

PROJECT: JAC-788-0.90 TYPE: BRIDGE PID: 115771 SFN: 4004329 START: 12/18/23 END: 12/19/23			DRILLING FIRM / OPERATOR: ODOT / CAREY SAMPLING FIRM / LOGGER: ODOT / SPROUSE DRILLING METHOD: 3.25" HSA / NQ2 SAMPLING METHOD: SPT / NQ2			DRILL RIG: CME 55 TRUCK HAMMER: CME AUTOMATIC CALIBRATION DATE: 11/7/23 ENERGY RATIO (%): 88			STATION / OFFSET: 475+06, 7' LT. ALIGNMENT: CL SR788 ELEVATION: 659.9 (ft) EOB: 51.5 ft. LAT / LONG: 39.062507, -82.623123			EXPLORATION ID B-001-0-23		PAGE 1 OF 1								
MATERIAL DESCRIPTION AND NOTES			ELEV.	DEPTHS		SPT/ RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL	
ASPHALT (17")			659.9																			
STIFF, BROWN, SANDY SILT, LITTLE CLAY, TRACE STONE FRAGMENTS, DAMP  @3.5'; SOME CLAY, MOIST  @6.0'; VERY STIFF, BROWN AND GRAY, CONTAINS SLAG  @8.0'; SOFT, LITTLE CLAY, WET  @9.5'; STIFF, BROWN, SOME CLAY, NO STONE FRAGMENTS    @14.0'; SOFT, BROWN AND GRAY, TRACE STONE FRAGMENTS			658.5	1																		
				2	6	3	10	33	SS-1	1.25	1	6	47	31	15	21	18	3	15	A-4a (2)		
				3		4																
				4	1	2	9	44	SS-2	1.75	2	3	23	45	27	27	20	7	22	A-4a (7)		
				5		4																
				6	7	5	13	56	SS-3	3.50	-	-	-	-	-	-	-	-	20	A-4a (V)		
				7		4																
				8	0	1	4	89	SS-4	0.25	3	10	46	25	16	20	17	3	23	A-4a (1)		
				9		2																
				10	0	0	0	44	SS-5	1.25	0	2	42	32	24	25	19	6	24	A-4a (4)		
				11		0																
				12	1	3	9	89	SS-6	1.25	0	1	50	27	22	24	19	5	22	A-4a (3)		
				13	0	0	3	100	SS-7	1.25	0	2	55	25	18	22	18	4	24	A-4a (2)		
				14		2																
			643.9	15	0	1	4	100	SS-8	0.25	1	8	51	21	19	25	18	7	27	A-4a (1)		
MEDIUM STIFF, GRAY, SILT, "AND" CLAY, TRACE SAND, MOIST			641.4	16	0	0	6	100	SS-9	1.00	0	0	5	55	40	32	23	9	27	A-4b (8)		
MEDIUM STIFF, GRAY, SANDY SILT, LITTLE CLAY, WET			W 638.5	17		4																
@21.0'; VERY SOFT, TRACE STONE FRAGMENTS	19	0		0	0	100	SS-10	0.75	0	1	32	49	18	22	19	3	25	A-4a (6)				
	20			0																		
	21	0		0	1	100	SS-11	0.25	1	8	46	29	16	20	17	3	30	A-4a (2)				
@23.5'; MEDIUM STIFF, GRAY MOTTLED WITH BROWN, SOME CLAY, NO STONE FRAGMENTS	22			1																		
	23																					
	24	0		0	0	100	SS-12	0.75	0	1	29	44	26	24	19	5	23	A-4a (7)				
@26.0'; STIFF	25			0																		
	26			0																		
	27	0		2	9	100	SS-13	1.00	-	-	-	-	-	-	-	-	26	A-4a (V)				
631.4	28		4																			
MEDIUM DENSE, GRAY AND BROWN, SANDY SILT, SOME STONE FRAGMENTS, TRACE CLAY, WET			W 628.6	29	7	8	28	67	SS-14	-	21	4	39	27	9	NP	NP	NP	17	A-4a (0)		
STIFF, GRAY, SILT, SOME SAND, SOME CLAY, TRACE STONE FRAGMENTS, MOIST	30			11																		
	31	4		3	12	78	SS-15	1.50	-	-	-	-	-	-	-	-	21	A-4b (V)				
	32		5																			
@33.5'; MEDIUM STIFF, WET	33																					
	34	0	0	6	89	SS-16	0.75	1	2	25	50	22	25	20	5	27	A-4b (7)					
	35		4																			
623.9	36																					
VERY STIFF, GRAY AND BROWN, SANDY SILT, LITTLE CLAY, TRACE STONE FRAGMENTS, MOIST			TR	37	4	12	41	100	SS-17	3.50	9	4	38	33	16	20	17	3	18	A-4a (3)		
SANDSTONE, YELLOW AND GRAY, HIGHLY WEATHERED, WEAK, FINE GRAINED.	38																					
	39	48		55/4"	-	100	SS-18	-	-	-	-	-	-	-	-	-	11	Rock (V)				
	40																					
618.4	41	53/4"	-	-	100	SS-19	-	-	-	-	-	-	-	-	-	7	Rock (V)					
@41.0'; GRAY.				42																		
SANDSTONE, LIGHT OLIVE GRAY, HIGHLY WEATHERED, WEAK, FINE TO MEDIUM GRAINED, THIN BEDDED, FRIABLE, ARGILLACEOUS, JOINT, FRACTURED TO MODERATELY FRACTURED, NARROW, SLIGHTLY ROUGH; BLOCKY, FAIR TO GOOD; RQD 65%, REC 100%. @42.8' - 43.5'; SEVERELY WEATHERED, VERY WEAK @ 43.0' - 43.4'; γ = 153 pcf; Qu = 10 psi	43																					
	44	62			100	NQ2-1												CORE				
	45																					
	46																					
	47																					
@ 47.0' - 47.4'; γ = 158 pcf; Qu = 1,149 psi	48																					
	49	60			100	NQ2-2												CORE				
	50																					
610.1	51																					
SHALE, BLACK, HIGHLY WEATHERED, WEAK, LAMINATED, JOINT, HIGHLY FRACTURED TO FRACTURED, NARROW, SLIGHTLY ROUGH; BLOCKY, FAIR; RQD 40%, REC 100%. @50.2' - 50.5'; SANDSTONE LAYER @50.7'; MODERATELY WEATHERED, MODERATELY STRONG.			608.4	EOB																		

