



291-2006 ADDENDUM 2

NORTH END WATER POLLUTION CONTROL CENTRE CENTRATE NUTRIENT TREATMENT – NITROGEN REMOVAL FACILITY

URGENT

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

ISSUED: June 26, 2006
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**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20050301

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 A – BID SUBMISSION

Replace: 291-2006 Bid Submission with 291-2006 Addendum 2 - Bid Submission. The following is a summary of changes incorporated in the replacement Bid Submission:

Form B (R1): Revise Items No. 2 and 5 to 10 inclusive.

PART E – SPECIFICATIONS

Section 01010 Revise: Clause 1.1.2.3 “sequencing batch reactor” to read “Nitrogen Removal Facility”

Section 01010 Revise: Clause 1.1.2.4 “Electrical Scope of Work” to read “Scope of Electrical Work”

Section 01010 Revise: Clause 1.3.1.3 “mechanical” to read “process/mechanical”

Section 01010 Revise: Clause 1.3.1.4 “mechanical” to read “process/mechanical”

Section 01010 Revise: Clause 1.3.1.5 to read: Install and make operational the process air blower system. Allow aeration system testing prior to SBR being covered.

Section 01010 Revise: Clause 1.3.1.7 “SBR tank, not” to read “SBR tanks and Equalization tank, not”

Section 01010 Revise: Clause 1.4.1 “With the exception of performing control system work,” to read “With the exception of performing piping tie-ins, electrical tie-ins and control system work,”

Section 01055 Add: Clause 1.5.3.3 Do not remove the gravel service road east of the Nitrogen Removal Facility.

Section 01060 Revise: Clause 1.3.11 “No Smoking” regulations are in effect in all areas of Work. Ensure that all workers comply with the regulations.

Section 01300 Revise: Clause 1.3.2 to read: Each copy shall be clearly titled to show all of the information required by the Specifications as well as operational information including: the item of Work concerned, a City’s Contract number, the name and address of the Contractor, the issue date, operational information on equipment, cleaning and lubrication schedules, filters, overhaul and adjustment schedules.

Section 01300 Revise: Clause 1.3.5.2 to read: List of contents in accordance with Section 01735 Clause 3.1

- Section 01300 Delete: Clause 1.3.5.2.1
- Section 01300 Delete: Clause 1.3.5.2.2
- Section 01300 Delete: Clause 1.3.5.2.3
- Section 01300 Delete: Clause 1.3.5.2.4
- Section 01300 Delete: Clause 1.3.5.2.5
- Section 01300 Delete: Clause 1.3.5.2.6
- Section 01300 Delete: Clause 1.3.5.2.7
- Section 01300 Delete: Clause 1.3.5.2.8
- Section 01500 Revise: Clause 1.1.2 to read: Locate where directed by Contract Administrator.
- Section 01500 Revise: Clause 1.2.3 to read: Locate where directed by Contract Administrator.
- Section 01500 Delete: Clause 1.3
- Section 01500 Revise: Clause 1.15.1 to read: The Contractor shall provide for two (2) temporary telephone lines, a fax and MTS Business Professional High Speed internet service or equivalent approved by the Contract Administrator including services to each of the two Contract Administrator's offices.
- Section 01500 Revise: Clause 1.32.1 "working inside the building" to read "at the NEWPCC"
- Section 01650 Revise: Clause 3.1.1 "Supplier" to read "Manufacturer's Representative"
- Section 01650 Revise: Certificate of Equipment Delivery: "Sub-Contractor" to read "Manufacturer"
- Section 01670 Revise: Clause 1.3.3 "turnover of a system to the City for his operation" to read "turnover of a system to the City for its operation"
- Section 01670 Revise: Clause 1.6.5 "Conduct sampling and analysis" to read "If required, conduct any sampling and analysis"
- Section 01670 Revise: Clause 3.2.2 to read: The Contract Administrator will make operating descriptions available prior to testing.
- Section 01670 Revise: Clause 3.4.1 "unless otherwise specified." to read "unless otherwise specified, and with no more than four (4) call out alarms during the seven (7) days."
- Section 01735 Revise: Clause 1.2.3 Submit complete operations manuals and maintenance information as soon as possible after review of project submittals but no later than the date of equipment delivery.
- Section 02220 Revise: Clause 2.1.4 "salt, petroleum products," to read "salt, drying bed sludge, petroleum products"
- Section 02220 Revise: Clause 3.1.2 to read: Review and understand the Geotechnical Report.
- Section 02511 Revise: Clause 1.1.1.4 to read: Construction of 38 mm water service connection to the Blower Building, 25 mm water service connection to the Fan Room, 100 mm water service to the Soda Ash Silo, and 38 mm water service connections to emergency shower/eyewashes.
- Section 02511 Revise Clause 1.2.1 to read: The following Sections and Specifications of the City of Winnipeg Standard Construction Specifications-latest edition are applicable to the Work:
- Section 02511 Revise: Clause 3.3.5.1 "to be operated by personnel" to read "to be operated by City personnel"
- Section 02531 Revise: Clause 1.1.1 All references to "nitrate" to read "nitrogen"

