

Aggregate Optimization Chart

PLANT #: **P-102**

Sample Date: 3/6/23

Concrete Grade: **S2M, 3500HP**

Dates Test Represents: 3/7/2023 through 3/13/2023

Contractor: _____

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1570	9.35	2.69	50.6
26A	58-003	Stoneco	330	1.97	2.69	10.6
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.7
Total Wt			3100	18.58		100.0

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



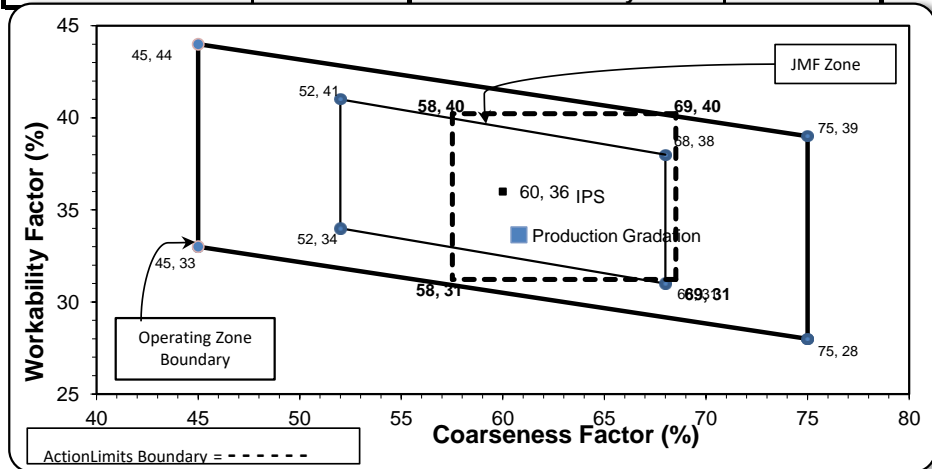
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Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.0	100.0	100.0	99.5	0.5	0.5
3/4"	80.1	100.0	100.0	89.9	9.6	10.1
1/2"	40.7	99.9	100.0	70.0	20.0	30.0
3/8"	22.5	89.8	100.0	59.7	10.3	40.3
#4	8.0	7.6	96.0	42.0	17.6	58.0
#8	4.6	2.5	80.2	33.6	8.4	66.4
#16	3.4	1.8	64.6	26.9	6.7	73.1
#30	3.0	1.8	47.8	20.2	6.7	79.8
#50	2.7	1.5	23.1	10.5	9.7	89.5
#100	2.6	1.5	6.3	3.9	6.6	96.1
LBW	1.8	1.2	1.8	1.7	2.2	98.3

*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.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **61** **Workability Factor:** **34**



Initial 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: