



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

August 25, 2020

Peter Narsavage, P.E.  
E.L. Robinson Engineering (ELR)  
950 Goodale Boulevard, Suite 180  
Grandview Heights, OH 43212

**RE:** Subsurface Exploration Data Report  
SUM 76/77 Phase III

Dear Mr. Narsavage

DLZ American Drilling has completed the drilling and laboratory testing of soils from subsurface exploration of SUM 76/77. A plan of borings, boring summary sheet, pavement core photos, boring logs, grain size information, and GB-1 summary are attached. A copy of the gINT file is attached via email.

If you have any questions regarding the information provided, do not hesitate to contact us.

Sincerely,

Barry K. Wong, P.E.  
Vice President

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# ATTACHMENTS

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- I. Table of Borings
- II. Plan/Survey Data
- III. Pavement Core Photos
- IV. Boring Logs
- V. Grain Size Reports
- VI. GB-1 Subgrade Analysis Summary Table

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# TABLE OF BORINGS

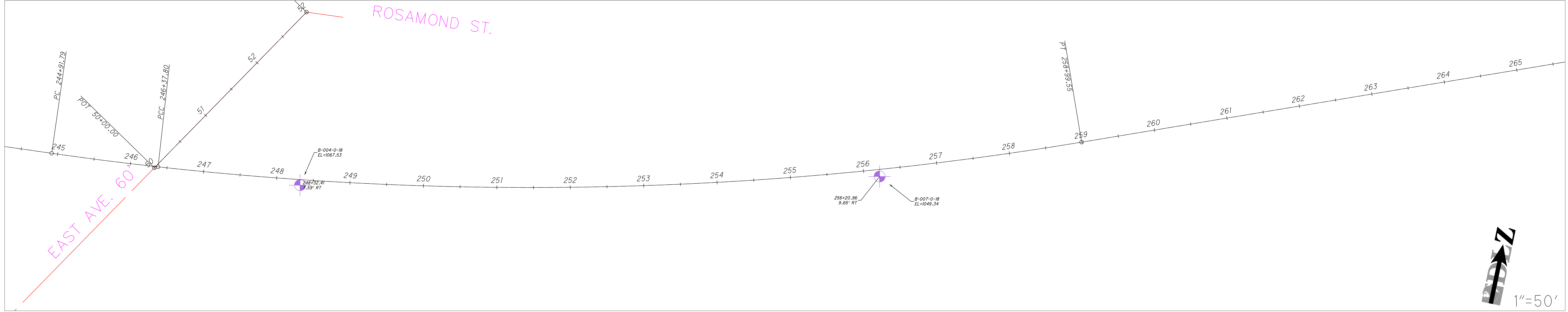
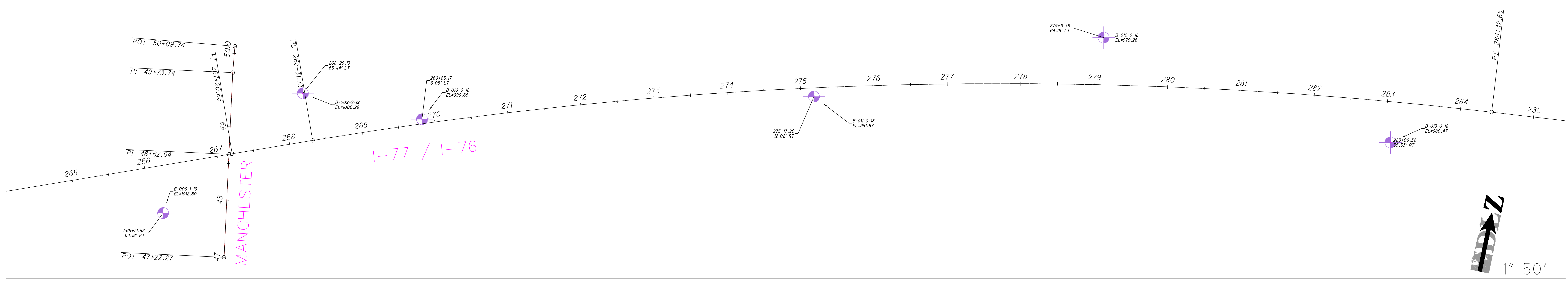
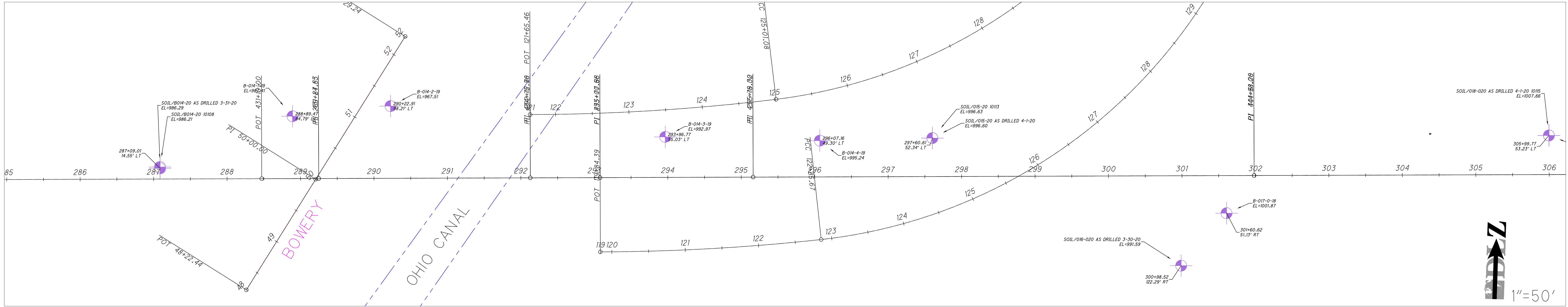
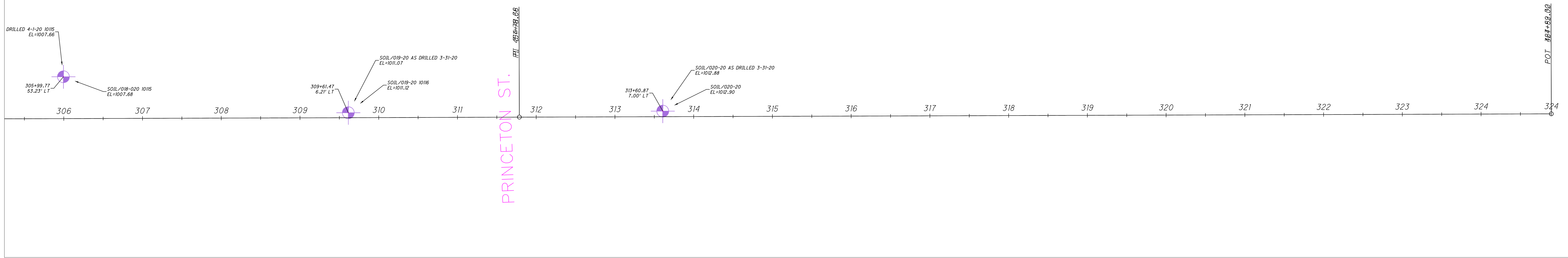
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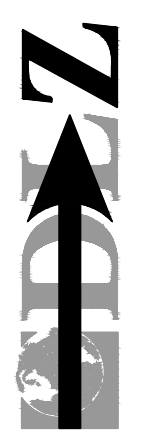
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P-002-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-004-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Lane of S.R. 8	10
P-005-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Lane of S.R. 8	10
P-007-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Shoulder of S.R. 8	10
P-010-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-014-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Lane of S.R. 8	10
P-015-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Lane of S.R. 8	10
P-017-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Inside Shoulder of S.R. 8	10
P-019-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-025-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-027-0-20	Pavement Core	S.R. 8 - Mainline	Northbound	Outside Shoulder of S.R. 8	10
P-030-0-20	Pavement Core	S.R. 8 - Ramp	Northbound	Inside Shoulder of S.R. 8 Ramp	10
P-033-0-20	Pavement Core	S.R. 8 - Ramp	Northbound	Inside Lane of S.R. 8 Ramp	10
P-001-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-003-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Lane of S.R. 8	10
P-006-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-008-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-009-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Shoulder of S.R. 8 Ramp	10
P-011-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Lane of S.R. 8	10
P-012-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Lane of S.R. 8 Ramp	10
P-013-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Gore Area of S.R. 8	10
P-016-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-018-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Inside Shoulder of S.R. 8	10
P-020-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-022-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Lane of S.R. 8	10
P-024-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
P-028-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8 Ramp	10
P-029-0-20	Pavement Core	S.R. 8 - Ramp	Southbound	Outside Lane of S.R. 8 Ramp	10
P-032-0-20	Pavement Core	S.R. 8 - Mainline	Southbound	Outside Shoulder of S.R. 8	10
Boring #	Boring Type	Road Name	Direction	Location	Estimated Depth (Feet)
E3-001-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-002-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-003-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-004-0-20	Retaining Wall	S.R. 8	Southbound	Existing Slope	50
E3-005-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-006-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-007-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
E3-008-0-20	Retaining Wall	I.R. 77 - Ramp S8	Southbound	Existing Slope	50
B2-001-0-20	Cut Section	S.R. 8	Southbound	Existing Top of Slope	30

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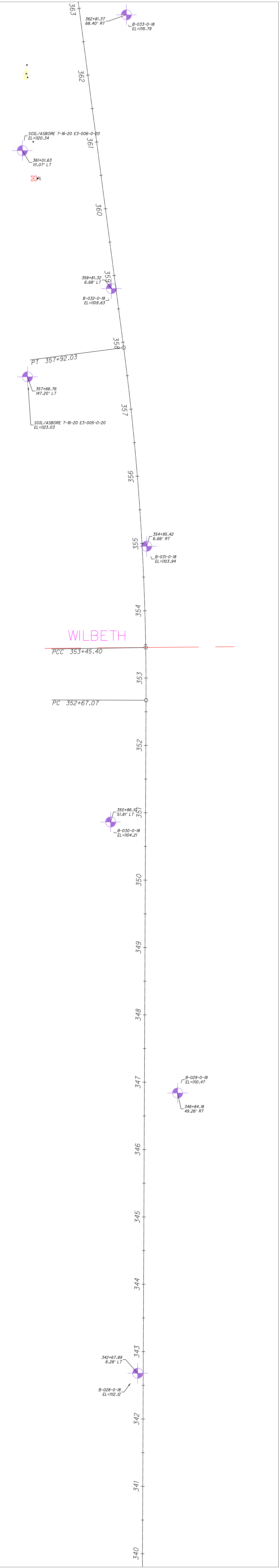
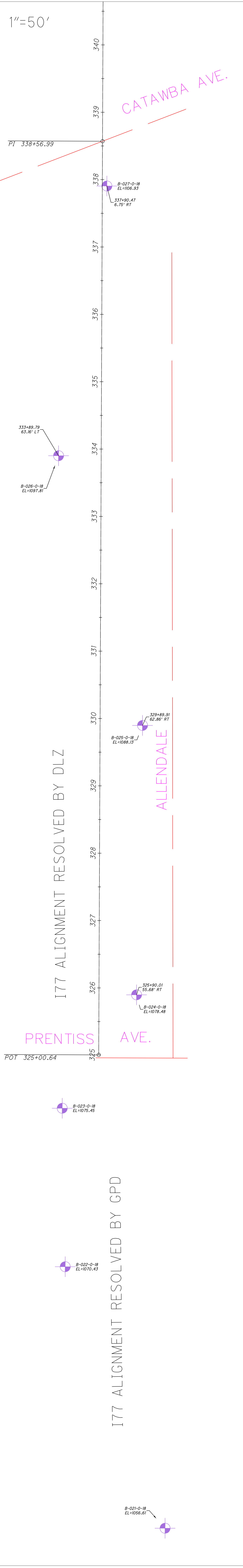
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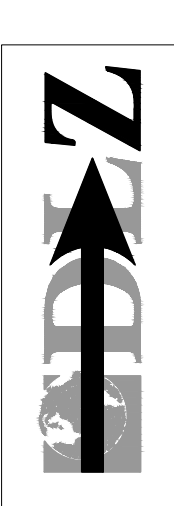
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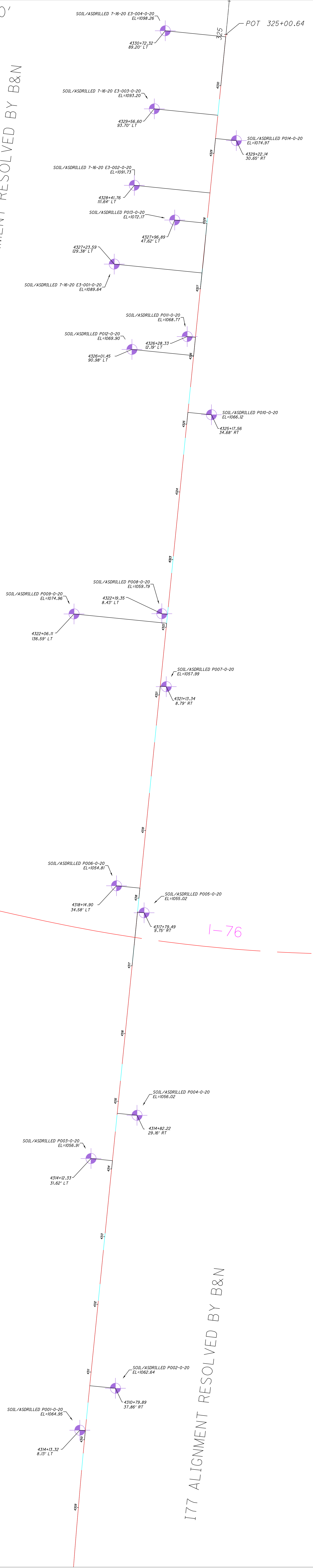
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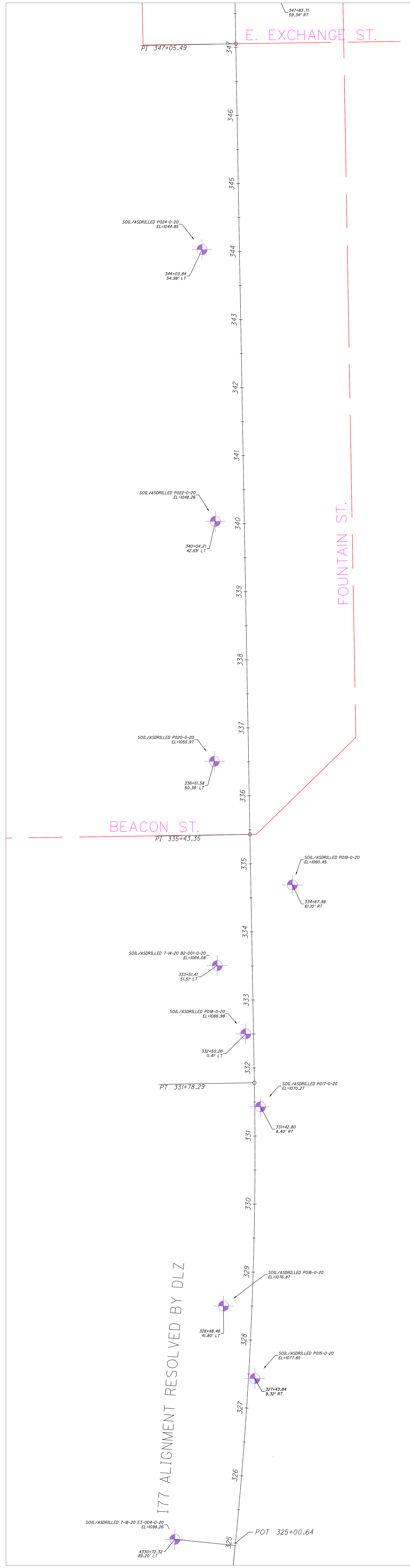


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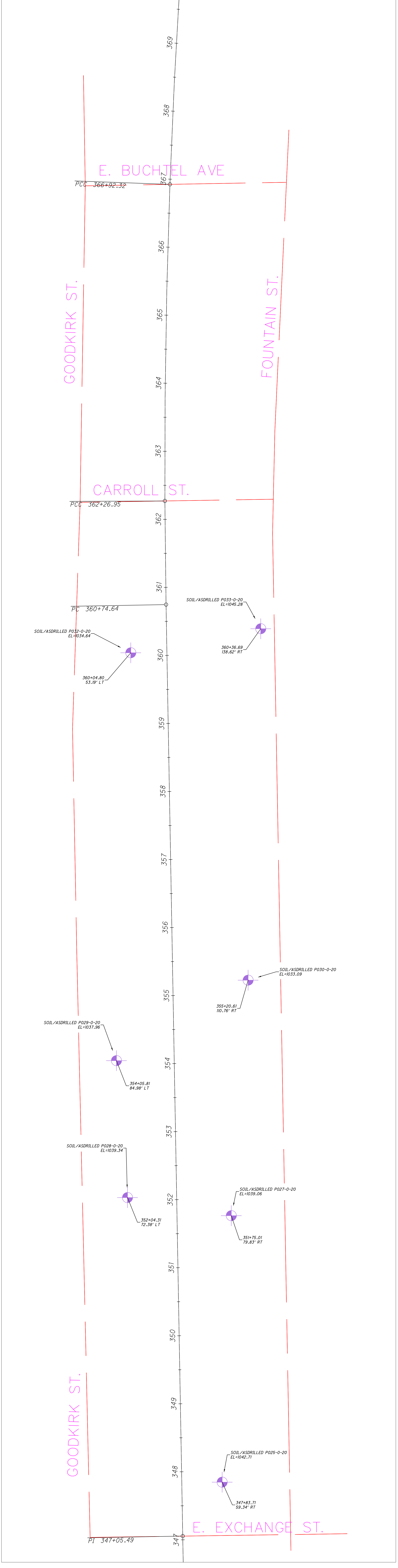
I77 ALIGNMENT RESOLVED BY B&N



I77 ALIGNMENT RESOLVED BY DLZ



I77 ALIGNMENT RESOLVED BY DLZ



I77 ALIGNMENT RESOLVED BY B&N



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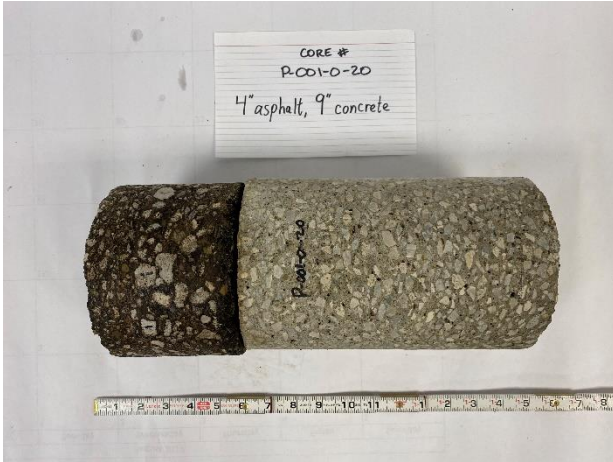
# PAVEMENT CORE PHOTOS

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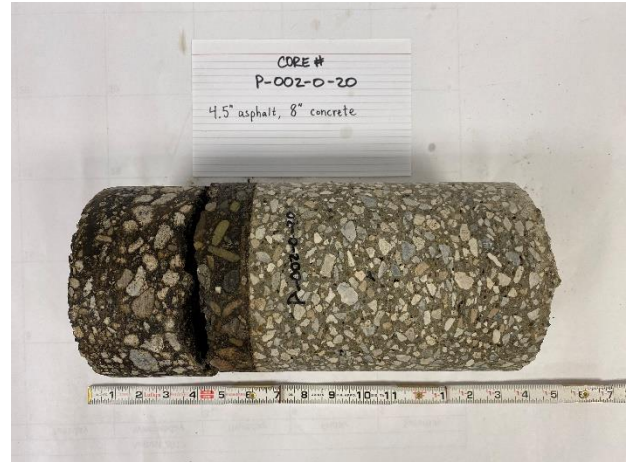
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**

<b>Boring</b>	<b>Paving Thickness</b>	<b>Boring</b>	<b>Paving Thickness</b>
<b>P-001-0-20</b>	4" Asphalt / 9" Concrete	<b>P-018-0-20</b>	3" Asphalt / 4.5" Concrete
<b>P-002-0-20</b>	4.5" Asphalt / 8" Concrete	<b>P-019-0-20</b>	13.5" Asphalt
<b>P-003-0-20</b>	6.75" Asphalt / 8.5" Concrete	<b>P-020-0-20</b>	11.5" Asphalt
<b>P-004-0-20</b>	5.75" Asphalt / 8.5" Concrete	<b>P-022-0-20</b>	13.75" Asphalt
<b>P-005-0-20</b>	5" Asphalt / 9.25" Concrete	<b>P-024-0-20</b>	12" Asphalt
<b>P-006-0-20</b>	4.75" Asphalt / 9.25 Concrete	<b>P-025-0-20</b>	11.75" Asphalt
<b>P-007-0-20</b>	4" Asphalt / 10.75" Concrete	<b>P-027-0-20</b>	12.25" Asphalt
<b>P-008-0-20</b>	4" Asphalt	<b>P-028-0-20</b>	13.75" Asphalt
<b>P-009-0-20</b>	8.75" Asphalt	<b>P-029-0-20</b>	13" Asphalt
<b>P-010-0-20</b>	3.25" Asphalt / 9.5" Concrete	<b>P-030-0-20</b>	13.25" Asphalt
<b>P-011-0-20</b>	4" Asphalt	<b>P-032-0-20</b>	12.75" Asphalt
<b>P-012-0-20</b>	5.25" Asphalt / 8.5" Concrete	<b>P-033-0-20</b>	9" Concrete
<b>P-013-0-20</b>	2.25" Asphalt / 8.75" Concrete		
<b>P-014-0-20</b>	3.5" Asphalt / 8.5" Concrete		
<b>P-015-0-20</b>	3.75" Asphalt / 8.5" Concrete		
<b>P-016-0-20</b>	4" Asphalt / 9.5" Concrete		
<b>P-017-0-20</b>	4.75" Asphalt / 8.25" Concrete		

Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-001-0-20  
Asphalt: 4"  
Concrete: 9"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-002-0-20  
Asphalt: 4.5"  
Concrete: 8"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-003-0-20  
Asphalt: 6.75"  
Concrete: 8.5"  
Date Cored: 06/24/2020  
Date Drilled: 06/25/2020

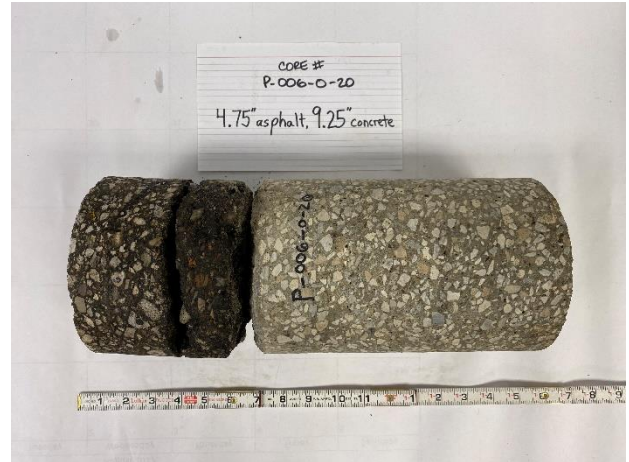


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
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Asphalt: 5.75"  
Concrete: 8.5"  
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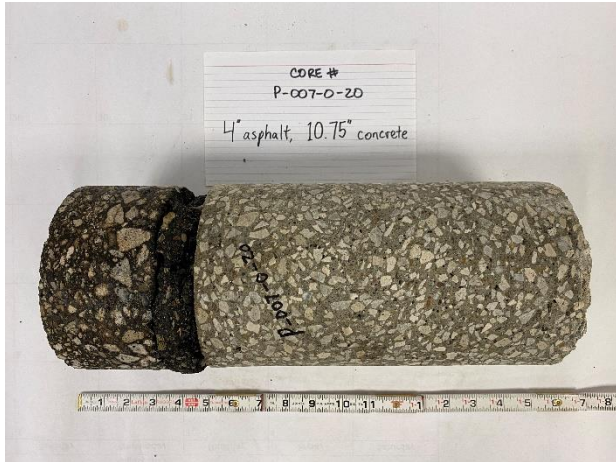
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



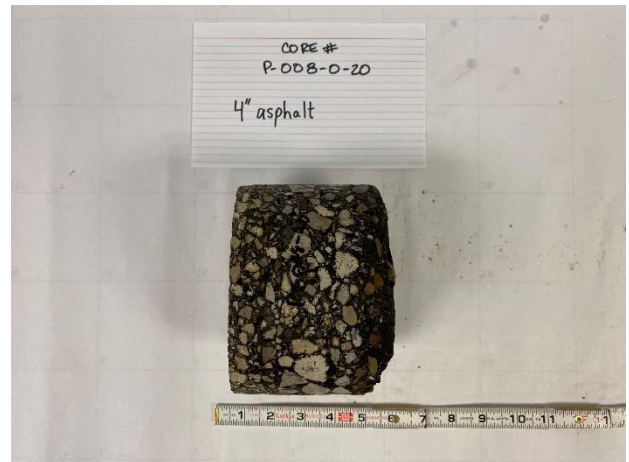
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Project Number: 1822-1016-00  
Boring: P-005-0-20  
Asphalt: 5"  
Concrete: 9.25"  
Date Cored: 06/26/2020  
Date Drilled: 06/26/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-006-0-20  
Asphalt: 4.75"  
Concrete: 9.25"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020