Section 02531 Revise: Clause 2.1.3.6.1.2.2 "Procedure: gor testing" to read "Procedure: for testing"

Section 02848 Revise: Clause 1.1.1 "Nutrient" to read "Nitrogen"

Section 06530 Revise: Clause 1.1.1 "has" to read "have"

Section 09730 Revise: Clause 1.7.1.2 to read: Maintain ambient temperature of not less than 18°C and a floor temperature of not less than 16°C from 7 days before installation to at least 48 hours after completion of Work and maintain relative humidity not higher than 40 percent during same period.

Section 09730 Revise: Clause 1.7.1.6 to read: Protect finished floor from damage by subsequent trades.

Section 09900 Revise: Clause 2.1.2 "accepted" to read "approved"

Section 09900 Revise: Clause 3.4.9 "Divisions 13 and 15" to read "Divisions 11 and 15"

Section 11005 Revise: Clause 1.16 All "Inspection" to read "inspection"

Section 11020 Revise: Clause 2.1.1 to read: Unless indicated otherwise, supply and install all equipment detailed on the equipment Specification sheets, or shown on the Drawings.

Section 11020 Revise: Clause 2.1.2 to read: Determine the extent of equipment to be supplied from the Specifications and manufacturer's Drawings covering the equipment. Furnish and install all additional materials necessary to complete the installation.

Section 11050 Revise: Clause 1.6 to read: Coordination

- .1 Process and Utility Piping identification
 - .1 Refer to Section 11901 for process piping identification.
- .2 Process and utility piping is identified in the Drawings as follows:
 - .1 The nominal line size; and
 - .2 The process fluid being conveyed, (commodity).
- .3 The process fluid (commodity) codes are defined in the Drawings.
- .4 Detailed process pipe Specifications are provided for each commodity in Section 11055.
- .5 Routing
 - .1 Coordinate piping installation routes and elevations with installation of sheet metal, process equipment, HVAC, instrumentation, and electrical work.
- .6 Pipe sleeves
 - .1 Coordinate with other Divisions to locate and place sleeves in cast-in-place concrete and in masonry building elements prior to construction.
- .7 Coordinate with Division 17 to provide correct piping configuration for primary instrumentation elements. For example, provide required minimum straight run of pipe upstream and downstream of flow meters. Coordinate with Division 17 for meter manufacturer's requirements.

Section 11105 Revise: All Sheets: "15100" to read "11100"

Section 11125 Revise: Clause 1.1.1 to read: Supply, delivery, and supervision of installation, and testing of process electric actuators.

