

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Sample Date: 5/5/25

Dates Test Represents: 5/6/2025 through 5/12/2025

Concrete Grade: **P1M, 3500HP, 4000HP**

Contractor: _____

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	970	5.93	2.62	31.6
IA	71-47	Presque Isle	900	5.50	2.62	29.3
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
Total Wt			3070	18.70		100.0

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

Sieve	CA	IA	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"	48.3	100.0	100.0	83.7	16.3	16.3
3/4"	8.3	99.6	100.0	70.9	12.8	29.1
1/2"	2.1	82.3	100.0	63.9	7.0	36.1
3/8"	1.5	54.8	100.0	55.6	8.3	44.4
#4	1.2	7.5	97.2	40.6	15.1	59.4
#8	1.2	2.5	82.1	33.2	7.4	66.8
#16	1.2	1.9	65.8	26.7	6.5	73.3
#30	1.2	1.8	46.2	19.0	7.7	81.0
#50	1.1	1.7	20.4	8.8	10.1	91.2
#100	1.1	1.6	3.2	2.1	6.8	97.9
LBW	0.6	1.4	0.3	0.7	1.4	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 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Superior Materials, LLC

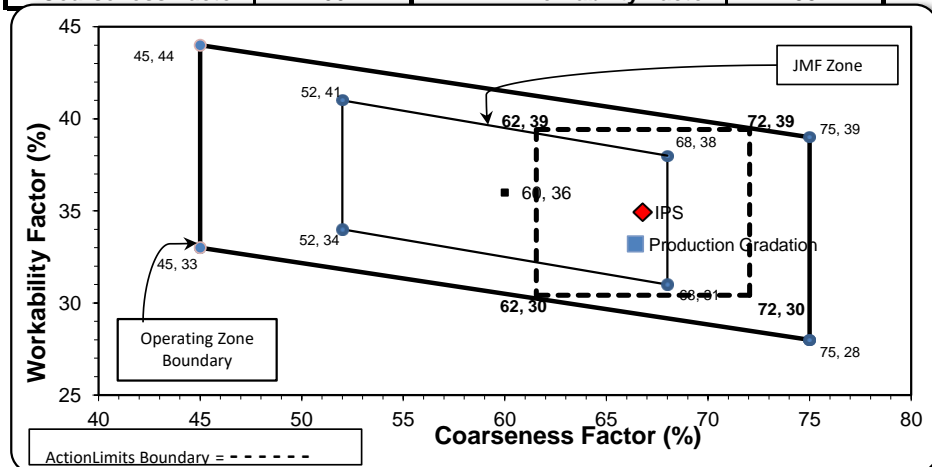
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Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

Coarseness Factor:	66	Workability Factor:	33
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Initial Production Sample (IPS)

Coarseness Factor:		67	
Workability Factor:		35	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.0	15.0	15.0
3/4"	72.1	12.9	27.9
1/2"	64.5	7.6	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

PREPARED BY:
SM, LLC Technical Service

Approved By:

[Signature]