

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P-36**

Contractor: _____

Sample Date: 7/13/20

Concrete Grade: **P1M**

Dates Test Represents: 7/14/2020 through 7/20/2020

MDOT No.: _____

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
NNS	63-92	Grange Hall	1200	7.26	2.65	39.1
Total Wt:						100.0

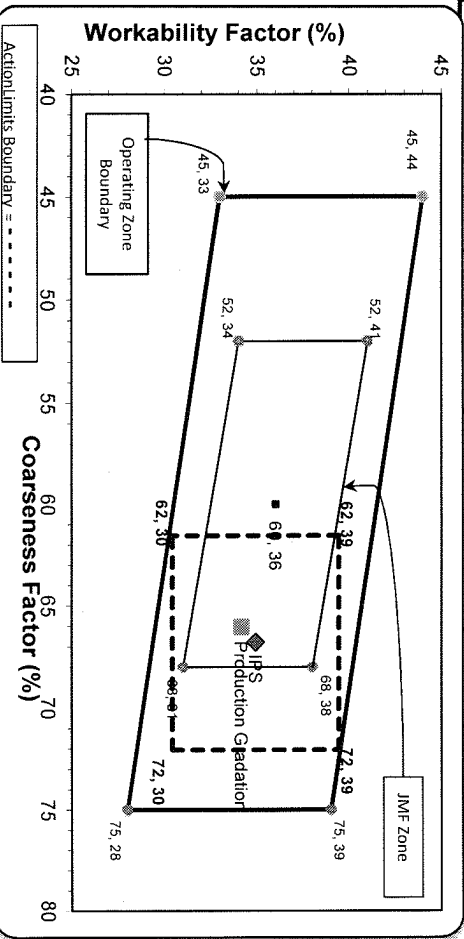
Verify this number is 100%

Sieve	CA	IA	NNS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	99.0	100.0	100.0	99.7	0.3	0.3
1"	45.0	100.0	100.0	83.0	16.7	17.0
3/4"	11.0	100.0	100.0	72.5	10.5	27.5
1/2"	4.0	78.0	100.0	63.7	8.8	36.3
3/8"	3.0	55.0	100.0	56.5	7.2	43.5
#4	2.0	11.0	97.0	41.8	14.7	58.2
#8	2.0	3.6	83.0	34.1	7.7	65.9
#16	1.8	2.4	68.0	27.9	6.3	72.1
#30	1.7	2.2	48.0	19.9	7.9	80.1
#50	1.6	2.0	19.6	8.8	11.2	91.2
#100	1.5	1.8	3.5	2.4	6.4	97.6
LBW	1.3	1.4	0.8	1.1	1.2	98.9

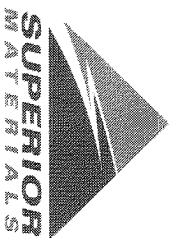
*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max., #100 and #200 sieves.
 *% Retained must be at least 4% for each sieve except max.
 nom. max., #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when
 a 2" max. size (nom. Max. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Initial Production Sample (IPS)



Sieve	Cumulative % Passing	% Retained	Cumulative % 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



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PREPARED BY:
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Approved By: _____



Basic Quality Statistical Summary Report

Plant S36-Superior Auburn Hills
Product 7919-COARSE AGG P1M LS
Specification Coarse Agg P1M LS Target
Period 07/12/2020 - 07/18/2020

Sieve/Test	Tests	Average	St Dev	Target	Specification
2" (50mm)	2	100.0	0.00	100-100	
1 1/2" (37.5mm)	2	98.5	0.00		
1" (25mm)	2	45.1	0.00		
3/4" (19mm)	2	11.2	0.00		
1/2" (12.5mm)	2	4.0	0.00		
3/8" (9.5mm)	2	3.2	0.00		
#4 (4.75mm)	2	2.1	0.00		
#8 (2.36mm)	2	1.9	0.00		
#16 (1.18mm)	2	1.8	0.00		
#30 (.6mm)	2	1.7	0.00		
#50 (.3mm)	2	1.6	0.00		
#100 (.15mm)	2	1.5	0.00		
#200 (75µm)	2	1.4	0.00	0-2	
Pan	2	0.0	0.00		
Wash Loss (#200/75um)	2	1.3	0.00		0-2
Total Moisture	2	2.20	0.000		



Basic Quality Statistical Summary Report

Plant S36-Superior Auburn Hills
Product 7920-INTERMED AGG P1M LS
Specification Intermed Agg P1M LS Target
Period 07/12/2020 - 07/18/2020

Sieve/Test	Tests	Average	St Dev	Target	Specification
2" (50mm)	2	100.0	0.00		
1 1/2" (37.5mm)	2	100.0	0.00		
1" (25mm)	2	100.0	0.00	100-100	
3/4" (19mm)	2	100.0	0.00		
1/2" (12.5mm)	2	77.9	0.00		
3/8" (9.5mm)	2	55.2	0.00		
#4 (4.75mm)	2	11.3	0.00		
#8 (2.36mm)	2	3.6	0.00		
#16 (1.18mm)	2	2.4	0.00		
#30 (.6mm)	2	2.2	0.00		
#50 (.3mm)	2	2.0	0.00		
#100 (.15mm)	2	1.8	0.00		
#200 (75µm)	2	1.6	0.00	0-3	
Pan	2	0.0	0.00		
Wash Loss (#200/75µm)	2	1.4	0.00		0-3
Total Moisture	2	2.41	0.000		



Basic Quality Statistical Summary Report

Plant S36-Superior Auburn Hills
Product 1022-2NS GR
Specification 2NS GR Spec
Period 07/12/2020 - 07/18/2020

Sieve/Test	Tests	Average	St Dev	Target	Specification
3/8" (9.5mm)	2	100.0	0.00		100-100
#4 (4.75mm)	2	97.2	0.00		95-100
#8 (2.36mm)	2	83.4	0.00		65-95
#16 (1.18mm)	2	67.7	0.00		35-75
#30 (.6mm)	2	48.4	0.00	40-50	20-55
#50 (.3mm)	2	19.6	0.00		10-30
#100 (.15mm)	2	3.5	0.00		0-10
#200 (75µm)	2	0.9	0.00		
Pan	2	0.0	0.00		
FM	2	2.80	0.000	2.7-2.9	2.6-3
Wash Loss (#200/75µm)	2	0.8	0.00		0-3
Total Moisture	2	3.49	0.000		