

PROJECT DESCRIPTION

PAVEMENT REPLACEMENT OVER SUM-76 FROM S.L.M. 8.24 TO 10.00, SUM-77 FROM S.L.M. 9.74 TO 11.54, AND SUM-8 FROM S.L.M. 0.00 TO 1.75. COVERS THE "SOUTH LEG" AND "WEST LEG", INCLUDES REHABILITATION OF SEVERAL STRUCTURES IN THE CITY OF AKRON, SUMMIT COUNTY, OHIO.

HISTORIC RECORDS

NUMEROUS HISTORIC GEOTECHNICAL RECORDS ARE AVAILABLE IN THE PROJECT AREA. THOSE HISTORIC BORINGS THAT COULD BE CONVENIENTLY SHOWN AND BELIEVED TO BE RELEVANT TO THE CURRENT PROJECT HAVE BEEN PRESENTED ON THIS SOIL PROFILE. ALL HISTORICAL INFORMATION IS AVAILABLE FOR REVIEW ON THE DEPARTMENT'S ONLINE TRANSPORTATION INFORMATION MAPPING SYSTEM, [HTTPS://GIS.DOT.STATE.OH.US/TIMS/MAP/GEOTECH](https://gis.dot.state.oh.us/tims/map/geotech).

GEOLOGY

THE SITE LIES IN THE GLACIATED PORTION OF OHIO, WITHIN THE AKRON-CANTON INTERLOBATE PLATEAU PHYSIOGRAPHIC REGION. THE SOIL GENERALLY CONSISTS OF GRANULAR OUTWASH DEPOSITS, LAKEBED DEPOSITS CONSISTING OF SILT AND CLAY, AND GLACIAL TILL. THE AREA ALSO PREVIOUSLY CONTAINED MANY UNDRAINED DEPRESSIONS WITHIN WHICH PEAT AND ORGANIC SILTS ACCUMULATED. THESE DEPRESSIONS HAVE NOW MOSTLY BEEN COVERED BY HUMAN ACTIVITY. THE UNDERLYING BEDROCK CONSISTS OF MISSISSIPPIAN-AGE SANDSTONE AND SHALE IN THE WESTERN PART OF THE PROJECT AND SANDSTONE FROM THE PENNSYLVANIAN-AGE POTTSVILLE GROUP IN THE EASTERN PART OF THE PROJECT.

RECONNAISSANCE

THE LAND USE ADJACENT TO MOST OF THE PROJECT CONSIST OF RESIDENTIAL PROPERTY WITH OCCASIONAL COMMERCIAL PROPERTY. I-76 NEAR THE BEGINNING OF THE PROJECT CROSSES THE OHIO CANAL JUST NORTH OF SUMMIT LAKE. THE ADJACENT LAND USE IS RECREATION PARKS IN THIS AREA. THIS IS ALSO THE AREA WHERE HISTORICAL BORINGS ENCOUNTERED PEAT DEPOSITS.

SUBSURFACE EXPLORATION

THIRTY-SIX (36) ROADWAY BORINGS WERE COMPLETED ON IR 76, I-77 AND THE RAMPS. MOST OF THESE BORINGS WERE COMPLETED BETWEEN JANUARY 9 AND 28, 2019, BUT SOME THAT WERE LOCATED IN A CONSTRUCTION ZONE WERE COMPLETED IN MARCH AND APRIL, 2020. SIX (6) STRUCTURE BORINGS WERE COMPLETED BETWEEN OCTOBER 15 AND 30, 2019. THE BORINGS WERE DRILLED WITH A TRUCK MOUNTED ROTARY DRILL RIG, USING 3.25-INCH I.D. HOLLOW STEM AUGERS TO ADVANCE THE BORINGS THROUGH SOIL. DISTURBED SAMPLES WERE COLLECTED IN ACCORDANCE WITH THE STANDARD PENETRATION TEST (AASHTO T206) AT CONTINUOUS INTERVALS FOR THE ROADWAY BORINGS. THE STRUCTURE BORINGS WERE SAMPLED AT CONTINUOUS INTERVALS TO A DEPTH OF 7 FEET, THEN 2.5-FOOT INTERVALS TO A DEPTH OF 25 FEET, FOLLOWED BY 5-FOOT INTERVALS TO THE DEPTH OF BORING OR UNTIL ROCK WAS CORED. ROCK WAS CORED WITH AN NQ2 WIRELINE SYSTEM AFTER AUGER REFUSAL WAS ENCOUNTERED. THE HAMMER SYSTEMS FOR THREE DIFFERENT DRILL RIGS WERE CALIBRATED BETWEEN APRIL 25, 2018 AND AUGUST 15, 2019. THE AVERAGE DRILL ROD ENERGY RATION (ER) WAS 87.1%. FOR THE CME-55, 83.7% FOR THE CME-75 AND 72% FOR THE CME-45.

ELEVEN (11) BORINGS ARE INCLUDED FROM A RECENT ADJACENT PROJECT, SUM-76-6.15 PID 100713. THESE BORINGS ARE LISTED BELOW. THE GEOTECHNICAL REPORT, DATED 7/31/2019, AND SOIL PROFILE SHEETS WERE PREPARED BY NEAS, INC. REFER TO THESE DOCUMENTS FOR A COMPLETE DESCRIPTION OF THE EXPLORATION AND SAMPLING OF THESE BORINGS.

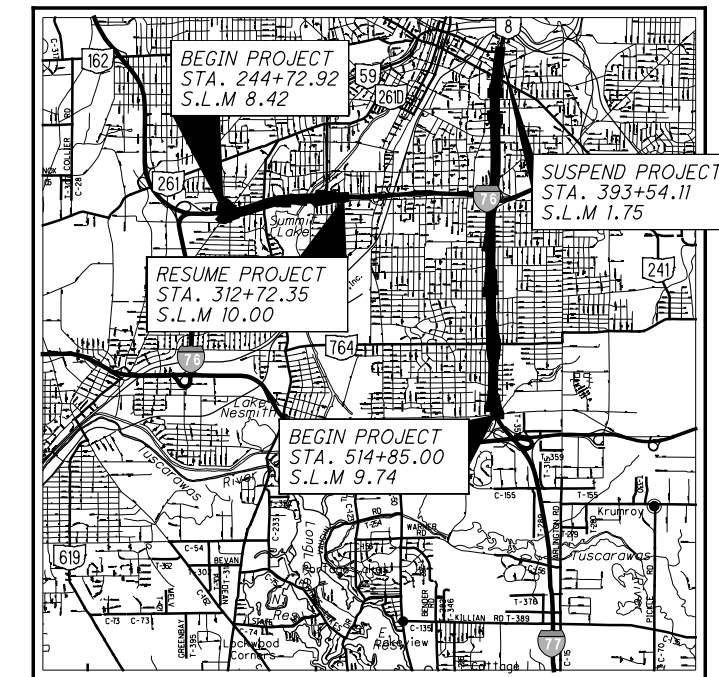
- B-045-1-18 B-046-0-18 B-047-0-18
- B-048-0-18 B-050-0-18 B-077-0-18
- B-077-1-18 B-077-2-18 B-077-3-18
- B-077-4-18

EXPLORATION FINDINGS

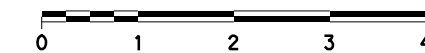
THE ROADWAY BORINGS PREDOMINATELY ENCOUNTERED STIFF TO VERY STIFF SANDY SILT (A-4a) ALONG WITH MEDIUM DENSE TO VERY DENSE FINE AND COARSE SAND (A-3a) AND OTHER LAYERS OF GRANULAR SOILS. SOME SILTY CLAY (A-6a) WAS ALSO ENCOUNTERED. WHEN ENCOUNTERED, ROCK CONSISTED OF DECOMPOSED TO SEVERELY WEATHERED SHALE OR DECOMPOSED TO HIGHLY WEATHERED SANDSTONE. FOUR BORINGS ENCOUNTERED SILT (A-4b) WITHIN 3 FEET OF SUBGRADE, B-011-0-18, B-016-0-20, B-033-0-18, AND B-038-0-18. NONE OF THE ROADWAY BORINGS ENCOUNTERED GROUNDWATER, ALTHOUGH SOME GRANULAR LAYERS WERE WET.

LEGEND

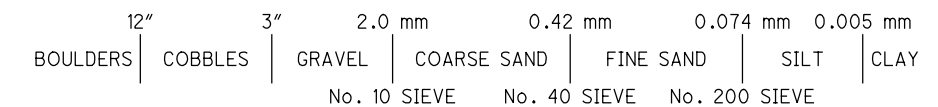
DESCRIPTION	ODOT CLASS	CLASSIFIED MECH./VISUAL	
GRAVEL AND/OR STONE FRAGMENTS	A-1-a	8	8
GRAVEL AND/OR STONE FRAGMENTS WITH SAND	A-1-b	18	7
FINE SAND	A-3	0	21
COARSE AND FINE SAND	A-3a	32	37
GRAVEL AND/OR ST. FRAG. WITH SAND AND SILT	A-2-4	8	7
GRAVEL AND/OR ST. FRAG. WITH SAND, SILT AND CLAY	A-2-6	0	0
SANDY SILT	A-4a	81	34
SILT	A-4b	17	30
SILT AND CLAY	A-6a	14	13
SILTY CLAY	A-6b	4	11
CLAY	A-7-6	0	3
	TOTAL	182	171
CLAYSTONE	VISUAL		
UNCONTROLLED FILL (UCF)	VISUAL		
SHALE	VISUAL		
SANDSTONE	VISUAL		
PAVEMENT OR BASE = X = APPROXIMATE THICKNESS	VISUAL		
SOD AND TOPSOIL = X = APPROXIMATE THICKNESS	VISUAL		
BORING LOCATION - PLAN VIEW.			
HISTORIC BORING LOCATION - PLAN VIEW - SUM-76-8.42/SUM-77-9.77			
DRIVE SAMPLE AND/OR ROCK CORE BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
AUGUR BORING PLOTTED TO VERTICAL SCALE ONLY. HORIZONTAL BAR INDICATES A CHANGE IN STRATIGRAPHY.			
<i>WC</i>	INDICATES WATER CONTENT IN PERCENT.		
<i>N₆₀</i>	INDICATES STANDARD PENETRATION RESISTANCE NORMALIZED TO 60% DRILL ROD ENERGY RATIO.		
<i>X/Y/Z</i>	NUMBER OF BLOWS FOR STANDARD PENETRATION TEST (SPT): X= NUMBER OF BLOWS FOR FIRST 6 INCHES. Y= NUMBER OF BLOWS FOR SECOND 6 INCHES. Z= NUMBER OF BLOWS FOR THIRD 6 INCHES.		
<i>w</i>	INDICATES FREE WATER ELEVATION.		
	INDICATES A PLASTIC MATERIAL WITH A MOISTURE CONTENT EQUAL TO OR GREATER THAN THE LIQUID LIMIT MINUS 3.		
	INDICATES A NON-PLASTIC MATERIAL WITH A MOISTURE CONTENT GREATER THAN 25 % OR GREATER THAN 19 % WITH A WET APPEARANCE.		
*	INDICATES A SAMPLE TAKEN WITHIN 3 FT OF PROPOSED GRADE.		
SS	INDICATES A SPLIT SPOON SAMPLE.		
ST	INDICATES A SHELBY TUBE SAMPLE.		
HA	INDICATES A HAND AUGER SAMPLE.		
NP	INDICATES A NON-PLASTIC SAMPLE.		
TR	INDICATES A TOP OF ROCK.		



LOCATION MAP
SCALE IN MILES



PARTICLE SIZE DEFINITIONS



RECON. - DLZ - 12/2018
 DRILLING - DLZ - 12/13/18 - 4/1/20
 DRAWN - KM, SM 08/2020
 REVIEWED - PAN 8/27/20

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EXPLORATION FINDINGS (CONTINUED)

TWO BORINGS WERE DRILLED FOR THE BRIDGE AT I-76 OVER MANCHESTER ROAD, B-009-1-19 AND B-009-2-19. B-009-1-19 GENERALLY ENCOUNTERED LOOSE TO MEDIUM DENSE SANDY SILT (A-4a) ABOVE SLIGHTLY TO MODERATELY WEATHERED SANDSTONE, ENCOUNTERED AT A DEPTH OF 50 FEET. B-009-2-19 GENERALLY ENCOUNTERED STIFF TO VERY STIFF SILT AND CLAY (A-6a) WITH SOME SANDY SILT (A-4a) AND SILT (A-4b) TO A DEPTH OF 28.5 FEET, FOLLOWED BY LOOSE TO DENSE SAND AND SILT TO THE DEPTH OF BORING. NO BEDROCK WAS ENCOUNTERED AT B-009-2-19. GROUND WATER WAS ENCOUNTERED IN BOTH BORINGS BELOW ELEV. 956.

TWO BORINGS WERE DRILLED FOR THE BRIDGE AT I-76 OVER BOWERY STREET, B-014-1-19 AND B-014-2-19. BORING B-014-1-19 WAS LOCATED AT THE TOP OF THE ROADWAY EMBANKMENT AND B-013-2-19 WAS LOCATED BELOW THE BRIDGE. B-014-1-19 ENCOUNTERED EMBANKMENT FILL CONSISTING MOSTLY OF LOOSE TO MEDIUM DENSE SANDY SILT (A-4a) WITH SOME SAND AND GRAVEL SEAMS. BELOW THE EMBANKMENT FILL AND IN B-014-2-19, BOTH BORINGS ENCOUNTERED PREDOMINANTLY GRANULAR SOILS CONSISTING OF FINE SAND (A-3) AND COARSE AND FINE SAND (A-3a) WITH LAYERS OF SILT (A-4b) AND SANDY SILT (A-4a). THE SOIL WAS GENERALLY MEDIUM DENSE TO VERY DENSE. GROUND WATER WAS ENCOUNTERED IN BOTH BORINGS BELOW ELEV. 955.

TWO BORINGS WERE DRILLED FOR THE BRIDGE AT I-76 OVER LAKE SHORE BOULEVARD, B-014-3-19 AND B-014-4-19. BORING B-014-3-19 ENCOUNTERED PREDOMINANTLY COARSE AND FINE SAND (A-3a) TO A DEPTH OF 33.5 FEET, WITH LAYERS OF SANDY SILT (A-4a) AND SILT (A-4b). AT A DEPTH OF 33.5 FEET, THIS BORING ENCOUNTERED LOOSE UNCONTROLLED FILL THAT CONTAINED WOOD, FOLLOWED BY LOOSE TO MEDIUM DENSE SILT (A-4b) TO THE DEPTH OF THE BORING, 100 FEET. BORING B-014-4-19 ENCOUNTERED GRAVEL TO A DEPTH OF 8.5 FEET, VARY IN DENSITY FROM VERY LOOSE TO DENSE. BELOW THE GRAVEL, THE BORING ENCOUNTERED A LAYER OF VERY LOOSE TO LOOSE SANDY SILT (A-4a) TO A DEPTH OF 21 FEET, FOLLOWED BY LOOSE TO MEDIUM DENSE COARSE AND FINE SAND (A-3a) TO A DEPTH OF 53.5 FEET. BELOW THIS THE BORING ENCOUNTERED DENSE SANDY SILT (A-4a), LOOSE TO MEDIUM DENSE SILT (A-4b) AND VERY DENSE FINE SAND (A-3) TO THE DEPTH OF THE BORING, 100 FEET. GROUND WATER WAS ENCOUNTERED BELOW ELEV. 972 WITH OCCASIONAL WET SOIL LAYERS ABOVE THIS ELEVATION.

REFER TO THE SOIL PROFILE SHEETS AND GEOTECHNICAL REPORT FOR SUM-76-6.15 PID 100713 FOR THE EXPLORATION FINDINGS FOR THE NEAS BORINGS.

SPECIFICATIONS

THIS GEOTECHNICAL EXPLORATION WAS PERFORMED IN ACCORDANCE WITH THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, OFFICE OF GEOTECHNICAL ENGINEERING, SPECIFICATIONS FOR GEOTECHNICAL EXPLORATIONS, DATED JULY 2017.

AVAILABLE INFORMATION

THE SOIL, BEDROCK, AND GROUNDWATER INFORMATION COLLECTED FOR THIS SUBSURFACE EXPLORATION THAT CAN BE CONVENIENTLY DISPLAYED ON THE SOIL PROFILE SHEETS HAS BEEN PRESENTED. GEOTECHNICAL REPORTS, IF PREPARED, ARE AVAILABLE FOR REVIEW ON THE OFFICE OF CONTRACT SALES WEBSITE. HISTORICAL INFORMATION, IF ANY, IS AVAILABLE FOR REVIEW ON THE DEPARTMENT'S ONLINE TRANSPORTATION INFORMATION MAPPING SYSTEM, [HTTPS://GIS.DOT.STATE.OH.US/TIMS/MAP/GEOTECH](https://gis.dot.state.oh.us/tims/map/geotech).

INDEX OF SHEETS

SUMMARY OF SOIL TEST DATA, SHEETS 3 - 21.						
LOCATION FROM STA. TO STA.	PLAN VIEW SHEET	PROFILE SHEET	CROSS-SECTION SHEET	CUT MAX.	FILL EMB. MAX.	
I.R. 76 244+72.92 312+72.35	22-34	22-34	55-90	<1 FT	<1 FT	
I.R. 77 514+85.00 407+09.97	91-105	91-105	129-146	<1 FT	<1 FT	
S.R. 8 407+09.97 393+54.11	105-120	105-120		<1 FT	<1 FT	
RAMP K	35	35		<1 FT	<1 FT	
RAMP J	36-38	36-38		<1 FT	<1 FT	
RAMP M	39	39		<1 FT	<1 FT	
RAMP EN	40-44	40-44		<1 FT	<1 FT	
RAMP SW	45	45		<1 FT	<1 FT	
RAMP L	46-48	46-48		<1 FT	<1 FT	
RAMP G	49-50	49-50		<1 FT	<1 FT	
RAMP W10	51-52	51-52		<1 FT	<1 FT	
RAMP W11	53-54	53-54		<1 FT	<1 FT	
RAMP IR-77 NB	121-124	121-124		<1 FT	<1 FT	
RAMP S10	125-126	125-126		<1 FT	<1 FT	
RAMP S9	127-128	127-128		<1 FT	<1 FT	
BORING LOGS, SHEETS 147 - 182.						

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SOIL PROFILE
EXPLORATION NOTES (CONT.)

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

Station & Offset	Depth From To	% Agg	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SHTL Close	Loss On Ign.
H-003-0-61 255+90 20'RT	0.3-7.0	0	6	18	48	28	NP	NP	15	A-4a	
	7.0-10.0	0	2	14	57	27	NP	NP	26	A-4b	
	10.0-14.0	10	6	13	44	27	27	10	14	A-4a*	
	14.0-23.0	0	5	14	46	35	29	11	12	A-6a	
	23.0-26.0	Dark Gray Broken Shale							8	Visual	
H-004-0-61 259+41 CL	0.4-3.0	45	5	9	29	12	NP	NP	12	A-4a	
	3.0-13.0	Brown Weathered Shale							6	Visual*	
	13.0-18.0	Gray and Brown Weathered Shale							8	Visual	
H-005-0-61 264+50 3'LT	0.2-4.0	20	5	17	34	24	NP	NP	17	A-4a	
	4.0-10.0	16	2	32	38	12	NP	NP	16	A-4a	
H-006-0-61 267+50 35'RT	0.0-4.0	22	15	30	24	12	NP	NP	9	A-2-4	
	4.0-10.0	17	7	32	29	15	NP	NP	16	A-4a	
	10.0-15.0	28	19	27	14	12	NP	NP	8	A-2-4	
	15.0-22.0	34	43	10	5	8	NP	NP	17	A-1-b	
	22.0-30.0	20	51	25	4	4	NP	NP	6	A-1-b	
H-007-0-61 268+75 CL	0.4-7.0	0	32	25	22	21	20	7	12	A-4a	
	7.0-14.0	16	40	37	7	-	NP	NP	4	A-3a	
	14.0-19.0	0	1	94	7	-	NP	NP	8	A-3	
	19.0-26.0	28	50	19	8	-	NP	NP	8	A-1-b	
	26.0-30.0	0	5	25	48	22	NP	NP	12	A-4a	
H-008-1-61 270+00 65'RT	0.4-4.0	0	8	14	40	38	33	16	25	A-6b	
	4.0-13.0	47	36	13	4	16	NP	NP	6	A-1-b	
	13.0-16.0	0	1	4	79	16	NP	NP	16	A-4b	
	16.0-18.0	0	15	78	7	-	NP	NP	20	A-3	
	18.0-21.0	52	29	13	6	-	NP	NP	11	A-1-a	
	21.0-28.0	0	2	9	58	31	NP	NP	15	A-4b	
	28.0-30.0	17	31	37	15	-	NP	NP	12	A-3a	
H-008-0-61 270+20 CL	0.5-5.0	20	53	24	-	4	NP	NP	NP	A-1-b	
	5.0-8.0	27	68	19	-	6	NP	NP	NP	A-3a	
	8.0-9.0	35	37	20	-	8	NP	NP	NP	A-1-b	
	9.0-12.0	49	29	14	-	8	NP	NP	NP	A-1-b	
	12.0-15.0	0	9	79	-	12	NP	NP	NP	A-3a	
H-014-0-61 276+09 CL	0.0-3.0	30	12	25	21	13	NP	NP	11	A-2-4	
	3.0-5.0	19	8	26	30	17	NP	NP	16	A-4a	
	5.0-7.0	3	1	52	21	19	NP	NP	21	A-4a	
	7.0-9.0	Black Loamy Compact Peat			Compact Peat				339	Visual	76%
	9.0-12.0	Black Fibrous Compact Peat			Compact Peat			366	Visual	17%	
	12.0-15.5	Brown to Black Fine-Textured			Peat			101	Visual		
	15.5-21.0	0	32	61	-	7	Peat	NP	23	A-3	
	21.0-26.0	0	22	67	-	11	NP	NP	22	A-3a	
	26.0-31.0	0	18	58	16	8	NP	NP	25	A-3a	

Station & Offset	Depth From To	% Agg	% CS	% FS	% Silt	% Clay	LL	PI	% WC	SMTL Class	Loss On Ign.
H-022-0-61 283+75 CL	0.0-1.5	Random Fill - Dark Gray W/Cinders and Bricks					Gravel			Visual	44%
	1.5-3.0	Dark Gray Loamy Compact Feat							22	Visual	86%
	3.0-8.0	Dark Gray Fibrous Feat							24	Visual	64%
	8.0-12.0	Brown & Black Fine-textured Feat							42	Visual	
	12.0-18.0	Gray Marly Sedimentary Feat							99	Visual	11%
	18.0-24.0	Silty Marly Sedimentary Feat							76	Visual	9%
	24.0-27.0	Gray Peat	1		3	64	33	43	43	A-7-5	5%
	27.0-30.0	Gray Peat	20		8			60	NP	A-1-a	
	30.0-35.0	Gray Peat	23		5			NP	NP	A-1-a	
	35.0-41.0	Gray Peat									
H-019-0-61 279+82 CL	0.5-2.0	Black Compact Feat	11		15	26	27	NP	26	A-4a	
	2.0-4.0	Black Compact Feat	23		17	16	15	NP	13	A-2-a	
	4.0-5.0	Black Compact Feat	23		5			NP	19	A-1-a	
	5.0-6.0	Black Compact Feat	23		7			NP	16	A-1-a	
	6.0-11.0	Black Compact Feat	23		7			NP	16	A-1-a	
	11.0-13.0	Black Compact Feat	23		7			NP	16	A-1-a	
	13.0-17.0	Black Compact Feat	23		7			NP	16	A-1-a	
	17.0-21.0	Black Compact Feat	23		7			NP	16	A-1-a	
	21.0-26.0	Black Compact Feat	23		7			NP	16	A-1-a	
	26.0-30.0	Black Compact Feat	23		7			NP	16	A-1-a	
H-021-0-61 282+35 15'BT	0.2-2.0	Black Fibrous Coarse-textured Feat	33		35	16	7	NP	7	A-3a	
	2.0-3.0	Black Fibrous Coarse-textured Feat	18		20	13	7	NP	13	A-1-b	
	3.0-5.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	5.0-6.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	6.0-10.5	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	10.5-11.5	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	11.5-16.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	16.0-21.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	21.0-25.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
	25.0-30.0	Black Fibrous Coarse-textured Feat	23		22	13	7	NP	18	A-1-b	
H-024-0-61 285+00 CL	0.4-4.0	Black Fibrous Coarse-textured Feat	18		25	29	16	NP	23	A-4a	
	4.0-5.0	Black Fibrous Coarse-textured Feat	12		13	13	5	NP	17	A-1-b	
	5.0-10.0	Black Fibrous Coarse-textured Feat	22		13	13	5	NP	10	A-1-b	
	10.0-15.0	Black Fibrous Coarse-textured Feat	33		11	9		NP	10	A-1-b	
	15.0-19.0	Black Fibrous Coarse-textured Feat	39		18	8		NP	6	A-1-b	
	19.0-24.0	Black Fibrous Coarse-textured Feat	23		5	10		NP	6	A-1-b	
	24.0-29.0	Black Fibrous Coarse-textured Feat	0		26	6		NP	18	A-4b	
	29.0-34.0	Black Fibrous Coarse-textured Feat	0		51	4		NP	14	A-4a	
	34.0-38.0	Black Fibrous Coarse-textured Feat	20		51	11		NP	14	A-3a	
	38.0-43.0	Black Fibrous Coarse-textured Feat	32		46	24		NP	14	A-2-a	
H-026-0-61 288+00 CL	0.4-5.0	Black Fibrous Coarse-textured Feat	17		10	12	10	NP	13	A-2-a	
	5.0-10.0	Black Fibrous Coarse-textured Feat	42		14	10	5	NP	7	A-1-b	
	10.0-12.0	Black Fibrous Coarse-textured Feat	41		12	10	5	NP	8	A-1-b	
	12.0-17.0	Black Fibrous Coarse-textured Feat	38		13	10	5	NP	3	A-1-b	
	17.0-22.0	Black Fibrous Coarse-textured Feat	10		6	10	5	NP	3	A-1-b	
	22.0-23.0	Black Fibrous Coarse-textured Feat	11		5	10	5	NP	3	A-1-b	
	23.0-25.0	Black Fibrous Coarse-textured Feat	3		7	10	5	NP	3	A-1-b	
	25.0-30.0	Black Fibrous Coarse-textured Feat	0		7	10	5	NP	20	A-1-b	
	30.0-35.0	Black Fibrous Coarse-textured Feat	2		7	10	5	NP	21	A-1-b	
	35.0-41.0	Black Fibrous Coarse-textured Feat	2		7	10	5	NP	20	A-1-b	

Station & Offset	Depth From-To	% Agg	% C.S	% ES	% Silt	% Clay	L.L	P.I.	% W.C	SHTL Class	
H-001-0-61 247+00 CL	2.0-6.0	0	1	2	74	23	27	3	18	A-4b	
	6.0-11.0	29	3	12	33	21	21	2	16	A-4a	
	11.0-16.0	48	8	12	17	15	NP	NP	12	Visual	
	16.0-26.0	22	6	13	36	23	23	6	20	A-4a	
		40	1	3	35	19	25	6	13	A-4a	
	0.0-1.5	18	22	10	34	16	22	8	15	A-4a	
	1.5-2.0	33	7	21	18	21	21	5	14	A-4a	
	2.0-3.0	0	4	25	48	23	NP	NP	19	A-4a	
	3.0-6.0	16	11	10	40	23	NP	NP	18	A-4a	
	6.0-7.0	7	10	38	29	16	NP	NP	22	A-4a	
H-002-0-61 253+00 CL	7.0-9.0	Dark	Brown	Fibrous	Peat				336	Visual	
	9.0-10.5	Dark	Brown	Fibrous	Peat				359	Visual	
	10.5-12.0	Dark	Brown	Fibrous	Peat				425	Visual	
	12.0-13.5	Dark	Brown	Fibrous	Peat				227	Visual	
	13.5-15.0	Dark	Brown	Fibrous	Peat				206	Visual	
	15.0-16.5	Dark	Brown	Fibrous	Peat				284	Visual	
	16.5-18.0	Dark	Brown	Fibrous	Peat				20	A-3	
	18.0-19.5	18	36	57	5	-	NP	NP	24	A-3	
	19.5-26.0	0	1	49	7	27	NP	NP	11	A-4b	
	26.0-31.0	0	16	19	53	20	NP	NP	25	A-4a	
H-015-0-61 276+15 CL	31.0-36.0	0	8	29	40	20	NP	NP	26	A-3a	
	36.0-41.0	0	12	68	20	18	NP	NP	14	A-4a	
	41.0-46.0	0	37	36	27	18	NP	NP	18	A-3a	
	46.0-51.0	0	11	54	27	-23	NP	NP	20	A-3a	
	51.0-56.0	0	20	57	-23	-16	NP	NP	20	A-3a	
	56.0-61.0	0	14	70	-16	-	NP	NP	21	A-3a	
	0.0-1.5	Random Fill	-	Black Sand	W/Gravel,						Visual
	1.5-3.0	Random Fill	-	Stone	Fragments and						Visual
	3.0-4.5	Random Fill	-	Cinders							Visual
	4.5-6.0	Brown Fibrous	Peat						233	Visual	
6.0-7.5	Brown Fibrous	Compact Peat						270	Visual		
7.5-9.0	Brown Fibrous	Compact Peat						206	Visual		
9.0-10.5	Brown Fibrous	Compact Peat						219	Visual		
10.5-12.0	26	17	41	11	3	NP	NP	31	A-3a		
12.0-13.5	0	12	57	20	11	NP	NP	18	A-3a		
13.5-15.0	59	11	13	10	17	NP	NP	11	A-1+b		
15.0-21.0	Brown Gravel									Visual	
21.0-26.0	Brown Silty	Sandy Gravel								Visual	
26.0-31.0	Brown Silty	Sandy Gravel								Visual	
31.0-36.0	Gray Clayey	Silt W/Few Gravel								Visual	
36.0-41.0	71	6	9	-14	-	NP	NP	16	A-1-a		
41.0-46.0	0	0	48	50	2	NP	NP	18	A-4b		
46.0-51.0	0	1	42	52	5	NP	NP	18	A-4b		
51.0-56.0	17	0	62	21	-	NP	NP	19	A-3a		
56.0-61.0	0	0	60	40	-	NP	NP	20	A-4a		

Station & Offset	Depth From-To	Agg	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	% W.C.	SHTL Class.
H-023-0-61 284+00 CL	0.8-1.5	30	12	14	28	16	NP	18	A-4a	
	1.5-2.0	26	20	21	12	19	NP	19	A-2-a	
	4.5-6.0	Blackish-Brown Textured Peat	Blackish-Brown Textured Peat	Fibrous Fine-				487	Visual	85%
	6.0-7.5	Blackish-Brown Textured Peat	Blackish-Brown Textured Peat	Fibrous Fine-				252	Visual	44%
	7.5-9.0	Blackish-Brown Peat	Slightly Fibrous	Pine-Textured				490	Visual	83%
	9.0-10.5	Blackish-Brown Peat	Slightly Fibrous	Pine-Textured				303	Visual	3%
	10.5-12.0	Dark Gray Peat	Marly Sedimentary				161	188	Visual	27%
	12.0-13.5	Dark Gray Peat	Marly Sedimentary				NP	88	Visual	18%
	13.5-15.0	Dark Gray Peat	Marly Sedimentary				50	100	Visual	17%
	15.0-16.5	Gray Marly Mixed W/Blackish-Brown Textured Peat	Gray Marly Sedimentary Peat				33	94	Visual	16%
	16.5-18.0	Gray Marly Sedimentary Peat					28	81	Visual	14%
	18.0-19.5	Gray Silty Trace of Marl	Silty Sedimentary Peat				24	59	Visual	14%
	19.5-21.0	Gray Silty Trace of Marl	Silty Sedimentary Peat				15	59	Visual	14%
	21.0-22.5	Gray Silty Trace of Marl	Silty Sedimentary Peat				14	36	Visual	9%
	22.5-23.5	Gray Silty Sedimentary Peat					12	54	Visual	
	24.0-26.0	54	18	14	6	8	NP	11	A-1-a	
	30.0-31.0	86	9	3	2	-	NP	7	A-1-a	
	35.0-36.0	67	16	9	8	-	NP	9	A-1-a	
	40.0-41.0	89	6	3	2	-	NP	10	A-1-a	
	50.0-51.0	5	44	41	10	-	NP	24	A-3	
	55.0-56.0	3	31	55	11	-	NP	23	A-3a	
	60.0-61.0	0	5	10	54	25	NP	18	A-4b	
H-008-2-61 270+00 175'RT	0.4-5.0	16	26	40	18	66	NP	7	A-3a	
	5.0-9.0	0	1	3	31	66	NP	55	A-7-5	
	9.0-15.0	Dark Peat	Brown Sandy Fibrous	Compact			143	Visual	24%	
	15.0-17.0	Gray Peat	Marly Sedimentary				44	88	Visual	8%
	17.0-25.0	6	19	68	7	-	NP	17	A-3	
	25.0-30.0	13	28	51	12	-	NP	14	A-3a	
H-007-1-61 269+00 75'RT	0.2-4.0	Brown Silty Sand and Gravel					NP	2	Visual	
	4.0-5.0	12	19	25	26	18	19	11	A-4a	
	5.0-9.0	17	47	19	8	9	24	7	A-2-a	
	9.0-12.0	55	19	20	-	6	NP	NP	A-1-a	
	12.0-20.0	40	45	11	-	4	NP	NP	A-1-b	

Station & Offset	Depth From-To	Agg %	C.S %	F.S %	Silt %	Clay %	L.L	P.I.	W.C %	SHTL Class		
H-017-4-61 271+00 75'BT	0.2-1.0	Brown Sandy Silt W/Gravel & Cinders								Visual		
	1.0-2.0	Light Brown Sandy Silt W/Little Gravel								Visual		
	2.0-3.0	Dark Brown Sandy Silt W/Some Gravel and Cinders								Visual		
	3.0-4.0		12	15	33	23	17	NP	15	A-4a		
	4.0-5.0		48	25	25	-	4+	NP	4	A-1-b		
	5.0-6.0		9	19	46	21	5	NP	17	A-3a		
	6.0-7.5		27	34	31	-	8-	NP	7	A-1-b		
	7.5-9.0		52	13	24	5	6	NP	11	A-1-b		
	9.0-10.0		3	7	81	6	3	NP	6	A-3		
	10.0-11.0		21	51	24	-	4-	NP	10	A-1-b		
	11.0-15.0		14	21	55	-10-	-	NP	9	A-3		
	15.0-18.0		0	2	94	-	4-	NP	22	A-3		
	H-017-4-61 271+00 150'BT	0.2-1.0		17	35	10	9	NP	NP	6	A-3a	
		1.0-3.0		38	22	10	10	NP	NP	9	A-1-b	
		3.0-7.0		0	3	17	43	37	NP	19	A-4a	
7.0-8.5			0	6	24	35	35	NP	25	A-6b		
8.5-16.0		Brown to Black Fine-Textured Feat							189	Visual		
14.0-15.0		Gray Sedimentary Feat							12	Visual		
15.0-18.0			12	17	46	14	11	NP	17	A-3a		
18.0-24.0			10	18	60	9	3	NP	20	A-3a		
H-010-1-61 272+20 120'BT		0.0-3.0		9	19	36	16	NP	NP	10	A-4a	
		3.0-6.0		34	20	19	8	NP	NP	12	A-2-4	
		6.0-7.0	Brown Fibrous Feat							229	Visual	
		7.0-11.0		0	9	76	11	4	NP	18	A-3a	
		11.0-11.5		0	3	42	38	17	NP	28	A-4a	
		11.5-12.0		4	30	56	6	4	NP	7	A-3	
		12.0-15.0		0	2	23	51	24	NP	23	A-4b	
	15.0-20.0		37	36	18	-	9-	NP	15	A-1-b		
	H-011-0-61 273+20 CL	0.0-2.0		0	7	74	24	5	NP	NP	12	
		2.0-5.0		0	21	74	-	5-	NP	NP	1	
		5.0-9.0		5	20	68	-	7-	NP	NP	4	
		9.0-11.0		0	28	57	10	5	NP	NP	5	
		11.0-16.0		0	1	8	59	22	NP	9	A-3a	
		16.0-17.0		66	8	18	1	3	NP	NP	27	
		H-012-0-61 274+25 29'BT	0.0-2.5		3	10	35	34	18	NP	NP	11
2.5-4.0			Brown Fibrous Feat								Visual	
4.0-7.0				8	10	79	-	3-	NP	NP	104	
7.0-13.0				0	22	71	-	7-	NP	NP	5	
13.0-16.0				0	17	63	9	11	NP	NP	6	
16.0-18.0				0	29	48	12	11	NP	NP	19	
18.0-24.0				0	1	5	58	36	NP	NP	20	
24.0-28.0				64	22	13	-	1-	NP	NP	28	
H-013-4-61 275+40 70'LT			0.2-1.0	Brown Silty Sand W/Gravel, Roots and Cinders								Visual
	1.0-3.0			25	23	29	14	9	NP	NP	A-3a	
	3.0-7.5		Dark Brown Fine-Textured Feat								Visual	
	7.5-11.0			3	38	39	17	3	NP	NP	A-3a	
	11.0-13.0		Dark Brown Fine-Textured Feat								Visual	
	13.0-22.0		Gray Sedimentary Feat								Visual	
	22.0-24.0		Gray Sedimentary Feat								Visual	
	24.0-29.0		2	13	68	-17-		NP	NP	Visual		
	H-013-3-61 275+47 57'BT	0.0-3.0	Gray Silt and Stone Fragments								Visual	
		3.0-7.0	Brown Fibrous Feat								Visual	
		7.0-9.5		0	4	91	-	5-	NP	NP	A-3	
		9.5-11.0		0	2	6	62	30	NP	NP	A-7-5	
		11.0-16.0		18	24	43	-15-		NP	NP	A-3a	
		H-013-2-61 275+75 10'LT	0.0-3.0	Silty Sand and Brick Fragments								Visual
			3.0-6.0	Brown Decayed Wood with a Trace of Silt								Visual
6.0-11.0				0	18	73	-	9-	NP	NP	A-3	
11.0-14.0				4	28	68	-	8-	NP	NP	A-3	

Station & Offset	Depth From-To	% Agg	% C.S	% F.S	% Silt	% Clay	LL	PI	% W.C	SHTL	Close
H-014-1-61 276+00 52'RT	0.0-4.0 4.0-6.0 6.0-12.0 12.0-14.0 14.0-15.0 15.0-20.0 20.0-24.0 24.0-25.0 25.0-28.0 28.0-33.0	0.0 0.0 7.0 7.0 0.0 0.0 0.0 0.0 0.0	11.0 11.0 67.0 61.0 38.0 36.0 20.0	1.0 1.0 14.0 14.0 11.0 11.0 23.0 23.0 23.0 13.0	34.0 34.0 61.0 61.0 28.0 30.0 67.0	181.0 NP 70.0 NP NP NP NP NP NP NP	NP NP NP NP NP NP NP NP NP NP	81.0 NP 37.0 NP NP NP NP NP NP NP	460 111 38 64 54 23 20 16	Visual Visual Visual A-3a Visual A-7-5 A-4a A-4a A-3a	Visual Visual Visual A-3a Visual A-7-5 A-4a A-4a A-3a
H-015-1-61 276+50 70'LT	0.0-4.0 4.0-5.0 5.0-10.0 10.0-15.0 15.0-20.0 20.0-25.0 25.0-30.0 30.0-34.0 34.0-37.0 37.0-42.0 42.0-46.0 46.0-50.0	53.0 23.0 16.0 13.0 10.0 13.0 34.0 13.0 0.0 0.0 0.0	15.0 26.0 21.0 31.0 30.0 21.0 24.0 31.0 0.0 0.0 0.0	26.0 26.0 42.0 40.0 42.0 45.0 32.0 41.0 0.0 0.0 0.0	-6.0 -17.0 9.0 -16.0 -18.0 12.0 -10.0 -15.0 0.0 0.0 0.0	145.0 86.0	NP NP NP NP NP NP NP NP NP NP NP	NP NP NP NP NP NP NP NP NP NP NP	17.0 24.0 18.0 17.0 16.0 20.0 16.0 15.0 311.0 94.0 111.0 64.0	A-1-b A-1-b A-3a+ A-3a A-3a A-3a A-1-b A-3a Visual Visual Visual A-7-5	A-1-b A-1-b A-3a+ A-3a A-3a A-3a A-1-b A-3a Visual Visual Visual A-7-5
H-015-2-61 277+00 70'LT	0.0-2.0 2.0-5.0 5.0-10.0 10.0-15.0 15.0-16.0 16.0-21.0	11.0 32.0 18.0 26.0 0.0 21.0	17.0 17.0 33.0 26.0 10.0 23.0	13.0 34.0 33.0 35.0 20.0 33.0	-13.0 4.0 -16.0 -13.0 25.0 7.0	NP NP NP NP NP NP	NP NP NP NP NP NP	NP NP NP NP 9.0 NP	7.0 20.0 13.0 16.0 21.0 16.0	A-3a A-3a A-1-b A-1-b A-4a A-3a	A-3a A-3a A-1-b A-1-b A-4a A-3a
H-016-0-61 277+00 35'LT	0.0-3.0 3.0-6.0 6.0-9.0 9.0-19.0 19.0-25.0 25.0-29.0 29.0-34.0	0.0 16.0 33.0 0.0 0.0 0.0	14.0 11.0 13.0 0.0 0.0 0.0	55.0 27.0 17.0 19.0 24.0 27.0	4.0 26.0 26.0 11.0 11.0 4.0	75.0 NP	NP NP NP NP NP NP	41.0 NP	62.0 19.0	Visual A-6a A-2-6 Visual Visual Visual Visual	Visual A-6a A-2-6 Visual Visual Visual Visual
H-016-1-61 277+02 75'RT	0.0-2.5 2.5-5.0 5.0-6.0 6.0-14.0 14.0-19.0 19.0-27.0 27.0-28.0 28.0-35.0 35.0-42.0 42.0-46.0 46.0-48.5	48.0 37.0 34.0 0.0 2.0 0.0 0.0 0.0 0.0 0.0	8.0 8.0 1.0 0.0 1.0 0.0 0.0 0.0 0.0	17.0 26.0 21.0 30.0 Fibrous Peat Sedimentary Peat Marl 8.0 57.0 5.0 10.0 4.0 3.0	7.0 9.0 14.0 33.0 -15.0 -48.0 43.0 40.0 34.0	45.0 48.0 NP 36.0 31.0 31.0 31.0	NP NP NP NP NP NP NP NP NP NP	NP NP NP NP NP NP NP NP NP NP	42.0 37.0 16.0 41.0 32.0 34.0 30.0	Visual A-7-6 A-3a A-6a A-6a A-4b A-6a	Visual A-7-6 A-3a A-6a A-6a A-4b A-6a
H-017-4-61 278+58 55'RT	0.0-1.5 1.5-2.0 2.0-6.5 6.5-7.0 7.0-12.0	58.0 0.0 0.0 0.0 0.0	13.0 4.0 4.0 19.0	11.0 Compact 60.0 29.0 56.0	7.0 Fine-Textured 7.0 46.0 15.0	NP NP NP NP	NP NP NP NP	NP NP NP NP	7.0 43.0 9.0 10.0 6.0	A-1-b Visual A-4a A-4a A-3a	A-1-b Visual A-4a A-4a A-3a
H-017-2-61 278+75 135'LT	0.0-1.5 1.5-3.5 3.5-5.0	17.0 0.0 67.0	23.0 Compact 18.0	20.0 Pine-Textured 7.0 2.0	10.0 Feat 2.0	NP NP NP	NP NP NP	NP NP NP	9.0 110.0 8.0	A-3a Visual A-1-a	A-3a Visual A-1-a
H-018-0-61 279+10 21'LT	2.0-4.0 4.0-10.0	63.0 65.0	11.0 18.0	8.0 7.0	11.0 14.0	NP NP	NP NP	NP NP	15.0 5.0	A-2-4 A-1-a	A-2-4 A-1-a
H-018-1-61 279+20 98'LT	0.0-1.0 1.0-2.0 2.0-3.5 3.5-5.0 5.0-7.0 7.0-7.5	24.0 25.0 42.0 19.0 62.0	17.0 17.0 7.0 8.0 29.0 11.0	17.0 18.0 Textured 17.0 16.0 11.0	17.0 18.0 Feat 20.0 31.0 9.0	NP NP NP NP NP NP	NP NP NP NP NP NP	NP NP NP NP NP NP	18.0 23.0 52.0 30.0 24.0 8.0	A-4a A-4a Visual A-1-b A-4a A-1-b	A-4a A-4a Visual A-1-b A-4a A-1-b

Station & Offset	Depth From-To	% Agg	% C.S	% F.S	% Silt	% Clay	L L	Pt	% W.G	SHTL
H-020-2-61 ✓ 280+70	0.0-3.0 3.0-4.0 4.0-5.0	(28 7 Gray Sandstone Fragments	19 7	24 17	18 31	11 38	NP 32	NP 12	9 23	A-2-4 A-6a Visual
H-020-3-61 ✓ 280+85	0.0-1.5 1.5-3.0 3.0-4.0 4.0-5.0 5.0-6.0 6.0-12.0	Brown Silty Sand W/Trace of Gravel and Stone Fragments Dark Brown Silt W/Trace of Roots 0 34 39 67	5 9 18 20	19 23 14 6	45 17 13 4	31 17 16 3	21 22 25 NP	3 3 8 NP	18 13 12 7	Visual A-4a A-2-4 A-2-4 A-1-a
H-020-2-61 ✓ 281+55	0.2-3.0 3.0-4.0 4.0-5.0 5.0-9.0 9.0-10.0 10.0-11.0 11.0-15.0	Black Sandy Silt and Clinders Black Sandy Silt and Clinders Black Fine-Textured Compact Peat Black Compact Fibrous Peat (4 52 (59	10 7 13 20	19 18 6 10	19 32 23 5	13 28 6 6	NP 29 24 NP	NP 12 6 NP	13 138 22 5	Visual Visual Visual Visual A-4a A-1-b A-1-a
H-021-0-61 ✓ 282+05	0.7-3.0 3.0-4.0 4.0-6.0 6.0-11.0	Reddish-Brown Compact Peat 15 69	7 13	18 6	32 6	28 6	29 24	12 6	13 138 22 5	A-2-4 Visual A-6a A-1-a
H-021-3-61 ✓ 282+50	0.0-1.0 1.0-2.0 2.0-9.0 9.0-10.0 10.0-12.0 12.0-14.0	(29 (44 Dark Brown Fibrous Peat Gray Marly Sedimentary Peat 68 (13	43 24 Dark Brown Fibrous Peat 34	25 20 10 37	3- 4 6 7	3- 8 6 7	NP NP NP NP	NP NP NP NP	9 17 440 76 7 17	A-1-b A-1-b Visual Visual A-1-a A-3a
H-021-2-61 ✓ 282+50	0.4-2.5 2.5-4.0 4.0-10.0 10.0-11.0 11.0-15.0	(30 Black Fine-Textured Peat Dark Brown Fibrous Peat Gray Marly Sedimentary Peat 60	22 18 25	21 10 8	14 14 3	13 11	20 27	3) 8	9 153 455 64 8	A-2-4 Visual Visual Visual Visual A-1-a
H-022-1-61 ✓ 283+50	0.5-3.0 3.0-4.0 4.0-10.0 10.0-11.0 11.0-17.0 17.0-20.0 20.0-21.0	47 Black Fine-Textured Peat Black Fibrous Peat Black Fine-Textured Peat Gray Marly Sedimentary Peat Gray Marly Sedimentary Peat 59	18 Black Fine-Textured Peat 25	10 14 6	11 11	11 7	27 20	8 3)	12 190 709 365 77 42 12	A-2-4 Visual Visual Visual Visual Visual A-2-4
H-022-4-61 ✓ 283+80	0.6-3.0 3.0-4.0 4.0-12.0 12.0-18.0 18.0-24.0 24.0-26.0 26.0-27.0 27.0-30.0	Black Sandy Clayey Silt W/Gravel and Tile Black Silty Peat W/Trace of Marl Black Fine-Textured Peat Gray Sedimentary Peat Trace of Marl Gray Sedimentary Peat (0 22 (69	57 Black Silty Peat W/Trace of Marl 127 103 144	57 412 60 69 104	57 412 60 69 104	57 412 60 69 104	57 412 60 69 104	57 412 60 69 104	57 412 60 69 104	Visual Visual Visual Visual Visual A-7-5 A-2-4 A-1-a
H-022-2-61 ✓ 283+90	0.0-1.0 1.0-2.0 2.0-10.0 10.0-16.0 16.0-21.0 21.0-22.0 22.0-24.0	Brown Sandy Silt W/Gravel Black Silty Peat W/Gravel & Decayed Wood Brown Fibrous Peat Gray Marly Sedimentary Peat Gray Sedimentary Peat W/Trace of Marl 2 23	148 80 NP NP	66 36 NP NP	66 36 NP NP	66 36 NP NP	66 36 NP NP	66 36 NP NP	116 68 20 11	Visual Visual Visual Visual Visual A-2-4 A-1-a
H-024-1-61 ✓ 285+32	0.4-2.0 2.0-4.0 4.0-5.0 5.0-6.0 6.0-11.0 11.0-14.0 14.0-15.0	(55 0 44 30 58 (29 (41	16 5 24 28 21 43 41	12 18 20 18 9 23 14	11 62 4 15 9 6 4	6 15 8 9 6 3 4	NP NP NP NP NP NP NP	NP NP NP NP NP NP NP	7 73 27 18 11 7 6	A-1-b A-4b A-1-b A-1-b A-1-a A-1-b A-1-b
H-020-1-61 ✓ 286+20	0.2-2.0 2.0-8.0 8.0-14.0	59 48 20	16 20 59	9 15 16	9 9 5-	8 8 -	NP NP NP	NP NP NP	7 6 6	A-1-b A-1-b A-1-b

Station & Offset	Depth From-To	% Agg	% C.S	% ES	% Silt	% Clay	L.L	P.I.	% W.G	SMTL Class	
H-026-1-61	288+00 75'LT	0.0-2.0	44	12	18	14	32	11	15	A-2-6	
		2.0-4.0	51	24	18	7-	NP	NP	7	A-1-a	
		4.0-6.0	4	27	66	2-	NP	NP	4	A-3	
		6.0-10.0	57	32	6	4-	NP	NP	6	A-1-a	
		10.0-11.0	(51)	26	8	7-	NP	NP	8	A-1-a	
		11.0-15.0	(4)	27	66	3-	NP	NP	4	A-3	
H-026-2-61	288+00 180'RT	0.0-1.0	Brown Sandy Silt W/Gravel & Tile								Visual *
		1.0-4.0	Brown Sandy Silt W/Gravel & Tile								Visual *
		4.0-7.0	Brown Sandy Silt W/Gravel & Glass								Visual
		7.0-11.0	Brown to Gray Fine-Textured Feat								Visual 39%
		11.0-12.0	0	23	38	33	37	13	43	A-6a	
		12.0-13.0	0	14	67	-19-	NP	NP	13	A-3a	
		13.0-15.0	52	14	18	10	6	NP	10	A-1-b	
H-026-2-61	288+07 125'RT	1.0-3.5	Brown Sandy Clayey Silt W/Gravel and Clinders								Visual
		3.5-5.0	0	2	45	29	14	NP	30	A-4a	
		5.0-6.0	48	13	27	9	3	NP	15	A-1-b	
		6.0-7.0	48	11	14	13	14	24	15	A-2-4	
H-027-2-61	288+85 110'RT	0.5-5.0	26	18	25	18	13	NP	13	A-2-b	
		5.0-5.5	18	7	24	18	23	NP	32	A-4a	
		5.5-6.5	27	15	27	18	13	24	10	A-2-b	
		6.5-7.0	9	3	18	37	31	20	4	A-4a	
H-027-3-61	289+00 75'LT	0.0-1.5	Bricks, Broken Tile, Concrete, & Soil								Visual
		1.5-3.0	29	11	18	24	8	NP	8	A-4a	
		3.0-4.0	Black Compact Feat								Visual 3
		4.0-6.0	16	6	29	27	22	21	7	A-4a	
		6.0-11.0	63	14	9	4	10	NP	6	A-1-a	
H-028-0-61	289+72 15'RT	0.2-2.0	31	17	15	22	15	27	9	A-4a	
		2.0-7.0	44	18	15	-23-	NP	NP	3	A-1-b	
		7.0-11.0	36	42	12	-10-	NP	NP	6	A-1-b	
H-029-1-61	290+00 170'LT	0.2-3.0	15	11	22	30	12	NP	6	A-4a *	
		3.0-5.0	37	17	13	22	11	24	8	A-2-4 *	
		5.0-6.0	17	27	19	18	19	96	45	A-7-5	
		6.0-7.0	Dark Brown Compact Feat								Visual 81%
		7.0-8.0	Brown to Gray Fine-Textured Feat								Visual 35%
		8.0-10.0	3	24	50	1	22	NP	13	A-3a	
		10.0-16.0	67	9	8	14	2	NP	10	A-1-b	
H-029-2-61	290+00 100'RT	0.0-3.0	22	24	14	21	15	NP	17	A-2-4	
		3.0-6.0	(26)	18	25	18	13	NP	14	A-2-4	
		6.0-7.0	(27)	13	27	18	13	24	10	A-2-4	
			45	26	11	12	6	NP	15	A-1-b	
H-030-0-61	290+55 40'LT	0.0-3.0	Brown Sandy Silt W/Little Gravel								Visual
		3.0-8.0	34	33	19	-14-	NP	NP	8	A-1-b	
		8.0-10.0	6	25	56	-13-	NP	NP	5	A-3a	
H-026-1-61	291+42 58'LT	0.4-3.0	Black Fine-Textured Feat								Visual
		3.0-5.0	Brown Fine-Textured Feat								Visual
		5.0-7.0	Slightly Fibrous								460
		7.0-9.0	0	12	63	18	7	NP	225	A-3a	
		9.0-14.0	0	14	55	-31-	NP	NP	35	A-3a	
		14.0-19.0	6	26	55	-13-	NP	NP	20	A-3a	
			0	26	62	-12-	NP	NP	21	A-3a	
DRIVE-PRESS SAMPLE SOIL TEST DATA											
H-026-1-61	276+55 65'LT	5.0-6.0	Dark Gray Silty Sand & Gravel								Visual
		10.0-11.0	Gray W/Little Gray Clayey Silt								Visual
		15.0-16.0	Gray Silty Sand								Visual
		20.0-21.0	Stone Fragments W/Some Gravel								Visual
		25.0-26.0	Gray Silty Sand and Gravel								Visual
		30.0-31.0	Gray Silty Sand & Stone Fragments								Visual
		35.0-36.0	56	20	19	0	3	NP	17	A-1-a	
		40.5-41.5	0	2	12	63	21	NP	84	A-4b	
		42.0-42.0	0	2	11	58	29	NP	99	A-4b	
		43.5-44.5	31	6	10	38	13	NP	47	A-4a	
		50.0-51.5	0	1	4	69	26	NP	67	A-4b	
		51.5-53.0	60	4	10	52	34	NP	53	A-1-b	
		53.0-54.5	57	8	14	16	6	NP	38	A-7-6	
		54.5-55.5	25	7	13	16	6	NP	54	A-4a	
		60.0-61.5	0	17	26	18	14	NP	19	A-4a	
		61.5-62.5	0	8	54	18	10	NP	21	A-4a	
		65.0-66.5	0	15	57	24	14	NP	20	A-3a	
		66.5-67.5	0	16	57	17	11	NP	21	A-3a	
		70.0-71.0	25	10	38	16	8	NP	17	A-4a	

BORING	STATION & OFFSET	DEPTH From To	% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C. CLASS	SHTL		
												CLASS	
B-018-1-61	454 + 40	74' R	Fill Material	33	6	23	28	10	NP	NP	17	A-4a	
				1.7- 5.0	0	1	24	58	17	24	3	21	A-4b
				5.0- 8.0	0	0	48	38	14	NP	NP	10	A-4a
				8.0-18.0	0	29	20	38	13	NP	NP	15	A-4a
				18.0-27.0	9	0	7	72	12	24	1	23	A-4b
				27.0-30.0	3	4	21	51	21	25	6	20	A-4b
				30.0-35.0	31	2	10	36	21	24	5	23	A-4a
				0.0- 3.0	28	8	21	28	15	20	2	23	A-4a
				3.0- 6.5	53	4	14	20	9	32	6	22	A-2-4
				6.5-17.0	2	4	29	45	20	22	4	17	A-4a
B-018-2-61	454 + 37	€	Light Brown and Gray Sandstone	2	5	28	49	16	23	3	19	A-4a	
				17.0-21.0	4	2	17	59	18	21	4	18	A-4b
				21.0-26.0	19	6	20	39	16	23	5	17	A-4a
				26.0-35.0	2	15	46	22	15	21	5	14	A-4a
				0.0- 15.0	0	0	45	48	7	NP	NP	15	A-4a
				15.0-18.0	1	1	36	48	14	21	4	15	A-4a
				18.0-23.5	21	19	34	19	7	20	2	20	A-3a
				23.5-35.0	7	3	10	55	25	23	5	23	A-4b
				0.0- 7.0	12	12	36	28	12	26/-	5/0	22	A-4a
				B-018-3-61	454 + 70	107' L	Light Brown and Gray Sandstone	4	4	39	31	22	23
7.0-15.0	9	24	58					-	9	NP	NP	3	A-3
15.0-18.0	2	0	67					24	7	NP	NP	18	A-3a
18.0-28.0	0	1	37					49	13	19	3	17	A-4a
28.0-38.0	1	0	41					46	12	NP	NP	16	A-4a
38.0-41.0	1	3	43					47	6	NP	NP	18	A-4a
41.0-52.0	6	1	26					58	9	17	0	17	A-4b
52.0-58.0	0	1	15					75	9	NP	NP	20	A-4b
58.0-62.0	20	6	19					41	14	18	2	15	A-4a
62.0-74.0	1	1	15					74	9	NP	NP	23	A-4b
B-020-1-60	436 + 83	18' L	Clayey Silt, with sand, some gravel	1	1	5	53	40	27	6	25	A-4b	
				7.0-15.0	25	32	29	-	14	NP	NP	11	A-1-b
				15.0-18.0	31	44	13	-	12	NP	NP	11	A-1-b
				18.0-28.0	37	44	16	-	3	NP	NP	13	A-1-b
				28.0-38.0	7	23	54	-	16	NP	NP	15	A-3a
				38.0-41.0	1	4	70	-	25	NP	NP	17	A-3a
				41.0-52.0	5	34	50	-	11	NP	NP	18	A-3a
				52.0-58.0	0	2	97	-	1	NP	NP	26	A-3
				58.0-62.0	11	18	39	25	7	NP	NP	20	A-3a
				62.0-74.0	6	17	37	25	15	22	5	15	A-4a
B-020-2-60	437 + 49	23' R	Clayey Silt, with sand, some gravel	4	10	41	23	22	23	9	11	A-4a	
				7.0-15.0	13	26	50	9	2	NP	NP	6	A-3a
				15.0-18.0	0	0	80	18	2	NP	NP	23	A-3a
				18.0-28.0	0	1	75	21	3	NP	NP	19	A-3a
				28.0-36.0	1	0	73	21	5	NP	NP	18	A-3a
				36.0-41.0	0	1	72	25	2	NP	NP	17	A-3a
				41.0-52.0	0	1	63	29	7	NP	NP	18	A-4a
				52.0-58.0	4	1	57	26	12	NP	NP	17	A-4a
				58.0-62.0	7	19	8	52	14	20/20	5/2	15	A-4b
				62.0-74.0	9	21	44	17	9	NP	NP	11	A-3a
B-020-4-60	438 + 58	38' L	Light Brown and Gray Sandstone	5	28	45	13	9	NP	13	A-3a		
				7.0-10.0	11	29	47	8	5	NP	NP	18	A-3a
				10.0-13.0	32	37	23	-	8	NP	NP	17	A-1-b
				13.0-22.0	18	12	56	-	14	NP	NP	9	A-3a
				22.0-24.0	6	3	78	-	13	NP	NP	21	A-3a
				0.0- 3.0	29	25	37	-	9	NP	NP	13	A-1-b
				3.0- 7.0	11	30	24	20	15	22	0	18	A-3a
				7.0-10.0	7	41	42	-	10	NP	NP	8	A-3
				10.0-13.0	25	44	20	-	11	NP	NP	6	A-1-b
				13.0-19.0	34	26	14	18	8	19	0	10	A-2-4
B-021-1-60	430 + 70	11' L	Light Brown and Gray Sandstone	39	37	18	-	6	NP	NP	5	A-1-b	
				19.0-31.5	0	7	88	-	5	NP	NP	3	A-3
				31.5-35.0	0	6	90	-	4	NP	NP	22	A-3
				35.0-40.0	0	7	89	-	4	NP	NP	21	A-3
				40.0-45.0	11	30	24	20	15	22	0	18	A-3a
				45.0-50.0	7	41	42	-	10	NP	NP	8	A-3
				50.0-55.0	25	44	20	-	11	NP	NP	6	A-1-b
				55.0-60.0	34	26	14	18	8	19	0	10	A-2-4
				60.0-65.0	39	37	18	-	6	NP	NP	5	A-1-b
				65.0-70.0	0	7	88	-	5	NP	NP	3	A-3

BORING	STATION & OFFSET		DEPTH		To	% Agg.	C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C. CLASS	SHTL
	438 + 58	38'L	From											
B-20-4	438 + 58	38'L	0.5-1.5	7	19	8	52	14	20/20	5/2	15	A-4b		
			1.4-10.0	9	21	44	17	9	NP	NP	11	A-3a		
				5	28	45	13	9	NP	NP	13	A-3a		
			10.0-13.0	11	29	47	8	5	NP	NP	18	A-3a		
			13.0-22.0	18	37	23	-	8	NP	NP	17	A-1-b		
			22.0-24.0	29	12	56	-	14	NP	NP	9	A-3a		
				6	3	78	-	13	NP	NP	21	A-3a		
				29	25	37	-	9	NP	NP	13	A-1-b		
B-21-1	430 + 70	11'L	0.0-3.0	11	30	24	20	15	22	0	18	A-3a		
			3.0-7.0	7	41	42	-	10	NP	NP	8	A-3		
			7.0-10.0	25	44	20	-	11	NP	NP	6	A-1-b		
			10.0-13.0	34	26	14	18	8	19	0	10	A-2-4		
			13.0-19.0	39	37	18	-	6	NP	NP	5	A-1-b		
			19.0-31.5	0	7	88	-	5	NP	NP	3	A-3		
				0	6	90	-	4	NP	NP	22	A-3		
				0	7	89	-	4	NP	NP	21	A-3		
B-21-1A	430 + 72	11'L	31.5-59.0	1	10	87	-	2	NP	NP	15	A-3		
				1	7	88	-	4	NP	NP	21	A-3		
				1	4	91	-	4	NP	NP	20	A-3		
				0	6	91	-	3	NP	NP	21	A-3		
				0	5	91	-	4	NP	NP	19	A-3		
			59.0-68.0	11	1	75	-	13	NP	NP	18	A-3a		
				1	1	79	-	19	NP	NP	20	A-3a		
				0	1	99	-	0	NP	NP	28	A-3		
			68.0-72.0	2	1	83	-	14	NP	NP	17	A-3a		
			72.0-77.0	1	1	93	-	5	NP	NP	21	A-3		
			77.0-80.5	1	1	84	-	14	NP	NP	20	A-3a		
			80.5-84.0	1	1	84	-	14	NP	NP	20	A-3a		
B-21-2	431 + 74	46' L	0.0-7.0	32	11	22	22	13	26	1	17	A-2-4		
			7.0-18.0	44	9	15	14	13	27	6	15	A-2-4		
				26	32	15	-	9	NP	NP	5	A-1-b		
			18.0-28.0	0	43	22	-	9	NP	NP	4	A-1-b		
				11	9	89	-	2	NP	NP	22	A-3		
			28.0-31.5	4	13	73	-	3	NP	NP	20	A-3		
				4	5	77	-	4	NP	NP	18	A-3a		
B-21-3	432 + 19	21'R	0.0-4.5	27	15	23	23	12	11	21	21	A-2-b		
			4.5-8.0	65	16	7	11	1	NP	NP	10	A-1-a		
			8.0-13.0	38	12	37	13	0	NP	NP	12	A-1-b		
			13.0-16.5	14	23	58	-	5	NP	NP	21	A-3		
			16.5-21.0	50	27	21	-	2	NP	NP	16	A-1-a		
			21.0-28.0	2	16	81	-	1	NP	NP	24	A-3		
			28.0-33.0	21	32	44	-	3	NP	NP	17	A-1-b		
			33.0-82.0	18	20	61	-	1	NP	NP	18	A-3		
				2	15	80	-	3	NP	NP	22	A-3		
				13	31	55	-	1	NP	NP	21	A-3		
				0	14	85	-	1	NP	NP	26	A-3		
				0	10	88	-	2	NP	NP	25	A-3		
				0	2	96	-	2	NP	NP	26	A-3		
				0	9	82	-	9	NP	NP	22	A-3		
				0	1	98	-	1	NP	NP	25	A-3		
				0	0	96	-	4	NP	NP	28	A-3		
				1	1	95	-	3	NP	NP	21	A-3		
			82.0-90.0	2	1	25	65	7	NP	NP	20	A-4b		
				1	2	32	56	9	NP	NP	19	A-4b		
B-21-4	432 + 78	54'R	0.0-1.0	24	21	25	20	10	NP	NP	23	A-2-4		
			1.0-4.0	25	12	24	23	16	26	6	18	A-4a		
			4.0-8.0	42	33	12	-	13	NP	NP	9	A-1-b		
			8.0-31.5	0	28	67	-	5	NP	NP	5	A-3		
				7	22	66	-	5	NP	NP	3	A-3		
				1	18	75	-	6	NP	NP	21	A-3		
				0	20	77	-	3	NP	NP	21	A-3		
				3	25	66	-	6	NP	NP	18	A-3		
B-21-5	434 + 16	36'L	0.0-3.5	23	23	30	13	11	NP	NP	49	A-3a		
			3.5-8.0	0	10	54	27	9	NP	NP	9	A-4a		
			8.0-13.0	4	32	46	10	8	NP	NP	15	A-3a		
			13.0-28.0	2	35	56	-	7	NP	NP	21	A-3		
				22	26	42	-	10	NP	NP	15	A-3		
				26	18	47	-	9	NP	NP	15	A-3		
			28.0-31.5	21	28	38	-	13	NP	NP	12	A-3a		

BORING	STATION & OFFSET		DEPTH		CL	From	To	% Agg.	C.S.	% F.S.	% Silt	% Clay	L.L.	P.I.	W.C. CLASS	SHTL
	434 + 80	434 + 80	CL	CL												
B-021-6-60	B-21-6	434 + 80	0.0- 6.0	14	1	26	31	15	48	16	34	A-4a				
			6.0- 8.5	8	13	44	24	11	139	33	80	A-4a				
			8.5-12.0	0	8	56	23	13	NP	NP	14	A-4a				
			12.0-18.0	22	30	41	-	7	NP	NP	17	A-1b				
			18.0-25.5	58	26	9	-	7	NP	NP	9	A-1a				
			25.5-30.0	1	10	86	-	3	NP	NP	22	A-3				
				0	12	86	-	2	NP	NP	22	A-3				
			30.0-32.0	38	9	41	-	12	NP	NP	13	A-3a				
			32.0-33.5	53	10	25	-	12	NP	NP	11	A-1b				
			33.5-44.0	3	1	2	74	20	22	3	25	A-4b				
				0	1	12	76	11	NP	NP	21	A-4b				
				9	3	6	55	27	23	3	21	A-4b				
			44.0-52.0	4	5	21	48	22	18	3	15	A-4a				
				21	6	16	40	17	17	1	16	A-4a				
			52.0-85.5	4	5	17	54	20	18	3	16	A-4b				
				10	4	15	52	19	19	2	20	A-4b				
				0	0	0	85	15	25	2	25	A-4b				
				0	0	0	86	14	25	4	25	A-4b				
				0	0	10	70	20	20	4	23	A-4b				
			85.5-88.3	0	0	71	-	29	-	-	21	A-3a				
			88.3-90.0	1	3	12	51	27	20	4	17	A-4b				
B-021-7-60	B-21-7	435 + 50	0.0- 7.0	19	14	30	23	14	NP	NP	24	A-4a				
				3	12	46	27	12	NP	NP	13	A-4a				
			7.0- 8.0	7	17	42	18	16	NP	NP	16	A-3a				
			8.0-13.0	15	33	44	-	8	-	NP	10	A-3				
			13.0-18.0	51	29	10	-	10	-	NP	6	A-1-a				
			18.0-31.5	1	3	91	-	5	-	NP	22	A-3				
				0	4	92	-	3	-	NP	24	A-3				
				0	5	90	-	5	-	NP	22	A-3				
R-001-0-59	R-1	441 + 86	0.3- 1.5	7	10	25	35	23	29/26	7/1	21	A-4a				
			1.5- 8.0	25	16	36	14	9	18	0	12	A-3a				
				16	20	47	10	7	-	-	12	A-3a				
			8.0-15.0	36	13	34	13	4	-	-	16	A-2-4				
				26	14	30	24	6	19	0	22	A-2-4				
R-002-0-59	R-2	445 + 21	0.0- 1.5	18	11	19	36	16	37	3	30	A-4a				
			1.5- 5-5	23	12	37	18	10	17	0	15	A-2-4				
			5.5- 9.0	5	21	62	-	12	-	NP	8	A-3a*				
			9.0-11.0	47	5	34	9	5	NP	NP	14	A-1-b*				
			11.0-16.0	1	0	80	16	3	NP	NP	27	A-3a				
R-003-0-59	R-3	449 + 38	0.3- 9.0	18	8	21	36	17	31	4	10	A-4a				
				29	5	13	35	18	26	7	17	A-4a				
				10	5	18	45	22	22	4	15	A-4a				
			9.0-19.0	7	3	15	52	23	23	3	18	A-4b				
				2	4	16	53	25	24	4	19	A-4b				
R-004-0-59	R-4	452 + 64	0.0- 1.5	36	19	20	20	5	-	0	21	A-1-b				
			1.5-14.0	10	6	30	35	19	22	2	15	A-4a				
				9	7	28	36	20	23	6	12	A-4a				
			14.0-25.0	20	10	20	33	17	25	7	12	A-4a				
				3	2	18	55	22	23	3	18	A-4b				
				0	0	1	62	37	27	6	24	A-4b				
			25.0-28.5	5	3	12	55	25	26	5	34	A-4b				
				37	0	53	-	10	-	-	6	A-3*				
R-010-0-59	R-10	447 + 69	0 - 2.5	19	15	29	22	15	24	3	20	A-4a				
			2.5-10.0	3	1	11	56	29	26	5	20	A-4b				
			10.0-12.0	53	4	30	-	13	-	NP	10	A-1-b				
			12.0-27.0	Gray and Brown Broken Sandstone								Visual				
R-011-0-59	R-11	450 + 38	0 - 14.0	21	8	27	24	20	29	4	25	A-4a				
				22	6	24	31	17	21	3	18	A-4a				
			14.0-18.0	28	17	15	22	18	24	4	19	A-4a				
			18.0-33.0	10	5	13	50	22	20	3	17	A-4b				
				Gray and Brown Broken Sandstone								Visual				
R-012-0-59	R-12	451 + 72.5	0.0- 2.0	18	11	39	18	14	22	2	21	A-3a				
			2.0-10.0	5	4	16	48	27	24	5	17	A-4a				
				8	7	17	44	24	23	3	20	A-4a				
			10.0-13.0	31	31	25	-	13	-	NP	5	A-1-b				
			13.0-20.0	0	3	91	-	6	-	NP	5	A-3				
			20.0-22.5	4	7	14	51	24	22	3	20	A-4b *				
			22.5-27.5	Light Brown Broken Sandstone								Visual				

STATION & OFFSET	DEPTH	FROM TO	AGG.	C.S.	F.S.	SILI	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.	
			SR 8 (NORTHBOUND LANES)									
H-041-0-61	CL	521+00	0.0-5.0 5.0-9.5	4 6	17 18	54 25	25 16	NP 21	NP 15	16 13	A-4a A-4a	
H-042-0-61	CL	525+00	0.6-5.0 5.0-10.0	9 14	21 21	35 38	18 18	21 23	3 3	12 13	A-4a * A-4a *	
			SR 8 (CL SURVEY)									
H-043-0-61	CL	327+00	0.0-5.0 5.0-10.0 10.0-14.0 14.0-18.5	16 0 17 26	5 11 31 23 19	48 37 38 32	20 27 16 19	NP 20 NP 13	NP 3 NP 3	6 13 17 13	A-4a * A-4a A-4a A-4a	
H-044-0-61	CL	330+00	0.0-4.0 4.0-9.0 9.0-14.0 14.0-18.0 18.0-23.0 23.0-27.0	30 21 34 24 18 0	7 8 7 11 14 13	33 34 25 40 40 46	12 12 13 10 11 13	NP NP NP NP NP NP	NP NP NP NP NP NP	9 13 16 15 14 13	A-2-4 A-4a * A-2-4 A-3a A-3a A-4a	
H-044-0-61	CL	339+00	0.3-2.0 2.0-5.0 3.0-7.0	11 53 0	5 5 3	32 25 11	16 7 58	NP NP 30	NP NP 15	14 8 21	A-4a A-1-D A-6a	
H-045-0-61	CL	341+92	0.3-1.0 1.0-3.5 3.5-7.0 7.0-11.5	6 4 9 34	8 6 10 6	27 18 44 38 13	24 22 12 9	NP NP NP NP	5 NP NP NP	14 13 9 7	A-4a A-4b A-4a A-2-4	
H-046-0-61	CL	350+35	0.3-1.3 1.3-2.0 2.0-3.0 3.0-3.5 3.5-9.0 9.0-11.0	18 20 25 25 0	7 17 17 16 21	40 38 28 19	18 19	20 23 23	6 7 8	15 18 18	Visual A-4a A-4a A-4a Visual Visual	
H-047-0-61	CL	512+05	0.3-4.0 5.0-10.0 10.0-13.0 13.0-16.5	0 0 25 0	10 12 11 5	53 53 34 12	24 24 20 11	NP NP NP NP	NP NP NP NP	10 10 13 5	A-4a A-4a A-4a A-3a	
			DRIVE SAMPLE SOIL TEST DATA									
			SR 8 (Northbound Lanes)									
H-048-0-61	57'Rt	515+73	2.5-3.5 5.0-6.0 7.5-8.5 10.0-11.0 15.0-16.0 20.0-21.0 25.0-26.0 30.0-31.0 35.0-36.0	0 20 27 10	9 10 22 7	21 27 23 55	38 24 11 16	32 19 12 12	5 4 NP NP	16 12 13 12	Visual A-4a A-4a A-1-D A-3a Visual A-3a A-1-D A-4a	
			SR 8 (Northbound Lanes) (Cont'd)									
B-016-0-63	120'Lt	512+19	2.5-3.5 5.0-6.0 7.5-8.5 10.0-11.0 12.5-13.5 15.0-16.0 17.5-18.5 20.0-21.0 25.0-26.0 30.0-31.0 35.0-36.0 40.0-41.0 45.0-46.0 50.0-51.0 55.0-55.4	10 0 12 15 17 0	6 6 7 4 5	17 21 20 17 14 13	37 43 33 35 37 54	30 30 28 28 28	7 6 7 4 2	16 15 14 13 14 12	A-4a A-4a A-4a A-4a A-4a A-4b Visual A-4a Visual A-1-D A-3a A-3 A-1-D Visual Visual	

H-045-0-61	STATION & OFFSET	DEPTH FROM TO	% AGG. C.S. F.S. SILT CLAY			L.L.	P.I.	% M.C.	SHTL CLASS.		
			%	%	%						
	SR 8 (CL SURVEY)										
H-045-0-61	333+63 45'Rt	5.0-6.0	41	6	11	25	17	23	7	15	A-4a
H-046-0-61	333+06 6'Rt	5.0-6.0	54	15	19	-	12	-	NP	15	A-1-0
H-047-2-61	341+90 85'Lt	2.0-3.0 3.0-6.0	31 36	3 4	18 14	33 29	13	19	7 NP	12 16	A-4a A-4a
H-051-1-61	350+43 110'Lt	2.0-3.0	Gray Clayey Silty Sand with Trace of Stone Fragments							15	Visual
		5.0-6.0	9	2	13	53	27	23	7	24	A-4b
		10.0-10.5	10	10	19	36	26	23	8	16	A-4a
H-051-0-61	350+35 CL	0.2-1.3 1.3-2.0 2.0-5.0 5.0-8.5 8.5-9.0 9.0-11.0	18 20 25 25	7 7 11	17 16 21	40 38 26	18 19 17	20 22 23	6 7 8	15 17 18 18	Visual A-4a A-4a A-4a Visual Visual
H-052-1-61	353+30 110'Lt	0.2-1.0 1.0-2.5 2.5-8.0 8.0-9.5	15 16 13 13	8 4 8	30 19 20	29 47 42	20 24 25	20	NP 15 NP 3	17 15 16 18	A-4-b A-4-b A-4e0 Visual
H-052-0-61	353+30 CL	0.8-3.0 3.0-5.5 5.5-11.0 11.0-13.5 13.5-16.0 16.0-19.0 19.0-20.0	47 22 12 10	7 6 6 4	23 37 23 21	16 18 38 40	7 17 21 25	7	NP NP 17 21 29	14 17 16 18 12 20 13	A-1-b A-2-4 A-4a A-4a Visual Visual Visual
H-052-2-61	353+30 95'Lt	0.3-1.5 1.5-3.0 3.0-6.0 6.0-10.0	46 6 0 7	8 4 4 8	24 26 12 18	14 36 36 43	8 28 28 24	8	NP NP NP NP	9 20 22 13	A-1-b A-4a A-4b A-4a
H-053-0-61	356+30 25'Lt	0.2-1.0 1.0-2.5 2.5-5.0 5.0-7.5 7.5-9.0 9.0-10.0	12 1 0 25 61	1 1 6 4 4	29 18 42 20 11	35 52 29 34 4	19 28 23 17 20	19	NP NP NP NP	17 19 16 17 8 12	A-4a A-4b A-4a A-4a A-1-b Visual
H-053-1-61	356+65 135'Lt	0.2-1.0 1.0-3.0 3.5-5.5 5.5-6.0	0 1 12 12	2 4 6 6	28 44 47 24	53 35 24	17 16 18	17	NP NP NP	11 8 8 8	A-4b A-4a A-3a Visual
H-055-0-61	361+00 18'Lt	0.6-4.5 4.5-8.0 8.0-10.0	17 0	8 1	16 3	40 55	19 41	19	NP NP NP	17 18 9	A-4a A-6a Visual
H-056-0-61	363+45 32'Lt	0.4-1.5 1.5-5.0 5.0-9.0 9.0-10.0 10.0-12.5 12.5-13.5	23 47 20 25 25	6 6 10 2	22 15 19 8	25 17 29 33	24 15 22 32	24	NP NP NP NP	16 12 16 15	A-4a A-2-4 A-4a A-6a Visual Visual
H-057-0-61	366+65 CL	0.7-4.5 4.5-5.0	17 17	6 6	26 26	28 28	23	21	8	11 8	A-4a Visual
H-058-0-61	374+75 CL	0.6-2.5 2.5-5.0 5.0-7.0 7.0-10.5 10.5-14.0 14.0-16.5 16.5-20.0	0 9 8 21 52 10 37	5 4 6 5 5 5	16 15 19 28 16 24 24	45 46 48 35 17 40 15	34 26 19 11 10 18 19	34	7 6 NP NP NP NP	18 17 18 14 16 12 11	A-4a A-4a A-4a A-4a A-2-4 A-4a A-2-4
H-058-1-61	374+75 180'Lt	0.4-3.0 3.0-7.0 7.0-10.0	11 9 23	5 5 5	18 19 23	41 50 29	25 17 17	25	NP NP NP	14 14 22	A-4a A-4b A-4a
H-059-0-61	378+60 CL	0.6-2.0 2.0-6.5 6.5-9.5	19 13 39	7 4 7	14 17 23	28 44 20	22 21 11	22	5 9 NP	9 12 12	A-4a A-4a A-2-4
H-059-1-61	378+60 130'Lt	0.7-1.5 1.5-5.0 5.0-10.0	14 10 16	8 5 7	27 19 26	28 43 35	23 23 16	23	8 5 3	8 15 13	A-4a A-4a A-4a

H-060-0-61	STATION & OFFSET	DEPTH FROM TO	AGG.	C.S.	F.S.	S&I	CLAY	L.L.	P.I.	W.C.	SHTL CLASS.
H-060-0-61	382+78 CL	0.3-4.0	9	6	14	44	27	27	11	27	A-6a
		4.0-7.5	11	6	17	46	20	22	7	17	A-4a
		7.5-10.0	15	6	20	39	20	18	5	12	A-4a
H-061-0-61	388+00 CL	0.3-3.0	24	5	17	38	16	18	5	14	A-4a *
		3.0-5.0	38	4	17	27	14	19	5	15	A-4a *
		5.0-7.5	38	4	11	31	16	23	7	23	A-4a
H-062-0-61	391+54 65'RB	0.6-1.5	12	4	14	48	22	NP	NP	25	A-4a
		1.5-7.5	7	7	19	41	26	21	7	16	A-4a
		7.5-10.0	16	7	40	25	12	NP	NP	13	A-4a
		10.0-11.0	73	1	16	6	4	NP	NP	20	A-1-a
H-051-1-61	350+43 110'LB	2.0-3.0	Gray Clayey Silty Sand with Trace of Stone Fragments								Visual
		5.0-6.0	9	2	9	53	27	25	7	24	A-4b
		10.0-10.5	10	10	19	35	26	23	8	16	A-4a
H-053-1-61	356+38 175'LB	2.0-3.0	0	4	72	12	12	NP	NP	10	A-3a
		5.0-6.0	7	6	73	6	8	NP	NP	18	A-3a
		10.0-11.0	30	3	48	9	10	NP	NP	23	A-3a
H-063-0-61	394+40 30'LB	5.0-6.0	18	7	16	36	23	NP	NP	16	A-4a
		10.0-11.0	Gray Gravel and Stone Fragments							8	Visual

SUMMARY OF SOIL TEST DATA
I.R. 76

EXPLORATION NO. STATION & OFFSET	FROM	TO	SAMPLE ID	% REC	% HP	% TSF	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GI)
B-036-0-79 STA. 03+45, 100' RT. NORTHING = EASTING =	2.5 - 3.0	SS-1	-	-	56	3	5	25	11	24	18	6	6	A-4a	(0)	
B-037-0-79 STA. 09+50, 110' RT. NORTHING = EASTING =	2.5 - 3.0	SS-1	-	-	18	4	11	36	31	26	17	9	15	A-4a	-	
B-038-0-79 STA. 03+80, 42' LT. NORTHING = EASTING =	2.5 - 3.5	SS-1	-	-	22	8	13	32	25	22	16	6	11	A-4a	-	
B-039-0-79 STA. 249+25, 75' LT. NORTHING = EASTING =	5.0 - 6.5	SS-1	-	-	0	1	2	52	45	31	23	8	24	A-4b	-	
B-040-0-79 STA. 09+35, 62' RT. NORTHING = EASTING =	5.0 - 6.5	SS-1	-	-	4	3	2	48	43	33	23	10	15	A-4a	-	
B-041-0-79 STA. 5+05, 40' RT NORTHING = EASTING =	2.5 - 3.5	SS-1	-	-	7	8	36	32	17	19	16	3	14	A-4a	-	
B-042-0-79 STA. 9+00, 45' RT NORTHING = EASTING =	2.5 - 4.0	SS-1	-	-	3	7	30	30	30	20	15	5	17	A-4a	(0)	
B-043-0-79 STA. 469+85, 25' RT NORTHING = EASTING =	2.5 - 4.0	SS-1	-	-	7	7	33	28	25	19	16	3	12	A-4a	(0)	
B-044-0-79 STA. 2+35, 42' RT NORTHING = EASTING =	2.5 - 4.0	SS-1	-	-	15	1	6	39	39	39	23	16	37	A-4a	(0)	
B-001-0-61 STA. 50+17, 77' LT. NORTHING = EASTING =	0.0 - 1.5	SS-1	-	-	-	-	-	-	-	-	-	-	-	-	-	
B-002-0-61 STA. 49+57, 77' LT. NORTHING = EASTING =	0.0 - 1.5	SS-1	-	-	-	-	-	-	-	-	-	-	-	-	-	

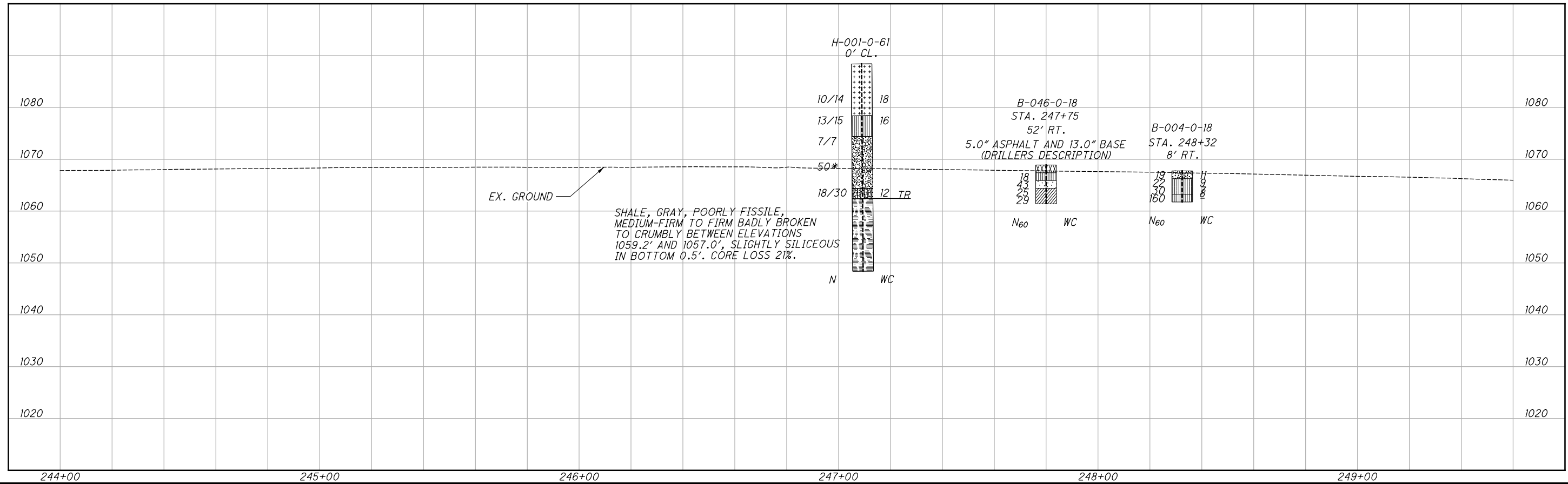
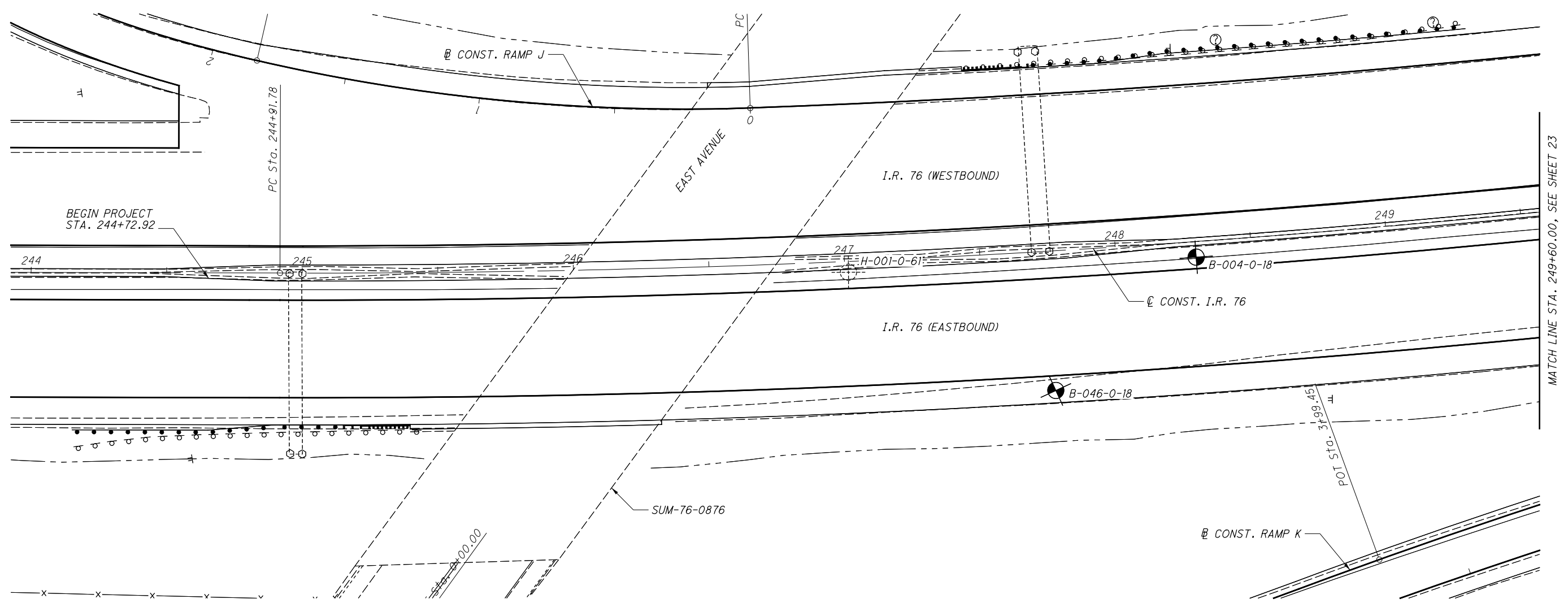
SUMMARY OF SOIL TEST DATA
I.R. 76

EXPLORATION NO. STATION & OFFSET	FROM	TO	SAMPLE ID	% REC	% TSF	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	WC CLASS (GI)	ODOT	
B-003-0-61 STA. 50+25, 32'LT. NORTHING = EASTING =	0.0 -	1.5	SS-1	-	-	-	-	FILL - NO TESTS PERFORMED	-	-	-	-	-	-	-	
	2.5 -	4.0	SS-2	-	7	5	17	31	40	51	24	27	32	A-7-6	(14)	
	5.0 -	5.5	SS-3	-	10	13	36	25	16	23	16	7	21	A-4	(1)	
	5.5 -	6.5	SS-4	-	21	40	22	-	17	-	-	-	43	A-1-b	(0)	
	7.5 -	9.0	SS-5	-	7	29	50	-	14	-	-	-	20	A-3a	(0)	
	10.0 -	11.5	SS-6	-	8	6	80	-	6	-	-	-	23	A-3	(0)	
	12.5 -	14.0	SS-7	-	7	17	49	16	11	-	-	-	19	A-3a	(0)	
	15.0 -	15.5	SS-8	-	0	1	85	13	1	-	-	-	26	A-3a	(0)	
	15.5 -	16.5	SS-9	-	0	0	1	61	38	26	19	7	25	A-4b	(8)	
	17.0 -	18.5	SS-10	-	1	1	6	65	27	24	20	4	25	A-4b	(8)	
	20.0 -	21.5	SS-11	-	0	0	0	86	14	27	23	4	32	A-4b	(8)	
	22.5 -	24.0	SS-12	-	0	0	1	50	49	29	20	9	30	A-4b	(8)	
	25.0 -	26.5	SS-13	-	0	0	0	35	65	33	20	13	33	A-6a	(9)	
	30.0 -	31.5	SS-14	-	28	29	34	-	9	-	-	-	13	A-1-b	(0)	
	35.0 -	36.5	SS-15	-	26	36	31	-	7	-	-	-	15	A-1-b	(0)	
	40.0 -	41.5	SS-16	-	30	27	37	-	6	-	-	-	14	A-1-b	(0)	
	45.0 -	46.5	SS-17	-	20	24	44	-	12	-	-	-	15	A-3a	(0)	
	50.0 -	51.5	SS-18	-	16	17	60	-	7	-	-	-	17	A-3	(0)	
	55.0 -	56.5	SS-19	-	42	38	11	-	9	-	-	-	12	A-1-b	(0)	
	60.0 -	61.5	SS-20	-	3	1	7	75	14	-	-	-	21	A-4b	(8)	
65.0 -	66.5	SS-21	-	0	0	4	82	14	-	-	-	27	A-4b	(8)		
70.0 -	71.5	SS-22	-	0	0	0	2	76	22	21	20	1	27	A-4b	(8)	
71.5 -	73.0	SS-24	-	0	0	29	63	8	-	-	-	22	A-4b	(7)		
75.0 -	76.5	SS-25	-	0	0	33	61	6	-	-	-	21	A-4b	(8)		
78.0 -	79.5	SS-26	-	0	0	33	60	7	-	-	-	24	A-4b	(6)		
79.5 -	81.0	SS-27	-	0	0	33	60	7	-	-	-	24	A-4b	(6)		
B-004-0-61 STA. 50+62, CL NORTHING = EASTING =	0.5 -	2.0	SS-1	-	16	22	27	22	13	21	17	4	11	A-2-4	(0)	
	2.5 -	3.0	SS-2	-	12	27	35	14	40	51	46	5	14	A-3a	(0)	
	3.0 -	4.0	SS-3	-	7	31	41	7	16	23	8	15	22	A-2-6	(2)	
	5.0 -	6.5	SS-4	-	0	88	-	12	-	-	-	-	22	A-3a	(0)	
	7.5 -	9.0	SS-5	-	0	7	76	-	17	-	-	-	17	A-3a	(0)	
	10.0 -	11.5	SS-6	-	0	0	0	59	41	25	18	7	22	A-4b	(8)	
	12.5 -	14.0	SS-7	-	0	2	0	61	37	25	18	7	22	A-4b	(8)	
	15.0 -	16.5	SS-8	-	1	0	2	72	1	22	17	5	27	A-4b	(8)	
	17.5 -	19.0	SS-9	-	0	0	1	60	38	25	18	7	21	A-4b	(8)	
	20.0 -	20.5	SS-10	-	0	0	1	40	27	31	19	12	26	A-6a	(6)	
	20.5 -	22.5	SS-11	-	0	0	84	-	16	-	-	-	23	A-3a	(0)	
	25.0 -	26.5	SS-12	-	0	0	79	-	21	-	-	-	24	A-3a	(0)	
	30.0 -	31.5	SS-13	-	0	0	2	62	36	23	18	5	23	A-4b	(8)	
	35.0 -	36.5	SS-14	-	0	0	1	73	26	22	19	3	25	A-4b	(8)	
	40.0 -	41.5	SS-15	-	52	33	9	-	6	-	-	-	11	A-1-a	(0)	
	B-005-0-61 STA. 51+13, CL NORTHING = EASTING =	0.5 -	2.0	SS-1	-	16	24	29	18	13	21	17	4	11	A-2-4	(0)
		2.5 -	3.0	SS-2	-	24	33	21	12	40	51	46	5	14	A-3a	(0)
		3.0 -	4.0	SS-3	-	0	2	82	9	16	23	8	15	23	A-2-6	(0)
		5.0 -	6.5	SS-4	-	0	3	84	-	18	-	-	-	20	A-3a	(0)
		7.5 -	9.0	SS-5	-	0	3	89	-	8	-	-	-	24	A-3a	(0)
10.0 -		11.5	SS-6	-	0	1	8	64	41	25	18	7	21	A-4b	(8)	
13.5 -		15.0	SS-7	-	0	0	1	65	37	25	18	7	27	A-4b	(8)	
13.5 -		15.0	SS-7A	-	0	0	0	60	1	22	17	5	22	A-4b	(8)	
16.0 -		16.5	SS-8	-	0	0	0	72	38	25	18	7	26	A-4b	(8)	
20.0 -		21.5	SS-10	-	0	0	0	80	-	20	-	12	24	A-6a	(0)	
25.0 -		26.5	SS-11	-	0	0	78	-	21	-	-	-	22	A-3a	(0)	
30.0 -		31.5	SS-12	-	0	0	0	70	30	21	18	3	24	A-4b	(8)	
33.5 -		35.0	SS-13	-	0	0	6	84	10	-	-	-	21	A-4b	(8)	
35.0 -		36.5	SS-14	-	0	0	3	83	14	-	-	-	25	A-1-a	(0)	
40.0 -		40.5	SS-15	-	45	29	8	13	5	-	-	-	10	A-1-b	(0)	
40.5 -		41.5	SS-16	-	58	26	8	-	8	-	-	-	9	A-1-a	(0)	
45.0 -		46.5	SS-17	-	54	30	11	-	5	-	-	-	15	A-1-a	(0)	
50.0 -		50.5	SS-18	-	10	25	42	-	23	-	-	-	18	A-3a	(0)	
55.0 -		56.0	SS-19	-	8	7	1	-	13	-	-	-	-	A-3a	(0)	
56.0 -		56.5	SS-20	-	-	-	-	-	-	-	-	-	-	-	-	
60.0 -	61.5	SS-21	-	0	0	17	71	12	-	-	-	-	21	A-4b	(8)	
65.0 -	66.5	SS-22	-	1	9	79	-	11	-	-	-	17	A-4a	(2)		
70.0 -	71.5	SS-23	-	0	0	72	26	2	-	-	-	19	A-3a	(0)		
75.0 -	76.5	SS-24	-	0	0	72	26	2	-	-	-	21	A-3a	(0)		
80.0 -	81.5	SS-25	-	0	1	66	29	4	-	-	-	19	A-3a	(0)		
B-006-0-61 STA. 48+38, 26' RT NORTHING = EASTING =	0.0 -	1.5	SS-1	-	-	-	-	-	-	-	-	-	-	-	-	
	2.5 -	4.0	SS-2	-	-	-	-	-	-	-	-	-	-	-	-	
	5.0 -	6.5	SS-3	-	4	9	32	31	24	25	18	7	20	A-4a	(0)	
	7.5 -	9.0	SS-4	-	26	7	27	25	15	19	16	3	14	A-4a	(0)	
	10.0 -	11.5	SS-5	-	45	6	20	17	12	19	14	5	11	A-2-4	(0)	
	12.5 -	13.0	SS-6	-	-	-	-	-	-	-	-	-	-	-	(8)	
	13.0 -	14.0	SS-7	-	9	16	63	-	12	-	-	-	7	A-3a	(8)	
	15.0 -	16.5	SS-7A	-	0	2	61	25	12	-	-	-	18	A-4a	(8)	
	17.5 -	19.0	SS-8	-	0	3	0	9	13	-	-	-	11	A-3a	(8)	
	20.0 -	21.5	SS-9	-	0	40	80	-	15	-	-	-	14	A-1-b	(0)	
	22.5 -	24.0	SS-10	-	0	35	75	-	9	-	-	-	14	A-1-b	(0)	
	25.0 -	26.5	SS-11	-	0	0	78	-	13	-	-	-	14	A-1-b	(0)	
	30.0 -	31.5	SS-12	-	0	46	0	-	13	-	-	-	18	A-1-b	(8)	
	35.0 -	36.5	SS-13	-	0	37	6	-	7	-	-	-	18	A-1-b	(8)	
	40.0 -	41.5	SS-14	-	0	9	3	33	12	15	14	1	14	A-4a	(8)	
	45.0 -	46.5	SS-15	-	45	16	8	14	5	16	15	1	12	A-1-b	(0)	
	50.0 -	51.5	SS-16	-	58	15	8	8	13	-	-	-	15	A-3a	(0)	
	55.0 -	56.5	SS-17	-	30	7	10	42	11	23	21	2	21	A-4a	(0)	
	B-007-0-61 STA. 49+10, 76' RT NORTHING = EASTING =	0.5 -	2.0	SS-1	-	-	-	-	-	-	-	-	-	-	-	-
		2.5 -	4.0	SS-2	-	0	46	37	17	19	3	16	19	19	A-4a	(4)
5.0 -		6.5	SS-3	-	21	60	14	-	5	-	-	-	4	A-1-b	(0)	
7.5 -		9.0	SS-4	-	9	55	33	-	3	-	-	-	4	A-1-b	(0)	
10.0 -		11.5	SS-5	-	11	44	41	-	4	-	-	-	4	A-1-b	(0)	
12.5 -		14.0	SS-6	-	16	63	17	-	4	-	-	-	4	A-1-b	(0)	
15.0 -		16.5	SS-7	-	0	2	94	-	4	-	-	-	5	A-3	(0)	
20.0 -		21.5	SS-7A	-	4	0	71	19	6	-	-	-	13	A-3a	(0)	
25.0 -		25.5	SS-8	-	1	0	8	77	14	22	22	0	23	A-4b	(8)	
25.5 -		26.5	SS-9	-	0	1	20	67	12	-	-	-	21	A-4b	(8)	
30.0 -		31.5	SS-10	-	-	-	-	-	-	-	-	-	-	-	-	
35.0 -		36.5	SS-11	-	47	24	18	-	11	-	-	-	9			