Section 11125 Revise: Clause 2.2.1: "Review and verify piping" to read "Review and verify process"

- Section 11183 Revise: Clause 1.3.2 to read: Weir gates shall be designed to withstand the maximum design head (maximum design head shall be taken as the height of the slide unless otherwise stated).
- Section 11183 Add: Clause 2.5.5 Actuator/ lifting mechanism assembly to be fixed to gate frame.
- Section 11183 Revise: Clause 3.2.2 "Install slide gates" to read "Install gates"
- Section 11205 Revise: Clause 2.12.1 to read: Factory paint motors as specified in Section 11901.
- Section 11205 Revise: Clause 2.14.1 to read: Provide maintenance materials and spare parts in accordance with Division 1.
- Section 11206 Delete: Clause 1.1.2
- Section 11206 Revise: Clause 2.18.1 to read: Factory paint motors as specified in Section 11901.
- Section 11206 Revise: Clause 2.21.1 to read: In addition to the maintenance materials and spare parts in accordance with Division 1, provide the following:
- Section 11207 Revise: Clause 2.6.1 to read: Factory paint submersible motors as specified in Section 11901.
- Section 11331 Revise: Clause 1.3.1 to read: All submersible pumps shall be the product of a single manufacturer.
- Section 11331 Revise: Clause 2.9.1 to read: Stainless steel 316L lifting chain or wire, shackle, and hook.
- Section 11331 Revise: Clause 2.9.3 to read: Stainless steel 316L guide wires with upperguide wire holder.
- Section 11331A Revise: Tag Number "C150-P; C250-P" to read "C150-WAP; C250-WAP; shelf spare"
- Section 11331A Revise: Accessories "Guide rails and upper guide bar holder" to read "Guide wire and upper guide wire holder"
- Section 11331B Revise: Accessories "Guide rails and upper guide bar holder" to read "Guide wire and upper guide wire holder"
- Section 11331B Add: Accessories to read: Variable Frequency Drive – Division 16
- Section 11331C Revise: Tag Number "C140-P; C240-P" to read "C140-P; C240-P; shelf spare"
- Section 11331C Revise: Accessories "Guide rails and upper guide bar holder" to read "Guide wire and upper guide wire holder"
- Section 11363 Revise: Clause 2.6.12 "Bottom of enclosure to be 800 mm from walkway" to read "Pumps and other ancillary items to be 800 mm above walkway"
- Section 11395 Revise: Clause 1.3.1 to read: All submersible mixers shall be the product of a single manufacturer.
- Section 11395 Revise: Clause 2.1.3 to read: Provide materials suitable for use in aerobic, anoxic, and anaerobic activated sludge.
- Section 11395 Revise: Clause 2.1.5 to read: Guide the entire weight of the mixer by a single mast or double mast, as specified in the data sheets, designed to handle all thrust created by the mixer.
- Section 11395 Revise: Clause 2.5.2 "316" to read "316L"
- Section 11395A Revise: Construction: All references to "316" to read "316L"
- Section 11395B Revise: Construction: All references to "316" to read "316L"
- Section 11455 Revise: Clause 2.1.3 to read: Equip each blower with accessories on datasheet and drawings.

