

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-102**

Sample Date: **8/7/23**

Dates Test Represents: **8/8/2023**

through **8/14/2023**

Concrete Grade: **DM, 4500HP**

Contractor: _____

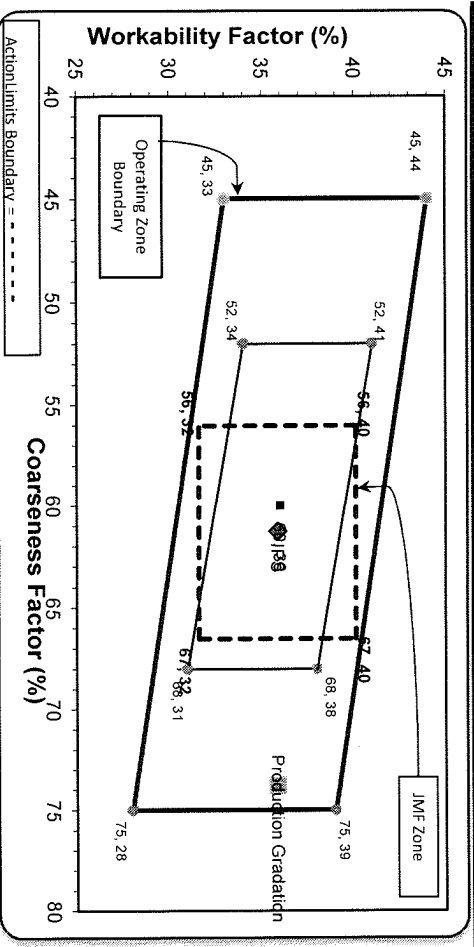
MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	58-003	Stoneco	1575	9.38	2.69	53.4
26A	58-003	Stoneco	225	1.34	2.69	7.6
2NS	81-019	Pleasant Lake	1150	6.95	2.65	39.0
Total Wt:						17.68
						100.0

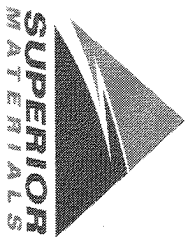
Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	99.4	100.0	100.0	99.7	0.3	0.3
3/4"	63.6	100.0	100.0	80.6	19.1	19.4
1/2"	23.1	99.3	100.0	58.9	21.7	41.1
3/8"	9.6	88.1	100.0	50.8	8.1	49.2
#4	2.5	14.2	97.7	40.5	10.3	59.5
#8	1.8	5.1	82.1	33.4	7.1	66.6
#16	1.7	3.8	64.0	26.1	7.2	73.9
#30	1.5	3.4	45.6	18.8	7.3	81.2
#50	1.4	3.2	21.8	9.5	9.3	90.5
#100	1.4	3.0	6.6	3.5	5.9	96.5
LBW	1.1	2.9	1.3	1.3	2.2	98.7

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **74** Workability Factor: **33** Adjusted WF: **35.9**



Sieve	Coarseness Factor:	Workability Factor:	Adjusted WF:	Initial Production Sample (IPS)
2"	100.0	100.0	100.0	61
1.5"	100.0	100.0	100.0	36
1"	99.3	99.3	99.3	
3/4"	89.2	89.2	89.2	
1/2"	70.7	70.7	70.7	
3/8"	60.7	60.7	60.7	
#4	44.4	44.4	44.4	
#8	35.9	35.9	35.9	
#16	27.3	27.3	27.3	
#30	19.1	19.1	19.1	
#50	7.4	7.4	7.4	
#100	1.9	1.9	1.9	
LBW	0.7	0.7	0.7	



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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.

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



Plant: S102-Superior Novi
Product: 1051-6AA LS
Period: 08/06/2023 - 08/12/2023

Name/Title: Doug Storey / QC Technician
Report Date: 08/12/2023

Procedure	Sieve/Test	Result	Unit	6AA LS
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	100-100
	1" (25mm)	99.4	%	95-100
	3/4" (19mm)	63.6	%	
	1/2" (12.5mm)	23.1	%	30-60
	3/8" (9.5mm)	9.6	%	
	#4 (4.75mm)	2.5	%	0-8
	#8 (2.36mm)	1.8	%	
	#16 (1.18mm)	1.7	%	
	#30 (.6mm)	1.5	%	
	#50 (.3mm)	1.4	%	
	#100 (.15mm)	1.4	%	
	#200 (75µm)	1.24	%	
	Wash Loss (#200/75um)	1.1	%	0-2
	Total Moisture	3.27	%	



Plant S102-Superior Novi
 Product 1067-26A Mod LS
 Period: 08/06/2023 - 08/12/2023

Name/Title Doug Storey / QC Technician
 Report Date 08/12/2023

Procedure	Sieve/Test	Result	Unit	26A Mod LS Spec
	2" (50mm)	100.0	%	
	1 1/2" (37.5mm)	100.0	%	
	1" (25mm)	100.0	%	
	3/4" (19mm)	100.0	%	100-100
	1/2" (12.5mm)	99.3	%	95-100
	3/8" (9.5mm)	88.1	%	60-95
	#4 (4.75mm)	14.2	%	5-30
	#8 (2.36mm)	5.1	%	0-12
	#16 (1.18mm)	3.8	%	
	#30 (.6mm)	3.4	%	
	#50 (.3mm)	3.2	%	
	#100 (.15mm)	3.0	%	
	#200 (75µm)	2.9	%	
	Wash Loss (#200/75µm)	2.9	%	0-3
	Total Moisture	4.40	%	



Plant S102-Superior Novi
Product 1022-2NS GR
Period: 08/06/2023 - 08/12/2023

Name/Title Doug Storey / QC Technician
Report Date 08/12/2023

Procedure	Sieve/Test	Result	Unit	2NS GR Spec
	3/8" (9.5mm)	100.0	%	100-100
	#4 (4.75mm)	97.7	%	95-100
	#8 (2.36mm)	82.1	%	65-95
	#16 (1.18mm)	64.0	%	35-75
	#30 (.6mm)	45.6	%	20-55
	#50 (.3mm)	21.8	%	10-30
	#100 (.15mm)	6.6	%	0-10
	#200 (75µm)	1.8	%	
	FM	2.82		2.6-3
	Wash Loss (#200/75um)	1.3	%	0-3
	Total Moisture	3.40	%	