S.W.COLE ENGINEERING, INC.

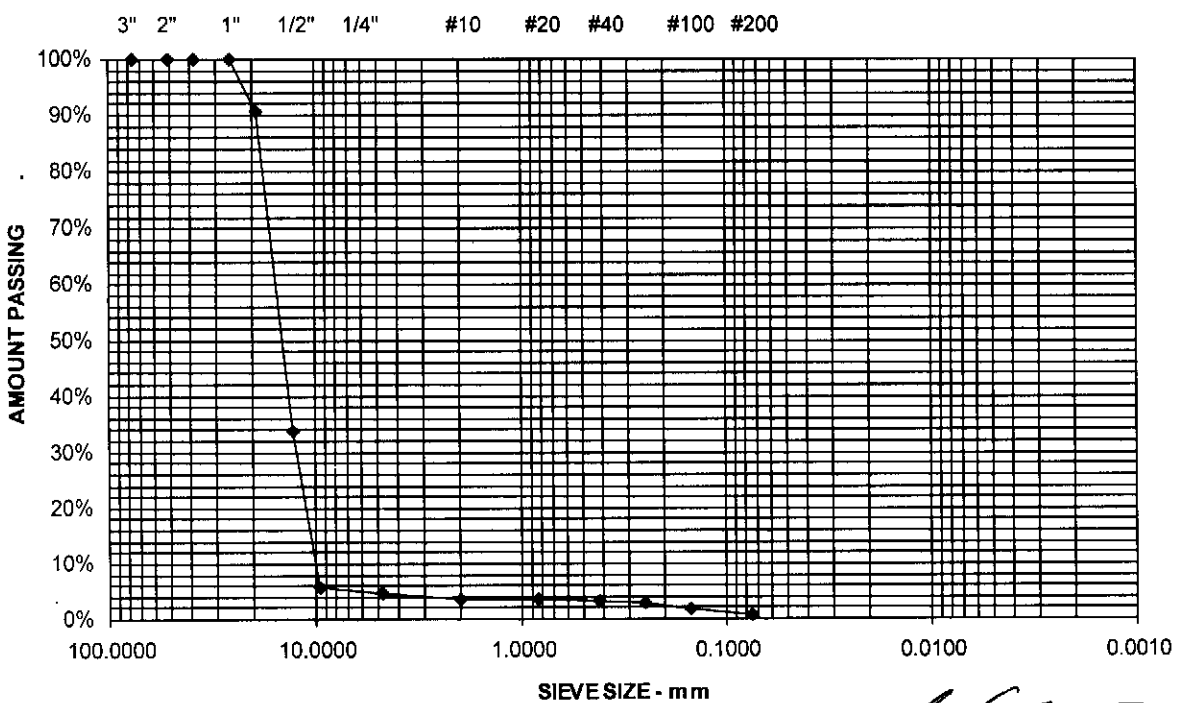
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	15980G
Material Type	3/4" STONE	Date Received	10/1/2012
Material Source	SHAW BROTHERS O-PIT	Date Completed	10/1/2012
		Tested By	CHARLES CROMWELL

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	GAS PERMEABLE COURSE AGG. SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	100	
25.0 mm	1"	100	100
19.0 mm	3/4"	91	90 - 100
12.5 mm	1/2"	34	20 - 55
9.5 mm	3/8"	6	0 - 15
4.75 mm	No. 4	5	0 - 5
2.00 mm	No. 10	4	
850 um	No. 20	3	
425 um	No. 40	3	
250 um	No. 60	3	
150 um	No. 100	2	
75 um	No. 200	0.9	

SAMPLE MEETS SPECIFICATION



Comments

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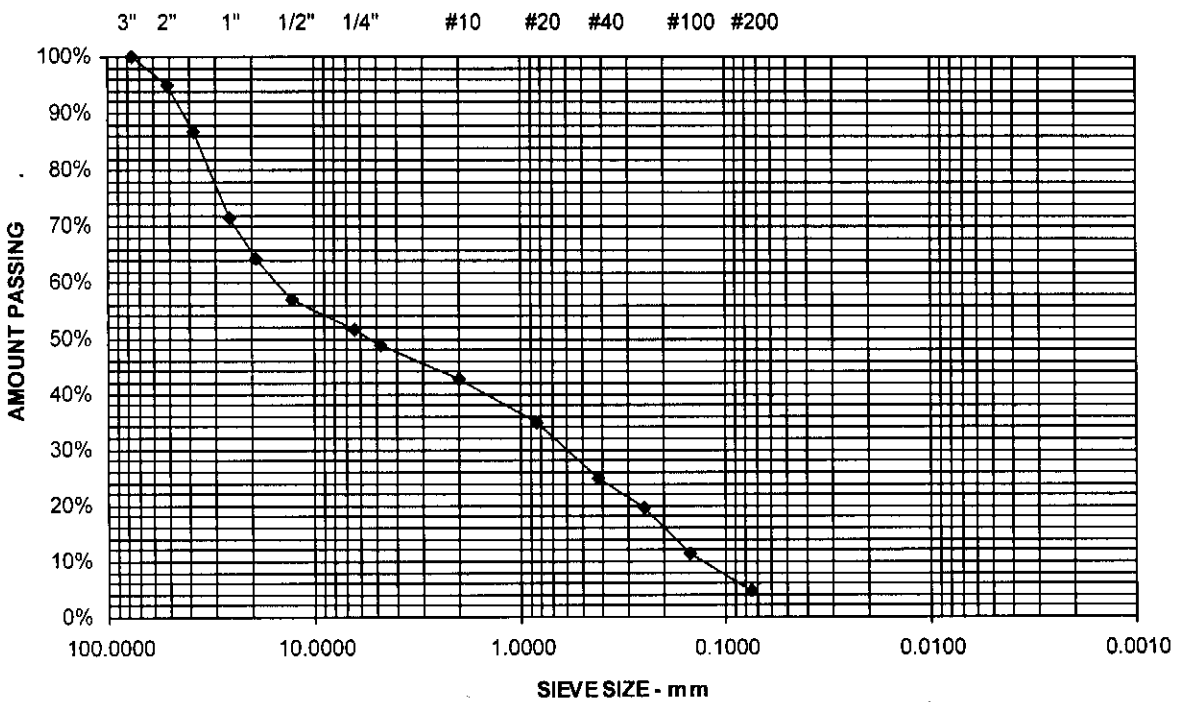
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	15981G
Material Type	GRANULAR FILL	Date Received	10/1/2012
Material Source	SHAW BROTHERS O-PIT	Date Completed	10/1/2012
		Tested By	CHARLES CROMWELL

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE B SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	100
75 mm	3"	100	
50 mm	2"	95	
38.1 mm	1-1/2"	87	
25.0 mm	1"	71	
19.0 mm	3/4"	64	
12.5 mm	1/2"	57	35 - 75
6.3 mm	1/4"	52	25 - 60
4.75 mm	No. 4	49	
2.00 mm	No. 10	43	
850 um	No. 20	35	
425 um	No. 40	25	0 - 25
250 um	No. 60	20	
150 um	No. 100	11	
75 um	No. 200	4.8	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



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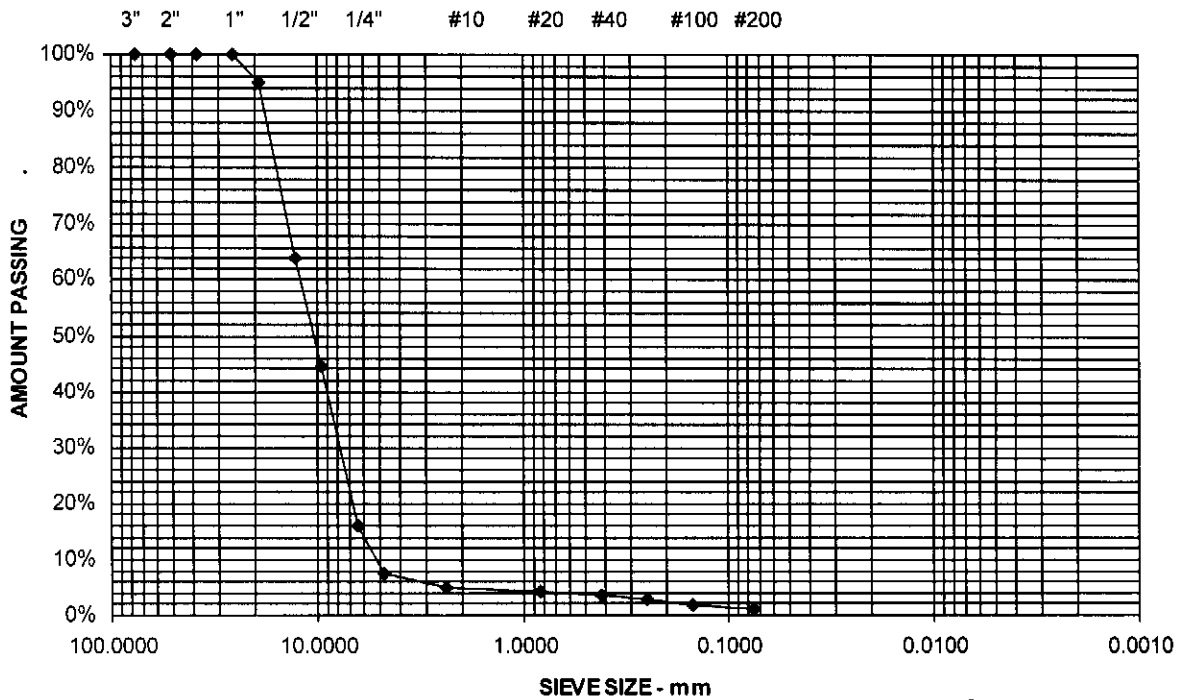
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	15985G
Material Type	COARSE AGGREGATE	Date Received	10/1/2012
Material Source	SHAW BROTHERS F-PIT	Date Completed	10/3/2012
		Tested By	CRAIG TURCOTTE

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	COARSE AGG. SPEC. SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	100	
25.0 mm	1"	100	100
19.0 mm	3/4"	95	90 - 100
12.5 mm	1/2"	64	45 - 80
9.5 mm	3/8"	44	20 - 55
6.3 mm	1/4"	16	5 - 20
4.75 mm	No. 4	7	0 - 10
2.36 mm	No. 8	5	0 - 5
850 um	No. 20	4	
425 um	No. 40	4	
250 um	No. 60	3	
150 um	No. 100	2	
75 um	No. 200	1.2	0.0 - 1.5

SAMPLE MEETS SPECIFICATION



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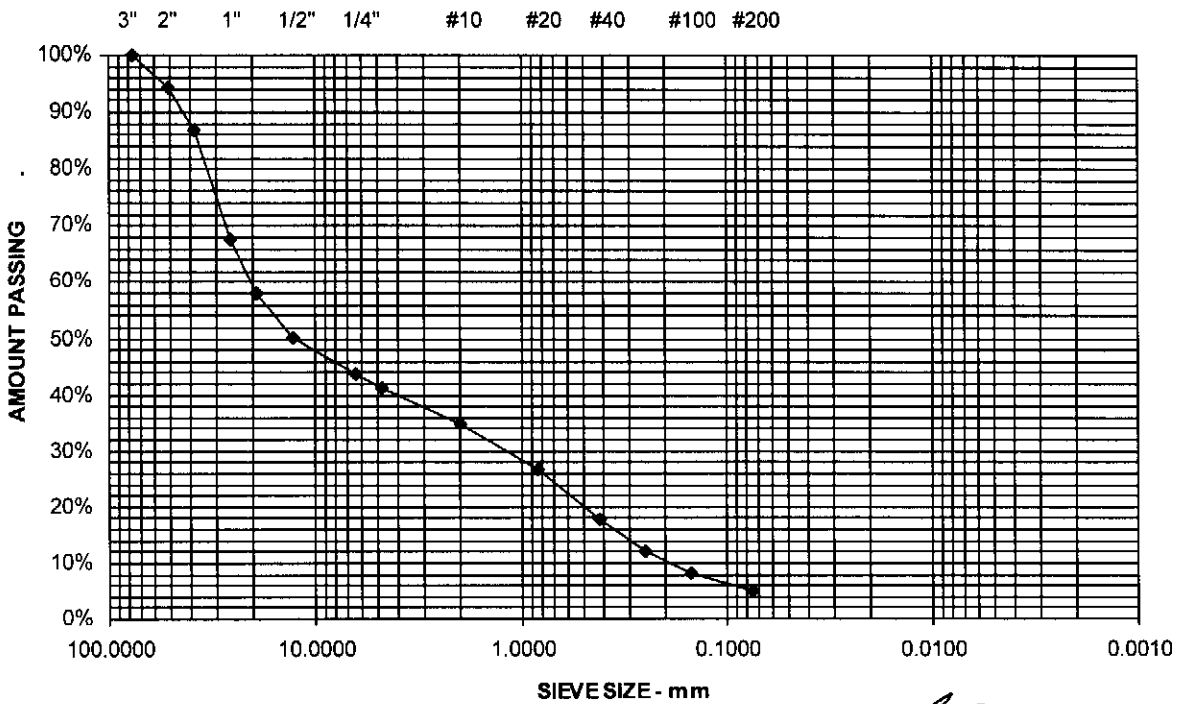
ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	16128G
Material Type	WBRC GRANULAR FILL	Date Received	11/9/2012
Material Source	SHAW BROS - O PIT	Date Completed	11/13/2012
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE B SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	100
75 mm	3"	100	
50 mm	2"	94	
38.1 mm	1-1/2"	87	
25.0 mm	1"	68	
19.0 mm	3/4"	58	
12.5 mm	1/2"	50	35 - 75
6.3 mm	1/4"	44	25 - 60
4.75 mm	No. 4	41	
2.00 mm	No. 10	35	
850 um	No. 20	27	
425 um	No. 40	18	0 - 25
250 um	No. 60	12	
150 um	No. 100	8	
75 um	No. 200	4.9	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



