PLANT #: P-101

Sample Date:

7/8/24 Concrete Grade: P1M, 3500HP 7/15/2024

Dates Test F	Represents:	7/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	850	5.20	2.62	27.7
IA	71-47	Presque Isle	1020	6.24	2.62	33.2
2NS	75-051	Mid Michigan	1200	7.23	2.66	39.1
Total Wt			3070	18.67		100.0

MDOT No.:

Contractor:



---- Verify this number is 100%

ulative tained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
0.0	Suite 500
).4	Farmington Hills, MI 48336

Cumulative Cumu CA IΑ % Retained Sieve 2NS % Passing % Ret 2" 100.0 100.0 100.0 100.0 0.0 0. 1.5" 98.5 100.0 100.0 99.6 0.4 0.4 58.7 100.0 100.0 88.6 11.0 11.4 3/4" 17.6 98.2 100.0 76.6 12.0 23.4 1/2' 6.7 63.6 100.0 62.1 14.5 37.9 3/8' 4.7 33.4 100.0 10.6 48.5 51.5 #4 2.6 2.8 96.0 39.2 12.3 60.8 #8 2.0 1.3 79.2 31.9 7.2 68.1 #16 1.9 1.1 62.4 25.3 6.7 74.7 #30 6.2 80.9 1.8 1.0 46.7 19.1 #50 1.8 1.0 24.6 10.4 8.6 89.6 #100 1.7 0.9 7.4 3.7 6.8 96.3 LBW 0.7

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

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

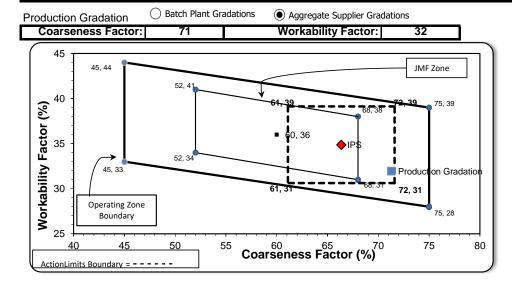
nom. max., #100 and #200 sieves.

*% Retained must be at least 4% for each sieve except max.,

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

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Initial Production Sample (IPS)

Coars	eness Factor:	66	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	84.3	15.3	15.7
3/4"	74.8	9.6	25.2
1/2"	64.3	10.4	35.7
3/8"	56.8	7.5	43.2
#4	43.0	13.8	57.0
#8	34.9	8.1	65.1
#16	26.4	8.5	73.6
#30	19.9	6.5	80.1
#50	10.4	9.5	89.6
#100	3.4	7.0	96.6
LBW	1.2	2.2	98.8

PREPARED BY: SM, LLC Technical Service

PLANT #: P-102

Sample Date:

Concrete Grade: P1M, 3500HP 7/8/24

Dates Test I	Represents:	1/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1420	8.46	2.69	45.5
IA	58-003	Stoneco	500	2.98	2.69	16.0
2NS	63-114	Highland	1200	7.26	2.65	38.5

Contractor:

MDOT No.:



Superior	Materials, LLC
30701 W.	10 Mile Rd.
Suite 500	

Farmington Hills, MI 48336

	Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	1/	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	100	0.0	100.0	100.0	0.0	0.0
1"	68.7	100	0.0	100.0	85.8	14.2	14.2
3/4"	44.9	100	0.0	100.0	74.9	10.8	25.1
1/2"	15.5	94	.0	100.0	60.6	14.3	39.4
3/8"	12.7	77	7.1	100.0	56.6	4.0	43.4
#4	4.9	15	.8	98.6	42.7	13.9	57.3
#8	2.6	4.	6	85.1	34.7	8.0	65.3
#16	2.2	2.	3	68.4	27.7	7.0	72.3
#30	2.1	1.	6	48.6	19.9	7.8	80.1
#50	2.0	1.	6	18.5	8.3	11.6	91.7
#100	1.9	1.	3	3.3	2.3	5.9	97.7
LBW	1.7	1.	0	0.5	1.1	1.2	98.9

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

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

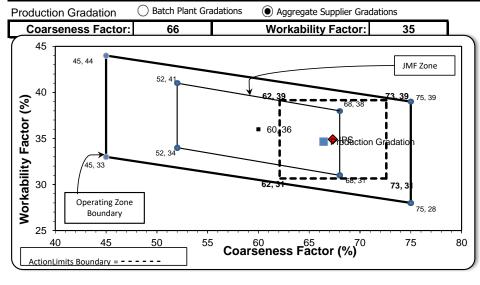
nom. max., #100 and #200 sieves.

