PLANT :	-	P-102					Contractor:				
Sample Date	-	5/27/24			Concrete Grade	DM, 4500HP					
Dates Test R	epresents:	5/28/2024	through	6/3/2024	Specific	%	MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution					
6AA	58-003	Stoneco	1600	9.53	2.69	54.2					
26A	58-003	Stoneco	200	1.19	2.69	6.8					
2NS	63-114	Highland	1150	6.95	2.65	39.0				SUP	ERIOR
		Total Wt	2950	17.68		100.0	< Verify this n	umber is 100%	1		FIALS
Sieve	(	6AA	26	•	2NS	Cumulative	% Retained	Cumulative		Superior	Materials, LLC
Sleve	Ľ		20	A	2115	% Passing	% Retained	% Retained			10 Mile Rd.
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0		Suite 500	
1.5"		00.0	10		100.0	100.0	0.0	0.0	Farmington Hills, MI 48336		n Hills, MI 48336
1"		99.9	10		100.0	99.9	0.1	0.1			
3/4"	8	36.4	10		100.0	92.6	7.3	7.4	]		
1/2"		47.4	99		100.0	71.5	21.2	28.5			
3/8"		26.3	87	-	100.0	59.1	12.3	40.9	*Maximum % Retained must be above the 3/8" sie		
#4	4.0		5		98.9	41.1	18.1	58.9	· · ·		qual 10% except max.,
#8	2.1		1.		85.2	34.5	6.6	65.5	nom. max., #100 and #200 sieves.		
#16		1.9	1.		67.8	27.6	6.9	72.4		*% Retained must be at least 4% for each sieve except i nom. max., #100 and #200 sieves.	
#30 #50		1.9 1.8	1.		48.8 18.8	20.1 8.4	7.4 11.8	79.9 91.6			
#30 #100		1.7	1		3.0	2.2	6.2	91.6	*% Retained must be at least 4% for the 3/4" si a 1.5" max. size (nom. Max. 1.0") aggregate is u		
LBW		1.3	1		0.5	1.0	1.2	99.0	a 1.5 max. siz		aggregate is used.
Production G	radation	Batch Plant Gra	dations 🔘 Aga	regate Supplier Gra	dations	Adjusted W/F	Intial Production	on Sample (IPS	■ 2)		
	ess Factor:	62		ability Factor:		37.0		eness Factor:	61		
					01	0.10		ability Factor:	36		
45					JMF Zone			Cumulative	%	Cumulative	
1 1	45, 44				JIVIF Zone		Sieve	% Passing	Retained	% Retained	
		52, 41 <b>56</b>	40	67 40			2"	100.0	0.0	0.0	
1		,		68, 38	75, 39		1.5"	100.0	0.0	0.0	
रू <sup>40</sup>			•	00, 30			1"	99.3	0.7	0.7	
(%) <sup>40</sup>			I				-			-	
tor (%)				Production Gradatic	on		3/4"	89.2	10.1	10.8	
actor (%)					on		3/4" 1/2"	89.2 70.7	18.5	29.3	
Factor (%)		52, 34			n		3/4" 1/2" 3/8"	89.2 70.7 60.7	18.5 10.0	29.3 39.3	
Factor (%)	45, 33	52, 34			on		3/4" 1/2" 3/8" #4	89.2 70.7 60.7 44.4	18.5 10.0 16.3	29.3 39.3 55.6	
Factor (%)		56,			'n		3/4" 1/2" 3/8" #4 #8	89.2 70.7 60.7 44.4 35.9	18.5 10.0 16.3 8.5	29.3 39.3 55.6 64.1	
Factor (%)	Operating Zone	56,					3/4" 1/2" 3/8" #4 #8 #16	89.2 70.7 60.7 44.4 35.9 27.3	18.5 10.0 16.3 8.5 8.6	29.3 39.3 55.6 64.1 72.7	
ability Factor (%)		56,			on 75, 28		3/4" 1/2" 3/8" #4 #8 #16 #30	89.2 70.7 60.7 44.4 35.9 27.3 19.1	18.5 10.0 16.3 8.5 8.6 8.2	29.3 39.3 55.6 64.1 72.7 80.9	
Factor (%)	Operating Zone	56,			75, 28	80	3/4" 1/2" 3/8" #4 #8 #16	89.2 70.7 60.7 44.4 35.9 27.3	18.5 10.0 16.3 8.5 8.6	29.3 39.3 55.6 64.1 72.7	