Comments

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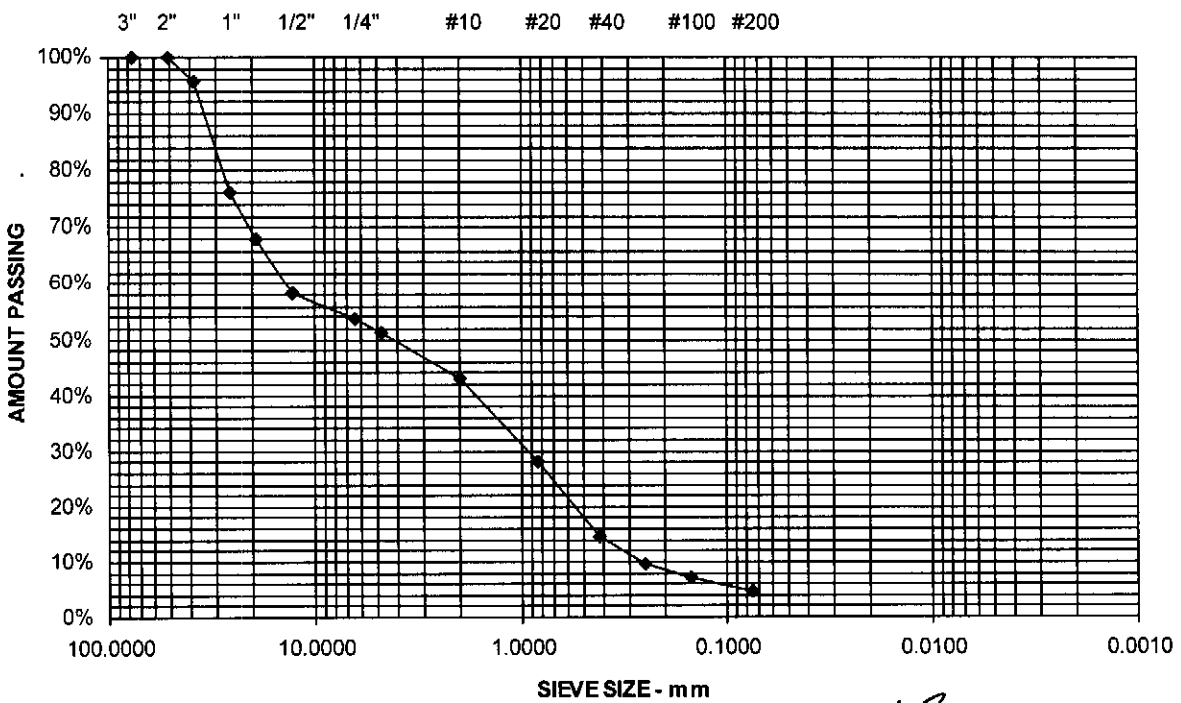
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	16417G
Material Type	AGGREGATE BASE (TYPE B)	Date Received	1/22/2013
Material Source	BRICKYARD QUARRY	Date Completed	1/23/2013
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/um)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE B SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	100
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	96	
25.0 mm	1"	76	
19.0 mm	3/4"	68	
12.5 mm	1/2"	58	35 - 75
6.3 mm	1/4"	54	25 - 60
4.75 mm	No. 4	51	
2.00 mm	No. 10	43	
850 um	No. 20	28	
425 um	No. 40	15	0 - 25
250 um	No. 60	10	
150 um	No. 100	7	
75 um	No. 200	4.5	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