*% Retained must be at least 4% for each sieve except max.,

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

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)

Coarseness Factor:		67	
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"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

Approved By: PREPARED BY: SM, LLC Technical Service

PLANT #: P-103

Sample Date:

Concrete Grade: P1M, 3500HP 7/8/24

Dates Test F	Represents:	7/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1420	8.46	2.69	45.5
IA	58-003	Stoneco	500	2.98	2.69	16.0
2NS	63-114	Highland	1200	7.26	2.65	38.5

Contractor:

MDOT No.:



tained	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
) N	0.0	Suite 500

Farmington Hills, MI 48336

*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.

	Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	1/	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	100.0	10	0.0	100.0	100.0	0.0	0.0
1"	68.7	10	0.0	100.0	85.8	14.2	14.2
3/4"	44.9	10	0.0	100.0	74.9	10.8	25.1
1/2"	15.5	94	.0	100.0	60.6	14.3	39.4
3/8"	12.7	77	. 1	100.0	56.6	4.0	43.4
#4	4.9	15	.8	98.6	42.7	13.9	57.3
#8	2.6	4.	6	85.1	34.7	8.0	65.3
#16	2.2	2	3	68.4	27.7	7.0	72.3
#30	2.1	1.	6	48.6	19.9	7.8	80.1
#50	2.0	1.	6	18.5	8.3	11.6	91.7
#100	1.9	1.	3	3.3	2.3	5.9	97.7
LBW	1.7	1.	0	0.5	1.1	1.2	98.9

Production Gradation



Coarseness	Factor: 66	Workability Factor:	35
45 45, 44			JMF Zone
40 j	52, 41	62, 39	39 75, 39
Workability Factor (%)	52, 34	■ 60 36 ■ B&ction Grad	dation
30 de la company	rating Zone	68, 31	73, 31
S 25 B	oundary		75, 28
40 ActionLimits Bour	45 50 55	Coarseness Factor (%) ⁷⁰	75 80

Coarseness Factor:		67	
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"	85.5	14.5	14.5
3/4"	73.4	12.1	26.6
1/2"	61.0	12.4	39.0
3/8"	56.2	4.8	43.8
#4	43.1	13.1	56.9
#8	34.9	8.2	65.1
#16	29.4	5.5	70.6
#30	21.6	7.8	78.4
#50	8.1	13.4	91.9
#100	2.2	5.9	97.8
LBW	1.4	0.8	98.6

PREPARED BY: SM, LLC Technical Service

PLANT #: 12

Sample Date:

7/8/24

Contractor:

Concrete Grade: P1M, 3500HP

Dates Test F	Represents:	7/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	850	5.20	2.62	27.7
IA	71-47	Presque Isle	1020	6.24	2.62	33.2
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1
Total Wt			3070	18.70		100.0

MDOT No.:

---- Verify this number is 100%

SIM			IC	
_	_			

Superior Materials, LLC 30701 W. 10 Mile Rd. Suite 500

Farmington Hills, MI 48336

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

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

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

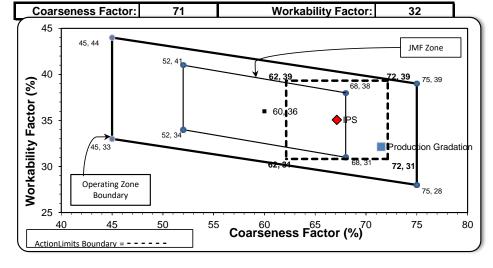
*% Retained must be at least 4% for each sieve except max.,

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.

