

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Sample Date: 9/21/20

Dates Test Represents: 9/22/2020 through 9/28/2020

Concrete Grade: **DM**

Contractor: _____

MDOT No.: _____

Aggr. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1455	8.90	2.62	50.1
26A	71-47	Presque Isle	350	2.14	2.62	12.0
2NS	63-92	Grange Hall	1100	6.65	2.65	37.9
Total Wt.						2905
						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"	99.2	100.0	100.0	99.6	0.4	0.4
3/4"	73.0	100.0	100.0	86.5	13.1	13.5
1/2"	41.7	100.0	100.0	70.4	16.1	29.6
3/8"	25.7	83.9	100.0	60.8	9.5	39.2
#4	5.3	21.0	97.3	42.0	18.8	58.0
#8	2.8	6.0	84.8	34.2	7.8	65.8
#16	2.3	3.2	69.8	28.0	6.3	72.0
#30	2.1	2.8	48.8	19.9	8.1	80.1
#50	2.0	2.7	19.3	8.6	11.2	91.4
#100	1.8	2.5	3.7	2.6	6.0	97.4
LBW	1.7	2.2	1.8	1.8	0.8	98.2

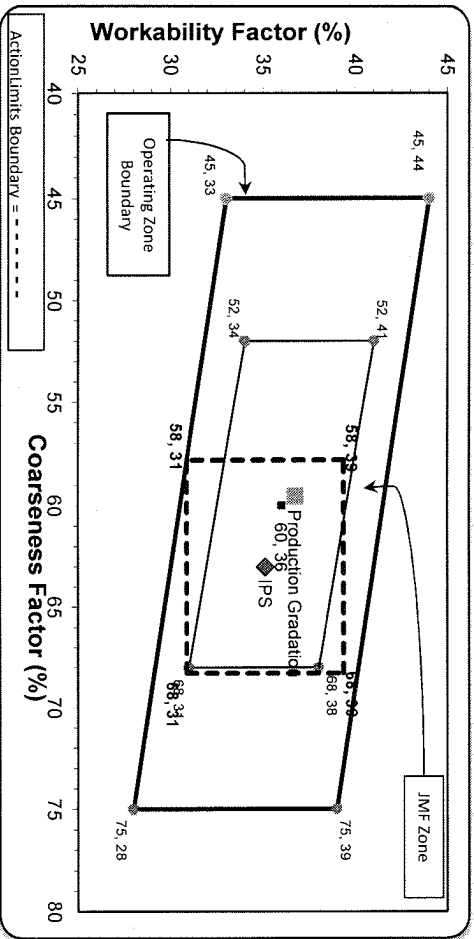
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when
 a 2" max. size (nom.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

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

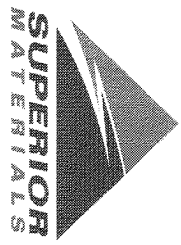
Coarseness Factor: **60** Workability Factor: **34** Adjusted WF: **36.7**

Initial Production Sample (IPS)

Coarseness Factor: **63** Workability Factor: **35**



Sieve	Cumulative % 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"	90.3	8.8	9.7
1/2"	69.2	21.1	30.8
3/8"	59.1	10.1	40.9
#4	41.8	17.3	58.2
#8	35.1	6.6	64.9
#16	28.5	6.6	71.5
#30	21.2	7.3	78.8
#50	8.7	12.5	91.3
#100	1.8	7.0	98.2
LBW	0.7	1.0	99.3



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

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1051-6AA LS

Name/Title Doug Storey / QC Technician

Period: 09/20/2020 - 09/26/2020

Report Date 09/25/2020

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	99.2	%	95-100
	3/4" (19mm)	73.0	%	
	1/2" (12.5mm)	41.7	%	30-60
	3/8" (9.5mm)	25.7	%	
	#4 (4.75mm)	5.3	%	0-8
	#8 (2.36mm)	2.8	%	
	#16 (1.18mm)	2.3	%	
	#30 (.6mm)	2.1	%	
	#50 (.3mm)	2.0	%	
	#100 (.15mm)	1.8	%	
	#200 (75µm)	1.7	%	
	Wash Loss (#200/75um)	1.7	%	0-2
	Total Moisture	2.99	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1067-26A Mod LS

Name/Title Doug Storey / QC Technician

Period: 09/20/2020 - 09/26/2020

Report Date 09/25/2020

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)	96.3	%	95-100
	3/8" (9.5mm)	83.9	%	60-95
	#4 (4.75mm)	21.0	%	5-30
	#8 (2.36mm)	6.0	%	0-12
	#16 (1.18mm)	3.2	%	
	#30 (.6mm)	2.8	%	
	#50 (.3mm)	2.7	%	
	#100 (.15mm)	2.5	%	
	#200 (75µm)	2.3	%	
	Wash Loss (#200/75um)	2.2	%	0-3
	Total Moisture	3.50	%	



2470 Auburn Road
Auburn Hills, MI 48432

Plant S36-Superior Auburn Hills

Product 1022-2NS GR

Name/Title Doug Storey / QC Technician

Period: 09/20/2020 - 09/26/2020

Report Date 09/25/2020

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.3	%	95-100
	#8 (2.36mm)	84.8	%	65-95
	#16 (1.18mm)	69.8	%	35-75
	#30 (.6mm)	48.8	%	20-55
	#50 (.3mm)	19.3	%	10-30
	#100 (.15mm)	3.7	%	0-10
	#200 (75µm)	1.8	%	
	FM	2.76		2.6-3
	Wash Loss (#200/75um)	1.8	%	0-3
	Total Moisture	3.39	%	