

SHOP DRAWING TRANSMITTAL



Project: Turnbull School Music Room Addition Project No: 1705
Date: December 10, 2018
To: TALCO Building Innovations Ltd.
Attn: Farah Bano (fbano@tal-co.com)
From: Michelle Cataldo

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|--|--|
| <input type="checkbox"/> Approval | <input type="checkbox"/> Courier |
| <input checked="" type="checkbox"/> Distribution | <input type="checkbox"/> By Hand |
| <input type="checkbox"/> Information and Use | <input type="checkbox"/> Fax |
| <input type="checkbox"/> Review and Comment | <input type="checkbox"/> To Be Picked Up |
| <input type="checkbox"/> Other | <input checked="" type="checkbox"/> e-mail |

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Shop Drawing Submittal: 03 00 00 – Concrete Mix Design
Submitted by: Tomlinson
Drawing Title: Concrete Mix Design Submission (Form A)
Revision No. N/A
Dated: 3-Dec-18
Comments:
Review.

TOMLINSON

Tomlinson Ready Mix

5597 Power Road

Ottawa, Ontario, K1G 3N4

Tel: (613) 835-3413 Fax: (613) 835-3412

Concrete Mix Design Submission (Form A)

Project: Turnbull School Music Room Date: December 3, 2018
 Location/Description: 1132 Fisher Avenue, Ottawa, ON Submitted By: Michel Bourbonnais, EIT
 Contractor: TAL-CO Building Innovations Ltd. Contact: Farah Bano
 Batch Plant: Stittsville Plant Secondary Plant: Rideau & Vars Plant

MIX CODE (Please place order with Mix #)		250FT	321SW	251W	
SPECIFICATION	Application / Element / Location	✓ Footings	✓ Sidewalks, handcurbs, Exterior Slabs	✓ Exterior Foundation Walls and Piers	
	-CSA Exposure Class	N ✓	C-2 ✓	F-2 ✓	
	-Maximum W/CM Ratio	0.63	0.45	0.55	
	-Minimum Specified Strength (MPa)	25MPa ✓	32MPa ✓	25MPa ✓	
	-Nominal Maximum Aggregate Size (mm)	20mm ✓	20mm ✓	20mm ✓	
	-Maximum Slag Replacement (%)	25%	25%	25%	
	-Maximum Silica Fume Replacement (%)	0%	0%	0%	
	-Plastic Air Content (%)	0%	5-8% ✓	4-7% ✓	
Durability Requirements	-Cement Content (if specified) (state OPSS if applicable)	Meets CSA	Meets CSA	Meets CSA	
	-Alkali Aggregate Reactivity				
	Slump Range (mm)	50mm - 110mm ^{75mm}	50mm - 110mm ^{80mm}	50mm - 110mm ^{80mm}	
CONTRACTOR REQUIREMENTS	Strength @ Age (MPa)	25MPa at 28 Days	32MPa at 28 Days	25MPa at 28 Days	
	Specialty				
	Specialty				
	Specialty				
	-Concrete Set (Delay, Normal, Accelerated)	Normal	Normal	Normal	
MATERIALS SECTION	Method of Placement				
	Material	Source Info.			
	Cement	Lafarge-Bath	GU	(kg/m3)	X
	Cement	Lehigh - Kilmar	GU	(kg/m3)	X
	SCM	Lehigh-Hamilton	Slag	(kg/m3)	X
	Water	Well	Well	(l/m3)	X
	Fine Agg.	Burnside-Howe-Ross	Inv. # K03-076-00	(kg/m3)	X
	Coarse Agg.	Tomlinson-Stittsville	Inv. # K03-042-00	(kg/m3)	X
	A.E.A.	BASF	MasterAir AE200	(ml/100 kg)	X
	W.R.D.A.	BASF	MasterPozzolith 210	(ml/100 kg)	X
	W.R.	BASF	MasterSet R100	(ml/100 kg)	X
H.R.W.R.	BASF	MasterGlenium 7500	(ml/100 kg)	X	
N.C.A.	BASF	MasterSet FP 20	(l/m3)		

Form Submitted By: _____
 Print Name: Michel Bourbonnais, EIT Signature: *Michel Bourbonnais* Date: December 3, 2018
 Contractor's Representative: _____
 Print Name: _____ Signature: _____ Date: _____

