



ADDENDUM 8 BID OPPORTUNITY 742-2005

WINNIPEG WATER TREATMENT PROGRAM – SUPPLY AND INSTALLATION OF WATER TREATMENT PLANT PROCESS MECHANICAL AND ELECTRICAL

ISSUED: June 14, 2006

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URGENT

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

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

Template Version: A20050506

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 10 of Form A: Bid may render your Bid non-responsive.

PART D – SUPPLEMENTAL CONDITIONS

- Add: D2.2(c)(xv): Where piping leaves the WTP building, the Mechanical Contractor shall supply and install piping to a point 1m outside the building envelope or foundation wall.
- Revise: D2.2(c)(xiv) to read: Supply and installation of any concrete grouting required for the support of mechanical Plant and Materials and the supply and installation of reinforced concrete as specified in Section 03301 for the filter underdrains specified in D2.2(a)(iv).
- Clarification: With reference to D2.5 and shop drawing information provided for DAF equipment: the grout specified for the beach plate in the Supply Contractor's shop drawings shall be all purpose filler grout.
- Add: D3.3(oooo) **Secure Storage Facility** means an off-site storage facility located within 50km of the Site and in which Material designated for the Work, may be safely stored by the Contractor before being subsequently fabricated or delivered to Site. This Secure Storage Facility is to be secured and title for all material stored in this facility shall be in the name of the City. A Secure Storage Facility may not be a part of a facility on the premises of the Contractor.
- Add: D3.3(pppp) **CDACS** means central data acquisition system also referred to as SCADA and refers to the I&C system supplied and installed pursuant to Division 17.
- Add: D3.3(qqqq) **BMS** or **BAS** means the building automation system supplied and installed pursuant to Sections 15900, 15901 and 15902.
- Add: D23A **SECURE STORAGE FACILITY**
- Add: D23A.1 Where Material designated for the Work is stored in a Secure Storage Facility and has been paid for by the City pursuant to D27.4(b):
- Add: D23A.1(a) A maximum of 10% of the cumulative invoiced cost of all stored Material may be removed from this Secure Storage Facility for fabrication or delivery to the Site, at any given time.

- Add: D23A.1(b) When Material has been fabricated and returned to the Secure Storage Facility or has been installed, then additional Material may be removed from the Secure Storage Facility, up to the maximum amount specified in D23A.1(a).
- Add: D23A.2 Material located in a Secure Storage Facility shall not be removed without the written approval of the Contract Administrator.
- Add: D27.4: Further to GC: 12.1, for the carbon steel pipe scheduled in Section 15200-03, 15200-04 and 15200-21 the Contractor will be paid in accordance with D27.1(a) and either:
- Add: D27.4(a) for the supplied and installed cost pursuant to GC:12.1, or
- Add: D27.4(b) for delivery to and storage in a Secure Storage Facility as follows:
- Add: D27.4(b)(i) 90% of the invoiced cost of Material will be paid upon the transfer of title to the City via an original bill of sale and proven delivery to the Secure Storage Facility. The Contractor shall provide the Contract Administrator with a complete inventory of all Material supplied to the Secure Storage Facility and attach this inventory to a completed Form 100 prior to any payment. All costs associated with the handling of material supplied by the Contractor to and from the Secure Storage Facility and transportation to the Site or any other location for fabrication will be incidental to the Work.
- Add: D27.4(b)(ii) the remaining 10% of the invoiced cost will be paid upon satisfactory installation of the materials.
- Add: D27.4(c) The invoiced cost used to determine payment pursuant to D27.4(b) shall be based on the cost invoiced to the Contractor for the Materials (F.O.B. the Secure Storage Facility).

PART E – SPECIFICATIONS

Section 11251

- Revise: 2.2.1.10 to read: FRP access platforms as shown on drawing WC-S7111 will be supplied and installed by others.

Section 11374

- Revise: 2.2.12 to read: Supply and install local NEMA/CSA 12 control panels as specified in Section 16991 – Control Panels.