Approved By:

PLANT :	-	P-103					Contractor:						
Sample Date	-	5/27/24			oncrete Grade	: DM, 4500HP							
Dates Test R	Represents:	5/28/2024	through	6/3/2024	Specific	0/	MDOT No.:						
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution							
6AA	58-003	Stoneco	1600	9.53	2.69	54.2							
26A	58-003	Stoneco	200	1.19	2.69	6.8							
2NS	63-114	Highland	1150	6.95	2.65	39.0				SUP	ERIOR		
		Total Wt	2950	17.68		100.0	< Verify this n	umber is 100%	1	MATE	RIALS		
Sieve	6	AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained			<b>Materials, LLC</b> 10 Mile Rd.		
2"	1	0.0	100	).0	100.0	100.0	0.0	0.0	Suite 500 Farmington Hills, MI 48336				
1.5"		0.0	100	-	100.0	100.0	0.0	0.0			n Hills, MI 48336		
1"		9.9	100		100.0	99.9	0.1	0.1					
3/4"	-	6.4	100	-	100.0	92.6	7.3	7.4					
1/2"		7.4	99		100.0	71.5	21.2	28.5		<b>D</b>			
3/8" #4		6.3	87 5.		100.0 98.9	59.1 41.1	12.3 18.1	40.9 58.9			above the 3/8" sieve.		
#4	4.0		5. 1.		96.9 85.2	34.5	6.6	65.5			qual 10% except max.,		
#16		1.9	1.		67.8	27.6	6.9	72.4		m. max., #100 and #200 sieves. % Retained must be at least 4% for each sieve except m			
#30		1.9	1.		48.8	20.1	7.4	79.9		00 and #200 sieves			
#50		1.8	1.		18.8	8.4	11.8	91.6	*% Retained must be at least 4% for the 3/4" sieve wh				
#100		1.7	1.	1	3.0	2.2	6.2	97.8	a 1.5" max. siz	e (nom. Max. 1.0")	aggregate is used.		
LBW		1.3	1.	0	0.5	1.0	1.2	99.0					
Production G	Gradation	Batch Plant Gra	idations 💿 Agg	regate Supplier Gra	dations	Adjusted WF	Intial Production	on Sample (IPS	5)				
Coarsene	ess Factor:	62	Work	ability Factor:	34	37.0	Coars	eness Factor:	61				
45				-			Work	ability Factor:	36				
45		_			JMF Zone		0	Cumulative	%	Cumulative			
1	45, 44				51011 2011e		Sieve	% Passing	Retained	% Retained			
10		52, 41 <b></b>	40	67 40			2"	100.0	0.0	0.0			
् <sup>40</sup>				68, 38	75, 39		1.5"	100.0	0.0	0.0			
ల 1			i	•			1"	99.3	0.7	0.7			
Factor (%)			■ <b>(</b> )189	roduction Gradatio			3/4"	89.2	10.1	10.8			
<b>a</b> 35			i				1/2" 3/8"	70.7 60.7	18.5 10.0	29.3 39.3			
Ъ I	45, 33	52, 34	+				3/8 #4	44.4	16.3	39.3 55.6			
	-0,00	56,	32	<b>67, 32</b> 67, 32			#4	35.9	8.5	64.1			
	Operating 7er -	Г		- 00, 31			#16	27.3	8.6	72.7			
	Operating Zone Boundary				75, 28		#30	19.1	8.2	80.9			
					. 5, 20		#50	7.4	11.7	92.6			
Workability													
25 40	45	50 55		65 Factor (%)	75	80	#100 LBW	1.9 0.7	5.6 1.2	98.1 99.3			