NOTES: LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 100 LB. BENTONITE CHIPS

PROJECT: JAC-788-0.90		DRILLING FIRM / OPERATOR: ODOT / CAREY		DRILL RIG: CME 55 TRUCK		STATION / OFFSET: 475+69, 6' RT.		EXPLORATION ID												
TYPE: BRIDGE		SAMPLING FIRM / LOGGER: ODOT / SPROUSE		HAMMER: CME AUTOMATIC		ALIGNMENT: CL SR788		B-002-0-23												
PID: 115771 SFN: 4004329		DRILLING METHOD: 3.25" HSA / NQ2		CALIBRATION DATE: 11/7/23		ELEVATION: 660.1 (ft) EOB: 49.0 ft.		PAGE												
START: 12/19/23 END: 12/20/23		SAMPLING METHOD: SPT / NQ2		ENERGY RATIO (%): 88		LAT / LONG: 39.062537, -82.622902		1 OF 1												
MATERIAL DESCRIPTION AND NOTES		ELEV.	DEPTHS		SPT/RQD	N <sub>60</sub>	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG			WC	ODOT CLASS (GI)	BACK FILL
		660.1								GR	CS	FS	SI	CL	LL	PL	PI			
ASPHALT (17")																				
		658.7																		
MEDIUM DENSE, BLACK, GRAY AND BROWN, <b>STONE FRAGMENTS WITH SAND AND SILT</b> , CONTAINS SLAG, DAMP					10	19	44	SS-1	-	40	12	19	22	7	28	25	3	14	A-2-4 (0)	
		656.6			8															
STIFF, GRAY, <b>SANDY SILT</b> , SOME CLAY, WET					5															
					2	7	56	SS-2	1.25	1	1	25	48	25	27	20	7	27	A-4a (8)	
					3															
@6.0'; MEDIUM STIFF					2															
					3															
		652.1			1	6	78	SS-3	0.75	-	-	-	-	-	-	-	-	28	A-4a (V)	
					1															
MEDIUM DENSE, GRAY, <b>SANDY SILT</b> , TRACE CLAY, DAMP			▽ 651.7		9	26	67	SS-4	-	0	3	56	31	10	NP	NP	NP	14	A-4a (1)	
		650.6			11															
STIFF, MOTTLED BROWN AND GRAY, <b>SANDY SILT</b> , SOME CLAY, WET					2	7	72	SS-5	1.75	0	0	33	45	22	25	18	7	23	A-4a (6)	
					3															
					0	7	100	SS-6	1.25	0	0	34	46	20	25	18	7	25	A-4a (6)	
@12.5'; SOFT, BROWN, LITTLE CLAY, TRACE STONE FRAGMENTS					2															
		646.1	W 646.3		0	0	89	SS-7	0.50	1	1	47	37	14	22	18	4	26	A-4a (3)	
			W 645.8		0															
VERY LOOSE, GRAY, <b>SANDY SILT</b> , TRACE CLAY, WET					0	3	100	SS-8	-	0	2	54	35	9	NP	NP	NP	27	A-4a (2)	
		644.1			1															
VERY SOFT, GRAY, <b>SILT</b> , SOME SAND, SOME CLAY, WET					0	0	100	SS-9	0.25	0	1	26	51	22	21	18	3	25	A-4b (8)	
					0															
					0	0	89	SS-10	0.25	-	-	-	-	-	-	-	-	25	A-4b (V)	
					0															
@21.0'; SOFT					0	0	100	SS-11	0.50	0	0	20	55	25	25	20	5	28	A-4b (8)	
		636.6			0															
STIFF, GRAY, <b>SANDY SILT</b> , LITTLE CLAY, WET					0	0	89	SS-12	1.25	0	1	44	40	15	20	17	3	26	A-4a (4)	
					0															
@26.0'; MEDIUM STIFF					0	0	100	SS-13	0.75	0	1	38	41	20	23	19	4	24	A-4a (5)	
		631.6			0															
VERY LOOSE, BROWN AND GRAY, <b>COARSE AND FINE SAND</b> , LITTLE SILT, TRACE CLAY, WET					0	3	100	SS-14	-	0	13	61	19	7	NP	NP	NP	26	A-3a (0)	
		626.6			1															
MEDIUM DENSE, BROWN, <b>STONE FRAGMENTS WITH SAND AND SILT</b> , TRACE CLAY, MOIST					6	22	61	SS-15	-	21	12	33	26	8	21	19	2	16	A-2-4 (0)	
		621.6			6															
					9															
<b>SANDSTONE</b> , YELLOWISH BROWN WITH LIGHT GRAY, HIGHLY WEATHERED, MODERATELY STRONG, FINE TO MEDIUM GRAINED, THIN BEDDED, SLIGHTLY ARGILLACEOUS, FRIABLE, JOINT, HIGHLY FRACTURED TO FRACTURED, NARROW, SLIGHTLY ROUGH; BLOCKY, FAIR TO GOOD; RQD 12%, REC 100%. @41.3' - 41.4'; CLAY SEAM			TR		50/3"	-	100	SS-16	-	-	-	-	-	-	-	-	-	11	Rock (V)	
		617.7			33		100	NQ2-1											CORE	
<b>SANDSTONE</b> , LIGHT GRAY, MODERATELY WEATHERED, STRONG, FINE TO MEDIUM GRAINED, THIN BEDDED, SLIGHTLY MICACEOUS, JOINT, MODERATELY FRACTURED, TIGHT TO NARROW, ROUGH TO SLIGHTLY ROUGH; BLOCKY, GOOD; RQD 62%, REC 100%. @ 42.4' - 42.8'; γ = 150 pcf; Qu = 10,725 psi @44.9' - 45.4'; COAL SEAM																				
		611.1	EOB		57		100	NQ2-2											CORE	

NOTES: LAT/LONG/ELEV FROM DISTRICT SURVEY GRADE INSTRUMENTS.