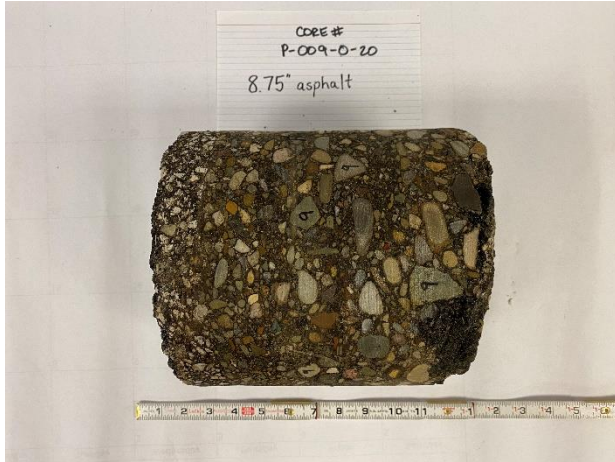


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-007-0-20  
Asphalt: 4"  
Concrete: 10.75"  
Date Cored: 06/26/2020  
Date Drilled: 06/26/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-008-0-20  
Asphalt: 4"  
Concrete:  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020

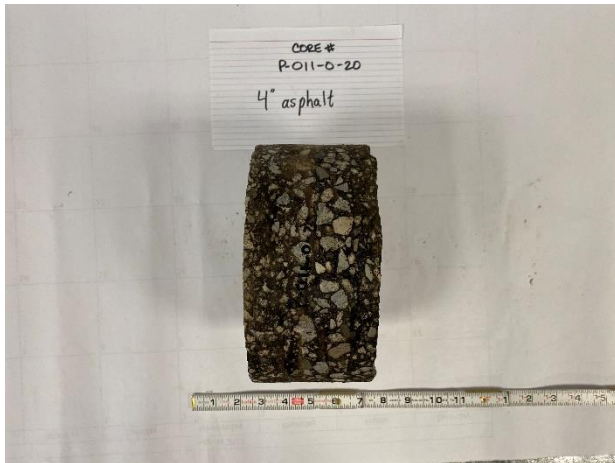
Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



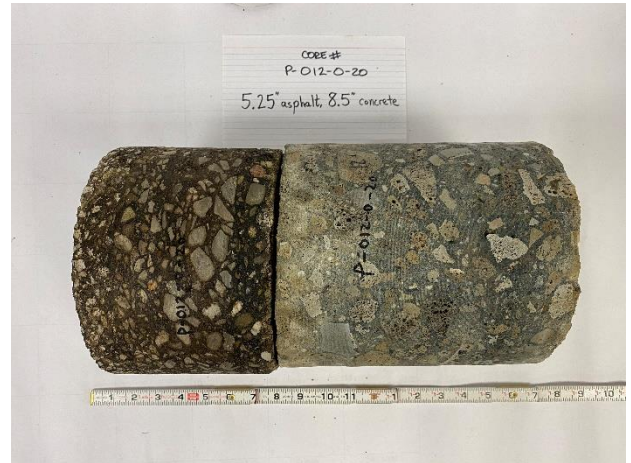
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Project Number: 1822-1016-00  
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Asphalt: 8.75"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
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Asphalt: 3.25"  
Concrete: 9.5"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020

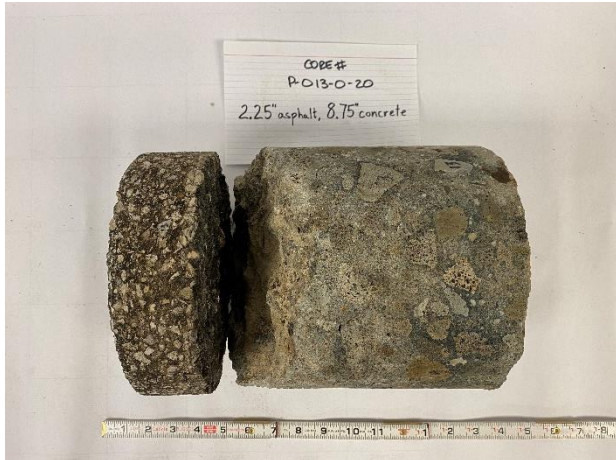


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-011-0-20  
Asphalt: 4"  
Concrete:  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-012-0-20  
Asphalt: 5.25"  
Concrete: 8.5"  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020

**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



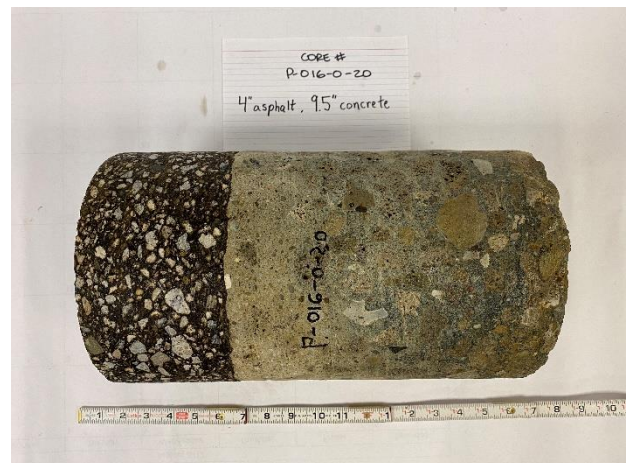
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Concrete: 8.75"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-014-0-20  
Asphalt: 3.5"  
Concrete: 8.5"  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
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Concrete: 8.5"  
Date Cored: 06/30/2020  
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Concrete: 9.5"  
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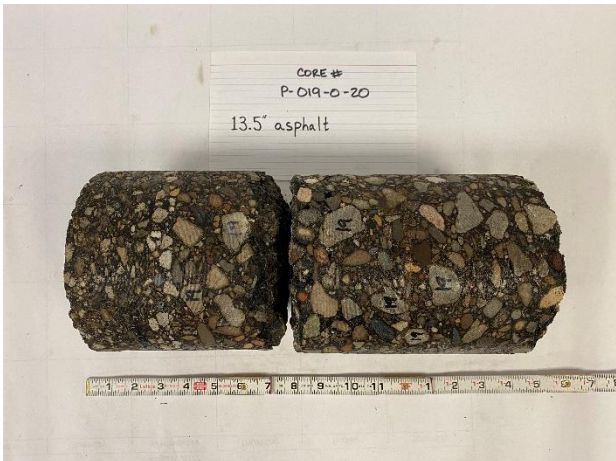
Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



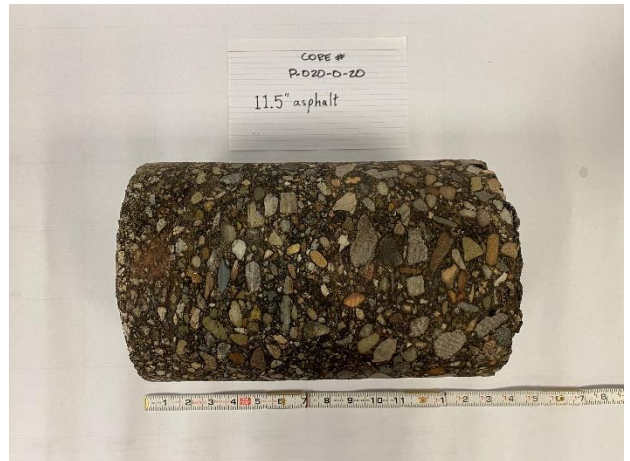
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Project Number: 1822-1016-00  
Boring: P-017-0-20  
Asphalt: 4.75"  
Concrete: 8.25"  
Date Cored: 06/30/2020  
Date Drilled: 06/30/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-018-0-20  
Asphalt: 3"  
Concrete: 4.5"  
Date Cored: 06/24/2020  
Date Drilled: 06/24/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-019-0-20  
Asphalt: 13.5"  
Concrete:  
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Date Drilled: 06/25/2020

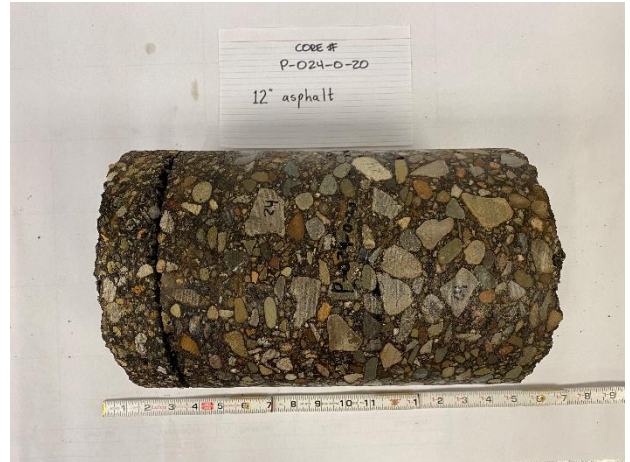


Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-020-0-20  
Asphalt: 11.5"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020

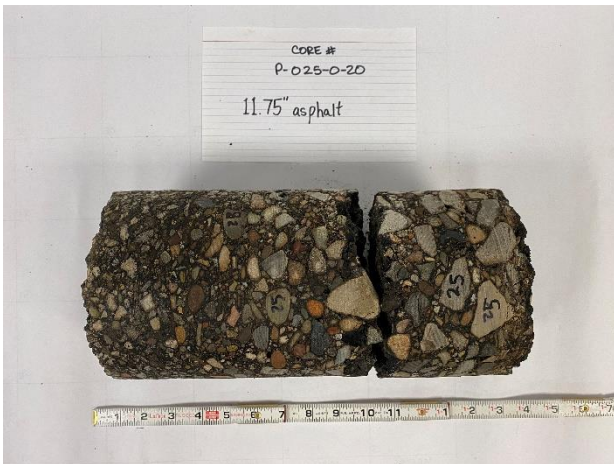
**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-022-0-20  
Asphalt: 13.75"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
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Asphalt: 12"  
Concrete:  
Date Cored: 06/23/2020  
Date Drilled: 06/23/2020



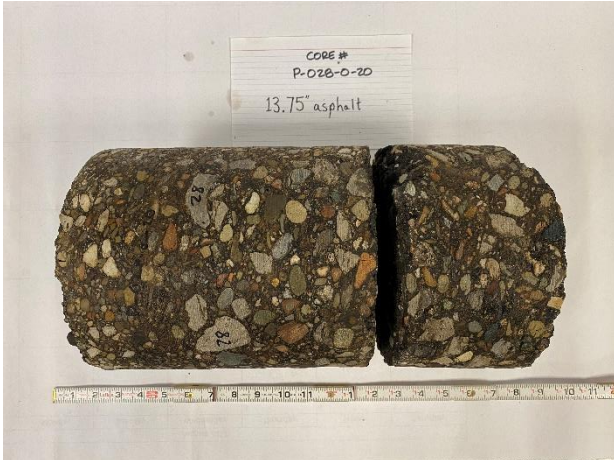
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Project Number: 1822-1016-00  
Boring: P-025-0-20  
Asphalt: 11.75"  
Concrete:  
Date Cored: 06/25/2020  
Date Drilled: 06/25/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-027-0-20  
Asphalt: 12.25"  
Concrete:  
Date Cored: 06/30/2020  
Date Drilled: 07/01/2020



**Phase 3 Retaining Wall SR 8 Job # 1822-1016.00**



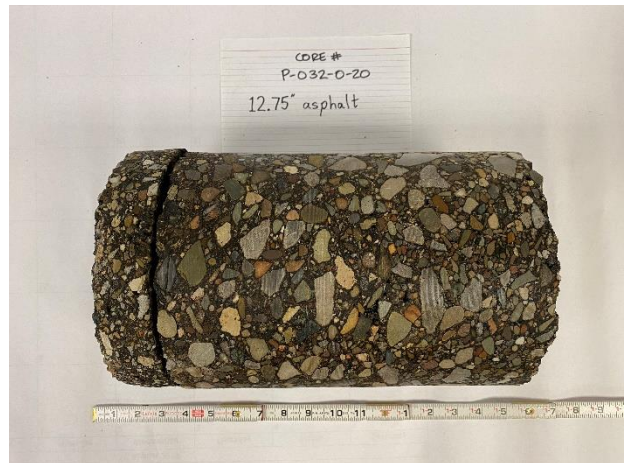
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Project Number: 1822-1016-00  
Boring: P-028-0-20  
Asphalt: 13.75"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/23/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-029-0-20  
Asphalt: 13"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/22/2020

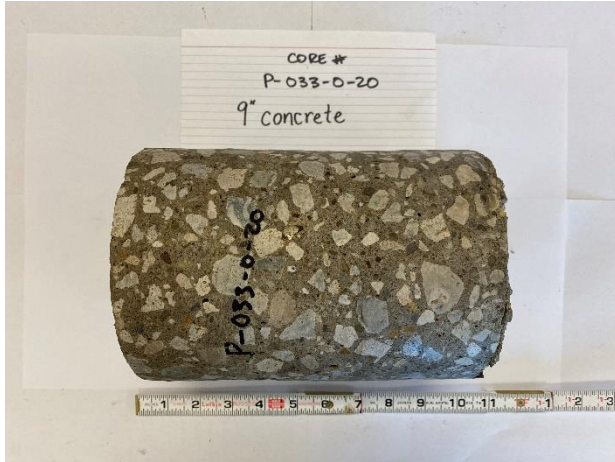


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Project Number: 1822-1016-00  
Boring: P-030-0-20  
Asphalt: 13.25"  
Concrete:  
Date Cored: 07/01/2020  
Date Drilled: 07/01/2020



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8  
Project Number: 1822-1016-00  
Boring: P-032-0-20  
Asphalt: 12.75"  
Concrete:  
Date Cored: 06/22/2020  
Date Drilled: 06/22/2020

Phase 3 Retaining Wall SR 8 Job # 1822-1016.00



Project Name: SUM 76-77 Phase 3 Retaining Wall on SR8

Project Number: 1822-1016-00

Boring: P-033-0-20

Asphalt:

Concrete: 9"

Date Cored: 07/01/2020

Date Drilled: 07/01/2020

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# BORING LOGS

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STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEAHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>333+51, 52' LT.</u>	EXPLORATION ID <u>B2-001-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1064.1 (MSL)</u> EOB: <u>40.0 ft.</u>	PAGE 1 OF 2
START: <u>7/15/20</u> END: <u>7/15/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>511889.9690 N, 2242981.6090 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 8" ASPHALT 4" GRANULAR BASE</b>	1064.1																	
STIFF, BROWN, <b>SANDY SILT</b> , LITTLE FINE SAND, TRACE GRAVEL, DAMP	1063.1	1	5															
		2	9	29	89	SS-1	-	8	8	23	37	24	25	17	8	11	A-4a (5)	
	1060.6	3	10															
MEDIUM DENSE, LIGHT TAN BROWN, <b>FINE SAND</b> , SOME GRAVEL, LITTLE SILT, DAMP		4	2	8	32	78	SS-2	-	-	-	-	-	-	-	-	5	A-3 (V)	
		5	8	13														
		6	2	2	9	33	SS-3	-	-	-	-	-	-	-	-	13	A-3 (V)	
	1055.6	7	2	4														
MEDIUM STIFF, BROWN, <b>SANDY SILT</b> , LITTLE FINE SAND, TRACE GRAVEL, SAND LENSES, DAMP		8	3	4	14	83	SS-4	-	4	13	31	27	25	24	14	10	12	A-4a (3)
		9	4	5														
		10	2	3	15	72	SS-5	-	-	-	-	-	-	-	-	10	A-4a (V)	
	1050.6	11	2	7														
MEDIUM STIFF, BROWN, <b>SANDY SILT</b> , LITTLE TO SOME FINE SAND, DAMP		12	4	6	20	56	SS-6	-	5	8	30	42	15	22	16	6	14	A-4a (4)
		13	6	7														
	1048.1	14	4	10	29	94	SS-7	-	6	3	12	51	28	30	18	12	18	A-6a (9)
STIFF, BROWN, <b>SILT AND CLAY</b> , TRACE SAND, TRACE GRAVEL, QUARTZITE FRAGMENTS, DAMP		15	4	7														
		16	10	9														
	1045.6	17	4	6														
VERY STIFF, BROWN, <b>SILT AND CLAY</b> , LITTLE GRAVEL, TRACE SAND, DAMP		18	3	4	12	83	SS-8	-	6	7	20	40	27	29	18	11	14	A-6a (7)
		19	4	4														
	1043.1	20	3	4	15	83	SS-9	-	-	-	-	-	-	-	-	17	A-6a (V)	
STIFF, BROWN, <b>SILT AND CLAY</b> , TRACE SAND, CONTAINS ROOT HAIRS, DAMP		21	3	6														
		22	4	6														
	1040.6	23	6	7	21	72	SS-10	-	-	-	-	-	-	-	-	11	A-6a (V)	
STIFF, GREENISH GREY, <b>SILT AND CLAY</b> , CONTAINS SHALE FRAGMENTS AND GRAVEL, DAMP		24	7	7														
		25	7															
		26	3	3	12	72	SS-11	-	-	-	-	-	-	-	-	16	A-6a (V)	
		27	3	5														
	1035.6	28																
VERY DENSE, BLACK, <b>UNCONTROLLED FILL</b> , CONTAINS COAL, SLAG, BRICK, DARK GREY CLAY, DAMP		29	30	50/4"	-	100	SS-12	-	-	-	-	-	-	-	-	10	UCF (V)	

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-001-176\_77 EL.ROBINSON (8-25-2020).G

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 333+51, 52' LT.    START: 7/15/20    END: 7/15/20    PG 2 OF 2    B2-001-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1034.1	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI				
MEDIUM DENSE, BLACK, <b>COARSE AND FINE SAND</b> , LITTLE SILT, TRACE GRAVEL, DAMP TO MOIST	1033.1	31	3																
		32	4	12	83	SS-13	-	11	23	56	4	6	-	-	-	18	A-3a (V)		
		33																	
		34	4	12	61	SS-14	-	-	-	-	-	-	-	-	-	-	16	A-3a (V)	
		35	4																
VERY DENSE, BLACK, <b>UNCONTROLLED FILL</b> , CONTAINS SLAG, DAMP	1025.6	36	2																
		37	3	12	56	SS-15	-	-	-	-	-	-	-	-	-	18	A-3a (V)		
		38																	
		39	1																
	1024.1	40	3		25	SS-16	-	-	-	-	-	-	-	-	18	UCF (V)			
		EOB	50/07																

DRAFT

NOTES: NONE

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

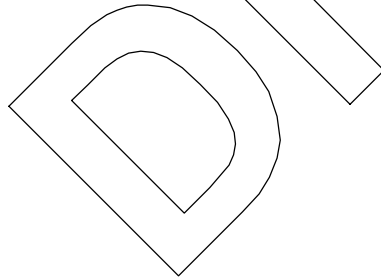
STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>4327+24, 129' LT.</u>	EXPLORATION ID <u>E3-001-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1089.6 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/13/20</u> END: <u>7/13/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>510696.6100 N, 2242897.1280 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
<b>UNCONTROLLED FILL</b> , 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.	1089.6																		
VERY STIFF, BROWN, <b>SILT AND CLAY</b> , TRACE GRAVEL, TRACE SAND, DAMP	1088.6	1	5																<L> >L>
VERY STIFF, LIGHT BROWN, <b>SANDY SILT</b> , LITTLE SAND, DAMP	1086.1	2	7 11	27	72	SS-1	-	5	5	19	38	33	27	16	11	13	A-6a (8)	<L> >L>	
VERY STIFF, LIGHT BROWN, <b>SILT</b> , LITTLE CLAY, DAMP	1083.6	3																	<L> >L>
		4	4 8 11	29	83	SS-2	-	13	6	21	41	19	26	20	6	12	A-4a (5)		
		5																	
		6	4																
		7	10 18	42	78	SS-3	-	14	2	13	54	17	28	22	6	8	A-4b (7)		
		8																	
		9	20 50/5"	-	45	SS-4	-	-	-	-	-	-	-	-	-	8	A-4b (V)		
		10																	
<b>SHALE</b> , GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1078.6	11	8																
		12	15 33	72	89	SS-5	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		13																	
		14	25 50/5"	-	64	SS-6	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		15																	
		16	50/5"	-	100	SS-7	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		17																	
		18																	
		19	50/5"	-	100	SS-8	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																	
		21	50/5"	-	80	SS-9	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																	
		23																	
		24	50/4"	-	100	SS-10	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		25																	
		26	35 50/5"	-	64	SS-11	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		27																	
		28																	
		29	32 50/5"	-	64	SS-12	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00\176\_77 EL. ROBINSON (8-25-2020).G

MATERIAL DESCRIPTION AND NOTES	ELEV. 1059.6	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
SHALE, GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/5"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		32																
		33																
		34		50/3"	-	100	SS-14	-	-	-	-	-	-	-	-	-	Rock (V)	
		35																
		36		50/5"	-	100	SS-15	-	-	-	-	-	-	-	-	-	Rock (V)	
		37																
		38																
		39		50/2"	-	100	SS-16	-	-	-	-	-	-	-	-	-	Rock (V)	
		40																
	41		50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	Rock (V)		
	42																	
	43																	
	44		50/2"	-	100	SS-18	-	-	-	-	-	-	-	-	-	Rock (V)		
	45																	
	46		50/3"	-	100	SS-19	-	-	-	-	-	-	-	-	-	Rock (V)		
	47																	
	48																	
	49		50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	Rock (V)		
	1039.6	50																



▼  
EOB

NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

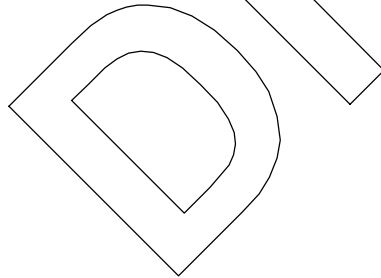




STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00\176\_77 EL.ROBINSON (8-25-2020).G

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 4328+42, 112' LT.    START: 7/13/20    END: 7/13/20    PG 2 OF 2    E3-002-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1061.7	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI			WC
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED. (continued)		31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		32																
		33																
		34	34	50/3"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)
		35																
		36	36	50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)
		37																
		38																
		39	39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)
		40																
		41	41	50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)
	42																	
	43																	
	44	44	50/3"	-	33	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	45																	
	46	46	50/2"	-	50	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	47																	
	48																	
	49	49	50/4"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	1041.7	50																



NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

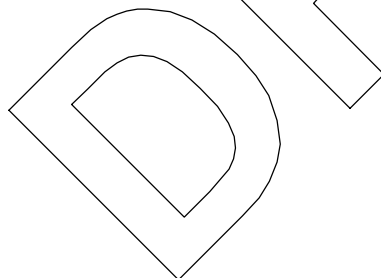
STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>4329+57, 94' LT.</u>	EXPLORATION ID <u>E3-003-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1093.2 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/10/20</u> END: <u>7/10/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>510939.9690 N, 2242937.5330 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>UNCONTROLLED FILL</b> , 1" TO 3" TOPSOIL, SURFACE MATERIALS CONSISTED OF ORGANIC MATERIAL AND TRASH. SITE CLEARED BY TRACKHOE PRIOR TO RIG ARRIVAL.  STIFF TO VERY STIFF, BROWN, <b>SANDY SILT</b> , TRACE SAND, CONTAINS ROOTHAIRS, DAMP	1093.2																	
	1092.2	1	6															<L> >L>
		2	12 17	44	89	SS-1	-	5	7	18	49	21	24	15	9	8	A-4a (7)	<L> >L>
		3																<L> >L>
		4	4	5 16	32	83	SS-2	-	-	-	-	-	-	-	-	14	A-4a (V)	
<b>SANDSTONE</b> , LIGHT BROWN, MODERATELY TO HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, FINE TO MEDIUM GRAINED, VERY THIN TO THIN BEDDED, FRIABLE.	1087.2	5																
		6	8	21 22	65	78	SS-3	-	54	4	26	-16	-	-	-	6	Rock (V)	
		7																
		8																
		9	30	35 26	92	94	SS-4	-	-	-	-	-	-	-	-	4	Rock (V)	
		10																
		11	50/5"	-	100		SS-5	-	-	-	-	-	-	-	-	-	Rock (V)	
		12																
		13																
		14	50/5"	-	60		SS-6	-	-	-	-	-	-	-	-	-	Rock (V)	
		15																
	<b>SHALE</b> , GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED.	1077.2	16	17	20 24	66	78	SS-7	-	-	-	-	-	-	-	-	-	Rock (V)
		17																
		18																
		19	21	21 30	77	94	SS-8	-	-	-	-	-	-	-	-	-	Rock (V)	
		20																
		21	50/5"	-	40		SS-9	-	-	-	-	-	-	-	-	-	Rock (V)	
		22																
		23																
		24	50/4"	-	100		SS-10	-	-	-	-	-	-	-	-	-	Rock (V)	
		25																
		26	50/5"	-	60		SS-11	-	-	-	-	-	-	-	-	-	Rock (V)	
		27																
		28																
		29	50/2"	-	100		SS-12	-	-	-	-	-	-	-	-	-	Rock (V)	

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\176\_77\_EL\_ROBINSON (8-25-2020).G

MATERIAL DESCRIPTION AND NOTES	ELEV. 1063.2	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI		
SHALE, GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO THIN BEDDED. (continued)		31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)
		32															
		33															
		34	34	50/2"	-	100	SS-14	-	-	-	-	-	-	-	-	-	Rock (V)
		35															
		36	36	50/4"	-	80	SS-15	-	-	-	-	-	-	-	-	-	Rock (V)
		37															
		38															
		39	39	50/5"	-	100	SS-16	-	-	-	-	-	-	-	-	-	Rock (V)
		40															
	41	41	50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	Rock (V)	
	42																
	43																
	44	44	50/5"	-	80	SS-18	-	-	-	-	-	-	-	-	-	Rock (V)	
	45																
	46	46	50/1"	-	100	SS-19	-	-	-	-	-	-	-	-	-	Rock (V)	
	47																
	48																
	49	49	50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	Rock (V)	
	1043.2	EOB															



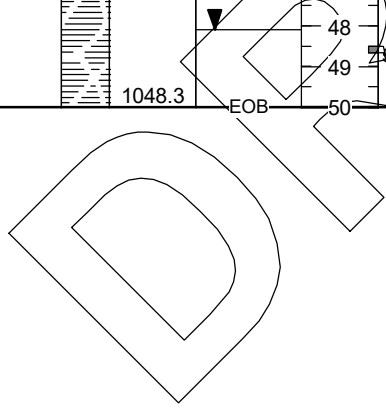
NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00\176\_77 EL. ROBINSON (8-25-2020).G