SUMMARY OF SOIL TEST DATA
I.R. 77

EXPLORATION NO. STATION & OFFSET	FROM	TO	SAMPLE ID	% REC	HP TSF	% GR	% CS	% FS	% SILT	% CLAY	LL	PL	PI	% WC	ODOT CLASS (GT)	
B-017-A-03 STA. 474+66, 176' LT NORTHING = EASTING =	0.0	1.5	SS-1	-	-	27	20	42	-	11	-	-	-	7	A-3a (0)	
	3.0	4.5	SS-2	-	-	21	17	49	-	13	-	-	-	13	A-3a (0)	
	6.0	7.5	SS-3	-	-	22	21	42	-	15	-	-	-	14	A-3a (0)	
	8.5	10.0	SS-4	-	-	42	18	17	16	4	20	16	4	14	A-1-b (0)	
	11.0	12.5	SS-5	-	-	53	23	7	15	2	-	-	-	13	A-1-b (0)	
	13.5	15.0	SS-6	-	-	52	23	10	10	5	22	18	4	14	A-1-a (0)	
	16.0	17.5	SS-7	-	-	42	11	29	11	7	18	16	2	15	A-1-a (0)	
	18.5	20.0	SS-8	-	-	24	11	14	28	23	23	16	7	12	A-4a (3)	
	21.0	21.5	SS-9	-	-	36	6	22	26	8	16	14	2	11	A-2-4 (0)	
	B-017-A-04 STA. 475+19, 166' LT NORTHING = EASTING =	0.0	1.5	SS-1	-	-	45	20	20	-	15	-	-	-	10	A-1-b (0)
		3.0	4.5	SS-2	-	-	27	5	36	23	9	-	-	-	14	A-2-4 (0)
6.0		7.5	SS-3	-	-	6	6	59	18	11	-	-	-	14	A-3a (0)	
8.5		10.0	SS-4	-	-	35	20	20	12	13	21	18	3	12	A-2-4 (0)	
11.0		12.5	SS-5	-	-	48	28	12	-	12	-	-	-	10	A-1-b (0)	
13.5		15.0	SS-6	-	-	45	25	16	9	5	20	17	3	16	A-1-b (0)	
16.0		17.5	SS-7	-	-	55	17	13	9	6	25	22	3	17	A-1-b (0)	
18.5		19.5	SS-8	-	-	54	12	9	17	8	24	19	5	16	A-1-b (3)	
23.0		24.5	SS-9	-	-	10	8	62	-	20	-	-	-	9	A-3a (0)	
25.5		27.0	SS-10	-	-	5	4	51	26	14	18	15	3	12	A-4a (1)	
30.5		31.0	SS-11	-	-	9	6	36	33	16	16	13	3	16	A-4a (3)	
B-017-A-05 STA. 475+89, 193' LT NORTHING = EASTING =	0.0	1.5	SS-1	-	-	38	13	34	-	15	-	-	-	6	A-1-b (0)	
	2.5	4.0	SS-2	-	-	46	16	19	-	19	-	-	-	7	A-1-b (0)	
	5.0	6.5	SS-3	-	-	32	11	37	-	20	-	-	-	9	A-2-4 (0)	
	7.5	9.0	SS-4	-	-	11	18	39	-	32	-	-	-	15	A-3a (0)	
	10.0	11.5	SS-5	-	-	39	32	13	-	16	-	-	-	13	A-1-b (0)	
	12.5	14.0	SS-6	-	-	46	27	12	-	15	-	-	-	13	A-1-b (0)	
	15.0	16.5	SS-7	-	-	41	29	12	-	18	-	-	-	15	A-1-b (0)	
	20.0	21.5	SS-8	-	-	31	4	31	26	8	15	12	3	12	A-2-4 (0)	
	25.0	26.5	SS-9	-	-	7	5	69	-	19	-	-	-	15	A-3a (0)	

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP001.dgn Sheet 8/27/2020 10:42:30 AM kmh/ace



N

HORIZONTAL SCALE IN FEET

DRAWN SM
 CHECKED PAN

SOIL PROFILE
BEGIN STA. 244+00.00 TO STA. 249+60.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

22

182

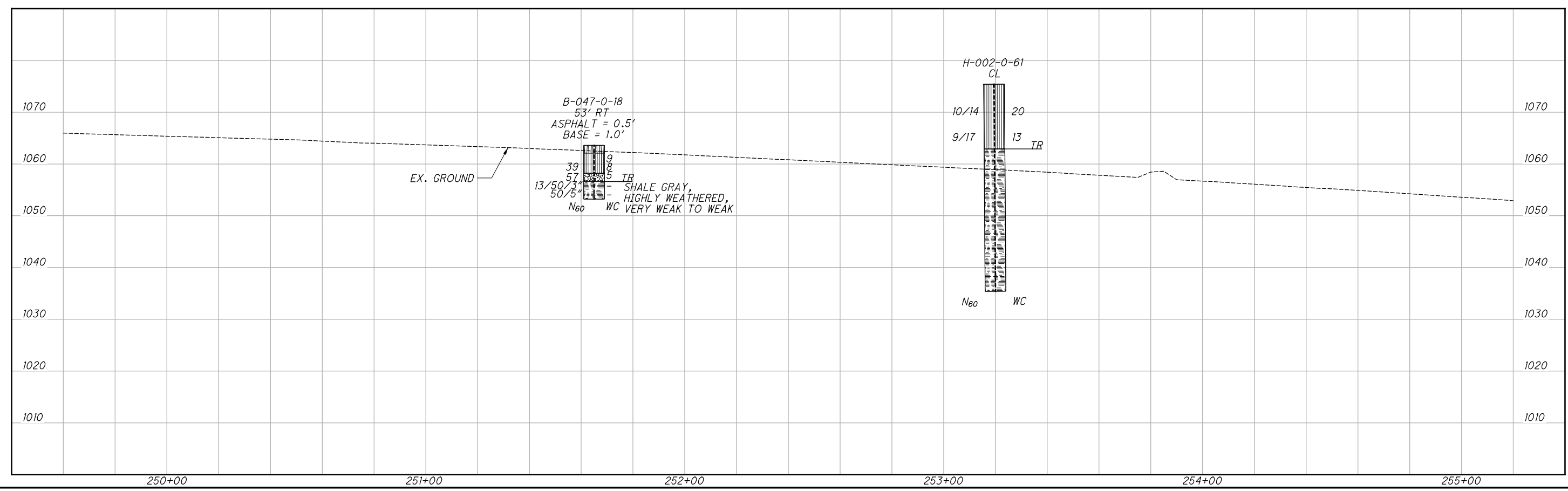
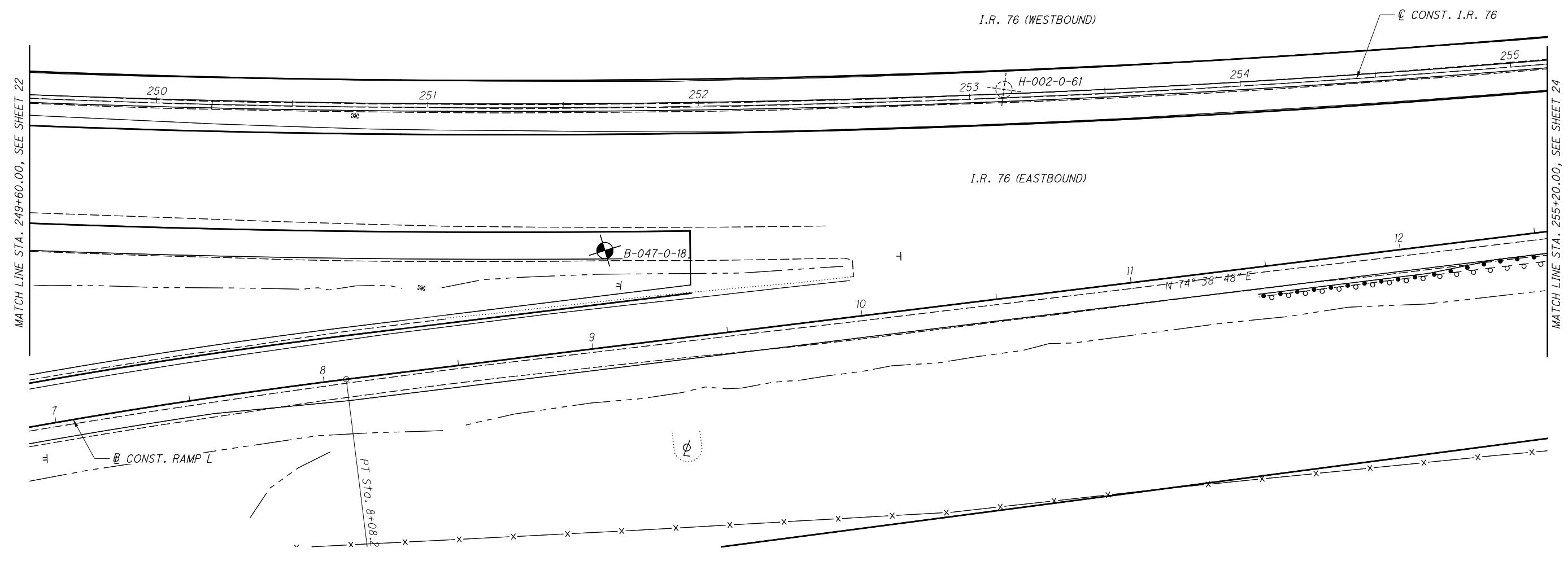


DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 249+60.00 TO STA. 255+20.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

23
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP002.dgn Sheet 8/27/2020 10:42:52 AM kmihalcea

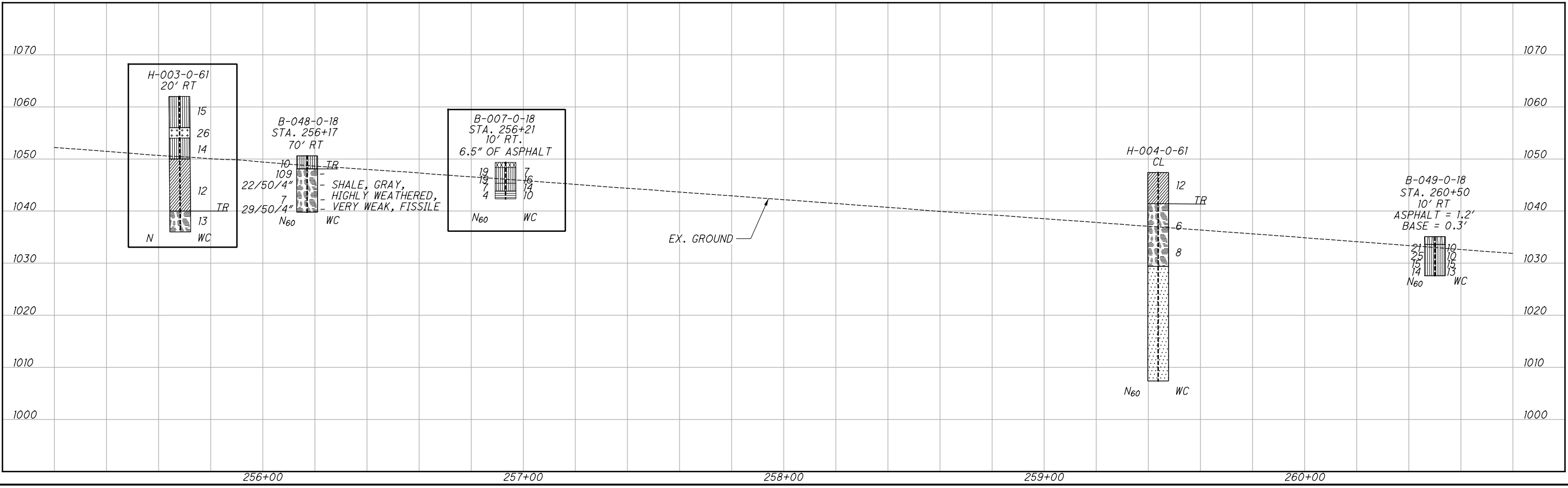
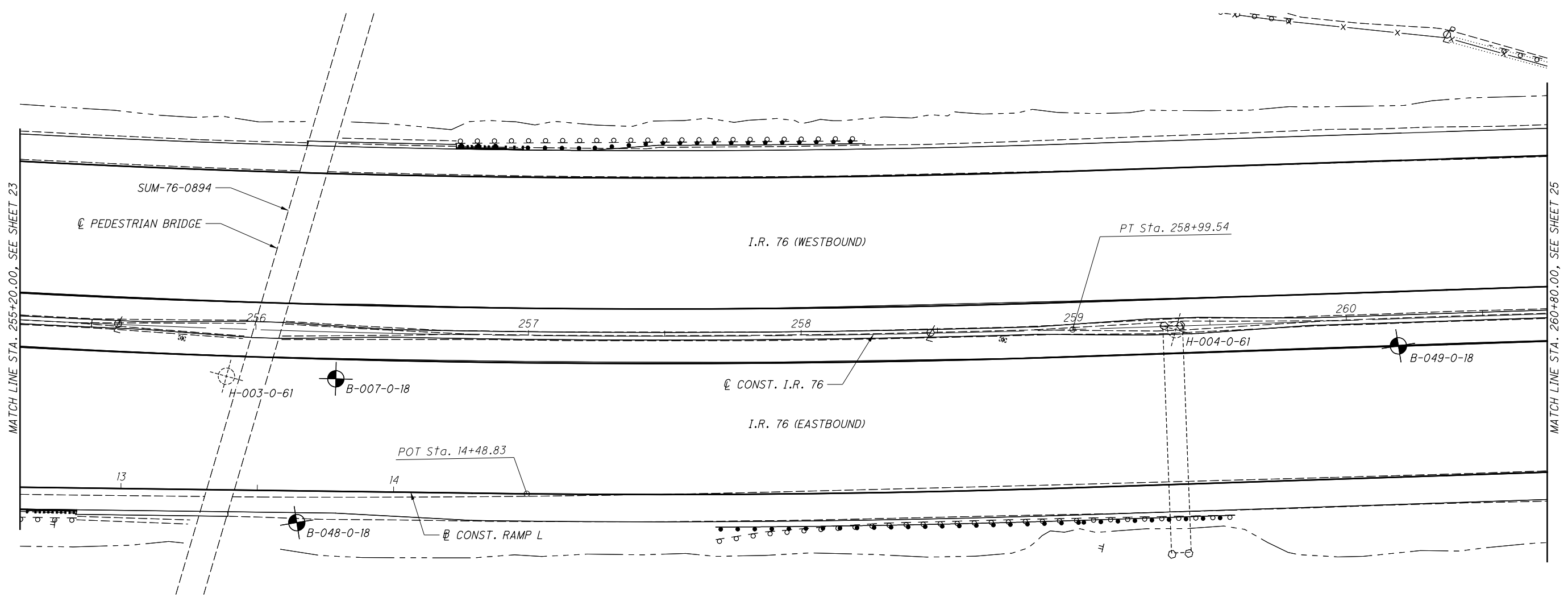


DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 255+20.00 TO STA. 260+80.00 I.R. 76

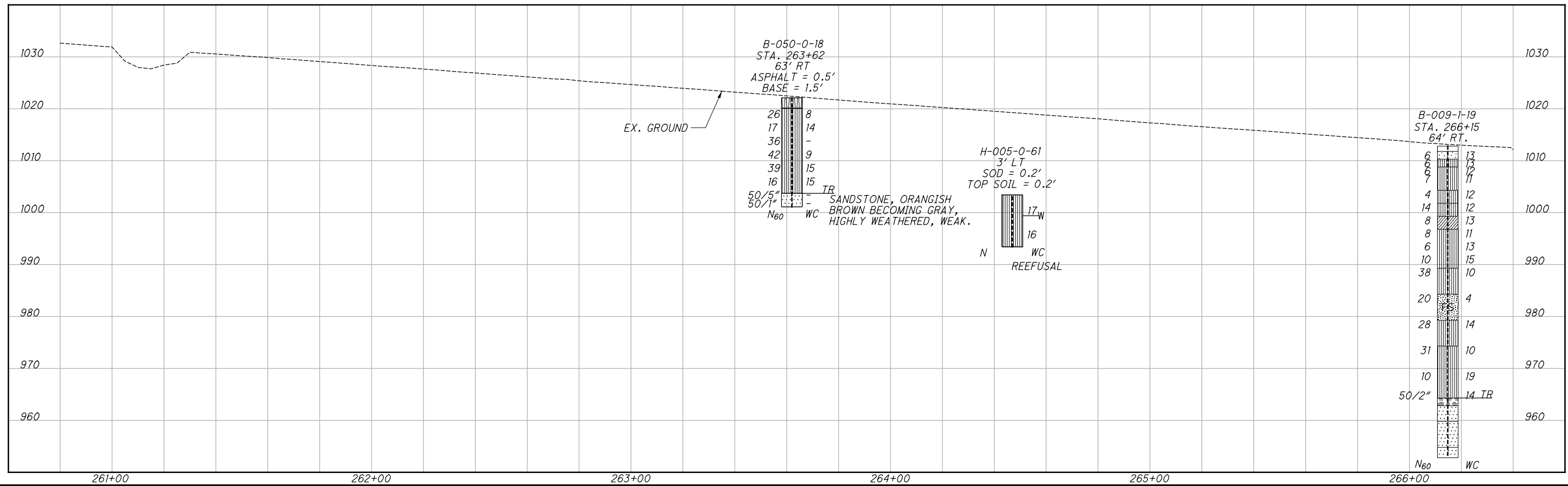
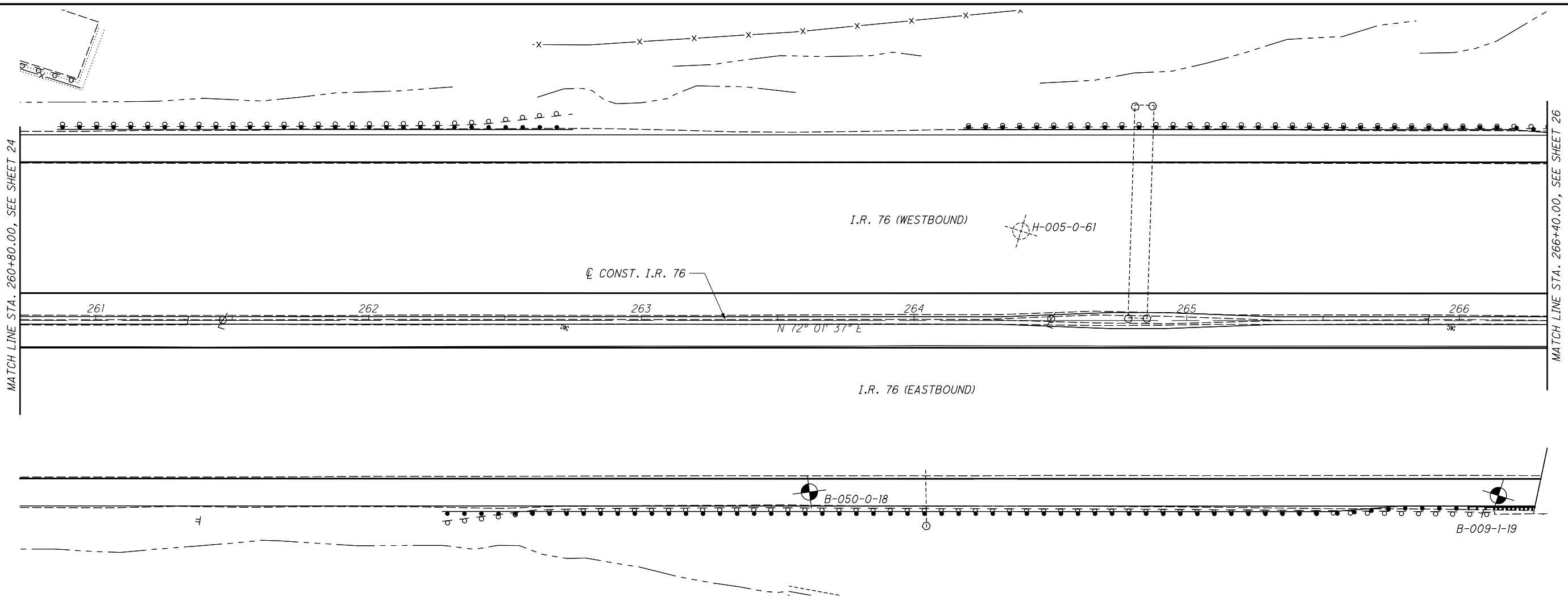
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

24
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP003.dgn Sheet 8/27/2020 10:43:13 AM kmihalcea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP004.dgn Sheet 8/27/2020 10:43:35 AM kminhalcea



SOIL PROFILE
STA. 260+80.00 TO STA. 266+40.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

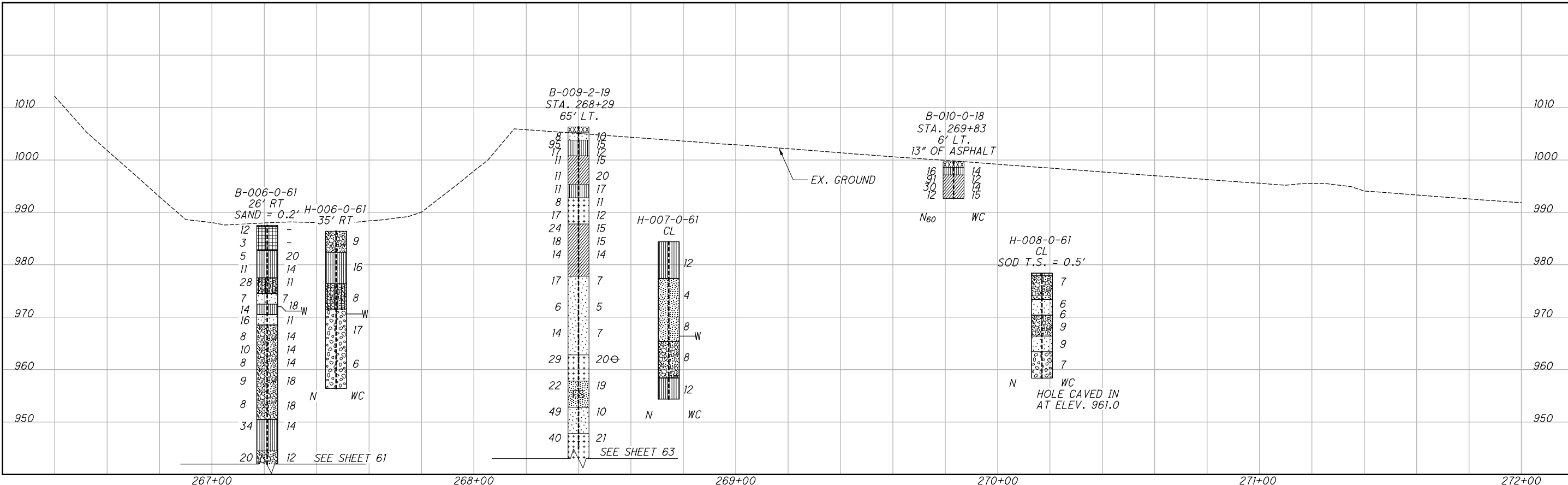
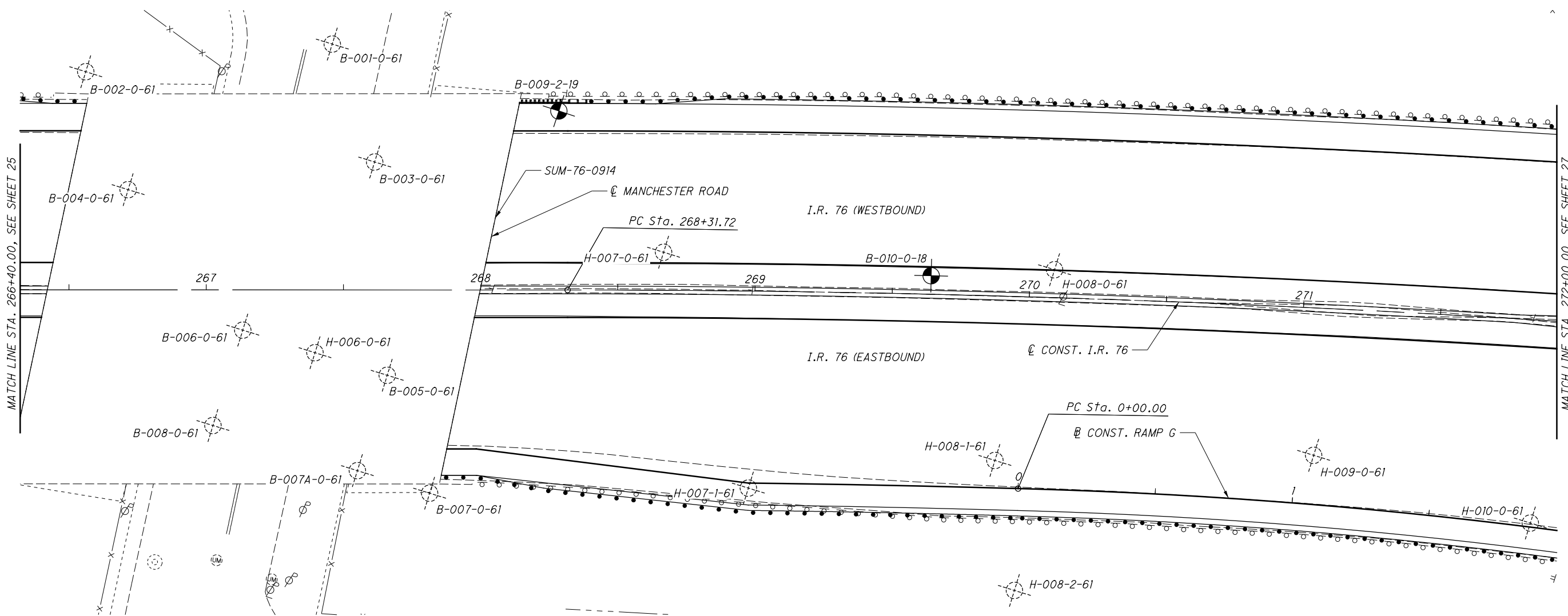


DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 266+40.00 TO STA. 272+00.00 I.R. 76

SUM-76/77/8-
8.24/9.74/0.00

26
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP005.dgn Sheet 8/27/2020 10:43:56 AM kmhnlce

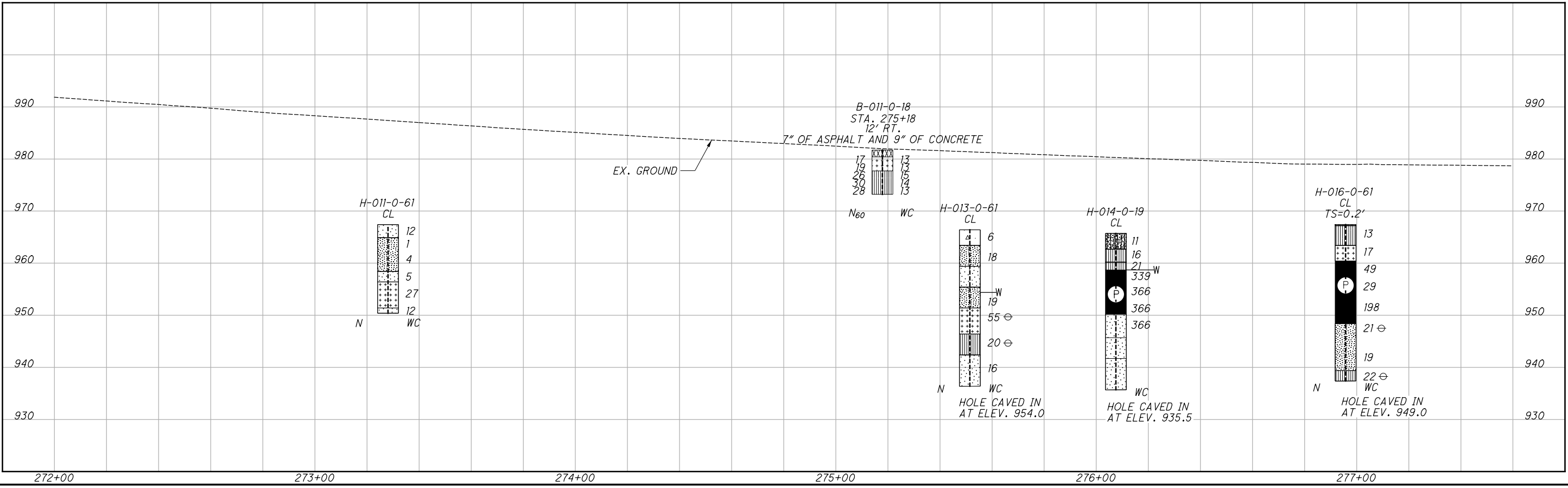
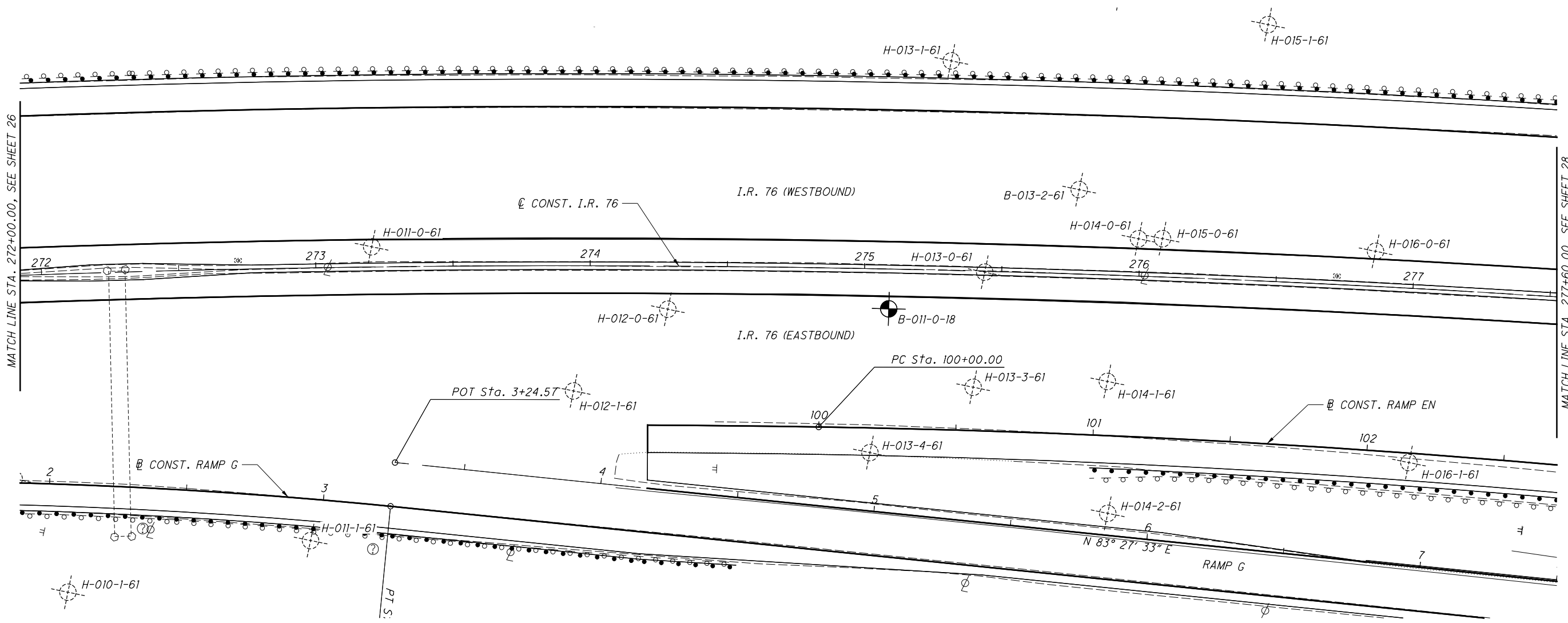


DRAWN SM
CHECKED PAN

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STA. 272+00.00 TO STA. 277+60.00 I.R. 76

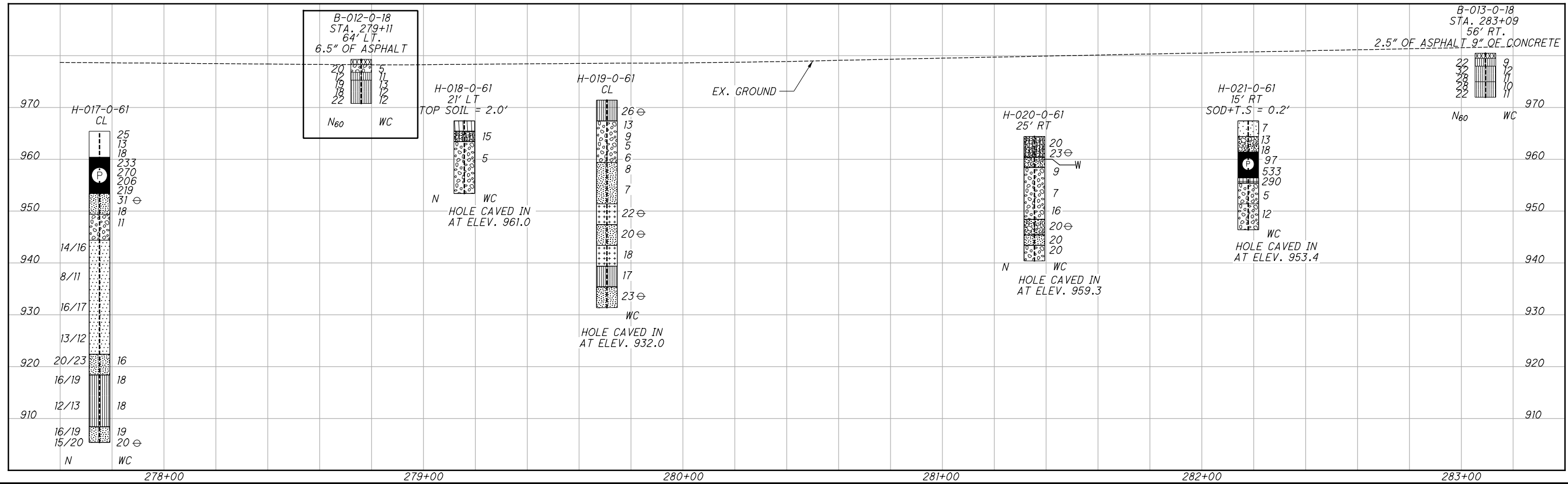
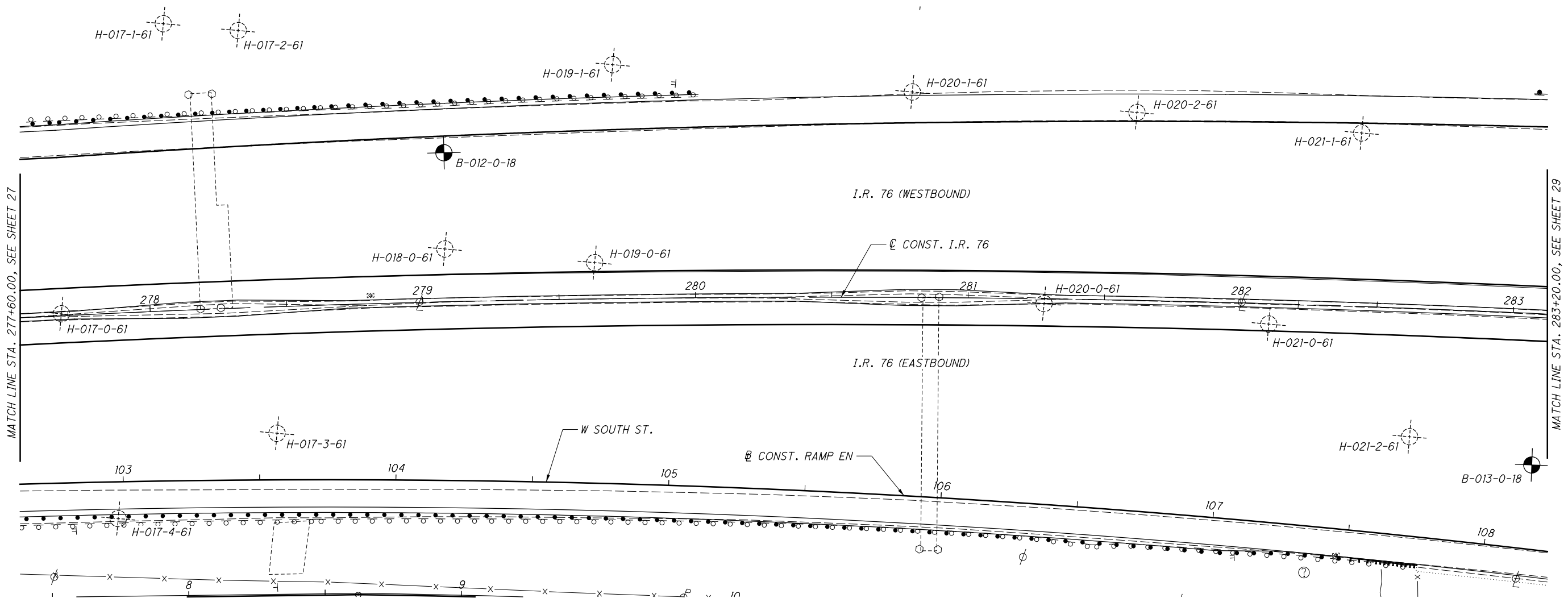
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

27
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP006.dgn_Sheet 8/27/2020 10:44:11 AM kmhabea

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SOIL PROFILE
STA. 277+60.00 TO STA. 283+20.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

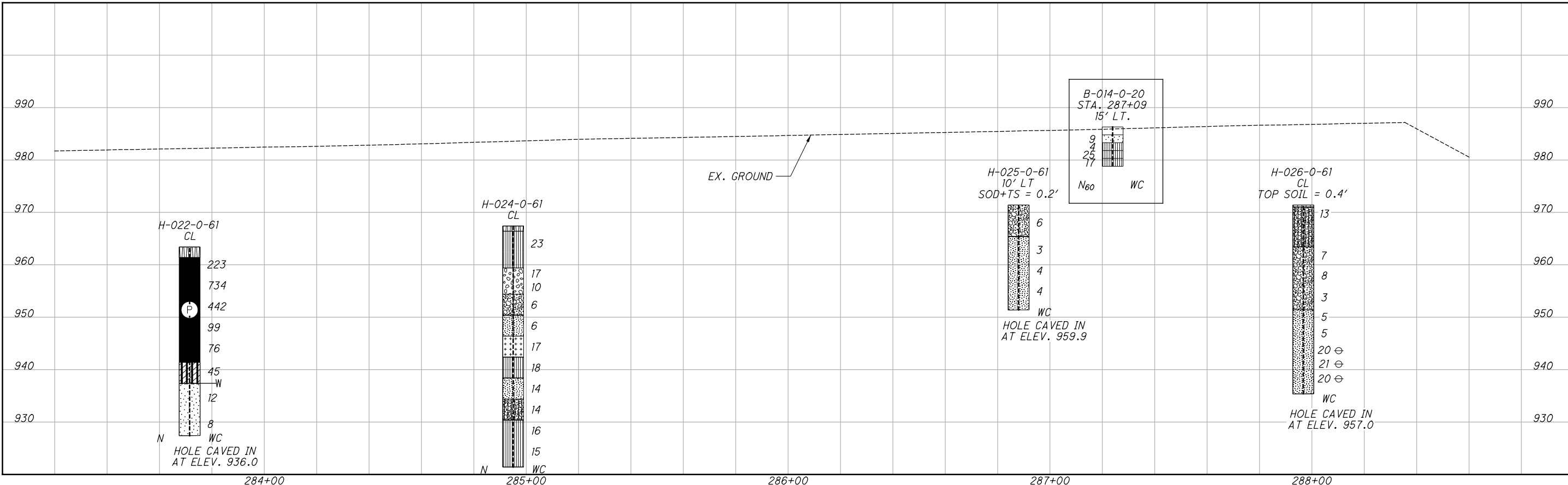
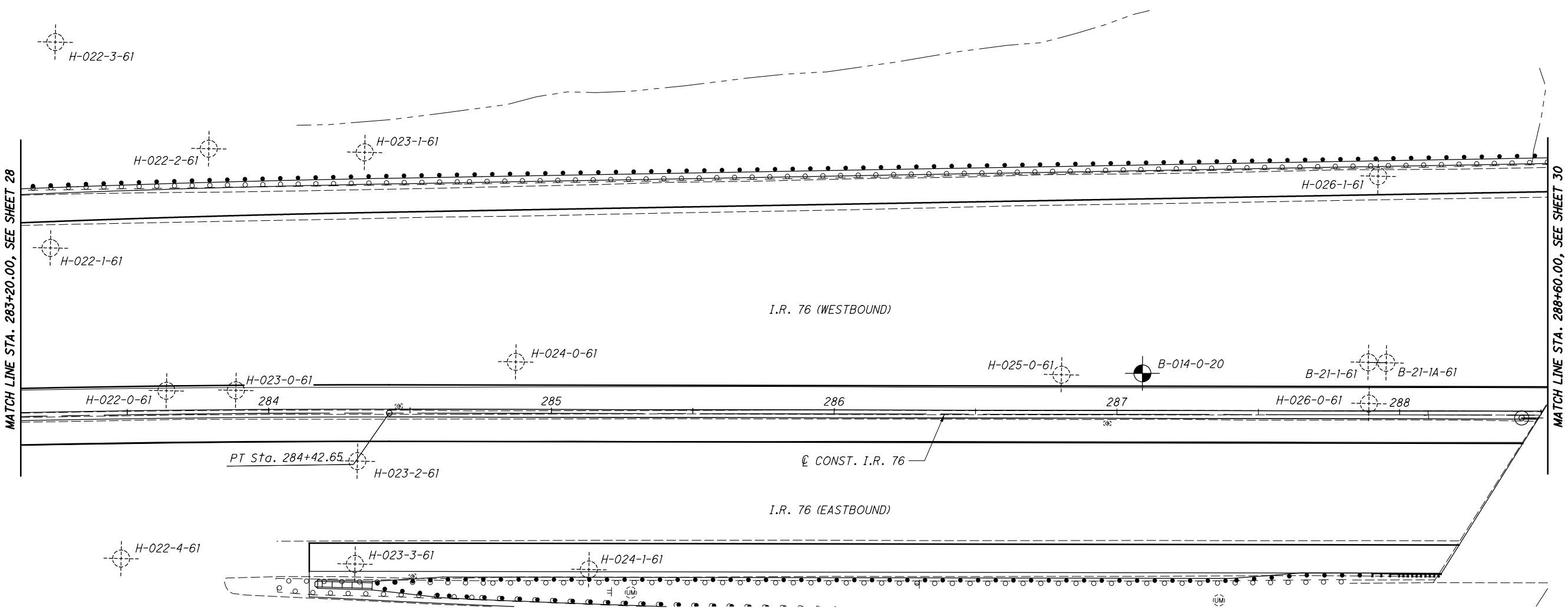


DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 283+20.00 TO STA. 288+60.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

29
182



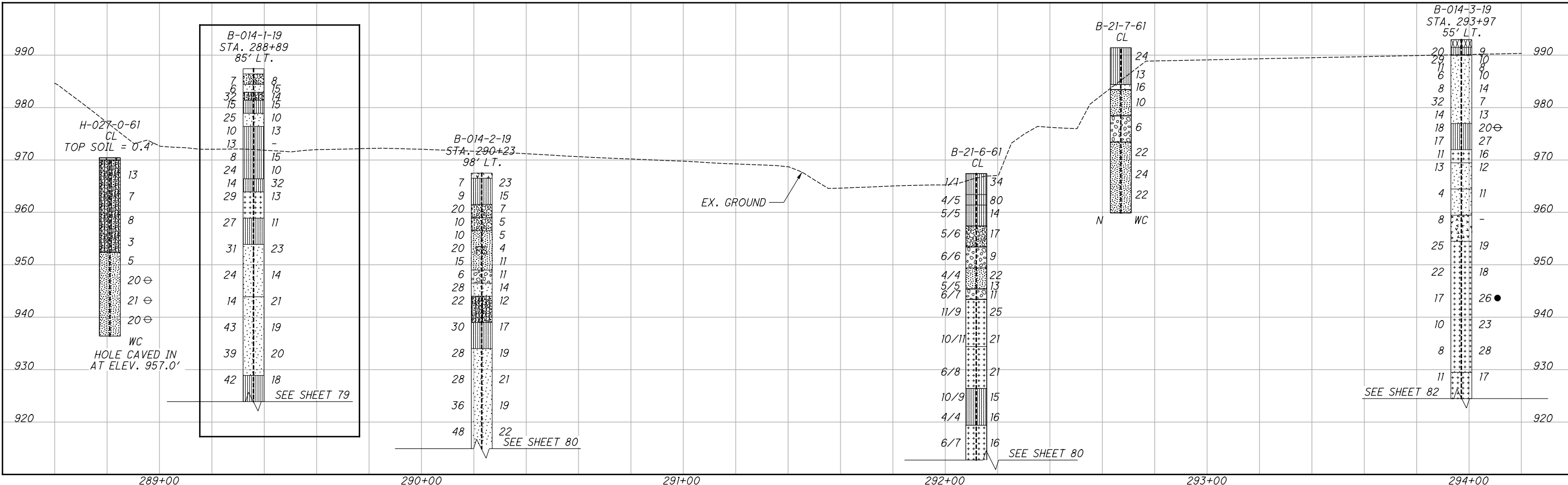
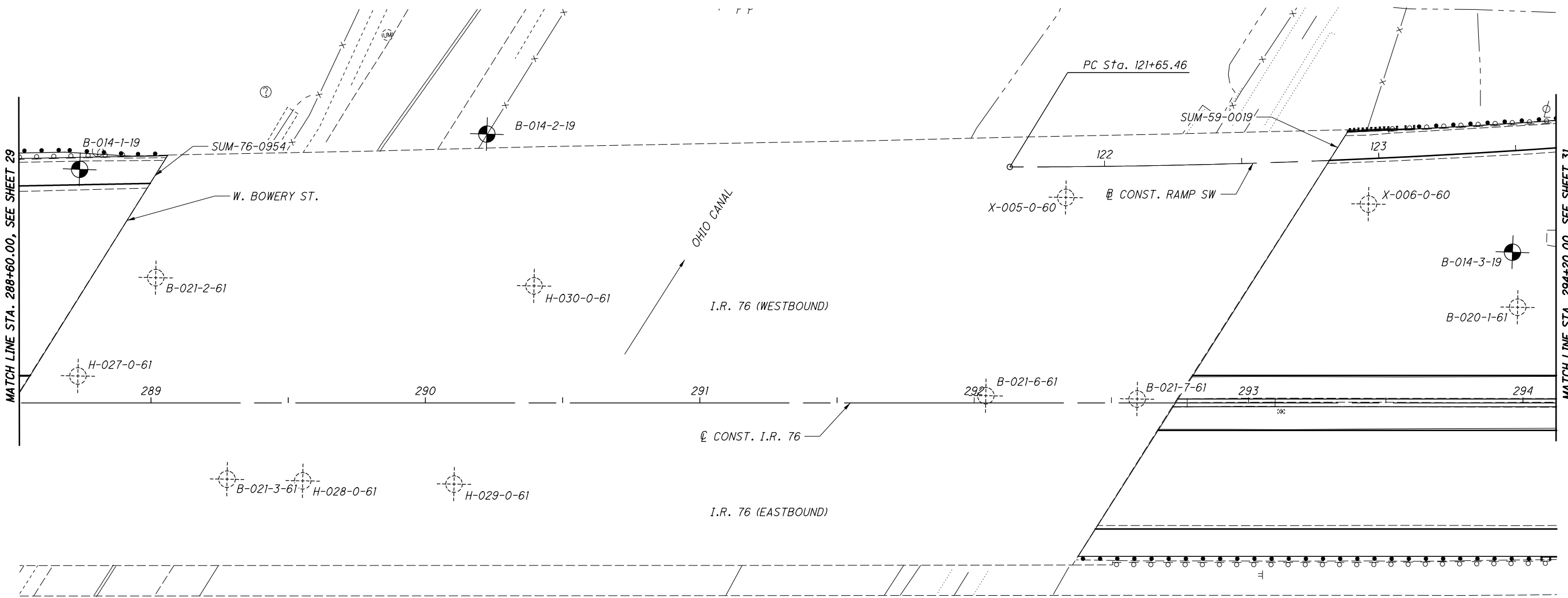
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DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 288+60.00 TO STA. 294+20.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



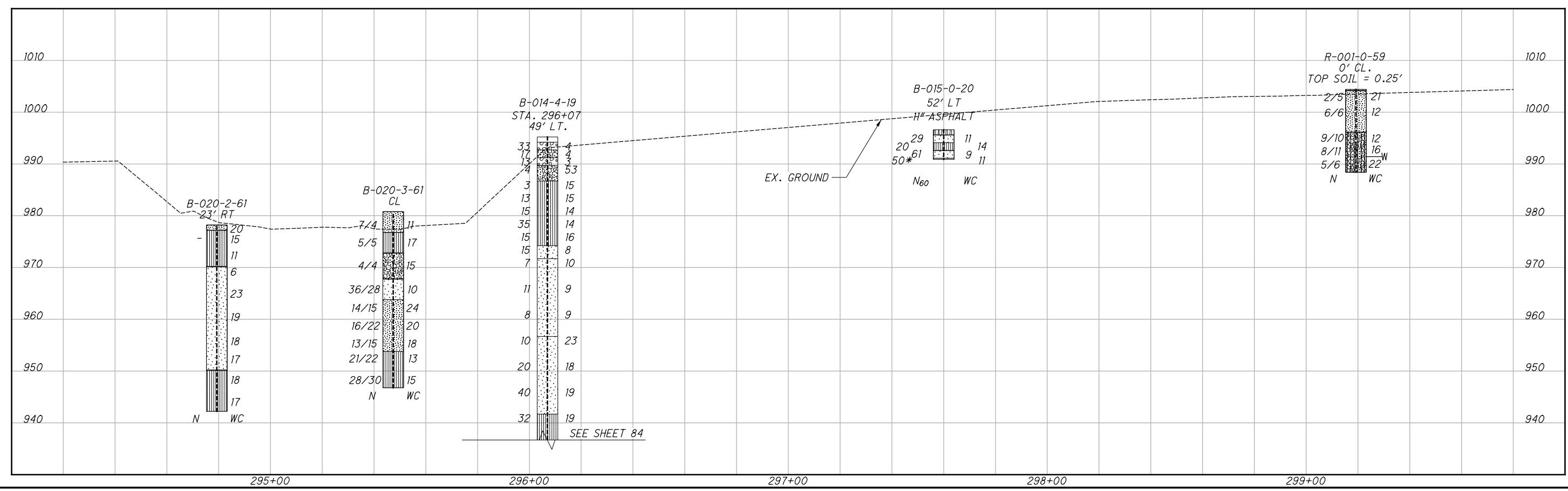
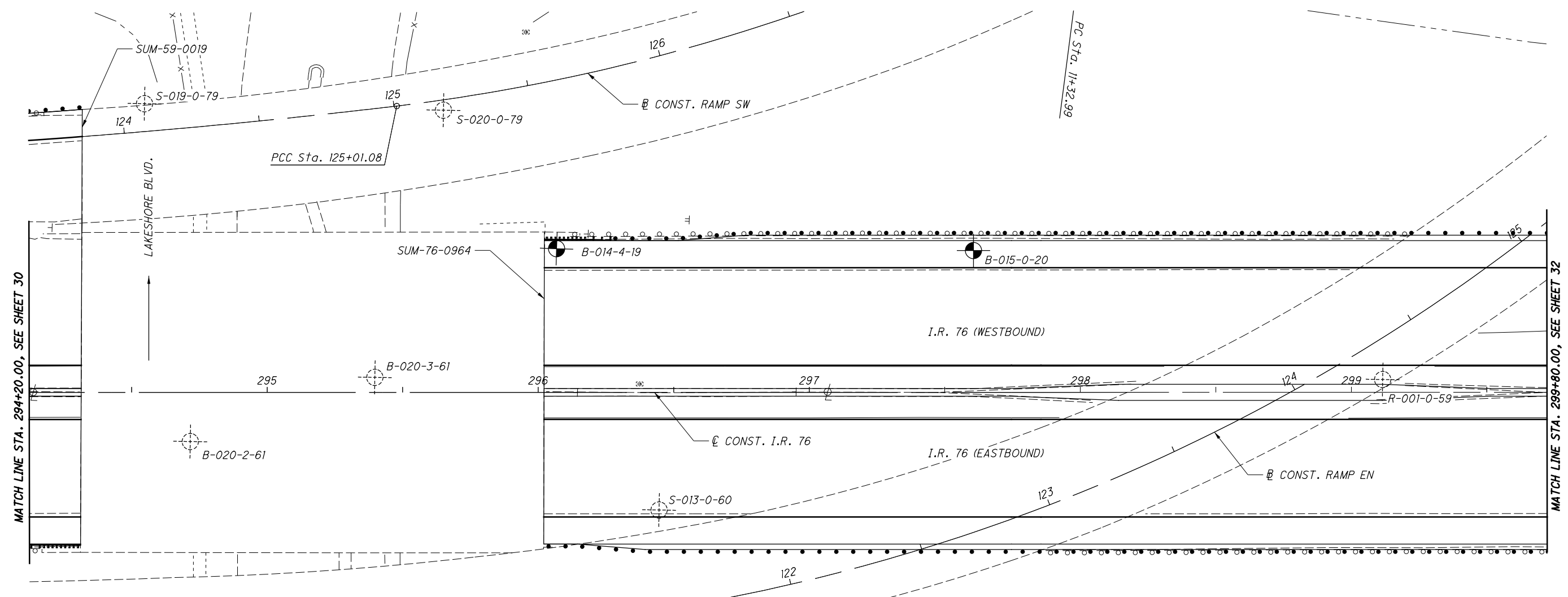
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DRAWN: SM
CHECKED: PAN

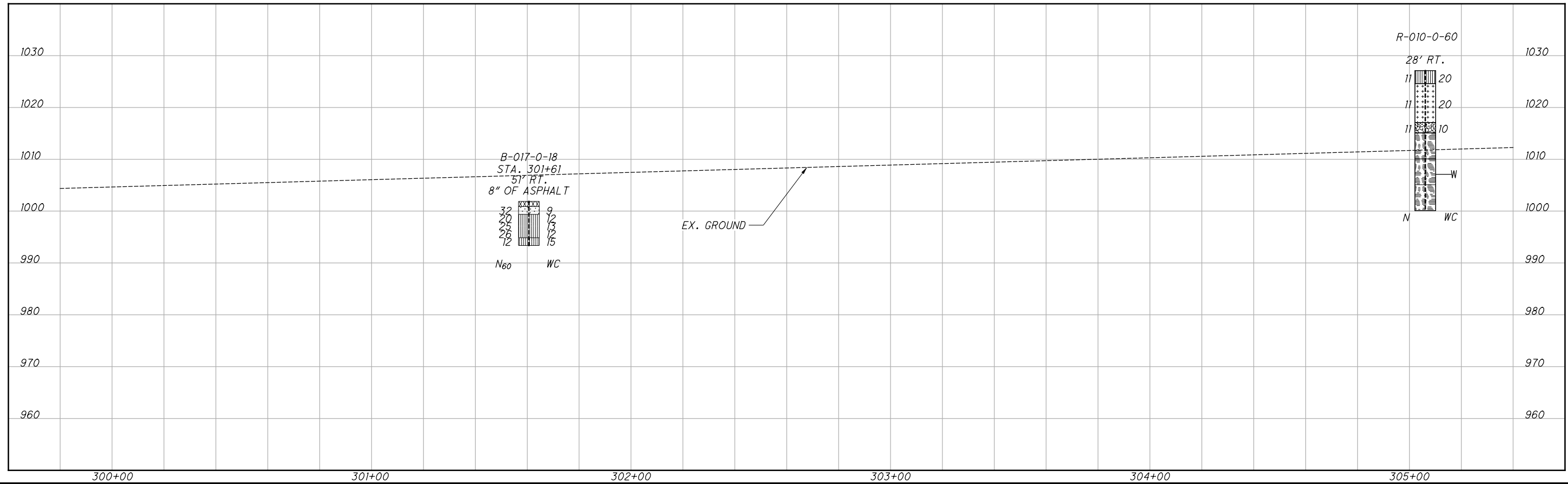
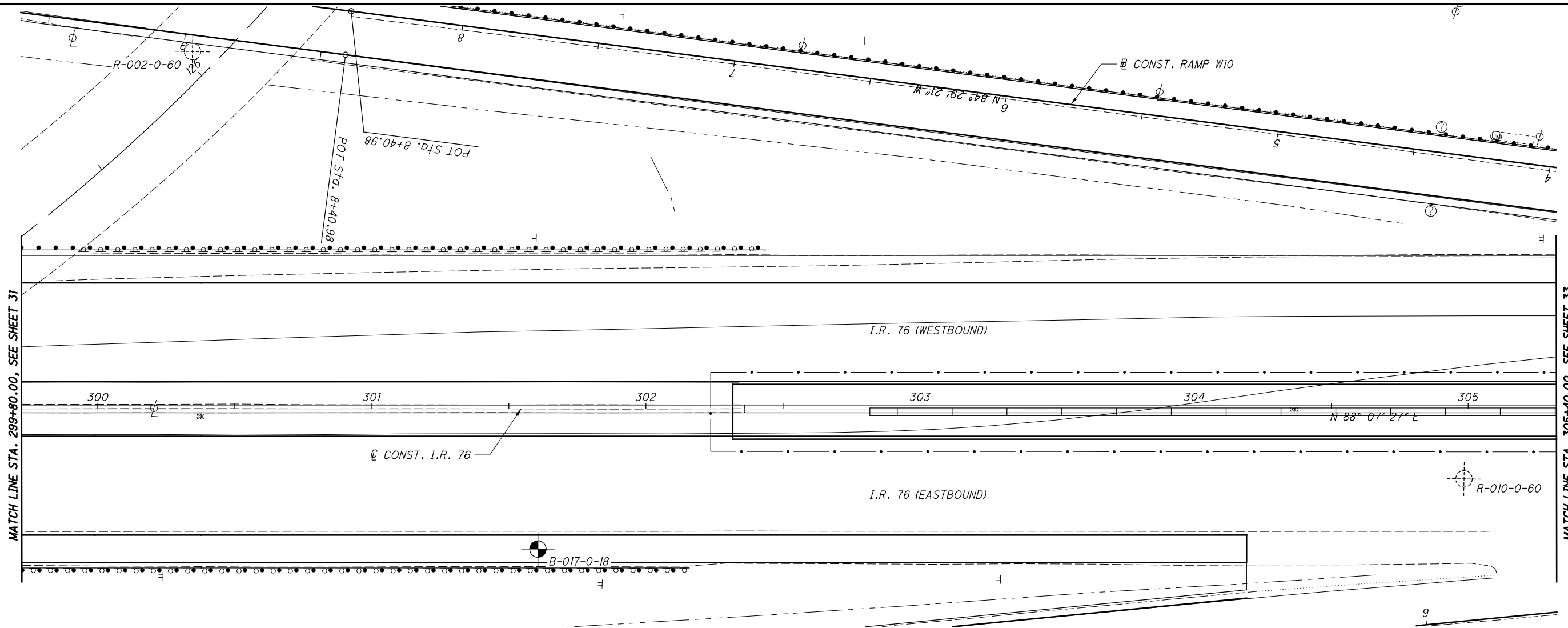
SOIL PROFILE
STA. 294+20.00 TO STA. 299+80.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP010.dgn Sheet 8/27/2020 10:44:31 AM kmhabea

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DRAWN SM

CHECKED PAN

SOIL PROFILE

STA. 299+80.00 TO STA. 305+40.00 I.R. 76

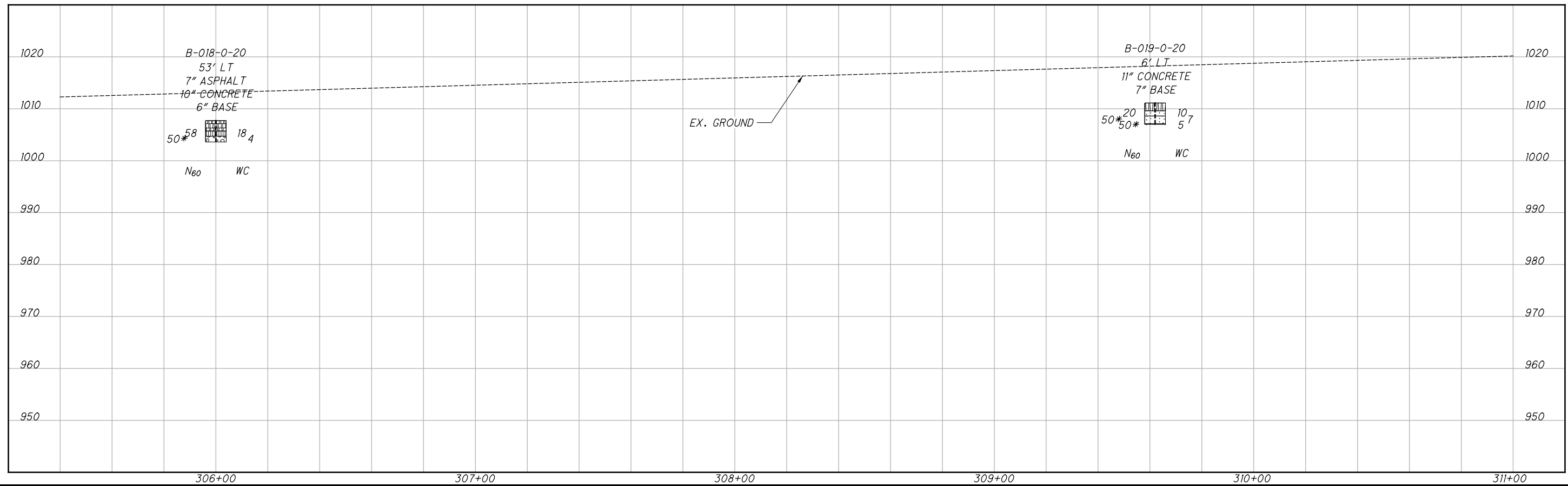
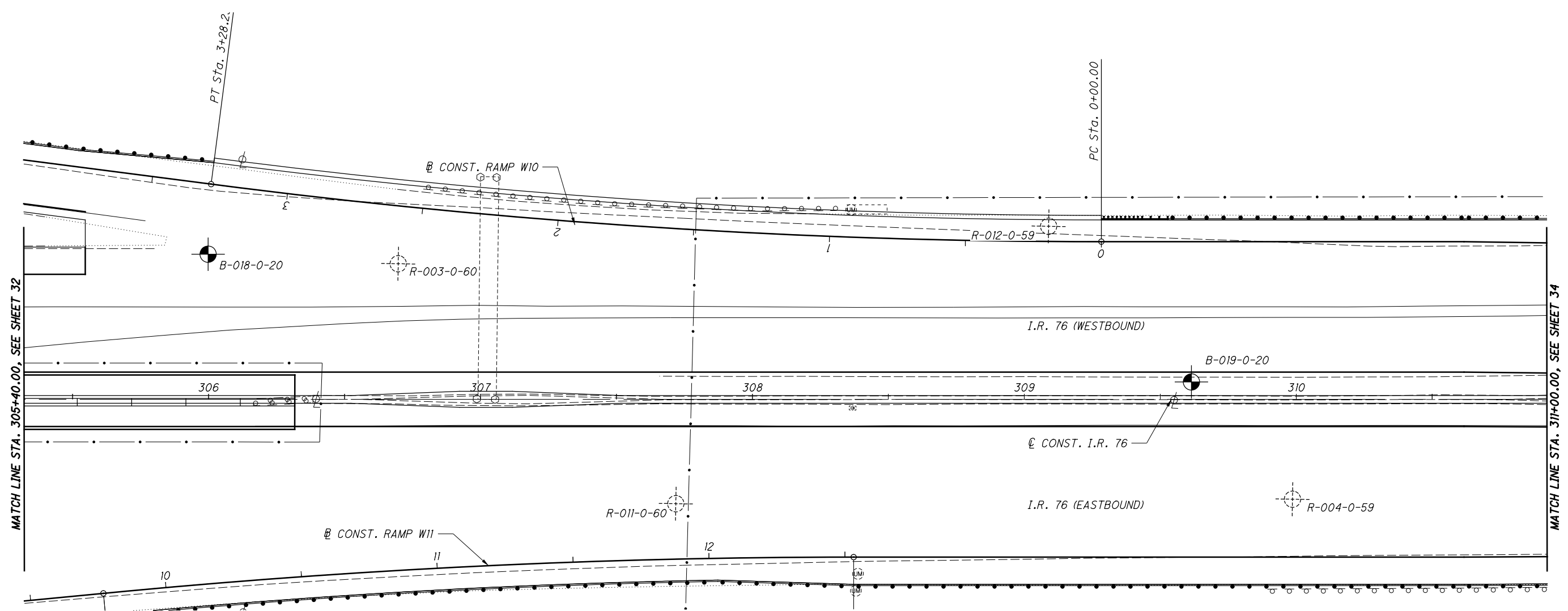
SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

32

182

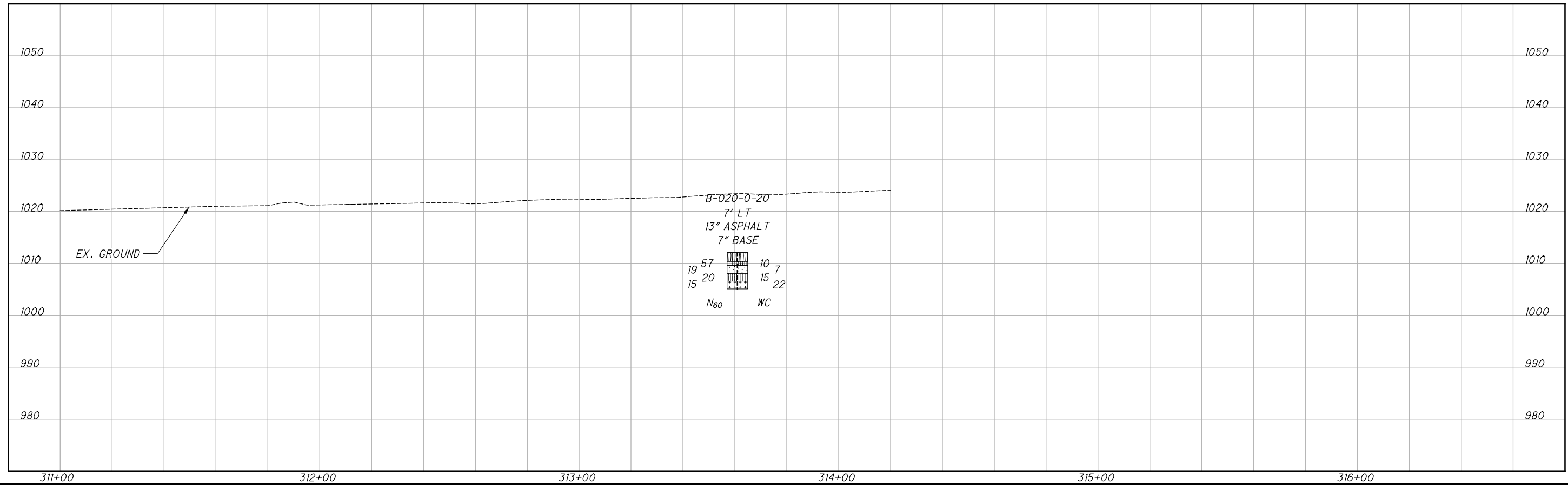
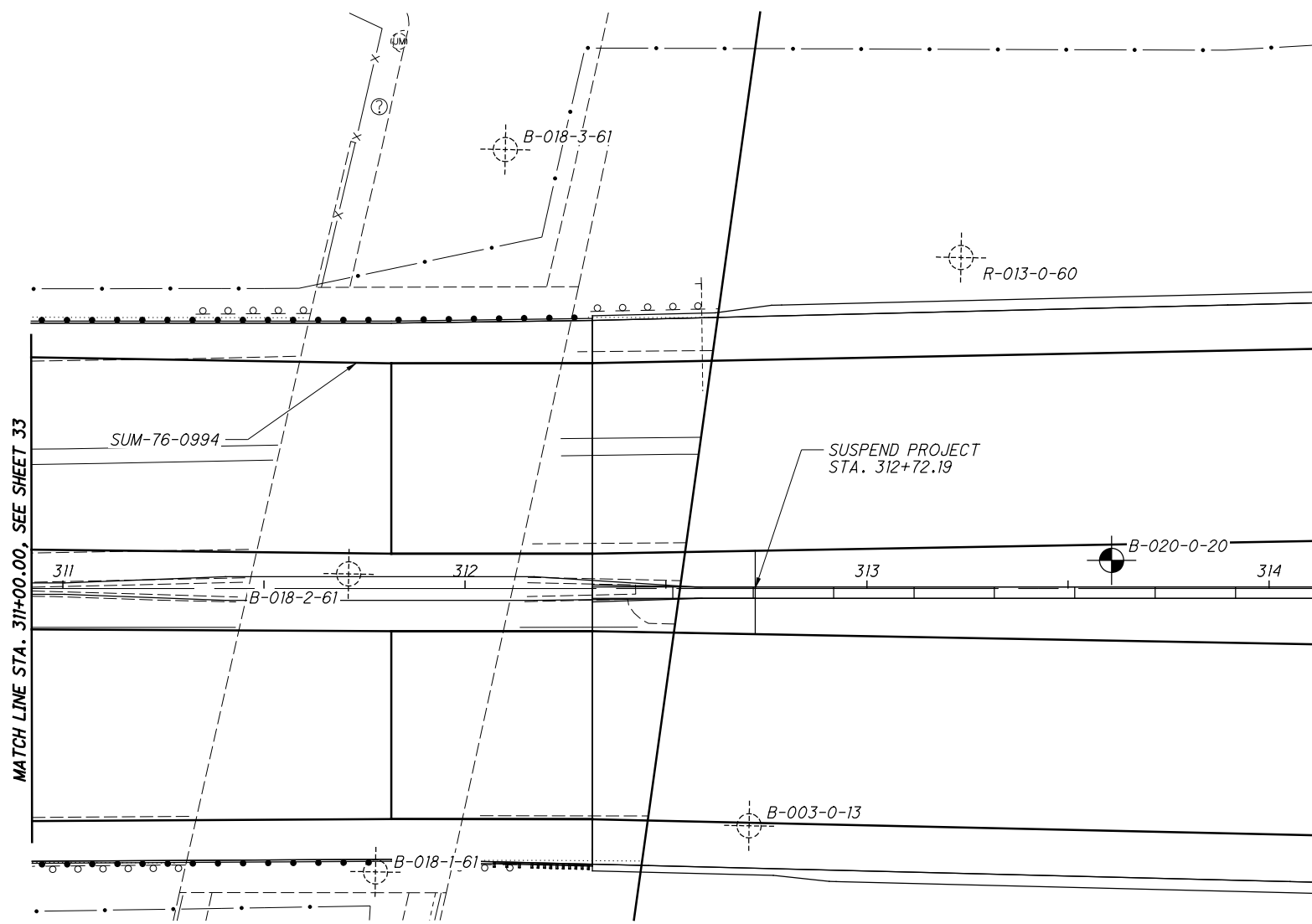
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SOIL PROFILE
STA. 305+40.00 TO STA. 311+00.00 I.R. 76

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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DRAWN	SM
CHECKED	PAN

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

SOIL PROFILE
STA. 311+00.00 TO STA. 312+65.00 I.R. 76

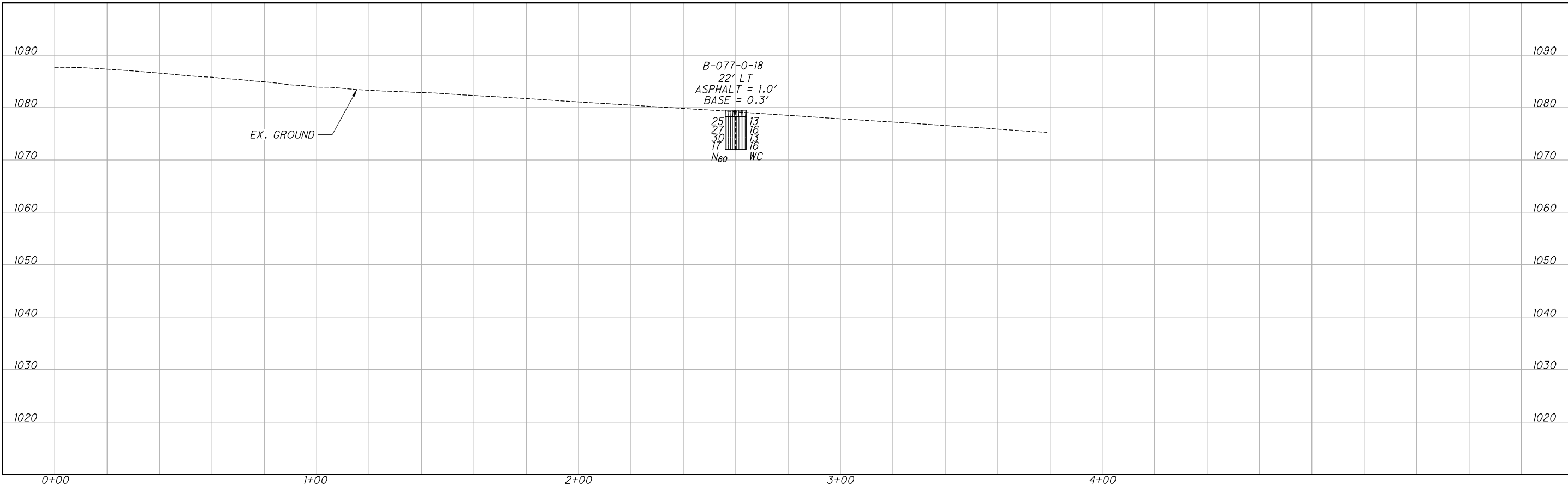
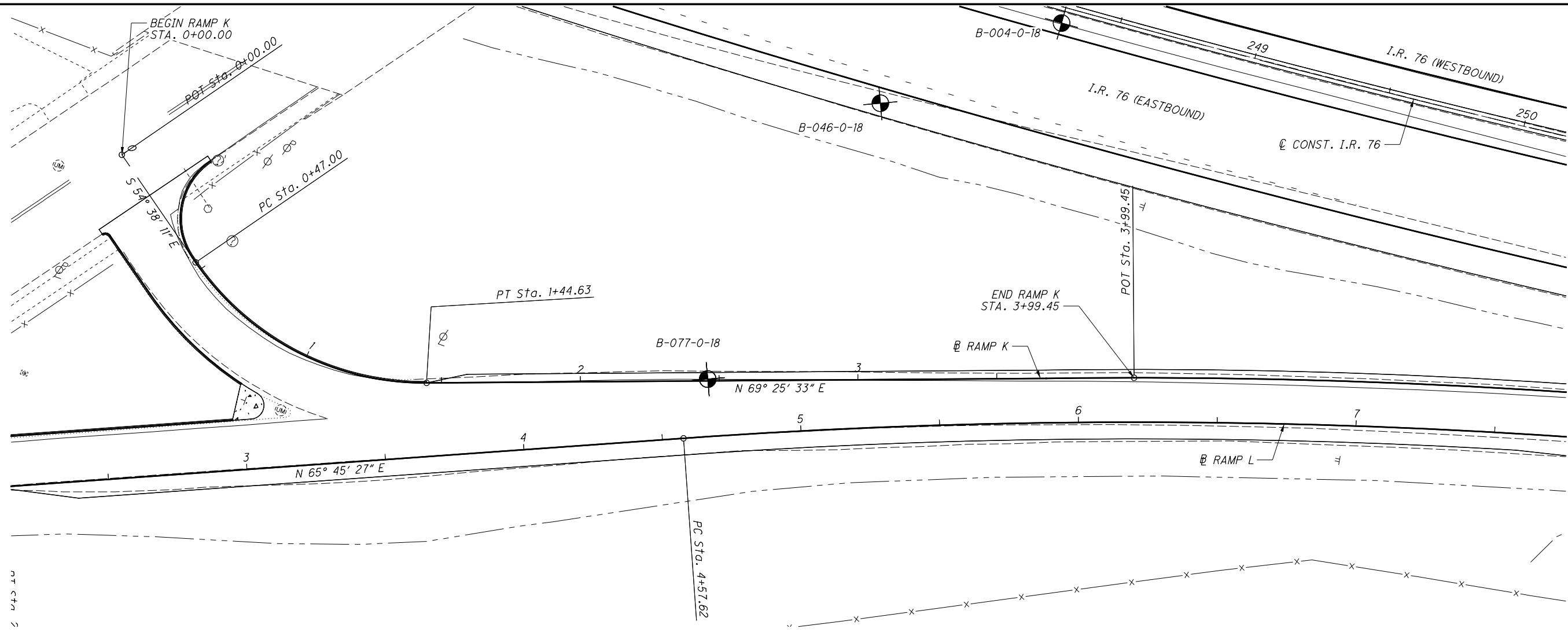
34
182



DRAWN: SM
CHECKED: PAN

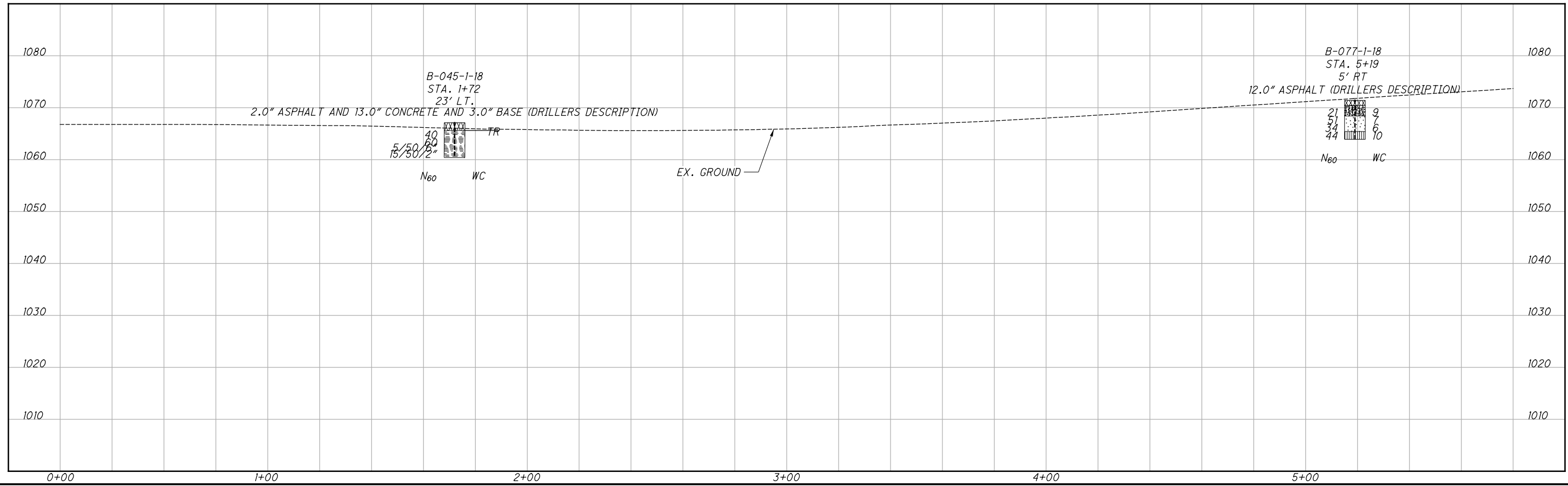
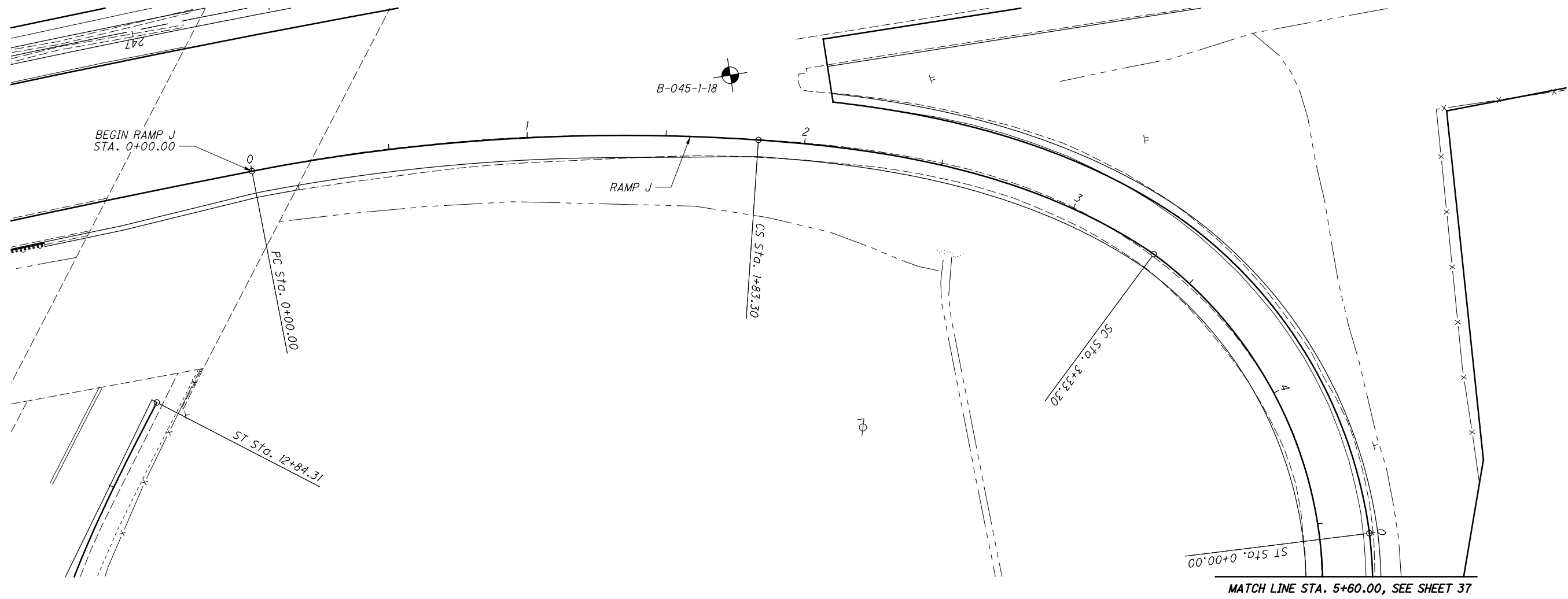
SOIL PROFILE
BEGIN STA. 0+00.00 TO END STA. 3+97.72 RAMP K

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP401.dgn Sheet 8/21/2020 10:44:58 AM kmihalcea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP402.dgn Sheet 8/27/2020 10:45:05 AM kmihalcea



B-045-1-18

HORIZONTAL SCALE IN FEET

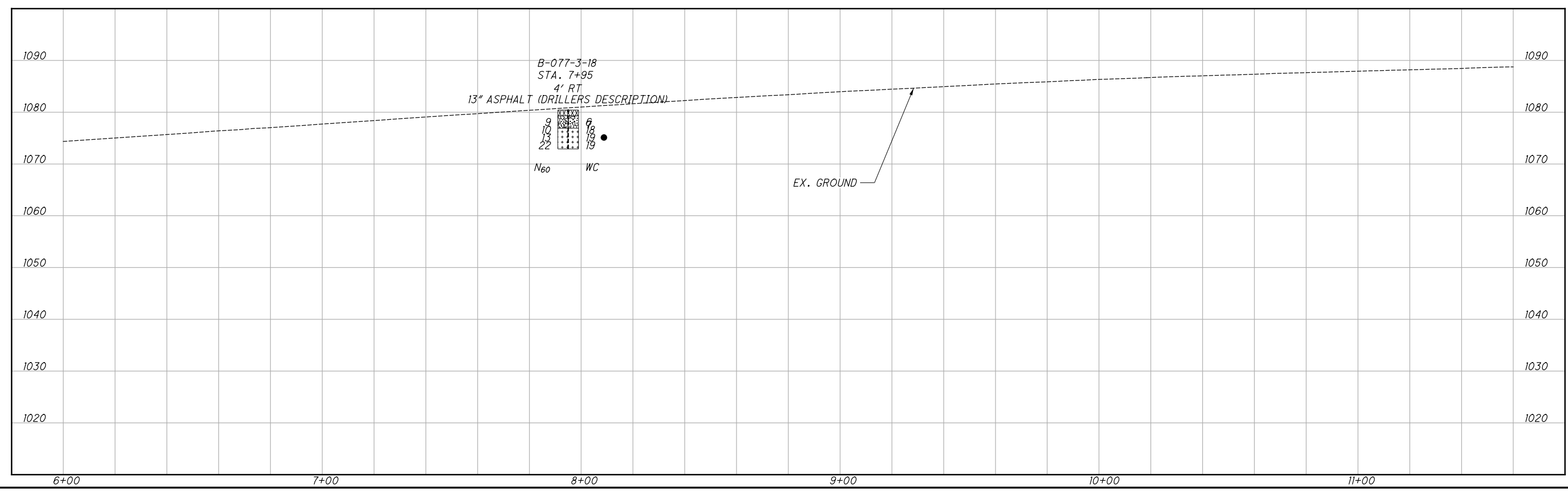
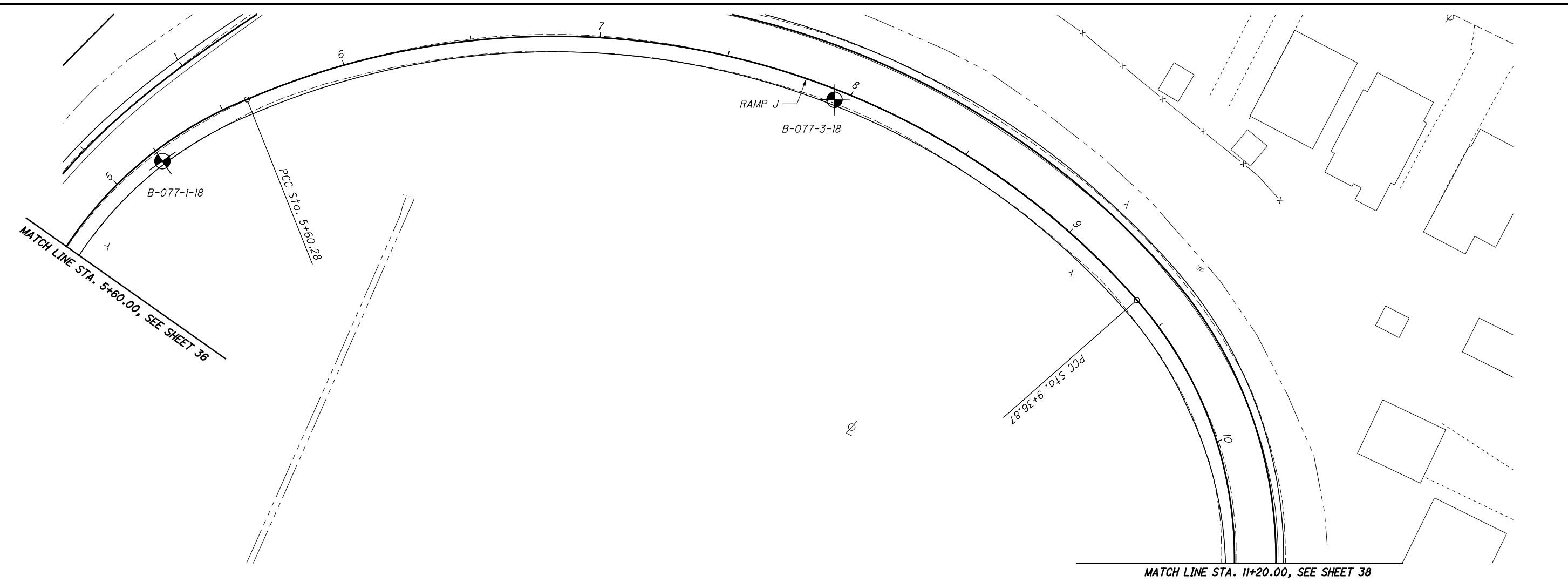
DRAWN	SM
CHECKED	PAN

SUM-76 / 77 / 8-
 8.24 / 9.74 / 0.00

SOIL PROFILE
BEGIN STA. 0+00.00 TO STA. 5+60.00 RAMP J

36
 182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP403.dgn Sheet 8/27/2020 10:45:11 AM kmhabea



DRAWN
SM
CHECKED
PAN

SOIL PROFILE

STA. 5+60.00 TO STA. 11+20.00 RAMP J

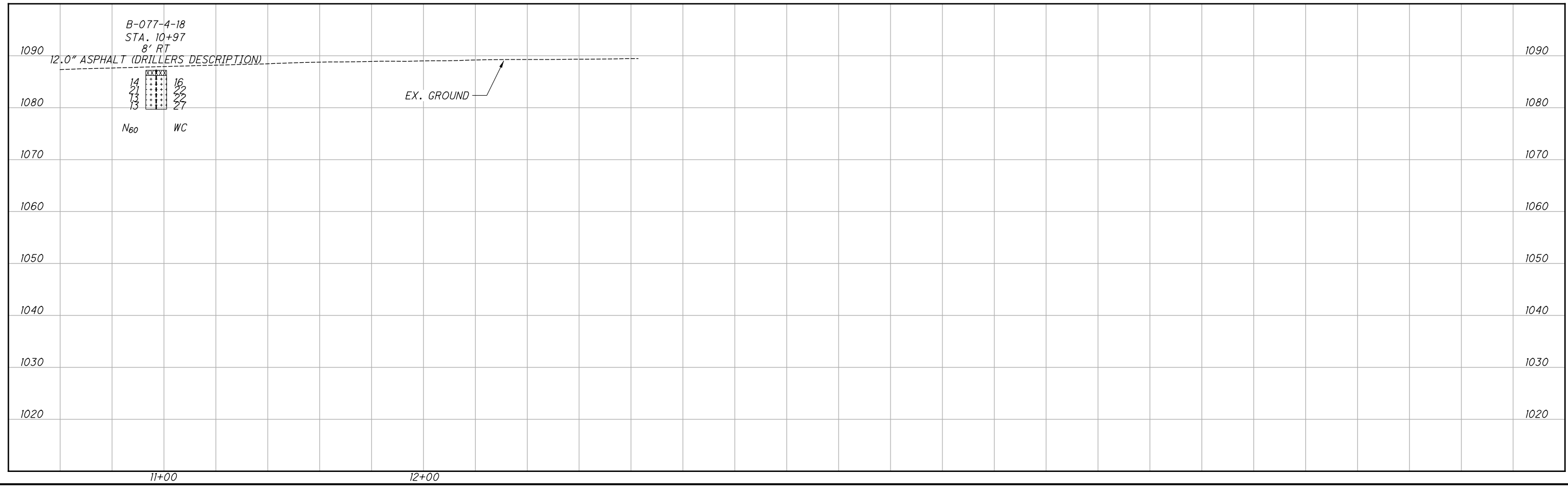
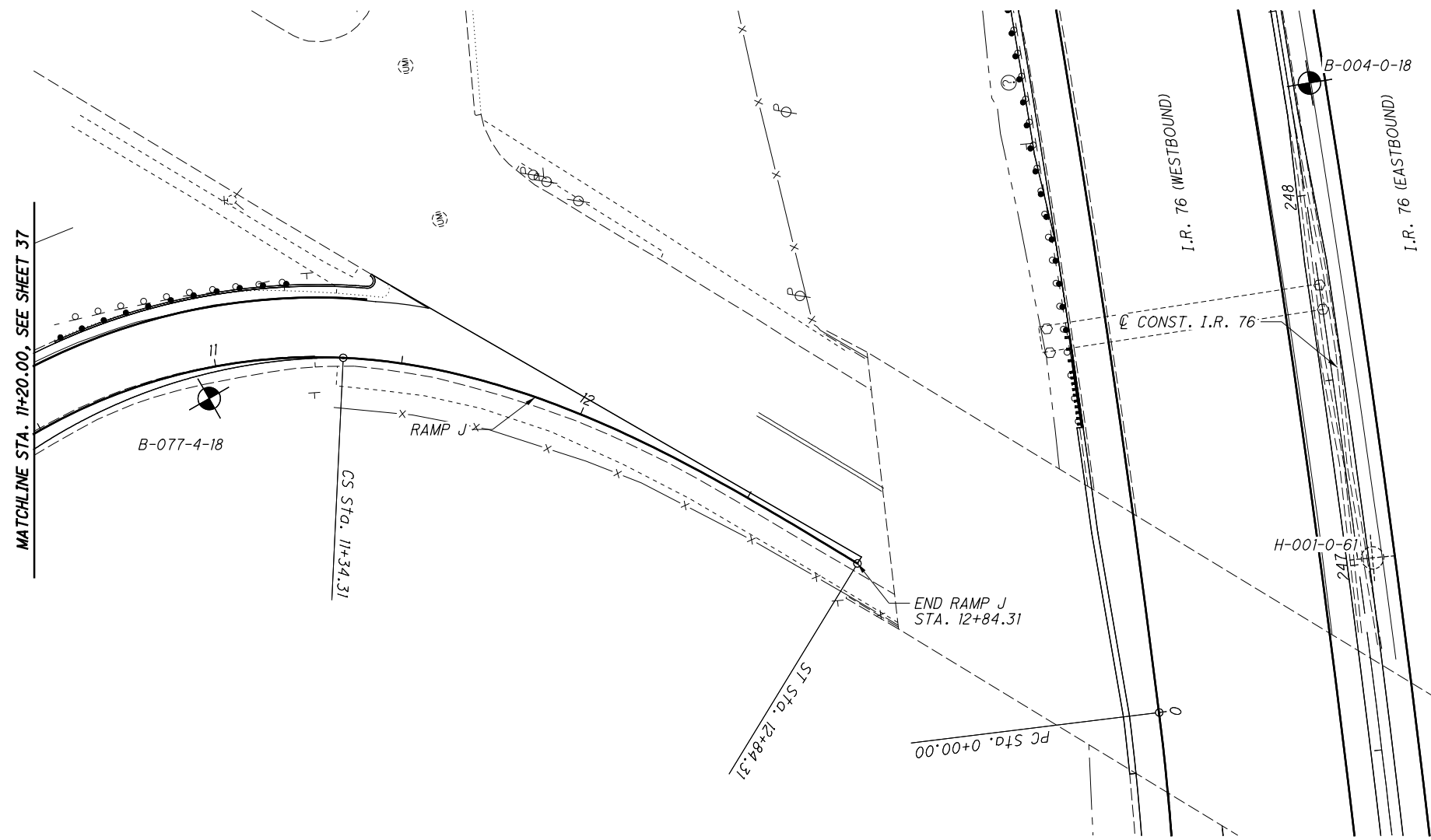
SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

37

182

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DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 11+20.00 TO END STA. 13+73.95 RAMP J

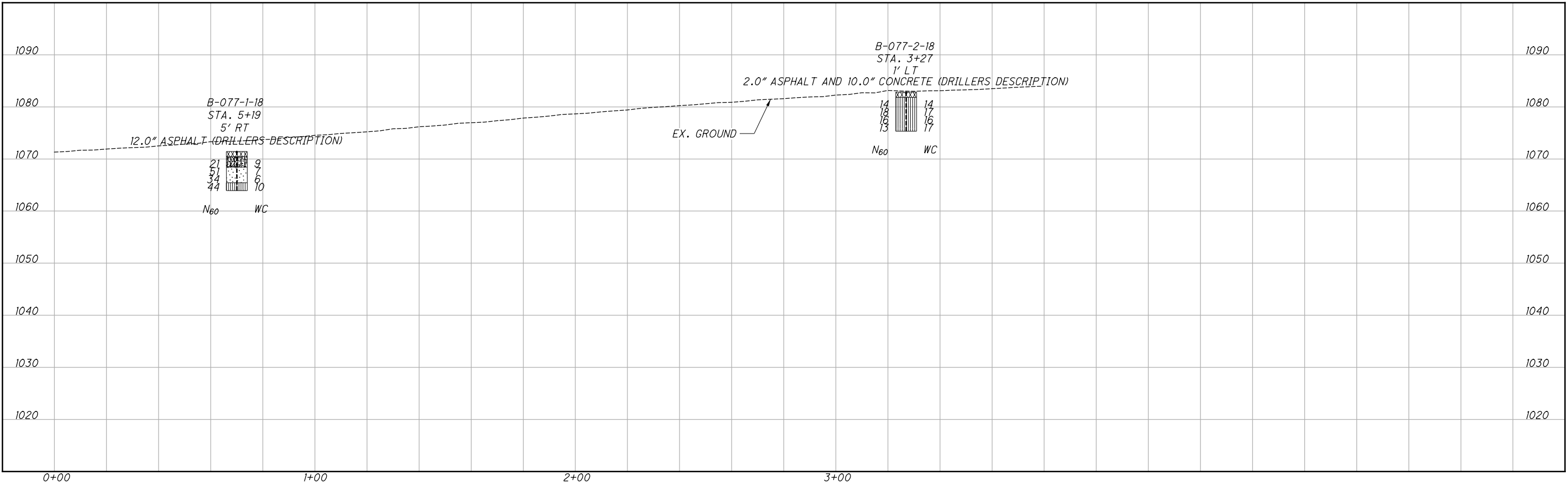
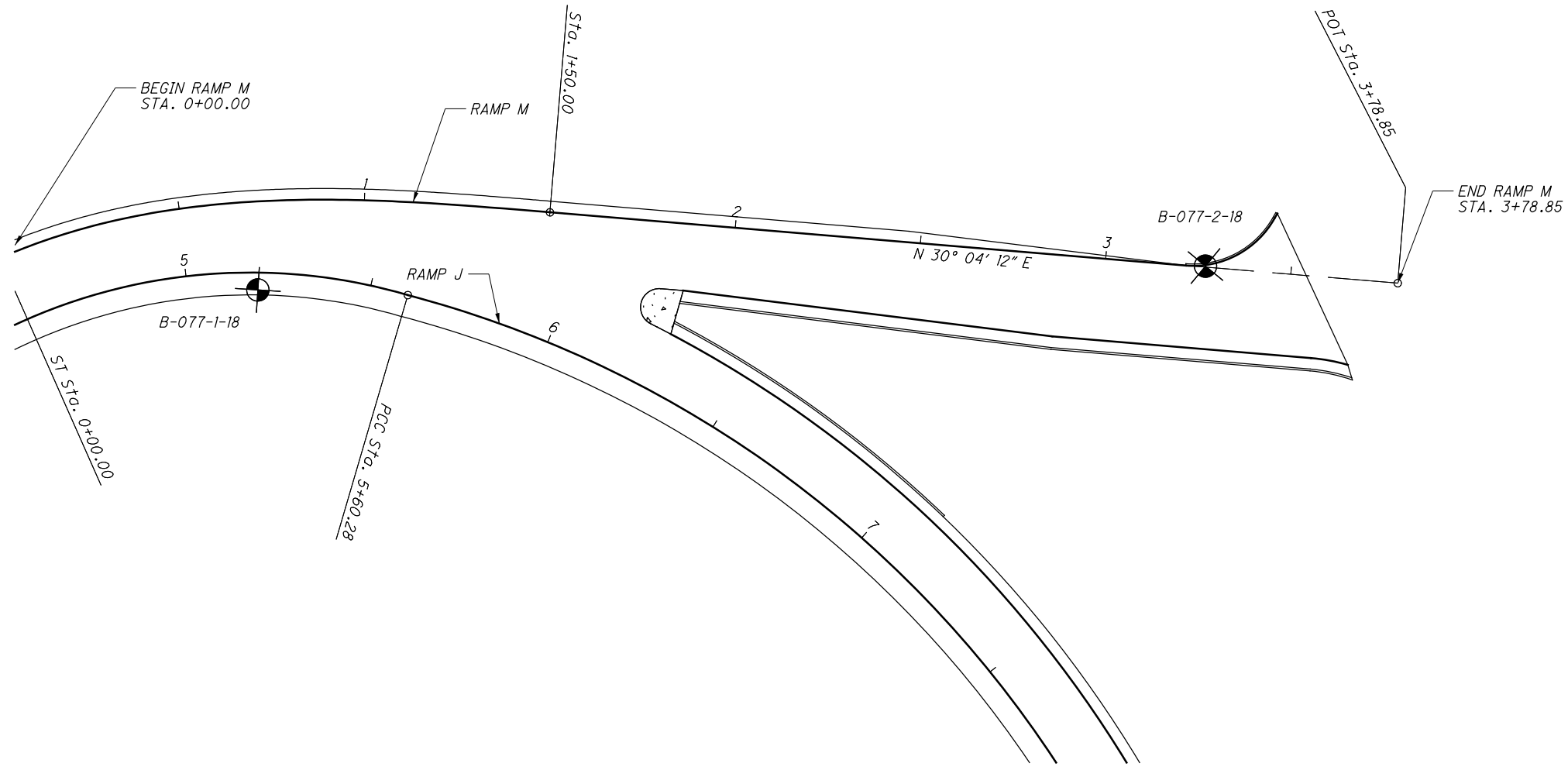
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



DRAWN: SM
CHECKED: PAN

SOIL PROFILE
BEGIN STA. 0+00.00 TO STA. 3+78.85 RAMP M

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP405.dgn Sheet 8/27/2020 10:45:26 AM kmhalcea

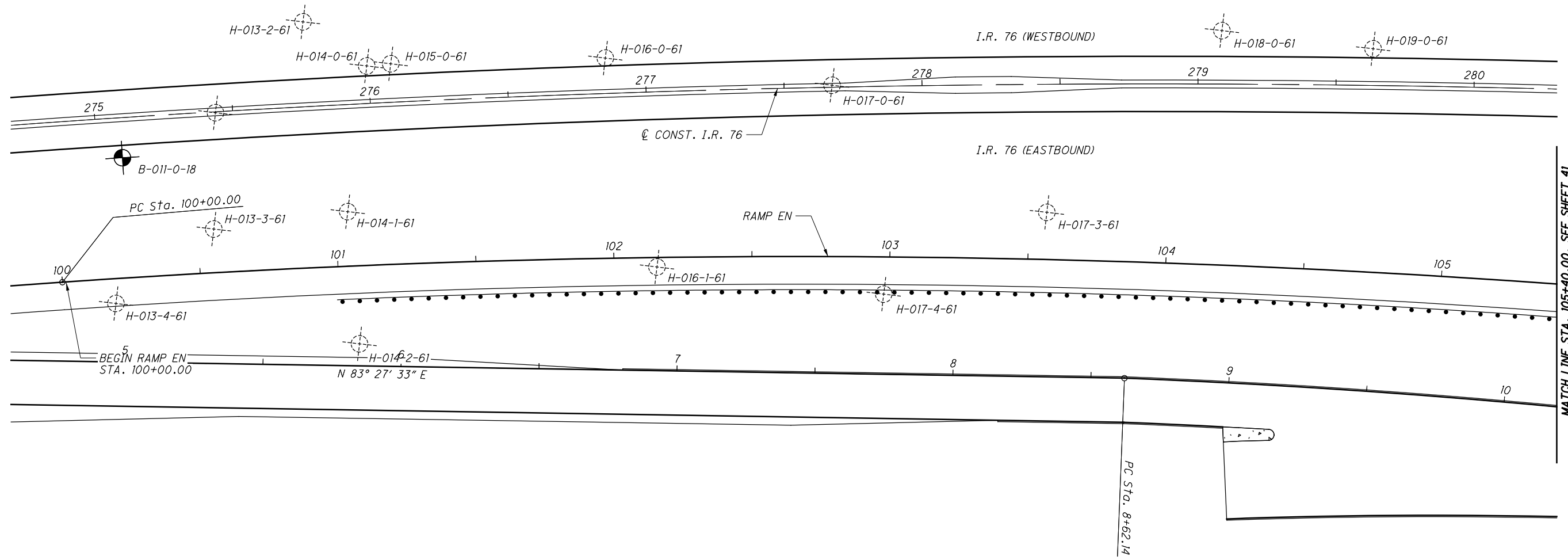


DRAWN SM
CHECKED PAN

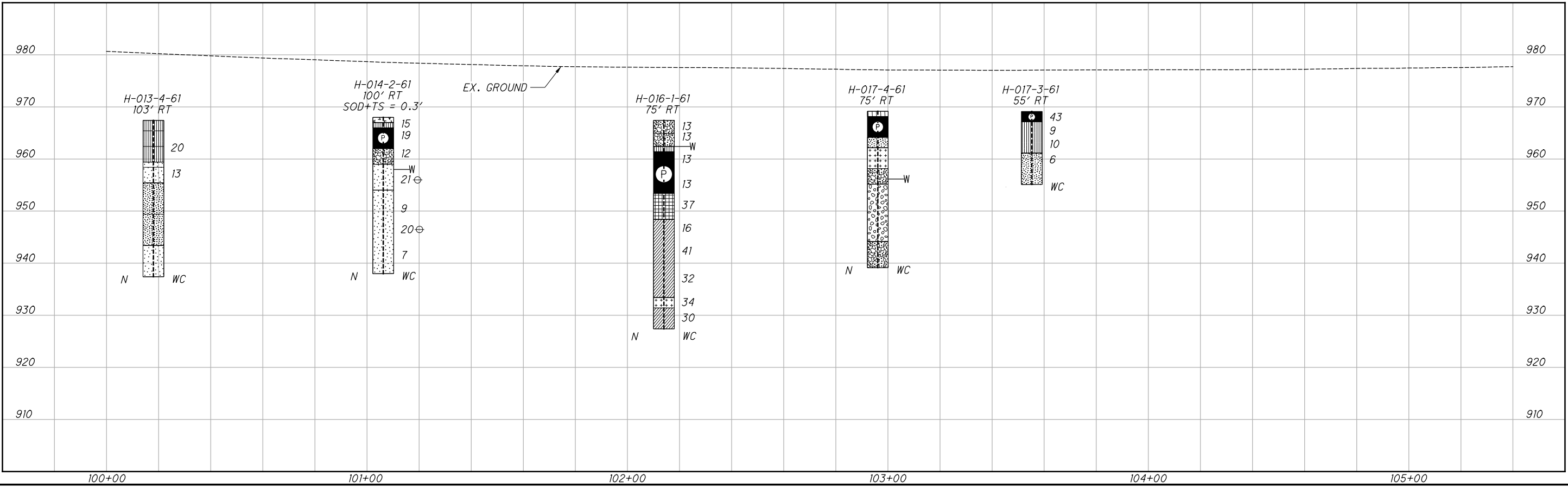
SOIL PROFILE
BEGIN STA. 100+00.00 TO STA. 105+40.00 RAMP EN

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

40
182

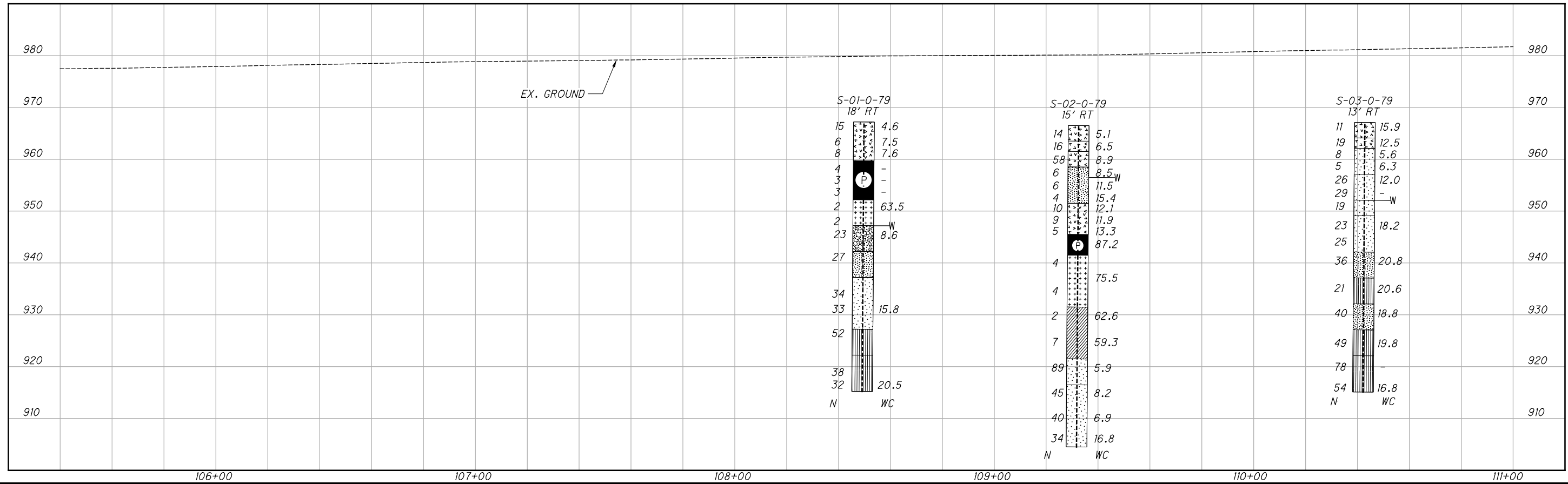
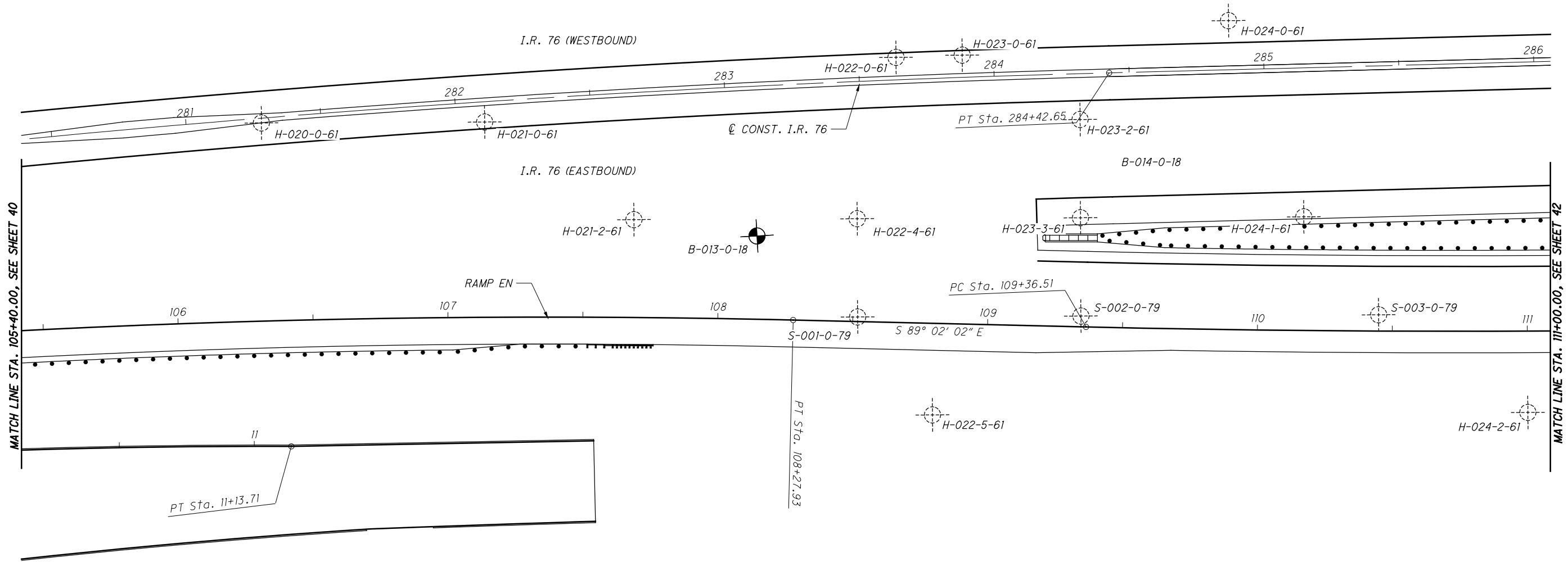


MATCH LINE STA. 105+40.00, SEE SHEET 41



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP406.dgn Sheet 8/27/2020 10:45:35 AM kmhalcea

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SOIL PROFILE

STA. 105+40.00 TO STA. 111+00.00 RAMP EN

SUM-76 / 77 / 8 -

8.24 / 9.74 / 0.00

41 / 182

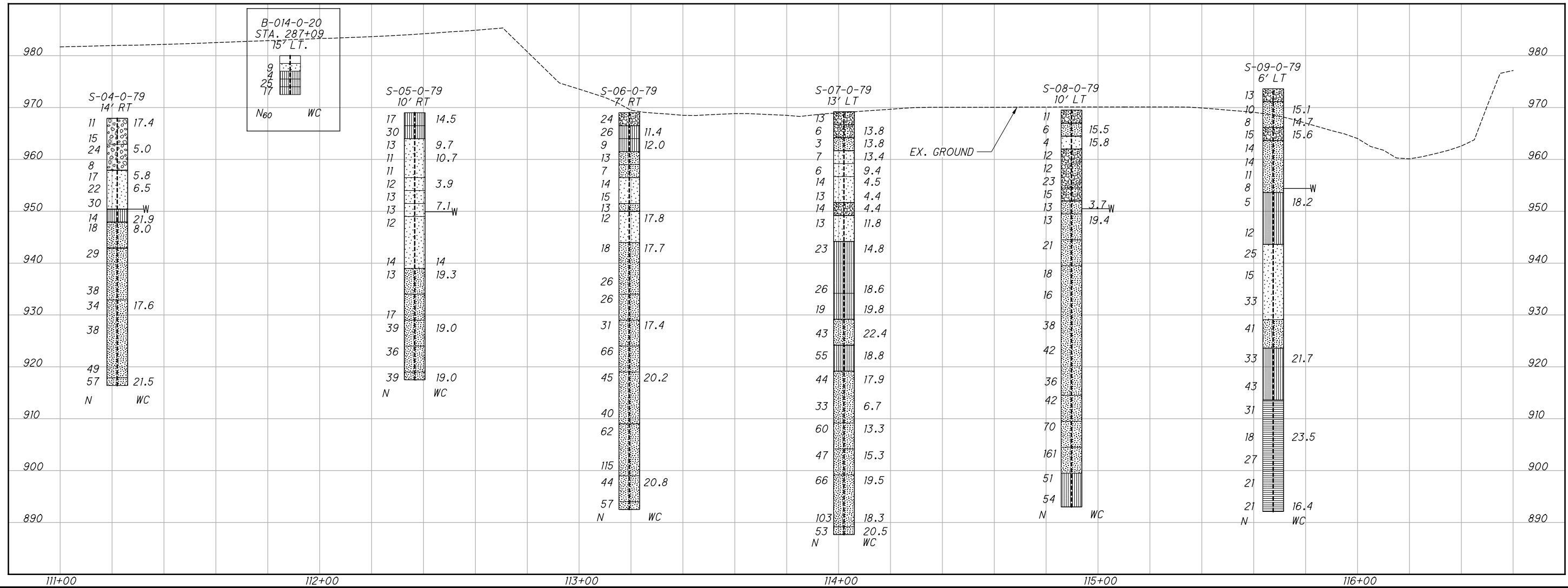
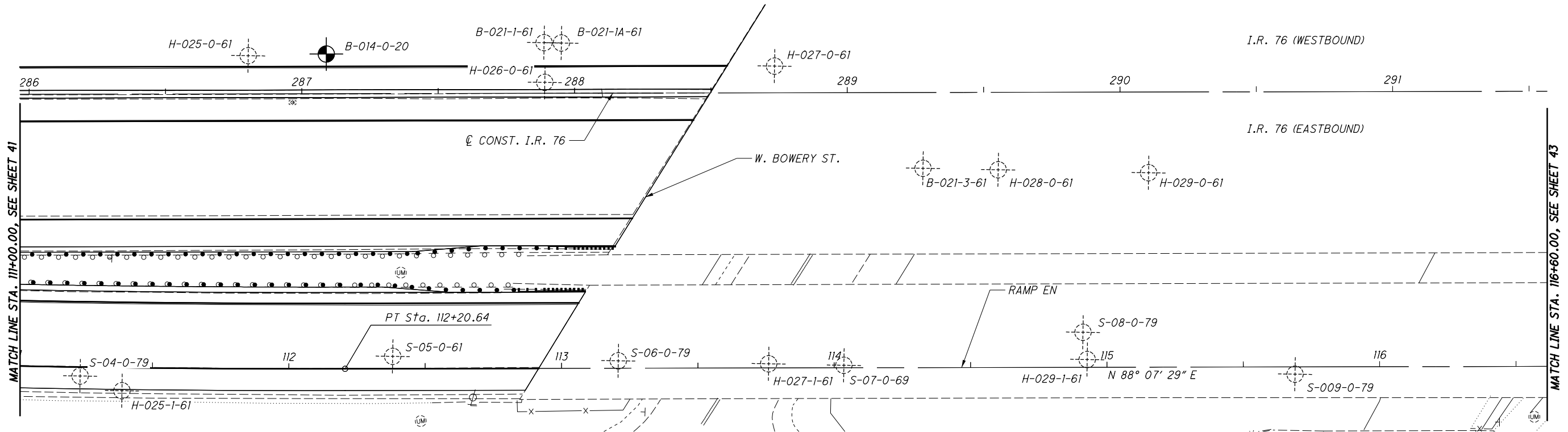
DRAWN: SM

CHECKED: PAN

0 20 40

HORIZONTAL SCALE IN FEET

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP408.dgn Sheet 8/27/2020 10:45:45 AM kmihalcea



SOIL PROFILE
STA. 111+00.00 TO STA. 116+60.00 RAMP EN

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

42
182

DRAWN: SM
CHECKED: PAN

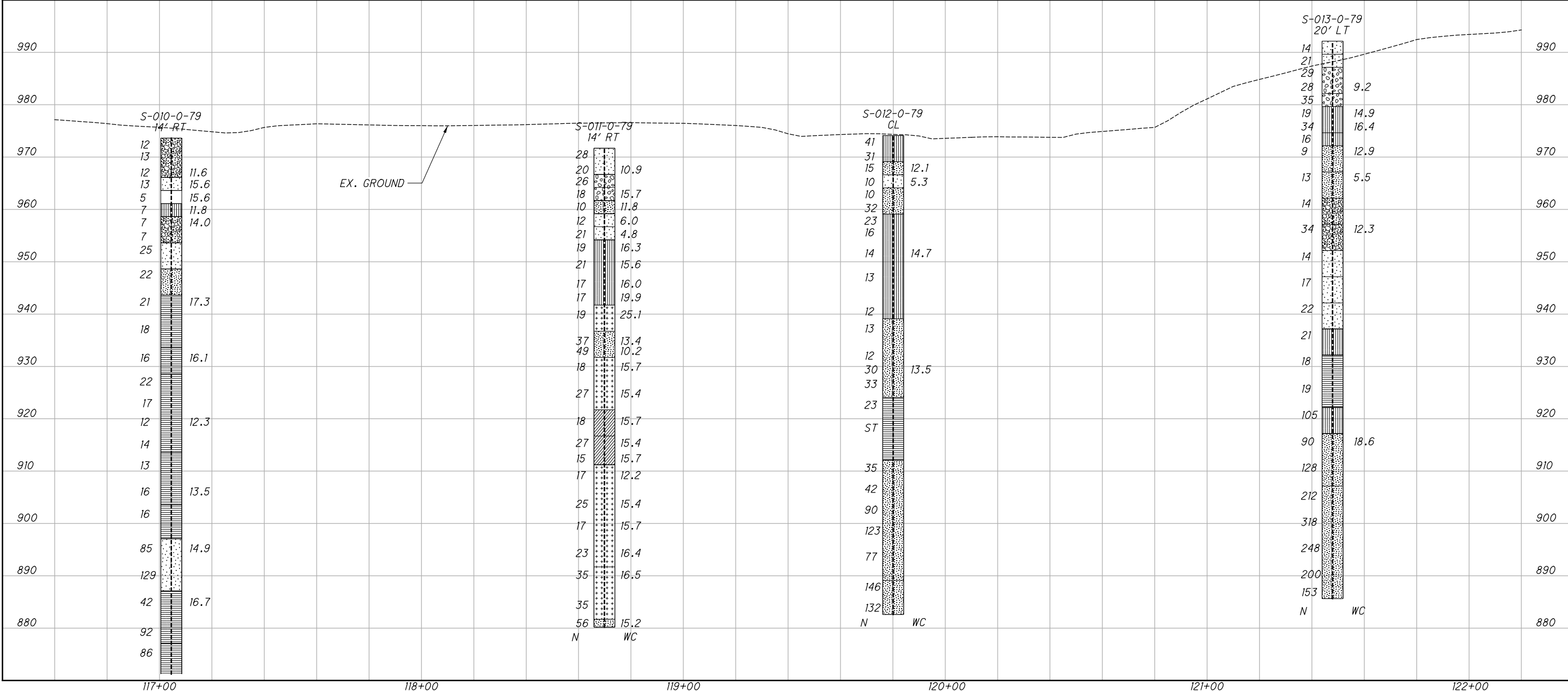
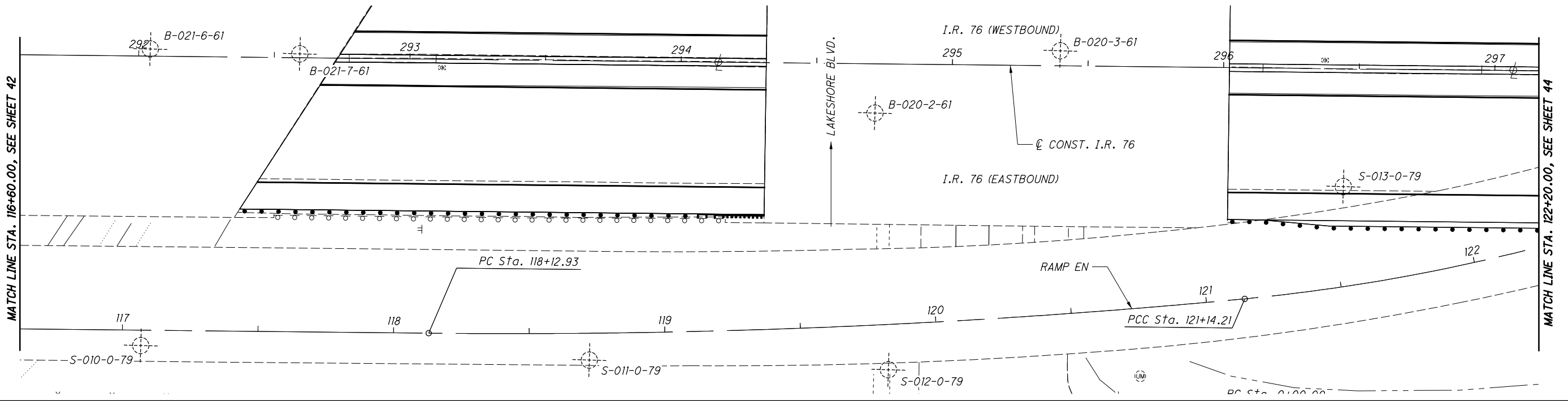
HORIZONTAL SCALE IN FEET
0 20 40



DRAWN: SM
CHECKED: PAN

SOIL PROFILE STA. 116+60.00 TO STA. 122+20.00 RAMP EN

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



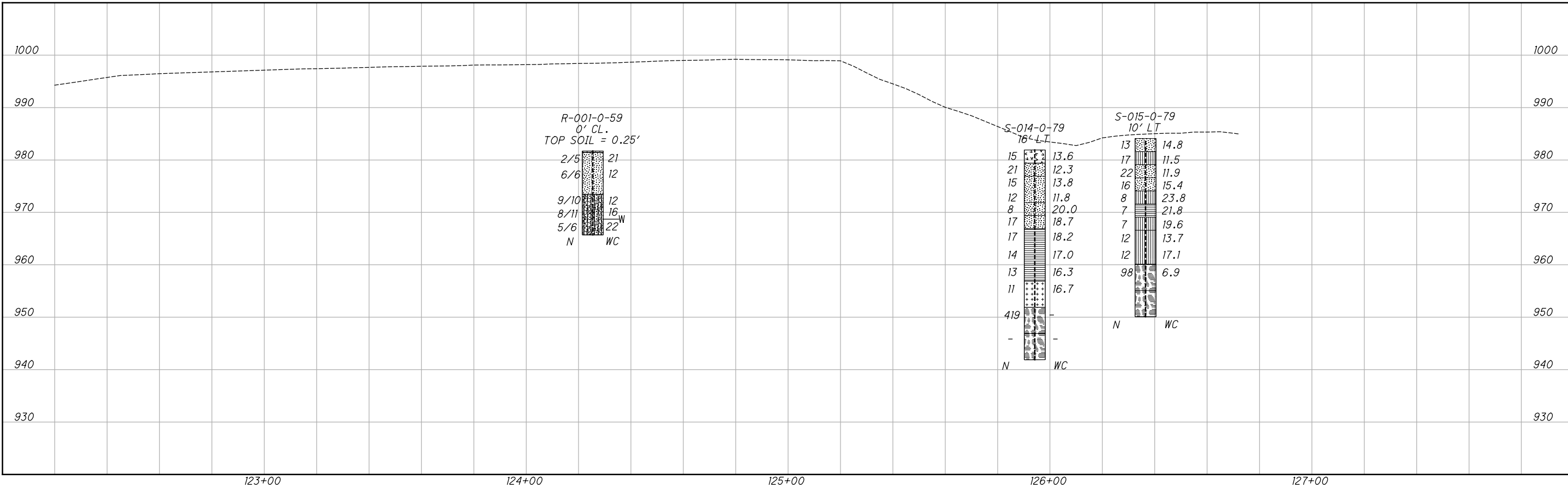
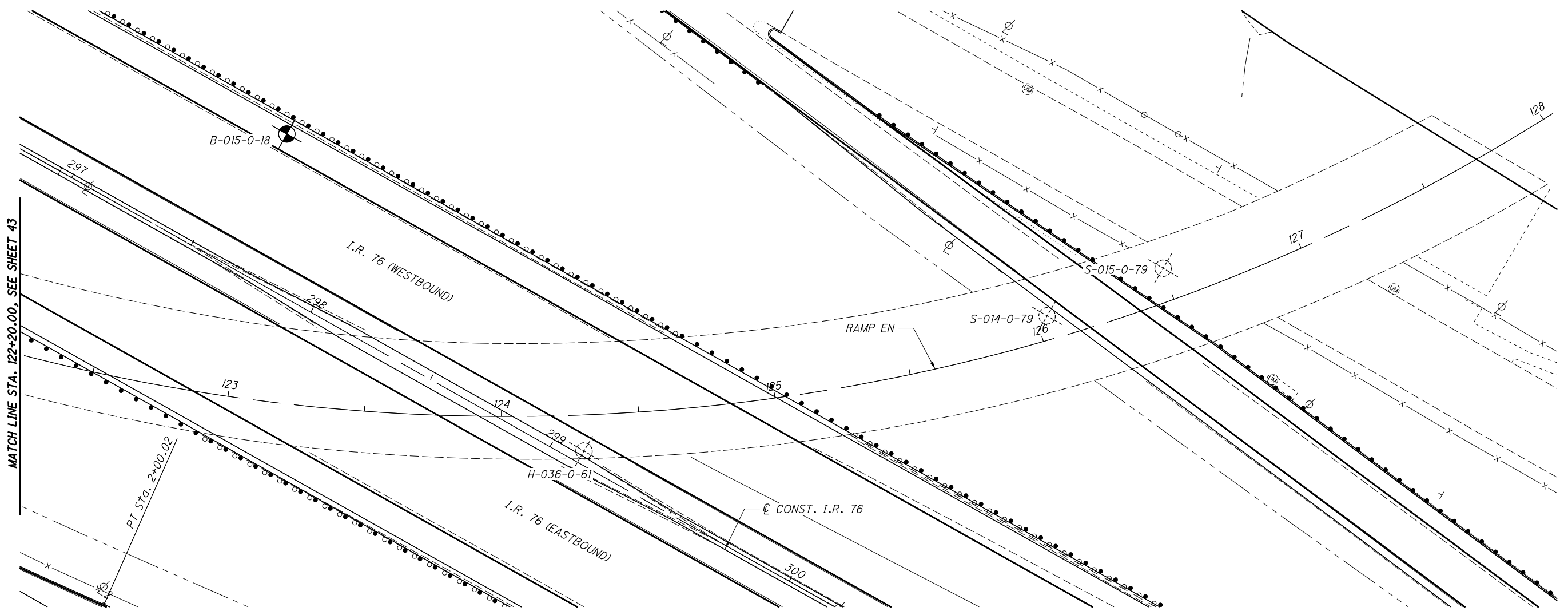
P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP409.dgn Sheet 8/27/2020 10:45:51AM kmhnlce



DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 122+20.00 TO STA. END RAMP EN

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP410.dgn Sheet 8/21/2020 10:46:00 AM kmh/abea



 0 20 40

 HORIZONTAL

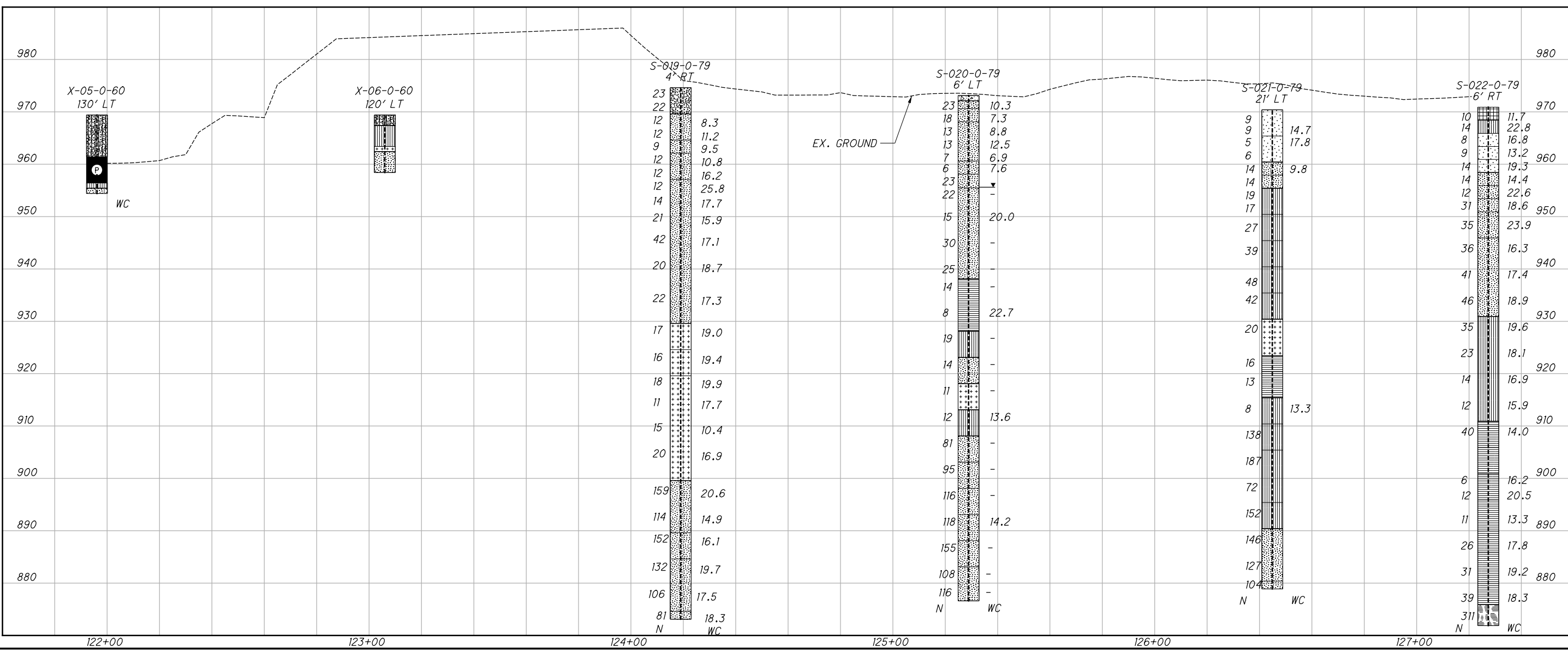
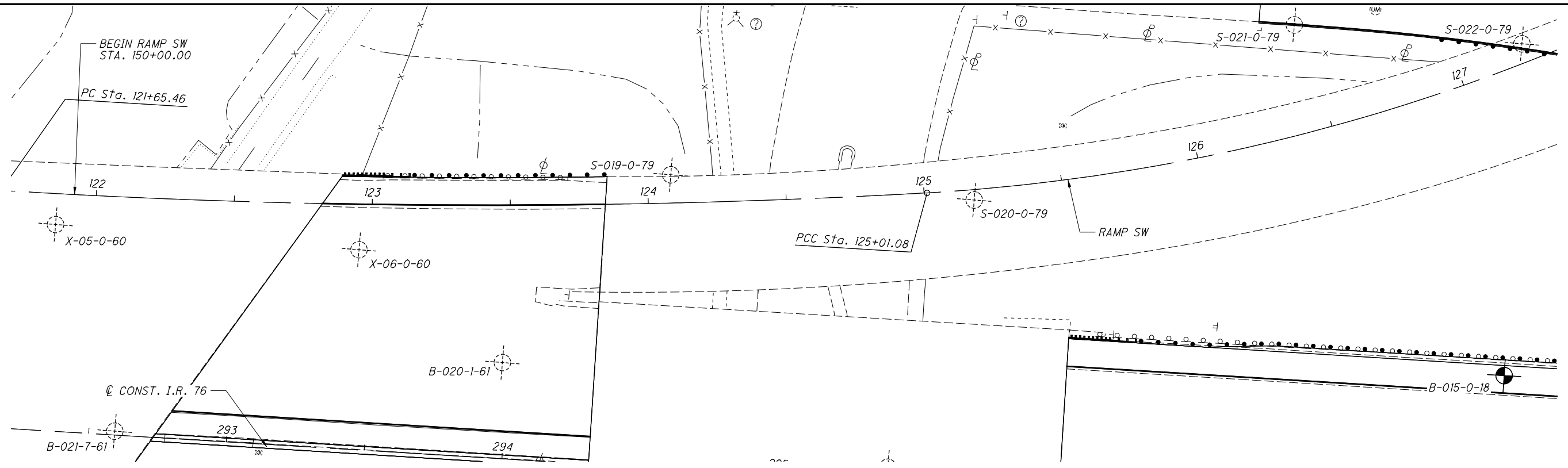
 SCALE IN FEET

 DRAWN: SM

 CHECKED: PAN

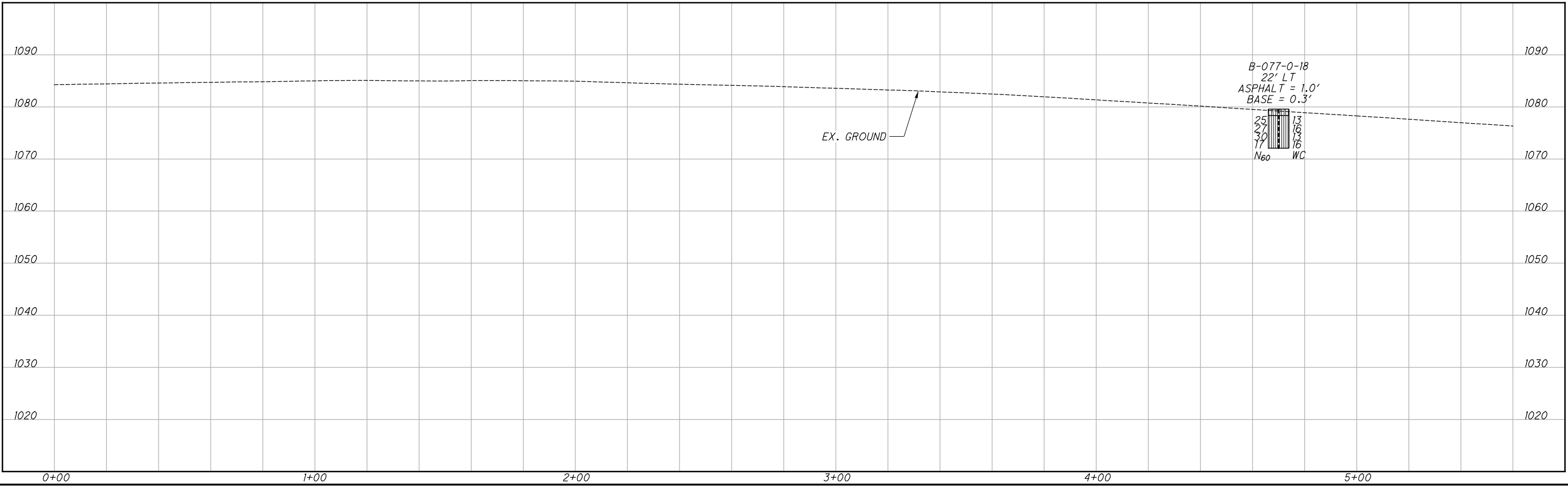
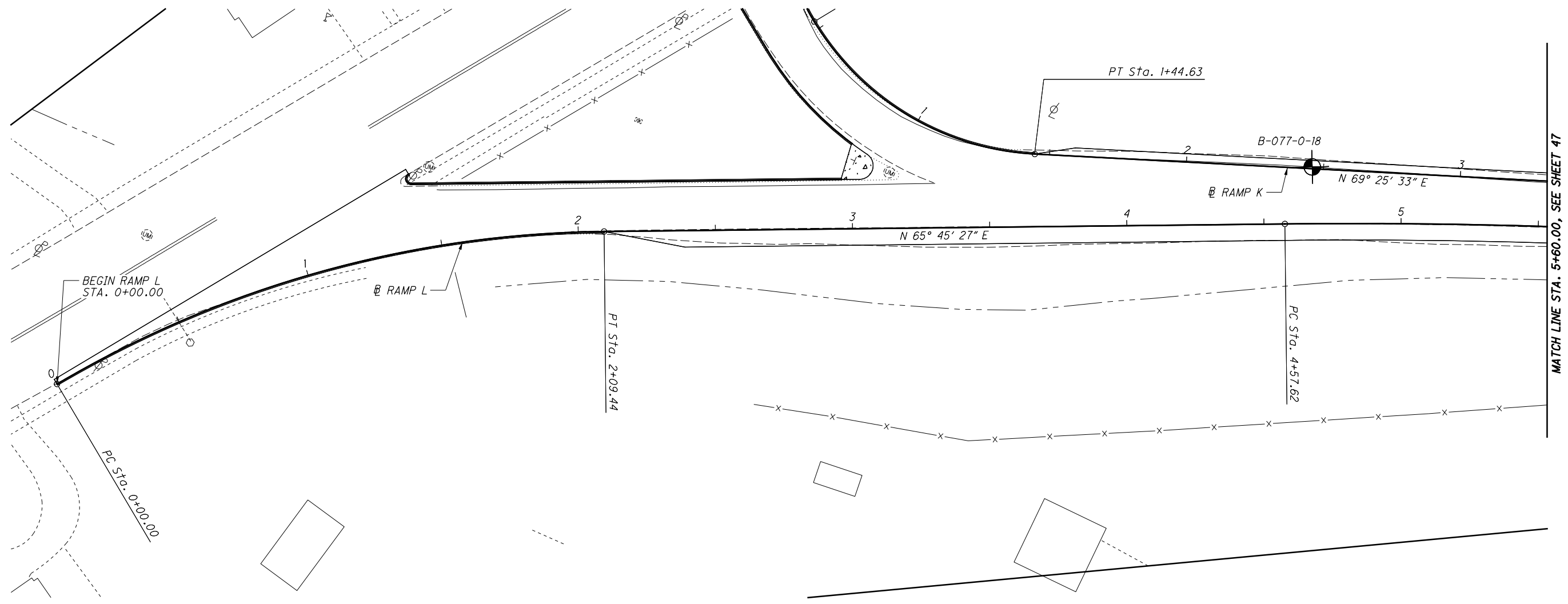
SOIL PROFILE
BEGIN STA. 122+00.00 TO END RAMP SW

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP41.dgn_Sheet 8/27/2020 10:46:06 AM kmh/ace

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP412.dgn Sheet 8/21/2020 10:46:15 AM kmhnlcea



HORIZONTAL SCALE IN FEET

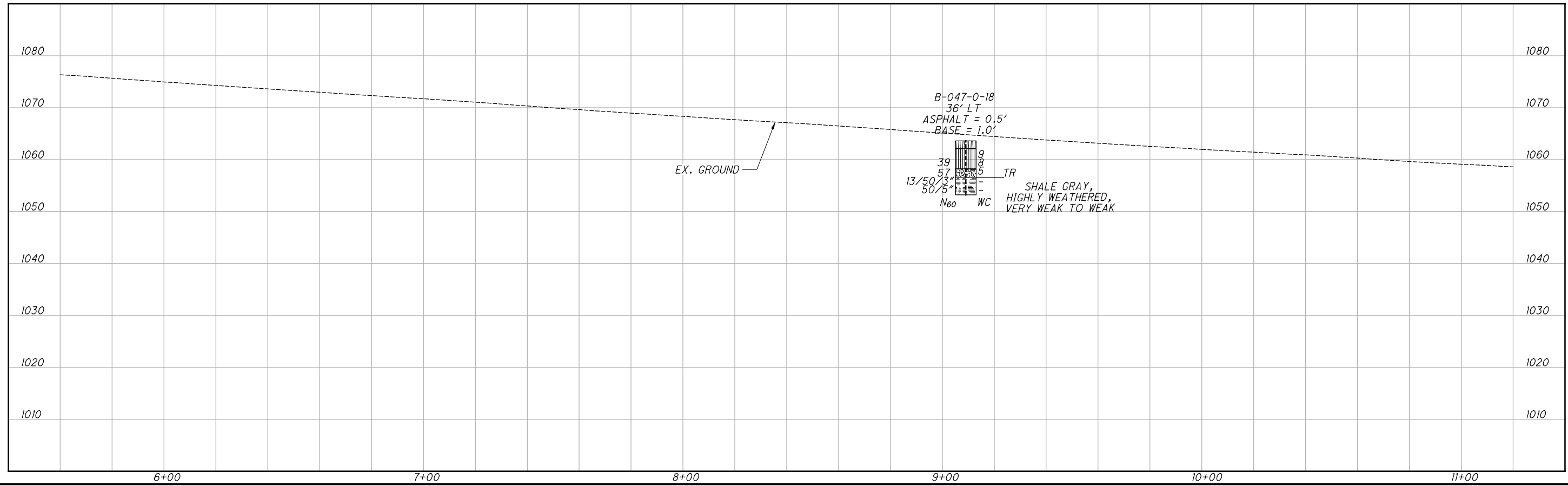
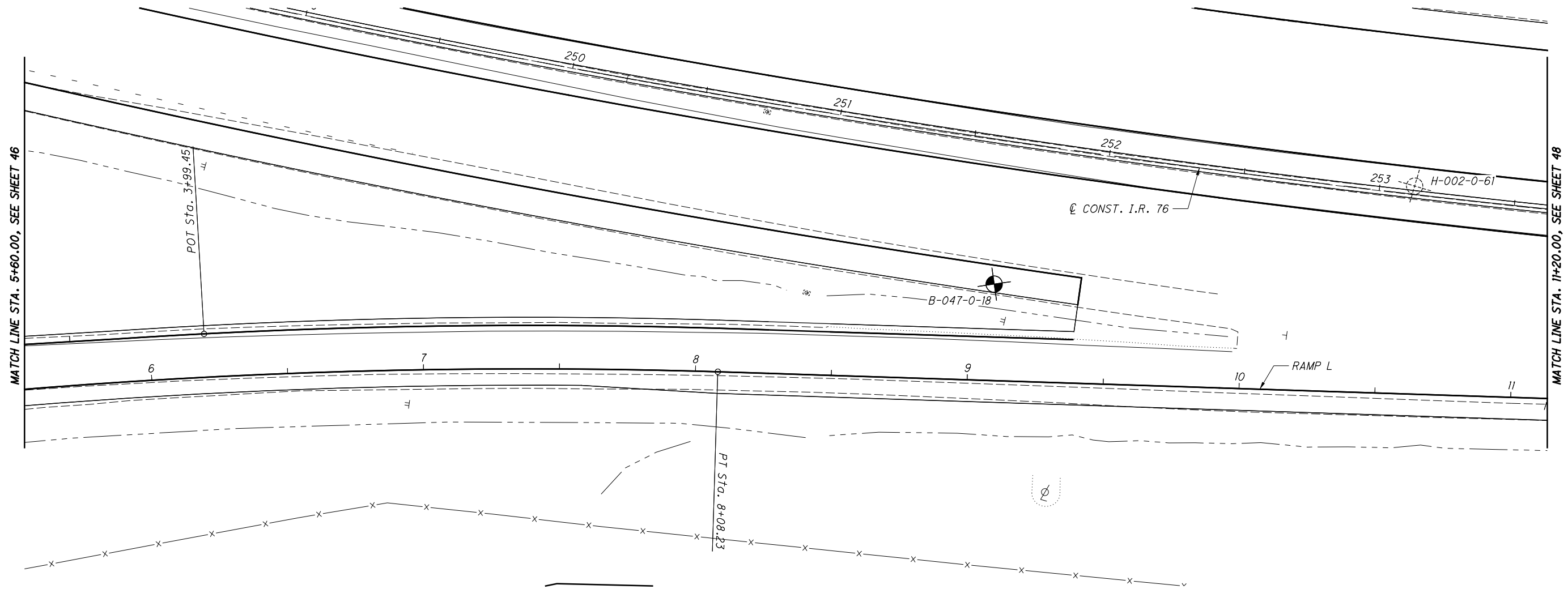
DRAWN
SM
CHECKED
PAN

SOIL PROFILE
BEGIN STA. 0+00.00 TO STA. 5+60.00 RAMP L

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

46
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP413.dgn Sheet 8/21/2020 10:46:21 AM kmh\ace



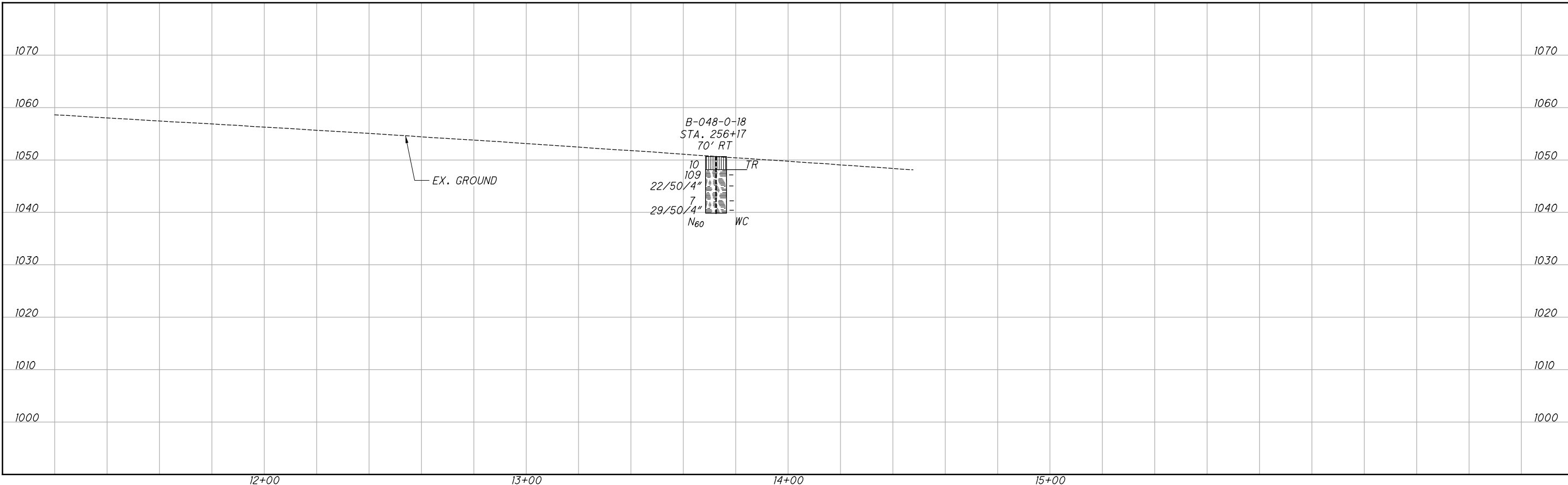
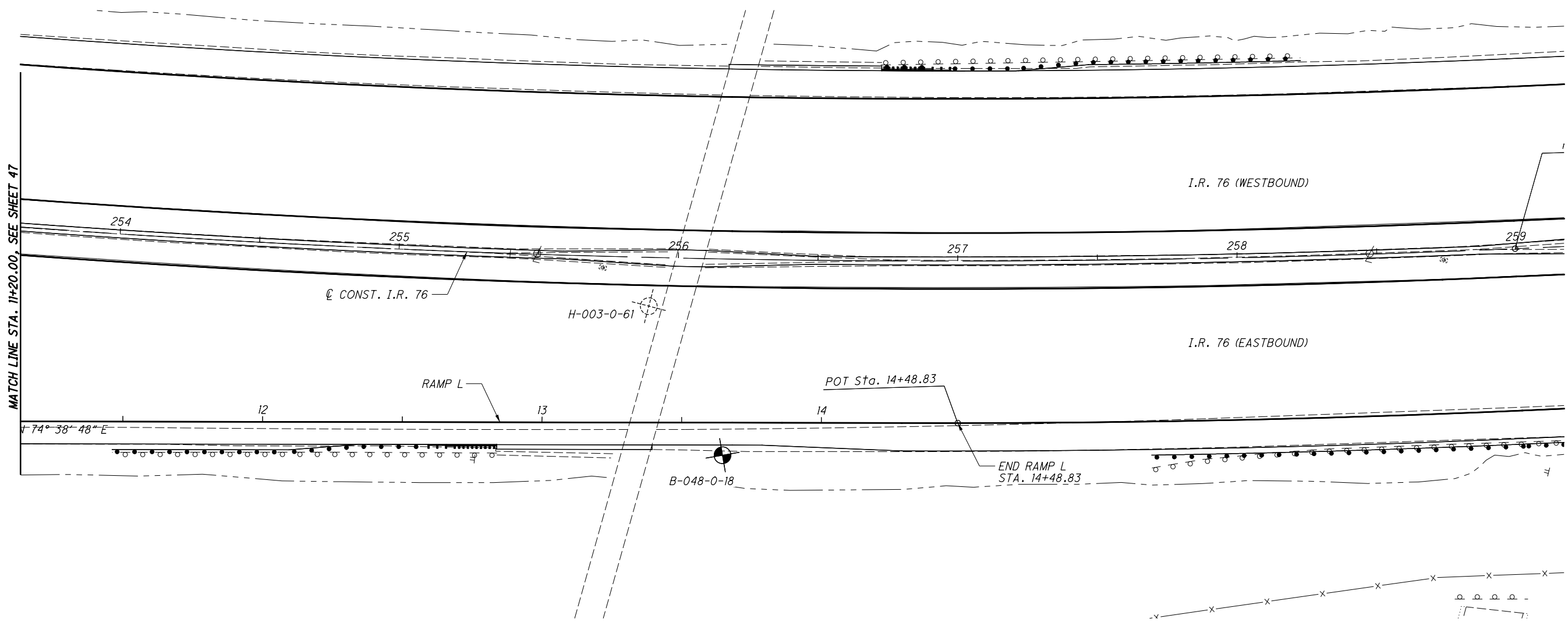


 HORIZONTAL SCALE IN FEET
 DRAWN: SM
 CHECKED: PAN

SOIL PROFILE
STA. 5+60.00 TO STA. 11+20.00 RAMP L

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

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DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 11+20.00 TO END STA. 14+48.83 RAMP L

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

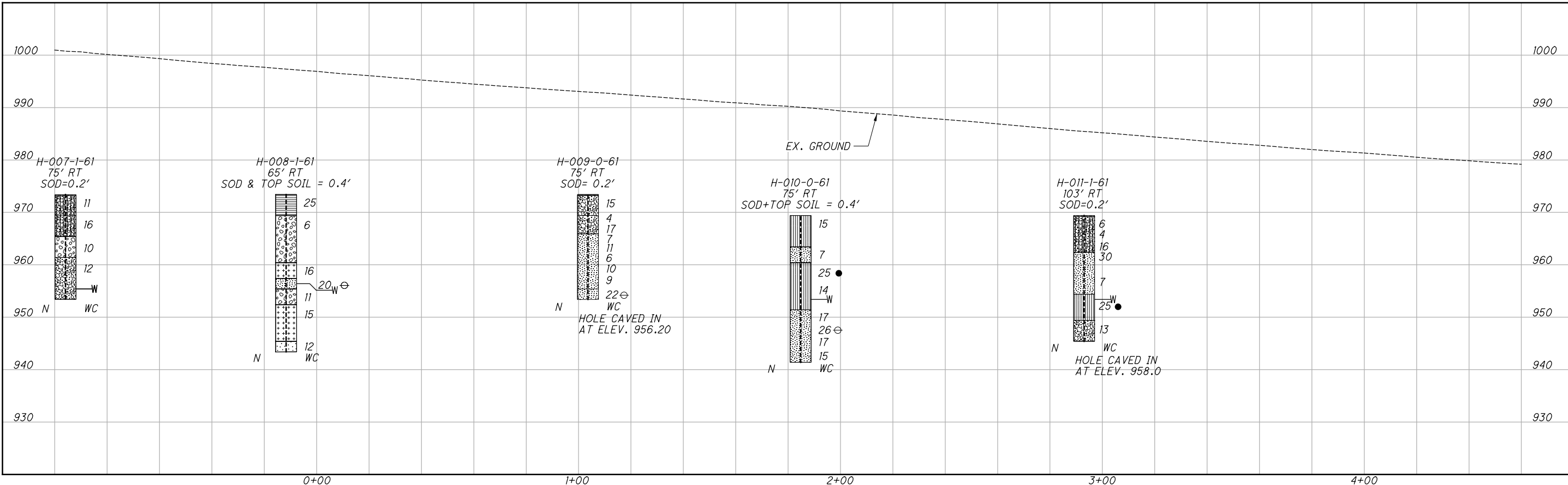
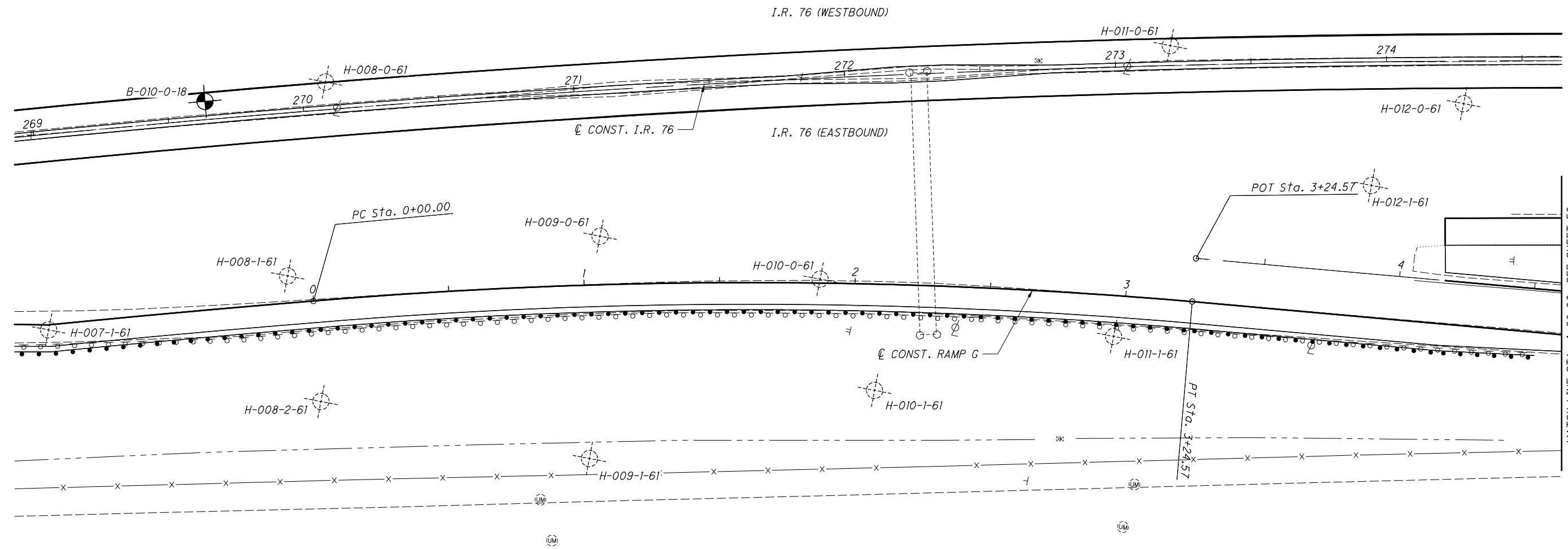


DRAWN SM
CHECKED PAN

SOIL PROFILE
BEGIN STA. 0+00.00 TO STA. 4+60.00 RAMP G

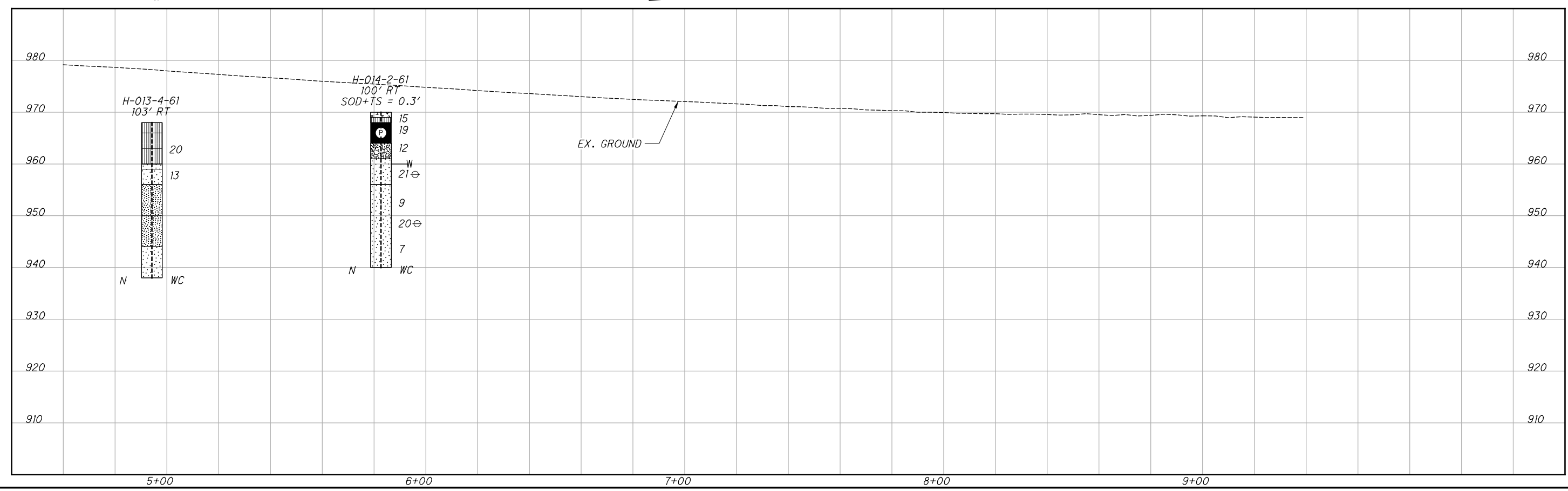
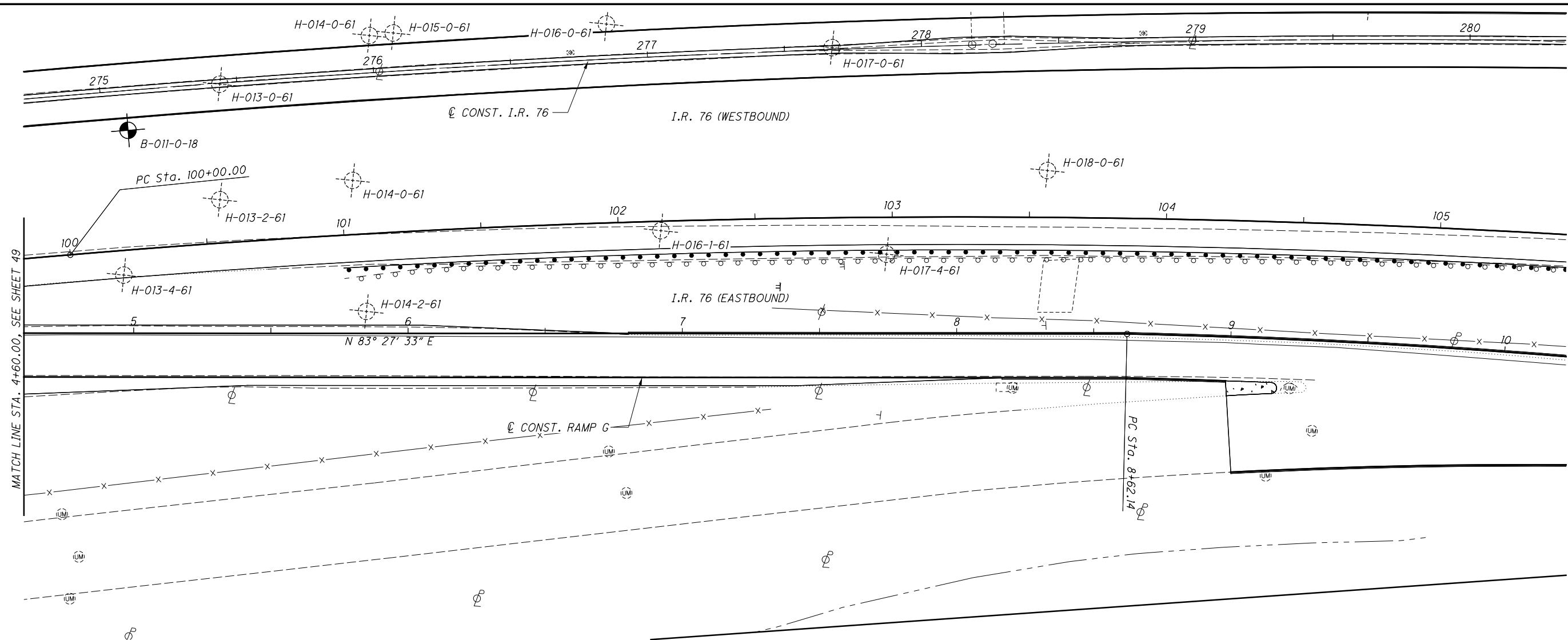
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

49
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP415.dgn Sheet 8/21/2020 10:46:34 AM kmhalcea

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N

HORIZONTAL SCALE IN FEET

DRAWN
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CHECKED
PAN

SOIL PROFILE

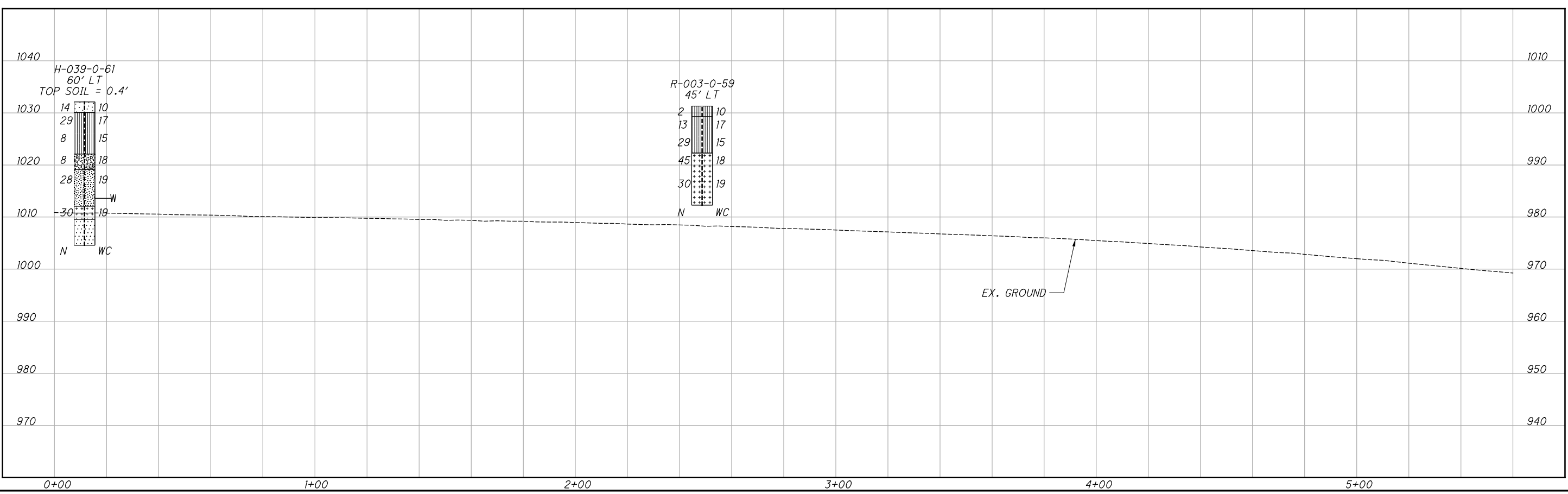
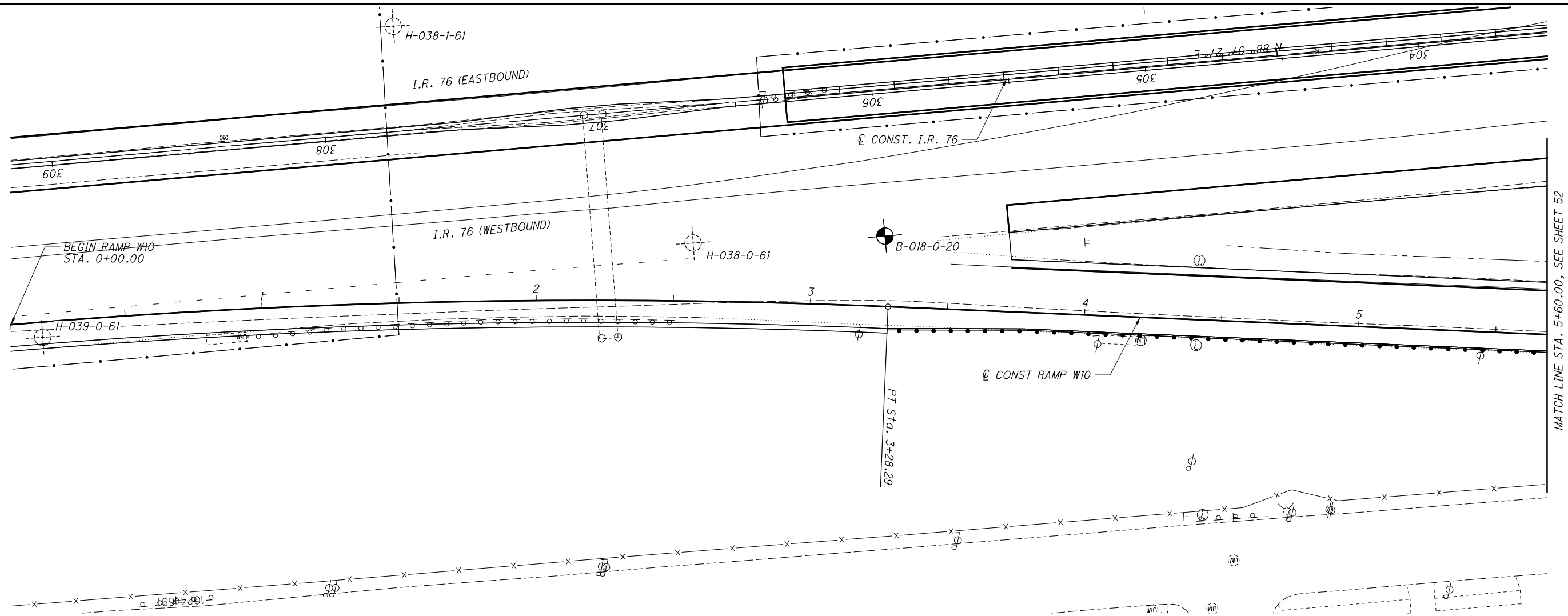
STA. 4+60.00 TO END RAMP G

SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

50
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP417.dgn Sheet 8/21/2020 10:46:48 AM kmh/ace



HORIZONTAL SCALE IN FEET

DRAWN: SM
CHECKED: PAN

SOIL PROFILE

BEGIN STA. 0+00.00 TO STA. 5+60.00 RAMP W10

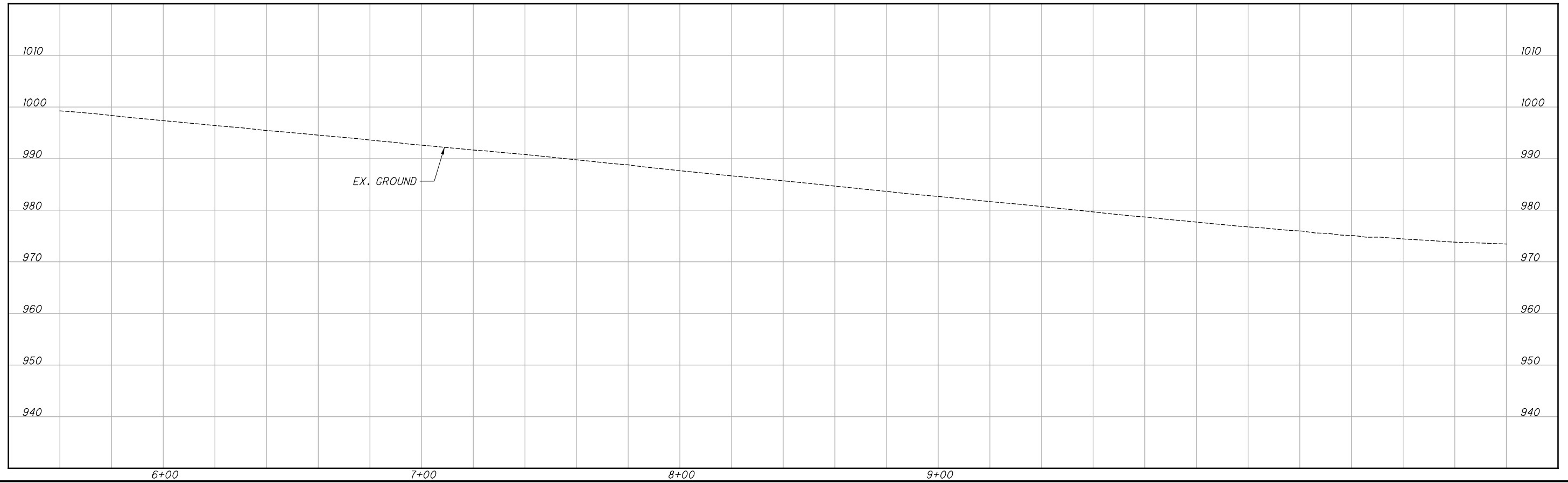
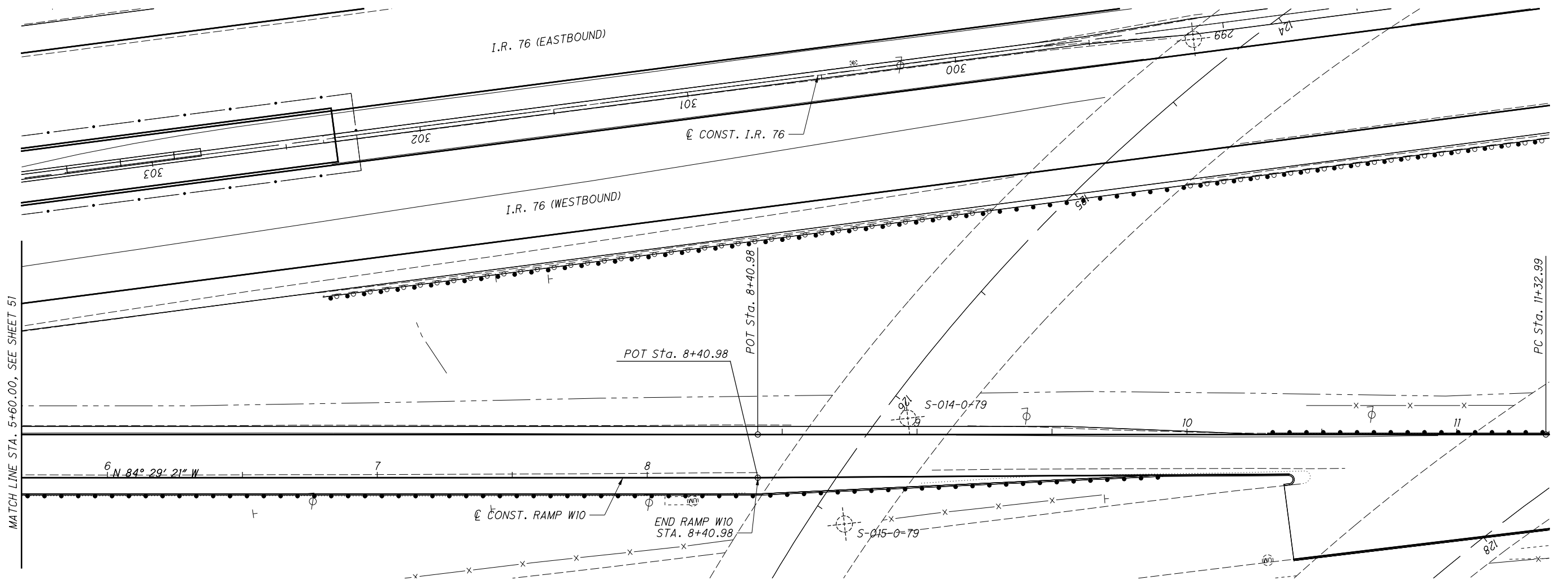
SUM-76 / 77 / 8 -

8.24 / 9.74 / 0.00

51

182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP41B.dgn Sheet 8/21/2020 10:46:54 AM kmhnlceca



HORIZONTAL SCALE IN FEET

DRAWN
SM
CHECKED
PAN

SOIL PROFILE
STA. 5+60.00 TO END STA. 8+40.98 RAMP W10

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

52

182

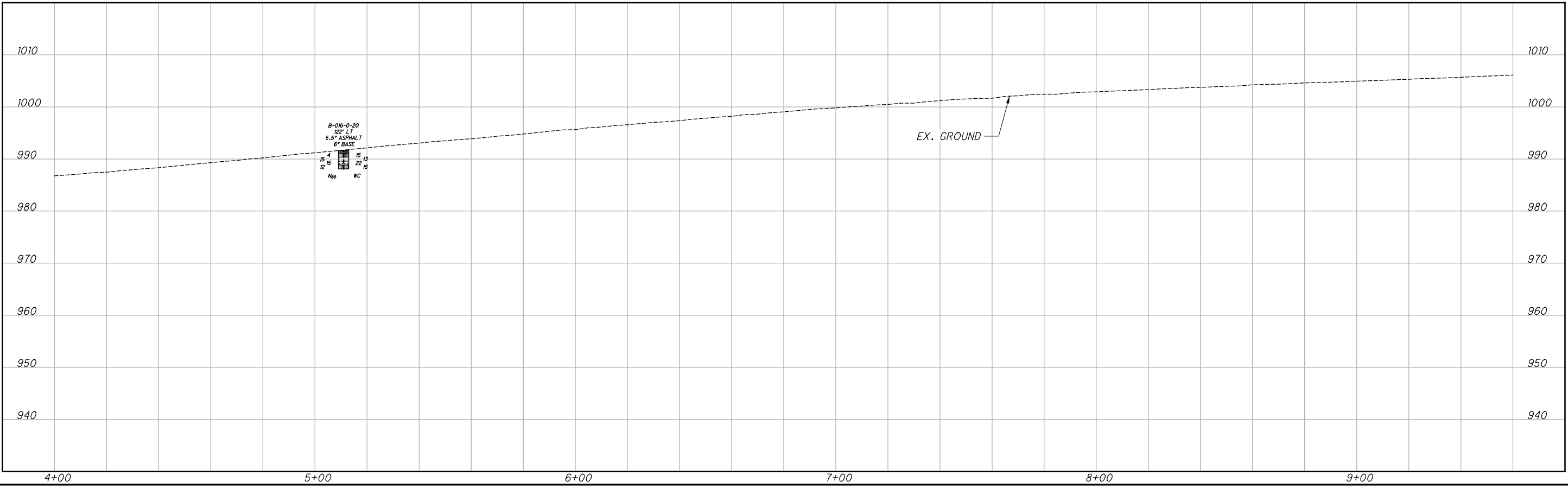
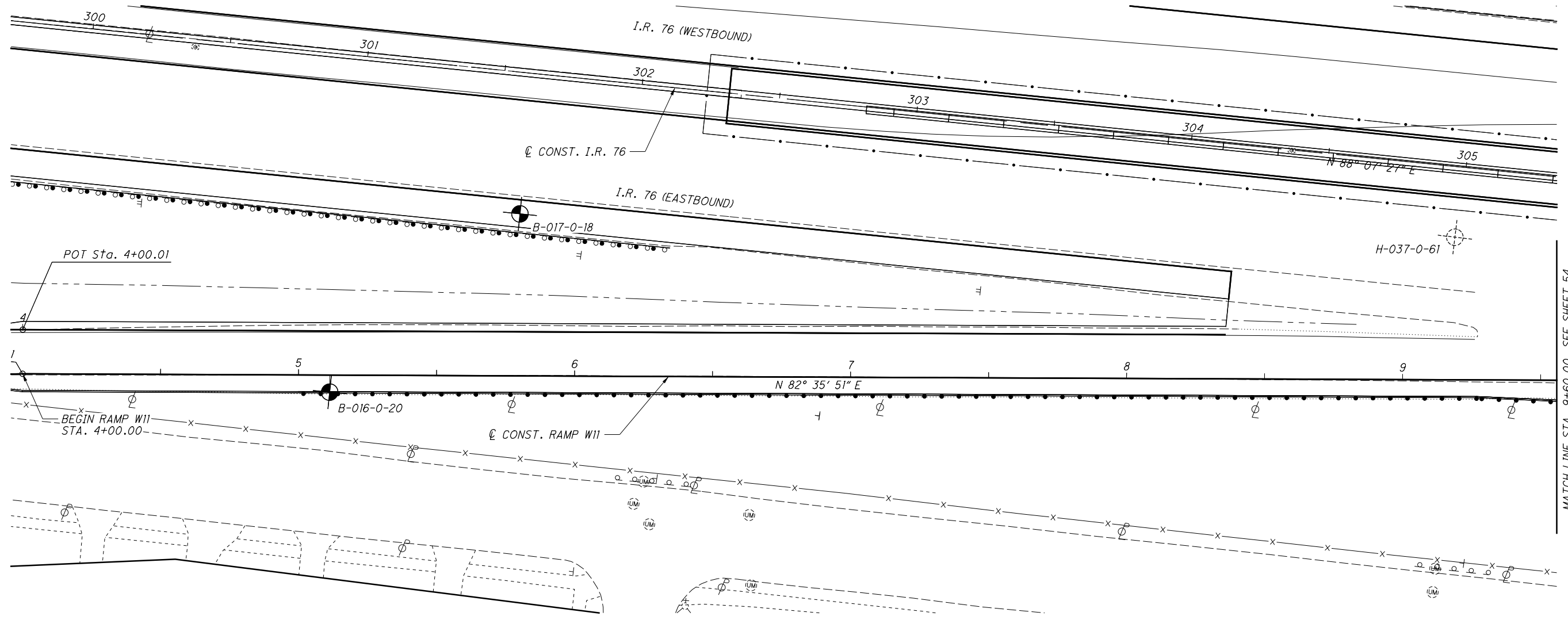


DRAWN: SM
CHECKED: PAN

SOIL PROFILE
BEGIN STA. 4+00.00 TO STA. 9+60.00 RAMP W11

SUM-76/77/8-
8.24/9.74/0.00

53
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP419.dgn Sheet 8/21/2020 10:47:00 AM kmhnlcea

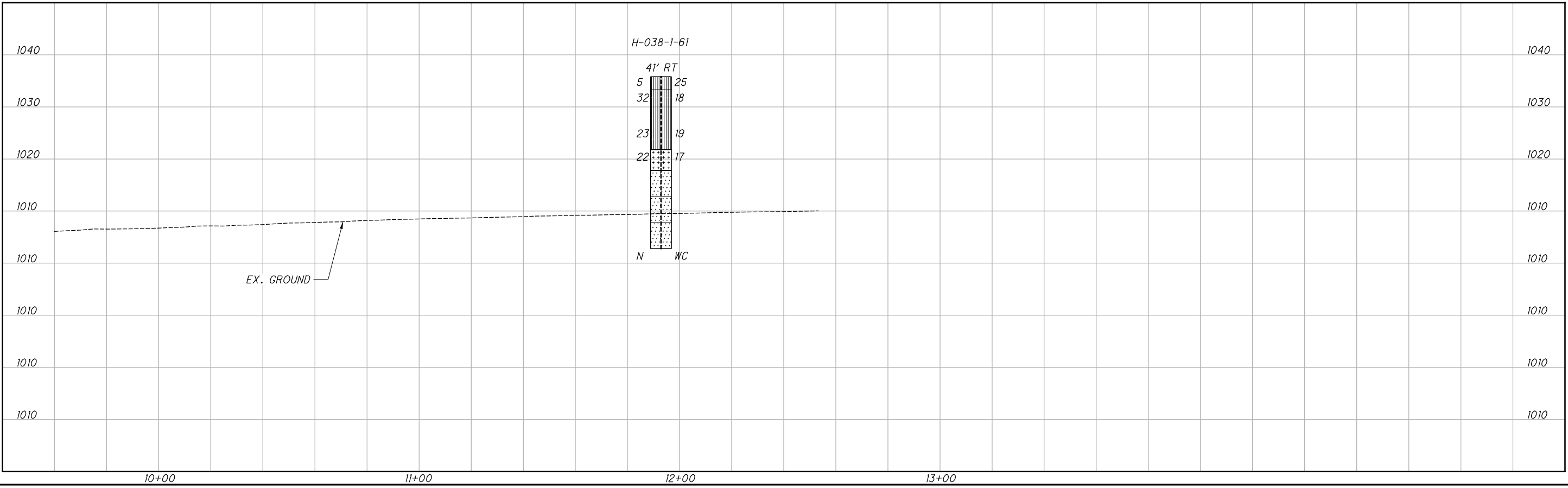
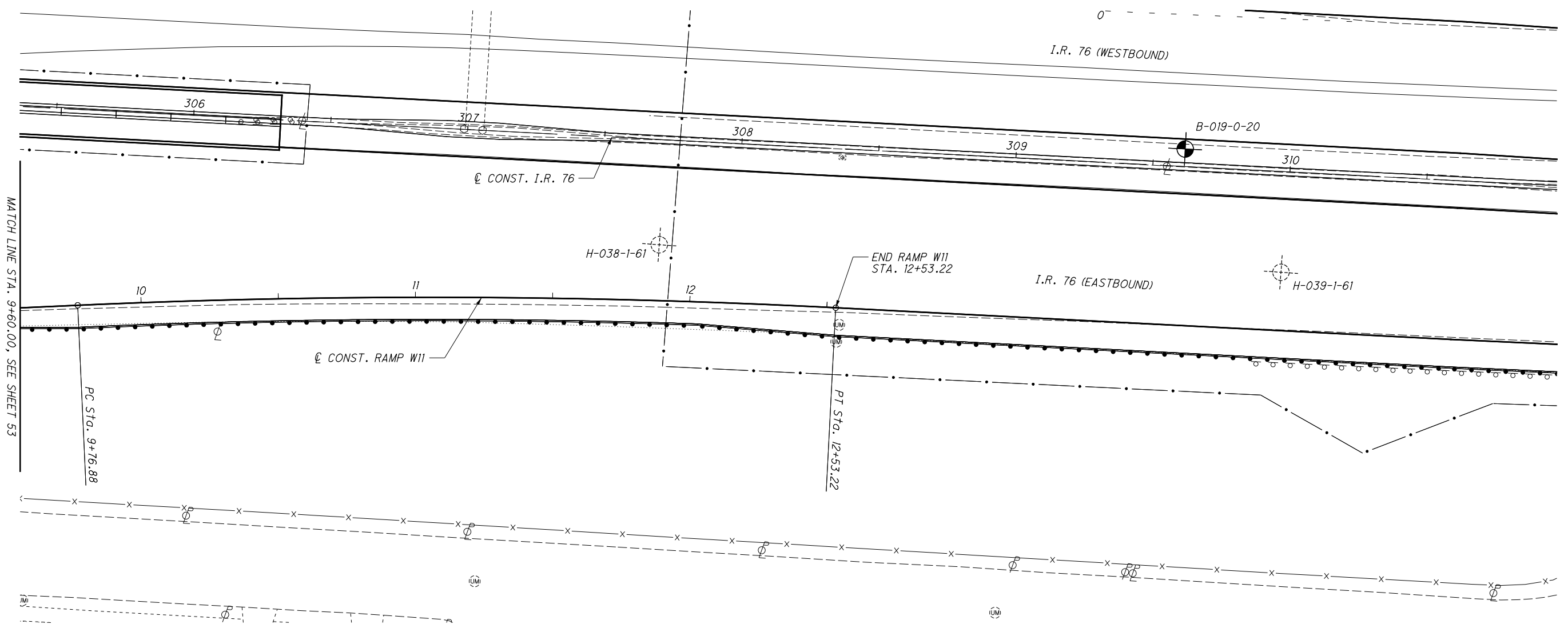


DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 9+60.00 TO END STA. 12+53.21 RAMP W11

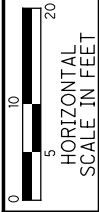
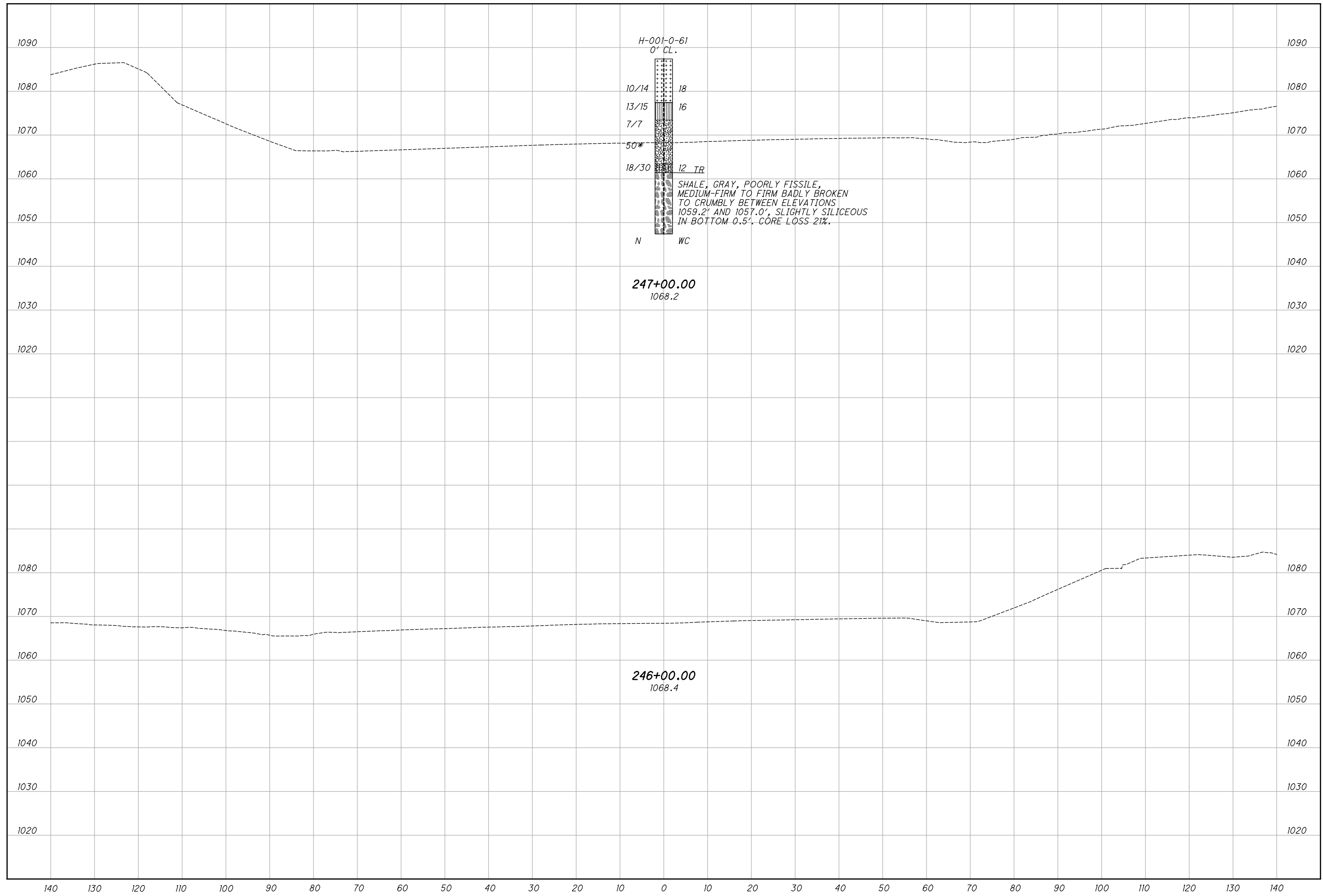
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

54
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP420.dgn Sheet 8/27/2020 10:47:08 AM kmihalcea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX001.dgn Sheet 8/27/2020 10:47:10 AM kmh/icea

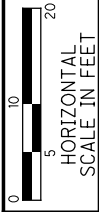
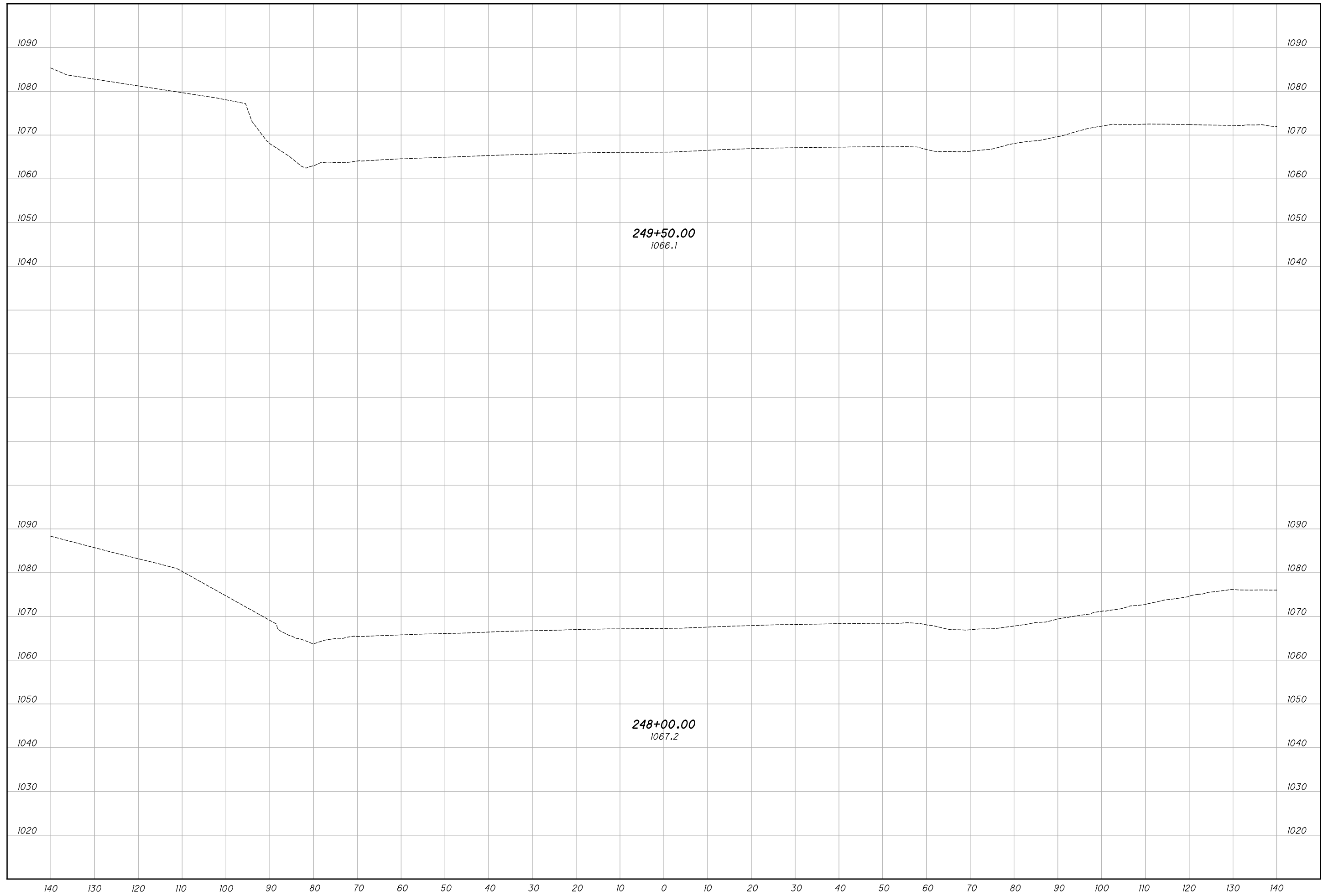


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 246+00.00 & 247+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX002.dgn Sheet 8/27/2020 10:47:13 AM kmihalcea



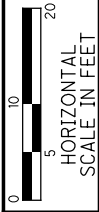
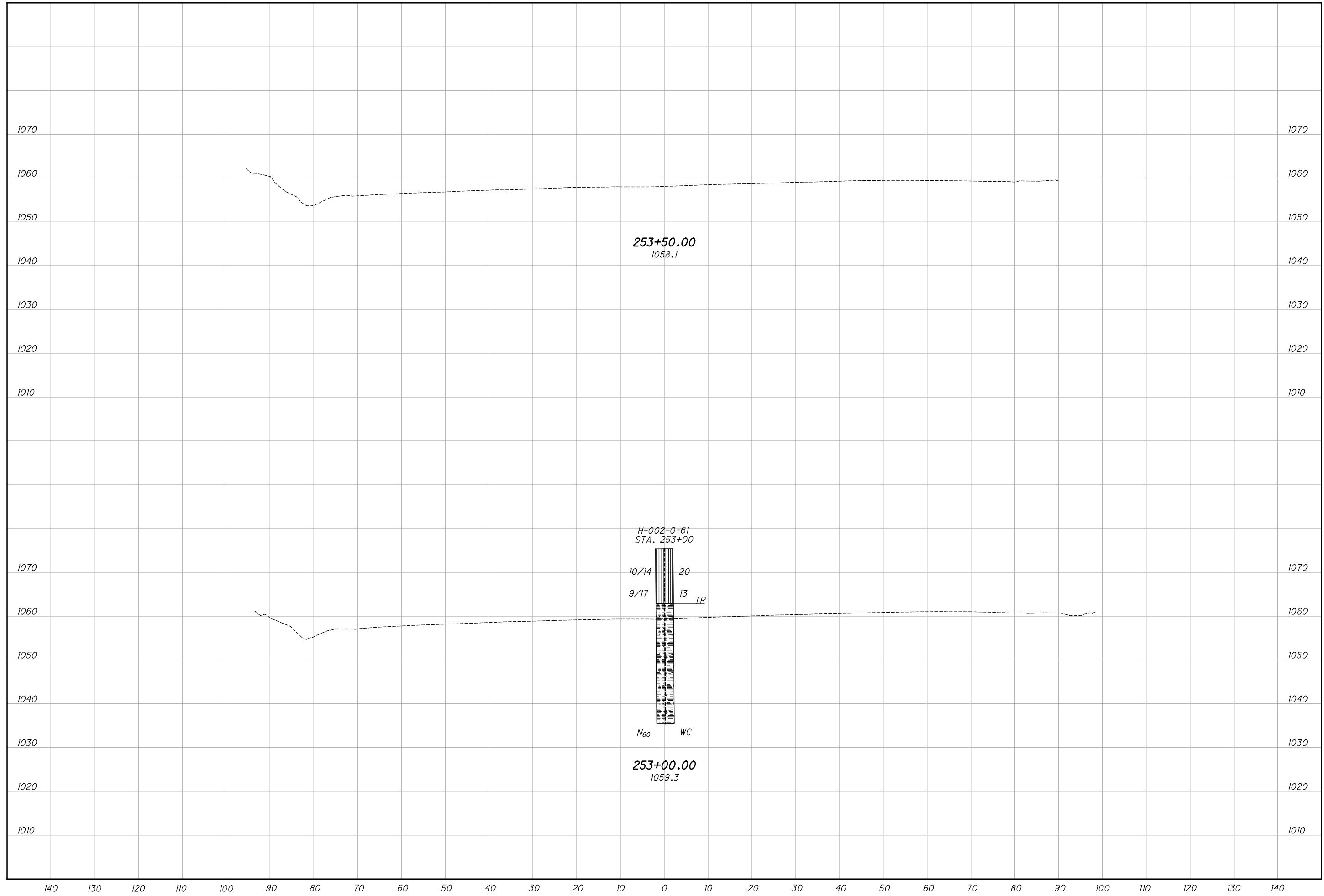
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 248+00.00 & 249+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

56
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX003.dgn Sheet 8/27/2020 10:47:16 AM kmihalcea



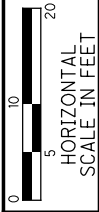
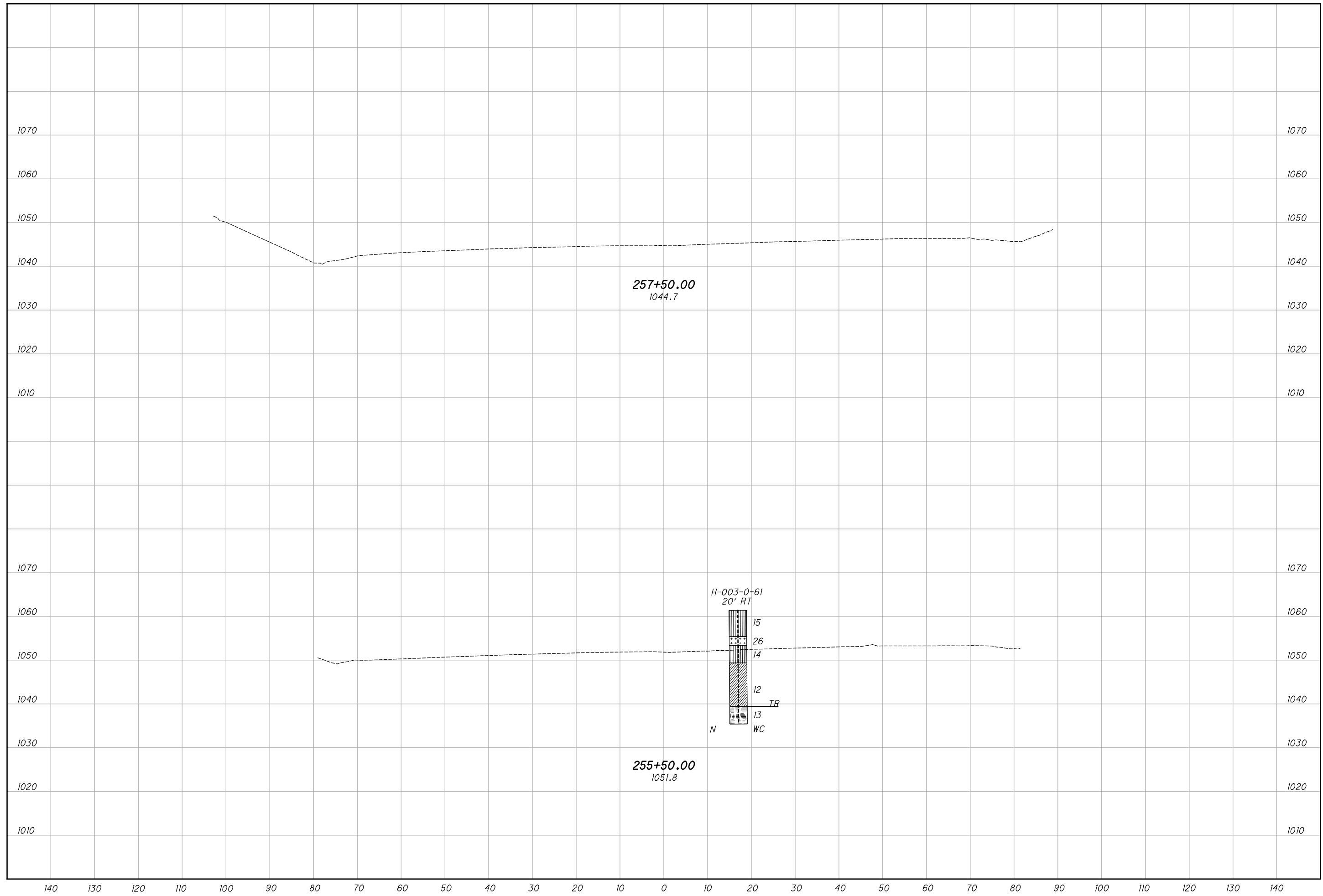
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 253+00.00 & 253+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

57
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX004.dgn Sheet 8/27/2020 10:47:17 AM kmihalcea