ABANDONMENT METHODS, MATERIALS, QUANTITIES: AUGER CUTTINGS MIXED WITH 100 LB. BENTONITE CHIPS



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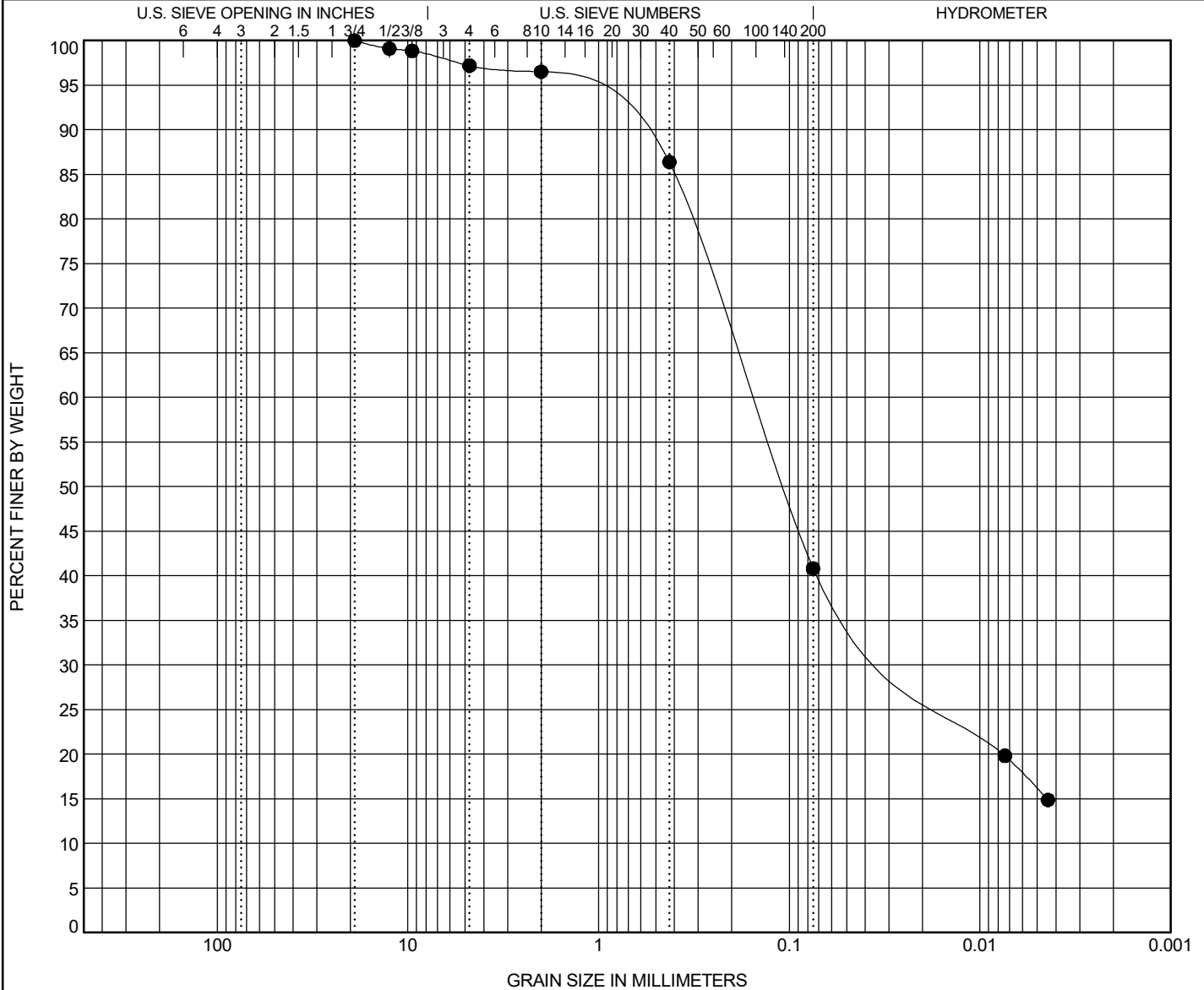
GRAIN SIZE DISTRIBUTION

