Total Wt

PLANT #: P-102

Sample Date:

11/11/24 Concrete Grade: **S2M**, **3500HP** 

P

Dates Test Represents: 11		11/12/2024	through	11/18/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1600	9.53	2.69	51.6
26A	58-003	Stoneco	300	1.79	2.69	9.7
2NS	63-114	Highland	1200	7.26	2.65	38.7

MDOT No.:

Contractor:

<---- Verify this number is 100%

SUPERIOR MATERIALS

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

					,	
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"	99.7	100.0	100.0	99.8	0.2	0.2
3/4"	81.1	100.0	100.0	90.2	9.6	9.8
1/2"	43.9	99.3	100.0	71.0	19.3	29.0
3/8"	22.6	88.2	100.0	58.9	12.1	41.1
#4	3.3	11.5	98.9	41.1	17.8	58.9
#8	2.0	2.4	85.0	34.2	6.9	65.8
#16	1.0	1.3	66.3	26.3	7.9	73.7
#30	0.9	1.1	45.4	18.1	8.2	81.9
#50	0.8	1.0	21.0	8.6	9.5	91.4
#100	0.8	1.0	4.5	2.3	6.4	97.7
LBW	0.7	0.9	0.3	0.6	1.7	99.4

18.58

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

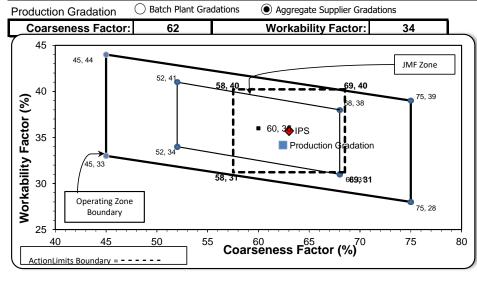
nom. max., #100 and #200 sieves.

 $^{*}\%$  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.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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

Highland

Total Wt

PLANT #: P-103

63-114

Sample Date:

2NS

11/11/24 Concrete Grade: **S2M**, **3500HP** 

7.26

18.58

2.65

**Dates Test Represents:** 11/12/2024 11/18/2024 through Specific ft<sup>3</sup> Pit# Agg. Class Source Weight (SSD) Gravity Contribution 6AA 58-003 Stoneco 1600 9.53 2.69 51.6 26A 58-003 300 1.79 2.69 Stoneco

1200

3100

Contractor:

MDOT No.:



100.0

----- Verify this number is 100%

ined	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
	0.0	Suite 500
	0.0	Farmington Hills, MI 48336

Cumulative 6AA 26A % Retai Sieve 2NS % Passing 2" 100.0 100.0 100.0 100.0 0.0 1.5" 100.0 100.0 100.0 100.0 0.0 0.0 99.8 99.7 100.0 100.0 0.2 0.2 3/4" 81.1 100.0 100.0 90.2 9.6 9.8 1/2' 43.9 99.3 100.0 71.0 19.3 29.0 3/8' 22.6 88.2 100.0 58.9 12.1 41.1 #4 3.3 11.5 98.9 41.1 17.8 58.9 #8 2.0 2.4 85.0 34.2 6.9 65.8 #16 1.0 1.3 66.3 26.3 7.9 73.7 #30 0.9 8.2 1.1 45.4 18.1 81.9 #50 0.8 1.0 21.0 8.6 9.5 91.4 #100 2.3 0.8 1.0 4.5 6.4 97.7

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

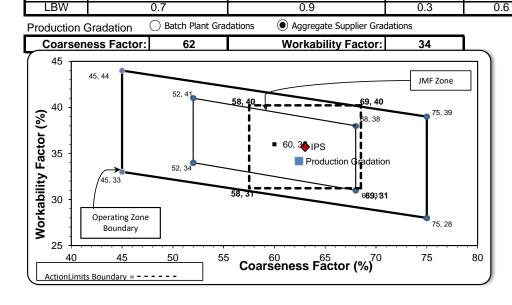
nom. max., #100 and #200 sieves.

 $^{*}\%$  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.



Intial Production Sample (IPS)

1.7

Coars	eness Factor:	63	
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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:

afriff Boll

PLANT #: 12

Sample Date:

Sieve

#50

#100

11/11/24

6AA

2.0

1.9

Contractor:

MDOT No.:

% Retained

9.2

8.0

2.0

Concrete Grade: S2M, 3500HP

2NS

25.4

5.7

Cumulative

11.4

3.4

**Dates Test Represents:** 11/12/2024 11/18/2024 through Specific ft<sup>3</sup> Agg. Class Pit# Source Weight (SSD) Gravity Contribution 6AA 71-47 Presque Isle 1820 11.13 2.62 59.7 26A 71-47 Presque Isle 0 0.00 2.62 0.0 2NS

63-115 Ray Rd 1230 7.44 2.65 40.3 Total Wt 3050 18.57 100.0

26A

2.3

2.2

---- Verify this number is 100%

Cumulative

88.6

96.6

98.6

SUPERIOR

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

				70 Fassiliy		76 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"	98.4	100.0	100.0	99.0	1.0	1.0
3/4"	88.0	100.0	100.0	92.8	6.2	7.2
1/2"	52.8	95.4	100.0	71.8	21.0	28.2
3/8"	34.4	83.4	100.0	60.9	11.0	39.1
#4	6.3	18.9	97.6	43.1	17.7	56.9
#8	2.6	5.0	80.2	33.9	9.2	66.1
#16	2.1	2.9	64.2	27.1	6.8	72.9
#30	2.0	2.5	48.3	20.7	6.5	79.3

\*Maximum % Retained must be above the 3/8" sieve.