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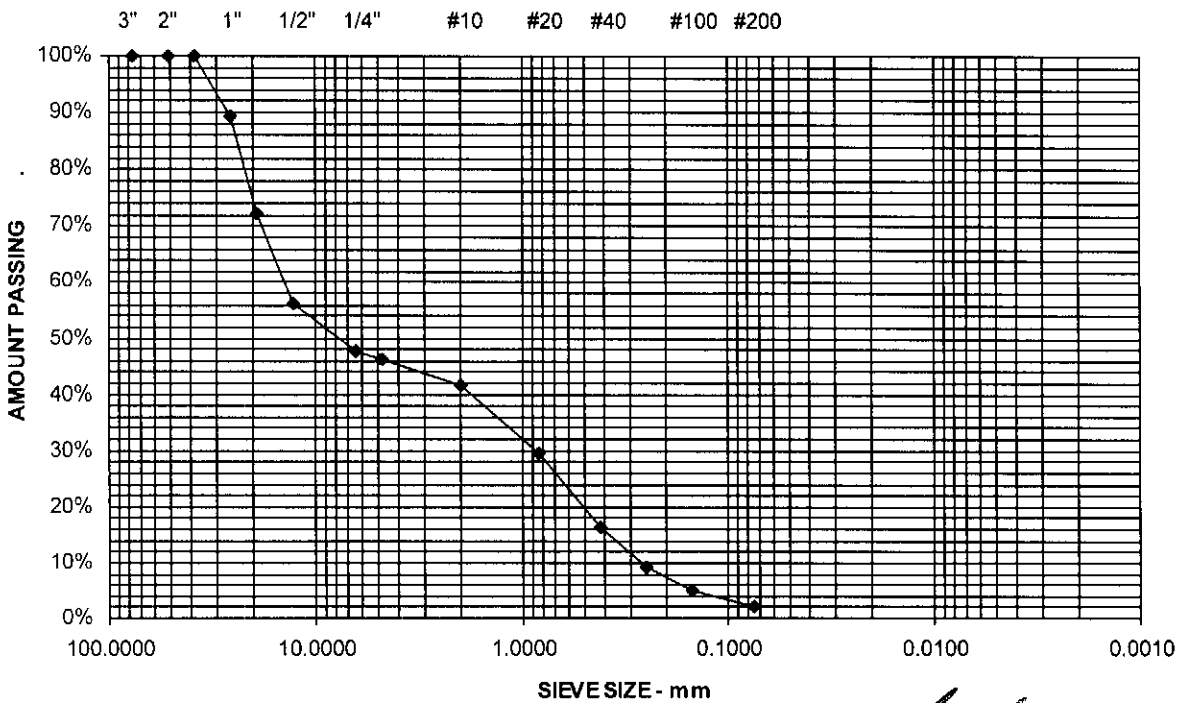
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	17128G
Material Type	GRANULAR FILL	Date Received	8/20/2013
Material Source	SHAW BROTHERS O-PIT	Date Completed	8/26/2013
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE B SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	100
75 mm	3"	100	
50 mm	2"	100	
38.1 mm	1-1/2"	100	
25.0 mm	1"	89	
19.0 mm	3/4"	72	
12.5 mm	1/2"	56	35 - 75
6.3 mm	1/4"	48	25 - 60
4.75 mm	No. 4	46	
2.00 mm	No. 10	42	
850 um	No. 20	30	
425 um	No. 40	16	0 - 25
250 um	No. 60	9	
150 um	No. 100	5	
75 um	No. 200	2.1	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



