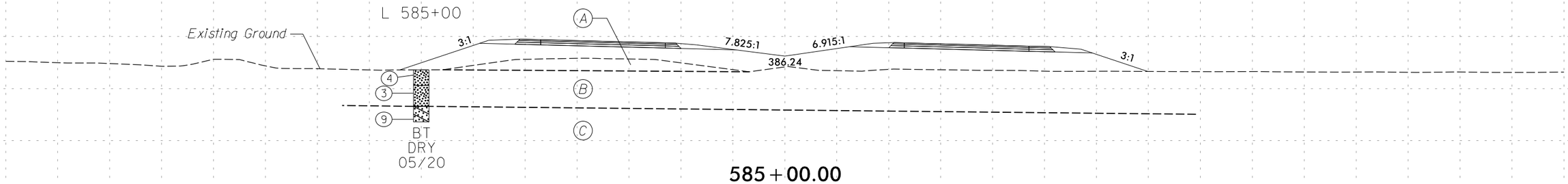
L 587+00



587+00.00

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Tan-brown to tan-orange, very loose to loose, clayey silty fine to coarse SAND (A-2-5) and silty fine SAND (A-2-4), trace of organic matter, moist
Ⓒ *COASTAL PLAIN* Tan-orange, loose, clayey coarse SAND (A-2-6), moist (Middendorf Formation)

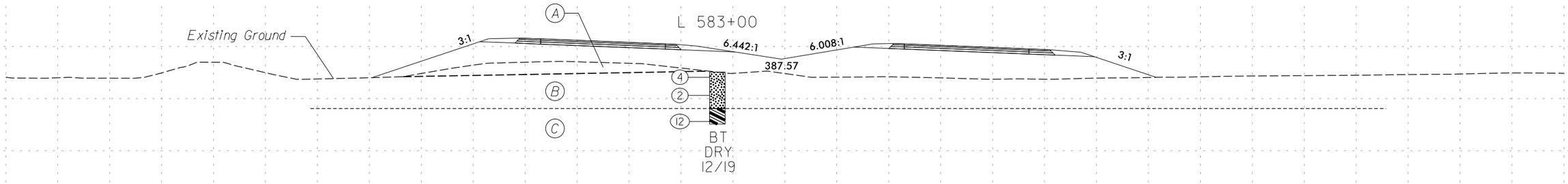
L 585+00



585+00.00

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown-tan, very loose to loose, silty fine to coarse SAND (A-2-4), moist
Ⓒ Gray-tan-orange, stiff, coarse sandy CLAY (A-6), wet

L 583+00



583+00.00

—L—

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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mmeyer
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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

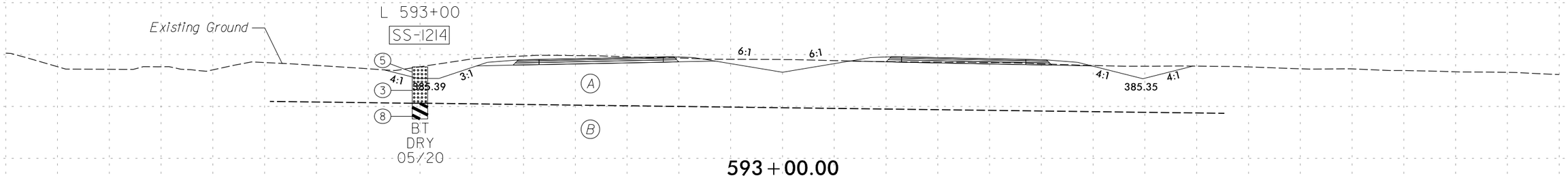
420 410 400 390 380 370 360

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS - 1214	593+00	70' LT	0.0 - 1.5	A-3	20	NP	52.0	43.0	1.0	4.0	100.0	80.0	6.4	4.8	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-orange, very loose to loose, fine SAND (A-3), trace gravel, moist

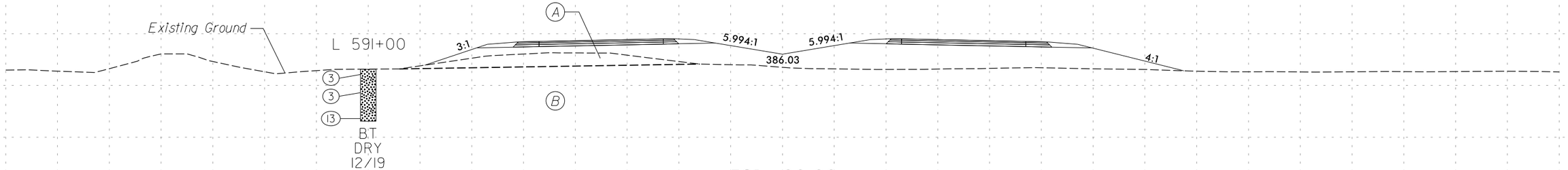
Ⓑ *COASTAL PLAIN* Tan-orange, stiff, fine sandy silty CLAY (A-7-6), trace mica, moist (Middendorf Formation)



593+00.00

Ⓐ *ROADWAY EMBANKMENT* Orange, medium dense, clayey SAND (A-2-7), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Gray to brown to light gray, very loose to medium dense, silty fine to coarse SAND (A-2-4), trace roots, moist

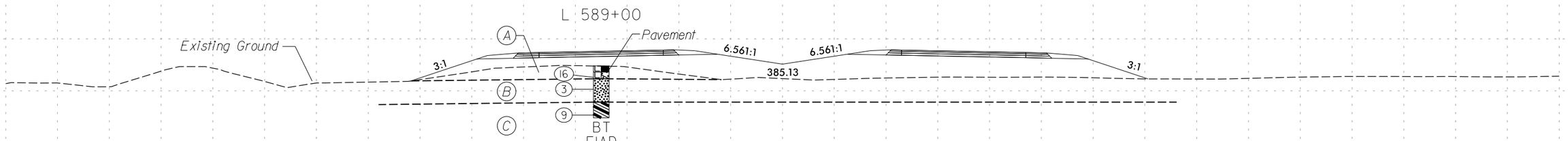


591+00.00

Ⓐ *ROADWAY EMBANKMENT* Orange, medium dense, clayey SAND (A-2-7), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Brown-orange, very loose, silty SAND (A-2-4), moist

Ⓒ *COASTAL PLAIN* Brown-orange, stiff, sandy CLAY (A-6), moist



589+00.00

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	120

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

400 390 380 370 360

(A) *ROADWAY EMBANKMENT* Orange, medium dense, clayey SAND (A-2-7), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, loose to medium dense, silty SAND (A-2-4), moist

L 599+00

Existing Ground

Pavement

3:1 6.578:1 6.578:1 4:1 4:1

384.99

381.11

(A)

(B)

(13)

(4)

(6)

BT
FIAD

599+00.00

(A) *ROADWAY EMBANKMENT* Orange, medium dense, clayey SAND (A-2-7), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan to tan-orange, very loose to medium dense, silty fine SAND (A-2-4) and clayey fine to coarse SAND (A-2-7), little gravel, dry to moist

L 597+00

Existing Ground

3:1 5.599:1 5.599:1 4:1 4:1

385.62

381.84

(A)

(B)

(3)

(3)

(12)

BT
DRY
05/20

597+00.00

L 595+20

Existing Ground

3:1 5.558:1 5.558:1 4:1 4:1

384.29

384.75

(2)

(3)

(9)

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN Tan-brown to tan-orange to orange to red, very loose to loose, silty fine SAND (A-2-4) and clayey fine to coarse SAND (A-2-7), dry to moist

595+00.00

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	121

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

400 390 380 370 360 420 410 400 390 380 370 360

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, clayey silty SAND (A-2-5), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Brown-orange to tan, loose, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace mica, moist

L 605+00

Existing Ground

Pavement

12.5:1 7.717:1 6:1 4:1 4:1

383.22

378.93

15 4 7

BT
FIAD

605+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS - 116	603+00	45' LT	1.2 - 2.7	A-3	16	NP	58.8	35.1	2.1	4.0	100.0	69.0	6.1	5.2	ND

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, fine to coarse SAND (A-3), trace gravel, moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose, silty SAND (A-2-4), trace gravel, moist

L 603+00

SS-116

Existing Ground

Pavement

12.5:1 6.166:1 6.017:1 4:1 4:1

383.81

379.65

15 4 9

BT
FIAD

603+00.00

L 601+20

601+20

Existing Ground

6:1 6:1 5.317:1 5.379:1 4:1 4:1

384.40

380.38

6 3 10

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN Brown to tan-orange to red, very loose to loose, silty fine SAND (A-2-4) and clayey coarse SAND (A-2-7), trace of organic matter, trace to little gravel, moist

601+00.00

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mmetty

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	122

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

400 390 380 370 360

L 611+00

SHEAR LINE @ -L-/-Y19- INTERSECTION

Y19 14+50
611+07

Existing Ground

6:1

UNDIVIDED COASTAL PLAIN Brown to tan-brown to tan-orange, very loose to medium dense, clayey silty fine SAND (A-2-4, A-2-5), trace roots, little gravel, moist

3 3 12 — BT DRY 05/20

4 6 8 — BT DRY 12/19

611+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan to tan-orange, very loose to loose, silty fine SAND (A-2-4), little gravel, moist

Ⓑ *COASTAL PLAIN* Gray-tan, loose, clayey coarse SAND (A-2-7), little gravel, moist

L 609+00

Existing Ground

6:1 6.002:1 6.002:1 3:1 3:1 3:1 377.69

Ⓐ

Ⓑ

4 2 9 — BT DRY 05/20

609+00.00

L 607+00

6:1 4:1 3:1 3:1 378.20 Existing Ground

13 4 6 — BT DRY 12/19

UNDIVIDED COASTAL PLAIN Gray to brown to light gray, very loose to medium dense, silty fine to coarse SAND (A-2-4) and clayey fine to coarse SAND (A-2-6), trace roots, moist

607+00.00

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8/29/2024
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mlesly

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	123

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

400 390 380 370 360

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, clayey SAND (A-2-7), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to light tan, loose, silty SAND (A-2-4), moist

L 617+25

Existing Ground

Pavement

6:1 6:1 6:1 6:1 3:1 3:1 3:1

375.67

(A) (B) 16 6 5

BT
FIAD

617+00.00

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, clayey SAND (A-2-7), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown to gray-tan, very loose to medium dense, clayey silty fine SAND (A-2-4), moist

L 615+00

Existing Ground

5:1 5:1 5.495:1 3:1 3:1 3:1

375.95

(A) (B) 3 5 10

BT
DRY
12/19

615+00.00

L 613+00

Existing Ground

6:1 6:1 5:1 5.441:1 3:1 3:1 3:1

376.55

4 3 8

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN Tan-brown to tan-orange, very loose to loose, silty fine to coarse SAND (A-2-4), moist

613+00.00

8/29/2024
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mmeng

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	124

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

390 380 370 360 350 400

L 624+00

Existing Ground

6:1 6:1 6.002:1 6:1 3:1

UNDIVIDED COASTAL PLAIN Tan-brown, very loose to medium dense, clayey silty fine to coarse SAND (A-2-4), moist

3 2 10

BT
DRY
12/19

624+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown-orange to light tan, very loose to loose, silty SAND (A-2-4), trace gravel, moist

L 621+75

621+75 Pavement

Existing Ground

6:1 6:1 6:1 3:1 3:1 3:1 377.17

A B 12 3 7

BT
FIAD

621+50.00

(A) *ROADWAY EMBANKMENT* Brown, loose, silty SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown-orange to white-tan, very loose to medium dense, clayey silty SAND (A-2-4, A-2-5), moist

L 619+50

Existing Ground Pavement

6:1 6:1 6:1 3:1 3:1 3:1 376.50

A B 8 3 5 13

BT
FIAD

619+50.00

8/29/2024
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mmeroy

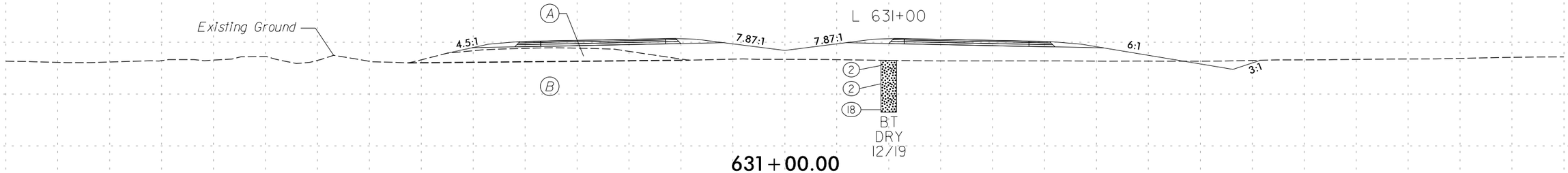
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	125

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

390 380 370 360 350 400 390

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, clayey silty SAND (A-2-5), little gravel, moist

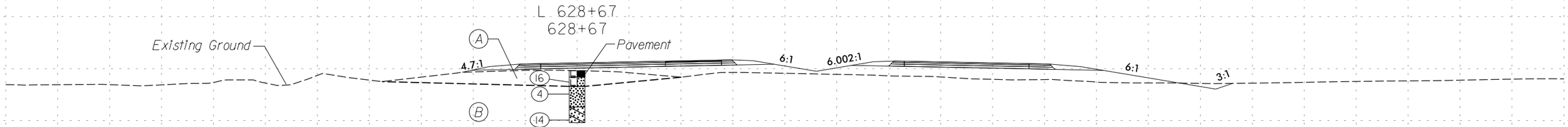
(B) *UNDIVIDED COASTAL PLAIN* Tan-brown-orange, very loose to medium dense, silty fine to coarse SAND (A-2-4), moist



631+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist

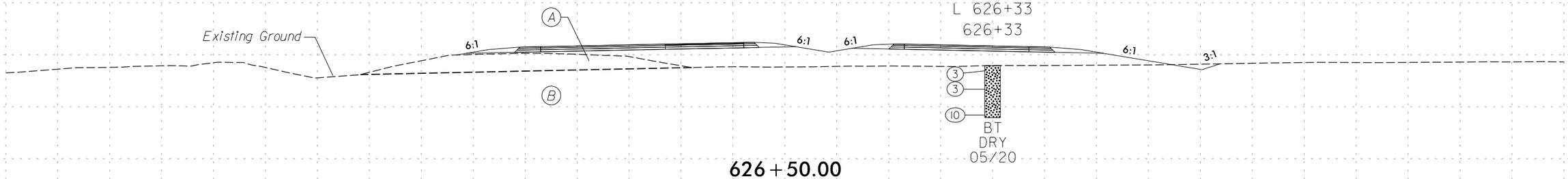
(B) *UNDIVIDED COASTAL PLAIN* Brown-orange to red-brown, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), moist



628+50.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange to white-tan, very loose to medium dense, silty fine to coarse SAND (A-2-4), moist



626+50.00

6/23/16

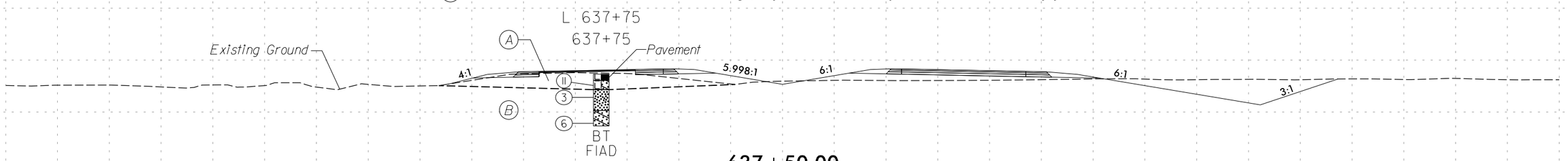
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	126

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

390 380 370 360

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, clayey SAND (A-2-7), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to orange, very loose to loose, silty SAND (A-2-4) and clayey SAND (A-2-7), moist

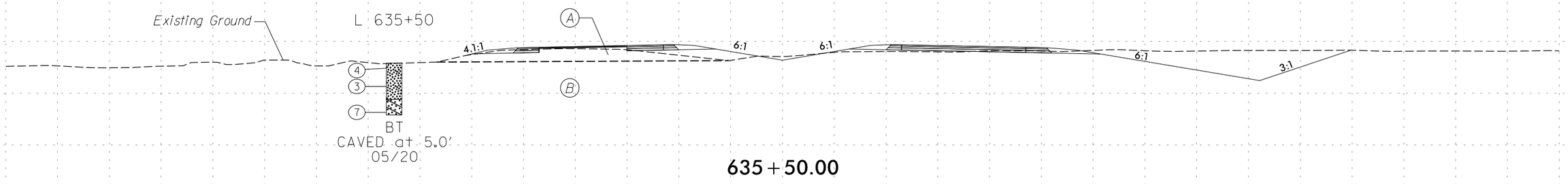


637+50.00

400 390 380 370 360

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, clayey silty SAND (A-2-5), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Tan to tan-orange, very loose to loose, silty fine SAND (A-2-4) and silty clayey fine to coarse SAND (A-2-7), moist

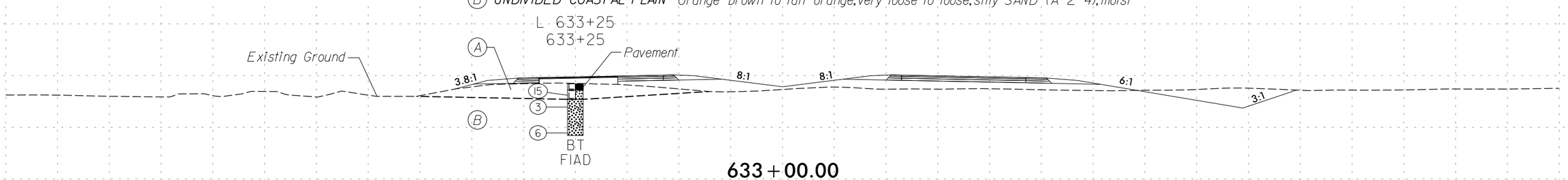


635+50.00

400 390 380 370 360 350

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, clayey silty SAND (A-2-5), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Orange-brown to tan-orange, very loose to loose, silty SAND (A-2-4), moist



633+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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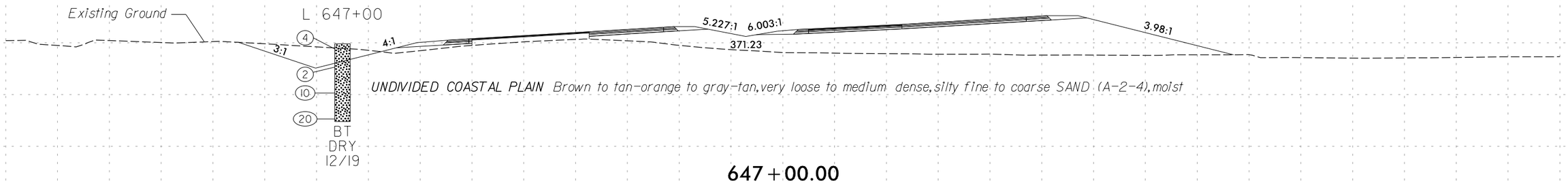
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	127

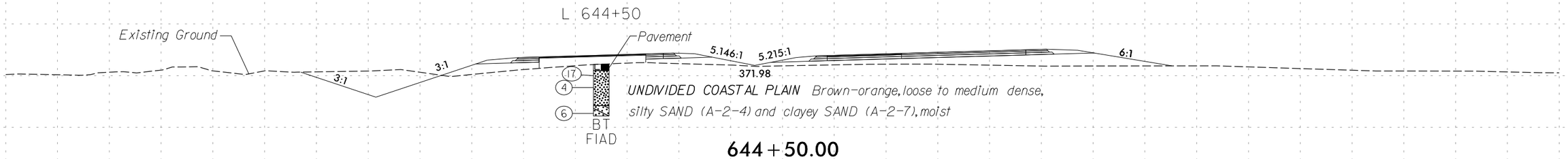
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

370 360 350 340 380



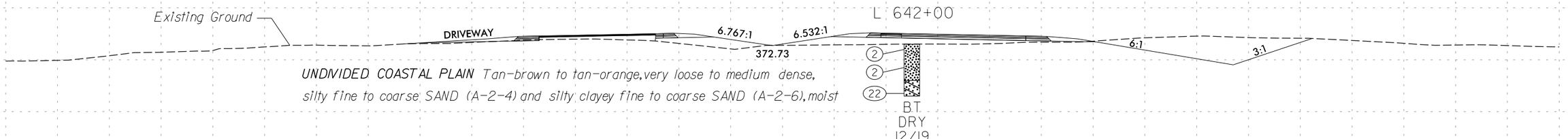
UNDIVIDED COASTAL PLAIN *Brown to tan-orange to gray-tan, very loose to medium dense, silty fine to coarse SAND (A-2-4), moist*

647+00.00



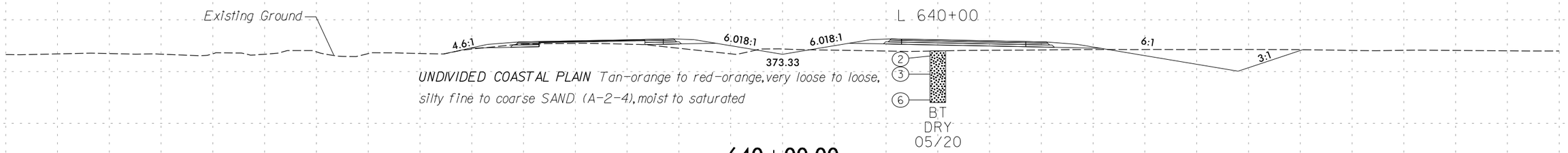
UNDIVIDED COASTAL PLAIN *Brown-orange, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), moist*

644+50.00



UNDIVIDED COASTAL PLAIN *Tan-brown to tan-orange, very loose to medium dense, silty fine to coarse SAND (A-2-4) and silty clayey fine to coarse SAND (A-2-6), moist*

642+00.00



UNDIVIDED COASTAL PLAIN *Tan-orange to red-orange, very loose to loose, silty fine to coarse SAND (A-2-4), moist to saturated*

640+00.00

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6/23/16

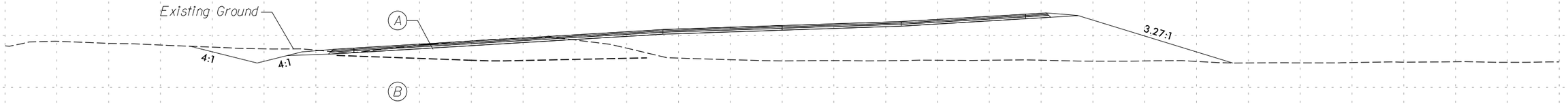
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	128

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

390 380 370 360 350

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, moderately plastic clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to white-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-6), moist to wet

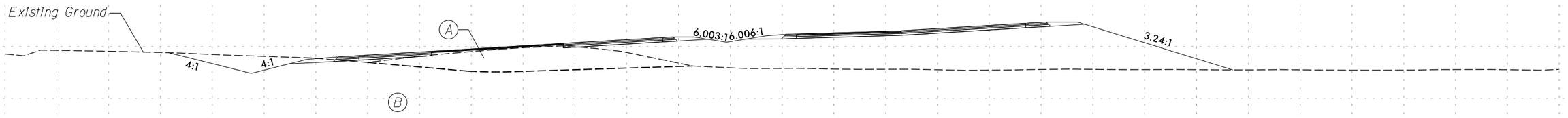


648+50.00

400 390 380 370 360 350

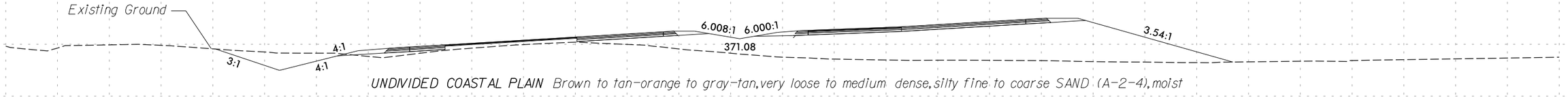
(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, moderately plastic clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to white-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-6), moist to wet



648+00.00

390 380 370 360 350 340



UNDIVIDED COASTAL PLAIN Brown to tan-orange to gray-tan, very loose to medium dense, silty fine to coarse SAND (A-2-4), moist

647+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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mmsley

6/23/16

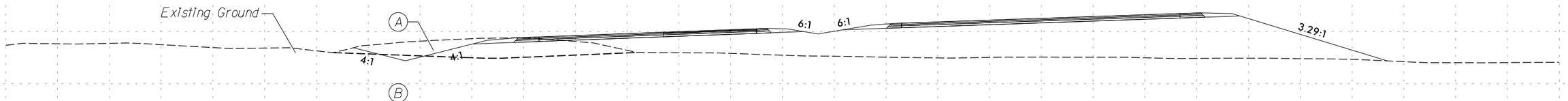
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	129

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

400 390 380 370 360 350

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, moderately plastic clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to white-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-6), moist to wet



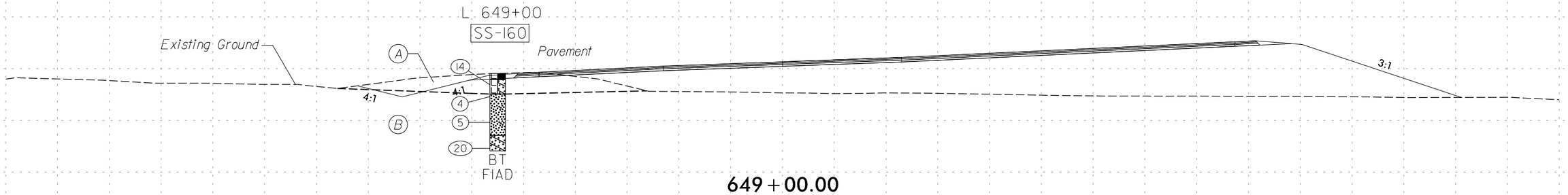
649+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-160	649+00	55' LT	1.2 - 2.7	A-2-6 (1)	37	18	53.0	15.0	2.0	30.0	99.0	64.0	32.0	14.0	ND

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, moderately plastic clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to white-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-6), moist to wet



649+00.00

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	130

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

370 360 350 340

Existing Ground

L 651+00

6.002:1 6:1 5.71:1

4:1 363.97 4:1

UNDIVIDED COASTAL PLAIN Tan to orange, very loose to medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), moist to wet

(2) (4) (12) BT FIAD

651+00.00

Existing Ground

6.003:1 6:1 5.17:1

4:1 364.11 4:1

UNDIVIDED COASTAL PLAIN Tan to orange, very loose to medium dense, clayey silty fine to coarse SAND (A-2-4, A-2-5), moist to wet

650+50.00

390 380 370 360 350 340

(A) *ROADWAY EMBANKMENT* Orange-brown, medium dense, moderately plastic clayey SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to white-tan, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-6), moist to wet

Existing Ground

(A)

5.998:1 6:1 3.95:1

4:1 4:1

(B)

650+00.00

8/29/2024
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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	131

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

380 370 360 350 340

Ⓐ *UNDIVIDED COASTAL PLAIN* *Brown-gray to tan-red, soft to stiff, fine to coarse sandy highly plastic CLAY (A-6), wet*

Ⓑ *Red-tan, medium dense, clayey fine to coarse SAND (A-2-6), moist*

Existing Ground

4:1 362.96 4:1 5.995:1 5.994:1 365.91 6:1

Ⓐ

Ⓑ

654+50.00

Ⓐ *UNDIVIDED COASTAL PLAIN* *Brown-gray to tan-red, soft to stiff, fine to coarse sandy highly plastic CLAY (A-6), wet*

Ⓑ *Red-tan, medium dense, clayey fine to coarse SAND (A-2-6), moist*

Existing Ground

4:1 363.11 4:1 5.992:1 5.991:1 366.11 6:1

Ⓐ

Ⓑ

654+00.00

Existing Ground

4:1 363.25 4:1 6:1 6:1 6:1

UNDIVIDED COASTAL PLAIN *Tan-brown to tan-orange to red-orange, very loose to loose, clayey silty fine to coarse SAND (A-2-4, A-2-5), little gravel, moist*

653+50.00

Existing Ground

L 653+00

⑥ ③ ⑩ BT DRY 05/20

4:1 363.39 4:1 6:1 6:1 6:1

UNDIVIDED COASTAL PLAIN *Tan-brown to tan-orange to red-orange, very loose to loose, clayey silty fine to coarse SAND (A-2-4, A-2-5), little gravel, moist*

653+00.00

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8/29/2024
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mmsley

6/23/16

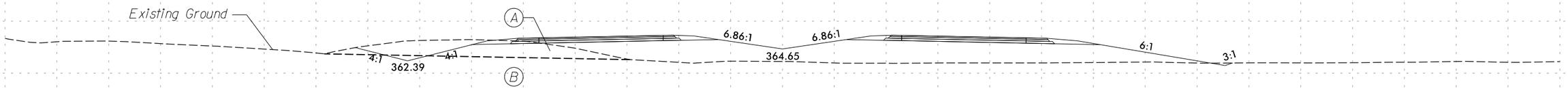
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	132

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

380 370 360 350 340

(A) *ROADWAY EMBANKMENT* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist

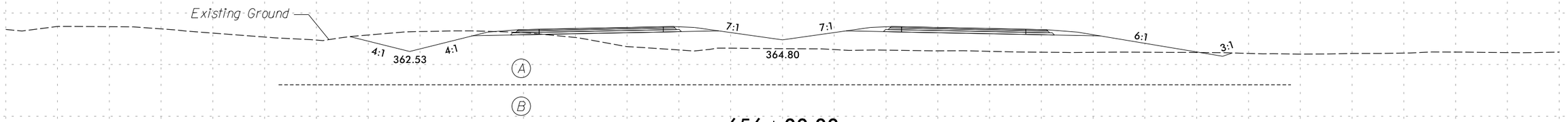
(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose to medium dense, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace gravel, moist



656+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-gray to tan-red, soft to stiff, fine to coarse sandy highly plastic CLAY (A-6), wet

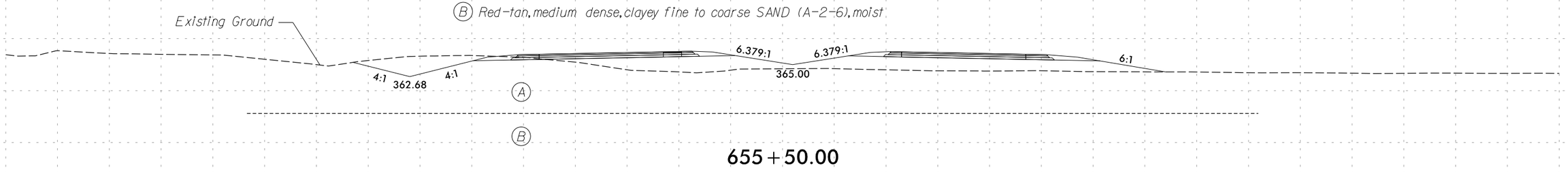
(B) *Red-tan, medium dense, clayey fine to coarse SAND (A-2-6), moist*



656+00.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-gray to tan-red, soft to stiff, fine to coarse sandy highly plastic CLAY (A-6), wet

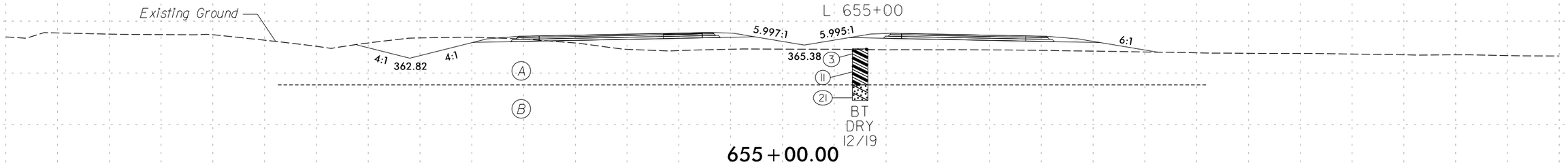
(B) *Red-tan, medium dense, clayey fine to coarse SAND (A-2-6), moist*



655+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-gray to tan-red, soft to stiff, fine to coarse sandy highly plastic CLAY (A-6), wet

(B) *Red-tan, medium dense, clayey fine to coarse SAND (A-2-6), moist*



655+00.00

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mmcfall

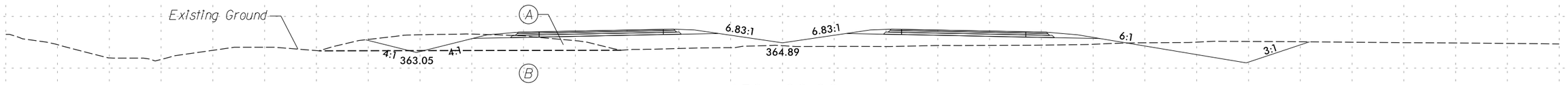
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	133

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

380
370
360
350

(A) *ROADWAY EMBANKMENT* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose to medium dense, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace gravel, moist

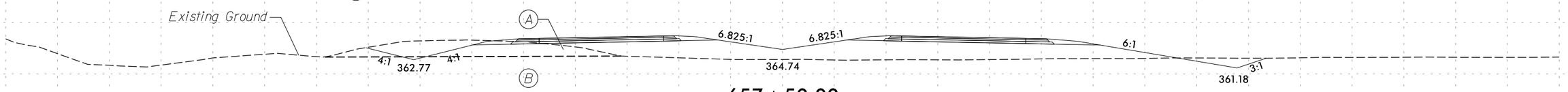


658+00.00

380
370
360
350

(A) *ROADWAY EMBANKMENT* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose to medium dense, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace gravel, moist



657+50.00

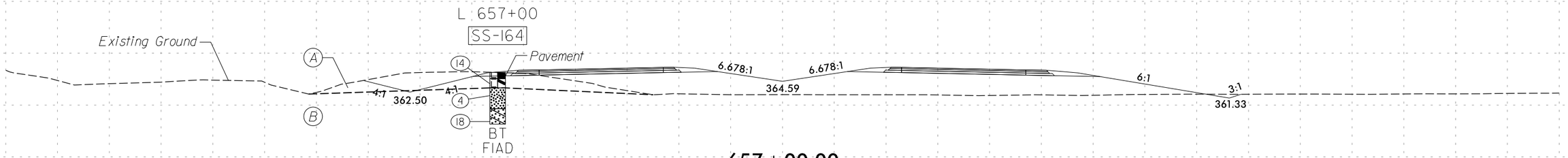
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-164	657+00	55' LT	1.2 - 2.7	A-7-6 (8)	50	29	40.0	15.0	3.0	42.0	99.0	74.0	45.0	15.0	ND

380
370
360
350

(A) *ROADWAY EMBANKMENT* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose to medium dense, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace gravel, moist



657+00.00

400
390
380
370
360
350
340

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	134

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

380 370 360 350 340

Ⓐ *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Brown to tan-orange, loose to medium dense, silty SAND (A-2-4) and clayey fine SAND (A-2-7), moist

L 661+00

Existing Ground

Pavement

Ⓐ 13 4 12 Ⓑ

4:1 362.57 4:1

5.792:1 5.792:1 364.24 6:1 3:1

BT
CAVED at 4.5'
05/20

661+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan, very loose, silty fine to coarse SAND (A-2-4), moist

Ⓑ *COASTAL PLAIN* Tan, loose, clayey fine SAND (A-2-6), little gravel, iron concretions, red to orange mottling, moist (Middendorf Formation)

Ⓒ Gray, stiff, silty CLAY (A-7-6), red and orange mottling, moist

L 659+00

Existing Ground

3 6 14

4:1 363.61 4:1 Ⓐ Ⓑ Ⓒ

7.272:1 7.272:1 365.19 6:1 3:1

BT
CAVED at 4.5'
05/20

659+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan, very loose, silty fine to coarse SAND (A-2-4), moist

Ⓑ *COASTAL PLAIN* Tan, loose, clayey fine SAND (A-2-6), little gravel, iron concretions, red to orange mottling, moist (Middendorf Formation)

Ⓒ Gray, stiff, silty CLAY (A-7-6), red and orange mottling, moist

Existing Ground

4:1 363.33 4:1 Ⓐ Ⓑ Ⓒ

7:1 7:1 365.04 6:1 3:1

658+50.00

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mmccoy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	135

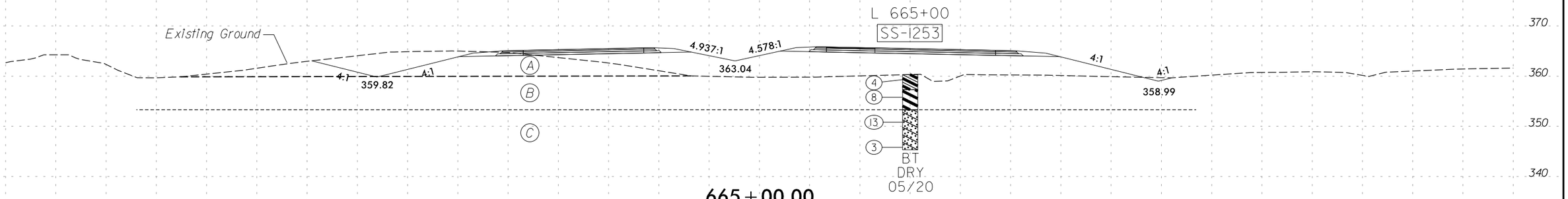
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1253	665+00	30' RT	0.0 - 1.5	A-6 (3)	28	11	26.0	18.0	20.0	36.0	99.0	84.0	56.0	16.0	5.0

(A) *ROADWAY EMBANKMENT* Gray to red-brown, stiff, coarse sandy CLAY (A-6), moist

(B) *COASTAL PLAIN* Light-dark gray, soft to stiff, fine sandy slightly plastic CLAY (A-6) and fine sandy silty CLAY (A-7-6), trace of organic matter, moist (Middendorf Formation)

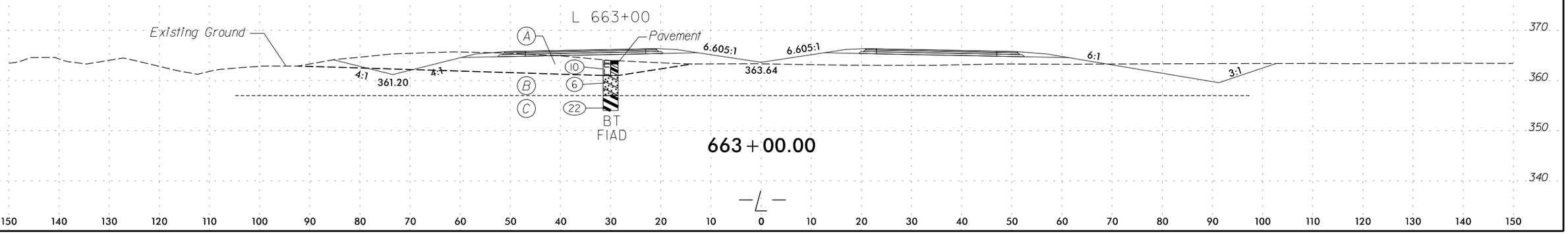
(C) Orange-white, very loose to medium dense, clayey coarse SAND (A-2-7), mottled, moist to saturated



(A) *ROADWAY EMBANKMENT* Gray to red-brown, stiff, coarse sandy CLAY (A-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey fine to coarse SAND (A-2-6), moist

(C) Red-brown to gray, very stiff, fine to coarse sandy silty CLAY (A-7-5), moist



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mmeloy

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	136

0 5 10

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

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1257	667+00	0' CL	0.0 - 1.5	A-4 (0)	27	8	50.0	13.0	17.0	20.0	100.0	65.0	37.0	12.0	5.0

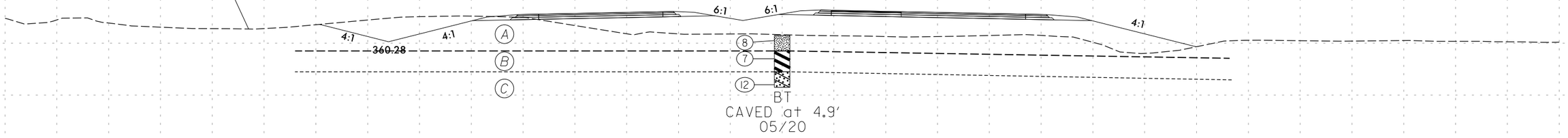
Ⓐ *UNDIVIDED COASTAL PLAIN Dark gray-black, stiff, slightly plastic clayey sandy SILT (A-4), trace of organic matter*

Ⓑ *COASTAL PLAIN Light gray, medium stiff, silty CLAY (A-7-6) (Middendorf Formation)*

Ⓒ *Tan-red, medium dense, clayey coarse SAND (A-2-7), red mottling*

L 667+00

SS-1257

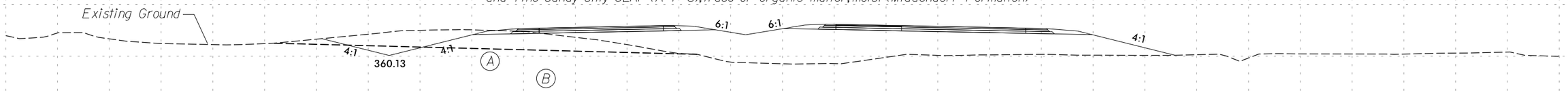


CAVED at 4.9'
05/20

667+00.00

Ⓐ *ROADWAY EMBANKMENT Gray to red-brown, stiff, coarse sandy CLAY (A-6), moist*

Ⓑ *COASTAL PLAIN Light-dark gray, soft to stiff, fine sandy slightly plastic CLAY (A-6) and fine sandy silty CLAY (A-7-6), trace of organic matter, moist (Middendorf Formation)*

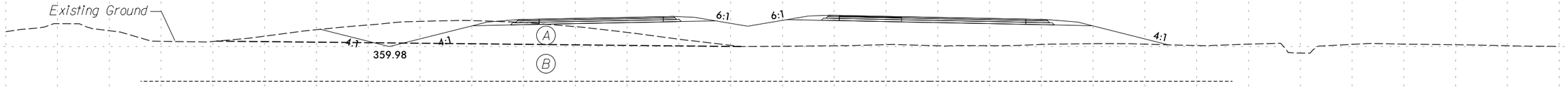


Orange-white, very loose to medium dense, clayey coarse SAND (A-2-7), mottled, moist to saturated

666+50.00

Ⓐ *ROADWAY EMBANKMENT Gray to red-brown, stiff, coarse sandy CLAY (A-6), moist*

Ⓑ *COASTAL PLAIN Light-dark gray, soft to stiff, fine sandy slightly plastic CLAY (A-6) and fine sandy silty CLAY (A-7-6), trace of organic matter, moist (Middendorf Formation)*



Orange-white, very loose to medium dense, clayey coarse SAND (A-2-7), mottled, moist to saturated

666+00.00

8/29/2024
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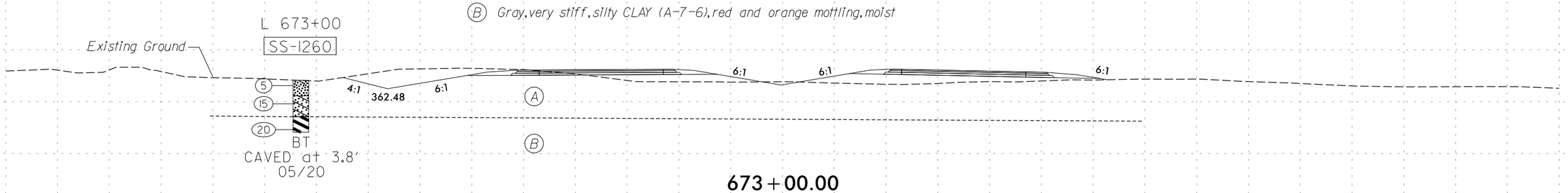
mmoya

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1260	673+00	93' LT	0.0 - 1.5	A-2-4	18	4	42.0	26.0	12.0	20.0	99.0	74.0	32.0	13.0	ND

