

# Aggregate Optimization Chart

Production Gradation Nancy Donahue

**PLANT #:** p11

Sample Date: 2/20/26

Concrete Grade: **S2M, 3500HP**

Dates Test Represents: 2/21/2026 through 2/27/2026

Contractor: \_\_\_\_\_

MDOT No.: \_\_\_\_\_

Agg. Class	Pit #	Source	Weight (SSD)	ft <sup>3</sup>	Specific Gravity	% Contribution
6AA	71-47	Presque Isle	1400	8.56	2.62	45.5
26A	71-47	Presque Isle	400	2.45	2.62	13.0
2NS	63-115	Ray Rd	1280	7.74	2.65	41.6
<b>Total Wt</b>			<b>3080</b>	<b>18.75</b>		<b>100.0</b>

<----- Verify this number is 100%

Sieve	6AA	26A	2NS	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"	96.0	100.0	100.0	98.2	1.8	1.8
3/4"	75.3	100.0	100.0	88.8	9.4	11.2
1/2"	36.1	96.4	100.0	70.5	18.3	29.5
3/8"	18.7	80.2	100.0	60.5	10.0	39.5
#4	3.5	13.9	97.0	43.7	16.8	56.3
#8	2.7	5.3	82.2	36.1	7.6	63.9
#16	2.4	3.3	64.9	28.5	7.6	71.5
#30	2.3	2.8	49.6	22.0	6.5	78.0
#50	2.1	2.6	26.2	12.2	9.8	87.8
#100	2.0	2.4	6.9	4.1	8.1	95.9
LBW	1.7	2.1	1.1	1.5	2.6	98.5

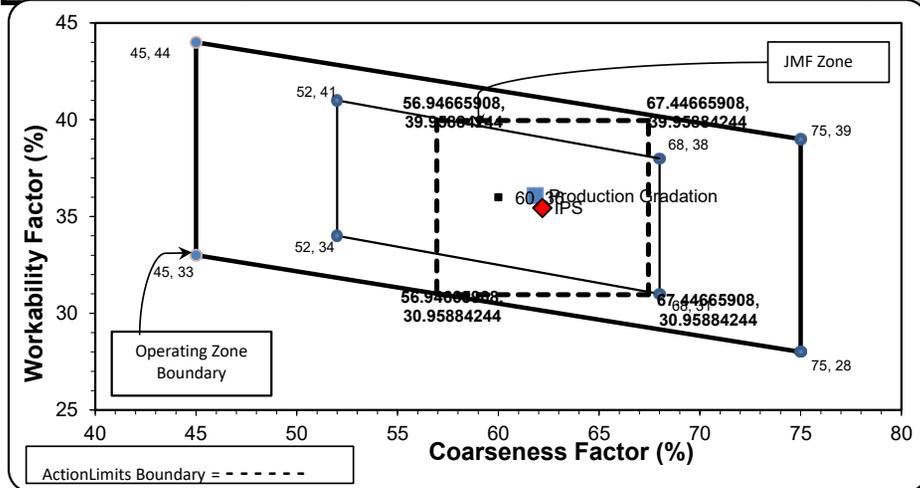
\*Maximum % Retained must be above the 3/8" sieve.  
 \*Any two adjacent sieves must equal 10% except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 4% for each sieve except max., nom. max., #100 and #200 sieves.  
 \*% Retained must be at least 4% for the 3/4" sieve when a 1.5" max. size (nom. Max. 1.0") aggregate is used.



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Production Gradation  Batch Plant Gradations  Aggregate Supplier Gradations

**Coarseness Factor:** **62**      **Workability Factor:** **36**



Initial Production Sample (IPS)

**Coarseness Factor:** **62**  
**Workability Factor:** **35**

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	100.0	0.0	0.0
3/4"	94.0	6.0	6.0
1/2"	70.2	23.7	29.8
3/8"	59.9	10.4	40.1
#4	42.7	17.2	57.3
#8	35.5	7.2	64.5
#16	28.4	7.0	71.6
#30	19.2	9.2	80.8
#50	8.9	10.3	91.1
#100	3.1	5.9	96.9
LBW	1.4	1.7	98.6

PREPARED BY:  
 SM, LLC Technical Service

Approved By:  
 Nancy Donahue