

MIX DESIGN REVIEW CHECKLIST

CS-JN PW-7027 Van Dyke		JMF # P1-DETM-2 - P1 5 inch																														
REVIEWER Dominic Conti		APPROVED ☒	AS NOTED ☐	REJECTED ☐																												
		DATE 06-29-2021																														
THE SUBMITTAL MUST INCLUDE THE FOLLOWING:			YES	NO																												
Form 1976 – Job Mix Formula (JMF) Concrete Field Communication			☒	☐																												
Source of Materials			☒	☐																												
Batch Weights of Constituent Materials (Dry)			☒	☐																												
For Optimized Gradations Only – Individual Aggregate Gradations			☐	☐																												
Specific Gravity of Constituent Materials (Dry - Required, SSD - Optional)			☒	☐																												
<table border="0"> <tr> <td>Typical Ranges:</td> <td>Type I Portland Cement:</td> <td>3.15(approximate)</td> <td>3.15</td> </tr> <tr> <td></td> <td>Class F Fly Ash:</td> <td>2.20 – 2.70</td> <td></td> </tr> <tr> <td></td> <td>Class C Fly Ash:</td> <td>2.55 – 2.80</td> <td></td> </tr> <tr> <td></td> <td>Slag Cement:</td> <td>2.85 – 2.95</td> <td></td> </tr> <tr> <td></td> <td>Coarse Aggregate:</td> <td>2.55 – 2.85</td> <td>2.65</td> </tr> <tr> <td></td> <td>Intermediate Aggregate:</td> <td>2.55 – 2.85</td> <td></td> </tr> <tr> <td></td> <td>Fine Aggregate:</td> <td>2.60 – 2.80</td> <td>2.61</td> </tr> </table>					Typical Ranges:	Type I Portland Cement:	3.15(approximate)	3.15		Class F Fly Ash:	2.20 – 2.70			Class C Fly Ash:	2.55 – 2.80			Slag Cement:	2.85 – 2.95			Coarse Aggregate:	2.55 – 2.85	2.65		Intermediate Aggregate:	2.55 – 2.85			Fine Aggregate:	2.60 – 2.80	2.61
Typical Ranges:	Type I Portland Cement:	3.15(approximate)	3.15																													
	Class F Fly Ash:	2.20 – 2.70																														
	Class C Fly Ash:	2.55 – 2.80																														
	Slag Cement:	2.85 – 2.95																														
	Coarse Aggregate:	2.55 – 2.85	2.65																													
	Intermediate Aggregate:	2.55 – 2.85																														
	Fine Aggregate:	2.60 – 2.80	2.61																													
Dry Loose or Dry Rodded Unit Weight of Coarse Aggregate			☒	☐																												
Water/Cementitious Ratio (w/cm) – 0.45 max			☒	☐																												
Volume (dry, rodded) of coarse aggregate per unit volume concrete – 65 – 75% (inclusive)			☒	☐																												
Aggregate Absorptions and Correction Factors			☒	☐																												
<table border="0"> <tr> <td>Typical Absorptions:</td> <td>Coarse Aggregate:</td> <td>≤ 2.5%</td> <td>1.97</td> </tr> <tr> <td></td> <td>Intermediate Aggregate:</td> <td>≤ 2.5%</td> <td></td> </tr> <tr> <td></td> <td>Fine Aggregate:</td> <td>≤ 2.0%</td> <td>1.1</td> </tr> </table>					Typical Absorptions:	Coarse Aggregate:	≤ 2.5%	1.97		Intermediate Aggregate:	≤ 2.5%			Fine Aggregate:	≤ 2.0%	1.1																
Typical Absorptions:	Coarse Aggregate:	≤ 2.5%	1.97																													
	Intermediate Aggregate:	≤ 2.5%																														
	Fine Aggregate:	≤ 2.0%	1.1																													
Alkali-Silica Reactivity (ASR) testing results for fine aggregate			☒	☐																												
Date of completion within the last 2 years			☒	☐																												
Conforms with one of the methods in c.5.A of 12SP604B			☒	☐																												
STRENGTH, COMPRESSION																																
The Lower Specification Limit (LSL) at 28 days, or			☒	☐																												
70% of the Lower Specification Limit (LSL) at 7 days (Method 1 verification only)			☐	☒																												
SUPPLEMENTAL CEMENTITIOUS MATERIALS (SCM)																																
If Used, Maximum Slag Cement Replacement is 40% (Minimum replacement 25% for P1M and DM)			☐	☒																												
If Used, Maximum Fly Ash Replacement is 40% (Minimum replacement 25% for P1M and DM)			☐	☒																												
If Both Are Used, They Must Not Exceed 40% of Cementitious Material			☐	☒																												

DOCUMENTATION

Air Content	Average Values from Test Data: 04- 23-2020 - 03-02- 2021	6.67	(%)
Slump		5.13	Inch
Compressive Strength		5424	Psi
Concrete Age at Time of Test		28	Days
Verification Method Use (ref. c.5.B.2 of 12SP604B)		1 ☐ 2 ☐ 3 ☒ 4 ☐	

QPL/APPROVED SOURCE CHECK

	YES	NO	N/A
Coarse Aggregate Ottawa Lake - 58-003	☒	☐	☐
Intermediate Aggregate	☐	☐	☒
Fine Aggregate Spring Mill - 47-003	☒	☐	☐
Cement Ash Grove - Mississauga	☒	☐	☐
Fly Ash	☐	☐	☒
Slag Cement	☐	☐	☒
Admixtures Polychem SA-50, KB-1200, Polychem R	☒	☐	☐
Specified Dosage Greater Than Minimum or Within Dosage Range	☒	☐	☐

CEMENTITIOUS CONTENT

Meets Requirements (ref. Table 1 of 12SP604B)	517-611	"564"	☒	☐	
---	---------	-------	-------------------------------------	--------------------------	--

YIELD AND OPTIMIZED GRADATION CHECK

Mix Design Yields (Use Concrete Job Mix Formula Yield Calculator) 27.13	☒	☐	
If Used, Optimized Aggregate Gradation Meets Appendix 1 requirements of 12SP602D	☐	☐	☒

Trial Batch Test Records (expires every 2 years)	☒	☐	☐
Stockpile Management Plan	☒	☐	☐
General Letter of Certification	☒	☐	☐
Material Data Test Reports	☒	☐	☐
Alkali-Silica Reactivity Report (expires every 2 years)	Expires 02-17-2023	☒	☐
Plant NRMCA Certification (expires every 2 years)	Expires 6-3-2022	☒	☐
Aggregate Scale Certificate of Calibration (expires every 6 months)	Expires 09-10-2021	☒	☐
Admixture Dispensing Equipment Check (expires every 90 days)	Expires 09-10-2021	☒	☐
Water Supply Documentation	☒	☐	☐

COMMENTS/NOTES:

- Provide updated certs as required.
- Test data is identical from previous submittal of mix without retarder. Need updated test results.