

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-2**

Sample Date: 9/9/26

Concrete Grade: **DM-4500HP**

Contractor: _____

Dates Test Represents: 9/10/2026 through 9/16/2026

1" Slump

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1570	9.79	2.57	52.9
26A	71-47	Presque Isle	200	1.25	2.57	6.7
2NS	63-115	Ray Rd	1200	7.20	2.67	40.4
Total Wt			2970	18.24		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"	85.7	100.0	100.0	92.4	7.0	7.6
1/2"	49.0	97.3	100.0	72.9	19.6	27.1
3/8"	26.6	82.9	100.0	60.0	12.8	40.0
#4	4.2	18.8	96.4	42.4	17.6	57.6
#8	2.2	5.7	82.1	34.7	7.7	65.3
#16	1.9	3.0	60.8	25.8	8.9	74.2
#30	1.8	2.3	44.2	19.0	6.8	81.0
#50	1.7	2.1	22.0	9.9	9.0	90.1
#100	1.6	1.9	5.2	3.1	6.9	96.9
LBW	1.4	1.7	0.8	1.2	1.9	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.

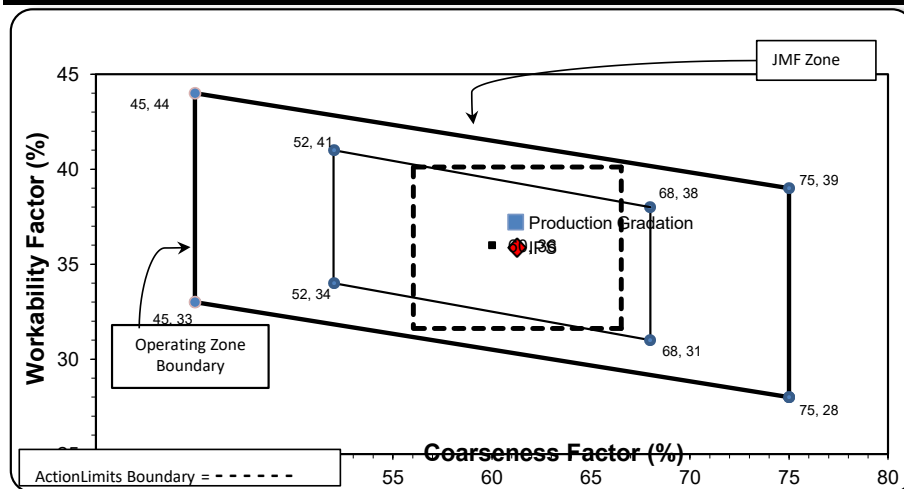
Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	61	Workability Factor:	35	37.2
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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

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Sample Date: 9/9/26

Concrete Grade: **DM-4500HP**

Contractor: _____

Dates Test Represents: 9/10/2026 through 9/16/2026

1" Slump

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	StoneCo	1590	9.47	2.69	51.8
1A	58-003	StoneCo	300	1.79	2.69	9.8
2NS	63-114	Highland	1180	7.11	2.66	38.4
Total Wt			3070	18.37		100.0

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



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Sieve	6AA	1A	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"	99.9	100.0	100.0	99.9	0.1	0.1
3/4"	86.4	100.0	100.0	93.0	7.0	7.0
1/2"	46.6	90.1	100.0	71.4	21.6	28.6
3/8"	29.3	75.0	100.0	60.9	10.4	39.1
#4	4.9	18.7	98.6	42.3	18.7	57.7
#8	2.2	2.7	84.0	33.7	8.6	66.3
#16	1.7	1.7	66.2	26.5	7.2	73.5
#30	1.5	1.5	46.7	18.9	7.6	81.1
#50	1.4	1.4	21.9	9.3	9.6	90.7
#100	1.4	1.3	4.4	2.5	6.7	97.5
LBW	1.1	1.1	0.4	0.8	1.7	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.