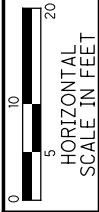
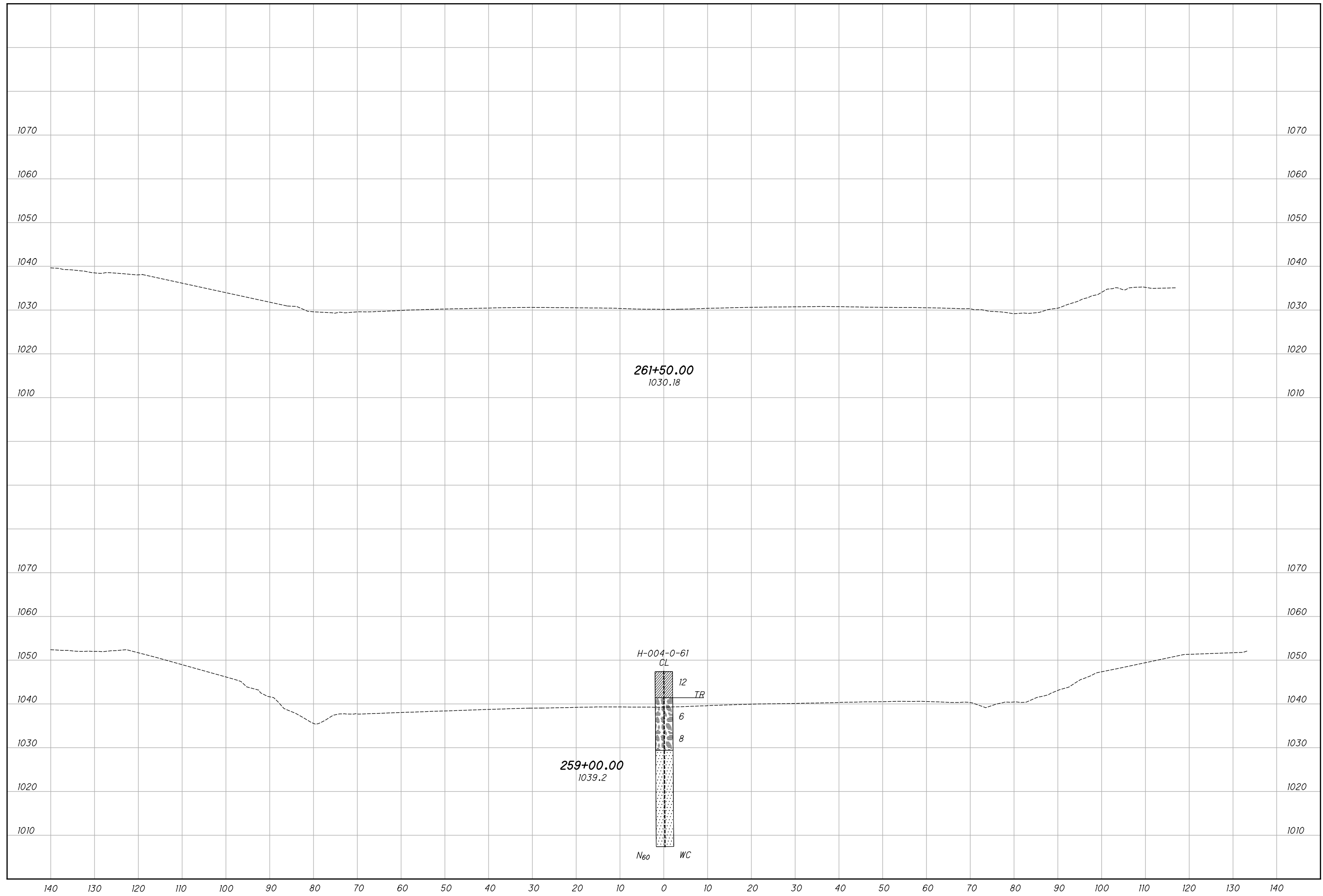
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 255+50.00 & 257+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

58
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX005.dgn Sheet 8/27/2020 10:47:19 AM kmihalcea

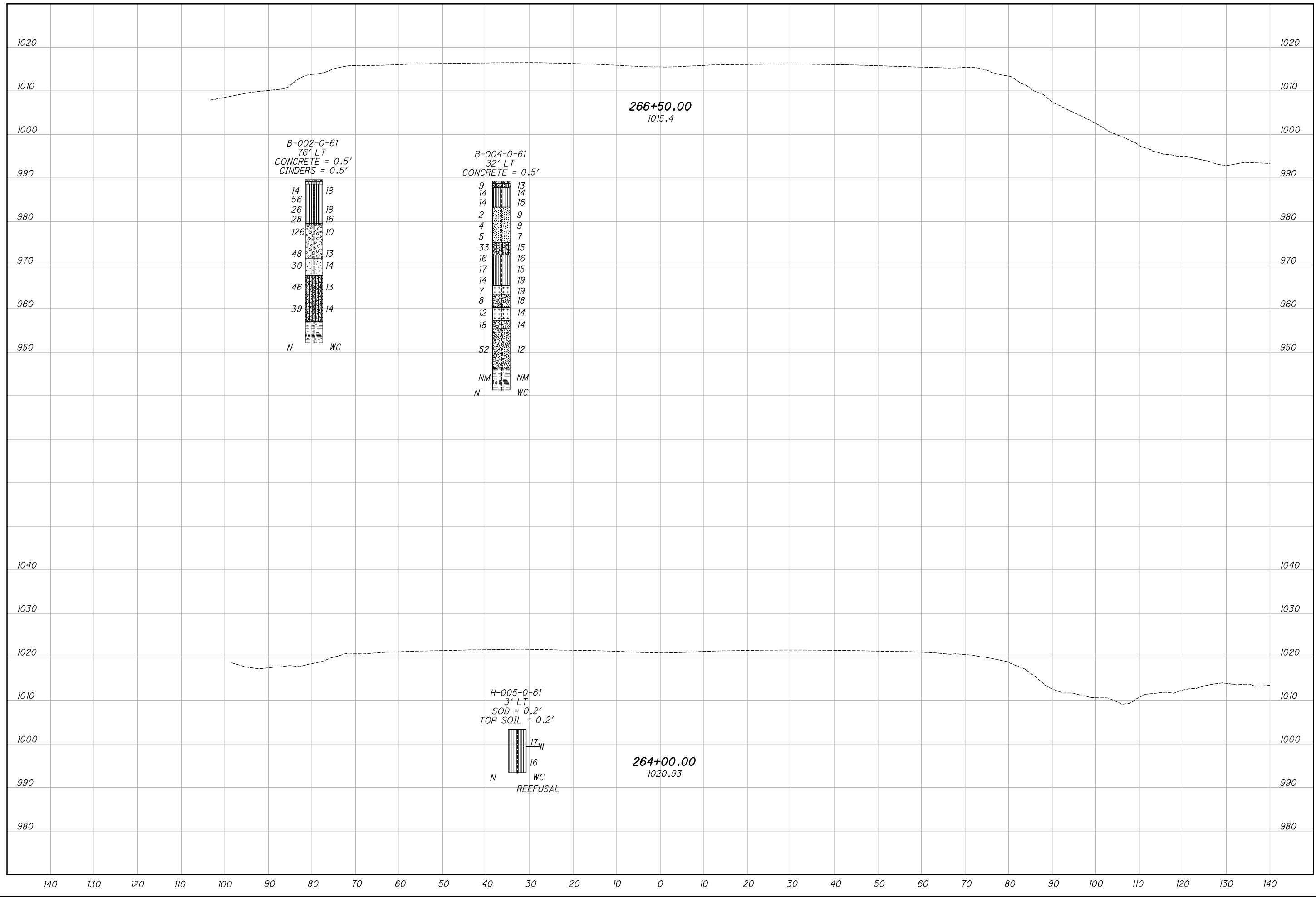


DRAWN
SM
CHECKED
PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 259+00.00 & 261+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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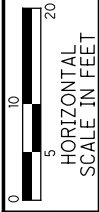
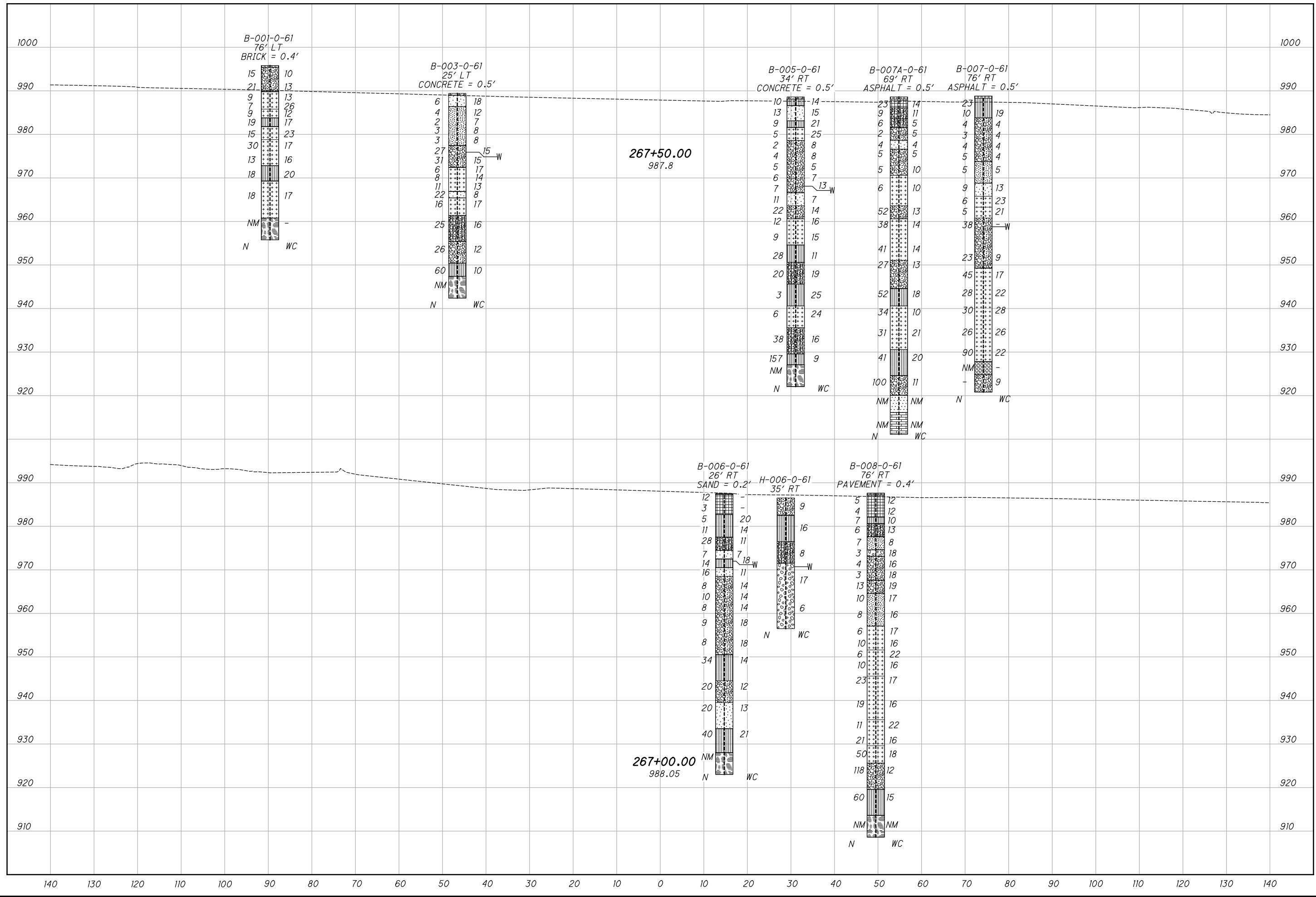
DRAWN SM
 CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 264+50.00 & 266+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

60
 182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX007.dgn Sheet 8/27/2020 10:47:23 AM kmihalcea

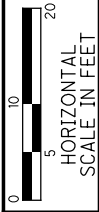
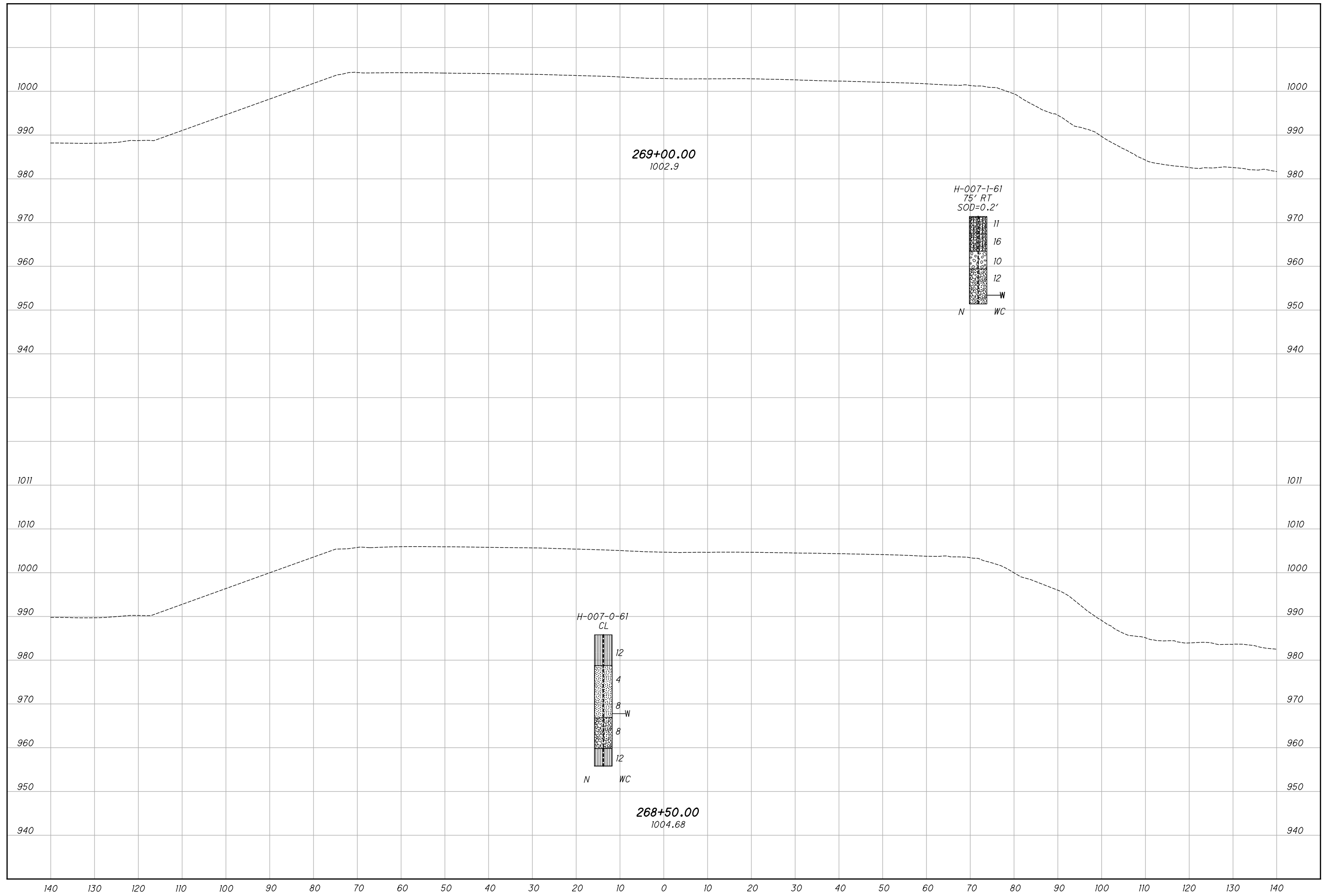


DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 267+00.00 & 267+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX008.dgn Sheet 8/27/2020 10:47:25 AM kmhalcea

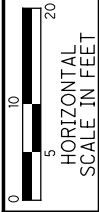
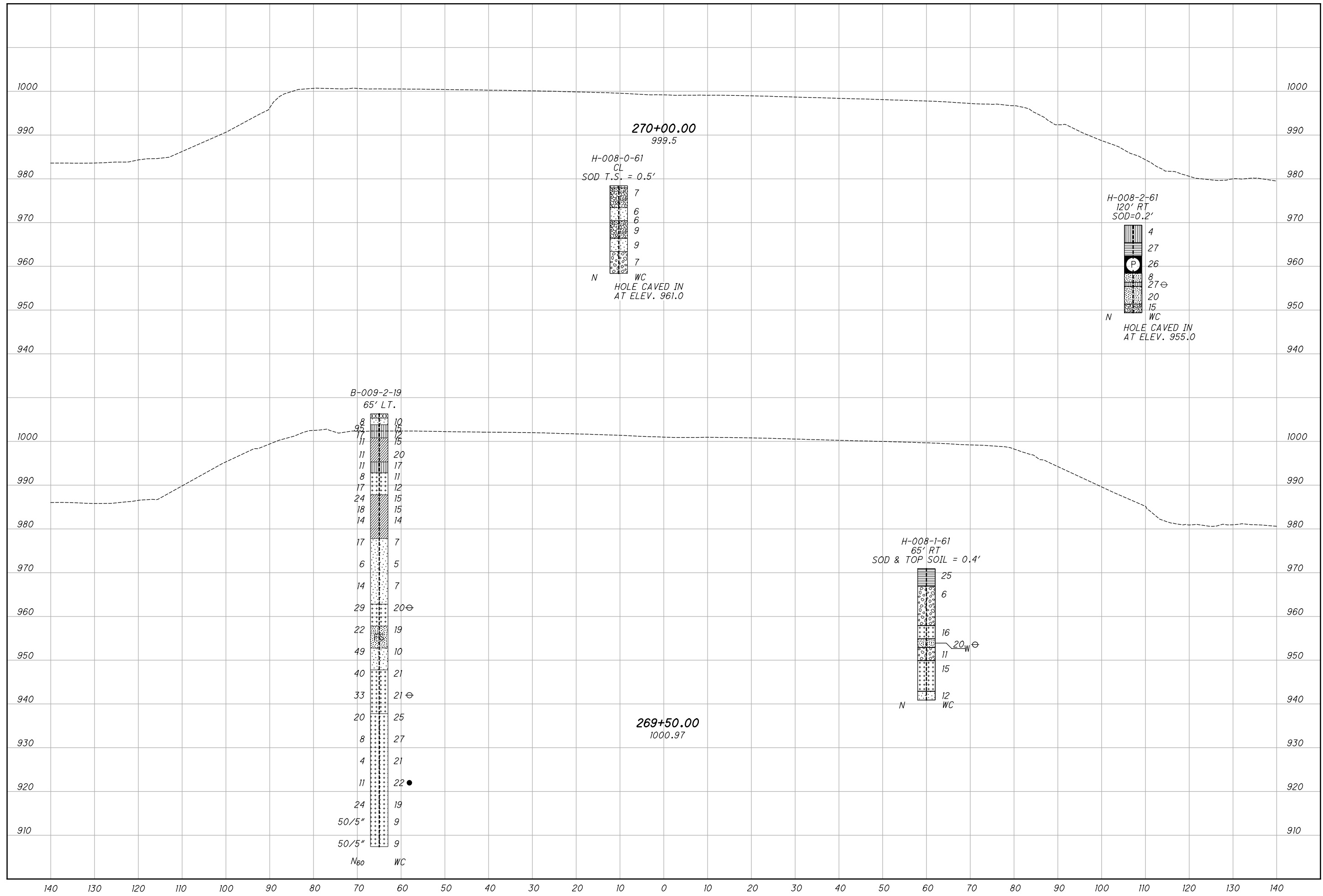


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 268+50.00 & 269+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX009.dgn Sheet 8/27/2020 10:47:27 AM kmhnlcega

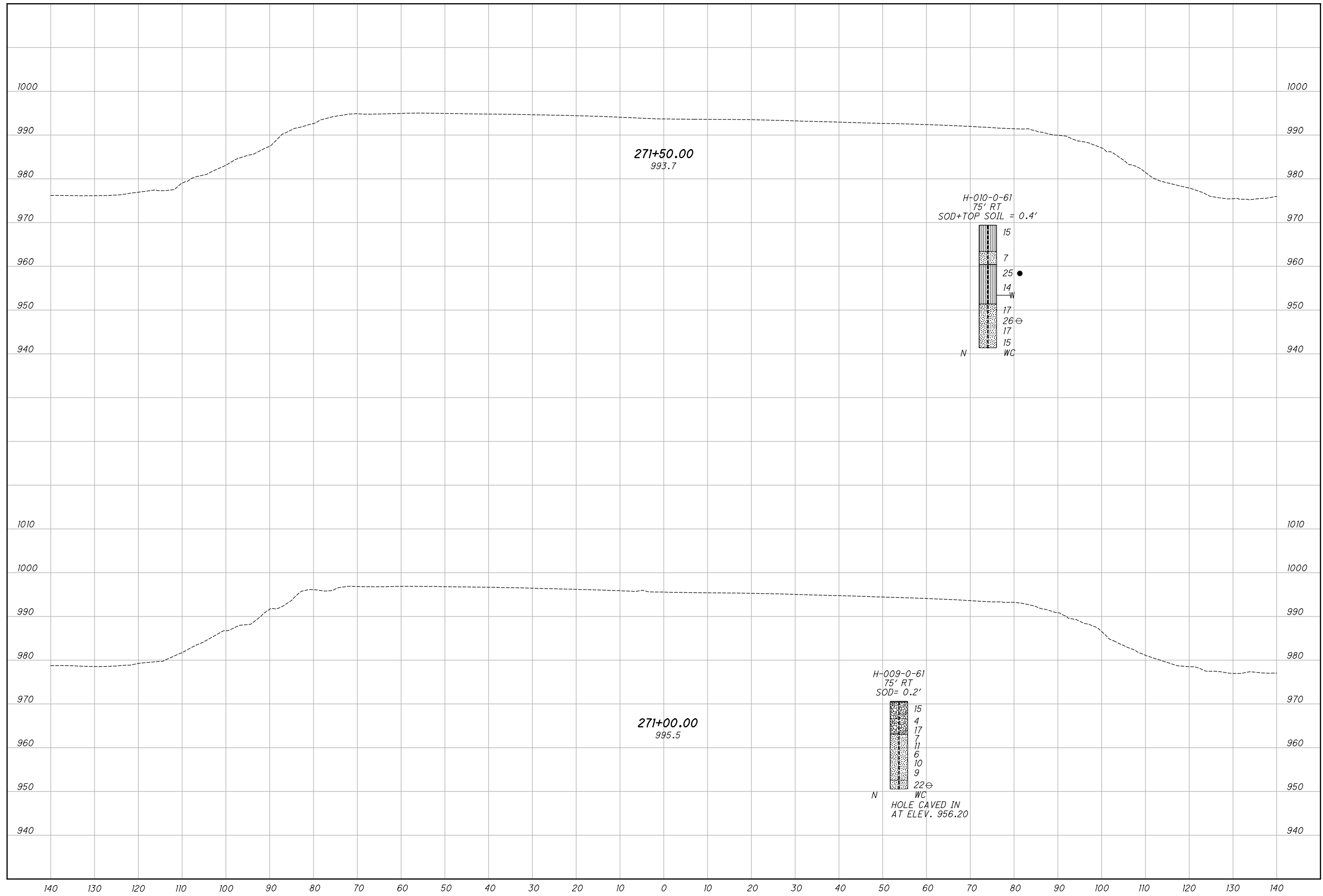


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 269+50.00 & 270+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\102329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\102329_1X010.dgn Sheet 8/27/2020 10:47:30 AM kmihalcea

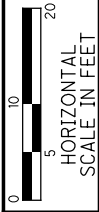
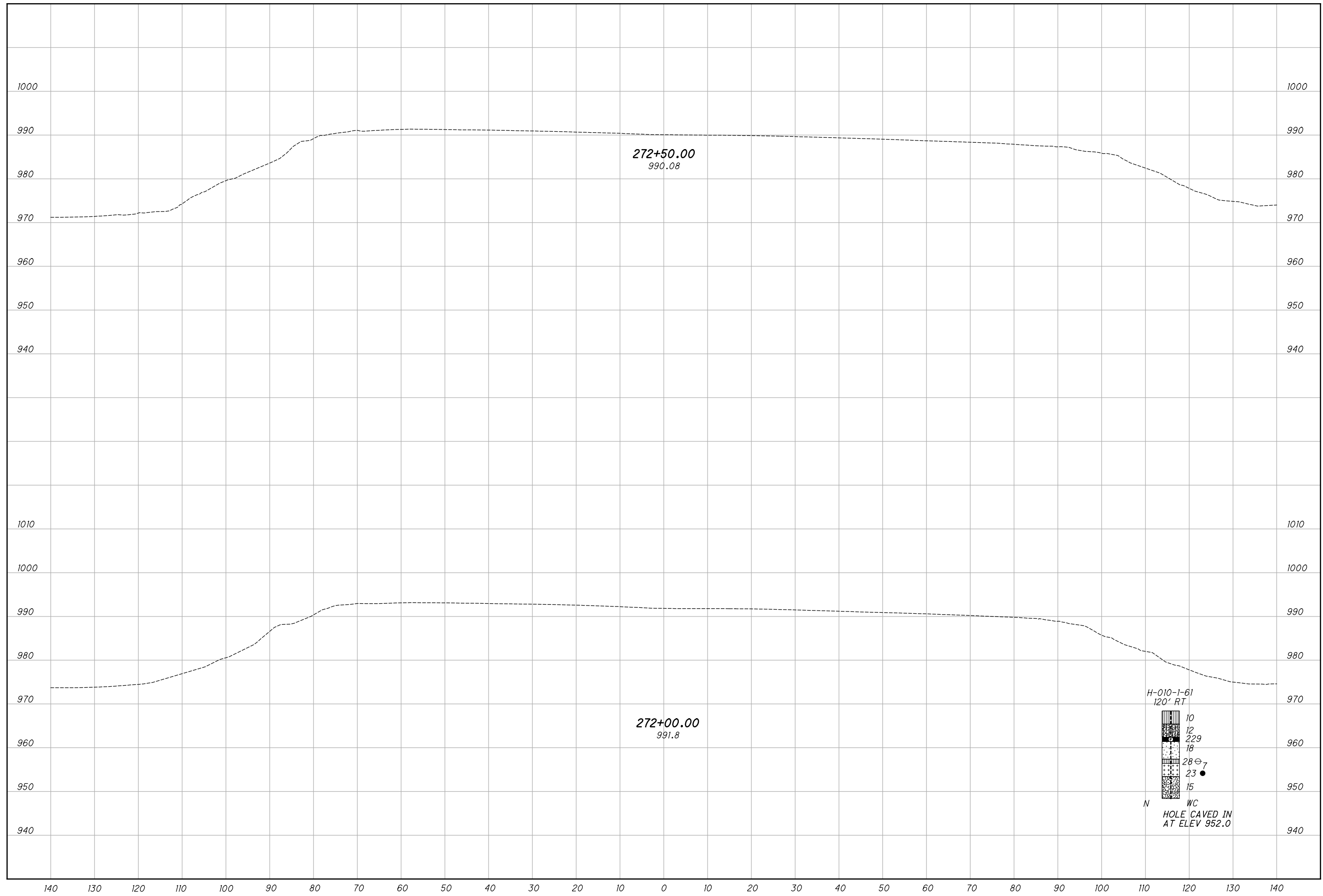


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 271+00.00 & 271+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX01.dgn_Sheet 8/27/2020 10:47:31 AM kmhnlcea

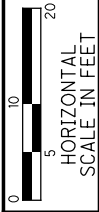
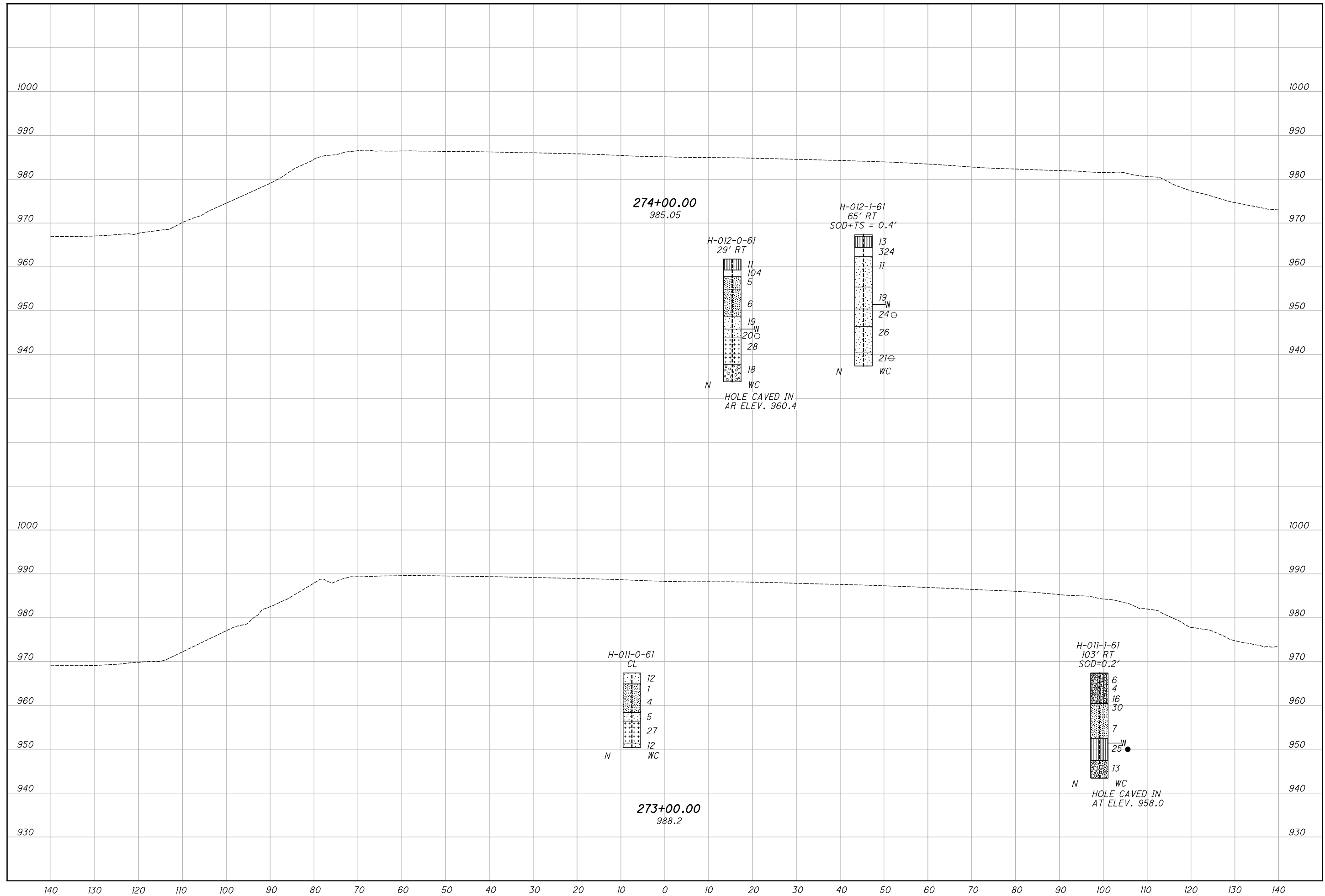


DRAWN
SM
CHECKED
PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 272+00.00 & 272+50.00

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

P:\102329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\102329_1X012.dgn Sheet 8/21/2020 10:47:33 AM kmihalcea

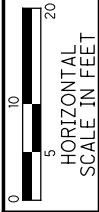
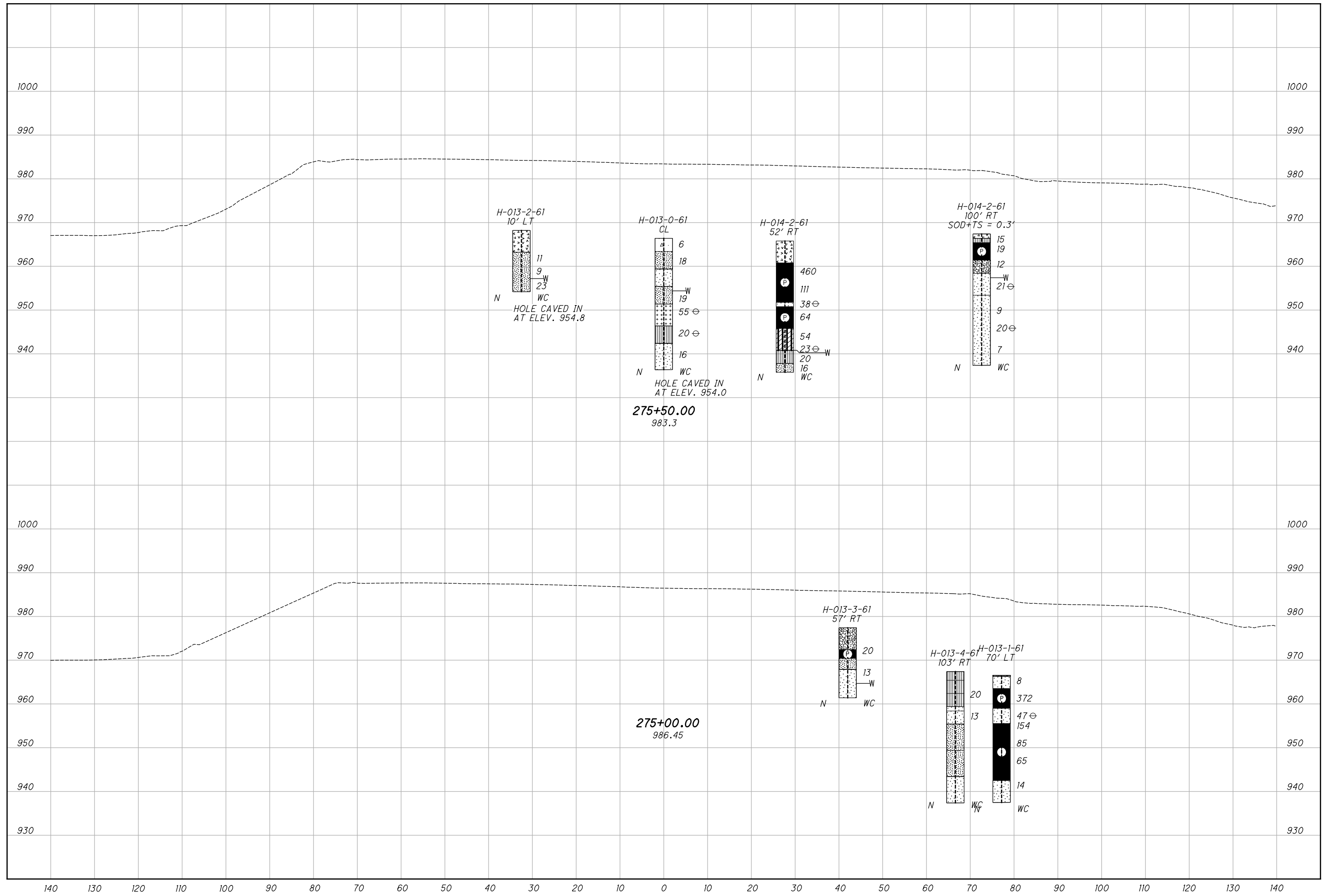


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 273+00.00 & 274+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I013.dgn Sheet 8/21/2020 10:47:35 AM kmihalcea

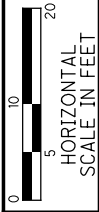
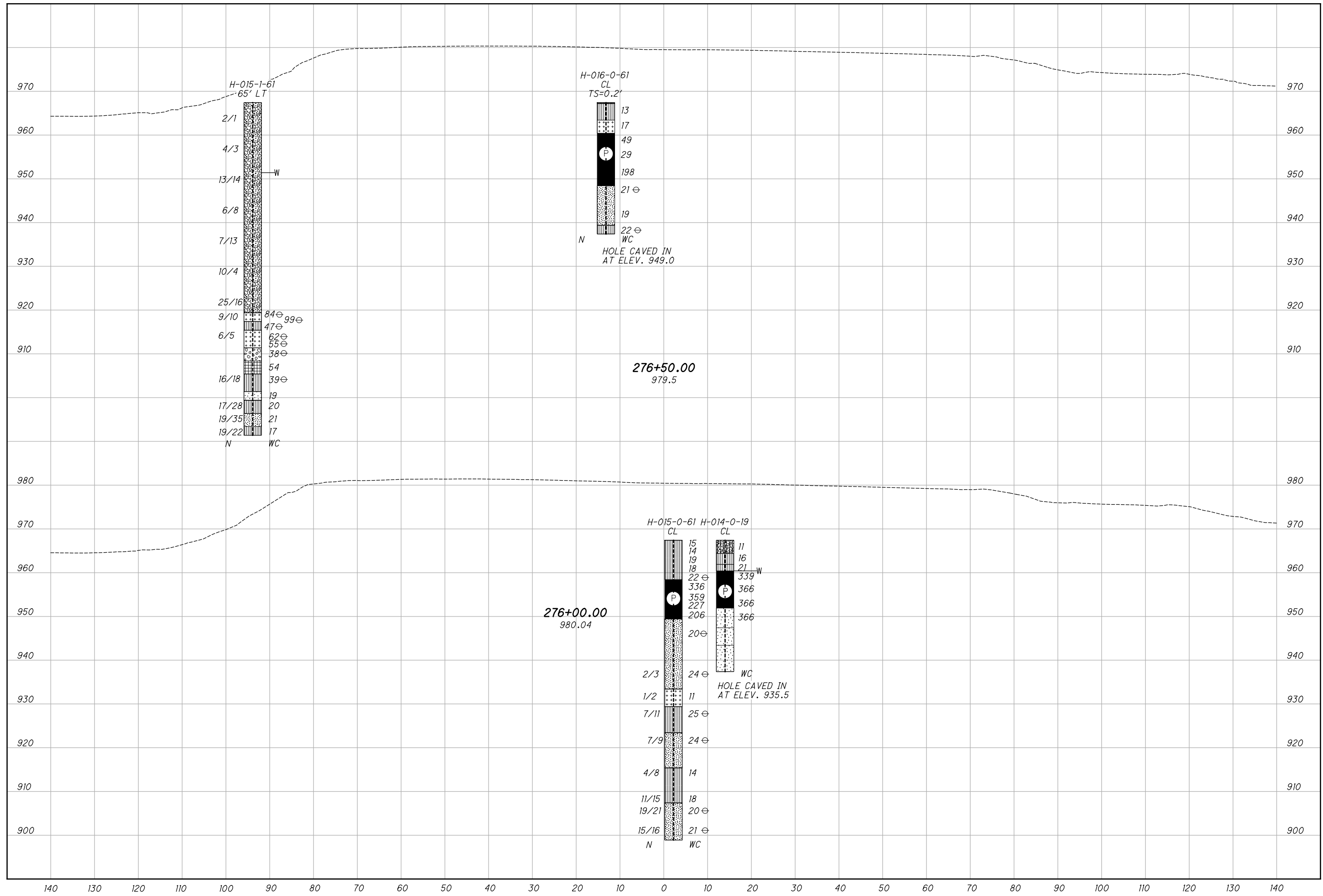


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 275+00.00 & 275+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I014.dgn Sheet 8/21/2020 10:47:36 AM kmihalcea

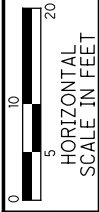
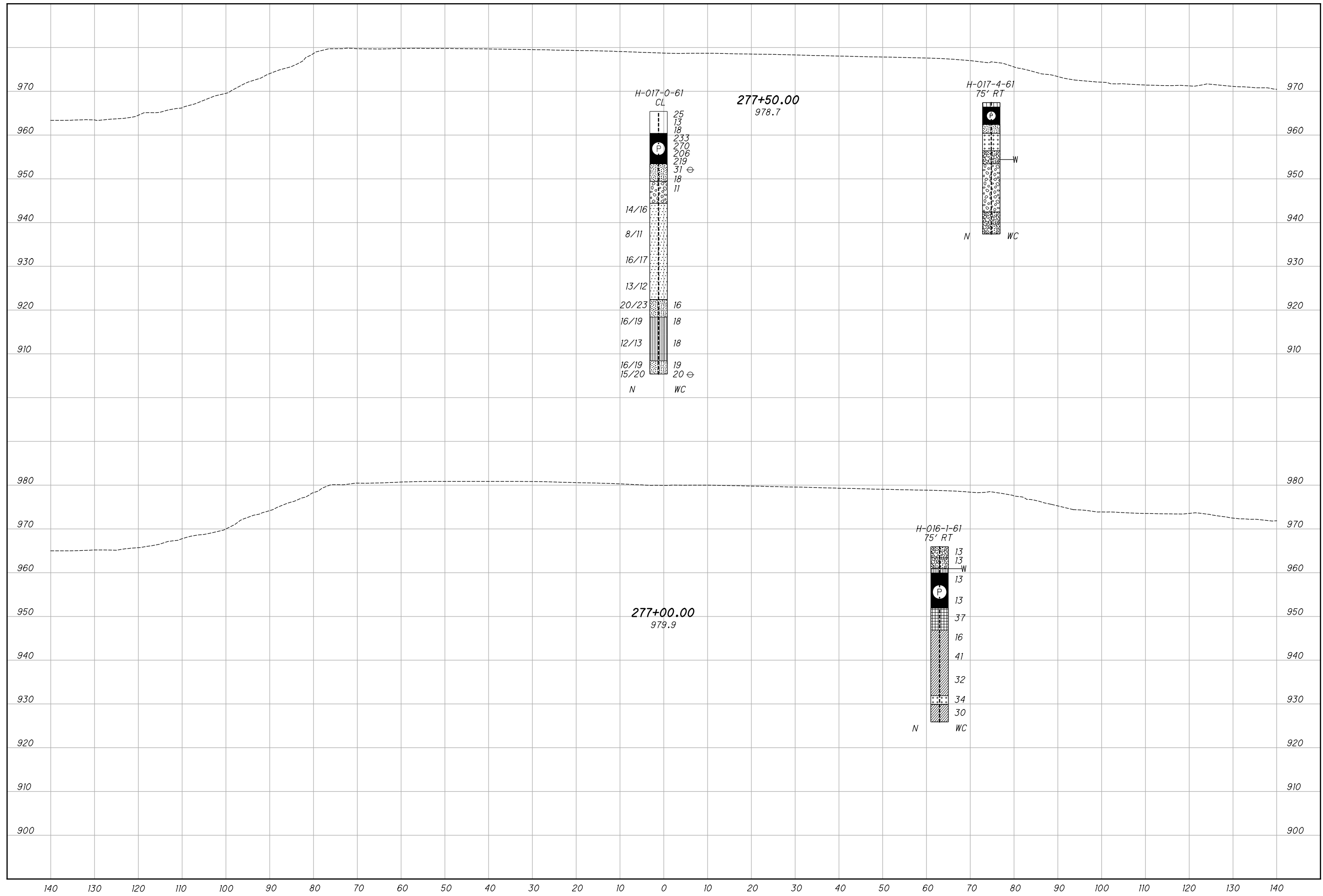


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 276+00.00 & 276+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I015.dgn Sheet 8/21/2020 10:47:37 AM kmihalcea

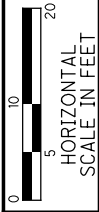
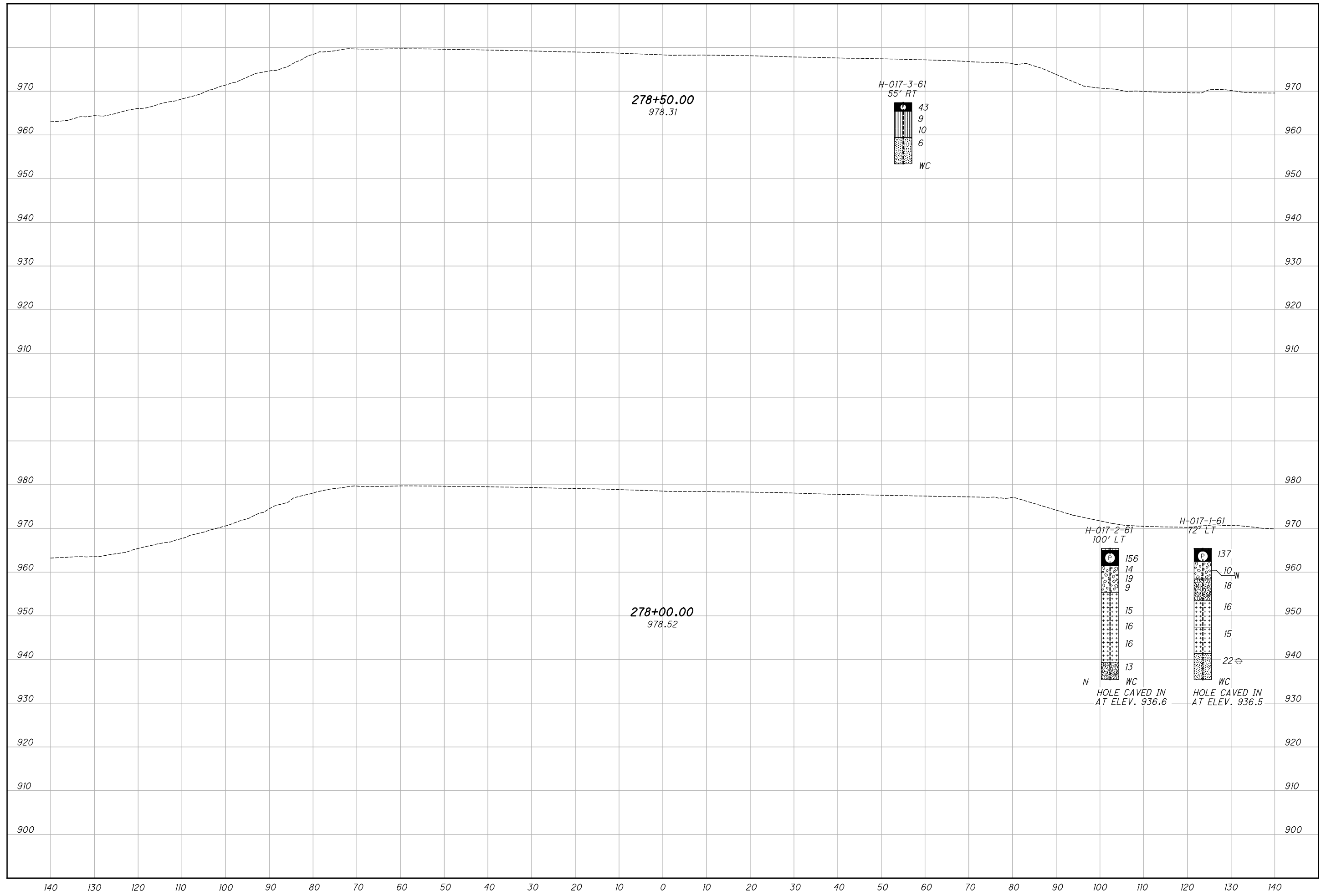


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 277+00.00 & 277+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\102329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\102329_1X016.dgn Sheet 8/27/2020 10:47:39 AM kmihalcea



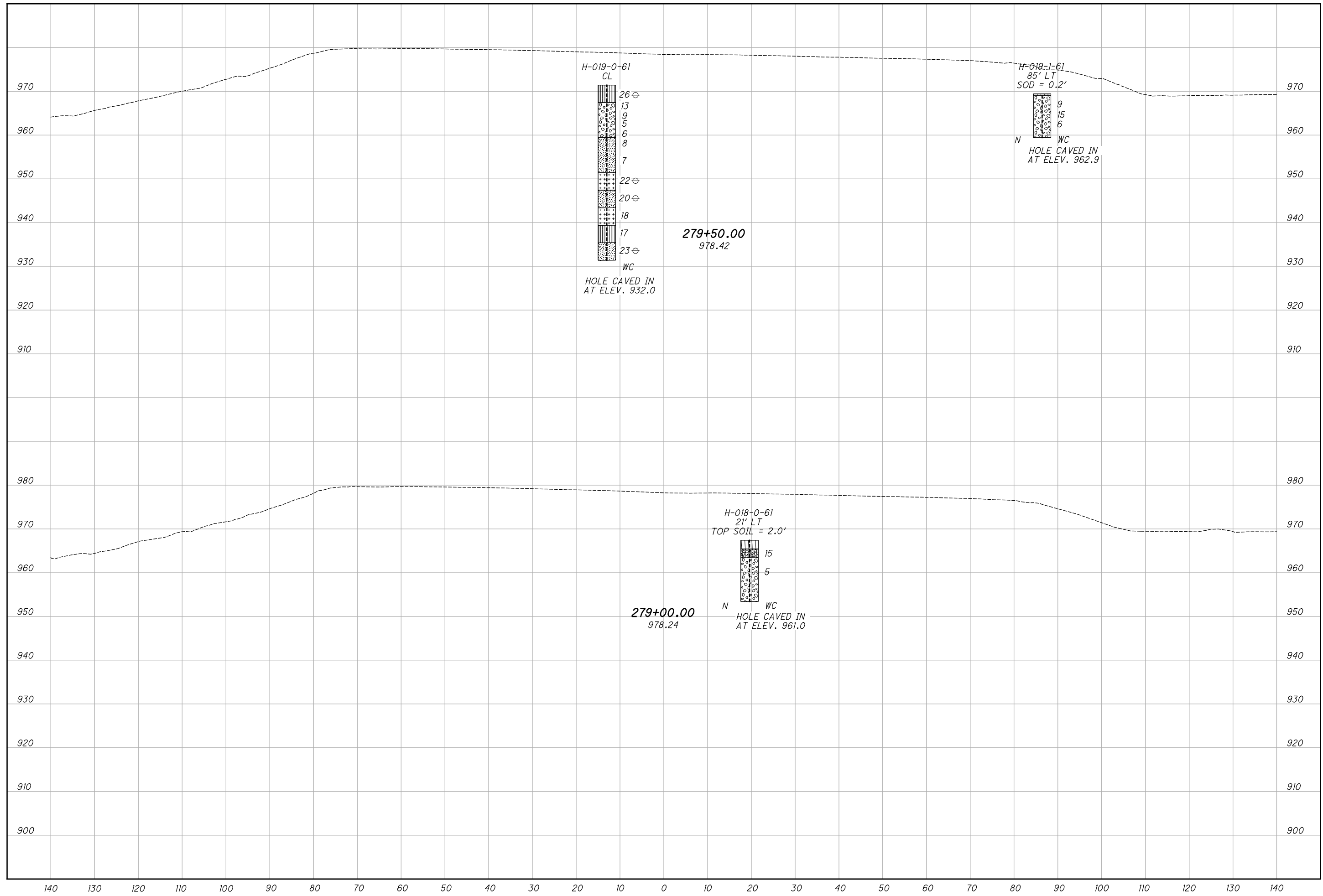
DRAWN
SM
CHECKED
PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 278+00.00 & 278+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

70
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I017.dgn Sheet 8/21/2020 10:47:41 AM kmhabea

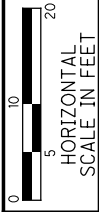
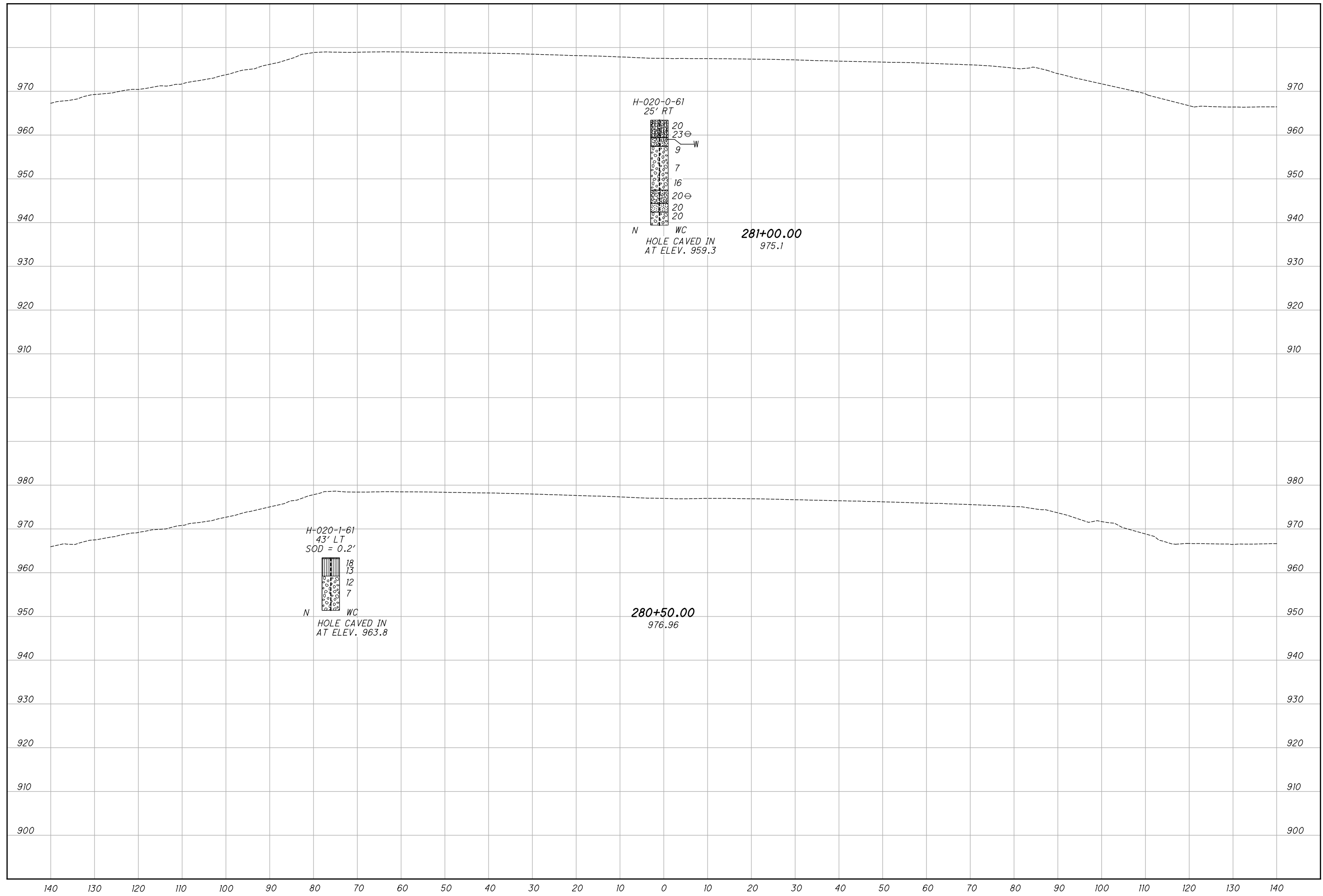


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 279+00.00 & 279+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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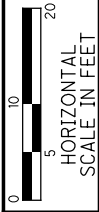
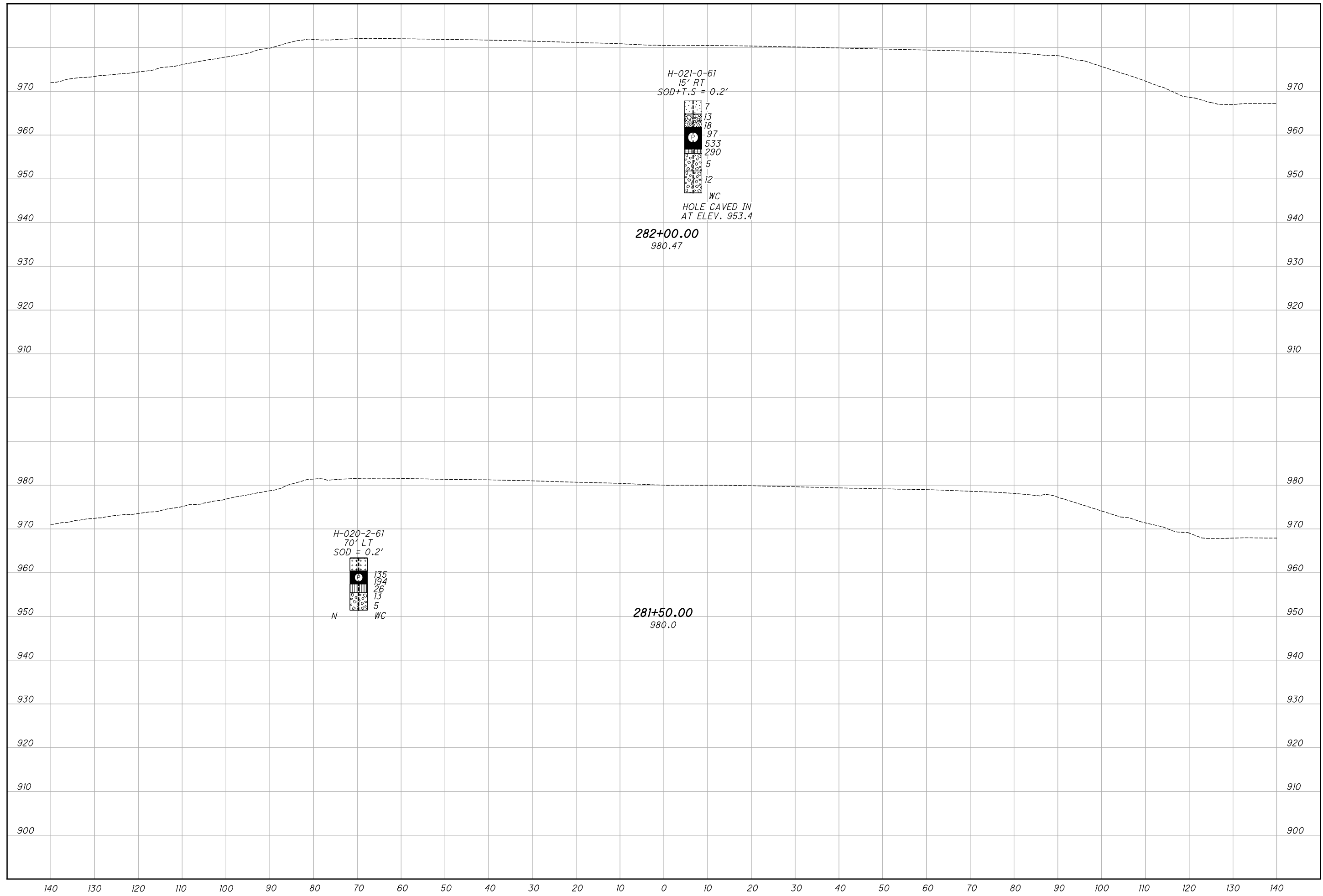


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 277+00.00 & 277+50.03

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_1X09.dgn Sheet 8/27/2020 10:47:44 AM kmihalcea

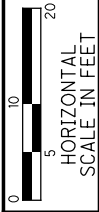
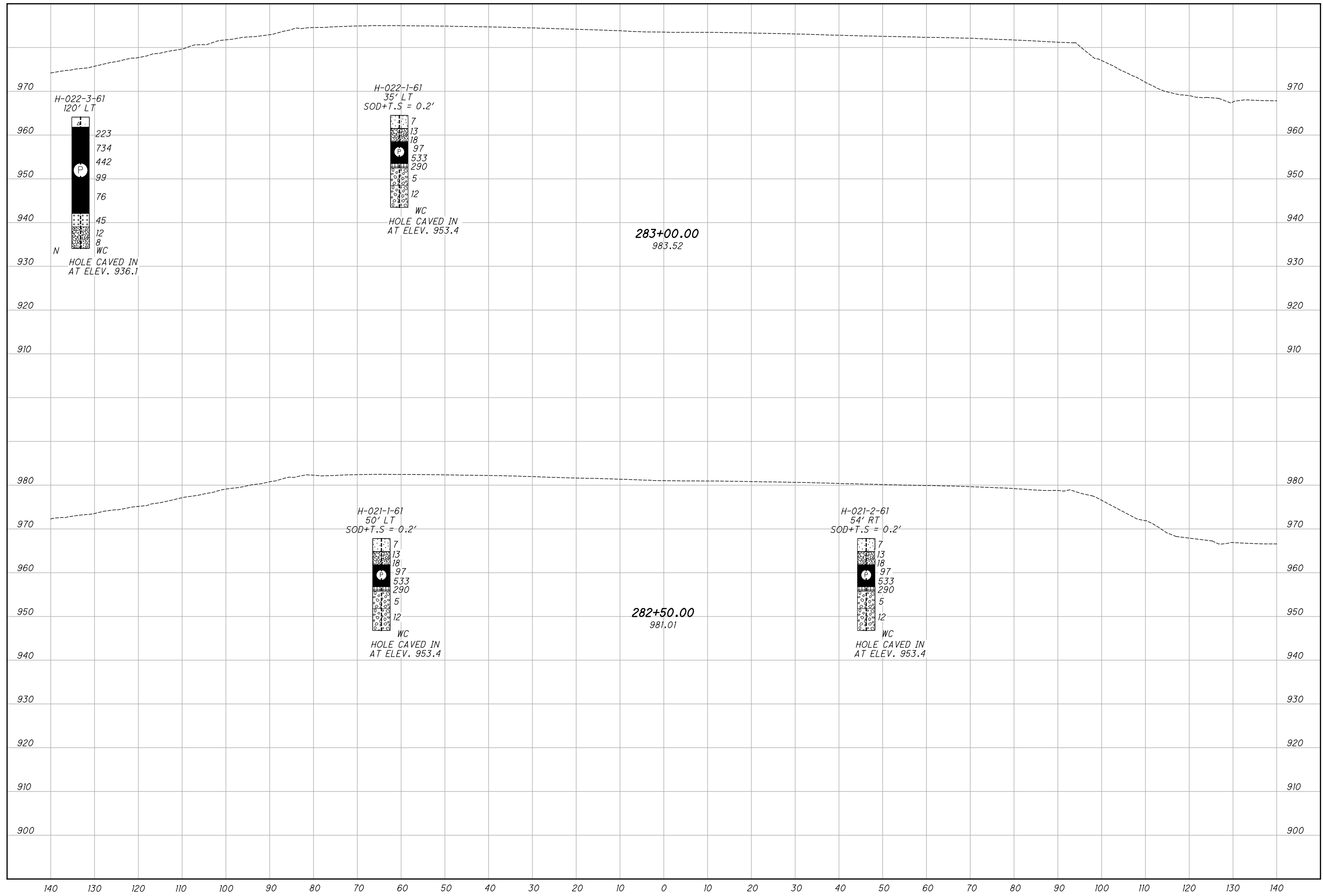


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 280+50.00 & 281+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX020.dgn Sheet 8/27/2020 10:47:45 AM kmhalicea

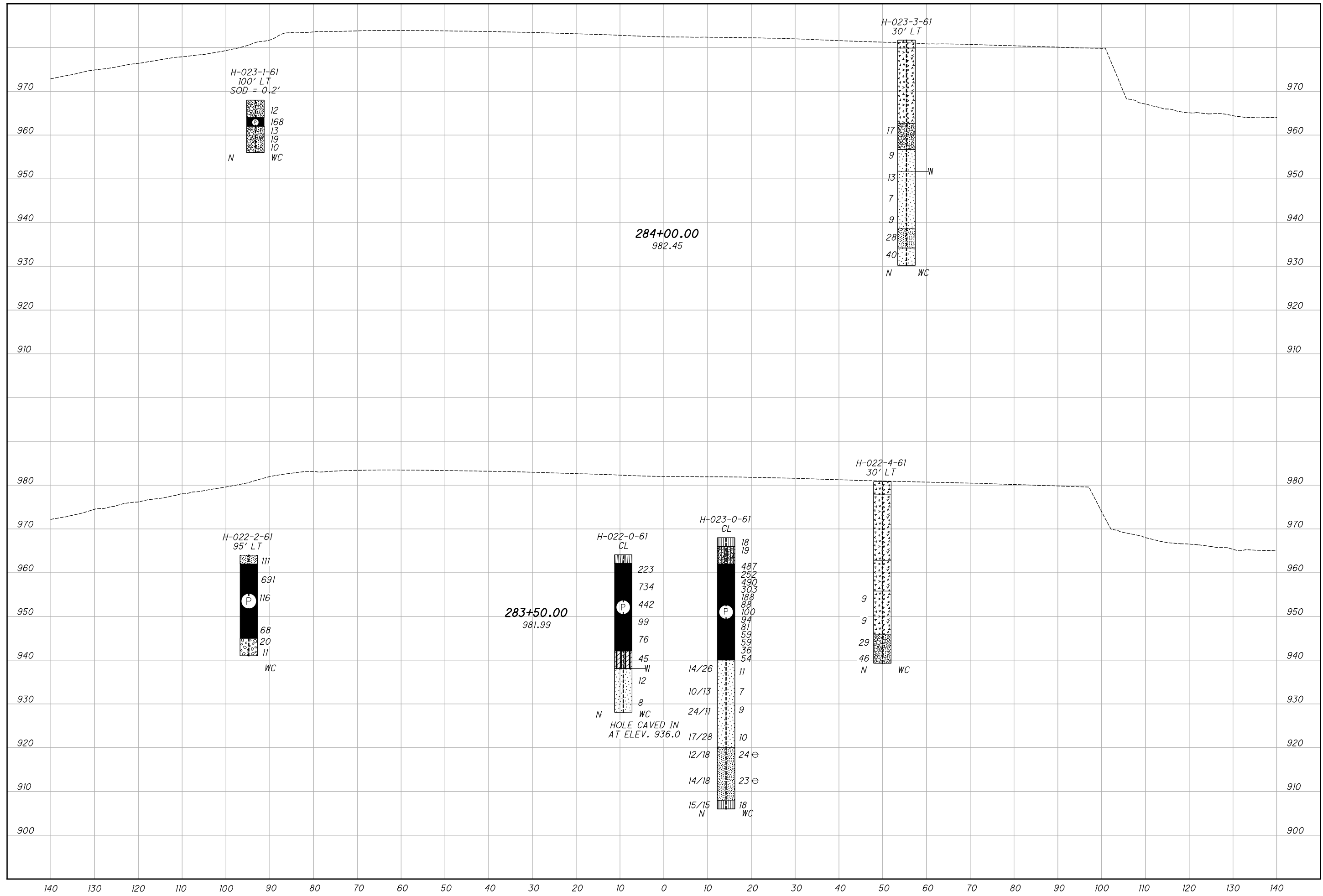


DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 281+50.00 & 282+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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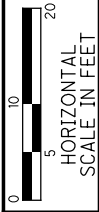
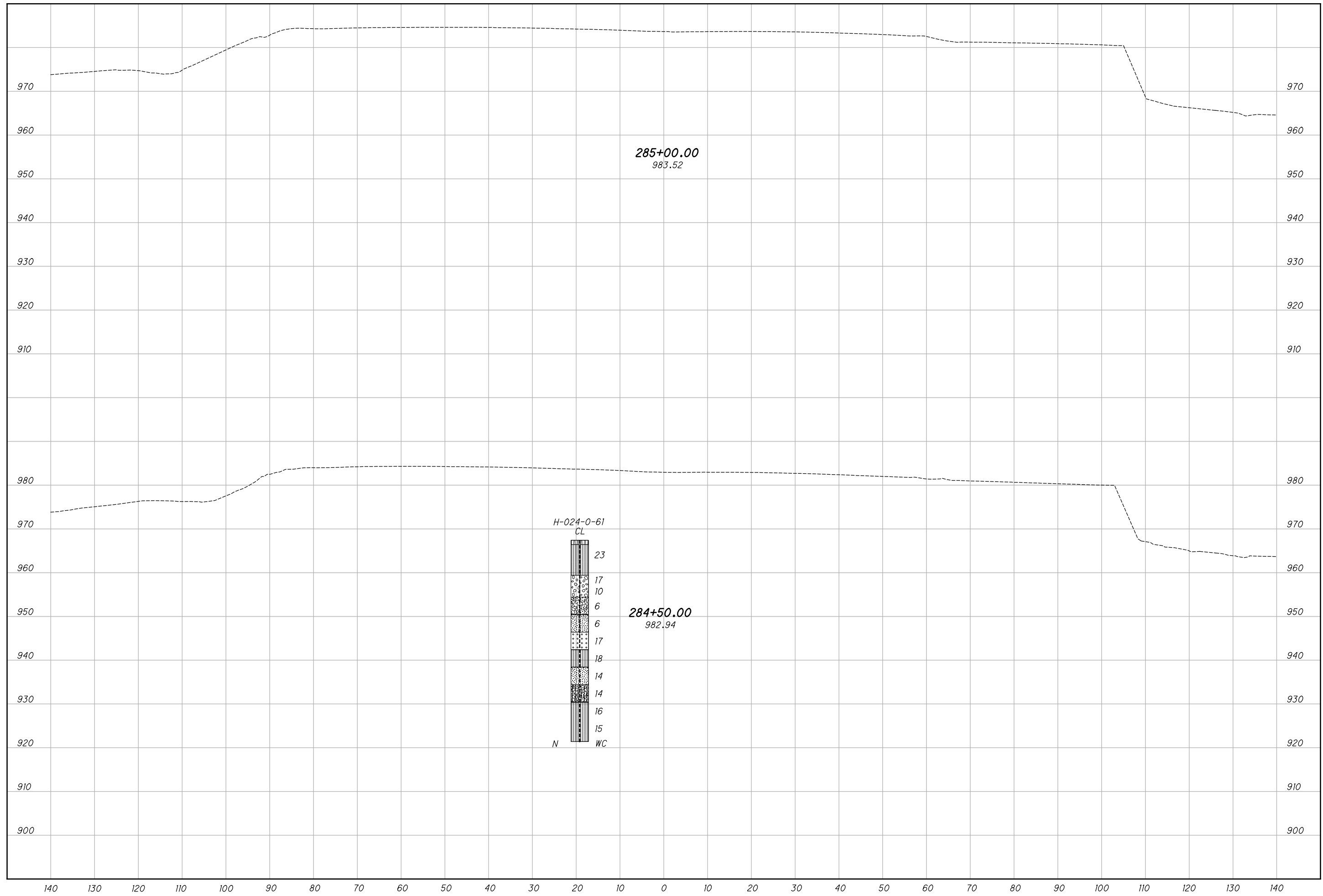
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 282+50.00 & 283+0.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

75
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX022.dgn Sheet 8/27/2020 10:47:47 AM kmhalicea



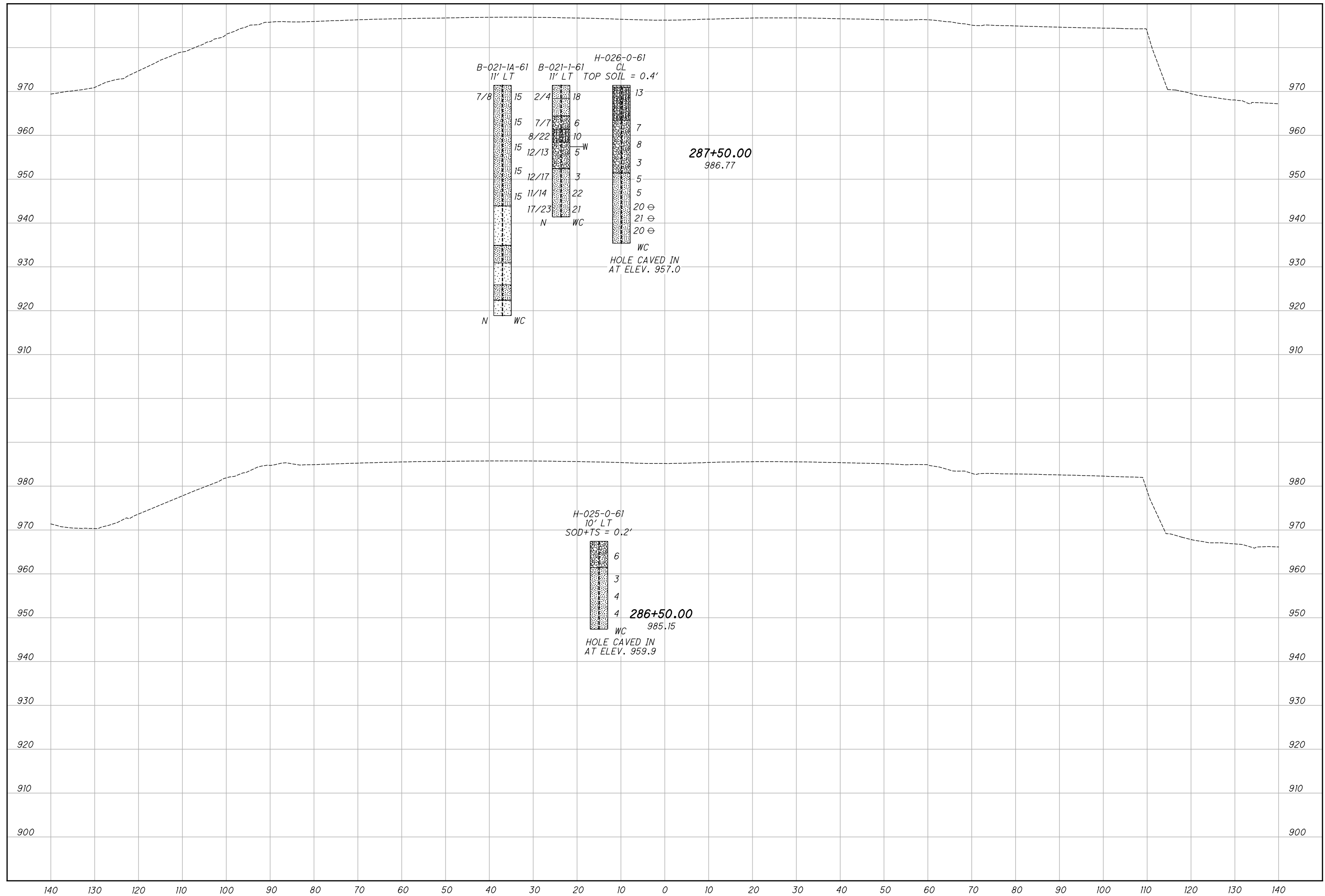
DRAWN
SM
CHECKED
PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 283+50.00 & 284+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

76
182

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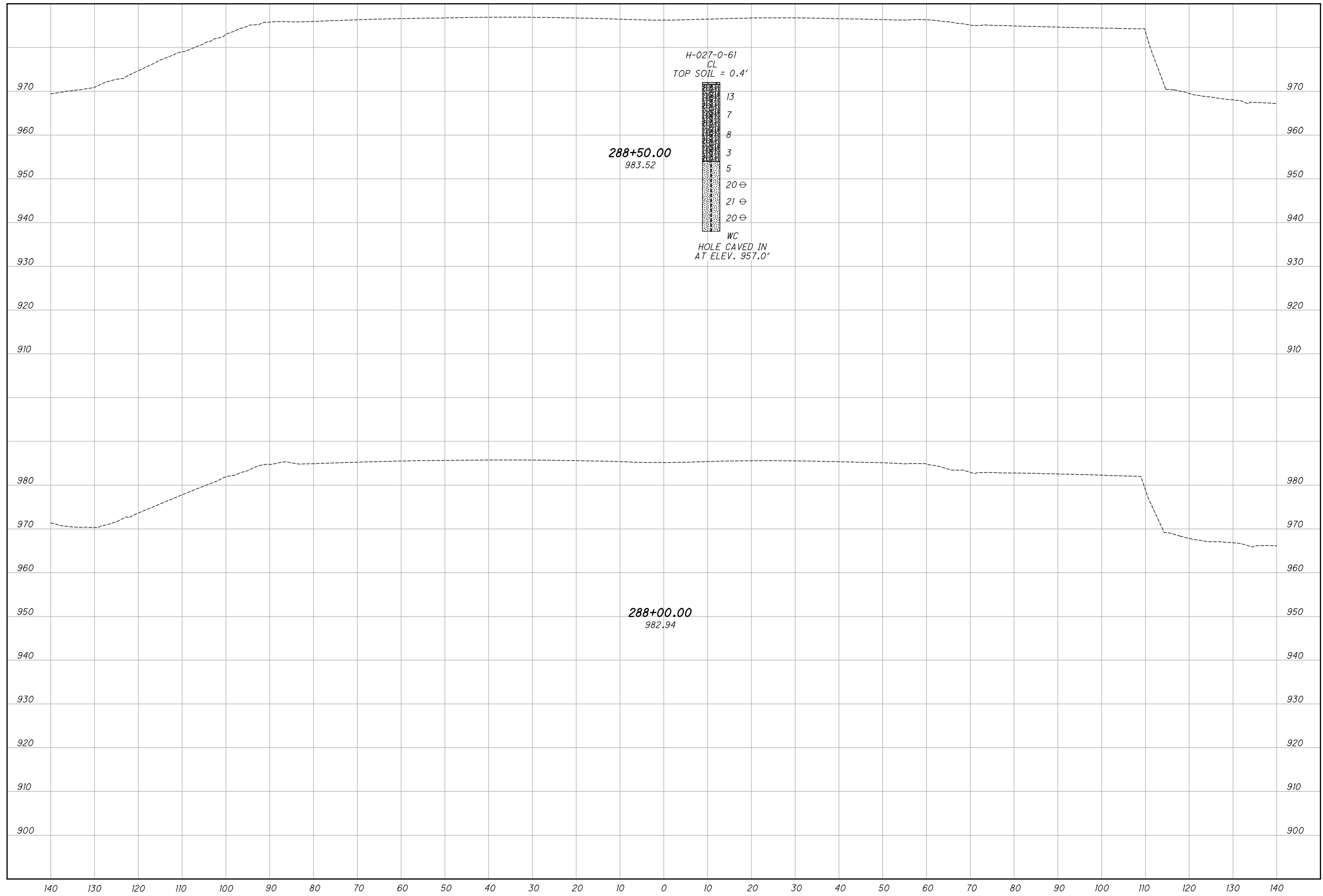


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 284+50.00 & 285+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX024.dgn Sheet 8/27/2020 10:47:50 AM kmhnlceq

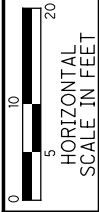
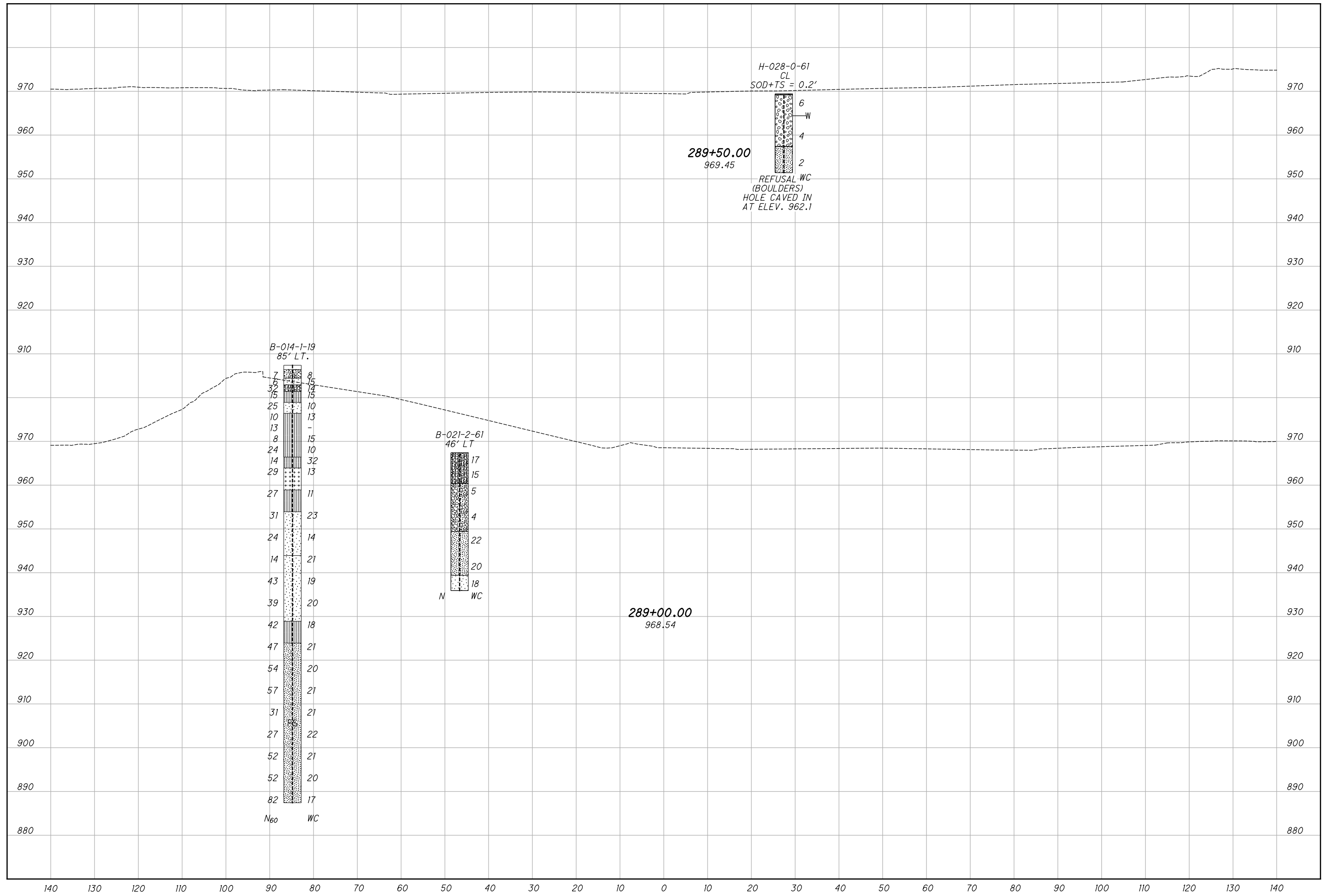


SOIL PROFILE
I.R. 76 CROSS SECTIONS 286+50.00 & 287+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

78
182

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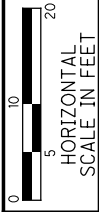
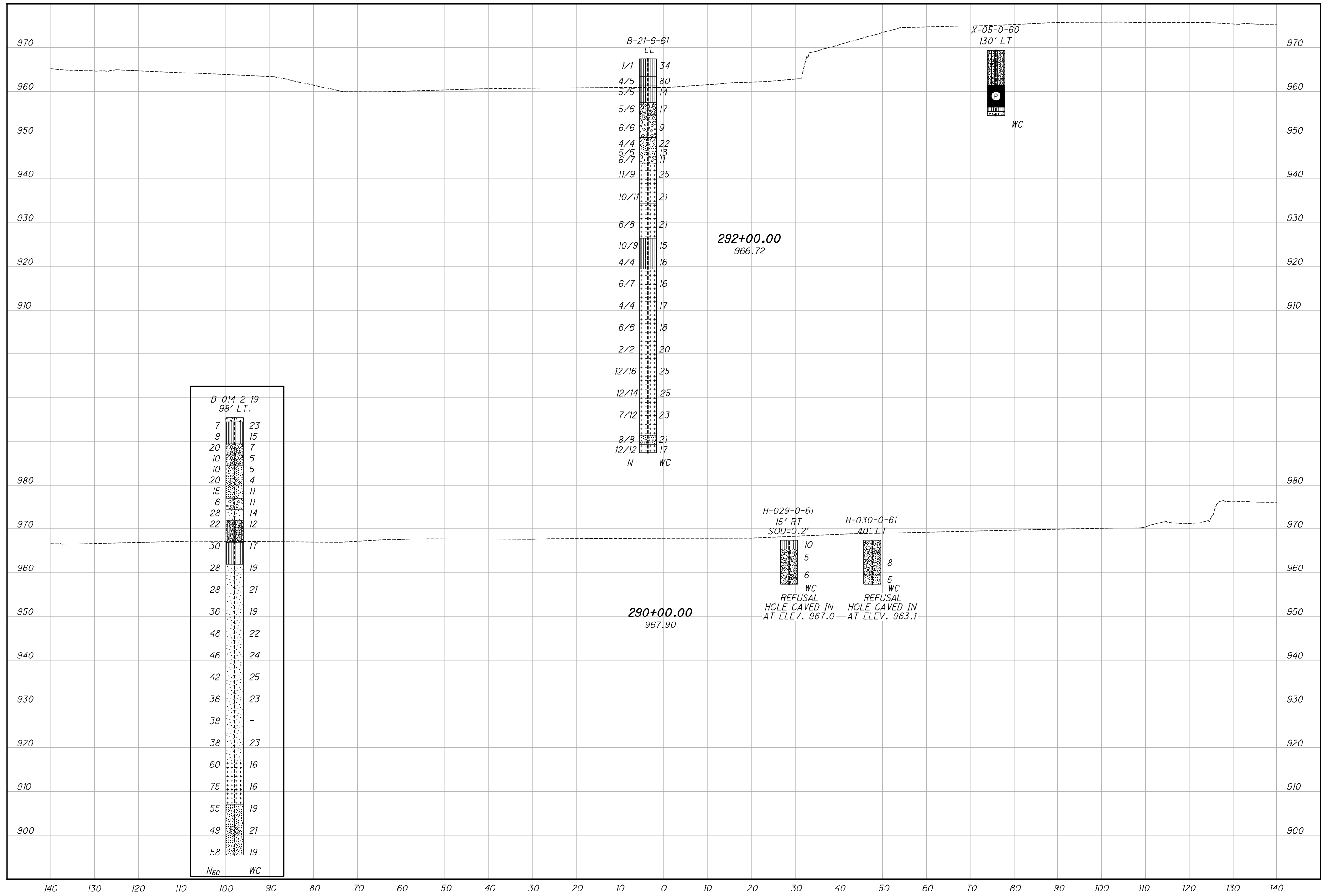


DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 288+00.00 & 288+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

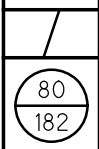
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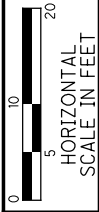
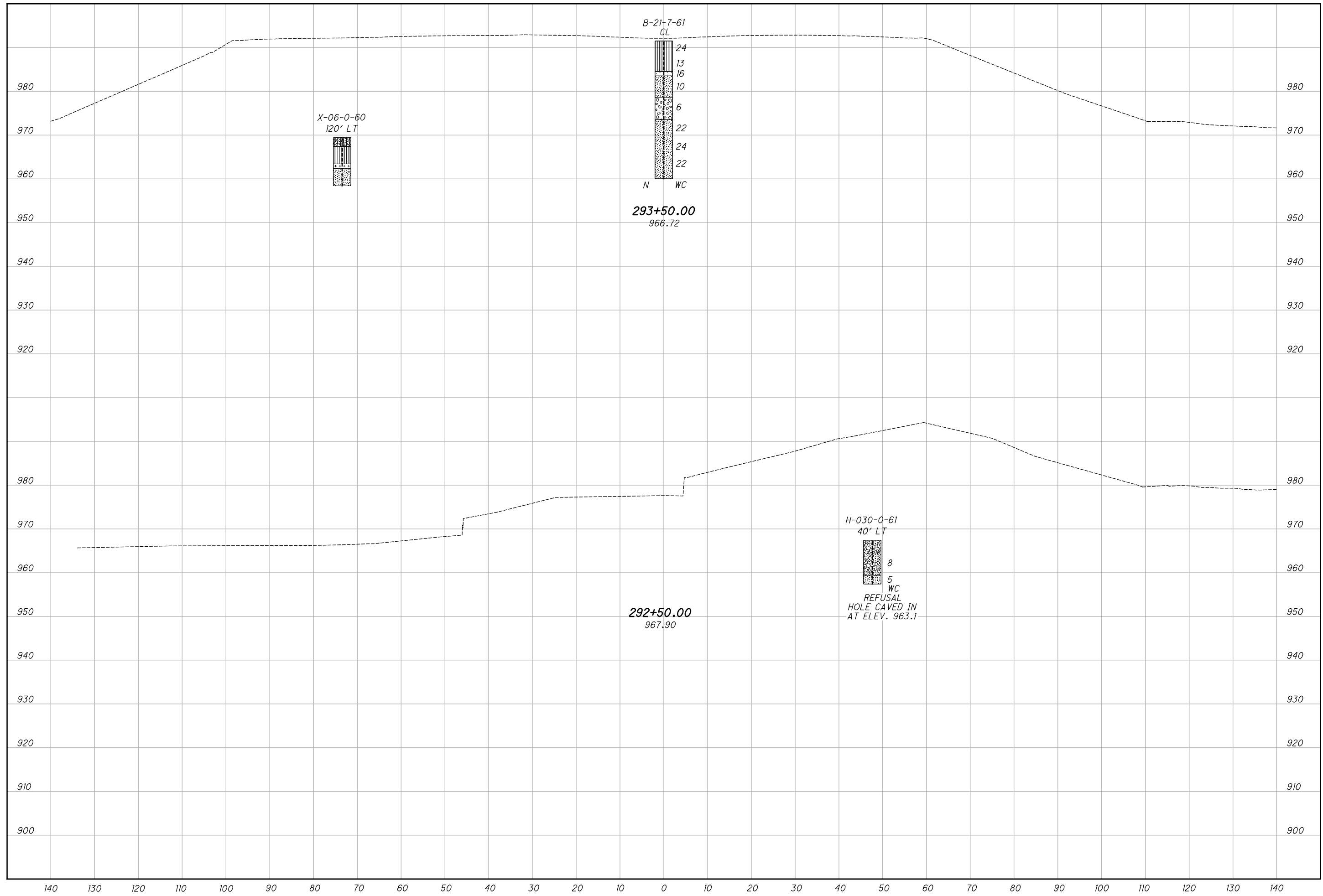
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 289+00.00 & 289+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX027.dgn Sheet 8/27/2020 10:47:55 AM kmhalicea

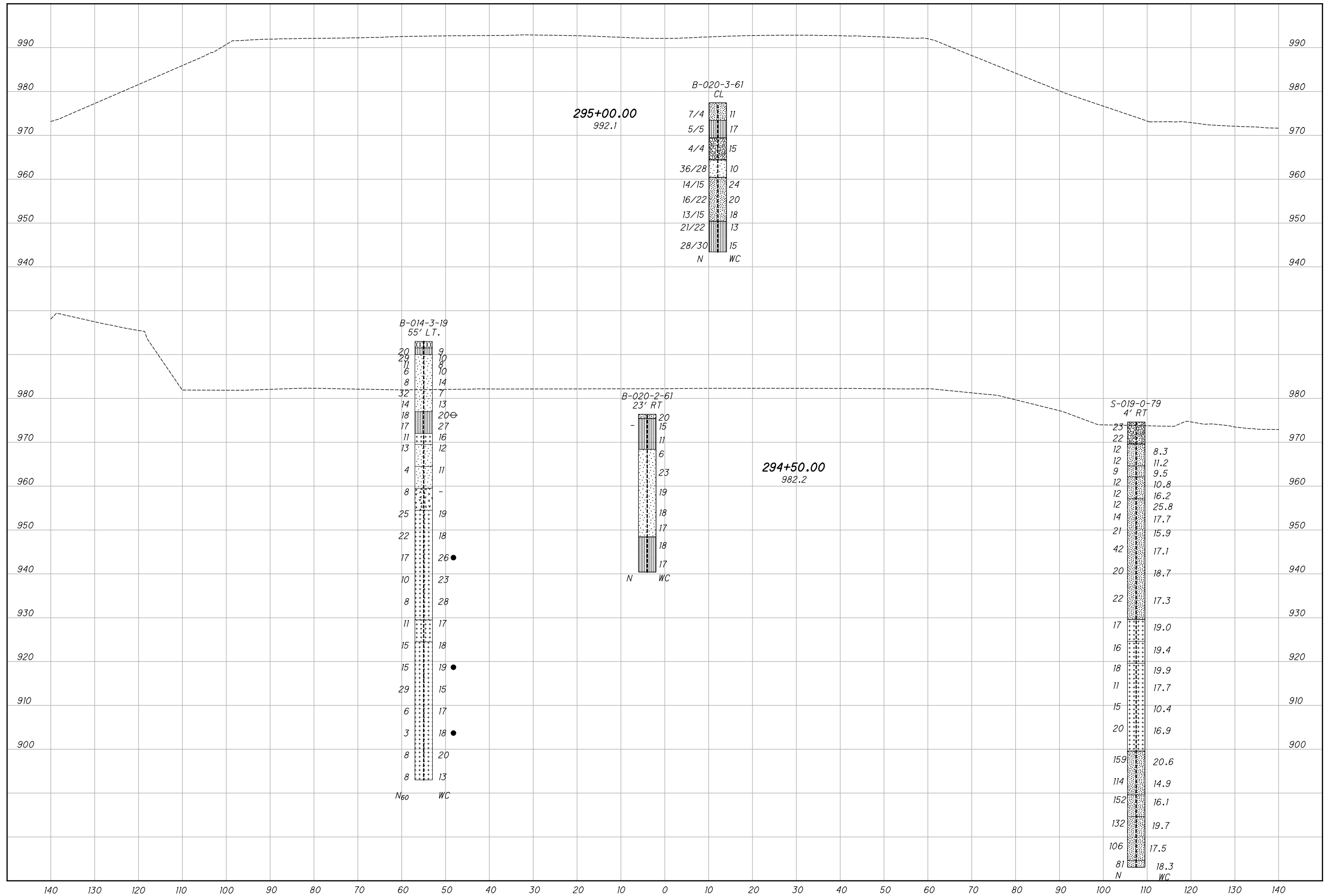


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 292+50.00 & 293+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX028.dgn Sheet 8/27/2020 10:47:57 AM kmihalcea

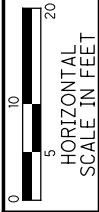
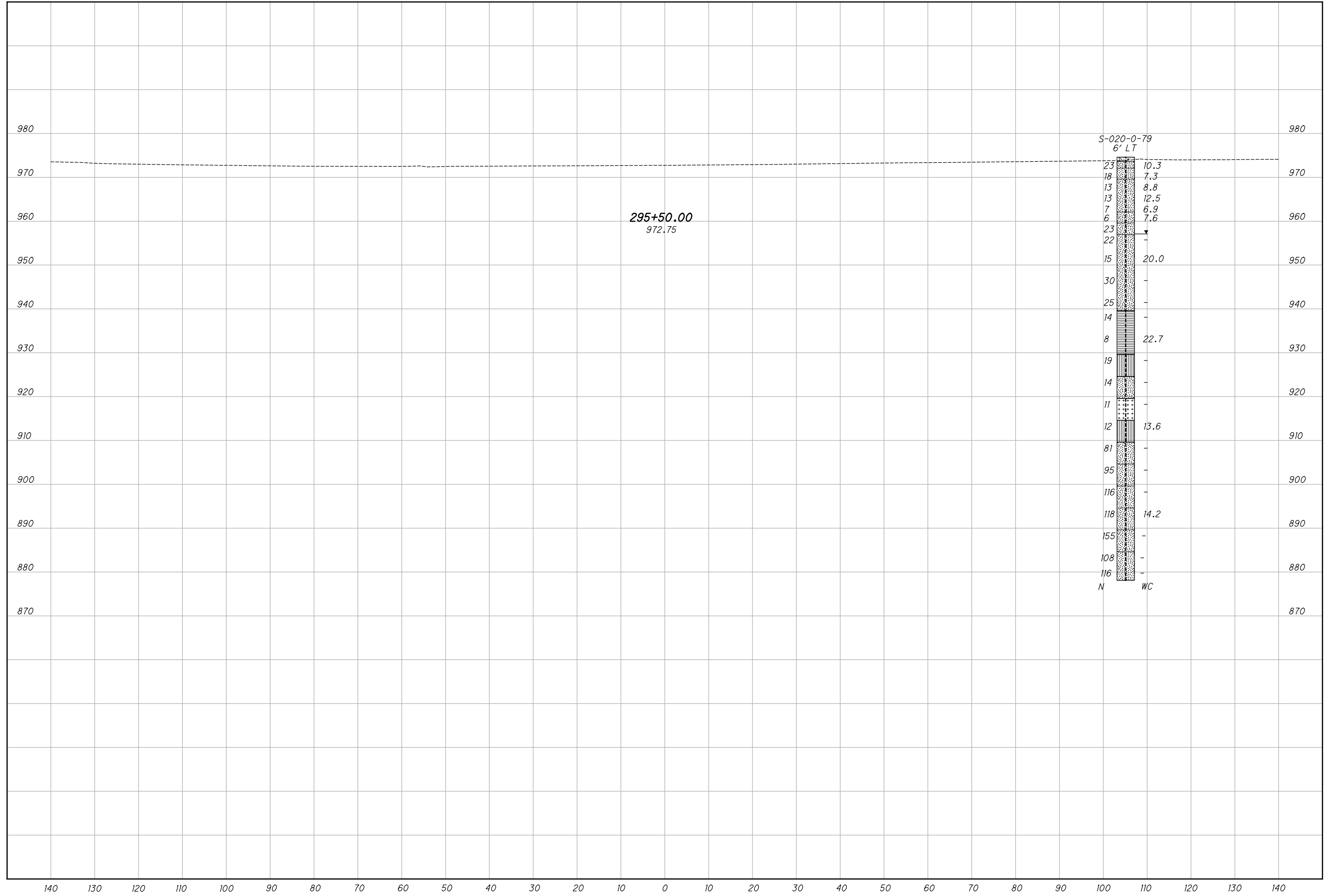


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 294+50.00 & 295+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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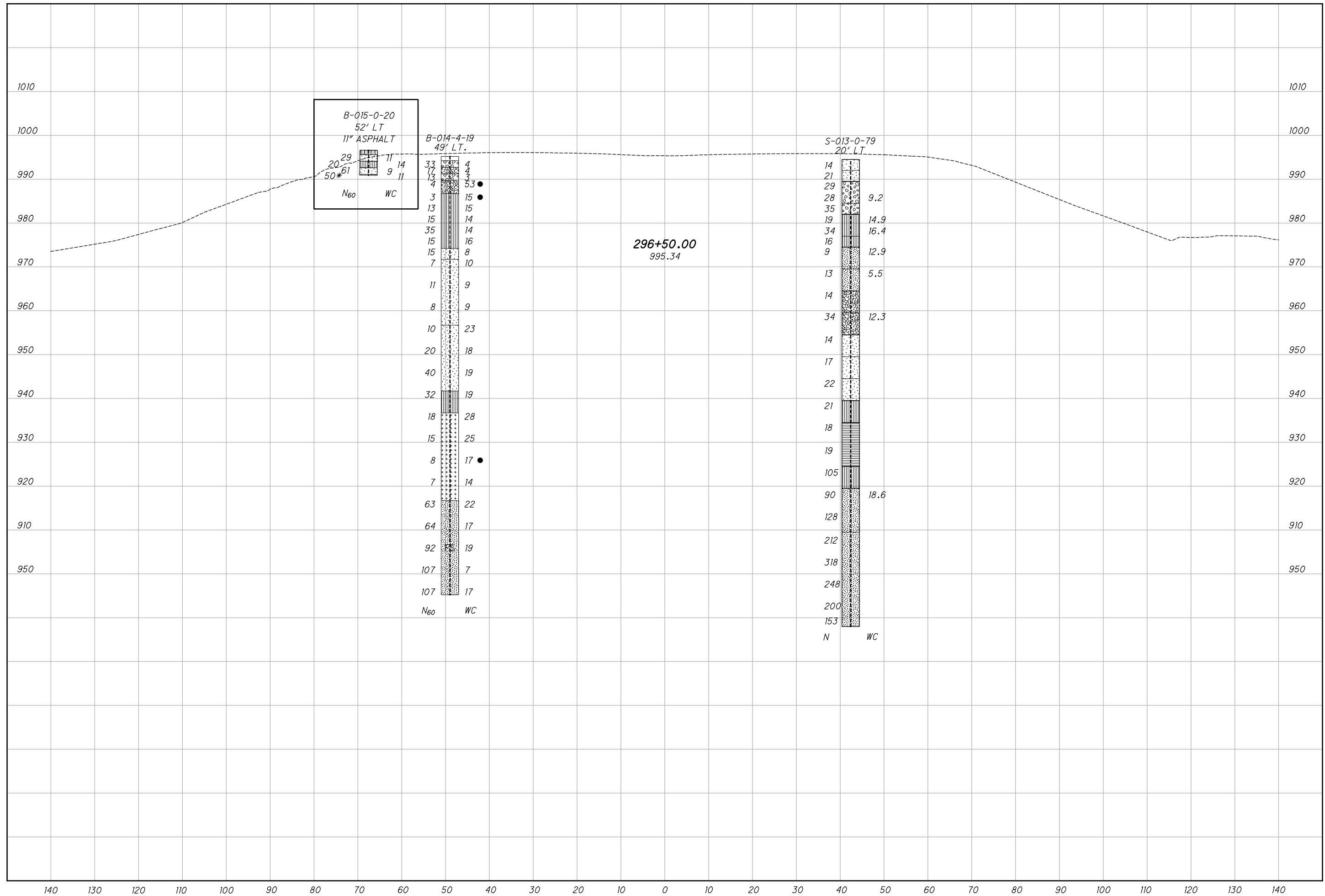


