

# Aggregate Optimization Chart

## Production Gradation Report

**PLANT #:** **P-103**

Sample Date: 5/26/25

Dates Test Represents: 5/27/2025 through 6/2/2025

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

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

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

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
CA	58-003	Stoneco	1520	9.06	2.69	48.7
IA	58-003	Stoneco	400	2.38	2.69	12.8
2NS	63-114	Highland	1200	7.26	2.65	38.5
<b>Total Wt</b>			<b>3120</b>	<b>18.70</b>		<b>100.0</b>

<----- 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"	69.8	100.0	100.0	85.3	14.7	14.7
3/4"	44.0	100.0	100.0	72.7	12.6	27.3
1/2"	19.1	92.4	100.0	59.6	13.1	40.4
3/8"	12.5	78.2	100.0	54.6	5.0	45.4
#4	5.8	18.4	99.2	43.3	11.2	56.7
#8	3.1	4.1	86.1	35.2	8.2	64.8
#16	2.5	1.0	67.8	27.4	7.7	72.6
#30	2.2	0.8	48.7	19.9	7.5	80.1
#50	2.1	0.6	21.4	9.3	10.6	90.7
#100	1.9	0.6	3.3	2.3	7.1	97.7
LBW	1.7	0.6	0.7	1.2	1.1	98.8

\*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.

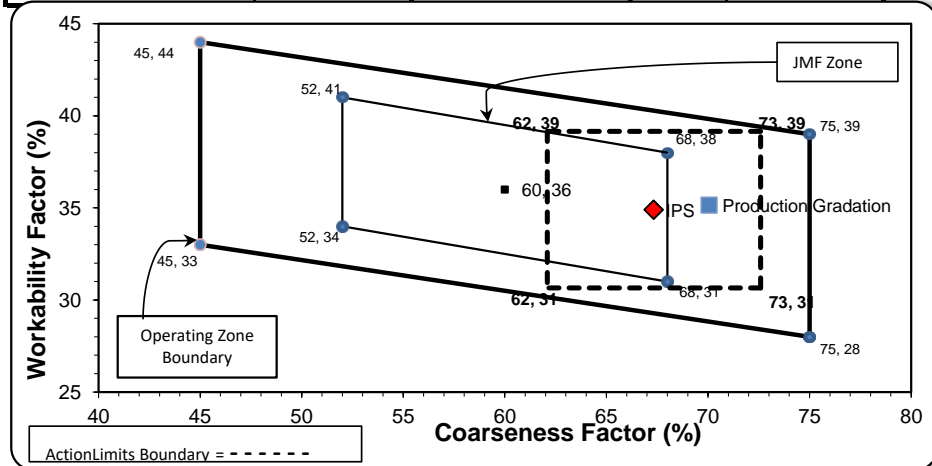
\*% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.



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Production Gradation ☐ Batch Plant Gradations ☒ Aggregate Supplier Gradations

<b>Coarseness Factor:</b>	<b>70</b>	<b>Workability Factor:</b>	<b>35</b>
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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"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

PREPARED BY:  
SM, LLC Technical Service

Approved BY:

*[Signature]*