

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Sample Date: 9/2/26

Concrete Grade: **S2M-3500HP**

Contractor: _____

Dates Test Represents: 9/3/2026 through 9/9/2026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1420	8.85	2.57	46.4
26A	71-47	Presque Isle	400	2.49	2.57	13.1
2NS	63-115	Ray Rd	1240	7.44	2.67	40.5
Total Wt			3060	18.79		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"	96.8	100.0	100.0	98.5	1.5	1.5
3/4"	75.0	100.0	100.0	88.4	10.1	11.6
1/2"	35.0	97.3	100.0	69.5	18.9	30.5
3/8"	16.0	84.0	100.0	58.9	10.6	41.1
#4	3.1	19.5	97.3	43.4	15.5	56.6
#8	1.7	6.3	82.5	35.0	8.4	65.0
#16	1.5	3.3	67.1	28.3	6.7	71.7
#30	1.4	2.7	48.5	20.7	7.7	79.3
#50	1.3	2.5	20.9	9.4	11.3	90.6
#100	1.2	2.4	4.4	2.7	6.7	97.3
LBW	1.0	2.0	0.9	1.1	1.6	98.9



Superior Materials, LLC

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

*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.

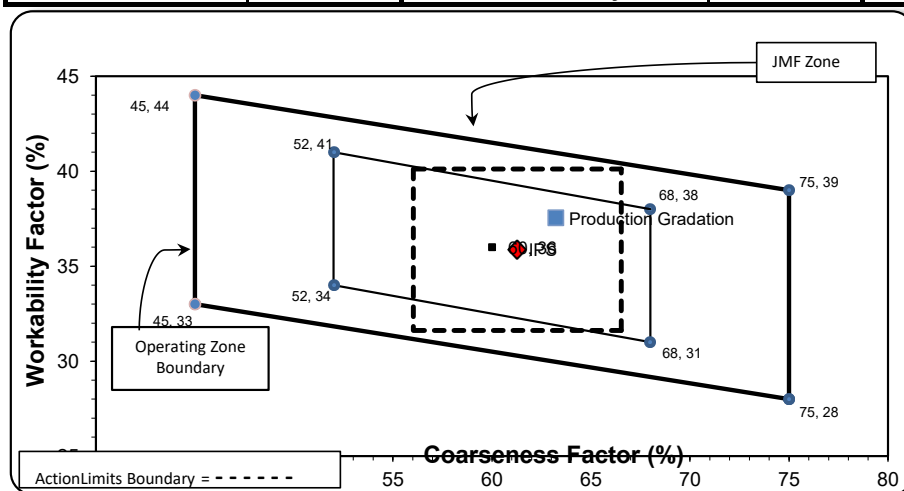
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	63	Workability Factor:	35	Adjusted WF	37.5
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Coarseness Factor:	61
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Workability Factor:	36
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Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By:
Nancy Donahue



Daily Summary Report

Date Wednesday, September 02 2026

Sample Id	-1989630839	674983739	-1989630840
Plant	S36	S36	S36
Product	Superior Auburn Hills 1022 2NS GR	Superior Auburn Hills 1051 6AA LS	Superior Auburn Hills 1067 26A Mod LS
Specification	2NS GR Spec	6AA LS	26A LS Spec
Sample Type	QA	QA	QA
Time	16:00	16:00	16:00
2" (50mm)		100.0	100.0
1 1/2" (37.5mm)		100.0	100.0
1" (25mm)		96.8	100.0
3/4" (19mm)		75.0	100.0
1/2" (12.5mm)		35.0	97.3
3/8" (9.5mm)	100.0	16.0	84.0
#4 (4.75mm)	97.3	3.1	19.5
#8 (2.36mm)	82.5	1.7	6.3
#16 (1.18mm)	67.1	1.5	3.3
#30 (.6mm)	48.5	1.4	2.7
#50 (.3mm)	20.9	1.3	2.5
#100 (.15mm)	4.4	1.2	2.4
#200 (75µm)	1.1	1.1	2.1
Pan	0.0	0.0	0.0
FM	2.79		
Wash Loss (#200/75µm)	0.9	1.0	2.0
Total Moisture	2.83	3.07	2.58

