

100-2015 ADDENDUM No. 1

# **REFURBISHMENT OF SHERBRROK POOL – 381 SHERBROOK**

# **URGENT**

# PLEASE FORWARD THIS DOCUMENT TO WHOEVER IS IN POSSESSION OF THE BID OPPORTUNITY

ISSUED: March 9, 2015 BY: Cindy Cousin, P.Eng. TELEPHONE NO. (204) 896-1209

THIS ADDENDUM SHALL BE INCORPORATED INTO THE BID OPPORTUNITY AND SHALL FORM A PART OF THE CONTRACT DOCUMENTS

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 8 of Form A: Bid may render your Bid non-responsive.

# PART D – SUPPLEMENTAL CONDITIONS

Add: D2.3 The City of Winnipeg will maintain and cover the cost of the support scaffolding currently in place, until such time as structural repairs to the building columns have been completed and it is safe to remove these supports. The Contractor will be responsible for any changes, modifications or additions to this scaffolding which can be arranged directly with North Star Scaffolding

# PART E – SPECIFICATIONS

Revise: E2.1 to read: If asbestos or other hazardous materials not otherwise identified are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

The existing roofing consists of a 4" deep asbestos cement roof deck; vapour retardant; 2" of insulation; and built-up roofing. The Work will require a limited number of penetrations through this asbestos-containing material. Asbestos abatement requirements for this work will be the responsibility of the Contractor.

# **DIVISION 08:**

# Section 08 33 13

Add: 2.1.3 The following product(s) have been approved as an alternative provided they meet all requirements of drawings and specifications: Model CD8-1 – The Cookson Company Inc. and Model 560 Security Shutter – Pentagon Security Shutters

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## **DIVISION 10:**

### Section 10 21 13

Add: 2.1.1 The following product(s) have been approved as an alternative provided they meet all requirements of drawings and specifications: Solid Plastic Partitions, Head Rail Braced Series – Hadrian Manufacturing Inc.

## **DIVISION 22:**

### Section 22 10 10 – Plumbing Pumps

- Add: 2.1.8 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (PU-3, PU-4) Bell & Gossett.
- Add: 2.2.9 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (PU-5) Taco.

## Section 22 30 05 – Domestic Water Heaters

Add: 2.3.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (HWT-1 & HWT-2) – Fulton.

## Section 22 42 01 – Plumbing Specialties and Accessories

- Add: 2.1.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EXP-1) Taco.
- Add: 2.2.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Roof Drains) Mifab Products.
- Add: 2.5.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (BFP-1) Beeco.
- Add: 2.6.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (BFP-2) Beeco.

### Section 22 42 03 – Commercial Fixtures

- Add: 2.1.6 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-1) Kohler K-4405-0, K-13516.
- Add: 2.2.6 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-2) Kohler K-4405-0, K-13516.
- Add: 2.3.4 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-3) Kohler K-3531-T.
- Add: 2.7.4 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-7) Kohler K-4991-et, K-13520.
- Add: 2.10.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-10) Mifab Products.
- Add: 2.11.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-11) Mifab Products.
- Add: 2.12.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (P-12) Mifab Products.

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# **DIVISION 23:**

## Section 23 09 33 - Electric and Electronic Control for HVAC

Revise:	3.15.1.1.1.3 to read:	Return air temperature	
Add:	3.15.1.1.1.9 Supply air Fan Start / Stop		
Add:	3.15.1.1.1.10 Outdoor air Fan Start / Stop		
Add:	3.15.1.1.1.1 Mixed air dampers minimum position.		
Add:	3.15.1.1.1.12 Return air humidity and humidity set-point. De-humidification start / stop signal.		
Revise:	3.15.1.1.2.1 to read:	AHU blower (supply and outdoor air fans) status. (Section 23 09 33 to provide current sensing relays and associated control wiring in AHU.)	
Revise:	3.15.1.1.2.2 to read:	Filter differential pressures. (Section 23 09 33 to provide differential pressure sensors and associated control wiring.)	
Revise:	3.15.1.1.2.3 to read:	Return Air temperature (By Section 23 09 33)	
Revise:	3.15.1.1.2.4 to read:	Return air humidity. (By Section 23 09 33)	
Revise:	3.15.1.1.2.5 to read:	Outdoor air temperature (Through CTRAC BacNet interface)	
Revise:	3.15.1.1.2.6 to read:	Outdoor air humidity. (By Section 23 09 33)	
Revise:	3.15.1.1.2.7 to read:	Mixed Air temperature (Through CTRAC BacNet interface)	
Revise:	3.15.1.1.2.8 to read:	Supply Air temperature. (Through CTRAC BacNet interface)	
Revise:	3.15.1.1.2.9 to read:	Damper positions. (Through CTRAC BacNet interface)	

