

Aggregate Optimization Chart

PLANT #: **P-102**

Sample Date: 11/24/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 11/25/2025 through 12/2/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1500	8.94	2.69	50.8
26A	58-003	Stoneco	300	1.79	2.69	10.2
2NS	63-114	Highland	1150	6.95	2.65	39.0
Total Wt			2950	17.68		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"	98.9	100.0	100.0	99.4	0.6	0.6
3/4"	81.6	100.0	100.0	90.6	8.8	9.4
1/2"	39.7	99.4	100.0	69.3	21.4	30.7
3/8"	22.5	82.4	100.0	58.8	10.5	41.2
#4	2.4	10.4	99.1	40.9	17.9	59.1
#8	1.2	3.0	85.1	34.1	6.8	65.9
#16	1.2	2.2	68.1	27.4	6.7	72.6
#30	1.0	1.8	49.8	20.1	7.3	79.9
#50	1.0	1.6	23.5	9.8	10.3	90.2
#100	0.9	1.4	4.2	2.2	7.6	97.8
LBW	0.7	1.0	0.8	0.8	1.5	99.2

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

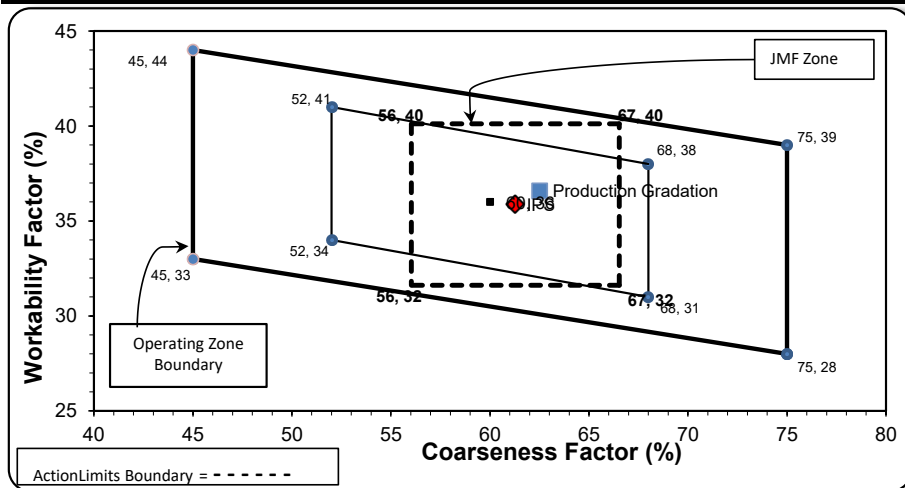
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	63	Workability Factor:	34	36.6
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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 Monday, November 24, 2025

Sample Id	-674926827	-674898705	-674957994
Plant	S102 Superior Novi	S102 Superior Novi	S102 Superior Novi
Product	1022 2NS GR	1051 6AA LS	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)		100.0	100.0
3/4" (19mm)		79.1	100.0
1/2" (12.5mm)		38.7	99.7
3/8" (9.5mm)	100.0	19.0	90.2
#4 (4.75mm)	99.1	2.3	11.8
#8 (2.36mm)	84.0	1.3	3.6
#16 (1.18mm)	66.5	1.0	2.4
#30 (.6mm)	47.9	0.9	1.9
#50 (.3mm)	23.7	0.9	1.5
#100 (.15mm)	5.1	0.8	1.2
#200 (75µm)	0.9	0.73	1.1
Pan	0.0	0.00	0.0
FM	2.74		
Wash Loss (#200/75um)	0.8	0.7	1.0
Total Moisture	3.38	3.03	2.67

