

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-02**

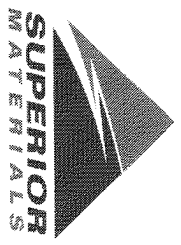
Sample Date: **11/4/24**

Dates Test Represents: **11/5/2024** through **11/11/2024**

Concrete Grade: **S2M, 3500HP**

Contractor: _____

MIDOT No.: _____



Superior Materials, LLC
30701 W. 10 Mile Rd.
Suite 500
Farmington Hills, MI 48336

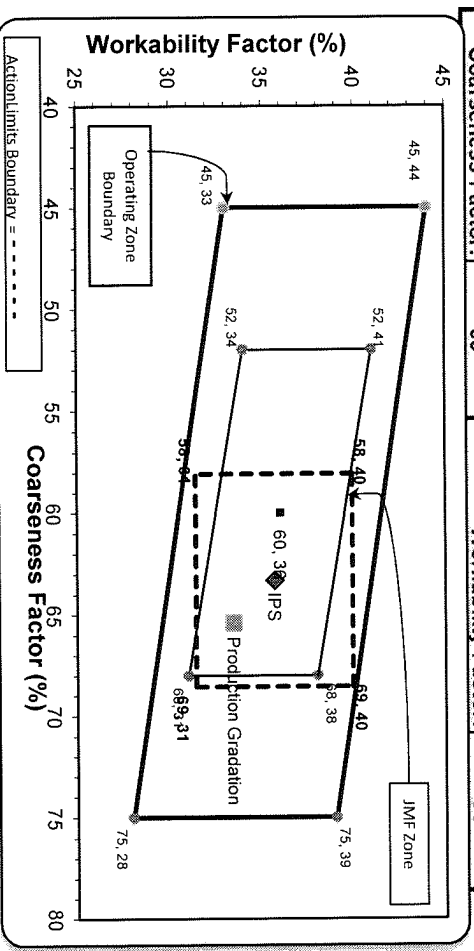
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1570	9.60	2.62	51.5
26A	71-47	Presque Isle	250	1.53	2.62	8.2
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
Total Wt:			3050	18.57		100.0

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"	98.1	100.0	100.0	99.0	1.0	1.0
3/4"	76.9	100.0	100.0	88.1	10.9	11.9
1/2"	37.1	97.5	100.0	67.4	20.7	32.6
3/8"	17.6	86.6	100.0	56.5	10.9	43.5
#4	3.0	19.2	95.8	41.8	14.7	58.2
#8	2.1	5.9	79.1	33.5	8.3	66.5
#16	1.9	3.7	63.9	27.1	6.4	72.9
#30	1.8	3.2	49.1	21.0	6.1	79.0
#50	1.7	3.0	26.7	11.9	9.1	88.1
#100	1.6	2.8	6.7	3.8	8.1	96.2
LBW	1.3	2.3	1.1	1.3	2.5	98.7

*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") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **65** Workability Factor: **33**

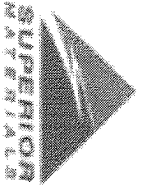


Initial Production Sample (IPS)

Sieve	Coarseness Factor:	Workability Factor:	Cumulative % Passing	% Retained	Cumulative % Retained
2"	63	36	100.0	0.0	0.0
1.5"			100.0	0.0	0.0
1"			100.0	0.0	0.0
3/4"			95.6	4.4	4.4
1/2"			73.1	22.6	26.9
3/8"			59.3	13.8	40.7
#4			42.8	16.5	57.2
#8			35.7	7.1	64.3
#16			28.9	6.8	71.1
#30			20.7	8.2	79.3
#50			9.9	10.8	90.1
#100			2.1	7.8	97.9
LBW			0.9	1.2	99.1

PREPARED BY:
SM, LLC Technical Service

Approved By:



Daily Summary Report

Date Wednesday, November 6, 2024

Sample Id	- 674949935	-674976539	-1989619472
Plant	Superior Hoover	Superior Hoover	Superior Hoover
Product	1051 6AA LS	1067 26A Mod LS	1022 2NS GR

Specification	6AA LS	26A Mod LS Spec	2NS GR Spec
Sample Type	QA	QA	QA
Time	14:02	14:06	14:08
2" (50mm)	100.0	100.0	100.0
1 1/2" (37.5mm)	100.0	100.0	95.8
1" (25mm)	98.1	100.0	79.1
3/4" (19mm)	76.9	100.0	63.9
1/2" (12.5mm)	37.1	97.5	49.1
3/8" (9.5mm)	17.6	86.6	26.7
#4 (4.75mm)	3.0	19.2	6.7
#8 (2.36mm)	2.1	5.9	1.4
#16 (1.18mm)	1.9	3.7	0.0
#30 (.6mm)	1.8	3.2	2.79
#50 (.3mm)	1.7	3.0	1.1
#100 (.15mm)	1.6	2.8	1.1
#200 (75um)	1.41	2.5	1.1
Pan	0.00	0.0	1.1
FM			2.79
Wash Loss (#200/75um)	1.3	2.3	4.15
Total Moisture	2.80	3.40	