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTION 295+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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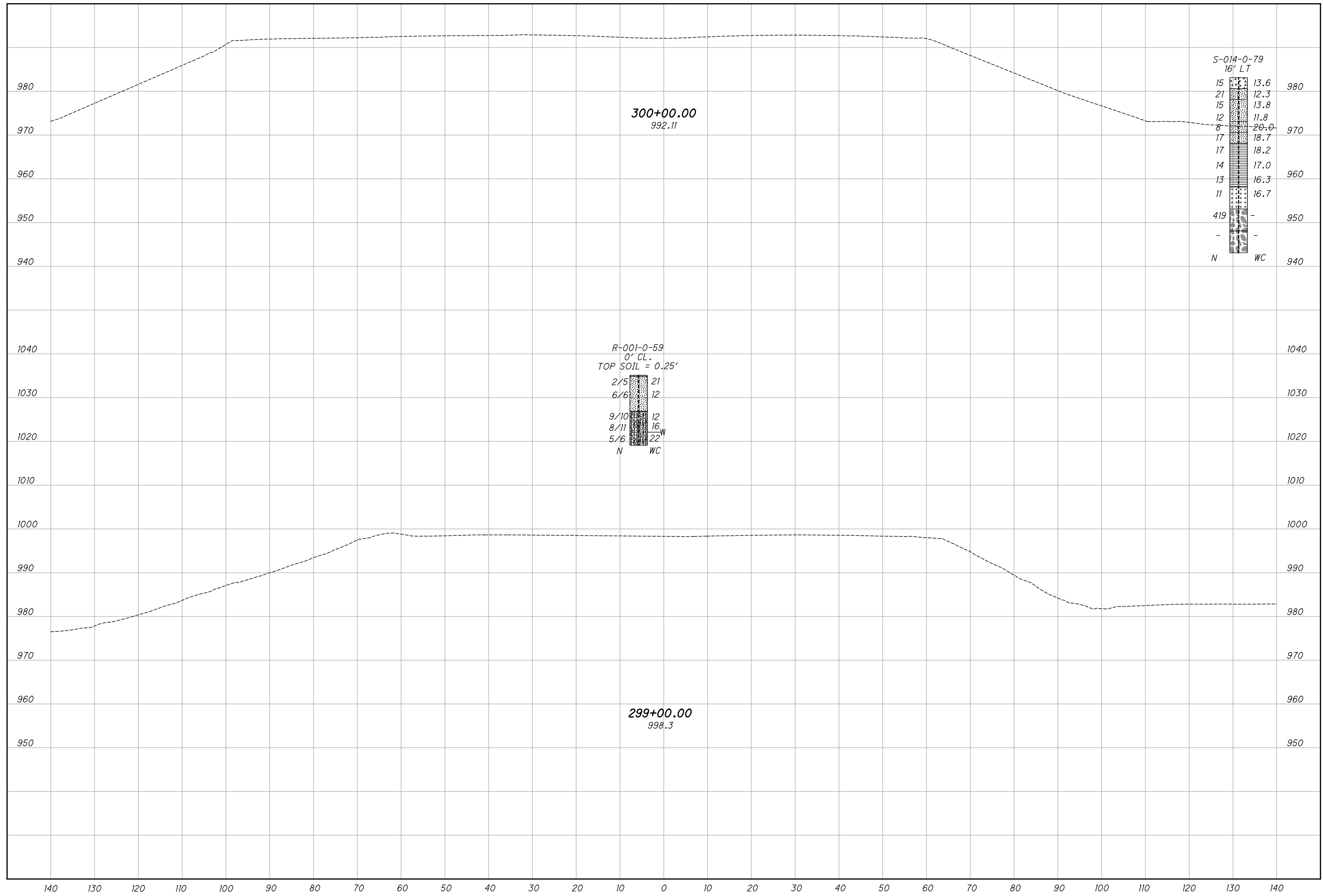


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTION 296 + 50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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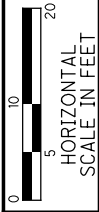
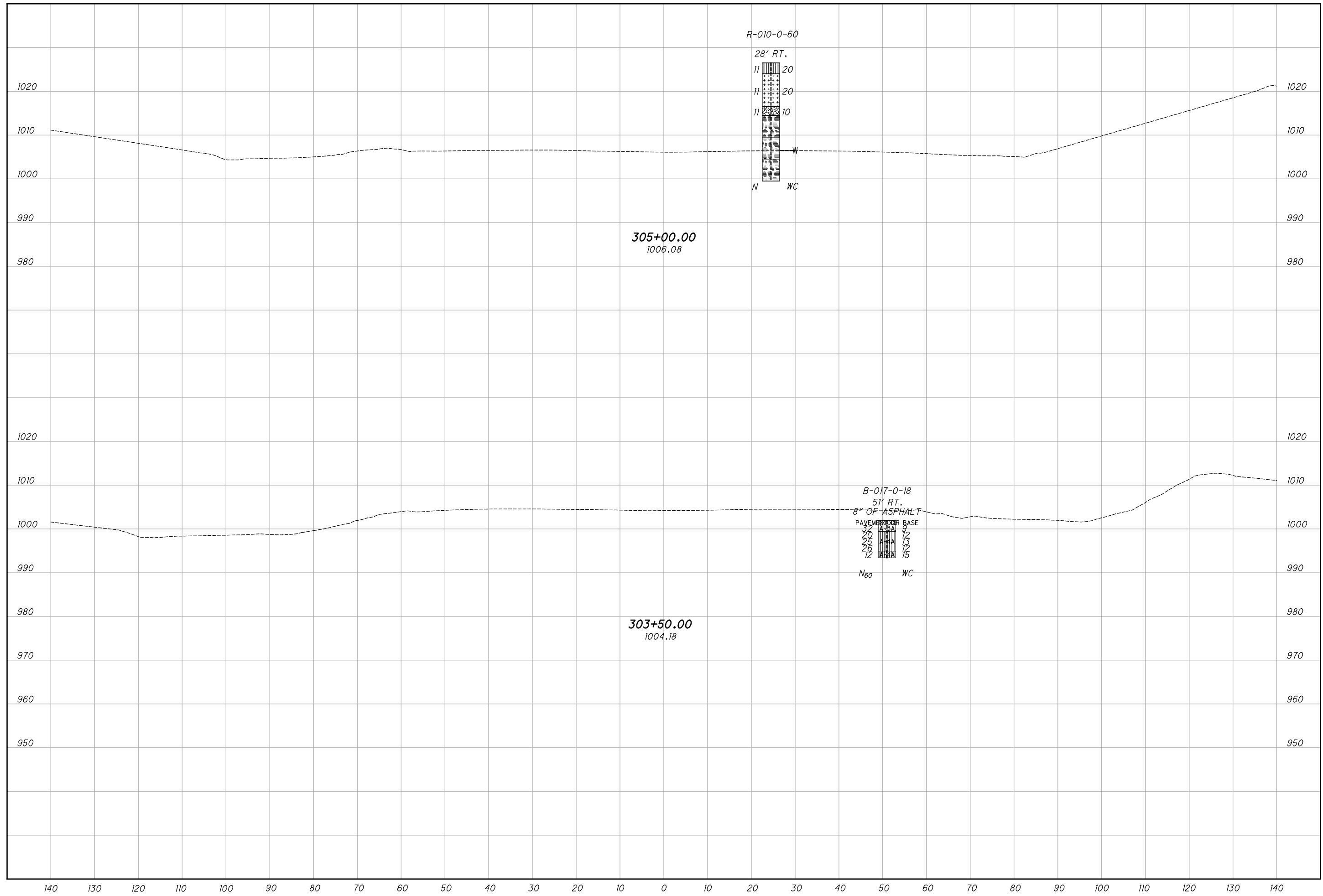


SOIL PROFILE
I.R. 76 CROSS SECTIONS 299+00.00 & 300+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

85
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I032.dgn Sheet 8/27/2020 10:48:04 AM kmhalcea

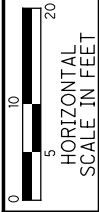
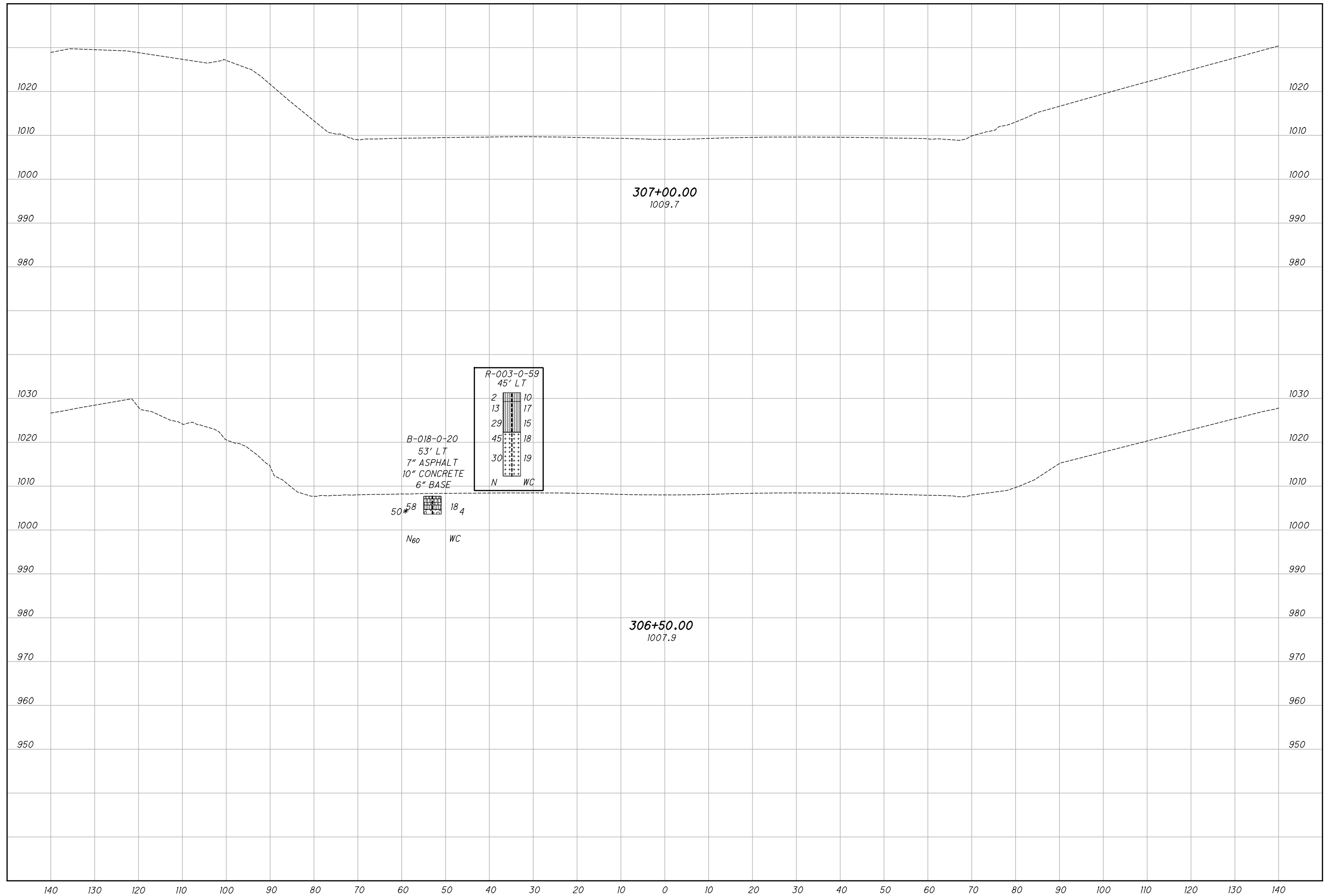


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 303+50.00 & 305+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_1X033.dgn Sheet 8/27/2020 10:48:05 AM kmhalcea



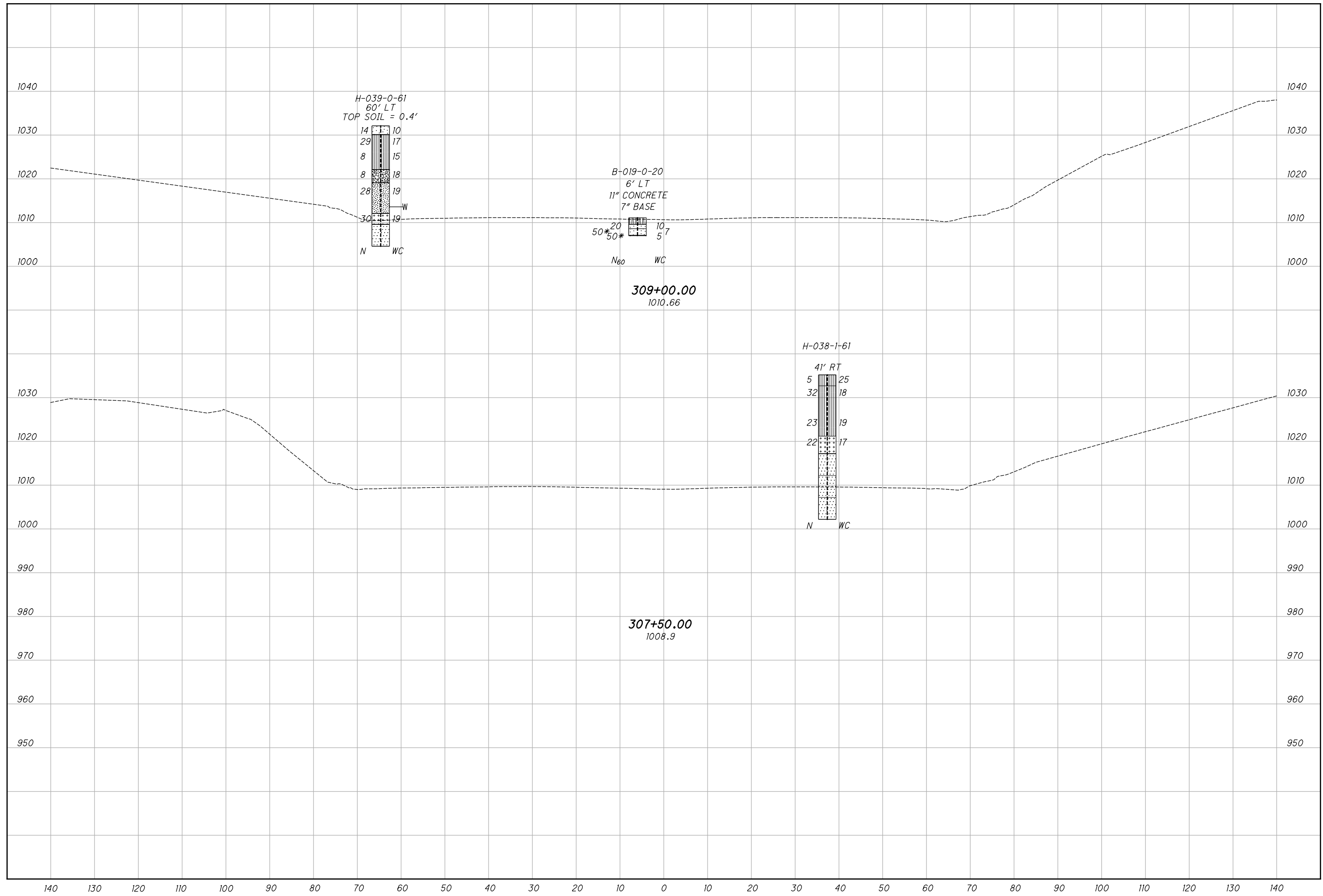
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 306+50.00 & 307+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

87
182

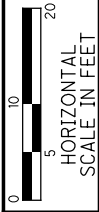
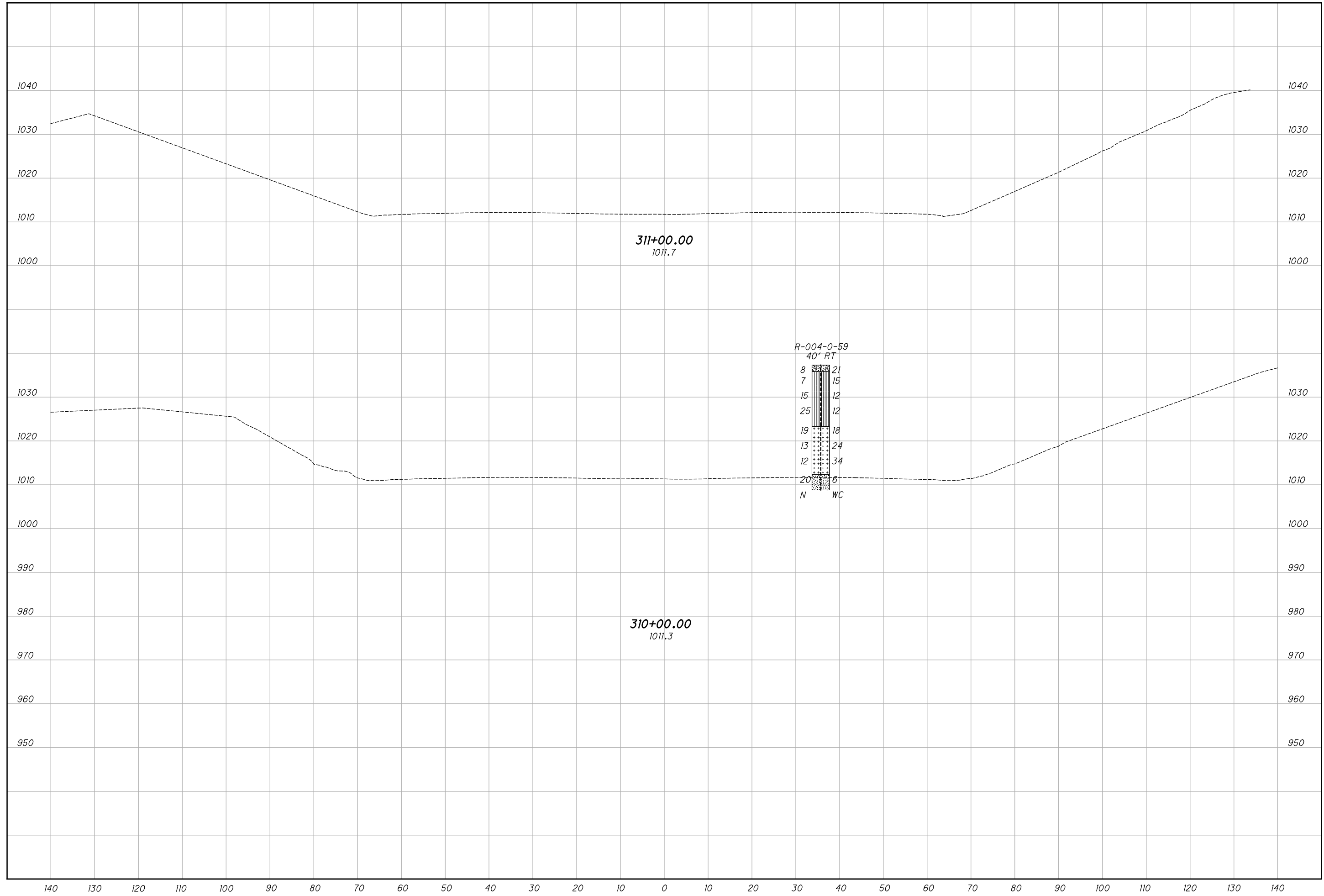
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SOIL PROFILE
I.R. 76 CROSS SECTIONS 307+50.00 & 309+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I035.dgn Sheet 8/27/2020 10:48:09 AM kmhalcea

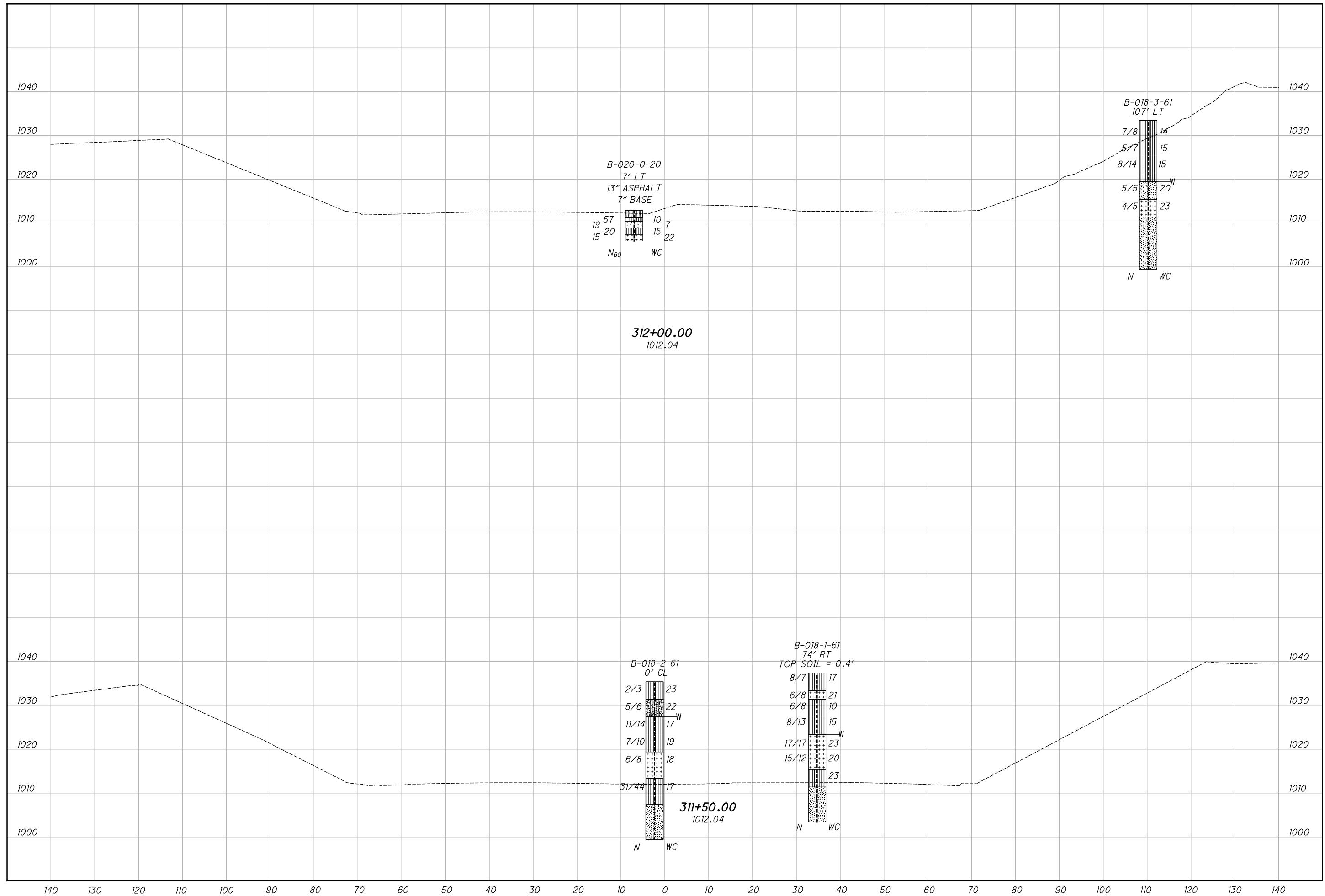


DRAWN
SM
CHECKED
PAN

SOIL PROFILE
I.R. 76 CROSS SECTIONS 310+00.00 & 311+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I036.dgn Sheet 8/27/2020 10:48:11 AM kmhabea



DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 76 CROSS SECTION 311+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

90
182

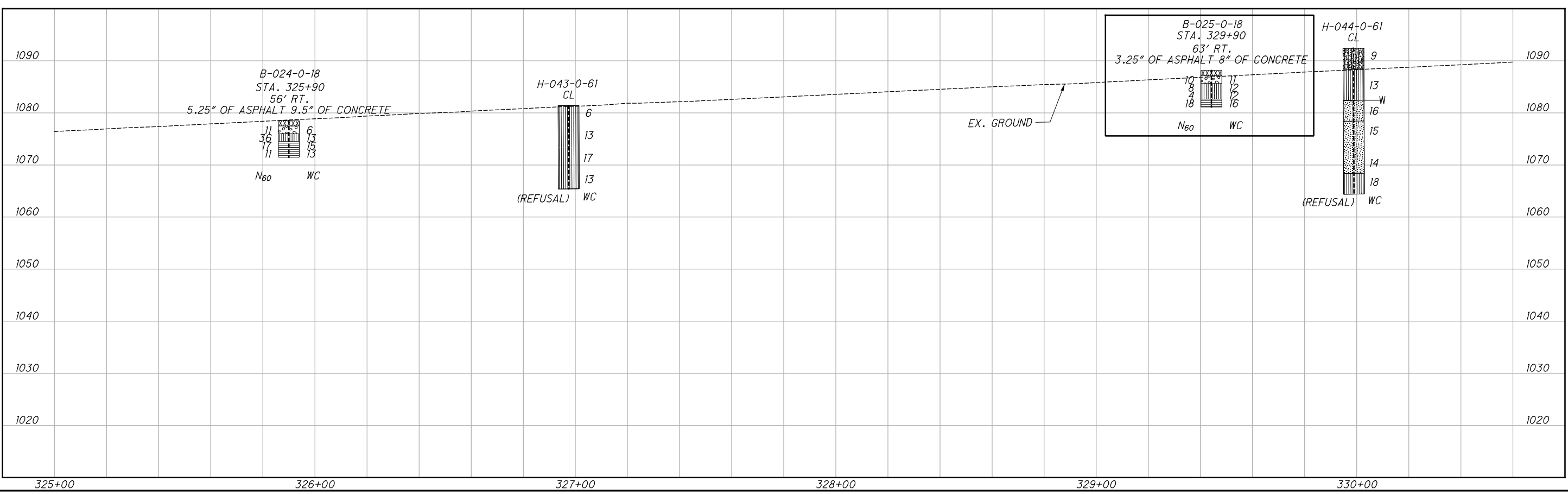
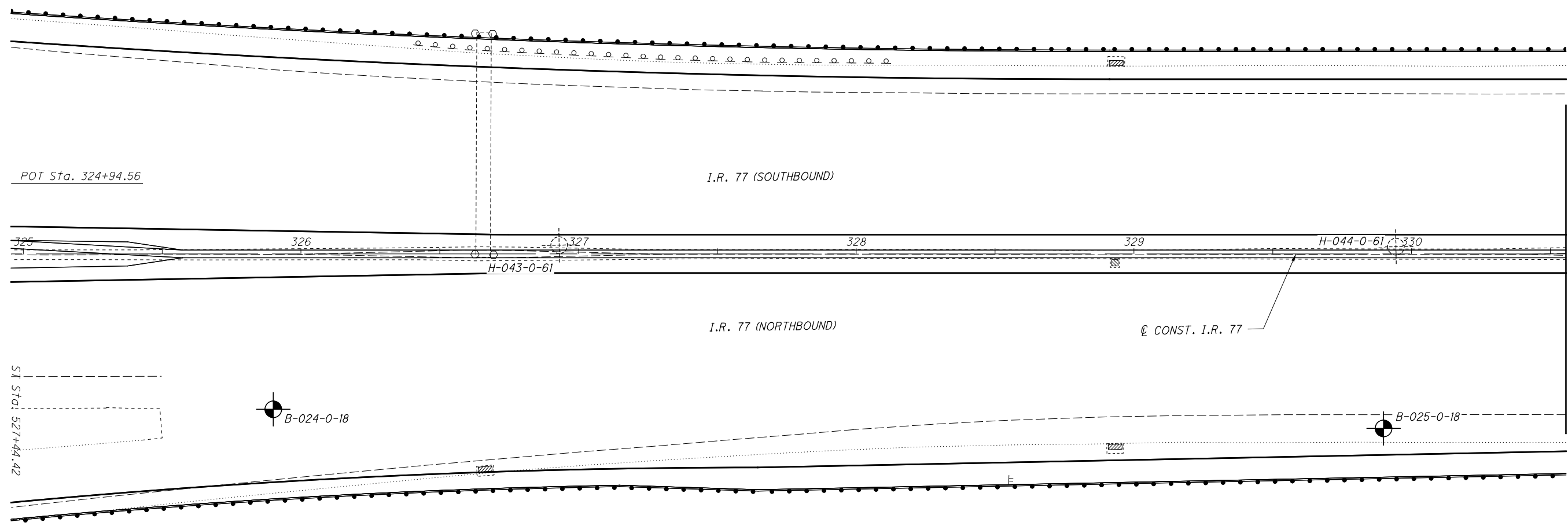


DRAWN SM
CHECKED PAN

SOIL PROFILE
BEGIN STA. 325+00.00 TO STA. 330+60.00 I.R. 77

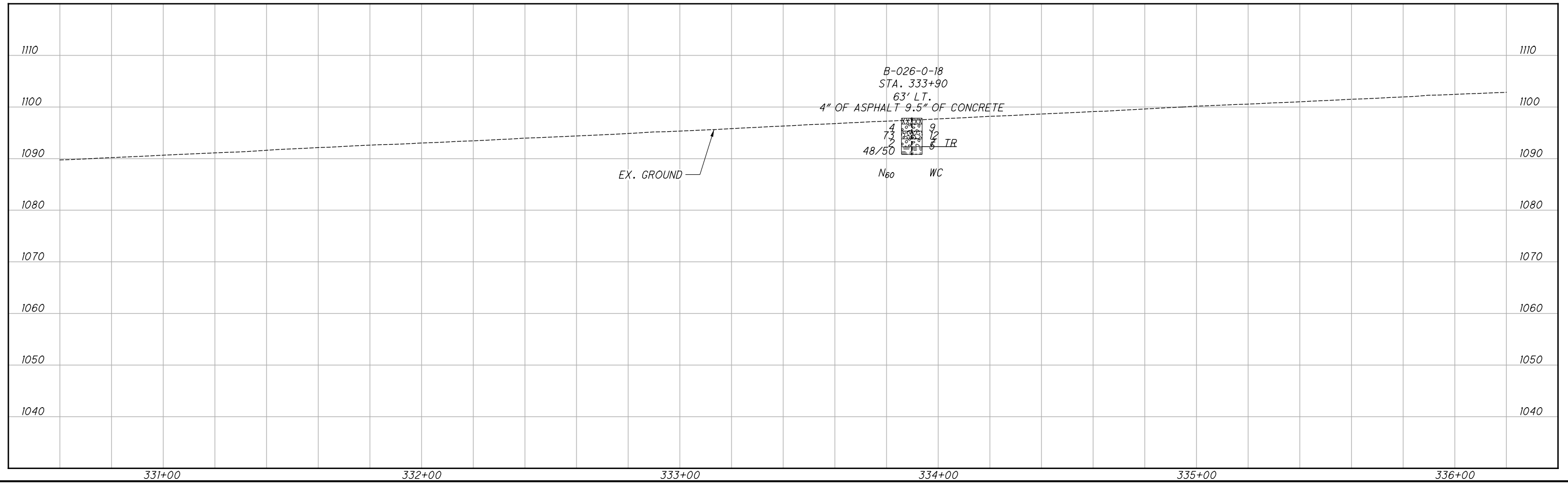
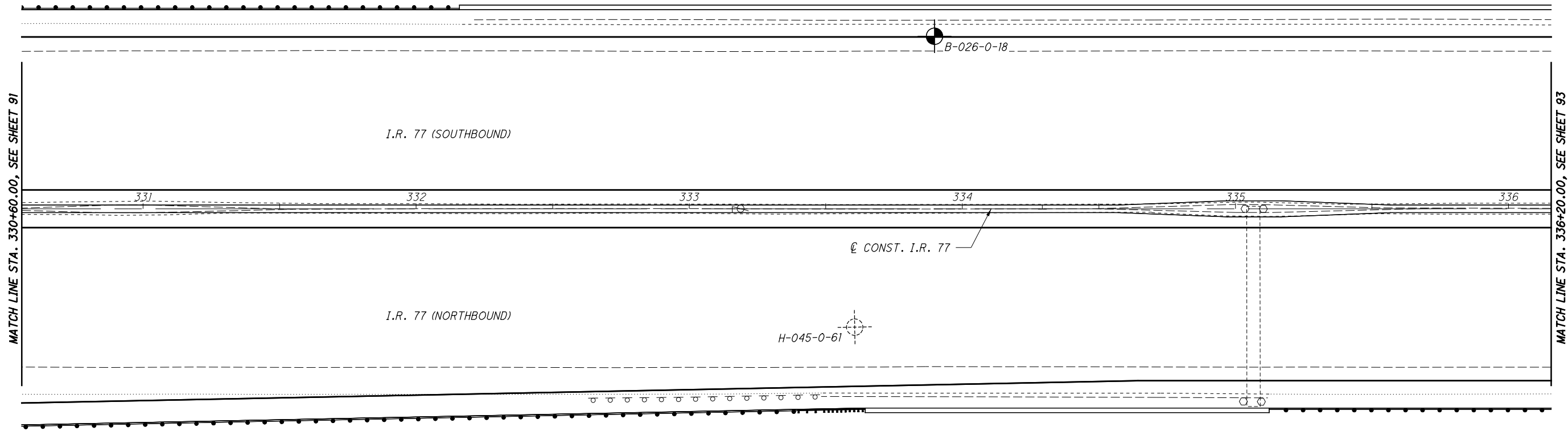
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

91
182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IPI01.dgn_Sheet 8/27/2020 10:48:19 AM kmhabea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP102.dgn Sheet 8/27/2020 10:48:22 AM kmihalcea

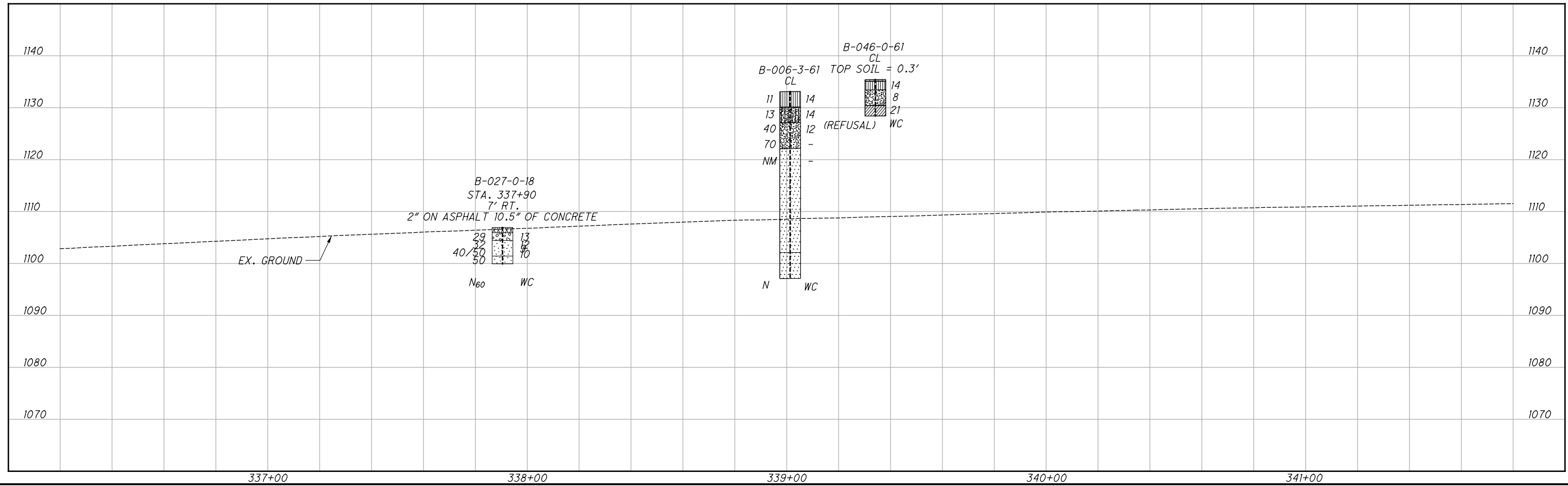
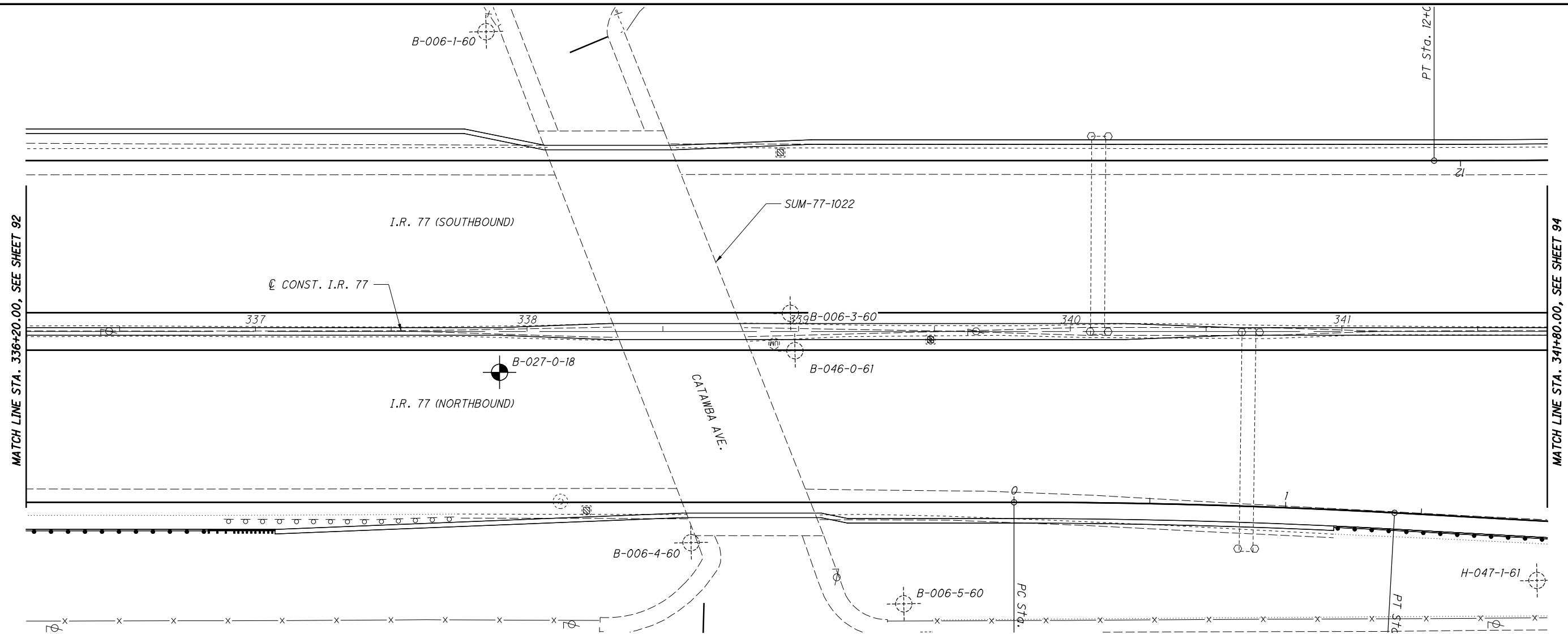


DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 330+60.00 TO STA. 336+20.00 I.R. 77

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP103.dgn Sheet 8/27/2020 10:48:25 AM kmihalcea



DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 336+20.00 TO STA. 341+80.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

93
182

H-047-1-61



0 5 10 20
HORIZONTAL
SCALE IN FEET

DRAWN
SM
CHECKED
PAN

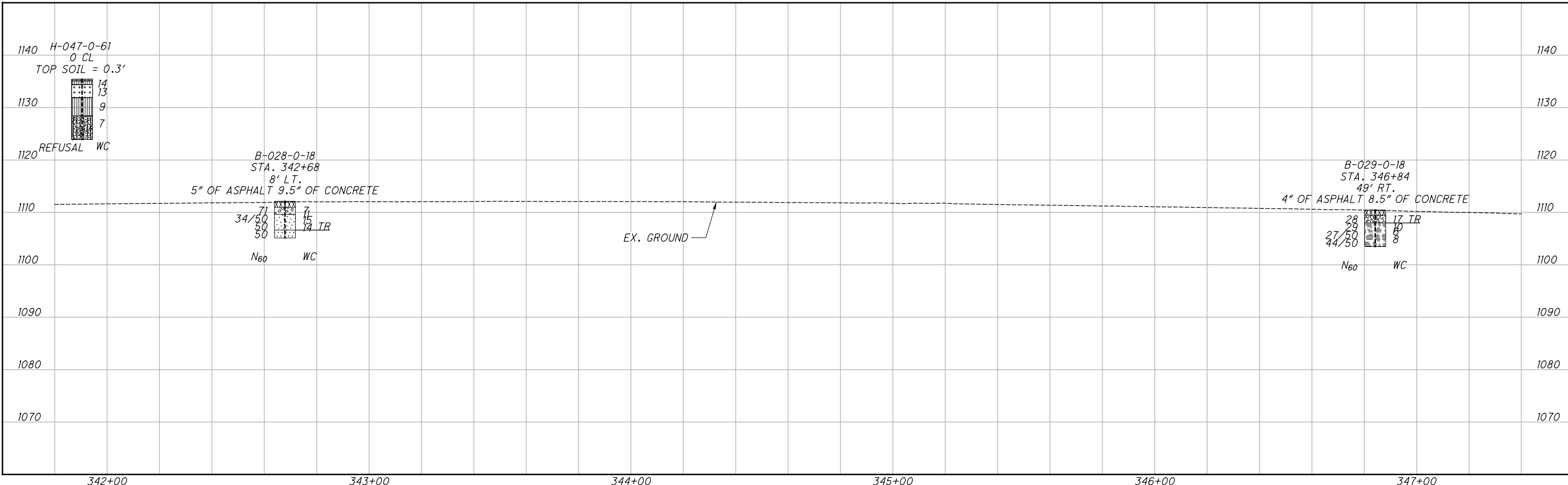
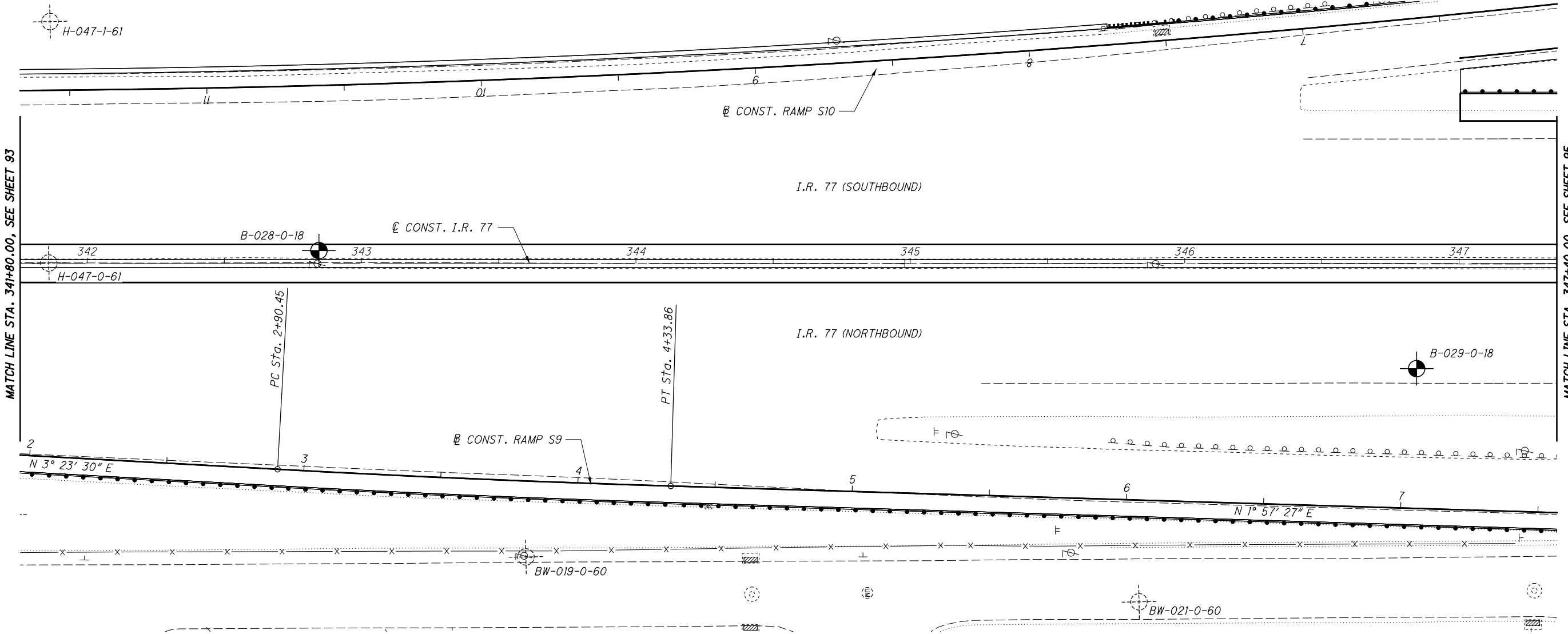
SOIL PROFILE
STA. 341+80.00 TO STA. 347+40.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

94
182

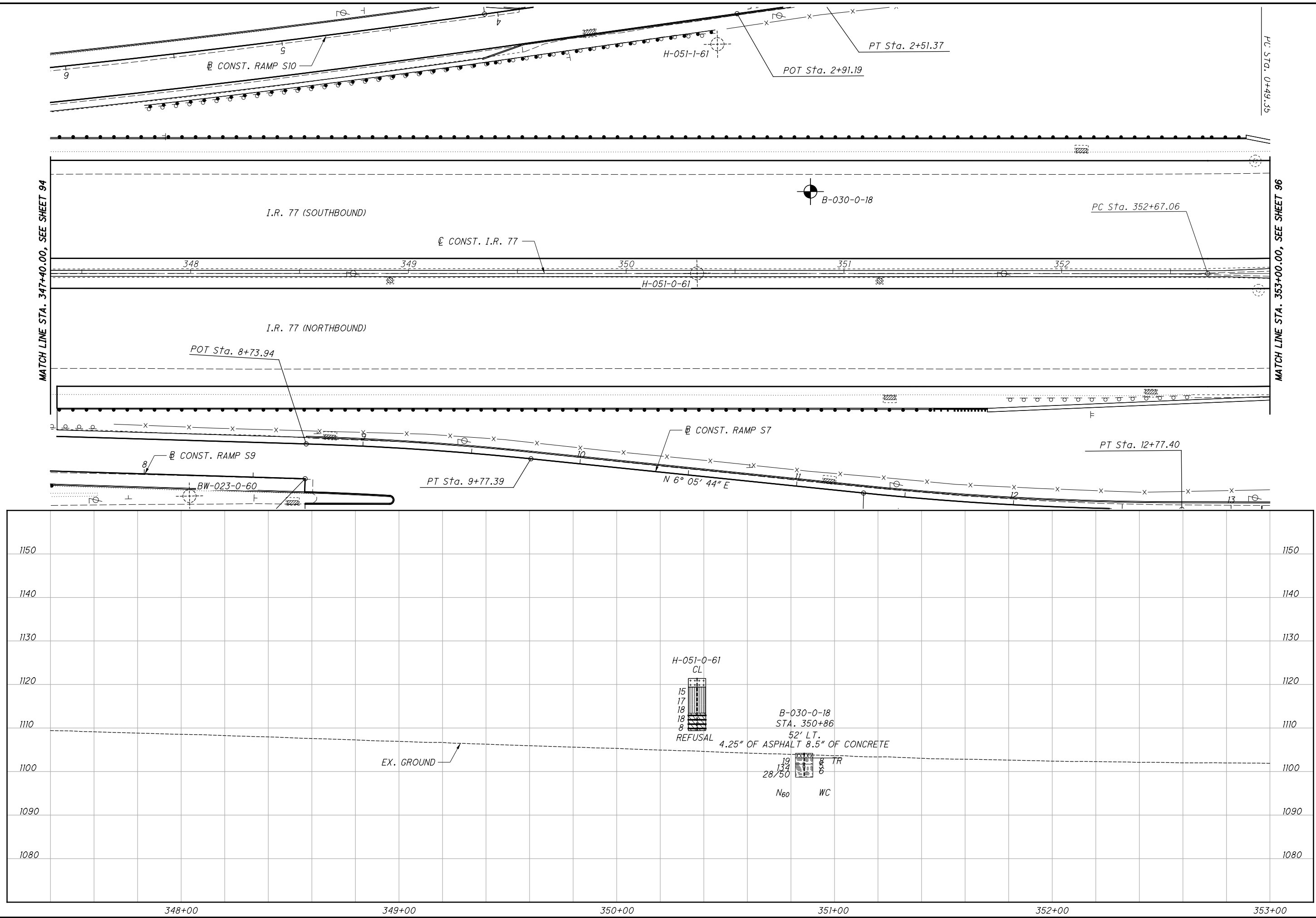
MATCH LINE STA. 341+80.00, SEE SHEET 93

MATCH LINE STA. 347+40.00, SEE SHEET 95



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP104.dgn Sheet 8/21/2020 10:48:27 AM kmihalcea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP105.dgn Sheet 8/27/2020 10:48:30 AM kmh/ace







 HORIZONTAL SCALE IN FEET

DRAWN SM

CHECKED PAN

SOIL PROFILE
STA. 347+40.00 TO STA. 353+00.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

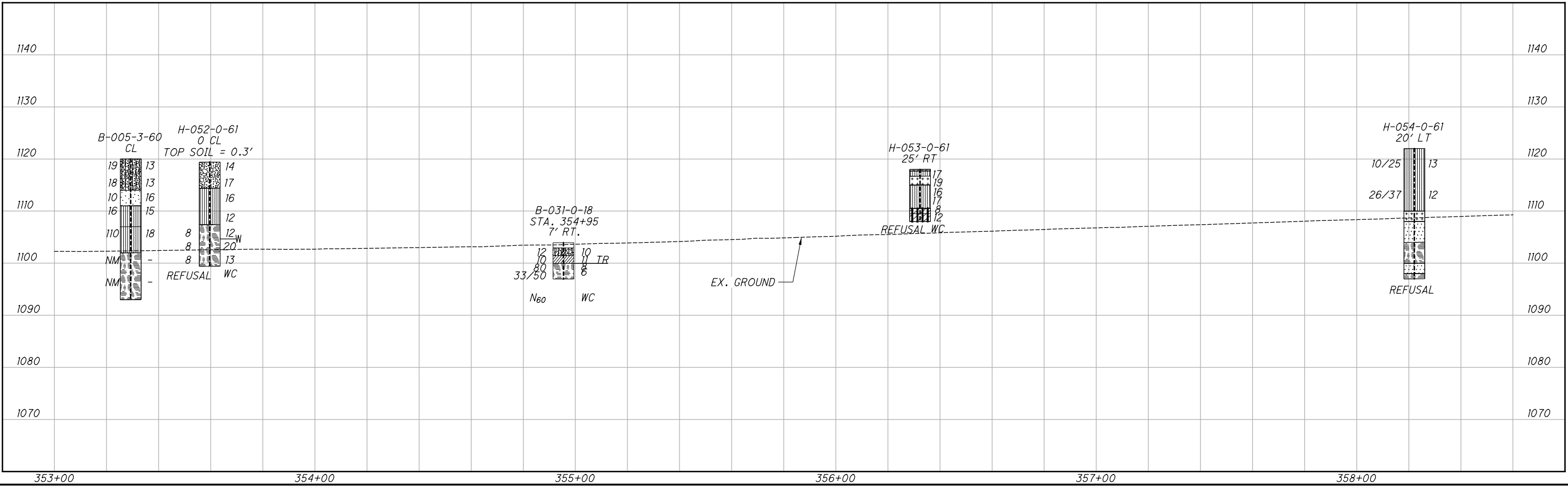
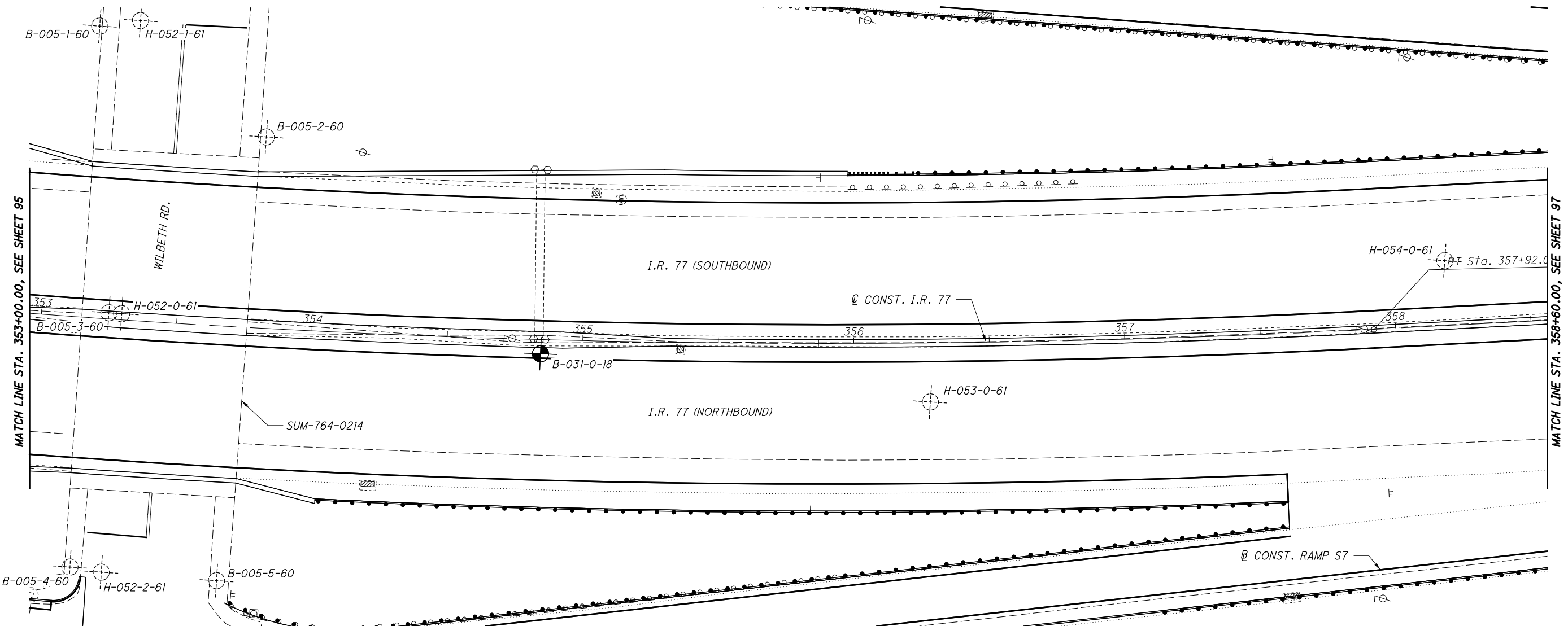
95
182



DRAWN SM
CHECKED PAN

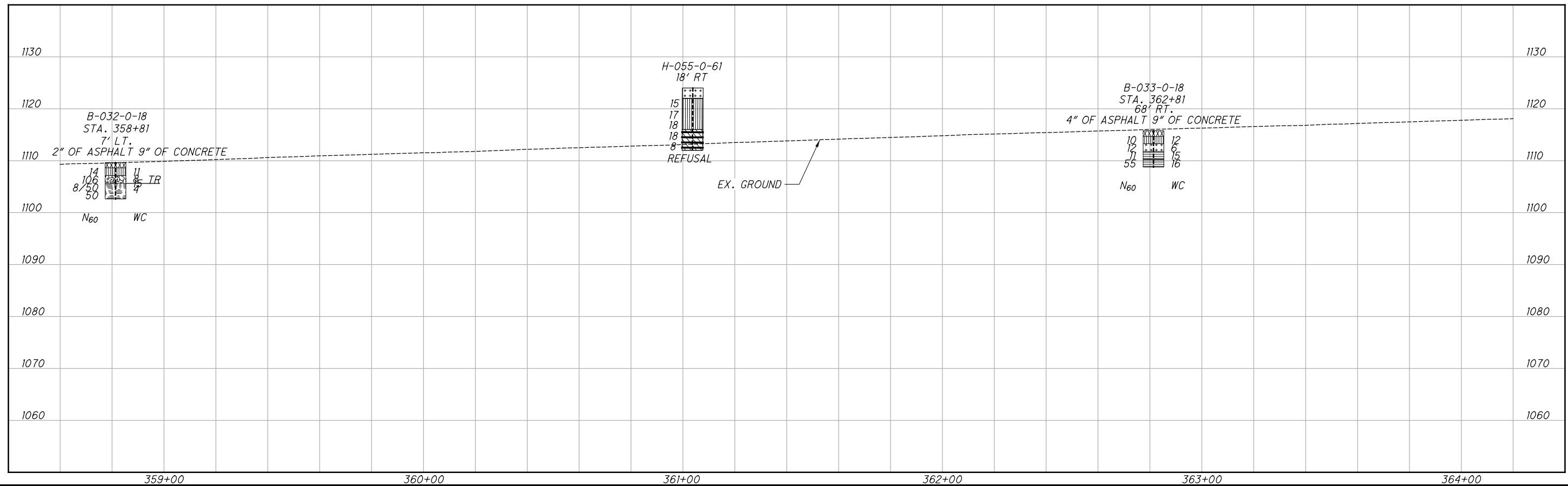
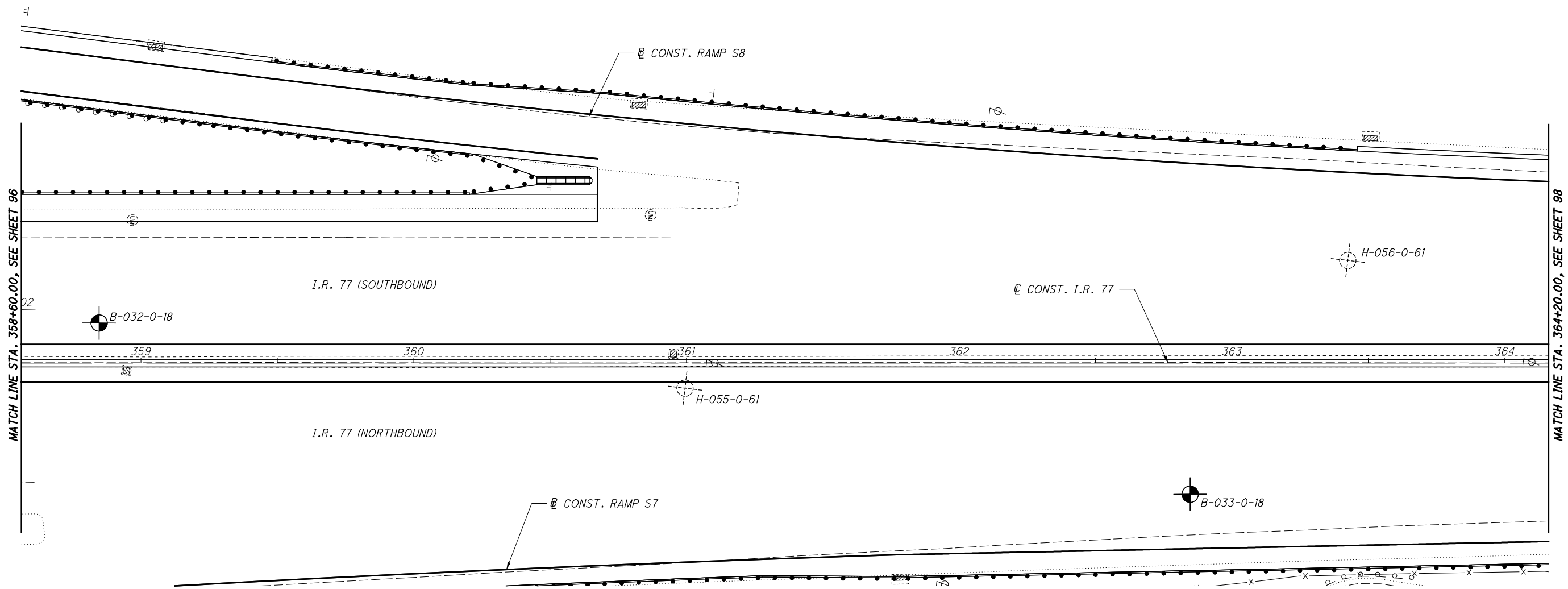
SOIL PROFILE
STA. 353+00.00 TO STA. 358+60.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP106.dgn Sheet 8/21/2020 10:48:31AM kmhabea

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IPI07.dgn Sheet 8/21/2020 10:48:33 AM kmihalcea



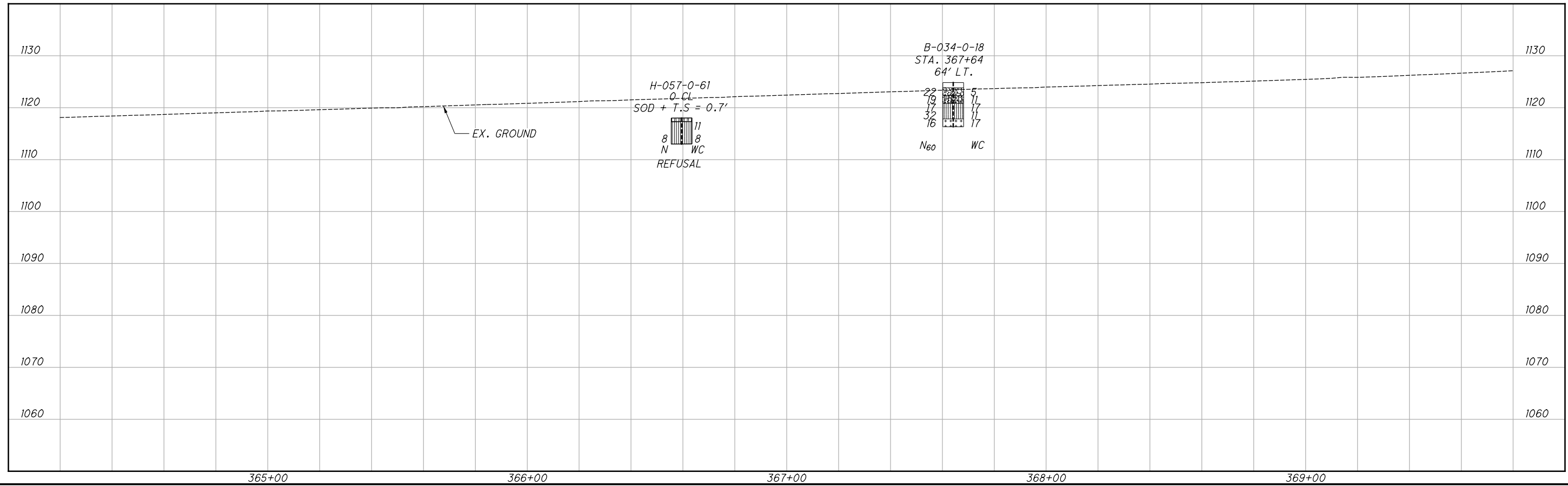
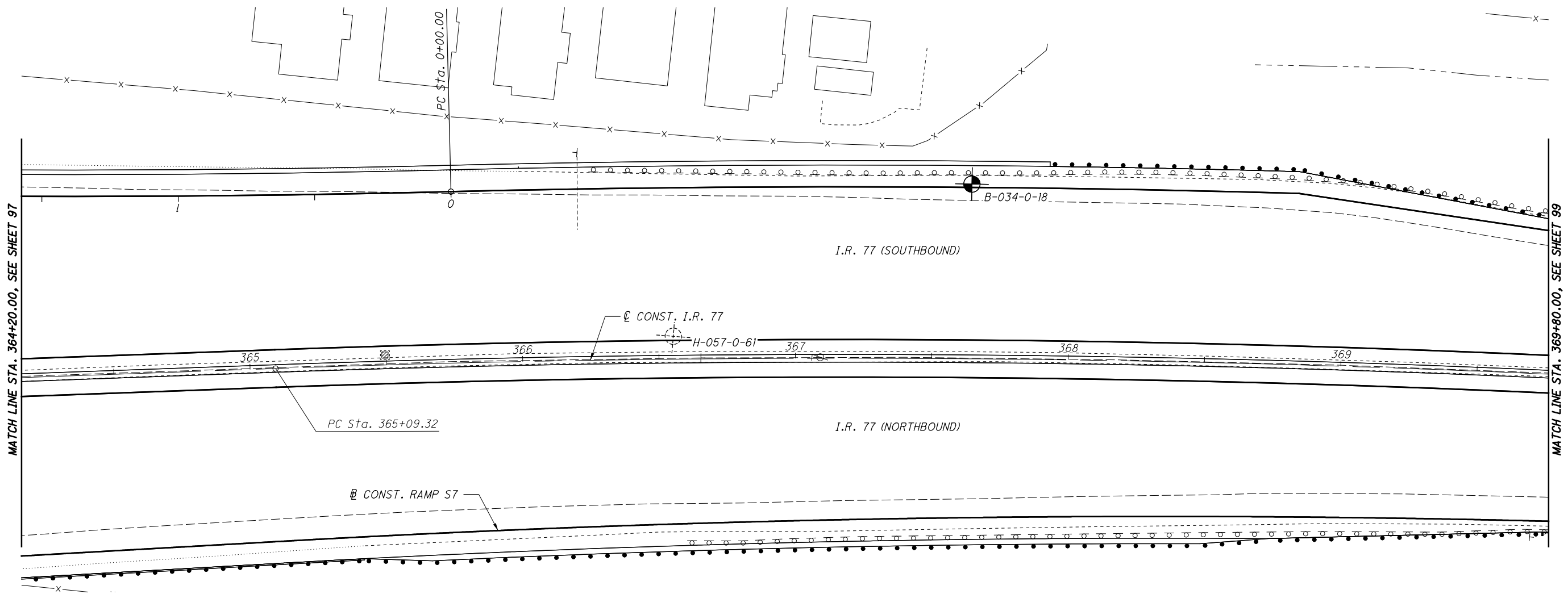
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 358+60.00 TO STA. 364+20.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

97
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP108.dgn Sheet 8/21/2020 10:48:37 AM kmihalcea



SOIL PROFILE

STA. 364+20.00 TO STA. 369+80.00 I.R. 77

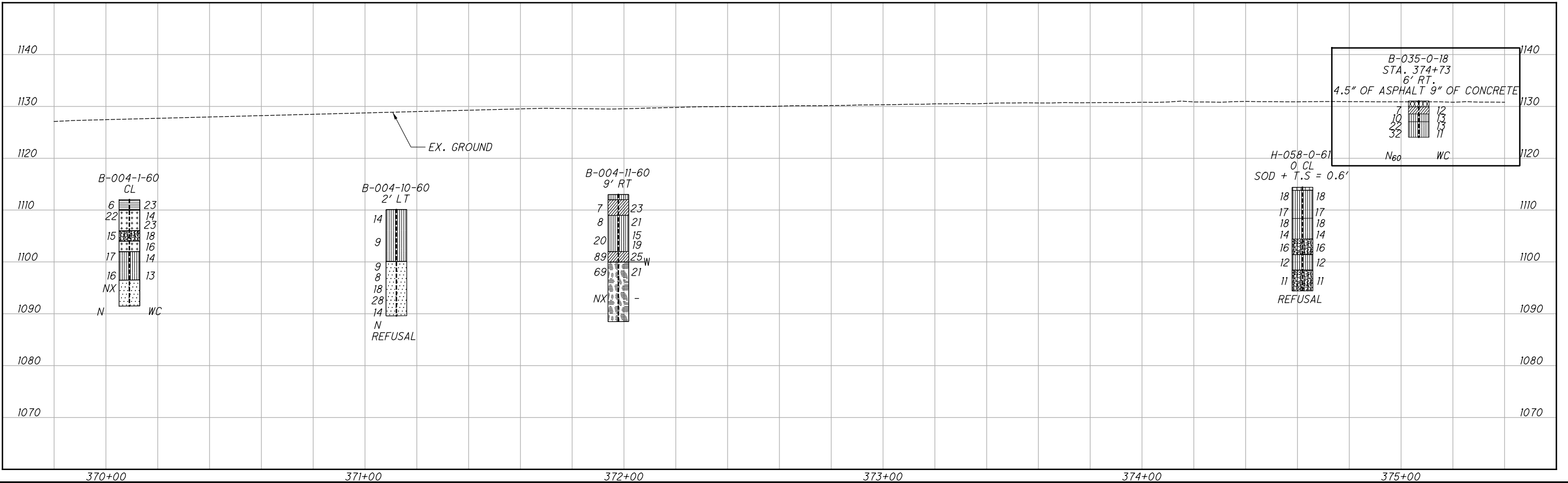
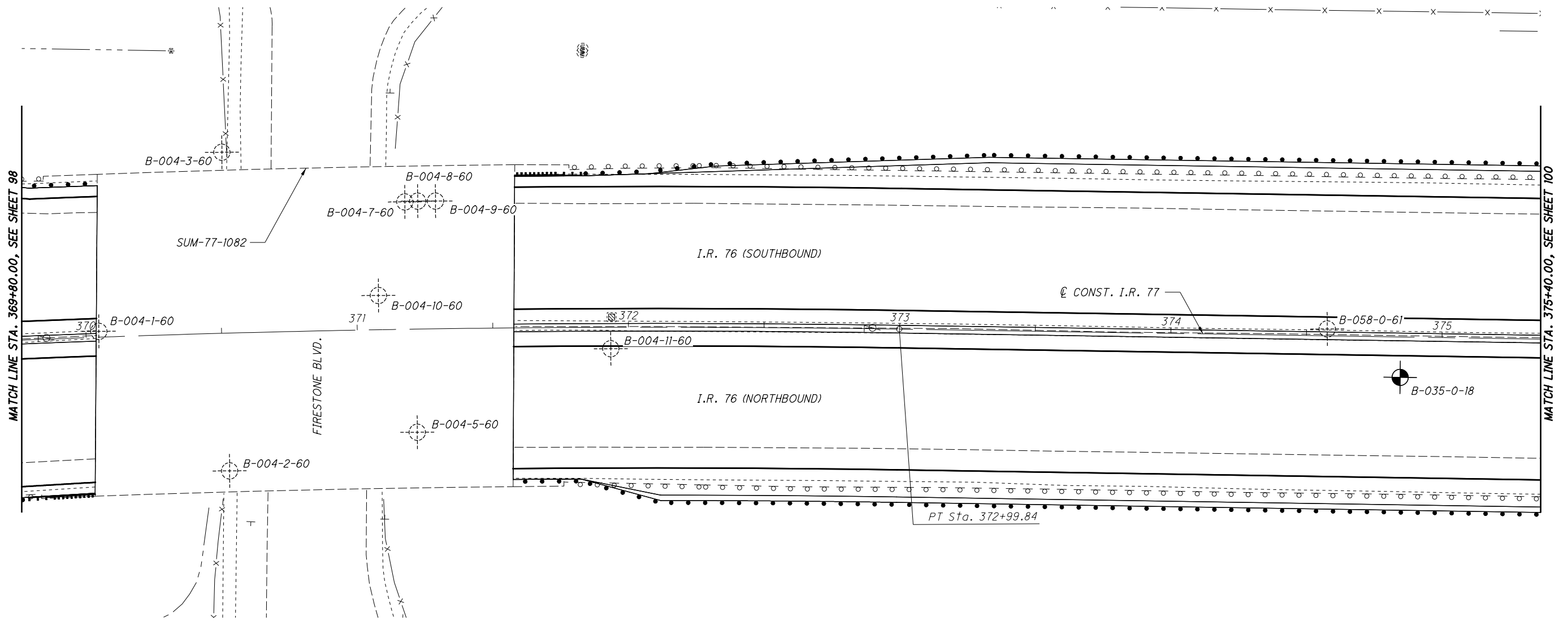
SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

98
182

DRAWN: SM
CHECKED: PAN

HORIZONTAL SCALE IN FEET
0 5 10 20

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HORIZONTAL SCALE IN FEET

DRAWN: SM
CHECKED: PAN

SOIL PROFILE

STA. 369+80.00 TO STA. 375+40.00 I.R. 77

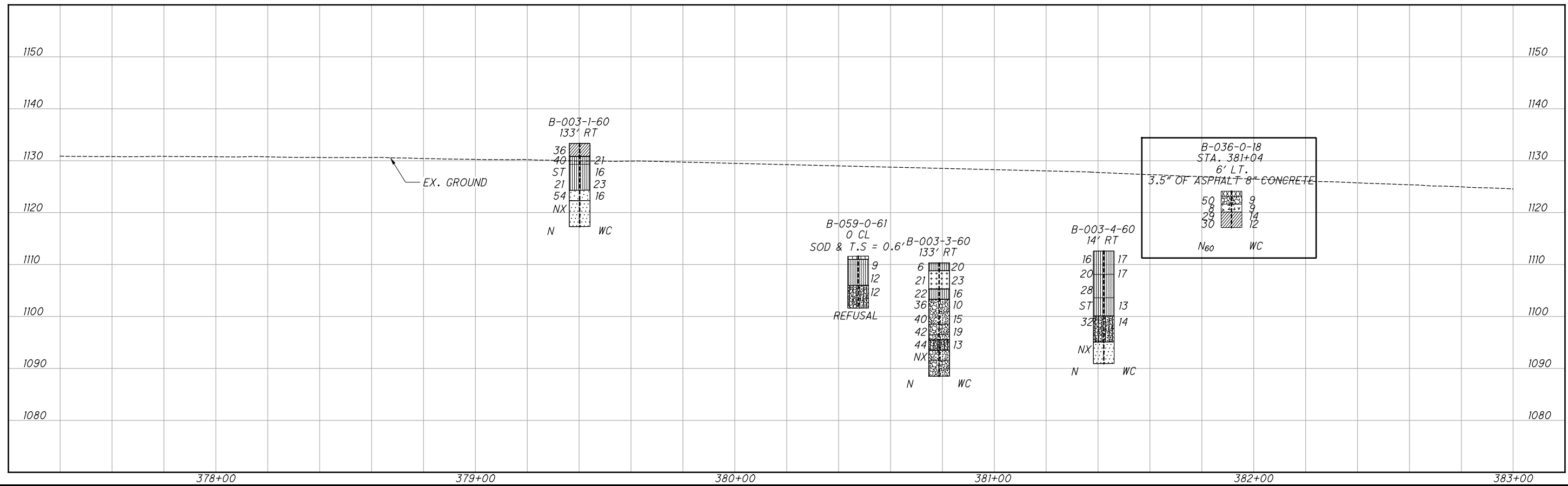
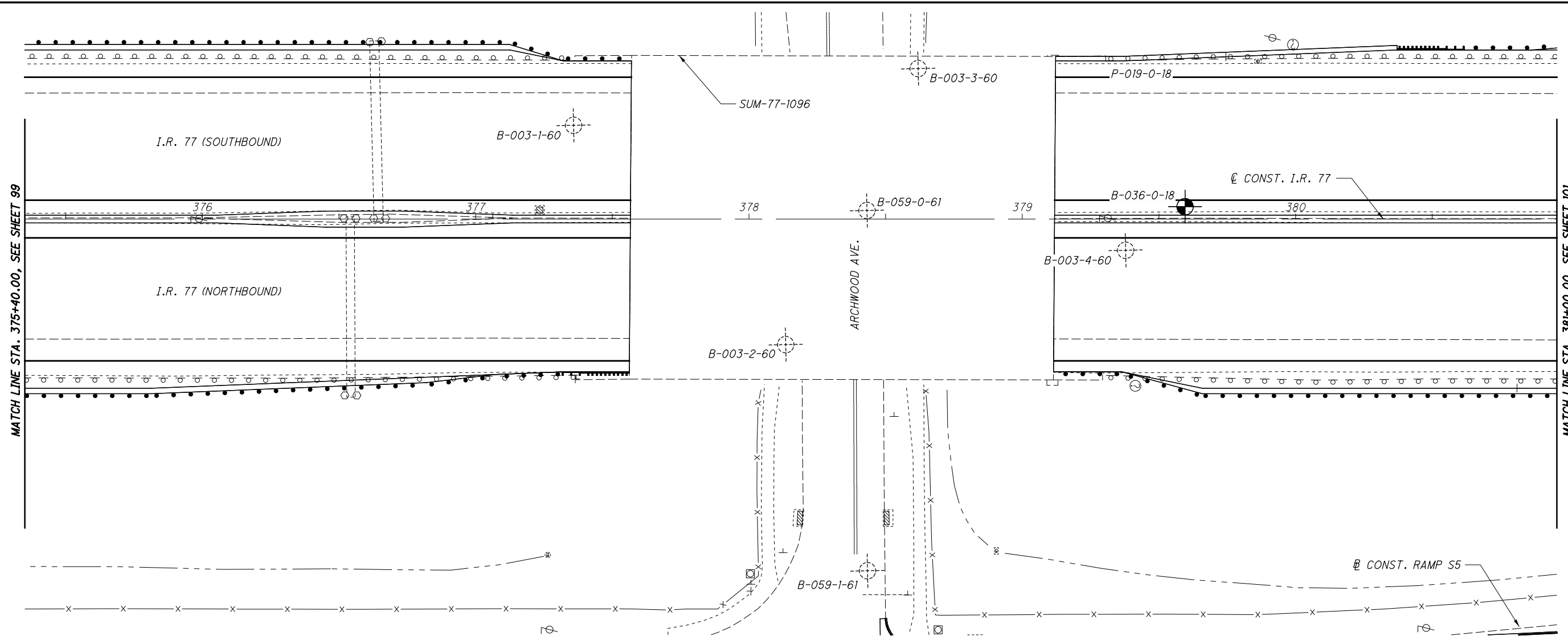
SUM-76 / 77 / 8 -

8.24 / 9.74 / 0.00

99

182

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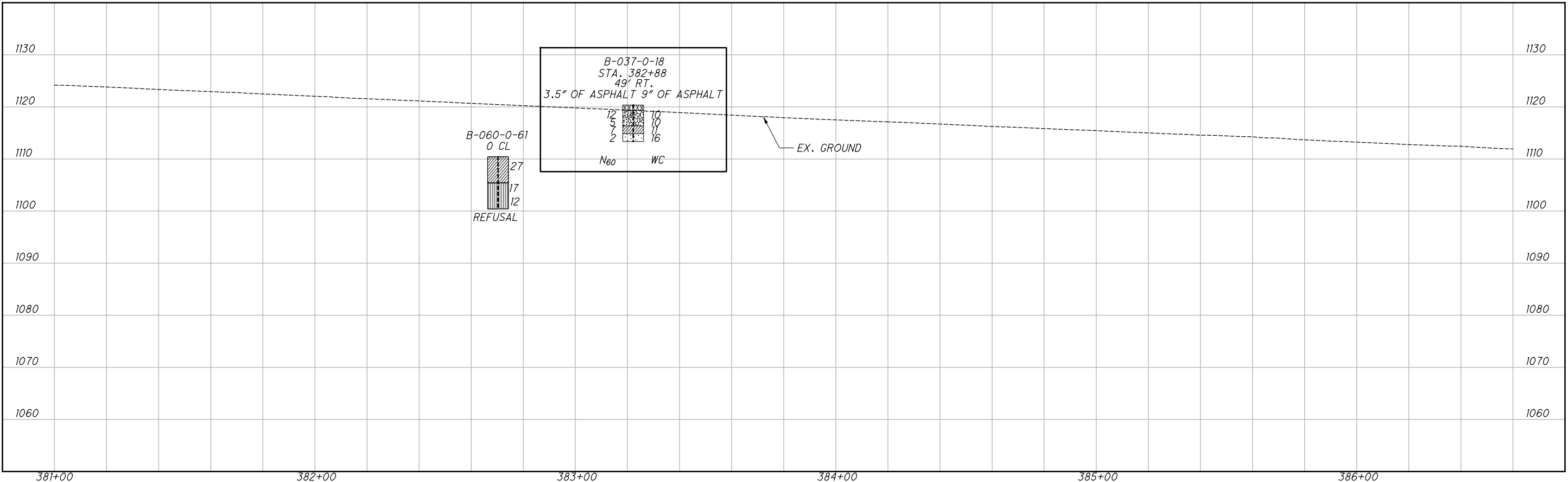
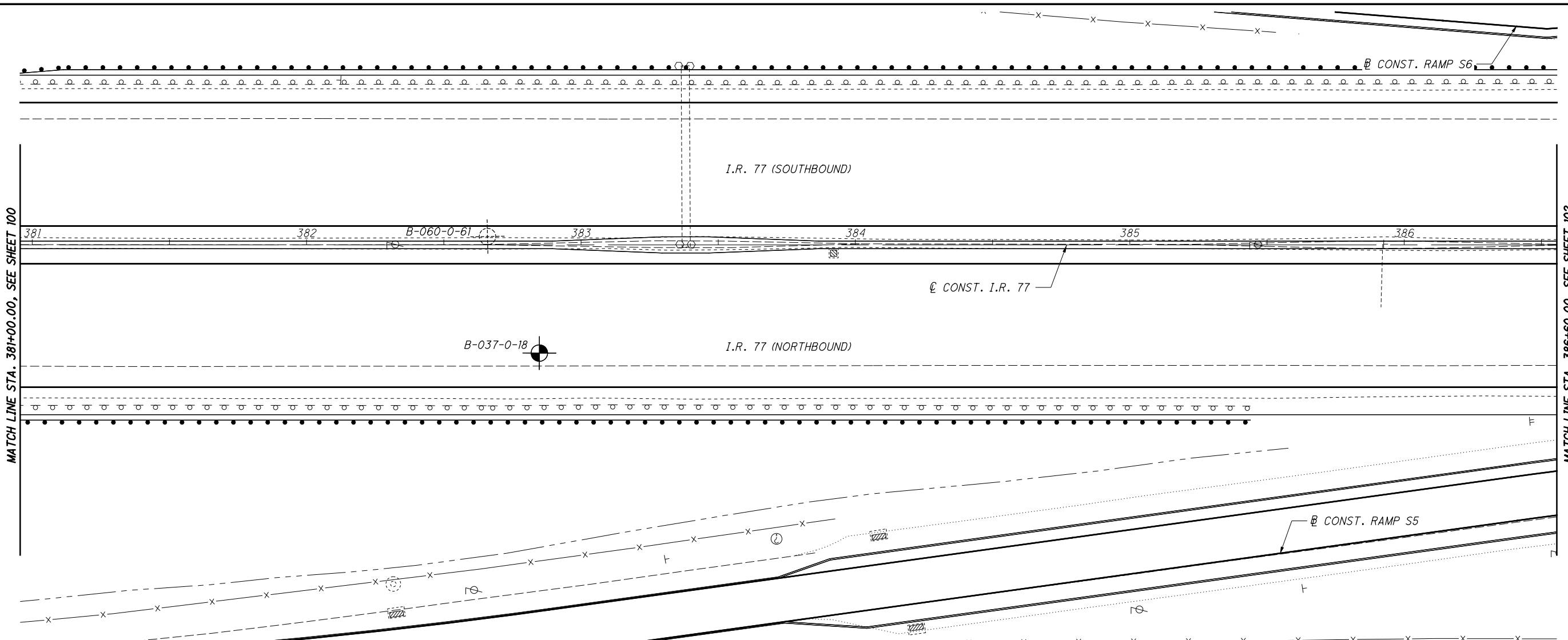
HORIZONTAL SCALE IN FEET

DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 375+40.00 TO STA. 381+00.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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N

0 5 10 20
HORIZONTAL
SCALE IN FEET

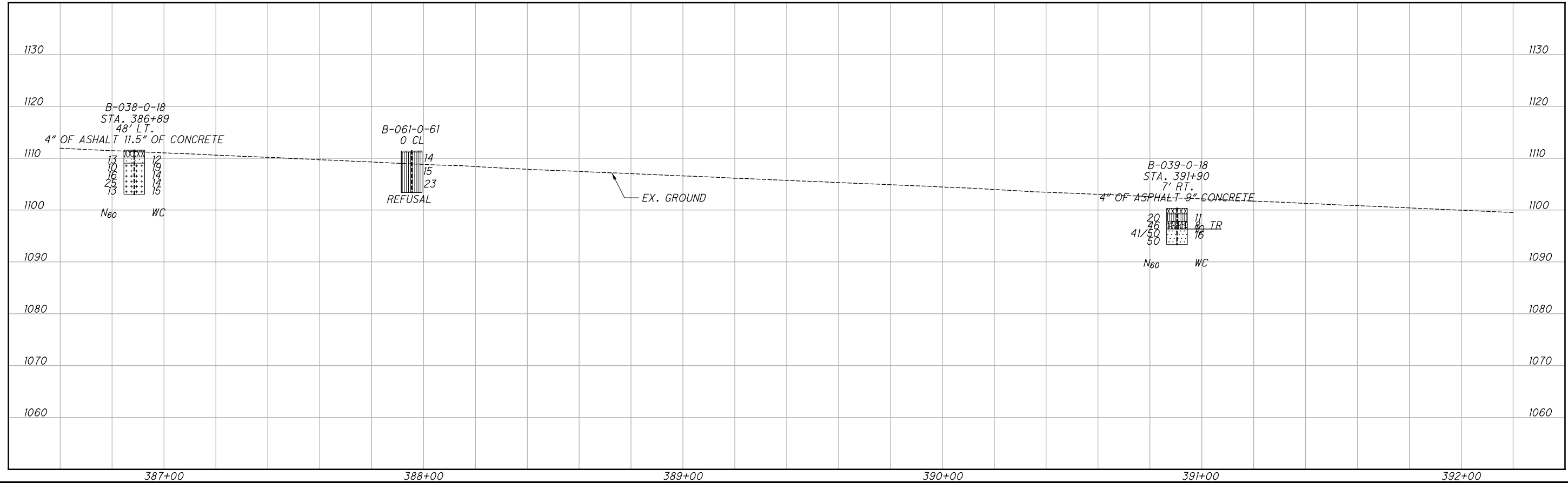
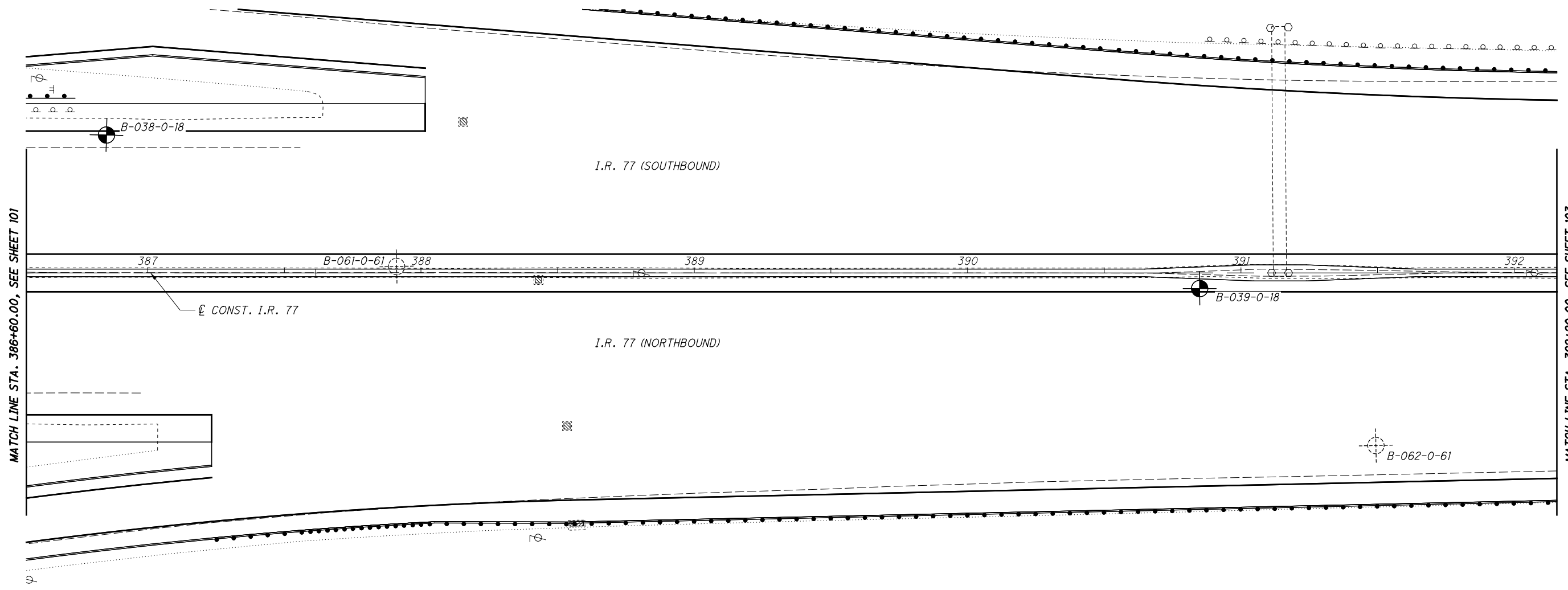
DRAWN
SM
CHECKED
PAN

SOIL PROFILE
STA. 381+00.00 TO STA. 386+60.00 I.R. 77

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

101
182

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DRAWN	SM
CHECKED	PAN

SOIL PROFILE

STA. 386+60.00 TO STA. 392+20.00 I.R. 77

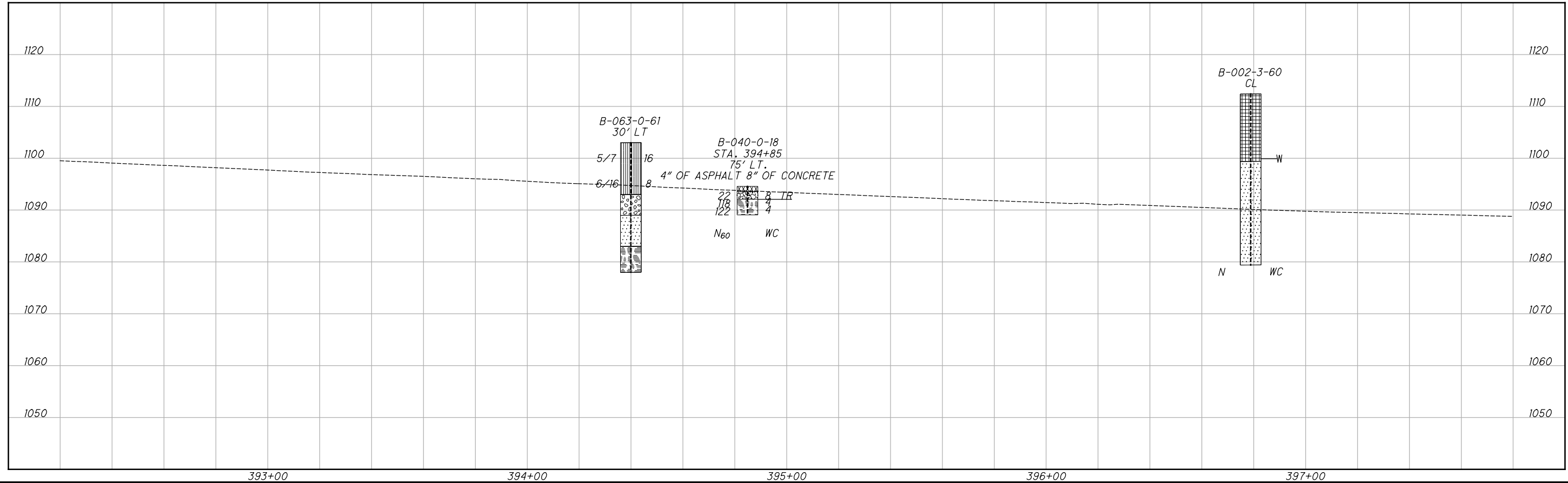
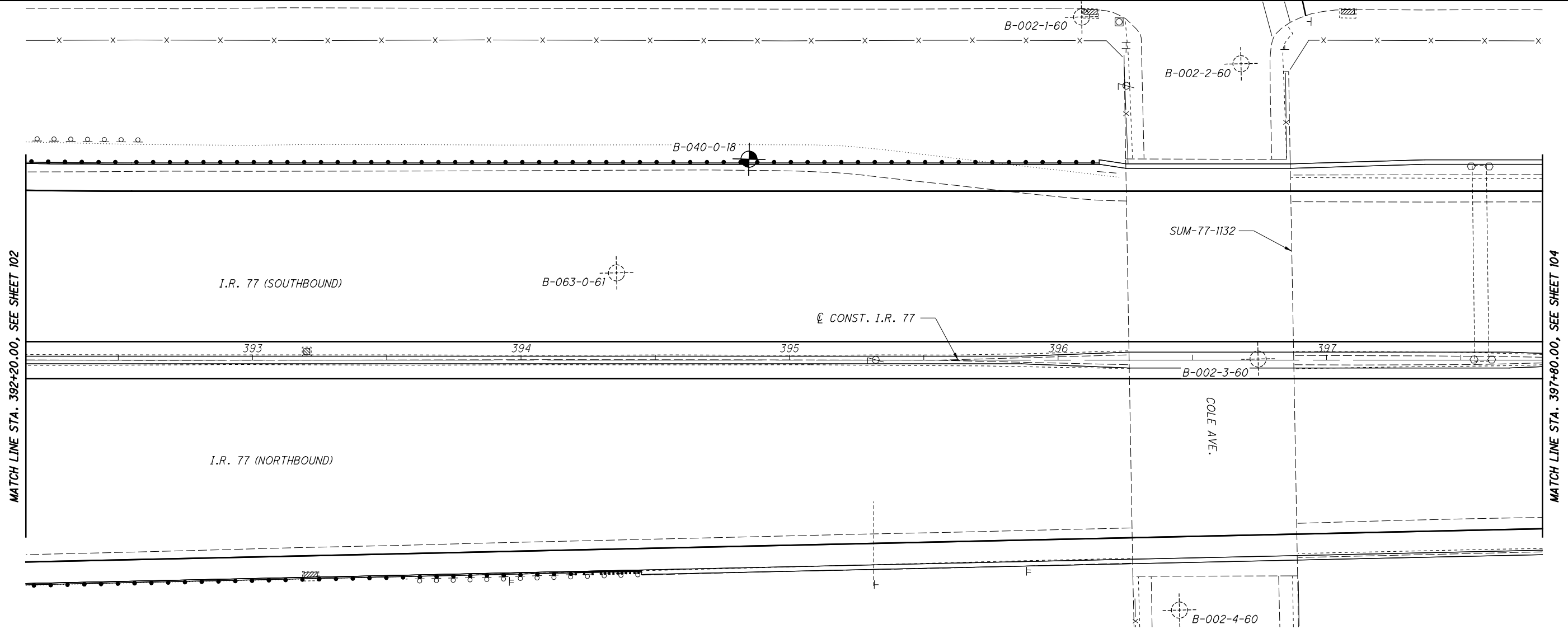
SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

102

182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP13.dgn_Sheet 8/27/2020 10:48:56 AM kmhnlcea



N

HORIZONTAL SCALE IN FEET

DRAWN	SM
CHECKED	PAN

SOIL PROFILE

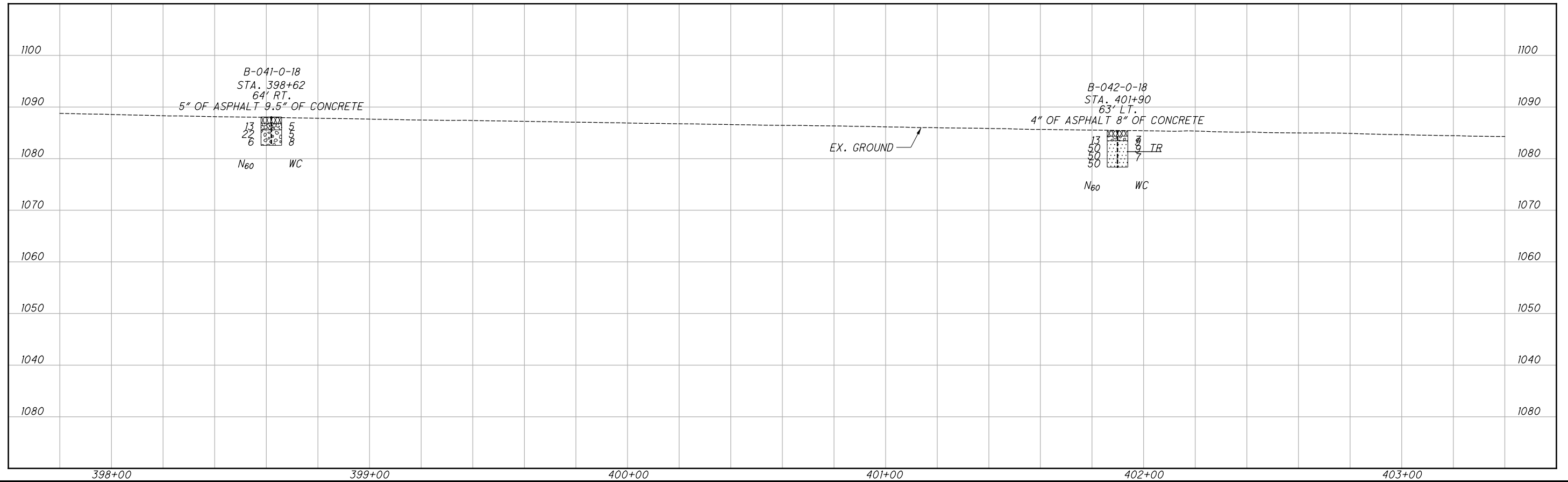
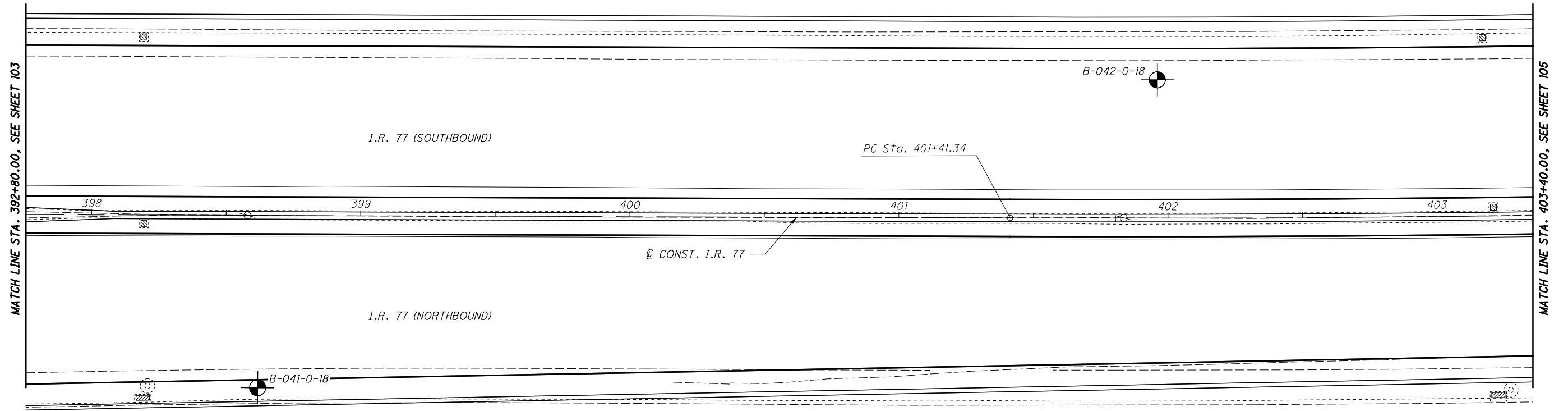
STA. 392+20.00 TO STA. 397+80.00 I.R. 77

SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

103
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP14.dgn_Sheet 8/27/2020 10:48:58 AM kmhnlceca



DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 397+80.00 TO STA. 403+40.00 I.R. 77

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

104
182

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MATCH LINE STA. 403+40.00, SEE SHEET 104

MATCH LINE STA. 4294+00.00, SEE SHEET 106





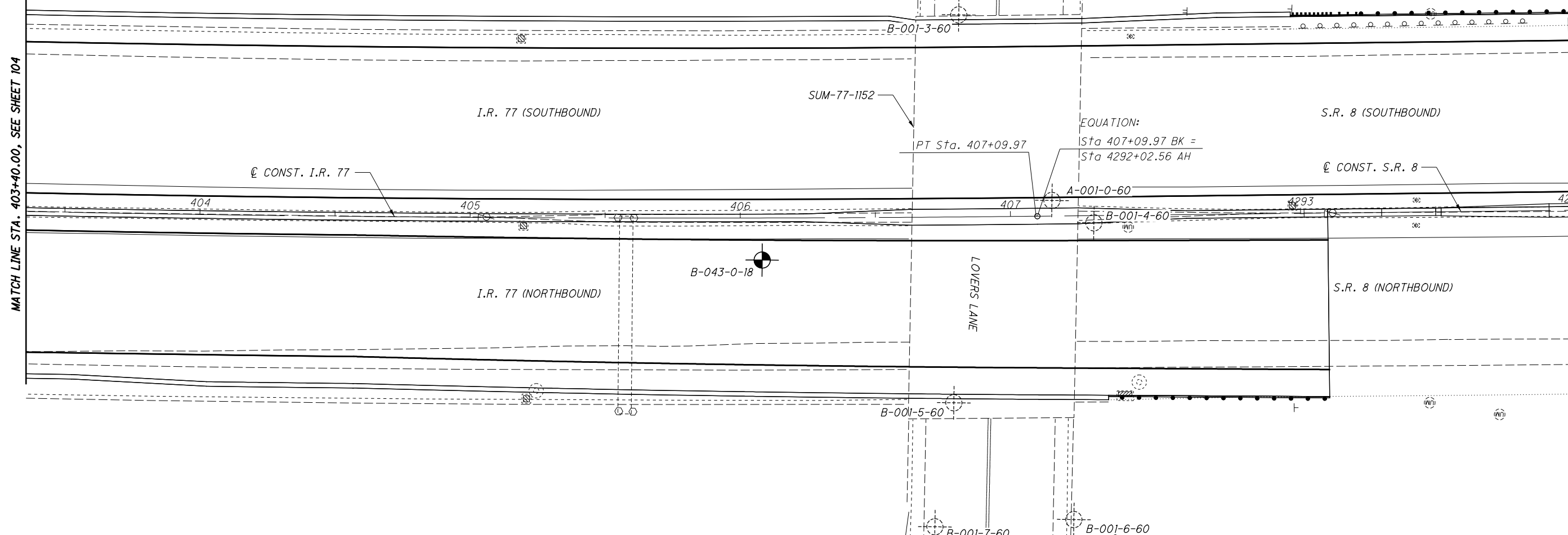
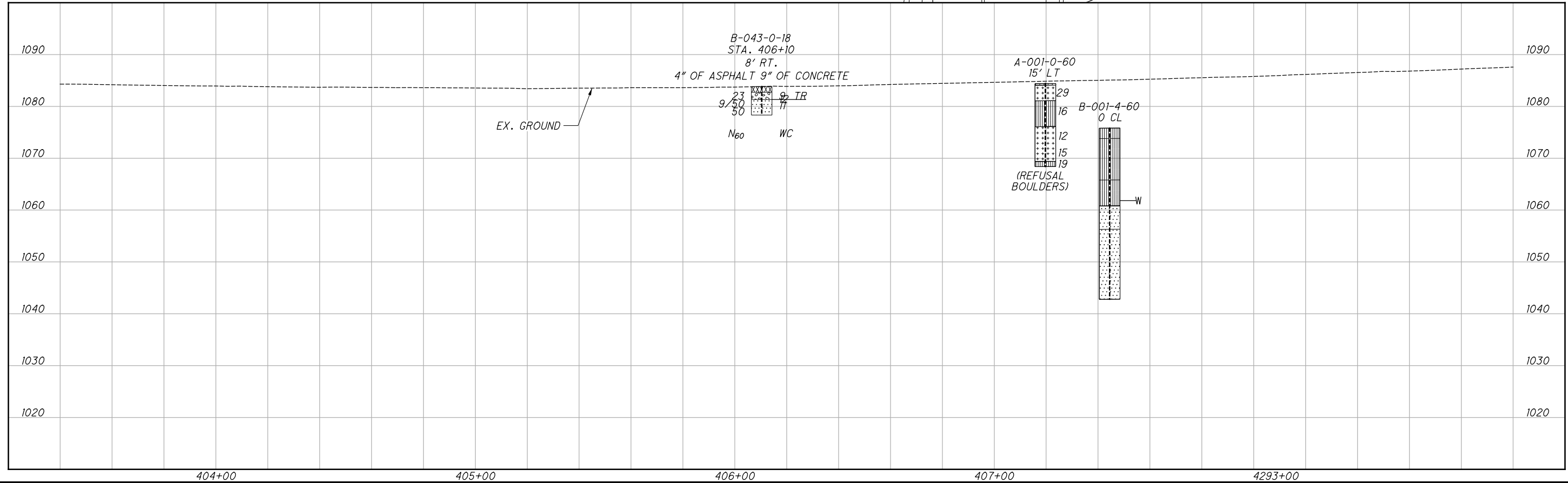
 HORIZONTAL SCALE IN FEET