Aggregate Optimization Chart

PLANT #: **P-103**

Sample Date: 11/24/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 11/25/2025 through 12/2/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1500	8.94	2.69	50.8
26A	58-003	Stoneco	300	1.79	2.69	10.2
2NS	63-114	Highland	1150	6.95	2.65	39.0
Total Wt			2950	17.68		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"	98.9	100.0	100.0	99.4	0.6	0.6
3/4"	81.6	100.0	100.0	90.6	8.8	9.4
1/2"	39.7	99.4	100.0	69.3	21.4	30.7
3/8"	22.5	82.4	100.0	58.8	10.5	41.2
#4	2.4	10.4	99.1	40.9	17.9	59.1
#8	1.2	3.0	85.1	34.1	6.8	65.9
#16	1.2	2.2	68.1	27.4	6.7	72.6
#30	1.0	1.8	49.8	20.1	7.3	79.9
#50	1.0	1.6	23.5	9.8	10.3	90.2
#100	0.9	1.4	4.2	2.2	7.6	97.8
LBW	0.7	1.0	0.8	0.8	1.5	99.2

*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 4% for the 3/4" sieve when

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

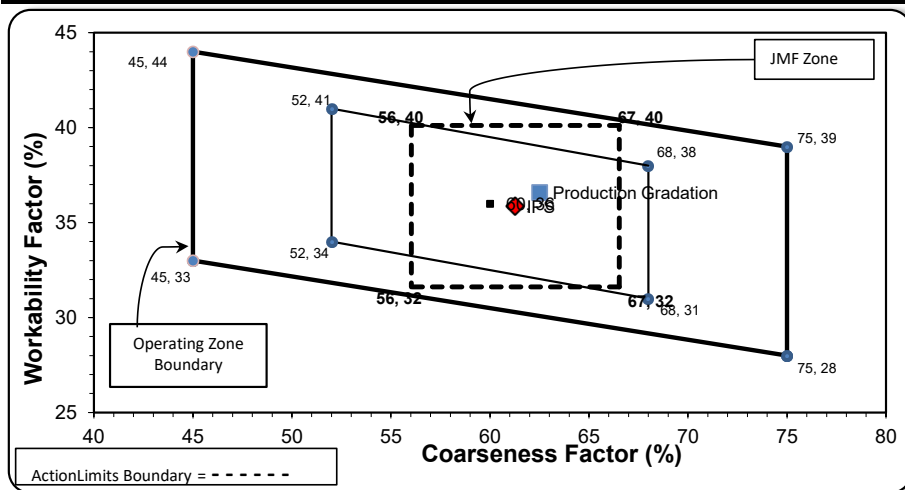
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	63	Workability Factor:	34	36.6
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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 Monday, November 24, 2025

Sample Id	-881357662	-1989637177	-1040801210
Plant	S103 Superior Brighton	S103 Superior Brighton	S103 Superior Brighton
Product	1022 2NS GR	1051 6AA LS	1067 26A Mod LS
Specification	2NS GR Spec	6AA LS	26A Mod LS Spec
Sample Type	QA	QA	QA
Time	11:00	11:00	11:00
2" (50mm)		100.0	100.0
1 1/2" (37.5mm)		100.0	100.0
1" (25mm)		100.0	100.0
3/4" (19mm)		86.3	100.0
1/2" (12.5mm)		42.6	99.3
3/8" (9.5mm)	100.0	20.5	89.5
#4 (4.75mm)	98.8	2.1	13.0
#8 (2.36mm)	83.9	1.3	4.7
#16 (1.18mm)	66.1	1.2	3.4
#30 (.6mm)	46.1	1.1	2.7
#50 (.3mm)	23.1	1.0	2.3
#100 (.15mm)	4.9	1.0	2.1
#200 (75µm)	1.0	0.89	2.0
Pan	0.0	0.00	0.0
FM	2.77		
Wash Loss (#200/75um)	0.8	0.8	1.8
Total Moisture	3.53	3.33	2.88

Aggregate Optimization Chart

PLANT #: **P-O2**

Sample Date: 11/24/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 11/25/2025 through 12/2/2025

