

# Aggregate Optimization Chart

MIX ID'S: DDP154E7 and DDP154E8

Production Gradation Report

**PLANT #:** **P-36**

Sample Date: 5/7/18

Concrete Grade: **P1M**

Contractor: \_\_\_\_\_

Dates Test Represents: 5/8/2018 to 5/14/2018

MDOT No.: \_\_\_\_\_

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	71-47	Presque Isle	950	5.81	2.62	30.6
IA	71-47	Presque Isle	950	5.81	2.62	30.6
2NS	63-92	AA Grange Hall	1200	7.26	2.65	38.7
<b>Total Wt</b>			<b>3100</b>	<b>18.88</b>		<b>100.0</b>

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



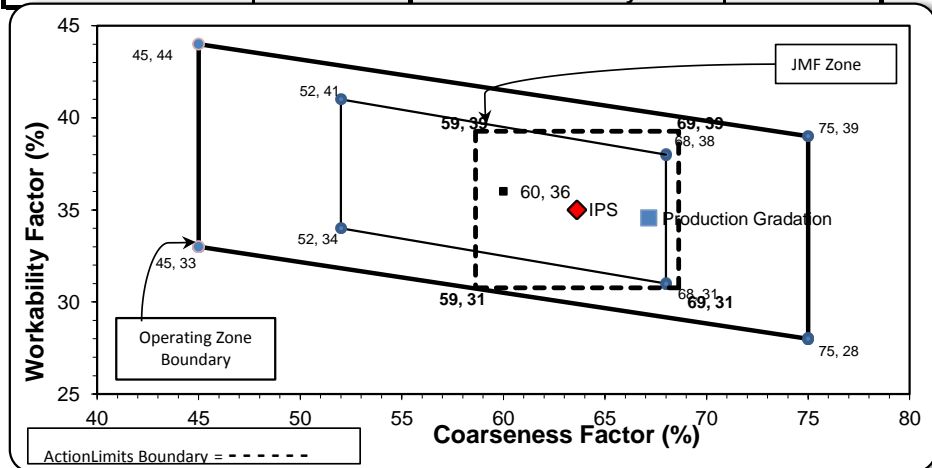
**Superior Materials, LLC**  
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Sieve	CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	94.3	100.0	100.0	98.3	1.7	1.7
1"	36.5	100.0	100.0	80.5	17.7	19.5
3/4"	10.0	99.1	100.0	72.1	8.4	27.9
1/2"	2.2	80.0	100.0	63.9	8.2	36.1
3/8"	1.6	55.0	100.0	56.1	7.8	43.9
#4	1.3	9.6	98.0	41.3	14.8	58.7
#8	1.3	3.1	85.8	34.6	6.7	65.4
#16	1.2	2.4	69.4	28.0	6.6	72.0
#30	1.2	2.3	48.8	20.0	8.0	80.0
#50	1.2	2.2	21.0	9.2	10.8	90.8
#100	1.1	2.1	3.3	2.3	6.9	97.7
LBW	0.8	1.7	0.2	0.8	1.4	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 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.

Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations

Coarseness Factor: **67**      Workability Factor: **35**



Initial Production Sample (IPS)

Coarseness Factor: <b>64</b>		Workability Factor: <b>35</b>	
Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	99.4	0.6	0.6
1"	84.6	14.7	15.4
3/4"	74.4	10.3	25.6
1/2"	66.0	8.4	34.0
3/8"	58.7	7.4	41.3
#4	44.6	14.0	55.4
#8	35.0	9.6	65.0
#16	27.6	7.4	72.4
#30	19.5	8.1	80.5
#50	8.6	11.0	91.4
#100	2.0	6.6	98.0
LBW	0.9	1.1	99.1

PREPARED BY:  
 SM, LLC Technical Service

Approved By: