Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-103**

Contractor:

Sample Date: 5/19/25

Concrete Grade: **S2M, 3500HP**

Dates Test Represents: 5/20/2025 through 5/26/2025

MDOT No.:

Agg. Class	Pit #	Source	Weight (SSD)	ft³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1500	8.94	2.69	48.4
26A	58-003	Stoneco	400	2.38	2.69	12.9
2NS	63-114	Highland	1200	7.26	2.65	38.7
		Total Wt	**3100**	**18.58**		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"	99.4	100.0	100.0	99.7	0.3	0.3
3/4"	82.0	100.0	100.0	91.3	8.4	8.7
1/2"	36.4	99.3	100.0	69.1	22.2	30.9
3/8"	17.3	86.7	100.0	58.3	10.9	41.7
#4	2.0	8.0	99.0	40.3	17.9	59.7
#8	1.4	1.9	85.4	34.0	6.3	66.0
#16	1.3	1.5	71.1	28.3	5.6	71.7
#30	1.2	1.3	50.3	20.2	8.1	79.8
#50	1.2	1.2	23.0	9.6	10.6	90.4
#100	1.1	1.1	3.9	2.2	7.5	97.8
LBW	1.0	1.0	0.8	0.9	1.3	99.1

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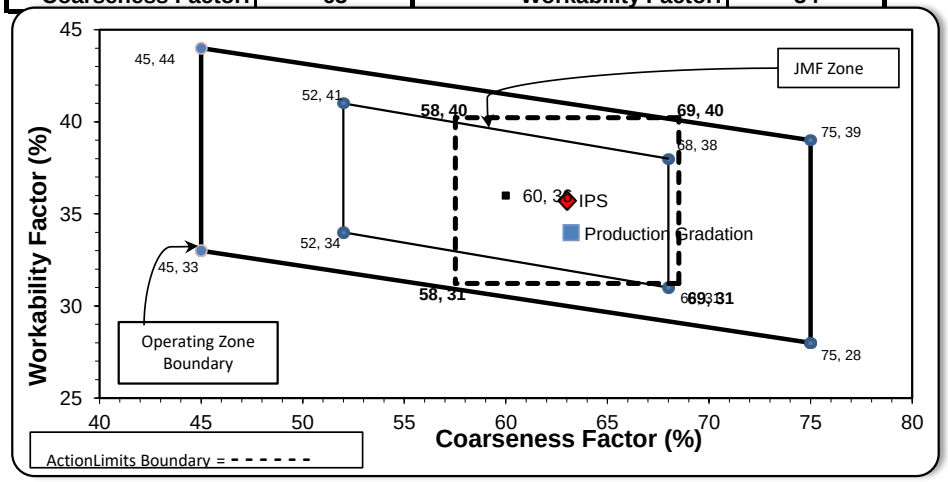
*Maximum % Retained must be above the 3/8" sieve.
*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.
*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.
*% Retained must be at least 4% for the 3/4" sieve when a 1.5" max. size (nom. Max. 1.0") aggregate is used.

Production Gradation ◉ Batch Plant Gradations ○ Aggregate Supplier Gradations

Coarseness Factor:	63	Workability Factor:	34



Intial Production Sample (IPS)

Coarseness Factor:	63
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"	99.2	0.8	0.8
3/4"	90.9	8.3	9.1
1/2"	71.3	19.6	28.7
3/8"	59.5	11.8	40.5
#4	43.8	15.7	56.2
#8	35.7	8.1	64.3
#16	27.0	8.7	73.0
#30	18.6	8.4	81.4
#50	6.8	11.8	93.2
#100	1.4	5.4	98.6
LBW	0.6	0.8	99.4

PREPARED BY:
SM, LLC Technical Service

Approved BY:

Daily Summary Report

Date Tuesday, May 20, 2025

Sample Id	-674968872	-674904153	-478554699	-1124318212	-1989636650
Plant	S103 Superior Brighton	S103 Superior Brighton	S103 Superior Brighton	S103 Superior Brighton	S103 Superior Brighton
Product	7920 INTERMED AGG P1M LS	7919 COARSE AGG P1M LS	1067 26A Mod LS	1051 6AA LS	1022 2NS GR
Specification	Intermed Agg P1M LS Target	Coarse Agg P1M LS Target	26A Mod LS Spec	6AA LS	2NS GR Spec
Sample Type	QA	QA	QA	QA	QA
2" (50mm)	100.0	100.0	100.0	100.0	
1 1/2" (37.5mm)	100.0	100.0	100.0	100.0	
1" (25mm)	100.0	61.7	100.0	99.4	
3/4" (19mm)	100.0	28.4	100.0	82.0	
1/2" (12.5mm)	85.5	15.5	99.3	36.4	
3/8" (9.5mm)	61.6	10.7	86.7	17.3	100.0
#4 (4.75mm)	11.2	2.5	8.0	2.0	99.0
#8 (2.36mm)	3.7	1.6	1.9	1.4	85.4
#16 (1.18mm)	2.2	1.5	1.5	1.3	71.1
#30 (.6mm)	1.8	1.4	1.3	1.2	50.3
#50 (.3mm)	1.6	1.4	1.2	1.2	23.0
#100 (.15mm)	1.5	1.4	1.1	1.1	3.9
#200 (75µm)	1.5	1.3	1.1	1.09	1.2
Pan	0.0	0.0	0.0	0.00	0.0
FM					2.67
Wash Loss (#200/75um)	1.4	1.2	1.0	1.0	0.8
Total Moisture	2.76	1.90	3.63	2.41	3.36