#### Section 23 21 14 – Hydronic Specialties

Add:	2.1.3	The following product(s) have been approved as equal provided they meet all requirements of
		drawings and specifications: (EXP-2) - Bell & Gossett, Taco

- Revise: 2.3.2 to read "Air separator shall be heavy duty cast iron construction with female threaded connection for air vent and 1/2" female threaded connection for expansion tank." replace with "Air separator shall be inline design, carbon steel construction, 4" flanged connections, 3/4" female NPT threaded connection for air vent and 1/2" female NPT threaded connection for expansion tank."
- Revise: 2.3.3 to read "Acceptable Products: "Watts" Model: FV-4M1 for automatic air vent and "Watts" Model: AS-M1 for air separator or approved equivalent in accordance with B7." Replace with "Acceptable Products: "Watts" Model: FV-4M1 for automatic air vent and "Flex-Hose" Model: PurgAir for air separator or approved equivalent in accordance with B7."
- Add: 2.3.4 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Air Vents) Bell & Gossett, Axiom
- Add: 2.5.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Chemical Pot Feeder System) - Axiom
- Add: 2.6.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Filter) - Axiom

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Add: 2.7.3 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Flow Indicator) - Axiom

# Section 23 21 23 – Hydronic Pumps

Add: 2.1.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (PU-1, PU-2) - Taco

### Section 23 33 15 - Dampers - Operating

- Add: 2.1.2 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (Backdraft Dampers) Ventex
- Add: 2.2.17 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (MD-1) Alumavent
- Add: 2.3.16 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (MD-2) Alumavent

#### Section 23 34 00 - HVAC Fans

- Add: 2.2.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-1) Loren Cook, Twin City Fan
- Add: 2.3.8 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-2) Loren Cook, Twin City Fan
- Add: 2.4.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-3) Loren Cook, Twin City Fan
- Add: 2.5.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-4) Loren Cook, Twin City Fan
- Add: 2.6.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-5) Twin City Fan
- Add: 2.7.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (EF-6) Loren Cook, Twin City Fan

#### Section 23 36 00 - Air Terminal Units

- Add: 2.1.10 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (VAV-1 to VAV-4) Nailor, Titus
- Add: 2.2.10 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (HC-1 to HC-2) Daikin

## Section 23 37 13 – Diffusers, Registers, and Grilles

Add: 2.3.2 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (G-1 to G-18) - Nailor, Titus

#### Section 23 37 20 – Louvers, Intakes and Vents

Add: 2.1.10 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (L-1 to L-2) - Ventex

### Section 23 52 00 – Heating Boilers

Add: 2.1.15 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (B-1 & B-2) - Vapor Power

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### Section 23 57 00 – Heat Exchangers for HVAC

Add: 2.1.5 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (HX-1 & HX-2) - Taco

# Section 23 73 11 – Packaged Air Handling Units

Revise: 2.1.4.3 to read

"Venting: Standard outdoor DJ provided with factory supplied flue." replace with "Venting: standard outdoor DJ provided with factory supplied flue. Flues are to be extended: 8 feet on preheat burner and 4 feet on final burner."

#### Revise: 2.1.7 to read

"Compressors shall be high efficiency variable speed hermetic type, designed to continuously provide load matching operation between 30 and 90 Hz." replace with "Compressors shall be hermetic type."

#### Revise: 2.1.8.3 to read

## **C-TRAC with Carel Controller**

The Carel Controller will provide the following functions: status, monitoring, command and reset signals. Based on EMS Communication of BACnet MSTP. Normal operation of the unit shall allow the BACnet controller to reset the discharge air temperature, start/stop the unit, **re-set damper position**.

#### Revise: 2.1.8.4.6 to read

The CTRAC shall provide the following to DDC system

- .1 Outdoor air temperature
- .2 Mixed Air temperature
- .3 Supply Air temperature.
- .4 Damper positions
- Add: 2.1.8.5 AHU-1 vendor shall provide on-site support to the controls contractor during commissioning of the control system.

#### Add: 2.2.9 "Mechanical Cooling:

Compressors shall be high efficiency variable speed hermetic type, designed to continuously provide load matching operation between 30 and 90 Hz. Compressor is set on resilient neoprene mounts and complete with live voltage break internal overload protection and internal pressure relief valve. External crankcase heaters locked out during compressor operation.

.1 Air Cooled Condenser

Condenser coils shall be copper tube type, mechanically expanded into aluminum fins. Coils shall be factory tested with air at 300 psig (2070 kPa) while immersed in an illuminated water tank.

Condenser fans shall be direct driven propeller type arranged for vertical draw through airflow. Motors shall be weather resistant type, with integral overload protection and designed for vertical shaft condenser fan applications. Fan and motor assemblies shall be mounted on a formed orifice plate for optimum efficiency with minimum noise level.

Condenser fan shall be fully housed fan with protective screen and fluted blades for optimum efficiency with minimum noise level.

Condenser to form an integral part of the unit.

.2 Packaged Air Conditioning Units

Packaged units shall be <sub>c</sub>ETL, ETL<sub>US</sub> approved and operate down to 50°F(10°C) as standard. Where applicable, multiple refrigeration circuits shall be separate from each other. Refrigeration circuits shall be complete with liquid line filter-driers, and service ports fitted with Schraeder fittings. Units with over 6 Ton hermetic compressors and all units with semi-hermetic compressors shall also incorporate load compensated thermal expansion valves with external equalizers and combination sight glass moisture indicators. Semi-hermetic compressor units shall have condensers designed for 15°F (8°C) liquid subcooling and be equipped with suction line filters and liquid line manual shutoff valves. The complete piping system shall be purged and pressure tested with dry nitrogen, then tested again under vacuum. Each system shall be factory run and adjusted prior to shipment.

Packaged units shall be supplied with R-410 refrigerant.

Controls for hermetic compressor units shall include compressor and condenser fan motor contactors, supply fan contactors and overload protection, control circuit transformer, cooling relays, ambient compressor lockout, automatic reset low pressure controls, and manual reset high pressure controls on compressors over 6 tons. Head pressure actuated fan cycling control shall be provided on all multiple condenser fan units.

Provide five minute anti-cycle timers.

Provide interstage time delay timers.

Provide hot gas bypass on the lead compressor to maintain adequate suction pressure in the event of low loads.

Compressors shall be located on the side of the unit in a service enclosure complete with hinged access doors for ease of service."

- Add: 2.2.10 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (AHU-2) Daikin
- Add: 2.3.7 The following product(s) have been approved as equal provided they meet all requirements of drawings and specifications: (AHU-3, AHU-4) Daikin

## Section 23 82 39 - Unit Heaters

- Add: 2.1.8 The following products have been approved as equal provided they meet all requirements of drawings and specifications: (UH-1, UH-2, UH-3) Rittling
- Add: 2.2.8 The following products have been approved as equal provided they meet all requirements of drawings and specifications: (FF-1 to FF-7) Rittling
- Add: 2.3.8 The following products have been approved as equal provided they meet all requirements of drawings and specifications: (BB-1 to BB-7) Rittling

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# Section 26 05 01 - Common\_Work\_Results

- Add: 1.9 SHORT CIRCUIT/COORDINATION/ARC FLASH STUDY
- Add: 1.9.1 Provide a Short Circuit/Coordination/Arc Flash Study for all new distribution equipment including 120/208V transformers. The study shall include Arc Flash approach boundaries, incident energy levels, and personal protective equipment (PPE) requirements. Submit a copy of the Short Circuit/Coordination/Arc Flash Study to the Contract Administrator with distribution shop drawings and include one copy in each Maintenance Manual.
- Add: 1.9.2 Ensure circuit protective devices such as over current trips, relays, fuses, are installed to values and settings as recommended in the Study.
- Add: 1.9.2 Ensure equipment labels are provided indicating Arc Flash information for each piece of studied equipment