

Aggregate Optimization Chart

PLANT #: **P-02**

Sample Date: 1/6/25 Concrete Grade: **S2M, 3500HP**
 Dates Test Represents: 1/7/2025 through 1/13/2025

Contractor: _____

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1520	9.30	2.62	49.8
26A	71-47	Presque Isle	300	1.83	2.62	9.8
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
Total Wt			3050	18.57		100.0

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



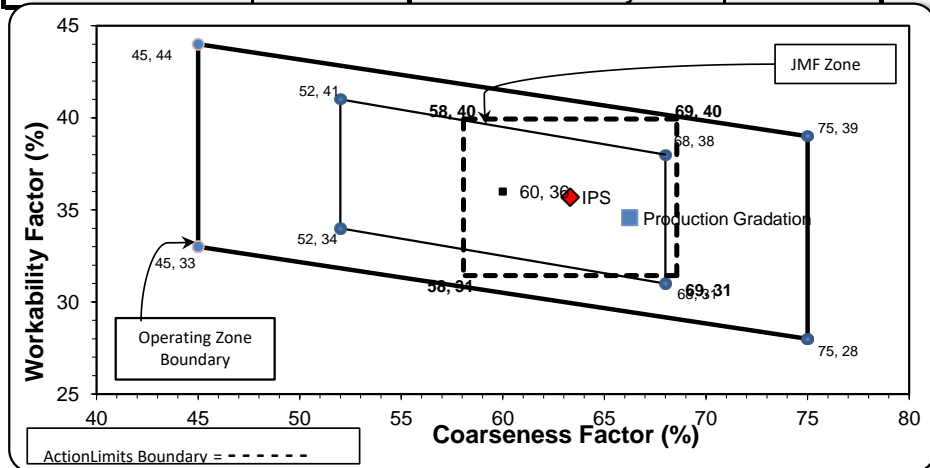
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	96.3	100.0	100.0	98.2	1.8	1.8
3/4"	72.3	100.0	100.0	86.2	12.0	13.8
1/2"	29.1	96.8	100.0	64.4	21.8	35.6
3/8"	16.3	83.5	100.0	56.7	7.7	43.3
#4	4.5	19.3	96.7	43.1	13.5	56.9
#8	3.1	6.6	80.3	34.6	8.6	65.4
#16	2.7	4.1	64.5	27.8	6.8	72.2
#30	2.5	3.4	49.0	21.3	6.4	78.7
#50	2.3	3.0	25.3	11.6	9.7	88.4
#100	2.1	2.8	6.0	3.7	7.9	96.3
LBW	1.8	2.5	1.3	1.7	2.1	98.3

*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 4% for the 3/4" sieve when a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **66** **Workability Factor:** **35**



Intial Production Sample (IPS)

Coarseness Factor: **63**
Workability Factor: **36**

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.6	4.4	4.4
1/2"	73.1	22.6	26.9
3/8"	59.3	13.8	40.7
#4	42.8	16.5	57.2
#8	35.7	7.1	64.3
#16	28.9	6.8	71.1
#30	20.7	8.2	79.3
#50	9.9	10.8	90.1
#100	2.1	7.8	97.9
LBW	0.9	1.2	99.1

PREPARED BY:
 SM, LLC Technical Service

Approved By:



Daily Summary Report

Date Wednesday, January 8, 2025

	Sample Id	-1083572587	-674960716	-674936347
Plant	Superior Hoover	Superior Hoover	Superior Hoover	Superior Hoover
Product	1022 2NS GR	1054 6AA LS PI	1067 26A Mod LS	
Specification	2NS GR Spec	6AA LS	26A Mod LS Spec	
Sample Type	QA	QA	QA	
Time	15:49	15:50	15:51	
2" (50mm)		100.0	100.0	
1 1/2" (37.5mm)		100.0	100.0	
1" (25mm)		96.3	100.0	
3/4" (19mm)		72.3	100.0	
1/2" (12.5mm)		29.1	96.8	
3/8" (9.5mm)	100.0	16.3	83.5	
#4 (4.75mm)	96.7	4.5	19.3	
#8 (2.36mm)	80.3	3.1	6.6	
#16 (1.18mm)	64.5	2.7	4.1	
#30 (.6mm)	49.0	2.5	3.4	
#50 (.3mm)	25.3	2.3	3.0	
#100 (.15mm)	6.0	2.1	2.8	
#200 (75µm)	1.5	1.93	2.5	
Pan	0.0	0.00	0.0	
FM	2.78			
Wash Loss (#200/75um)	1.3	1.8	2.5	
Total Moisture	3.85	2.85	3.64	