

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P-36

Sample Date: 8/29/22

Dates Test Represents: 8/30/2022 through 9/5/2022

Concrete Grade: S2M, 3500HP

Contractor: _____

MDOT No.: _____

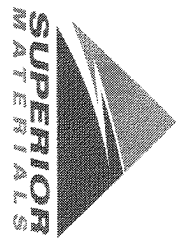
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1550	9.48	2.62	50.8
26A	71-47	Presque Isle	300	1.83	2.62	9.8
2NS	63-92	Grange Hall	1200	7.26	2.65	39.3
			Total Wt	3050		100.0

<----- Verify this number is 100%

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"	96.6	100.0	100.0	98.3	1.7	1.7
3/4"	81.0	100.0	100.0	90.3	7.9	9.7
1/2"	36.7	94.0	100.0	67.2	23.1	32.8
3/8"	19.0	82.2	100.0	57.1	10.2	42.9
#4	3.5	19.0	97.6	42.0	15.0	58.0
#8	2.1	5.0	81.5	33.6	8.4	66.4
#16	1.9	2.5	65.7	27.1	6.6	72.9
#30	1.8	2.0	46.3	19.3	7.7	80.7
#50	1.7	1.8	17.0	7.7	11.6	92.3
#100	1.6	1.7	3.7	2.4	5.3	97.6
LBW	1.2	1.6	0.5	1.0	1.5	99.0

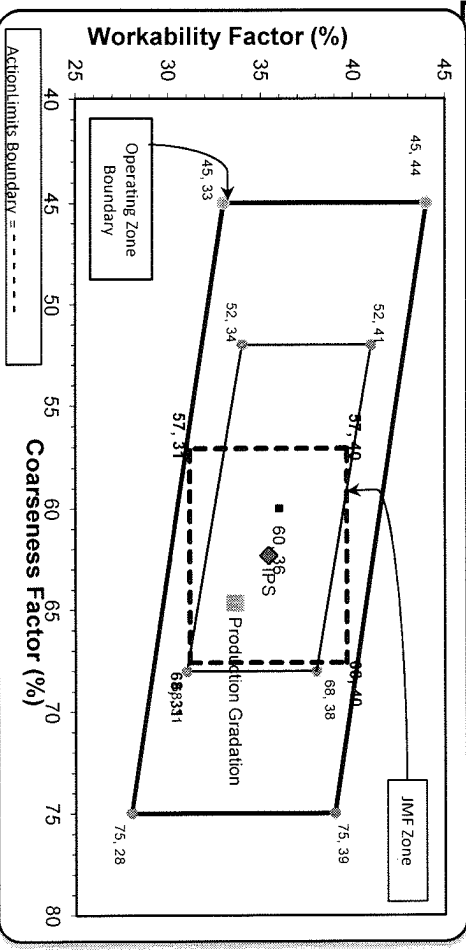
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max. nom. max., #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max. nom. max., #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom.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

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



Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 65 Workability Factor: 34



Initial Production Sample (IPS)

Sieve	% Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.1	0.9	0.9
3/4"	90.5	8.6	9.5
1/2"	69.8	20.7	30.2
3/8"	59.8	10.0	40.2
#4	42.2	17.6	57.8
#8	35.4	6.7	64.6
#16	28.8	6.7	71.2
#30	21.4	7.4	78.6
#50	8.8	12.6	91.2
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



Superior Auburn Hills
2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills
Product 1022-2NS GR
Period: 08/28/2022 - 09/03/2022

Name/Title Doug Storey / QC Technician
Report Date 09/02/2022

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.6	%	95-100
	#8 (2.36mm)	81.5	%	65-95
	#16 (1.18mm)	65.7	%	35-75
	#30 (.6mm)	46.3	%	20-55
	#50 (.3mm)	17.0	%	10-30
	#100 (.15mm)	3.7	%	0-10
	#200 (75µm)	0.8	%	
	FM	2.88		2.6-3
	Wash Loss (#200/75um)	0.5	%	0-3
	Total Moisture	3.42	%	



Superior Auburn Hills
 2470 Auburn Road
 Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 08/28/2022 - 09/03/2022

Report Date 09/02/2022

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)	94.0	%	95-100
	3/8" (9.5mm)	82.2	%	60-95
	#4 (4.75mm)	19.0	%	5-30
	#8 (2.36mm)	5.0	%	0-12
	#16 (1.18mm)	2.5	%	
	#30 (.6mm)	2.0	%	
	#50 (.3mm)	1.8	%	
	#100 (.15mm)	1.7	%	
	#200 (75µm)	1.6	%	
	Wash Loss (#200/75um)	1.6	%	0-3
	Total Moisture	3.29	%	



Superior Auburn Hills
 2470 Auburn Road
 Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1051-6AA LS

Name/Title Doug Storey / QC Technician

Period: 08/28/2022 - 09/03/2022

Report Date 09/02/2022

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	96.6	%	95-100
	3/4" (19mm)	81.0	%	
	1/2" (12.5mm)	36.7	%	30-60
	3/8" (9.5mm)	19.0	%	
	#4 (4.75mm)	3.5	%	0-8
	#8 (2.36mm)	2.1	%	
	#16 (1.18mm)	1.9	%	
	#30 (.6mm)	1.8	%	
	#50 (.3mm)	1.7	%	
	#100 (.15mm)	1.6	%	
	#200 (75µm)	1.4	%	
	Wash Loss (#200/75um)	1.2	%	0-2
	Total Moisture	3.30	%	