

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Sample Date: 10/20/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 10/21/2025 through 10/27/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1800	10.72	2.69	61.0
26A	58-003	Stoneco	0	0.00	2.69	0.0
2NS	63-114	Highland	1150	6.95	2.65	39.0
Total Wt			2950	17.68		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	99.5	0.5	0.5
3/4"	80.1	100.0	100.0	87.9	11.7	12.1
1/2"	41.2	100.0	100.0	64.1	23.7	35.9
3/8"	23.0	92.2	100.0	53.0	11.1	47.0
#4	2.5	23.2	98.9	40.1	12.9	59.9
#8	1.0	3.9	83.7	33.2	6.8	66.8
#16	0.8	2.1	66.5	26.4	6.8	73.6
#30	0.8	1.8	46.3	18.5	7.9	81.5
#50	0.7	1.6	22.6	9.2	9.3	90.8
#100	0.7	1.5	4.4	2.1	7.1	97.9
LBW	0.6	1.4	0.8	0.7	1.5	99.3

*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.

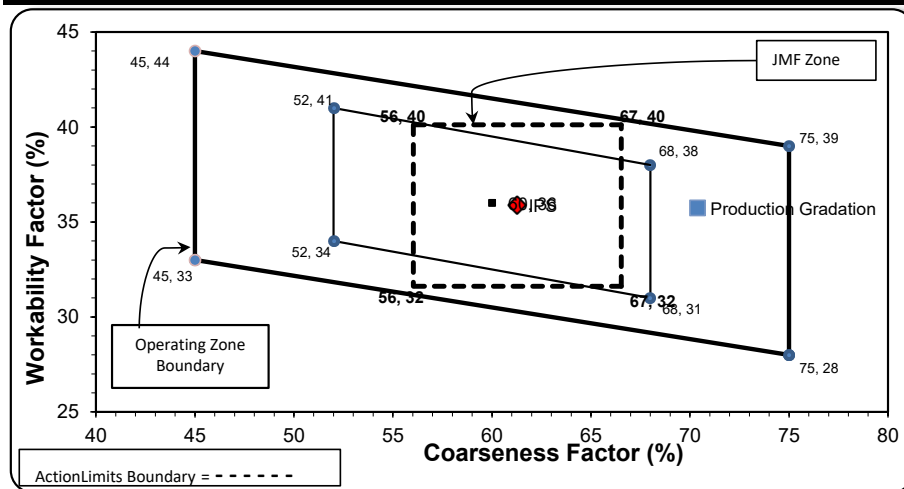
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	70	Workability Factor:	33	35.7
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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:

[Signature]



Superior Materials, LLC

30701 W. 10 Mile Rd.

Suite 500

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Daily Summary Report

Date Wednesday, October 22, 2025

Sample Id	-674897690	-674989774	-674913425
Plant	S102 Superior Novi	S102 Superior Novi	S102 Superior Novi
Product	1051 6AA LS	1022 2NS GR	1067 26A Mod LS
Specification	6AA LS	2NS GR Spec	26A Mod LS Spec
Sample Type	QA	QA	QA
2" (50mm)	100.0		100.0
1 1/2" (37.5mm)	100.0		100.0
1" (25mm)	99.2		100.0
3/4" (19mm)	80.1		100.0
1/2" (12.5mm)	41.2		100.0
3/8" (9.5mm)	23.0	100.0	92.2
#4 (4.75mm)	2.5	98.9	23.2
#8 (2.36mm)	1.0	83.7	3.9
#16 (1.18mm)	0.8	66.5	2.1
#30 (.6mm)	0.8	46.3	1.8
#50 (.3mm)	0.7	22.6	1.6
#100 (.15mm)	0.7	4.4	1.5
#200 (75µm)	0.67	1.0	1.4
Pan	0.00	0.0	0.0
FM		2.78	
Wash Loss (#200/75um)	0.6	0.8	1.4
Total Moisture	3.53	5.53	4.58

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **p11**

Sample Date: 10/20/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 10/21/2025 through 10/27/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	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%

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"	80.1	100.0	100.0	90.0	8.8	10.0
1/2"	34.9	98.1	100.0	67.2	22.8	32.8
3/8"	16.6	86.1	100.0	56.8	10.4	43.2
#4	3.2	22.5	97.6	42.6	14.2	57.4
#8	2.2	8.2	83.7	35.1	7.5	64.9
#16	1.9	4.7	67.0	28.0	7.1	72.0
#30	1.8	3.8	48.9	20.7	7.3	79.3
#50	1.7	3.5	25.0	11.1	9.5	88.9
#100	1.7	3.3	6.9	3.9	7.2	96.1
LBW	1.5	3.0	1.3	1.6	2.3	98.4

*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.



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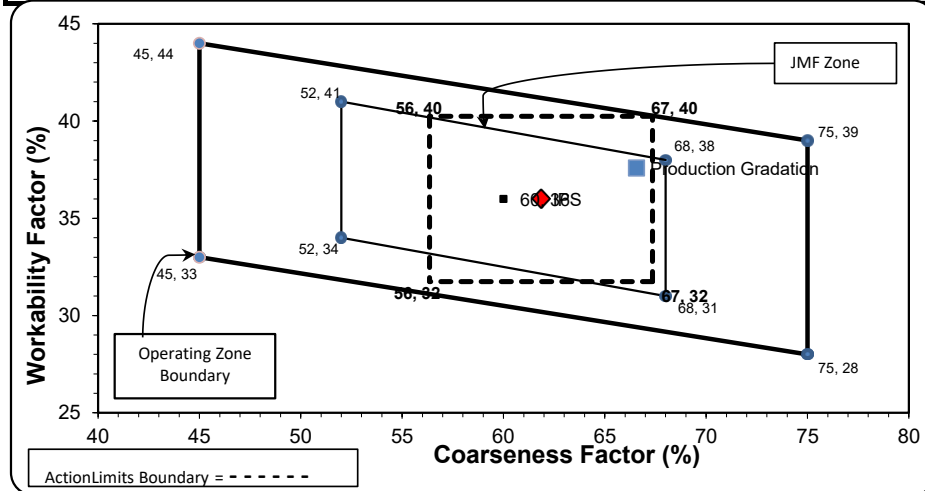
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	67	Workability Factor:	35	Adjusted WF	37.6
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Coarseness Factor: **62**

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"	95.0	5.0	5.0
1/2"	72.3	22.8	27.7
3/8"	60.4	11.8	39.6
#4	42.6	17.8	57.4
#8	36.0	6.6	64.0
#16	29.5	6.5	70.5
#30	20.3	9.2	79.7
#50	9.5	10.8	90.5
#100	3.4	6.1	96.6
LBW	1.3	2.1	98.7

PREPARED BY:
SM, LLC Technical Service

Approved By:

[Signature]

Daily Summary Report

Date Monday, October 20, 2025

Sample Id	-674928587	-674929440	-674963503
Plant	Onsite Jefferson	Onsite Jefferson	Onsite Jefferson
Product	1067 26A Mod LS	1051 6AA LS	1022 2NS GR
Specification	26A Mod LS Spec		2NS GR Spec
Sample Type	QA	QA	QA
2" (50mm)	100.0	100.0	
1 1/2" (37.5mm)	100.0	100.0	
1" (25mm)	100.0	97.6	
3/4" (19mm)	100.0	80.1	
1/2" (12.5mm)	98.1	34.9	
3/8" (9.5mm)	86.1	16.6	100.0
#4 (4.75mm)	22.5	3.2	97.6
#8 (2.36mm)	8.2	2.2	83.7
#16 (1.18mm)	4.7	1.9	67.0
#30 (.6mm)	3.8	1.8	48.9
#50 (.3mm)	3.5	1.7	25.0
#100 (.15mm)	3.3	1.7	6.9
#200 (75µm)	3.1	1.57	1.8
Pan	0.0	0.00	0.0
FM			2.71
-#200 (75um)			1.8
Wash Loss (#200/75um)	3.0	1.5	1.3
Total Moisture	2.9	2.4	4.8