PROJECT JAC-788-0.90

PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION





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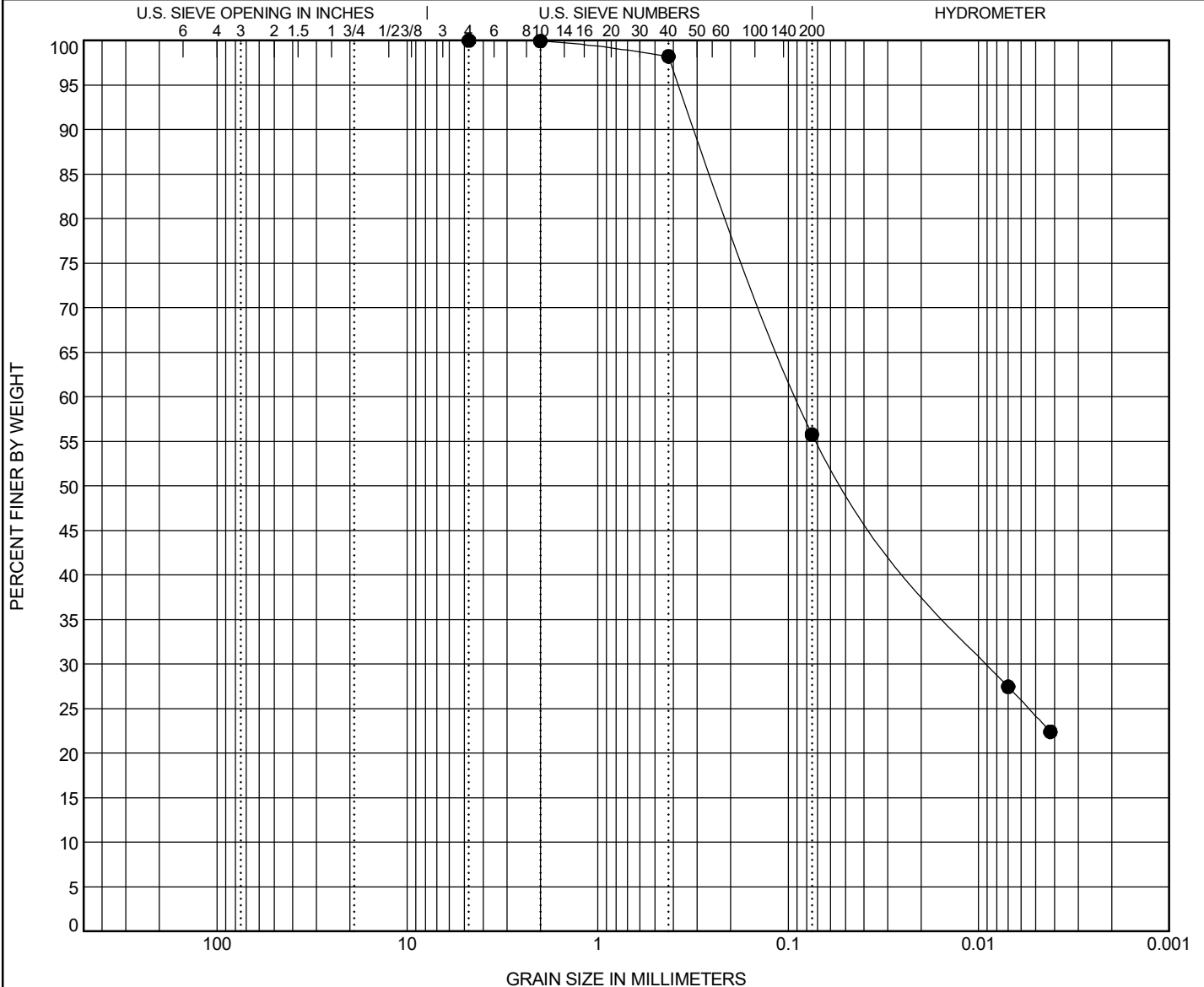
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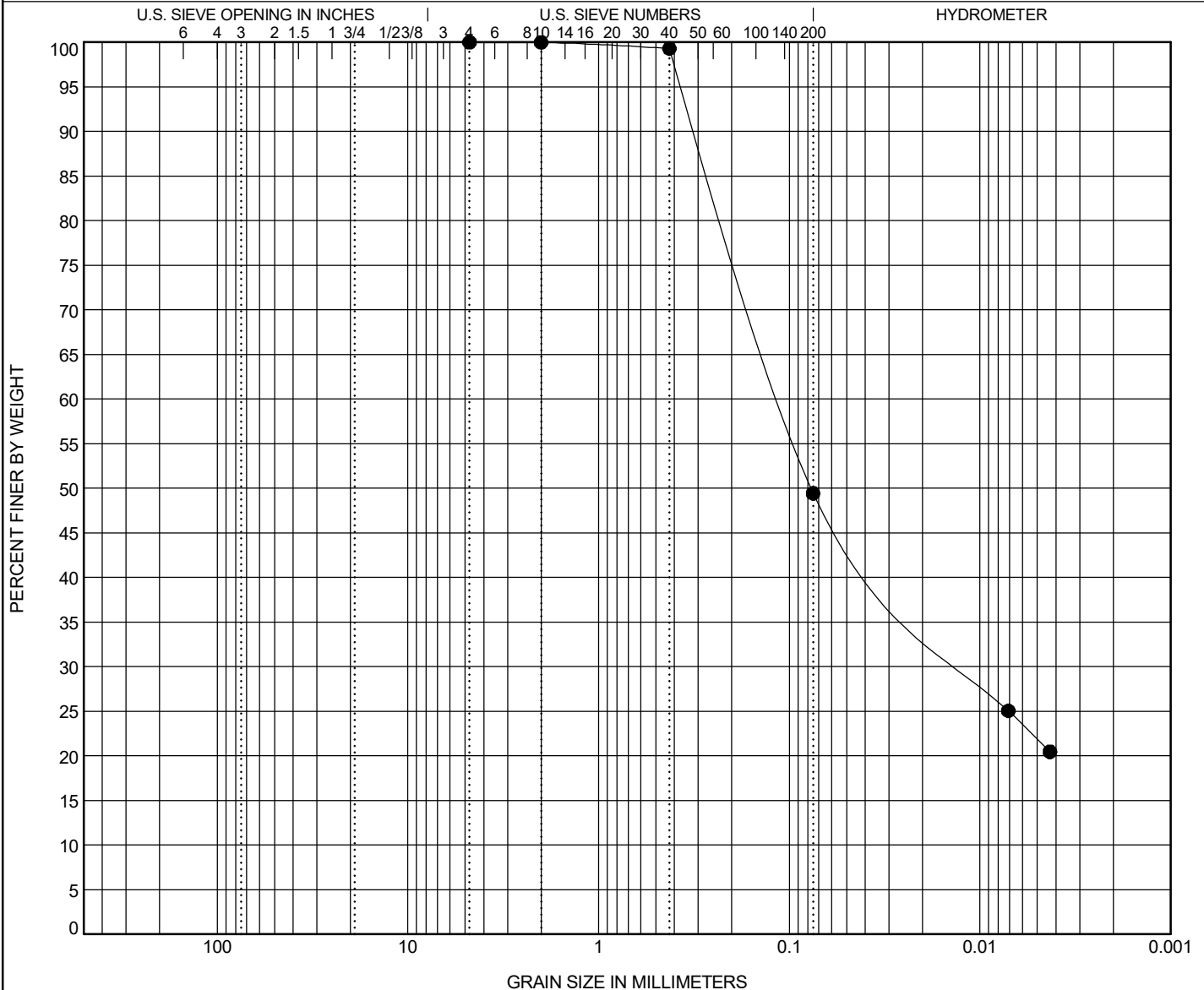
GRAIN SIZE DISTRIBUTION

PROJECT JAC-788-0.90

PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification			ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
●	B-001-0-23	11.0	A-4a ~ SILTY, CLAYEY SAND(SC-SM)								24	19	5
Specimen Identification			D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
●	B-001-0-23	11.0	0.308	0.076	0.011		0	1	50	27	22		