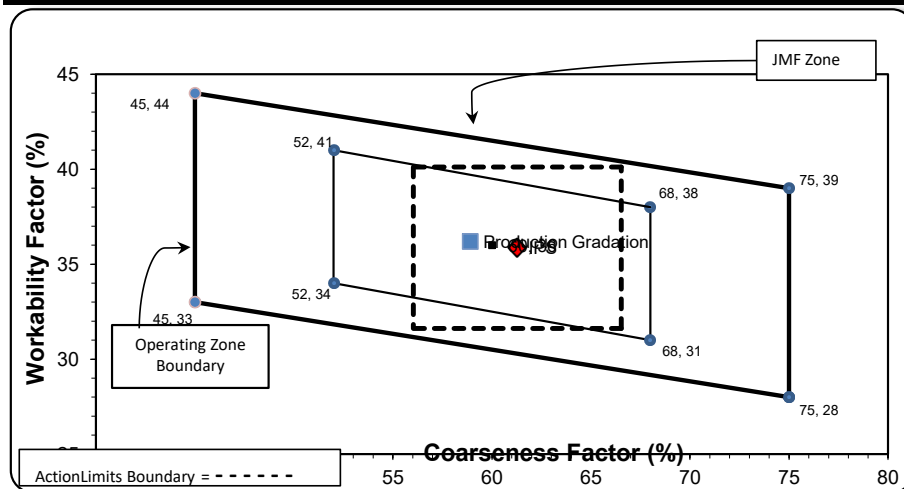
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Coarseness Factor:	61
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Workability Factor:	36
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#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By:
Nancy Donahue

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-103**

Sample Date: 9/9/26

Concrete Grade: **DM-4500HP**

Contractor: _____

Dates Test Represents: 9/10/2026 through 9/16/2026

1" Slump

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	StoneCo	1590	9.47	2.69	51.8
1A	58-003	StoneCo	300	1.79	2.69	9.8
2NS	63-114	Highland	1180	7.11	2.66	38.4
Total Wt			3070	18.37		100.0

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Sieve	6AA	1A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
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1"	99.9	100.0	100.0	99.9	0.1	0.1
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#16	1.7	1.7	66.2	26.5	7.2	73.5
#30	1.5	1.5	46.7	18.9	7.6	81.1
#50	1.4	1.4	21.9	9.3	9.6	90.7
#100	1.4	1.3	4.4	2.5	6.7	97.5
LBW	1.1	1.1	0.4	0.8	1.7	99.2

*Maximum % Retained must be above the 3/8" sieve.

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nom. max., #100 and #200 sieves.

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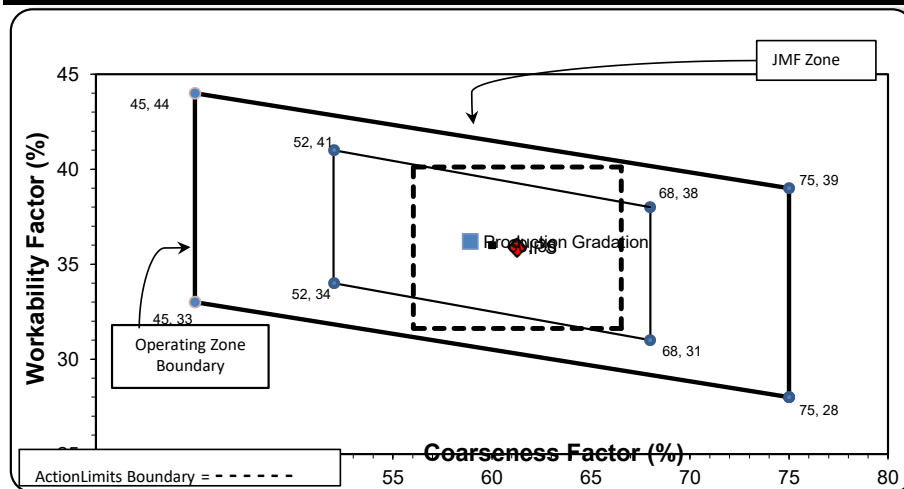
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#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

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