	i Otal Wi	10.10		100.0	< Verily tills if	difficilis 10070
Sieve	CA	IA	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	98.5	100.0	100.0	99.6	0.4	0.4
1"	58.7	100.0	100.0	88.6	11.0	11.4
3/4"	17.6	98.2	100.0	76.6	12.0	23.4
1/2"	6.7	63.6	100.0	62.1	14.5	37.9
3/8"	4.7	33.4	100.0	51.5	10.6	48.5
#4	2.6	2.8	97.6	39.8	11.7	60.2
#8	2.0	1.3	79.7	32.1	7.7	67.9
#16	1.9	1.1	64.5	26.1	6.0	73.9
#30	1.8	1.0	49.6	20.2	5.9	79.8
#50	1.8	1.0	27.4	11.5	8.7	88.5
#100	1.7	0.9	6.2	3.2	8.3	96.8
LBW	1.3	0.7	0.7	0.9	2.3	99.1
Production Grad	dation O Batch Plant Grad	dations Aggregate Supplier	Gradations		Intial Production	on Sample (IPS



Intial Production Sample (IPS)

Coars	eness Factor:	67	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.0	9.8	26.0
1/2"	63.7	10.3	36.3
3/8"	56.4	7.3	43.6
#4	43.0	13.4	57.0
#8	35.1	7.9	64.9
#16	29.0	6.1	71.0
#30	20.9	8.0	79.1
#50	8.1	12.8	91.9
#100	1.6	6.5	98.4
LBW	0.9	0.8	99.1

PREPARED BY: SM, LLC Technical Service

PLANT #: 20

Sample Date:

Concrete Grade: P1M, 3500HP 7/8/24

Dates Test Represents:		7/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	950	5.81	2.62	30.9
IA	71-47	Presque Isle	920	5.63	2.62	30.0
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
		Total W/s	2070	10.70		100.0

MDOT No.:

Contractor:

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

	Total Wt	3070	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	L	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	98.6	10	0.0	100.0	99.6	0.4	0.4
1"	36.0	10	0.0	100.0	80.2	19.4	19.8
3/4"	8.4	98.2		100.0	71.1	9.1	28.9
1/2"	2.6	75.2		100.0	62.4	8.7	37.6
3/8"	2.0	50).6	100.0	54.9	7.6	45.1
#4	1.4	10	0.0	97.4	41.5	13.4	58.5
#8	1.4	3	.4	81.6	33.3	8.2	66.7
#16	1.4	2	.5	66.9	27.3	6.0	72.7
#30	1.4	2.3		50.0	20.7	6.7	79.3
#50	1.4	2.2		23.5	10.3	10.4	89.7
#100	1.3	2.1		4.2	2.7	7.6	97.3
LBW	1.0	1	.8	0.6	1.1	1.6	98.9

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

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

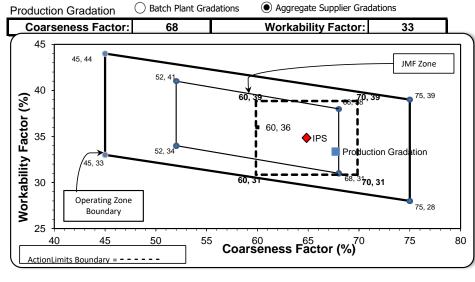
nom. max., #100 and #200 sieves.

*% Retained must be at least 4% for each sieve except max.,

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

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	65	
Work	ability Factor:	35	
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.1	0.9	0.9
1"	80.8	18.2	19.2
3/4"	71.3	9.6	28.7
1/2"	64.0	7.3	36.0
3/8"	57.7	6.2	42.3
#4	42.8	15.0	57.2
#8	34.8	7.9	65.2
#16	28.4	6.4	71.6
#30	20.2	8.2	79.8
#50	7.6	12.6	92.4
#100	1.6	6.0	98.4
LBW	1.0	0.6	99.0

PREPARED BY: SM, LLC Technical Service

PLANT #: P11

Sample Date: 7/8/24 Concrete Grade: P1M, 3500HP

Dates Test Represents: 7/9/2024 through 7/15/2024

MDOT No.:

- 4.00		., .,		.,,		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	800	4.89	2.62	26.1
IA	71-47	Presque Isle	1070	6.54	2.62	34.9
2NS	63-115	Ray Rd	1200	7.26	2.65	39.1
	•	Total Wt	3070	18 70		100.0

bution	
3.1	
4.9	
9.1	



---- Verify this number is 100%

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

	i otai wt	3070	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	L	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	98.5	10	0.0	100.0	99.6	0.4	0.4
1"	58.7	10	100.0		89.2	10.4	10.8
3/4"	17.6	98	3.2	100.0	77.9	11.3	22.1
1/2"	6.7	63	3.6	100.0	63.0	14.9	37.0
3/8"	4.7	33	3.4	100.0	52.0	11.0	48.0
#4	2.6	2	.8	97.6	39.8	12.2	60.2
#8	2.0	1	.3	79.7	32.1	7.7	67.9
#16	1.9	1	.1	64.5	26.1	6.0	73.9
#30	1.8	1	.0	49.6	20.2	5.9	79.8
#50	1.8	1	.0	27.4	11.5	8.7	88.5
#100	1.7	0	.9	6.2	3.2	8.3	96.8
LBW	1.3	0	.7	0.7	0.9	2.3	99.1

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

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

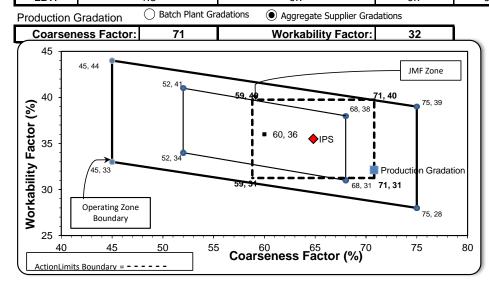
nom. max., #100 and #200 sieves.

 $^{*}\%$ 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.



Intial Production Sample (IPS)

Coars	eness Factor:	65	
Work	Workability Factor:		
Sieve	Cumulative	%	Cumulative
Sieve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.0	0.6	0.6
1"	84.0	15.3	16.0
3/4"	73.5	10.5	26.5
1/2"	65.2	8.2	34.8
3/8"	58.2	7.1	41.8
#4	44.1	14.1	55.9
#8	35.5	8.6	64.5
#16	29.1	6.4	70.9
#30	21.9	7.3	78.1
#50	9.6	12.2	90.4
#100	2.6	7.1	97.4
LBW	1.0	1.6	99.0

PREPARED BY: SM, LLC Technical Service

7/8/24

PLANT #: P-35

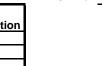
Sample Date:

Concrete Grade: P1M, 3500HP

Dates Test I	es l'est Represents: 1/9/2024		through	7/15/2024		
Agg. Class	Pit#	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	58-003	Stoneco	1420	8.46	2.69	45.5
IA	58-003	Stoneco	500	2.98	2.69	16.0
2NS	81-019	Pleasant Lake	1200	7.26	2.65	38.5

Contractor:

MDOT No.:



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

	Total Wt	3120	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	IA		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"	68.7	100.0		100.0	85.8	14.2	14.2
3/4"	44.9	100.0		100.0	74.9	10.8	25.1
1/2"	15.5	94.0		100.0	60.6	14.3	39.4
3/8"	12.7	77.1		100.0	56.6	4.0	43.4
#4	4.9	15.8		98.4	42.6	14.0	57.4
#8	2.6	4.6		86.0	35.0	7.6	65.0
#16	2.2	2.3		64.7	26.3	8.7	73.7
#30	2.1	1.6		43.3	17.9	8.4	82.1
#50	2.0	1.6		19.7	8.7	9.1	91.3
#100	1.9	1.3		3.1	2.3	6.5	97.7
I BW	1 7	1.0		0.4	11	12	98.9

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

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

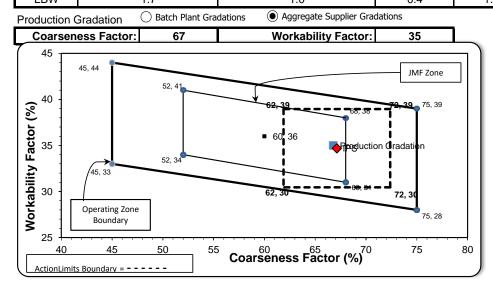
nom. max., #100 and #200 sieves.

*% Retained must be at least 4% for each sieve except max.,

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

*% Retained must be at least 8% for the 1" sieve when

a 2" max. size (nom. Max. 1.5") aggregate is used.