- Notes 1) The "Concrete Supplier" provides to the contractor a valid "Certificate of Concrete Production Facilities" as issued by the RMCAO (copy available upon request). Check www.rmcao.org for an updated list of certified concrete plants.
 2) The "Concrete Supplier" certifies that all materials incorporated in the mix designs meet current CSA A23.1 requirements.
 3) Concrete Testing shall incorporate www.cmats.com and shall be used by the testing company.
 4) Concrete tests not done according to CSA Standards shall not be accepted for any basis of measurement.
 5) The Owner shall be responsible for performance "off the chute" if the owner specifies any material proportion(s).
 *) Concrete Cylinders as per CSA A23.1 and concrete curing temperatures must remain at 20 °C or above

SHOP DRAWING REVIEW	
CUNLIFFE & ASSOCIATES	
<small>This review is for the sole purpose of determining general conformance with the Structural Drawings. This review does not mean that Cunliffe & Associates approves the detail design inherent in the shop drawings. The responsibility for which remains with the Contractor submitting the shop drawings. Our review does not relieve the contractor of his responsibility for errors or omissions in the shop drawings or meeting the requirements of the Contract Documents. The Contractor is responsible for dimensions to be confirmed and correlated at the job site and information that pertains solely to fabrication processes or to techniques of construction installation and for co-ordination of the work of all subtrades.</small>	
<small>SHOP DRAWING REVIEW</small> REVIEWED AS NOTED <input checked="" type="checkbox"/> REVIEWED AS NOTED <input type="checkbox"/> REVISIONS REQUIRED <input type="checkbox"/> HOBIN	CHK'D BY NH DATE 12/07/18

TOMLINSON

Tomlinson Ready Mix

5597 Power Road
Ottawa, Ontario, K1G 3N4
Tel: (613) 835-3413 Fax: (613) 835-3412

Concrete Mix Design Submission (Form A)

Project: Turnbull School Music Room Date: December 3, 2018
 Location/Description: 1132 Fisher Avenue, Ottawa, ON Submitted By: Michel Bourbonnais, EIT
 Contractor: TAL-CO Building Innovations Ltd. Contact: Farah Bano
 Batch Plant: Stittsville Plant Secondary Plant: Rideau & Vars Plant

MIX CODE (Please place order with Mix #)		351W	250FL	250FT??
Application / Element / Location		Exterior Retaining Wall	Interior Slabs	
SPECIFICATION	-CSA Exposure Class	C-1 ✓	N	
	-Maximum W/CM Ratio	0.4	0.6	
	-Minimum Specified Strength (MPa)	35MPa ✓	25MPa	
	-Nominal Maximum Aggregate Size (mm)	20mm ✓	20mm	
	-Maximum Slag Replacement (%)	25%	0%	
	-Maximum Silica Fume Replacement (%)	0%	0%	
	-Plastic Air Content (%)	5-8% ✓		
Durability Requirements				
-Cement Content (if specified) (state OPSS if applicable)		Meets CSA	Meets CSA	Meets CSA
-Alkali Aggregate Reactivity				
CONTRACTOR REQUIREMENTS	Slump Range (mm)	<u>50mm - 110mm</u> ^{80mm}	50mm - 110mm	
	Strength @ Age (MPa)	35MPa at 28 Days	25MPa at 28 Days	
	Specialty			
	Specialty			
	Specialty			
	-Concrete Set (Delay, Normal, Accelerated)	Normal	Normal	Normal
Method of Placement				
MATERIALS SECTION	Material	Source Info.		
	Cement	<u>Lafarge-Bath</u>	<u>GU</u>	(kg/m3)
	Cement	<u>Lehigh - Kilmar</u>	<u>GU</u>	(kg/m3)
	SCM	<u>Lehigh-Hamilton</u>	<u>Slag</u>	(kg/m3)
	Water	<u>Well</u>	<u>Well</u>	(l/m3)
	Fine Agg.	<u>Burnside-Howe-Ross</u>	<u>Inv. # K03-076-00</u>	(kg/m3)
	Coarse Agg.	<u>Tomlinson-Stittsville</u>	<u>Inv. # K03-042-00</u>	(kg/m3)
	A.E.A.	<u>BASF</u>	<u>MasterAir AE200</u>	(ml/100 kg)
	W.R.D.A.	<u>BASF</u>	<u>MasterPozzolith 210</u>	(ml/100 kg)
	W.R.	<u>BASF</u>	<u>MasterSet R100</u>	(ml/100 kg)
	H.R.W.R.	<u>BASF</u>	<u>MasterGlenium 7500</u>	(ml/100 kg)
N.C.A.	<u>BASF</u>	<u>MasterSet FP 20</u>	(l/m3)	

