

Aggregate Optimization Chart

Production Gradation Report

PLANT #: **P11**

Contractor: _____

Sample Date: **6/3/24**

Concrete Grade: **P1M, 3500HP**

Dates Test Represents: **6/4/2024** through **6/10/2024**

MIDOT No.: _____

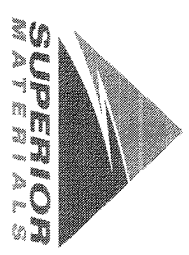
Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
CA	71-47	Presque Isle	900	5.50	2.62	29.3
IA	71-47	Presque Isle	970	5.93	2.62	31.6
NNS	95-013	Smelter Bay	1200	7.26	2.65	39.1
Total Wt			3070			100.0

<----- 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"	91.5	100.0	100.0	97.5	2.5	2.5
1"	29.7	100.0	100.0	79.4	18.1	20.6
3/4"	10.2	98.1	100.0	73.1	6.3	26.9
1/2"	3.9	75.4	100.0	64.1	9.0	35.9
3/8"	2.8	45.2	100.0	54.2	9.9	45.8
#4	1.8	8.4	95.8	40.6	13.6	59.4
#8	1.7	3.4	83.4	34.2	6.5	65.8
#16	1.6	2.6	68.0	27.9	6.3	72.1
#30	1.5	2.3	48.9	20.3	7.6	79.7
#50	1.5	2.2	24.3	10.6	9.7	89.4
#100	1.4	2.1	7.2	3.9	6.7	96.1
LBW	1.2	1.8	1.3	1.4	2.5	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 8% for the 1" sieve when
 a 2" max. size (nom. Max. 1.5") aggregate is used.

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 Suite 500
 Farmington Hills, MI 48336

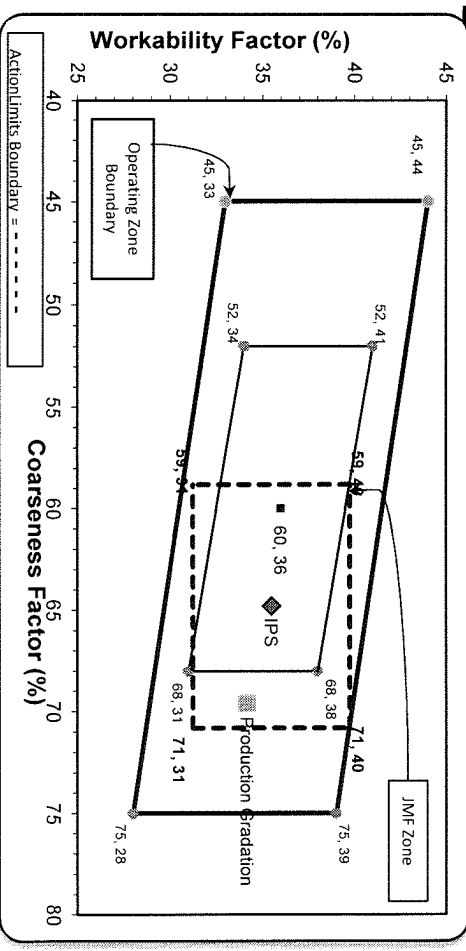


Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Initial Production Sample (IPS)

Coarseness Factor: **70** Workability Factor: **34**

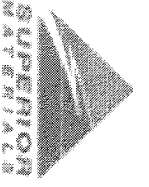
Coarseness Factor: **65** Workability Factor: **36**



Sieve	Cumulative % Passing	% Retained	Cumulative % 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

Approved By: _____



Daily Summary Report

Date Tuesday, June 4, 2024

Sample Id -1178926018

-1989645973

-674902596

Plant

Onsite Jefferson

Onsite Jefferson

Onsite Jefferson

Product

COARSE AGG
P1M LS

2NS GR

INTERMED
AGG P1M LS

Specification

Coarse Agg P1M
LS Target

2NS GR Spec

Intermed Agg P1M
LS Target

Sample Type

QA

QA

QA

Time

08:15

08:35

13:21

2" (50mm)	100.0		100.0
1 1/2" (37.5mm)	91.5		100.0
1" (25mm)	29.7		100.0
3/4" (19mm)	10.2		98.1
1/2" (12.5mm)	3.9		75.4
3/8" (9.5mm)	2.8	100.0	45.2
#4 (4.75mm)	1.8	95.8	8.4
#8 (2.36mm)	1.7	83.4	3.4
#16 (1.18mm)	1.6	68.0	2.6
#30 (.6mm)	1.6	48.9	2.3
#50 (.3mm)	1.5	24.3	2.2
#100 (.15mm)	1.4	7.2	2.1
#200 (75µm)	1.3	1.9	1.9
Pan	0.0	0.0	0.0
FM		2.72	
Wash Loss (#200/75µm)	1.2	1.3	1.8
Total Moisture	0.42	3.76	2.92