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 4330+72, 89' LT.    START: 7/9/20    END: 7/9/20    PG 2 OF 2    E3-004-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1068.3	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI			WC
SHALE, GREYISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, WEAK TO SLIGHTLY STRONG, FINE GRAINED, THIN BEDDED; RQD 0%, REC 39%. (continued)	1068.3	31																
		32																
		33																
		34																
		35																
SHALE, GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1062.3	36	50/5"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		37																
		38																
		39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		40																
		41	50/3"	-	67	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		42																
		43																
		44	50/3"	-	67	SS-18	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		45																
	1048.3	46	50/3"	-	67	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	
47																		
48																		
49		50/2"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		50																



NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-176-77 EL ROBINSON (8-25-2020).G

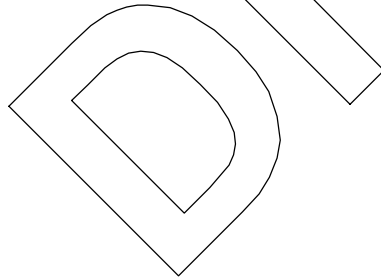
PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEAHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>357+67, 147' LT.</u>	EXPLORATION ID <u>E3-005-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1123.0 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/15/20</u> END: <u>7/15/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502235.3890 N, 2242798.3070 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
UNCONTROLLED FILL, 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. VERY STIFF, DARK GREYISH BROWN, <b>SILTY CLAY</b> , DAMP	1123.0																		
	1122.0	1	5																<L> >L> <L> >L>
VERY STIFF, DARK GREY, <b>SILT AND CLAY</b> , DAMP	1119.5	2	9 18	41	78	SS-1	-	0	0	5	49	46	38	22	16	14	A-6b (10)		
	1117.0	3																	
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1117.0	4	8 13 18	47	94	SS-2	-	0	5	7	51	37	38	25	13	15	A-6a (9)		
		5																	
TR		6	11 38 50/5"	-	82	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)		
		7																	
		8																	
		9	13 39 50/4"	-	81	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)		
		10																	
		11	17 12 50/4"	-	88	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		12																	
		13																	
		14	50/4"	-	100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		15																	
		16	41 50/4"	-	70	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		17																	
		18																	
		19	50/5"	-	60	SS-8	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		20																	
		21	50/5"	-	40	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		22																	
		23																	
		24	50/4"	-	50	SS-10	-	-	-	-	-	-	-	-	-	8	Rock (V)		
		25																	
		26	50/3"	-	33	SS-11	-	-	-	-	-	-	-	-	-	9	Rock (V)		
		27																	
		28																	
		29	50/3"	-	33	SS-12	-	-	-	-	-	-	-	-	-	4	Rock (V)		

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00\176\_77 EL. ROBINSON (8-25-2020).G

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 357+67, 147' LT.    START: 7/15/20    END: 7/15/20    PG 2 OF 2    E3-005-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1093.0	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI		
SHALE, GREY, HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/2"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)
		32															
		33															
		34	50/5"	-	60	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)
		35															
		36	50/4"	-	75	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)
		37															
		38															
		39	50/2"	-	50	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)
		40															
	41	50/2"	-	50	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	42																
	43																
	44	50/0"	-	-	-	SS-18	-	-	-	-	-	-	-	-	-	Rock (V)	
	45																
	46	50/1"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	47																
	48																
	49	50/1"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	1073.0	EOB															



NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEOTECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEAHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>361+02, 111' LT.</u>	EXPLORATION ID <u>E3-006-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1120.3 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/16/20</u> END: <u>7/16/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502570.2400 N, 2242794.9520 E</u>	

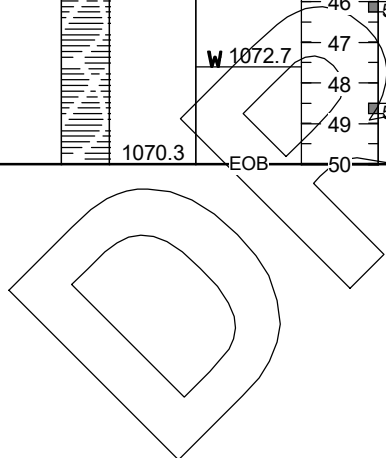
MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
<b>SOD AND TOPSOIL, 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. VERY STIFF, DARK GREYISH BROWN, SILTY CLAY, DAMP</b>	1120.3																		
	1119.3	1	10																<L> >L>
		2	11 16	41	72	SS-1	-	1	6	8	40	45	38	21	17	16	A-6b (11)	<L> >L>	
		3																	
		4	13 14 17	47	94	SS-2	-	1	3	6	50	40	38	21	17	12	A-6b (11)	<L> >L>	
1114.3	5																		
<b>SHALE, DARK GREY, DECOMPOSED WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.</b>	1114.3	6	13																
		7	16 16	48	78	SS-3	-	-	-	-	-	-	-	-	-	12	Rock (V)		
<b>SHALE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.</b>	1111.8	8																	
		9	50/5"	-	20	SS-4	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		10																	
		11	4	22		88	SS-5	-	-	-	-	-	-	-	-	-	Rock (V)		
		12	50/4"	-															
<b>SHALE, GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.</b>	1106.8	13																	
		14	39		100	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		15																	
		16	29		82	SS-7	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		17	50/5"	-															
		18																	
		19	50/4"	-	100	SS-8	-	-	-	-	-	-	-	-	-	11	Rock (V)		
		20																	
		21	31		91	SS-9	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		22	50/5"	-															
		23																	
		24	50/5"	-	80	SS-10	-	-	-	-	-	-	-	-	-	-	Rock (V)		
25																			
26	50/4"	-	50	SS-11	-	-	-	-	-	-	-	-	-	-	Rock (V)				
27																			
28																			
29	50/5"	-	60	SS-12	-	-	-	-	-	-	-	-	-	-	Rock (V)				



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00\176\_77 EL.ROBINSON (8-25-2020).G

PID: 102329    SFN: \_\_\_\_\_    PROJECT: INTERSTATE 76/77    STATION / OFFSET: 361+02, 111' LT.    START: 7/16/20    END: 7/16/20    PG 2 OF 2    E3-006-0-20

MATERIAL DESCRIPTION AND NOTES	ELEV. 1090.3	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI			WC
SHALE, GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/5"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		32																
		33																
		34	50/5"	-	80	SS-14	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		35																
		36	50/3"	-	67	SS-15	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		37																
		38																
		39	50/5"	-	80	SS-16	-	-	-	-	-	-	-	-	-	-	-	Rock (V)
		40																
	41	50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	42																	
	43																	
	44	50/2"	-	50	SS-18	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	45																	
	46	50/3"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	47																	
	48																	
	49	50/3"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	1070.3	EOB																



NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT

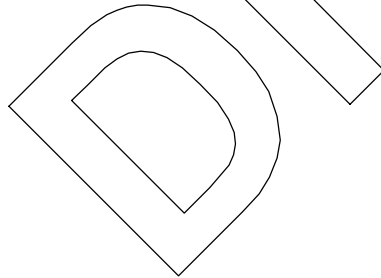
STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / BEAHR</u>	DRILL RIG: <u>'18 CME 55-TATV-265</u>	STATION / OFFSET: <u>364+33, 89' LT.</u>	EXPLORATION ID <u>E3-007-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / MORGAL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 2
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>4/26/18</u>	ELEVATION: <u>1122.7 (MSL)</u> EOB: <u>50.0 ft.</u>	
START: <u>7/16/20</u> END: <u>7/16/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>90*</u>	COORD: <u>502906.2850 N, 2242768.0620 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED			
								GR	CS	FS	SI	CL	LL	PL	PI	WC					
TOPSOIL, 0" TO 2" TOPSOIL, SITE CLEARED WITH TRACKHOE BEFORE DRILL RIG ARRIVAL. MEDIUM DENSE, BROWN, SANDY SILT, MOIST	1122.7	1	1																		
	1121.7	2	9	24	67	SS-1	-	11	4	44	12	29	23	16	7	20	A-4a (1)	<L> >L> <L> >L>			
VERY DENSE, BROWN AND GREY, SANDY SILT, CONTAINS SHALE FRAGMENTS, WET	1119.2	3																			
	1116.7	4	10	40	100	SS-2	-	6	15	37	19	23	NP	NP	NP	41	A-4a (1)				
SHALE, GREY TO DARK GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED.	1116.7	5																			
		6	25	50/3"	78	SS-3	-	-	-	-	-	-	-	-	-	-	-	Rock (V)			
		7																			
		8																			
		9	25	48	50/0"	83	SS-4	-	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		10																			
		11	20	25	47	108	78	SS-5	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		12																			
		13																			
		14	30	36	49	128	72	SS-6	-	-	-	-	-	-	-	-	-	-	Rock (V)		
		15																			
		16	35	50/5"	100	SS-7	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)		
17																					
18																					
19	31	50/3"	67	SS-8	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)				
20																					
21	50/5"	80	SS-9	-	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)				
22																					
23																					
24	43	50/5"	45	SS-10	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)				
25																					
26	50/4"	75	SS-11	-	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)				
27																					
28																					
29	50/4"	100	SS-12	-	-	-	-	-	-	-	-	-	-	-	-	-	Rock (V)				

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:02 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00\176\_77 EL. ROBINSON (8-25-2020).G

MATERIAL DESCRIPTION AND NOTES	ELEV. 1092.7	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
SHALE, GREY TO DARK GREY, MODERATELY TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)		31	50/3"	-	67	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		32																
		33																
		34	50/2"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		35																
		36	50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		37																
		38																
		39	50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	-	Rock (V)	
		40																
	41	50/3"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)		
	42																	
	43																	
	44	50/2"	-	100	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)		
	45																	
	46	50/5"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)		
	47																	
	48																	
	49	50/2"	-	100	SS-20	-	-	-	-	-	-	-	-	-	-	Rock (V)		
	1072.7	EOB																

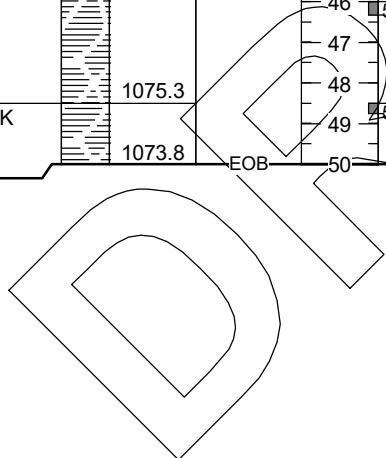


NOTES: NONE  
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00\176\_77 EL. ROBINSON (8-25-2020).G

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI		
<b>SHALE, GREY TO DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED. (continued)</b>	1093.8																
		31	50/3"	-	100	SS-13	-	-	-	-	-	-	-	-	-	-	Rock (V)
		32															
		33															
		34	50/1"	-	100	SS-14	-	-	-	-	-	-	-	-	-	-	Rock (V)
		35															
		36	50/2"	-	100	SS-15	-	-	-	-	-	-	-	-	-	-	Rock (V)
		37															
		38															
		39	50/1"	-	100	SS-16	-	-	-	-	-	-	-	-	-	10	Rock (V)
	40																
	41	50/2"	-	100	SS-17	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	42																
	43																
	44	50/3"	-	100	SS-18	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	45																
	46	50/4"	-	100	SS-19	-	-	-	-	-	-	-	-	-	-	Rock (V)	
	47																
	48																
	49	50/3"	-	100	SS-20	-	-	-	-	-	-	-	-	-	15	Rock (V)	
	1075.3																
<b>SHALE, GREY, DECOMPOSED WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, LAMINATED TO VERY THIN BEDDED, ARGILLACEOUS.</b>	1073.8																
		50															



NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: TREMIED BENTONITE GROUT



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4310+80, 38' RT.</u>	EXPLORATION ID <u>P-002-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1062.6 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509058.8080 N, 2242886.4910 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 4.5" ASPHALT, 8" CONCRETE</b>	1062.6																	
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE GRAVEL, TRACE DARK BROWN AND GREY CLAY, MOIST TO WET	1061.6	1	9															
		2	10 13	32	72	SS-1	-	9	42	17	27	5	15	NP	NP	10	A-3a (0)	
		3																
<b>CLAYSTONE</b> , GREY, HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1058.6	4	23 50/5"	-	91	SS-2	-	0	12	11	54	23	28	21	7	5	Rock (V)	
		5																
		6	36 50/2"	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		7																
		8																
	1053.5	9	42 50/1"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		EOB																

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00-1-76\_77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4314+12, 32' LT.</u>	EXPLORATION ID <u>P-003-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1056.9 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509395.6030 N, 2242852.0760 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED		
								GR	CS	FS	SI	CL	LL	PL	PI					
<b>PAVEMENT AND BASE, 6.75" ASPHALT, 8.5" CONCRETE</b>	1056.9																	X		
LOOSE, BROWN, <b>GRAVEL AND/OR STONE FRAGMENTS WITH SAND</b> , TRACE CLAY, MOIST TO WET <b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1055.6	1																<>		
	1055.1	2	7	26	106	83	SS-1	-	19	56	13	2	10	NP	NP	NP	14	A-1-b (0)	<>	
		3		31															<>	
			4	31	50/1"	-	100	SS-2	-	0	36	16	28	20	28	19	9	4	Rock (V)	<>
			5																<>	
		6	50/5"			60	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	<>	
		7																<>		
		8																<>		
	1047.8	9	33	50/1"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	<>	
		EOB																<>		

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4314+82, 29' RT.</u>	EXPLORATION ID <u>P-004-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1056.0 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509458.8080 N, 2242913.5160 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 5.75" ASPHALT, 8.5" CONCRETE</b>	1056.0																X	
DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE CLAY, DAMP	1054.7	1															>	
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1054.3	2	13 50	-	61	SS-1	-	10	41	21	26	2	18	NP	NP	11	A-3a (0)	>
		3																>
		4	48 50/1"	-	100	SS-2	-	0	36	15	33	16	26	19	7	4	Rock (V)	>
		5																
		6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	>
		7																>
	1047.1	8	50/5"	-	60	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	>
		EOB																>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4317+80, 10' RT.</u>	EXPLORATION ID <u>P-005-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1055.0 (MSL)</u> EOB: <u>8.6 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509769.5520 N, 2242933.7280 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
PAVEMENT AND BASE, 5" ASPHALT, 9.25" CONCRETE	1055.0																	
DENSE, ORANGISH BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND, TRACE CLAY AND GRAVEL, DAMP TO MOIST	1053.8	1	10	-	94	SS-1	-	9	47	29	13	2	19	18	1	14	A-1-b (0)	
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1053.2	2	10															
		3	34	-	100	SS-2	-	9	42	17	22	10	24	20	4	3	Rock (V)	
		4	50/2"															
		5																
		6	50/5"	-	80	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)	
		7																
	1046.4	8	50/1"	-	100	SS-4	-	-	-	-	-	-	-	-	-	3	Rock (V)	
		EOB																

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4318+15, 35' LT.</u>	EXPLORATION ID <u>P-006-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1054.8 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>509795.6030 N, 2242882.4650 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 4.75" ASPHALT, 9.25" CONCRETE</b>	1054.8																	
LOOSE, BROWN, <b>SANDY SILT</b> , TRACE CLAY AND GRAVEL, DAMP	1053.6	1	5														X	
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1053.0	2	5 37	59	83	SS-1	-	5	35	11	31	18	20	15	5	12	A-4a (3)	
		3																>
		4	31 50/1"			100	SS-2	-	0	37	24	28	11	24	16	8	4	Rock (V)
		5																>
		6	50/5"			100	SS-3	-	-	-	-	-	-	-	-	5	Rock (V)	
		7																>
	1045.9	8	50/5"			20	SS-4	-	-	-	-	-	-	-	-	5	Rock (V)	
		EOB																>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4321+13, 9' RT.</u>	EXPLORATION ID <u>P-007-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1058.0 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510089.5650 N, 2242956.9740 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 4" ASPHALT, 10.75" CONCRETE</b>	1058.0																	X
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE CLAY, MOIST TO WET	1056.7	TR	4															<>
<b>CLAYSTONE</b> , DARK GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1056.4		8 12	28	78	SS-1	-	10	37	38	10	5	NP	NP	NP	18	A-3a (0)	<>
			13 50/2"			SS-2	-	0	17	11	49	23	28	21	7	6	Rock (V)	<>
			50/5"		80	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	<>
			48 50/1"		57	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	<>
	1048.9	EOB																<>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4322+19, 8' LT.</u>	EXPLORATION ID <u>P-008-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1059.8 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510195.6030 N, 2242955.5290 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 4" ASPHALT</b>	1059.8																	
MEDIUM DENSE, BROWN, <b>GRAVEL AND/OR STONE FRAGMENTS WITH SAND</b> , TRACE CLAY, TIP OF SPOON CONTAINED BROWN A-7-6 W/ TRACE SAND, DAMP	1058.8	1	5															
SOFT, BROWN, <b>CLAY</b> , TRACE SAND, DAMP	1057.5	2	7	21	44	SS-1A	-	13	50	23	12	2	NP	NP	NP	9	A-1-b (0)	
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1056.3	3	8			SS-1B	4.00	8	34	23	23	12	-	-	-	13	A-7-6 (V)	
		4	11	64	39	SS-2		8	34	23	23	12	28	25	3	6	Rock (V)	
		5	14															
		6	39															
		7	50/1"															
		8																
	1050.7	9	47			SS-4												
			50/1"															

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4322+06, 137' LT.</u>	EXPLORATION ID <u>P-009-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1075.0 (MSL)</u> EOB: <u>10.0 ft.</u>	PAGE 1 OF 1
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510195.6030 N, 2242824.0670 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
<b>PAVEMENT AND BASE, 8.75" ASPHALT, 3" GRAVEL BASE</b>	1075.0																	
LOOSE, GREY, <b>GRANULAR BASE</b> Note: sample taken from cuttings; spooned twice with little recovery.	1074.0	1	6															
		2	4	10	6	SS-1	-	-	-	-	-	-	-	-	-	9	A-1-a (V)	
	1071.5	3																
VERY STIFF, GREY, <b>SILTY CLAY</b> , TRACE SAND AND GRAVEL, DAMP		4	2															
		5	5	14	56	SS-2	2.25	4	24	30	30	12	37	20	17	19	A-6b (3)	
	1069.0	6																
LOOSE, GREY AND BROWN, <b>COARSE AND FINE SAND</b> , SOME CLAY, TRACE GRAVEL, DAMP		7	4															
		8	4	10	50	SS-3	-	0	13	63	19	5	22	NP	NP	11	A-3a (0)	
	1066.5	9	2															
SOFT, GREY, <b>SILTY CLAY</b> , TRACE SAND AND GRAVEL, DAMP		10	1	4	28	SS-4	-	-	-	-	-	-	-	-	-	9	A-6b (V)	
	1065.0																	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4325+18, 35' RT.</u>	EXPLORATION ID <u>P-010-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1066.1 (MSL)</u> EOB: <u>9.2 ft.</u>	
START: <u>6/24/20</u> END: <u>6/24/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510489.5650 N, 2243027.2870 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 3.25" ASPHALT, 9.5" CONCRETE</b>	1066.1																	
LOOSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE CLAY AND GRAVEL, MOIST	1065.0	1	3															
		2	4	13	56	SS-1	-	0	45	33	17	5	15	NP	NP	12	A-3a (0)	
	1062.6	3	5															
<b>CLAYSTONE</b> , GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.		4	19	-	91	SS-2	-	10	39	22	23	6	25	22	3	5	Rock (V)	
		5																
		6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	3	Rock (V)	
		7																
		8																
	1056.9	9	27	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	
		EOB	50/2"															

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\18222-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4326+28, 12' LT.</u>	EXPLORATION ID <u>P-011-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1068.8 (MSL)</u> EOB: <u>9.1 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510595.6030 N, 2242987.9680 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI		
<b>PAVEMENT AND BASE, 4" ASPHALT</b>	1068.8																
MEDIUM DENSE, GREY AND BROWN, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, DAMP</b>	1067.7	1	5														
		2	6	20	44	SS-1	-	19	54	10	5	12	21	14	7	10	A-2-4 (0)
	1065.3	3															
<b>CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.</b>		4	6	-	100	SS-2	-	4	22	32	34	8	20	NP	NP	6	Rock (V)
		5															
		6	23	-	100	SS-3	-	-	-	-	-	-	-	-	-	5	Rock (V)
		7	50/1"														
		8															
	1059.7	9	30	-	100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)
		EOB	50/1"														

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL.ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>4326+01, 91' LT.</u>	EXPLORATION ID <u>P-012-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1069.9 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>510595.6030 N, 2242899.0430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
<b>PAVEMENT AND BASE, 5.25" ASPHALT, 8.5" CONCRETE, 4" SUBBASE</b>	1069.9	1																	X
VERY STIFF, BROWN AND GREY, <b>SANDY SILT</b> , TRACE SAND AND GRAVEL, DAMP	1068.4	2	3 6	17	72	SS-1	3.50	4	15	13	39	29	24	15	9	16	A-4a (7)		>
	1063.9	4	19 24 50/5"	-	6	SS-2	-	14	17	32	26	11	17	NP	NP	9	A-4a (0)		>
	1061.4	6	10 13 15	39	50	SS-3	-	5	20	42	20	13	19	NP	NP	12	A-3a (0)		>
MEDIUM DENSE, BROWN AND GREY, <b>COARSE AND FINE SAND</b> , LITTLE CLAY AND GRAVEL, DAMP	1059.9	8	10 30 33	88	56	SS-4	-	-	-	-	-	-	-	-	-	6	A-7-6 (V)		>
HARD, GREY, <b>CLAY</b> , TRACE SAND AND GRAVEL, DAMP looks similar to grey claystone from other borings, though blow counts are under 50.	1059.9	10																	>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS





STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>327+44, 9' RT.</u>	EXPLORATION ID <u>P-015-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1077.7 (MSL)</u> EOB: <u>8.75 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511289.5650 N, 2243082.1500 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 3.75" ASPHALT, 8.5" CONCRETE, 3" GRAVEL BASE	1077.7																	
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1076.4	TR	23 50/4"	-	90	SS-1	-	0	12	48	29	11	24	19	5	4	Rock (V)	
			50/3"	-	100	SS-2	-	11	27	25	27	10	-	-	-	5	Rock (V)	
			50/3"	-	33	SS-3	-	-	-	-	-	-	-	-	-	4	Rock (V)	
			50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	
	1068.9	EOB	50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	4	Rock (V)	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>328+48, 42' LT.</u>	EXPLORATION ID <u>P-016-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1076.9 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511395.6030 N, 2243026.1600 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 4" ASPHALT, 9.5" CONCRETE, 5" SUBBASE	1076.9																	
HARD, GREY, SANDY SILT, TRACE SAND, DAMP	1075.3	1	6															
		2	10	31	56	SS-1	4.00	2	8	24	44	22	22	17	5	10	A-4a (6)	
		3	12															
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED TO VERY THIN BEDDED, ARENACEOUS.	1073.4	4	23	-	82	SS-2	-	0	4	10	65	21	25	22	3	6	Rock (V)	
		5																
		6	16	-	82	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		7	50/5"															
		8																
	1068.0	EOB	50/5"	-	100	SS-4	-	-	-	-	-	-	-	-	-	5	Rock (V)	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>331+43, 8' RT.</u>	EXPLORATION ID <u>P-017-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1070.3 (MSL)</u> EOB: <u>9.25 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511689.5650 N, 2243082.5290 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
PAVEMENT AND BASE, 4.75" ASPHALT, 8.25" CONCRETE, 4" GRAVEL BASE	1070.3																	
HARD, BROWN, SILT, TRACE SAND AND GRAVEL, DAMP	1068.9	1	10															
		2	13 18	43	78	SS-1	4.00	0	7	7	52	34	25	18	7	13	A-4b (8)	
		3																
HARD, BROWN, SILT AND CLAY, TRACE SAND AND GRAVEL, DAMP	1066.8	4	16															
		5	47 50/2"	-	71	SS-2	4.00	0	25	11	39	25	27	14	13	11	A-6a (7)	
		6																
CLAYSTONE, GREY, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK, VERY FINE GRAINED, LAMINATED, ARENACEOUS.	1064.0	TR	17															
		7	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	8	Rock (V)	
		8																
	1061.0	EOB	29															
		9	50/3"	-	100	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEOTECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76\_77\_EL\_ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>332+50, 11' LT.</u>	EXPLORATION ID <u>P-018-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1067.0 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/23/20</u> END: <u>6/23/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>511795.6030 N, 2243067.1070 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 3" ASPHALT, 4.5" CONCRETE, 4" GRAVEL BASE (NOTE: CONCRETE IS BROKEN).	1067.0																	
LOOSE, BROWN, <b>GRAVEL AND STONE FRAGMENTS WITH SAND</b> , TRACE CLAY, DAMP	1065.7	1	3															
		2	3	11	56	SS-1	3.25	23	54	10	4	9	NP	NP	NP	8	A-1-b (0)	
	1063.5	3																
MEDIUM DENSE, BROWN, <b>GRAVEL AND/OR STONE FRAGMENTS WITH SAND AND SILT</b> , LITTLE CLAY, DAMP		4	3															
		5	5	15	72	SS-2	-	21	15	32	19	13	17	15	2	11	A-2-4 (0)	
	1061.0	6																
VERY STIFF, BROWN, <b>SANDY SILT</b> , DAMP		7	3															
		8	13	42	67	SS-3	-	2	11	26	26	35	21	14	7	11	A-4a (5)	
	1058.5	9	11															
<b>SHALE</b> , BROWN, HIGHLY WEATHERED, VERY WEAK TO WEAK, VERY FINE GRAINED, VERY THIN BEDDED, ARENACEOUS.	1057.0	10	24	67	72	SS-4	-	-	-	-	-	-	-	-	-	9	Rock (V)	
		TR																
		EOB																