(A) COASTAL PLAIN Brown to red-orange, loose to medium dense, clayey silty SAND (A-2-4) and clayey coarse SAND (A-2-7), mottled, trace of organic matter, moist (Middendorf Formation)

(B) Gray, very stiff, silty CLAY (A-7-6), red and orange mottling, moist



673+00.00

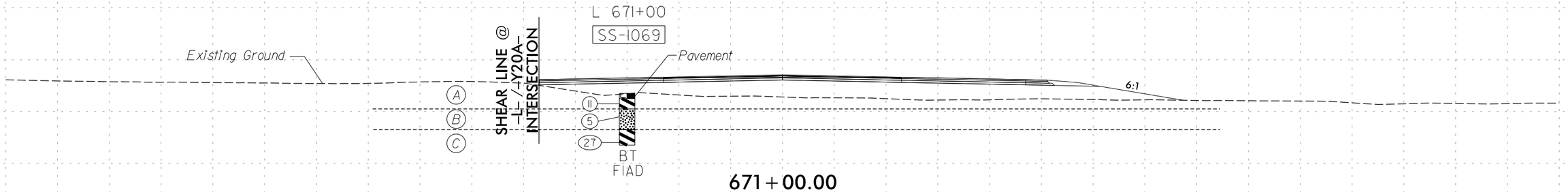
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1069	671+00	30' LT	3.5 - 5.0	A-2-4	19	5	48.0	23.0	7.0	22.0	100.0	75.0	28.8	17.0	ND

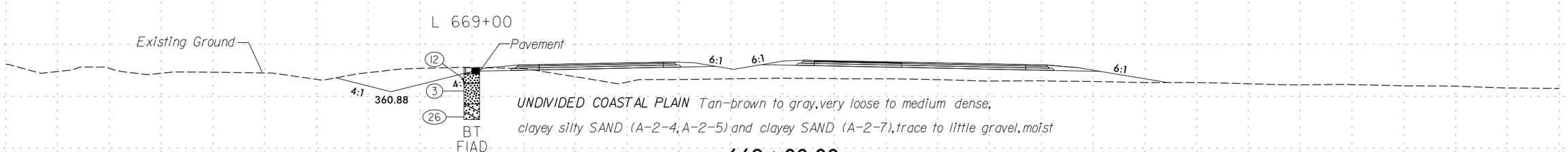
(A) UNDIVIDED COASTAL PLAIN Gray, stiff, fine to coarse sandy silty CLAY (A-7-5), moist

(B) Gray, loose, clayey silty fine to coarse SAND (A-2-4), moist

(C) Red-brown, very stiff, coarse sandy silty CLAY (A-7-5), moist

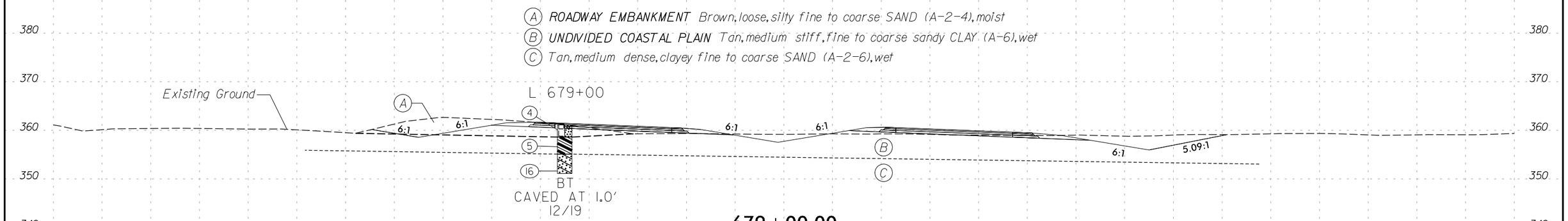


671+00.00



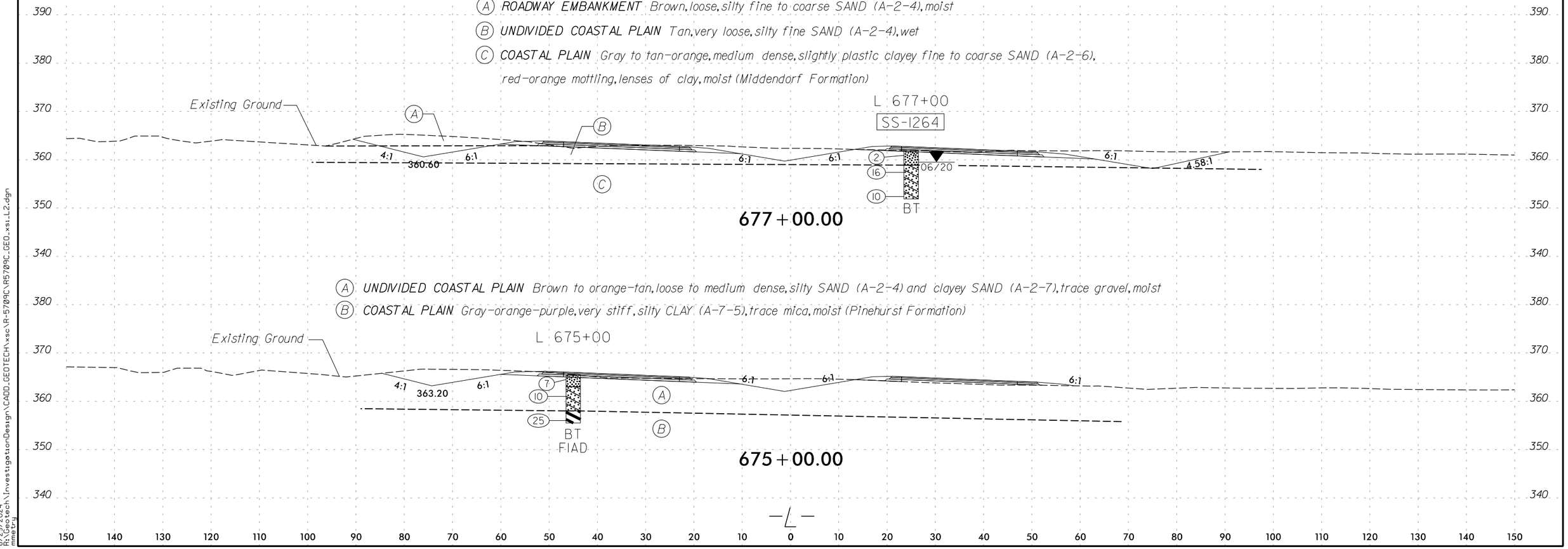
UNDIVIDED COASTAL PLAIN Tan-brown to gray, very loose to medium dense, clayey silty SAND (A-2-4, A-2-5) and clayey SAND (A-2-7), trace to little gravel, moist

669+00.00



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1264	677+00	25' RT	3.5 - 5.0	A-2-6(1)	34	15	46.9	22.4	4.5	26.1	99.8	68.8	30.6	ND	ND

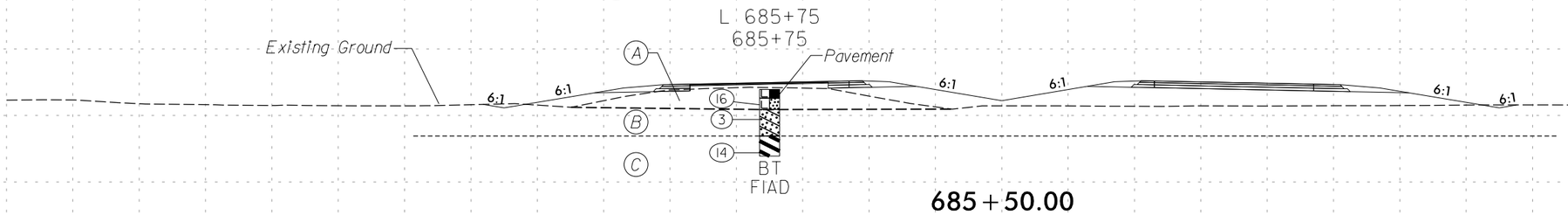


0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	139

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

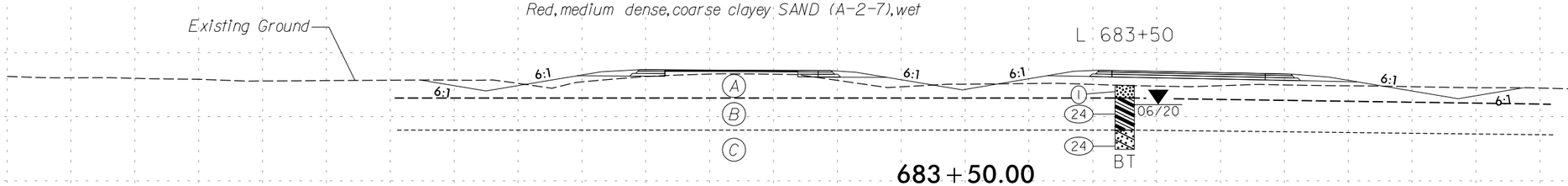
380 370 360 350 340 330

(A) *ROADWAY EMBANKMENT* Dark gray to brown, medium dense, clayey silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty clayey SAND (A-2-6), moist
(C) Gray-orange, stiff, sandy silty CLAY (A-7-5), trace gravel, moist



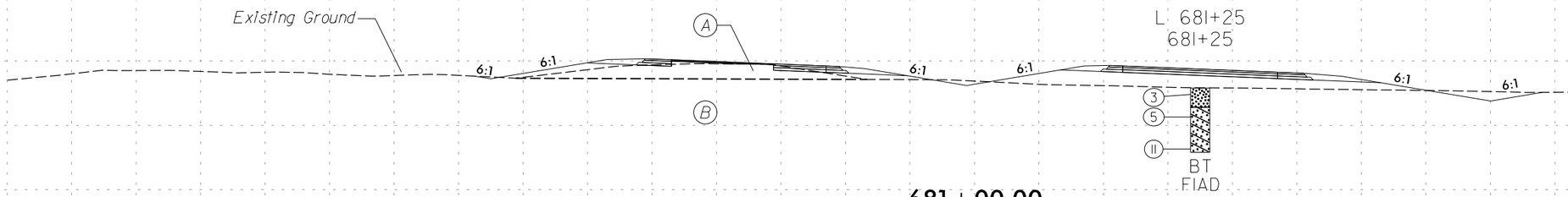
685+50.00

(A) *UNDIVIDED COASTAL PLAIN* Black, very loose, silty SAND (A-2-4), trace of organic matter, moist
(B) *COASTAL PLAIN* Tan-orange, very stiff, silty fine to coarse sandy CLAY (A-6), red mottling, moist (Middendorf Formation)
Red, medium dense, coarse clayey SAND (A-2-7), wet



683+50.00

(A) *ROADWAY EMBANKMENT* Brown, loose, silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to brown-orange to tan-orange, very loose to medium dense, silty fine SAND (A-2-4) and silty clayey coarse SAND (A-2-6), trace of organic matter, trace to little gravel, wet



681+00.00

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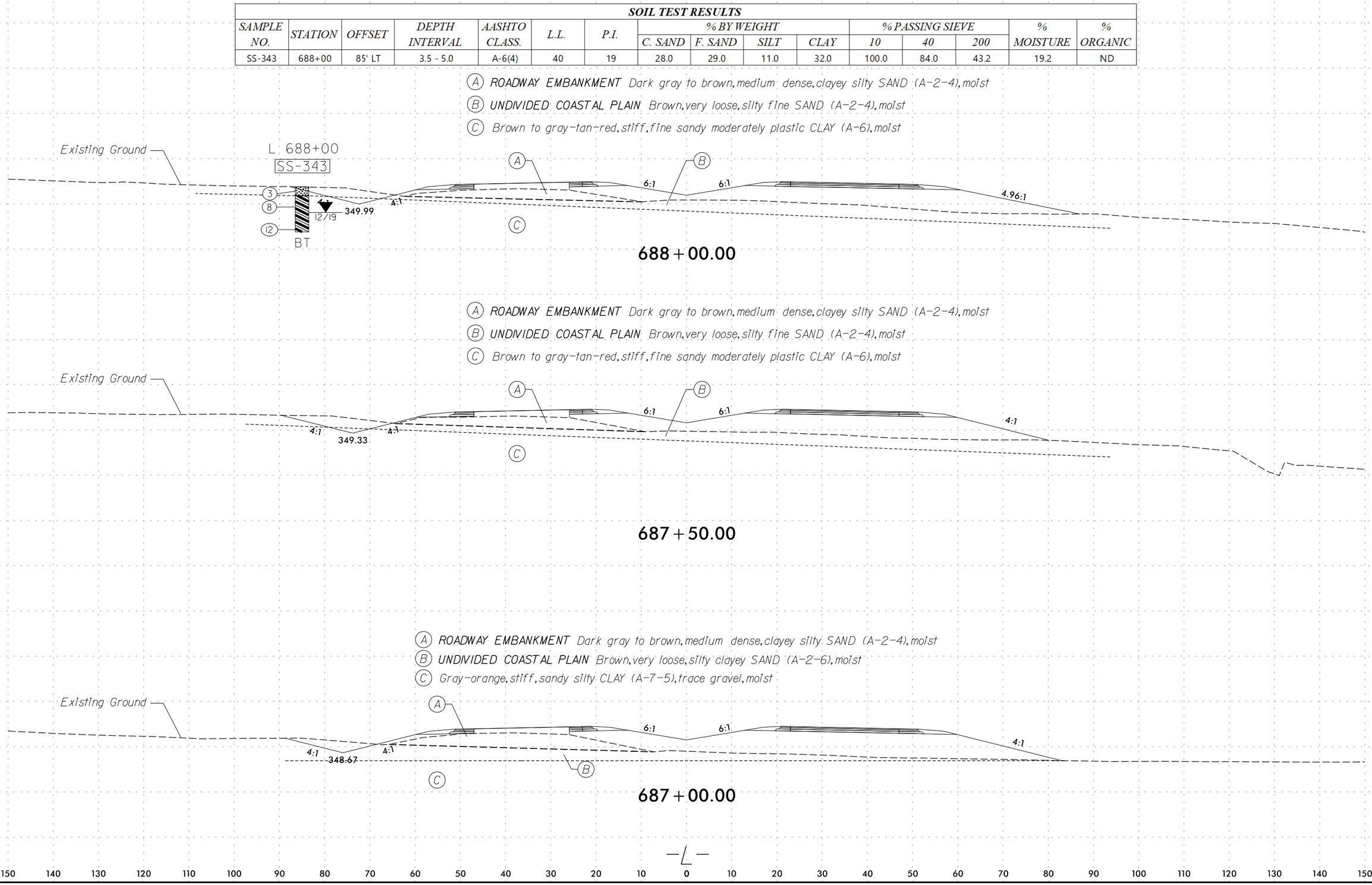
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	140

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-343	688+00	85' LT	3.5 - 5.0	A-6(4)	40	19	28.0	29.0	11.0	32.0	100.0	84.0	43.2	19.2	ND



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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	141

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

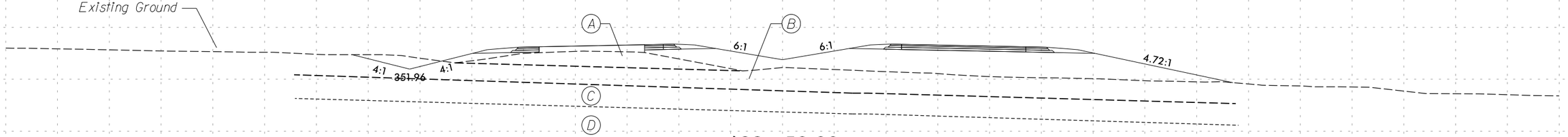
380 370 360 350 340 330

Ⓐ *ROADWAY EMBANKMENT* *Dark gray to brown, medium dense, clayey silty SAND (A-2-4), moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Tan, soft, fine to coarse sandy slightly plastic CLAY (A-6), moist*

Ⓒ *COASTAL PLAIN* *Tan, stiff, fine to coarse sandy CLAY (A-6), orange mottling, moist (Middendorf Formation)*

Ⓓ *Gray, medium dense, clayey coarse SAND (A-2-6), red-orange mottling, moist*



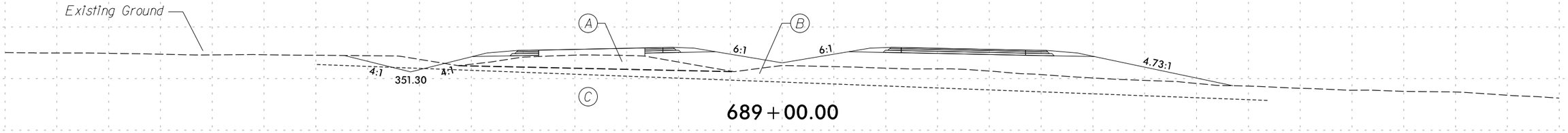
689 + 50.00

380 370 360 350 340

Ⓐ *ROADWAY EMBANKMENT* *Dark gray to brown, medium dense, clayey silty SAND (A-2-4), moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Brown, very loose, silty fine SAND (A-2-4), moist*

Ⓒ *Brown to gray-tan-red, stiff, fine sandy moderately plastic CLAY (A-6), moist*



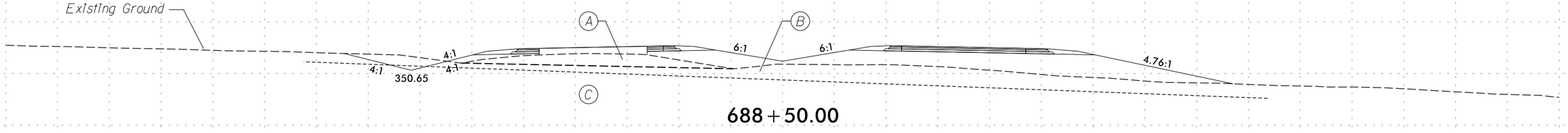
689 + 00.00

380 370 360 350 340

Ⓐ *ROADWAY EMBANKMENT* *Dark gray to brown, medium dense, clayey silty SAND (A-2-4), moist*

Ⓑ *UNDIVIDED COASTAL PLAIN* *Brown, very loose, silty fine SAND (A-2-4), moist*

Ⓒ *Brown to gray-tan-red, stiff, fine sandy moderately plastic CLAY (A-6), moist*



688 + 50.00

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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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mmsley

6/23/16

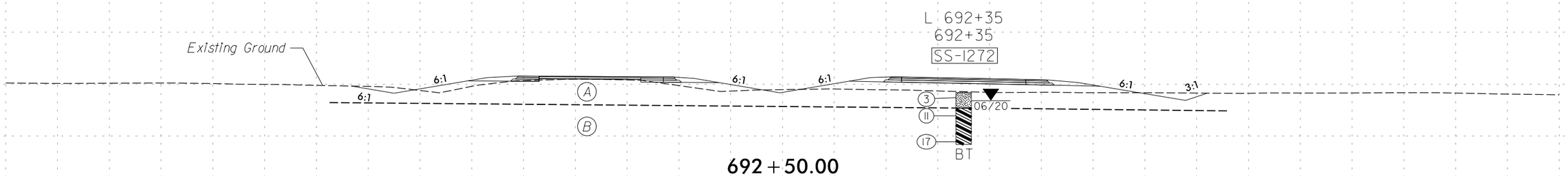
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	142

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1272	692+35	35' RT	0.0 - 1.5	A-4(0)	38	NP	35.8	21.8	8.3	34.0	96.7	72.9	42.3	20.4	ND

(A) *UNDIVIDED COASTAL PLAIN* Tan, soft, clayey sandy SILT (A-4), moist

(B) *COASTAL PLAIN* Tan-orange, stiff to very stiff, fine sandy CLAY (A-6), red mottling, moist (Middendorf Formation)



692 + 50.00

SOIL TEST RESULTS

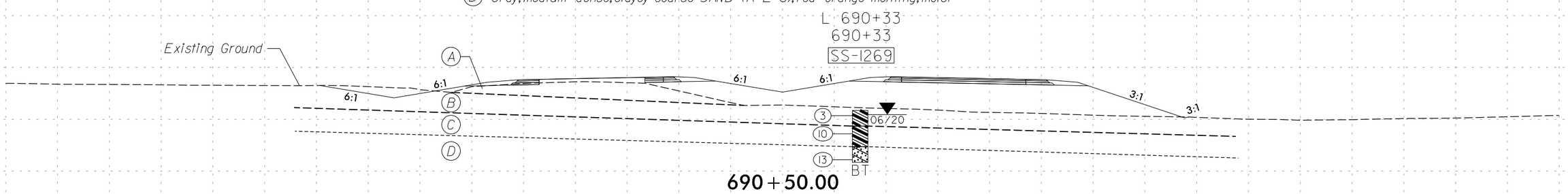
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1269	690+33	15' RT	0.0 - 1.5	A-6(2)	31	15	36.2	28.2	5.4	30.2	98.0	77.0	35.6	0.2	ND

(A) *ROADWAY EMBANKMENT* Dark gray to brown, medium dense, clayey silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan, soft, fine to coarse sandy slightly plastic CLAY (A-6), moist

(C) *COASTAL PLAIN* Tan, stiff, fine to coarse sandy CLAY (A-6), orange mottling, moist (Middendorf Formation)

(D) Gray, medium dense, clayey coarse SAND (A-2-6), red-orange mottling, moist



690 + 50.00

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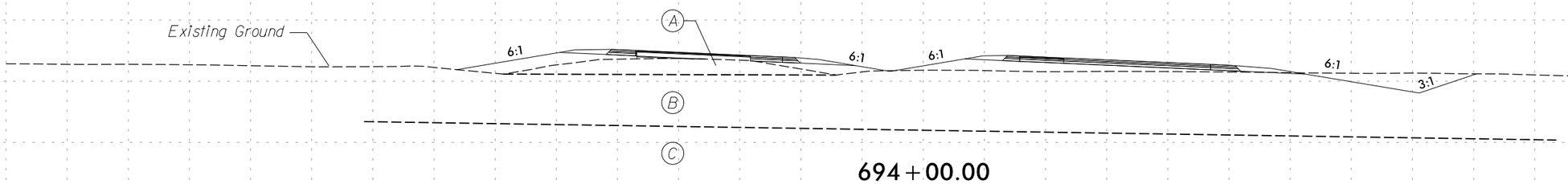
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	143

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

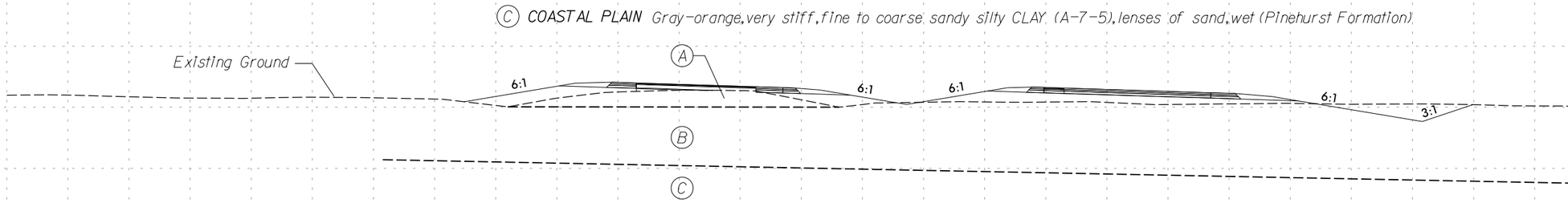
390
380
370
360
350
340

Ⓐ *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown to orange-tan, very loose to loose, moderately plastic clayey fine to coarse SAND (A-2-7), wet
Ⓒ *COASTAL PLAIN* Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-5), lenses of sand, wet (Pinehurst Formation)



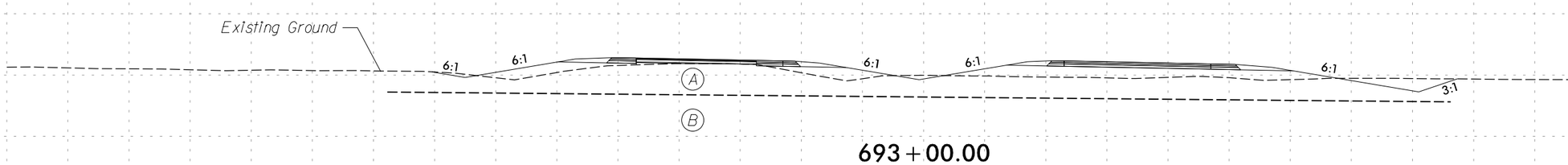
694+00.00

Ⓐ *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown to orange-tan, very loose to loose, moderately plastic clayey fine to coarse SAND (A-2-7), wet
Ⓒ *COASTAL PLAIN* Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-5), lenses of sand, wet (Pinehurst Formation)



693+50.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan, soft, clayey sandy SILT (A-4), moist
Ⓑ *COASTAL PLAIN* Tan-orange, stiff to very stiff, fine sandy CLAY (A-6), red mottling, moist (Middendorf Formation)



693+00.00

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mmetz

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	144

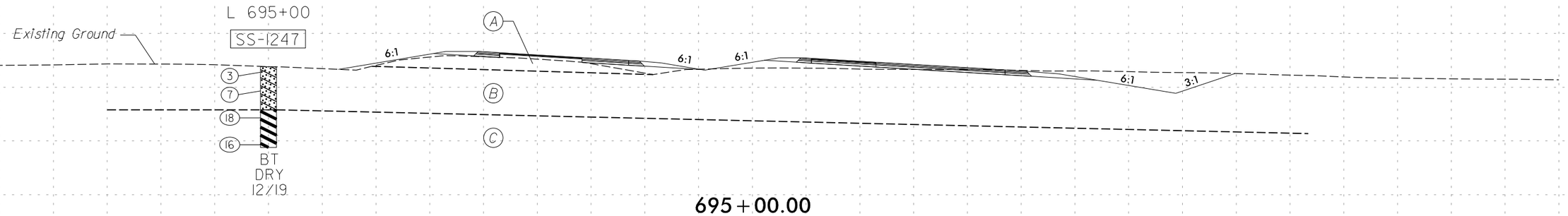
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1247	695+00	90' LT	3.5 - 5.0	A-2-7(3)	46	25	48.0	18.0	6.0	28.0	95.0	62.0	32.4	19.1	ND

(A) ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) UNDIVIDED COASTAL PLAIN Brown to orange-tan, very loose to loose, moderately plastic clayey fine to coarse SAND (A-2-7), wet

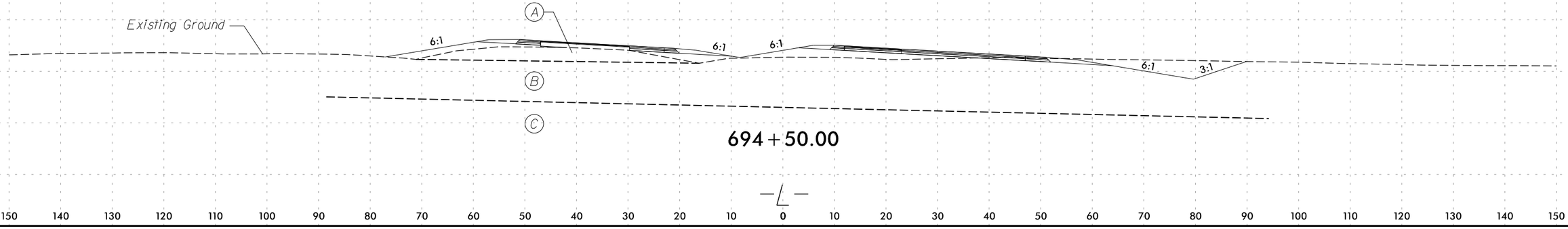
(C) COASTAL PLAIN Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-5), lenses of sand, wet (Pinehurst Formation)



(A) ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) UNDIVIDED COASTAL PLAIN Brown to orange-tan, very loose to loose, moderately plastic clayey fine to coarse SAND (A-2-7), wet

(C) COASTAL PLAIN Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-5), lenses of sand, wet (Pinehurst Formation)



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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	145

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

380 370 360 350 340 390 380

Existing Ground

6:1 6:1 5.324:1 5.562:1 6:1 4.37:1

363.34

(A) *UNDIVIDED COASTAL PLAIN* Brown-red, stiff, sandy silty moderately plastic CLAY (A-7-6), trace gravel, moist

(B) Red, medium dense, silty SAND (A-2-4), little gravel, moist

696+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown-red, stiff, sandy silty moderately plastic CLAY (A-7-6), trace gravel, moist

(B) Red, medium dense, silty SAND (A-2-4), little gravel, moist

Existing Ground

6:1 6:1 5.990:1 5.995:1 6:1 3:1

363.52

696+00.00

(A) *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Brown to orange-tan, very loose to loose, moderately plastic clayey fine to coarse SAND (A-2-7), wet

(C) *COASTAL PLAIN* Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-5), lenses of sand, wet (Pinehurst Formation)

Existing Ground

6:1 6:1 5.997:1 5.998:1 6:1 3:1

695+50.00

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	146

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

380 370 360 350 340

(A) UNDIVIDED COASTAL PLAIN Brown-red, stiff, sandy silty moderately plastic CLAY (A-7-6), trace gravel, moist

(B) Red, medium dense, silty SAND (A-2-4), little gravel, moist

Existing Ground

3:1 362.72 4:1 6:1 6:1 6:1 6:1

(A)

(B)

698+00.00

380 370 360 350 340

(A) UNDIVIDED COASTAL PLAIN Brown-red, stiff, sandy silty moderately plastic CLAY (A-7-6), trace gravel, moist

(B) Red, medium dense, silty SAND (A-2-4), little gravel, moist

Existing Ground

6:1 6:1 6.014:1 6.008:1 362.97 6:1 5.35:1

(A)

(B)

697+50.00

400 390 380 370 360 350 340

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-176	697+00	45' LT	3.5 - 5.0	A-7-6 (4)	43	25	34.3	25.5	5.9	34.3	91.0	71.0	40.2	16.0	ND

(A) UNDIVIDED COASTAL PLAIN Brown-red, stiff, sandy silty moderately plastic CLAY (A-7-6), trace gravel, moist

(B) Red, medium dense, silty SAND (A-2-4), little gravel, moist

L 697+00

SS-176

Pavement

Existing Ground

6:1 6:1 8 14 22 BT FIAD 5.305:1 5.547:1 363.15 6:1 4.65:1

(A)

(B)

697+00.00

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6/23/16

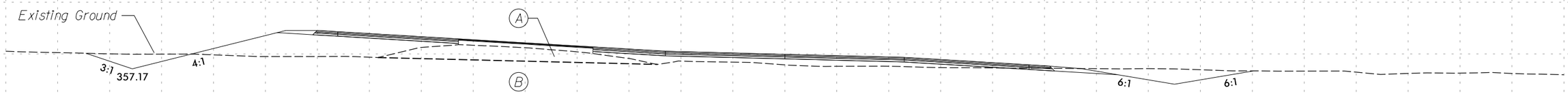
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	147

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

380 370 360 350

Ⓐ ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Brown-orange, loose to dense, clayey silty SAND (A-2-5), trace to little gravel, moist to wet

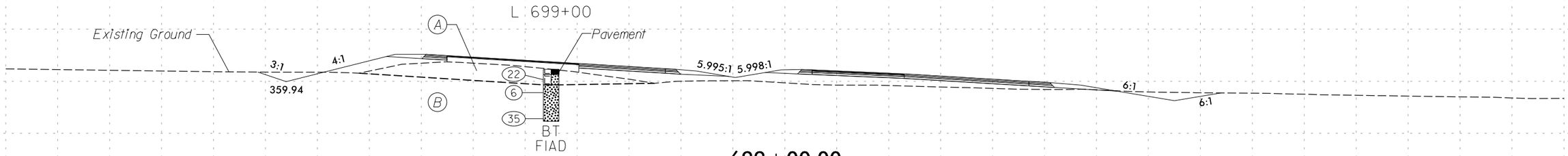


700+00.00

Ⓐ ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Brown-orange, loose to dense, clayey silty SAND (A-2-5), trace to little gravel, moist to wet

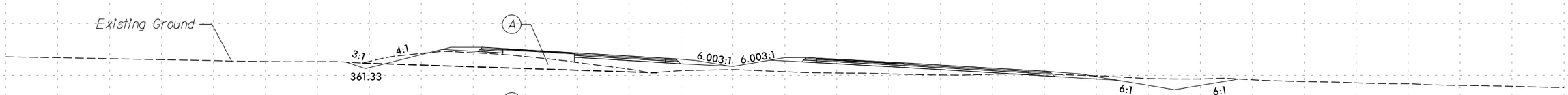
L 699+00



699+00.00

Ⓐ ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Brown-orange, loose to dense, clayey silty SAND (A-2-5), trace to little gravel, moist to wet



698+50.00

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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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6/23/16

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	148

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

400 390 380 370 360 350 340

SOIL TEST RESULTS

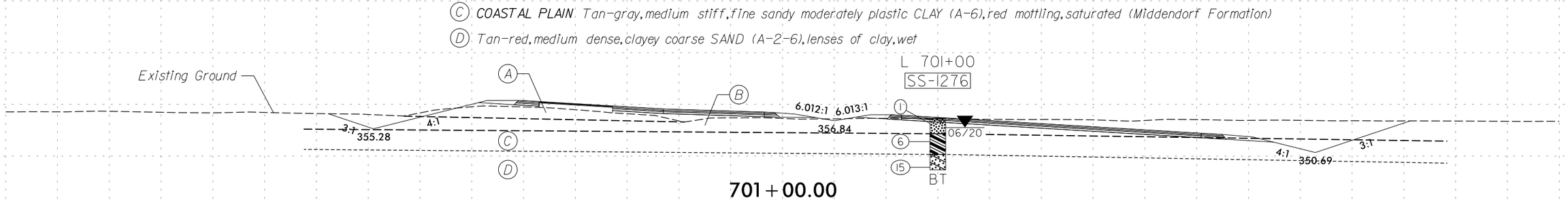
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1276	701+00	30' RT	3.5 - 5.0	A-6(4)	39	23	36.9	27.4	3.7	32.0	99.6	77.8	35.7	ND	ND

Ⓐ ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Tan, very loose, silty fine SAND (A-2-4), wet

Ⓒ COASTAL PLAIN Tan-gray, medium stiff, fine sandy moderately plastic CLAY (A-6), red mottling, saturated (Middendorf Formation)

Ⓓ Tan-red, medium dense, clayey coarse SAND (A-2-6), lenses of clay, wet



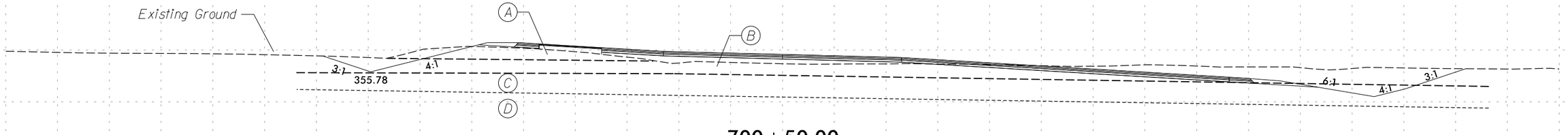
701+00.00

Ⓐ ROADWAY EMBANKMENT Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist

Ⓑ UNDIVIDED COASTAL PLAIN Tan, very loose, silty fine SAND (A-2-4), wet

Ⓒ COASTAL PLAIN Tan-gray, medium stiff, fine sandy moderately plastic CLAY (A-6), red mottling, saturated (Middendorf Formation)

Ⓓ Tan-red, medium dense, clayey coarse SAND (A-2-6), lenses of clay, wet



700+50.00

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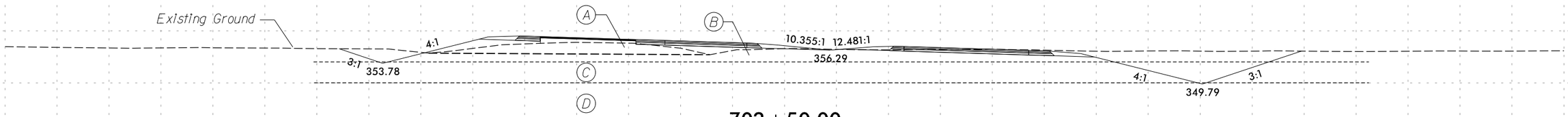
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	149

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

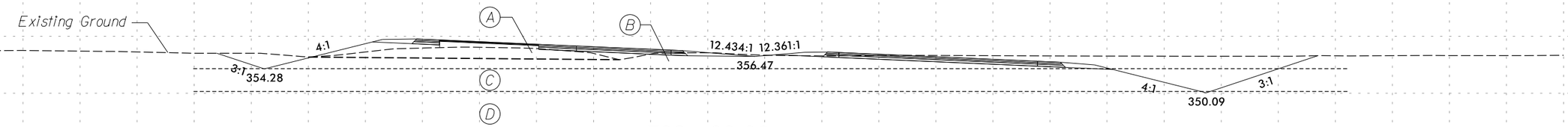
380 370 360 350 340

(A) *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty fine to coarse SAND (A-2-4), moist
(C) Orange, very stiff, coarse sandy silty moderately plastic CLAY (A-7-5), moist
(D) Orange, medium dense, clayey coarse SAND (A-2-7), wet



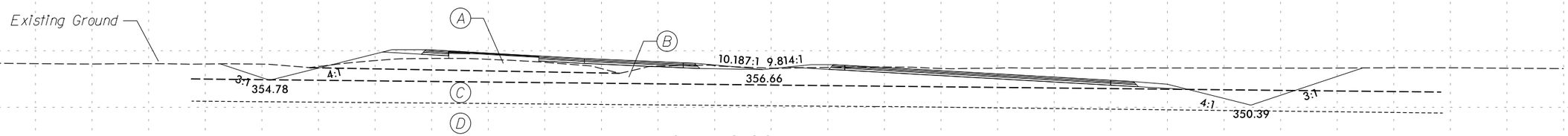
702 + 50.00

(A) *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty fine to coarse SAND (A-2-4), moist
(C) Orange, very stiff, coarse sandy silty moderately plastic CLAY (A-7-5), moist
(D) Orange, medium dense, clayey coarse SAND (A-2-7), wet



702 + 00.00

(A) *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Tan, very loose, silty fine SAND (A-2-4), wet
(C) *COASTAL PLAIN* Tan-gray, medium stiff, fine sandy moderately plastic CLAY (A-6), red mottling, saturated (Middendorf Formation)
(D) Tan-red, medium dense, clayey coarse SAND (A-2-6), lenses of clay, wet



701 + 50.00

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mesley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	150

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

380 370 360 350 340

Ⓐ *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty fine to coarse SAND (A-2-4), moist
Ⓒ Orange, very stiff, coarse sandy silty moderately plastic CLAY (A-7-5), moist
Ⓓ Orange, medium dense, clayey coarse SAND (A-2-7), wet

Existing Ground

3:1 352.28 4:1 6.757:1 7.959:1 355.77 4:1 348.88 3:1

704+00.00

Ⓐ *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty fine to coarse SAND (A-2-4), moist
Ⓒ Orange, very stiff, coarse sandy silty moderately plastic CLAY (A-7-5), moist
Ⓓ Orange, medium dense, clayey coarse SAND (A-2-7), wet

Existing Ground

3:1 352.78 4:1 8.230:1 11.424:1 355.92 4:1 349.18 3:1

703+50.00

Ⓐ *ROADWAY EMBANKMENT* Dark gray-brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ *UNDIVIDED COASTAL PLAIN* Brown, very loose, silty fine to coarse SAND (A-2-4), moist
Ⓒ Orange, very stiff, coarse sandy silty moderately plastic CLAY (A-7-5), moist
Ⓓ Orange, medium dense, clayey coarse SAND (A-2-7), wet

Existing Ground

L 703+00

③ ⑰ ⑬ 3:1 353.28 4:1 9.196:1 12.532:1 356.10 4:1 349.49 3:1

BT
DRY
12/19

703+00.00

330

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mmcfa

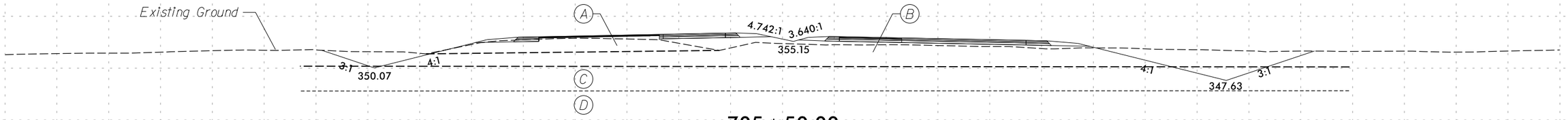
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	151

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

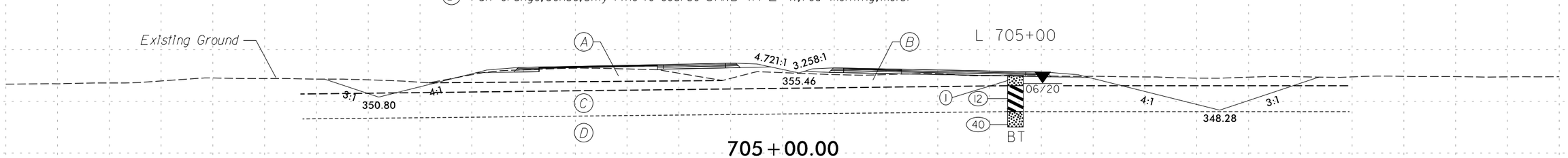
380 370 360 350 340 330 390

(A) ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), moist
(B) UNDIVIDED COASTAL PLAIN Tan, very loose, fine to coarse silty SAND (A-2-4), wet
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy silty CLAY (A-7-5), red mottling, moist (Middendorf Formation)
(D) Tan-orange, dense, silty fine to coarse SAND (A-2-4), red mottling, moist



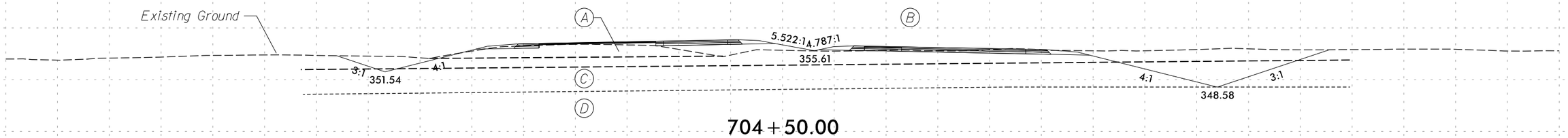
705+50.00

(A) ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), moist
(B) UNDIVIDED COASTAL PLAIN Tan, very loose, fine to coarse silty SAND (A-2-4), wet
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy silty moderately plastic CLAY (A-7-5), red mottling, moist (Middendorf Formation)
(D) Tan-orange, dense, silty fine to coarse SAND (A-2-4), red mottling, moist



705+00.00

(A) ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), moist
(B) UNDIVIDED COASTAL PLAIN Tan, very loose, fine to coarse silty SAND (A-2-4), wet
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy silty moderately plastic CLAY (A-7-5), red mottling, moist (Middendorf Formation)
(D) Tan-orange, dense, silty fine to coarse SAND (A-2-4), red mottling, moist



704+50.00

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6/23/16

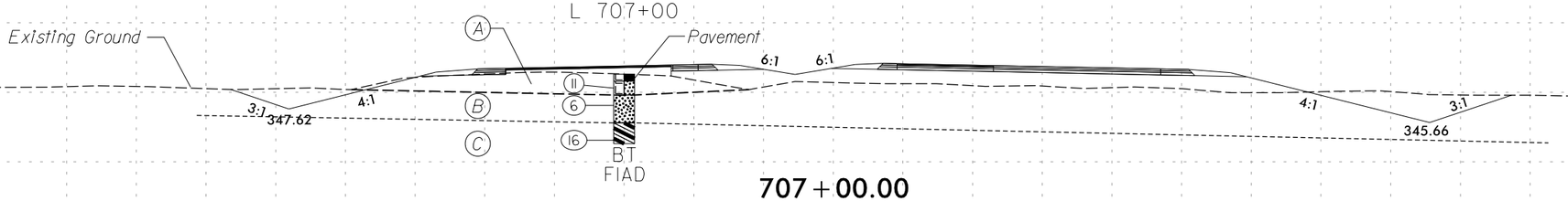
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	152

