## Aggregate Optimization Chart

PLANT		P-102	-				Contractor:				
Sample Date:		2/26/24	Concrete Grade: DM, 4500HP								
Dates Test F	Represents:	2/27/2024	through	3/4/2024			MDOT No.:				
Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific	%					
6AA	58-003	Stoneco	1400	8.34	Gravity 2.69	Contribution 47.5					
26A	58-003	Stoneco	400	2.38	2.69	13.6					
2NS	63-114	Highland	1150	6.95	2.65	39.0				SUD	ERIOR
		Total Wt	2950 17.68			100.0	< Verify this number is 100%		MATERIALS		
Sieve	6AA		26A		2NS	Cumulative % Passing	% Retained Cumulative % Retained		Superior Materials, LLC 30701 W. 10 Mile Rd.		
2"	1	00.0	10	0.0	100.0	100.0	0.0	0.0	Suite 500		
1.5"	100.0		100.0		100.0	100.0	0.0	0.0	Farmington Hills, MI 48336		
1"	99.5		100.0		100.0	99.8	0.2	0.2	]		
3/4"		33.1		0.0	100.0	92.0	7.8	8.0	]		
1/2"		37.5	98	-	100.0	70.2	21.8	29.8			
3/8"		15.3	86.4		100.0	58.0	12.2	42.0	*Maximum % Retained must be above the 3/8" sieve.		
#4 #8	3.4 2.7		10.6 3.2		99.0 83.3	41.6 34.2	16.3 7.5	58.4 65.8	*Any two adjacent sieves must equal 10% except max.,		
#8 #16	2.7		2.2		64.8	26.7	7.5	73.3	nom. max., #100 and #200 sieves. *% Retained must be at least 4% for each sieve except		
#30	2.3		1.9		45.2	19.0	7.8	81.0	nom. max., #100 and #200 sieves.		
#50	2.2		1.7		17.7	8.2	10.8	91.8	*% Retained must be at least 4% for the 3/4" sieve when		
#100	1.9		1.6		3.0	2.3	5.9	97.7	a 1.5" max. size (nom. Max. 1.0") aggregate is used.		
LBW		1.7	1	5	0.5	1.2	1.1	98.8			
Production G	Gradation	O Batch Plant Gra	adations 💿 Agg	regate Supplier Gra	adations	Adjusted WF	Intial Production	on Sample (IPS	5)		
Coarseness Factor: 64		64	Workability Factor: 34		34	36.7	Coarseness Factor:		61		
45							Workability Factor:		36		
-	5, 44			JMF Zone			Sieve	Cumulative	%	Cumulative	
	-10, -1-				Juli Zone			% Passing	Retained	% Retained	
40		52, 4 <b>1</b> 56	,40	67_40			2"	100.0	0.0	0.0	
ଛ ⁺ଁ ]				68, 38	75, 39		1.5"	100.0	0.0	0.0	
<u> </u>			i.		detien.		1"	99.3	0.7	0.7	
<b>5</b> 35			■ 60j <b>p3g</b>	Production Gra	uauon		3/4" 1/2"	89.2 70.7	10.1 18.5	10.8 29.3	
Factor (%)	$\rightarrow$	52. 34		<b>i</b>			3/8"	60.7	10.0	39.3	
<i>√</i> <sup>45, 33</sup> <i>− − − −</i>							44.4	16.3	55.6		
- <b>u</b>		56	, 32	<b>67, 32</b> , 31			#8	35.9	8.5	64.1	
jit		7		55,01			#16	27.3	8.6	72.7	
	()nerating /one				75, 28		#30	19.1	8.2	80.9	
orkabilit	Operating Zone Boundary						#50	7.4	11.7	00.6	
Worka										92.6	
Norkabilit		 	5 60	<b>Factor (%)</b>	75	80	#30 #100 LBW	1.9 0.7	5.6	92.0 98.1 99.3	

PREPARED BY: SM, LLC Technical Service

Approved By: