

Aggregate Optimization Chart

Production Gradation Report

PLANT #: P11

Sample Date: 6/24/24

Dates Test Represents: 6/25/2024 through 7/1/2024

Concrete Grade: P1M, 3500HP

Contractor: _____

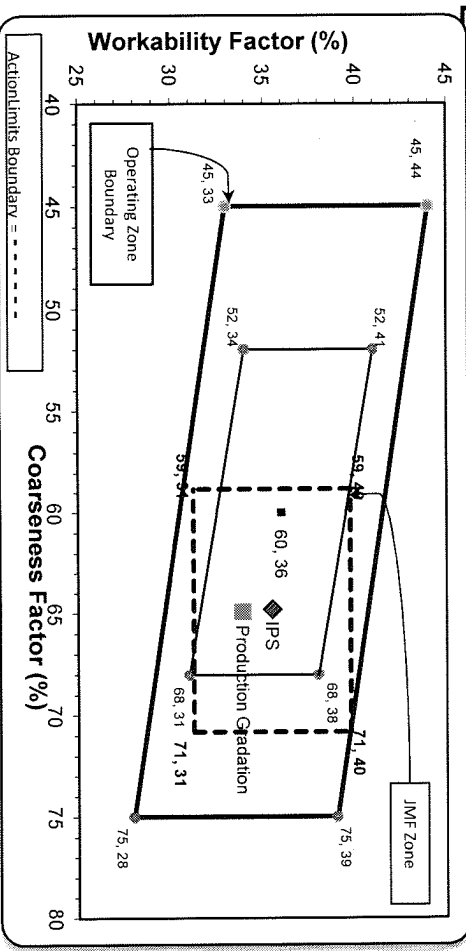
MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	Contribution %
CA	71-47	Presque Isle	770	4.71	2.62	25.1
IA	71-47	Presque Isle	1100	6.73	2.62	35.8
ZNS	63-115	Ray Rd	1200	7.26	2.65	39.1
Total Wt						100.0
Total Wt						18.70

Sieve	CA	IA	ZNS	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"	43.9	100.0	100.0	85.9	14.1	14.1
3/4"	9.8	100.0	100.0	77.4	8.6	22.6
1/2"	1.7	79.4	100.0	68.0	9.4	32.0
3/8"	1.5	49.2	100.0	57.1	10.9	42.9
#4	1.4	6.8	95.9	40.3	16.8	59.7
#8	1.4	2.2	83.8	33.9	6.4	66.1
#16	1.4	1.7	69.2	28.0	5.9	72.0
#30	1.4	1.5	50.5	20.6	7.4	79.4
#50	1.3	1.5	24.3	10.4	10.3	89.6
#100	1.2	1.4	7.4	3.7	6.7	96.3
LBW	1.1	1.3	2.0	1.5	2.2	98.5

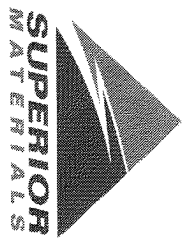
Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 65 Workability Factor: 34



Initial Production Sample (IPS)

Sieve	Coarseness Factor:	Workability Factor:	% Retained	Cumulative % Retained
2"	65	36	0.0	0.0
1.5"			0.6	0.6
1"			15.3	16.0
3/4"			10.5	26.5
1/2"			8.2	34.8
3/8"			7.1	41.8
#4			14.1	55.9
#8			8.6	64.5
#16			6.4	70.9
#30			7.3	78.1
#50			12.2	90.4
#100			7.1	97.4
LBW			1.6	99.0

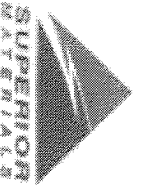


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*Maximum % Retained must be above the 3/8" sieve.
*Any two adjacent sieves must equal 10% except max.
nom. max. #100 and #200 sieves.
*% Retained must be at least 4% for each sieve except max.
nom. max. #100 and #200 sieves.
*% Retained must be at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

PREPARED BY:
SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Tuesday, June 25, 2024

Sample Id	Plant	Product	Specification	Sample Type	Time	2" (50mm)	1 1/2" (37.5mm)	1" (25mm)	3/4" (19mm)	1/2" (12.5mm)	3/8" (9.5mm)	#4 (4.75mm)	#8 (2.36mm)	#16 (1.18mm)	#30 (.6mm)	#50 (.3mm)	#100 (.15mm)	#200 (75µm)	Pan
-1989628059		7919 COARSE AGG P1M LS	Coarse Agg P1M LS Target	QA	07:15	100.0	100.0	43.9	9.8	1.7	1.5	1.4	1.4	1.4	1.3	1.2	1.1	0.0	0.0
-674969604		7920 INTERMED AGG P1M LS	Intermed Agg P1M LS Target	QA	07:20	100.0	100.0	100.0	100.0	79.4	49.2	6.8	2.2	1.7	1.5	1.4	1.3	0.0	0.0
-1018110836		1022 2NS GR	2NS GR Spec	QA	07:30	100.0	100.0	100.0	100.0	100.0	95.9	83.8	69.2	50.5	24.3	7.4	2.0	0.0	0.0
-674964846		1067 26A Mod LS	26A Mod LS Spec	QA	12:17	100.0	100.0	100.0	100.0	94.9	83.5	20.8	5.1	3.3	2.9	2.8	2.7	2.6	0.0
-674966533		1051 6AA LS	6AA LS	QA	12:21	100.0	100.0	98.7	83.8	43.2	22.2	5.2	3.3	2.0	1.7	1.6	1.5	1.32	0.00