- Section 11455 Revise: Clause 2.9.3.1 to read: Provide inverter-rated motor suitable for variable frequency drive speed control for process blowers.
- Section 11455A Revise: Design Conditions "Air flow rate" to read "Maximum air flow rate"
- Section 11455A Add: Design Conditions to read: Minimum air flow rate 63 Nm³/min.
- Section 11455A Add: Design Conditions to read: Maximum and minimum discharge temperature 125°C
- Section 11455B Add: Accessories to read: Motor starter
- Section 11531 Add: Clause 1.1.4.9 Shop drawings of this equipment will be available at the Contract Administrator's office prior to installation.
- Section 11531 Revise: Clause 2.3.3 to read: The aeration equipment shall be installed prior to the completion of the SBRs, specifically prior to installation of the pre-cast double tees.
- Section 11715 Revise: Clause 2.2.2 to read: Stanco
- Section 11715 Revise: Clause 2.3.1.1 "PTC" to read "RTD"
- Section 11715 Revise: Clause 2.3.1.4 "16810" to read "16811"
- Section 11715 Add: Clause 2.3.4 Blower and unloading system shall be capable of unloading soda ash at a rate of 15 tonnes per hour.
- Section 11715 Add: Clause 2.7.3 Provide minimum 1.5 m diameter.
- Section 11715 Add: Clause 2.8.2 Provide minimum 300 mm diameter.
- Section 11715 Revise: Clause 2.11.2 to read: Select a tank sized for the application. Provide minimum 3.8 m³ of useable tank volume. Provide justification for selection of tank volume.
- Section 11715 Revise: Clause 2.11.6 to read: Provide one tank mixer (C650) of sufficient capacity to thoroughly mix the tank. The mixer shall include a 316L stainless steel shaft and impeller.
- Section 11715 Revise: Clause 2.13.3 "lockset" to read "lockset keyed to City's existing GMK system"
- Section 11715 Revise: Clause 2.16.1 to read: Provide two 5 kW skirt electrical heaters with line voltage, heating only thermostat. Total heating capacity to be 10 kW.
- Section 11715 Revise: Clause 2.17 to read: Provide four interior lights. Lights to be 100W wall pack with polycarbonate reflector similar to Keene Model 313100 120 V MA 335. Provide switch control at door.
- Section 11715 Revise: Clause 2.21.1.1 to read: One (1) full set of replacement filter media.
- Section 11715 Revise: Clause 2.21.1.2 to read: Two (2) hanger bushings for bin activator.
- Section 11715 Revise: Clause 3.3.1 to read: Ensure the equipment is installed as required to provide satisfactory service. Coordinate with the supplier of the soda ash equipment as to the exact responsibilities for on-site assembly and installation.
- Section 11820 Revise: Clause 2.9.4 to read: Equip fans with variable frequency drives in accordance with 16815.
- Section 11820 Revise: Clause 2.13.1 "11900" to read "11901"
- Section 11820 Revise: Clause 2.13.2 "11901" to read "11900"
- Section 11851 Revise: Clause 2.6.2 to read: Tag and store spare parts in accordance with Division 1.

- Section 11851 Add: Clause 2.8 Eyewash
- .1 Provide a wall mounted emergency eyewash bottle station.
- Section 11852 Add: Clause 2.3.3 Refer to Division 17.
- Section 11910 Revise: Clause 2.5.1.1 "All piping and valves: paint or band the piping with the colours agreed prior to the Work," to read "All piping and valves: paint or band the piping with the colours listed in 2.5.3,"
- Section 11910 Delete: Clause 2.5.1.3
- Section 14620 Add: Clause 2.2 Spare Parts
- .1 Provide a list of spare parts which might be required during the initial five years of operation. Provide prices for each part.
- Section 14620 Add: Clause 3.4 Manufacturer's Representative
- .1 The Manufacturer's Representative shall be required to attend the Site to train installation personnel, train operating and maintenance staff, to witness installation and testing to ensure the equipment is installed and operated as intended.
- Section 14620 Add: Clause 3.5 Installation
- .1 Verify satisfactory delivery of the equipment by completing Form 100, included in Section 01650.
 - .2 Cooperate with the Contractor to fulfill the requirements for a successful installation as documented by Form 102, included in Section 01650.
 - .3 Conform to the requirements of Section 01664.
- Section 14620 Add: Clause 3.6 Training
- .1 Conform to the requirements of Section 01664.
- Section 15010 Revise: Clause 1.1.8 "one year from the date of Substantial Performance" to read "one year from the date of Total Performance"
- Section 15010 Revise: Clause 1.22.1 to read: Coordinate colour coding of piping and equipment with Work Division 9 and Section 11900.
- Section 15010 Revise: Clause 1.22.2 to read: Colour code mechanical equipment, piping and exposed ductwork. Refer to colour schedule in Section 11900.
- Section 15010 Revise: Clause 1.22.5 to read: Apply colour bands at both ends of the label with primary colour bands used to secure both ends of the individual labels. Refer to colour schedule in Section 11900.
- Section 15010 Revise: Clause 1.23.1 to read: Refer to section 11910.
- Section 15010 Delete Clause 1.23.2
- Section 15010 Delete Clause 1.23.3
- Section 15010 Revise: Clause 1.26.4 "Chemical treatment supplies final inspection and test certificate" to read "Chemical treatment suppliers final inspection and test certificate"
- Section 15010 Revise: Clause 1.26.5.1 to read: Submit final air and water balance reports.