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-O2**

Sample Date: 10/20/25

Concrete Grade: **DM, 4500HP**

Contractor: _____

Dates Test Represents: 10/21/2025 through 10/27/2025

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	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%

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"	94.9	100.0	100.0	97.4	2.6	2.6
3/4"	76.2	100.0	100.0	88.1	9.4	11.9
1/2"	32.8	98.2	100.0	66.2	21.9	33.8
3/8"	14.8	86.5	100.0	55.9	10.2	44.1
#4	1.9	21.9	96.4	41.4	14.6	58.6
#8	1.3	7.7	81.4	33.7	7.7	66.3
#16	1.2	4.8	63.5	26.2	7.4	73.8
#30	1.1	3.9	45.9	19.1	7.1	80.9
#50	1.1	3.5	23.2	10.1	9.0	89.9
#100	1.1	3.2	6.3	3.4	6.7	96.6
LBW	0.9	2.7	1.5	1.3	2.1	98.7

*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.



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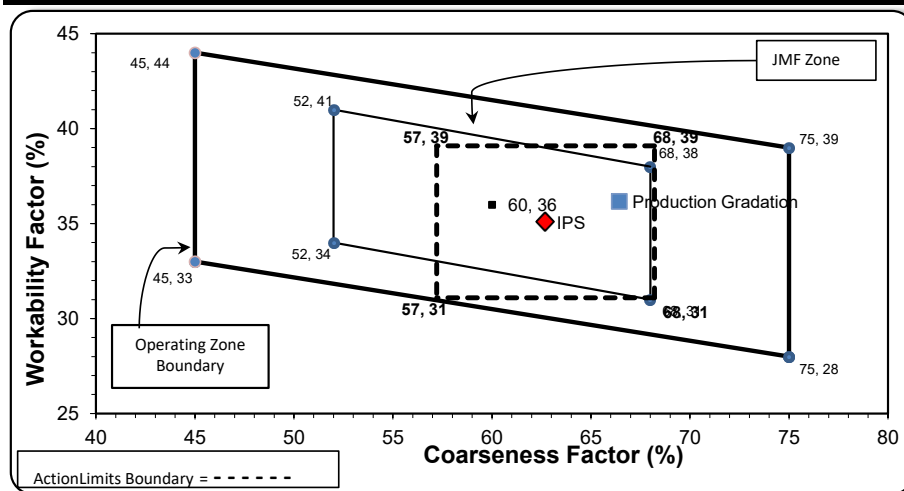
Production Gradation ☒ Batch Plant Gradations ☐ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	66	Workability Factor:	34	36.2
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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:

[Signature]



Daily Summary Report

Date Monday, October 20, 2025

Sample Id	-315823798	-674928410	-674985002
Plant	Superior Hoover	Superior Hoover	Superior Hoover
Product	1054 6AA LS PI	1067 26A Mod LS	1022 2NS GR
Specification	6AA LS	26A Mod LS Spec	2NS GR Spec
Sample Type	QA	QA	QA

2" (50mm)	100.0	100.0	
1 1/2" (37.5mm)	100.0	100.0	
1" (25mm)	94.9	100.0	
3/4" (19mm)	76.2	100.0	
1/2" (12.5mm)	32.8	98.2	
3/8" (9.5mm)	14.8	86.5	100.0
#4 (4.75mm)	1.9	21.9	96.4
#8 (2.36mm)	1.3	7.7	81.4
#16 (1.18mm)	1.2	4.8	63.5
#30 (.6mm)	1.1	3.9	45.9
#50 (.3mm)	1.1	3.5	23.2
#100 (.15mm)	1.1	3.2	6.3
#200 (75µm)	0.95	2.9	1.7
Pan	0.00	0.0	0.0
FM			2.83
Wash Loss (#200/75um)	0.9	2.7	1.5
Total Moisture	2.34	2.88	5.58