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

370 360 350 340 330

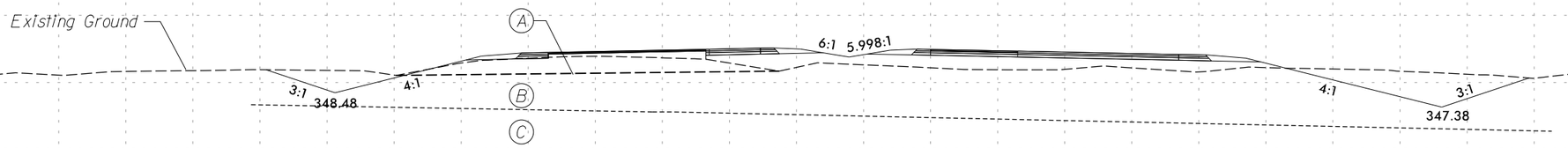
(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), wet
(C) Gray-orange, very stiff, silty sandy CLAY (A-6), moist

L 707+00



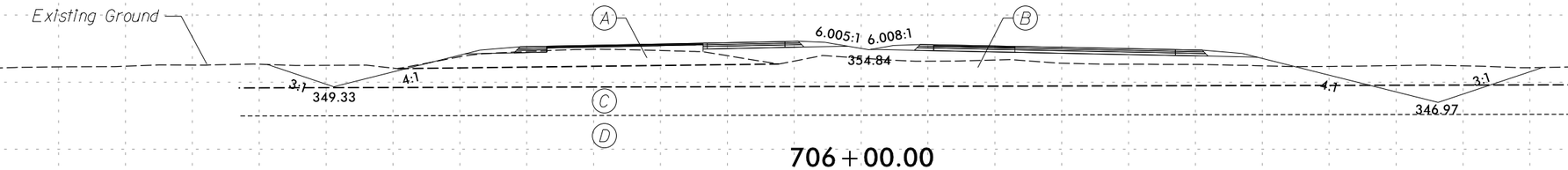
707+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), wet
(C) Gray-orange, very stiff, silty sandy CLAY (A-6), moist



706+50.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Tan, very loose, fine to coarse silty SAND (A-2-4), wet
(C) *COASTAL PLAIN* Tan-orange, stiff, fine sandy silty CLAY (A-7-5), red mottling, moist (Middendorf Formation)
(D) Tan-orange, dense, silty fine to coarse SAND (A-2-4), red mottling, moist



706+00.00

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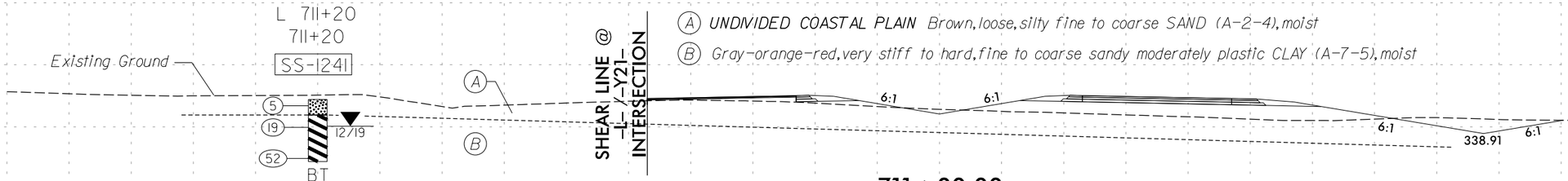
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	153

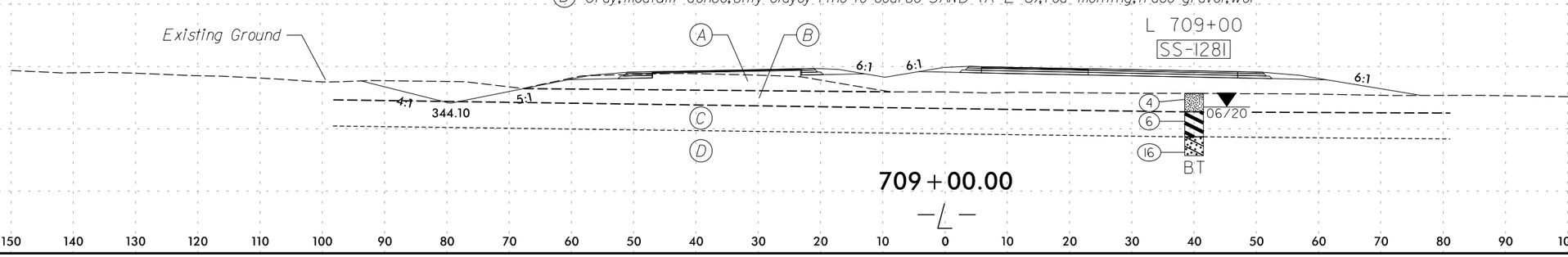
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1241	711+20	100' LT	3.5 - 5.0	A-7-5(6)	49	18	32.0	18.0	8.0	42.0	94.0	74.0	47.0	23.6	ND



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1281	709+00	40' RT	0.0 - 1.5	A-4(1)	24	10	29.0	31.7	11.0	28.3	99.7	85.3	39.3	14.0	ND



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PROJ. REFERENCE NO.	SHEET NO.
R-5709C	154

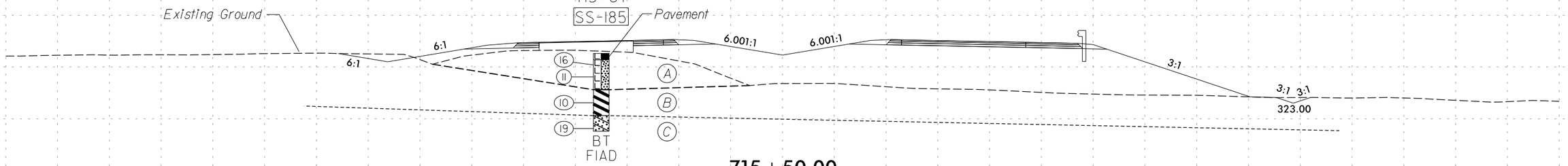
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-185	715+67	35' LT	1.2 - 2.7	A-2-4	15	4	41.0	28.0	9.0	22.0	100.0	74.0	31.0	8.0	ND

(A) ROADWAY EMBANKMENT Brown-orange, medium dense, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Orange, stiff, sandy silty CLAY (A-7-5), moist

(C) Tan-orange, medium dense, clayey SAND (A-2-7), little gravel, moist



715+50.00

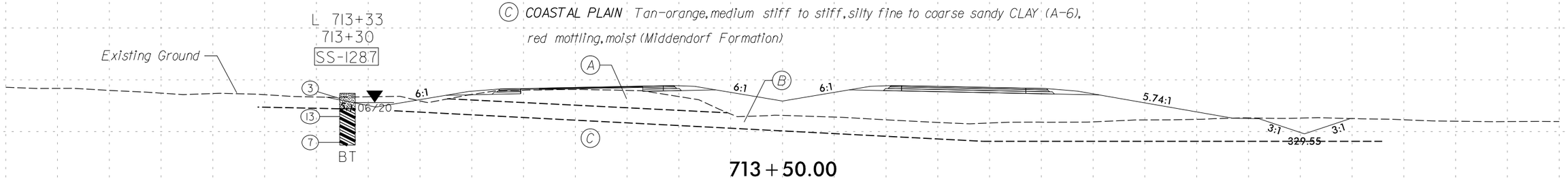
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1287	713+30	84' LT	0.0 - 1.5	A-4(0)	35	NP	34.1	22.2	7.6	36.1	95.6	72.9	43.7	17.4	ND

(A) ROADWAY EMBANKMENT Brown-orange, medium dense, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Tan-brown, soft, clayey sandy SILT (A-4), moist

(C) COASTAL PLAIN Tan-orange, medium stiff to stiff, silty fine to coarse sandy CLAY (A-6), red mottling, moist (Middendorf Formation)



713+50.00

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	155

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

390 380 370 360 350 340 330 320 310 300

SOIL TEST RESULTS

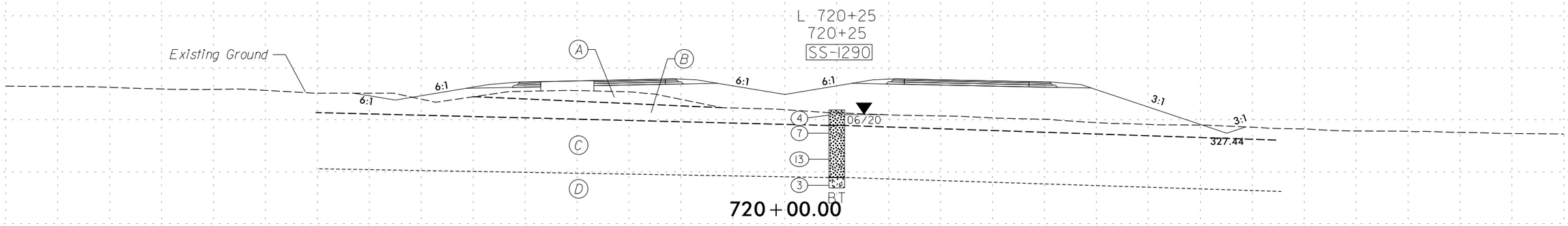
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1290	720+25	10' RT	0.0 - 1.5	A-2-4	30	NP	50.5	17.8	3.7	28.0	99.2	65.3	31.7	ND	ND

(A) ROADWAY EMBANKMENT Brown-orange, medium dense, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Brown, loose, clayey silty SAND (A-2-4), moist

(C) COASTAL PLAIN Brown to gray, loose to medium dense, clayey silty SAND (A-2-4), red mottling, trace mica, moist (Middendorf Formation)

(D) Tan-orange, soft, fine sandy clayey SILT (A-5), mottled, trace mica, saturated

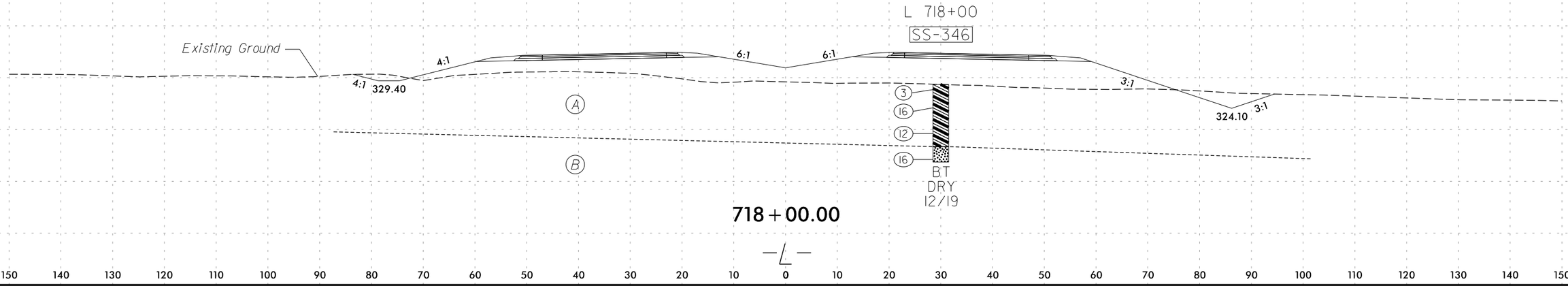


SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-346	718+00	30' RT	3.5 - 5.0	A-6(1)	35	11	38.0	22.0	9.0	30.0	99.0	78.0	39.1	16.1	ND

(A) UNDIVIDED COASTAL PLAIN Brown-tan-red, soft to very stiff, fine to coarse sandy slightly plastic CLAY (A-6), moist

(B) Brown, medium dense, clayey silty fine to coarse SAND (A-2-4), wet



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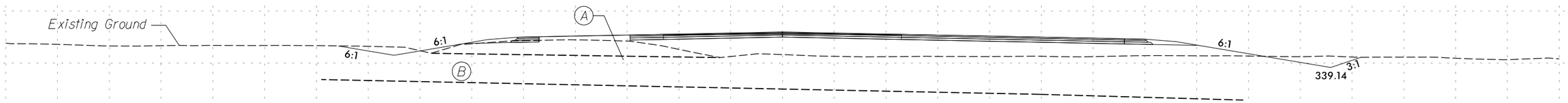
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	156

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

360 350 340 330 320

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, very loose, clayey silty SAND (A-2-4), moist



COASTAL PLAIN Tan-orange to white-orange, very loose to medium dense, clayey silty SAND (A-2-4)
and silty clayey fine to coarse SAND (A-2-7), red mottling, trace mica, moist to saturated (Middendorf Formation)

723+50.00

380 370 360 350 340 330 320 310

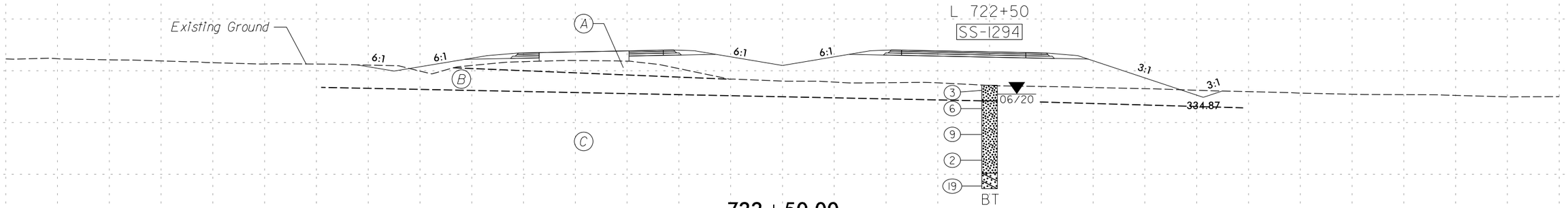
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1294	722+50	40' RT	0.0 - 1.5	A-2-4	27	NP	47.6	20.0	4.3	28.1	98.6	69.4	32.4	17.7	ND

(A) *ROADWAY EMBANKMENT* Brown-orange, medium dense, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, very loose, clayey silty SAND (A-2-4), moist

(C) *COASTAL PLAIN* Tan-orange to white-orange, very loose to medium dense, clayey silty SAND (A-2-4)
and silty clayey fine to coarse SAND (A-2-7), red mottling, trace mica, moist to saturated (Middendorf Formation)



722+50.00

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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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mierzwa

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	157

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

360 / 350 / 340 / 330

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

4:1 6:1 4.970:1 4.748:1 6:1 4.05:1

344.93

Orange, stiff, sandy silty CLAY (A-7-5), trace mica, moist

725+00.00

360 / 350 / 340 / 330 / 320

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, medium dense, clayey silty SAND (A-2-5), moist

Ⓑ Orange, stiff, sandy silty CLAY (A-7-5), trace mica, moist

L 724+75
724+75

Existing Ground

12 14 12

5.05:1 6:1 6.013:1 6.019:1 6:1 6:1

345.14

BT
CAVED at 3.5'
05/20

724+50.00

360 / 350 / 340 / 330 / 320

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

6:1 6:1 6:1 6:1

Orange, stiff, sandy silty CLAY (A-7-5), trace mica, moist

724+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	158

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

350
340
330
320

Existing Ground

6:1 342.04 6:1 5.049:1 4.897:1 344.29 6:1 342.18 4:1

UNDIVIDED COASTAL PLAIN Red-orange, stiff to very stiff, fine to coarse sandy CLAY (A-6), moist to wet

COASTAL PLAIN Gray, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)

726+50.00

350
340
330
320

Existing Ground

6:1 6:1 4.647:1 4.429:1 344.50 6:1 342.36 4:1

UNDIVIDED COASTAL PLAIN Red-orange, stiff to very stiff, fine to coarse sandy CLAY (A-6), moist to wet

COASTAL PLAIN Gray, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)

726+00.00

360
350
340
330
320

(A) UNDIVIDED COASTAL PLAIN Brown, medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

(A) 5.74:1 6:1 4.613:1 4.365:1 344.72 6:1 342.53 4:1

Orange, stiff, sandy silty CLAY (A-7-5), trace mica, moist

725+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	159

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

360 350 340 330 320

(A) *UNDIVIDED COASTAL PLAIN* *Red-orange, stiff to very stiff, fine to coarse sandy CLAY (A-6), moist to wet*

(B) *COASTAL PLAIN* *Gray, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)*

Existing Ground

3:1 3:1 337.79 6:1 6:1 6:1 4.60:1

(A) (B)

728+00.00

(A) *UNDIVIDED COASTAL PLAIN* *Red-orange, stiff to very stiff, fine to coarse sandy CLAY (A-6), moist to wet*

Existing Ground

3:1 6:1 339.39 6:1 6:1 6:1 4:1 3:1

(A)

COASTAL PLAIN *Gray, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)*

727+50.00

(A) *UNDIVIDED COASTAL PLAIN* *Red-orange, stiff to very stiff, fine to coarse sandy CLAY (A-6), moist to wet*

(B) *COASTAL PLAIN* *Gray, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)*

L 727+00

Existing Ground

6:1 6:1 340.99 344.08 5.986:1 5.983:1 6:1 4:1 3:1

13 19 9 22

BT
DRY
12/19

(A) (B)

727+00.00

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	160

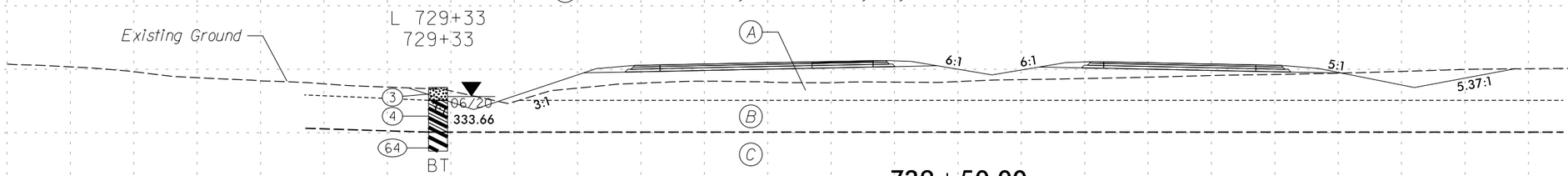
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

360 350 340 330 320

(A) *UNDIVIDED COASTAL PLAIN* Black,very loose,clayey silty fine SAND (A-2-5),trace of organic matter,moist

(B) Tan-orange,medium stiff,sandy CLAY (A-6),moist

(C) *COASTAL PLAIN* Gray,hard,fine sandy silty CLAY (A-7-6),moist (Middendorf Formation)

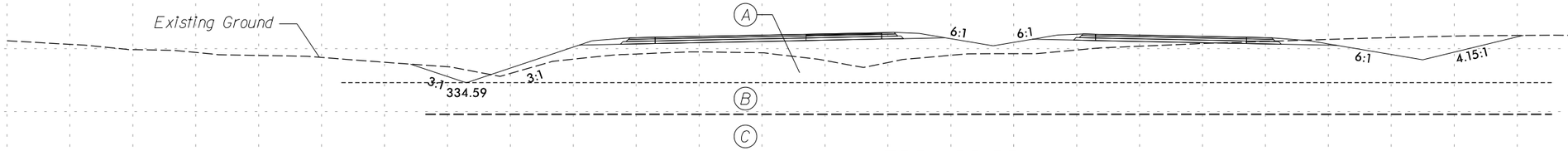


729+50.00

(A) *UNDIVIDED COASTAL PLAIN* Black,very loose,clayey silty fine SAND (A-2-5),trace of organic matter,moist

(B) Tan-orange,medium stiff,sandy CLAY (A-6),moist

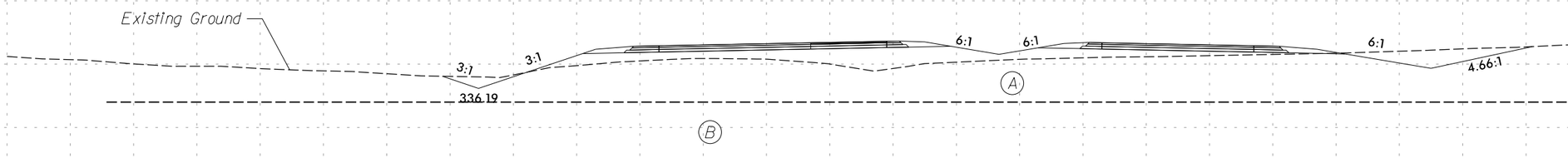
(C) *COASTAL PLAIN* Gray,hard,fine sandy silty CLAY (A-7-6),moist (Middendorf Formation)



729+00.00

(A) *UNDIVIDED COASTAL PLAIN* Red-orange,stiff to very stiff,fine to coarse sandy CLAY (A-6),moist to wet

(B) *COASTAL PLAIN* Gray,very stiff,fine to coarse sandy silty CLAY (A-7-6),wet (Middendorf Formation)



728+50.00

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mlang

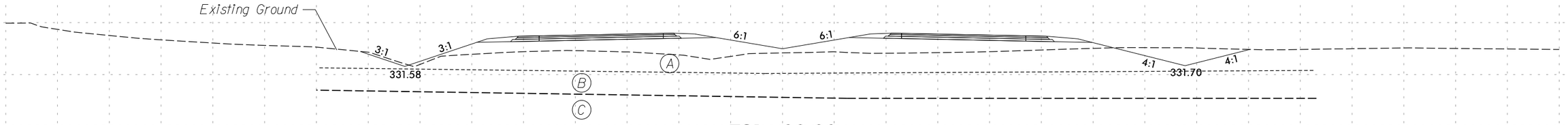
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	161

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

360 350 340 330 320 310

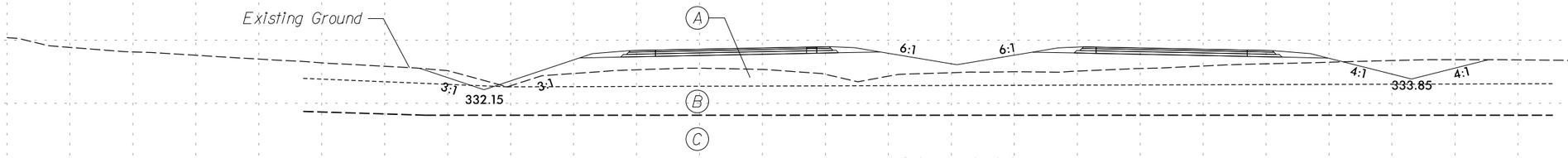
(A) *UNDIVIDED COASTAL PLAIN* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist
(B) Gray,loose,silty clayey coarse SAND (A-2-6),wet
(C) *COASTAL PLAIN* Gray,dense,clayey fine to coarse SAND (A-2-6),saturated (Middendorf Formation)



731+00.00

360 350 340 330 320 310

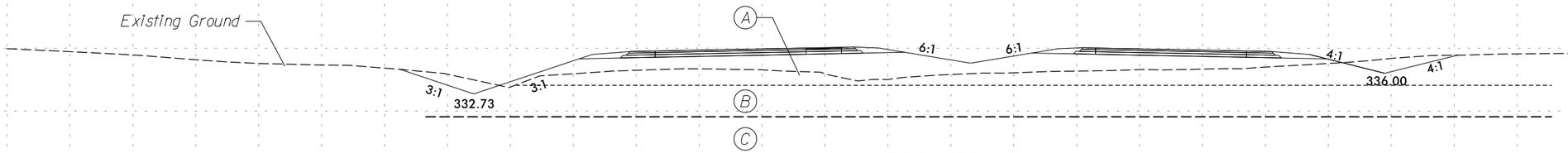
(A) *UNDIVIDED COASTAL PLAIN* Black,very loose,clayey silty fine SAND (A-2-5),trace of organic matter,moist
(B) Tan-orange,medium stiff,sandy CLAY (A-6),moist
(C) *COASTAL PLAIN* Gray,hard,fine sandy silty CLAY (A-7-6),moist (Middendorf Formation)



730+50.00

360 350 340 330 320

(A) *UNDIVIDED COASTAL PLAIN* Black,very loose,clayey silty fine SAND (A-2-5),trace of organic matter,moist
(B) Tan-orange,medium stiff,sandy CLAY (A-6),moist
(C) *COASTAL PLAIN* Gray,hard,fine sandy silty CLAY (A-7-6),moist (Middendorf Formation)



730+00.00

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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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6/23/16

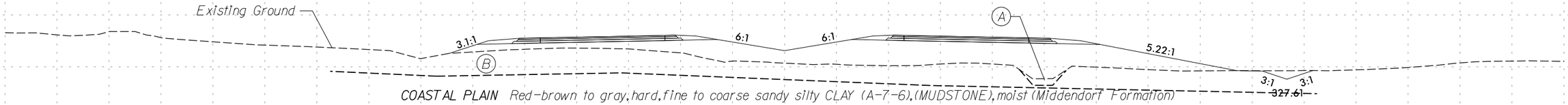
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	162

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

350 340 330 320

(A) *ALLUVIAL* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist

(B) *UNDIVIDED COASTAL PLAIN* Red-brown,very stiff,fine to coarse sandy CLAY (A-6),trace gravel,moist



COASTAL PLAIN Red-brown to gray,hard,fine to coarse sandy silty CLAY (A-7-6),(MUDSTONE),moist (Middendorf Formation)

732+50.00

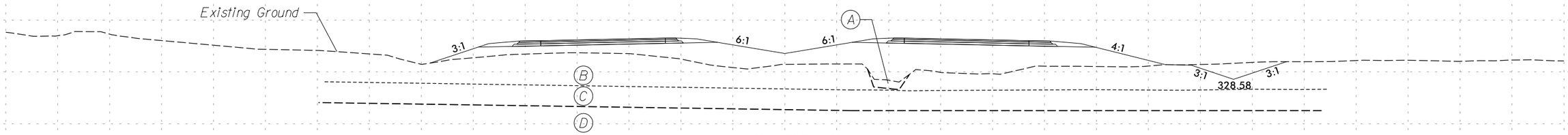
360 350 340 330 320

(A) *ALLUVIAL* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist

(C) Gray,loose,silty clayey coarse SAND (A-2-6),wet

(D) *COASTAL PLAIN* Gray,dense,clayey fine to coarse SAND (A-2-6),saturated (Middendorf Formation)



732+00.00

310 380 370 360 350 340 330 320 310

SOIL TEST RESULTS

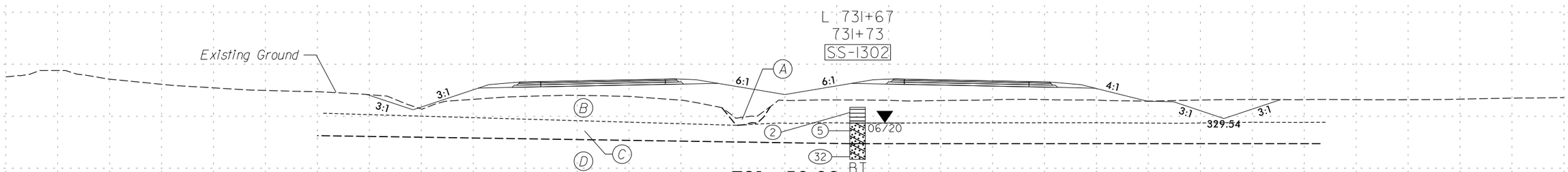
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1302	731+73	14' RT	0.0 - 1.5	A-4(0)	30	NP	49.3	17.9	14.9	18.0	99.3	67.0	33.0	18.6	ND

(A) *ALLUVIAL* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist

(B) *UNDIVIDED COASTAL PLAIN* Tan-black,very soft,clayey fine to coarse sandy SILT (A-4),little organic matter,moist

(C) Gray,loose,silty clayey coarse SAND (A-2-6),wet

(D) *COASTAL PLAIN* Gray,dense,clayey fine to coarse SAND (A-2-6),saturated (Middendorf Formation)



731+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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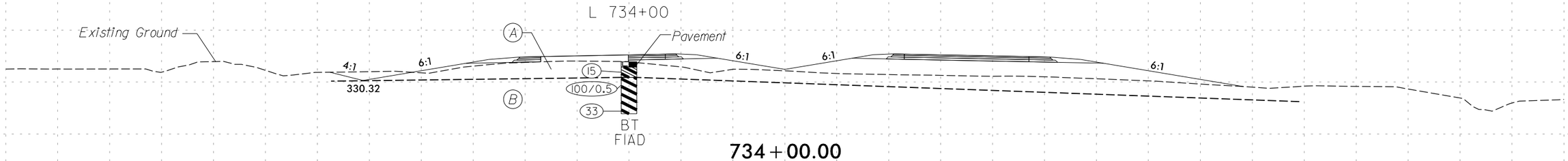
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	163

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

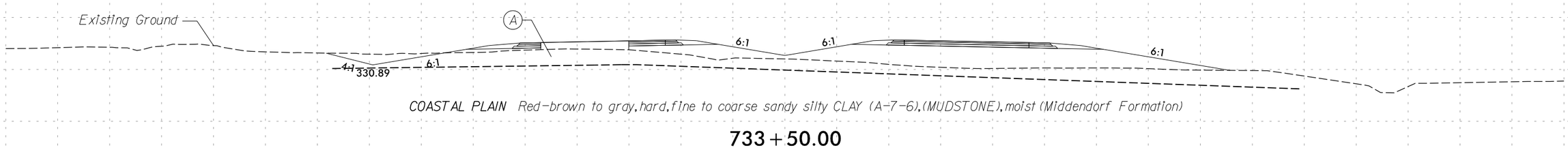
350 340 330 320 310

(A) *UNDIVIDED COASTAL PLAIN* Red-brown,very stiff,fine to coarse sandy CLAY (A-6),trace gravel,moist

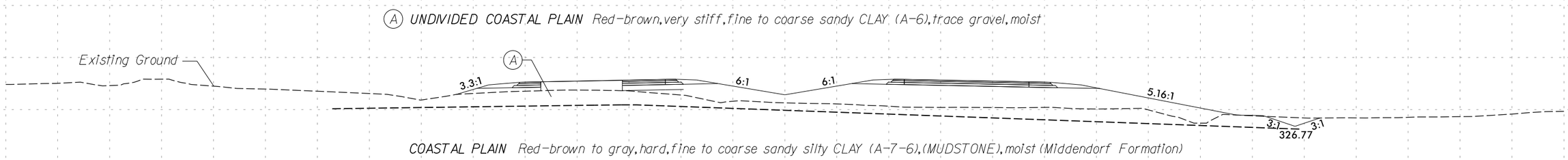
(B) *COASTAL PLAIN* Red-brown to gray,hard,fine to coarse sandy silty CLAY (A-7-6),(MUDSTONE),moist (Middendorf Formation)



734+00.00



733+50.00



733+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	164

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

340
330
320
310

(A) UNDIVIDED COASTAL PLAIN Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist
(B) Tan-orange, medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

4:1 329.05 6:1 6:1 6:1 6:1

735+50.00

350
340
330
320
310

(A) UNDIVIDED COASTAL PLAIN Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist
(B) Tan-orange, medium dense, clayey silty SAND (A-2-5), moist

Existing Ground

4:1 329.40 6:1 6:1 6:1 6:1

735+00.00

350
340
330
320

(A) UNDIVIDED COASTAL PLAIN Red-brown, very stiff, fine to coarse sandy CLAY (A-6), trace gravel, moist
(B) COASTAL PLAIN Red-brown to gray, hard, fine to coarse sandy silty CLAY (A-7-6), (MUDSTONE), moist (Middendorf Formation)

Existing Ground

4:1 329.75 6:1 6:1 6:1 6:1

734+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

8/29/2024
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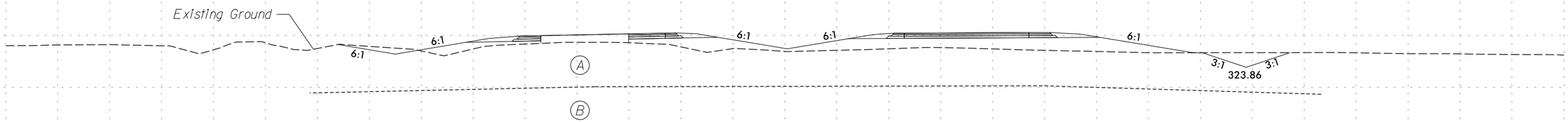
mmesta

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	165

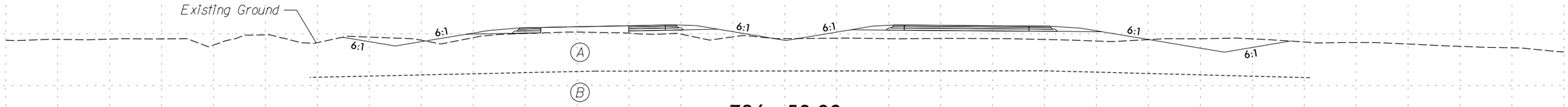
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

Ⓐ *UNDIVIDED COASTAL PLAIN* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist
Ⓑ Tan-orange, medium dense, clayey silty SAND (A-2-5), moist



737+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist
Ⓑ Tan-orange, medium dense, clayey silty SAND (A-2-5), moist



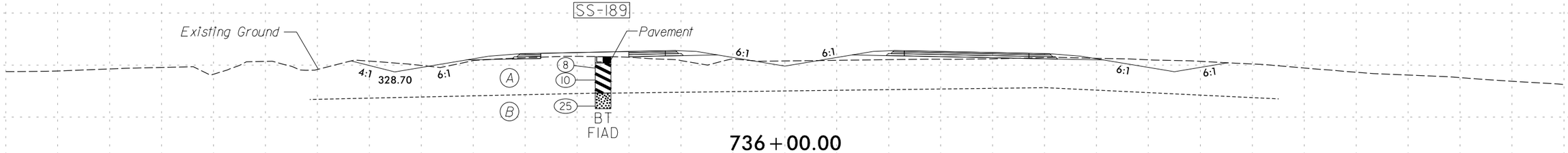
736+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-189	736+00	35' LT	1.2 - 2.7	A-7-6 (6)	45	29	40.0	17.0	13.0	30.0	94.0	71.0	43.6	20.0	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Orange-brown, stiff, sandy silty highly plastic CLAY (A-7-6), moist
Ⓑ Tan-orange, medium dense, clayey silty SAND (A-2-5), moist

L 736+00
SS-189



736+00.00

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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

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	166

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

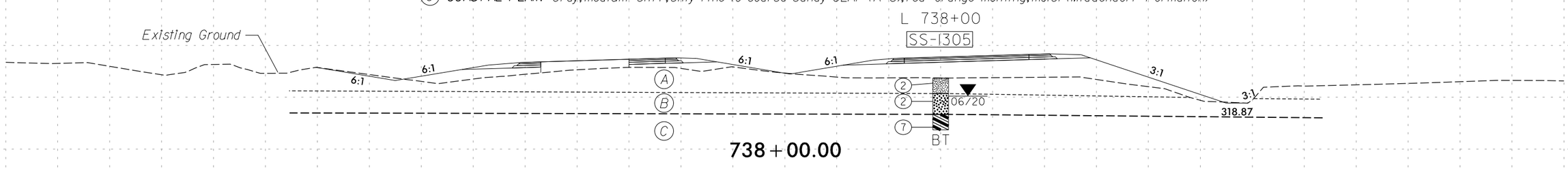
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1305	738+00	30' RT	0.0 - 1.5	A-4(0)	25	NP	42.8	19.5	21.7	16.0	99.8	60.6	42.4	ND	ND

Ⓐ UNDIVIDED COASTAL PLAIN Black-gray, soft, clayey sandy SILT (A-4), trace of organic matter, moist

Ⓑ Tan-brown, very loose, clayey silty fine to coarse SAND (A-2-4), saturated

Ⓒ COASTAL PLAIN Gray, medium stiff, silty fine to coarse sandy CLAY (A-6), red-orange mottling, moist (Middendorf Formation)



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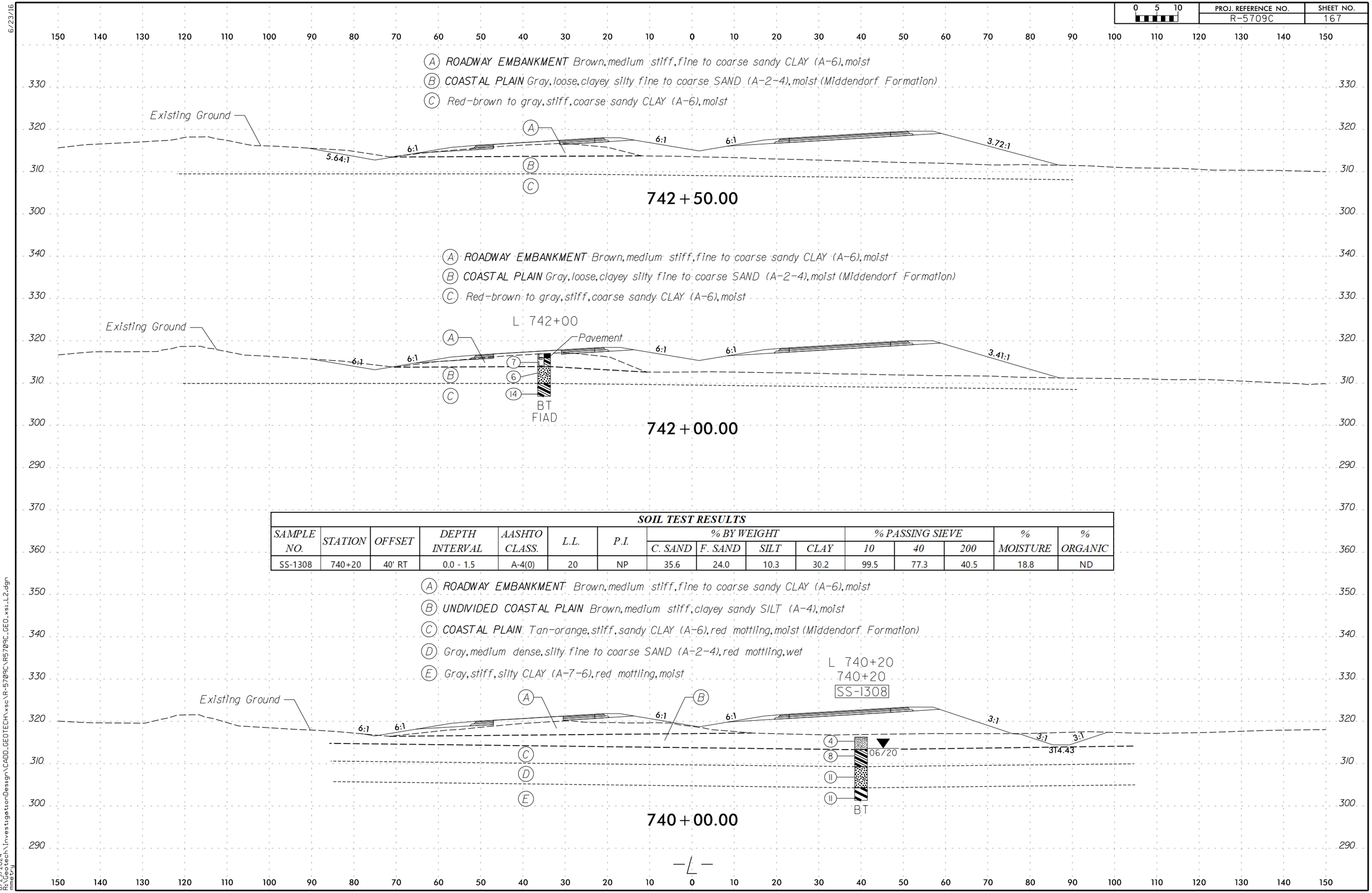
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	167



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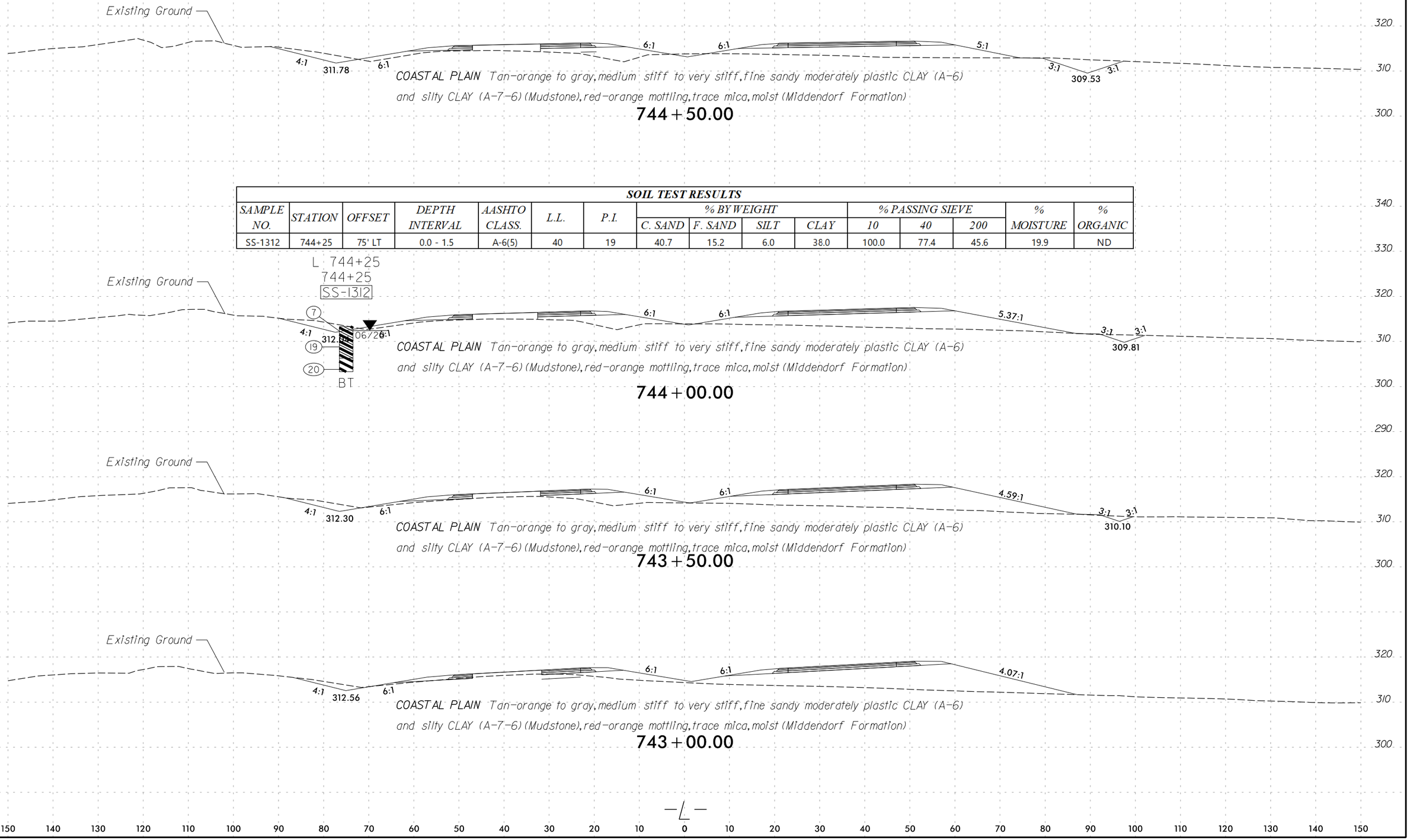
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	168



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1312	744+25	75' LT	0.0 - 1.5	A-6(5)	40	19	40.7	15.2	6.0	38.0	100.0	77.4	45.6	19.9	ND