GRAIN SIZE - OH DOT.GDT - 1/10/24 10:41 - X:\GINT\PROJECTS\601113.GPJ



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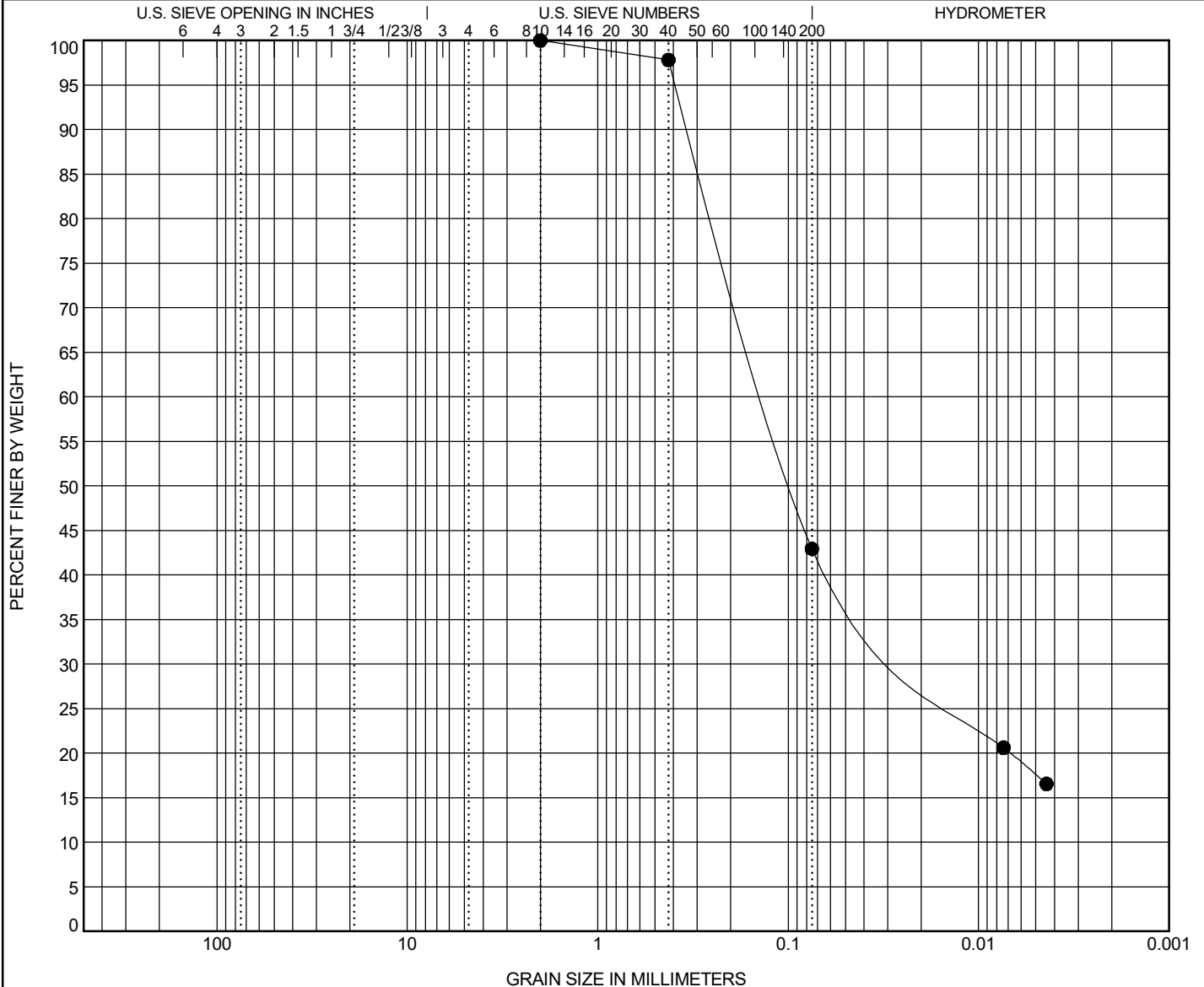
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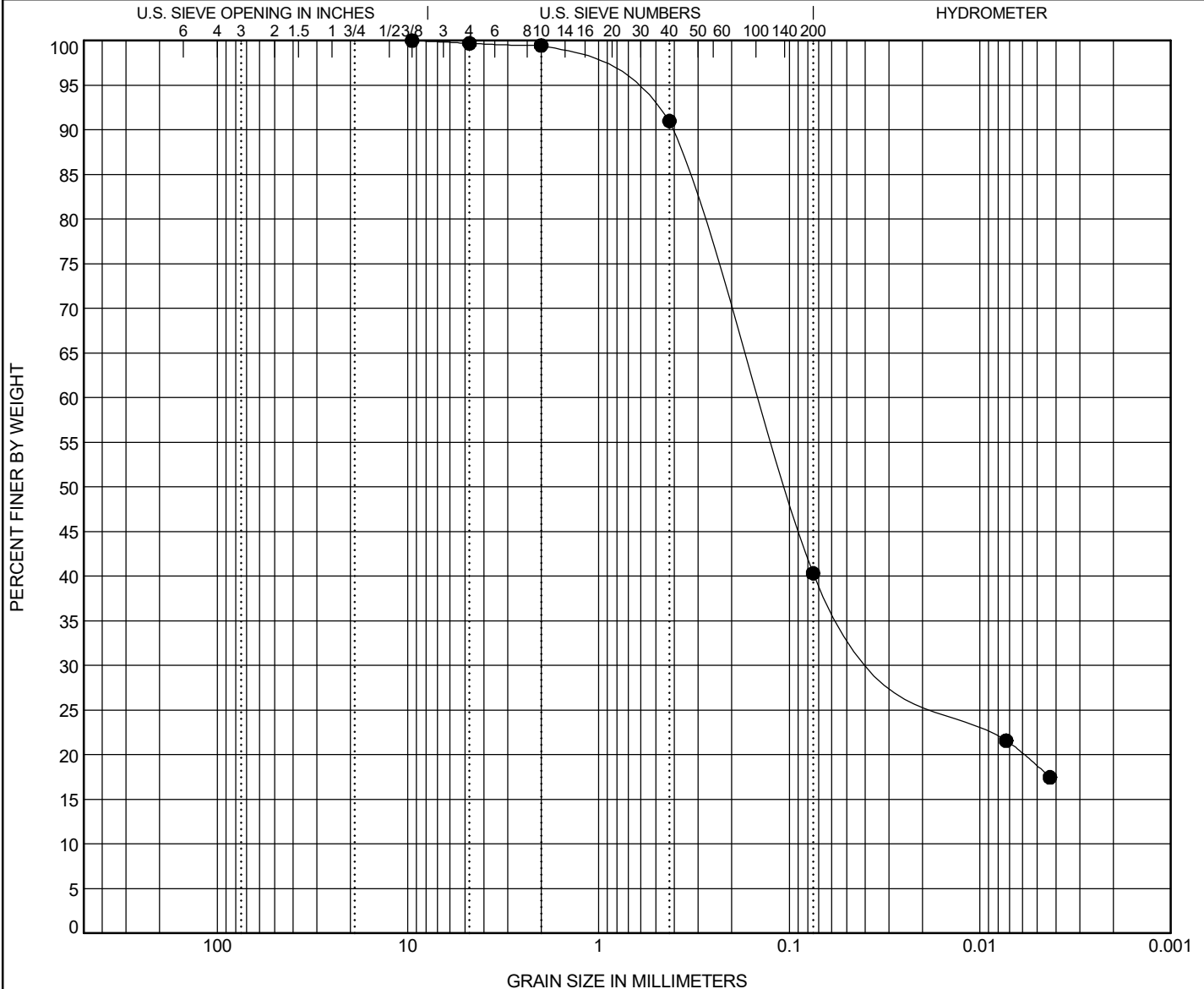
GRAIN SIZE DISTRIBUTION