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **p11**

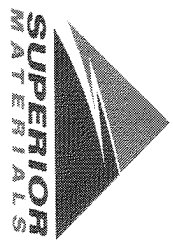
Sample Date: **11/4/24**

Dates Test Represents: **11/5/2024** through **11/11/2024**

Concrete Grade: **S2M, 3500HP**

Contractor: _____

MIDOT No.: _____



Superior Materials, LLC
 30701 W. 10 Mile Rd.
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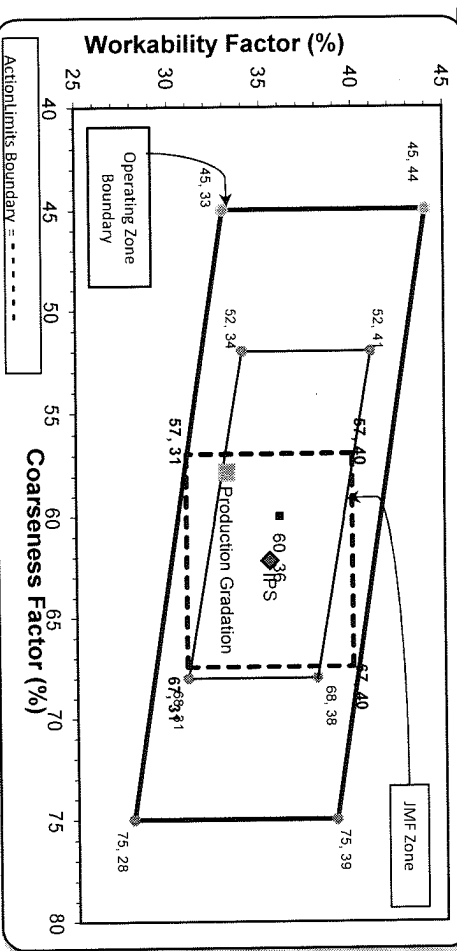
Agg. Class	Pit #	Source	Weight (ssd)	ft ³	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1570	9.60	2.62	51.5
26A	71-47	Presque Isle	250	1.53	2.62	8.2
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
		Total Wt	3050	18.57		100.0

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"	97.3	100.0	100.0	98.6	1.4	1.4
3/4"	85.6	100.0	100.0	92.6	6.0	7.4
1/2"	51.2	96.7	100.0	74.6	18.0	25.4
3/8"	27.5	83.8	100.0	61.4	13.3	38.6
#4	4.7	21.8	94.7	42.4	19.0	57.6
#8	2.4	7.5	77.6	33.1	9.3	66.9
#16	2.1	4.6	61.6	26.3	6.8	73.7
#30	2.0	3.9	46.5	20.1	6.2	79.9
#50	2.0	3.6	25.1	11.4	8.7	88.6
#100	1.9	3.3	6.5	3.9	7.6	96.1
LBW	1.6	2.7	0.7	1.3	2.5	98.7

*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: **58** Workability Factor: **33**



Initial Production Sample (IPS)

Coarseness Factor:	62		
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"	100.0	0.0	0.0
3/4"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



EDW C. LEVY CO.
 8500 Oak Avenue, Detroit, MI 48226
 (313) 843-7200

Onsite Jefferson

Daily Summary Report

Date Thursday, November 7, 2024

Sample Id	-674953995	-1590544574	-674962999	-1989655612	-1989644798
Plant	S11 Onsite Jefferson	S11 Onsite Jefferson	S11 Onsite Jefferson	S11 Onsite Jefferson	S11 Onsite Jefferson
Product	1067 26A Mod LS	1051 6AA LS	7920 INTERMED AGG P1M LS	1022 2NS GR	7919 COARSE AGG P1M LS
Specification	26A Mod LS Spec		Intermed Agg P1M LS Target	2NS GR Spec	Coarse Agg P1M LS Target
Sample Type	QA	QA	QA	QA	QA
Time	14:20	15:24	15:25	15:27	17:23
2" (50mm)	100.0	100.0	100.0		100.0
1 1/2" (37.5mm)	100.0	100.0	100.0		96.9
1" (25mm)	100.0	97.3	100.0		36.9
3/4" (19mm)	100.0	85.6	98.5		10.2
1/2" (12.5mm)	96.7	51.2	68.0		2.6
3/8" (9.5mm)	83.8	27.5	39.5	100.0	2.0
#4 (4.75mm)	21.8	4.7	5.9	94.7	1.8
#8 (2.36mm)	7.5	2.4	2.7	77.6	1.7
#16 (1.18mm)	4.6	2.1	2.2	61.6	1.7
#30 (.6mm)	3.9	2.0	2.1	46.5	1.6
#50 (.3mm)	3.6	2.0	2.0	25.1	1.6
#100 (.15mm)	3.3	1.9	2.0	6.5	1.5
#200 (75um)	2.9	1.77	1.7	1.0	1.3
Pan	0.0	0.00	0.0	0.0	0.0
FM				2.88	
#200 (75um)				1.0	
Wash Loss (#200/75um)	2.7	1.6	1.6	0.7	1.2
Total Moisture	2.3	2.9	1.3	4.0	0.1