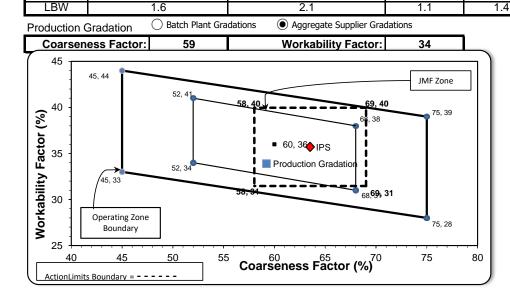
\*Any two adjacent sieves must equal 10% except max.,

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 4% for the 3/4" sieve when

a 1.5" max. size (nom. Max. 1.0") aggregate is used.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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"	59.2	12.1	40.8
#4	41.5	17.7	58.5
#8	35.7	5.8	64.3
#16	27.9	7.9	72.1
#30	18.3	9.5	81.7
#50	7.3	11.0	92.7
#100	2.0	5.3	98.0
LBW	0.9	1.1	99.1

PREPARED BY: SM, LLC Technical Service

**PLANT #:** p11

Sample Date:

11/11/24 Concrete Grade: S2M, 3500HP

Dates Test F	Represents:	11/12/2024	through	11/18/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1820	11.13	2.62	59.7
26A	71-47	Presque Isle	0	0.00	2.62	0.0
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3
		Total Wt	3050	18.57		100.0

Contractor:

MDOT No.:



<---- Verify this number is 100%

ined	Cumulative % Retained	Superior Materials, LLC
	0.0	Suite 500
	0.0	Farmington Hills, MI 48336

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"	98.4	100.0	100.0	99.0	1.0	1.0
3/4"	88.0	100.0	100.0	92.8	6.2	7.2
1/2"	52.8	95.4	100.0	71.8	21.0	28.2
3/8"	34.4	83.4	100.0	60.9	11.0	39.1
#4	6.3	18.9	97.6	43.1	17.7	56.9
#8	2.6	5.0	80.2	33.9	9.2	66.1
#16	2.1	2.9	64.2	27.1	6.8	72.9
#30	2.0	2.5	48.3	20.7	6.5	79.3
#50	2.0	2.3	25.4	11.4	9.2	88.6
#100	1.9	2.2	5.7	3.4	8.0	96.6
LBW	1.6	2.1	1.1	1.4	2.0	98.6

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

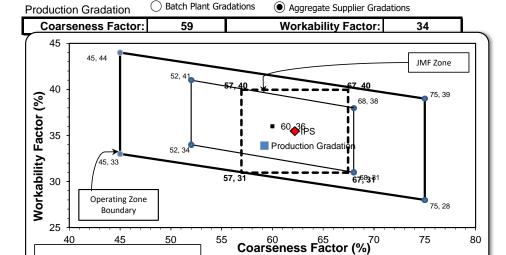
nom. max., #100 and #200 sieves.

\*% 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.



Intial Production Sample (IPS)

Coarseness Factor:		62	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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

ActionLimits Boundary = - - - - -

**Total Wt** 

PLANT #: P-O2

Sample Date:

11/11/24 Concrete Grade: **S2M**, **3500HP** 

18.57

Dates Test Represents:		11/12/2024	through	11/18/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1820	11.13	2.62	59.7
26A	71-47	Presque Isle	0	0.00	2.62	0.0
2NS	63-115	Ray Rd	1230	7.44	2.65	40.3

3050

Contractor:

MDOT No.:

100.0



Farmington Hills, MI 48336

----- Verify this number is 100%

tained	Cumulative % Retained	
0.0	0.0	Suite 500

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"	98.4	100.0	100.0	99.0	1.0	1.0
3/4"	88.0	100.0	100.0	92.8	6.2	7.2
1/2"	52.8	95.4	100.0	71.8	21.0	28.2
3/8"	34.4	83.4	100.0	60.9	11.0	39.1
#4	6.3	18.9	97.6	43.1	17.7	56.9
#8	2.6	5.0	80.2	33.9	9.2	66.1
#16	2.1	2.9	64.2	27.1	6.8	72.9
#30	2.0	2.5	48.3	20.7	6.5	79.3
#50	2.0	2.3	25.4	11.4	9.2	88.6
#100	1.9	2.2	5.7	3.4	8.0	96.6
I RW/	16	2.1	11	1 4	2.0	98.6

\*Maximum % Retained must be above the 3/8" sieve.

\*Any two adjacent sieves must equal 10% except max.,

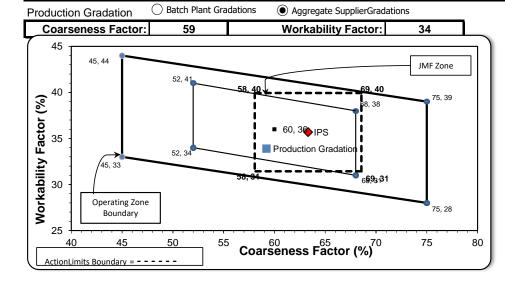
nom. max., #100 and #200 sieves.

\*% 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.



Intial Production Sample (IPS)

Coars	Coarseness Factor: 63		
Workability Factor:		36	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% 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"	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