PROJECT JAC-788-0.90

PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification		ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
● B-001-0-23 14.0		A-4a ~ SILTY, CLAYEY SAND(SC-SM)								25	18	7
Specimen Identification		D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
● B-001-0-23 14.0		0.411	0.104	0.021		1	8	51	21	19		

GRAIN SIZE - OH DOT.GDT - 1/10/24 10:41 - X:\GINT\PROJECTS\601113.GPJ



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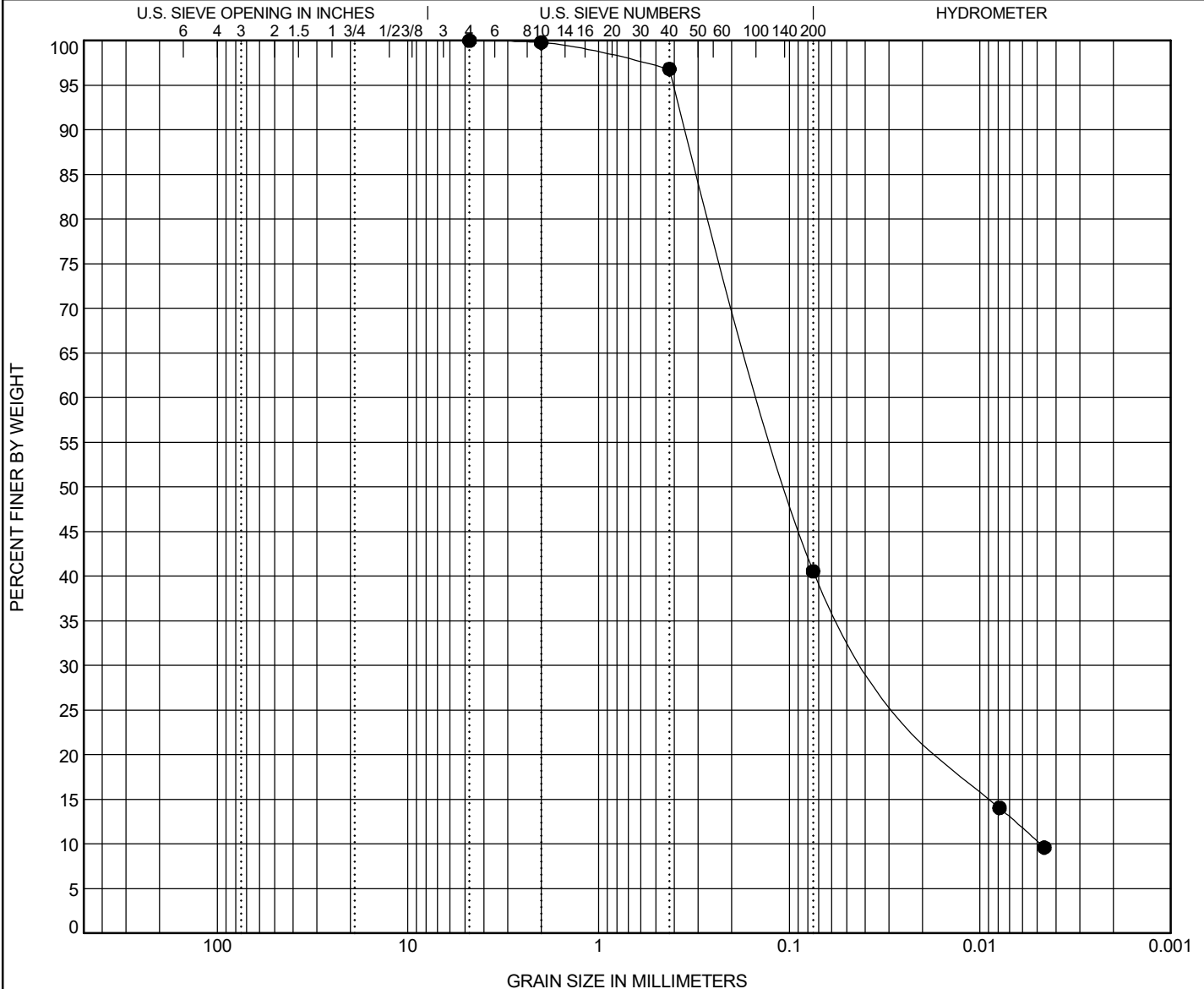
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PROJECT JAC-788-0.90

PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification			ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
●	B-002-0-23	8.0	A-4a ~ SILTY SAND(SM)								NP	NP	NP
Specimen Identification			D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
●	B-002-0-23	8.0	0.344	0.1	0.031	0.005	0	3	56	31	10	1.42	28.32