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	169

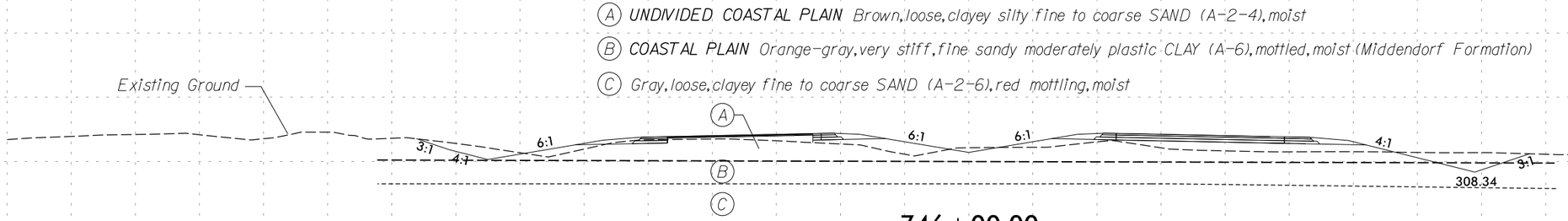
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

330 320 310 300

(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey silty fine to coarse SAND (A-2-4), moist

(B) *COASTAL PLAIN* Orange-gray, very stiff, fine sandy moderately plastic CLAY (A-6), mottled, moist (Middendorf Formation)

(C) Gray, loose, clayey fine to coarse SAND (A-2-6), red mottling, moist

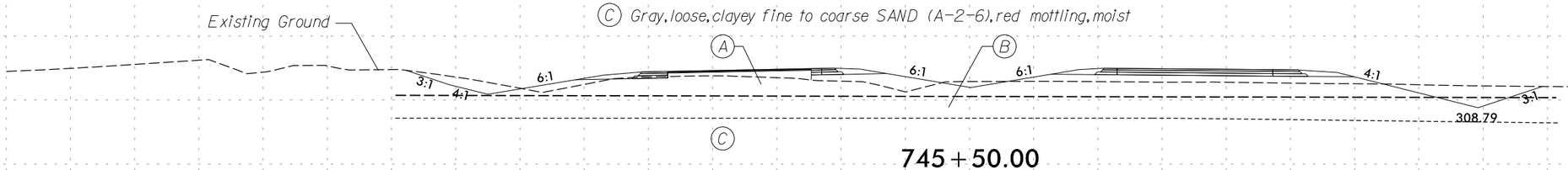


746+00.00

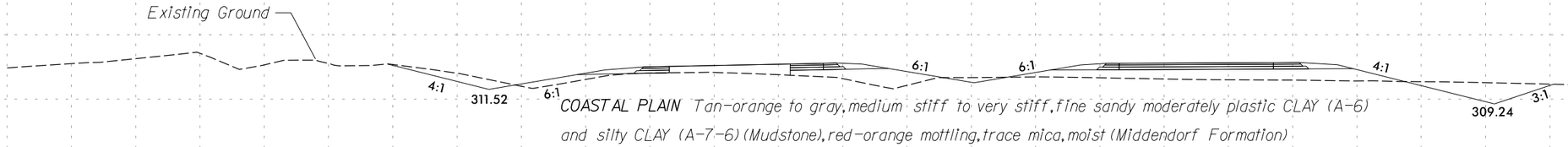
(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey silty fine to coarse SAND (A-2-4), moist

(B) *COASTAL PLAIN* Orange-gray, very stiff, fine sandy moderately plastic CLAY (A-6), mottled, moist (Middendorf Formation)

(C) Gray, loose, clayey fine to coarse SAND (A-2-6), red mottling, moist



745+50.00



COASTAL PLAIN Tan-orange to gray, medium stiff to very stiff, fine sandy moderately plastic CLAY (A-6) and silty CLAY (A-7-6) (Mudstone), red-orange mottling, trace mica, moist (Middendorf Formation)

745+00.00

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	170

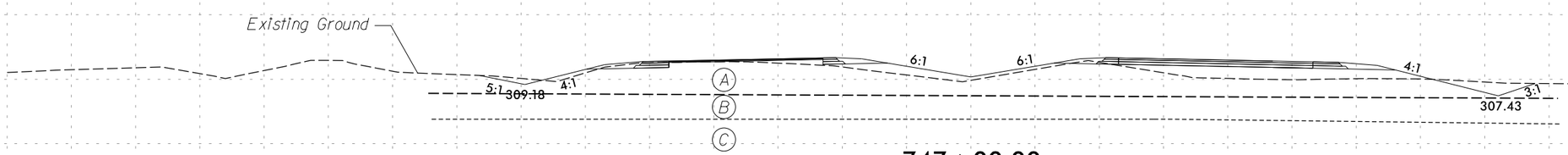
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

330 320 310 300 290

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey silty fine to coarse SAND (A-2-4), moist

Ⓑ *COASTAL PLAIN* Orange-gray, very stiff, fine sandy CLAY (A-6), mottled, moist (Middendorf Formation)

Ⓒ Gray, loose, clayey fine to coarse SAND (A-2-6), red mottling, moist



747 + 00.00

350 340 330 320 310 300 290

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1315	746+50	30' RT	0.0 - 1.5	A-2-4	15	NP	42.3	34.9	10.7	12.0	99.8	77.9	22.7	ND	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, clayey silty fine to coarse SAND (A-2-4), moist

Ⓑ *COASTAL PLAIN* Orange-gray, very stiff, fine sandy moderately plastic CLAY (A-6), mottled, moist (Middendorf Formation)

Ⓒ Gray, loose, clayey fine to coarse SAND (A-2-6), red mottling, moist

746 + 50.00

350 340 330 320 310 300 290

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	171

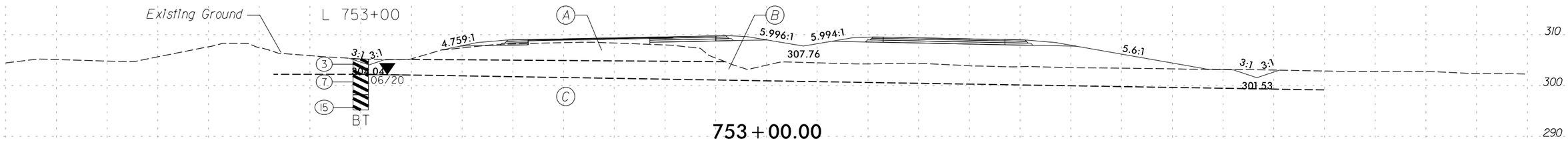
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

330 320 310 300 290

(A) *ROADWAY EMBANKMENT* Gray, loose, silty clayey fine to coarse SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown-red, soft, silty CLAY (A-7-6), moist

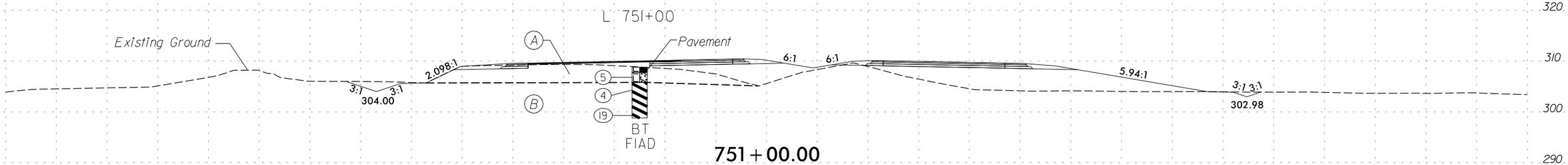
(C) *COASTAL PLAIN* Gray-orange to gray, medium stiff to stiff, silty CLAY (A-7-5, A-7-6), moist (Middendorf Formation)



753+00.00

(A) *ROADWAY EMBANKMENT* Gray, loose, silty clayey fine to coarse SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Gray to red-brown, medium stiff to very stiff, fine to coarse sandy silty CLAY (A-7-5), moist



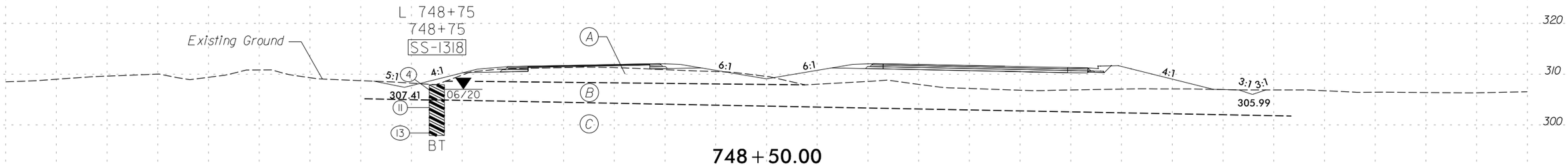
751+00.00

SOIL TEST RESULTS															
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1318	748+75	65' LT	0.0 - 1.5	A-6(3)	30	12	28.6	24.9	14.4	32.1	99.3	81.3	46.5	18.1	ND

(A) *ROADWAY EMBANKMENT* Gray, loose, silty clayey fine to coarse SAND (A-2-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, medium stiff, silty sandy slightly plastic CLAY (A-6), moist

(C) *COASTAL PLAIN* Gray, stiff, silty sandy CLAY (A-6), orange mottling, moist (Middendorf Formation)



748+50.00

350 340 330 320 310 300 290

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	172

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

330 320 310 300 290

Ⓐ *UNDIVIDED COASTAL PLAIN* Red to orange, stiff, sandy silty highly plastic CLAY (A-7-6), moist

Ⓑ Tan, medium dense, clayey SAND (A-2-7), little gravel, trace mica, moist

Existing Ground

6:1 6:1 6:1 6:1 6:1 309.69

Ⓐ Ⓑ

756+50.00

Ⓐ *ROADWAY EMBANKMENT* Gray, loose, silty clayey fine to coarse SAND (A-2-6), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Tan-brown, very soft, slightly plastic clayey sandy SILT (A-4), moist

Ⓒ *COASTAL PLAIN* Gray, stiff to very stiff, fine sandy CLAY (A-6), red-orange mottling, moist to wet (Middendorf Formation)

Existing Ground

Ⓐ Ⓑ

6:1 6:1 6:1 6:1 6:1 3:1 3:1 308.36

Ⓒ

756+00.00

350 340

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1324	755+00	15' RT	0.0 - 1.5	A-4(1)	23	10	36.9	25.8	11.2	26.1	99.7	76.9	37.3	ND	ND

Ⓐ *ROADWAY EMBANKMENT* Gray, loose, silty clayey fine to coarse SAND (A-2-6), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Tan-brown, very soft, slightly plastic clayey sandy SILT (A-4), moist

Ⓒ *COASTAL PLAIN* Gray, stiff to very stiff, fine sandy CLAY (A-6), red-orange mottling, moist to wet (Middendorf Formation)

L 755+00

SS-1324

Existing Ground

Ⓐ Ⓑ

6:1 6:1 6:1 6:1 6:1 3:1 3:1 305.91

Ⓒ

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755+00.00

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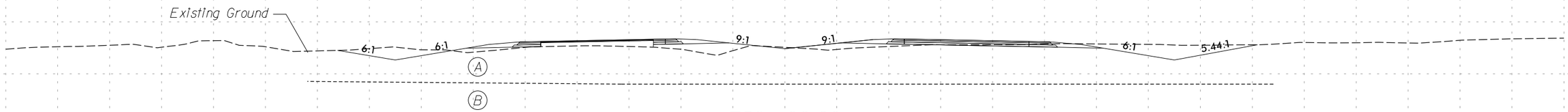
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	173

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

330 320 310 300

(A) *UNDIVIDED COASTAL PLAIN* *Red to orange, stiff, sandy silty highly plastic CLAY (A-7-6), moist*

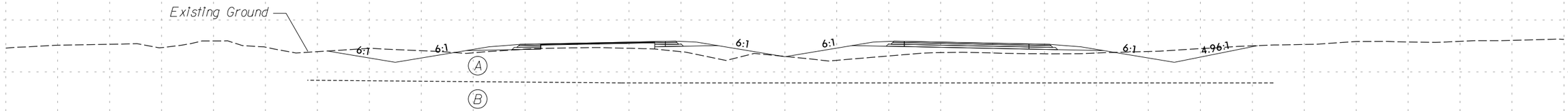
(B) *Tan, medium dense, clayey SAND (A-2-7), little gravel, trace mica, moist*



758+00.00

(A) *UNDIVIDED COASTAL PLAIN* *Red to orange, stiff, sandy silty highly plastic CLAY (A-7-6), moist*

(B) *Tan, medium dense, clayey SAND (A-2-7), little gravel, trace mica, moist*



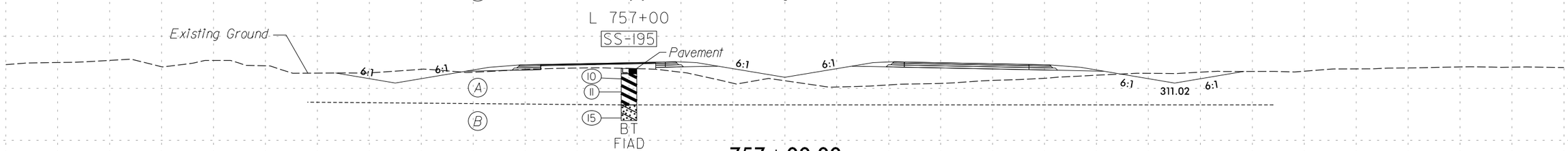
757+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-195	757+00	30' LT	1.0 - 2.5	A-7-6 (13)	51	29	22.0	21.2	12.5	44.4	100.0	87.0	57.0	20.0	ND

(A) *UNDIVIDED COASTAL PLAIN* *Red to orange, stiff, sandy silty highly plastic CLAY (A-7-6), moist*

(B) *Tan, medium dense, clayey SAND (A-2-7), little gravel, trace mica, moist*



757+00.00

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PROJ. REFERENCE NO.	SHEET NO.
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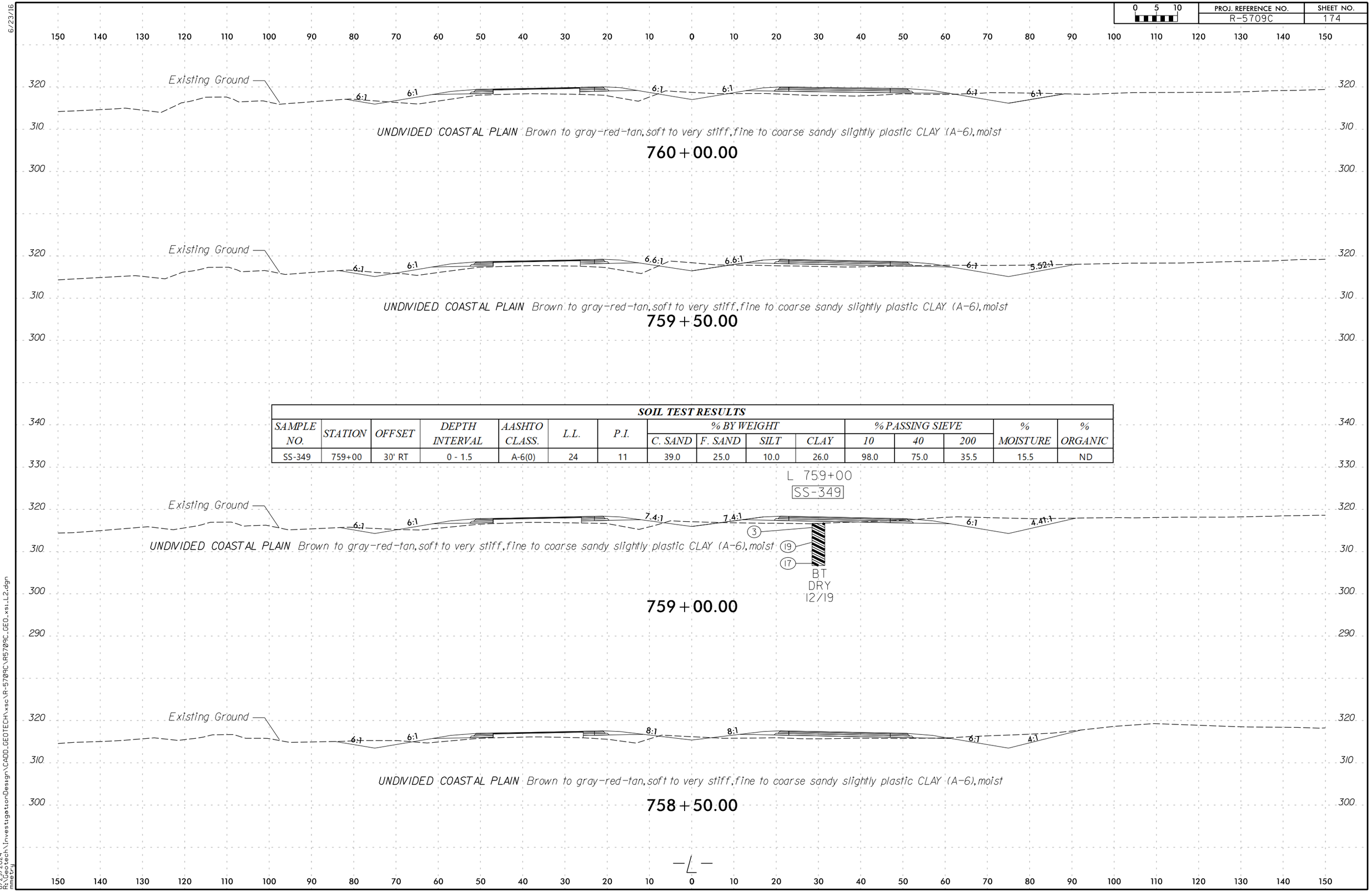

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-349	759+00	30' RT	0 - 1.5	A-6(0)	24	11	39.0	25.0	10.0	26.0	98.0	75.0	35.5	15.5	ND

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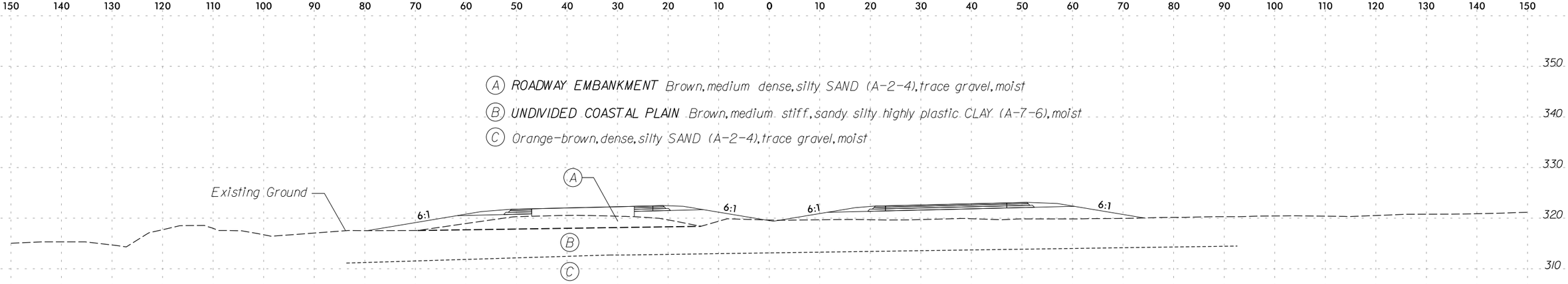
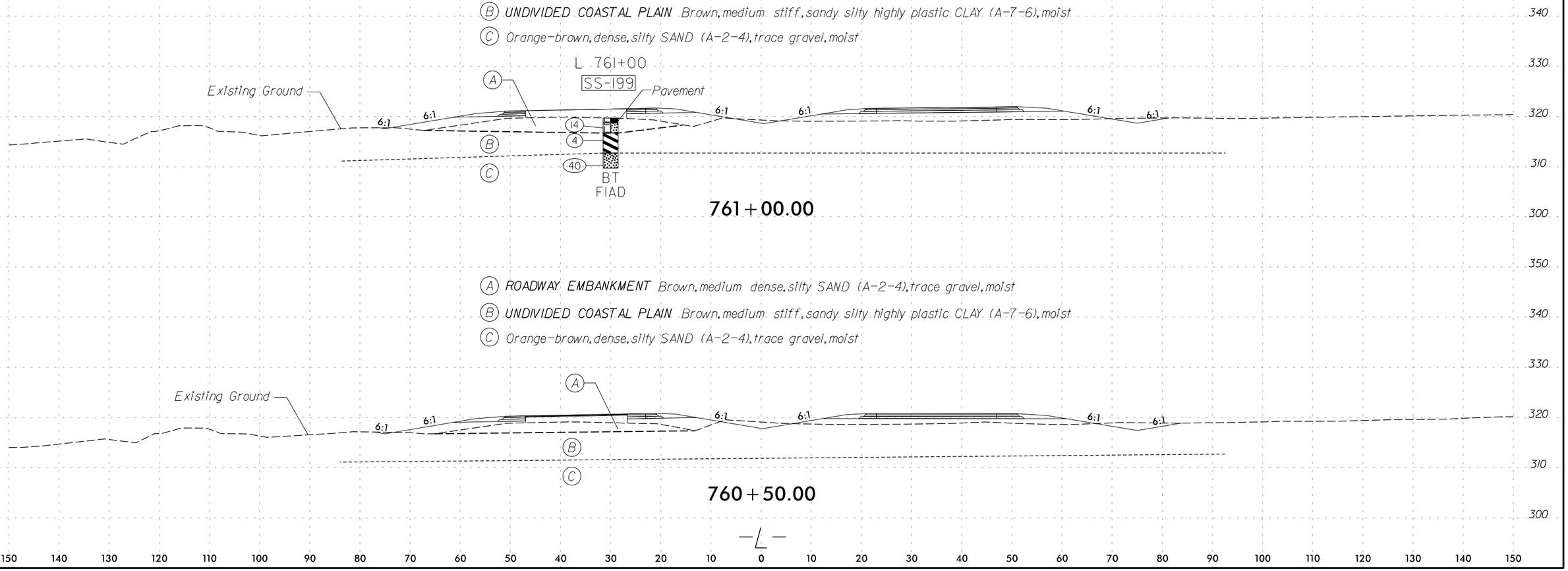
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	175



761+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-199	761+00	30' LT	3.5 - 5.0	A-7-6 (6)	43	28	40.0	18.0	6.0	36.0	98.0	72.0	42.0	13.0	ND



761+00.00

760+50.00

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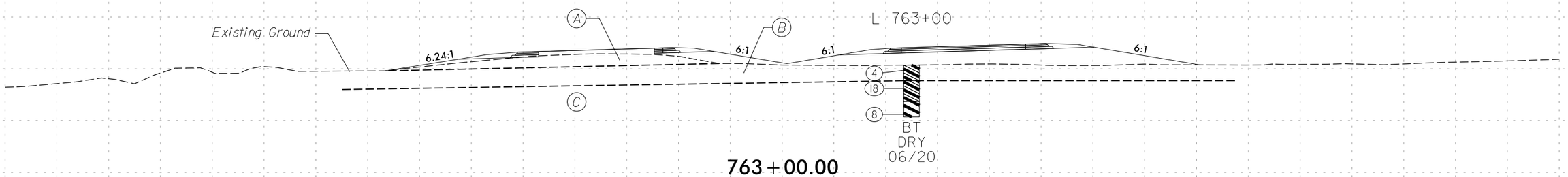
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	176

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

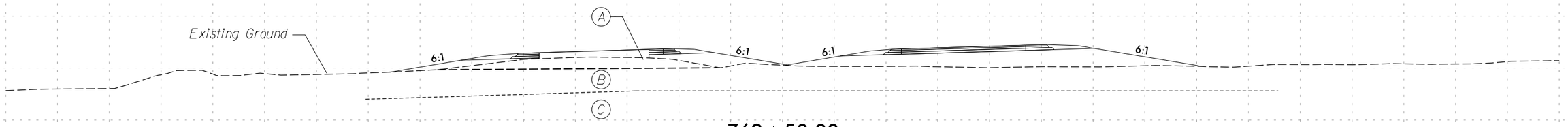
350 340 330 320 310 300

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Tan-brown, medium stiff, silty fine sandy moderately plastic CLAY (A-6), moist
(C) *COASTAL PLAIN* Tan-orange to red, stiff to very stiff, silty fine to coarse sandy CLAY (A-6) and fine sandy silty CLAY (A-7-5), red mottling, moist (Middendorf Formation)



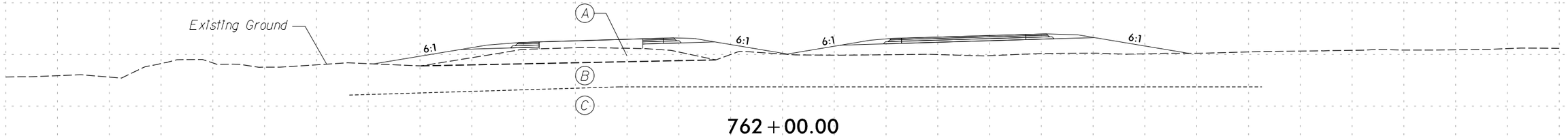
763+00.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, medium stiff, sandy silty highly plastic CLAY (A-7-6), moist
(C) Orange-brown, dense, silty SAND (A-2-4), trace gravel, moist



762+50.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, medium stiff, sandy silty highly plastic CLAY (A-7-6), moist
(C) Orange-brown, dense, silty SAND (A-2-4), trace gravel, moist



762+00.00

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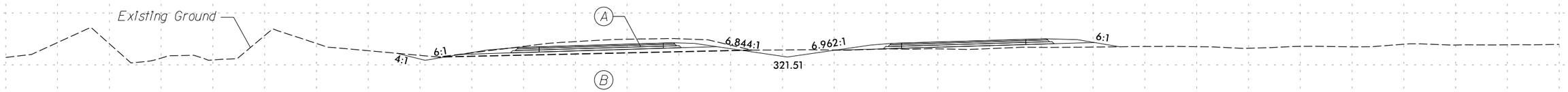
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	177

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

340
330
320
310

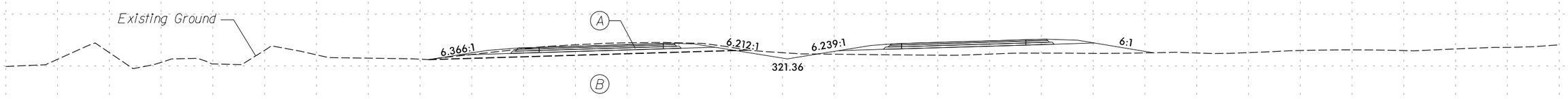
Ⓐ ROADWAY EMBANKMENT Orange-brown, medium stiff, sandy silty moderately plastic CLAY (A-7-6), moist
Ⓑ UNDIVIDED COASTAL PLAIN Red-orange-gray, stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6), moist



764+50.00

340
330
320
310

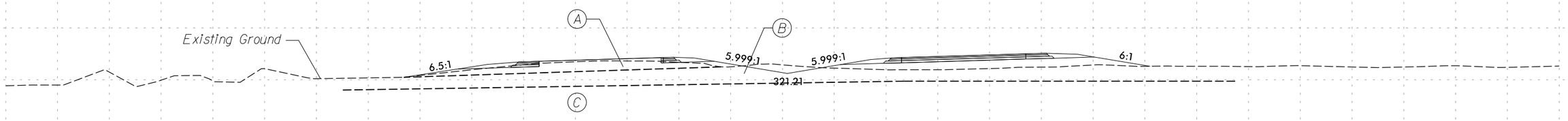
Ⓐ ROADWAY EMBANKMENT Orange-brown, medium stiff, sandy silty moderately plastic CLAY (A-7-6), moist
Ⓑ UNDIVIDED COASTAL PLAIN Red-orange-gray, stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6), moist



764+00.00

350
340
330
320
310
300

Ⓐ ROADWAY EMBANKMENT Brown, medium dense, silty SAND (A-2-4), trace gravel, moist
Ⓑ UNDIVIDED COASTAL PLAIN Tan-brown, medium stiff, silty fine sandy moderately plastic CLAY (A-6), moist
Ⓒ COASTAL PLAIN Tan-orange to red, stiff to very stiff, silty fine to coarse sandy CLAY (A-6) and fine sandy silty CLAY (A-7-5), red mottling, moist (Middendorf Formation)



763+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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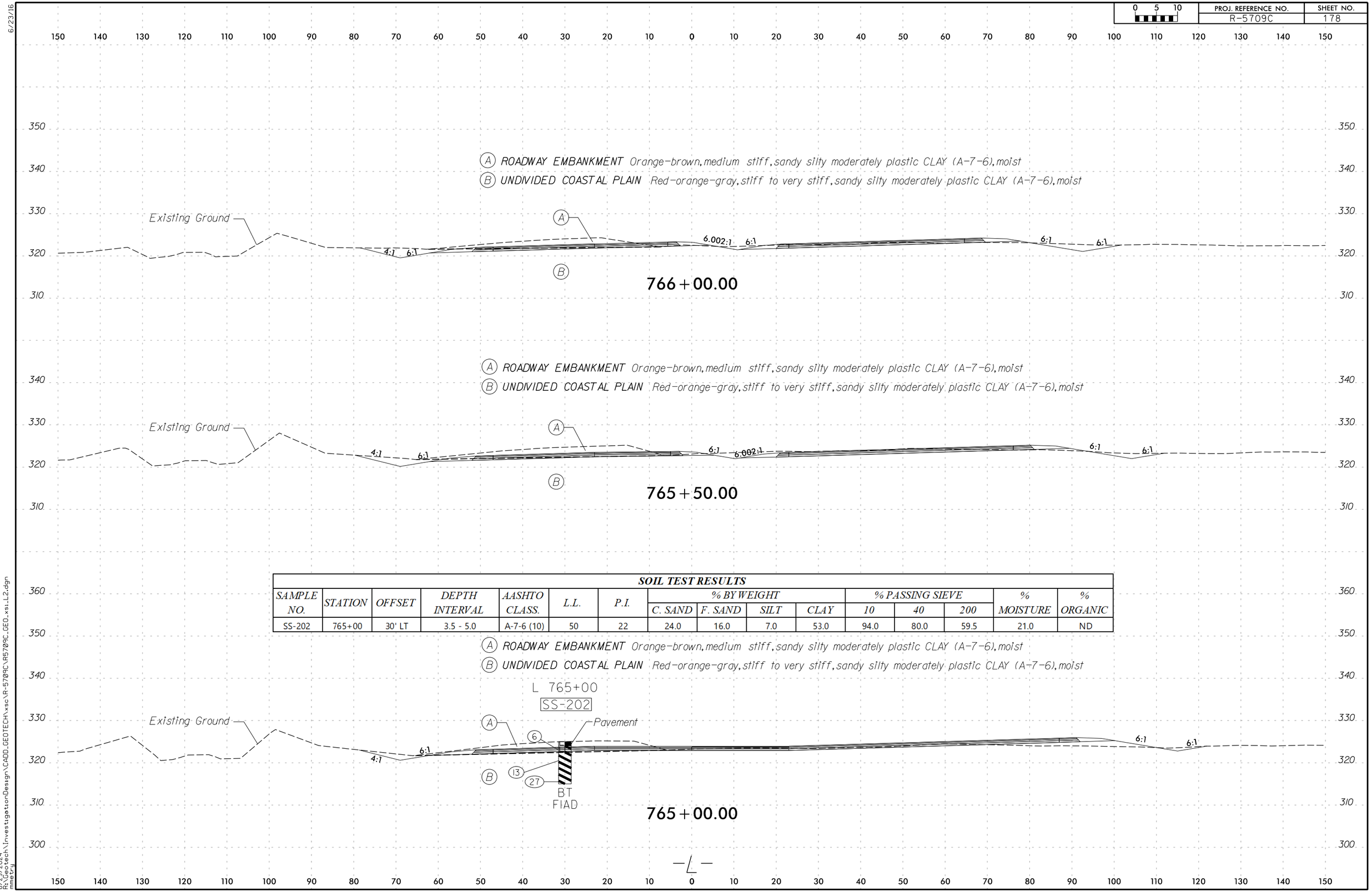
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	178



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-202	765+00	30' LT	3.5 - 5.0	A-7-6 (10)	50	22	24.0	16.0	7.0	53.0	94.0	80.0	59.5	21.0	ND

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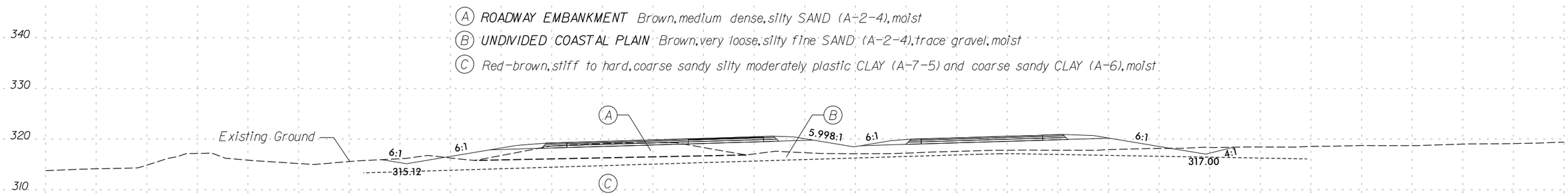
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	179

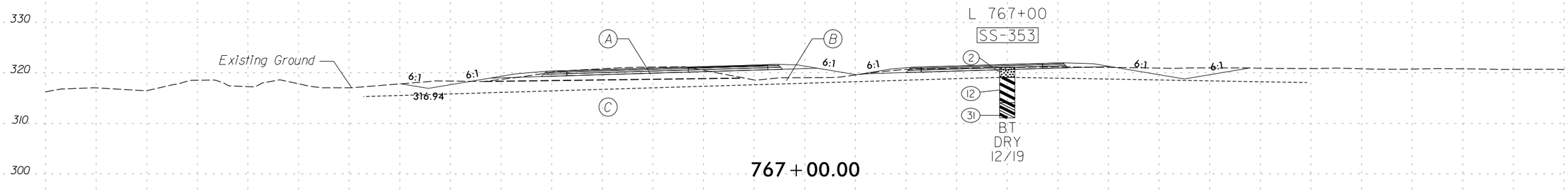
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



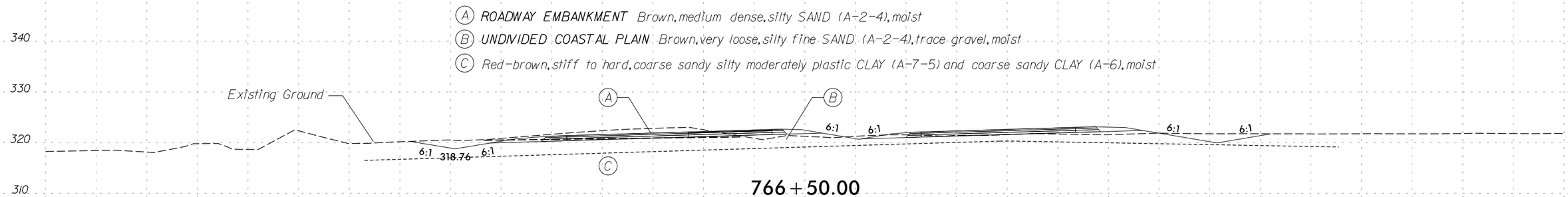
767+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-353	767+00	40' RT	3.5 - 5.0	A-7-5(12)	54	19	19.0	15.0	2.0	64.0	98.0	87.0	64.4	25.1	ND



767+00.00



766+50.00

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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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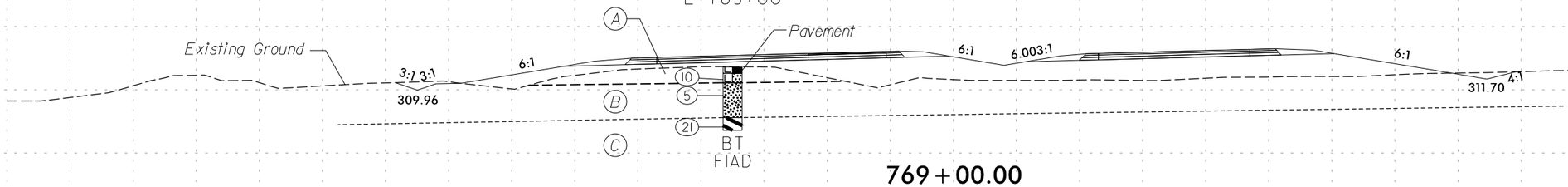
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	180

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

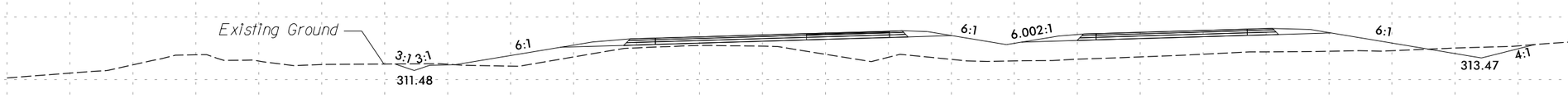
340 330 320 310 300 290

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist
(C) Tan-orange-gray, very stiff, sandy silty CLAY (A-7-5), moist

L 769+00

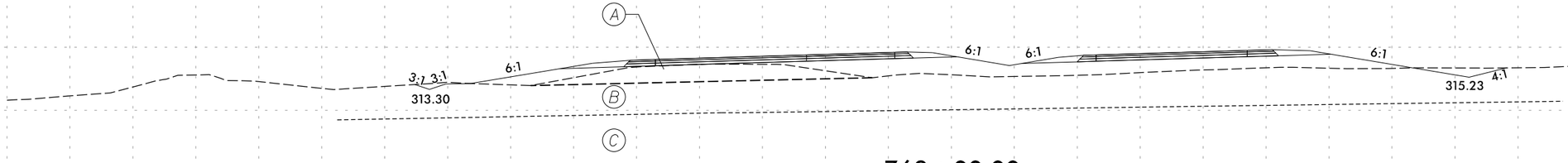


769+00.00



768+50.00

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist
(C) Tan-orange-gray, very stiff, sandy silty CLAY (A-7-5), moist



768+00.00

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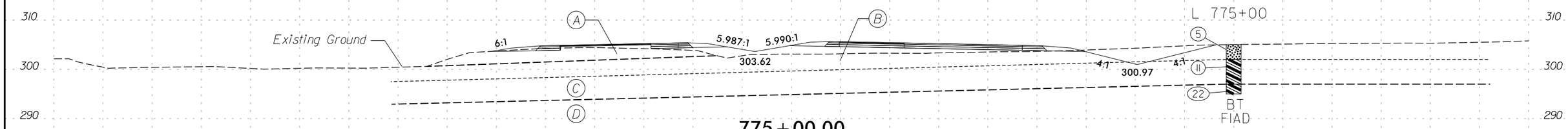
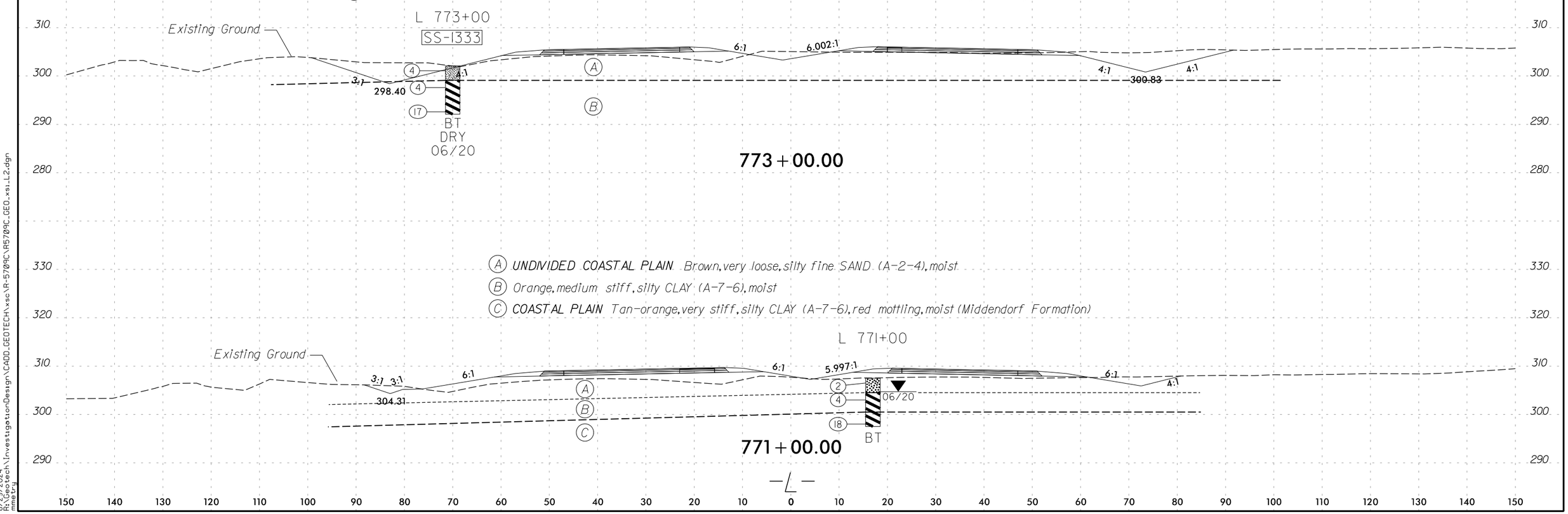
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	181



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1333	773+00	70' LT	0.0 - 1.5	A-4(1)	29	6	30.5	20.2	15.2	34.0	95.6	77.1	49.4	24.5	ND



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0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	182

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

320
310
300
290

Existing Ground

6:1 6:1 5.986:1 5.990:1 6:1 6:1

305.89 303.13

UNDIVIDED COASTAL PLAIN Brown-red to red-orange-gray, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

778+50.00

Ⓐ UNDIVIDED COASTAL PLAIN Black-brown, very loose, silty fine SAND (A-2-4), moist

Ⓑ COASTAL PLAIN Light brown to red-gray, soft to very stiff, silty CLAY (A-7-6) and silty fine to coarse sandy CLAY (A-6), red-orange mottling, moist (Middendorf Formation)

Existing Ground

6:1 6.002:1 6:1 6:1 5.20:1

Ⓐ

Ⓑ

778+00.00

Ⓐ UNDIVIDED COASTAL PLAIN Black-brown, very loose, silty fine SAND (A-2-4), moist

Ⓑ COASTAL PLAIN Light brown to red-gray, soft to very stiff, silty CLAY (A-7-6) and silty fine to coarse sandy CLAY (A-6), red-orange mottling, moist (Middendorf Formation)