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76\_77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>334+68, 61' RT.</u>	EXPLORATION ID <u>P-019-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1060.5 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512015.1450 N, 2243133.3590 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 13.5" ASPHALT, 5" GRAVEL BASE	1060.5																	
MEDIUM DENSE, BROWN, SANDY SILT, TRACE CLAY, DAMP	1059.0	1	10															
		2	11	27	50	SS-1	-	19	24	20	21	16	NP	NP	NP	8	A-4a (0)	
		3																
		4	4	8	44	SS-2	1.25	0	25	29	30	16	21	16	5	12	A-4a (2)	
		5	3	3														
LOOSE, BROWN, COARSE AND FINE SAND, TRACE GRAVEL, DAMP	1054.5	6	4	2	6	39	SS-3	-	5	24	36	23	12	20	NP	NP	11	A-3a (0)
		7																
		8																
LOOSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, LITTLE CLAY, DAMP	1052.0	9	3	7	11	SS-4	-	-	-	-	-	-	-	-	-	-	13	A-2-4 (V)
	1050.5	10	2															

DRAFT

EOB

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS





STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>340+04, 43' LT.</u>	EXPLORATION ID <u>P-022-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1048.3 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512547.3800 N, 2243020.5430 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
<b>PAVEMENT AND BASE, 13.75" ASPHALT, 5" GRAVEL BASE</b>	1048.3																		X
	1046.7	1	14																>>>
MEDIUM DENSE, BROWN, <b>SILTY SAND</b> , TRACE GRAVEL, @9.9' TIP OF SPOON CONTAINS BROWN CLAY, DAMP		2	12 14	36	56	SS-1	-	9	12	32	28	19	18	15	3	13			>>>
		3																	>>>
		4	11 12 13	35	72	SS-2		5	8	32	39	16	17	15	2	11			>>>
		5																	>>>
		6	6																>>>
		7	15 17	45	78	SS-3	-	0	15	41	32	12	16	14	2	10			>>>
		8																	>>>
		9	3 6	15	72	SS-4	-	7	10	41	28	14	15	15	NP	11			>>>
	1038.3	10	5																>>>
		EOB																	>>>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76 - 77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>344+04, 55' LT.</u>	EXPLORATION ID <u>P-024-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1044.9 (MSL)</u> EOB: <u>10.0 ft.</u>	PAGE 1 OF 1
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>512947.3800 N, 2242995.1570 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
PAVEMENT AND BASE, 12" ASPHALT, 5" GRAVEL BASE	1044.9																	
MEDIUM DENSE, BROWN, SANDY SILT, CONTAINS ROCK FRAGMENTS, DAMP	1043.5	1	14															
		2	10	31	44	SS-1	-	0	17	45	28	10	18	17	1	9	A-4a (1)	
	1041.4	3	12															
MEDIUM DENSE, ORANGISH BROWN, SILT, DAMP		4	9															
		5	13	39	72	SS-2	-	1	4	16	56	23	21	18	3	13	A-4b (8)	
	1038.9	6	15															
MEDIUM DENSE, BROWN, SANDY SILT, CONTAINS ROCK FRAGMENTS, DAMP		7	4															
	1036.4	8	6	38	72	SS-3	-	13	8	33	28	18	16	15	1	11	A-4a (2)	
		9	21															
MEDIUM DENSE, LIGHT BROWN, COARSE AND FINE SAND, LITTLE GRAVEL, DAMP		10	4															
	1034.9	EOB	13	31	72	SS-4	-	20	10	56	11	3	NP	NP	NP	5	A-3a (0)	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>347+84, 59' RT.</u>	EXPLORATION ID <u>P-025-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1042.7 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/25/20</u> END: <u>6/25/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513322.2130 N, 2243106.1760 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI				
<b>PAVEMENT AND BASE, 11.75" ASPHALT, 5" GRAVEL BASE</b>	1042.7																	X	
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , TRACE TO LITTLE GRAVEL, @3.5-5.5': LOOSE TO MEDIUM DENSITY, TRACE CLAY AS WELL, DAMP	1041.3	1	24															>	
		2	14 12	36	50	SS-1	-	17	30	32	15	6	NP	NP	NP	7	A-3a (0)	>	
LOOSE, BROWN, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , TRACE TO LITTLE CLAY, DAMP TO MOIST	1036.7	3																>	
		4	8															>	
		5	5 5	14	44	SS-2	-	10	25	35	22	8	14	NP	NP	9	A-3a (0)	>	
	1036.7	6	2															>	
		7	3 2	7	17	SS-3	-	-	-	-	-	-	-	-	-	-	7	A-2-4 (V)	>
	1032.7	8																>	
		9	2															>	
		10	2 2	6	17	SS-4	-	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	>
		EOB																>	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>351+75, 80' RT.</u>	EXPLORATION ID <u>P-027-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1039.1 (MSL)</u> EOB: <u>10.0 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513722.2130 N, 2243120.1970 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED	
								GR	CS	FS	SI	CL	LL	PL	PI	WC			
PAVEMENT AND BASE, 12.25" ASPHALT, 3.75" GRAVEL BASE	1039.1																		
MEDIUM DENSE, BROWN, <b>COARSE AND FINE SAND</b> , SOME CLAY, TRACE TO LITTLE GRAVEL, DAMP	1037.8	1	9																
		2	12 13	35	50	SS-1	-	33	20	17	15	15	-	-	-	11	A-3a (V)		
	1035.6	3																	
MEDIUM DENSE, GREY, <b>GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT</b> , DAMP	1034.8	4				SS-2A	-	52	17	19	9	3	-	-	-	5	A-2-4 (V)		
STIFF, BROWN, <b>SILTY CLAY</b> , TRACE TO LITTLE SAND, TRACE TO LITTLE GRAVEL, DAMP		5	11 7	20	44	SS-2B	1.75	-	-	-	-	-	-	-	-	12	A-6b (V)		
		6	5																
		7	5 6	15	44	SS-3	2.25	3	14	33	27	23	25	15	10	14	A-6b (V)		
		8																	
		9	5																
	1029.1	10	4 3	10	56	SS-4	3.75	-	-	-	-	-	-	-	-	14	A-6b (V)		
		EOB																	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>352+04, 72' LT.</u>	EXPLORATION ID <u>P-028-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1039.3 (MSL)</u> EOB: <u>8.7 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513747.3800 N, 2242961.4840 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 13.75" ASPHALT, 4" GRAVEL BASE	1039.3																	
	1037.6	1	17														X	
DENSE, BROWN, COARSE AND FINE SAND, TRACE CLAY, TRACE GRAVEL, DAMP		2	17	47	61	SS-1	-	27	16	28	17	12	NP	NP	NP	11	A-3a (V)	
	1035.8	3	17														X	
STIFF, BROWN, SANDY SILT, TRACE GRAVEL, DAMP		4	2	3	10	56	SS-2	1.25	4	19	37	25	15	20	16	4	14	A-4a (1)
		5	3	4														X
	1030.8	6	4															X
		7	6	50/5"	-	76	SS-3	4.00	0	17	24	35	24	22	15	7	13	A-4a (5)
	1030.6	8	50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	-	5	Rock (V)
SANDSTONE, ORANGISH BROWN, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, VERY THIN BEDDED.																		X

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:03 - X:\SHARED\DISCIPLINE\GEOTECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>354+06, 85' LT.</u>	EXPLORATION ID <u>P-029-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1038.0 (MSL)</u> EOB: <u>10.0 ft.</u>	PAGE 1 OF 1
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>513949.7200 N, 2242949.4840 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 13" ASPHALT, 5" GRAVEL BASE	1038.0																	
MEDIUM DENSE, BROWN, COARSE AND FINE SAND, DAMP	1036.5	1	15															
		2	12	33	56	SS-1	-	8	3	58	15	16	NP	NP	NP	10	A-3a (0)	
	1034.5	3																
HARD, GREY, SANDY SILT, TRACE GRAVEL, DAMP		4	7															
		5	9	33	39	SS-2	4.00	9	7	24	34	26	23	16	7	11	A-4a (5)	
	1032.0	6																
MEDIUM DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, TRACE CLAY, DAMP		7	4															
		8	6	20	44	SS-3	-	32	7	28	17	16	19	16	3	11	A-2-4 (0)	
	1029.5	9																
DENSE TO VERY DENSE, BROWN AND GREY, COARSE AND FINE SAND, TRACE GRAVEL, SAMPLE IS MOTTLED, DAMP		10	5	27	71	SS-4	-	2	2	61	18	17	17	16	1	9	A-3a (0)	
	1028.0			24														

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:04 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>355+21, 111' RT.</u>	EXPLORATION ID <u>P-030-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1033.1 (MSL)</u> EOB: <u>8.9 ft.</u>	
START: <u>6/30/20</u> END: <u>6/30/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>514066.9780 N, 2243137.8480 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
<b>PAVEMENT AND BASE, 13.25" ASPHALT, 4" GRAVEL BASE</b>	1033.1																	
MEDIUM DENSE, GREYISH BROWN, <b>COARSE AND FINE SAND</b> , LITTLE GRAVEL, TRACE CLAY, DAMP	1031.7	1	12															
		2	11	28	44	SS-1	-	48	42	3	5	2	-	-	-	8	A-3a (V)	
	1029.6	3																
MEDIUM DENSE, BROWN, <b>SANDY SILT</b> , TRACE CLAY, DAMP	1029.3	4	6			SS-2A	-	0	26	33	34	7	20	18	2	10	A-4a (1)	
VERY STIFF TO HARD, BROWN, <b>CLAY</b> , TRACE SAND AND GRAVEL, DAMP	1027.1	5	6	29	33	SS-2B	4.00	-	-	-	-	-	-	-	-	13	A-7-6 (V)	
		6	15															
<b>SANDSTONE</b> , BROWN, HIGHLY WEATHERED, WEAK TO MODERATELY STRONG, MEDIUM GRAINED, VERY THIN TO THIN BEDDED, @8.5-8.9': ALSO PORTIONS OF LIGHT GREY TO GREY SANDSTONE, FRIABLE, SAME CHARACTERISTICS OTHERWISE.	1027.1	TR																
	1024.2	8	50/5"	-	20	SS-3	-	-	-	-	-	-	-	-	-	6	Rock (V)	
		EOB	50/5"	-	20	SS-4	-	-	-	-	-	-	-	-	-	6	Rock (V)	

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 8/27/20 10:04 - X:\SHARED\DISCIPLINE\GEO\TECH\GINT - COLUMBUS\PROJECTS\1822-1016-00-1-76-77 EL ROBINSON (8-25-2020).G

PROJECT: <u>INTERSTATE 76/77</u>	DRILLING FIRM / OPERATOR: <u>DLZ-AD / REINHART</u>	DRILL RIG: <u>'19 CME 75-079-797</u>	STATION / OFFSET: <u>360+05, 53' LT.</u>	EXPLORATION ID <u>P-032-0-20</u>
TYPE: <u>ROADWAY</u>	SAMPLING FIRM / LOGGER: <u>DLZ / HUZINEC</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>102329</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>8/15/19</u>	ELEVATION: <u>1034.6 (MSL)</u> EOB: <u>8.7 ft.</u>	
START: <u>6/22/20</u> END: <u>6/22/20</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>83.7</u>	COORD: <u>514547.3800 N, 2242971.2730 E</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI			
PAVEMENT AND BASE, 12.75" ASPHALT, 4" GRAVEL BASE	1034.6																	X
VERY DENSE, BROWN, COARSE AND FINE SAND, CONTAINS ROCK FRAGMENTS, DAMP	1033.2	1	11															>
		2	42 29	99	61	SS-1	-	15	2	56	13	14	NP	NP	NP	9	A-3a (0)	>
VERY DENSE, BROWN, GRAVEL AND STONE FRAGMENTS WITH SAND AND SILT, DAMP	1028.6	3																>
		4	6 50/2"	-	100	SS-2	1.75	0	16	49	20	15	20	17	3	12	A-3a (0)	>
SANDSTONE, BROWN, DECOMPOSED TO HIGHLY WEATHERED, VERY WEAK TO WEAK, FINE GRAINED, VERY THIN BEDDED.	1026.1	5																>
	1025.9	6	50/5"	-	100	SS-3	-	-	-	-	-	-	-	-	-	9	A-2-4 (V)	>
		7																>
		8	50/2"	-	100	SS-4	-	-	-	-	-	-	-	-	-	8	Rock (V)	>

DRAFT

NOTES: NONE

ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED ASPHALT PATCH; BACKFILLED WITH AUGER CUTTINGS



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# GRAIN SIZE REPORTS

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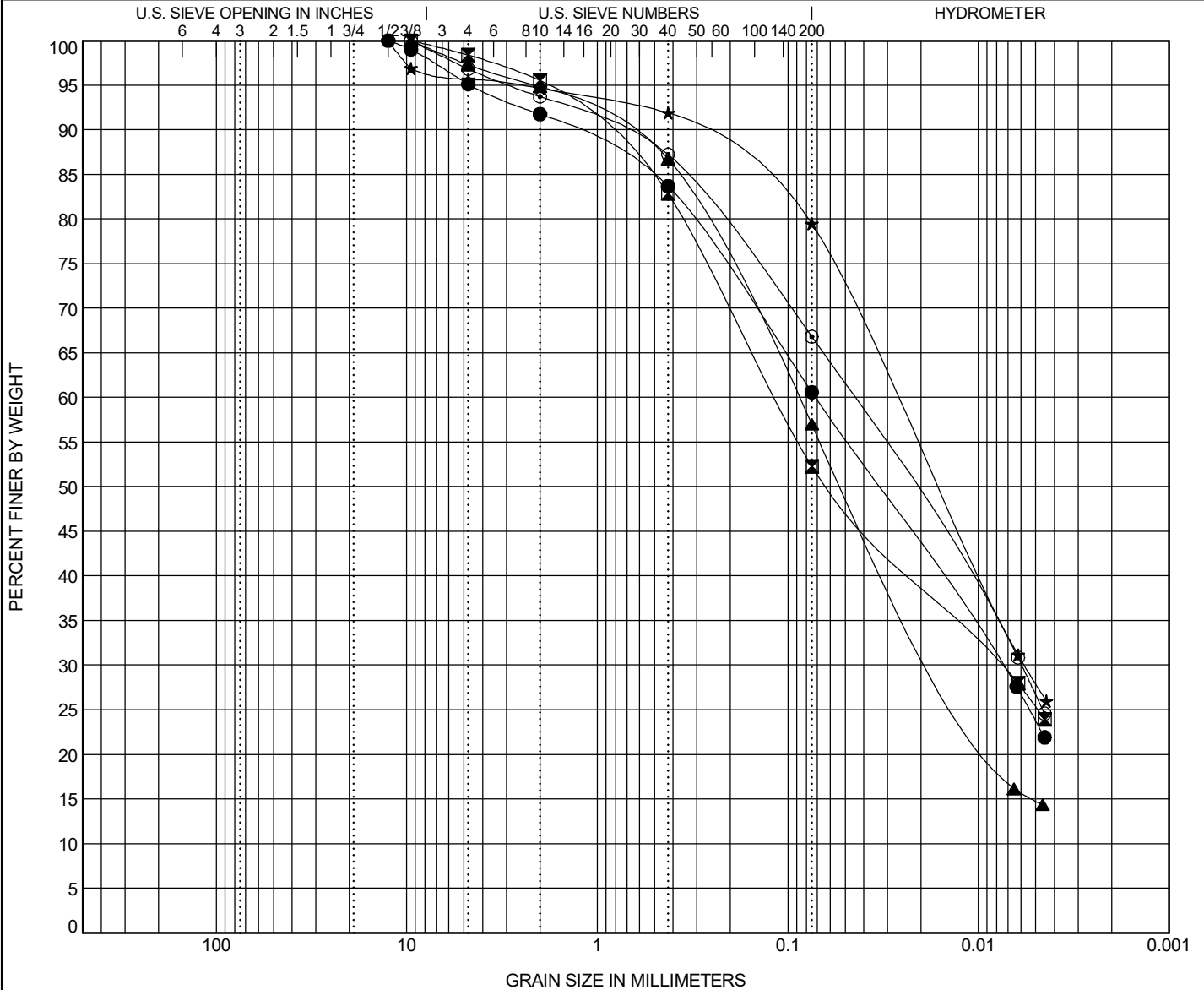


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● B2-001-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										25	17	8
■ B2-001-0-20 8.5	A-4a ~ SANDY LEAN CLAY(CL)										24	14	10
▲ B2-001-0-20 13.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										22	16	6
★ B2-001-0-20 16.0	A-6a ~ LEAN CLAY with SAND(CL)										30	18	12
◎ B2-001-0-20 18.5	A-6a ~ SANDY LEAN CLAY(CL)										29	18	11
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● B2-001-0-20 1.0	1.426	0.034	0.008		8	8	23	37	24				
■ B2-001-0-20 8.5	1.017	0.059	0.008		4	13	31	27	25				
▲ B2-001-0-20 13.5	0.794	0.049	0.015		5	8	30	42	15				
★ B2-001-0-20 16.0	0.326	0.016	0.006		6	3	12	51	28				
◎ B2-001-0-20 18.5	0.821	0.023	0.006		6	7	20	40	27				

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



OHIO DEPARTMENT OF TRANSPORTATION  
OFFICE OF GEOTECHNICAL ENGINEERING

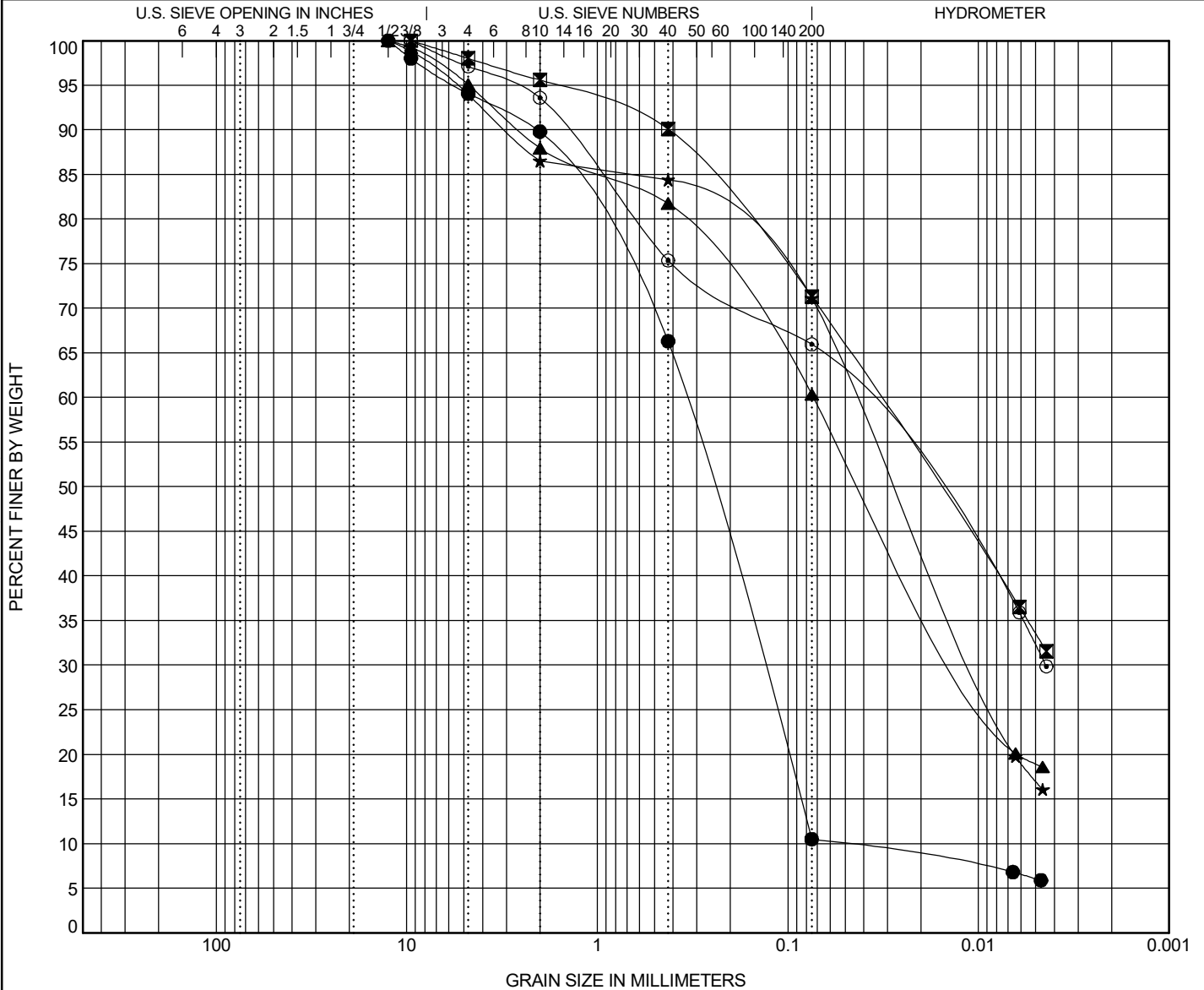
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● B2-001-0-20 31.0	~												
■ E3-001-0-20 1.0	A-6a ~ LEAN CLAY with SAND(CL)										27	16	11
▲ E3-001-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										26	20	6
★ E3-001-0-20 6.0	A-4b ~ SILTY CLAY with SAND(CL-ML)										28	22	6
⊙ E3-002-0-20 1.0	A-6a ~ SANDY LEAN CLAY(CL)										30	17	13
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● B2-001-0-20 31.0	2.081	0.256	0.138	0.055	11	23	56	4	6	0.99	6.39		
■ E3-001-0-20 1.0	0.421	0.016			5	5	19	38	33				
▲ E3-001-0-20 3.5	2.566	0.04	0.012		13	6	21	41	19				
★ E3-001-0-20 6.0	2.996	0.027	0.01		14	2	13	54	17				
⊙ E3-002-0-20 1.0	1.474	0.02	0.004		7	18	9	34	32				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

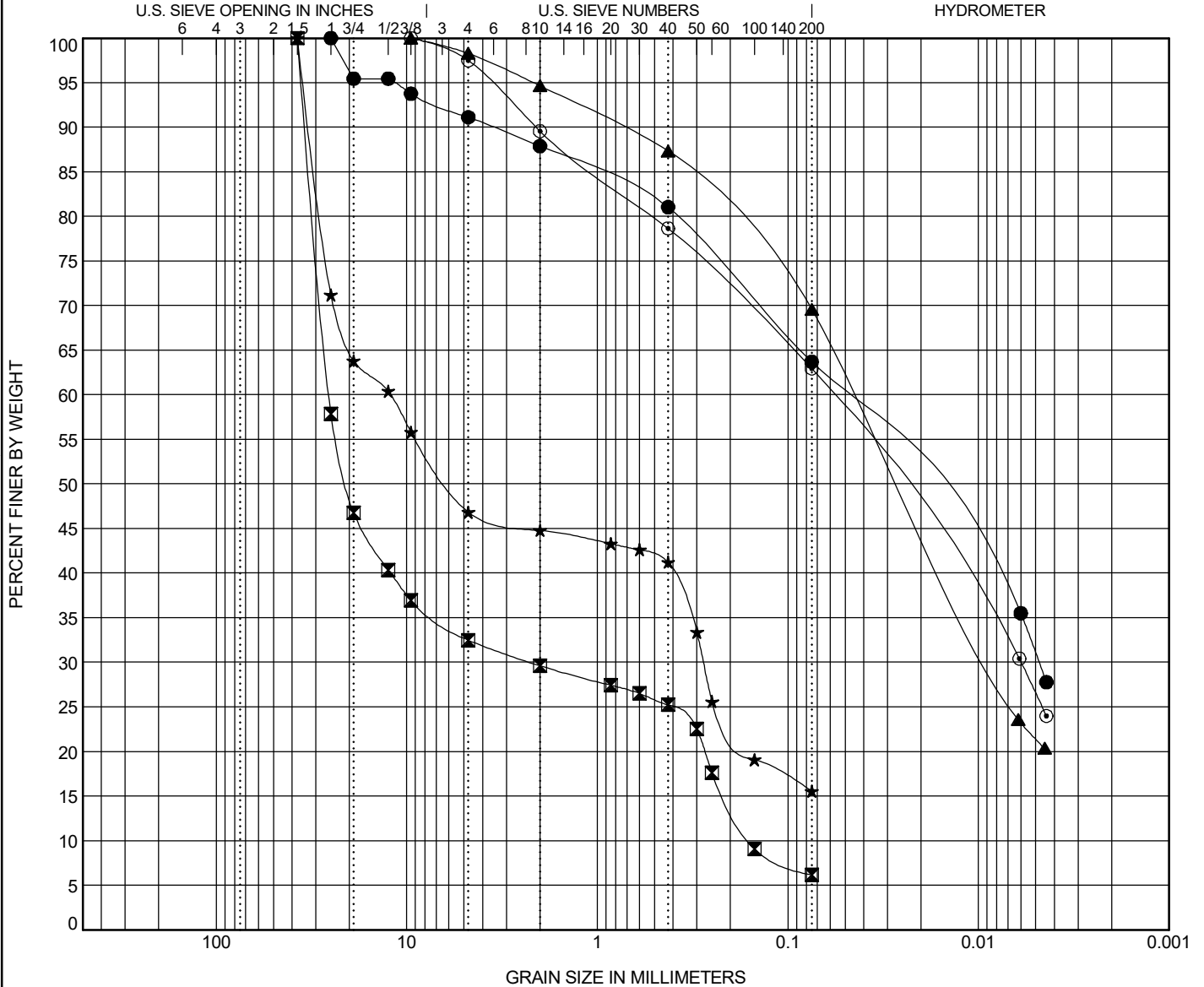


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-002-0-20 3.5	A-6a ~ SANDY LEAN CLAY(CL)										29	17	12
■ E3-002-0-20 8.5	~												
▲ E3-003-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										24	15	9
★ E3-003-0-20 6.0	~												
⊙ E3-004-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										26	16	10
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-002-0-20 3.5	3.514	0.022	0.005		12	7	17	33	31				
■ E3-002-0-20 8.5	34.061	20.583	2.258	0.159	71	4	19	6		1.26	160.73		
▲ E3-003-0-20 1.0	0.746	0.026	0.009		5	7	18	49	21				
★ E3-003-0-20 6.0	32.575	6.068	0.277		54	4	26	16					
⊙ E3-004-0-20 1.0	2.097	0.028	0.006		10	11	16	37	26				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\176\_77\_EL ROBINSON (8-24-2020).GPJ