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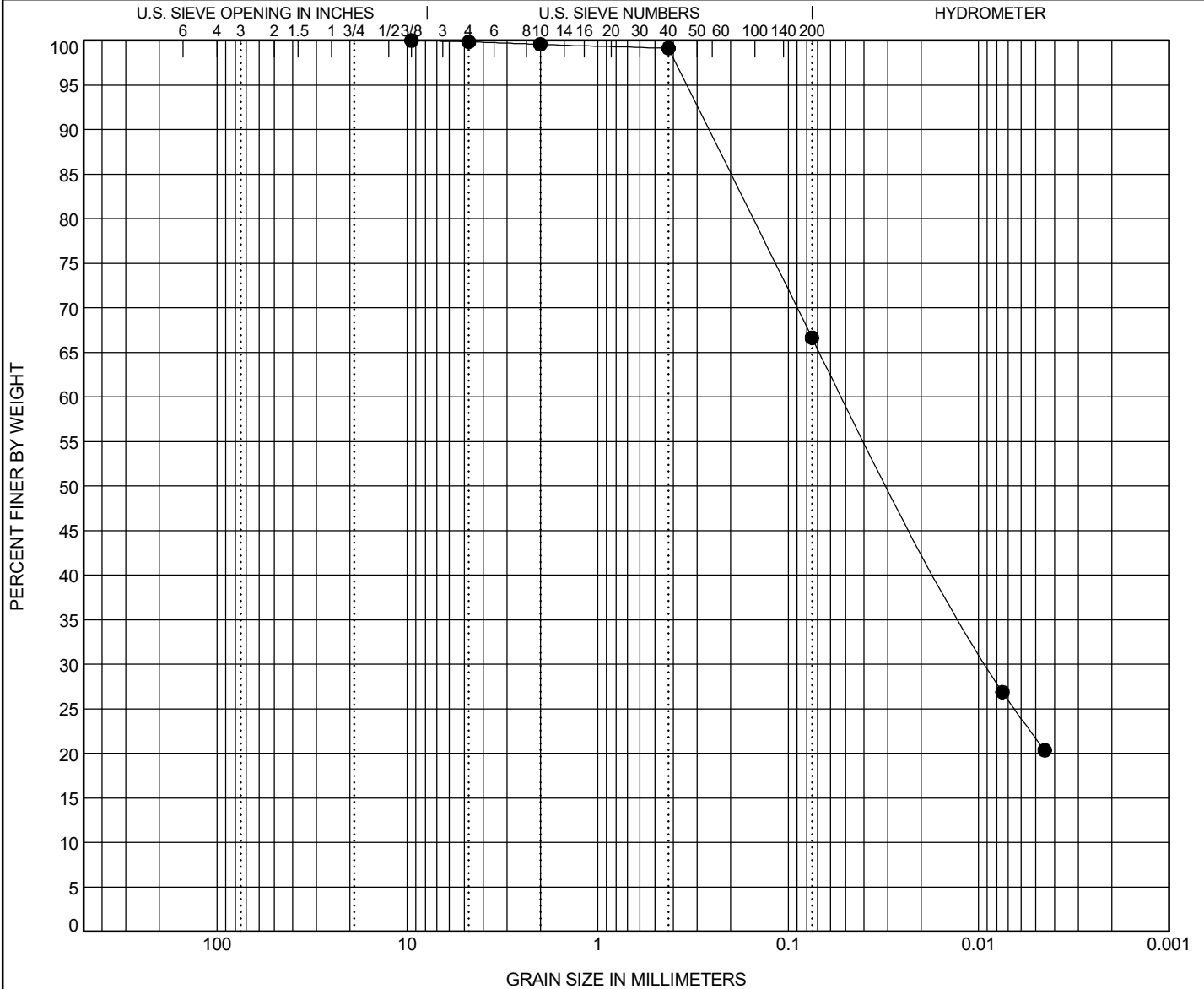
GRAIN SIZE DISTRIBUTION

PROJECT JAC-788-0.90

PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification			ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
●	B-002-0-23	9.5	A-4a ~ SANDY SILTY CLAY(CL-ML)								25	18	7
Specimen Identification			D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
●	B-002-0-23	9.5	0.261	0.029	0.009		0	0	33	45	22		

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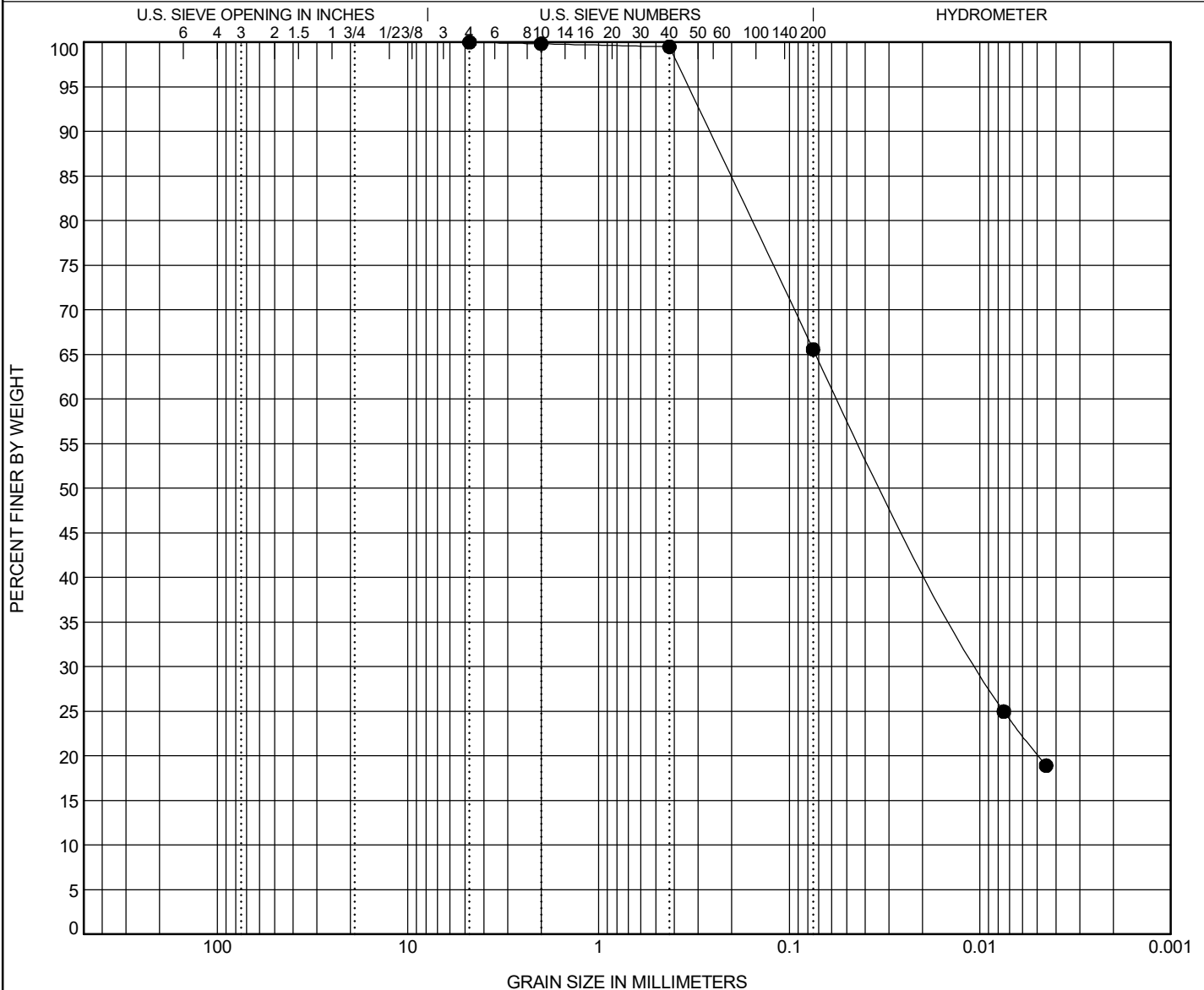
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PROJECT TYPE STRUCTURE FOUNDATION