Intial Production Sample (IPS)

Coars	eness Factor:	67	
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"	86.9	13.1	13.1
3/4"	76.1	10.8	23.9
1/2"	63.7	12.4	36.3
3/8"	56.2	7.5	43.8
#4	43.2	13.0	56.8
#8	34.7	8.5	65.3
#16	27.5	7.2	72.5
#30	20.6	7.0	79.4
#50	9.0	11.6	91.0
#100	2.1	6.9	97.9
LBW	1.0	1.1	99.0

PREPARED BY: SM, LLC Technical Service

7/8/24

PLANT #: P-36

Sample Date:

Concrete Grade: P1M, 3500HP

Contractor:

Dates Test Represents: 7/9/2024

7/15/2024 through

MDOT No.	
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Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	800	4.89	2.62	26.1
IA	71-47	Presque Isle	1070	6.54	2.62	34.9
2NS	63-92	Grange Hall	1200	7.26	2.65	39.1
		Total Wt	3070	18.70		100.0

SUBER	210	P
SUPER MATER	IAL	s

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

	Total Wt	3070	18.70		100.0	< Verify this n	umber is 100%
Sieve	CA	L	4	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	10	0.0	100.0	100.0	0.0	0.0
1.5"	98.5	10	0.0	100.0	99.6	0.4	0.4
1"	58.7	10	0.0	100.0	89.2	10.4	10.8
3/4"	17.6	98	3.2	100.0	77.9	11.3	22.1
1/2"	6.7	63	3.6	100.0	63.0	14.9	37.0
3/8"	4.7	33	3.4	100.0	52.0	11.0	48.0
#4	2.6	2	.8	97.4	39.7	12.2	60.3
#8	2.0	1	.3	81.6	32.9	6.9	67.1
#16	1.9	1	.1	66.9	27.0	5.8	73.0
#30	1.8	1	.0	50.0	20.4	6.7	79.6
#50	1.8	1	.0	23.5	10.0	10.4	90.0
#100	1.7	0	.9	4.2	2.4	7.6	97.6
LBW	1.3	0	.7	0.6	0.8	1.6	99.2

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

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

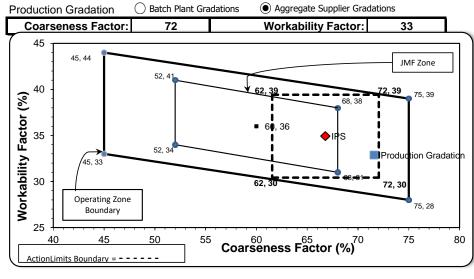
nom. max., #100 and #200 sieves.

*% 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.



Intial Production Sample (IPS)

Coars	Coarseness Factor:		
Work	ability 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"	85.0	15.0	15.0
3/4"	72.1	12.9	27.9
1/2"	64.5	7.6	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

PREPARED BY: SM, LLC Technical Service

Krake Willis Rd

CA

100.0

98.5

58.7

17.6

6.7

4.7

2.6

2.0

1.9

1.8

1.8

1.7

Total Wt

PLANT #: P-39

44-051

Sample Date:

CA IΑ 2NS

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

LBW

7/8/24 Concrete Grade: P1M, 3500HP

7.56

18.69

2.65

2NS

100.0

100.0

100.0

100.0

100.0

100.0

99.2

84.4

68.6

49.8

22.0

5.9

Dates Test F	Represents:	7/9/2024	through	7/15/2024		
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
CA	71-47	Presque Isle	650	3.98	2.62	21.2
IA	71-47	Presque Isle	1170	7.16	2.62	38.1

IΑ

100.0

100.0

100.0

98.2

63.6

33.4

2.8

1.3

1.1

1.0

1.0

0.9

1250

3070

Contractor:

MDOT No.:



100.