DRAWN: SM
 CHECKED: PAN

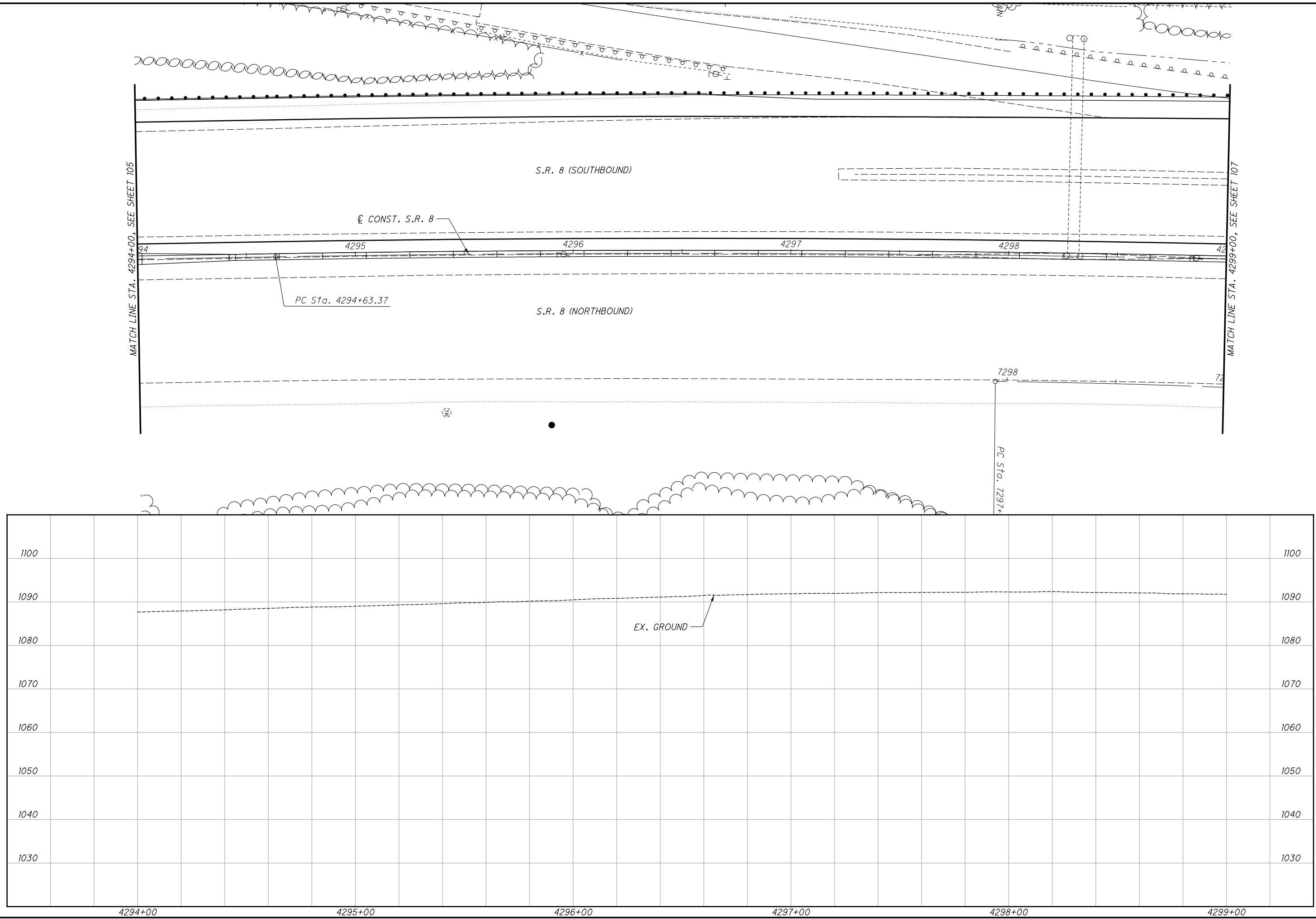
SOIL PROFILE
STA. 403+40.00 TO STA. 4294+00.00 I.R. 77

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

105
 182



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP16.dgn_Sheet 8/27/2020 10:50:02 AM kmhnlacea



SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

SOIL PROFILE
STA. 4294+00.00 TO STA. 4299+00.00 S.R. 8

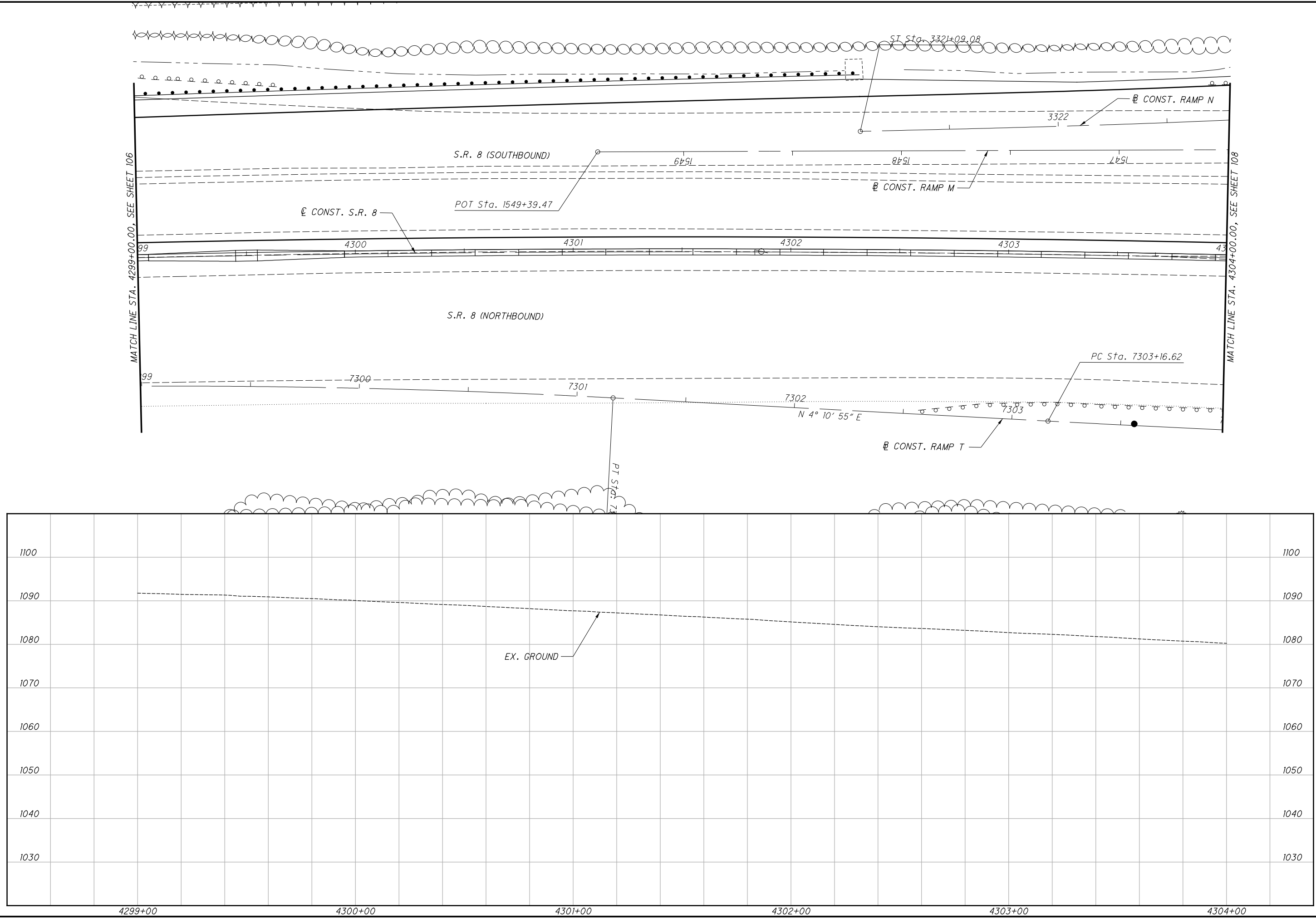
106
182

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20

HORIZONTAL
SCALE IN FEET

CALCULATED
SM
CHECKED
PAN

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 HORIZONTAL SCALE IN FEET

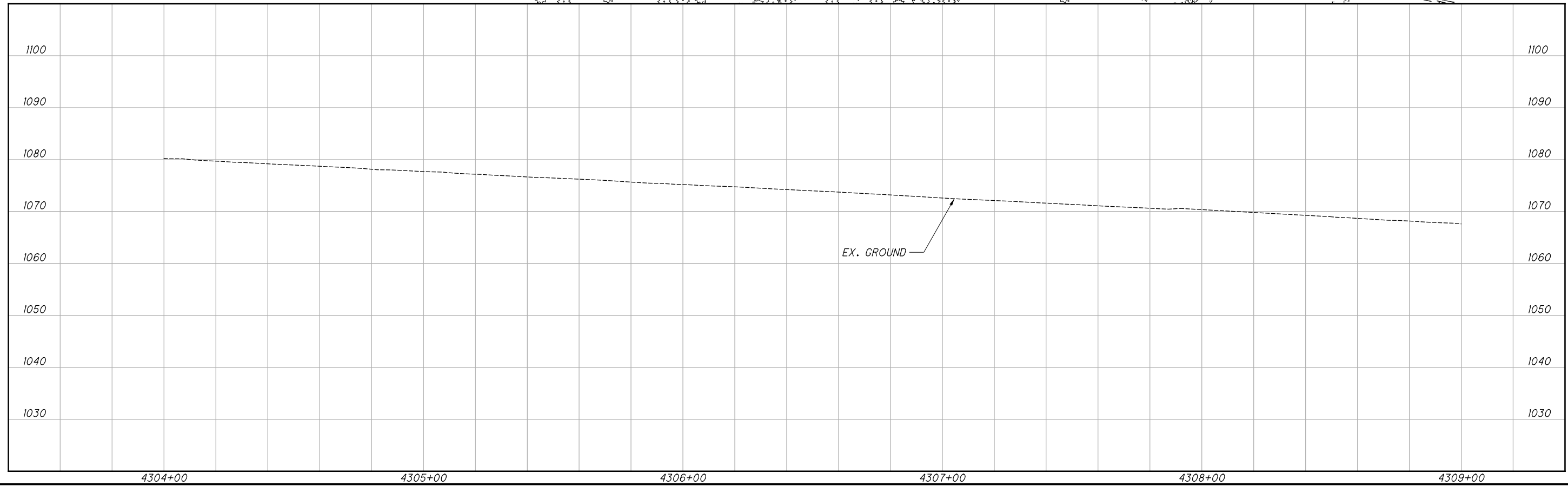
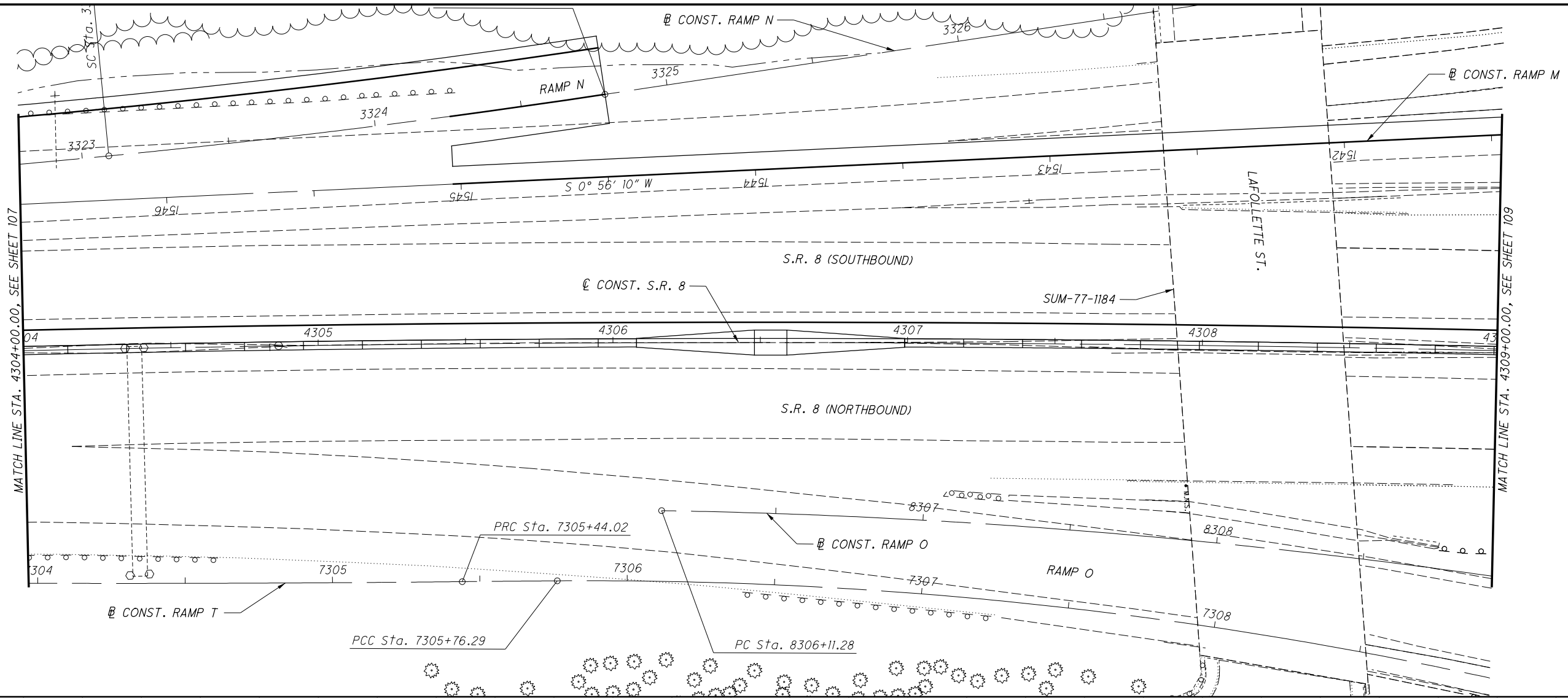
CALCULATED SM
 CHECKED PAN

SOIL PROFILE
STA. 4299+00.00 TO STA. 4304+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

107
 182

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HORIZONTAL SCALE IN FEET

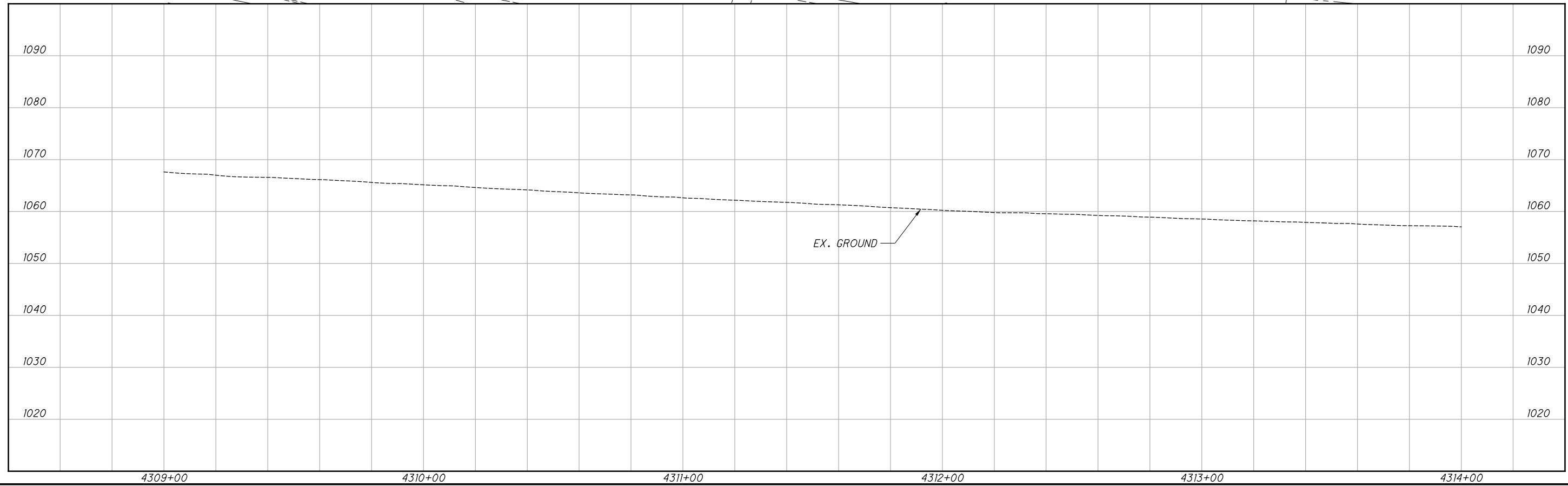
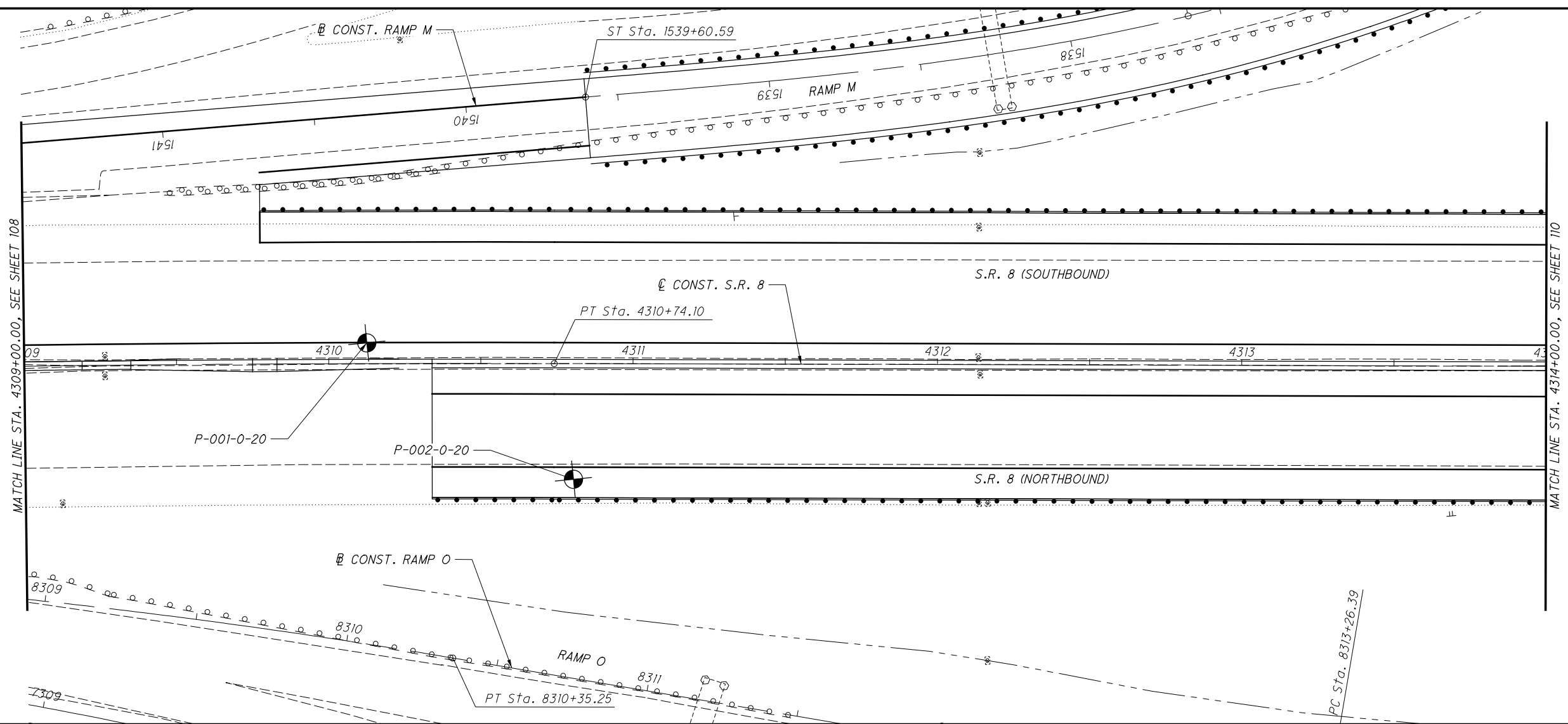
CALCULATED
SM
CHECKED
PAN

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

SOIL PROFILE
STA. 4304+00.00 TO STA. 4309+00.00 S.R. 8

108
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP19.dgn_Sheet 8/27/2020 10:52:08 AM kmhnlacea



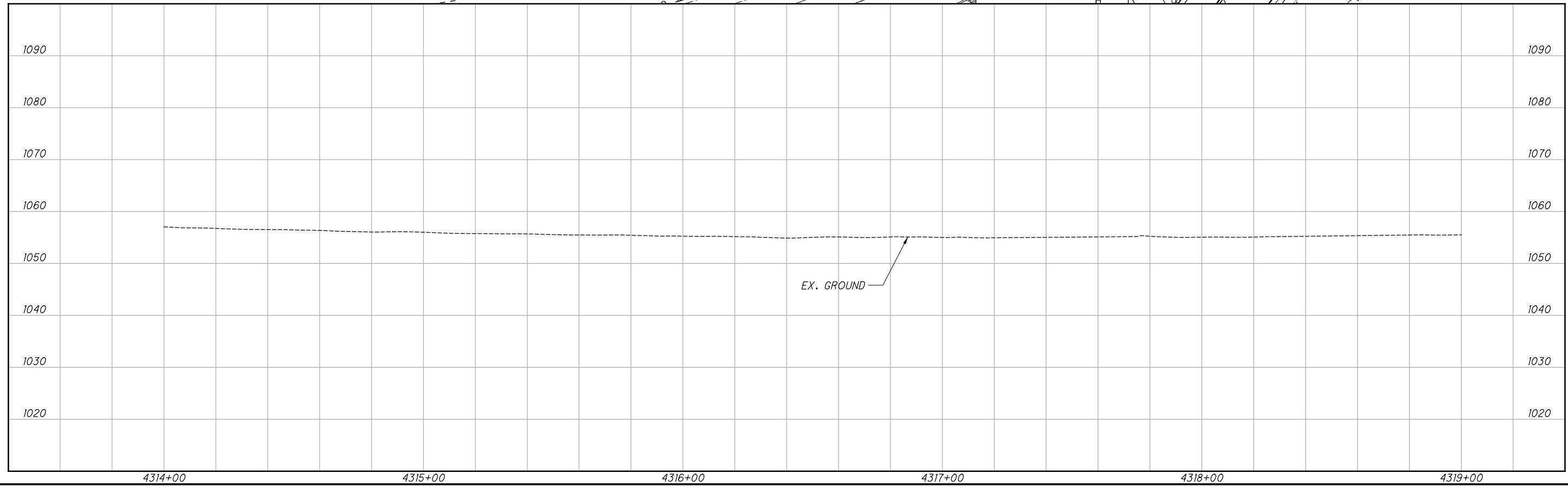
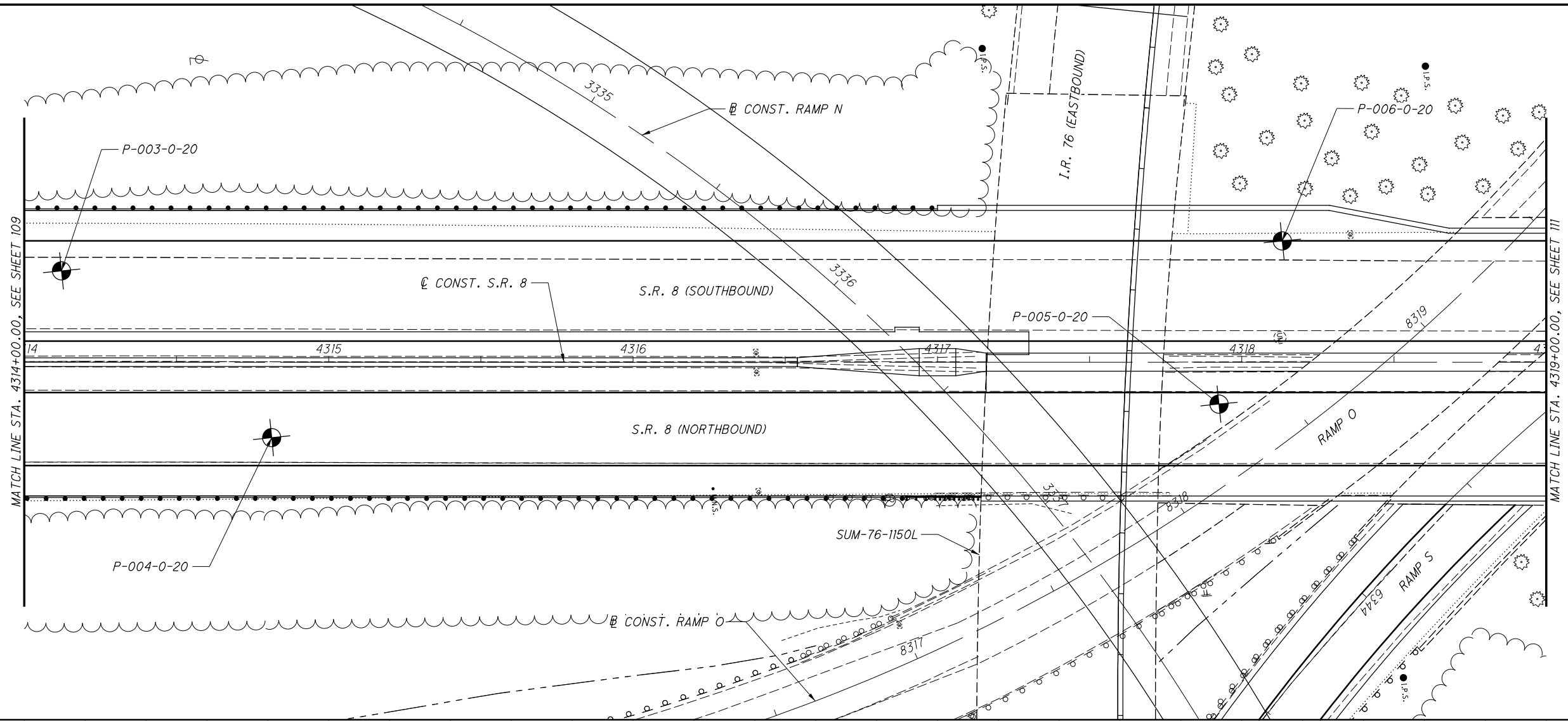
CALCULATED SM
CHECKED PAN

SOIL PROFILE
STA. 4309+00.00 TO STA. 4314+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

109
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\I02329_I020.dgn Sheet 8/21/2020 10:53:22 AM kmihalcea







 HORIZONTAL SCALE IN FEET

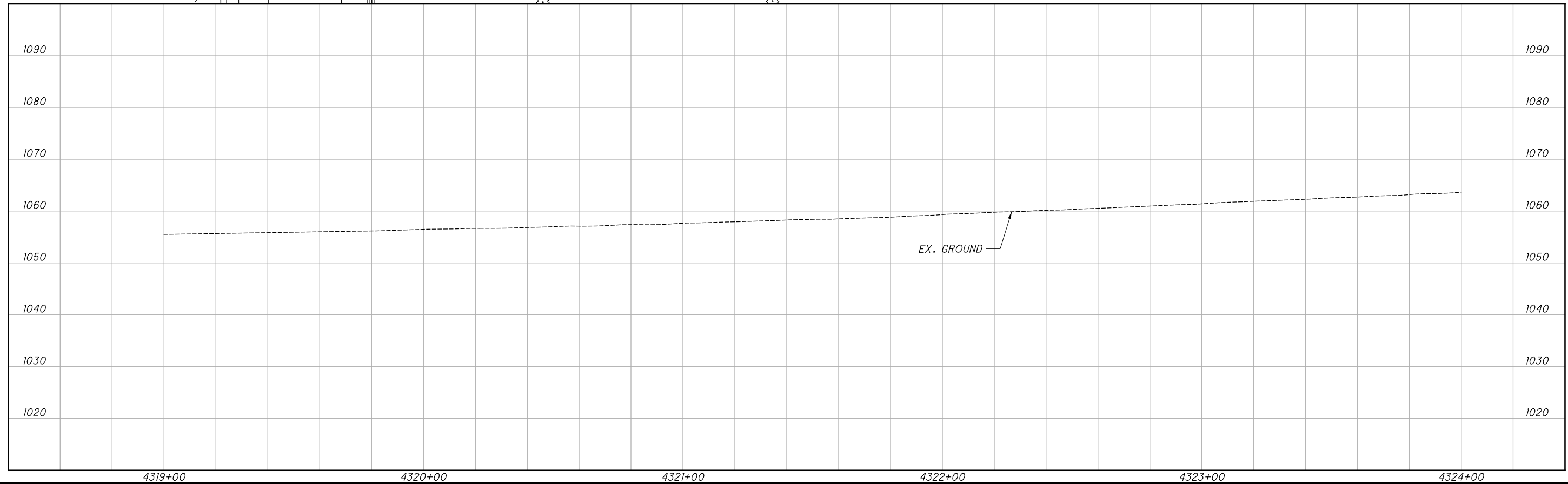
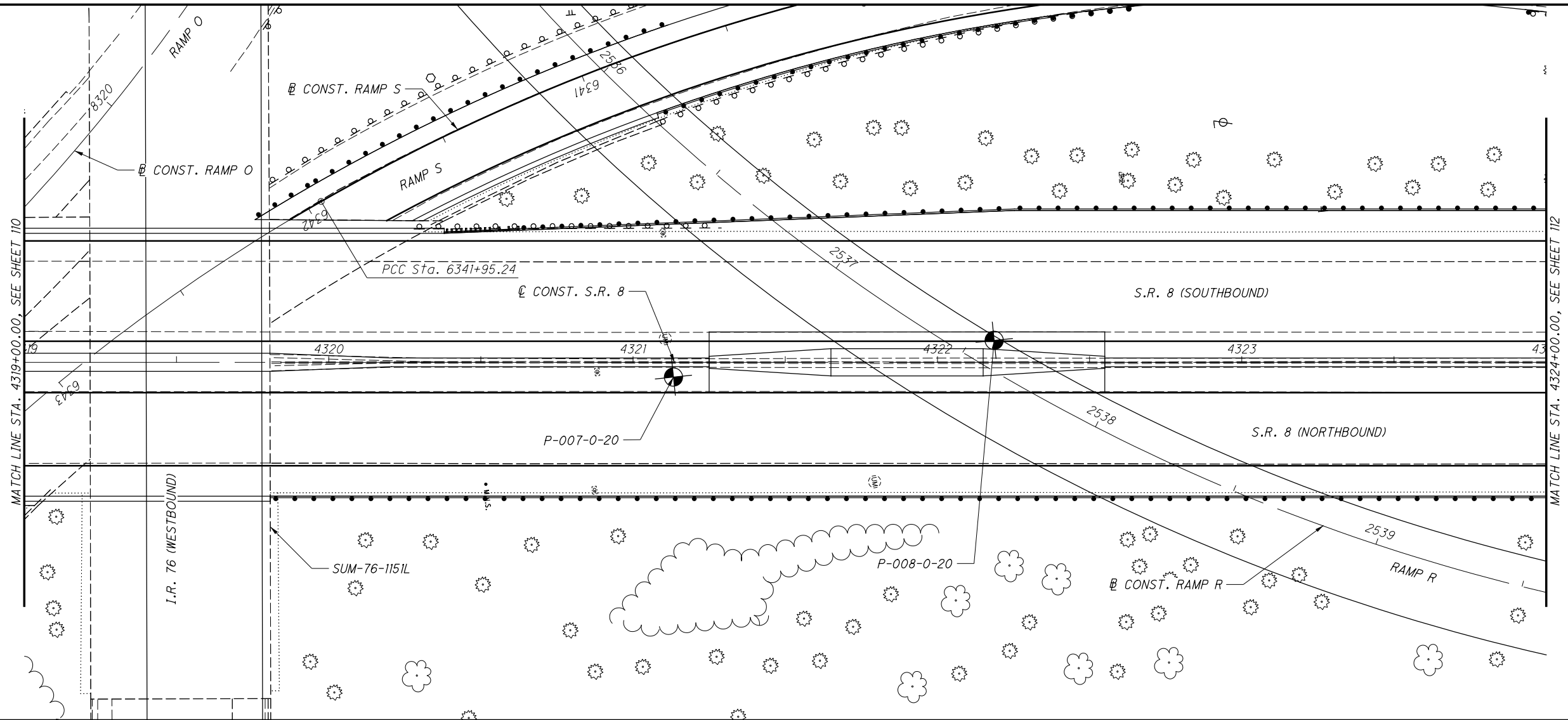
CALCULATED SM
 CHECKED PAN

SOIL PROFILE
STA. 4314+00.00 TO STA. 4319+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

110
 182

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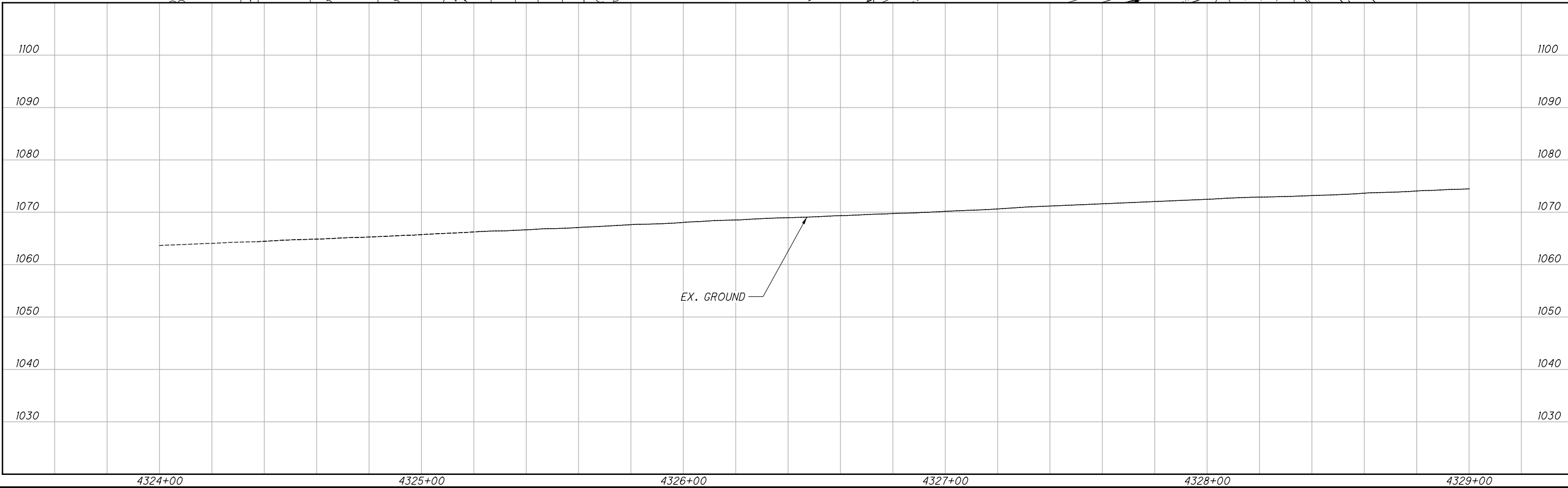
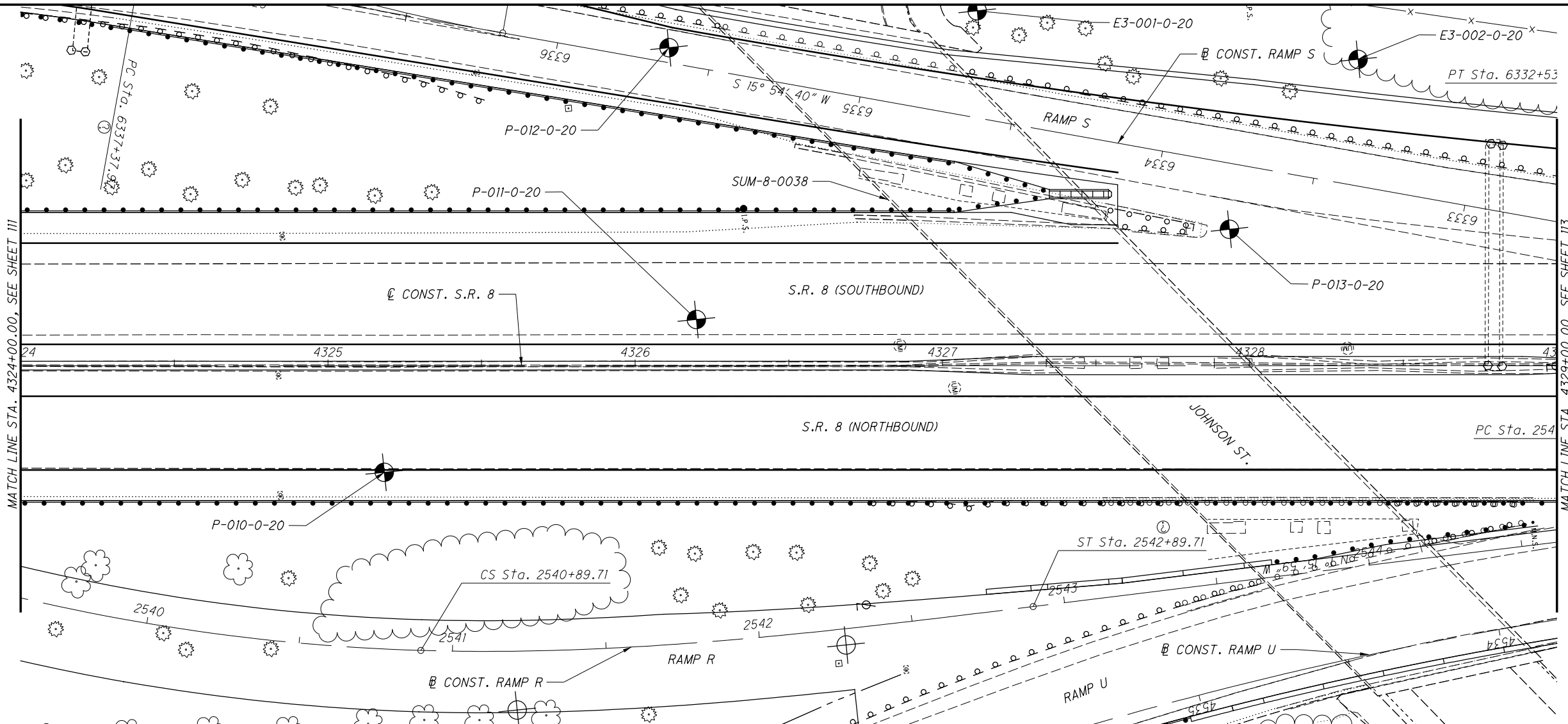


 HORIZONTAL SCALE IN FEET

CALCULATED SM
 CHECKED PAN
SOIL PROFILE
STA. 4319+00.00 TO STA. 4324+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00
 111
 182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP122.dgn Sheet 8/21/2020 10:55:46 AM kmihalcea



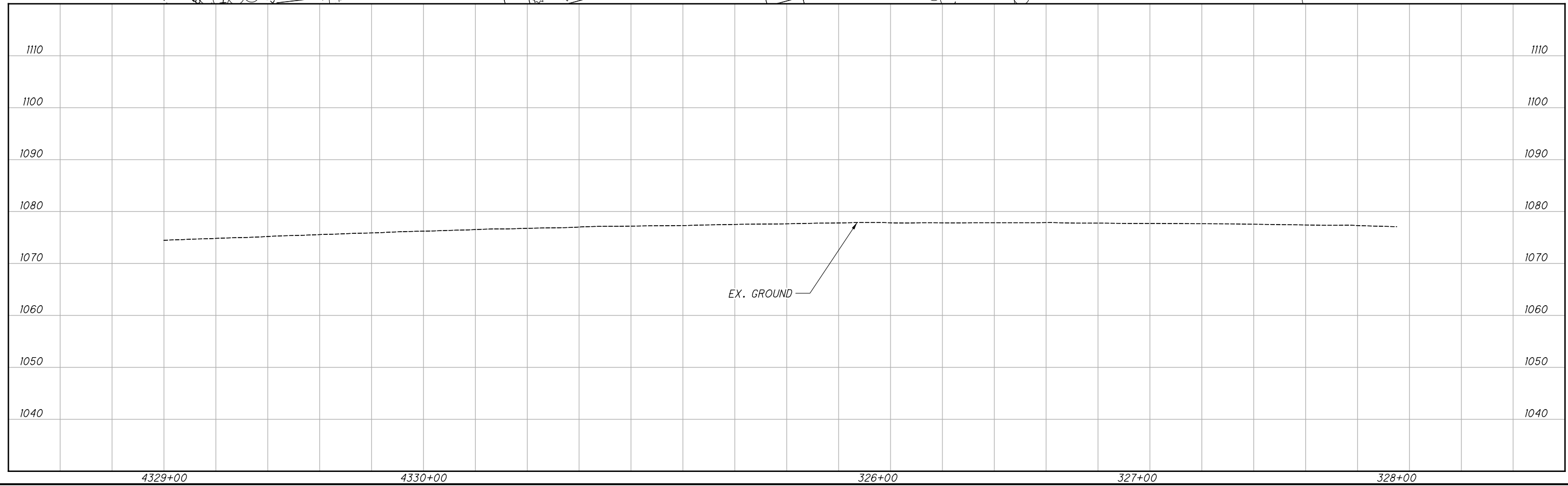
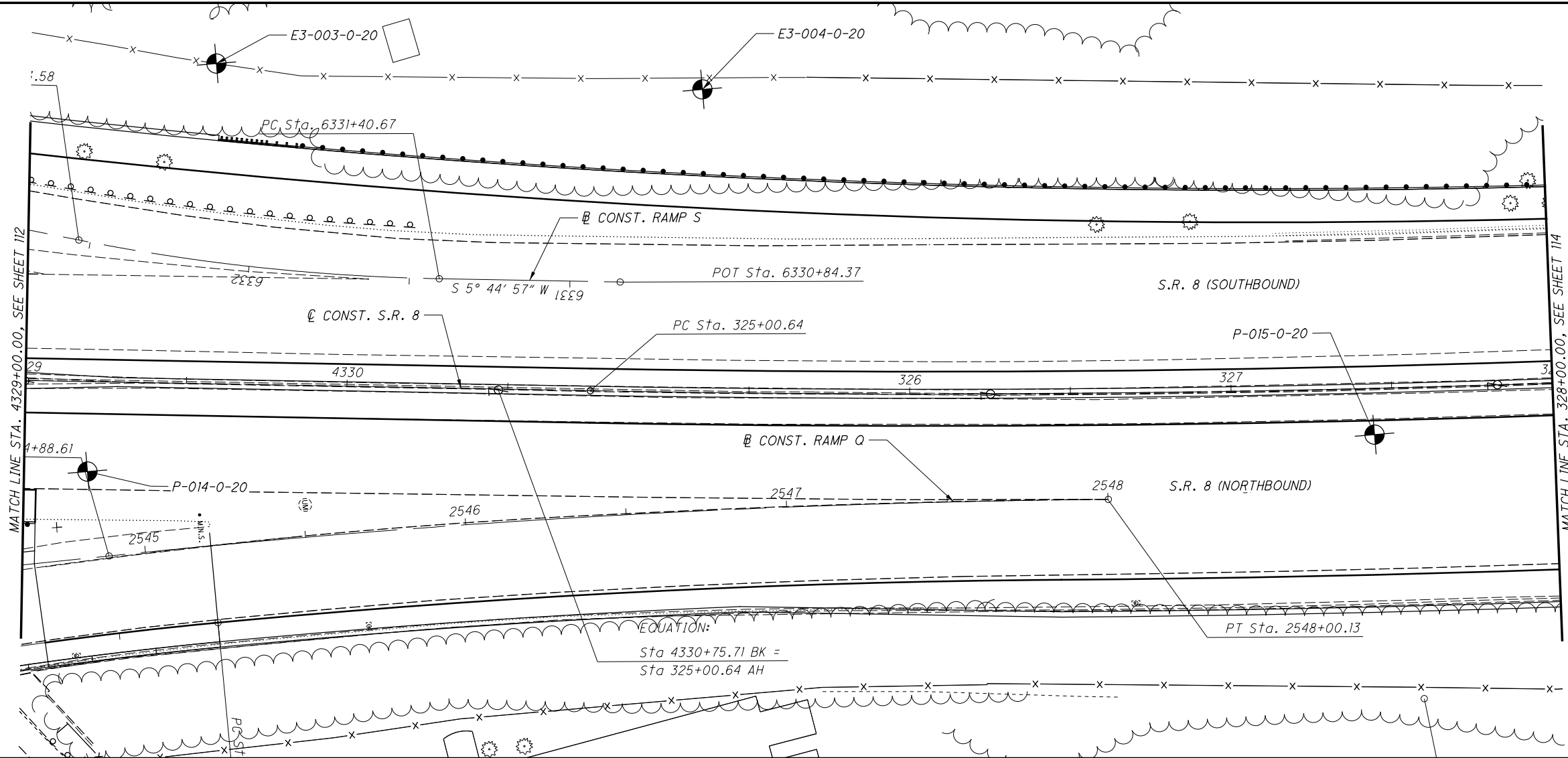
CALCULATED SM CHECKED PAN

0 5 10 15 20
HORIZONTAL SCALE IN FEET

SOIL PROFILE
STA. 4324+00.00 TO STA. 4329+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP123.dgn Sheet 8/21/2020 10:56:56 AM kmihalcea



SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

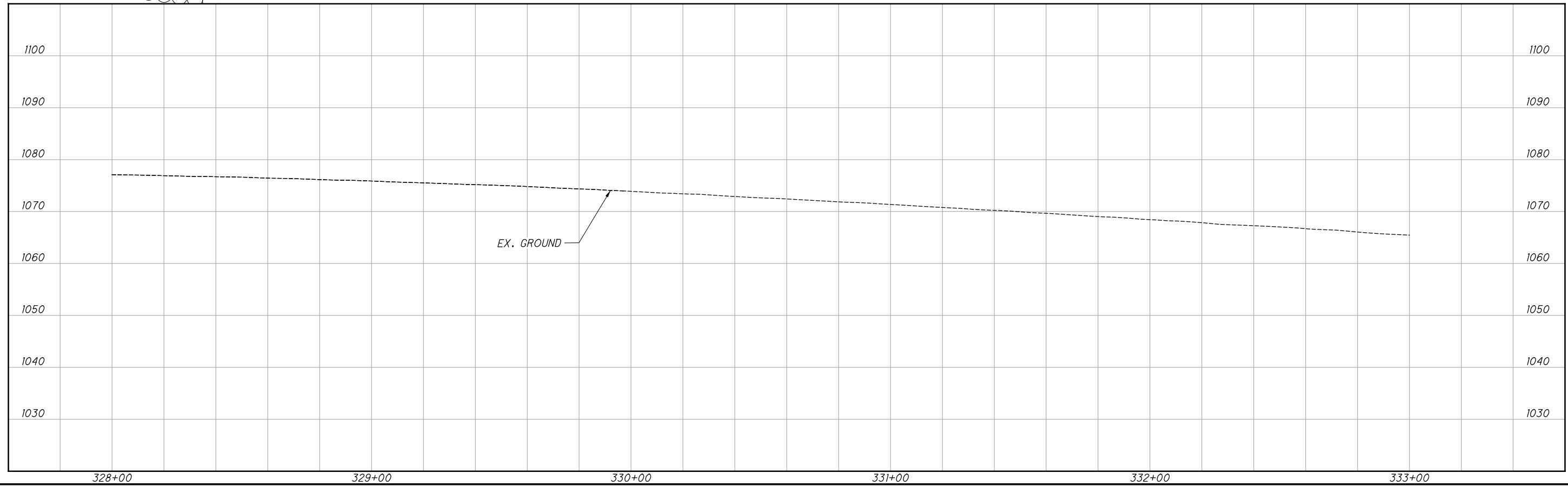
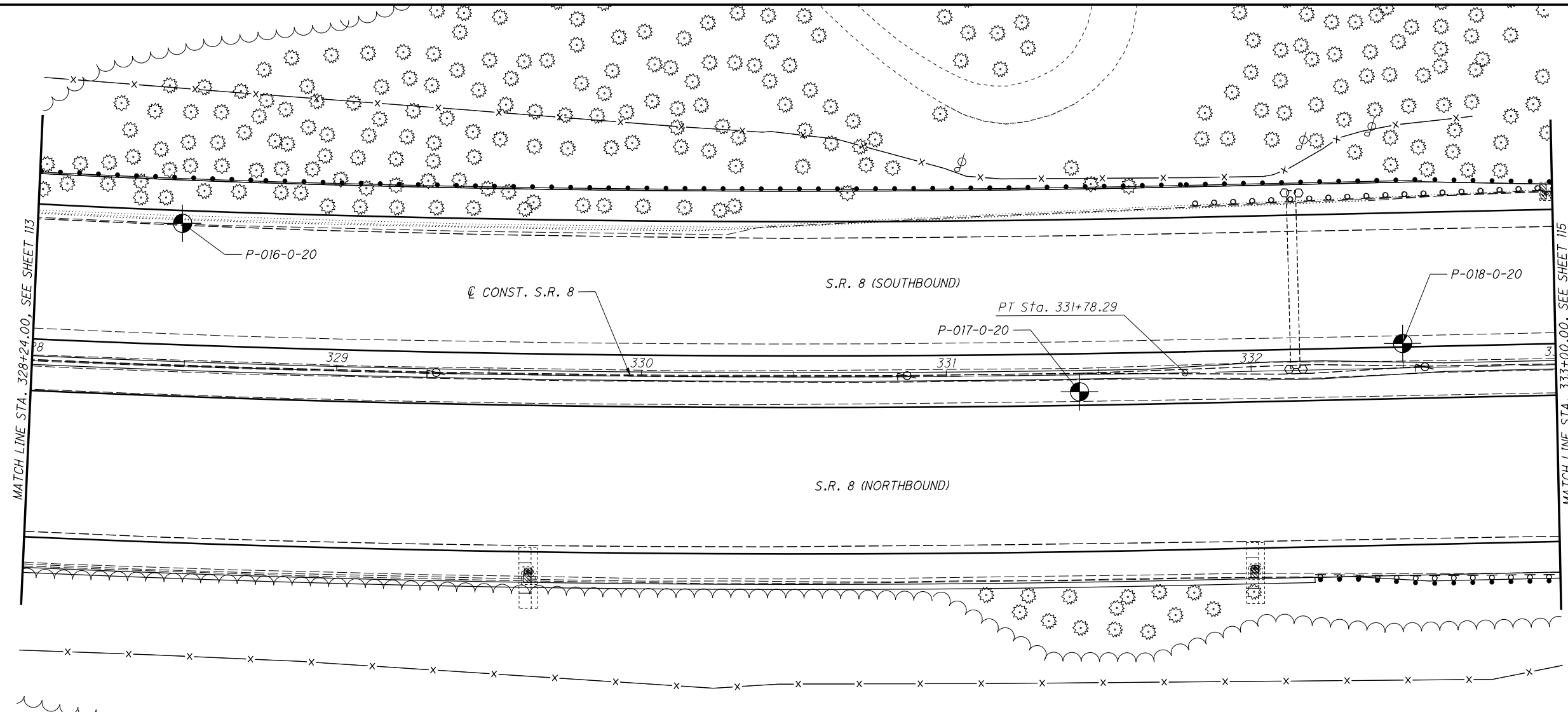
SOIL PROFILE
STA. 4329+00.00 TO STA. 328+00.00 S.R. 8

113
182

CALCULATED: SM
CHECKED: PAN

0 5 10 20
HORIZONTAL SCALE IN FEET

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP124.dgn Sheet 8/21/2020 10:58:05 AM kmihalcea



CALCULATED SM CHECKED PAN

0 5 10 20
HORIZONTAL SCALE IN FEET

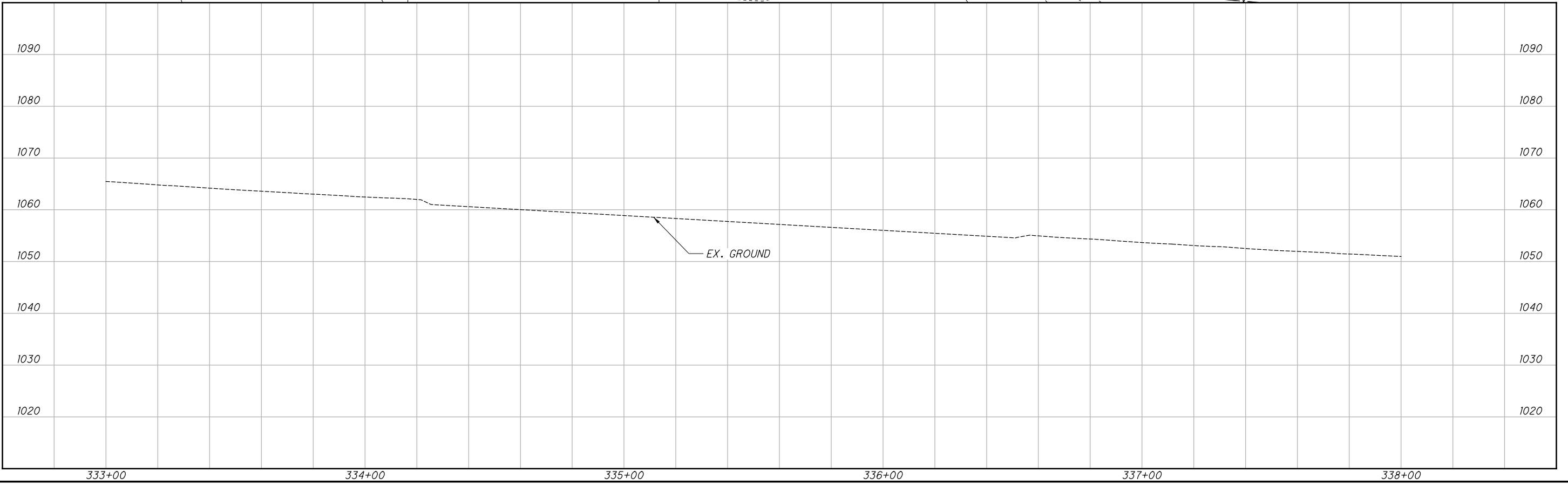
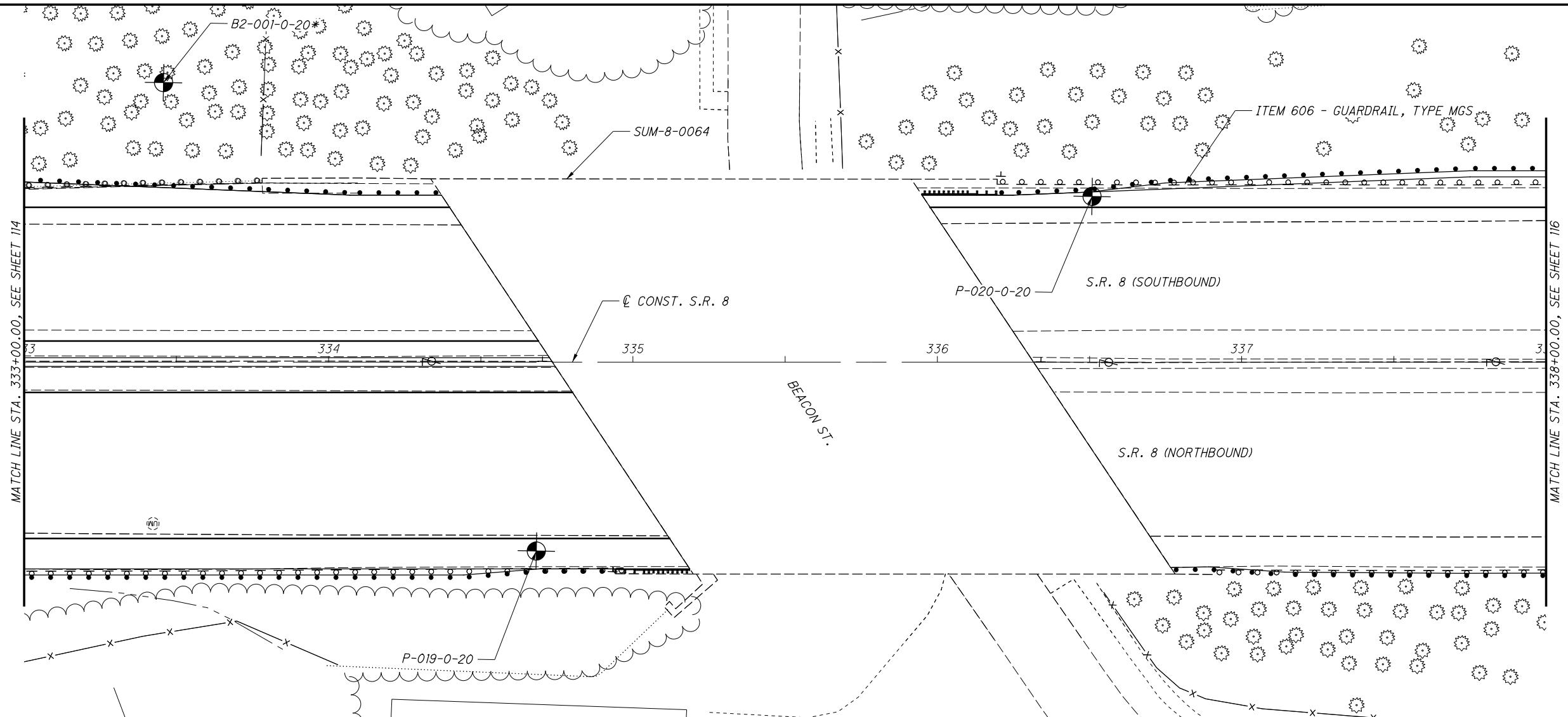
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SOIL PROFILE
STA. 328+00.00 TO STA. 333+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

114
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP125.dgn Sheet 8/21/2020 10:59:18 AM kmhnlacea



CALCULATED SM CHECKED PAN

HORIZONTAL SCALE IN FEET

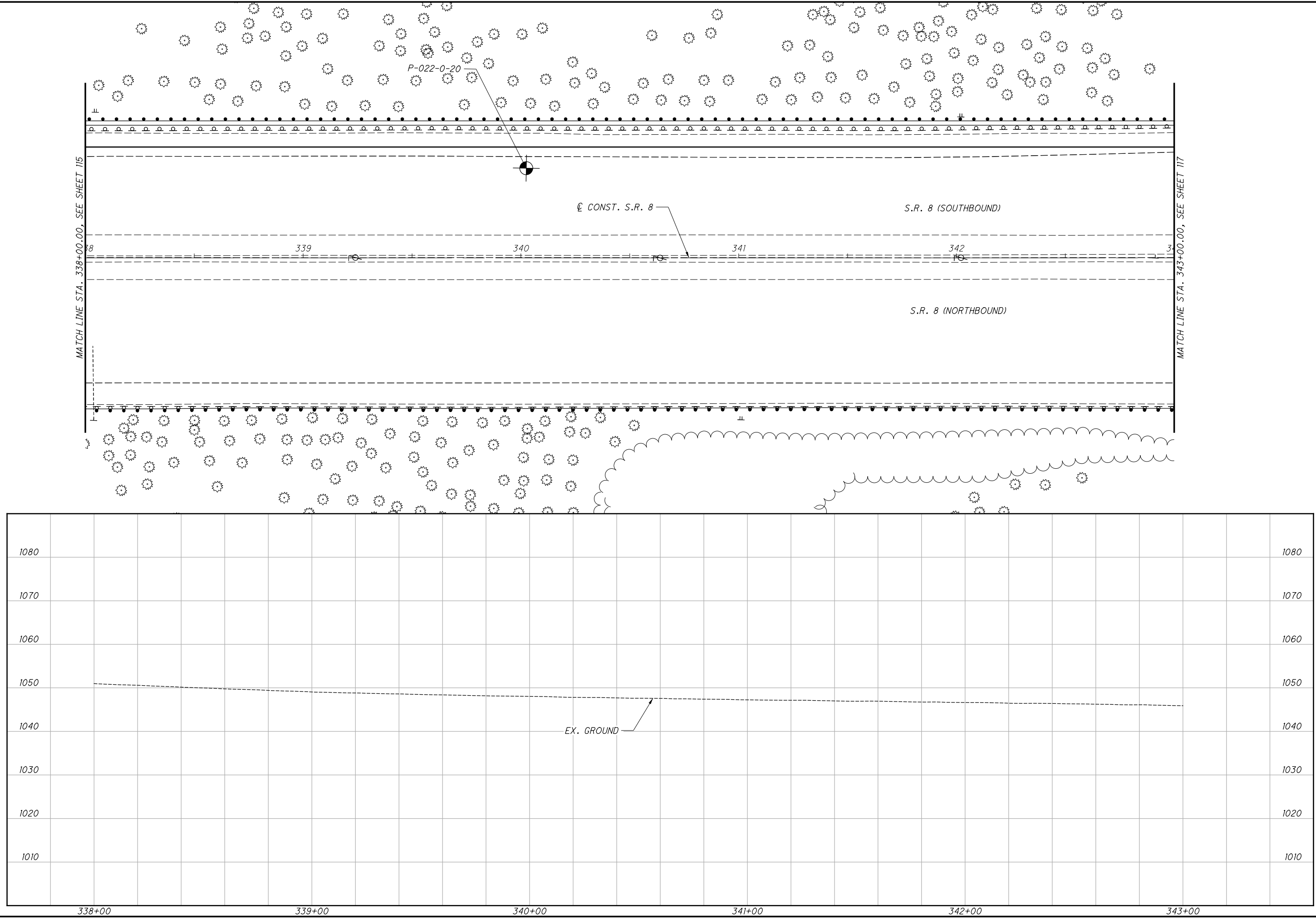
0 5 10 20

N

SOIL PROFILE
STA. 333+00.00 TO STA. 338+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

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CALCULATED SM CHECKED PAN

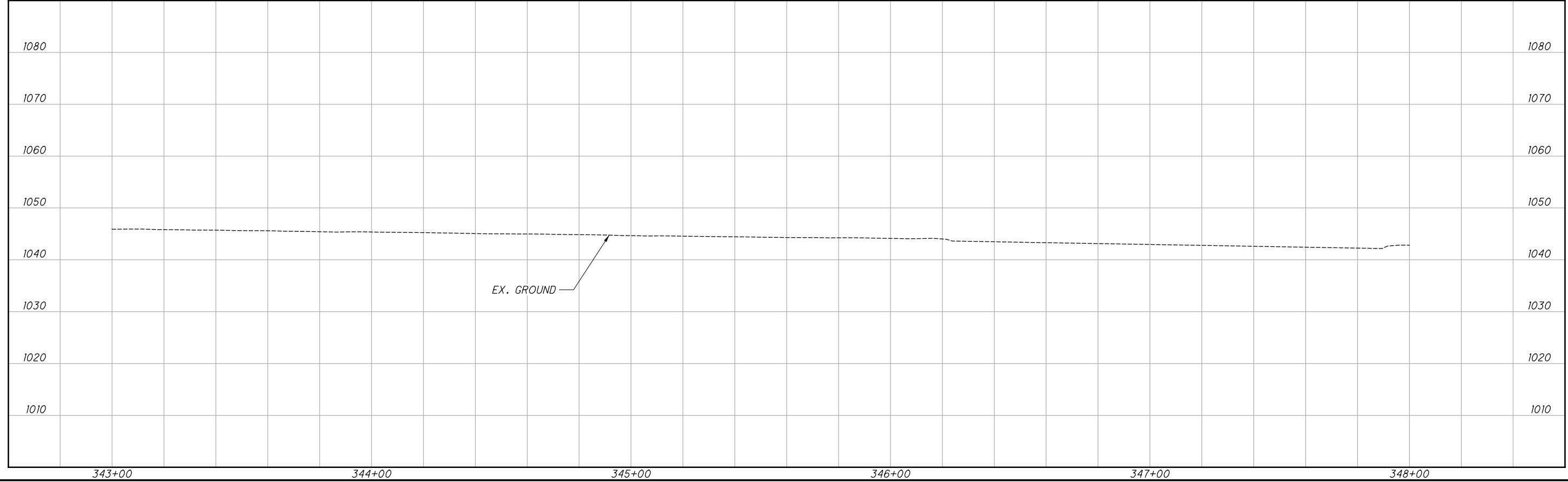
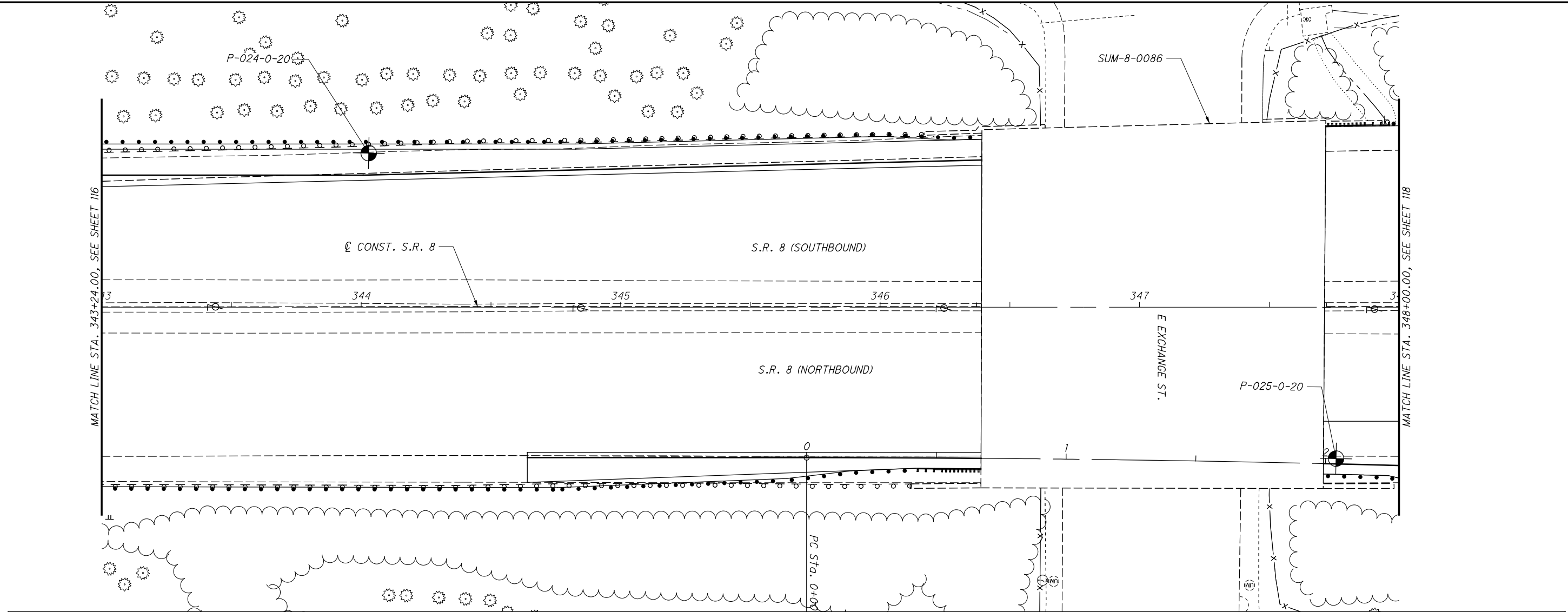
0 5 10 20
HORIZONTAL SCALE IN FEET

SOIL PROFILE
STA. 338+00.00 TO STA. 343+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

116
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP127.dgn Sheet 8/21/2020 10:45 AM kmh/ace



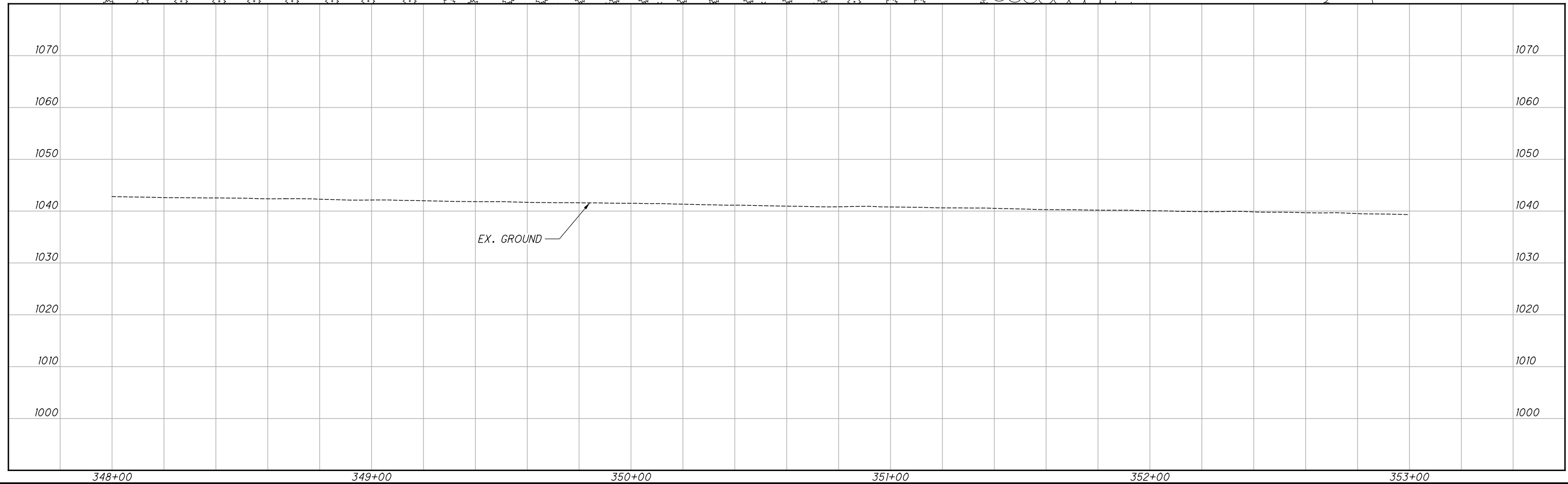
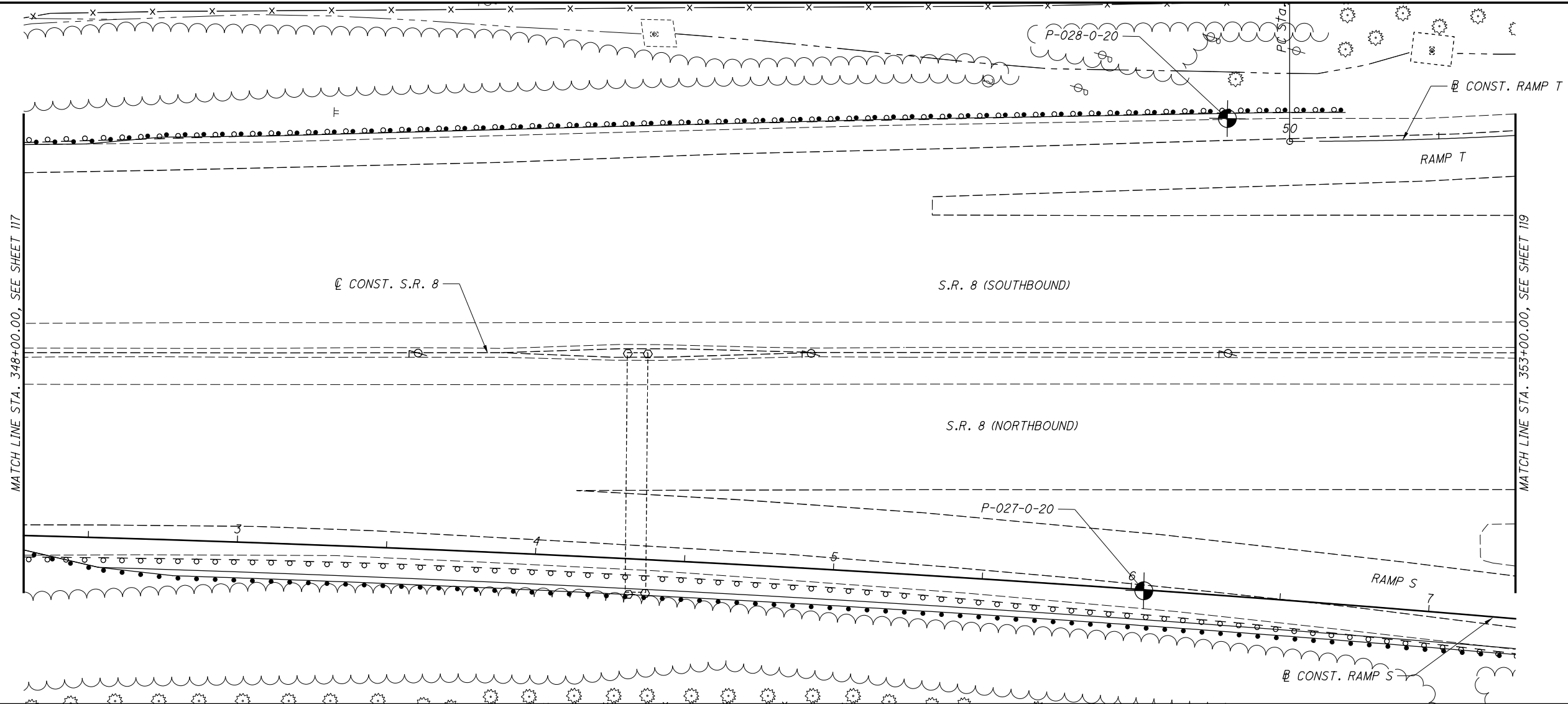
CALCULATED SM CHECKED PAN

0 5 10 20
HORIZONTAL SCALE IN FEET

SOIL PROFILE
STA. 343+00.00 TO STA. 348+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

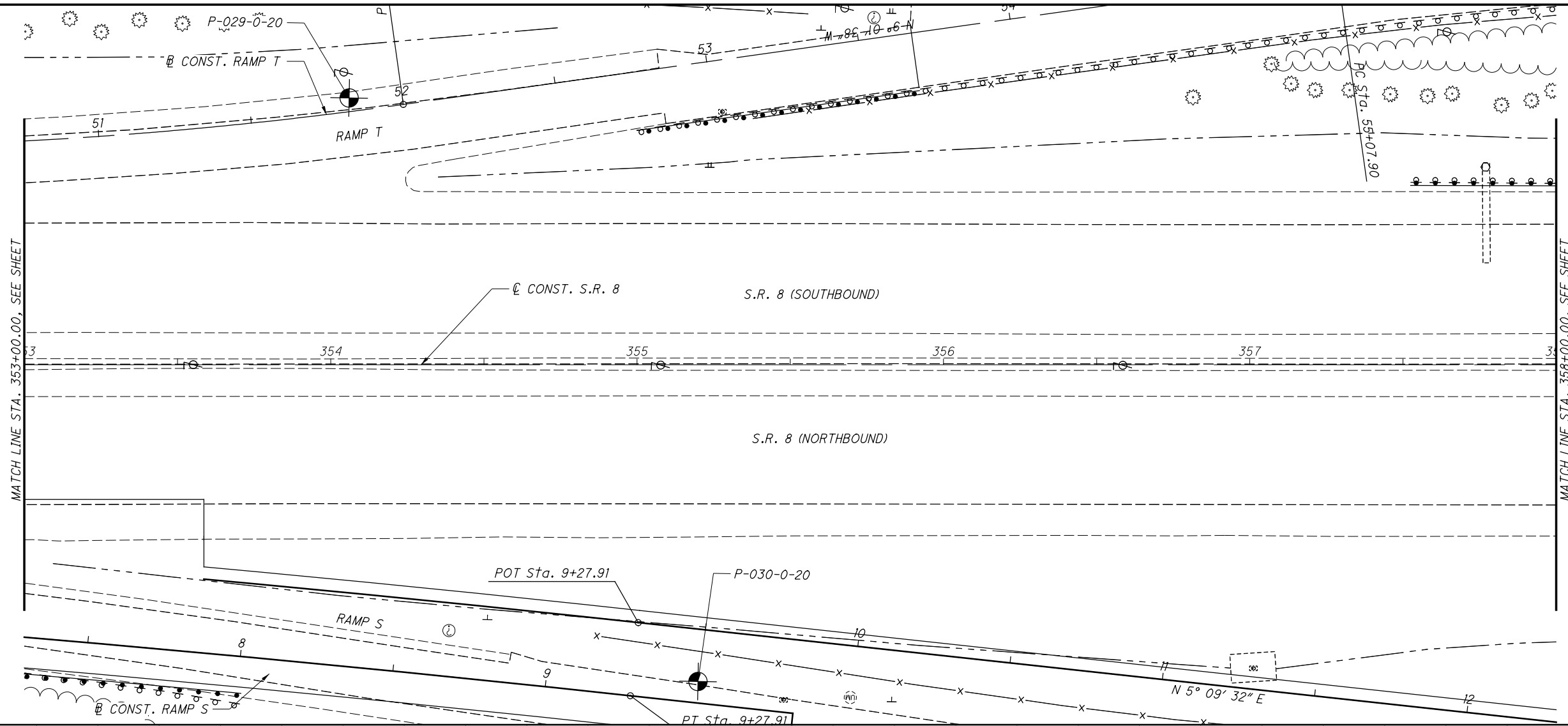
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CALCULATED SM CHECKED PAN
SOIL PROFILE
STA. 348+00.00 TO STA. 353+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00
 118
 182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP129.dgn Sheet 8/21/2020 10:04:06 AM kmhnlceca





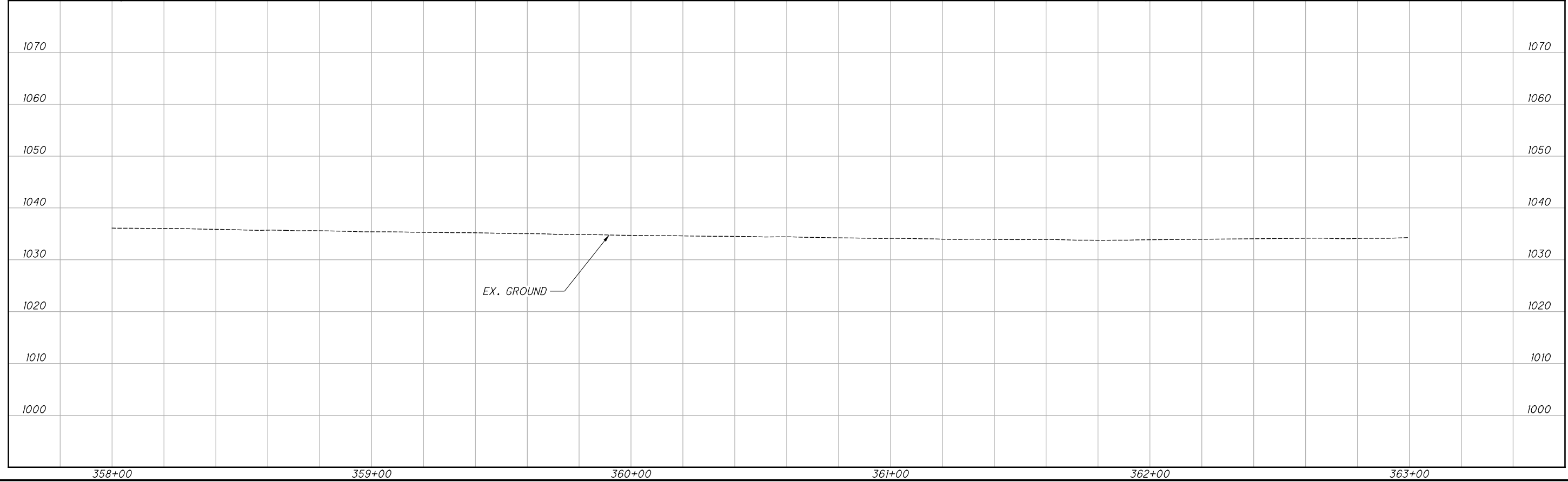
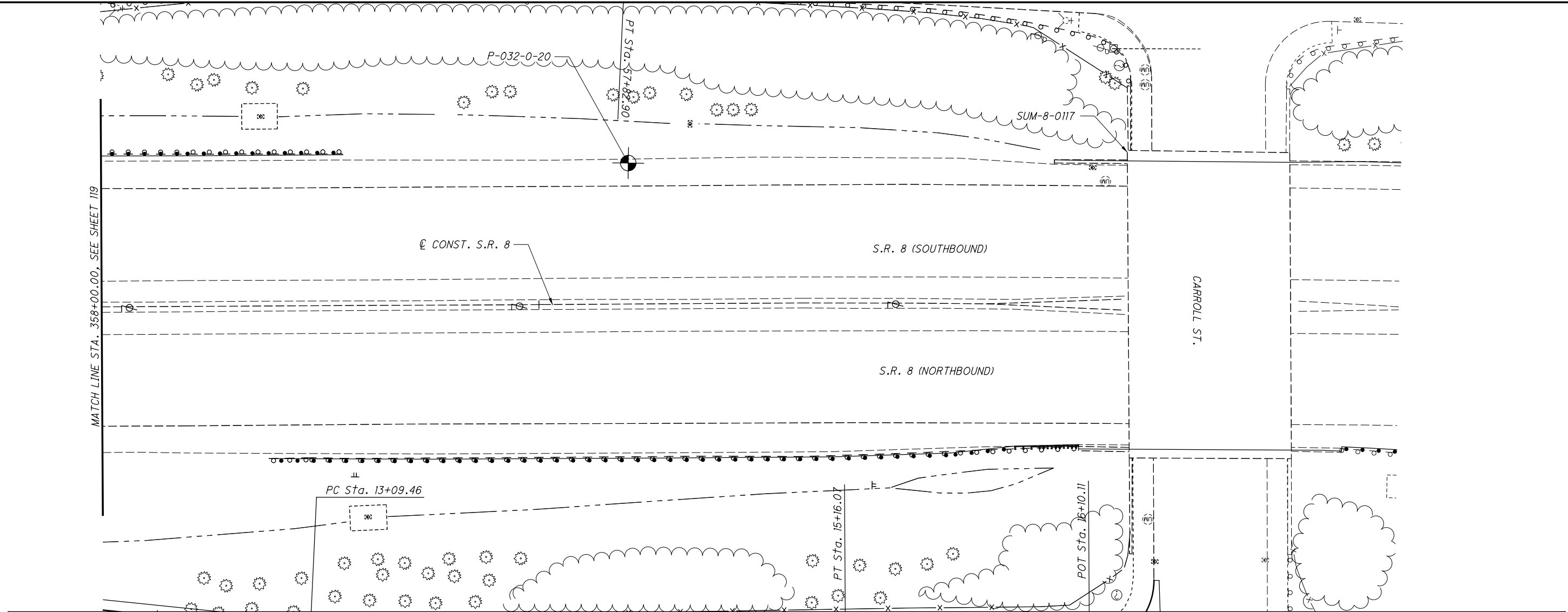


 HORIZONTAL SCALE IN FEET

CALCULATED SM CHECKED PAN
SOIL PROFILE
STA. 353+00.00 TO STA. 358+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00
 119
 182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP130.dgn Sheet 8/21/2020 11:05:19 AM kmh/ace



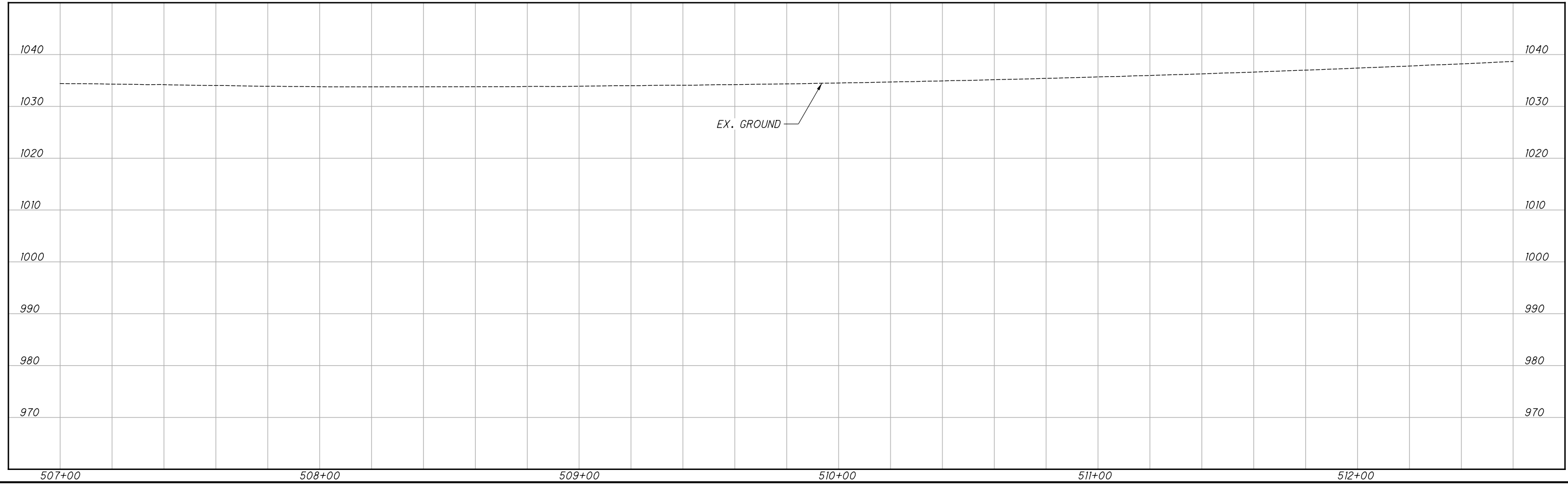
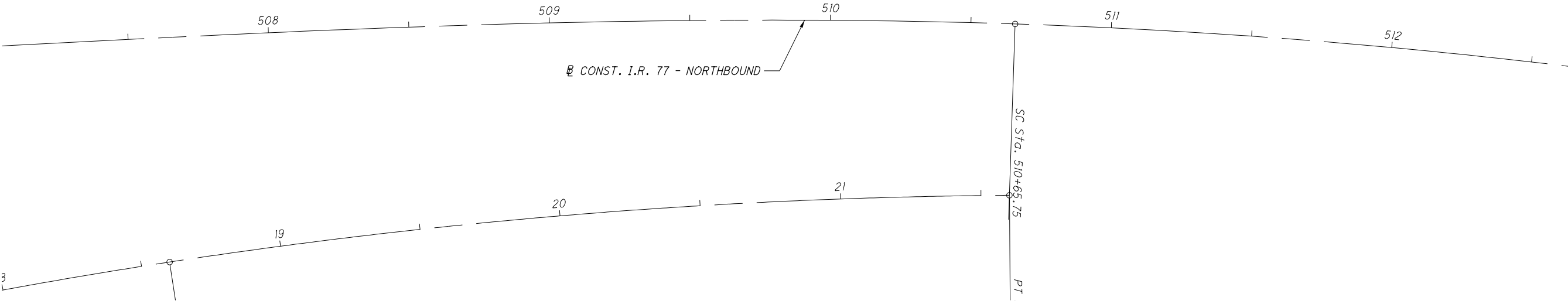
CALCULATED SM CHECKED PAN

0 5 10 15 20
HORIZONTAL SCALE IN FEET

SOIL PROFILE
STA. 358+00.00 TO END STA. 363+00.00 S.R. 8

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

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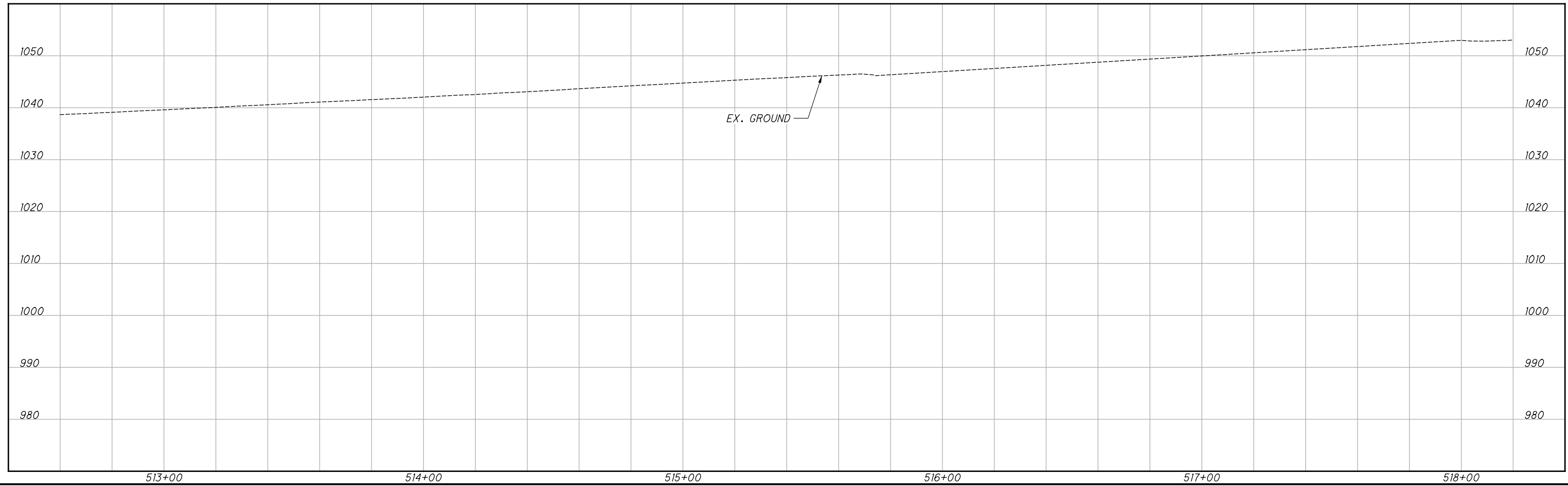
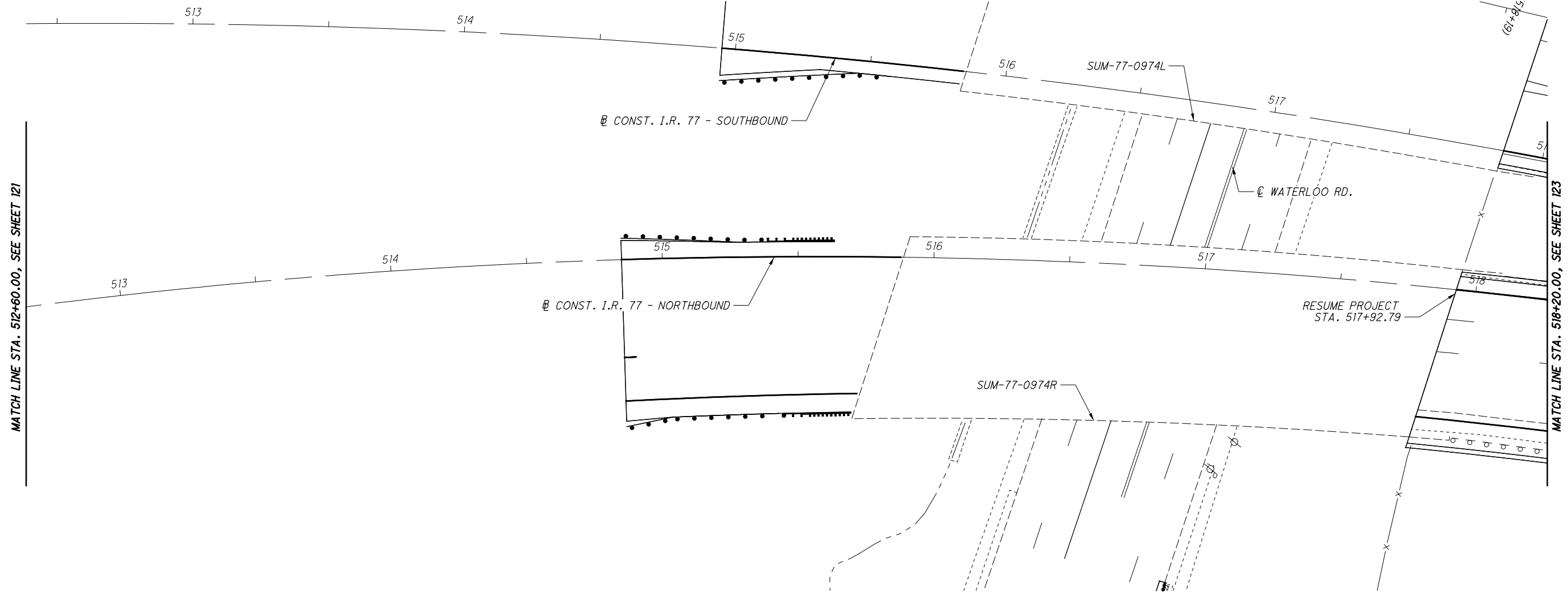
DRAWN: SM
 CHECKED: PAN

SOIL PROFILE
STA. 507+00.00 TO STA. 512+60.00 I.R. 77 NB

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

121
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P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP202.dgn Sheet 8/27/2020 11:05:33 AM kmihalcea



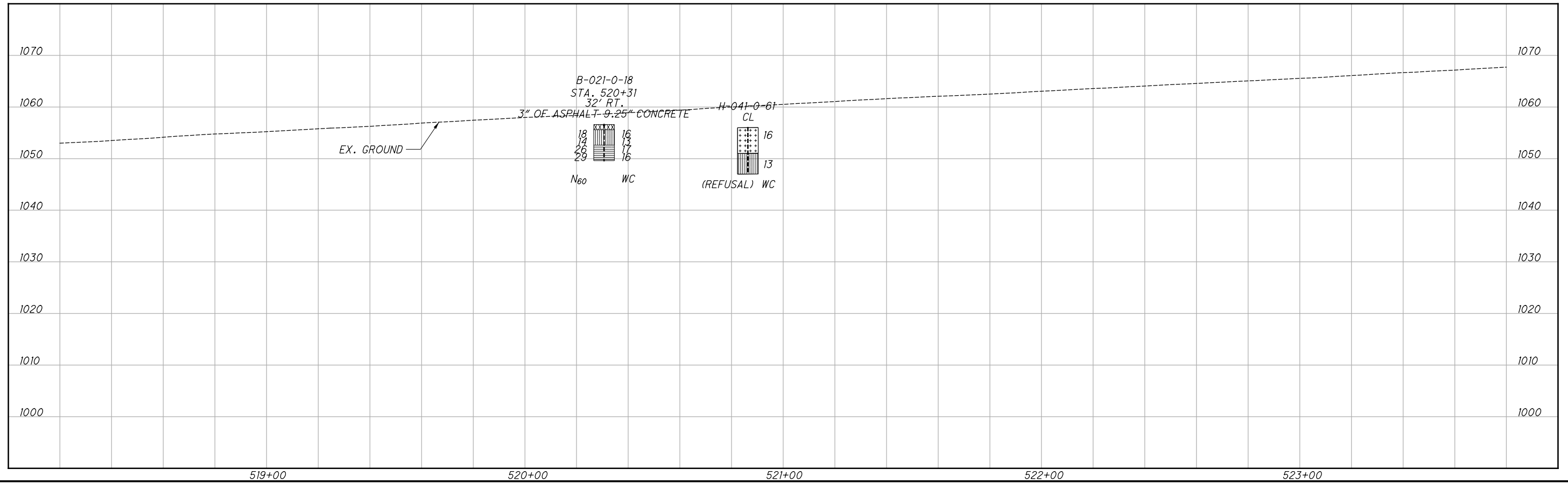
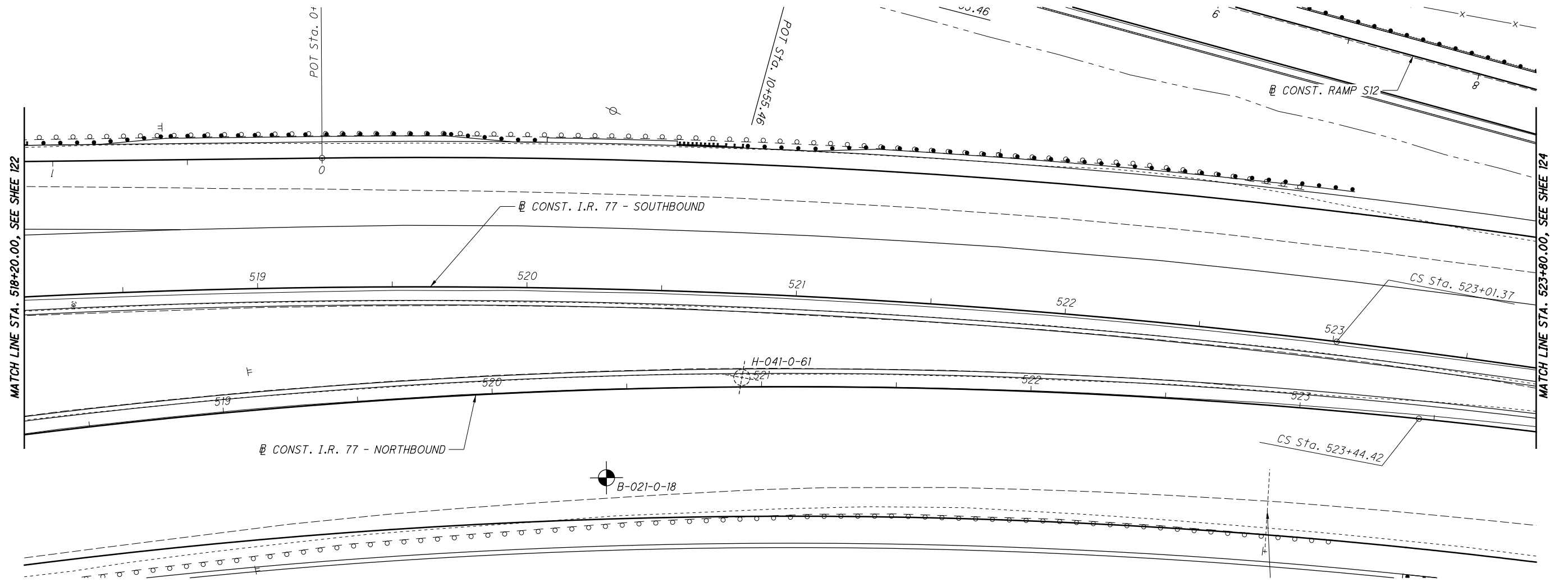
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 512+60.00 TO STA. 518+20.00 I.R. 77 NB

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

122
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP203.dgn Sheet 8/27/2020 11:05:55 AM kmihalcea