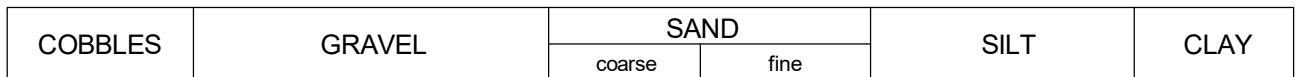
COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification			ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
●	B-002-0-23	11.0	A-4a ~ SANDY SILTY CLAY(CL-ML)								25	18	7
Specimen Identification			D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
●	B-002-0-23	11.0	0.261	0.031	0.01		0	0	34	46	20		

GRAIN SIZE - OH DOT.GDT - 1/10/24 10:41 - X:\GINT\PROJECTS\601113.GPJ



**PROJECT TYPE** STRUCTURE FOUNDATION





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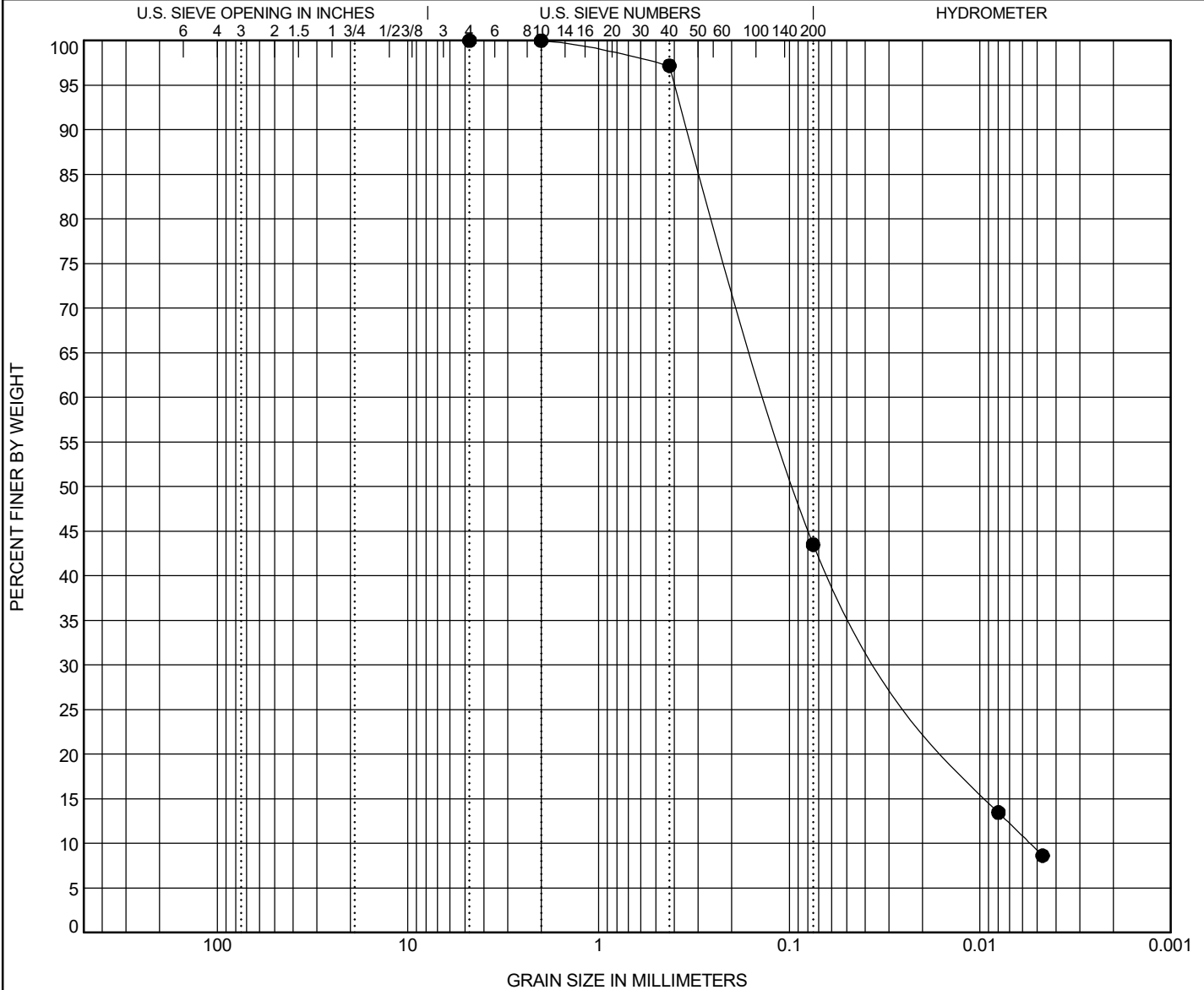
GRAIN SIZE DISTRIBUTION

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PID 115771

OGE NUMBER 601113

PROJECT TYPE STRUCTURE FOUNDATION



COBBLES	GRAVEL	SAND		SILT	CLAY
		coarse	fine		

Specimen Identification			ODOT (Modified AASHTO) ~ USCS Classification								LL	PL	PI
●	B-002-0-23	14.0	A-4a ~ SILTY SAND(SM)								NP	NP	NP
Specimen Identification			D90	D50	D30	D10	%G	%CS	%FS	%M	%C	Cc	Cu
●	B-002-0-23	14.0	0.337	0.093	0.027	0.005	0	2	54	35	9	1.08	23.41

GRAIN SIZE - OH DOT.GDT - 1/10/24 10:42 - X:\GINT\PROJECTS\601113.GPJ

Run #:	Depth		Recovery		RQD	
NQ2-1	41.5'	46.5'	60/60	100%	37/60	62%
NQ2-2	46.5'	51.5'	60/60	100%	36/60	60%
JAC-788-0.90 PID 115771						

BR-1 39.0

BR-2 44.0  
ER-1

ER-2 49.0

Run #:	Depth		Recovery		RQD	
NQ2-1	39.0'	44.0'	60/60	100%	20/60	33%
NQ2-2	44.0'	49.0'	60/60	100%	34/60	57%
JAC-788-0.90 PID 115771						