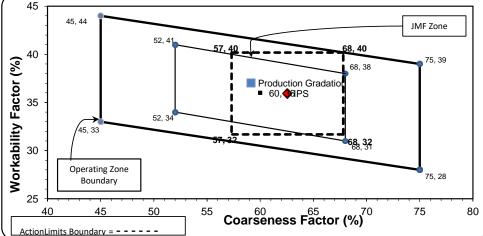
Approved BY: May 1. Ball

PLANT #	:	12					Contractor:			
Sample Date:		5/27/24			Concrete Grade:	DM, 4500HP				
Dates Test Re	presents:	5/28/2024	through	6/3/2024			MDOT No.:			
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution				
6AA	71-47	Presque Isle	1500	9.17	2.62	51.6				
26A	71-47	Presque Isle	255	1.56	2.62	8.8				
2NS	63-115	Ray Rd	1150	6.95	2.65	39.6				
		Total Wt	2905	17.69		100.0	< Verify this n	umber is 100%		SU
Sieve		6AA	26	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained		<u>Superi</u> 30701 \
2"	1	00.0	100	0.0	100.0	100.0	0.0	0.0		Suite 50
1.5"	1	00.0	100	0.0	100.0	100.0	0.0	0.0		Farmin
1"		98.3	100	0.0	100.0	99.1	0.9	0.9		
3/4"	8	83.9	100	0.0	100.0	91.7	7.4	8.3		
1/2"	4	47.7	94	.9	100.0	72.5	19.1	27.5	*Maximum % Retained mu *Any two adjacent sieves r	
3/8"		28.0	82	.5	100.0	61.3	11.3	38.7		
#4		6.3	15	.8	95.9	42.6	18.7	57.4		
#8		3.9				65.5	nom. max., #10	00 and #200 si		
#16		3.4	2.	0	66.0	28.1	6.5	71.9	*% Retained r	must be at leas
#30		3.2	1.	7	50.8	21.9	6.1	78.1	nom. max., #10	00 and #200 si
#50		3.0	1.		27.2	12.5	9.5	87.5	*% Retained r	must be at leas
#100		2.8	1.		6.0	4.0	8.5	96.0	a 1.5" max. siz	e (nom. Max. 1
LBW		2.5	1.	3	0.8	1.7	2.2	98.3		
Production Gr	adation	O Batch Plant Grad		regate Supplier		Adjusted WF	Intial Production	on Sample (IPS	5)	
Coarsenes	ss Factor:	59	Work	ability Facto	or: 35	37.0	Coars	eness Factor:	63	
45						$\neg$ )	Work	ability Factor:	36	
45	i, 44				JMF Zone		Sieve	Cumulative	%	Cumulati
		52, 41	57, 40	68, 4	•		2"	% Passing	Retained	% Retain
<b>a</b> <sup>40</sup>			21,40		75.39		1.5"	100.0 100.0	0.0	0.0
ا (%				68,	38		1.5 1"	99.3	0.0	0.0
5			Productio	on Gradation			3/4"	99.3 89.0	10.3	0.7
<b>ž</b> 35			■ 60, <b>4</b> 6				3/4 1/2"	70.3	10.3	29.7
lity Factor (%)		52, 34		1			3/8"	59.9	10.7	40.1
	45, 33		<u> </u>				3/8 #4	41.9	18.0	58.1



ior Materials, LLC W. 10 Mile Rd. 500 ngton Hills, MI 48336

st be above the 3/8" sieve. nust equal 10% except max., sieves. ast 4% for each sieve except max., sieves. ast 4% for the 3/4" sieve when 1.0") aggregate is used.



Coar	seness Factor:	63	
Wor	kability Factor:	36	
Sieve	Cumulative	%	Cumulative
Sleve	% Passing	Retained	% Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.0	10.3	11.0
1/2"	70.3	18.7	29.7
3/8"	59.9	10.4	40.1
#4	41.9	18.0	58.1
#8	35.9	6.0	64.1
#16	27.8	8.2	72.2
#30	18.9	8.8	81.1
#50	6.3	12.6	93.7
#100	1.7	4.6	98.3
LBW	1.0	0.7	99.0

Approved By:

Mart P. Ball

PLANT # Sample Date		<b>p11</b> 5/27/24		C	Concrete Grade	DM. 4500HP	Contractor:					
Dates Test R		5/28/2024	through	6/3/2024			MDOT No.:					
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution						
6AA	71-47	Presque Isle	1405	8.59	2.62	48.4						
26A	71-47	Presque Isle	350	2.14	2.62	12.0						
2NS	95-013	Smelter Bay	1150	6.95	2.65	39.6				SUD	ERIOR	
		Total Wt	2905	17.69		100.0	< Verify this n	umber is 100%	-		RIALS	
Sieve	1	6AA	26/	A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained			<b>Materials, LLC</b> 10 Mile Rd.	
2"	1	100.0	100	.0	100.0	100.0	0.0	0.0		Suite 500		
1.5"	1	100.0	100	.0	100.0	100.0	0.0	0.0		Farmingto	n Hills, MI 48336	
1"		98.6	100	-	100.0	99.3	0.7	0.7				
3/4"		77.8	100		100.0	89.3	10.1	10.7				
1/2"		35.4	94.		100.0	68.1	21.1	31.9				
3/8"		19.0	82.		100.0	58.7	9.4	41.3	*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 m nom. max., #100 and #200 sieves. *% Retained must be at least 4% for the 3/4" sieve when			
#4		3.6	15.		96.1	41.7	17.0	58.3				
#8		2.3	3.3		84.9	35.1	6.6	64.9				
#16		1.9	2.0		69.9	28.8	6.3	71.2				
#30 #50		1.8 1.7	1.7		48.5 23.0	20.3 10.1	8.6 10.2	79.7 89.9				
#50		1.6	1.6		6.6	3.6	6.6	96.4		e (nom. Max. 1.0")		
LBW		1.3	1.3		1.2	1.3	2.3	98.7	a 1.5 111ax. 512		ayyreyale is used.	
Production G	Gradation	Batch Plant Gra		gate Supplier Gra		Adjusted WF	-	on Sample (IPS	5)			
Coarsene	ess Factor:	64	Work	ability Factor:	35	37.6		eness Factor:	62			
45						<u> </u>	Work	ability Factor:	36			
	45, 44				JMF Zone		Sieve	Cumulative % Passing	% Retained	Cumulative % Retained		
- 4		52, 41	i 40				2"	100.0	0.0	0.0		
-		54		67, 40			<u> </u>					
40		54		67,40	75, 39		1.5"	100.0	0.0	0.0		
40		51					1.5" 1"	100.0	0.0	0.0 0.0		
40		51	■ 6 <b>⊕</b> 385	68, 38 Product on Grad			1.5" 1" 3/4"	100.0 95.0	0.0 5.0	0.0 0.0 5.0		
40		52 24		68, 38 Product on Grad			1.5" 1" 3/4" 1/2"	100.0 95.0 72.3	0.0 5.0 22.8	0.0 0.0 5.0 27.7		
40 -	45, 33	52, 34		68, 38 Product on Grad			1.5" 1" 3/4" 1/2" 3/8"	100.0 95.0 72.3 60.4	0.0 5.0 22.8 11.8	0.0 0.0 5.0 27.7 39.6		
40 -	45, 33	52, 34		68, 38 Product on Grad			1.5" 1" 3/4" 1/2" 3/8" #4	100.0 95.0 72.3 60.4 42.6	0.0 5.0 22.8 11.8 17.8	0.0 0.0 5.0 27.7 39.6 57.4		
40				68, 38 Product on Grad			1.5" 1" 3/4" 1/2" 3/8" #4 #8	100.0 95.0 72.3 60.4 42.6 36.0	0.0 5.0 22.8 11.8 17.8 6.6	0.0 0.0 5.0 27.7 39.6 57.4 64.0		
40 -	Operating Zone			68, 38 Product on Grad	ation		1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16	100.0 95.0 72.3 60.4 42.6 36.0 29.5	0.0 5.0 22.8 11.8 17.8 6.6 6.5	0.0 0.0 5.0 27.7 39.6 57.4 64.0 70.5		
Workability Factor (%) 00 01 02 02 02 04 04 04 04 04 04 04 04 04 04				68, 38 Product on Grad			1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	100.0 95.0 72.3 60.4 42.6 36.0 29.5 20.3	0.0 5.0 22.8 11.8 17.8 6.6 6.5 9.2	0.0 0.0 5.0 27.7 39.6 57.4 64.0 70.5 79.7		
40 -	Operating Zone		● 6 <b>● 38</b> 5	68, 38 Production Grad	ation 75, 28		1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16	100.0 95.0 72.3 60.4 42.6 36.0 29.5	0.0 5.0 22.8 11.8 17.8 6.6 6.5	0.0 0.0 5.0 27.7 39.6 57.4 64.0 70.5		