Form Submitted By: _____
 Print Name: Michel Bourbonnais, EIT Signature: *Michel Bourbonnais* Date: December 3, 2018
 Contractor's Representative: _____
 Print Name: _____ Signature: _____ Date: _____

- Notes
- The "Concrete Supplier" provides to the contractor a valid "Certificate of Concrete Production Facilities" as issued by the RMCAO (copy available upon request). Check www.rmcao.org for an updated list of certified concrete plants.
 - The "Concrete Supplier" certifies that all materials incorporated in the mix designs meet current CSA A23.1 requirements.
 - Concrete Testing shall incorporate www.cmats.com and shall be used by the testing company.
 - Concrete tests not done according to CSA Standards shall not be accepted for any basis of measurement.
 - The Owner shall be responsible for performance "off the chute" if the owner specifies any material proportion(s).
 - Concrete Cylinders as per CSA A23.1 and concrete curing temperatures must remain at 20 °C or above

SHOP DRAWING REVIEW
CUNLIFFE & ASSOCIATES

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REVIEWED AS NOTED REVIEWED RESUBMIT

CHK'D BY NH
 DATE 12/07/18

SHOP DRAWING REVIEW
 REVIEWED AS NOTED REVIEWED RESUBMIT
 This review is for the sole purpose of determining general conformance with the Structural Drawings and does not constitute approval of the design. The contractor is responsible for meeting the requirements of the Contract Documents. The contractor is responsible for dimensions to be confirmed and correlated at the job site and information that pertains solely to fabrication processes or to techniques of construction installation and for co-ordination of the work of all subtrades.
 Michelle Canale Date: Dec. 10, 2018
 HOBIN ARCHITECTURE INCORPORATED

**CERTIFICATE OF
READY MIXED CONCRETE
Production Facilities**

is awarded to

**TOMLINSON READY MIX
Rideau Road Plant**

(a member of the Ready Mixed Concrete Association of Ontario) on the basis of a signed statement given by an RMCAO Approved Professional Engineer registered in the Province of Ontario, that he/she has certified the ready mixed concrete production facilities of the above-named plant in accordance with the current RMCAO Audit and Check List for the Certification of Ready Mixed Concrete Production Facilities and that the facilities meet these requirements,

and

on the basis of a signed statement by a responsible official of the Company above-named, that the facilities referred to above will be maintained to the requirements of this Certification and the By-Laws of the Ready Mixed Concrete Association of Ontario.



RMCAO Chair

May 18, 2019

Expiry Date



R1025

**CERTIFICATE OF
READY MIXED CONCRETE
Production Facilities**

is awarded to

**TOMLINSON READY MIX
Vars Plant**

(a member of the Ready Mixed Concrete Association of Ontario) on the basis of a signed statement given by an RMCAO Approved Professional Engineer registered in the Province of Ontario, that he/she has certified the ready mixed concrete production facilities of the above-named plant in accordance with the current RMCAO Audit and Check List for the Certification of Ready Mixed Concrete Production Facilities and that the facilities meet these requirements,

and

on the basis of a signed statement by a responsible official of the Company above-named, that the facilities referred to above will be maintained to the requirements of this Certification and the By-Laws of the Ready Mixed Concrete Association of Ontario.



RMCAO Chair

June 8, 2019

Expiry Date



R1025

**CERTIFICATE OF
READY MIXED CONCRETE
Production Facilities**

is awarded to

**TOMLINSON READY MIX
Stittsville Plant**

(a member of the Ready Mixed Concrete Association of Ontario) on the basis of a signed statement given by an RMCAO Approved Professional Engineer registered in the Province of Ontario, that he/she has certified the ready mixed concrete production facilities of the above-named plant in accordance with the current RMCAO Audit and Check List for the Certification of Ready Mixed Concrete Production Facilities and that the facilities meet these requirements,

and

on the basis of a signed statement by a responsible official of the Company above-named, that the facilities referred to above will be maintained to the requirements of this Certification and the By-Laws of the Ready Mixed Concrete Association of Ontario.



RMCAO Chair

June 8, 2019

Expiry Date



R1025