

Aggregate Optimization Chart

PLANT #: P-02

Sample Date: 12/17/25

Concrete Grade: S2M, 3500HP

Dates Test Represents: 12/19/2025 through 12/26/2025

Contractor: _____

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1480	9.05	2.62	48.1
26A	71-47	Presque Isle	400	2.45	2.62	13.0
2NS	63-115	Ray Rd	1200	7.26	2.65	39.0
Total Wt			3080	18.76		100.0

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



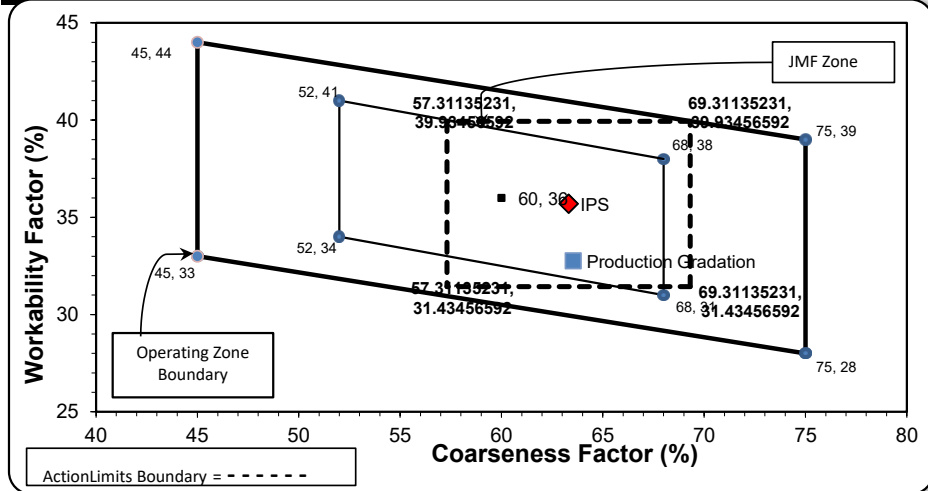
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	99.2	100.0	100.0	99.6	0.4	0.4
3/4"	85.1	100.0	100.0	92.8	6.8	7.2
1/2"	42.0	95.9	100.0	71.6	21.2	28.4
3/8"	18.2	73.7	100.0	57.3	14.3	42.7
#4	2.5	12.8	96.7	40.5	16.7	59.5
#8	1.6	6.0	80.1	32.8	7.8	67.2
#16	1.4	4.6	64.1	26.2	6.5	73.8
#30	1.2	3.9	47.8	19.7	6.5	80.3
#50	1.2	3.2	24.0	10.3	9.4	89.7
#100	1.1	2.5	5.0	2.8	7.5	97.2
LBW	1.0	2.1	1.0	1.1	1.7	98.9

*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:	64	Workability Factor:	33
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Initial 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:
 Nancy Donahue



Daily Summary Report

Date Wednesday, December 17, 2025

Sample Id	-1989628778	-1989629065	-1989643319
Plant	S02 Superior Hoover	S02 Superior Hoover	S02 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	12:00	12:00	12:00
2" (50mm)		100.0	100.0
1 1/2" (37.5mm)		100.0	100.0
1" (25mm)		99.2	100.0
3/4" (19mm)		85.1	100.0
1/2" (12.5mm)		42.0	95.9
3/8" (9.5mm)	100.0	18.2	73.7
#4 (4.75mm)	96.7	2.5	12.8
#8 (2.36mm)	80.1	1.6	6.0
#16 (1.18mm)	64.1	1.4	4.6
#30 (.6mm)	47.8	1.2	3.9
#50 (.3mm)	24.0	1.2	3.2
#100 (.15mm)	5.0	1.1	2.5
#200 (75µm)	1.2	1.05	2.2
Pan	0.0	0.00	0.0
FM	2.82		
Wash Loss (#200/75um)	1.0	1.0	2.1
Total Moisture	2.15	2.32	2.12