Approved By: Mart 1. Ball

PLANT		P-35					Contractor:				
Sample Date		5/27/24			Concrete Grade	DM, 4500HP					
Dates Test F	Represents:	5/28/2024	through	6/3/2024			MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution					
6AA	58-003	Stoneco	1600	9.53	2.69	54.2					
26A	58-003	Stoneco	200	1.19	2.69	6.8					
2NS	81-019	Pleasant Lake	1150	6.95	2.65	39.0				SUP	ERIOR
		Total Wt	2950	17.68		100.0	< Verify this n	umber is 100%	1	MATE	RIALS
Sieve	f	6AA	26/	<b>A</b>	2NS	Cumulative % Passing	% Retained	Cumulative % Retained		<b>Superior</b> 30701 W. 1	<b>Materials, LLC</b> 10 Mile Rd.
2"	1	00.0	100	.0	100.0	100.0	0.0	0.0		Suite 500	
1.5"		00.0	100	.0	100.0	100.0	0.0	0.0	Farmington Hills, MI 48336		n Hills, MI 48336
1"		99.9	100		100.0	99.9	0.1	0.1			
3/4"		36.4	100	-	100.0	92.6	7.3	7.4			
1/2"		47.4	99.		100.0	71.5	21.2	28.5			
3/8"		26.3	87.		100.0	59.1	12.3	40.9	*Maximum % Retained must be above the 3/8" sieve		
#4		4.0	5.2		99.3	41.2	17.9	58.8			qual 10% except max.,
#8		2.1	1.7		87.4	35.3	5.9	64.7	nom. max., #100 and #200 sieves. *% Retained must be at least 4% for each sieve except nom. max., #100 and #200 sieves. *% Retained must be at least 4% for the 3/4" sieve when		
#16 #30		1.9 1.9	1.4		65.2 40.6	26.5 16.9	8.8 9.6	73.5 83.1			
#30 #50		1.8	1.2		17.6	7.9	9.0	92.1			
#100		1.7	1.1		2.8	2.1	5.8	97.9		e (nom. Max. 1.0")	
LBW		1.3	1.0		0.3	0.9	1.2	99.1		e (nem max ne )	aggiogato to accar
Production G	Aradation	O Batch Plant Gra	dations 💿 Aggre	egate Supplier Gra	dations	Adjusted WF	Intial Production	on Sample (IPS	5)		
	ess Factor:	63	Work	ability Factor:	35	37.8		eness Factor:	-) 61		
								ability Factor:	36		
45								Cumulative	%	Cumulative	
	45, 44				JMF Zone		Sieve	% Passing	Retained	% Retained	
1		52, 41					2"	100.0	0.0	0.0	
<del>2</del> <sup>40</sup>		56,	# <del>0</del>		75, 39		1.5"	100.0	0.0	0.0	
2			!	68, 38 Production Grada	tion		1"	99.3	0.7	0.7	
j j			• 🚳 186				3/4"	89.1	10.2	10.9	
<b>te</b> 35			- ₩1PS	i			1/2"	70.5	18.6	29.5	
Щ́ į		52, 34	+	<b>!</b>			3/8"	60.5	10.0	39.5	
İţ	45, 33		1	i			#4	44.1	16.4	55.9	
		56,	31	67, 88, 31			#8	35.6	8.5	64.4	
<b>ig</b> 30	Operating Zone						#16	27.7	7.9	72.3	
kabil					75, 28		#30 #50	20.6 8.7	7.1 11.8	79.4	
Vorkabil	Boundary						#60	07	110		
Worka	Boundary									91.3	
30 40 <b>Norkabil</b>	Boundary 45	 50 55	<sup>60</sup> Coarseness	65 70	75	80	#30 #100 LBW	1.6 1.1	7.1	91.3 98.4 98.9	

Approved By:

PLANT #		P-38					Contractor:					
Sample Date		5/27/24			Concrete Grade:	DM, 4500HP						
Dates Test R	epresents:	5/28/2024	through	6/3/2024	Specific	%	MDOT No.:					
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Gravity	70 Contribution						
6AA	58-003	Stoneco	1600	9.53	2.69	54.2						
26A	58-003	Stoneco	200	1.19	2.69	6.8						
2NS	81-019	Pleasant Lake		6.95	2.65	39.0				SUP	ERIOR	
		Total Wt	2950	17.68		100.0	< Verify this nu	umber is 100%	1		RIALS	
0.		C A A			0110	Cumulative	0 Detained	Cumulative		Superior	Materials, LLC	
Sieve		6AA	26	А	2NS	% Passing	% Retained	% Retained		30701 W. 1	•	
2"		00.0	100	10	100.0	100.0	0.0	0.0		Suite 500		
1.5"		100.0	100		100.0	100.0	0.0	0.0	Farmington Hills, MI 48336		n Hills, MI 48336	
1"		99.9	100		100.0	99.9	0.1	0.1	1			
3/4"		86.4	100		100.0	92.6	7.3	7.4				
1/2"		47.4	99	.7	100.0	71.5	21.2	28.5				
3/8"		26.3	87		100.0	59.1	12.3	40.9	*Maximum % Retained must be above the 3/8" s		above the 3/8" sieve.	
#4	4.0		5.		99.3	41.2	17.9	58.8	*Any two adja	cent sieves must e	qual 10% except max.,	
#8		2.1	1.		87.4	35.3	5.9	64.7		om. max., #100 and #200 sieves.		
#16		1.9	1.		65.2	26.5	8.8	73.5	*% Retained must be at least 4% for each sieve			
#30 #50		1.9	1.		40.6 17.6	16.9 7.9	9.6 9.0	83.1 92.1	,	00 and #200 sieves		
#50 #100		1.8 1.7	1.		2.8	2.1	9.0 5.8	92.1		must be at least 4% e (nom. Max. 1.0") :	for the 3/4" sieve when	
LBW		1.3	1.		0.3	0.9	1.2	99.1	a 1.5 max. siz		ayyreyale is used.	
Production G	radation	Batch Plant Gra	_	regate Supplier Gra				on Sample (IPS	3)			
	ess Factor:	63		ability Factor:	35	37.8		eness Factor:	, 61	1		
Coarsene	55 T actor.	03	WOIR NOT	apility racior.	33	57.0						
-									-			
45								ability Factor:	36	Cumulative		
_	15, 44				JMF Zone			ability Factor: Cumulative	36 %	Cumulative % Retained		
_	15, 44	52, 41			JMF Zone		Worka Sieve	ability Factor:	36	Cumulative % Retained 0.0		
40	15, 44	52, 41 56,	10	<del>97,</del> 40	JMF Zone		Worka	ability Factor: Cumulative % Passing	36 % Retained	% Retained		
40	15, 44	52, 41 56,		<b>67, 40</b>	75, 39		Worka Sieve 2"	ability Factor: Cumulative % Passing 100.0	<b>36</b> % <b>Retained</b> 0.0	% Retained 0.0		
40	15, 44	52, 41 56;		68, 38 Productor Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4"	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1	<b>36</b> % Retained 0.0 0.0 0.7 10.2	% Retained 0.0 0.0 0.7 10.9		
40	15, 44	52, 41 56;		68, 38 Productor Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2"	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5	<b>36</b> % <b>Retained</b> 0.0 0.0 0.7 10.2 18.6	% Retained 0.0 0.0 0.7 10.9 29.5		
40		52, 41 <b>56</b> , 52, 34		68, 38 Productor Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8"	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5	<b>36</b> % <b>Retained</b> 0.0 0.0 0.7 10.2 18.6 10.0	% Retained   0.0   0.7   10.9   29.5   39.5		
40	45, 33	56,		68, 38 Productori Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8" #4	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5 44.1	<b>36</b> % <b>Retained</b> 0.0 0.0 0.7 10.2 18.6 10.0 16.4	% Retained 0.0 0.7 10.9 29.5 39.5 55.9		
40		56,		68, 38 Productor Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8" #4 #8	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5 44.1 35.6	<b>36</b> % <b>Retained</b> 0.0 0.0 0.7 10.2 18.6 10.0 16.4 8.5	% Retained   0.0   0.7   10.9   29.5   39.5   55.9   64.4		
40	45, 33 Operating Zone	52, 34		68, 38 Productori Gradat	tion 75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5 44.1 35.6 27.7	<b>36</b> % <b>Retained</b> 0.0 0.7 10.2 18.6 10.0 16.4 8.5 7.9	% Retained   0.0   0.7   10.9   29.5   39.5   55.9   64.4   72.3		
40	45, 33	52, 34		68, 38 Productori Gradat	75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16 #30	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5 44.1 35.6 27.7 20.6	<b>36</b> % <b>Retained</b> 0.0 0.7 10.2 18.6 10.0 16.4 8.5 7.9 7.1	% Retained   0.0   0.7   10.9   29.5   39.5   55.9   64.4   72.3   79.4		
ability Factor (%)	45, 33 Operating Zone	52, 34		68, 38 Productori Gradat	tion 75, 39		Worka Sieve 2" 1.5" 1" 3/4" 1/2" 3/8" #4 #8 #16	ability Factor: Cumulative % Passing 100.0 100.0 99.3 89.1 70.5 60.5 44.1 35.6 27.7	<b>36</b> % <b>Retained</b> 0.0 0.7 10.2 18.6 10.0 16.4 8.5 7.9	% Retained   0.0   0.7   10.9   29.5   39.5   55.9   64.4   72.3		