**OHIO DEPARTMENT OF TRANSPORTATION  
OFFICE OF GEOTECHNICAL ENGINEERING**

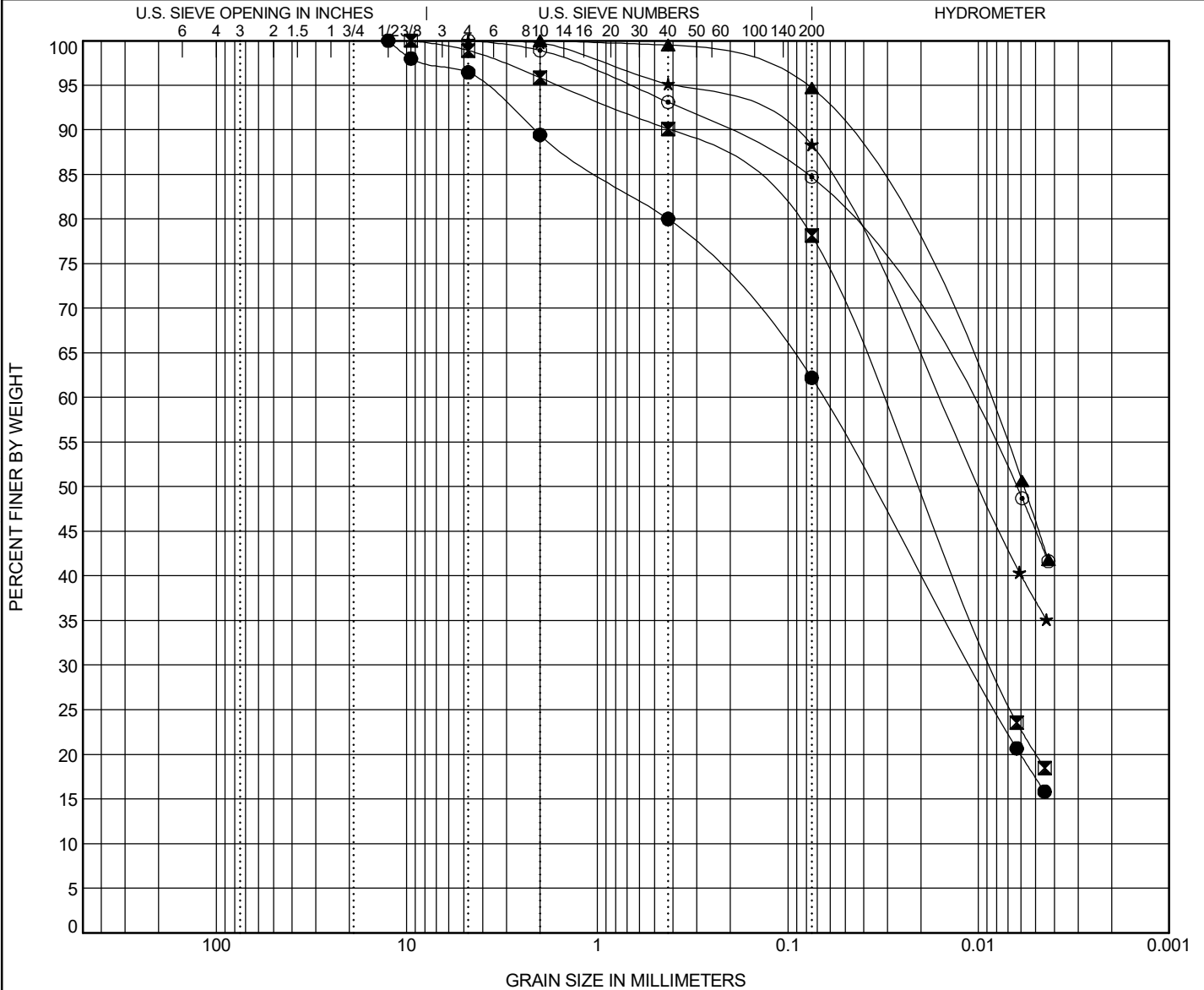
**GRAIN SIZE DISTRIBUTION**

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-004-0-20 6.0	A-4a ~ SANDY LEAN CLAY(CL)										29	21	8
☒ E3-004-0-20 8.5	A-4b ~ LEAN CLAY with SAND(CL)										29	21	8
▲ E3-005-0-20 1.0	A-6b ~ LEAN CLAY(CL)										38	22	16
★ E3-005-0-20 3.5	A-6a ~ SILT(ML)										38	25	13
⊙ E3-006-0-20 1.0	A-6b ~ LEAN CLAY with SAND(CL)										38	21	17
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-004-0-20 6.0	2.144	0.036	0.011		11	9	18	45	17				
☒ E3-004-0-20 8.5	0.418	0.021	0.008		4	6	12	58	20				
▲ E3-005-0-20 1.0	0.057	0.006			0	0	5	49	46				
★ E3-005-0-20 3.5	0.114	0.01			0	5	7	51	37				
⊙ E3-006-0-20 1.0	0.223	0.006			1	6	8	40	45				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



OHIO DEPARTMENT OF TRANSPORTATION  
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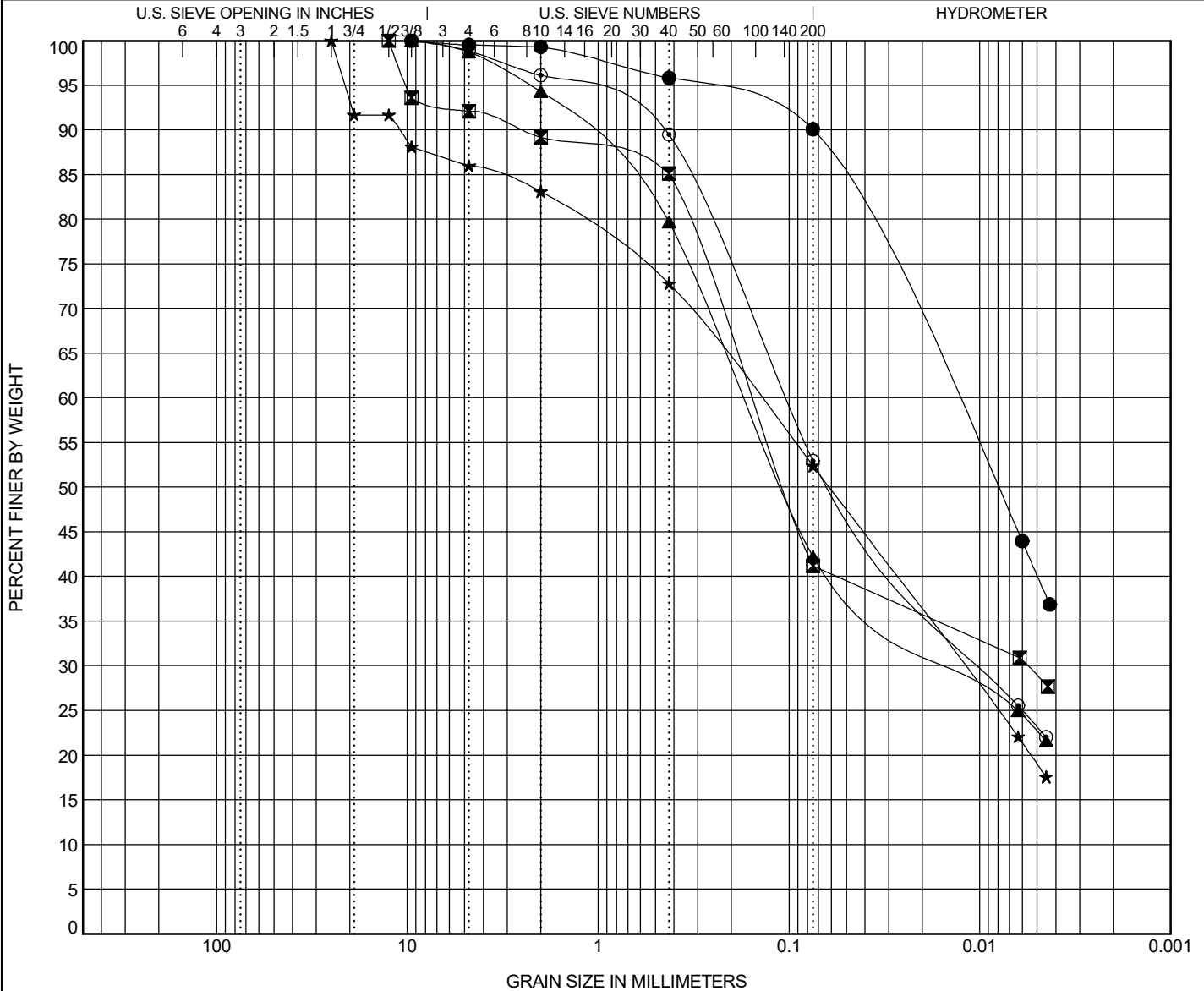
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● E3-006-0-20 3.5	A-6b ~ LEAN CLAY(CL)										38	21	17
☒ E3-007-0-20 1.0	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										23	16	7
▲ E3-007-0-20 3.5	A-4a ~ SILTY SAND(SM)										NP	NP	NP
★ E3-008-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										27	17	10
◎ E3-008-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)										21	14	7
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● E3-006-0-20 3.5	0.075	0.008			1	3	6	50	40				
☒ E3-007-0-20 1.0	2.544	0.106	0.006		11	4	44	12	29				
▲ E3-007-0-20 3.5	1.266	0.108	0.013		6	15	37	19	23				
★ E3-008-0-20 1.0	10.978	0.062	0.012		18	10	20	33	19				
◎ E3-008-0-20 6.0	0.477	0.057	0.009		3	7	37	30	23				

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



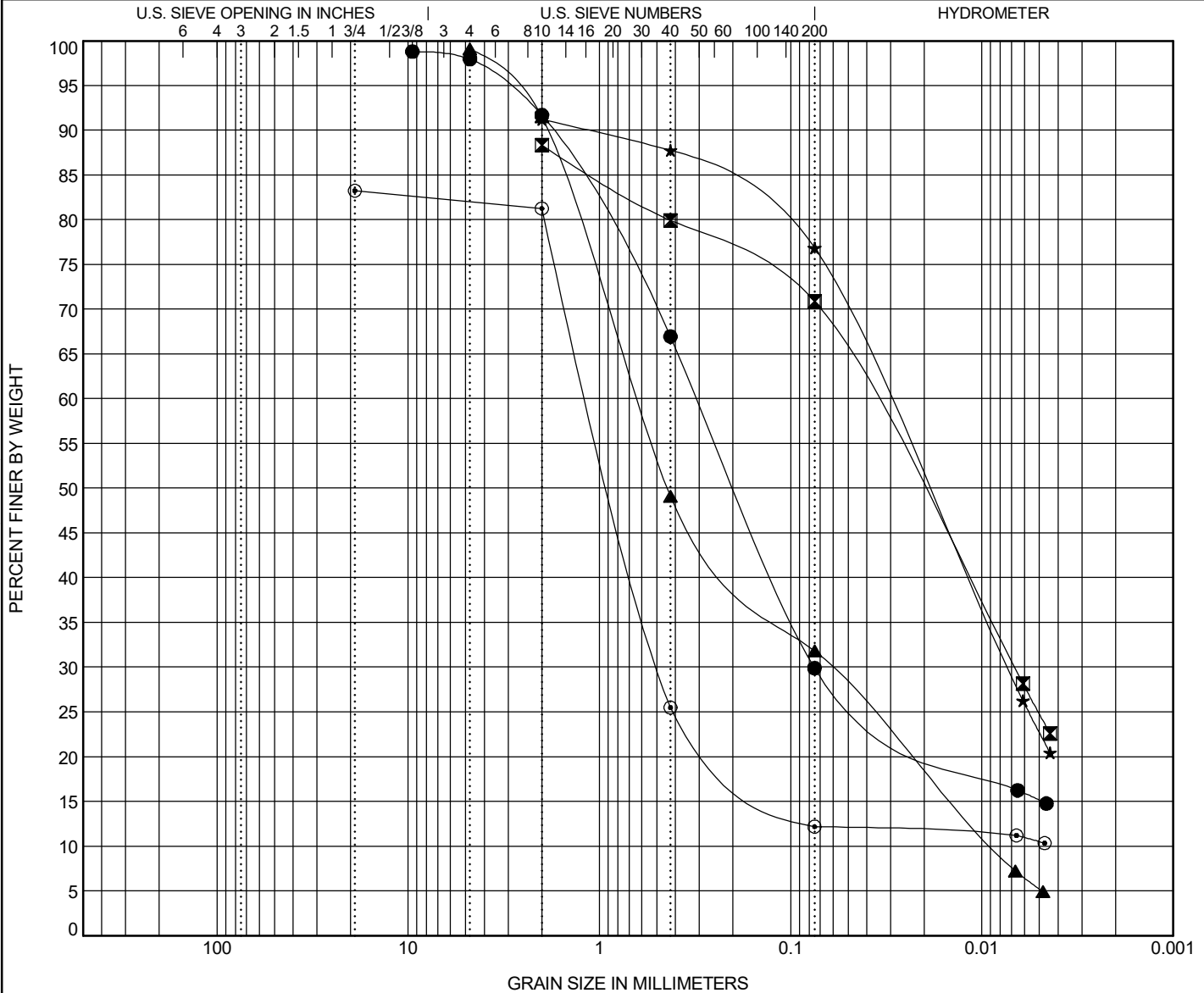


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-001-0-20 1.1	A-3a ~ SILTY SAND(SM)										16	17	NP
☒ P-001-0-20 3.5	A-4a ~ SILT with SAND(ML)										29	46	NP
▲ P-002-0-20 1.0	A-3a ~ SILTY SAND(SM)										15	NP	NP
★ P-002-0-20 3.5	A-4b ~ SILTY CLAY with SAND(CL-ML)										28	21	7
⊙ P-003-0-20 1.3	A-1-b ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-001-0-20 1.1	1.798	0.192	0.075		8	25	37	15	15				
☒ P-001-0-20 3.5		0.022	0.007		0	20	9	46	25				
▲ P-002-0-20 1.0	1.894	0.439	0.063	0.009	9	42	17	27	5	0.71	71.88		
★ P-002-0-20 3.5	1.162	0.02	0.007		0	12	11	54	23				
⊙ P-003-0-20 1.3		0.84	0.482		19	56	13	2	10				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



OHIO DEPARTMENT OF TRANSPORTATION  
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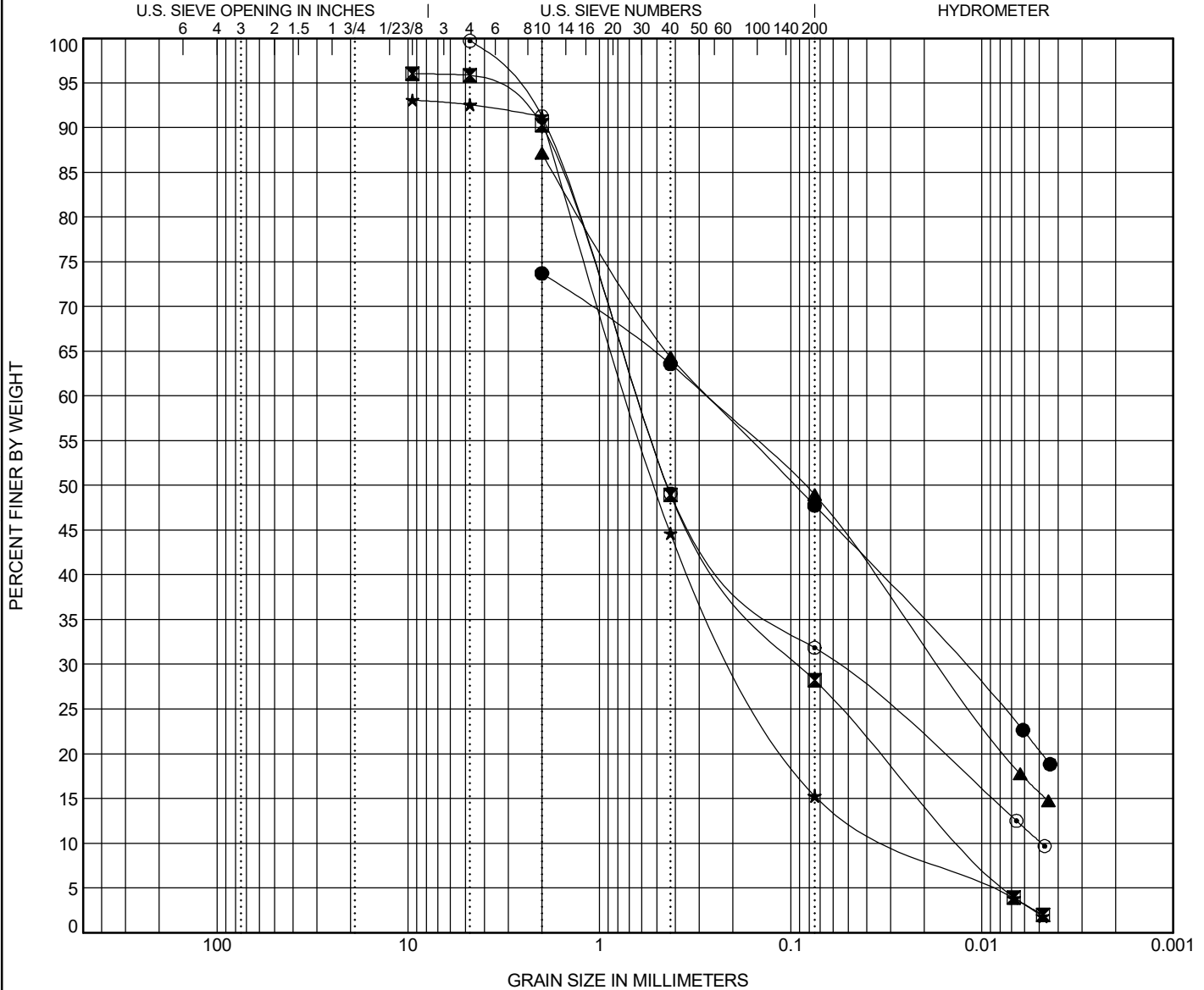
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-003-0-20 3.5	A-4a ~ CLAYEY SAND(SC)										28	19	9
■ P-004-0-20 1.3	A-3a ~ SILTY SAND(SM)										18	NP	NP
▲ P-004-0-20 3.5	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										26	19	7
★ P-005-0-20 1.2	A-1-b ~ SILTY SAND(SM)										19	18	1
○ P-005-0-20 3.5	A-3a ~ SILTY, CLAYEY SAND(SC-SM)										24	20	4
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-003-0-20 3.5		0.096	0.013		0	36	16	28	20				
■ P-004-0-20 1.3	1.98	0.442	0.087	0.012	10	41	21	26	2	0.95	51.86		
▲ P-004-0-20 3.5		0.084	0.017		0	36	15	33	16				
★ P-005-0-20 1.2	1.918	0.508	0.179	0.025	9	47	29	13	2	1.82	28.50		
○ P-005-0-20 3.5	1.909	0.44	0.06	0.005	9	42	17	22	10	1.14	129.62		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:16 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



OHIO DEPARTMENT OF TRANSPORTATION  
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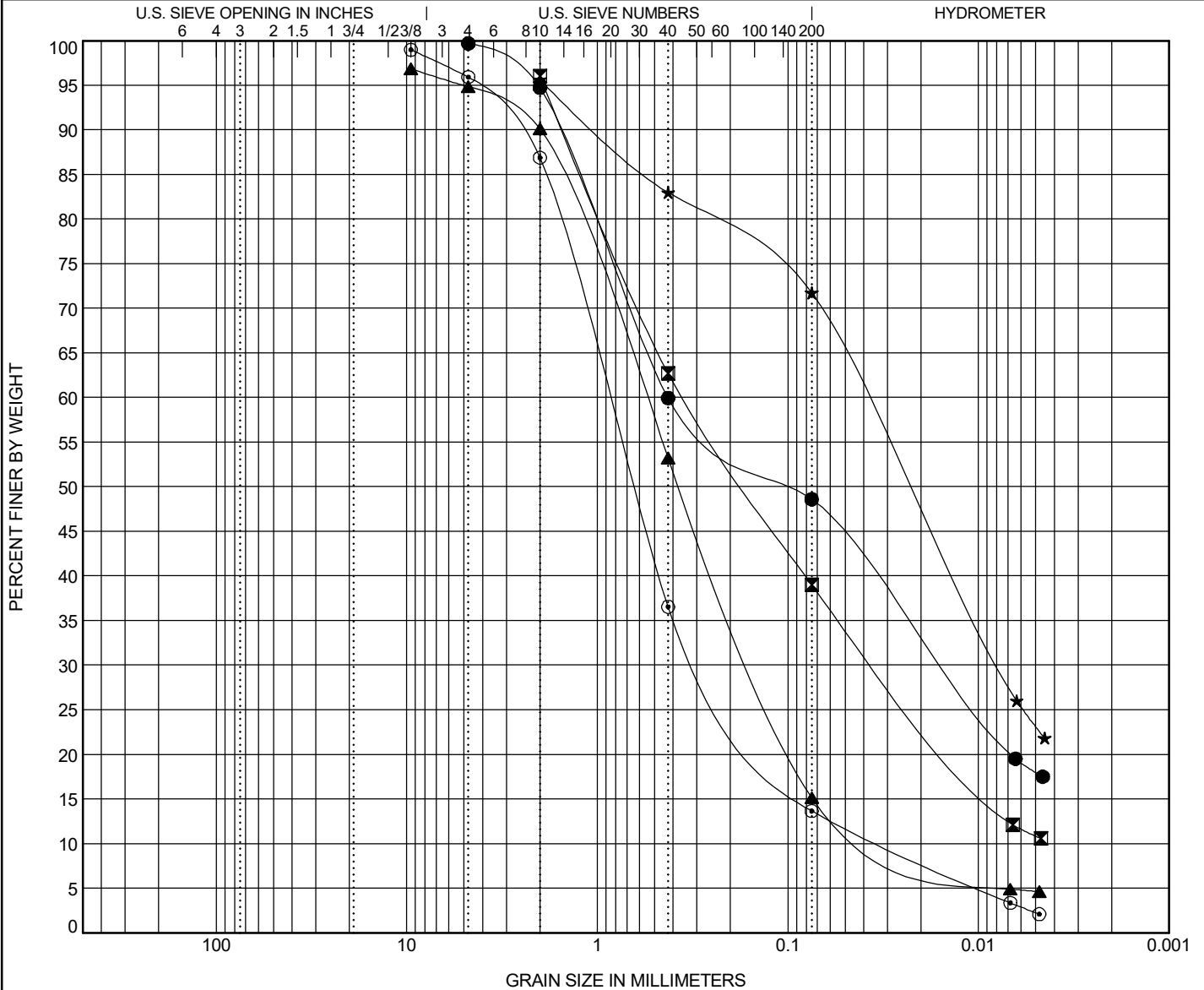
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-006-0-20 1.2	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										20	15	5
☒ P-006-0-20 3.5	A-4a ~ CLAYEY SAND(SC)										24	16	8
▲ P-007-0-20 1.3	A-3a ~ SILTY SAND(SM)										NP	NP	NP
★ P-007-0-20 3.5	A-4a ~ SILTY CLAY with SAND(CL-ML)										28	21	7
◎ P-008-0-20 1.0	A-1-b ~ SILTY SAND(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-006-0-20 1.2	1.62	0.093	0.016		5	35	11	31	18				
☒ P-006-0-20 3.5	1.51	0.168	0.033		0	37	24	28	11				
▲ P-007-0-20 1.3	1.991	0.367	0.148	0.023	10	37	38	10	5	1.71	24.99		
★ P-007-0-20 3.5	1.005	0.023	0.008		0	17	11	49	23				
◎ P-008-0-20 1.0	2.696	0.643	0.259	0.032	13	50	23	12	2	2.39	27.22		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