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-39**

Sample Date: 9/2/26

Concrete Grade: **S2M-3500HP**

Contractor: _____

Dates Test Represents: 9/3/2026 through 9/9/2026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1420	8.85	2.57	46.4
26A	71-47	Presque Isle	440	2.74	2.57	14.4
2NS	63-0009	Koenig	1200	7.26	2.65	39.2
Total Wt			3060	18.86		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"	96.2	100.0	100.0	98.2	1.8	1.8
3/4"	77.0	100.0	100.0	89.3	8.9	10.7
1/2"	36.1	95.2	100.0	69.7	19.7	30.3
3/8"	19.9	81.3	100.0	60.1	9.5	39.9
#4	2.9	21.3	97.9	42.8	17.3	57.2
#8	2.0	7.6	84.1	35.0	7.8	65.0
#16	1.9	4.0	68.4	28.3	6.7	71.7
#30	1.8	3.2	51.4	21.5	6.8	78.5
#50	1.8	2.9	26.7	11.7	9.7	88.3
#100	1.7	2.7	5.8	3.5	8.3	96.5
LBW	1.5	2.5	1.2	1.5	1.9	98.5



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*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

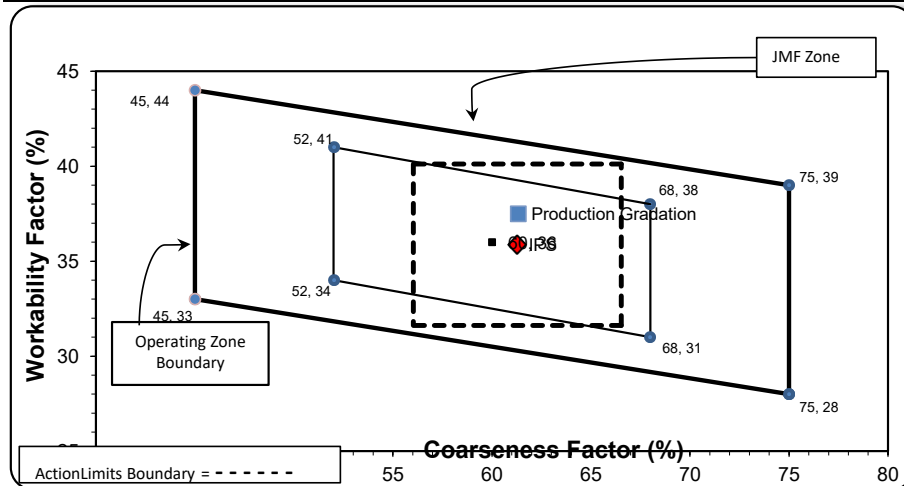
a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	61	Workability Factor:	35	37.5
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Coarseness Factor:		61	
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"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3



PREPARED BY:
SM, LLC Technical Service

Approved By:
Nancy Donahue



Daily Summary Report

Date Wednesday September 02, 2026

Sample Id	-1989631553	674957621	-1989631559
Plant	S39	S39	S39
Product	Superior Sterling Heights 1022 2NS GR	Superior Sterling Heights 1051 6AA LS	Superior Sterling Heights 1067 26A Mod LS
Specification	2NS GR Spec	6AA LS	26A LS Spec
Sample Type	QA	QA	QA
Time	12:30	12:30	12:30
2" (50mm)		100.0	100.0
1 1/2" (37.5mm)		100.0	100.0
1" (25mm)		96.2	100.0
3/4" (19mm)		77.0	100.0
1/2" (12.5mm)		36.1	95.2
3/8" (9.5mm)	100.0	19.9	81.3
#4 (4.75mm)	97.9	2.9	21.3
#8 (2.36mm)	84.1	2.0	7.6
#16 (1.18mm)	68.4	1.9	4.0
#30 (.6mm)	51.4	1.8	3.2
#50 (.3mm)	26.7	1.8	2.9
#100 (.15mm)	5.8	1.7	2.7
#200 (75µm)	1.2	1.60	2.6
Pan	0.0	0.00	0.0
FM	2.66		
Wash Loss (#200/75µm)	1.2	1.5	2.5
Total Moisture	2.45	1.70	1.90