L 777+00
776+93

Existing Ground

① 6:1 6:1 6:1 5.38:1

Ⓐ

③ 06/20

Ⓑ

⑱ BT

777+00.00

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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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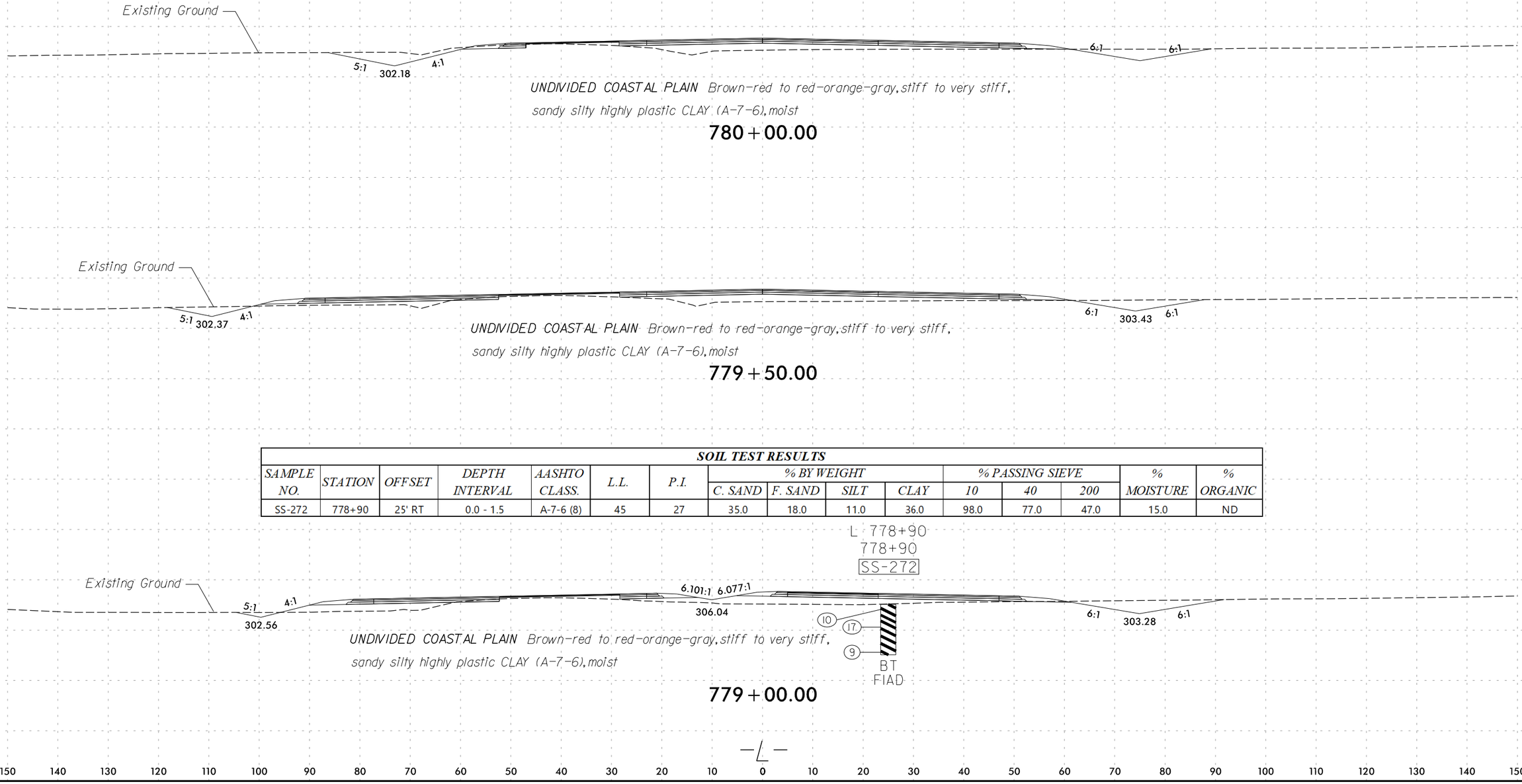
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	183

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



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-272	778+90	25' RT	0.0 - 1.5	A-7-6 (8)	45	27	35.0	18.0	11.0	36.0	98.0	77.0	47.0	15.0	ND

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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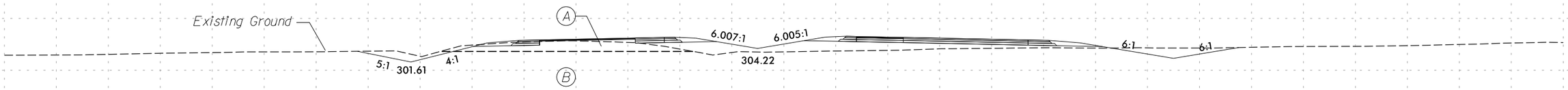
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	184

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

320 310 300 290 350 340 330 320 310 300 290 280 330 320 310 300 290

Ⓐ ROADWAY EMBANKMENT Brown, loose, silty SAND (A-2-4), moist
Ⓑ UNDIVIDED COASTAL PLAIN Orange-red-brown, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-5), little gravel, moist



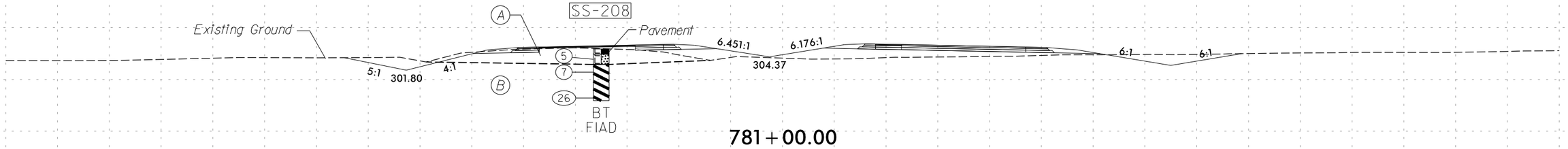
781+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-208	781+00	35' LT	3.5 - 5.0	A-7-6 (7)	45	23	34.0	17.0	9.0	40.0	95.0	74.0	47.0	18.0	ND

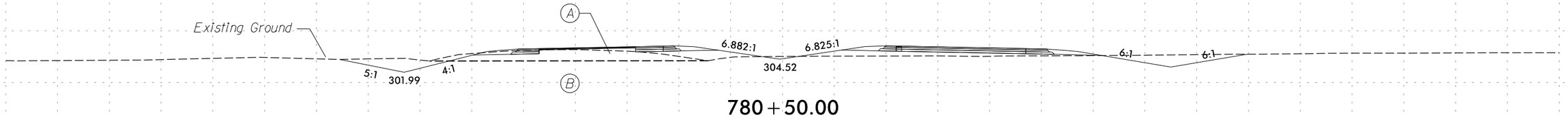
Ⓐ ROADWAY EMBANKMENT Brown, loose, silty SAND (A-2-4), moist
Ⓑ UNDIVIDED COASTAL PLAIN Orange-red-brown, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-5), little gravel, moist

L 781+00
SS-208



781+00.00

Ⓐ ROADWAY EMBANKMENT Brown, loose, silty SAND (A-2-4), moist
Ⓑ UNDIVIDED COASTAL PLAIN Orange-red-brown, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-5), little gravel, moist



780+50.00

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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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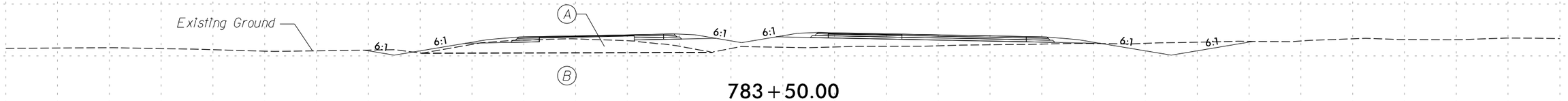
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	185

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

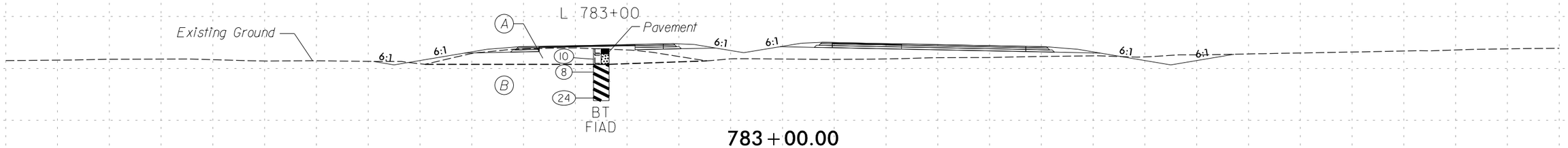
320 310 300 290

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to red-brown, stiff to very stiff, coarse sandy silty moderately plastic CLAY (A-7-6), moist



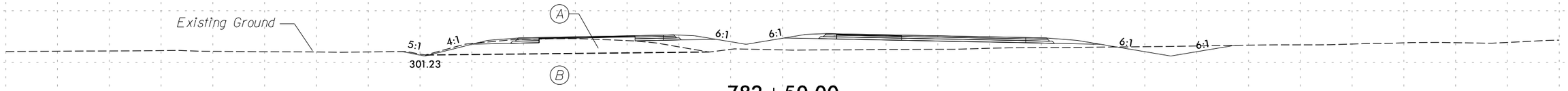
783+50.00

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to red-brown, stiff to very stiff, coarse sandy silty moderately plastic CLAY (A-7-6), moist



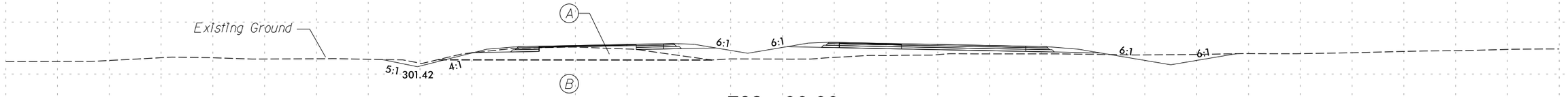
783+00.00

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to red-brown, stiff to very stiff, coarse sandy silty moderately plastic CLAY (A-7-6), moist



782+50.00

(A) *ROADWAY EMBANKMENT* Brown, loose, silty SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Orange-red-brown, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-5), little gravel, moist



782+00.00

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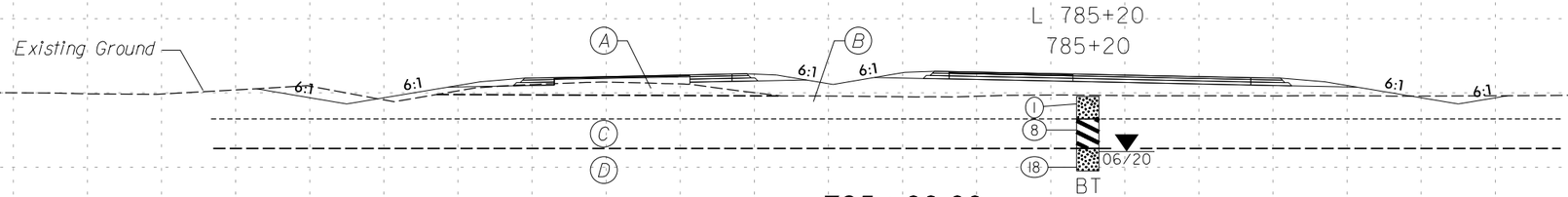
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	186

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

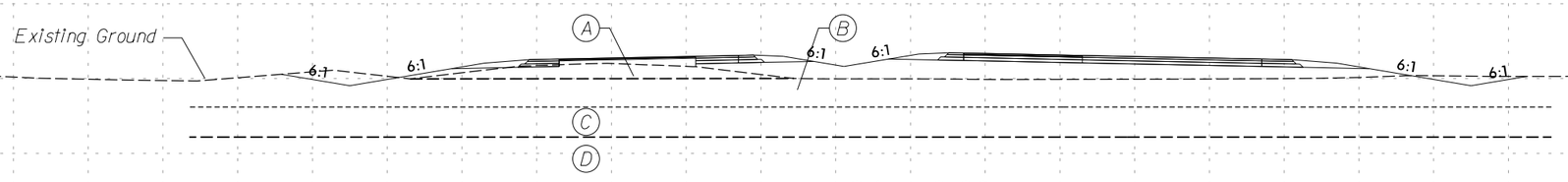
330 320 310 300 290 280

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Tan to dark gray, very loose, silty fine SAND (A-2-4), moist
(C) Light brown, stiff, fine to coarse sandy silty CLAY (A-7-5), moist
(D) *COASTAL PLAIN* Tan-orange, medium dense, clayey silty SAND (A-2-5), red mottling, moist (Middendorf Formation)



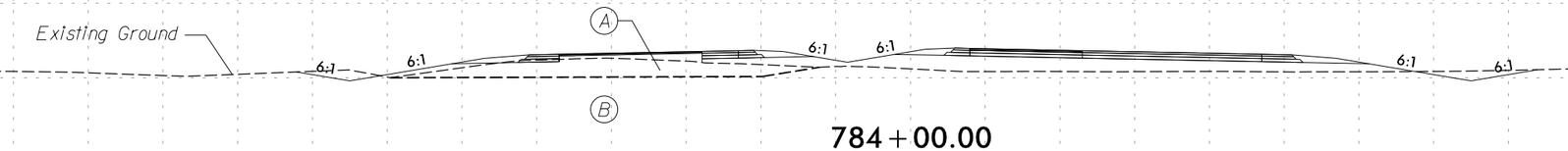
785+00.00

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Tan to dark gray, very loose, silty fine SAND (A-2-4), moist
(C) Light brown, stiff, fine to coarse sandy silty CLAY (A-7-5), moist
(D) *COASTAL PLAIN* Tan-orange, medium dense, clayey silty SAND (A-2-5), red mottling, moist (Middendorf Formation)



784+50.00

(A) *ROADWAY EMBANKMENT* Red-brown to gray, medium dense, clayey silty fine to coarse SAND (A-2-4), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown to red-brown, stiff to very stiff, coarse sandy silty moderately plastic CLAY (A-7-6), moist



784+00.00

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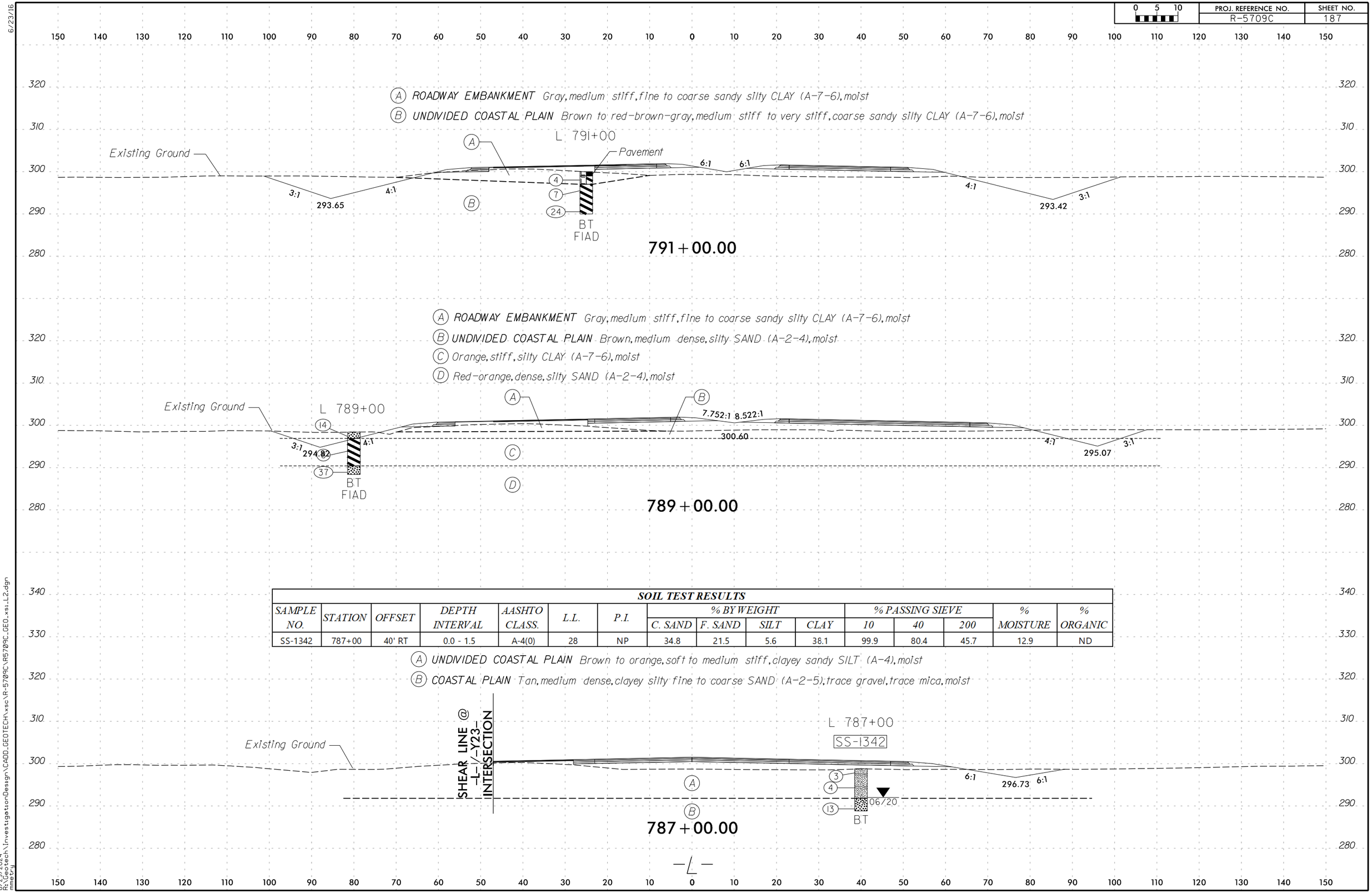
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	187



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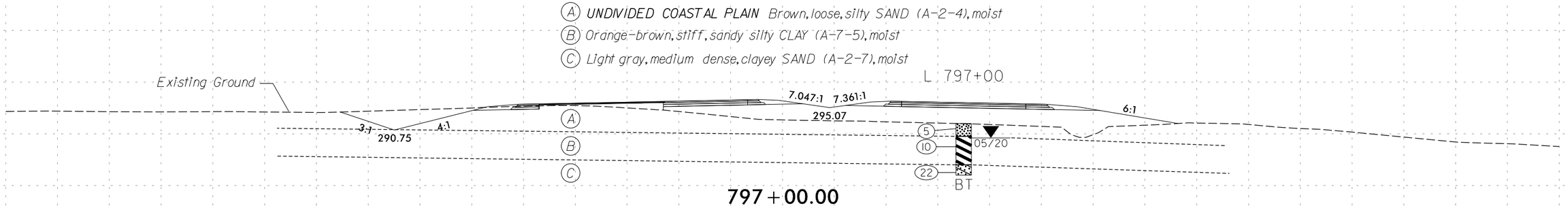
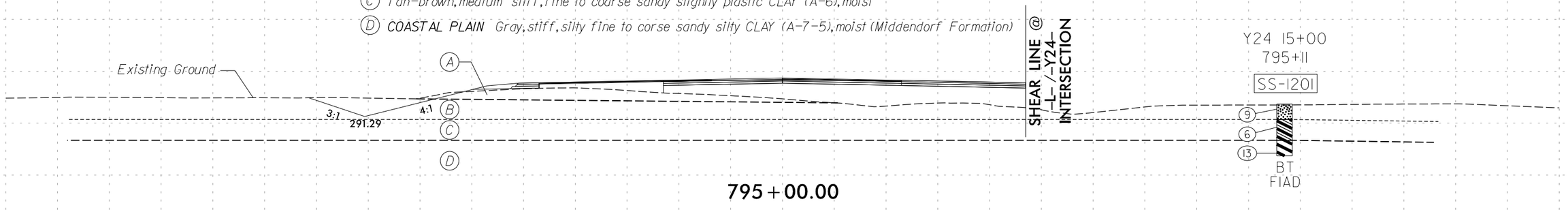
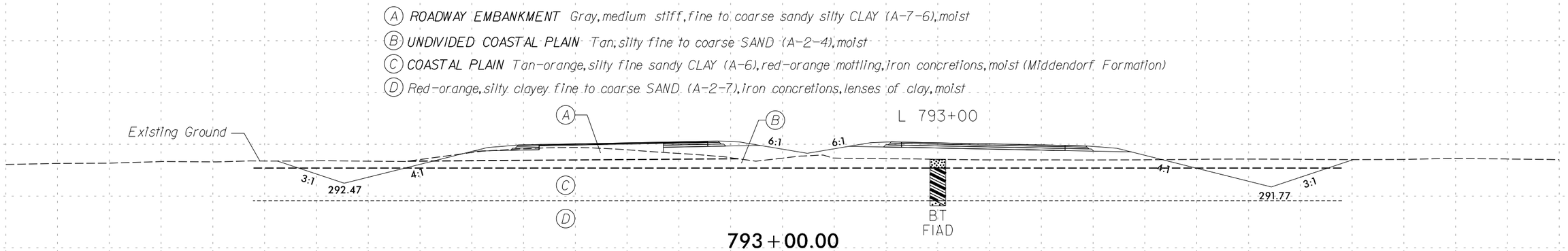
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	188



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1201	14+90	27' RT	3.5 - 5.0	A-6(1)	33	13	35.0	27.0	12.0	26.0	100.0	81.0	38.1	15.0	ND





PROJ. REFERENCE NO.	SHEET NO.
R-5709C	189

0 5 10

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

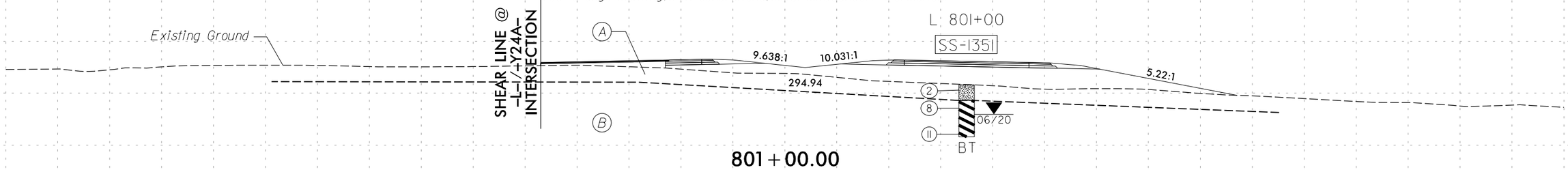
330 320 310 300 290 280 270

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1351	801+00	35' RT	0.0 - 1.5	A-4(0)	29	NP	35.6	33.0	6.9	24.5	99.6	80.0	32.4	ND	ND

Ⓐ UNDIVIDED COASTAL PLAIN Tan-orange, very soft, clayey sandy SILT (A-4), moist

Ⓑ COASTAL PLAIN Tan-orange-gray, stiff, fine to coarse sandy silty CLAY (A-7-6), red-orange mottling, iron concretions, moist (Middendorf Formation)



801+00.00

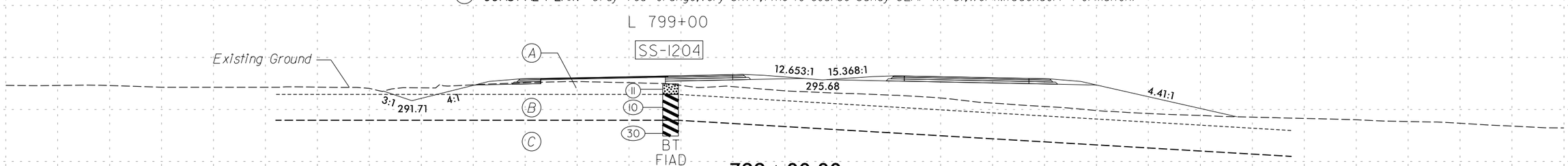
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1204	799+00	28' LT	3.5 - 5.0	A-7-6(4)	42	15	29.0	24.0	9.0	38.0	99.0	83.0	46.5	18.6	ND

Ⓐ UNDIVIDED COASTAL PLAIN Brown, medium dense, clayey silty SAND (A-2-4), moist

Ⓑ Tan-brown, stiff, fine to coarse sandy silty slightly plastic CLAY (A-7-6), moist

Ⓒ COASTAL PLAIN Gray-red-orange, very stiff, fine to coarse sandy CLAY (A-6), wet (Middendorf Formation)



799+00.00

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	190

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

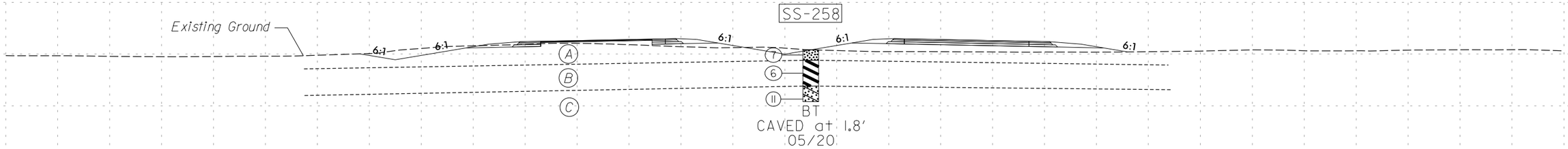
330 320 310 300 290 280 270 260

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-258	805+00	5' RT	3.5 - 5.0	A-7-6 (11)	48	23	23.0	19.0	20.0	38.0	100.0	87.0	58.0	23.0	ND

(A) UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), moist
(B) Orange, medium stiff, silty moderately plastic CLAY (A-7-6), moist
(C) Red-orange, medium dense, clayey SAND (A-2-7), little gravel, moist

L 805+00
SS-258



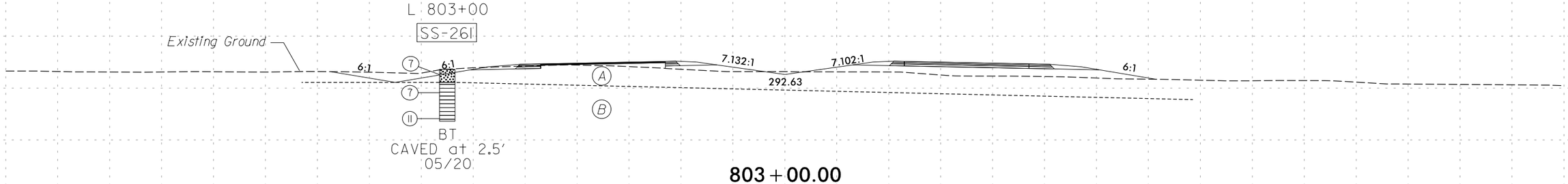
805+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-261	803+00	65' LT	3.5 - 5.0	A-6 (6)	38	20	26.2	24.4	13.0	36.4	100.0	85.0	49.3	21.0	6.0

(A) UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), little gravel, trace of organic matter, moist
(B) Red-orange-brown, medium stiff to stiff, sandy moderately plastic CLAY (A-6), little organic matter, moist

L 803+00
SS-261



803+00.00

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	191

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

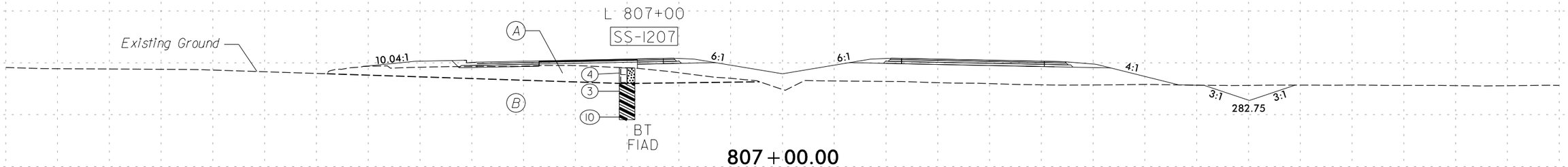
330 320 310 300 290 280 270

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1207	807+00	30' LT	3.5 - 5.0	A-6(7)	34	19	25.0	21.0	22.0	32.0	100.0	85.0	54.1	20.1	ND

(A) *ROADWAY EMBANKMENT* Brown, loose, clayey silty fine to coarse SAND (A-2-5), moist

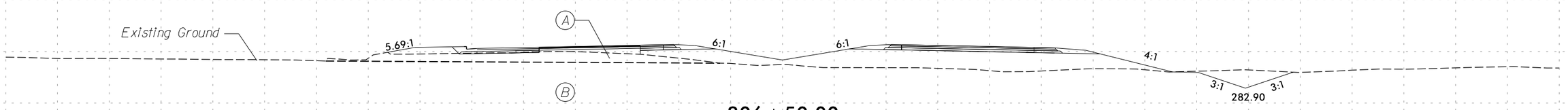
(B) *UNDIVIDED COASTAL PLAIN* Gray-brown, soft to stiff, silty fine to coarse sandy moderately plastic CLAY (A-6), moist



807+00.00

(A) *ROADWAY EMBANKMENT* Brown, loose, clayey silty fine to coarse SAND (A-2-5), moist

(B) *UNDIVIDED COASTAL PLAIN* Gray-brown, soft to stiff, silty fine to coarse sandy moderately plastic CLAY (A-6), moist

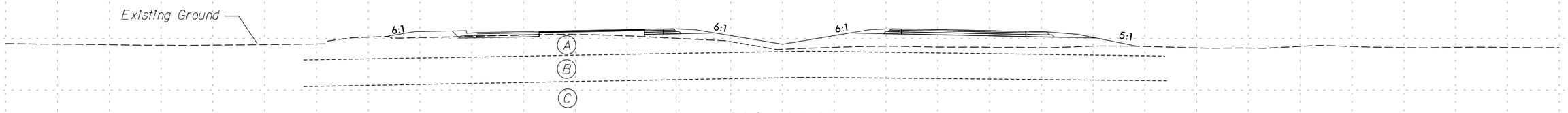


806+50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), moist

(B) Orange, medium stiff, silty moderately plastic CLAY (A-7-6), moist

(C) Red-orange, medium dense, clayey SAND (A-2-7), little gravel, moist



806+00.00

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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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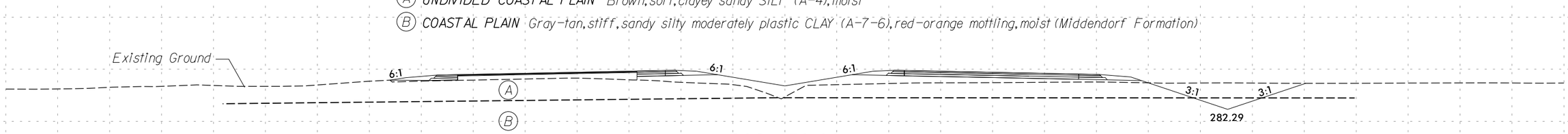
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	192

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

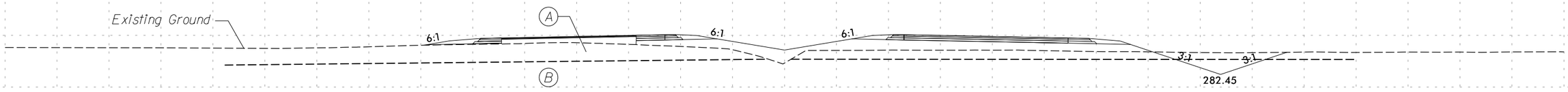
300
290
280
270

(A) *UNDIVIDED COASTAL PLAIN* Brown, soft, clayey sandy SILT (A-4), moist
(B) *COASTAL PLAIN* Gray-tan, stiff, sandy silty moderately plastic CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)



808 + 50.00

(A) *UNDIVIDED COASTAL PLAIN* Brown, soft, clayey sandy SILT (A-4), moist
(B) *COASTAL PLAIN* Gray-tan, stiff, sandy silty moderately plastic CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)



808 + 00.00

(A) *ROADWAY EMBANKMENT* Brown, loose, clayey silty fine to coarse SAND (A-2-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Gray-brown, soft to stiff, silty fine to coarse sandy moderately plastic CLAY (A-6), moist

807 + 50.00

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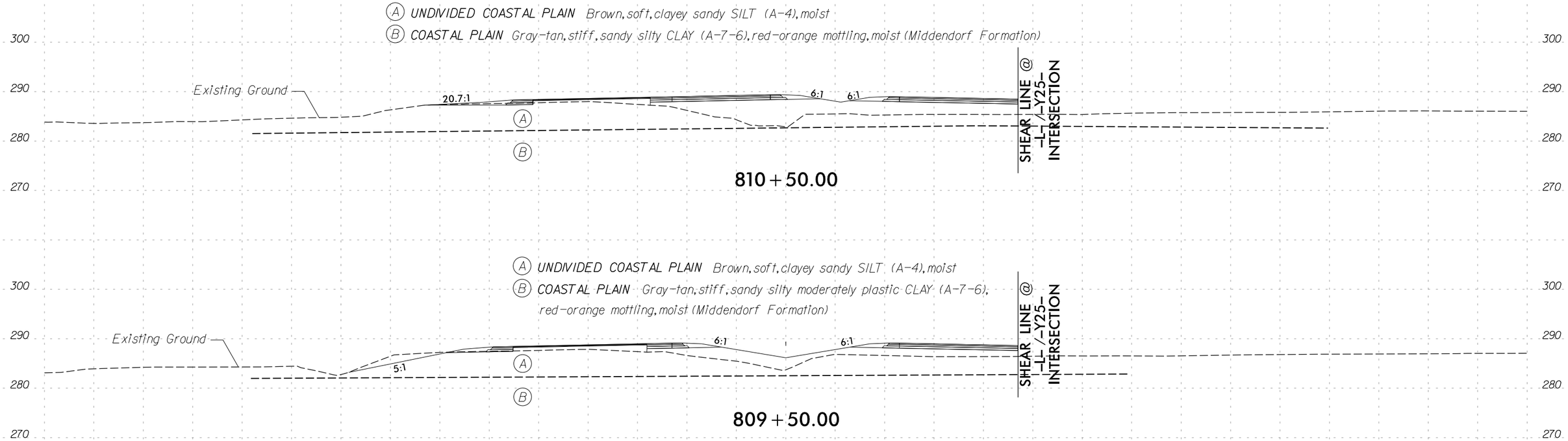
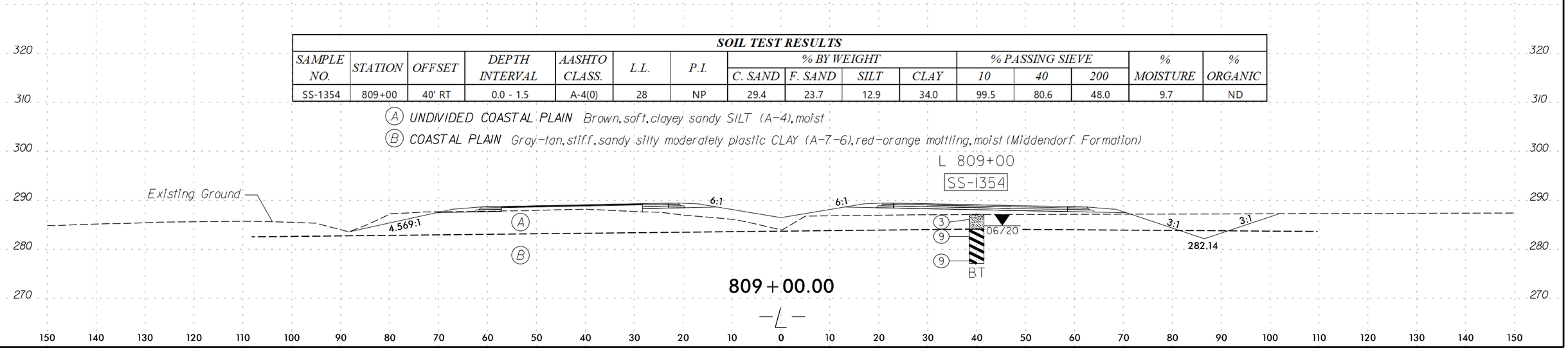
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	193

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



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1354	809+00	40' RT	0.0 - 1.5	A-4(0)	28	NP	29.4	23.7	12.9	34.0	99.5	80.6	48.0	9.7	ND



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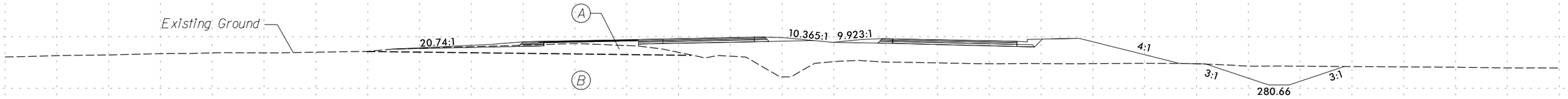
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	194

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

310 300 290 280 270

Ⓐ ROADWAY EMBANKMENT Brown, medium stiff, sandy CLAY (A-6), trace of organic matter, moist

Ⓑ UNDIVIDED COASTAL PLAIN Orange-brown to light gray-red, soft to stiff, sandy silty highly plastic CLAY (A-7-5, A-7-6), moist to wet

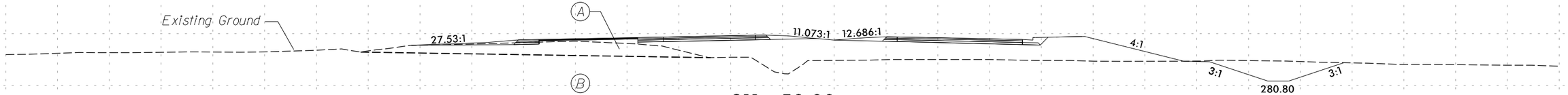


812 + 00.00

310 300 290 280 270

Ⓐ ROADWAY EMBANKMENT Brown, medium stiff, sandy CLAY (A-6), trace of organic matter, moist

Ⓑ UNDIVIDED COASTAL PLAIN Orange-brown to light gray-red, soft to stiff, sandy silty highly plastic CLAY (A-7-5, A-7-6), moist to wet



811 + 50.00

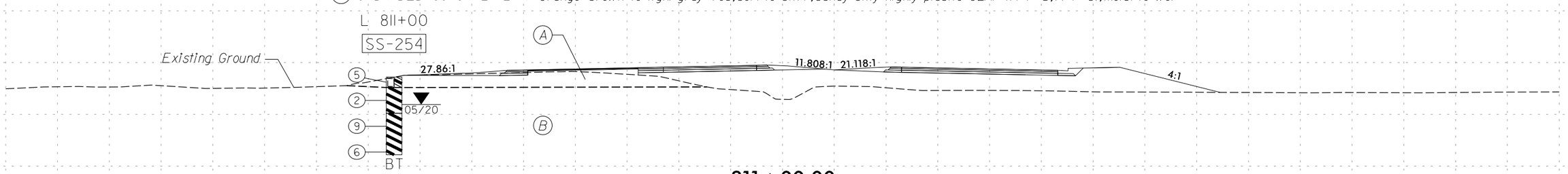
320 310 300 290 280 270

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-254	811+00	75' LT	3.5 - 5.0	A-7-6 (13)	47	27	22.5	19.0	18.1	40.4	100.0	86.0	58.5	27.0	ND

Ⓐ ROADWAY EMBANKMENT Brown, medium stiff, sandy CLAY (A-6), trace of organic matter, moist

Ⓑ UNDIVIDED COASTAL PLAIN Orange-brown to light gray-red, soft to stiff, sandy silty highly plastic CLAY (A-7-5, A-7-6), moist to wet



811 + 00.00

320 310 300 290 280 270 260

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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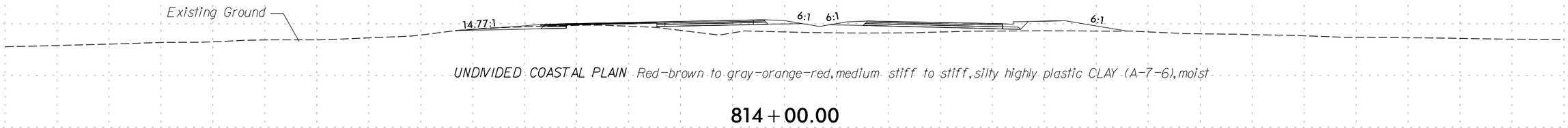
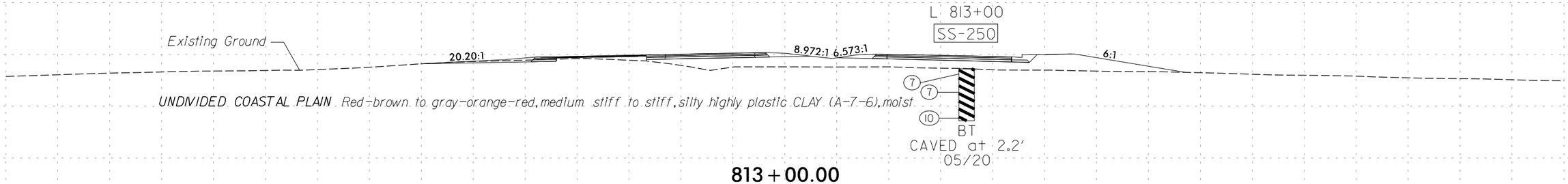
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	195

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



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-250	813+00	35' RT	0.0 - 1.5	A-7-6 (18)	53	35	22.0	18.0	10.0	50.0	100.0	87.0	60.0	19.0	ND



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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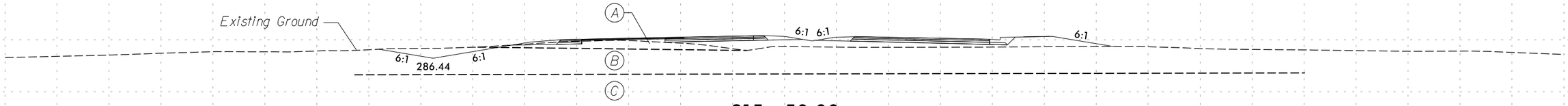
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	196

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

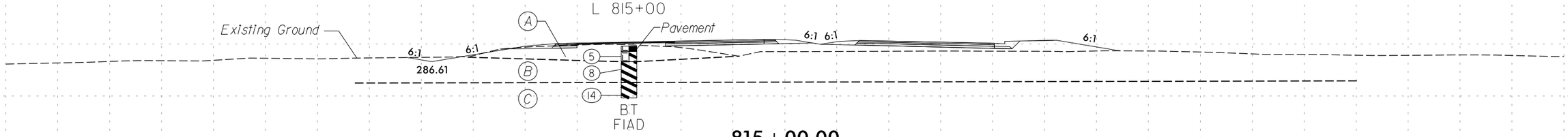
310
300
290
280
270

(A) *ROADWAY EMBANKMENT* Red-brown, medium stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Red-brown, stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(C) *COASTAL PLAIN* Gray-orange, stiff, fine to coarse sandy silty CLAY (A-7-6), moist (Middendorf Formation)



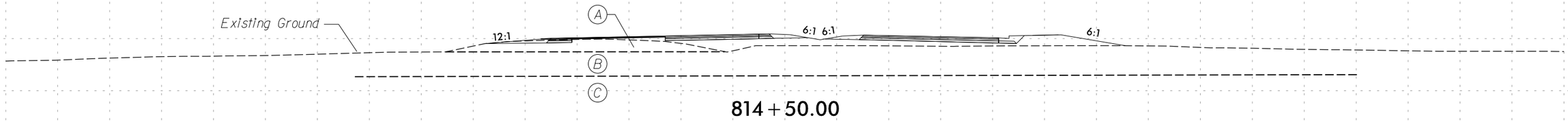
815 + 50.00

(A) *ROADWAY EMBANKMENT* Red-brown, medium stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Red-brown, stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(C) *COASTAL PLAIN* Gray-orange, stiff, fine to coarse sandy silty CLAY (A-7-6), moist (Middendorf Formation)



815 + 00.00

(A) *ROADWAY EMBANKMENT* Red-brown, medium stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Red-brown, stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(C) *COASTAL PLAIN* Gray-orange, stiff, fine to coarse sandy silty CLAY (A-7-6), moist (Middendorf Formation)



814 + 50.00

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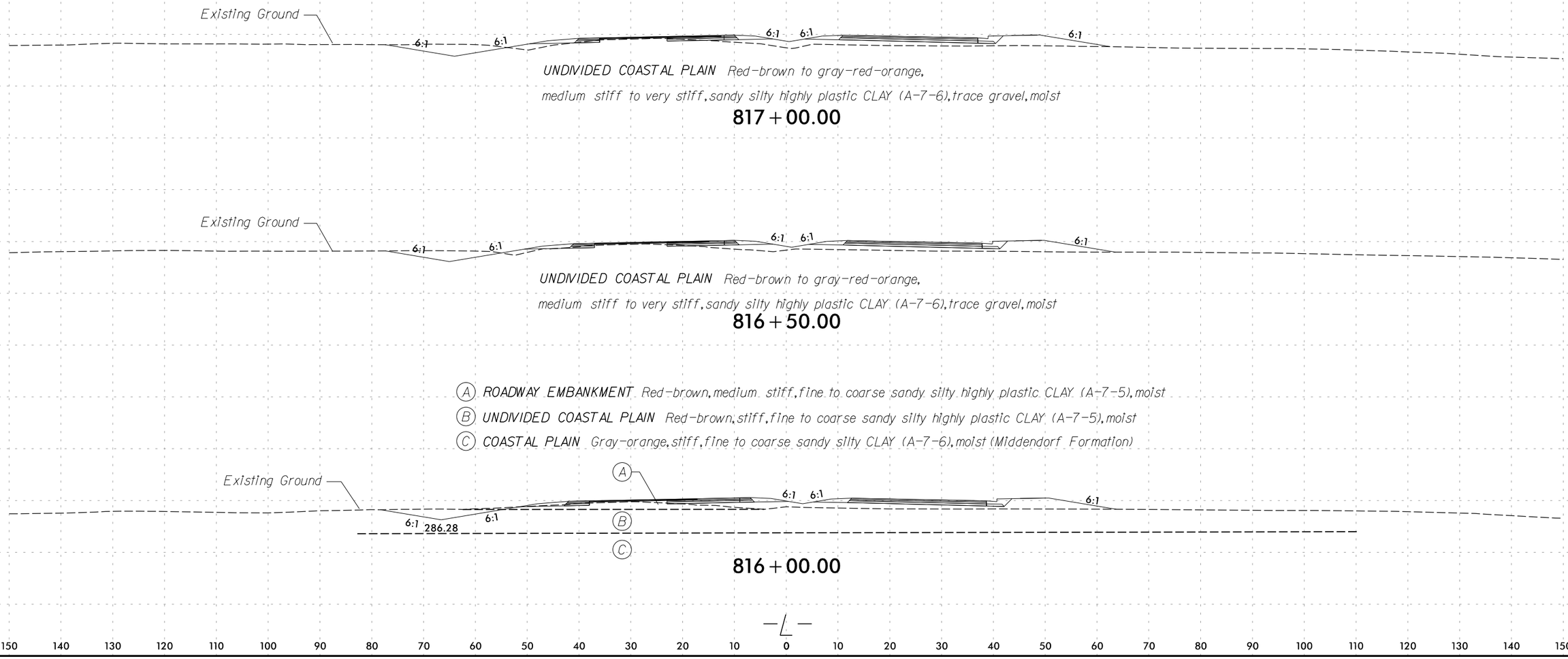
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	197