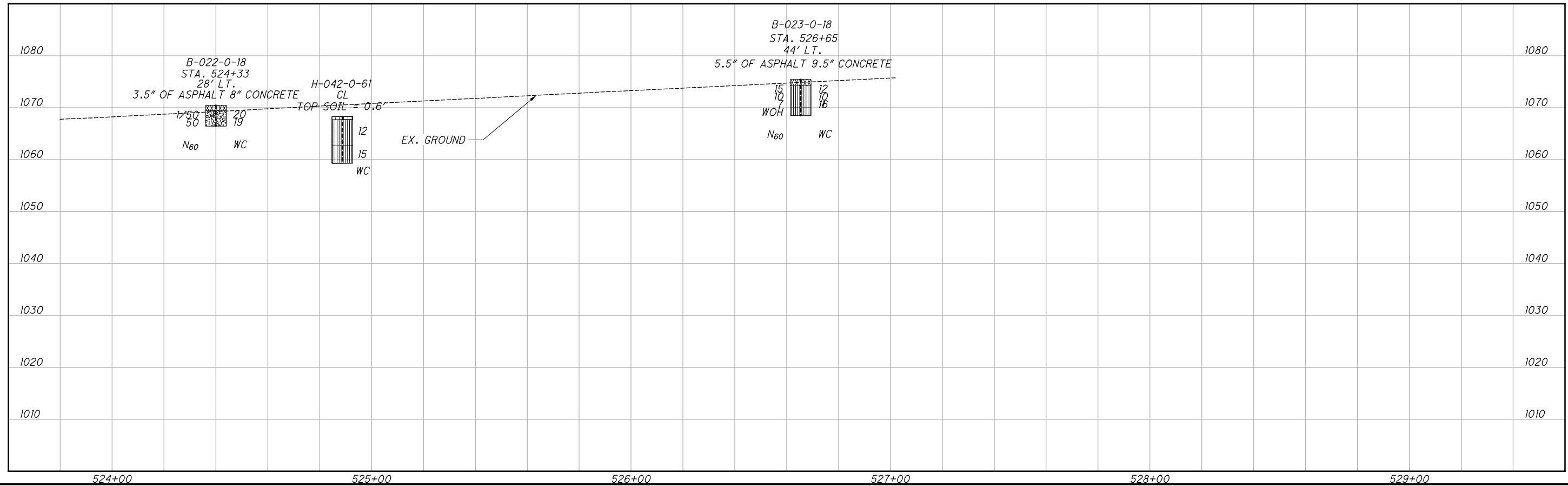
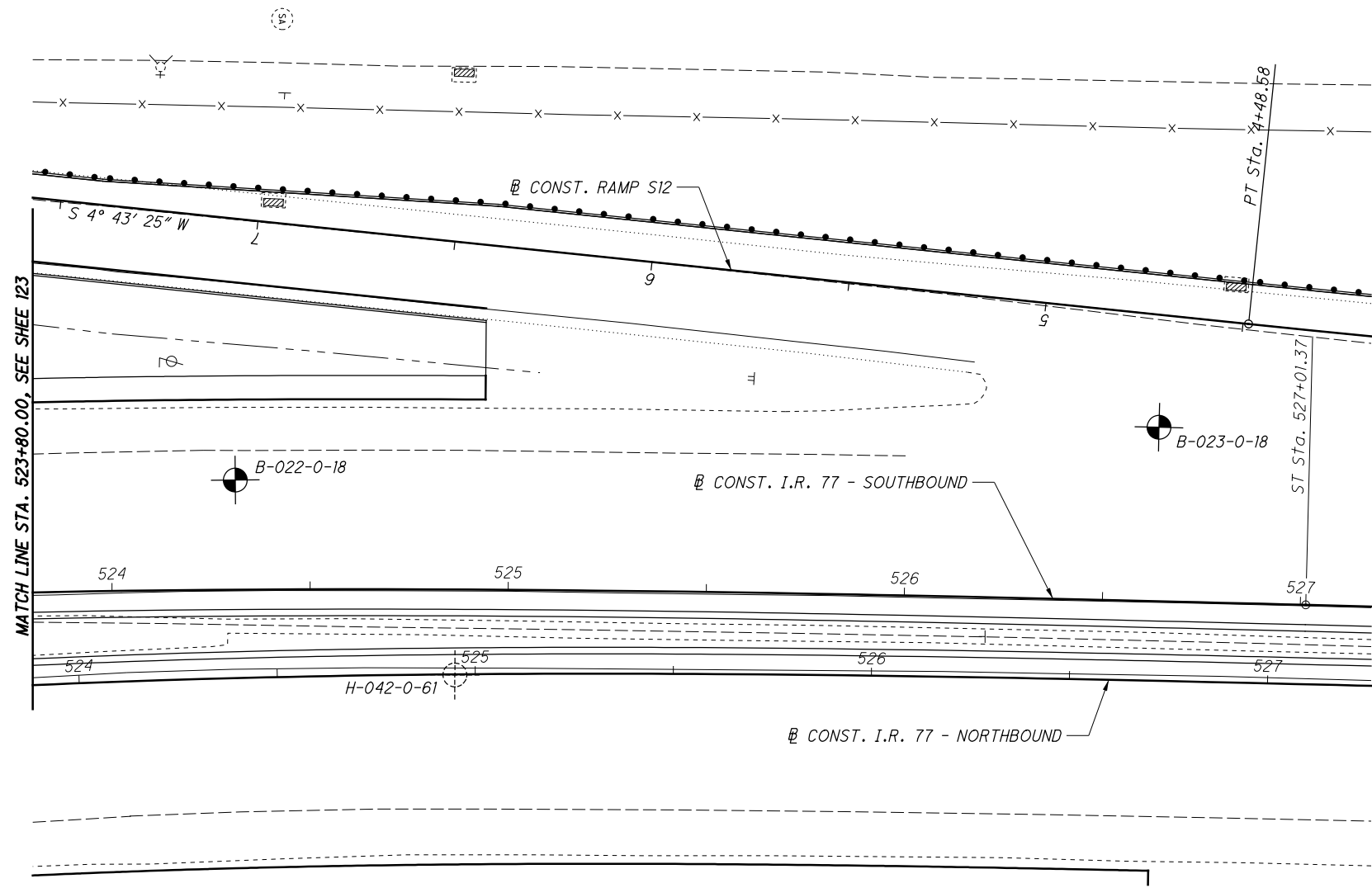
DRAWN SM
CHECKED PAN

SOIL PROFILE
STA. 518+20.00 TO STA. 523+80.00 I.R. 77 NB

SUM-76 / 77 / 8-
8.24 / 9.74 / 0.00

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182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP204.dgn Sheet 8/27/2020 11:06:05 AM kmihalcea



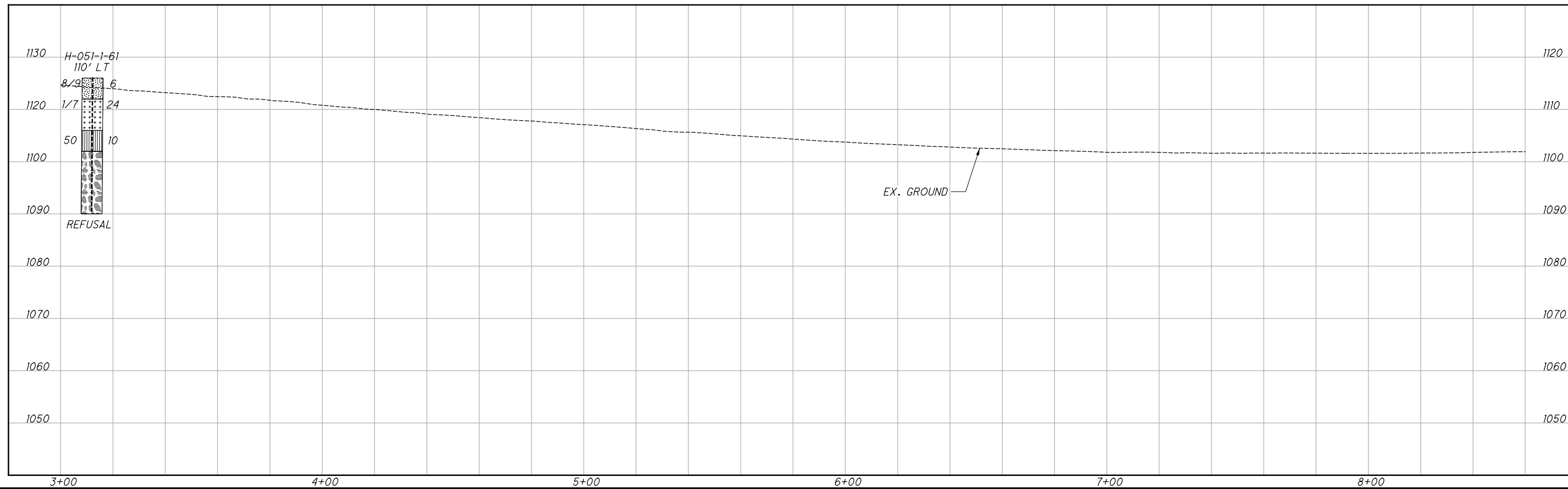
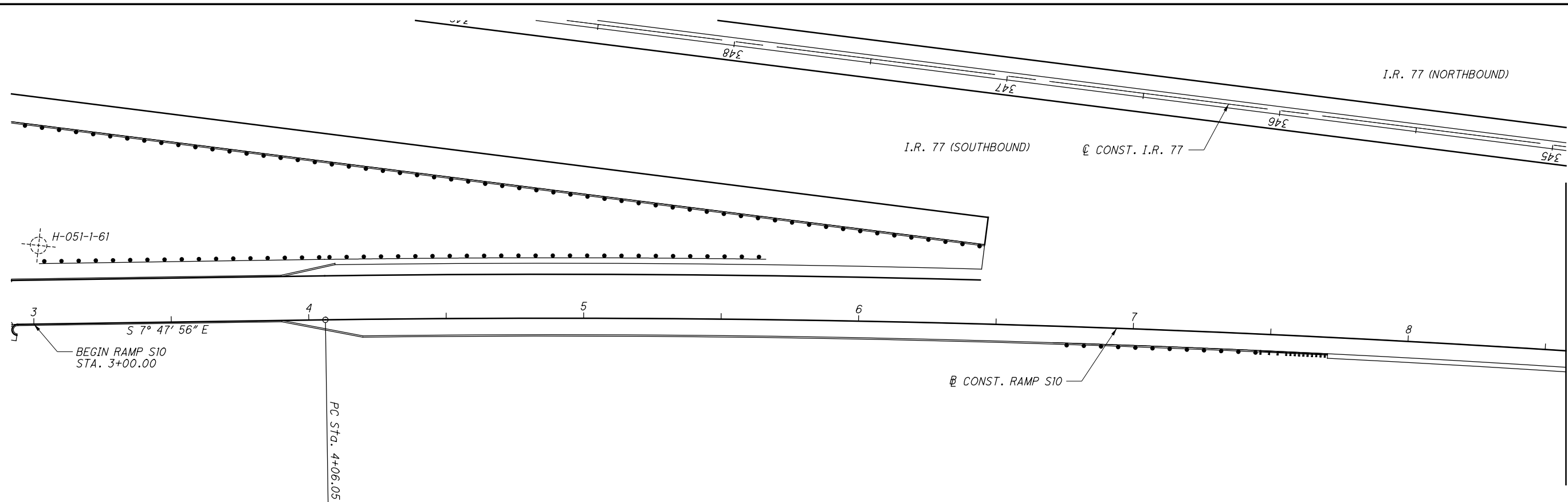
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
STA. 523+80.00 TO STA. 527+00.00 I.R. 77 NB

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

124
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP505.dgn_Sheet 8/27/2020 11:06:25 AM kmihalcea



N

HORIZONTAL SCALE IN FEET

DRAWN	SM
CHECKED	PAN

SOIL PROFILE

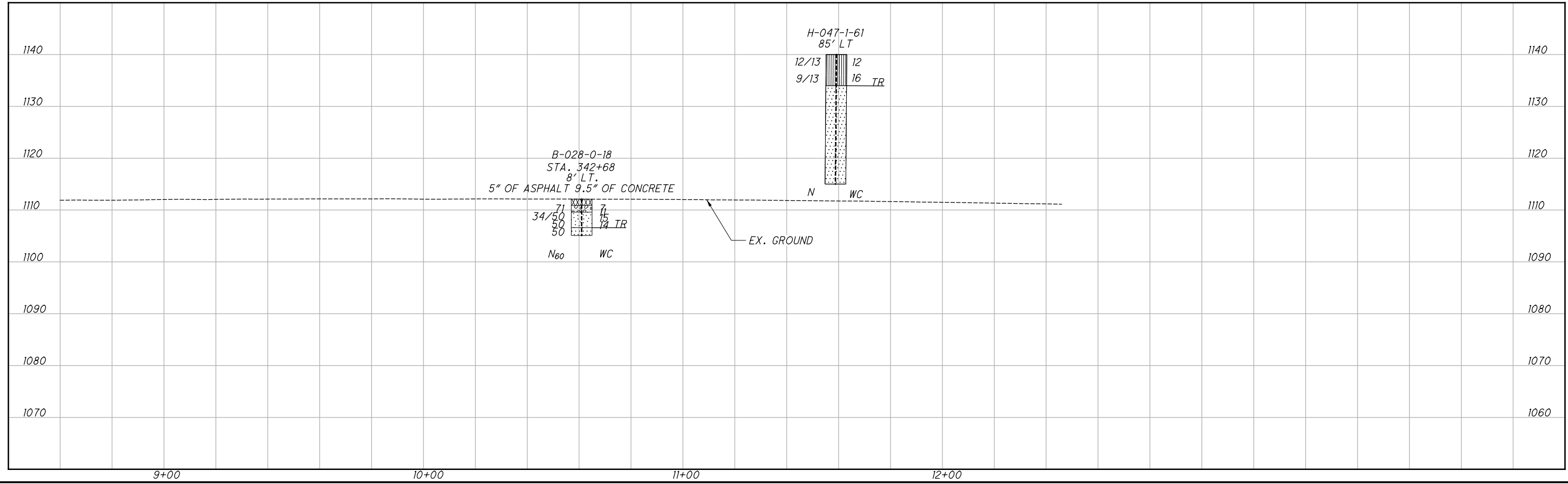
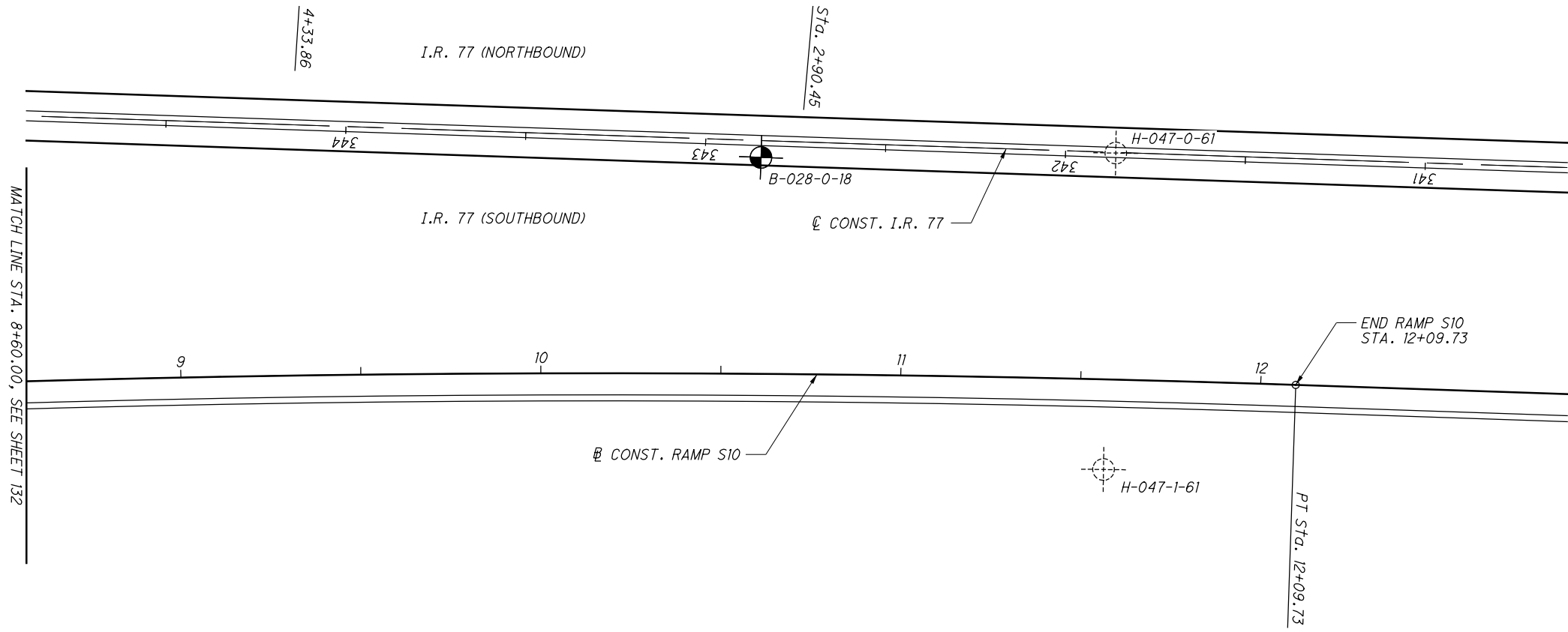
BEGIN STA. 3+00.00 TO STA. 8+60.00 RAMP S10

SUM-76 / 77 / 8-

8.24 / 9.74 / 0.00

125
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP506.dgn Sheet 8/27/2020 11:06:48 AM kmihalcea









 HORIZONTAL SCALE IN FEET

DRAWN: SM
 CHECKED: PAN
SOIL PROFILE
STA. 8+60.00 TO END STA. 12+09.73 RAMP S10

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00
 126
 182

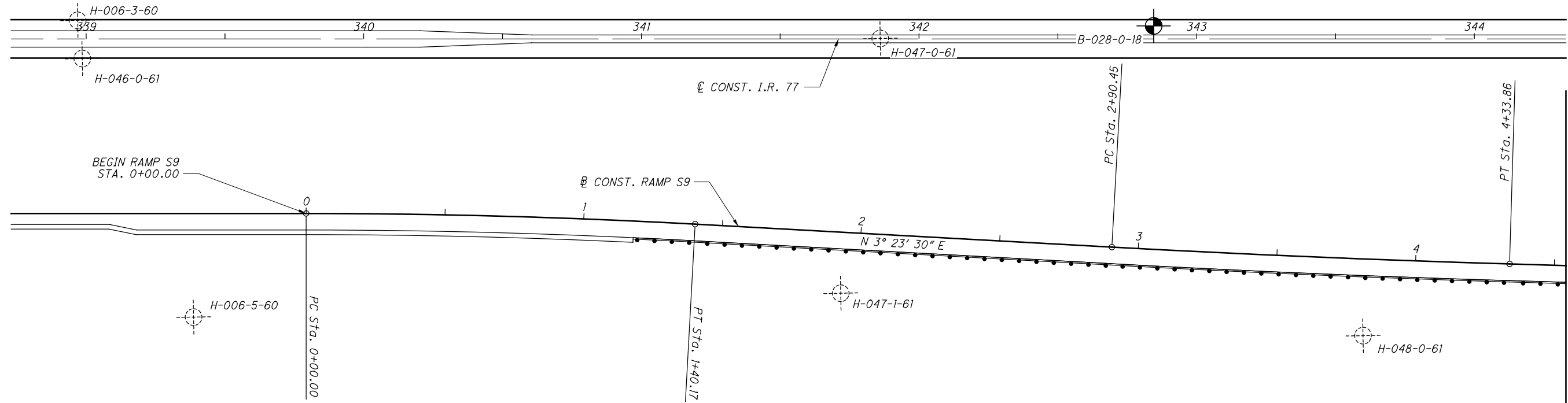


DRAWN SM
CHECKED PAN

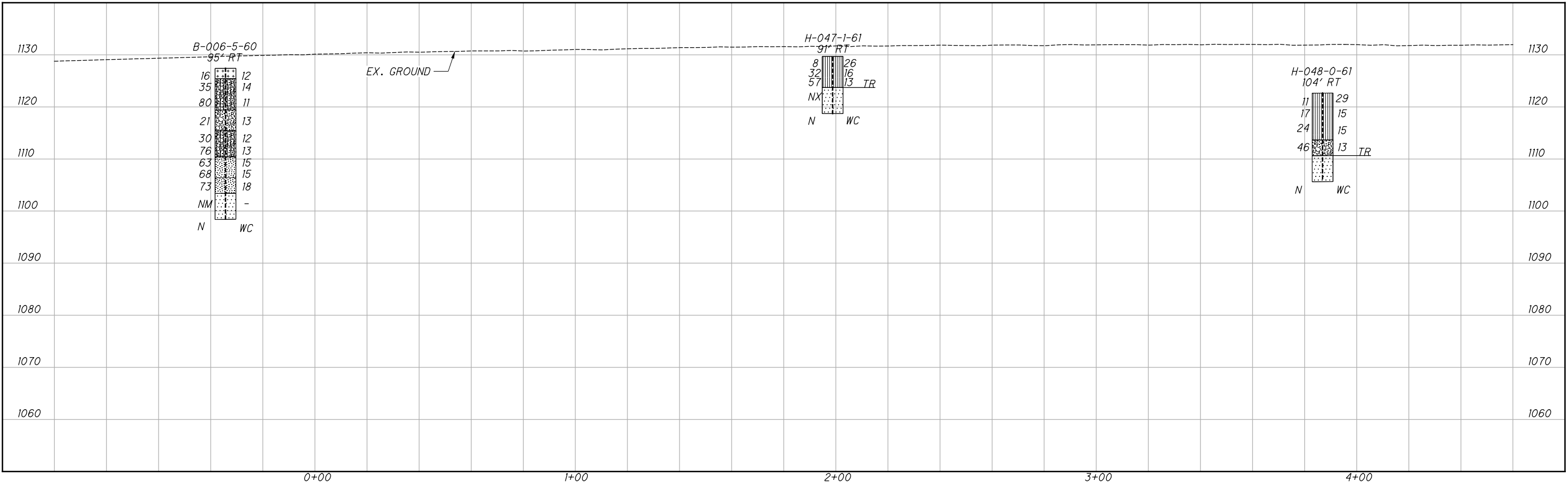
SOIL PROFILE
BEGIN STA. 0+00.00 TO STA. 5+60.00 RAMP S9

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

127
182

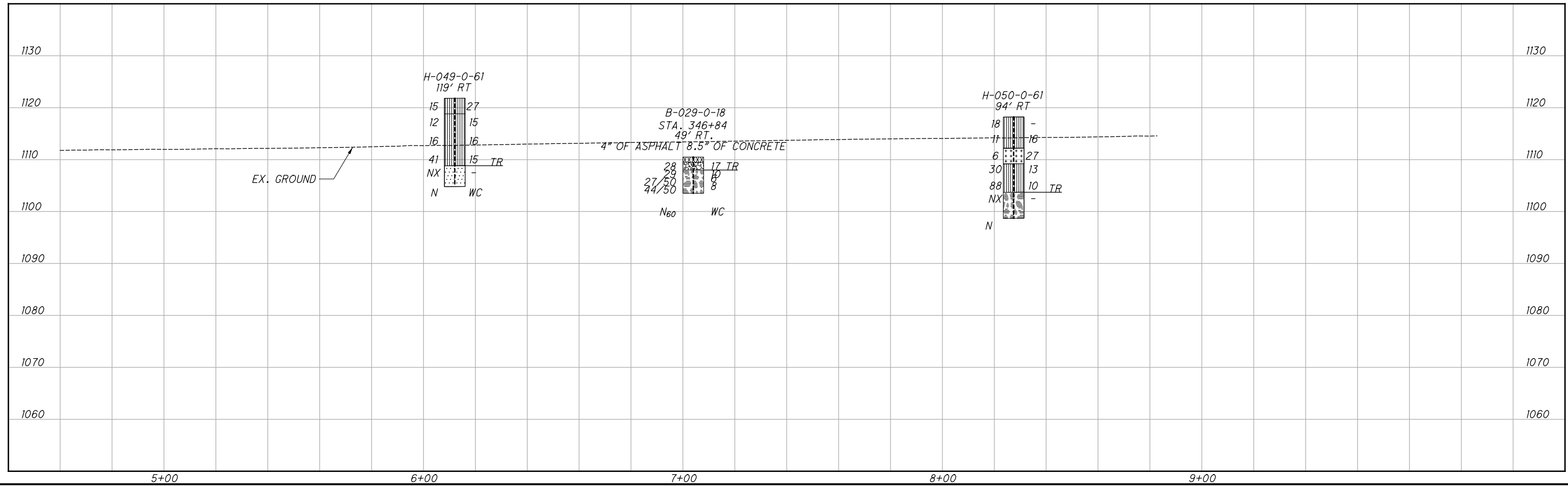
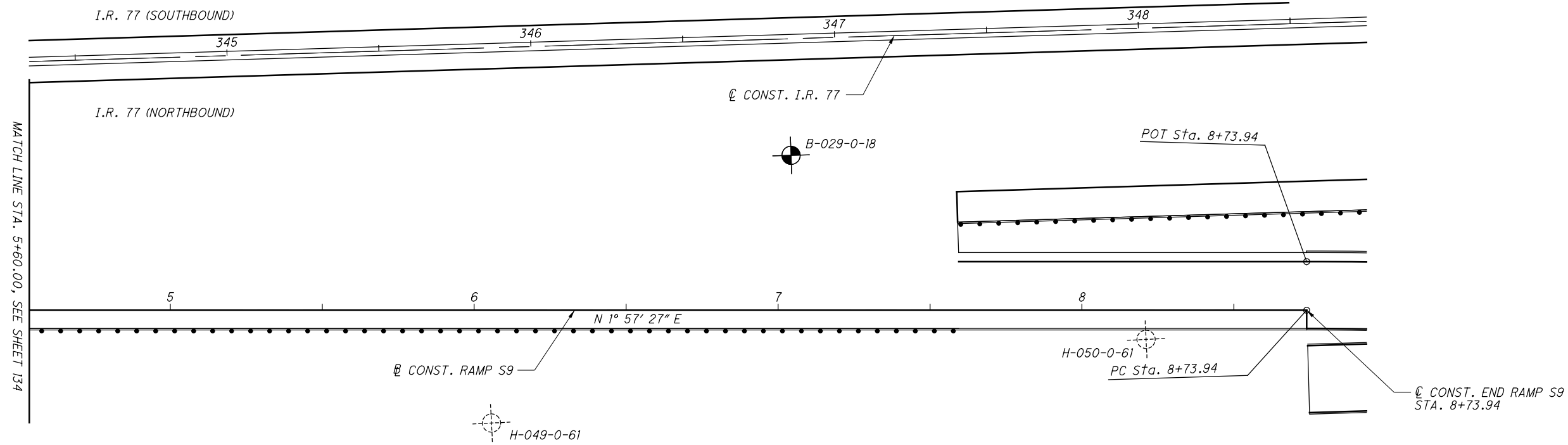


MATCH LINE STA. 5+60.00, SEE SHEET 135



P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IP507.dgn Sheet 8/27/2020 11:07:11 AM kmhnlcea

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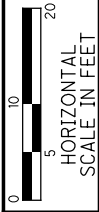
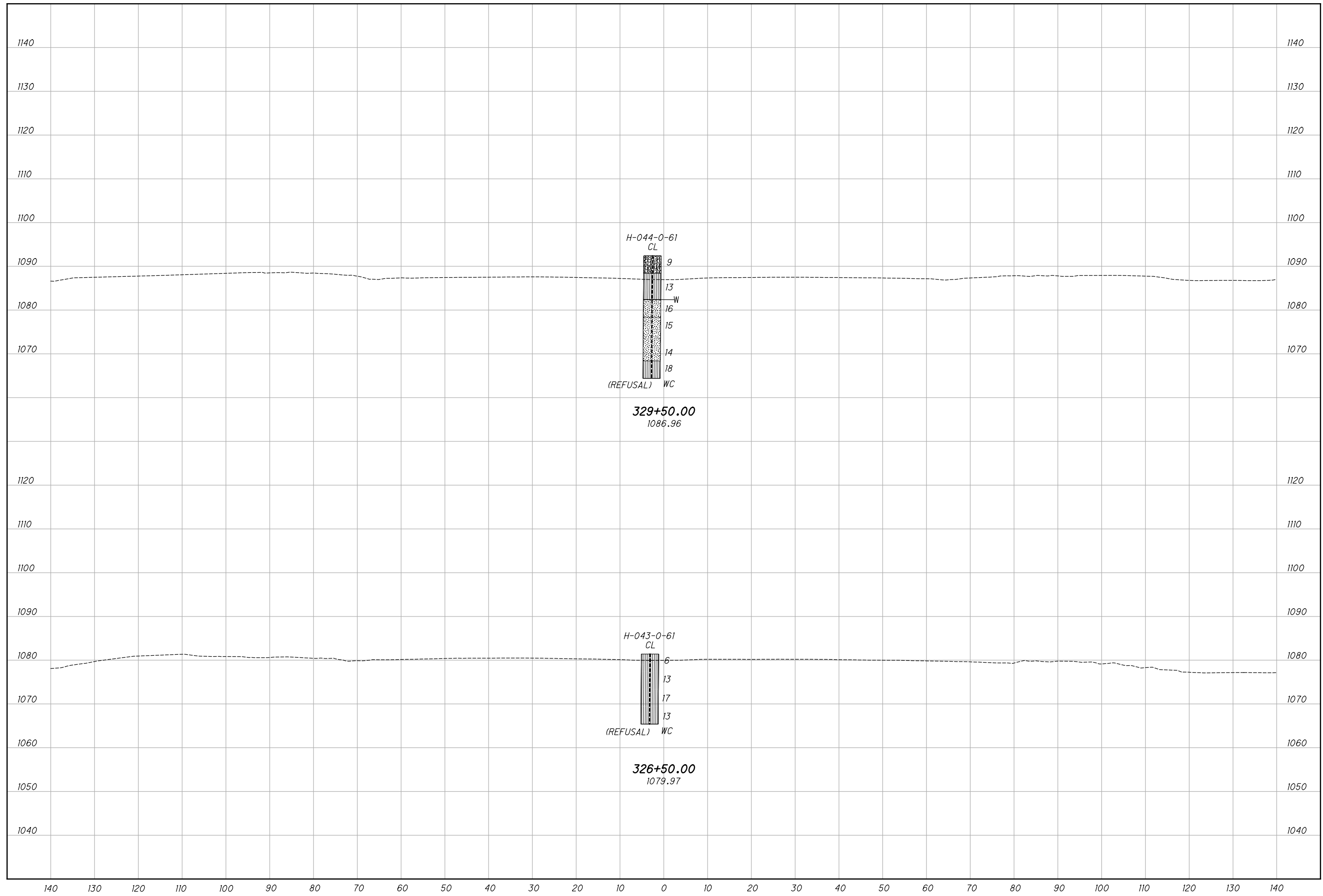
SOIL PROFILE
STA. 5+60.00 TO END STA. 9+82.69 RAMP S9

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

0 / 0

128
182

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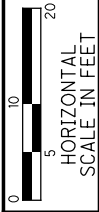
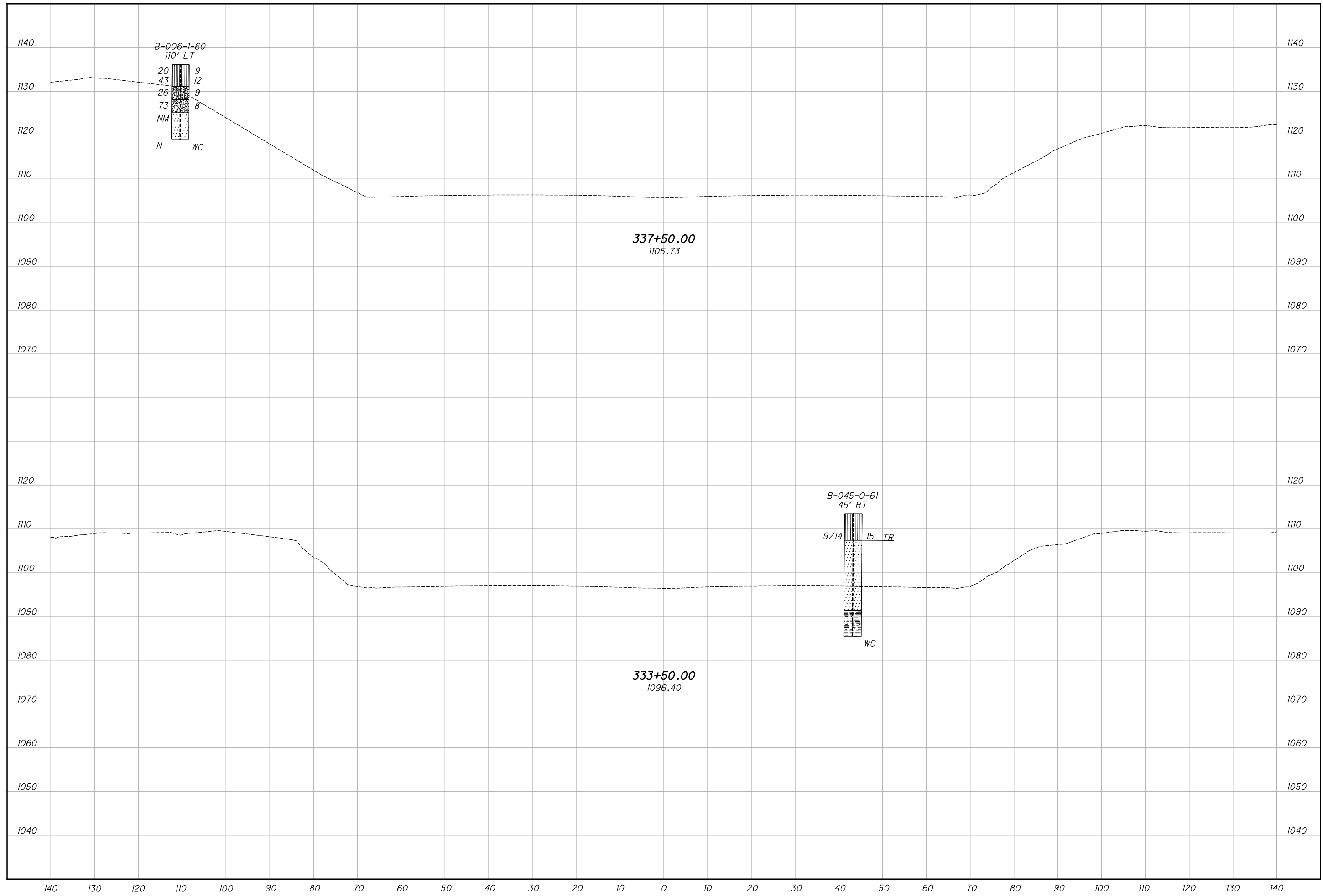
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 326+50.00 & 329+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

129
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IXI02.dgn Sheet 8/27/2020 11:07:45 AM kmhnlcea



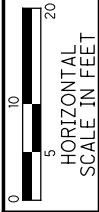
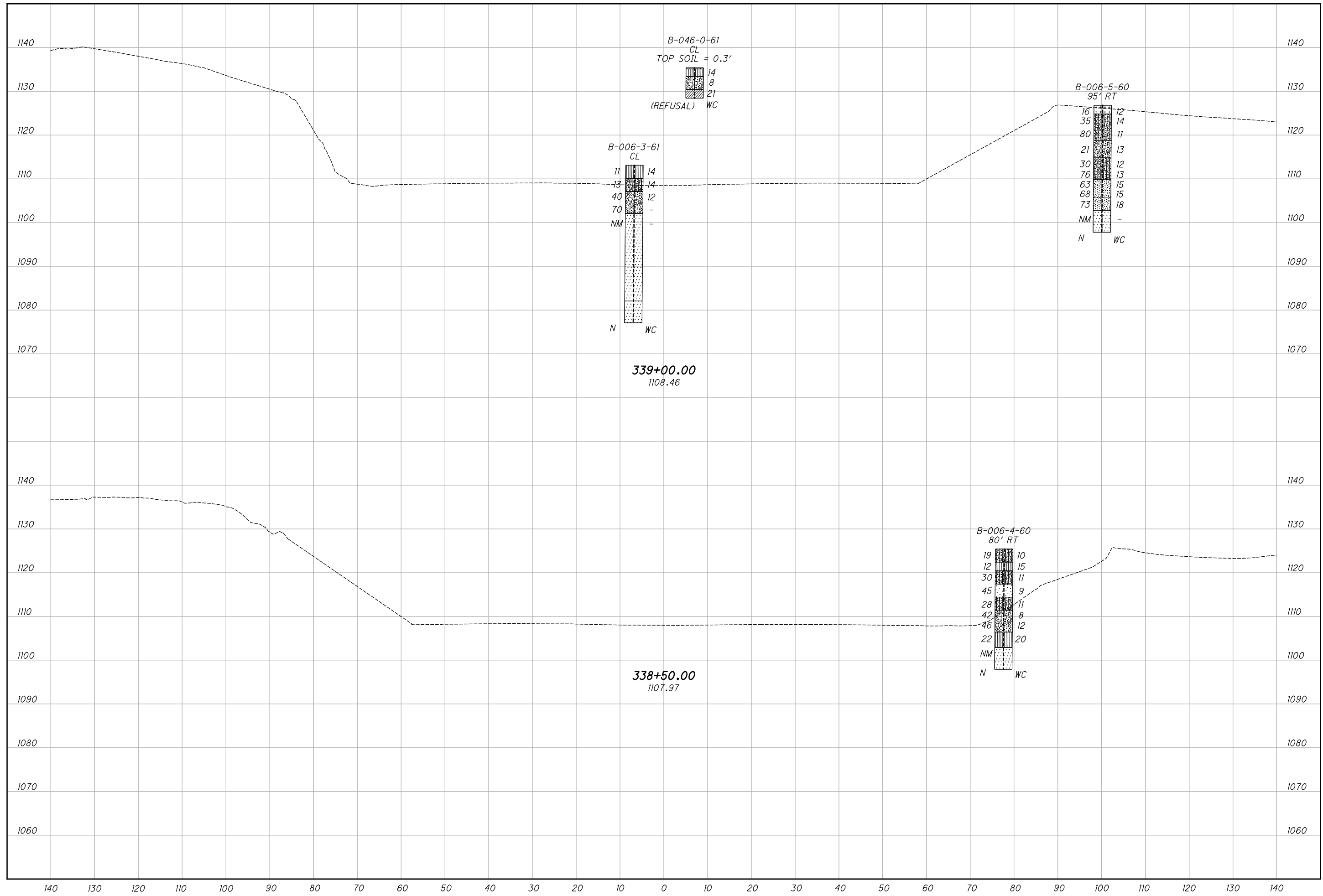
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 333+50.00 & 337+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

130
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IX103.dgn Sheet 8/21/2020 11:07:46 AM kmhnlcea

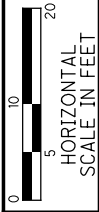
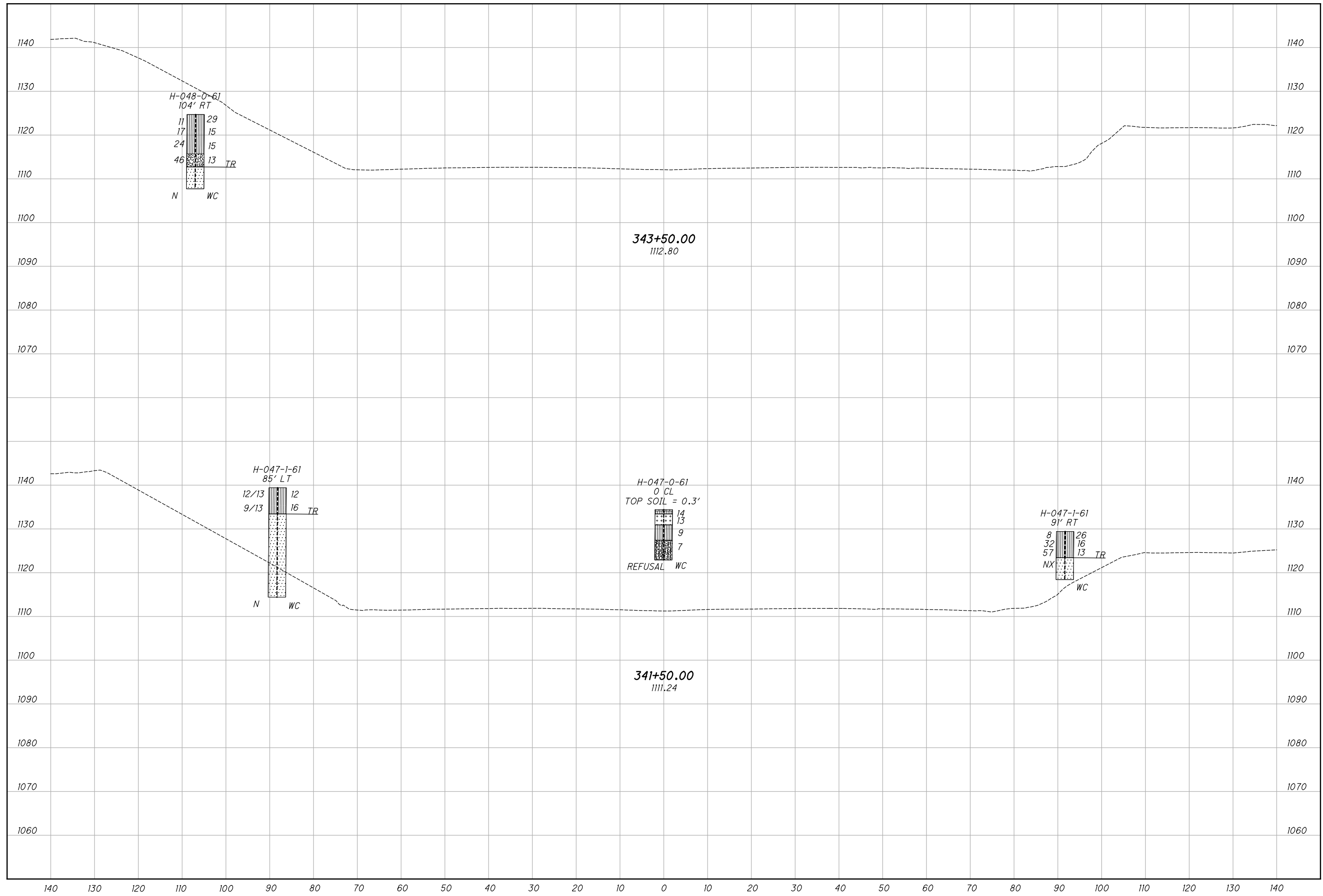


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 338+50.00 & 339+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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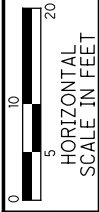
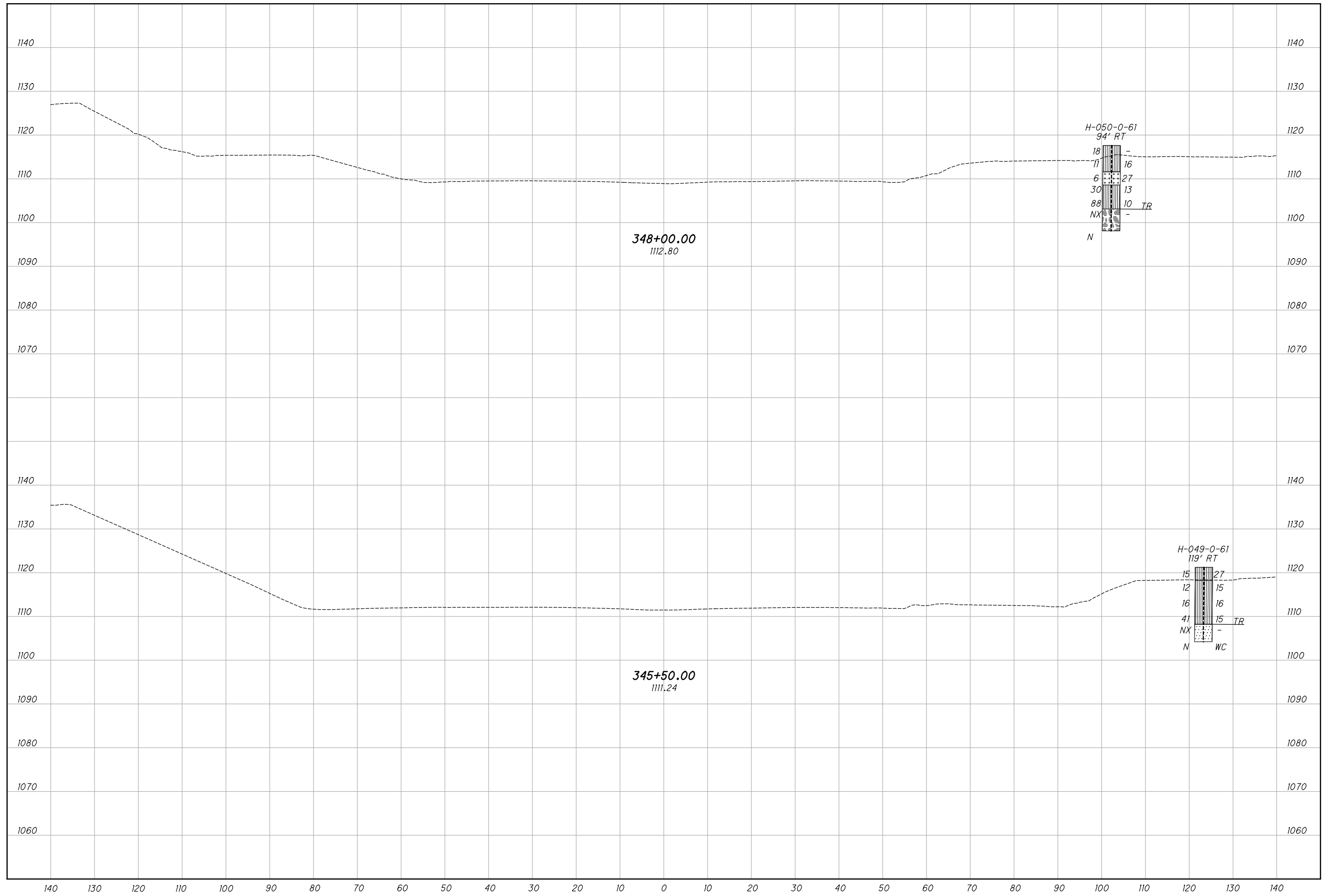
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 341+50.00 & 343+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

132
182

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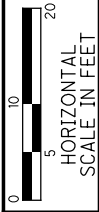
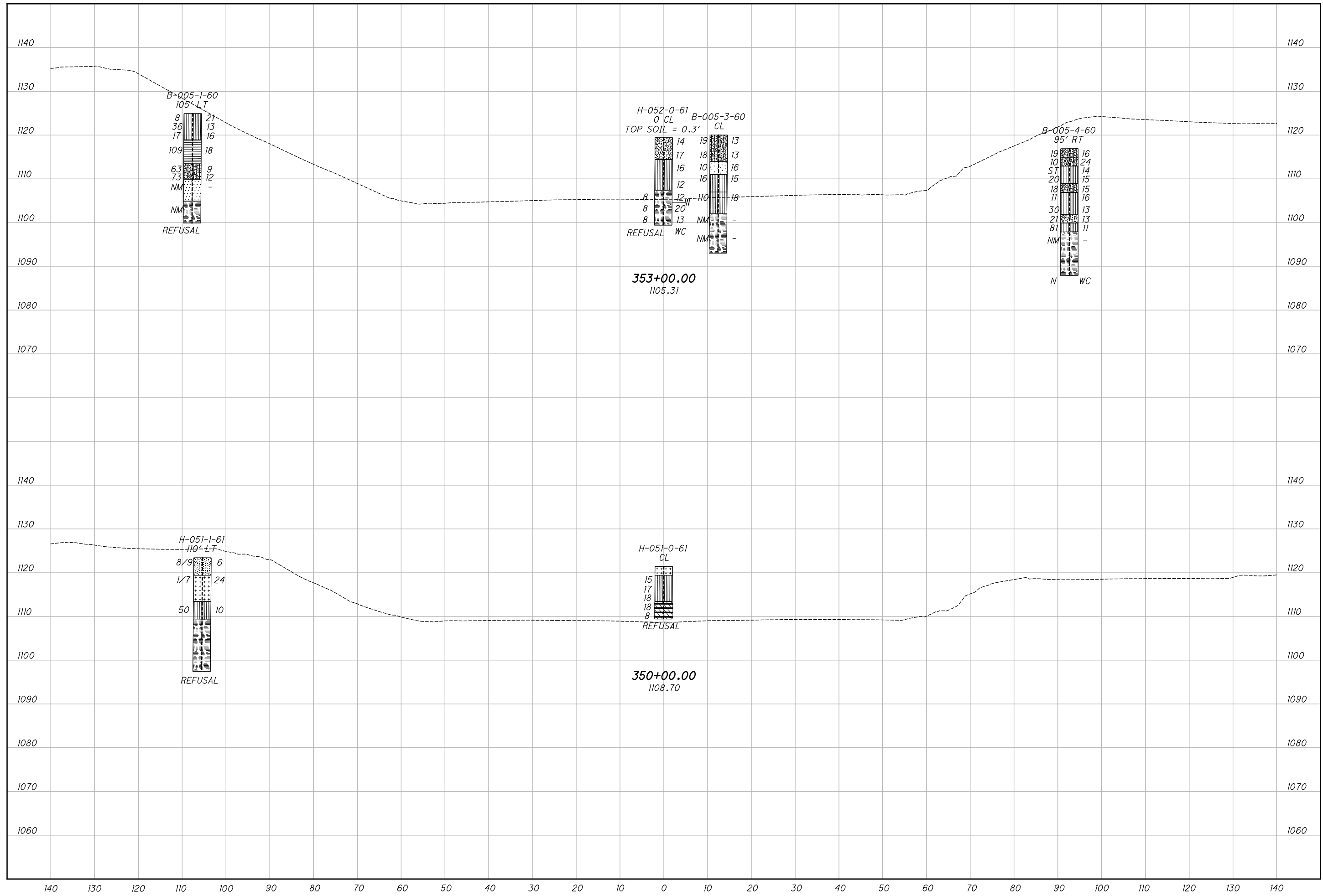
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 345+50.00 & 348+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

133
182

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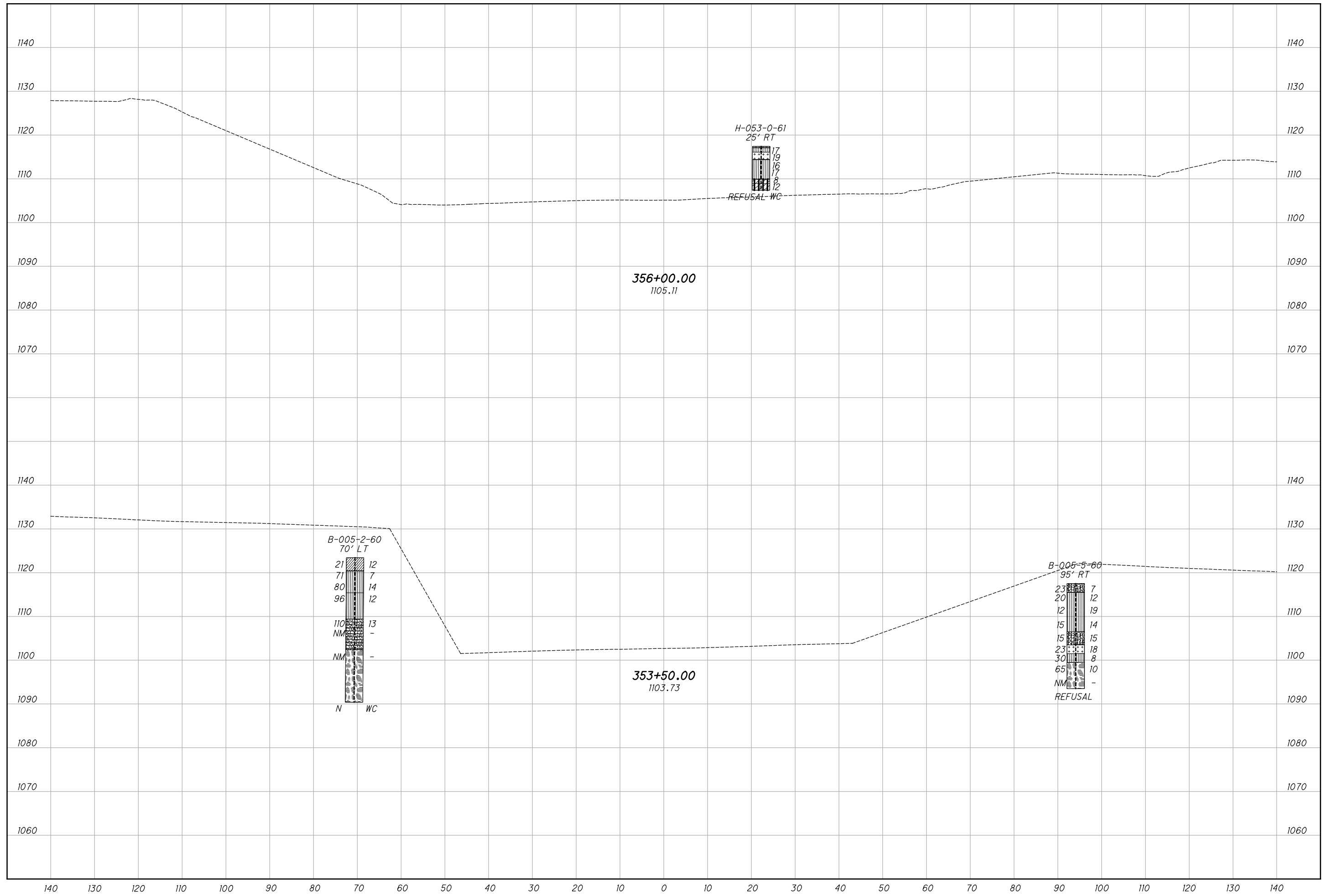


DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 350+00.00 & 353+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

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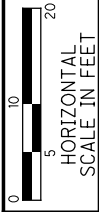
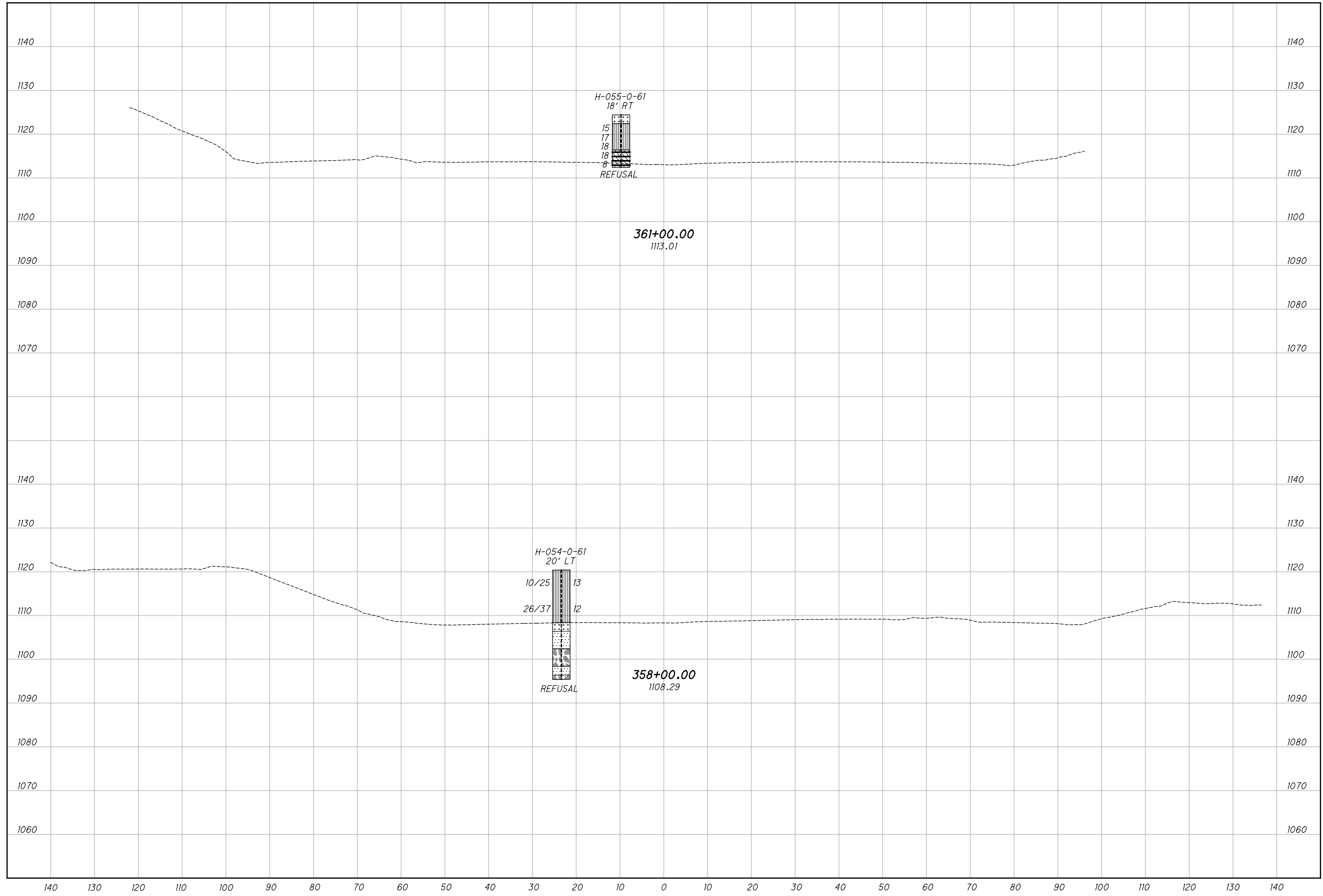
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 353+50.00 & 356+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

135
182

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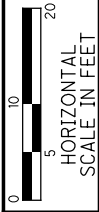
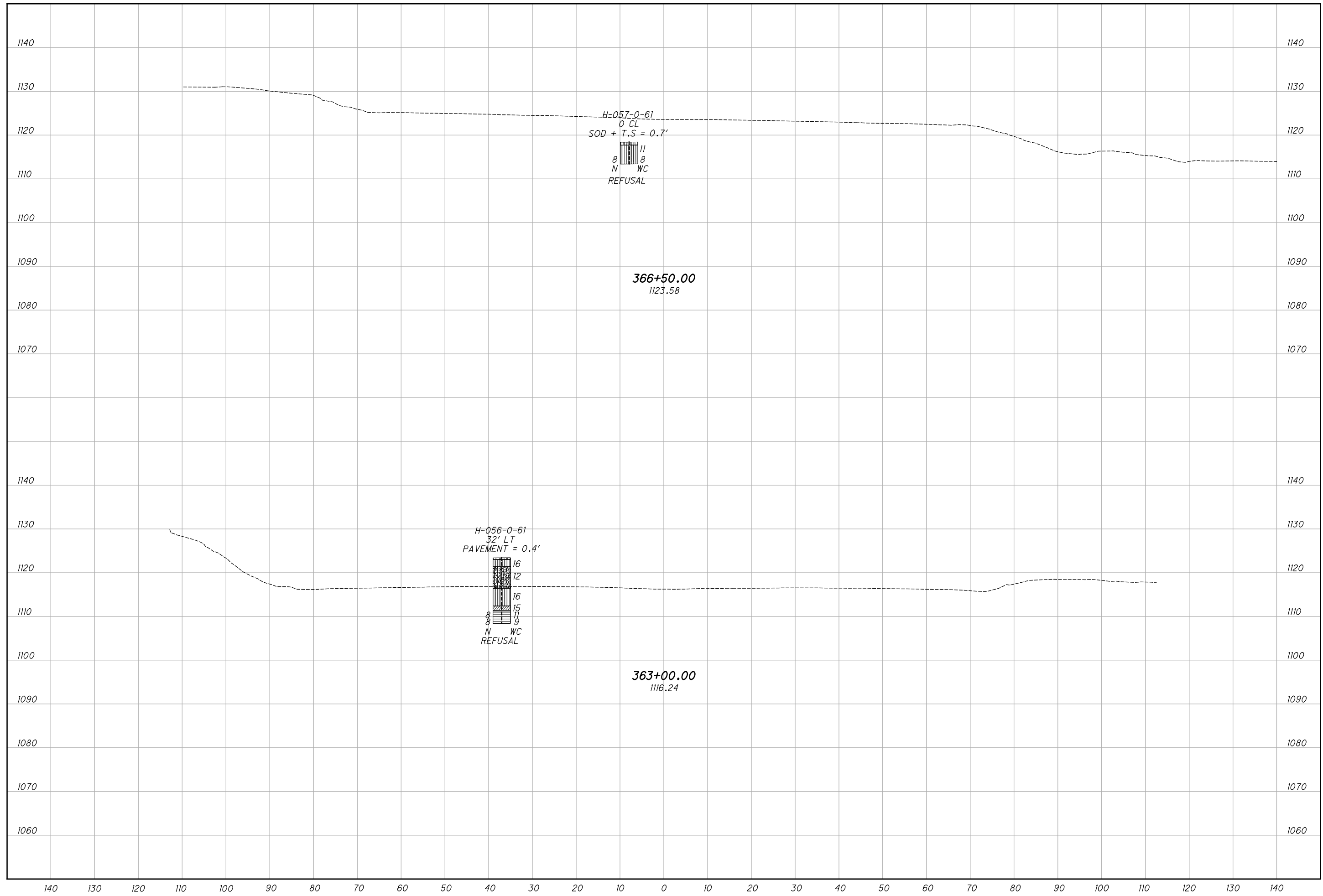
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 358+00.00 & 361+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

136
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_I109.dgn Sheet 8/27/2020 11:07:58 AM kmhnlcea



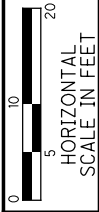
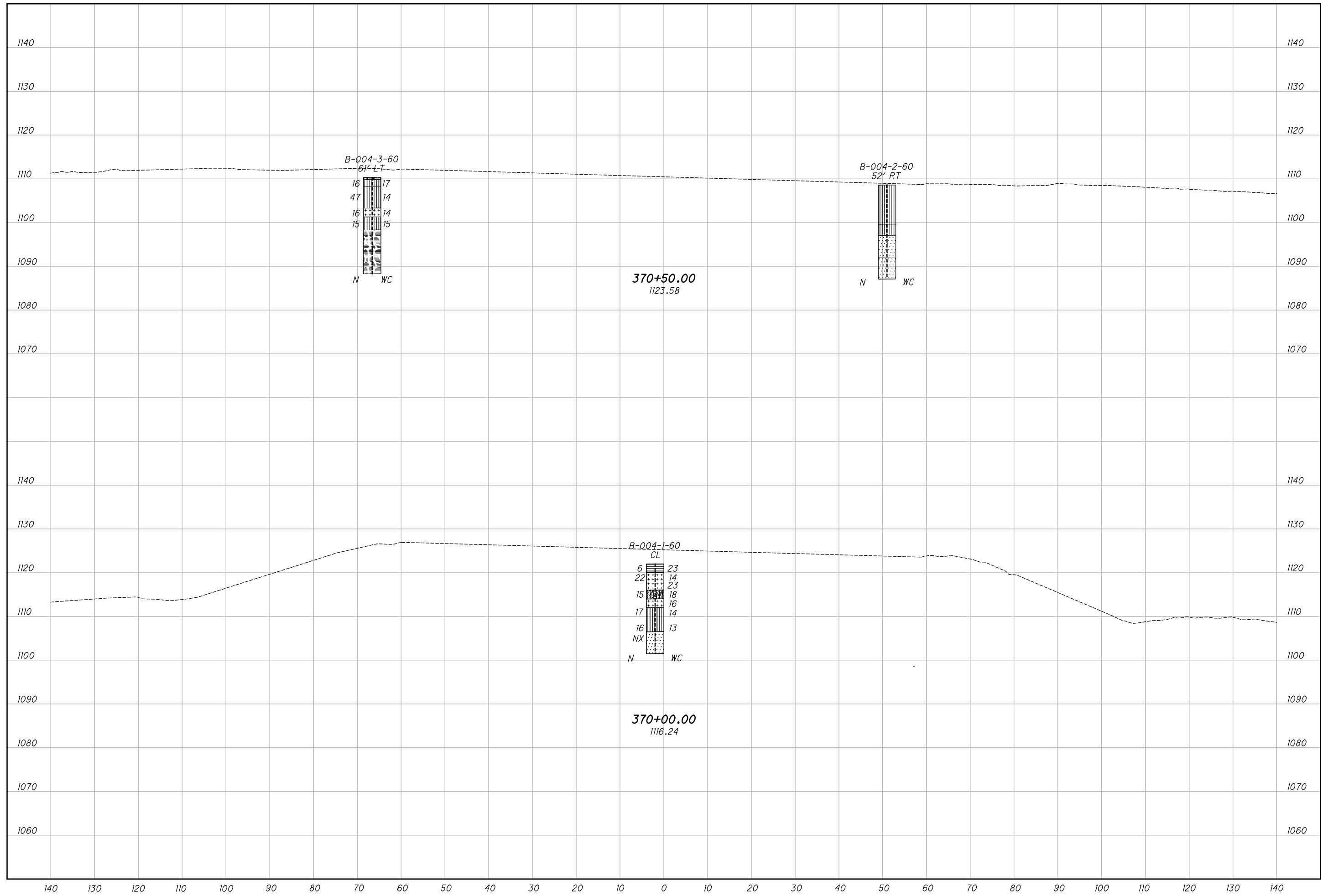
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 363+00.00 & 366+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

137
182

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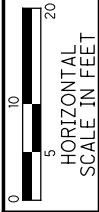
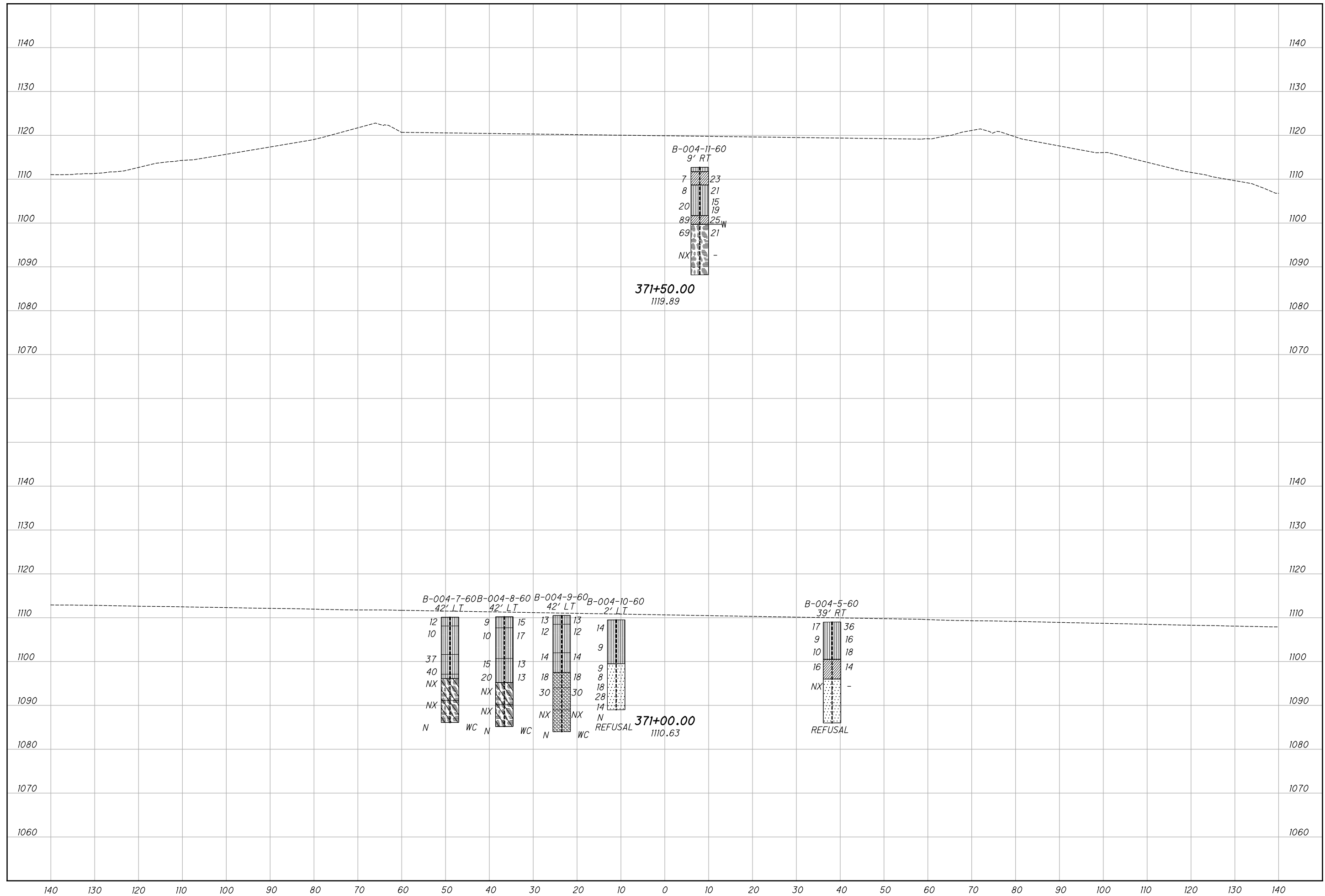
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 370+00.00 & 370+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

138
182

P:\02329_SUM-76_77\Design\Geotechnical\Sheets\SoilProfile\02329_IXIII.dgn Sheet B/27/2020 11:08:01 AM kmihalcea



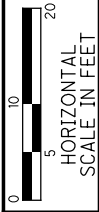
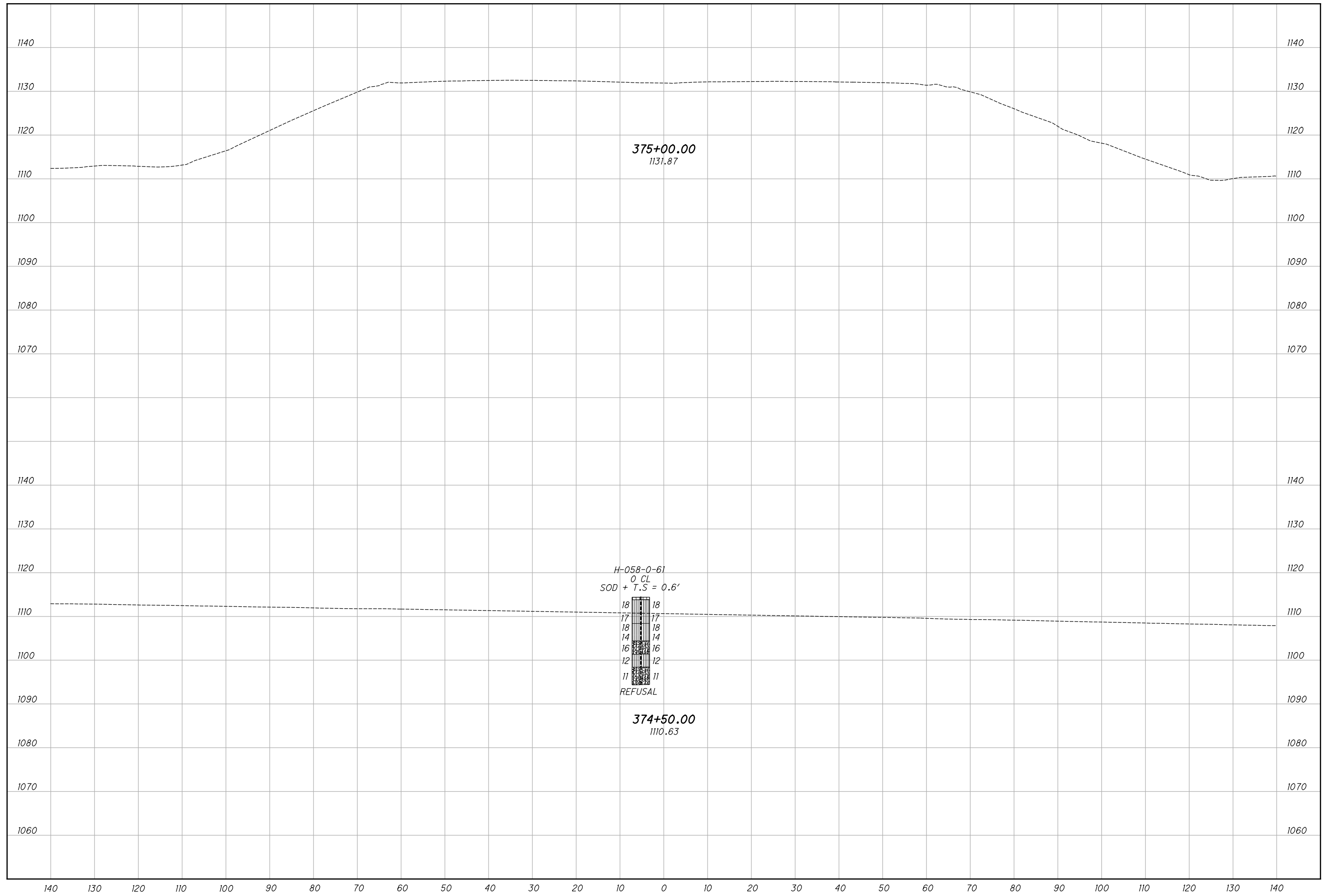
DRAWN: SM
CHECKED: PAN

SOIL PROFILE
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SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

139
182

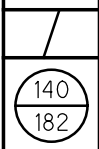
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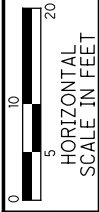
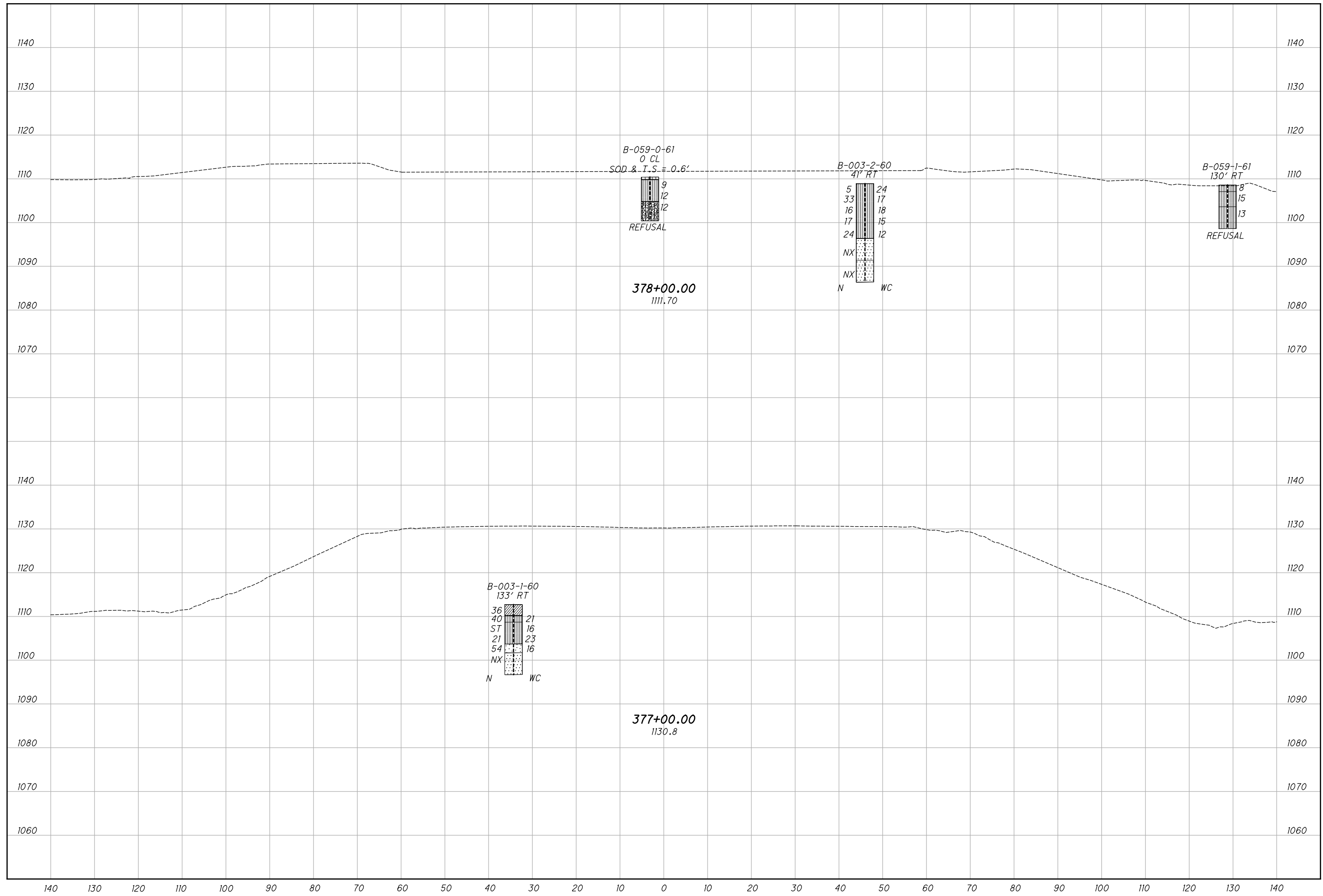
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CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 374+50.00 & 375+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



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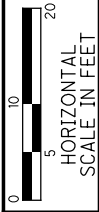
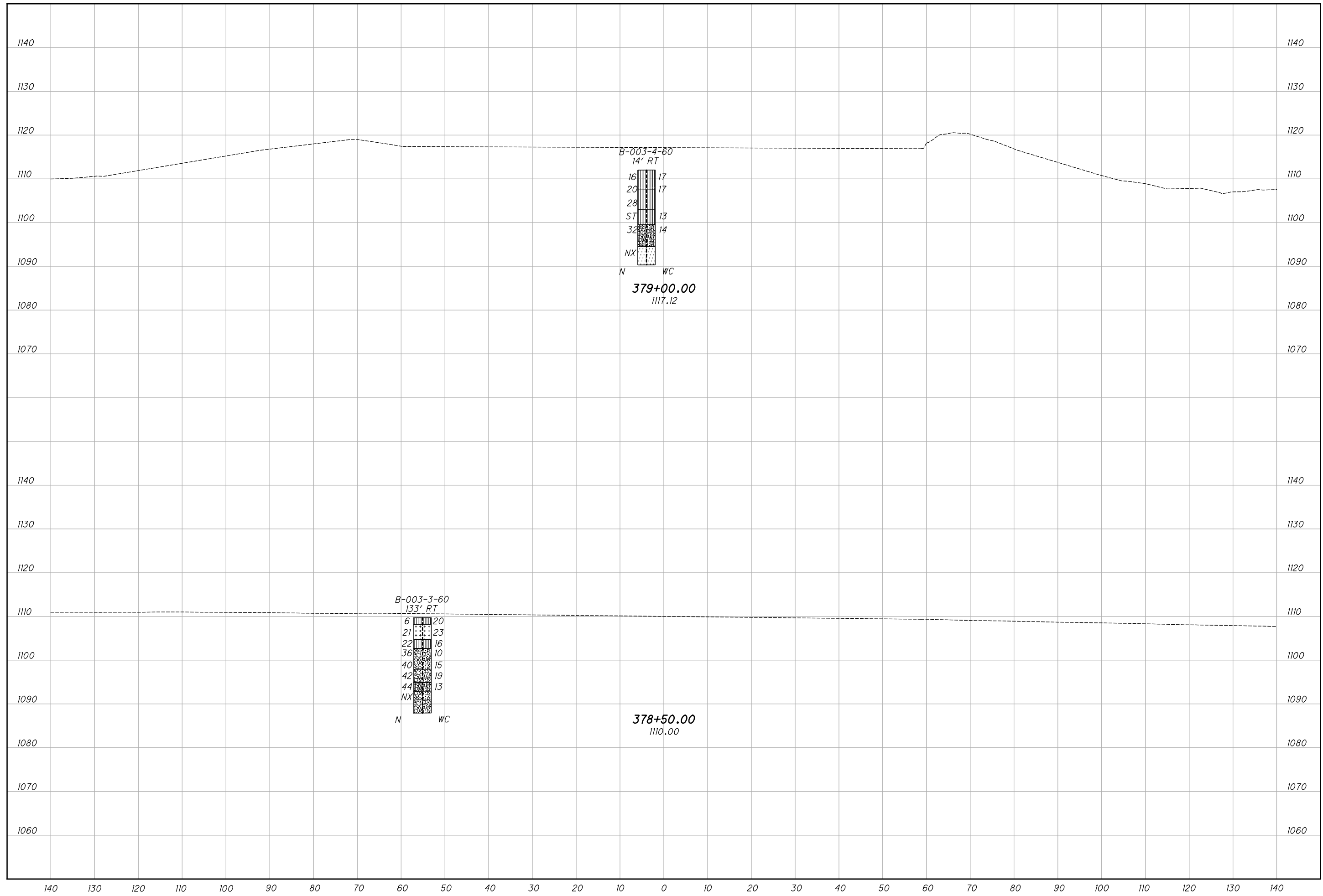
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 377+00.00 & 378+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

141
182

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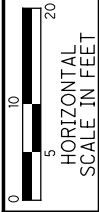
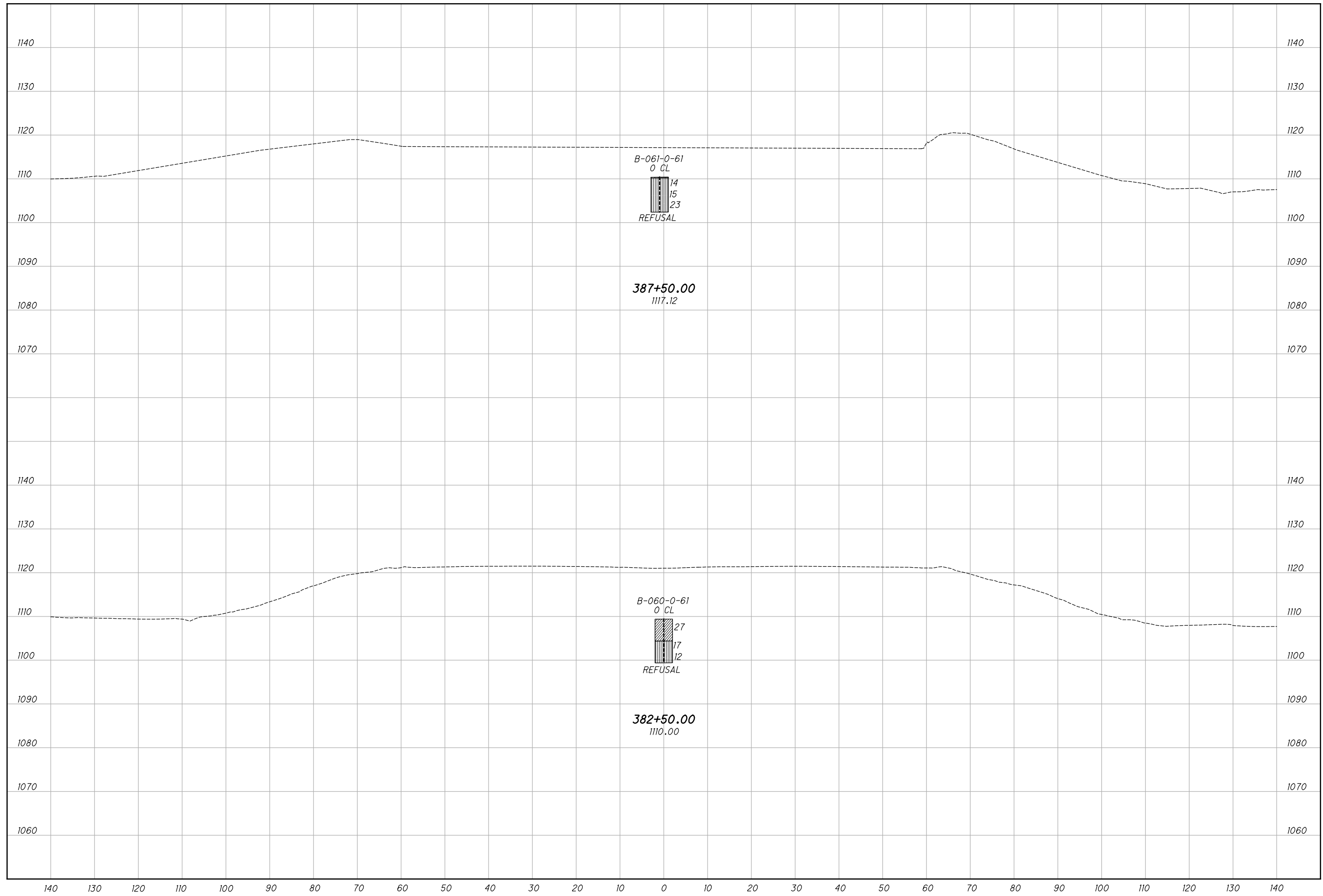
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 378+50.00 & 379+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

142
182

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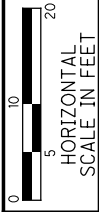
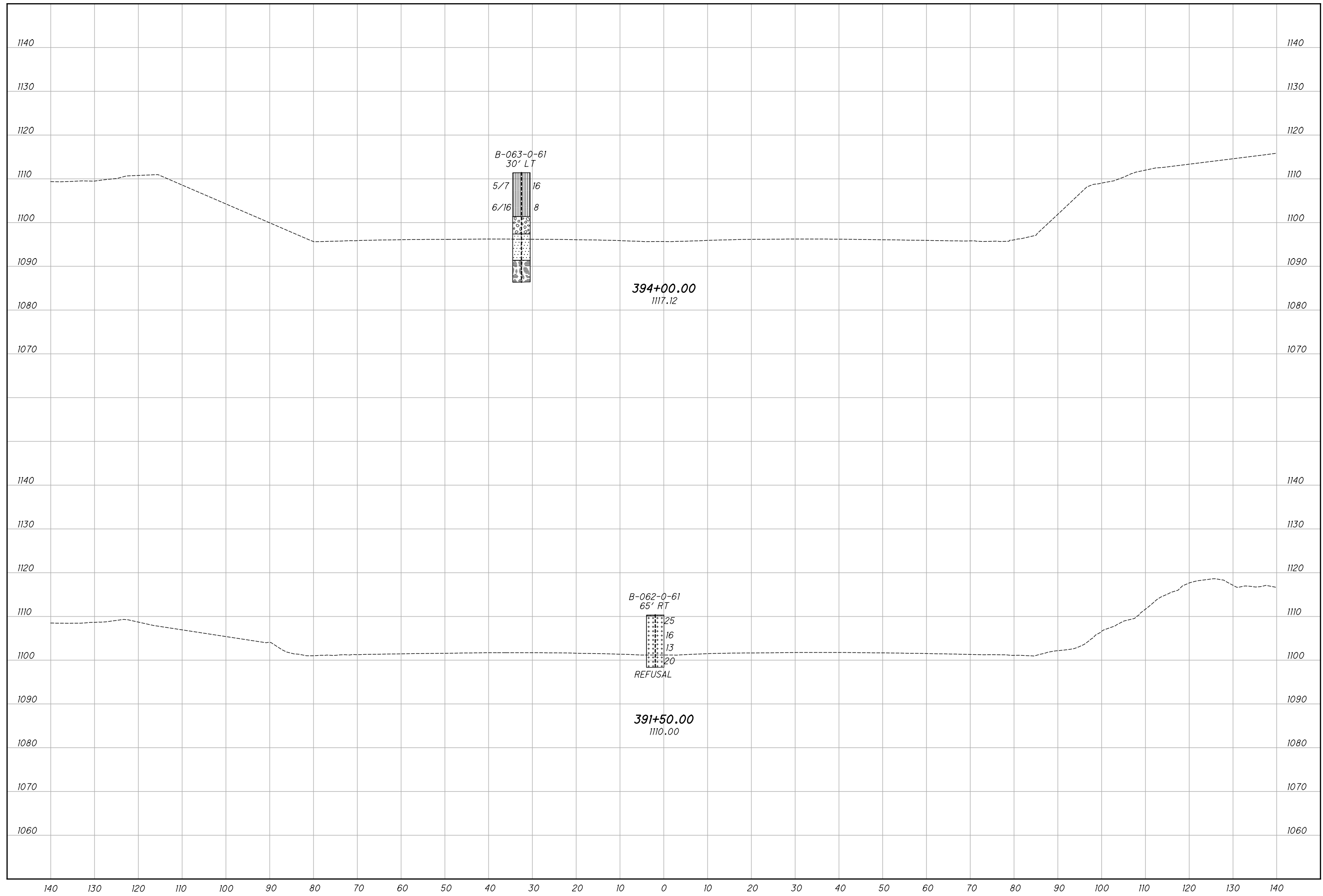
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 382+50.00 & 387+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

143
182

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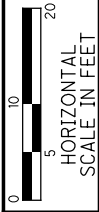
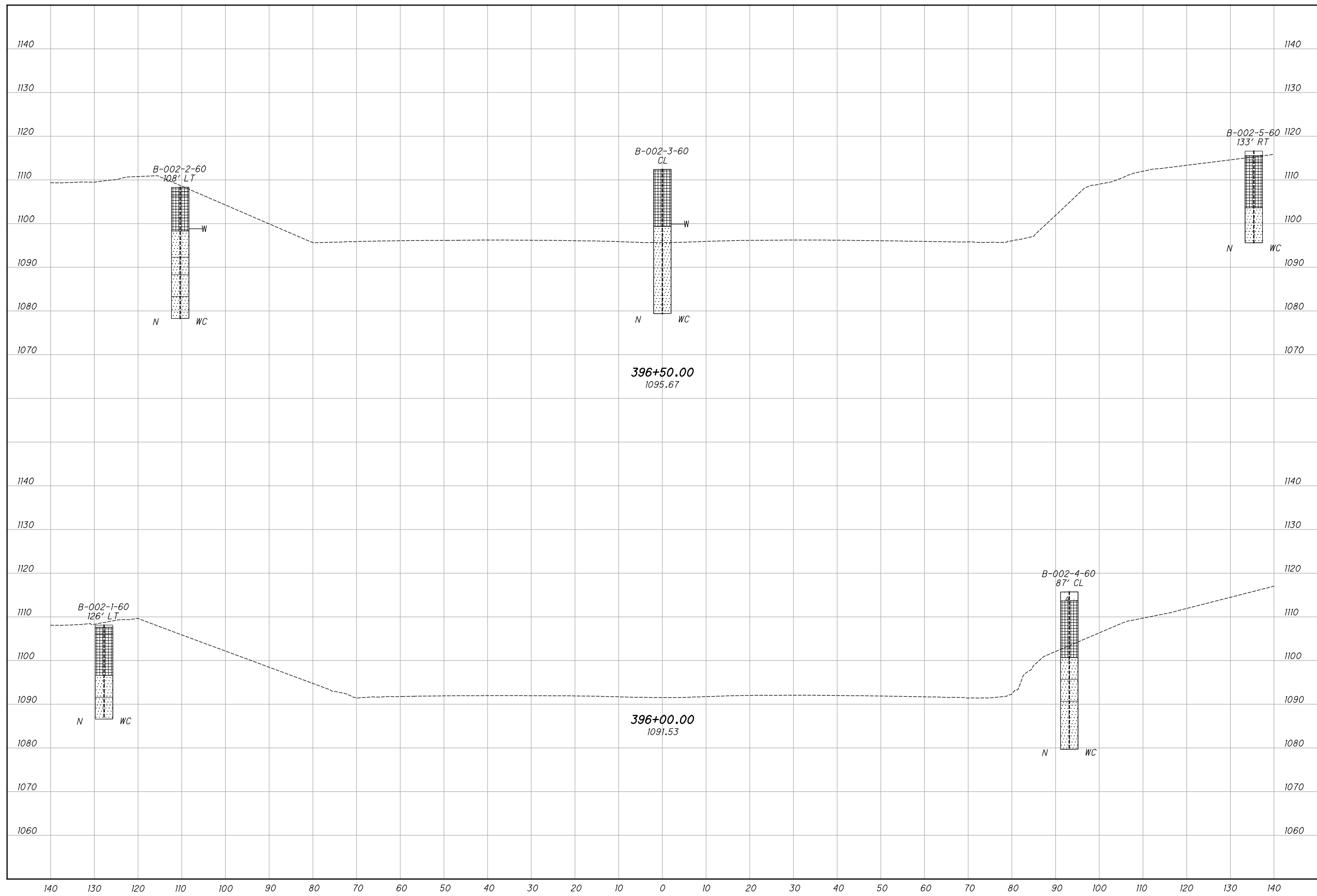
DRAWN SM
CHECKED PAN

SOIL PROFILE
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SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

144
182

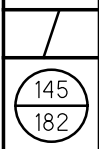
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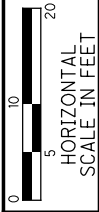
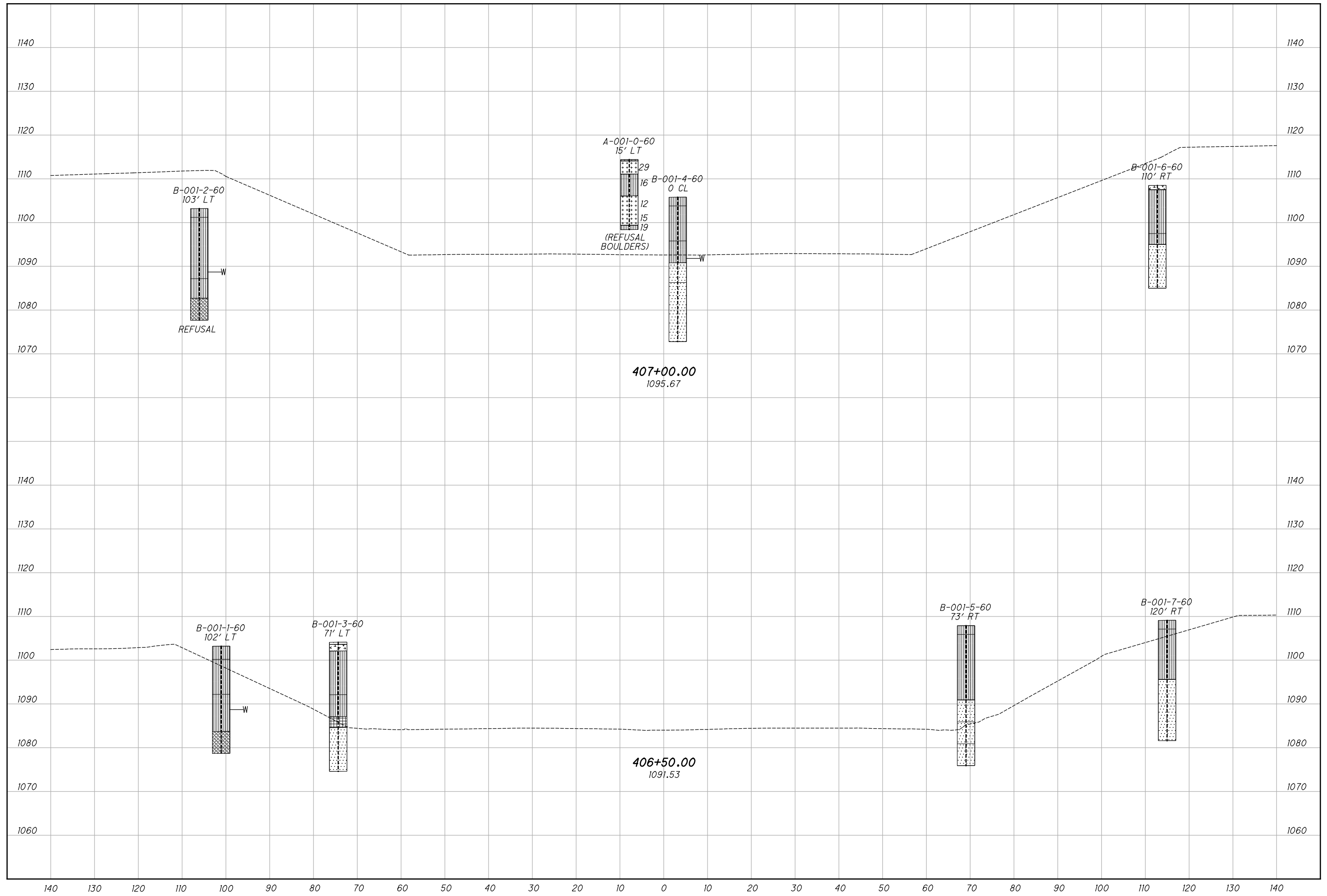
DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 396+00.00 & 396+50.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00



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DRAWN SM
CHECKED PAN

SOIL PROFILE
I.R. 77 CROSS SECTIONS 406+50.00 & 407+00.00

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

146
182

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

THE H. C. NUTTING COMPANY

Form No. 530-16-59

TESTING ENGINEERS AND SOILS CONSULTANTS

Split **LOG OF BORING** Page 1 of 2

DATE STARTED 5-29-61 SAMPLER TYPE Split DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-29-61 CASING LENGTH 35' DIA. 3.5" I.D. AFTER HOURS PROJECT: Akron Expressway, Sum 18-0506
Backfilled (Driveway) over Manchester Rd. Part 13

BORING No. 1 STATION AND OFFSET 48+78, 76' Lt. of Centerline of SURFACE ELEV. 996.4

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL. CLASS				
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.			
996.4	0				0.4' brick												
995.0	2	1	3-4-11	14%	Brown silty sand, some sandstone fragments, fill, moist - medium stiff.	30	7	37	17	9	-	0	10	A-2-4			
	4	2	10-10-11	14%	do	29	10	33	19	9	19	6	13	A-2-4			
990.4	6	3	6-6-3	10%	do	30	9	23	26	12	21	7	13	A-2-4			
	8	4	3-3-4	15%	Brown silt, some fine sand, with clay seams, wet - loose.	0	0	20	65	15	23	3	28	A-4b			
986.4	10	5	2-3-6	10%	Brown gravelly sand, little silt, moist - loose.	17	29	40	-14-	-	-	-	12	A-1-b			
984.4	12																
982.4	14	6	10-8-11	10%	Brown sandy silt, with sand seam, some gravel, moist - medium dense.	24	6	15	40	15	24	5	17	A-4a			
	16	7	5-7-8	8%	Brown reddish brown silt, little sand, trace of gravel, moist - medium dense.	7	6	13	54	20	26	6	23	A-4b			
979.4	18	8	13-15-13	15%	Brown and gray sandy silt, some gravel, moist - medium dense.	33	7	18	32	10	22	4	17	A-4a			
	20	9	5-6-7	16%	Gray sandy silt, little gravel, very moist - medium dense.	13	6	17	47	17	19	4	16	A-4a			
	22																
973.4	24																
	26	10	8-8-10	14%	Brown silt, little sand, trace of gravel, moist - medium dense.	6	4	8	55	27	28	8	20	A-4b			
969.9	28																
	30																
	32	11	5-8-10	10%	Gray sandy silt, some gravel and rock fragments, very moist - medium dense.	27	8	13	38	14	19	3	17	A-4a			
	34																

AS A MUTUAL PROTECTOR TO CLIENTS, THE PUBLIC, AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS, OR EXTRACTS FROM OR REISSUING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

THE H. C. NUTTING COMPANY

Form No. 530-16-59

TESTING ENGINEERS AND SOILS CONSULTANTS

Split **LOG OF BORING** Page 2 of 2

DATE STARTED 5-29-61 SAMPLER TYPE Split DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-29-61 CASING LENGTH 35' DIA. 3.5" AFTER HOURS PROJECT: Akron Expressway, Sum 18-0506
Backfilled (Driveway) over Manchester Rd. Part 13

BORING No. 1 STATION AND OFFSET 48+78, 76' Lt. of Centerline of SURFACE ELEV. 996.4

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL. CLASS				
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.			
961.4	34																
	36																
956.4	38	12	NM	80%	Light gray firm to hard, siliceous shale (core consists of 3/8" to 3" pieces - avg. 3").												
	40																
	42																
	44				Boring completed.												

