

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-02**

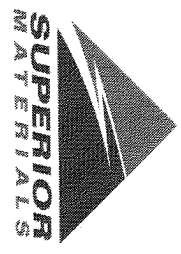
Sample Date: **12/9/24**

Dates Test Represents: **12/10/2024** through **12/16/2024**

Concrete Grade: **DM, 4500HP**

Contractor: _____

MDOT No.: _____



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

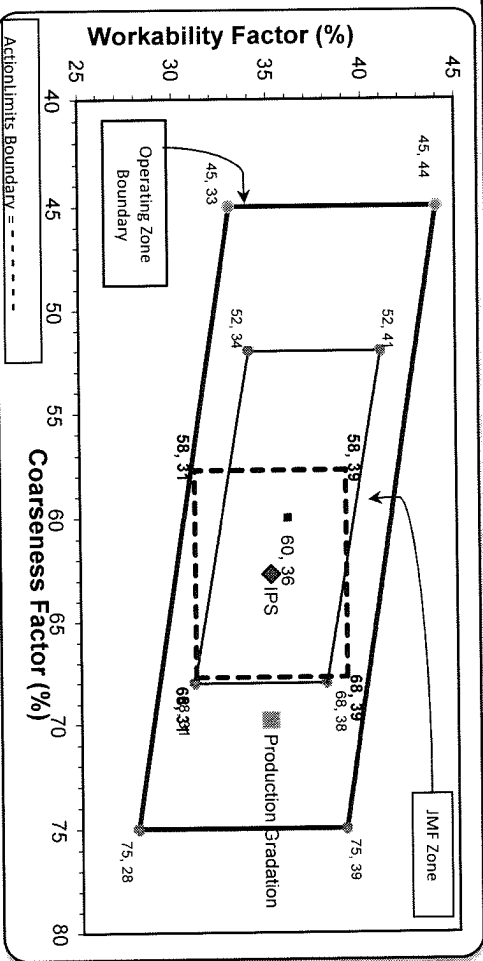
Aggr. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
6AA	71-47	Presque Isle	1550	9.48	2.62	53.4
26A	71-47	Presque Isle	205	1.25	2.62	7.1
2NS	63-115	Ray Rd	1150	6.95	2.65	39.6
Total Wt			2905	17.69		100.0

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"	95.8	100.0	100.0	100.0	2.2	2.2
3/4"	70.7	100.0	100.0	100.0	13.4	15.6
1/2"	30.8	96.6	100.0	100.0	21.5	37.2
3/8"	14.2	81.2	100.0	100.0	9.9	47.1
#4	2.1	11.3	96.0	100.0	13.0	60.1
#8	1.6	3.4	79.4	100.0	7.4	67.5
#16	1.4	2.4	63.4	100.0	6.5	74.0
#30	1.3	2.2	48.0	100.0	6.2	80.1
#50	1.2	2.1	25.0	100.0	9.2	89.3
#100	1.2	1.9	6.0	100.0	7.5	96.9
LBW	1.0	1.8	1.0	100.0	2.1	98.9

*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

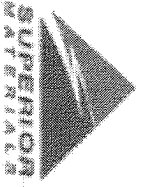
Coarseness Factor: **70** Workability Factor: **33** Adjusted WF: **35.0**



Sieve	Initial Production Sample (IPS)	Coarseness Factor: 63	Workability Factor: 35
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	95.1	4.9	4.9
1/2"	74.6	20.5	25.4
3/8"	59.3	15.3	40.7
#4	42.1	17.2	57.9
#8	35.1	7.1	64.9
#16	29.2	5.9	70.8
#30	21.9	7.3	78.1
#50	9.6	12.4	90.4
#100	2.4	7.2	97.6
LBW	0.9	1.5	99.1

PREPARED BY:
SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Monday, December 9, 2024

Sample Id - 674895812

-674952759

-1989656406

Plant

Clemens

Product

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

15:59

16:02

16:03

2" (50mm)	100.0	100.0	100.0
1 1/2" (37.5mm)	100.0	100.0	96.0
1" (25mm)	95.8	100.0	79.4
3/4" (19mm)	70.7	100.0	63.4
1/2" (12.5mm)	30.8	96.6	48.0
3/8" (9.5mm)	14.2	81.2	25.0
#4 (4.75mm)	2.1	11.3	6.0
#8 (2.36mm)	1.6	3.4	1.2
#16 (1.18mm)	1.4	2.4	0.0
#30 (.6mm)	1.3	2.2	2.82
#50 (.3mm)	1.2	2.1	1.0
#100 (.15mm)	1.2	1.9	1.0
#200 (75µm)	1.09	1.8	1.0
Pan	0.00	0.0	1.0
FM			3.86
Wash Loss (#200/75um)	1.0	1.8	1.0
Total Moisture	2.42	4.21	3.86