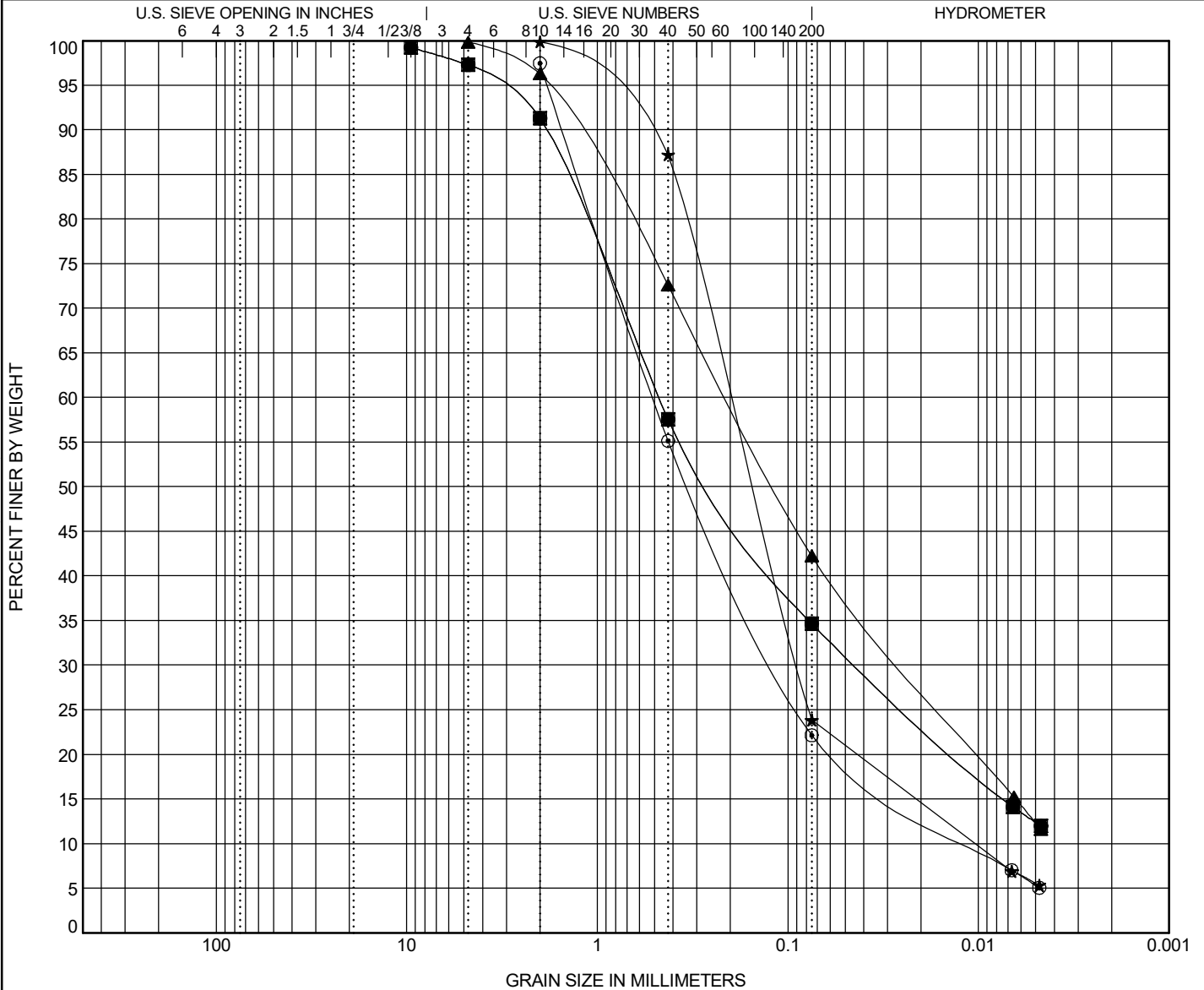


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification									LL	PL	PI
● P-008-0-20 2.3	~											
☒ P-008-0-20 3.5	A-3a ~ SILTY SAND(SM)									28	25	3
▲ P-009-0-20 3.5	A-6b ~ CLAYEY SAND(SC)									37	20	17
★ P-009-0-20 6.0	A-3a ~ SILTY SAND(SM)									22	NP	NP
⊙ P-010-0-20 1.1	A-3a ~ SILTY SAND(SM)									15	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu	
● P-008-0-20 2.3	1.884	0.24	0.043		8	34	23	23	12			
☒ P-008-0-20 3.5	1.884	0.24	0.043		8	34	23	23	12			
▲ P-009-0-20 3.5	1.326	0.117	0.025		4	24	30	30	12			
★ P-009-0-20 6.0	0.598	0.153	0.089	0.01	0	13	63	19	5	3.74	19.34	
⊙ P-010-0-20 1.1	1.522	0.325	0.113	0.011	0	45	33	17	5	2.34	47.01	

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

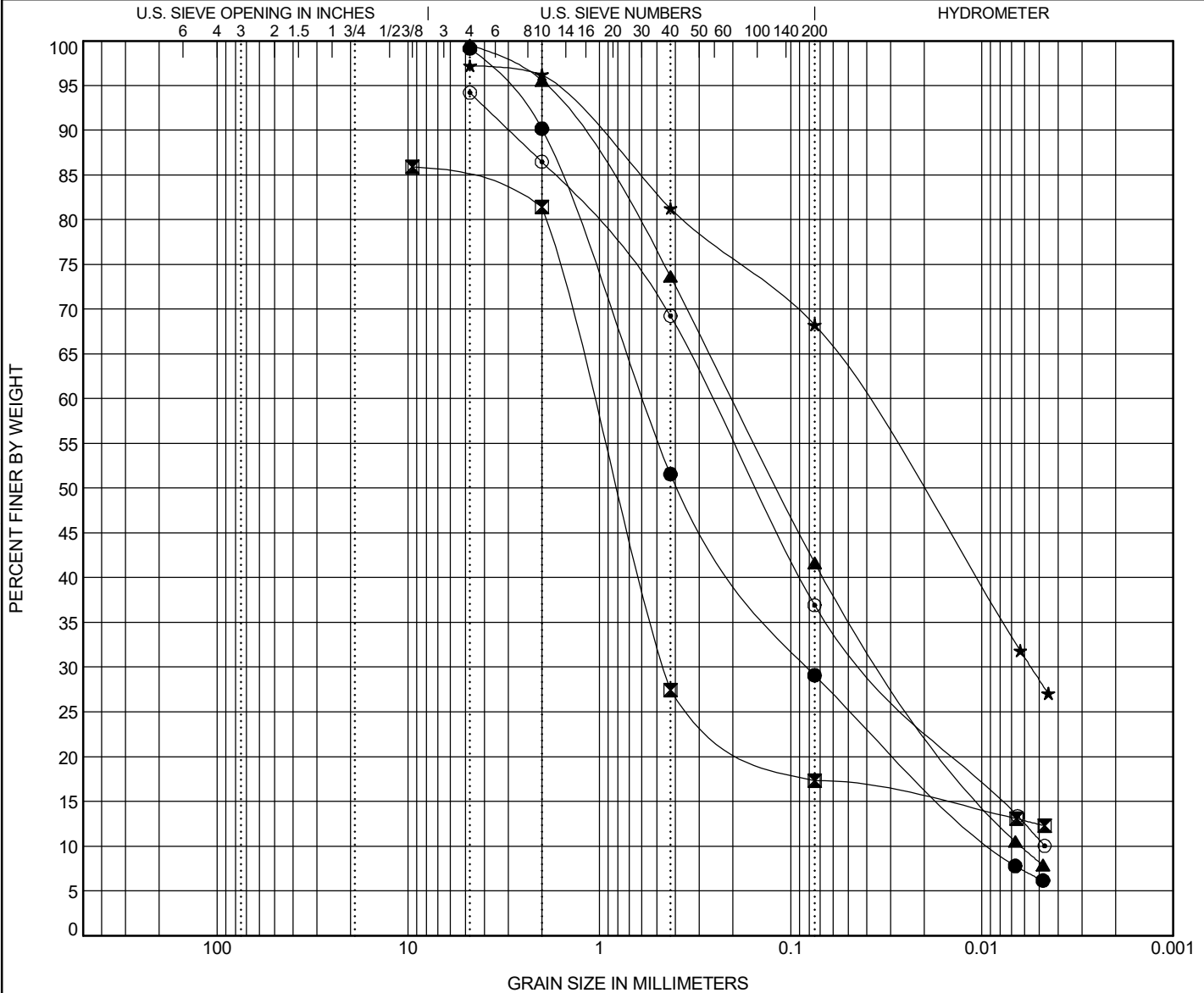


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-010-0-20 3.5	A-3a ~ SILTY SAND(SM)										25	22	3
☒ P-011-0-20 1.0	A-2-4 ~ SILTY, CLAYEY SAND with GRAVEL(SC-SM)										21	14	7
▲ P-011-0-20 3.5	A-4a ~ SILTY SAND(SM)										20	NP	NP
★ P-012-0-20 1.2	A-4a ~ SANDY LEAN CLAY(CL)										24	15	9
⊙ P-012-0-20 3.5	A-4a ~ SILTY SAND(SM)										17	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-010-0-20 3.5	1.986	0.377	0.081	0.009	10	39	22	23	6	1.26	69.10		
☒ P-011-0-20 1.0		0.812	0.458		19	54	10	5	12				
▲ P-011-0-20 3.5	1.347	0.118	0.03	0.006	4	22	32	34	8	0.72	32.25		
★ P-012-0-20 1.2	1.049	0.022	0.006		4	15	13	39	29				
⊙ P-012-0-20 3.5	2.969	0.151	0.037		14	17	32	26	11				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:17 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

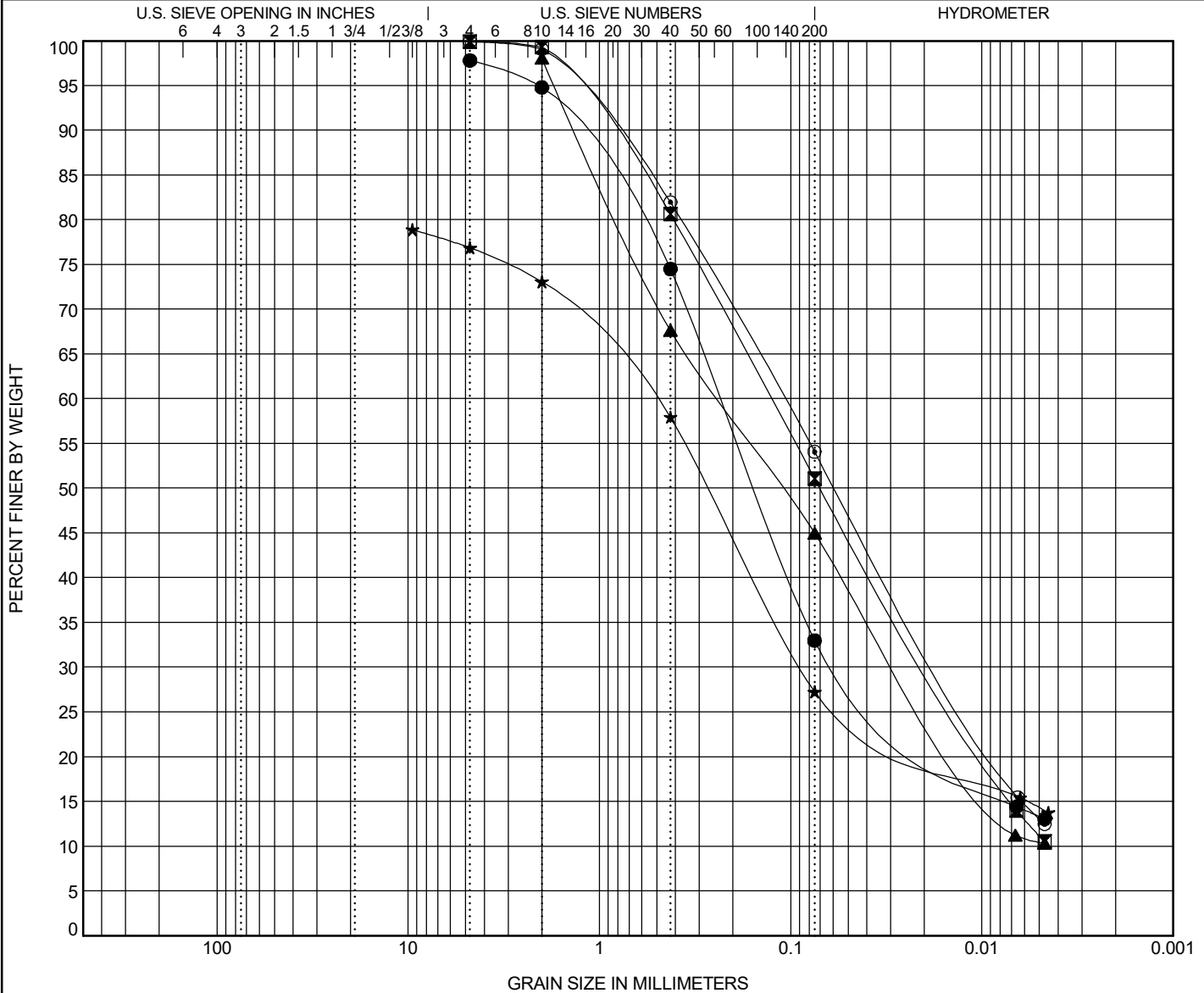


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-012-0-20 6.0	A-3a ~ SILTY SAND(SM)										19	NP	NP
■ P-013-0-20 1.0	A-4a ~ SANDY LEAN CLAY(CL)										24	16	8
▲ P-013-0-20 3.5	A-6a ~ CLAYEY SAND(SC)										28	17	11
★ P-014-0-20 1.1	A-2-4 ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
○ P-014-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)										28	22	6
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-012-0-20 6.0	1.389	0.153	0.051		5	20	42	20	13				
■ P-013-0-20 1.0	0.924	0.07	0.019		0	19	30	40	11				
▲ P-013-0-20 3.5	1.328	0.11	0.026		0	32	23	35	10				
★ P-014-0-20 1.1		0.271	0.088		27	15	31	13	14				
○ P-014-0-20 3.5	0.881	0.058	0.016		1	17	28	41	13				

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:18 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



OHIO DEPARTMENT OF TRANSPORTATION  
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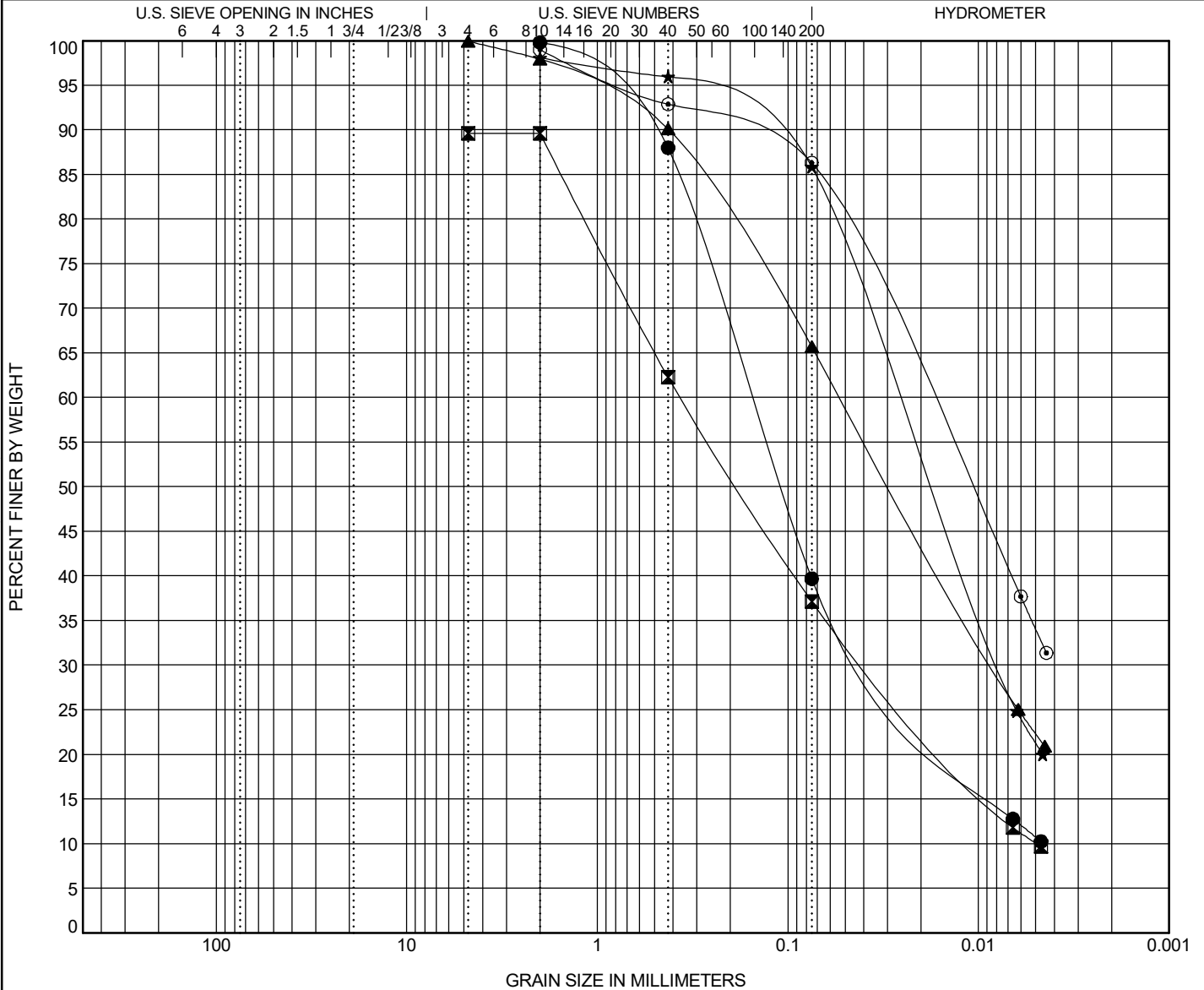
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-015-0-20 1.0	<b>A-4a ~ SILTY, CLAYEY SAND(SC-SM)</b>										24	19	5
■ P-015-0-20 3.5	~												
▲ P-016-0-20 1.2	<b>A-4a ~ SANDY SILTY CLAY(CL-ML)</b>										22	17	5
★ P-016-0-20 3.5	<b>A-4b ~ SILT(ML)</b>										25	22	3
⊙ P-017-0-20 1.1	<b>A-4b ~ SILTY CLAY(CL-ML)</b>										25	18	7
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-015-0-20 1.0	0.553	0.109	0.031		0	12	48	29	11				
■ P-015-0-20 3.5		0.182	0.038	0.005	11	27	25	27	10	0.80	73.13		
▲ P-016-0-20 1.2	0.422	0.029	0.008		2	8	24	44	22				
★ P-016-0-20 3.5	0.153	0.017	0.008		0	4	10	65	21				
⊙ P-017-0-20 1.1	0.199	0.011			0	7	7	52	34				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:18 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

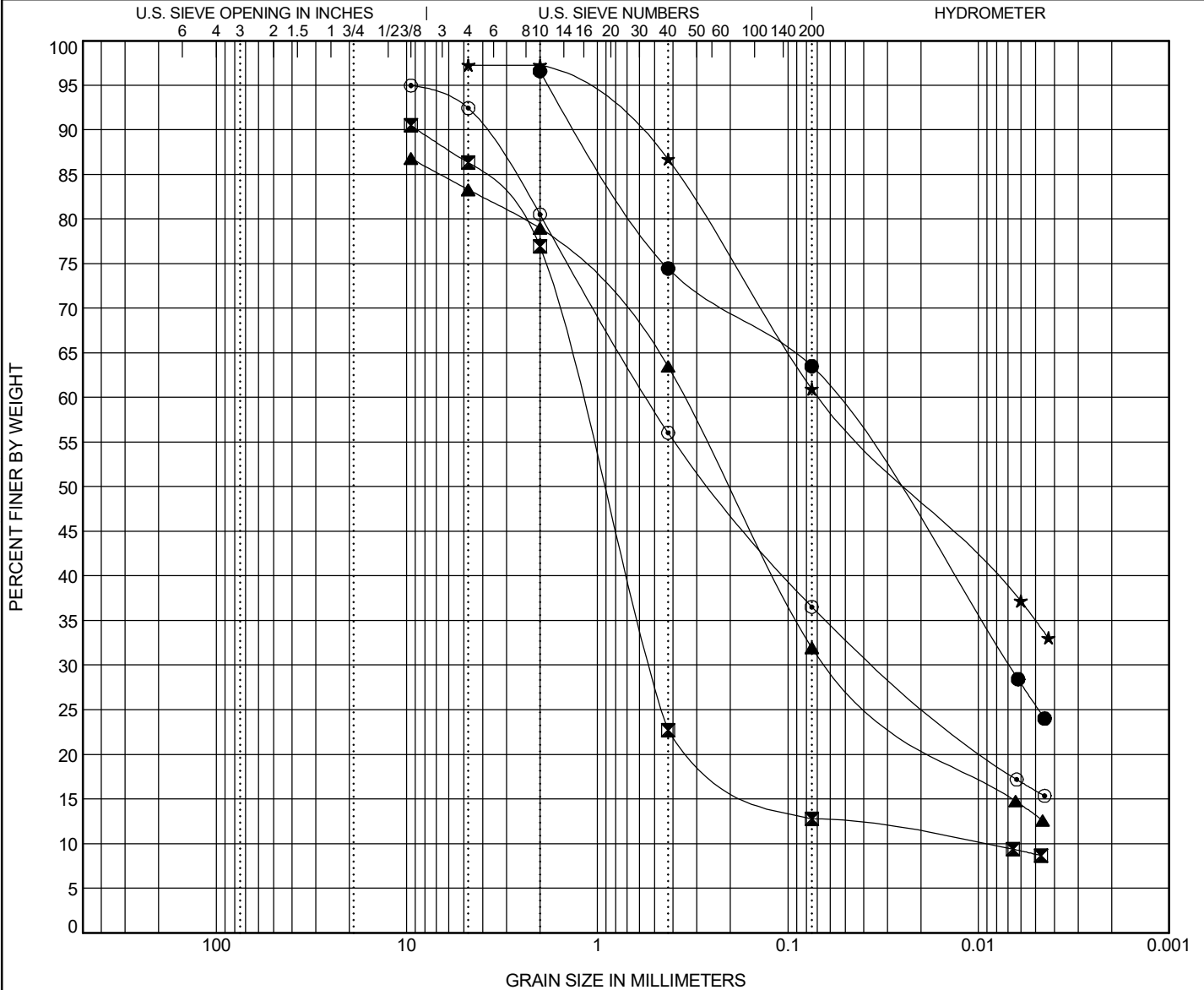


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-017-0-20 3.5	A-6a ~ SANDY LEAN CLAY(CL)										27	14	13
☒ P-018-0-20 1.0	A-1-b ~ SILTY SAND(SM)										NP	NP	NP
▲ P-018-0-20 3.5	A-2-4 ~ SILTY SAND with GRAVEL(SM)										17	15	2
★ P-018-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)										21	14	7
◎ P-019-0-20 1.0	A-4a ~ SILTY SAND(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-017-0-20 3.5	1.261	0.029	0.007		0	25	11	39	25				
☒ P-018-0-20 1.0	8.753	0.927	0.524	0.01	23	54	10	4	9	21.64	120.03		
▲ P-018-0-20 3.5		0.203	0.057		21	15	32	19	13				
★ P-018-0-20 6.0		0.688	0.023		2	11	26	26	35				
◎ P-019-0-20 1.0	3.979	0.248	0.033		19	24	20	21	16				

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:19 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



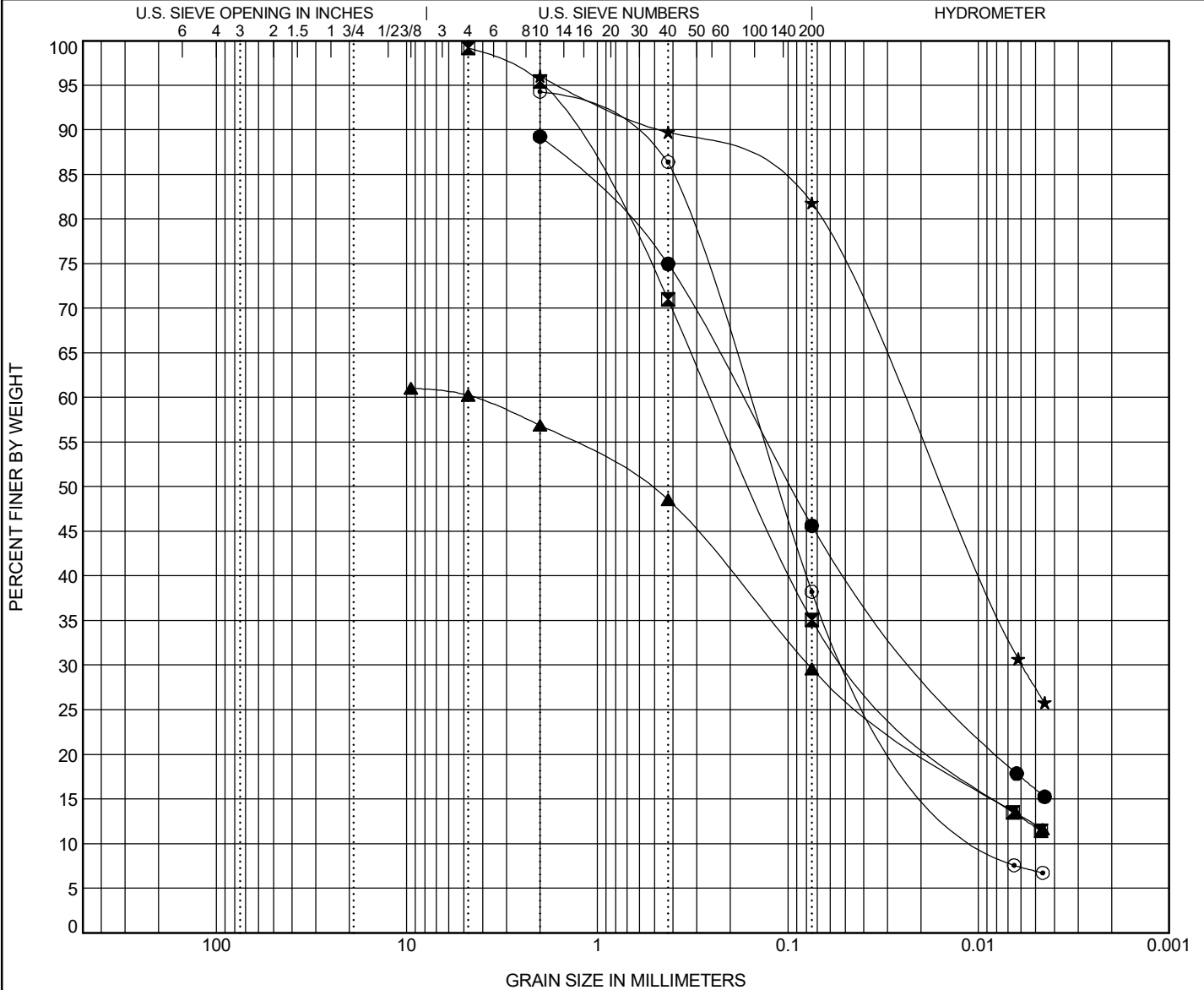


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-019-0-20 3.5	A-4a ~ SILTY, CLAYEY SAND(SC-SM)										21	16	5
☒ P-019-0-20 6.0	A-3a ~ SILTY SAND(SM)										20	NP	NP
▲ P-020-0-20 1.0	~												
★ P-020-0-20 6.0	A-4b ~ LEAN CLAY with SAND(CL)										28	20	8
◎ P-020-0-20 8.5	A-4a ~ SILTY SAND(SM)										NP	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-019-0-20 3.5		0.097	0.019		0	25	29	30	16				
☒ P-019-0-20 6.0	1.418	0.154	0.042		5	24	36	23	12				
▲ P-020-0-20 1.0		0.556	0.078		43	8	19	18	12				
★ P-020-0-20 6.0	0.454	0.016	0.006		0	10	8	55	27				
◎ P-020-0-20 8.5	0.862	0.115	0.039	0.008	0	14	48	31	7	1.17	20.79		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:19 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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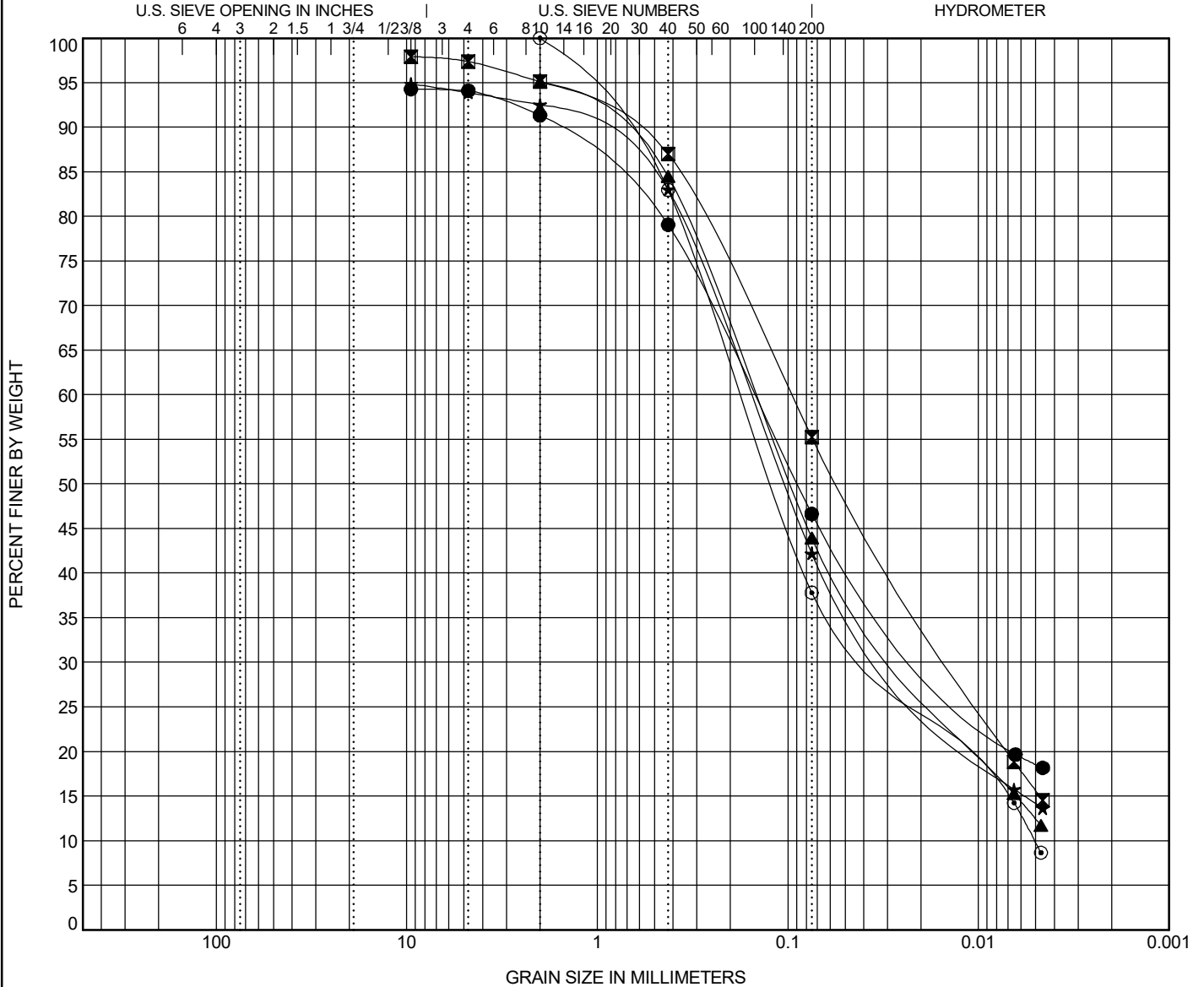
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-022-0-20 1.2	A-4a ~ SILTY SAND(SM)										18	15	3
■ P-022-0-20 3.5	A-4a ~ SANDY SILT(ML)										17	15	2
▲ P-022-0-20 6.0	A-4a ~ SILTY SAND(SM)										16	14	2
★ P-022-0-20 8.5	A-4a ~ SILTY SAND(SM)										15	15	NP
○ P-024-0-20 1.0	A-4a ~ SILTY SAND(SM)										18	17	1
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-022-0-20 1.2	1.687	0.09	0.016		9	12	32	28	19				
■ P-022-0-20 3.5	0.752	0.053	0.014		5	8	32	39	16				
▲ P-022-0-20 6.0	0.949	0.097	0.023		0	15	41	32	12				
★ P-022-0-20 8.5	1.323	0.105	0.024		7	10	41	28	14				
○ P-024-0-20 1.0	0.805	0.12	0.033	0.005	0	17	45	28	10	1.25	34.58		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:20 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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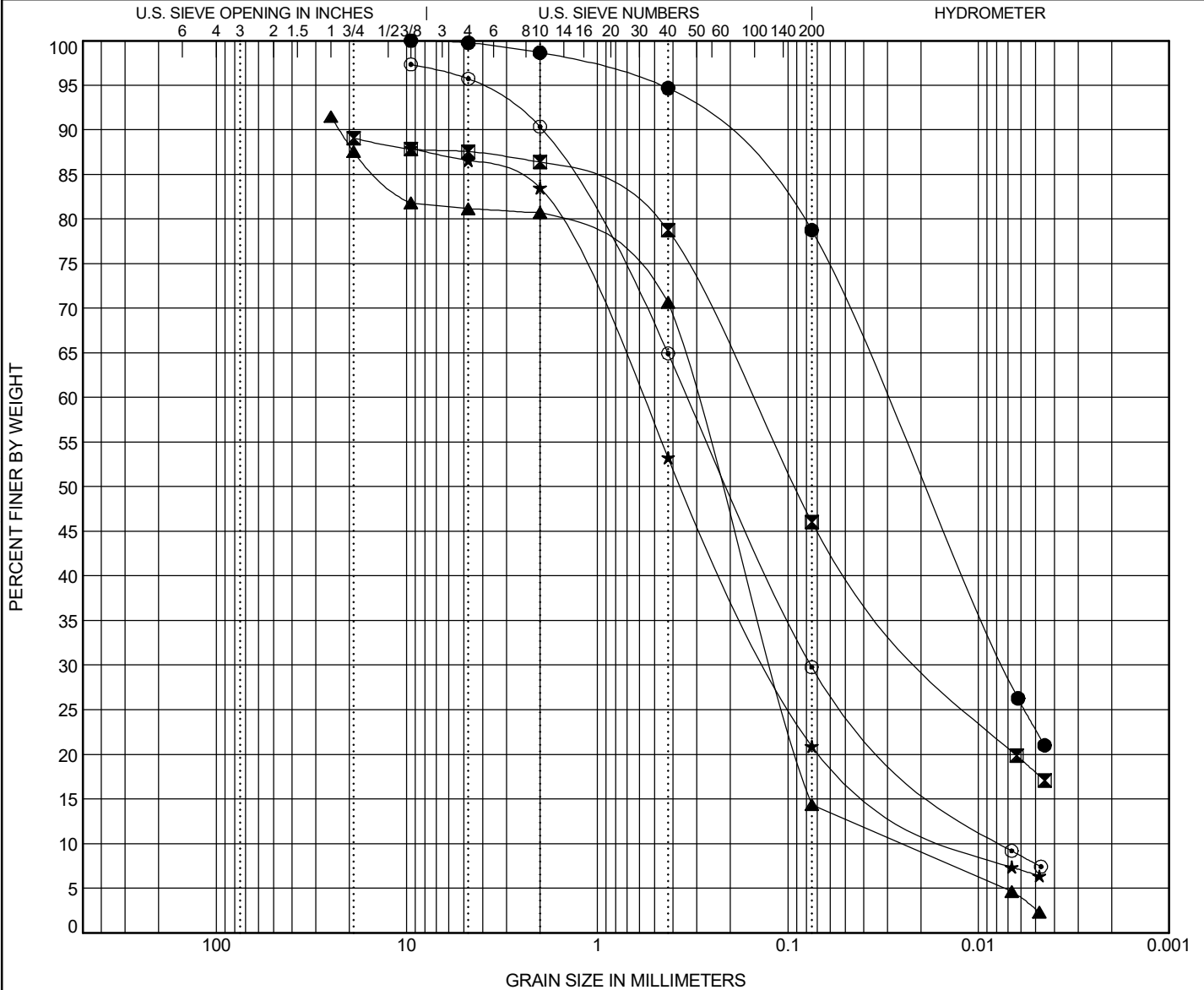
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-024-0-20 3.5	A-4b ~ SILT with SAND(ML)										21	18	3
☒ P-024-0-20 6.0	A-4a ~ SILTY SAND(SM)										16	15	1
▲ P-024-0-20 8.5	A-3a ~ SILTY SAND with GRAVEL(SM)										NP	NP	NP
★ P-025-0-20 1.0	A-3a ~ SILTY SAND(SM)										NP	NP	NP
◎ P-025-0-20 3.5	A-3a ~ SILTY SAND(SM)										14	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-024-0-20 3.5	0.255	0.019	0.007		1	4	16	56	23				
☒ P-024-0-20 6.0		0.093	0.016		13	8	33	28	18				
▲ P-024-0-20 8.5	22.54	0.225	0.121	0.026	20	10	56	11	3	1.89	11.99		
★ P-025-0-20 1.0		0.357	0.122	0.011	17	30	32	15	6	2.31	55.82		
◎ P-025-0-20 3.5	1.957	0.203	0.076	0.007	10	25	35	22	8	2.34	45.11		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:21 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

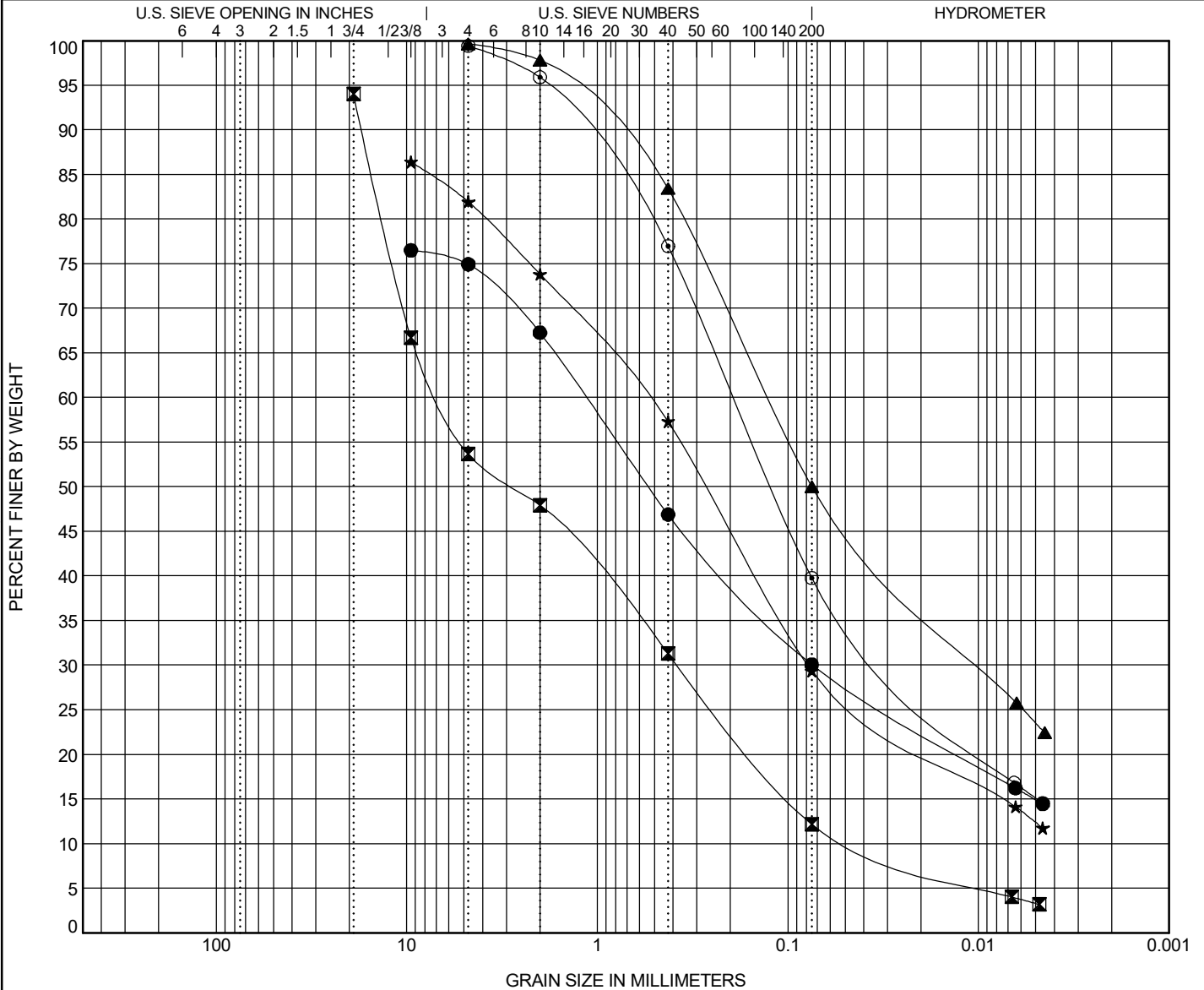


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification									LL	PL	PI
● P-027-0-20 1.0	~											
☒ P-027-0-20 3.5	~											
▲ P-027-0-20 6.0	<b>A-4a ~ CLAYEY SAND(SC)</b>									25	15	10
★ P-028-0-20 1.2	<b>A-2-4 ~ SILTY SAND with GRAVEL(SM)</b>									NP	NP	NP
◎ P-028-0-20 3.5	<b>A-4a ~ SILTY, CLAYEY SAND(SC-SM)</b>									20	16	4
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu	
● P-027-0-20 1.0		0.539	0.074		33	20	17	15	15			
☒ P-027-0-20 3.5	17.159	2.738	0.378	0.04	52	17	19	9	3	0.54	167.62	
▲ P-027-0-20 6.0	0.862	0.075	0.01		3	14	33	27	23			
★ P-028-0-20 1.2		0.27	0.078		27	16	28	17	12			
◎ P-028-0-20 3.5	1.234	0.121	0.027		4	19	37	25	15			

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:22 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

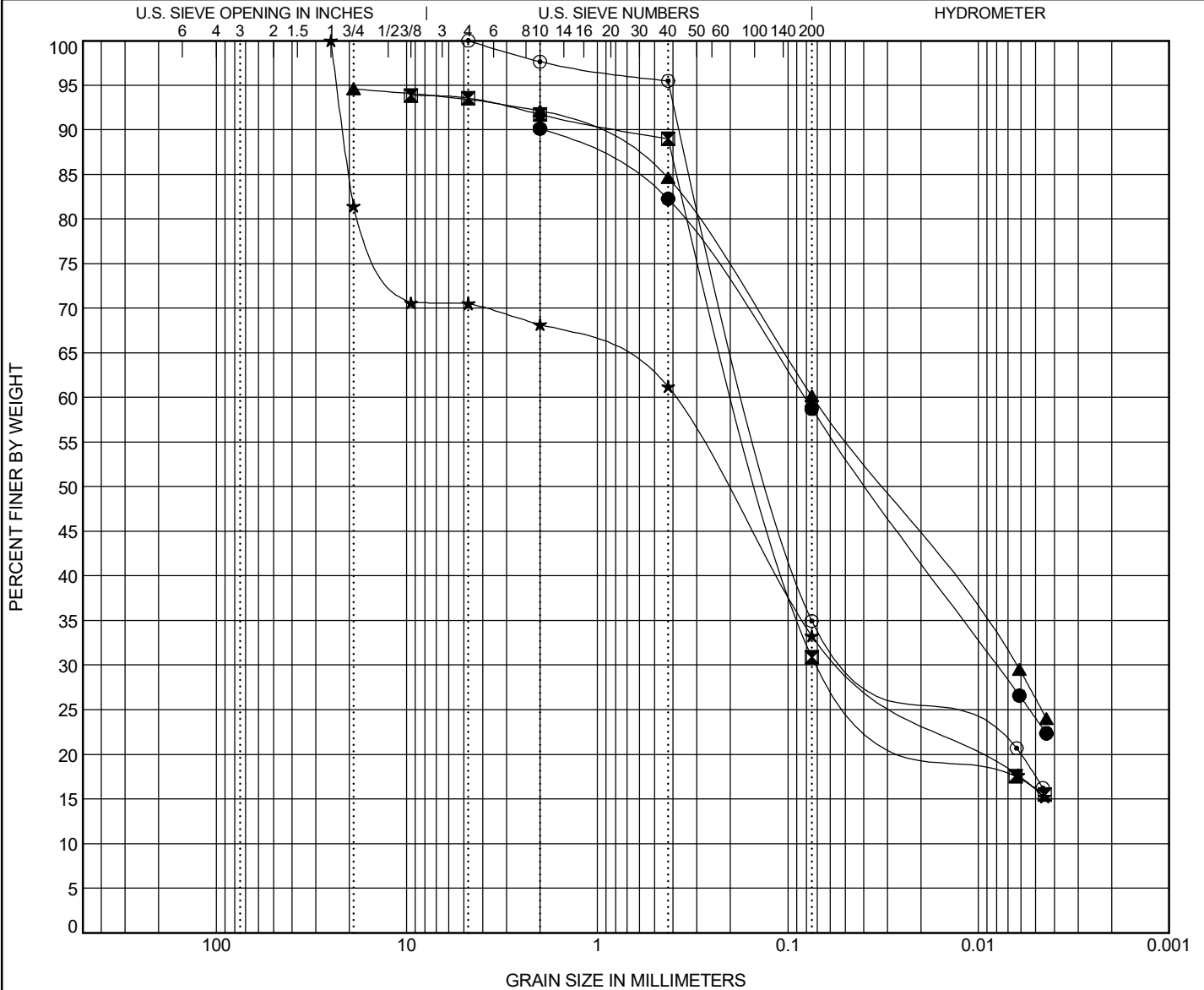


PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification									LL	PL	PI
● P-028-0-20 6.0	A-4a ~ SANDY SILTY CLAY(CL-ML)									22	15	7
■ P-029-0-20 1.1	A-3a ~ SILTY SAND(SM)									NP	NP	NP
▲ P-029-0-20 3.5	A-4a ~ SANDY SILTY CLAY(CL-ML)									23	16	7
★ P-029-0-20 6.0	A-2-4 ~ SILTY SAND with GRAVEL(SM)									19	16	3
○ P-029-0-20 8.5	A-3a ~ SILTY SAND(SM)									17	16	1
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu	
● P-028-0-20 6.0	1.944	0.038	0.008		0	17	24	35	24			
■ P-029-0-20 1.1	0.746	0.133	0.064		8	3	58	15	16			
▲ P-029-0-20 3.5	1.287	0.033	0.006		9	7	24	34	26			
★ P-029-0-20 6.0	21.56	0.212	0.044		32	7	28	17	16			
○ P-029-0-20 8.5	0.363	0.115	0.032		2	2	61	18	17			

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:23 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ



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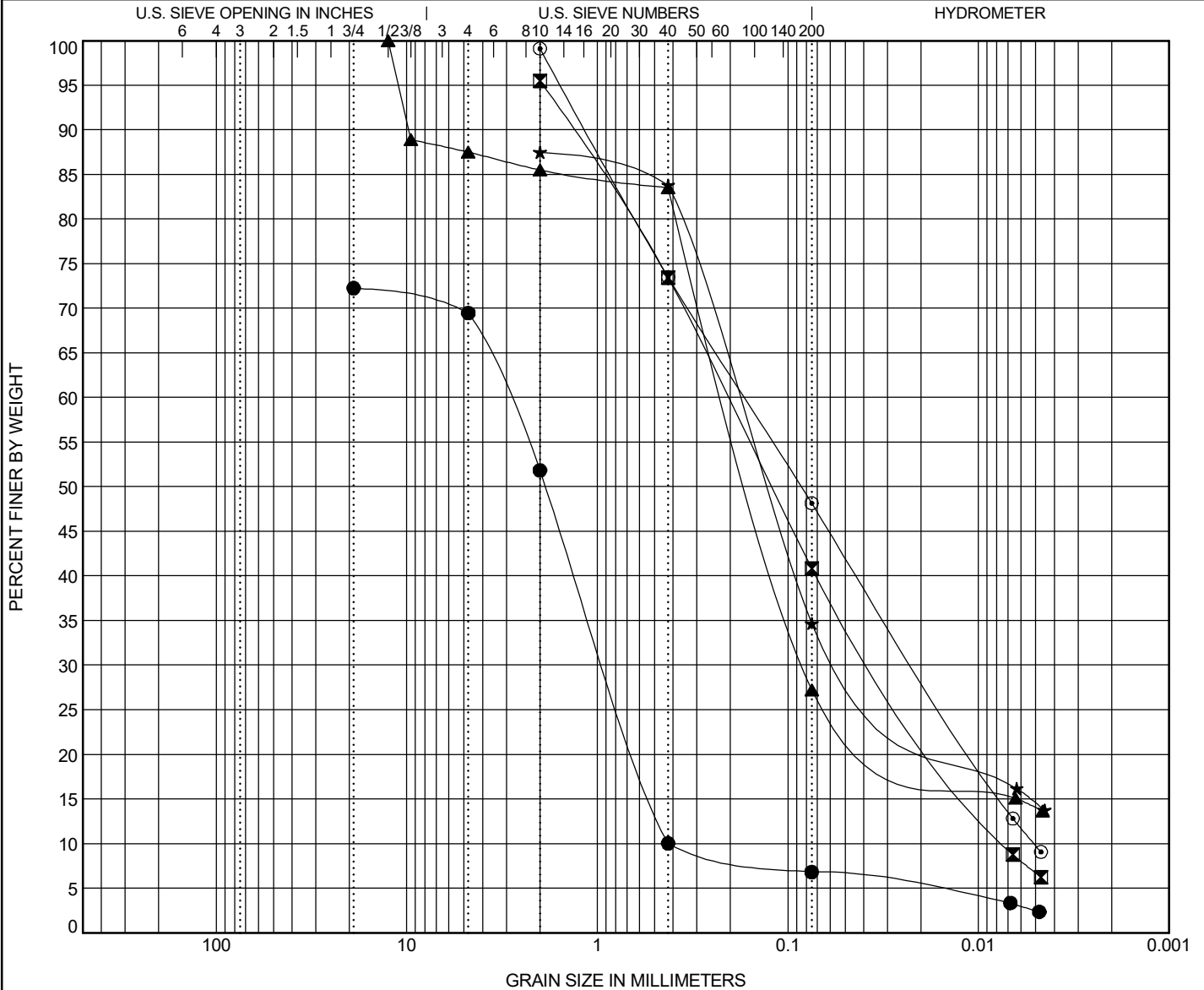
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification										LL	PL	PI
● P-030-0-20 1.0	~												
■ P-030-0-20 3.5	A-4a ~ SILTY SAND(SM)										20	18	2
▲ P-032-0-20 1.0	A-3a ~ SILTY SAND(SM)										NP	NP	NP
★ P-032-0-20 3.5	A-3a ~ SILTY SAND(SM)										20	17	3
⊙ P-033-0-20 1.0	A-4a ~ SILTY SAND(SM)										18	NP	NP
Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu		
● P-030-0-20 1.0		1.869	0.891	0.422	48	42	3	5	2	0.63	7.08		
■ P-030-0-20 3.5	1.358	0.122	0.033	0.007	0	26	33	34	7	0.72	28.65		
▲ P-032-0-20 1.0	9.764	0.151	0.082		15	2	56	13	14				
★ P-032-0-20 3.5		0.129	0.04		0	16	49	20	15				
⊙ P-033-0-20 1.0	1.153	0.085	0.022	0.005	0	27	25	38	10	0.54	32.97		

GRAIN SIZE - OH.DOT.GDT - 8/25/20 12:24 - X:\SHARED\DISCIPLINE\GEOTECH\IGNT\_COLUMBUS\PROJECTS\1822-1016-00-1-76\_77 EL ROBINSON (8-24-2020).GPJ



