Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-11**

Sample Date: 9/30/26

Dates Test Represents: 10/1/2026 through 10/7/2026

Concrete Grade: **S2M-3500HP**

Contractor:

MDOT No.:

Agg. Class	Pit #	Source	Weight (SSD)	ft^3	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1600	9.98	2.57	52.6
26A	71-47	Presque Isle	200	1.25	2.57	6.6
2NS	63-115	Ray Rd	1240	7.44	2.67	40.8
		Total Wt	**3040**	**18.67**		100.0

1600

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

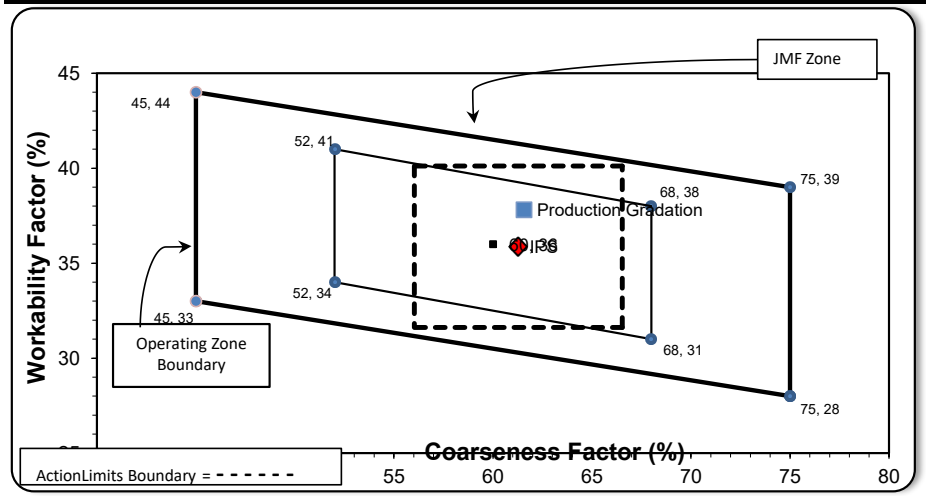
Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.1	100.0	100.0	99.5	0.5	0.5
3/4"	85.4	100.0	100.0	92.3	7.2	7.7
1/2"	47.4	97.3	100.0	72.1	20.2	27.9
3/8"	26.3	84.3	100.0	60.2	12.0	39.8
#4	4.3	4.7	96.3	41.9	18.3	58.1
#8	2.3	2.6	83.2	35.3	6.5	64.7
#16	2.0	2.1	63.3	27.0	8.3	73.0
#30	1.8	2.0	47.3	20.4	6.6	79.6
#50	1.8	1.8	26.0	11.7	8.7	88.3
#100	1.6	1.6	7.5	4.0	7.7	96.0
LBW	1.4	2.6	1.1	1.4	2.7	98.6

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:	62	Workability Factor:	35	Adjusted WF 37.8



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