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



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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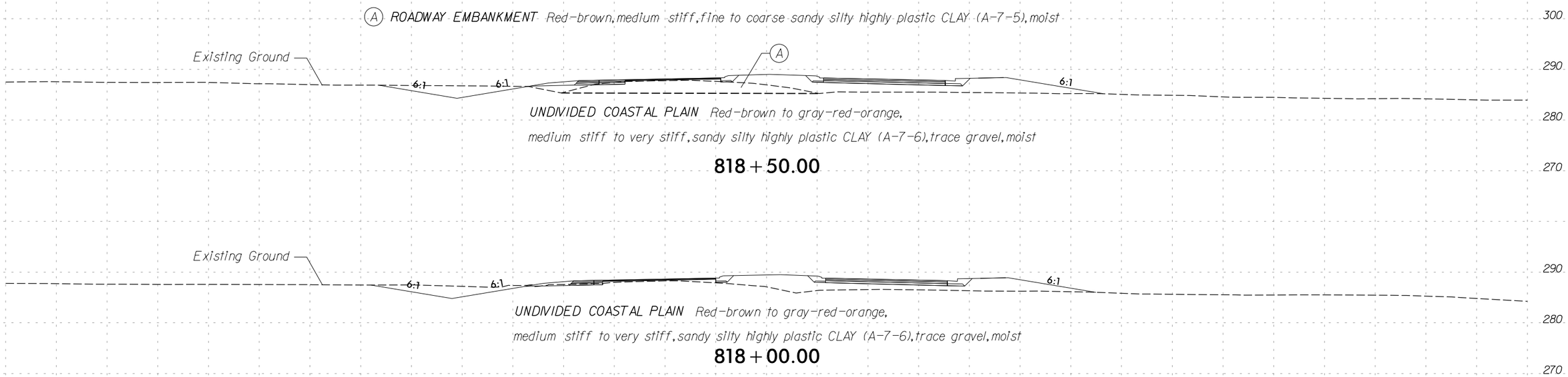
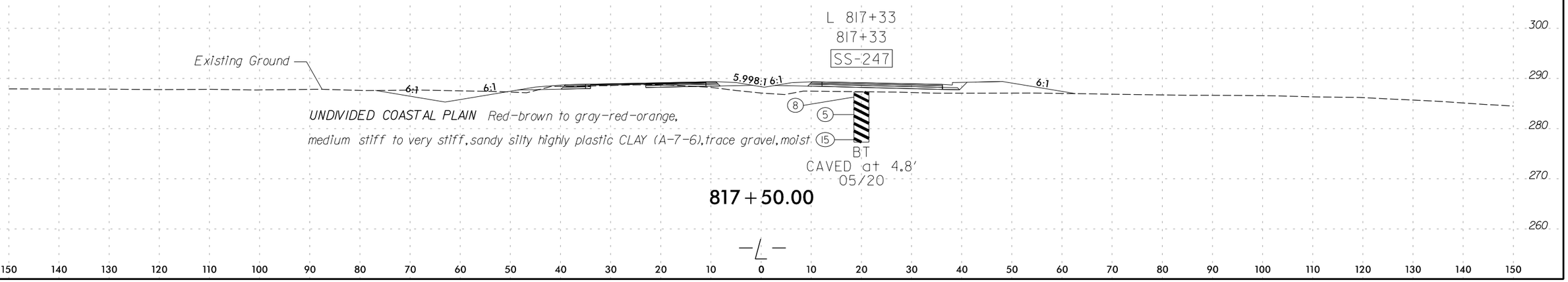
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	198

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



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-247	817+33	20' RT	0.0 - 1.5	A-7-6 (12)	44	27	24.0	18.0	9.0	49.0	100.0	85.0	58.0	17.0	ND



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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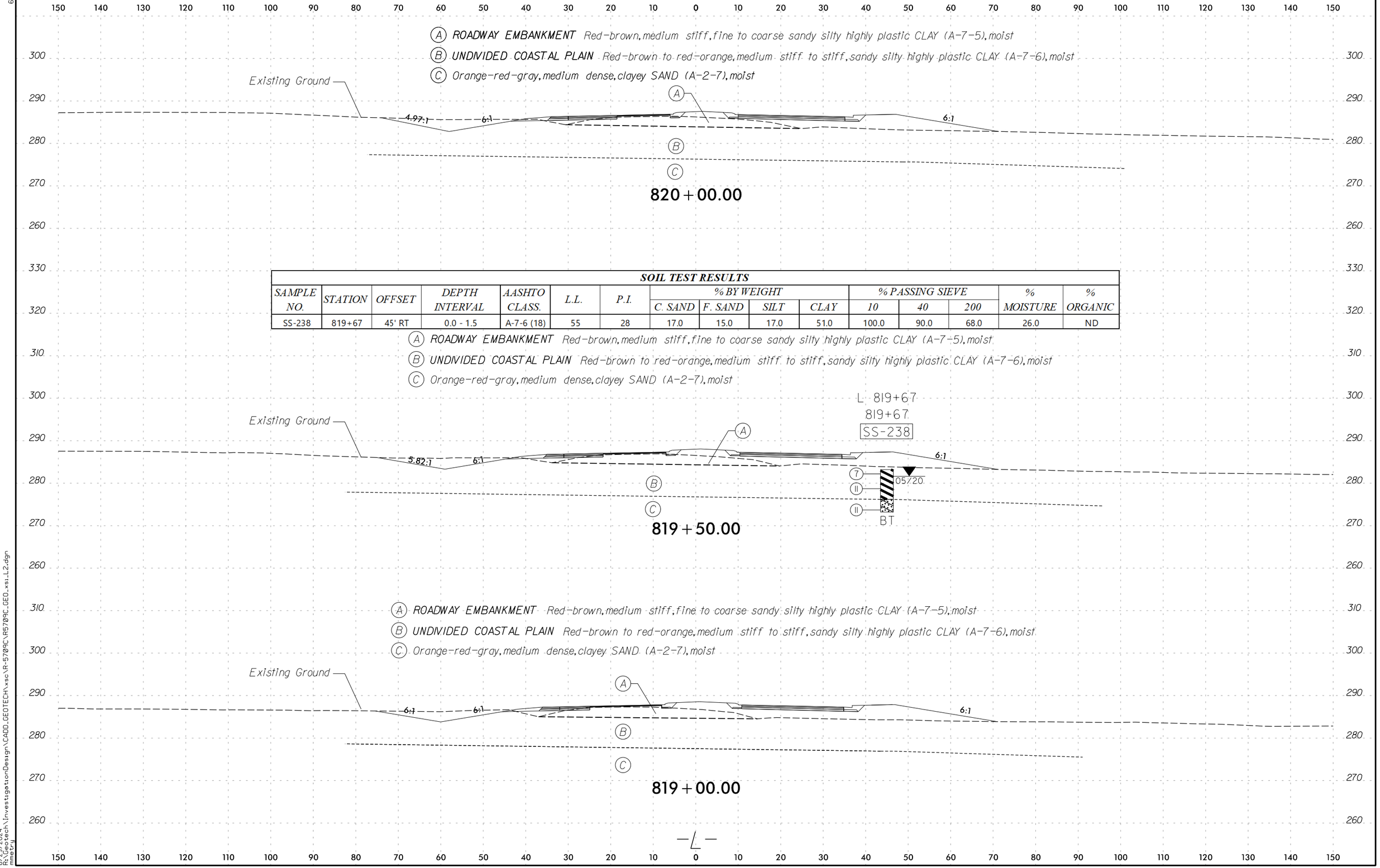
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	199



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-238	819+67	45' RT	0.0 - 1.5	A-7-6 (18)	55	28	17.0	15.0	17.0	51.0	100.0	90.0	68.0	26.0	ND

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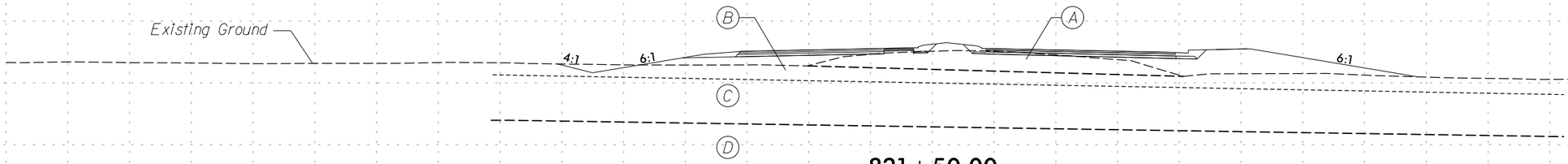
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	200

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

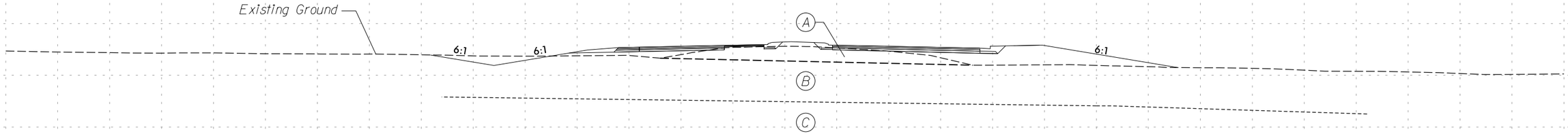
310
300
290
280
270
260

(A) *ROADWAY EMBANKMENT* Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist
(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty fine to coarse SAND (A-2-4), wet
(C) Orange, medium stiff, fine to coarse sandy silty moderately plastic CLAY (A-7-6), wet
(B) *COASTAL PLAIN* Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)



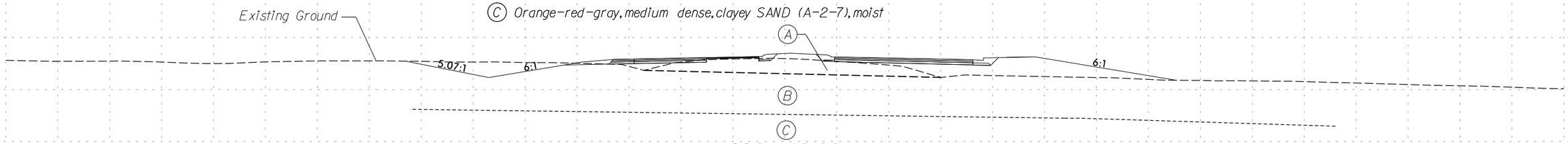
821+50.00

(A) *ROADWAY EMBANKMENT* Red-brown, medium stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Red-brown to red-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist
(C) Orange-red-gray, medium dense, clayey SAND (A-2-7), moist



821+00.00

(A) *ROADWAY EMBANKMENT* Red-brown, medium stiff, fine to coarse sandy silty highly plastic CLAY (A-7-5), moist
(B) *UNDIVIDED COASTAL PLAIN* Red-brown to red-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist
(C) Orange-red-gray, medium dense, clayey SAND (A-2-7), moist



820+50.00

—L—

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mmcgee

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	201

SOIL TEST RESULTS

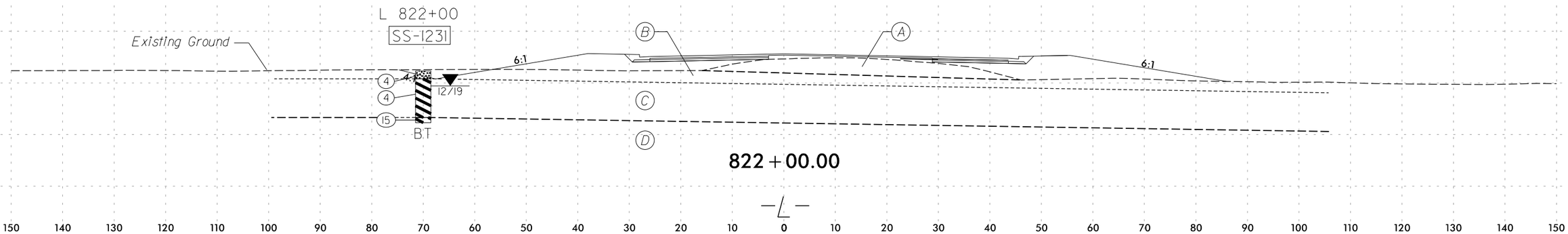
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1231	822+00	70' LT	3.5 - 5.0	A-7-6(6)	44	16	27.0	20.0	13.0	40.0	100.0	84.0	53.4	23.3	ND

(A) *ROADWAY EMBANKMENT* Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty fine to coarse SAND (A-2-4), wet

(C) Orange, medium stiff, fine to coarse sandy silty moderately plastic CLAY (A-7-6), wet

(B) *COASTAL PLAIN* Gray-orange, very stiff, fine to coarse sandy silty CLAY (A-7-6), wet (Middendorf Formation)



822+00.00

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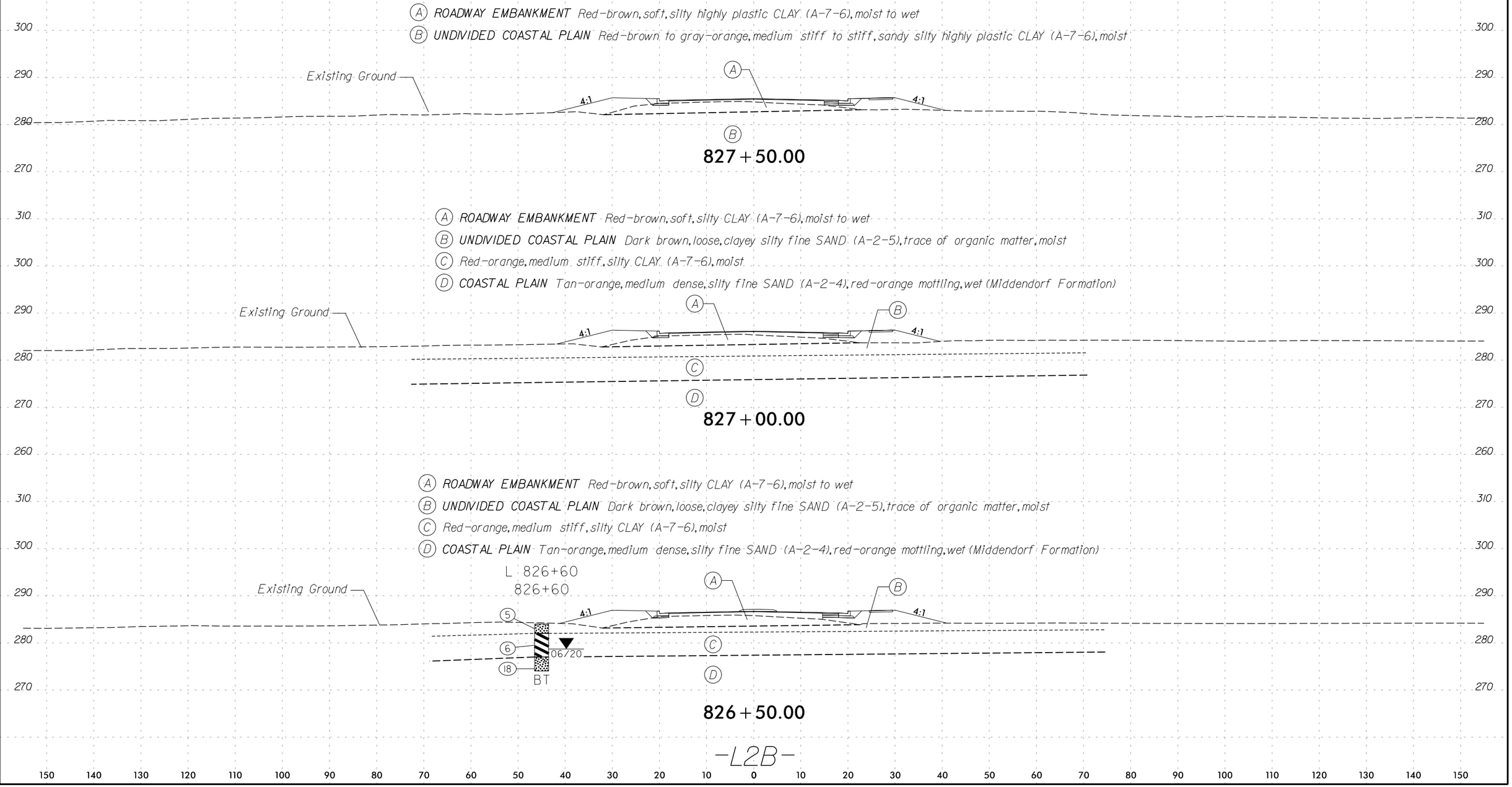
mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	202

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



(A) *ROADWAY EMBANKMENT* Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet

(B) *UNDIVIDED COASTAL PLAIN* Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist

(A) *ROADWAY EMBANKMENT* Red-brown, soft, silty CLAY (A-7-6), moist to wet

(B) *UNDIVIDED COASTAL PLAIN* Dark brown, loose, clayey silty fine SAND (A-2-5), trace of organic matter, moist

(C) Red-orange, medium stiff, silty CLAY (A-7-6), moist

(D) *COASTAL PLAIN* Tan-orange, medium dense, silty fine SAND (A-2-4), red-orange mottling, wet (Middendorf Formation)

(A) *ROADWAY EMBANKMENT* Red-brown, soft, silty CLAY (A-7-6), moist to wet

(B) *UNDIVIDED COASTAL PLAIN* Dark brown, loose, clayey silty fine SAND (A-2-5), trace of organic matter, moist

(C) Red-orange, medium stiff, silty CLAY (A-7-6), moist

(D) *COASTAL PLAIN* Tan-orange, medium dense, silty fine SAND (A-2-4), red-orange mottling, wet (Middendorf Formation)

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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mmccoy

6/23/16

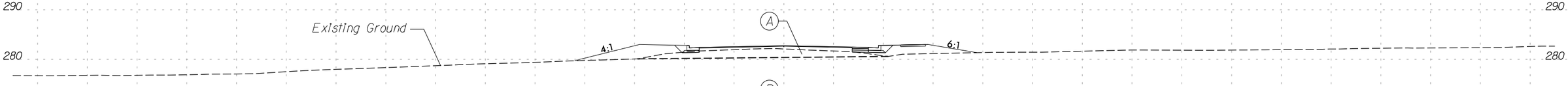
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	203

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

300 290 280 270

Ⓐ ROADWAY EMBANKMENT Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet

Ⓑ UNDIVIDED COASTAL PLAIN Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist



829+00.00

320 310

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-236	828+75	40' RT	3.5 - 5.0	A-7-6 (15)	53	26	20.0	17.0	10.0	53.0	100.0	88.0	63.0	25.0	ND

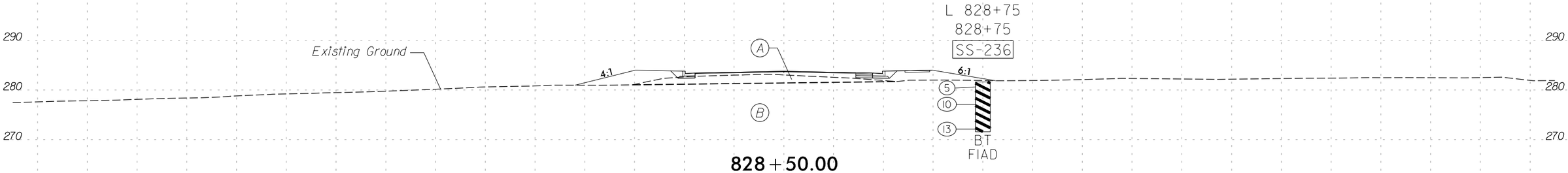
Ⓐ ROADWAY EMBANKMENT Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet

Ⓑ UNDIVIDED COASTAL PLAIN Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist

L 828+75

828+75

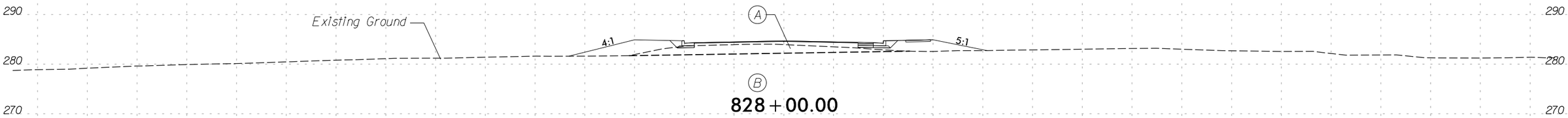
SS-236



828+50.00

Ⓐ ROADWAY EMBANKMENT Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet

Ⓑ UNDIVIDED COASTAL PLAIN Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist



828+00.00

-L2B-

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mmesley

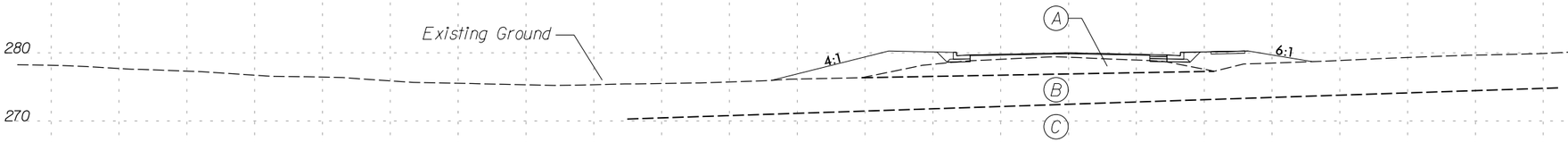
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	204

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

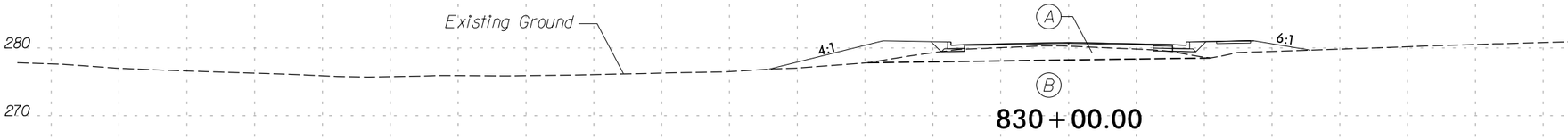
300
290
280
270
260

(A) ROADWAY EMBANKMENT Red-brown, soft, silty CLAY (A-7-6), moist to wet
(B) UNDIVIDED COASTAL PLAIN Gray-orange, medium dense, silty clayey fine to coarse SAND (A-2-6), wet
(C) COASTAL PLAIN Gray-orange, stiff, fine to coarse sandy silty CLAY (A-7-5), moist (Middendorf Formation)



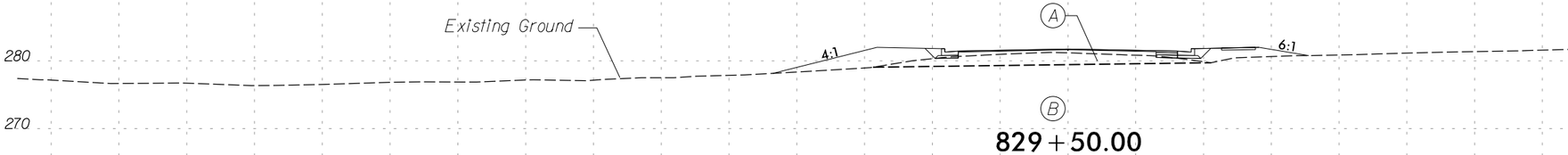
830 + 50.00

(A) ROADWAY EMBANKMENT Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet
(B) UNDIVIDED COASTAL PLAIN Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist



830 + 00.00

(A) ROADWAY EMBANKMENT Red-brown, soft, silty highly plastic CLAY (A-7-6), moist to wet
(B) UNDIVIDED COASTAL PLAIN Red-brown to gray-orange, medium stiff to stiff, sandy silty highly plastic CLAY (A-7-6), moist



829 + 50.00

-L2B-

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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mmoy

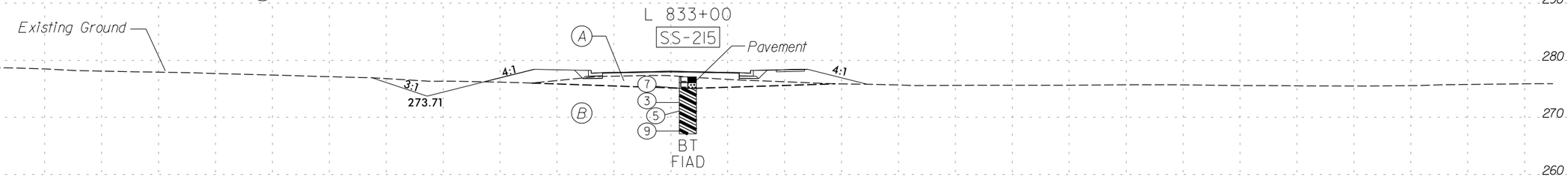
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	205

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-215	833+00	3' RT	5.0 - 6.5	A-6 (4)	29	14	24.3	24.2	31.4	20.1	100.0	87.0	51.6	15.0	ND

(A) ROADWAY EMBANKMENT Black-brown, loose, silty SAND (A-2-4), moist

(B) UNDIVIDED COASTAL PLAIN Brown-orange to gray-orange-red, soft to stiff, silty sandy slightly plastic CLAY (A-6), moist



833+00.00

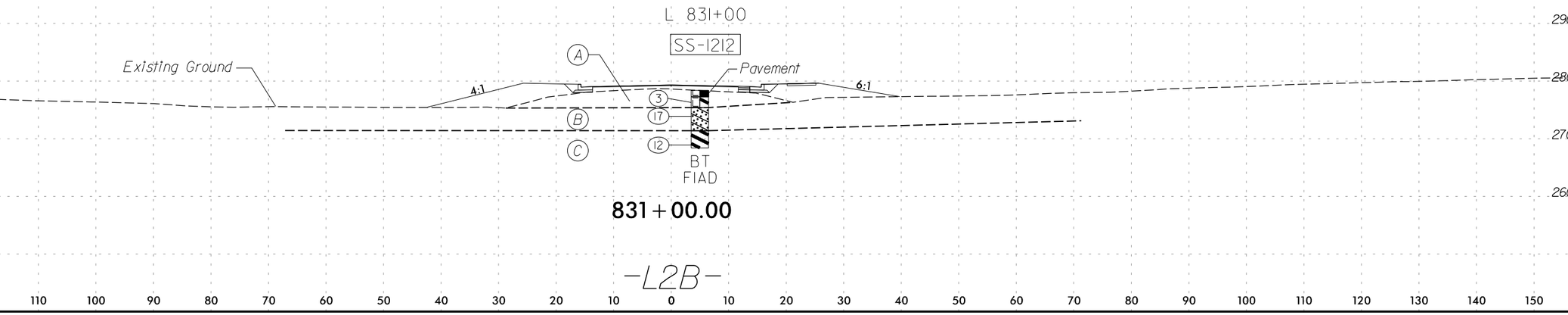
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1212	831+00	5' RT	1.1 - 2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND

(A) ROADWAY EMBANKMENT Red-brown, soft, silty CLAY (A-7-6), moist to wet

(B) UNDIVIDED COASTAL PLAIN Gray-orange, medium dense, silty clayey fine to coarse SAND (A-2-6), wet

(C) COASTAL PLAIN Gray-orange, stiff, fine to coarse sandy silty CLAY (A-7-5), moist (Middendorf Formation)



831+00.00

-L2B-

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	206

SOIL TEST RESULTS

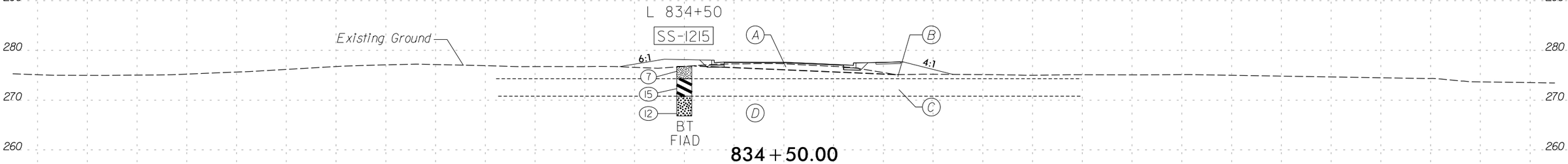
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1215	834+50	20' LT	0 - 1.5	A-4(0)	15	3	28.0	27.0	31.0	14.0	99.0	85.0	45.0	20.4	ND

(A) *ROADWAY EMBANKMENT* Black-brown, loose, silty SAND (A-2-4), moist

(B) *UNDIVIDED COASTAL PLAIN* Brown, medium stiff, fine to coarse sandy SILT (A-4), moist

(C) Orange-tan, very stiff, fine sandy silty CLAY (A-7-5), moist

(D) Orange, medium dense, silty fine to coarse SAND (A-2-4), wet



834+50.00

-L2B-

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mmesa

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	207

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

310 300 290 280 270

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Ⓑ UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

6:1

Ⓐ

284.69

Ⓑ

11+00.00

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Ⓑ UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

SHEAR LINE @ -L2B- /-RAB L2- INTERSECTION

Ⓐ

285.17

Ⓑ

10+50.00

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Ⓑ UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

6:1

6:1

282.78

Ⓐ

284.14

Ⓑ

10+00.00

-RAB_L2-

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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mmeyer

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	208

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

320
310
300
290
280
270
260

(A) ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

(B) UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

SHEAR LINE @ -Y27-/-RAB L2- INTERSECTION

284.37

12+00.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-210	11+60	8' LT	1.0 - 2.5	A-6 (6)	31	17	25.0	21.0	13.0	40.0	99.0	83.0	53.0	11.0	ND

(A) ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

(B) UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

L 824+10
11+60
SS-210

Pavement

Existing Ground

SHEAR LINE @ -Y27-/-RAB L2- INTERSECTION

13
6
10

284.42

BT
FIAD

11+50.00

-RAB_L2-

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mlacy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	209

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

310
300
290
280
270

(A) ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist
(B) UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

SHEAR LINE @ -Y26-/-RAB L2- INTERSECTION

283.04

13+50.00

(A) ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist
(B) UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

SHEAR LINE @ -RAB L2- INTERSECTION

283.99

13+00.00

(A) ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist
(B) UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

Existing Ground

SHEAR LINE @ -L2B-/-RAB L2- INTERSECTION

284.54

12+50.00

-RAB_L2-

8/29/2024
mmccoy

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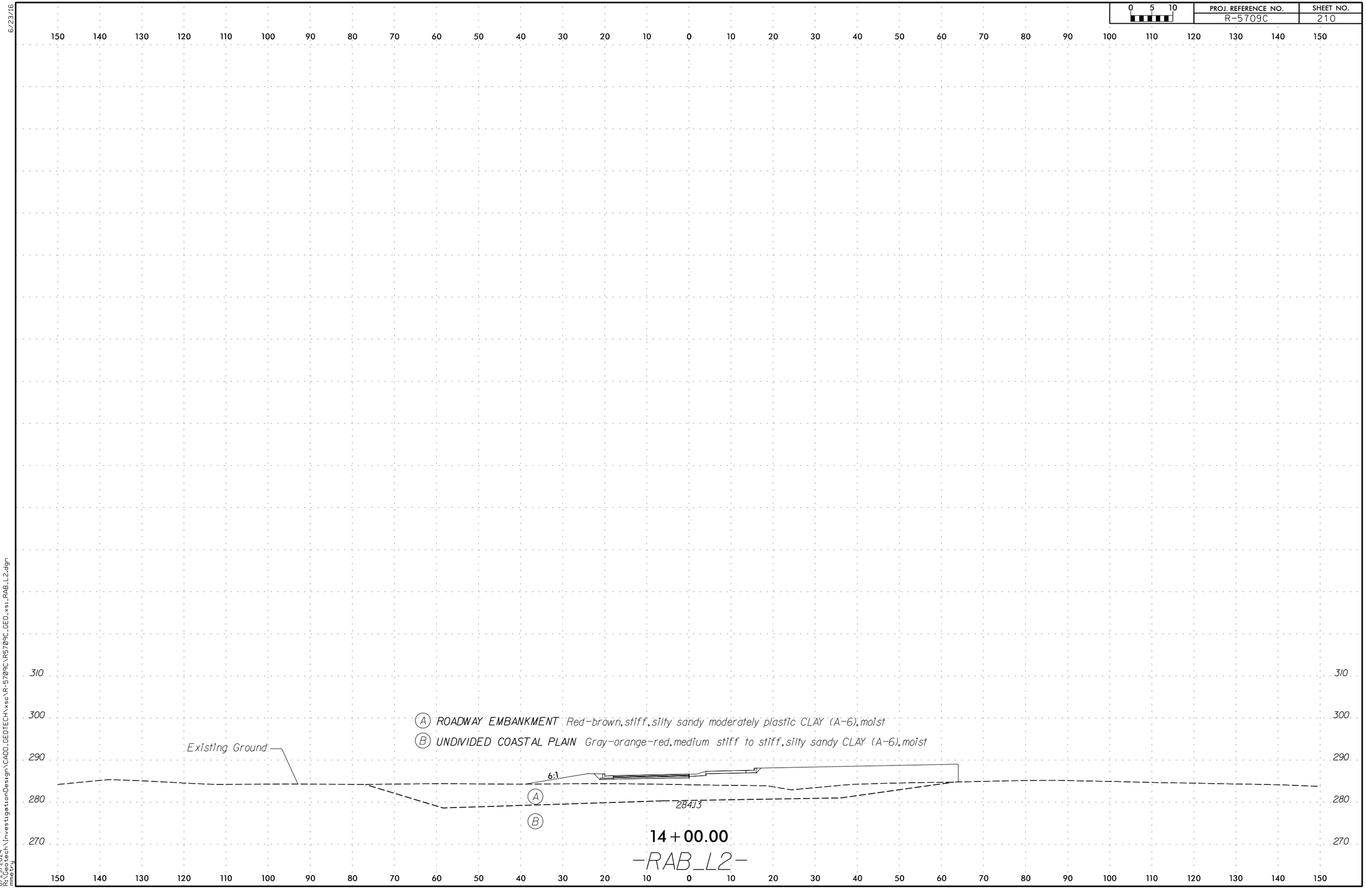
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	210



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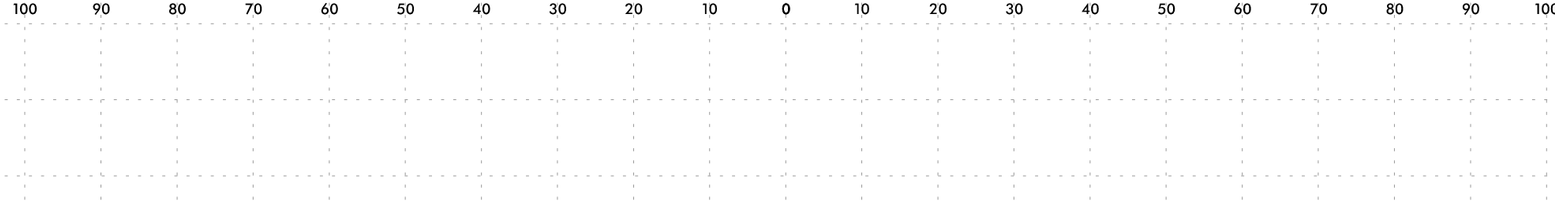
mmoss

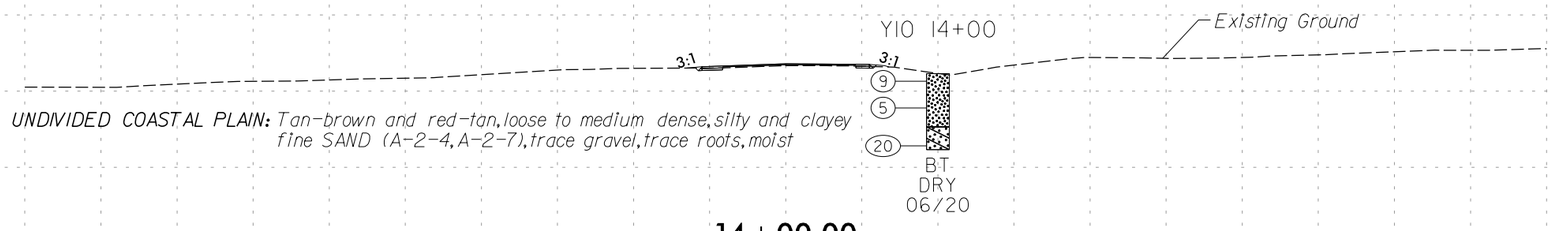
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	211

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

500
490
480
470
460
450





-Y10-

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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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	212

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

520
510
500
490
480
470

(A) *UNDIVIDED COASTAL PLAIN* Brown to orange-tan, medium dense, clayey silty SAND (A-2-5) and clayey SAND (A-2-7), trace to little gravel

(B) *COASTAL PLAIN* Tan, medium dense, silty fine SAND (A-2-4), little mica (Middendorf Formation)

Existing Ground

Y11 12+00

3:1

3:1

(A) 10

10

(B) 12

BT

CAVED at 3.3'

05/20

12+00.00

-Y11-

520
510
500
490
480
470

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

8/29/2024
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mmccoy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	213

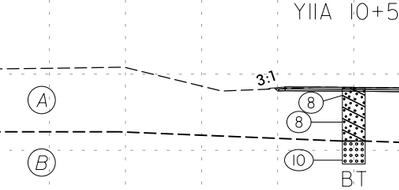
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

520
510
500
490
480
470
460

(A) *UNDIVIDED COASTAL PLAIN* *Tan-orange and tan-white, loose, clayey fine to coarse SAND (A-2-6), trace gravel, moist*

(B) *COASTAL PLAIN* *Brown to white, medium dense, fine to coarse SAND (A-3), lenses of clay, moist (Middendorf Formation)*

Existing Ground



10+50.00

-YIIA-

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

8/29/2024
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mmosley

6/23/16

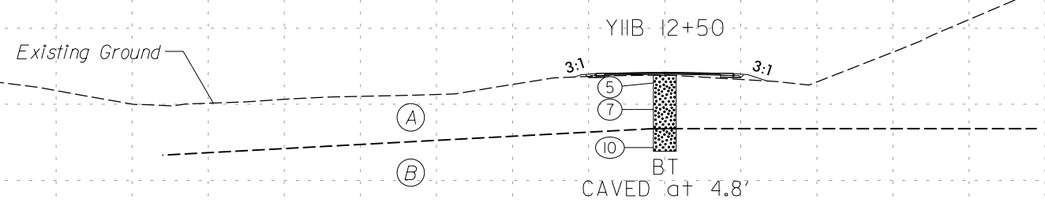
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	214

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

520 510 500 490 480 470

(A) *UNDIVIDED COASTAL PLAIN* Orange-white, loose, silty fine to coarse SAND (A-2-4), moist

(B) *COASTAL PLAIN* Orange-white, medium dense, silty fine to coarse SAND (A-2-4), trace mica, moist (Middendorf Formation)



YIIB 12+50

BT

CAVED at 4.8'

05/20

12+50.00

SOIL TEST RESULTS

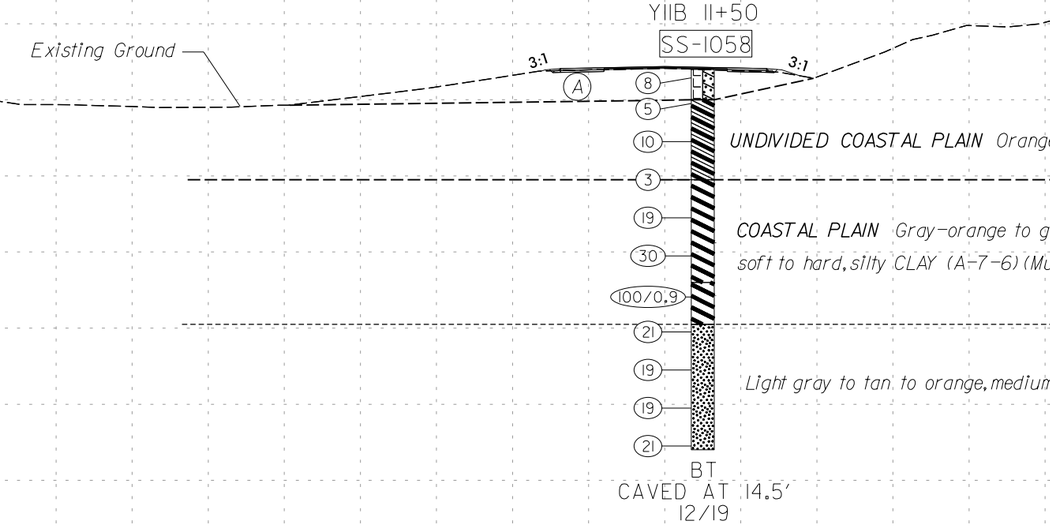
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1058	11+50	5' RT	13.5 - 15.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND

500 490 480 470 460 450 440 430 420

(A) *ROADWAY EMBANKMENT* Orange-brown, loose, clayey SAND (A-2-7), moist

YIIB 11+50

SS-1058



UNDIVIDED COASTAL PLAIN Orange-gray, medium stiff to stiff, sandy silty CLAY (A-6), moist

COASTAL PLAIN Gray-orange to gray-purple to light gray, soft to hard, silty CLAY (A-7-6) (Mudstone), moist (Middendorf Formation)

Light gray to tan to orange, medium dense, clayey silty fine to coarse SAND (A-2-4), moist

BT

CAVED AT 14.5'

12/19

11+50.00

-YIIB-

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

8/29/2024
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mmccoy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	215

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

480 470 460 450 440 430

Ⓐ *UNDIVIDED COASTAL PLAIN* *Red to light brown-black, loose, silty fine to coarse SAND (A-2-4), moist*

Ⓑ *COASTAL PLAIN* *Orange, stiff, clayey fine sandy SILT (A-4), trace mica, moist (Pinehurst Formation)*

Y11C 10+27

Existing Ground

3:1 0.013 0.019 3:1

7
7
14

Ⓐ

Ⓑ

BT

CAVED at 4.0'

05/20

10+50.00

-Y11C-

480 470 460 450 440 430

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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mmesse