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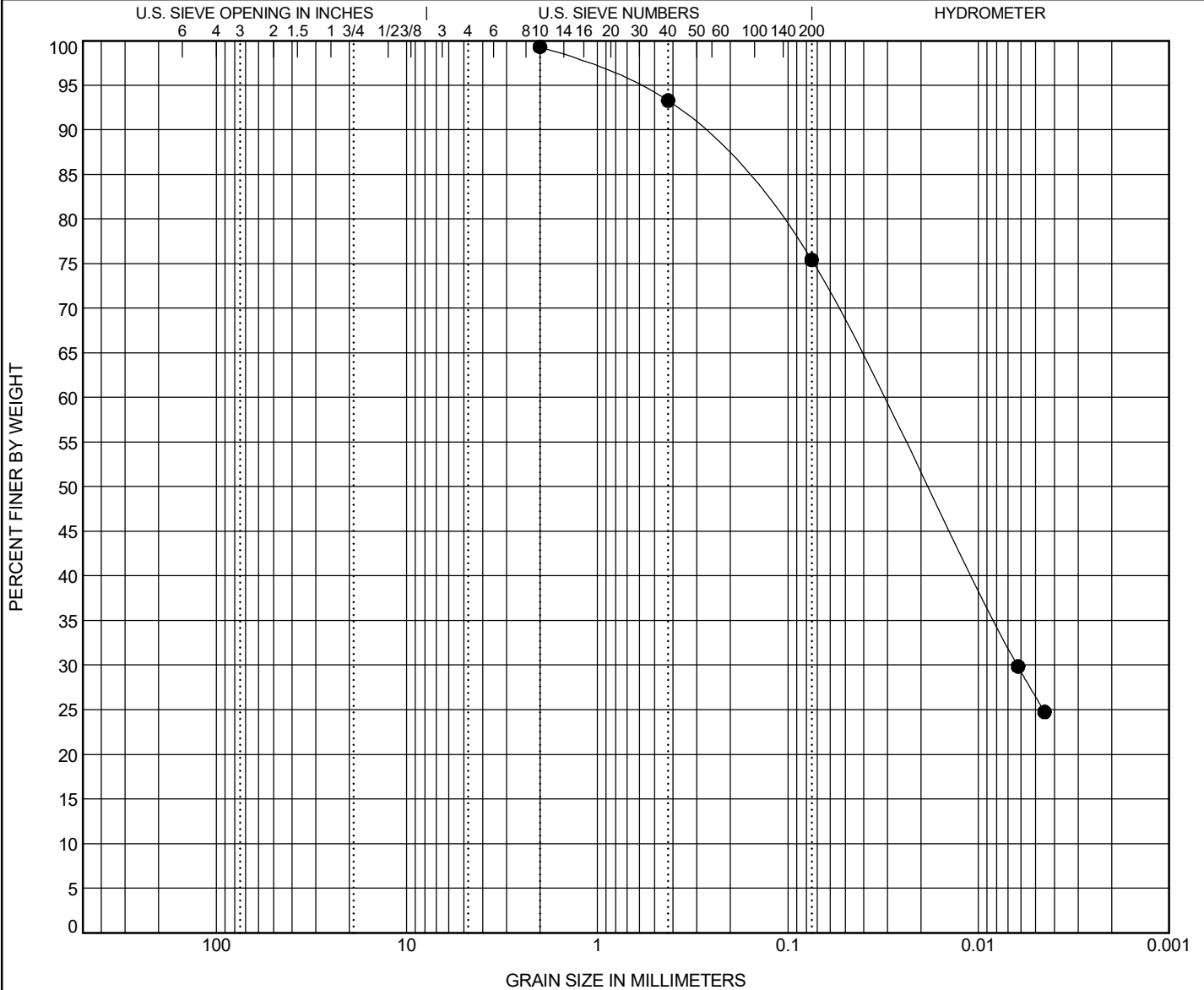
# GRAIN SIZE DISTRIBUTION

PROJECT INTERSTATE 76/77

PID 102329

OGE NUMBER SUM-076/077-08.42/09.74

PROJECT TYPE ROADWAY



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification	ODOT (Modified AASHTO) ~ USCS Classification							LL	PL	PI
● P-033-0-20 3.5	<b>A-6a ~ LEAN CLAY with SAND(CL)</b>							<b>27</b>	<b>16</b>	<b>11</b>

Specimen Identification	D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
● P-033-0-20 3.5	<b>0.309</b>	<b>0.019</b>	<b>0.006</b>		<b>0</b>	<b>7</b>	<b>18</b>	<b>49</b>	<b>26</b>		

GRAIN SIZE - OH DOT.GDT - 8/25/20 12:24 - X:\SHARED\DISCIPLINE\GEOTECH\GINT\_COLUMBUS\PROJECTS\1822-1016-00\1-76\_77 EL ROBINSON (8-24-2020).GPJ

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# GB-1 SUBGRADE ANALYSIS TAB

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EXPLOR. ID	STATION	OFFSET	DIR	SAMPLE ID	SAMPLE FROM	TO	SUBGRADE FROM	TO	N60	N60L	tsf HP	LL	PL	PI	% SILT	% CLAY	P 200	% WC	MOPT	ODOT CLASS	GI	ppm SO4
B2-001-0-20	333+51	52	Lt	SS-1	01.00	02.50			29			25	17		37	24		11		A-4a	-	-
B2-001-0-20	333+51	52	Lt	SS-2	03.50	05.00			29									5		Rock	-	-
B2-001-0-20	333+51	52	Lt	SS-3	06.00	07.50			3									13		Rock	-	-
B2-001-0-20	333+51	52	Lt	SS-4	08.50	10.00			14			24	14		27	25		10		A-4a	-	-
B2-001-0-20	333+51	52	Lt	SS-5	11.00	12.50			15									10		A-4a	-	-
B2-001-0-20	333+51	52	Lt	SS-6	13.50	15.00			20			22	16		42	15		14		A-4a	-	-
B2-001-0-20	333+51	52	Lt	SS-7	16.00	17.50			29			30	18		51	28		18		A-6a	-	-
B2-001-0-20	333+51	52	Lt	SS-8	18.50	20.00			12			29	18		40	27		14		A-6a	-	-
B2-001-0-20	333+51	52	Lt	SS-9	21.00	22.50			15									17		A-6a	-	-
B2-001-0-20	333+51	52	Lt	SS-10	23.50	25.00			21									11		Rock	-	-
B2-001-0-20	333+51	52	Lt	SS-11	26.00	27.50			12									16		Rock	-	-
B2-001-0-20	333+51	52	Lt	SS-12	28.50	29.33			30/50/4"									10		UCF	-	-
B2-001-0-20	333+51	52	Lt	SS-13	31.00	32.50			12						4	6		18		A-3a	-	-
B2-001-0-20	333+51	52	Lt	SS-14	33.50	35.00			12									16		A-3a	-	-
B2-001-0-20	333+51	52	Lt	SS-15	36.00	37.50			12									18		A-3a	-	-
B2-001-0-20	333+51	52	Lt	SS-16	38.50	39.50			1/3/50/0"									18		UCF	-	-
E3-001-0-20	4327+24	129	Lt	SS-1	01.00	02.50			27									13		A-6a	-	-
E3-001-0-20	4327+24	129	Lt	SS-2	03.50	05.00			29			26	20		41	19		12		A-4a	-	-
E3-001-0-20	4327+24	129	Lt	SS-3	06.00	07.50			42			28	22		54	17		8		A-4b	-	-
E3-001-0-20	4327+24	129	Lt	SS-4	08.50	09.42			20/50/5"									8		Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-5	11.00	12.50			72											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-6	13.50	14.42			25/50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-7	16.00	16.42			50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-8	18.50	18.92			50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-9	21.00	21.42			50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-10	23.50	23.83			50/4"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-11	26.00	26.92			35/50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-12	28.50	29.42			32/50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-13	31.00	31.42			50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-14	33.50	33.75			50/3"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-15	36.00	36.42			50/5"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-16	38.50	38.67			50/2"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-17	41.00	41.25			50/3"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-18	43.50	43.67			50/2"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-19	46.00	46.25			50/3"											Rock	-	-
E3-001-0-20	4327+24	129	Lt	SS-20	48.50	48.58			50/1"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-1	01.00	02.50			38			30	17		34	32		12		A-6a	-	-
E3-002-0-20	4328+42	112	Lt	SS-2	03.50	05.00			59			29	17		33	31		11		A-6a	-	-
E3-002-0-20	4328+42	112	Lt	SS-3	06.00	07.50			41									6		Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-4	08.50	10.00			41									6		Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-5	11.00	12.50			12											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-6	13.50	15.00			89											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-7	16.00	16.92			14/50/5"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-8	18.50	19.25			35/50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-9	21.00	21.42			50/5"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-10	23.50	23.92			50/5"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-11	26.00	26.33			50/4"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-12	28.50	28.75			50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-13	31.00	31.17			50/2"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-14	33.50	33.75			50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-15	36.00	36.17			50/2"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-16	38.50	38.75			50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-17	41.00	41.25			50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-18	43.50	43.75			50/3"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-19	46.00	46.17			50/2"											Rock	-	-
E3-002-0-20	4328+42	112	Lt	SS-20	48.50	48.83			50/4"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-1	01.00	02.50			44			24	15		49	21		8		A-4a	-	-
E3-003-0-20	4329+57	94	Lt	SS-2	03.50	05.00			32									14		A-4a	-	-
E3-003-0-20	4329+57	94	Lt	SS-3	06.00	07.50			65									6		Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-4	08.50	10.00			92									4		Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-5	11.00	11.42			50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-6	13.50	13.92			50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-7	16.00	17.50			66											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-8	18.50	20.00			77											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-9	21.00	21.42			50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-10	23.50	23.83			50/4"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-11	26.00	26.42			50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-12	28.50	28.67			50/2"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-13	31.00	31.17			50/2"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-14	33.50	33.67			50/2"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-15	36.00	36.83			37/50/4"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-16	38.50	39.42			36/50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-17	41.00	41.25			50/3"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-18	43.50	43.92			50/5"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-19	46.00	46.08			50/1"											Rock	-	-
E3-003-0-20	4329+57	94	Lt	SS-20	48.50	48.58			50/1"											Rock	-	-
E3-004-0-20	4330+72	89	Lt	SS-1	01.00	02.50			50			26	16		37	26		10		A-4a	-	-
E3-004-0-20	4330+72	89	Lt	SS-2	03.50	05.00			50									9		A-4a	-	-
E3-004-0-20	4330+72	89	Lt	SS-3	06.00	07.50			35			29	21		45	17		14		A-4a	-	-
E3-004-0-20	4330+72	89	Lt	SS-4	08.50	09.83			7/39/50/4"			29	21		58	20		10		A-4b	-	-
E3-004-0-20	4330+72	89	Lt	SS-5	11.00																	



EXPLOR. ID	STATION	OFFSET	DIR	SAMPLE ID	SAMPLE FROM	TO	SUBGRADE FROM	TO	N60	N60L	tsf HP	LL	PL	PI	% SILT	% CLAY	P 200	% WC	MOPT	ODOT CLASS	GI	ppm SO4		
E3-008-0-20	367+73	80	Lt	SS-13	31.00	31.25			50/3"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-14	33.50	33.58			50/1"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-15	36.00	36.17			50/2"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-16	38.50	38.58			50/1"									10			Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-17	41.00	41.17			50/2"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-18	43.50	43.75			50/3"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-19	46.00	46.33			50/4"												Rock	-	-	
E3-008-0-20	367+73	80	Lt	SS-20	48.50	48.75			50/3"									15			Rock	-	-	
P-001-0-20	4314+13	8	Lt	SS-1	01.10	02.60			22			16	17		15	15		18		A-3a	-	-		
P-001-0-20	4314+13	8	Lt	SS-2	03.50	04.30			19/50/4"			29	46		46	25		4			Rock	-	-	
P-001-0-20	4314+13	8	Lt	SS-3	06.00	06.80			38/50/4"									4			Rock	-	-	
P-001-0-20	4314+13	8	Lt	SS-4	08.50	09.20			42/50/2"									4			Rock	-	-	
P-002-0-20	4310+80	38	Rt	SS-1	01.00	02.50			32			15	NP					5			A-3a	-	-	
P-002-0-20	4310+80	38	Rt	SS-2	03.50	04.40			23/50/5"			28	21		54	23		10			Rock	-	-	
P-002-0-20	4310+80	38	Rt	SS-3	06.00	06.70			36/50/2"									5			Rock	-	-	
P-002-0-20	4310+80	38	Rt	SS-4	08.50	09.10			42/50/1"									4			Rock	-	-	
P-003-0-20	4314+12	32	Lt	SS-1	01.30	02.60			106			NP	NP		2	10		14			A-1-b	-	-	
P-003-0-20	4314+12	32	Lt	SS-2	03.50	04.10			31/50/1"			28	19		28	20		4			Rock	-	-	
P-003-0-20	4314+12	32	Lt	SS-3	06.00	06.40			50/5"									4			Rock	-	-	
P-003-0-20	4314+12	32	Lt	SS-4	08.50	09.10			33/50/1"									4			Rock	-	-	
P-004-0-20	4314+82	29	Rt	SS-1	01.30	02.20			13/50			18	NP		26	2		11			A-3a	-	-	
P-004-0-20	4314+82	29	Rt	SS-2	03.50	04.10			48/50/1"			26	19		33	16		4			Rock	-	-	
P-004-0-20	4314+82	29	Rt	SS-3	06.00	06.40			50/5"									4			Rock	-	-	
P-004-0-20	4314+82	29	Rt	SS-4	08.50	08.90			50/5"									4			Rock	-	-	
P-005-0-20	4317+80	10	Rt	SS-1	01.20	02.40			10/10/50/4"			19	18		13	2		14			A-1-b	-	-	
P-005-0-20	4317+80	10	Rt	SS-2	03.50	04.20			34/50/2"			24	20		22	10		3			Rock	-	-	
P-005-0-20	4317+80	10	Rt	SS-3	06.00	06.40			50/5"									3			Rock	-	-	
P-005-0-20	4317+80	10	Rt	SS-4	08.50	08.60			50/1"									5			Rock	-	-	
P-006-0-20	4318+15	35	Lt	SS-1	01.20	02.70						20	15		31	18		12			A-4a	-	-	
P-006-0-20	4318+15	35	Lt	SS-2	03.50	04.10			31/50/1"			24	16		28	11		4			Rock	-	-	
P-006-0-20	4318+15	35	Lt	SS-3	06.00	06.40			50/5"									5			Rock	-	-	
P-006-0-20	4318+15	35	Lt	SS-4	08.50	08.90			50/5"									5			Rock	-	-	
P-007-0-20	4321+13	9	Rt	SS-1	01.30	02.80			28			NP	NP		10	5		18			A-3a	-	-	
P-007-0-20	4321+13	9	Rt	SS-2	03.50	04.20			13/50/2"			28	21		49	23		6			Rock	-	-	
P-007-0-20	4321+13	9	Rt	SS-3	06.00	06.40			50/5"									8			Rock	-	-	
P-007-0-20	4321+13	9	Rt	SS-4	08.50	09.10			48/50/1"									9			Rock	-	-	
P-008-0-20	4322+19	8	Lt	SS-1A	01.00	02.50			21			NP	NP		12	2		9			A-1-b	-	-	
P-008-0-20	4322+19	8	Lt	SS-1B	02.25	02.50					4.00	NP	NP		23	12		13			A-7-6	-	-	
P-008-0-20	4322+19	8	Lt	SS-2	03.50	05.00			64			28	25		23	12		6			Rock	-	-	
P-008-0-20	4322+19	8	Lt	SS-3	06.00	06.60			39/50/1"									5			Rock	-	-	
P-008-0-20	4322+19	8	Lt	SS-4	08.50	09.10			47/50/1"									4			Rock	-	-	
P-009-0-20	4322+06	137	Lt	SS-1	01.00	02.50			10			2.25	37	20		30	12		19		A-1-a	-	-	
P-009-0-20	4322+06	137	Lt	SS-2	03.50	05.00			14			22	NP		19	5		11			A-6b	-	-	
P-009-0-20	4322+06	137	Lt	SS-3	06.00	07.50			10									9			A-3a	-	-	
P-009-0-20	4322+06	137	Lt	SS-4	08.50	10.00			4									9			A-6b	-	-	
P-010-0-20	4325+18	35	Rt	SS-1	01.10	02.60			13			15	NP		17	5		12			A-3a	-	-	
P-010-0-20	4325+18	35	Rt	SS-2	03.50	04.40			19/50/5"			25	22		23	6		3			Rock	-	-	
P-010-0-20	4325+18	35	Rt	SS-3	06.00	06.40			50/5"									5			Rock	-	-	
P-010-0-20	4325+18	35	Rt	SS-4	08.50	09.20			27/50/2"									4			Rock	-	-	
P-011-0-20	4326+28	12	Lt	SS-1	01.00	02.50						21	14		5	12		10			A-2-4	-	-	
P-011-0-20	4326+28	12	Lt	SS-2	03.50	04.30			6/50/4"			20	NP		34	8		6			Rock	-	-	
P-011-0-20	4326+28	12	Lt	SS-3	06.00	06.60			23/50/1"									5			Rock	-	-	
P-011-0-20	4326+28	12	Lt	SS-4	08.50	09.10			30/50/1"									6			Rock	-	-	
P-012-0-20	4326+01	91	Lt	SS-1	01.20	02.70			17			3.50	24	15		39	29		16			A-4a	-	-
P-012-0-20	4326+01	91	Lt	SS-2	03.50	04.90			19/24/50/5"			17	NP		26	11		9			A-4a	-	-	
P-012-0-20	4326+01	91	Lt	SS-3	06.00	07.50			39			19	NP		20	13		12			A-3a	-	-	
P-012-0-20	4326+01	91	Lt	SS-4	08.50	10.00			88									6			A-7-6	-	-	
P-013-0-20	4327+97	48	Lt	SS-1	01.00	02.50			15			4.00	24	16		40	11		14			A-4a	-	-
P-013-0-20	4327+97	48	Lt	SS-2	03.50	04.10			31/50/1"			28	17		35	10		6			Rock	-	-	
P-013-0-20	4327+97	48	Lt	SS-3	06.00	06.40			50/5"									6			Rock	-	-	
P-013-0-20	4327+97	48	Lt	SS-4	08.50	08.90			50/5"									7			Rock	-	-	
P-014-0-20	4329+22	31	Rt	SS-1	01.10	02.60			50			NP	NP		13	14		12			A-2-4	-	-	
P-014-0-20	4329+22	31	Rt	SS-2	03.50	04.40			7/50/5"			28	22		41	13		7			Rock	-	-	
P-014-0-20	4329+22	31	Rt	SS-3	06.00	06.40			50/5"									5			Rock	-	-	
P-014-0-20	4329+22	31	Rt	SS-4	08.50	09.20			27/50/2"									4			Rock	-	-	
P-015-0-20	327+44	9	Rt	SS-1	01.00	01.80			23/50/4"			24	19		29	11		4			Rock	-	-	
P-015-0-20	327+44	9	Rt	SS-2	03.50	03.90			50/3"						27	10		5			Rock	-	-	
P-015-0-20	327+44	9	Rt	SS-3	06.00	06.10			50/3"									4			Rock	-	-	
P-015-0-20	327+44	9	Rt	SS-4	08.50	08.75			50/3"									4			Rock	-	-	
P-016-0-20	328+48	42	Lt	SS-1	01.20	02.70			31			4.00	22	17		44	22		10			A-4a	-	-
P-016-0-20	328+48	42	Lt	SS-2	03.50	04.40			23/50/5"			25	22		65	21		6			Rock	-	-	
P-016-0-20	328+48	42	Lt	SS-3	06.00	06.90			16/50/5"									6			Rock	-	-	
P-016-0-20	328+48	42	Lt	SS-4	08.50	08.90			50/5"									5			Rock	-	-	
P-017-0-20	331+43	8	Rt	SS-1	01.10	02.60			43			4.00	25	18		52	34		13			A-4b	-	-
P-017-0-20	331+43	8	Rt	SS-2	03.50	04.90			16/47/50/2"			4.00	27	14		39	25		11			A-6a	-	-
P-017-0-20	331+43	8	Rt	SS-3	06.00	06.90			17/50/5"									8			Rock	-	-	
P-017-0-20	331+43	8	Rt	SS-4	0																			

"GB1 Subgrade Analysis Tab, PID 102329, INTERSTATE 76/77, OGE Number SUM-076/077-08.42/09.74"

EXPLOR. ID	STATION	OFFSET	DIR	SAMPLE ID	SAMPLE FROM	TO	SUBGRADE FROM	TO	N60	N60L	tsf HP	LL	PL	PI	% SILT	% CLAY	P 200	% WC	MOPT	ODOT CLASS	GI	ppm SO4
P-019-0-20	334+68	61	Rt	SS-2	03.50	05.00			8		1.25	21	16		30	16		12		A-4a	-	-
P-019-0-20	334+68	61	Rt	SS-3	06.00	07.50			7			20	NP		23	12		11		A-3a	-	-
P-019-0-20	334+68	61	Rt	SS-4	08.50	10.00			13									13		A-2-4	-	-
P-020-0-20	336+52	50	Lt	SS-1	01.00	02.50			29						18	12		11		A-4a	-	-
P-020-0-20	336+52	50	Lt	SS-2	03.50	05.00			14									4		A-2-4	-	-
P-020-0-20	336+52	50	Lt	SS-3	06.00	07.50			14			28	20		55	27		11		A-4b	-	-
P-020-0-20	336+52	50	Lt	SS-4	08.50	10.00			13			NP	NP		31	7		15		A-4a	-	-
P-022-0-20	340+04	43	Lt	SS-1	01.20	02.70			36			18	15		28	19		13		A-4a	-	-
P-022-0-20	340+04	43	Lt	SS-2	03.50	05.00			35			17	15		39	16		11		A-4a	-	-
P-022-0-20	340+04	43	Lt	SS-3	06.00	07.50			45			16	14		32	12		10		A-4a	-	-
P-022-0-20	340+04	43	Lt	SS-4	08.50	10.00			15			15	15		28	14		11		A-4a	-	-
P-024-0-20	344+04	55	Lt	SS-1	01.00	02.50			31			18	17		28	10		9		A-4a	-	-
P-024-0-20	344+04	55	Lt	SS-2	03.50	05.00			39			21	18		56	23		13		A-4b	-	-
P-024-0-20	344+04	55	Lt	SS-3	06.00	07.50			38			16	15		28	18		11		A-4a	-	-
P-024-0-20	344+04	55	Lt	SS-4	08.50	10.00			31			NP	NP		11	3		9		A-3a	-	-
P-025-0-20	347+84	59	Rt	SS-1	01.00	02.50			36			NP	NP		15	6		7		A-3a	-	-
P-025-0-20	347+84	59	Rt	SS-2	03.50	05.00			14			14	NP		22	8		9		A-3a	-	-
P-025-0-20	347+84	59	Rt	SS-3	06.00	07.50			7									9		A-2-4	-	-
P-025-0-20	347+84	59	Rt	SS-4	08.50	10.00			6									9		A-2-4	-	-
P-027-0-20	351+75	80	Rt	SS-1	01.00	02.50			35						15	15		11		A-3a	-	-
P-027-0-20	351+75	80	Rt	SS-2A	03.50	04.25			20						9	3		5		A-2-4	-	-
P-027-0-20	351+75	80	Rt	SS-2B	04.25	05.00					1.75							5		A-2-4	-	-
P-027-0-20	351+75	80	Rt	SS-3	06.00	07.50			15			2.25	25	15	27	23		12		A-6b	-	-
P-027-0-20	351+75	80	Rt	SS-4	08.50	10.00			10			3.75						14		A-6b	-	-
P-028-0-20	352+04	72	Lt	SS-1	01.20	02.70			47			NP	NP		17	12		11		A-3a	-	-
P-028-0-20	352+04	72	Lt	SS-2	03.50	05.00			10		1.25	20	16		25	15		14		A-4a	-	-
P-028-0-20	352+04	72	Lt	SS-3	06.00	07.40			4/6/50/5"		4.00	22	15		35	24		13		A-4a	-	-
P-028-0-20	352+04	72	Lt	SS-4	08.50	08.70			50/2"									5		Rock	-	-
P-029-0-20	354+06	85	Lt	SS-1	01.10	02.60			33			NP	NP		15	16		10		A-3a	-	-
P-029-0-20	354+06	85	Lt	SS-2	03.50	05.00			33		4.00	23	16		34	26		11		A-4a	-	-
P-029-0-20	354+06	85	Lt	SS-3	06.00	07.50			20			19	16		17	16		11		A-2-4	-	-
P-029-0-20	354+06	85	Lt	SS-4	08.50	10.00			71			17	16		18	17		9		A-3a	-	-
P-030-0-20	355+21	111	Rt	SS-1	01.00	02.50			28						5	2		8		A-3a	-	-
P-030-0-20	355+21	111	Rt	SS-2A	03.50	03.75			29			20	18		34	7		10		A-4a	-	-
P-030-0-20	355+21	111	Rt	SS-2B	03.75	05.00					4.00				13			13		A-7-6	-	-
P-030-0-20	355+21	111	Rt	SS-3	06.00	06.40			50/5"									6		Rock	-	-
P-030-0-20	355+21	111	Rt	SS-4	08.50	08.90			50/5"									6		Rock	-	-
P-032-0-20	360+05	53	Lt	SS-1	01.00	02.50			99			NP	NP		13	14		9		A-3a	-	-
P-032-0-20	360+05	53	Lt	SS-2	03.50	03.70			6/50/2"		1.75	20	17		20	15		12		A-3a	-	-
P-032-0-20	360+05	53	Lt	SS-3	06.00	06.40			50/5"									9		A-2-4	-	-
P-032-0-20	360+05	53	Lt	SS-4	08.50	08.70			50/2"									8		Rock	-	-
P-033-0-20	360+37	139	Rt	SS-1	01.00	02.50			63			18	NP		38	10		8		A-4a	-	-
P-033-0-20	360+37	139	Rt	SS-2	03.50	05.00			15		3.25	27	16		49	26		16		A-6a	-	-
P-033-0-20	360+37	139	Rt	SS-3A	06.00	07.25			27		3.00							16		A-6a	-	-
P-033-0-20	360+37	139	Rt	SS-3B	07.25	07.50												10		A-2-4	-	-
P-033-0-20	360+37	139	Rt	SS-4	08.50	10.00			22		4.00							16		A-6a	-	-