Section 15200-000

- Revise: 3.19.1 to read: All stainless steel pipe shall be pickled and passivated by the Contractor in accordance with any method described in ASTM A380. This shall include but not be limited to the following:
- Add: 3.19.1.1 Degreasing to remove oil and grease films,
- Add: 3.19.1.2 Pickling to chemically clean the surface
- Add: 3.19.1.3 Passivating to form an oxide film
- Add: 3.19.1.4 Testing to ensure successful treatment.

Section 15202

- Delete: 2.5.5.3
- Add: 2.5.4.13 Type V302 Ball Valve for Oxygen Service, 50 mm or smaller
- Add: 2.5.4.13.1 ANSI Class 150 flanged style, ASTM A276 GR 316 or ASTM A351/A351M GR CF8M stainless steel body and end piece, full port ASTM A276 Type 316 stainless steel ball, reinforced PTFE seats, stainless steel stem, stainless steel lever operator with vinyl grip.
- Add: 2.5.4.13.2 Acceptable Manufacturers: Conbraco Apollo(87-200 Series), CFF (SS3 Series), Kitz(UTBZM Series).
- Clarification: With reference to 2.5.5.3: Plug valves shall not be used for oxygen service.
- Add: 2.5.6.8 Type 502 Butterfly Valve for Oxygen Service, larger than 50 mm
- Add: 2.5.6.8.1 ANSI Class 150 flanged or wafer style, high performance type, Type 316 stainless steel body, Type 316 stainless steel single or double offset disc, Type 316 stainless steel shaft and taper pins, PTFE seat, PTFE stem packing, stainless steel with PTFE thrust washer.
- Add: 2.5.6.8.2 Acceptable Manufacturers: Dezurik (BHP Series), Fisher (A41 Series), W-K-M Dynacentric HPBV.

Section 15202-02(R3)

Revise the following rows of the Manual Valve Schedule:

P&ID Number	Tag Number	Valve Type	Valve Type Number	Commodity	Size (mm)	Valve Location	Maximum Working Pressure (kPa)	Comments/ Control Features
WO - P0003	HV - O030A	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O030B	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O031A	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O031B	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O032A	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O032B	Butterfly	V502	GOX	75	Exposed	500	
WO - P0003	HV - O032C	Butterfly	V502	GOX	75	Exposed	500	
WO - P0003	HV - O119A	Butterfly	V502	GOX	75	Exposed	500	
WO - P0003	HV - O139A	Ball	V302	GOX	50	Exposed	500	
WO - P0003	HV - O159A	Butterfly	V502	GOX	75	Exposed	500	

Section 15830-01(R2)

Replace Section 15830-01(R2) with Section 15830-01(R3) included in this Addendum. Entries for EF-H075 and EF-H076 have been revised.

Section 15900-01

Clarification: With reference article .11 and to the I/Os listed on HVAC Schematic drawings: The Contractor shall provide individual outputs from panel HCP-H030 (drawing WC-H0131) to the SCADA system from panel. The SCADA control panel will be located in Electrical Room No. 2 within 3m of HCP-H030. Terminations within HCP-H030 will be provided by Division 16.

Section 16030

Revise: 1.1.4.4 to read: Communication systems installed under this Contract.

Section 16123

Delete this Section.

Clarification: The supply and installation of the voice and data systems in the Administration Area are not part of the Work.

Section 16426

Add: 2.7.2 Motor protection relays shall be GE Multilin model F60-G03-HCH-F8F or approved equal.

Section 16321

Revise: 2.17.2 to read: Equip transformer with a GE Multilin model T60-G03-HCH-F8H-H6C-M8F transformer protection relay as per Single Line Diagrams. Connect the "shut-down" alarm contact back to the 5kV Switchgear unit controlling the power feed to the transformer.

Section 16814

Revise: 2.3.1 to read: For motors 150 hp and above provide a GE Multilin M60-G03-HCH-F8F motor protection relay.