21.0

9.7

3.1

0.8

<---- Verify this number is 100%

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

Cumulative % Passing	% Retained	Cumulative % Retained	
100.0	0.0	0.0	
99.7	0.3	0.3	
91.3	8.4	8.7	
81.9	9.4	18.1	
66.4	15.5	33.6	
54.4	11.9	45.6	*M
42.0	12.4	58.0	*Ar
35.3	6.7	64.7	nom
28.8	6.5	71.2	*%

7.7

11.3

6.6

laximum % Retained must be above the 3/8" sieve.

any two adjacent sieves must equal 10% except max.,

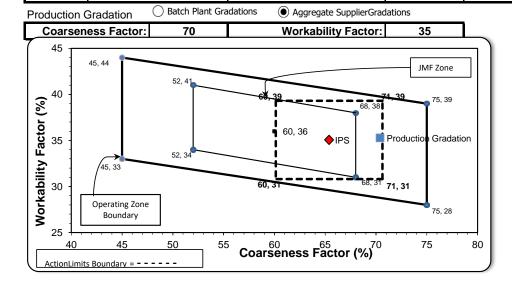
m. max., #100 and #200 sieves.

6 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.



Intial Production Sample (IPS)

79.0

90.3

96.9

99.2

Coarseness Factor:		65	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	99.6	0.4	0.4
1"	83.9	15.7	16.1
3/4"	74.1	9.8	25.9
1/2"	64.3	9.7	35.7
3/8"	57.5	6.8	42.5
#4	44.5	13.1	55.5
#8	35.1	9.4	64.9
#16	27.9	7.2	72.1
#30	21.7	6.2	78.3
#50	12.6	9.1	87.4
#100	3.5	9.1	96.5
LBW	1.2	2.4	98.8

PREPARED BY: SM, LLC Technical Service

7/8/24

CA

100.0

98.5

58.7

17.6

6.7

4.7

2.6

2.0

1.9

1.8

1.8

1.7

PLANT #: P-O2

Sample Date:

Sieve

2"

1.5"

3/4"

1/2'

3/8'

#4

#8

#16

#30

#50

#100

Concrete Grade: P1M, 3500HP

2NS

100.0

100.0

100.0

100.0

100.0

100.0

97.6

79.7

64.5

49.6

27.4

6.2

Dates Test Represents: 7/9/2024 7/15/2024 through Specific ft³ Pit# Agg. Class Source Weight (SSD) Gravity Contribution CA 71-47 Presque Isle 850 5.20 2.62 27.7 IΑ 71-47 Presque Isle 1020 6.24 2.62 33.2 2NS 63-115 Ray Rd 1200 7.26 2.65 39.1 3070 Total Wt 18.70 100.0

IΑ

100.0

100.0

100.0

98.2

63.6

33.4

2.8

1.3

1.1

1.0

1.0

0.9

MDOT No.:

11.4

23.4

37.9

48.5

60.2

67.9

73.9

79.8

88.5

96.8

.....

11.0

12.0

14.5

10.6

11.7

7.7

6.0

5.9

8.7

8.3

2.3

Cumulative

% Passing

100.0

99.6

88.6

76.6

62.1

51.5

39.8

32.1

26.1

20.2

11.5

3.2

Contractor:

<---- Verify this number is 100%

% Retained	Cumulative % Retained	<u>Superior Materials, LLC</u> 30701 W. 10 Mile Rd.
0.0	0.0	Suite 500
0.4	0.4	Farmington Hills, MI 48336



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

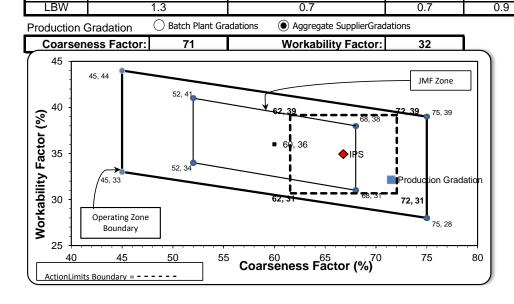
nom. max., #100 and #200 sieves.

*% 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.



Intial Production Sample (IPS)

Coarseness Factor:		67	
Workability Factor:		35	
Sieve	Cumulative	%	Cumulative
	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	85.0	15.0	15.0
3/4"	72.3	12.7	27.7
1/2"	64.5	7.8	35.5
3/8"	56.5	8.0	43.5
#4	42.7	13.8	57.3
#8	34.9	7.8	65.1
#16	29.0	5.9	71.0
#30	21.0	8.0	79.0
#50	8.2	12.8	91.8
#100	1.6	6.5	98.4
LBW	0.7	0.9	99.3

PREPARED BY: SM, LLC Technical Service