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	216

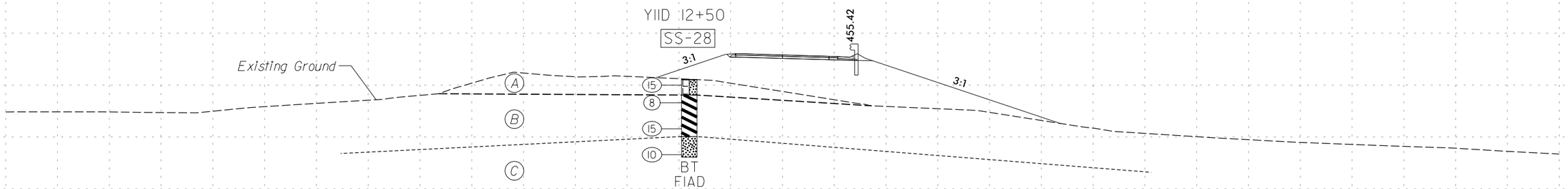
SOIL TEST RESULTS

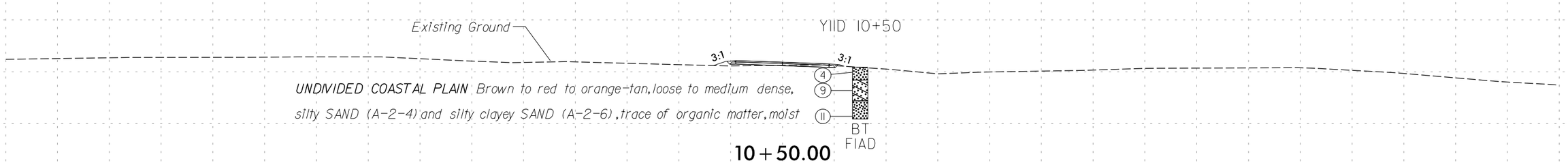
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-28	12+50	18' LT	3.5 - 5.0	A-7-6 (20)	58	32	6.0	8.0	12.0	74.0	99.0	97.0	86.0	26.0	ND

(A) *ROADWAY EMBANKMENT* Brown, medium dense, silty fine to coarse SAND (A-2-4), little gravel, moist

(B) *UNDIVIDED COASTAL PLAIN* Gray-orange-purple to white, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

(C) White, medium dense, silty SAND (A-2-4), clay balls, moist (Middendorf Formation)





UNDIVIDED COASTAL PLAIN Brown to red to orange-tan, loose to medium dense, silty SAND (A-2-4) and silty clayey SAND (A-2-6), trace of organic matter, moist

-Y11D-

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mmeng

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	217

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

490 480 470 460 450 440

Existing Ground

YIIE II+80
II+80

3:1 0.020 0.020 3:1

12
6
6

UNDIVIDED COASTAL PLAIN Orange, loose to medium dense, clayey silty fine to coarse SAND (A-2-5) and clayey fine to coarse SAND (A-2-7), moist to wet (Pinehurst Formation)

BT
DRY
05/20

12+00.00

-YIIE-

8/29/2024
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mmsley

6/23/16

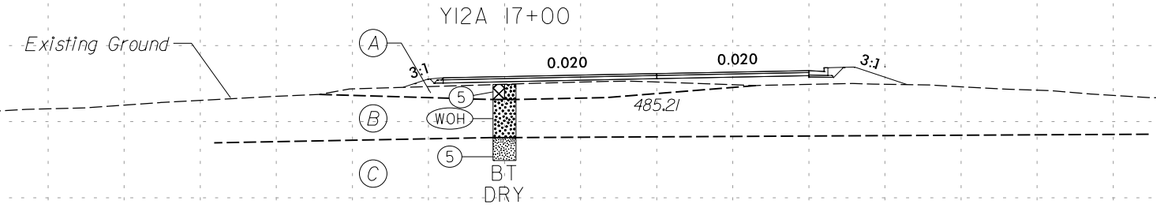
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	218

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

520
510
500
490
480
470

(A) *ARTIFICIAL FILL* Brown-black, loose, silty fine to coarse SAND (A-2-4), trace of organic matter, trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Red, very loose, clayey silty fine to coarse SAND (A-2-5), moist
(C) *COASTAL PLAIN* White-orange, medium stiff, clayey fine sandy SILT (A-4), moist (Pinehurst Formation)

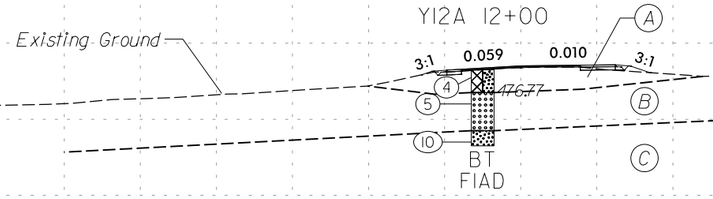
Y12A 17+00



17+00.00

(A) *ARTIFICIAL FILL* Tan-brown, loose, silty fine to coarse SAND (A-2-4), trace of organic matter, trace gravel, moist
(B) *UNDIVIDED COASTAL PLAIN* Tan-orange, loose, fine to coarse SAND (A-3), moist
(C) *COASTAL PLAIN* Tan-orange, medium dense, clayey silty fine to coarse SAND (A-2-5), moist (Pinehurst Formation)

Y12A 12+00



12+00.00

-Y12A-

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mmoss4

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	219

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

510 500 490 480 470

Existing Ground

3:1 6:1 3:1

Y13 15+33
15+33

7
6
8
BT
CAVED at 5.0'
05/20

UNDIVIDED COASTAL PLAIN Tan to red-brown to brown-white, loose, fine SAND (A-3) to clayey SAND (A-2-6), moist

15+50.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Tan-brown to tan-white-orange, very loose to medium dense, silty fine to coarse SAND (A-2-4), trace roots, moist

Ⓑ Tan-white-orange, stiff, coarse sandy CLAY (A-7-5), moist

500 490 480 470 460

Existing Ground

3:1 6:1 3:1

Y13 13+00

Ⓐ
Ⓑ
2
12
16
20
13
BT
DRY
12/19

13+00.00

490 480 470 460 450

Existing Ground

6:1

L 449+00
10+58
Pavement

18
7
11
6
BT
FIAD

UNDIVIDED COASTAL PLAIN Brown to tan-orange-purple, loose to medium dense, silty SAND (A-2-4), little gravel, trace mica, moist

10+50.00

-Y13-

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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mmercy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	220

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

510
500
490
480
470

Existing Ground

3:1 6:1 3:1

Y13 I7+67
I7+67

6
2
5

BT
DRY
05/20

UNDIVIDED COASTAL PLAIN *Red-brown to tan to orange, very loose to loose, silty fine to coarse SAND (A-2-4), trace gravel, moist*

17+50.00

-Y13-

510
500
490
480
470

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

8/29/2024
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mmesse

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	221

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

480 470 460 450

Y14 15+00

Existing Ground

3:1 3:1

Pavement

21
11
12

BT
FIAD

UNDIVIDED COASTAL PLAIN Tan-brown, medium dense, silty fine to coarse SAND (A-2-4), trace mica, moist

15+00.00

Existing Ground

Y14 12+60
12+60

5
7
5

3:1 3:1 3:1 3:1

458.51

456.77

BT
CAVED at 4.9'
05/20

UNDIVIDED COASTAL PLAIN Orange, loose, clayey fine to coarse SAND (A-2-6) and silty fine to coarse SAND (A-2-4), trace gravel, moist

12+50.00

480 470 460 450 440

-Y14-

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

8/29/2024
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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	222

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

480 470 460 450 440 430 420

Ⓐ *COASTAL PLAIN* Tan, loose, clayey coarse SAND (A-2-6), moist (Pinehurst Formation)

Ⓑ Tan-orange to white, stiff, silty CLAY (A-7-6), lenses of sand, iron concretions, moist

Ⓒ Red-orange to white, medium dense, silty coarse SAND (A-1-b), moist

L 467+20
15+09

Existing Ground

3:1

450.47

Ⓐ Ⓑ Ⓒ

3:1

448.29

⑦ ⑪ ⑬

BT
DRY
05/20

15+00.00

Existing Ground

Y15 13+00
12+83

② ⑥ ⑤

BT
DRY
05/20

3:1 3:1

439.28

3:1 3:1

438.98

UNDIVIDED COASTAL PLAIN Tan to orange to white-orange, very loose to loose, clayey fine to coarse SAND (A-2-6) and coarse SAND (A-1-b), little gravel, moist

13+00.00

-Y15-

8/29/2024
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mmeng

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	223

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

450 440 430 420 410

(A) *UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), moist*

(B) *Brown to orange, medium stiff to very stiff, sandy CLAY (A-6), moist*

Existing Ground

3:1

L 533+35
18+71

6
6
16
BT
CAVED at 4.5'
05/20

SHEAR LINE @ INTERSECTION WITH -L-

18+50.00

Y16 16+50

Existing Ground

3:1 3:1

6
4
13
BT
CAVED at 4.1'
05/20

UNDIVIDED COASTAL PLAIN Brown to orange, loose to medium dense, silty SAND (A-2-4) and clayey SAND (A-2-7), little gravel, moist

16+50.00

-Y16-

8/29/2024
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mmsley

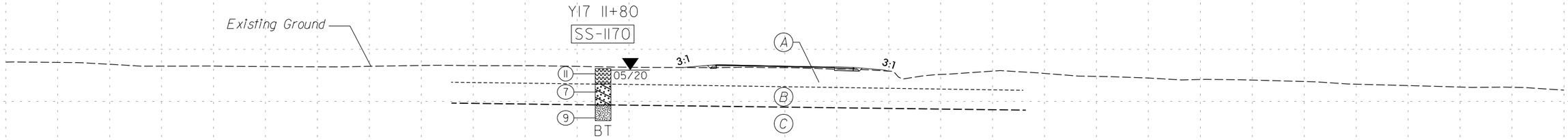
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	224

SOIL TEST RESULTS

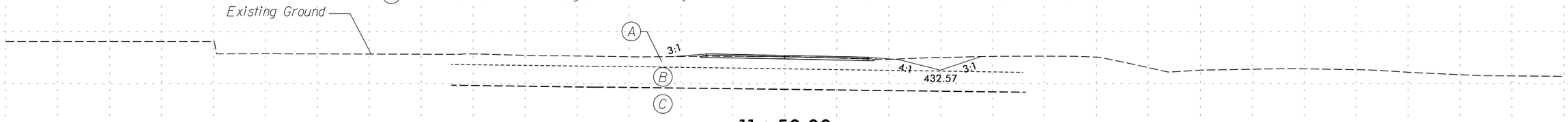
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1170	11+80	35' LT	0.0 - 1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.0

(A) UNDIVIDED COASTAL PLAIN Black, stiff, sandy PEAT, moderately to highly organic, moist
(B) Tan, loose, clayey coarse SAND (A-2-7), moist
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy SILT (A-4), iron concretions, mottled, moist (Middendorf Formation)



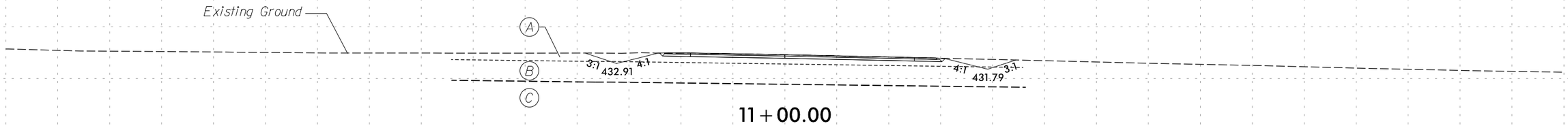
12+00.00

(A) UNDIVIDED COASTAL PLAIN Black, stiff, sandy PEAT, moderately to highly organic, moist
(B) Tan, loose, clayey coarse SAND (A-2-7), moist
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy SILT (A-4), iron concretions, mottled, moist (Middendorf Formation)



11+50.00

(A) UNDIVIDED COASTAL PLAIN Black, stiff, sandy PEAT, moderately to highly organic, moist
(B) Tan, loose, clayey coarse SAND (A-2-7), moist
(C) COASTAL PLAIN Tan-orange, stiff, fine sandy SILT (A-4), iron concretions, mottled, moist (Middendorf Formation)



11+00.00

-Y17-

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mmoy

6/23/16

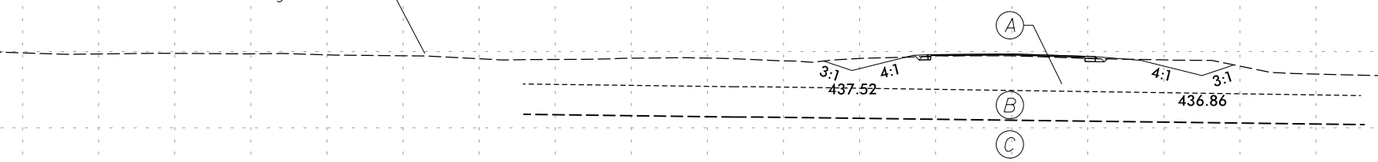
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	225

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

470
460
450
440
430
420

Ⓐ *UNDIVIDED COASTAL PLAIN* Black, stiff, sandy PEAT, moderately to highly organic, moist
Ⓑ Tan, loose, clayey coarse SAND (A-2-7), moist
Ⓒ *COASTAL PLAIN* Tan-orange, stiff, fine sandy SILT (A-4), iron concretions, mottled, moist (Middendorf Formation)

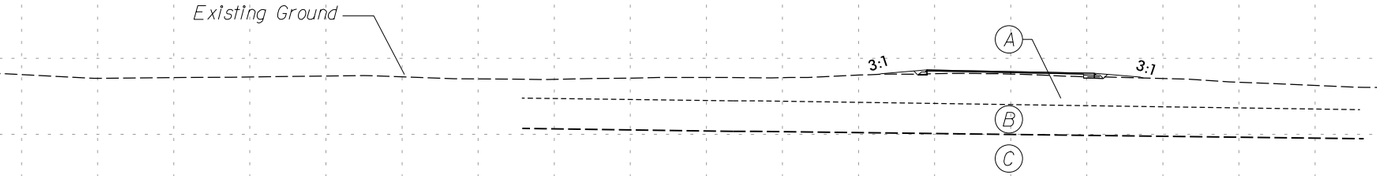
Existing Ground



13 + 00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Black, stiff, sandy PEAT, moderately to highly organic, moist
Ⓑ Tan, loose, clayey coarse SAND (A-2-7), moist
Ⓒ *COASTAL PLAIN* Tan-orange, stiff, fine sandy SILT (A-4), iron concretions, mottled, moist (Middendorf Formation)

Existing Ground



12 + 50.00

-Y17-

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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mtroy

6/23/16

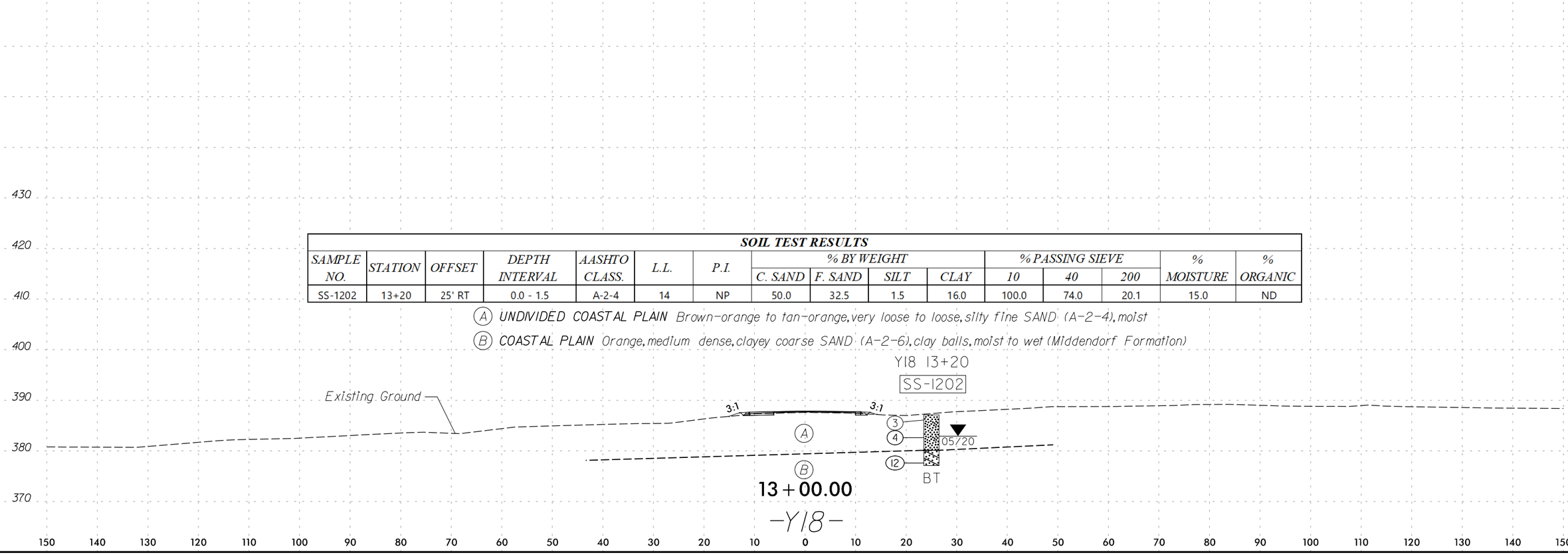
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	226

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1202	13+20	25' RT	0.0 - 1.5	A-2-4	14	NP	50.0	32.5	1.5	16.0	100.0	74.0	20.1	15.0	ND

(A) *UNDIVIDED COASTAL PLAIN* Brown-orange to tan-orange, very loose to loose, silty fine SAND (A-2-4), moist

(B) *COASTAL PLAIN* Orange, medium dense, clayey coarse SAND (A-2-6), clay balls, moist to wet (Middendorf Formation)



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mmosley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	227

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

400
390
380
370
360

Y19 14+50

Existing Ground

3:1 3:1

4
6
8

BT
DRY
12/19

UNDIVIDED COASTAL PLAIN Brown to tan-brown, loose, silty fine SAND (A-2-4), trace roots, trace clay, moist

14+50.00

Ⓐ *ROADWAY EMBANKMENT* Brown, dense, silty SAND (A-2-4), little gravel, moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Brown-orange, loose to medium dense, silty SAND (A-2-4) and silty clayey SAND (A-2-6), moist

Y19 12+20

Existing Ground

Ⓐ

Ⓑ

3:1

Pavement

3:1 3:1

381.38

30
5
13

BT
FIAD

12+00.00

-Y19-

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

8/29/2024
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mmoore

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	228

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

400
390
380
370
360

Existing Ground

Y20 13+50

Pavement

3:1 3:1 3:1 3:1

379.69

378.95

17
3
10

BT
FIAD

UNDIVIDED COASTAL PLAIN Brown-orange, very loose to medium dense, silty SAND (A-2-4) and silty clayey SAND (A-2-6), moist

13+50.00

-Y20-

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

8/29/2024
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mmsley

6/23/16

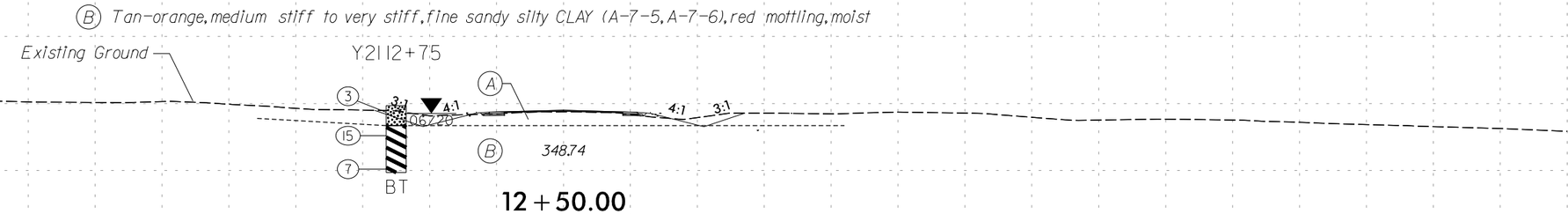
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	229

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

380
370
360
350
340
330

Ⓐ *COASTAL PLAIN* Tan-brown, very loose, clayey silty fine to coarse SAND (A-2-5), red mottling, wet (Middendorf Formation)

Ⓑ Tan-orange, medium stiff to very stiff, fine sandy silty CLAY (A-7-5, A-7-6), red mottling, moist



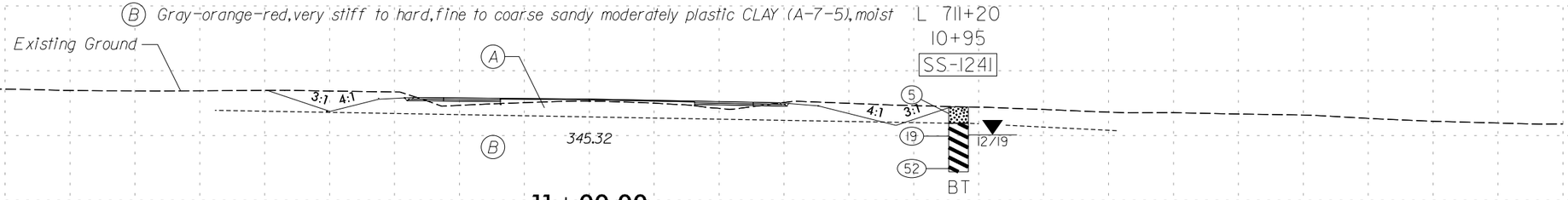
12+50.00

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1241	711+20	100' LT	3.5 - 5.0	A-7-5(6)	49	18	32.0	18.0	8.0	42.0	94.0	74.0	47.0	23.6	ND

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, silty fine to coarse SAND (A-2-4), moist

Ⓑ Gray-orange-red, very stiff to hard, fine to coarse sandy moderately plastic CLAY (A-7-5), moist



11+00.00

-Y21-

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mmay

6/23/16

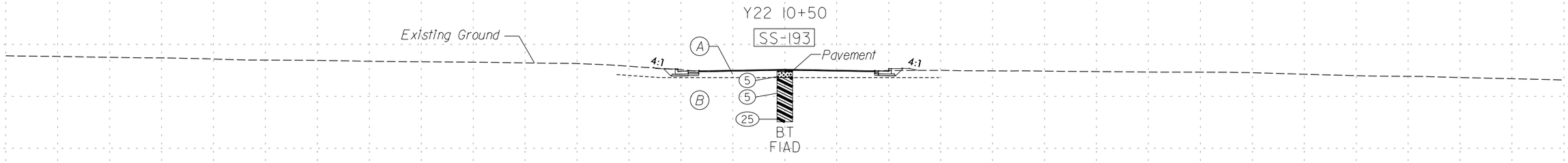
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	230

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-193	10+50	0' CL	3.5 - 5.0	A-6 (0)	26	11	45.0	18.0	19.0	18.0	99.0	71.0	37.0	15.0	ND

(A) UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), little gravel, moist

(B) Brown-orange to light gray, medium stiff to very stiff, silty sandy slightly plastic CLAY (A-6), moist



10+50.00

-Y22-

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mmoss

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	231

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

320 310 300 290 280

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), trace of organic matter, moist

Existing Ground

3:1 3:1 3:1 3:1

Orange-brown to gray-orange, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6) and sandy CLAY (A-6), moist

11+50.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), trace of organic matter, moist

Existing Ground

3:1 3:1 3:1 3:1

Orange-brown to gray-orange, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6) and sandy CLAY (A-6), moist

11+00.00

Ⓐ *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), trace of organic matter, moist

Existing Ground

Orange-brown to gray-orange, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6) and sandy CLAY (A-6), moist

10+50.00

-Y23-

8/29/2024
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mmosy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	232

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

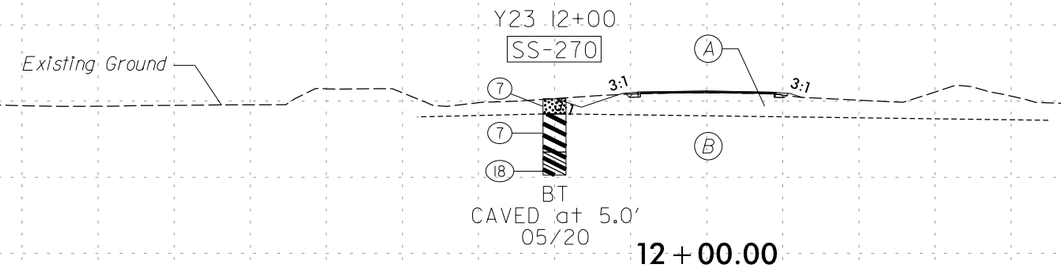
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-270	12+00	20' LT	3.5 - 5.0	A-7-6 (6)	43	19	32.9	16.5	6.2	44.5	99.0	79.0	50.7	19.0	ND

330 320 310 300 290 280

(A) UNDIVIDED COASTAL PLAIN Brown, loose, silty SAND (A-2-4), trace of organic matter, moist

(B) Orange-brown to gray-orange, medium stiff to very stiff, sandy silty moderately plastic CLAY (A-7-6) and sandy CLAY (A-6), moist



12+00.00

-Y23-

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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mmsley

6/23/16

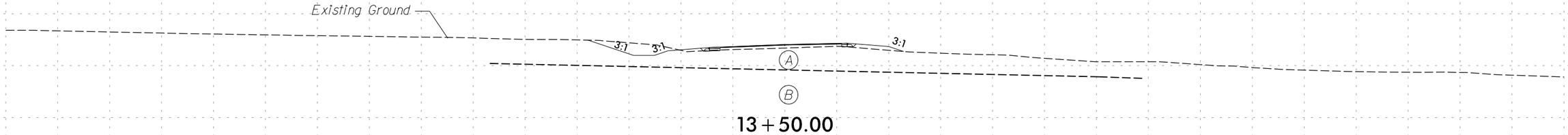
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	233

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

320 / 310 / 300 / 290 / 280

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown, soft, sandy silty moderately plastic CLAY (A-7-6), moist

(B) *COASTAL PLAIN* Tan-orange to gray, stiff, fine sandy silty CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)



13 + 50.00

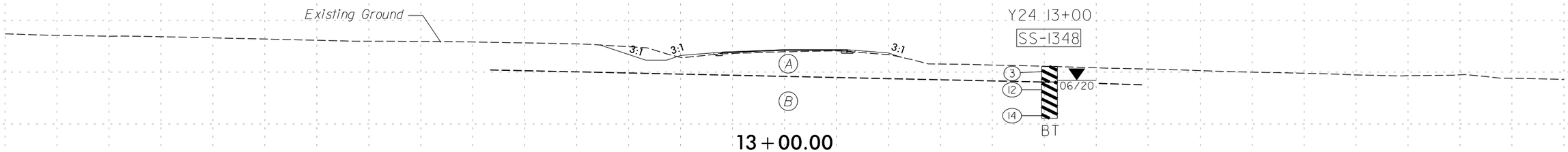
SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1348	13+00	51' RT	0.0 - 1.5	A-7-6(7)	42	24	31.8	23.7	10.3	34.2	99.8	79.6	45.0	ND	ND

320 / 310 / 300 / 290 / 280

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown, soft, sandy silty moderately plastic CLAY (A-7-6), moist

(B) *COASTAL PLAIN* Tan-orange to gray, stiff, fine sandy silty CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)

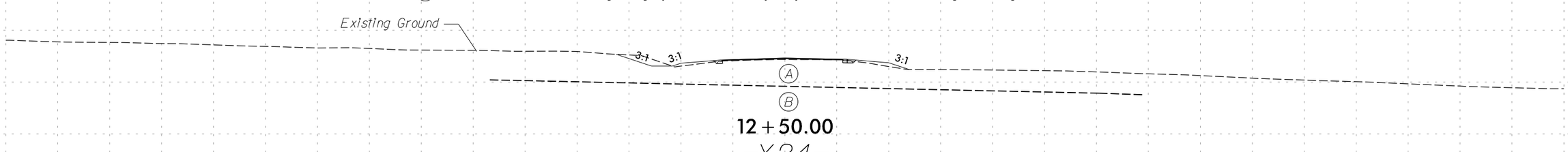


13 + 00.00

320 / 310 / 300 / 290 / 280

(A) *UNDIVIDED COASTAL PLAIN* Tan-brown, soft, sandy silty moderately plastic CLAY (A-7-6), moist

(B) *COASTAL PLAIN* Tan-orange to gray, stiff, fine sandy silty CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)



12 + 50.00

-Y24-

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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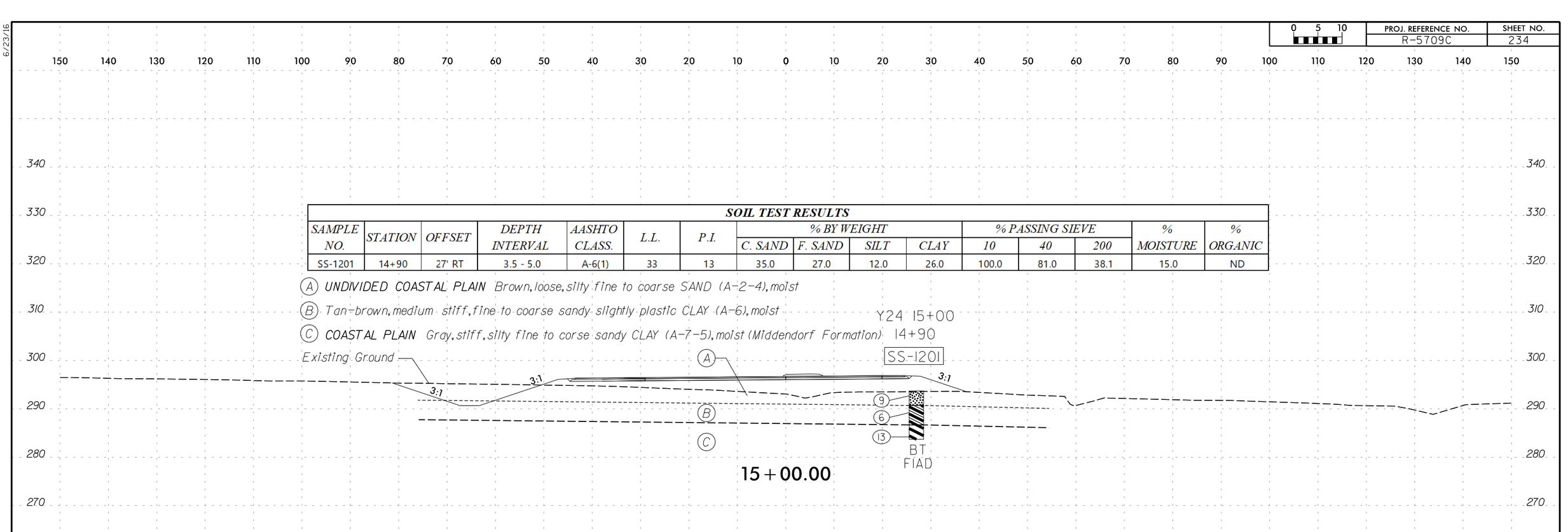
mmsly

6/23/16

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	234

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1201	14+90	27' RT	3.5 - 5.0	A-6(1)	33	13	35.0	27.0	12.0	26.0	100.0	81.0	38.1	15.0	ND



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mmsley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	235

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1354	809+00	40' RT	0.0 - 1.5	A-4(0)	28	NP	29.4	23.7	12.9	34.0	99.5	80.6	48.0	9.7	ND

L 809+00
15+59
SS-1354

Existing Ground

(A) UNDIVIDED COASTAL PLAIN Brown, soft, clayey sandy SILT (A-4), moist
(B) COASTAL PLAIN Gray-tan, stiff, sandy silty CLAY (A-7-6), red-orange mottling, moist (Middendorf Formation)

3
9
9
06/20
BT

15+50.00

(A) UNDIVIDED COASTAL PLAIN Brown, very loose, silty fine SAND (A-2-4), moist
(B) COASTAL PLAIN Tan-orange-red, stiff, silty CLAY (A-7-6), red mottling, moist (Middendorf Formation)

Y25 14+00

Existing Ground

3
10
10
06/20
BT

4:1
4:1

14+00.00

-Y25-

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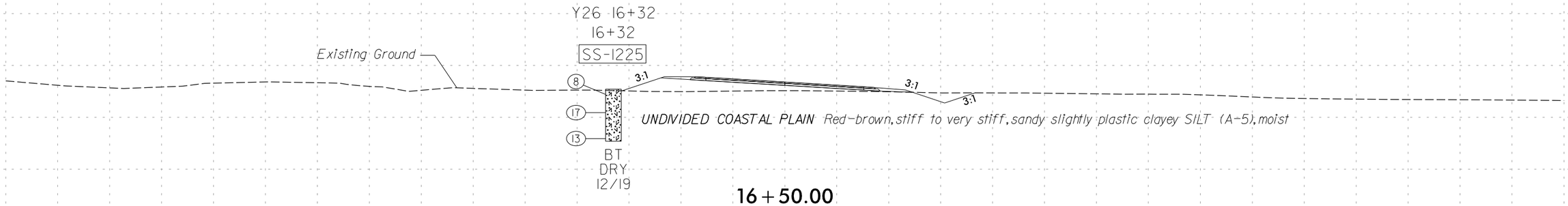
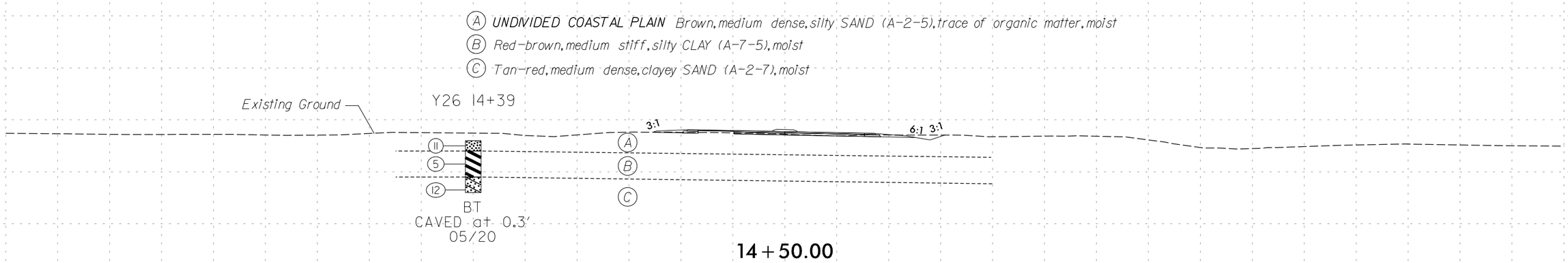
PROJ. REFERENCE NO.	SHEET NO.
R-5709C	236

SOIL TEST RESULTS

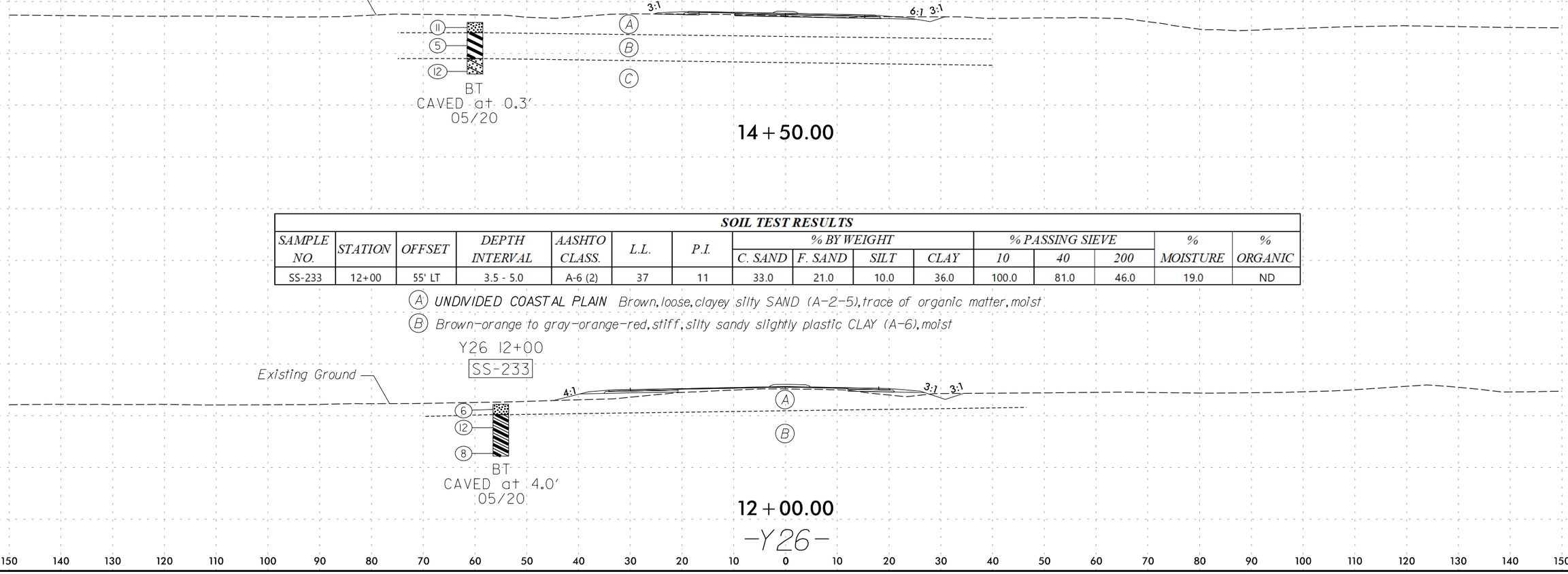
SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1225	16+32	0 CL	3.5 - 5.0	A-5(2)	43	9	29.0	23.0	10.0	38.0	99.0	81.0	48.5	19.1	ND





SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-233	12+00	55' LT	3.5 - 5.0	A-6 (2)	37	11	33.0	21.0	10.0	36.0	100.0	81.0	46.0	19.0	ND



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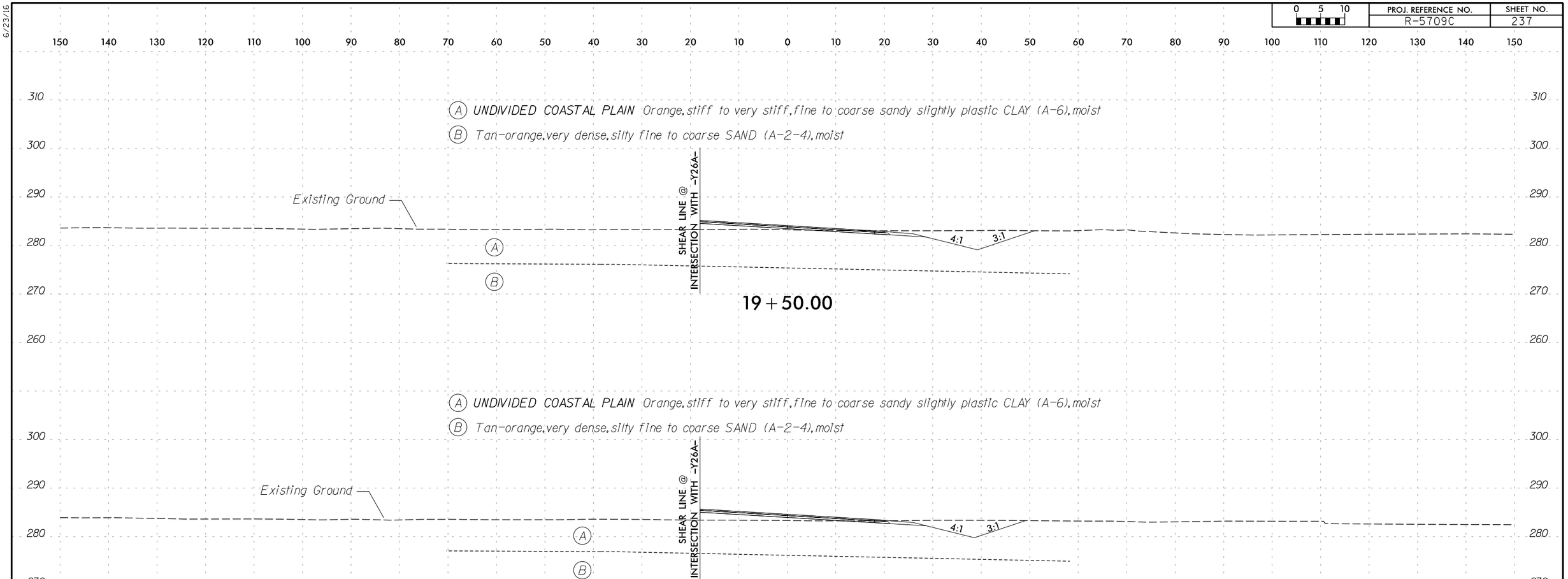
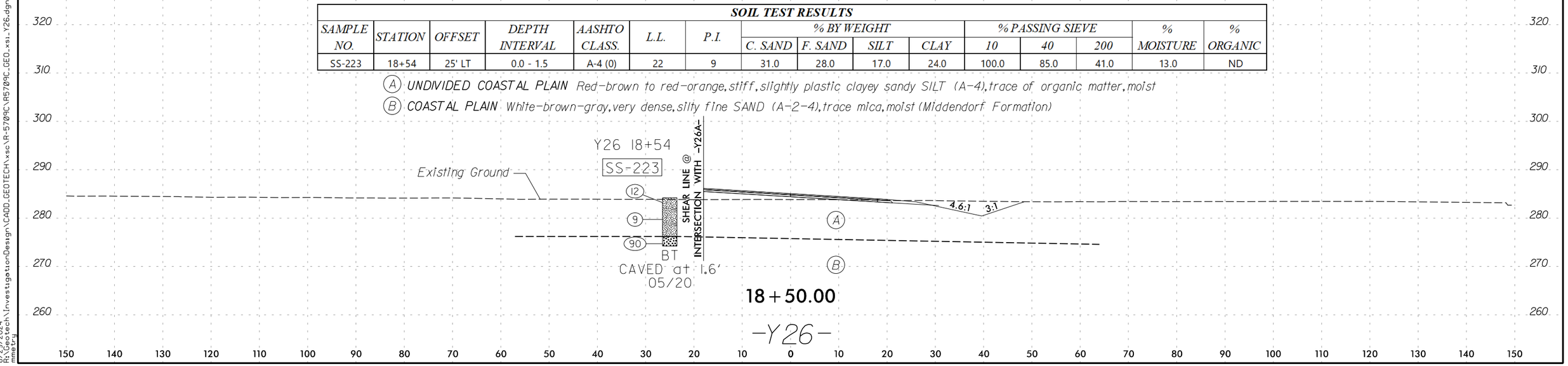
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	237



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-223	18+54	25' LT	0.0 - 1.5	A-4 (0)	22	9	31.0	28.0	17.0	24.0	100.0	85.0	41.0	13.0	ND