Section 16820

Delete: 3.3.1

Section 16903-01(R1)

Clarification: Local Control Panels (LCPs) listed in the Power Cable Schedule but not shown on the Drawings shall be located within 3m of the equipment which they control. This includes, but is not limited to, the following:

Panel Number	Located Within 3m of:	Drawing Reference
LCP-H700A	P-H702A	WA-E0102
LCP-H600A	CMP-H601A	WC-H0132
LCP-H600B	CMP-H602A	WC-H0132
LCP-A41	ERH-H072	WA-E0145
LCP-C001	PPU-C001	WC-E0112
LCP-O510A	CDU-O510A	WO-E0132
LCP-O520A	CDU-O520A	WO-E0132
LCP-O530A	CDU-O530A	WO-E0132
LCP-UPS-31	UPS-H31	WC-E0131

Section 16903-02(R1)

Replace Section 16903-02(R1) with Section 16903-02(R2).

Clarification: In order to avoid duplication, communication cables that have been specified on the automation schedule have been deleted in 16903-02(R2).

Section 17010

Clarification: With reference to 1.1.6.5: The Contractor shall provide the loop drawings for Vendor Packages supplied under any division of these Specifications. For City Supplied Equipment, the City will provide loop drawings showing loop information within the contract limits of the City Supplied Equipment. The Contractor shall complete these loop drawings for City Supplied Equipment by adding all loop information for Materials installed under any division of these Specifications.

Section 17600-A(R1)

Replace Section 17600-A(R1) with Section 17600-A(R2).

Section 17701-A(R1)

Revise: Instrument I164 specifications to read:

INSTRUMENT SPECIFICATION NUMBER:	I164
DEVICE:	Particle Counter
TAG:	Refer to Instrument Index, Section 17700
SERVICE:	Filtered Water
MAXIMUM PARTICLE CONCENTRATION	<i>0-2500 particles/ml</i>
PARTICLE SIZE RANGE	<i>1-150 micron</i>
OUTPUT:	<i>4 number 4-20 mA DC output channels</i> Channel 1 2-5 micron Channel 2 5-15 micron Channel 3 15-50 micron Channel 4 50 micron or larger <i>Dedicated fault relay output</i>
RESOLUTION	<i>5% at 10 microns</i>
MEASURING METHOD	<i>Pulse height analyzing</i>
POWER SUPPLY:	120 VAC, 60 Hz
INDICATION:	Local indication of Particle Count, <i>sample flow rate.</i>
ENCLOSURE:	NEMA 4X transmitter housing. Wall-mount sensor and transmitter.
SAMPLE CONNECTIONS MANUFACTURER AND MODEL:	6mm (1/4") <i>IBR (Inter Basic Resources Inc) Model WPCS</i> Hach 2200 PCX Chemtrac

Appendix A

Replace Appendix A dated March 31, 2006 with Appendix A dated June 2, 2006.

DRAWINGS

The following Drawings have been revised and form part of this Addendum:

<u>Consultant Drawing No.</u>	<u>City Drawing No.</u>	<u>Drawing Title</u>
WF-P0001	1-0601F-G-P0001-001-01D	PROCESS - FILTER No. 1 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0002	1-0601F-G-P0002-001-01D	PROCESS - FILTER No. 2 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0003	1-0601F-G-P0003-001-01D	PROCESS - FILTER No. 3 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0004	1-0601F-G-P0004-001-01D	PROCESS - FILTER No. 4 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0005	1-0601F-G-P0005-001-01D	PROCESS - FILTER No. 5 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0006	1-0601F-G-P0006-001-01D	PROCESS - FILTER No. 6 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0007	1-0601F-G-P0007-001-01D	PROCESS - FILTER No. 7 - PROCESS AND INSTRUMENTATION DIAGRAM
WF-P0008	1-0601F-G-P0008-001-01D	PROCESS - FILTER No. 8 - PROCESS AND INSTRUMENTATION DIAGRAM
WO-P0010	1-0601O-G-P0010-001-01D	OZONATION AREA - OZONE CONTACTOR No. 1 - PROCESS AND INSTRUMENTATION DIAGRAM