Approved By:

PLANT :	•	P-02					Contractor:				
Sample Date	-	5/27/24			Concrete Grade:	DM, 4500HP					
Dates Test R	(epresents:	5/28/2024	through	6/3/2024		~	MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific	%					
6AA	71-47	Presque Isle	1500	9.17	Gravity 2.62	Contribution 51.6					
26A	71-47	Presque Isle	255	1.56	2.62	8.8					
2NS	63-115	Ray Rd	1150	6.95	2.65	39.6				EUD	ERIOR
		Total Wt	2905	17.69		100.0	< Verify this n	umber is 100%		MATE	RIALS
Sieve	(	6AA	26	Δ	2NS	Cumulative	% Retained	Cumulative		Superior	Materials, LLC
Oleve					% Passing		70 Netamed	% Retained		30701 W.	10 Mile Rd.
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0		Suite 500	
1.5"		00.0	10		100.0	100.0	0.0	0.0	Farmington Hills, MI 48336		n Hills, MI 48336
1"		98.3	10		100.0	99.1	0.9	0.9			
3/4"		33.9	10		100.0	91.7	7.4	8.3			
1/2" 3/8"		47.7	94		100.0	72.5	19.1	27.5	***		
3/8 #4		28.0 6.3	82 15		100.0 95.9	61.3 42.6	<u>11.3</u> 18.7	38.7 57.4		Maximum % Retained must be above the 3/8" siev	
#4		3.9	3		81.4	34.5	8.1	65.5		00 and #200 sieves	
#16		3.4	2		66.0	28.1	6.5	71.9			6 for each sieve except
#30		3.2	1		50.8	21.9	6.1	78.1		00 and #200 sieves	
#50		3.0	1		27.2	12.5	9.5	87.5	*% Retained	must be at least 4%	6 for the 3/4" sieve whe
#100		2.8	1		6.0	4.0	8.5	96.0	a 1.5" max. siz	e (nom. Max. 1.0")	aggregate is used.
LBW		2.5	1	.3	0.8	1.7	2.2	98.3			
Production G	Fradation	Batch Plant Gra	dations 💿 Agg	regate SupplierGrac	lations	Adjusted WF	Intial Production	on Sample (IPS	S)	_	
Coarsene	ess Factor:	59	Work	ability Factor:	35	37.0	Coars	eness Factor:	63		
45							Work	ability Factor:	35		
	45, 44				JMF Zone		Sieve	Cumulative	%	Cumulative	
								% Passing	Retained	% Retained	
40		52, 41					2"	100.0	0.0	0.0	
			58, 39	<b>68, 39</b> 68, 38	75, 39		<u> </u>	100.0 100.0	0.0	0.0	
Factor (%)			Producti	on Gradation			3/4"	95.1	4.9	4.9	
<b>5</b> 35			<b>6</b> 0, 36				1/2"	74.6	20.5	25.4	
La	$\rightarrow$	52, 34					3/8"	59.3	15.3	40.7	
	45, 33	02, 04					#4	42.1	17.2	57.9	
÷ ∓			58, 31				#8	35.1	7.1	64.9	
oility	+	7		00,04			#16	29.2	5.9	70.8	
kability	Operating Zone				75, 28		#30	21.9	7.3	78.1	
orkability	Operating Zone Boundary							0.0	10.1		
Worka							#50	9.6	12.4	90.4	
Norkability 25 40		 50 55		65 Factor (%)	75	80	#50 #100 LBW	9.6 2.4 0.9	12.4 7.2 1.5	90.4 97.6 99.1	

Approved By: Mary 1. Ball