

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P-36

Sample Date: 1/27/20

Dates Test Represents: 1/28/2020 through 2/3/2020

Concrete Grade: S2M

Contractor: _____

MDOT No.: _____



Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

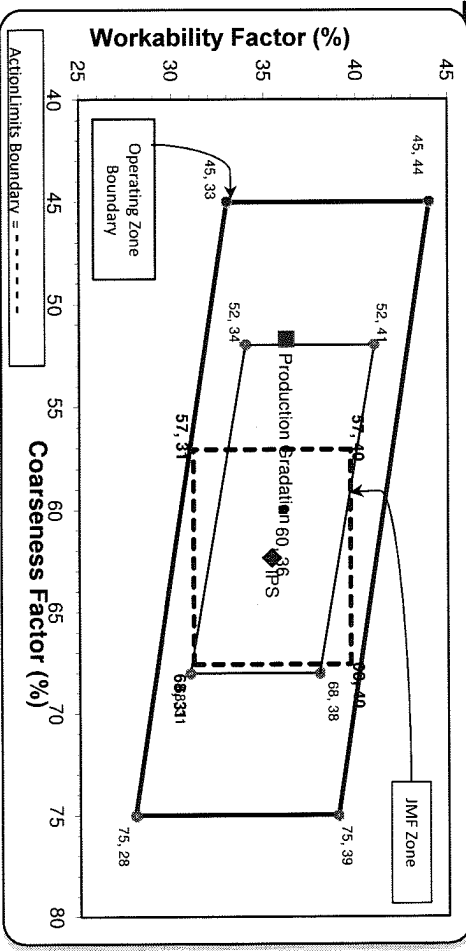
Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1500	9.17	2.62	49.2
26A	71-47	Presque Isle	350	2.14	2.62	11.5
2NS	63-92	Grange Hall	1200	7.26	2.65	39.3
		Total Wt	3050	18.57		100.0

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	97.5	100.0	100.0	98.8	1.2	1.2
3/4"	87.4	100.0	100.0	93.8	5.0	6.2
1/2"	57.5	100.0	100.0	79.1	14.7	20.9
3/8"	36.1	86.3	100.0	67.0	12.1	33.0
#4	6.2	28.9	97.7	44.8	22.2	55.2
#8	2.8	10.6	85.4	36.2	8.6	63.8
#16	2.5	5.3	70.2	29.5	6.7	70.5
#30	2.3	4.2	49.7	21.2	8.3	78.8
#50	2.2	3.7	19.3	9.1	12.1	90.9
#100	2.1	3.3	2.8	2.5	6.6	97.5
LBW	2.0	2.8	0.3	1.4	1.1	98.6

*Maximum % Retained must be above the 3/8" sieve.
*Any two adjacent sieves must equal 10% except max. nom. max., #100 and #200 sieves.
*% Retained must be at least 4% for each sieve except max. nom. max., #100 and #200 sieves.
*% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 52 Workability Factor: 36



Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	97.5	100.0	100.0	98.8	1.2	1.2
3/4"	87.4	100.0	100.0	93.8	5.0	6.2
1/2"	57.5	100.0	100.0	79.1	14.7	20.9
3/8"	36.1	86.3	100.0	67.0	12.1	33.0
#4	6.2	28.9	97.7	44.8	22.2	55.2
#8	2.8	10.6	85.4	36.2	8.6	63.8
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#30	2.3	4.2	49.7	21.2	8.3	78.8
#50	2.2	3.7	19.3	9.1	12.1	90.9
#100	2.1	3.3	2.8	2.5	6.6	97.5
LBW	2.0	2.8	0.3	1.4	1.1	98.6

PREPARED BY: SM, LLC Technical Service

Approved By: _____



Superior Auburn Hills
 2470 Auburn Road
 Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills
 Product 1051-6AA LS
 Period: 01/26/2020 - 02/01/2020

Name/Title Doug Storey / QC Technician
 Report Date 01/31/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	97.5	%	95-100
	3/4" (19mm)	87.4	%	
	1/2" (12.5mm)	57.5	%	30-60
	3/8" (9.5mm)	36.1	%	
	#4 (4.75mm)	6.2	%	0-8
	#8 (2.36mm)	2.8	%	
	#16 (1.18mm)	2.5	%	
	#30 (0.6mm)	2.3	%	
	#50 (0.3mm)	2.2	%	
	#100 (0.15mm)	2.1	%	
	#200 (75µm)	2.09	%	
	Wash Loss (#200/75um)	2.0	%	0-2
	Total Moisture	3.82	%	



Superior Auburn Hills
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 Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1067-26A Mod LS

Period: 01/26/2020 - 02/01/2020

Name/Title Doug Storey / QC Technician

Report Date 01/31/2020

Procedure	Sieve/Test	Result	Unit	26A LS Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	
	1" (25mm)	100.0	%	
	3/4" (19mm)	100.0	%	100-100
	1/2" (12.5mm)	100.0	%	95-100
	3/8" (9.5mm)	86.3	%	60-95
	#4 (4.75mm)	28.9	%	5-30
	#8 (2.36mm)	10.6	%	0-12
	#16 (1.18mm)	5.3	%	
	#30 (0.6mm)	4.2	%	
	#50 (0.3mm)	3.7	%	
	#100 (0.15mm)	3.3	%	
	#200 (75µm)	3.0	%	
	Wash Loss (#200/75um)	2.8	%	0-3
	Total Moisture	6.35	%	



Superior Auburn Hills
2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1022-2NS GR

Period: 01/26/2020 - 02/01/2020

Name/Title Doug Storey / QC Technician

Report Date 01/31/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.7	%	95-100
	#8 (2.36mm)	85.4	%	65-95
	#16 (1.18mm)	70.2	%	35-75
	#30 (0.6mm)	49.7	%	20-55
	#50 (0.3mm)	19.3	%	10-30
	#100 (0.15mm)	2.8	%	0-10
	#200 (75µm)	0.5	%	
	FM	2.75		2.6-3
	Wash Loss (#200/75um)	0.3	%	0-3
	Total Moisture	3.57	%	