SUM-76/77/8-
8.24/9.74/0.00

SOIL PROFILE
BRIDGE OVER MANCHESTER ROAD
BORING LOG B-001-0-61

DRAWN
SM
CHECKED
PAN

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

Page 1 of 2

Split

DATE STARTED 5-29-61 SAMPLER: TYPE SPHORN DIA. 2" O.D. WATER ELEV. IMMEDIATE NONE CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-30-61 CASING: LENGTH 31 DIA. 3.5" I.D. AFTER HOURS PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 2 STATION AND OFFSET 47+84, 76' L. of Centerline of Manchester Rd. BACKFILLED (Sidewalk) Over Manchester Rd. Part 13
 SURFACE ELEV. 990.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	P.L.		W.C.
990.2	0					30	6	20	33	11	21	5	18	A-4a
989.2	2	1	2-10-4	14"	0.5' Concrete-0.5' Cinders	Insufficient sample for testing.								
	4	2	20-23-33	2"	Brown sandy silt, some gravel and sandstone fragments, moist - loose.									
	6	3	10-13-13	13"	Brown and gray sandy silt, some gravel and sandstone fragments, moist - medium stiff.	20	4	13	42	21	24	6	18	A-4a
980.2	8	4	10-10-18	14"	Brown sandy silt, little gravel, moist-medium stiff.	12	7	19	44	18	25	5	16	A-4a
	10	5	46-80	8"	Brown gravely sand, with rock fragments, little silt, moist - very dense.	40	19	23	-18-	-	-	-	10	A-1-b
	12													
	14													
972.2	16	6	25-23-25	6"	Brown gravely sand, little gravel, very moist - very dense.	25	14	45	-16-	-	-	-	13	A-1-b
	18													
	20													
968.2	22	7	22-15-15	7"	Brown fine and coarse sand, little gravel and rock fragments, little silt, moist - dense.	16	18	38	19	9	16	1	14	A-3a
	24													
	26	8	14-18-28	8"	Gray silty sand and gravel with rock fragments, very moist - dense.	55	9	10	21	5	17	1	13	A-2-4
	28													
	30	9	15-18-21	9"	Gray silty sand and gravel with shale and rock fragments, moist - dense.	58	7	7	25	3	21	1	14	A-2-4
	32													

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC, AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS, OR EXTRACTS FROM OR REBARRING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

Page 2 of 2

Split

DATE STARTED 5-29-61 SAMPLER: TYPE SPHORN DIA. 2" O.D. WATER ELEV. IMMEDIATE NONE CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-30-61 CASING: LENGTH 31 DIA. 3.5" I.D. AFTER HOURS PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 2 STATION AND OFFSET 47+84, 76' L. of Centerline of Manchester Rd. BACKFILLED (Sidewalk) Over Manchester Rd. Part 13
 SURFACE ELEV. 990.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.
957.7	32													
	34				Layered gray, hard, siliceous, shale and limestone (core consists of broken pieces to 3 1/2" pieces - avg. 3" in limestone and 1" in shale). Limestone composes 9" of core.									
952.7	36	10	NH	65%										
	38													
	40				Boring completed.									

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

Page 1 of 2

Split

DATE STARTED 5-24-61 SAMPLER TYPE SPoon DIA. 2" O.D. WATER ELEV. IMMEDIATE Net at 13.5 CLIENT: CITY of Akron, Ohio
 DATE COMPLETED 5-25-61 CASING LENGTH 27.0' DIA. 3.5" I.D. AFTER PAN Core Barrel
 BORING No. 3 STATION AND OFFSET 48+87, 25' Lt. of Centerline of SURFACE ELEV. 990.0 PROJECT: AKRON EXPRESSWAY, Sum 18-0506
MANCHESTER RD. BACKFILLED (SIDEWALK) OVER MANCHESTER RD. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	P.I.		W.C.
990.0	0				0.5' Concrete	11	14	40	25	10	-	0	18	A-3a
989.5	2	1	2-3-3	14"	Brown fine and coarse sand, little gravel, little silt, fill, moist-loose.									
987.0	4	2	2-2-2	12"	Brn. fine sand, and coarse sand, trace of gravel and silt, moist-very loose.	3	35	59	-3-	-3-	-	-	12	A-3
	6	3	1-1-1	16"	Brn. fine sand, some coarse sand, trace of gravel and silt, moist-very loose.	1	29	67	-3-	-3-	-	-	7	A-3
	8	4	1-1-2	17"	Brown fine sand, trace of coarse sand gravel and silt, moist - very loose.	2	9	83	-6-	-6-	-	-	8	A-3
978.0	10		1-1-2	16"	Brown fine sand, and coarse sand, trace of gravel and silt, moist - very loose.	8	39	50	-3-	-3-	-	-	8	A-3
	14	6	4-9-18	13"	Brown sandy gravel, with rock fragments, little silt, moist - med. dense	50	10	25	12	3	-	0	15	A-1-b
973.0	16	7	9-14-17	12"	do	49	9	26	12	4	-	0	15	A-1-b
	18	8	5-6	8"	Brn. sandy silt, little gravel, moist-medium stiff.	12	9	25	39	15	20	2	17	A-4a
	20	9	8	6"	Brn. and gray silty silt, little gravel, moist - medium stiff.	18	8	19	39	16	18	4	14	A-4a
967.5	22	10	7-5-6	9"	Gray sandy silt, little gravel, moist-medium dense.	12	5	22	45	16	17	2	13	A-4a
966.0	24	11	6-9-13	10"	Gray fine and coarse sand, little gravel, some silt, with clay seams, moist - medium dense.	18	20	37	23	2	-	0	8	A-3a
962.0	26	12	6-6-10	15"	Gray silt, and clay, moist - stiff.	0	0	1	61	38	26	9	17	A-4b
956.0	30	13	6-9-16	8"	Gray silty sand, and gravel with brown sand seams, moist - medium dense.	45	14	15	24	2	-	0	16	A-2-4
	32													
	34													

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Form No. 530-16-58

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 2 of 2

Split

DATE STARTED 5-24-61 SAMPLER TYPE SPoon DIA. 2" O.D. WATER ELEV. IMMEDIATE Net at 13.5 CLIENT: CITY of Akron, Ohio
 DATE COMPLETED 5-25-61 CASING LENGTH 27.0' DIA. 3.5" I.D. AFTER PAN Core Barrel
 BORING No. 3 STATION AND OFFSET 48+87, 25' Lt. of Centerline of SURFACE ELEV. 990.0 PROJECT: AKRON EXPRESSWAY, Sum 18-0506
MANCHESTER RD. BACKFILLED (SIDEWALK) OVER MANCHESTER RD. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	P.I.		W.C.
956.0	34					52	6	20	16	6	-	0	12	A-1-b
957.0	36	14	4-5-21	8"	Gray sandy gravel, little silt, moist - medium dense.									
	38													
948.0	40	15	24-60	8"	Gray sandy silt, and rock fragments, moist - very dense.	38	7	6	31	18	26	9	10	A-4a
	42													
	44													
943.0	46	16	NK	85%	Gray, hard, siliceous, shale (core consists of broken pieces to 2-3/4" pieces - avg. 1" with one 2 1/2" layer of limestone at top).									
	48				Boring completed.									
	50													

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 1 of 2

DATE STARTED 5-25-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-26-61 CASING LENGTH 20.0" DIA. 3.5" I.D. AFTER HOURS Backfilled (Sidewalk) PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 4 STATION AND OFFSET 48+25, 32' L. of Centerline of SURFACE ELEV. 989.8 Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SMTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.
989.8	0				0.5' Concrete	29	13	23	25	10	19	3	13	A-2-4
989.3	2	1	2-5-4	13	Brown silty sand, some gravel, moist - medium stiff.	34	11	11	27	17	26	9	14	A-4a
988.3	4	2	4-6-8	14	shale fragments, moist - stiff.	11	6	46	22	15	19	5	16	A-4a
883.8	6	3	9-7-7	14	Brown sandy silt, little gravel, with fine sand seams, moist - medium dense.	7	36	51	-6	-	-	-	9	A-3
	8	4	2-1-1	18	Brown fine sand, and coarse sand	6	32	53	-9	-	-	-	9	A-3
	10				trace of gravel and silt, moist - very loose.	2	33	60	-5	-	-	-	7	A-3
	12	5	1-2-2	16	do	37	6	32	21	4	-	0	15	A-2-4
	14	6	1-2-3	14	do	35	10	19	35	1	21	3	16	A-4a
	16	7	9-16-17	11	Brown silty sand, and shale and sandstone fragments, moist - dense.	14	7	19	46	14	19	4	15	A-4a
	18	8	9-7-9	11	Brown sandy silt, and sandstone fragments, moist - medium stiff.	Insufficient sample for testing.								
	20	9	6-6-11	7	Gray sandy silt, little fine gravel, very moist - medium dense.	0	0	10	69	21	23	6	19	A-4b
	22				do	46	13	19	16	6	19	2	19	A-1-b
	24	10	5-6-8	5	GRAY silt, trace of fine sand, very moist - medium stiff.	11	8	17	59	5	18	3	18	A-4b
963.8	26	11	4-7	12	Brown sandy gravel, little silt, wet - medium dense.	(cont'd. next page)								
	28	12	8	5	do									
960.8	30				Gray silt, some sand in seams, little gravel, wet - soft.									
957.8	32	13	5-5-7	14	do									
953.8	34				do									

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TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 2 of 2

DATE STARTED 5-25-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-26-61 CASING LENGTH 20.0" DIA. 3.5" I.D. AFTER HOURS Backfilled (Sidewalk) PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 4 STATION AND OFFSET 48+25, 32' L. of Centerline of SURFACE ELEV. 989.8 Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SMTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.
953.8	34				Brown gravelly sand, little silt, wet - medium dense.	34	36	16	-1	-	-	-	14	A-1-b
946.8	36	14	4-7-11	8	Gray sandy gravel and rock fragments, little silt, moist - very dense.	65	7	8	15	5	19	2	12	A-1-b
	38				Gray, hard, siliceous, shale (core consists of broken to 5 1/2" piece - avg. 1 1/2" - core is highly weathered at 44.5' and contains one 2" layer of limestone at top.)									
	40	15	33-24-20	7	do									
	42				do									
	44				do									
941.8	46	16	MM	93%	do									
	48				do									
	50				Boring Completed.									

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 1 of 2

DATE STARTED 5-23-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE Met at 20.5' CLIENT: City of Akron, Ohio
DATE COMPLETED 5-24-61 CASING LENGTH 61.5' PANM Core Barrel AFTER Backfilled (Sidewalk) PROJECT: Akron Expressway, Sum 18-0506
BORING No. 5 STATION AND OFFSET 49+00, 34' R of Centerline of Manchester Rd. SURFACE ELEV. 989.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics						SMTL CLASS					
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL		PL	W.C.			
989.2	0				0.5' Concrete												
987.2	2	1	4-3-7	14"	Brown sandy silt, some gravel, and cinders, fill, moist - medium stiff.	24	10	26	23	17	23	7	14	A-4a			
983.7	4	2	7-6-7	15"	Brown fine and coarse sand, little silt, trace of gravel, fill, moist - medium stiff.	6	6	62	12	14	-	0	15	A-3a			
982.2	6	3	2-4-5	15"	Brown sandy silt, moist - medium stiff.	0	0	58	32	10	-	0	21	A-4a			
979.2	8	4	3-2-3	17"	Brown silt, some fine sand and silt seams, wet - soft.	0	0	29	57	14	22	3	25	A-4b			
	12	5	1-1-1	15"	Brn. gravelly sand, trace of silt, moist - very loose.	36	44	13	-7	-	-	-	8	A-1-b			
	14	6	1-2-2	17"	Brown sandy gravel, trace of silt, moist - loose.	49	33	10	-8	-	-	-	8	A-1-b			
	16	7	1-2-3	15"	Brown gravelly sand, trace of silt, moist - loose.	12	46	37	-5	-	-	-	5	A-1-b			
	18	8	2-2-4	16"	do	16	57	22	-5	-	-	-	7	A-1-b			
967.2	22	9	2-2-5	17"	do	7	55	32	-6	-	-	-	13	A-1-b			
	24	10	4-5-6	17"	Brown fine sand, little silt, moist - medium dense.	0	1	87	-12	-	-	-	7	A-3a			
964.2	26	11	10-11-1	12"	Brown gravelly sand, little silt, moist - medium dense.	33	22	28	12	5	-	0	14	A-1-b			
935.2	34	12	7-6-6	10"	Gray silt, some sand, little gravel, with shale fragments, wet - medium dense.	12	4	20	53	11	17	2	16	A-4b			

(cont'd. next page)

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 2 of 2

DATE STARTED 5-23-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE Met at 20.0' CLIENT: City of Akron, Ohio
DATE COMPLETED 5-24-61 CASING LENGTH 61.5' PANM Core Barrel AFTER Backfilled (Sidewalk) PROJECT: Akron Expressway, Sum 18-0506
BORING No. 5 STATION AND OFFSET 49+00, 34' R of Centerline of Manchester Rd. SURFACE ELEV. 989.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics						SMTL CLASS		
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL		PL	W.C.
955.2	34				Gray sandy silt, with silt and sand seams, some shale and rock fragments, wet - loose.	31	7	19	32	11	17	3	15	A-4a
951.2	36	13	3-4-5	7"	Gray silty sand and shale and rock fragments, wet - medium dense.	47	13	14	21	5	17	1	11	A-2-4
	38													
946.2	40	14	13-14-14	4"	Gray sandy silt, some rock fragments, wet - medium dense.	23	4	9	45	19	19	3	19	A-4a
	42													
	44	15	9-9-11	6"	Gray silty sand, trace of sand, wet - loose. Brown silt, some sand, moist - medium dense.	0	1	3	70	26	23	3	25	A-4b
941.2	46													
	48				Gray silty sand, and shale fragments, moist - very stiff. Gray, hard, silty sand, shale (core consists of broken pieces to 3/4" pieces - avg. 2 1/2" - Core is highly weathered at top and shattered at 65.5').	48	5	4	30	13	27	9	9	A-4a
938.7	50	16	10-26-14	8"										
	52	17			Boring completed.									
936.2	54													
	56	18												
	58													
930.2	60	19												
927.7	62													
	64	20												
922.7	66													
	68													

SUM-76/77/8-
8.24/9.74/0.00

SOIL PROFILE
BRIDGE OVER MANCHESTER ROAD
BORING LOG B-005-0-61

DRAWN SM
CHECKED PAN

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 1 of 2

Split

DATE STARTED 5-16-61 SAMPLER TYPE SPOON DIA. 2" O.D. WATER ELEV. IMMEDIATE Wet @ 15.5' CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-17-61 CASING LENGTH 59.5' DIA. 3.5" I.D. AFTER 24 HOURS Caved dry @ 32' PROJECT: Akron Expressway, Sum 18-0506
 Over Manchester Rd. Part 13

BORING No. 6 STATION AND OFFSET 48+38.26' Rt. of Centerline of SURFACE ELEV. 988.1

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS				
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.			
988.1	0				0.2" Sand												
987.5	2	1	5-5-7	12"	Brown sandy clay and cinders, fill, moist - medium stiff.	No tests performed.											
	4	2	2-1-2	8"	do	No tests performed.											
983.1	6	3	1-2-3	13"	Brown sandy silt, with fine sand lenses, trace of gravel, moist - medium stiff.	4	9	32	31	24	25	7	20	A-4a			
	8	4	2-4-7	14"	Brown and gray sandy silt, some sandstone fragments, moist - medium stiff.	26	7	27	25	15	19	3	14	A-4a			
978.1	10	5	14-14-14	13"	Brown silty sand, and sandstone fragments, moist - medium dense.	45	6	20	17	12	19	5	11	A-24			
	12	6	9	3"	do	Insufficient sample for testing.											
975.1	14	7	7-7	11"	Brown fine and coarse sand, little silt, trace of gravel, moist - medium dense.	9	16	63	-12-				7	A-3a			
973.1	16	8	7-7-7	10"	Brown sandy silt with fine sand seams, moist - medium dense.	0	2	61	20	12	-	0	18	A-4a			
971.1	18	9	7-8-8	7"	Brown fine to coarse sand, trace of gravel, moist - medium dense.	10	3	55	9	13	-	0	11	A-3a			
969.1	20	10	5-4-4	9"	Brown gravelly sand, little silt, moist - loose.	33	40	12	-	-15-			14	A-1-b			
	22																
	24	11	4-5-5	5"	Brown sandy gravel, trace of silt, wet - loose.	46	35	10	-	-9-			14	A-1-b			
	26	12	4-4-4	6"	Brown gravelly sand, little silt, wet - loose.	31	40	16	-	-13-			14	A-1-b			
	28																
	30	13	3-3-6	8"	Brown gravelly sand, little silt	9	46	32	-13-				18	A-1-b			

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 2 of 2

Split

DATE STARTED 5-16-61 SAMPLER TYPE SPOON DIA. 2" O.D. WATER ELEV. IMMEDIATE Wet @ 15.5' CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-17-61 CASING LENGTH 59.5' DIA. 3.5" I.D. AFTER 24 HOURS Caved Dry @ 32' PROJECT: Akron Expressway, Sum 18-0506
 Over Manchester Rd. Part 13

BORING No. 6 STATION AND OFFSET 48+38.26' Rt. of Centerline of SURFACE ELEV. 988.1

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.
981.1	34				Brown gravelly sand, trace of silt, wet - loose.	34	37	22	-7-				18	A-1-b
	36	14	2-3-5	10"										
	38													
	40				Gray sandy silt with fine wet sand seams, little gravel, moist - medium stiff.	14	9	32	33	12	15	1	14	A-4a
945.1	42	15	15-16-18	5"										
	44													
	46	16	9-10-10	8"	Gray and brown sandy gravel, little silt, wet - medium dense.	50	16	15	14	5	16	1	12	A-1-b
940.1	48													
	50				Brown fine and coarse sand, some gravel, trace of silt, wet - medium dense.	27	15	37	8	13	-	0	15	A-3a
	52	17	7-7-10	6"										
	54													
	56	18	13-13-27	10"	Brown sandy silt, some sand and gravel seams, wet - dense.	30	7	10	42	11	23	2	21	A-4a
928.6	58													
	60													
	62	19	NM	75%	Gray, hard, siliceous, shale (core consists of broken pieces to 3/4" pieces - avg. broken pieces except last 1 1/2' which is hard and in tact.)									
923.6	64													
	66				Boring completed.									

TESTING ENGINEERS AND SOILS CONSULTANTS

Split
LOG OF BORING Page 1 of 2

DATE STARTED 5-22-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-22-61 CASING LENGTH 62.0' DIA. 3.5" I.D. AFTER HOURS Caved at 30' PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 7 STATION AND OFFSET 49+10, 76' R. of Centerline of SURFACE ELEV. 989.4 Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS				
						AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.			
989.4	0				0.5" Blacktop.	No tests performed											
988.4	2	1	21-15-8	16"	Brown sandy clay and cinders, fill, moist - medium stiff.												
884.4	4	2	5-4-6	17"	Brown sandy silt, fill, moist - medium stiff.	0	0	46	37	17	19	3		19	A-4a		
	6	3	1-2-2	15"	Brown gravelly sand, trace of silt, moist - very loose.	21	60	14	-	-	-	-		4	A-1-b		
	8	4	1-1-2	14"	do	9	55	33	-	-	-	-		4	A-1-b		
974.4	10				do	11	44	41	-	-	-	-		4	A-1-b		
	12	5	1-2-2	17"	do	16	63	17	-	-	-	-		4	A-1-b		
	14	6	2-2-3	16"	Brown gravelly sand, trace of silt, moist - loose.	0	2	94	-	-	-	-		5	A-3		
	16	7	1-2-3	17"	Light brown fine sand, trace of coarse sand, trace of silt, moist - loose.	4	0	71	19	6	-	0	13	A-3a			
966.4	20	8	4-4-5	8"	Brown fine sand, little silt, trace of gravel, moist - loose.												
	22				Brown silt, trace of fine sand, trace of gravel, very moist - medium stiff.	1	0	8	77	14	22	0	23	A-4b			
	24	9	6	4-5	8"	Gray silt, some fine sand, wet - loose.	0	1	20	67	12	0	21	A-4b			
963.9	26	10															
961.4	28																
	30	11	17-23-15	2"	Gray sandy gravel, little silt, wet - dense.	Insufficient sample for testing.											
	32																
	34																

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC, AND OURSELVES, ALL REPORTS AND SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS, OR EXTRACTS FROM OR REQUIRING OUR REPORTS IS RESERVED PENDING OUR WRITTEN APPROVAL.

LOG OF BORING Page 2 of 2

Split
DATE STARTED 5-22-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-22-61 CASING LENGTH 62.0' DIA. 3.5" I.D. AFTER HOURS Caved at 30' PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 7 STATION AND OFFSET 49+10, 76' R. of Centerline of SURFACE ELEV. 989.4 Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS				
						AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		W.C.			
949.9	34																
	36	12	8-11-12	4"	Gray sandy gravel, little silt, wet - dense.	47	24	18	-	-	-	-	9	A-1-b			
	38																
	40																
	42	13	20-21-24	8"	Gray silt, trace of sand, trace of gravel, moist - dense.	2	3	7	72	16	21	2	17	A-4b			
928.4	44																
	46	14	13-13-15	8"	Gray silt, little fine sand, wet - dense.	0	0	16	74	10	-	0	22	A-4b			
	48																
927.4	50	15	14-13-17	6"	Gray silt, trace of fine sand, wet - dense.	0	0	3	87	10	-	0	28	A-4b			
	52																
	54																
	56	16	12-12-14	6"	Gray silt, trace of fine sand, wet - medium dense.	0	0	3	87	10	-	0	26	A-4b			
925.4	58																
	60	17	28-90	8"	Gray silt, with clay lenses, little fine sand, wet - very dense.	0	0	14	76	10	-	0	22	A-4b			
	62																
921.4	64	18	NM	30%	Light gray friable fine to medium grained sandstone (Core consists of 7", 4", 2" pieces plus foreign gravel).												
	66																
	68	19	67-68 (Sample)	(Wash)	Gray gravelly sand, trace of silt, moist - very dense. Boring completed.	3	48	39	-	-	-	-	9	A-1-b			

NOTE: Unable to drive casing through sandstone layers. Boring terminated by City of Akron representative.

SUM-76/77/8-
8.24/9.74/0.00

SOIL PROFILE
BRIDGE OVER MANCHESTER ROAD
BORING LOG B-007-0-61

DRAWN SM
CHECKED PAN

Form No. 530-1659

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

Split
LOG OF BORING Page 1 of 3

DATE STARTED 5-30-61 SAMPLER: TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 6-1-61 CASING: LENGTH 72.5' DIA. 3.5" I.D. AFTER HOURS Backfilled (driveway) PROJECT: Akron Expressway, Sum. 18-0506
 BORING No. 7A STATION AND OFFSET 48+94.69' R. of Centerline of Manchester Rd. SURFACE ELEV. 989.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	P.I.		W.C.
989.2	0				0.5' Blacktop	No tests performed.								
988.7	2	1	13-11-14	16"	Brown sandy clay and cinders, fill, moist - medium stiff.	4	32	43	12	9	25	10	14	A-2-4
986.7	4	2	6-5-4	14"	Brown silty sand, trace of gravel, moist - loose.	26	18	30	21	5	-	0	11	A-2-4
982.2	6	3	2-3-3	8"	Brown silty sand, some gravel, moist - loose.	32	49	14	-	-	-	-	5	A-1-b
979.2	8	4	3-1-1	14"	Brown gravelly sand, trace of silt, moist - very loose.	10	37	49	-	-	-	-	5	A-3
977.2	10	5	2-2-2	16"	Brown fine sand, and coarse sand, trace of gravel, trace of silt, moist - loose.	22	32	39	-	-	-	-	4	A-1-b
	12	6	2-2-3	14"	Brown gravelly sand, trace of silt, moist - loose.	25	46	24	-	-	-	-	5	A-1-b
971.2	14	7	2-2-3	17"	do	0	2	84	11	3	-	0	10	A-3a
	16	8	2-3-3	16"	Brown fine and coarse sand, little silt, moist - loose	49	10	25	13	3	-	0	13	A-1-b
964.2	18	9	54-52	9"	Brown sandy gravel and sandstone fragments, little silt, moist - very dense.	5	3	6	59	27	22	5	14	A-4b
961.2	20	10	15-17-21	14"	Gray silt, trace of sand, trace of gravel, moist - stiff.	(cont'd. next page)								

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC, AND OURSELVES, ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENTS, CONCLUSIONS.

TESTING ENGINEERS AND SOILS CONSULTANTS

Split
LOG OF BORING Page 2 of 3

DATE STARTED 5-30-61 SAMPLER: TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 6-1-61 CASING: LENGTH 72.5' DIA. 3.5" I.D. AFTER HOURS Backfilled (Driveway) PROJECT: Akron Expressway, Sum. 18-0506
 BORING No. 7A STATION AND OFFSET 48+94.69' R. of Centerline of Manchester Rd. SURFACE ELEV. 989.2

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SHTL CLASS	
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	P.I.		W.C.
951.7	34	11	16-19-22	10"	Gray silt, little sand, trace of gravel, moist - dense.	10	5	8	52	25	22	4	14	A-4b
	36	12	10-12-15	8"	Gray gravelly sand, trace of silt, moist - medium dense.	27	30	34	-	-	-	-	13	A-1-b
945.2	38	13	21-22-30	8"	Gray sandy silt, and gravel and rock fragments, moist - very dense.	36	10	12	36	6	-	0	18	A-4a
941.2	40	14	15-15-19	11"	Gray silt, with clay lenses, trace of sand, trace of gravel, moist - dense.	4	1	7	74	14	20	0	10	A-4b
	42	15	11-13-18	15"	Gray silt, little fine sand, wet - dense.	0	0	19	75	6	-	0	21	A-4b
931.2	44	16	10-20-21	12"	Gray sandy silt, and gravel with rock fragments, wet - dense.	36	5	6	43	10	20	2	20	A-4a
925.2	46	17	28-40-60	7"	Gray sandy shale and rock fragments, little silt, moist - very dense.	56	14	9	16	5	18	2	11	A-1-b

SUM-76/77/8-
8.24/9.74/0.00

SOIL PROFILE
BRIDGE OVER MANCHESTER ROAD
BORING LOG B-007A-0-61

DRAWN SM
CHECKED PAN

Form No. 530-16-59

THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING page 3 of 3

Split

DATE STARTED 5-30-61 SAMPLER TYPE Spoon DIA. 2" O.D. WATER ELEV. IMMEDIATE None CLIENT: City of Akron, Ohio
 DATE COMPLETED 6-1-61 CASING LENGTH 72.5' DIA. 3.5" I.D. AFTER HOURS PROJECT: Akron Expressway, Sum. 18-0506
 BORING No. 7A STATION AND OFFSET 48+94, 69' R. of Centerline of SURFACE ELEV. 989.2
 Backfilled (Driveway) Over Manchester Rd. Part 13
 Manchester Rd.

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics							SMTL CLASS				
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY	LL	PL		WC			
920.7	68																
916.7	70	18	NM	18%	(Core consists of broken pieces of sandstone, limestone, quartz, gravel and foreign gravel.)												
	72																
	74																
911.7	76	19	NM	100%	Gray, hard, siliceous, shale with 3 thin layers of limestone (Core consists of 1/4 to 3" pieces - avg. 2" with three 1" layers of limestone).												
	78																
	80				Boring completed.												

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THE H. C. NUTTING COMPANY

4120 AIRPORT ROAD
CINCINNATI 26, OHIO

TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 1 of 3

DATE STARTED 5-18-61 SAMPLER: TYPE SPOON DIA. 2" O.D. WATER ELEV. IMMEDIATE Wet @ 17.5' CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-19-61 CASING: LENGTH 74'-0" DIA. 3.5" I.D. AFTER 60 HOURS PROJECT: Akron Expressway, Sum 18-0506
 BORING No. 8 STATION AND OFFSET 48+48, 76' Rt. of Centerline of SURFACE ELEV. 988.2
 Caved Dry @ 31' Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics					SMTL CLASS						
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY		L.L.	P.I.	W.C.			
988.2	0				0.4' Blacktop.												
987.8	2	1	6-3-2	10"	Brown sandy clay and cinders, fill, moist - medium stiff.												
	4	2	3-2-2	14"	do												
982.7	6	3	2-3-4	10"	Brown sandy silt, little gravel, moist - medium stiff.	14	9	41	22	14	17	2	12	A-4a			
981.2	8	4	3-3-3	16"	Brown silty sand, trace of gravel, moist - loose.	8	40	31	8	13	25	10	12	A-2-4			
978.2	10																
	12	5	3-4-3	16"	Brown fine sand, little coarse sand, trace of gravel, trace of silt, moist - loose.	5	16	70	-	-	-	-	10	A-3			
975.2	14	6	2-1-1	16"	Brown sandy gravel, trace of silt, moist - very loose.	56	31	7	-	-	-	-	13	A-1-a			
973.7	16	7	2-2-2	14"	Brown gravelly sand, trace of silt, moist - loose.	9	42	44	-	-	-	-	8	A-1-b			
	18	8	2-1-2	16"	do	9	41	39	6	5	-	0	18	A-1-b			
968.2	20	9	3-4-9	8"	Brown fine sand, some coarse sand, little gravel, very moist - medium dense.	15	30	46	-	-	-	-	16	A-3			
965.2	22																
	24																
	26	10	3-5-5	10"	Brown fine sand, little silt, trace of gravel, moist - medium dense.	2	0	77	17	4	-	0	18	A-3a			
	28																
957.7	30	11	8	5"	Gray fine and coarse sand, some silt, trace of gravel, wet - medium dense.	4	8	54	27	7	-	0	19	A-3a			
	32	12	5-6	5"	Gray silt, little fine sand, trace of gravel, wet - medium dense.	3	0	18	71	8	-	0	17	A-4b			
	34																

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LOG OF BORING Page 2 of 3

DATE STARTED 5-18-61 SAMPLER: TYPE SPOON DIA. 2" O.D. WATER ELEV. IMMEDIATE Wet @ 17.5' CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-19-61 CASING: LENGTH 74'-0" DIA. 3.5" I.D. AFTER 60 HOURS PROJECT: Akron Expressway, Sum. 18-0506
 BORING No. 8 STATION AND OFFSET 48+48, 76' Rt. of Centerline of SURFACE ELEV. 988.2
 Caved Dry @ 31' Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics					SMTL CLASS						
						% AGG.	% C.S.	% F.S.	% SILT	% CLAY		L.L.	P.I.	W.C.			
956.2	34																
	36	13	7-4-6	15"	Gray sandy silt with silt lenses, some sand, little gravel, moist - medium dense.	15	4	26	36	19	18	5	16	A-4a			
	38																
946.2	40	14	9-10-13	3"	Gray sandy silt, little gravel, moist - medium stiff.	15	12	12	36	25	21	6	17	A-4a			
	42																
	44																
	46	15	12-9-10	12"	Gray silt, little sand, little gravel, moist - medium dense.	11	3	7	50	29	23	6	16	A-4b			
	48																
936.2	50	16	5-5-6	13"	Gray silt, trace of fine sand, trace of gravel, wet - medium dense.	1	0	10	73	16	20	1	22	A-4b			
	52																
	54																
930.2	56	17	5-8-13	13"	Gray sandy silt, trace of gravel, wet - medium dense.	1	5	42	42	10	-	0	16	A-4a			
	58																
	60	18	16-22-28	16"	Gray silt, little fine sand, moist - dense.	0	0	14	58	28	19	2	18	A-4b			
926.2	62																
	64																
	66	19	45-50-68	12"	Gray gravelly sand, with clay seams, little silt, moist - very dense.	35	15	25	17	8	16	2	12	A-1-b			
920.2	68																

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TESTING ENGINEERS AND SOILS CONSULTANTS

LOG OF BORING Page 3 of 3

Split

DATE STARTED 5-18-61 SAMPLER TYPE SPOON DIA. 2" O.D. WATER ELEV. IMMEDIATELY @ 17.5' CLIENT: City of Akron, Ohio
 DATE COMPLETED 5-19-61 CASING LENGTH 74.0' AFTER 60 HOURS PROJECT: Akron Expressway, Sum. 18-0506
 BORING No. 8 STATION AND OFFSET 48+28.76' Pt. of Centerline of SURFACE ELEV. 988.2 Over Manchester Rd. Part 13

ELEV.	DEPTH	SAMPLE No.	STD. PEN. (N)	% REC.	DESCRIPTION	Physical Characteristics						SHTL. CLASS					
						% ARG.	% C.S.	% F.S.	% SILT	% CLAY	LL		PL	W.C.			
920.2	68																
	70	20	20-25-35	8%	Gray sandy silt, some shale and limestone fragments, moist - stiff.	23	7	15	37	18	19	4	15	A-4a			
914.2	74																
	76																
	78	21	NM	67%	Gray, hard, siliceous, shale (core consists of few broken to 2 1/2" pieces - avg. 2" core indicates heavy weathering at 76.5' with other seams).												
909.2	80				Boring completed.												

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DATE STARTED 11-4-79 SAMPLER; TYPE S.S. DIA. 2.0" O. D. WATER ELEVATION
 DATE COMPLETED 11-4-79 CASING; LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 950.5
 BORING NUMBER 4-S CORE BARREL; TYPE SIZE AFTER HRS. BACKFILLED
 STATION & OFFSET 113+00, 14, RT. B.L. RAMP "EN" SURFACE ELEVATION 968.0

ELEV.	DEPTH	STN PEN (N)	DESCRIPTION	SA NO	PHYSICAL CHARACTERISTICS								
					% AGG CS	% FS	% SILT	% CLAY	LI	PI	WC		
968.0	0		BROWN SANDY SILTY CLAY WITH SOME GRAVEL, SAND, AND ROCK FRAGMENTS, (FILL), MOIST-STIFF	1								17.4	
963.0	2	3-4-7											
	4	6-7-8											
	6	5-12-12											
958.0	8	5-4-4	BROWN SANDY SILTY CLAY WITH SOME GRAVEL, CINDERS, AND CONCRETE FRAGMENTS (FILL), MOIST-STIFF	2								5.0	
	10												
	12	7-8-9											
950.5	14	9-10-12	BROWN FINE TO COARSE SAND WITH A LITTLE GRAVEL, MOIST-MEDIUM DENSE	3								5.6	
	16	12-14-16											6.5
	18	7-7-7											
948.0	20												21.9
943.0	22	6-8-10	GRAY SILTY FINE SAND, WET - MEDIUM DENSE	4									
	24												
	26	8-13-16											
	28												
933.0	30	9-15-23	GRAY FINE SAND, WET-DENSE	5									
	32												
	34												
	36	10-14-20											17.6
	38		GRAY FINE SAND WITH A LITTLE FINE GRAVEL, WET - DENSE	6									
	40												
	42	10-16-22											
	44												
918.0	46	14-21-28	GRAY FINE SAND, WET - VERY DENSE	7									
916.5	48												
	50	16-23-34										21.5	

BORING COMPLETED

ARVIN INHERBELT
SUN 94-00.00

7
40
4
6

DATE STARTED 10-10-19 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION IMMEDIATE 849.6
 DATE COMPLETED 10-11-19 CASING LENGTH H.S.A. DIA. 3.5" I.D. AFTER 24 HOURS 19.7'
 BORING NUMBER 5-5 CORE BARREL TYPE SIZE SURFACE ELEVATION 893.6
 STATION & OFFSET 11400.00 RT. BL. RAMP "R"

DATE STARTED 11-4-19 SAMPLER TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION IMMEDIATE 850.1
 DATE COMPLETED 11-4-19 CASING LENGTH H.S.A. DIA. 3.5" I.D. AFTER 24 HOURS 19.7'
 BORING NUMBER 4-5 CORE BARREL TYPE SIZE SURFACE ELEVATION 893.6
 STATION & OFFSET 113-00.14 RT. B.L. RAMP "R" HRS. BACKFILLED

ELEV. DEPTH	STN. PEN. (ft)	DESCRIPTION	PHYSICAL CHARACTERISTICS
			SA % NO MOISTURE ES SILT CLAY PI MC
893.0	0	BROWN SANDY SILTY CLAY WITH SOME GRAVEL, SAND, AND ROCK FRAGMENTS (FILL), MOIST-STIFF	1 VISUAL 17.4
893.0	2		
893.0	4		
893.0	6	BROWN SANDY SILTY CLAY WITH SOME GRAVEL, CONCRETE AND CONCRETE FRAGMENTS (FILL), MOIST-STIFF	2 VISUAL 5.0
893.0	8		
893.0	10		
893.0	12	BROWN FINE TO COARSE SAND WITH A LITTLE GRAVEL, MOIST-MEDIUM DENSE	3 VISUAL 5.6
893.0	14		
893.0	16		
893.0	18		
893.0	20	GRAY SANDY SILT, NET - MEDIUM DENSE	6 0 0 21 10 9 N.P. - 20.9
893.0	22		
893.0	24		
893.0	26	GRAY FINE SAND, NET-MEDIUM DENSE	8 VISUAL
893.0	28		
893.0	30		
893.0	32	GRAY FINE SAND, NET-MEDIUM DENSE	9 VISUAL
893.0	34		
893.0	36		
893.0	38		
893.0	40		
893.0	42		
893.0	44		
893.0	46		
893.0	48		
893.0	50	GRAY FINE SAND, NET-VERY DENSE	13 VISUAL 21.5

BORING COMPLETED

ELEV. DEPTH	STN. PEN. (ft)	DESCRIPTION	PHYSICAL CHARACTERISTICS
			SA % NO MOISTURE ES SILT CLAY PI MC
893.6	0	BROWN SANDY SILTY CLAY WITH SOME SANDSTONE FRAGMENTS (FILL), MOIST - VERY STIFF	1 VISUAL 14.5
893.6	2		
893.6	4	DARK BROWN SANDY SILTY CLAY WITH SOME SANDSTONE FRAGMENTS, TRACE DRINKING FILL, MOIST - VERY STIFF	2 VISUAL 12.2
893.6	6		
893.6	8	BROWN SILTY FINE TO COARSE SAND AND GRAVEL, MOIST - MEDIUM DENSE	3 VISUAL 9.7
893.6	10		
893.6	12		
893.6	14		
893.6	16		
893.6	18		
893.6	20	BROWN FINE TO COARSE SAND AND GRAVEL, VERY MOIST - MEDIUM DENSE	4 47 23 15 9 6 N.P. 10.7
893.6	22		
893.6	24		
893.6	26		
893.6	28		
893.6	30		
893.6	32		
893.6	34		
893.6	36		
893.6	38		
893.6	40		
893.6	42		
893.6	44		
893.6	46		
893.6	48		
893.6	50		
893.6	52	GRAY FINE SAND, NET - DENSE	15 VISUAL 19.0

BORING COMPLETED

THE H. C. MULLING COMPANY
 GEOTECHNICAL ENGINEERS
 AIRPORT ROAD CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
 REMAINING WALL BETWEEN SOUTH
 STREET & RAMP "R"
 STATION 109-55 TO 114-20
 SEE ARVIN INHERBELT SUN-59-00-00

BORING DATA
 BORING BY: JKS
 CHECKED BY: JKS
 DATE: 4/7/80

SUM-76 / 77 / 8 -
 8.24 / 9.74 / 0.00

SOIL PROFILE
 BRIDGE OVER BOWERY
 BORING LOG S-005-0-79

DRAWN SM
 CHECKED PAN

159
 182

DATE STARTED 10-10-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
 DATE COMPLETED 10-10-79 CASING: LENGTH H.S.A O.A. 3.5' L.D. IMMEDIATE 19.0'
 BORING NUMBER 6-S CORE BARREL: TYPE _____ AFTER 24 HOURS 18.2'
 STATION & OFFSET 114+81 7' RT. BL RAMP EN SURFACE ELEVATION 970.1

ELEV.	DEPTH	STN. PEN (N)	DESCRIPTION	SA NO.	PHYSICAL CHARACTERISTICS															
					% AGG.	% CS	% FS	% SILT	% CLAY	LI	PI	WC								
970.1	0																			
967.6	2	4-18-6	DARK BROWN SANDY SILTY CLAY W/SOME GRAVEL, CINDERS, AND ROCK FRAGMENTS (FILL). MOIST - VERY STIFF	1						VISUAL										11.4
965.1	4	11-12-14	BROWN SANDY SILTY CLAY W/SOME GRAVEL (FILL), MOIST - VERY STIFF	2						VISUAL										12.0
962.6	6	4-4-5	GRAY AND BROWN SANDY SILT W/SOME CLAY AND SANDSTONE FRAGMENTS, (FILL) MOIST - STIFF	3						VISUAL										
960.1	8	6-7-6	BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST - MEDIUM DENSE	4						VISUAL										
957.6	10	3-3-4	GRAY SILTY FINE SAND, TRACE GRAVEL, MOIST - LOOSE	5						VISUAL										
952.6	12	7-7-7	GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE	6						VISUAL										
951.1	14	7-7-8	DO	7						VISUAL										
951.1	16	7-7-8	DO	8						VISUAL										
945.1	18	5-6-7	GRAY SILTY FINE SAND, MOIST - MEDIUM DENSE	9						VISUAL										
945.1	20	6-6-6	DARK BROWN FINE TO COARSE SAND W/SOME GRAVEL, WET - MEDIUM DENSE	10						VISUAL										17.8
945.1	22	6-6-6	DO	11						VISUAL										
945.1	24	12-12-14	DO	12						VISUAL										
945.1	26	4-7-11	GRAY FINE SAND, WET - MEDIUM DENSE	13						VISUAL										
945.1	28			14						VISUAL										
945.1	30			15						VISUAL										
945.1	32	12-12-14	DO	16						VISUAL										
945.1	34			17						VISUAL										
945.1	36	6-11-15	GRAY FINE SAND, WET - MEDIUM DENSE	18						VISUAL										
945.1	38			19						VISUAL										
945.1	40	7-13-18	GRAY FINE SAND, WET - DENSE	20						VISUAL										
945.1	42			21						VISUAL										
945.1	44			22						VISUAL										
945.1	46	20-30-36	GRAY FINE SAND, WET - VERY DENSE	23						VISUAL										
945.1	48			24						VISUAL										
945.1	50	10-18-27	GRAY FINE SAND, WET - DENSE	25						VISUAL										
945.1	52			26						VISUAL										
945.1	54			27						VISUAL										
945.1	56	12-12-28	DO	28						VISUAL										
945.1	58			29						VISUAL										
945.1	60			30						VISUAL										
945.1	62	12-23-39	GRAY SILTY FINE SAND, WET - VERY DENSE	31						VISUAL										
945.1	64			32						VISUAL										
945.1	66	18-47-68	DO	33						VISUAL										
945.1	68			34						VISUAL										
945.1	70			35						VISUAL										
945.1	72	11-18-26	GRAY SILTY FINE SAND, WET - DENSE	36						VISUAL										
945.1	74			37						VISUAL										
945.1	76	12-21-36	GRAY SILTY FINE SAND, WET - VERY DENSE	38						VISUAL										
945.1	78			39						VISUAL										

BORING COMPLETED

DATE STARTED 9-15-79 SAMPLER: TYPE S.S DIA. 2.0'' O.D. WATER ELEVATION
 DATE COMPLETED 9-16-79 CASING: LENGTH H.S.A. DIA. 3.5'' I.D. IMMEDIATE 20.0'
 BORING NUMBER Z-S CORE BARREL: TYPE _____ SIZE _____ AFTER 24 HOURS 18.0'
 STATION & OFFSET 115+74 13' LT. BL RAMP EN SURFACE ELEVATION 969.9

ELEV.	DEPTH	STN. PEN (N)	DESCRIPTION	SA NO.	% AGG	% CS	% FS	% SILT	% CLAY	CHARACTERISTICS	LL	PI	WC
969.9	0			1						VISUAL			
967.4	2	7-8-5	BLACKTOP AND SAND W/SOME GRAVEL (FILL). MOIST - MEDIUM DENSE							VISUAL			
964.9	4	3-3-3	BROWN SANDY SILTY CLAY W/SOME GRAVEL AND SAND (FILL). MOIST - MEDIUM STIFF	2						VISUAL			13.8
962.4	6	1-1-2	BROWN SILTY FINE SAND W/SOME ORGANICS. MOIST - VERY LOOSE	3						VISUAL			13.6
959.9	8	2-3-4	BROWN SILTY FINE TO COARSE SAND AND GRAVEL. MOIST - LOOSE	4						VISUAL			13.4
957.4	10	3-3-3	BROWN FINE TO COARSE SAND AND GRAVEL. MOIST - LOOSE	5	47	32	11	6	4	N.P.			9.4
	12	6-6-8	BROWN FINE TO COARSE SAND AND GRAVEL. MOIST - MEDIUM DENSE	6						VISUAL			4.5
	14	6-6-7	DO	7	51	32	12	2	3				4.4
952.4	16	5-7-7	BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL. WET - MEDIUM DENSE	8						VISUAL			4.4
949.9	18	5-6-7	BROWN FINE TO COARSE SAND AND GRAVEL WET - MEDIUM DENSE	9	52	28	17	-	3				11.8
	20												
944.9	22												
	24												
	26	9-10-13	GRAY SANDY SILT W/FINE SAND SEAMS. WET - MEDIUM DENSE	10						VISUAL			14.8
	28												
	30												
	32	6-10-16	DO	11						VISUAL			18.6
	34												
934.9	36	9-9-10	GRAY SANDY SILT, WET - MEDIUM DENSE	12	0	1	35	56	8	N.P.			19.8
	38												
929.9	40												
	42	11-18-25	GRAY SILTY FINE SAND, WET - DENSE	13						VISUAL			22.4
	44												
924.9	46	19-25-30	GRAY SANDY SILT, WET - VERY DENSE	14						VISUAL			18.8
	48												
919.9	50												
	52	11-19-25	GRAY SILTY FINE SAND, WET - DENSE	15						VISUAL			17.9
	54												
	56	9-13-20	DO	16	5	4	58	25	8				6.7
	58												
909.9	60												
	62	15-24-36	GRAY SILTY FINE SAND, WET - VERY DENSE	17						VISUAL			13.3
	64												
904.9	66	13-20-27	GRAY SILTY FINE SAND, WET - DENSE	18						VISUAL			15.3
	68												
899.9	70												
	72	11-25-41	GRAY SILTY FINE SAND, WET - VERY DENSE	19						VISUAL			19.5
	74												
	76	19-40-63	DO	20						VISUAL			18.3
	78												
889.9	80												
888.4	82	9-19-34	GRAY FINE SAND, WET - VERY DENSE	21	0	1	89	-	10				20.5

BORING COMPLETED

DATE STARTED 9-14-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION 970.1
 DATE COMPLETED 9-15-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 20.0'
 BORING NUMBER 8-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 19.0'
 STATION & OFFSET 116+50 10' LT RL RAMP EN SURFACE ELEVATION 970.1

(6
11)

ELEV.	DEPTH	STN. PEN. (N)	DESCRIPTION	SA. NO.	PHYSICAL CHARACTERISTICS									
					% AGG.	% CS	% FS	% SILT	% CLAY	LL	PI	WC		
970.1	0		BROWN FINE TO COARSE SAND W/SOME GRAVEL, CINDEES AND CLAY LENSES (FILL), MOIST - MEDIUM DENSE	1						VISUAL				5.5
967.6	2	3-4-7		2						VISUAL				5.8
965.1	4	3-3-3	BROWN SILTY FINE SAND, VERY MOIST - LOOSE	3						VISUAL				
962.6	6	4-2-2	BROWN CLAYEY FINE TO COARSE SAND AND GRAVEL, MOIST - LOOSE	4						VISUAL				
955.1	8	6-6-6	BROWN FINE TO COARSE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE	5						VISUAL				
	10	3-5-7	DO	6						VISUAL				
	12	13-13-10	DO	7						VISUAL				
952.6	16	24-9-6	BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE	8	2	24	69	0	5	VISUAL				3.7
950.1	18	4-6-7	BROWN FINE SAND, MOIST - MEDIUM DENSE	9	2	28	66	0	4	VISUAL				19.4
	20	5-6-7	BROWN FINE SAND, WET - MEDIUM DENSE											
945.1	24													
	26	7-9-12	BROWN FINE SAND, TRACE GRAVEL, WET - MEDIUM DENSE	10						VISUAL				
	28													
940.1	30	9-7-11	BROWN AND GRAY FINE SAND, WET - MEDIUM DENSE	11						VISUAL				
938.6	32													
	34													
	36	6-7-9	GRAY FINE SAND, WET - MEDIUM DENSE	12						VISUAL				
	38													
930.1	40	9-15-23	GRAY FINE SAND, WET - DENSE	13						VISUAL				
	42													
	44													
	46	11-17-25	DO	14						VISUAL				
	48													
	50													
	52	10-14-22	DO	15						VISUAL				
	54													
915.1	56	11-17-25	GRAY SILTY FINE SAND, WET - DENSE	16						VISUAL				
	58													
910.1	60	14-31-39	GRAY FINE SAND, TRACE ORGANICS, WET - VERY DENSE	17						VISUAL				
	62													
	64													
905.1	66	31-74-87	GRAY FINE SAND, WET - VERY DENSE	18						VISUAL				
	68													
900.1	70	9-18-33	GRAY SANDY SILT WITH A LITTLE CLAY, VERY DENSE	19						VISUAL				
	72													
	74													
895.1	76	12-21-33	DO	20						VISUAL				
	78													

BORING COMPLETED

THE H.C. NUTTING COMPANY
 GEOTECHNICAL ENGINEERS
 AIRPORT ROAD
 CINCINNATI, OHIO

SUM-76/77/8-
8.24/9.74/0.00

SOIL PROFILE
 BRIDGE OVER BOWERY
 BORING LOG S-008-0-79

DRAWN SM
 CHECKED PAN

162
182

DATE STARTED 10/19/89 DATE COMPLETED 8-13-78 CASING LENGTH 115.0' DIA. 3.5" I.D. IMMEDIATE 20.0' BORING NUMBER 8-5 CORE BARREL TYPE SIZE AFTER 24 HOURS 18.7' STATION & OFFSET 117'-18" P.U. BL. PUMPER SURFACE ELEVATION 818.5

ELEV. (DEPTH) STN. FEET	DEPTH (N)	DESCRIPTION	S&P PHYSICAL CHARACTERISTICS					
			NO.	1	2	3	4	
818.0	2	BROWN FINE TO COARSE SAND W/ SOME GRAVEL (FILL) - MOIST - MEDIUM DENSE	1	VISUAL				
817.0	4	GRAY CLAYEY FINE SAND - MOIST - LOOSE	2	VISUAL				15.1
816.0	6	DO	3	VISUAL				14.7
815.0	8	BROWN CLAYEY FINE TO COARSE SAND W/ SOME SANDSTONE FRAGMENTS AND FINE SAND - MOIST - MEDIUM DENSE	4	VISUAL				15.6
814.0	10	GRAY FINE SAND W/ SOME GRAVEL - MOIST - MEDIUM DENSE	5	VISUAL				
813.0	12	GRAY SILTY FINE SAND - MOIST - MEDIUM DENSE	6	VISUAL				
812.0	14	GRAY FINE SAND - MOIST - MEDIUM DENSE	7	VISUAL				
811.0	16	GRAY FINE SAND - MOIST - LOOSE	8	VISUAL				
810.0	18	GRAY FINE SAND - MOIST - LOOSE	9	VISUAL				18.2
809.0	20	BROWN SILTY FINE SAND - NET - LOOSE	10	VISUAL				
808.0	22	BROWN SILTY FINE SAND - NET - MEDIUM DENSE	11	VISUAL				
807.0	24	DO	12	VISUAL				
806.0	26	DO	13	VISUAL				
805.0	28	DO	14	VISUAL				
804.0	30	DO	15	VISUAL				
803.0	32	DO	16	VISUAL				
802.0	34	DO	17	VISUAL				
801.0	36	DO	18	VISUAL				
800.0	38	DO	19	VISUAL				
799.0	40	DO	20	VISUAL				
798.0	42	DO	21	VISUAL				
797.0	44	DO	22	VISUAL				
796.0	46	DO	23	VISUAL				
795.0	48	DO	24	VISUAL				
794.0	50	DO	25	VISUAL				
793.0	52	DO	26	VISUAL				
792.0	54	DO	27	VISUAL				
791.0	56	DO	28	VISUAL				
790.0	58	DO	29	VISUAL				
789.0	60	DO	30	VISUAL				
788.0	62	DO	31	VISUAL				
787.0	64	DO	32	VISUAL				
786.0	66	DO	33	VISUAL				
785.0	68	DO	34	VISUAL				
784.0	70	DO	35	VISUAL				
783.0	72	DO	36	VISUAL				
782.0	74	DO	37	VISUAL				
781.0	76	DO	38	VISUAL				
780.0	78	DO	39	VISUAL				
779.0	80	DO	40	VISUAL				
778.0	82	DO	41	VISUAL				

BORING COMPLETED

16 40

ARON INHERBET
SUM-89-00-00

SFN. 7701799

THE H. C. MITCHELL COMPANY
GEOLOGICAL ENGINEERS
AIRPORT ROAD
CINCINNATI, OHIO

STRUCTURE FOUNDATION INVESTIGATION
BRIDGE NO. SUM-89-00-00 ARON INHERBET
PUMP "E" OVER ROBERT ST. OVER CANAL
EXISTING WEST EXPRESSWAY & RUSSELL AVE
SEC. ARON INHERBET SUM-89-00-00

BORING DATA
CHECKED BY REFERRED BY DATE
JAS CHL 7.25.80

DRAWN SM
CHECKED PAN

SOIL PROFILE
BRIDGE OVER BOWERY
BORING LOG S-009-0-79

SUM-76 / 77 / 8 -
8.24 / 9.74 / 0.00

163
182

DATE STARTED 9-21-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION: 974.2
 DATE COMPLETED 10-1-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 25.0'
 BORING NUMBER 10-S CORE BARREL: TYPE SIZE AFTER 24 HOURS 24.7'
 STATION & OFFSET 118+52 14' RT. BL RAMP "EN" SURFACE ELEVATION 974.2

ELEV.	DEPTH	STN. PEN. (N)	DESCRIPTION	SA. NO.	PHYSICAL CHARACTERISTICS												
					% AGG.	% CS	% FS	% SILT	CLAY	LU	PI	WC					
974.2	0		DARK BROWN SILTY FINE TO COARSE SAND W/SOME GRAVEL AND CLAY LENSES, TRACE SLAG (FILL), MOIST - MEDIUM DENSE	1													
	2	3-6-6		2													
	4	7-6-7	DO	3													
	6	6-6-6	DO	4													
966.7	8		BROWN FINE TO COARSE SAND W/SOME GRAVEL, ORGANICS, AND ROCK FRAGMENTS, TRACE BRICK (FILL), MOIST - MEDIUM DENSE	5													
964.2	10	6-9-4		6													
961.7	12	2-2-3	BLACK FINE TEXTURED PEAT, VERY MOIST - LOOSE	7	23	34	28	5	5								14.0
959.2	14	2-3-4	BROWN SILTY FINE SAND W/CLAY LENSES, MOIST - LOOSE	8													
	16	2-3-4	BROWN AND GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST - LOOSE	9													
	18	9-7-18	BROWN AND GRAY FINE TO COARSE SAND W/SOME GRAVEL, MOIST - MEDIUM DENSE	10													
954.2	20		BROWN AND GRAY FINE TO COARSE SAND AND GRAVEL, MOIST - MEDIUM DENSE	11													
	22	5-9-13		12													
949.2	24		GRAY FINE SAND, TRACE GRAVEL, WET - MEDIUM DENSE	13													
	26	7-9-12		14													
	28		GRAY CLAYEY SILT, WET - STIFF	15													
944.2	30			16													
	32	7-9-9		17													
	34		DO	18													
	36	6-7-9		19													
	38			20													
934.2	40		GRAY CLAYEY SILT, TRACE GRAVEL WET - VERY STIFF	21													
	42	8-10-12		22													
	44		GRAY CLAYEY SILT, WET - STIFF	23													
	46	5-8-9		24													
929.2	48			25													
	50	4-5-7		26													
	52		DO	27													
	54			28													
	56	4-6-8		29													
	58		DO	30													
914.2	60		GRAY CLAYEY SILT, TRACE GRAVEL, WET - STIFF	31													
	62	5-6-7		32													
	64		DO	33													
	66	4-4-4		34													
	68		DO	35													
904.2	70			36													

10-S CONTINUED

904.2	70													
	72	5-7-9	DO	DO	DO									
899.2	74													
	76	34-39-46	GRAY SILTY FINE SAND WITH SILT LENSES, WET-VERY DENSE											
	78													
	80													
	82	27-49-80	DO	DO	DO									
	84													
889.2	86	12-18-24	GRAY CLAYEY SILT, WET - VERY STIFF											
	88													
	90													
	92	20-37-55	DO	DO	DO									
	94													
	96	23-35-51	GRAY CLAYEY SILT WITH FINE SAND SEAMS, WET- VERY STIFF											
879.2	98													
	100													
	102	17-27-39	DO	DO	DO									
	104													
869.2	106	20-37-59	GRAY CLAYEY SILT, WET- VERY STIFF											
	108													
867.7														

BORING COMPLETED

VISUAL

VISUAL

VISUAL

VISUAL

VISUAL

VISUAL

VISUAL

VISUAL

19

20

21

22

23

24

25

26

14.9

16.7

DATE STARTED 10-1-79 SAMPLER; TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
 DATE COMPLETED 10-2-79 CASING; LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 7.5 & 17.5'
 BORING NUMBER 11-S CORE BARREL; TYPE _____ SIZE _____ AFTER 24 HRS. 17 W.
 STATION & OFFSET 120+17, 14' RT. B.L. RAMP "EN" SURFACE ELEVATION 972.3

ELEV.	DEPTH	STN PEN (N)	DESCRIPTION	SA NO.	PHYSICAL CHARACTERISTICS																
					% AGG CS	% FS	% SILT	% CLAY	LL	PI	WC										
972.3	0		BROWN SILTY FINE TO COARSE SAND WITH SOME GRAVEL TRACE SLAG AND CLAY LENSES (FILL), MOIST - MEDIUM DENSE	1																	
967.3	2	4-11-17	DO	2																	10.9
964.8	4	2-11-9	DO	3																	
962.3	6	17-17-9	SLAG AND BRICK FRAGMENTS WITH SOME SAND AND GRAVEL (FILL), MOIST - MEDIUM DENSE	4																	15.0
959.8	8	21-11-7	BROWN AND GRAY FINE SAND WITH LITTLE CONCRETE FRAGMENTS (FILL) WET - MEDIUM DENSE	5																	11.8
957.3	10	4-5-5	BROWN SILTY FINE SAND WITH A LITTLE GRAVEL, MOIST - MEDIUM DENSE	6																	6.0
954.8	12	3-4-8	BROWN FINE SAND, MOIST - MEDIUM DENSE	7																	4.8
	14	5-9-12	BROWN FINE TO COARSE SAND, TRACE GRAVEL, MOIST- MEDIUM DENSE	8																	16.3
	16	7-9-10	GRAY SANDY SILT, WET - MEDIUM DENSE	9																	15.6
	18	5-9-12	DO	10																	16.0
	20		DO																		
	22		DO																		
	24		DO																		
	26	5-8-9	DO																		
	28		DO																		
942.3	30																				
	32																				

11- S CONTINUED

	32	5-7-10	GRAY SILT, WET- MEDIUM DENSE	11	0	1	28	58	13	N. P.	19.9
937.3	34										
	36	6-8-11	GRAY SILT WITH SOME CLAY, WET - MEDIUM DENSE	12	0	0	2	78	29	N. P.	25.1
932.3	38										
	40										
	42	17-18-19	GRAY FINE SAND, WET-DENSE	13	1	12	73	10	4		13.4
	44										
	46	17-23-26	DO	14			VISUAL				10.2
	48										
922.3	50										
	52	6-8-10	GRAY CLAYEY SILT, MOIST-STIFF	15			VISUAL				15.7
917.3	54										
	56	9-12-15	GRAY SILT WITH A LITTLE CLAY AND GRAVEL	16			VISUAL				15.4
	58	S-T	WET - MEDIUM DENSE	S-1	17	5	12	47	19	N. P.	15.3
	60	5-7-8		17			(CONSOLIDATION TEST) VISUAL				15.8
911.8	62	4-7-10	GRAY CLAYEY SILT WITH SAND LENSES, WET- VERY STIFF	18			VISUAL				12.2
	64										
	66	32-11-14	DO	19			VISUAL				15.4
	68										
	70										
	72	5-7-10	DO	20			VISUAL				15.7
892.3	74										
	76	12-10-13	DO	21			VISUAL				16.4
	78										
	80										
	82	12-14-21	GRAY CLAYEY SILT, VERY MOIST- VERY STIFF	22			VISUAL				16.5
	84										
882.3	86	12-15-20	DO	23			VISUAL				
	88										
	90										
	92	16-28-28	GRAY SILTY FINE SAND, WET - VERY DENSE	24			VISUAL				15.2
94											

PORING COMPLETED

DATE STARTED 10-16-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION
 DATE COMPLETED 10-17-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 10.0'
 BORING NUMBER 14-S CORE BARREL: TYPE NXM SIZE _____ AFTER 24 HOURS 9.5'

STATION & OFFSET 127+45 16' LT. BL RAMP "EN" SURFACE ELEVATION 987.5

ELEV.	DEPTH	STN. PEN. (N)	DESCRIPTION	PHYSICAL CHARACTERISTICS											
				SA NO	% AGG	% CS	% FS	% SILT	% CLAY	LL	PI	WC			
982.5	0		DARK BROWN SANDY SILTY CLAY W/SOME CINDERS AND SANDSTONE FRAGMENTS, TRACE ORGANICS (FILL), MOIST - STIFF	1					VISUAL						13.6
980.0	2	2-7-8		2					VISUAL						12.3
977.5	4	6-9-12	BROWN CLAYEY FINE SAND W/LITTLE GRAVEL, MOIST - MEDIUM DENSE	3					VISUAL						13.8
972.5	6	6-6-9	BROWN SILTY FINE SAND, TRACE GRAVEL, MOIST - MEDIUM DENSE	4					VISUAL						11.8
970.0	8	6-6-6	DO	5	10	20	49	12	9						20.0
970.0	10	4-4-4	BROWN SILTY FINE SAND, TRACE GRAVEL, VERY MOIST - LOOSE	6					VISUAL						18.7
967.5	12	7-7-10	GRAY SILTY FINE SANDY W/A LITTLE GRAVEL, VERY MOIST - MEDIUM DENSE	7					VISUAL						18.2
957.5	14	8-8-9	GRAY CLAYEY SILT WITH SOME SAND, WET - STIFF	8					VISUAL						17.0
957.5	16	5-7-7	DO	9					VISUAL						16.3
957.5	18	5-6-7	DO	10	2	4	13	57	24	N.P					16.7
957.5	20	4-5-6	GRAY SILT WITH SOME CLAY, LITTLE SAND, TRACE GRAVEL, WET - MEDIUM DENSE	11					VISUAL						
952.5	22	126-293	GRAY VERY SOFT SHALE												
947.5	24														
947.5	26														
947.5	28														
947.5	30														
947.5	32														
947.5	34														
947.5	36	CORE RECOVERY	INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE, SHALE, 80%, SILICEOUS SHALE, 20% OCCURRING IN 1/2" TO 3" LAYERS, AVERAGE 1"												
942.5	38	97%													
942.5	40														

BORING COMPLETED

DATE STARTED 11-6-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION IMMEDIATE 12.5'
 DATE COMPLETED 11-6-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. AFTER 24 HOURS 9.8'
 BORING NUMBER 15-S CORE BARREL: TYPE NXM SIZE

STATION & OFFSET 128+19 10' LT BL RAMP "EN" SURFACE ELEVATION 984.7

ELEV.	DEPTH STN (N)	DESCRIPTION	SA. NO.	PHYSICAL CHARACTERISTICS						
				AGG %	CS %	FS %	SILT CLAY %	LL PI	WC	
984.7	0		1				VISUAL			14.8
982.2	2	BROWN SILTY FINE SAND W/SANDSTONE FRAGMENTS (FILL) MOIST - MEDIUM DENSE	2				VISUAL			11.5
979.7	4	BROWN SANDY SILTY CLAY W/TOPSOIL AND GRAVEL (FILL), MOIST - STIFF	3	4	22	56	5	13	N.P.	11.9
977.2	6	BROWN CLAYEY FINE SAND, TRACE FINE GRAVEL, VERY MOIST - MEDIUM DENSE	4	0	13	62	13	12		15.4
974.7	8	BROWN SILTY FINE SAND, VERY MOIST - MEDIUM DENSE	5	0	2	38	47	13	N.P.	23.8
972.2	10	BROWN SANDY SILT WITH LITTLE CLAY, MOIST - LOOSE	6				VISUAL			21.8
969.7	12	GRAY CLAYEY SILT, WET - MEDIUM STIFF	7	0	0	22	69	9	N.P.	19.6
967.2	14	GRAY SANDY SILT, MOIST - LOOSE	8				VISUAL			13.7
	16	GRAY SANDY SILT WITH LITTLE CLAY VERY MOIST - MEDIUM DENSE	9				VISUAL			17.1
	18	DO DO DO	10				VISUAL			6.9
960.7	20	GRAY VERY SOFT SHALE								
	22									
	24									
	26									
	28									
955.7	30	INTERBEDDED GRAY FIRM SHALE AND GRAY HARD SILICEOUS SHALE. SHALE 65% SILICEOUS SHALE 35% OCCURRING IN 1/2" TO 4" LAYERS, AVERAGE 2" HIGH ANGLE JOINTING EVIDENCED.								
	32	CORE RECOVERY								
950.7	34	100%								

BORING COMPLETED

DATE STARTED 10-13-79 SAMPLER: TYPE S.S. DIA. 2.0" O.D. WATER ELEVATION _____
 DATE COMPLETED 10-14-79 CASING: LENGTH H.S.A. DIA. 3.5" I.D. IMMEDIATE 17.5'
 BORING NUMBER 19-S CORE BARREL: TYPE _____ SIZE _____ AFTER 24 HOURS 17.2'
 STATION & OFFSET 123+92 4' RT. BL RAMP SW SURFACE ELEVATION 975.2

ELEV. DEPTH	STN. PEN (N)	DESCRIPTION	SA. NO.	PHYSICAL CHARACTERISTICS																				
				% AGG. CS	% FS	% LT	% CLAY	LL	PI	WC														
975.2	0	BROWN CLAYEY FINE SAND W/SOME SANDSTONE FRAGMENTS, TRACE GRAVEL (FILL), MOIST - MEDIUM DENSE	1																					
	2		4-14-9	2																				
970.2	4	BROWN SILTY FINE SAND W/A LITTLE GRAVEL, MOIST - MEDIUM DENSE	3																					
	6		5-6-6	4																				
965.2	10	BROWN FINE SAND, TRACE GRAVEL, MOIST - LOOSE	5	4	15	0	7																	
	12		3-4-5	6																				
962.7	14	GRAY SILTY FINE SAND, MOIST - MEDIUM DENSE	7																					
	16		4-5-7	8																				
957.7	18	GRAY SILTY FINE SAND, WET - MEDIUM DENSE	9																					
	20		5-5-7	10																				
	22	GRAY SILTY FINE SAND, WET - DENSE	11																					
	24		7-9-12	12																				
	26	GRAY CLAYEY SILT, VERY MOIST - STIFF	13																					
	28		8-10-12	14																				
	30	GRAY SILT WITH SOME CLAY AND LITTLE SAND, VERY MOIST - MEDIUM DENSE	15	C	0	14	57	29	N.P.	19.4														
	32		6-7-9	16																				
	34	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - STIFF	17	4	6	16	50	24	N.P.	17.7														
	36		7-8-10	18																				
	38	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	19																					
	40		4-5-6	20	1	4	81	9	5		20.8													
	42	GRAY FINE SAND W/SILT SEAMS, TRACE GRAVEL, WET - VERY DENSE	21																					
	44		3-6-9																					
930.2	46	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - STIFF	22																					
	48		7-9-11																					
925.2	50	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	23																					
	52		24-43-7																					
	54	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - STIFF	24																					
	56		7-8-10																					
920.2	58	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	25																					
	60		4-5-6																					
	62	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	26																					
	64		3-6-9																					
	66	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - STIFF	27																					
	68		7-9-11																					
	70	GRAY FINE SAND W/SILT SEAMS, TRACE GRAVEL, WET - VERY DENSE	28																					
	72		31-69-90																					
	74	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	29																					
900.2	76		24-43-7																					
	78	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	30																					
	80		7-9-11																					
	82	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	31																					
	84		3-6-9																					
890.2	86	GRAY CLAYEY SILT WITH SOME SAND, TRACE GRAVEL, VERY MOIST - MEDIUM DENSE	32																					
	88		7-9-11																					

19-S CONTINUED

850.2	86	28-93-59	GRAY FINE SAND, WET - VERY DENSE	22	VISUAL	16.1
	88					
885.2	90		GRAY FINE SAND, WET - VERY DENSE	23	VISUAL	19.7
	92	37-57-75				
	94					
	96	18-41-65				
875.2	98		GRAY SILTY FINE SAND, WET - VERY DENSE	24	VISUAL	17.5
	100	00				
873.7	102	21-40-41	GRAY SILTY FINE SAND, WET - VERY DENSE	25	VISUAL	18.3

BORING COMPLETED

PROJECT: INTERSTATE 76/77 TYPE: ROADWAY		DRILLING FIRM / OPERATOR: DLZ-AD / DEARING SAMPLING FIRM / LOGGER: DLZ / MIDDLETON		DRILL RIG: '19 CME 75-079-797 HAMMER: CME AUTOMATIC		STATION / OFFSET: 266+15.64 RT.		EXPLORATION ID B-009-1-19								
PID: 102329 SFN:		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 8/15/19		ALIGNMENT: 1012.8 (MSL) EOB: 60.0 ft.		PAGE 1 OF 1								
START: 10/30/19 END: 10/30/19		SAMPLING METHOD: SPT		ENERGY RATIO (%): 83.7		COORD: 509425 6900 N, 2230486 8800 E										
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	REC N ₆₀	HP (tsf)	GRADATION (%)				ATTERBERG			ODOT CLASS (G)	HOLE SEALED	
							GR	CS	FS	SI	CL	LL	PL	PI	WC	
LOOSE, BROWN, COARSE AND FINE SAND, AND GRAVEL, TRACE SILT, TRACE CLAY, CONTAINS ASPHALT FRAGMENTS, MOIST	1012.8	1	6	2	6	89	42	23	27	-	8	-	-	-	13	
LOOSE, GRAY, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, DAMP	1010.3	3	2	2	6	67	12	12	15	43	18	24	18	6	13	A-4a(5)
LOOSE GRAY AND BROWN, SANDY SILT, SOME GRAVEL, LITTLE CLAY, DAMP	1008.8	4	2	2	6	83	22	9	14	36	19	22	15	7	12	A-4a(4)
VERY LOOSE, GRAY, SANDY SILT, SOME GRAVEL, SOME CLAY, CONTAINS SHALE FRAGMENTS, DAMP	1004.3	9	2	1	4	89	21	9	17	33	20	22	15	7	12	A-4a(4)
MEDIUM DENSE, BROWN, SANDY SILT, SOME GRAVEL, LITTLE CLAY, DAMP	1001.8	11	1	5	14	72	21	7	10	43	19	26	18	8	12	A-4a(5)
MEDIUM STIFF, GRAY, SILT AND CLAY, LITTLE GRAVEL, SOME SAND, DAMP	999.3	14	3	3	8	56	13	9	13	51	14	29	18	11	13	A-6a(6)
LOOSE, BROWN TO GRAY, SANDY SILT, SOME GRAVEL, LITTLE CLAY, DAMP	996.8	16	1	3	8	106	-	-	-	-	-	-	-	-	11	A-4a(V)
DENSE, BROWN, SANDY SILT, LITTLE GRAVEL, SOME CLAY, CONTAINS SANDSTONE FRAGMENTS, DAMP	989.3	24	8	17	38	94	19	18	18	25	20	NP	NP	NP	10	A-4a(2)
MEDIUM DENSE, BROWN, FINE SAND, TRACE GRAVEL, TRACE SILT, TRACE CLAY, DAMP	984.3	29	4	7	20	94	1	6	83	-	10	-	-	-	4	A-3(V)
MEDIUM DENSE, BROWN, SANDY SILT, TRACE GRAVEL, LITTLE CLAY, DAMP	979.3	34	6	10	28	100	8	5	43	30	14	NP	NP	NP	14	A-4a(2)
LOOSE TO MEDIUM DENSE, BROWN, SANDY SILT, SOME GRAVEL, TRACE CLAY, DAMP	974.3	39	4	11	31	94	26	16	22	24	12	19	16	3	10	A-4a(0)
VERY DENSE, GREY, STONE FRAGMENTS SHALE	964.3	48	60/2'	100%	SS-16										14	Rock(V)
SANDSTONE, GREY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE GRAINED, LAMINATED TO THIN BEDDED, HIGHLY FRACTURED; RQD 25%.	962.8	51	25		92	NO2-1 NO2-R-1										CORE
SANDSTONE, GREY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE GRAINED, LAMINATED TO THIN BEDDED, HIGHLY FRACTURED; RQD 53%.	959.8	55	53		95	NO2-2 NO2-R-2										CORE
SANDSTONE, GREY, SLIGHTLY TO MODERATELY WEATHERED, SLIGHTLY TO MODERATELY STRONG, FINE GRAINED, LAMINATED TO THIN BEDDED, HIGHLY FRACTURED	954.8	58	63		100	NO2-3 NO2-R-3										CORE
NOTES: NONE	952.8	59														

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT

STANDARD ODOT BORING LOG (11 X 17) - OH DOT GDT - 8/26/20 17:25 - P:\102329_SUM-76_77\Design\GEO\GEO\TECHNICAL\LABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PROJECT: INTERSTATE 76/77 TYPE: ROADWAY		DRILLING FIRM / OPERATOR: DLZ-AD / DEARING SAMPLING FIRM / LOGGER: DLZ / MIDDLETON		DRILL RIG: '19 CME 75-079-797 HAMMER: CME AUTOMATIC		STATION / OFFSET: 268+29.65' LT.		EXPLORATION ID B-009-2-19							
PID: 102329 SFN:		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 8/15/19		ALIGNMENT: 1006.3 (MSL) EOB: 98.9 ft.		PAGE 1 OF 2							
START: 10/28/19 END: 10/29/19		SAMPLING METHOD: SPT		ENERGY RATIO (%): 83.7		COORD: 509615.1100 N, 2230650.7300 E									
MATERIAL DESCRIPTION AND NOTES		ELEV.		SPT / RQD		REC SAMPLE (%)		HP (tsf)		GRADATION (%)		ATTERBERG		HOLE SEaled	
		1006.3		DEPTHS		ID		GR		GR		GR		WC	
		1005.3		1		SS-1		7		59		12		- 22 - 10 A-3a (V)	
		1003.8		2		SS-2		-		-		-		- 15 A-4a (V)	
		1000.8		3		SS-3		15		8		15		37 24 16 8 12 A-4a (5)	
				4		SS-4		6		4		12		46 32 28 16 15 A-6a (9)	
				5											
				6											
				7											
				8											
				9		SS-5		-		-		-		- 20 A-6a (V)	
				10											
		995.3		11											
				12											
		992.8		13											
				14		SS-7		-		-		-		- 11 A-4b (V)	
				15											
				16											
				17		SS-8		-		-		-		- 12 A-4b (V)	
				18											
				19		SS-9		5		4		13		50 28 28 16 15 A-6a (9)	
				20											
				21											
				22		SS-10		-		-		-		- 15 A-6a (V)	
				23											
				24		SS-11		-		-		-		- 14 A-6a (V)	
				25											
				26											
				27											
				28											
		977.8		29		SS-12		21		34		30		- 15 - 7 A-3a (V)	
				30											
				31											
				32											
				33											
				34		SS-13		-		-		-		- 5 A-3a (V)	
				35											
				36											
				37											
				38											
				39		SS-14		-		-		-		- 7 A-3a (V)	
				40											
				41											
				42											
				43											
		962.8		44		SS-15		0		0		35		56 9 NP NP 20 A-4b (6)	
				45											
				46											
				47											
				48											
		957.8		49		SS-16		6		15		73		- 6 - 19 A-3 (V)	
				50											
				51											
				52											
				53											
		952.8		54		SS-17		43		34		10		- 13 - 10 A-1-b (V)	
				55											
				56											
				57											
				58											
		947.8		59		SS-18		78		40		-		- 21 A-4b (V)	
				60											

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:25 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\RDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PID: 102329	SFN:	PROJECT: INTERSTATE 76/77	STATION/OFFSET: 268+29.65' LT.	START: 10/28/19	END: 10/29/19	PG 2 OF 2			B-009-2-19						
						GR	CS	FS							
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ROD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)			ATTERBERG			ODOT CLASS (GI)	HOLE SEALED
								CL	LL	PL	PI	WC			
DENSE, GRAY, SILT, LITTLE SAND, LITTLE CLAY, DAMP (continued)		946.3	61												
			62												
		937.8	63												
			64	8	33	89	SS-19	-	0	12	77	11	NP	NP	21
LOOSE TO MEDIUM DENSE, GRAY, SILT, LITTLE TO SOME SAND, TRACE GRAVEL, LITTLE CLAY, WET		936.8	65												
			66												
		937.8	67												
			68												
		937.8	69	8	20	100	SS-20	-	-	-	-	-	-	25	A-4b (V)
			70												
		937.8	71												
			72												
		937.8	73												
			74	4	3	78	SS-21	-	-	-	-	-	-	-	27
		937.8	75												
			76												
		937.8	77												
			78												
		937.8	79	1	4	67	SS-22	-	-	-	-	-	-	21	A-4b (V)
			80												
		937.8	81												
			82												
		937.8	83												
			84	4	11	94	SS-23	-	8	18	5	50	19	23	19
		937.8	85												
			86												
		937.8	87												
			88												
		937.8	89	1	6	89	SS-24	-	-	-	-	-	-	19	A-4b (V)
			90												
		937.8	91												
			92												
		937.8	93												
			94	50/5"		100	SS-25	-	-	-	-	-	-	-	9
		937.8	95												
			96												
		937.8	97												
			98												
			EOB			100	SS-26	-	-	-	-	-	-	9	A-4b (V)

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:25 - P:\102329_SUM-76_77\DESIGN\GEO\GEO\TECHNICAL\ABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT

PROJECT: INTERSTATE 76/77 TYPE: ROADWAY		DRILLING FIRM / OPERATOR: DLZ-AD / CONRAD		DRILL RIG: '19 CME 75-079-797		STATION / OFFSET: 288+89.85' LT.		EXPLORATION ID										
PID: 102329 SFN:		SAMPLING FIRM / LOGGER: DLZ / MIDDLETON		HAMMER: CME AUTOMATIC		ALIGNMENT:		B-014-1-19										
START: 10/22/19 END: 10/25/19		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 8/15/19		ELEVATION: 987.4 (MSL) EOB: 100.0 ft.		PAGE										
		SAMPLING METHOD: SPT		ENERGY RATIO (%): 83.7		COORD: 509929.7600 N, 2232698.8700 E		1 OF 2										
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTH	SPT/RQD	REC (%)	N ₆₀	HP (tsf)	GR	CS	FS	SI	CL	LL	PL	PI	WC	ODOT CLASS (G)	HOLE SEALED
CONCRETE		987.4	1															
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, LITTLE CLAY, DAMP		986.4	2	2	33	7		35	29	14	-	22	-	-	-	8	A-1-b (V)	
LOOSE, DARK BROWN, COARSE AND FINE SAND, TRACE GRAVEL, SOME SILT, LITTLE CLAY, CONTAINS ORGANICS, MOIST		984.4	3	1	22	6		8	41	18	21	12	19	13	6	15	A-3a (0)	
DENSE, BROWN, GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT, LITTLE CLAY, CONTAINS ROOT HAIRS, ORGANIC ODOR, DAMP		982.9	4	2	89	32		17	19	30	20	14	19	14	5	14	A-2-4 (0)	
MEDIUM DENSE, BROWN, SANDY SILT, TRACE GRAVEL, LITTLE CLAY, MOIST		981.4	5	3	100	15		6	18	39	20	17	22	13	9	15	A-4a (0)	
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, TRACE GRAVEL, LITTLE SILT, LITTLE CLAY, MOIST		978.9	6	8	89	25		8	23	46	12	11	NP	NP	NP	10	A-3a (0)	
LOOSE TO MEDIUM DENSE, GRAYISH BROWN, SANDY SILT, LITTLE GRAVEL, LITTLE CLAY, CONTAINS SHALE FRAGMENTS, ORGANIC ODOR, MOIST		976.4	7	3	100	10		-	-	-	-	-	-	-	-	13	A-4a (V)	
MEDIUM DENSE, DARK GRAY, SANDY SILT, TRACE GRAVEL, SOME CLAY, HIGHLY ORGANIC, MOIST		966.4	8	4	83	14		2	8	24	46	20	36	31	5	32	A-4a (6)	
MEDIUM DENSE, LIGHT GRAY, SILT, SOME GRAVEL, LITTLE CLAY, TRACE SAND, CONTAINS SILTSTONE FRAGMENTS, DAMP		963.9	9	10	100	29		-	-	-	-	-	-	-	-	13	A-4b (V)	
MEDIUM DENSE, LIGHT GRAY, SANDY SILT, LITTLE GRAVEL, SOME CLAY, SLIGHT ORGANIC ODOR, DAMP		958.9	10	14	100	27		11	16	21	31	21	19	13	6	11	A-4a (3)	
DENSE, LIGHT BROWN, COARSE AND FINE SAND, TRACE TO SOME GRAVEL, TRACE SILT, TRACE CLAY, MOIST		953.9	11	9	100	31		5	80	8	-	7	-	-	-	23	A-3a (V)	
MEDIUM DENSE TO DENSE, GRAY, COARSE AND FINE SAND, TRACE SILT, TRACE CLAY, WET		943.9	12	7	94	24		34	40	19	-	7	-	-	-	14	A-3a (V)	
DENSE, GRAY, SANDY SILT, TRACE GRAVEL, TRACE CLAY, WET		928.9	13	14	100	43		0	6	81	-	13	-	-	-	19	A-3a (V)	
			14	15	100	43		-	-	-	-	-	-	-	-	20	A-3a (V)	
			15	16	100	42		-	-	-	-	-	-	-	-	18	A-4a (2)	

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:25 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\ABDATA\1822-1016-001-76_77 EL ROBINSON.GPJ

PID: 102329	SFN:	PROJECT: INTERSTATE 76/77	STATION / OFFSET: 288+89.85' LT.	START: 10/22/19	END: 10/25/19	PG 2 OF 2			B-014-1-19							
						GR	CS	FS								
MATERIAL DESCRIPTION AND NOTES		ELEV. 927.4	DEPTH	SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)			ATTERBERG			ODOT CLASS(GI)	HOLE SEALED	
								GR	CS	FS	CL	LL	PL	PI	WC	
DENSE, GRAY, SANDY SILT, TRACE GRAVEL, TRACE CLAY, WET (continued)		923.9	61													
			62													
DENSE TO VERY DENSE, GRAY, FINE SAND, TRACE GRAVEL, TRACE SILT, TRACE CLAY, WET		923.9	63													
			64	10	47	100	SS-19	-	-	-	-	-	-	-	-	21
			65	18												
			66													
			67													
			68													
			69	14	54	100	SS-20	-	-	-	-	-	-	-	20	A-3 (V)
			70	24												
			71													
			72													
			73													
			74	12	57	100	SS-21	-	0	0	90	-	10	-	-	21
			75	20												
			76													
			77													
			78													
			79	6	31	100	SS-22	-	-	-	-	-	-	-	21	A-3 (V)
			80	14												
			81													
			82													
			83													
			84	7	27	89	SS-23	-	-	-	-	-	-	-	-	22
			85	10												
			86													
			87													
			88													
			89	15	52	100	SS-24	-	2	5	87	-	6	-	21	A-3 (V)
			90	18												
			91													
			92													
			93													
			94	20	52	100	SS-25	-	-	-	-	-	-	-	-	20
			95	17												
			96													
			97													
			98													
			99	22	82	100	SS-26	-	-	-	-	-	-	-	17	A-3 (V)
			100	34												

EOB 100

887.4

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:25 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\LABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PROJECT: INTERSTATE 76/77		DRILLING FIRM / OPERATOR: DLZ-AD / DEARING		STATION / OFFSET: 290+23.98' LT.		EXPLORATION ID							
TYPE: ROADWAY		SAMPLING FIRM / LOGGER: DLZ / SCHMITZ		ALIGNMENT:		B-014-2-19							
PID: 102329 SFN:		DRILLING METHOD: 3.25" HSA		ELEVATION: 967.5 (MSL) EOB: 100.0 ft.		PAGE							
START: 10/21/19 END: 10/22/19		SAMPLING METHOD: SPT		COORD: 509947.5400 N, 2232831.7300 E		1 OF 2							
DRILL RIG: '18 CME 55 404185		HAMMER: CME AUTOMATIC		GRADATION (%):		HOLE							
CALIBRATION DATE: 4/25/18		ENERGY RATIO (%): 87.1		GR CS FS SI CL LL PL PI WC		SEAL							
SPT/ RQD		REC SAMPLE ID		HP (tsf)		ODOT CLASS (GI)							
N ₆₀		N ₆₀		N ₆₀		N ₆₀							
SPT/ RQD		N ₆₀		N ₆₀		N ₆₀							
1	3	7	SS-1	0	10	39	30	21	31	24	7	23	A-4a (3)
2	2	9	SS-2	26	12	20	24	18	23	17	6	15	A-4a (1)
3	3	20	SS-3	35	33	14	11	7	NP	NP	NP	7	A-1-b (0)
4	8	10	SS-4	32	32	29	7	-	-	-	-	5	A-1-b (V)
5	3	10	SS-5	5	38	51	6	-	-	-	-	5	A-3 (V)
6	3	20	SS-6										
7	8	15	SS-7										
8	4	6	SS-8	66	17	12	5	-	-	-	-	11	A-1-a (V)
9	1	28	SS-9	23	10	47	14	6	NP	NP	NP	14	A-3a (0)
10	2	22	SS-10	42	16	28	14	-	-	-	-	12	A-1-b (V)
11	6	30	SS-11	0	3	54	34	9	NP	NP	NP	17	A-4a (2)
12	10	28	SS-12										
13	8	56	SS-13	0	0	89	11	-	-	-	-	21	A-3a (V)
14	5	36	SS-14										
15	7	48	SS-15										
16	10	46	SS-16	0	0	86	14	-	-	-	-	24	A-3a (V)
17	12	42	SS-17										
18	3	44	SS-18										
19	13	42	SS-19										
20	16	44	SS-20										
21	3	44	SS-21										
22	13	44	SS-22										
23	16	44	SS-23										
24	3	44	SS-24										
25	13	44	SS-25										
26	16	44	SS-26										
27	3	44	SS-27										
28	13	44	SS-28										
29	16	44	SS-29										
30	3	44	SS-30										
31	13	44	SS-31										
32	16	44	SS-32										
33	3	44	SS-33										
34	13	44	SS-34										
35	16	44	SS-35										
36	3	44	SS-36										
37	13	44	SS-37										
38	16	44	SS-38										
39	3	44	SS-39										
40	13	44	SS-40										
41	16	44	SS-41										
42	3	44	SS-42										
43	13	44	SS-43										
44	16	44	SS-44										
45	3	44	SS-45										
46	13	44	SS-46										
47	16	44	SS-47										
48	3	44	SS-48										
49	13	44	SS-49										
50	16	44	SS-50										
51	3	44	SS-51										
52	13	44	SS-52										
53	16	44	SS-53										
54	3	44	SS-54										
55	13	44	SS-55										
56	16	44	SS-56										
57	3	44	SS-57										
58	13	44	SS-58										
59	16	44	SS-59										

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:26 - P:\102329_SUM-76_77\Design\Geotechnical\ABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PID: 102329	SFN:	PROJECT: INTERSTATE 76/77	STATION/OFFSET: 290+23.98' LT.	START: 10/21/19		END: 10/22/19		PG 2 OF 2		B-014-2-19					
				GR	CS	FS	SI	CL	LL		PL	PI	WC		
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ROD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)			ODOT CLASS (GI)	HOLE SEALED			
MEDIUM DENSE TO DENSE, GRAY, COARSE AND FINE SAND, TRACE SILT, TRACE CLAY, WET (continued)		907.5	61												
			62												
			63												
			64	9	36	SS-18	-	-	-	-	-	-	23	A-3a (V)	
			65	16											
			66												
			67												
			68												
			69	4	39	SS-19	-	-	-	-	-	-	-	-	A-3a (V)
			70	17											
			71												
			72												
			73												
			74	5	38	SS-20	-	-	-	-	-	-	23	A-3a (V)	
			75	13											
			76												
			77												
			78												
			79	5	60	SS-21	-	0	2	27	57	14	NP	NP	A-4b (7)
			80	16											
			81	25											
			82												
			83												
			84	10	75	SS-22	-	-	-	-	-	-	-	-	A-4b (V)
			85	24											
			86	28											
			87												
			88												
			89	9	55	SS-23	-	-	-	-	-	-	-	-	A-3 (V)
			90	18											
			91	20											
			92												
			93												
			94	4	49	SS-24	-	-	-	-	-	-	-	-	A-3 (V)
			95	15											
			96	19											
			97												
			98												
			99	8	58	SS-25	-	0	4	89	-	7	-	-	A-3 (V)
			100	17											
			EOB	23	867.5										

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: SHOVELED AUGER CUTTINGS, TREMIED BENTONITE GROUT

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:26 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\LABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PROJECT: INTERSTATE 76/77 TYPE: ROADWAY		DRILLING FIRM / OPERATOR: DLZ-AD / CONRAD SAMPLING FIRM / LOGGER: DLZ / MIDDLETON		DRILL RIG: '19 CME 75-079-797 HAMMER: CME AUTOMATIC		STATION / OFFSET: 293+97.55' LT.		EXPLORATION ID B-014-3-19									
PID: 102329 SFN:		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 8/15/19		ALIGNMENT: 993.0 (MSL) EOB: 100.0 ft.		PAGE 1 OF 2									
START: 10/21/19 END: 10/22/19		SAMPLING METHOD: SPT		ENERGY RATIO (%): 83.7		COORD: 509916 6200 N, 2233206.8100 E											
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	REC N ₆₀	HP ID	GR	GRADATION (%)				ATTERBERG	ODOT CLASS (G)	HOLE SEALED			
		993.0				(tsf)		GR	CS	FS	SI	CL	LL	PL	PI	WC	
CONCRETE			1														
MEDIUM DENSE GREY AND BROWN, SANDY SILT, SOME GRAVEL, LITTLE CLAY, DAMP		991.5	2	10	20	SS-1	24	10	18	32	16	20	14	6	9	A-4a (3)	
MEDIUM DENSE TO DENSE, BROWN, COARSE AND FINE SAND, TRACE TO SOME GRAVEL, LITTLE SILT, LITTLE CLAY, DAMP		990.0	3	10	29	SS-2	9	4	53	21	13	NP	NP	NP	10	A-3a (0)	
			4	11													
			5	11	11	SS-3	27	22	33	11	7	NP	NP	NP	8	A-3a (0)	
			6	2	6	SS-4	15	10	45	19	11	NP	NP	NP	10	A-3a (0)	
			7	2	2												
			8														
			9	3	8	SS-5	-	-	-	-	-	-	-	-	-	14	A-3a (V)
			10	2	4												
			11														
			12	8	32	SS-6	-	-	-	-	-	-	-	-	-	7	A-3a (V)
			13	11													
			14	6	14	SS-7	-	-	-	-	-	-	-	-	-	13	A-3a (V)
			15	5	5												
			16	16	18	SS-8	7	21	31	26	15	NP	NP	NP	20	A-4a (1)	
			17	6	7												
			18														
			19	5	17	SS-9	-	-	-	-	-	-	-	-	-	27	A-4a (V)
			20	5	7												
			21	3	11	SS-10	-	-	-	-	-	-	-	-	-	16	A-4b (V)
			22	3	5												
			23														
			24	4	13	SS-11	8	31	32	15	14	18	12	6	12	A-3a (0)	
			25	4	5												
			26														
			27														
			28														
			29	2	4	SS-12	17	24	40	-	19	-	-	-	11	A-3a (V)	
			30	1	2												
			31														
			32														
			33														
			34	16	8	SS-13	-	-	-	-	-	-	-	-	-	UCF (V)	
			35	3													
			36														
			37														
			38														
			39	9	25	SS-14	-	-	-	-	-	-	-	-	19	A-4b (V)	
			40	9	9												
			41														
			42														
			43														
			44	9	22	SS-15	-	-	-	-	-	-	-	-	18	A-4b (V)	
			45	10	6												
			46														
			47														
			48														
			49	5	17	SS-16	0	4	16	62	18	20	18	2	26	A-4b (8)	
			50	6	6												
			51														
			52														
			53														
			54	3	10	SS-17	-	-	-	-	-	-	-	-	23	A-4b (V)	
			55	4	3												
			56														
			57														
			58														
			59	5	8	SS-18	-	-	-	-	-	-	-	-	28	A-4b (V)	
			60	3	3												

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:26 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\LABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

PID: 102329	SFN:	PROJECT:	INTERSTATE 76/77	STATION / OFFSET:	293+97.55' LT.	START:	10/21/19			END:	10/22/19			PG 2 OF 2	B-014-3-19				
							GR	CS	FS		CL	LL	PL			PI	WC		
MATERIAL DESCRIPTION AND NOTES		ELEV.		SPT/ RQD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)			ATTERBERG			HOLE SEALING					
								GR	CS	FS	CL	LL	PL		PI	WC			
LOOSE TO MEDIUM DENSE, GREY, SILT, SOME SAND, LITTLE CLAY, WET (continued)		933.0		61															
		929.5		62															
		924.5		63															
MEDIUM DENSE, GRAY, SILT, TRACE GRAVEL, TRACE SAND, AND CLAY, MOIST		924.5		64	4	11	-	2	0	7	56	35	23	15	8	17	A-4b (8)		
		924.5		65	4														
		924.5		66															
		924.5		67															
		924.5		68															
		924.5		69	4	15	100	-	-	-	-	-	-	-	-	-	-	18	A-4b (V)
		924.5		70	5	6													
		924.5		71															
		924.5		72															
		924.5		73															
		924.5		74	4	15	100	-	4	2	8	70	16	19	15	4	19	A-4b (8)	
		924.5		75	5	6													
		924.5		76															
		924.5		77															
		924.5		78															
		924.5		79	10	29	100	-	-	-	-	-	-	-	-	-	-	15	A-4b (V)
		924.5		80	10	11													
924.5		81																	
924.5		82																	
924.5		83																	
924.5		84	3	6	100	-	-	-	-	-	-	-	-	-	-	17	A-4b (V)		
924.5		85	2	2															
924.5		86																	
924.5		87																	
924.5		88																	
924.5		89	WOR	3	100	-	3	4	17	59	17	21	16	5	18	A-4b (8)			
924.5		90	WOR	2															
924.5		91																	
924.5		92																	
924.5		93																	
924.5		94	3	8	100	-	-	-	-	-	-	-	-	-	-	20	A-4b (V)		
924.5		95	3	3															
924.5		96																	
924.5		97																	
924.5		98																	
924.5		99	3	8	100	-	-	-	-	-	-	-	-	-	-	13	A-4b (V)		
924.5		100	3	3															

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT

PROJECT: INTERSTATE 76/77 TYPE: ROADWAY		DRILLING FIRM / OPERATOR: DLZ-AD / CONRAD		DRILL RIG: '19 CME 75-079-797		STATION / OFFSET: 296+07.49' LT.		EXPLORATION ID										
PID: 102329 SFN:		SAMPLING FIRM / LOGGER: DLZ / MIDDLETON		HAMMER: CME AUTOMATIC		ALIGNMENT:		B-014-4-19										
START: 10/15/19 END: 10/15/19		DRILLING METHOD: 3.25" HSA		CALIBRATION DATE: 8/15/19		ELEVATION: 995.2 (MSL) EOB: 100.0 ft.		PAGE										
SAMPLING METHOD: SPT		SAMPLING METHOD: SPT		ENERGY RATIO (%): 83.7		COORD: 509917.7800 N, 2233417.2700 E		1 OF 2										
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ RQD	REC N ₆₀ (%)	HP (tsf)	GR	GRADATION (%)			ATTERBERG			ODOT CLASS (G)	HOLE SEALED			
		995.2						GR	CS	FS	SI	CL	LL	PL	PI	WC		
CONCRETE			1															
DENSE, DARK BROWN, GRAVEL AND STONE FRAGMENTS, LITTLE SAND, CONTAINS ASPHALT FRAGMENTS, DAMP		994.2	2	10	33	50	83	12	4	1	-	-	-	-	-	4	A-1-a (V)	
MEDIUM DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, TRACE SILT, TRACE CLAY, DAMP		992.7	3	8	17	44	67	11	6	16	-	-	-	-	-	4	A-1-b (V)	
MEDIUM DENSE, BROWN, GRAVEL AND STONE FRAGMENTS, LITTLE SAND, TRACE SILT, TRACE CLAY, DAMP		991.2	4	5	13	17	79	10	7	4	-	-	-	-	-	3	A-1-a (V)	
VERY LOOSE, LIGHT BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, LITTLE SILT, TRACE CLAY, WET		989.7	5	3	4	17	47	14	20	12	7	20	16	4	53	A-1-b (0)		
VERY LOOSE TO LOOSE, LIGHT BROWN, SANDY SILT, TRACE TO LITTLE GRAVEL, LITTLE TO SOME CLAY, DAMP TO MOIST		986.7	6	1	2													
			7															
			8															
			9	2	1	3	33	9	13	34	28	16	14	4	15	A-4a (2)		
			10															
			11	1	3	13	33									15	A-4a (V)	
			12	6														
			13															
			14	5	5	15	100	3	6	22	47	22	15	7	14	A-4a (7)		
			15															
			16	9	14	35	100									14	A-4a (V)	
			17	11														
			18															
			19	4	5	15	89	10	10	21	39	20	18	7	16	A-4a (5)		
			20															
			21	5	6	15	100									8	A-3a (V)	
		974.2	22															
MEDIUM DENSE, LIGHT BROWN, COARSE AND FINE SAND, LITTLE SILT, LITTLE GRAVEL, TRACE CLAY, DAMP			23															
			24	2	3	7	100	10	28	43	19	-	-	-	10	A-3a (V)		
LOOSE TO MEDIUM DENSE, BROWN, COARSE AND FINE SAND, LITTLE GRAVEL, TRACE SILT, TRACE CLAY, DAMP TO MOIST		971.7	25															
			26															
			27															
			28															
			29	5	4	11	100									9	A-3a (V)	
			30															
			31															
			32															
			33															
			34	1	3	8	83									9	A-3a (V)	
			35															
			36															
			37															
			38															
		956.7	39	3	3	10	100									23	A-3a (V)	
MEDIUM DENSE TO DENSE, GRAY, COARSE AND FINE SAND, TRACE GRAVEL, LITTLE SILT, LITTLE CLAY, WET			40															
			41															
			42															
			43															
			44	5	6	20	100	1	0	79	20	-	-	-	18	A-3a (V)		
			45															
			46															
			47															
			48															
			49	12	15	40	100									19	A-3a (V)	
			50	14														
			51															
			52															
			53															
		941.7	54	10	12	32	100	2	0	46	42	10	NP	NP	NP	19	A-4a (3)	
DENSE, GRAY, SANDY SILT, TRACE GRAVEL, LITTLE CLAY, WET			55	11														
			56															
			57															
			58															
		936.7	59	6	8	18	100									28	A-4b (V)	
LOOSE TO MEDIUM DENSE, GRAY, SILT, TRACE GRAVEL, SOME SAND, SOME CLAY, MOIST TO WET			60	5														

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:26 - P:\102329_SUM-76_77\DESIGN\GEO\GEO\TECHNICAL\LABDATA\1822-1016-001-77 EL ROBINSON.GPJ

PID: 102329	SFN:	PROJECT: INTERSTATE 76/77	STATION / OFFSET: 296+07.49' LT.	START: 10/15/19		END: 10/15/19		PG 2 OF 2		B-014-4-19											
				GR	CS	FS	SI	CL	LL		PL	PI	WC								
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS	SPT/ROD	N ₆₀	REC SAMPLE (%)	HP (tsf)	GRADATION (%)			ATTERBERG		ODOT CLASS (GI)	HOLE SEALED							
		935.2				ID		GR	CS	FS	SI	CL	LL	PL	PI	WC					
LOOSE TO MEDIUM DENSE, GRAY, SILT, TRACE GRAVEL, SOME SAND, SOME CLAY, MOIST TO WET (continued)		935.2	61																		
			62																		
			63																		
			64	4	15	100	SS-19	-										25	A-4b (V)		
			65	5	6																
			66																		
VERY DENSE, BROWN TO GRAY, FINE SAND, TRACE GRAVEL, TRACE SILT, TRACE CLAY, WET		916.7	67																		
			68																		
			69	2	8	100	SS-20	-													
			70	2	4																
			71																		
			72																		
			73																		
			74	2	7	100	SS-21	-											14	A-4b (V)	
			75	2	3																
			76																		
VERY DENSE, BROWN TO GRAY, FINE SAND, TRACE GRAVEL, TRACE SILT, TRACE CLAY, WET		916.7	77																		
			78																		
			79	7	63	100	SS-22	-											22	A-3 (V)	
			80	19	26																
			81																		
			82																		
			83																		
			84	17	64	100	SS-23	-												17	A-3 (V)
			85	21	25																
			86																		
			87																		
			88																		
			89	12	92	100	SS-24	-			2	8	82	-	-	-	-	-		19	A-3 (V)
			90	30	36																
91																					
92																					
93																					
94	20	107	83	SS-25	-												7	A-3 (V)			
95	36	41																			
96																					
97																					
98																					
99	19	107	100	SS-26	-													17	A-3 (V)		
100	35	42																			
		895.2	EOB																		

STANDARD ODOT SOIL BORING LOG (11 X 17) - OH DOT.GDT - 8/26/20 17:26 - P:\102329_SUM-76_77\DESIGN\GEO\TECHNICAL\LABDATA\1822-1016-00-1-76_77 EL ROBINSON.GPJ

NOTES: NONE
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; TREMIED BENTONITE GROUT