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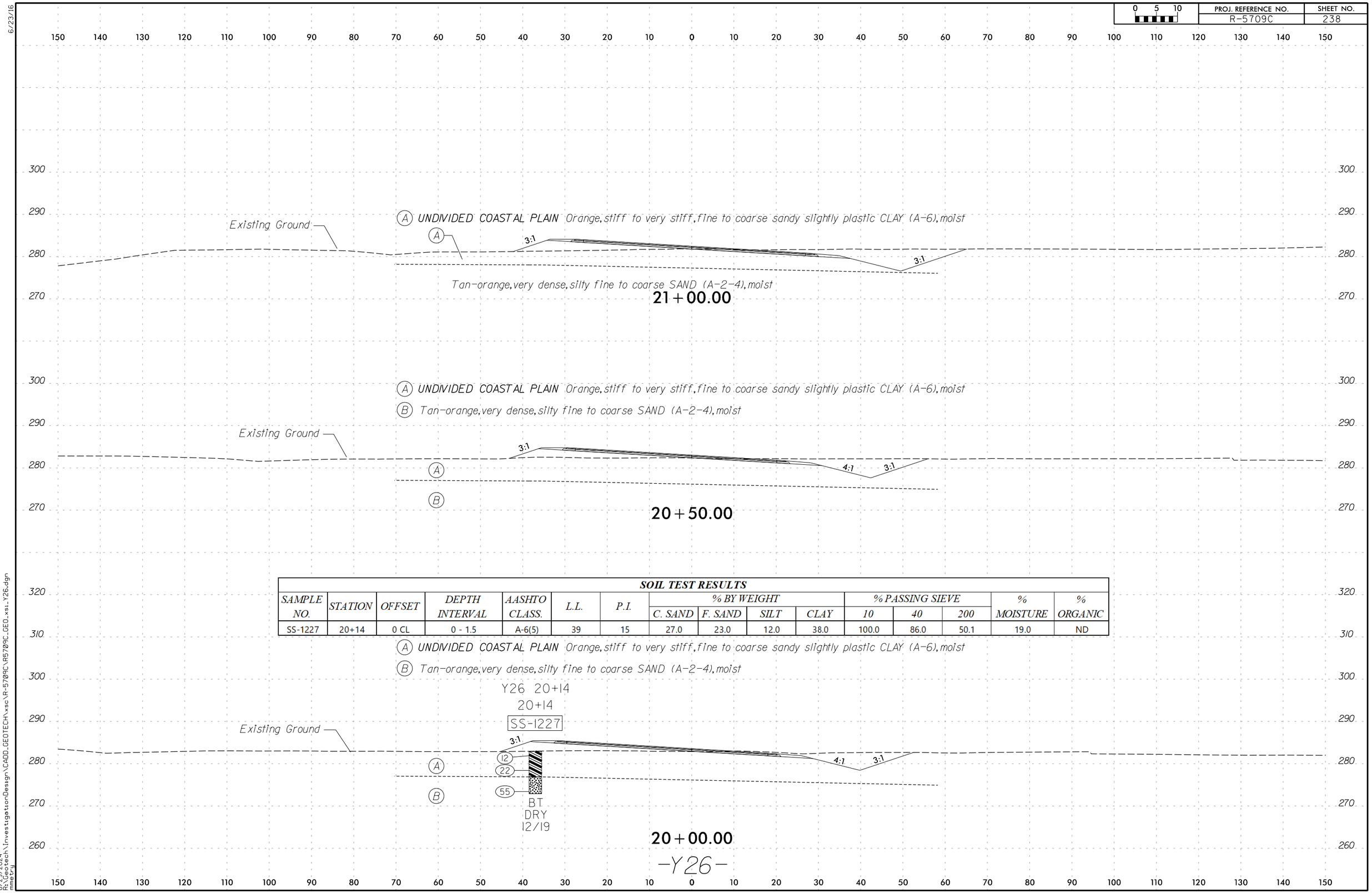
6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	238



SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-1227	20+14	0 CL	0 - 1.5	A-6(5)	39	15	27.0	23.0	12.0	38.0	100.0	86.0	50.1	19.0	ND

A UNDIVIDED COASTAL PLAIN Orange, stiff to very stiff, fine to coarse sandy slightly plastic CLAY (A-6), moist

B Tan-orange, very dense, silty fine to coarse SAND (A-2-4), moist

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6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	239

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

290 280 270 260

Existing Ground

3:1 4:1 3:1

UNDIVIDED COASTAL PLAIN *Brown to orange-gray, stiff to very stiff, silty highly plastic CLAY (A-7-6, A-7-5), trace roots, moist*

23+00.00

Y26 22+72

Existing Ground

3:1 4:1 3:1

8
16
13
BT
CAVED at 2.0'
05/20

UNDIVIDED COASTAL PLAIN *Brown to orange-gray, stiff to very stiff, silty highly plastic CLAY (A-7-6, A-7-5), trace roots, moist*

22+50.00

Existing Ground

3:1 4:1 3:1

UNDIVIDED COASTAL PLAIN *Brown to orange-gray, stiff to very stiff, silty highly plastic CLAY (A-7-6, A-7-5), trace roots, moist*

22+00.00

Existing Ground

3:1 4:1 3:1

UNDIVIDED COASTAL PLAIN *Brown to orange-gray, stiff to very stiff, silty highly plastic CLAY (A-7-6, A-7-5), trace roots, moist*

21+50.00

-Y26-

8/29/2024
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mmeng

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	240

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

310 300 290 280 270 260

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-217	25+00	4' LT	0.8 - 2.3	A-7-6 (9)	49	26	30.0	21.0	13.0	36.0	100.0	83.0	49.0	18.0	ND

Y26 25+00

SS-217

Existing Ground

Pavement

3:1

3:1

14

17

10

BT

FIAD

UNDIVIDED COASTAL PLAIN Brown, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

25+00.00

Existing Ground

3:1

SHEAR LINE @ DRIVEWAY

UNDIVIDED COASTAL PLAIN Brown, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

24+50.00

Existing Ground

3:1

SHEAR LINE DRIVEWAY

UNDIVIDED COASTAL PLAIN Brown, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

24+00.00

Existing Ground

3:1

4:1

3:1

UNDIVIDED COASTAL PLAIN Brown to orange-gray, stiff to very stiff, silty highly plastic CLAY (A-7-6, A-7-5), trace roots, moist

23+50.00

-Y26-

8/29/2024
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mmecy

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	241

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

300 290 280 270 260 250 240

Existing Ground

3:1

3:1

UNDIVIDED COASTAL PLAIN Brown, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist

25+50.00

-Y26-

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

300 290 280 270 260 250 240

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mmosley

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	242

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

310 300 290 280 270

Ⓐ UNDIVIDED COASTAL PLAIN Red-orange to orange-brown, stiff, sandy moderately plastic CLAY (A-6), moist
Ⓑ COASTAL PLAIN Light gray, medium dense, clayey silty SAND (A-2-5), trace mica, moist (Middendorf Formation)

Existing Ground — 3:1 — Ⓐ — 3:1

Ⓑ

11+50.00

Ⓐ UNDIVIDED COASTAL PLAIN Red-brown to red-orange, stiff, slightly plastic clayey sandy SILT (A-4), trace of organic matter, moist
Ⓑ COASTAL PLAIN White-brown-gray, very dense, silty fine SAND (A-2-4), trace mica, moist (Middendorf Formation)

300 290 280 270 260

Existing Ground — 3:1 — Ⓐ — 3:1

Ⓑ

11+00.00

320 310 300 290 280 270 260

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-223	18+54	25' LT	0.0 - 1.5	A-4 (0)	22	9	31.0	28.0	17.0	24.0	100.0	85.0	41.0	13.0	ND

Ⓐ UNDIVIDED COASTAL PLAIN Red-brown to red-orange, stiff, slightly plastic clayey sandy SILT (A-4), trace of organic matter, moist
Ⓑ COASTAL PLAIN White-brown-gray, very dense, silty fine SAND (A-2-4), trace mica, moist (Middendorf Formation)

320 310 300 290 280 270 260

Y26 18+54
10+28
SS-223

Existing Ground — 3:1 — Ⓐ — 3:1

12
9
90
BT
CAVED at 1.6'
05/20

Ⓑ

10+50.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

-Y26A-

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mmsley

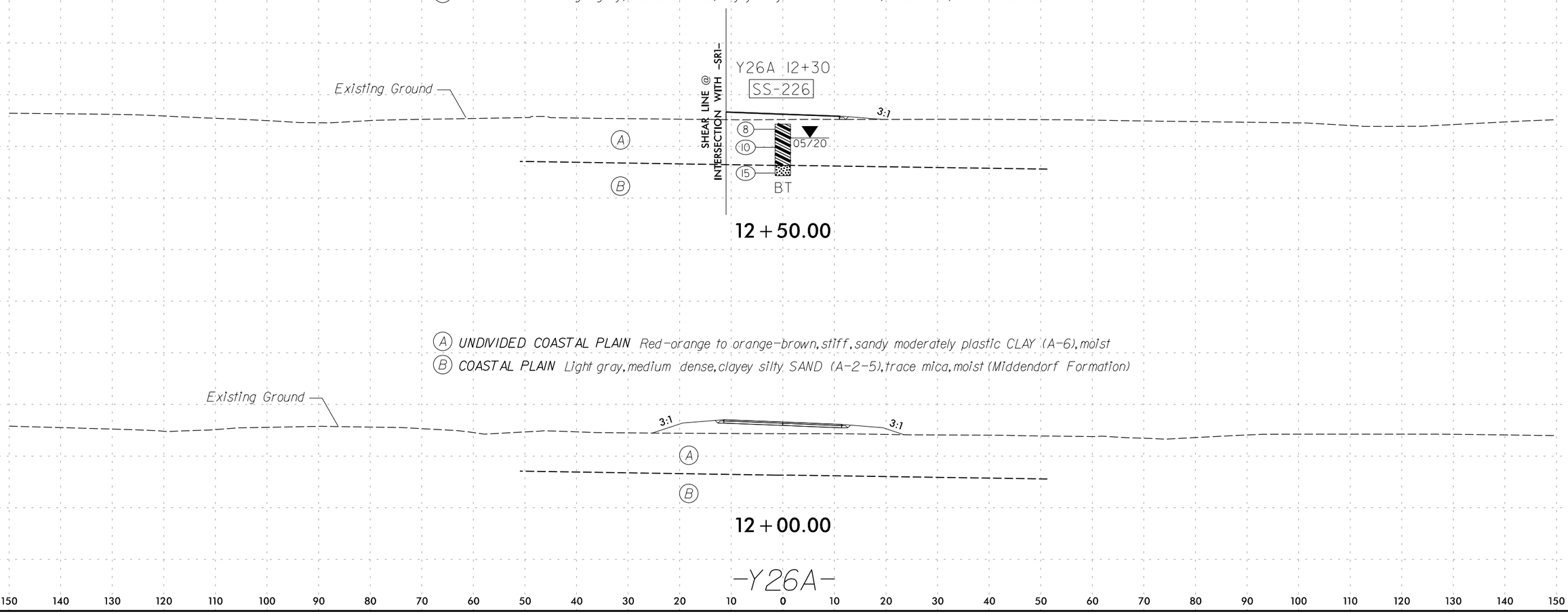
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	243

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-226	12+30	0' CL	0.0 - 1.5	A-6 (3)	38	20	36.0	27.0	9.0	28.0	100.0	80.0	37.0	15.0	ND

(A) UNDIVIDED COASTAL PLAIN Red-orange to orange-brown, stiff, sandy moderately plastic CLAY (A-6), moist

(B) COASTAL PLAIN Light gray, medium dense, clayey silty SAND (A-2-5), trace mica, moist (Middendorf Formation)



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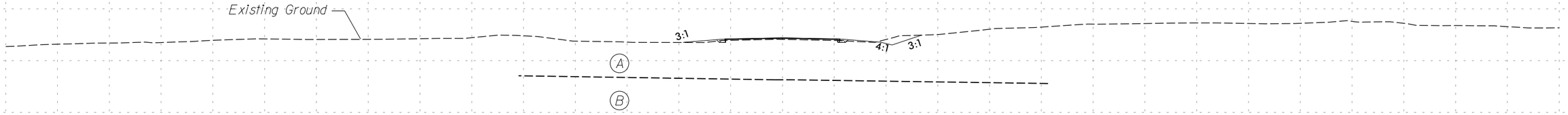
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	244

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

310 300 290 280 270

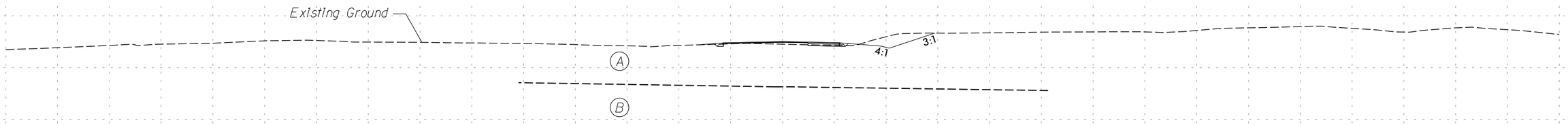
Ⓐ UNDIVIDED COASTAL PLAIN Red-orange to orange-brown, stiff, sandy moderately plastic CLAY (A-6), moist
Ⓑ COASTAL PLAIN Light gray, medium dense, clayey silty SAND (A-2-5), trace mica, moist (Middendorf Formation)



14 + 00.00

310 300 290 280 270 260

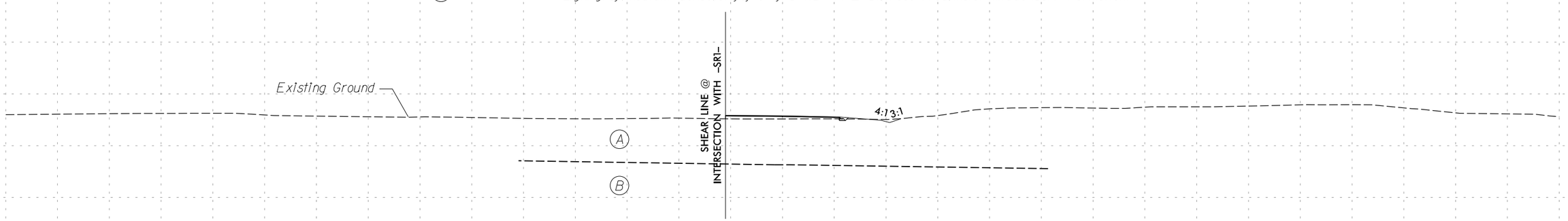
Ⓐ UNDIVIDED COASTAL PLAIN Red-orange to orange-brown, stiff, sandy moderately plastic CLAY (A-6), moist
Ⓑ COASTAL PLAIN Light gray, medium dense, clayey silty SAND (A-2-5), trace mica, moist (Middendorf Formation)



13 + 50.00

310 300 290 280 270 260

Ⓐ UNDIVIDED COASTAL PLAIN Red-orange to orange-brown, stiff, sandy moderately plastic CLAY (A-6), moist
Ⓑ COASTAL PLAIN Light gray, medium dense, clayey silty SAND (A-2-5), trace mica, moist (Middendorf Formation)



13 + 00.00

-Y26A-

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

8/29/2024
mlesley
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6/23/16

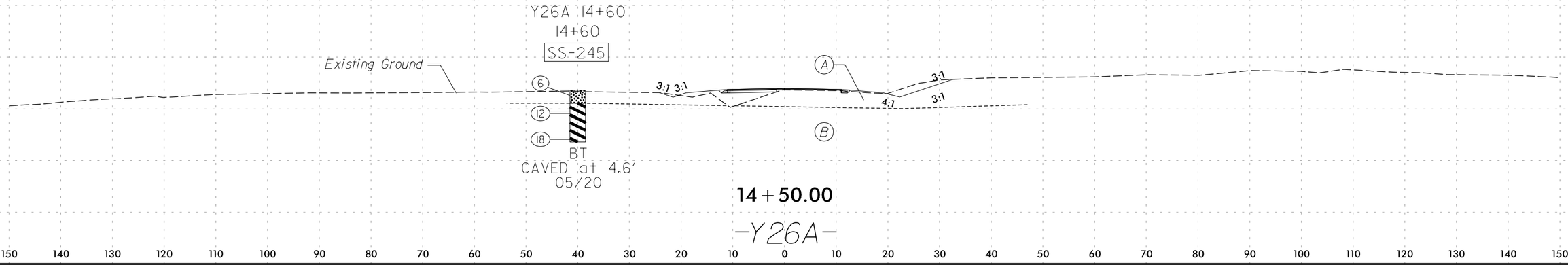
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	245

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-245	14+60	40' LT	3.5 - 5.0	A-7-6 (14)	56	36	30.5	19.2	16.2	34.1	100.0	81.0	50.4	19.0	ND

(A) *UNDIVIDED COASTAL PLAIN* Brown, loose, silty SAND (A-2-4), trace of organic matter, moist

(B) Orange-gray, stiff to very stiff, sandy silty highly plastic CLAY (A-7-6), moist



14+50.00

-Y26A-

8/29/2024
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mmesse

6/23/16

0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	R-5709C	246

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

300 290 280 270 260

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Existing Ground

3:1 3:1 3:1

279.43

UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

12+00.00

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Existing Ground

3:1 3:1 3:1

279.27

UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

11+50.00

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Existing Ground

3:1 3:1

UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

11+00.00

Ⓐ ROADWAY EMBANKMENT Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Existing Ground

3:1 3:1

UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

10+50.00

-Y27-

8/29/2024
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mmsley

0 5 10

PROJ. REFERENCE NO.	SHEET NO.
R-5709C	247

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

SOIL TEST RESULTS

SAMPLE NO.	STATION	OFFSET	DEPTH INTERVAL	AASHTO CLASS.	L.L.	P.I.	% BY WEIGHT				% PASSING SIEVE			% MOISTURE	% ORGANIC
							C. SAND	F. SAND	SILT	CLAY	10	40	200		
SS-210	13+15	8' LT	1.0 - 2.5	A-6 (6)	31	17	25.0	21.0	13.0	40.0	99.0	83.0	53.0	11.0	ND

Ⓐ *ROADWAY EMBANKMENT* Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Ⓑ *UNDIVIDED COASTAL PLAIN* Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

320 310 300 290 280 270 260

L 824+10
13+15
SS-210

Existing Ground — 3:1 — Ⓐ — Pavement — 3:1

Ⓑ — 13 — 6 — 10

BT
FIAD

13+00.00

Ⓐ *ROADWAY EMBANKMENT* Red-brown, stiff, silty sandy moderately plastic CLAY (A-6), moist

Existing Ground — 3:1 — Ⓐ — 3:1

UNDIVIDED COASTAL PLAIN Gray-orange-red, medium stiff to stiff, silty sandy CLAY (A-6), moist

12+50.00

-Y27-

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R–5709C	248	

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

ROADWAY SUBSURFACE INVESTIGATION

APPENDIX A
BORE LOGS

REFERENCE: R–5709C

PROJECT: 50205

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

GEOTECHNICAL BORING REPORT
BORE LOG

WBS 50205.1.1	**TIP** R-5709	**COUNTY** HOKE	**GEOLOGIST** Cary, P.	
SITE DESCRIPTION NC 211 Widening from US 15-501 in Aberdeen to SR 1244 (W. Palmer St.)/SR 1311 (Mockingbird Hill Rd.)				**GROUND WTR (ft)**
BORING NO. Y26 27+00	**STATION** 27+00	**OFFSET** 4 ft LT	**ALIGNMENT** -Y26-	**0 HR.** Dry
COLLAR ELEV. 276.0 ft	**TOTAL DEPTH** 10.0 ft	**NORTHING** 451,394	**EASTING** 1,927,455	**24 HR.** FIAD
DRILL RIG/HAMMER EFF./DATE FME3304 CME-45B 87% 03/13/2020		**DRILL METHOD** H.S. Augers		**HAMMER TYPE** Automatic
DRILLER Phillips, J.	**START DATE** 05/18/20	**COMP. DATE** 05/18/20	**SURFACE WATER DEPTH** N/A	

ELEV (ft)	DRIVE ELEV (ft)	DEPTH (ft)	BLOW COUNT 0.5ft	0.5ft	0.5ft	BLOWS PER FOOT 0 25 50 75 100	SAMP. NO.	MOI	LOG	SOIL AND ROCK DESCRIPTION ELEV. (ft)	DEPTH (ft)
280											
										276.0 GROUND SURFACE	0.0
275	275.2	0.8	4	3	15	18		M		275.2 **ROADWAY EMBANKMENT** 0.8' Asphalt	0.8
	272.5	3.5	2	3	4	7		M		273.0 Brown-gray, very stiff, sandy CLAY (A-6), trace gravel	3.0
270										**UNDIVIDED COASTAL PLAIN**	
										269.0 Brown, medium stiff, sandy CLAY (A-6)	7.0
	267.5	8.5	3	5	8	13		M		266.0 Tan-orange, medium dense, silty clayey SAND (A-2-6), trace mica	10.0
										Boring Terminated at Elevation 266.0 ft in silty clayey SAND (A-6-2)	

***Not shown in cross section - boring drilled beyond the end of updated Y26 alignment**

NCDOT BORE DOUBLE R5709_SEC2_RDY.GPJ NC_DOT.GDT 2/18/21

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R–5709C	250	

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

ROADWAY SUBSURFACE INVESTIGATION

APPENDIX B
LAB RESULTS

REFERENCE: R–5709C

PROJECT: 50205

RK&K
P: (919) 878-9560
8601 Six Forks Road, Forum 1,Suite 700
Raleigh, North Carolina 27615-3960
NC License No. F-0112
Engineers | Construction Managers | Planners | Scientists
www.rkk.com
Responsive People | Creative Solutions

LAB RESULTS

Project: NC 211 Widening from 0.4 miles north of SR 1225 (Ashemont Road) to east of SR 1244 (West Palmer Street) / SR 1311 (Mockingbird Hill Road) in Raeford

T.I.P.: R-5709C

Boring No.	Sample No.	Station No.	Offset	Alignment	Northing	Easting	Sample Depth (ft)	AASHTO Classification	% PASSING SIEVE			% BY WEIGHT				LL	PI	% ORGANIC	% MOISTURE
									10	*40*	*200*	*C. SAND*	*F. SAND*	*SILT*	*CLAY*				
L 331+33	SS-682	331+33	20' LT	L	482193	1893042	3.5 - 5.0	A-2-4	99	77	25	47	30	2	20	21	5	ND	17
L 333+33	SS-678	333+33	20' LT	L	482023	1893146	0.0 - 1.5	A-3	100	62	7	72	21	4	2	17	NP	4	3
L 349+00	SS-672	349+00	35' LT	L	480691	1893972	0.0 - 1.5	A-2-4	100	67	12	61	29	4	6	15	NP	ND	5
L 353+00	SS-491	353+00	25' RT	L	480315	1894123	1.3 - 2.8	A-2-6	94	60	25	59	15	3	22	30	12	ND	ND
L 355+33	SS-669	355+33	0' CL	L	480126	1894261	0.0 - 1.5	A-2-4	98	54	17	65	20	5	10	15	NP	ND	3
L 355+33	SS-670	355+33	0' CL	L	480126	1894261	3.5 - 5.0	A-2-6	98	54	31	57	13	2	28	40	16	ND	18
L 357+00	SS-1725	357+00	10' RT	L	479976	1894335	0.0 - 1.5	A-2-4	99	67	10	49	42	3	3	18	NP	ND	9
L 361+25	SS-666	361+25	5' LT	L	479615	1894561	0.0 - 1.5	A-2-4	100	64	15	61	27	3	10	18	NP	ND	5
L 363+50	SS-1001	363+50	5' RT	L	479356	1894698	3.5 - 5.0	A-2-6 (0)	97.0	52.0	25.0	61.0	14.0	1.0	24.0	32	14	ND	20.0
L 368+00	SS-202	368+00	22' LT	L	478968	1894928	3.5 - 5.0	A-2-4	99.0	76.0	27.0	44.0	30.0	2.0	24.0	34	8	ND	16.5
L 379+00	SS-1019	379+00	30' RT	L	477915	1895244	0.0 - 1.5	A-2-6 (0)	94.0	25.0	22.0	69.0	10.0	1.0	20.0	31	11	ND	10.0
L 381+00	SS-1022	381+00	15' RT	L	477724	1895303	0.0 - 1.5	A-6 (8)	100.0	86.0	60.0	23.0	17.0	20.0	40.0	40	16	ND	18.0
L 383+00	SS-208	383+00	10' RT	L	477530	1895346	3.5 - 5.0	A-2-4	99.0	58.0	23.2	56.0	21.0	3.0	20.0	23	6	ND	17.5
L 387+50	SS-1028	387+50	0' CL	L	477086	1895422	0.0 - 1.5	A-2-4	98.0	71.0	18.0	53.0	29.0	8.0	10.0	20	NP	ND	12.0
L 394+33	SS-11	394+33	27' LT	L	476418	1895558	33.5 - 35.0	A-6 (1)	99.0	64.0	38.6	46.0	15.0	8.2	30.4	36	13	5.7	19.8
L 389+75	SS-1031	389+75	0' CL	L	476863	1895454	0 - 1.5	A-2-4	100.0	94.0	21.0	35.0	45.0	2.0	18.0	22	NP	ND	11.0
L 401+00	SS-705	401+00	35' RT	L	475792	1895769	13.5 - 15.0	A-7-5 (20)	100.0	100.0	92.3	0.4	7.3	11.8	80.5	23	7	ND	17.5
L 405+50	SS-224	405+50	45' RT	L	475370	1895941	3.5 - 5.0	A-2-4	100.0	60.0	32.0	54.0	14.0	8.0	24.0	36	10	ND	14.2
L 411+00	SS-1743	411+00	35' RT	L	474941	1896292	0.0 -1.5	A-2-4	100.0	69.0	26.6	50.0	25.0	3.0	22.0	23	7	ND	17.5
L 413+00	SS-34	413+00	28' LT	L	474828	1896468	0.3 - 1.8	A-2-6 (0)	100.0	51.0	27.0	61.0	12.0	1.0	26.0	30	13	ND	7.0
L 419+50	SS-47	419+50	25' LT	L	474327	1896882	14.5 - 15.0	A-2-4	97.0	66.0	27.0	46.3	26.3	9.1	18.2	33	8	7.0	56.0
L 421+75	SS-1750	421+90	30' RT	L	474107	1896993	0.0 - 1.5	A-2-4	100.0	76.0	21.5	36.1	42.4	9.4	12.1	30	NP	2.5	32.1
L 431+00	SS-234	431+00	10' RT	L	473421	1897591	3.5 - 5.0	A-7-5(20)	100.0	99.0	96.6	2.0	2.0	31.0	65.0	59	25	ND	27.5
L 441+00	SS-1070	441+00	10' RT	L	472620	1898188	0.0 - 1.5	A-2-6 (1)	100.0	62.0	26.4	44.4	29.1	0.3	26.1	36	16	ND	16.0
L 451+10	SS - 1096	451+10	0' CL	L	471785	1898756	0.0 - 2.0	A-2-4	99.0	52.0	10.9	66.0	24.0	2.0	8.0	19	NP	ND	5.8
L 455+00	SS-251	455+00	70' LT	L	471498	1899028	3.5 - 5.0	A-2-6(0)	96.0	69.0	27.4	60.0	12.0	2.0	26.0	32	12	ND	10.6
L 471+00	SS-258	471+00	70' LT	L	470161	1899908	3.5 - 5.0	A-2-6(0)	99.0	69.0	27.3	50.0	23.0	1.0	26.0	32	12	ND	16.4
L 485+75	SS - 1136	485+75	75' LT	L	468969	1900759	0.0 - 1.5	A-3	100.0	58.0	8.1	71.0	22.0	1.0	6.0	16	NP	ND	3.9
L 502+00	SS-1145	502+00	1' RT	L	467670	1901739	8.5 - 10.0	A-6 (2)	100.0	81.0	38.0	39.0	24.0	4.0	34.0	36	15	ND	17.0
L 508+00	SS-274	508+00	75' LT	L	467257	1902181	0 - 1.5	A-2-4	100.0	56.0	14.8	63.0	22.0	9.0	6.0	16	NP	ND	12.3
L 512+10	SS-1155	512+10	0' CL	L	466889	1902379	3.5 - 5.0	A-2-6 (0)	100.0	82.0	33.0	45.0	22.0	1.0	32.0	33	11	ND	15.0
L 520+25	SS-1164	520+25	70' LT	L	466257	1902900	3.5 - 5.0	A-7-6 (3)	99.0	83.0	41.0	36.0	23.0	7.0	34.0	41	17	ND	19.0
L 527+00	SS-282	527+00	40' RT	L	465637	1903188	3.5 - 5.0	A-2-4	100.0	76.0	19.4	47.0	33.0	5.0	14.0	20	NP	ND	13.5
L 541+00	SS-1177	541+00	75' LT	L	464543	1904069	3.5 - 5.0	A-2-4	100.0	93.0	33.0	36.2	31.3	6.4	26.1	27	10	ND	17.0
L 549+67	SS-100	549+67	40' LT	L	463806	1904527	1.2 - 2.7	A-2-4	100.0	75.0	29.0	49.0	23.0	0.0	28.0	25	7	ND	13.0
L 554+00	SS-104	554+00	34' LT	L	463445	1904765	1.2 - 2.7	A-2-6 (0)	97.0	52.0	25.0	61.0	14.0	1.0	24.0	32	14	ND	8.0
L 558+00	SS-292	558+00	40' RT	L	463072	1904929	0 - 1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.9	87.8
L 560+00	SS-1191	560+00	0' CL	L	462929	1905074	0.0 - 1.5	A-2-4	100.0	75.0	24.0	48.5	27.4	10.0	14.2	23	NP	ND	27.0
L 566+00	SS-302	566+00	15' RT	L	462451	1905381	3.5 - 5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.8	191.8
L 568+00	SS-125	568+00	30' RT	L	462250	1905499	0.0 - 1.5	A-4 (0)	99.0	82.0	38.0	32.0	30.0	6.0	32.0	29	9	ND	27.0
L 572+00	SS-130	572+00	0' CL	L	461936	1905748	3.5 - 5.0	A-7-6 (9)	100.0	85.0	52.0	29.0	19.0	12.0	40.0	45	24	ND	17.0
L 593+00	SS - 1214	593+00	70' LT	L	460106	1906777	0.0 - 1.5	A-3	100.0	80.0	6.4	52.0	43.0	1.0	4.0	20	NP	ND	4.8
L 603+00	SS - 116	603+00	45' LT	L	459172	1907134	1.2 - 2.7	A-3	100.0	69.0	6.1	58.8	35.1	2.1	4.0	16	NP	ND	5.2

Boring No.	Sample No.	Station No.	Offset	Alignment	Northing	Easting	Sample Depth (ft)	AASHTO Classification	% PASSING SIEVE			% BY WEIGHT				LL	PI	% ORGANIC	% MOISTURE
									10	*40*	*200*	*C. SAND*	*F. SAND*	*SILT*	*CLAY*				
L 649+00	SS-160	649+00	55' LT	L	456792	1910744	1.2 - 2.7	A-2-6 (1)	99.0	64.0	32.0	53.0	15.0	2.0	30.0	37	18	ND	14.0
L 657+00	SS-164	657+00	55' LT	L	456730	1911539	1.2 - 2.7	A-7-6 (8)	99.0	74.0	45.0	40.0	15.0	3.0	42.0	50	29	ND	15.0
L 665+00	SS-1253	665+00	30' RT	L	456586	1912331	0.0 - 1.5	A-6 (3)	99.0	84.0	56.0	26.0	18.0	20.0	36.0	28	11	ND	16.0
L 665+00	SS-1253A	665+00	30' RT	L	456586	1912331	0.0 - 1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.0	ND
L 667+00	SS-1257	667+00	0' CL	L	456603	1912512	0.0 - 1.5	A-4 (0)	100.0	65.0	37.0	50.0	13.0	17.0	20.0	27	8	5.0	12.0
L 671+00	SS-1069	671+00	30' LT	L	456626	1912939	3.5 - 5.0	A-2-4	100.0	75.0	28.8	48.0	23.0	7.0	22.0	19	5	ND	17.0
L 673+00	SS-1260	673+00	93' LT	L	456650	1913137	0.0 - 1.5	A-2-4	99.0	74.0	32.0	42.0	26.0	12.0	20.0	18	4	ND	13.0
L 677+00	SS-1264	677+00	25' RT	L	456490	1913524	3.5 - 5.0	A-2-6(1)	99.8	68.8	30.6	46.9	22.4	4.5	26.1	34	15	ND	ND
L 688+00	SS-343	688+00	85' LT	L	456284	1914610	3.5 - 5.0	A-6(4)	100.0	84.0	43.2	28.0	29.0	11.0	32.0	40	19	ND	19.2
L 690+33	SS-1269	690+33	15' RT	L	456113	1914797	0.0 - 1.5	A-6(2)	98.0	77.0	35.6	36.2	28.2	5.4	30.2	31	15	ND	0.2
L 692+35	SS-1272	692+35	35' RT	L	456028	1914981	0.0 - 1.5	A-4(0)	96.7	72.9	42.3	35.8	21.8	8.3	34.0	38	NP	ND	ND
L 695+00	SS-1247	695+00	90' LT	L	456050	1915277	3.5 - 5.0	A-2-7(3)	95.0	62.0	32.4	48.0	18.0	6.0	28.0	46	25	ND	19.1
L 697+00	SS-176	697+00	45' LT	L	455918	1915441	3.5 - 5.0	A-7-6 (4)	91.0	71.0	40.2	34.3	25.5	5.9	34.3	43	25	ND	16.0
L 701+00	SS-1276	701+00	30' RT	L	455626	1915726	3.5 - 5.0	A-6(4)	99.6	77.8	35.7	36.9	27.4	3.7	32.0	39	23	ND	ND
L 709+00	SS-1281	709+00	40' RT	L	455057	1916285	0.0 - 1.5	A-4(1)	99.7	85.3	39.3	29.0	31.7	11.0	28.3	24	10	ND	14.0
L 711+20	SS-1241	711+20	100' LT	L	454999	1916540	3.5 - 5.0	A-7-5(6)	94.0	74.0	47.0	32.0	18.0	8.0	42.0	49	18	ND	23.6
L 713+33	SS-1287	713+30	84' LT	L	454839	1916676	0.0 - 1.5	A-4(0)	95.6	72.9	43.7	34.1	22.2	7.6	36.1	35	NP	ND	17.4
L 715+67	SS-185	715+67	35' LT	L	454636	1916808	1.2 - 2.7	A-2-4	100.0	74.0	31.0	41.0	28.0	9.0	22.0	15	4	ND	8.0
L 718+00	SS-346	718+00	30' RT	L	454424	1916926	3.5 - 5.0	A-6(1)	99.0	78.0	39.1	38.0	22.0	9.0	30.0	35	11	ND	16.1
L 720+25	SS-1290	720+25	10' RT	L	454279	1917098	0.0 - 1.5	A-2-4	99.2	65.3	31.7	50.5	17.8	3.7	28.0	30	NP	ND	ND
L 722+50	SS-1294	722+50	40' RT	L	454098	1917235	0.0 - 1.5	A-2-4	98.6	69.4	32.4	47.6	20.0	4.3	28.1	27	NP	ND	17.7
L 731+67	SS-1302	731+73	14' RT	L	453460	1917903	0.0 - 1.5	A-4(0)	99.3	67.0	33.0	49.3	17.9	14.9	18.0	30	NP	ND	18.6
L 736+00	SS-189	736+00	35' LT	L	453191	1918238	1.2 - 2.7	A-7-6 (6)	94.0	71.0	43.6	40.0	17.0	13.0	30.0	45	29	ND	20.0
L 738+00	SS-1305	738+00	30' RT	L	453004	1918334	0.0 - 1.5	A-4(0)	99.8	60.6	42.4	42.8	19.5	21.7	16.0	25	NP	ND	ND
L 740+20	SS-1308	740+20	40' RT	L	452850	1918498	0.0 - 1.5	A-4(0)	99.5	77.3	40.5	35.6	24.0	10.3	30.2	20	NP	ND	18.8
L 744+25	SS-1312	744+25	75' LT	L	452757	1918904	0.0 - 1.5	A-6(5)	100.0	77.4	45.6	40.7	15.2	6.0	38.0	40	19	ND	19.9
L 746+50	SS-1315	746+50	30' RT	L	452575	1919072	0.0 - 1.5	A-2-4	99.8	77.9	22.7	42.3	34.9	10.7	12.0	15	NP	ND	ND
L 748+75	SS-1318	748+75	65' LT	L	452575	1919317	0.0 - 1.5	A-6(3)	99.3	81.3	46.5	28.6	24.9	14.4	32.1	30	12	ND	18.1
L 755+00	SS-1324	755+00	15' RT	L	452250	1919857	0.0 - 1.5	A-4(1)	99.7	76.9	37.3	36.9	25.8	11.2	26.1	23	10	ND	ND
L 757+00	SS-195	757+00	30' LT	L	452211	1920058	1.0 - 2.5	A-7-6 (13)	100.0	87.0	57.0	22.0	21.2	12.5	44.4	51	29	ND	20.0
L 759+00	SS-349	759+00	30' RT	L	452075	1920218	0 - 1.5	A-6(0)	98.0	75.0	35.5	39.0	25.0	10.0	26.0	24	11	ND	15.5
L 761+00	SS-199	761+00	30' LT	L	452050	1920425	3.5 - 5.0	A-7-6 (6)	98.0	72.0	42.0	40.0	18.0	6.0	36.0	43	28	ND	13.0
L 765+00	SS-202	765+00	30' LT	L	451901	1920794	3.5 - 5.0	A-7-6 (10)	94.0	80.0	59.5	24.0	16.0	7.0	53.0	50	22	ND	21.0
L 767+00	SS-353	767+00	40' RT	L	451769	1920961	3.5 - 5.0	A-7-5(12)	98.0	87.0	64.4	19.0	15.0	2.0	64.0	54	19	ND	25.1
L 773+00	SS-1333	773+00	70' LT	L	451706	1921567	0.0 - 1.5	A-4(1)	95.6	77.1	49.4	30.5	20.2	15.2	34.0	29	6	ND	24.5
L 778+90	SS-272	778+90	25' RT	L	451453	1922109	0.0 - 1.5	A-7-6 (8)	98.0	77.0	47.0	35.0	18.0	11.0	36.0	45	27	ND	15.0
L 781+00	SS-208	781+00	35' LT	L	451453	1922327	3.5 - 5.0	A-7-6 (7)	95.0	74.0	47.0	34.0	17.0	9.0	40.0	45	23	ND	18.0
L 787+00	SS-1342	787+00	40' RT	L	451217	1922884	0.0 - 1.5	A-4(0)	99.9	80.4	45.7	34.8	21.5	5.6	38.1	28	NP	ND	12.9
L 799+00	SS-1204	799+00	28' LT	L	450949	1924055	3.5 - 5.0	A-7-6(4)	99.0	83.0	46.5	29.0	24.0	9.0	38.0	42	15	ND	18.6
L 801+00	SS-1351	801+00	35' RT	L	450839	1924232	0.0 - 1.5	A-4(0)	99.6	80.0	32.4	35.6	33.0	6.9	24.5	29	NP	ND	ND
L 803+00	SS-261	803+00	65' LT	L	450881	1924452	3.5 - 5.0	A-6 (6)	100.0	85.0	49.3	26.2	24.4	13.0	36.4	38	20	6.0	21.0
L 805+00	SS-258	805+00	5' RT	L	450759	1924625	3.5 - 5.0	A-7-6 (11)	100.0	87.0	58.0	23.0	19.0	20.0	38.0	48	23	ND	23.0
L 807+00	SS-1207	807+00	33' LT	L	450735	1924826	3.5 - 5.0	A-6(7)	100.0	85.0	54.1	25.0	21.0	22.0	32.0	34	19	ND	20.1
L 809+00	SS-1354	809+00	40' RT	L	450616	1925000	0.0 - 1.5	A-4(0)	99.5	80.6	48.0	29.4	23.7	12.9	34.0	28	NP	ND	9.7
L 811+00	SS-254	811+00	75' LT	L	450672	1925224	3.5 - 5.0	A-7-6 (13)	100.0	86.0	58.5	22.5	19.0	18.1	40.4	47	27	ND	27.0
L 813+00	SS-250	813+00	35' RT	L	450511	1925386	0.0 - 1.5	A-7-6 (18)	100.0	87.0	60.0	22.0	18.0	10.0	50.0	53	35	ND	19.0
L 817+33	SS-247	817+33	20' RT	L	450407	1925807	0.0 - 1.5	A-7-6 (12)	100.0	85.0	58.0	24.0	18.0	9.0	49.0	44	27	ND	17.0

Boring No.	Sample No.	Station No.	Offset	Alignment	Northing	Easting	Sample Depth (ft)	AASHTO Classification	% PASSING SIEVE			% BY WEIGHT				LL	PI	% ORGANIC	% MOISTURE
									10	*40*	*200*	*C. SAND*	*F. SAND*	*SILT*	*CLAY*				
L 819+67	SS-238	819+67	45' RT	L	450322	1926027	0.0 - 1.5	A-7-6 (18)	100.0	90.0	68.0	17.0	15.0	17.0	51.0	55	28	ND	26.0
L 822+00	SS-1231	822+00	70' LT	L	450377	1926281	3.5 - 5.0	A-7-6(6)	100.0	84.0	53.4	27.0	20.0	13.0	40.0	44	16	ND	23.3
L 824+10	SS-210	11+60	8' LT	L	450174	1926449	1.0 - 2.5	A-6 (6)	99.0	83.0	53.0	25.0	21.0	13.0	40.0	31	17	ND	11.0
L 828+75	SS-236	828+75	40' RT	L2B	450111	1926910	3.5 - 5.0	A-7-6 (15)	100.0	88.0	63.0	20.0	17.0	10.0	53.0	53	26	ND	25.0
L 831+00	SS-1212	831+00	5' RT	L2B	450085	1927137	1.1 - 2.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.5
L 833+00	SS-215	833+00	3' RT	L2B	450033	1927329	5.0 - 6.5	A-6 (4)	100.0	87.0	51.6	24.3	24.2	31.4	20.1	29	14	ND	15.0
L 834+50	SS-1215	834+50	20' LT	L2B	450015	1927479	0 - 1.5	A-4(0)	99.0	85.0	45.0	28.0	27.0	31.0	14.0	15	3	ND	20.4
Y11B 11+50	SS-1058	11+50	5' RT	Y11B	475668	1895708	13.5 - 15.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26.1
Y11D 12+50	SS-28	12+50	18' LT	Y11D	475488	1895543	3.5 - 5.0	A-7-6 (20)	99.0	97.0	86.0	6.0	8.0	12.0	74.0	58	32	ND	26.0
Y17 11+80	SS-1170	11+80	35' LT	Y17	465311	1903677	0.0 - 1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.0	ND
Y18 13+20	SS-1202	13+20	25' RT	Y18	461270	1905886	0.0 - 1.5	A-2-4	100.0	74.0	20.1	50.0	32.5	1.5	16.0	14	NP	ND	15.0
Y22 10+50	SS-193	10+50	0' CL	Y22	452324	1919227	3.5 - 5.0	A-6 (0)	99.0	71.0	37.0	45.0	18.0	19.0	18.0	26	11	ND	15.0
Y23 12+00	SS-270	12+00	20' LT	Y23	451441	1922958	3.5 - 5.0	A-7-6 (6)	99.0	79.0	50.7	32.9	16.5	6.2	44.5	43	19	ND	19.0
Y24 13+00	SS-1348	13+00	51' RT	Y24	450777	1923514	0.0 - 1.5	A-7-6(7)	99.8	79.6	45.0	31.8	23.7	10.3	34.2	42	24	ND	ND
Y24 15+00	SS-1201	14+90	27' RT	Y24	450941	1923648	3.5 - 5.0	A-6(1)	100.0	81.0	38.1	35.0	27.0	12.0	26.0	33	13	ND	15.0
Y26 12+00	SS-233	12+00	55' LT	Y26	450454	1926434	3.5 - 5.0	A-6 (2)	100.0	81.0	46.0	33.0	21.0	10.0	36.0	37	11	ND	19.0
Y26 18+54	SS-223	18+54	25' LT	Y26	451087	1926651	0.0 - 1.5	A-4 (0)	100.0	85.0	41.0	31.0	28.0	17.0	24.0	22	9	ND	13.0
Y26 25+00	SS-217	25+00	4' LT	Y26	451380	1927256	0.8 - 2.3	A-7-6 (9)	100.0	83.0	49.0	30.0	21.0	13.0	36.0	49	26	ND	18.0
Y26 23+00	SS-1225	23+00	0 CL	Y26	450926	1926540	3.5 - 5.0	A-5(2)	99.0	81.0	48.5	29.0	23.0	10.0	38.0	43	9	ND	19.1
Y26 27+00	SS-1227	27+00	0 CL	Y26	451394	1927455	0 - 1.5	A-6(5)	100.0	86.0	50.1	27.0	23.0	12.0	38.0	39	15	ND	19.0
Y26A 12+30	SS-226	12+30	0' CL	Y26A	451276	1926547	0.0 - 1.5	A-6 (3)	100.0	80.0	37.0	36.0	27.0	9.0	28.0	38	20	ND	15.0
Y26A 14+60	SS-245	14+60	40' LT	Y26A	451496	1926454	3.5 - 5.0	A-7-6 (14)	100.0	81.0	50.4	30.5	19.2	16.2	34.1	56	36	ND	19.0