MDOT No.: _____

Agg. 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	300	1.83	2.62	10.3
2NS	63-115	Ray Rd	1150	6.95	2.65	39.6
Total Wt			2905	17.69		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"	97.6	100.0	100.0	98.8	1.2	1.2
3/4"	80.2	100.0	100.0	90.1	8.7	9.9
1/2"	37.8	98.7	100.0	68.7	21.4	31.3
3/8"	19.7	86.5	100.0	58.4	10.3	41.6
#4	3.5	17.6	98.0	42.4	16.0	57.6
#8	2.1	4.7	83.9	34.8	7.6	65.2
#16	1.8	2.5	62.9	26.1	8.7	73.9
#30	1.7	2.1	44.1	18.5	7.5	81.5
#50	1.6	1.9	20.8	9.2	9.3	90.8
#100	1.6	1.8	4.7	2.8	6.4	97.2
LBW	1.3	1.6	1.0	1.2	1.6	98.8

*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.

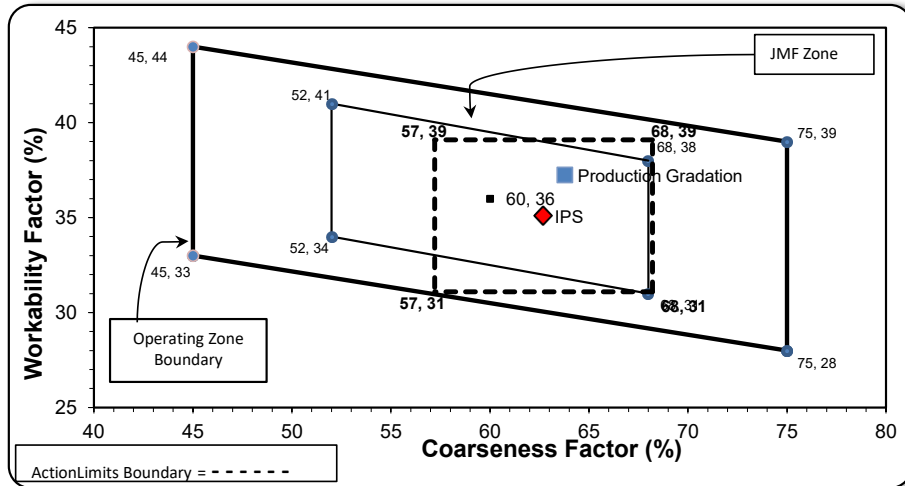
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	64	Workability Factor:	35	37.3
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Coarseness Factor:	63
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Workability Factor:	35
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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"	100.0	0.0	0.0
3/4"	95.1	4.9	4.9
1/2"	74.6	20.5	25.4
3/8"	59.3	15.3	40.7
#4	42.1	17.2	57.9
#8	35.1	7.1	64.9
#16	29.2	5.9	70.8
#30	21.9	7.3	78.1
#50	9.6	12.4	90.4
#100	2.4	7.2	97.6
LBW	0.9	1.5	99.1

PREPARED BY:
 SM, LLC Technical Service

Approved By:
 Nancy Donahue



Daily Summary Report

Date Tuesday, November 25, 2025

	Sample Id	-674922051	-674957840	-1989618809
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	12:00	12:00	12:00	
2" (50mm)		100.0	100.0	
1 1/2" (37.5mm)		100.0	100.0	
1" (25mm)		98.5	100.0	
3/4" (19mm)		82.0	100.0	
1/2" (12.5mm)		44.9	97.7	
3/8" (9.5mm)	100.0	26.1	82.8	
#4 (4.75mm)	96.5	5.0	17.5	
#8 (2.36mm)	79.9	2.5	5.7	
#16 (1.18mm)	64.4	2.1	3.3	
#30 (.6mm)	48.8	2.0	2.8	
#50 (.3mm)	25.5	1.9	2.6	
#100 (.15mm)	5.0	1.7	2.5	
#200 (75µm)	1.2	1.61	2.4	
Pan	0.0	0.00	0.0	
FM	2.80			
Wash Loss (#200/75um)	1.0	1.5	2.3	
Total Moisture	3.47	3.26	3.12	