Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Contractor: _____

Sample Date: 8/26/26

Concrete Grade: **S2M-3500HP**

Dates Test Represents: 8/27/2026 through 9/22026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1680	10.48	2.57	54.9
26A	71-47	Presque Isle	200	1.25	2.57	6.5
2NS	63-115	Ray Rd	1180	7.08	2.67	38.6
		Total Wt	**3060**	**18.81**		100.0

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

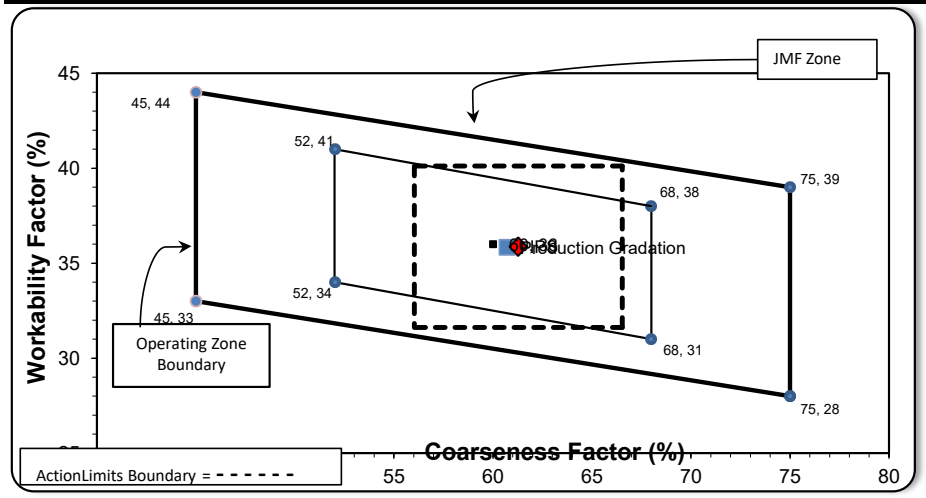
Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

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"	99.1	100.0	100.0	99.5	0.5	0.5
3/4"	86.4	100.0	100.0	92.5	7.0	7.5
1/2"	50.8	97.1	100.0	72.8	19.7	27.2
3/8"	28.5	81.4	100.0	59.5	13.3	40.5
#4	4.4	17.7	96.3	40.7	18.8	59.3
#8	2.3	5.2	82.3	33.3	7.4	66.7
#16	1.9	2.5	61.4	24.9	8.5	75.1
#30	1.8	2.0	45.4	18.6	6.3	81.4
#50	1.7	1.8	23.7	10.2	8.4	89.8
#100	1.6	1.7	6.5	3.5	6.7	96.5
LBW	1.4	1.5	1.1	1.3	2.2	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.

Production Gradation ○ Batch Plant Gradations ◉ Aggregate Supplier Gradations

Coarseness Factor:	61	Workability Factor:	33	Adjusted WF 35.8



Intial Production Sample (IPS)

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

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-39**

Contractor: _____

Sample Date: 8/2626

Concrete Grade: **S2M-3500HP**

Dates Test Represents: 8/27/2026 through 9/2/2026

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1680	10.48	2.57	54.9
26A	71-47	Presque Isle	200	1.25	2.57	6.5
2NS	63-0009	Koenig	1180	7.14	2.65	38.6
		Total Wt	**3060**	**18.86**		100.0

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

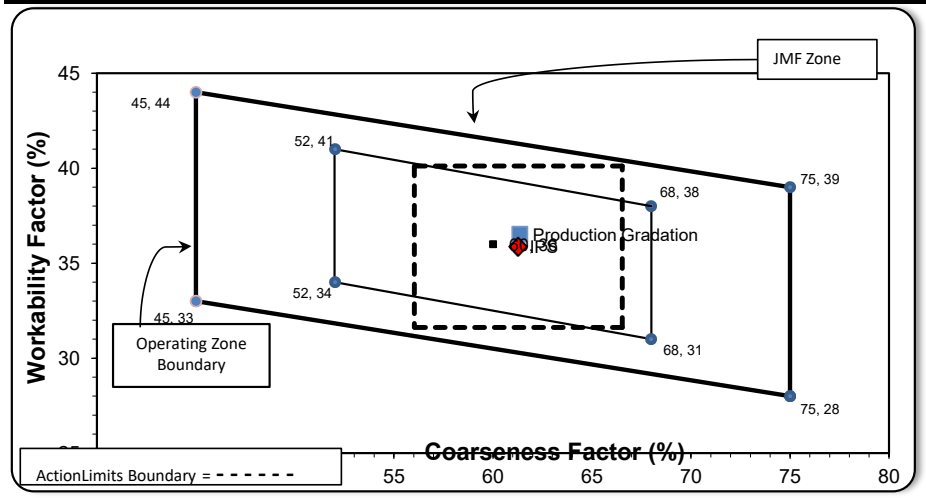
Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.1	100.0	100.0	99.5	0.5	0.5
3/4"	86.4	100.0	100.0	92.5	7.0	7.5
1/2"	50.8	97.1	100.0	72.8	19.7	27.2
3/8"	28.5	81.4	100.0	59.5	13.3	40.5
#4	4.4	17.7	97.5	41.2	18.4	58.8
#8	2.3	5.2	84.1	34.0	7.1	66.0
#16	1.9	2.5	69.4	28.0	6.1	72.0
#30	1.8	2.0	50.6	20.6	7.3	79.4
#50	1.7	1.8	24.8	10.6	10.0	89.4
#100	1.6	1.7	2.5	2.0	8.7	98.0
LBW	1.4	1.5	0.2	0.9	1.0	99.1

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

Coarseness Factor:	61	Workability Factor:	34	Adjusted WF 36.5



Intial Production Sample (IPS)

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