

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Sample Date: 9/9/26

Concrete Grade: **S2M-3500HP**

Contractor: _____

Dates Test Represents: 9/10/2026 through 9/16/1962

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"	99.1	100.0	100.0	99.6	0.4	0.4
3/4"	88.2	100.0	100.0	94.5	5.1	5.5
1/2"	46.1	98.1	100.0	74.7	19.8	25.3
3/8"	22.7	86.6	100.0	62.4	12.4	37.6
#4	3.0	23.6	96.2	43.5	18.9	56.5
#8	1.7	6.3	80.5	34.2	9.2	65.8
#16	1.4	3.8	63.3	26.8	7.4	73.2
#30	1.3	3.2	46.0	19.7	7.1	80.3
#50	1.2	3.1	25.1	11.1	8.5	88.9
#100	1.2	2.9	7.1	3.8	7.3	96.2
LBW	1.1	2.6	1.1	1.3	2.5	98.7



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.

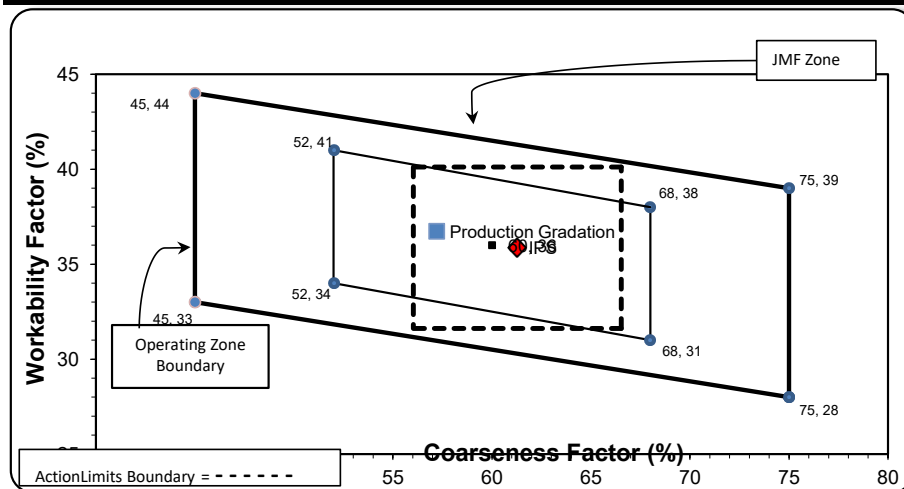
Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

Coarseness Factor:	57	Workability Factor:	34	36.7
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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:
Nancy Donahue

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-39**

Sample Date: 9/9/26

Concrete Grade: **S2M-3500HP**

Contractor: _____

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

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1580	9.85	2.57	52.0
26A	71-47	Presque Isle	260	1.62	2.57	8.6
2NS	63-0009	Koenig	1200	7.26	2.65	39.5
Total Wt			3040	18.73		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"	98.9	100.0	100.0	99.4	0.6	0.6
3/4"	85.7	100.0	100.0	92.6	6.9	7.4
1/2"	49.0	97.3	100.0	73.3	19.3	26.7
3/8"	26.6	82.9	100.0	60.4	12.9	39.6
#4	4.2	18.8	97.5	42.3	18.1	57.7
#8	2.2	5.7	84.5	35.0	7.3	65.0
#16	1.9	3.0	69.5	28.7	6.3	71.3
#30	1.8	2.3	50.8	21.2	7.5	78.8
#50	1.7	2.1	25.1	11.0	10.2	89.0
#100	1.6	1.9	3.4	2.3	8.6	97.7
LBW	1.4	1.7	0.7	1.1	1.2	98.9



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

*% Retained must be at least 4% for each sieve except max.,

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

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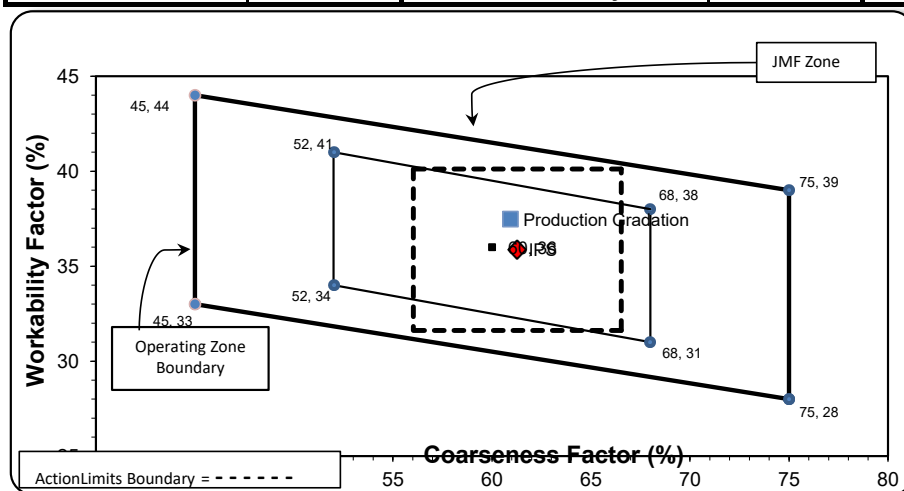
a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Adjusted WF Initial Production Sample (IPS)

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Coarseness Factor:		61	
Workability Factor:		36	
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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
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