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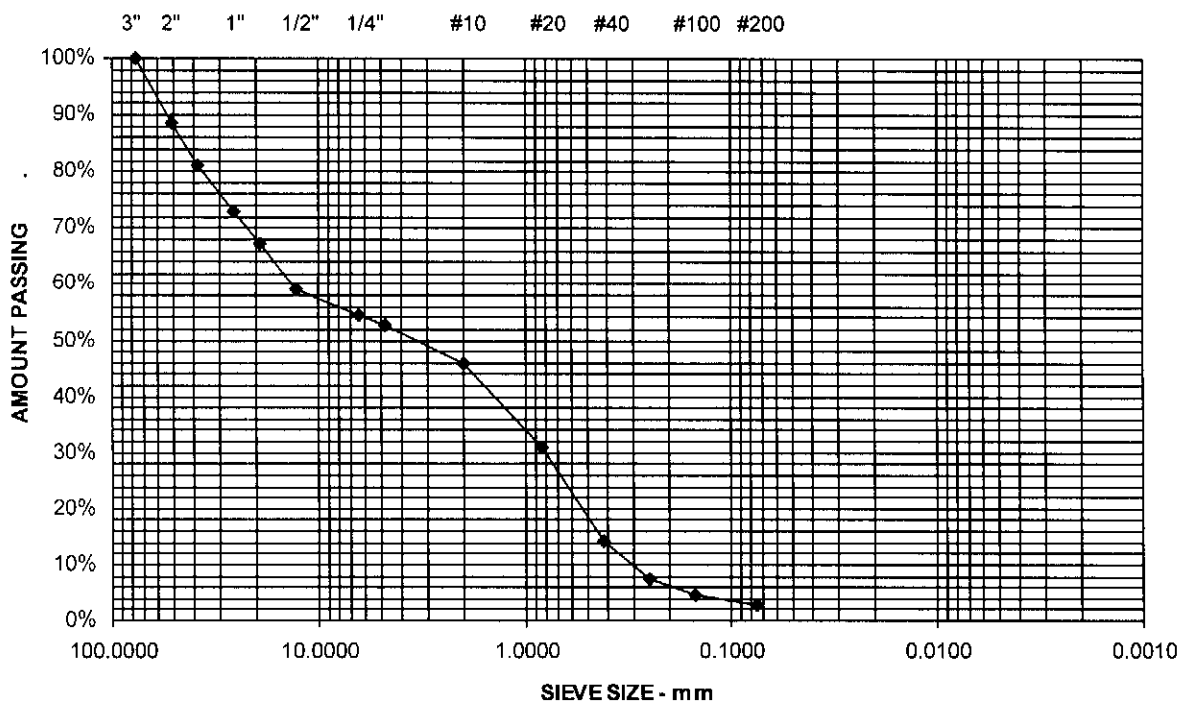
Report of Gradation

ASTM C-117 & C-136

Project Name	PORTLAND ME - CUMBERLAND COUNTY CIVIC CENTER RENOVATIONS - CONSTRUCTION MATERIALS TESTING	Project Number	12-0034.1
Client	CUMBERLAND COUNTY CIVIC CENTER	Lab ID	17134G
Material Type	GRANULAR FILL	Date Received	8/21/2013
Material Source	SHAW. BROS. N-PIT	Date Completed	8/26/2013
		Tested By	JUSTIN BISSON

STANDARD DESIGNATION (mm/µm)	SIEVE SIZE	AMOUNT PASSING (%)	MDOT 703.06 TYPE B SPECIFICATIONS (%)
150 mm	6"	100	
125 mm	5"	100	
100 mm	4"	100	100
75 mm	3"	100	
50 mm	2"	89	
38.1 mm	1-1/2"	81	
25.0 mm	1"	73	
19.0 mm	3/4"	67	
12.5 mm	1/2"	59	35 - 75
6.3 mm	1/4"	55	25 - 60
4.75 mm	No. 4	53	
2.00 mm	No. 10	46	
850 um	No. 20	31	
425 um	No. 40	14	0 - 25
250 um	No. 60	7	
150 um	No. 100	4	
75 um	No. 200	2.8	0.0 - 5.0

SAMPLE MEETS SPECIFICATION



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