



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 822-2009

**NORTH END AND SOUTH END WATER POLLUTION CONTROL CENTRES
HAULED WASTEWATER RECEIVING FACILITIES AND ASSOCIATED WORKS**

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DIVISION 01 - GENERAL REQUIREMENTS

Section No. Description

01 29 00	Measurement and Payment
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01 45 00	Quality Control
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01 52 00	Construction Facilities
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01 56 00	Temporary Barriers and Enclosures
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01 71 00	Examination and Preparation
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01 74 11	Cleaning
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01 77 00	Closeout Procedures
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01 78 00	Close out Submittals
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01 79 00	Demonstration and Training
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01 91 13	General Commissioning Requirements
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01 91 41	Commissioning: Training
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DIVISION 03 - CONCRETE

Section No. Description

03 10 00	Concrete Forming and Accessories
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03 20 00	Concrete Reinforcing
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03 30 00	Cast-in-Place Concrete
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03 35 00	Concrete Floor Sealing
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DIVISION 04 - MASONRY

Section No. Description

04 05 00	Common Work Results for Masonry
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04 05 12	Masonry Mortar and Grout
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04 05 19	Masonry Anchorage and Reinforcing
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04 22 00	Concrete Unit Masonry
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04 43 00	Quarried Limestone
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DIVISION 05- METALS

Section No. Description

05 12 23	Structural Steel for Buildings
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05 31 00	Steel Decking
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05 50 00 Metal Fabrications

DIVISION 07- THERMAL AND MOISTURE PROTECTION

Section No. Description

07 11 13 Bituminous Dampproofing
07 13 52 Waterproofing: Modified Bituminous Sheet
07 16 16 Crystalline Waterproofing
07 21 13 Board Insulation
07 21 16 Blanket Insulation
07 27 13 Air Barriers
07 52 00 Modified Bituminous Membrane Roofing
07 62 00 Sheet Metal Flashing and Trim
07 90 00 Joint Sealers

DIVISION 08- OPENINGS

Section No. Description

08 11 13 Hollow Metal Doors and Frames
08 71 00 Door Hardware

DIVISION 09- FINISHES

Section No. Description

09 67 15 Epoxy Floor Coating
09 91 00 Painting
09 96 23 Graffiti-Resistant Coatings

DIVISION 10 - SPECIALTIES

Section No. Description

10 14 53 Traffic Signage

DIVISION 11 - EQUIPMENT

Section No. Description

11 12 00 Parking Control Equipment

DIVISION 21 - FIRE SUPPRESSION

Section No. Description

21 50 01 Fire-Extinguisher

DIVISION 22 - PLUMBING

Section No. Description

22 05 01 General Mechanical Provisions
22 05 13 Common Motor Requirements
22 05 19 Meters and Gauges
22 05 23 General Duty Valves and Strainers
22 05 29 Hanger and Supports
22 05 53 Painting and Identification
22 07 16 Equipment Insulation
22 07 19 Piping Insulation
22 11 16 Domestic Water Piping
22 11 23 Natural Gas Piping
22 13 19 Sanitary Waste Piping Specialties
22 13 29 Sump Pumps
22 33 33 Electric Domestic Hot Water Heaters

22 42 00 Plumbing Fixtures

DIVISION 23 - HEATING, VENTILATION, AND AIR CONDITIONING

Section No. Description

23 05 01 Common Items for Mechanical Work
23 05 93 Testing, Adjusting and Balancing
23 07 13 Duct Insulation
23 08 00 Commissioning
23 09 13 Instrumentation and Control Devices
23 09 23 Direct-Digital Control System
23 09 93 Sequence of Operations for HVAC Controls
23 21 13 Hydronic System
23 31 13 Metal Ducts
23 31 15 Special Ductwork Cleaning
23 33 00 Air Duct Accessories
23 34 00 HVAC Fans
23 37 00 Air Outlets and Inlets
23 55 02 Electric Oxidizer
23 72 00 Air-to-Air Energy Recovery Equipment
23 82 16 Heating Coils
23 82 39 Unit Heater

DIVISION 26 - ELECTRICAL

Section No. Description

26 05 01 Common Work Results – Electrical
26 05 05 Harmonics Study
26 05 20 Wire and Box Connectors 0 - 1000V
26 05 21 Wires and Cables 0- 1000V
26 05 28 Grounding - Secondary
26 05 31 Splitters, Junction, Pull Boxes, Cabinets
26 05 32 Outlet Boxes, Conduit Boxes and Fittings
26 05 34 Conduits, Conduit Fastenings and Fittings
26 05 44 Installation of Cables in Trenches
26 12 17 Dry Type Transformers up to 600V Primary
26 24 17 Panelboards Breaker Type
26 24 19 Motor Control Centre
26 27 26 Wiring Devices
26 28 21 Moulded Case Circuit Breakers
26 28 23 Disconnect Switches - Fused and Non-Fused
26 29 10 Motor Starters to 600V
26 29 11 Variable Frequency Drives
26 43 13 Surge Suppressors
26 50 00 Lighting
26 52 01 Unit Equipment for Emergency Lighting
26 53 00 Exit Signs

DIVISION 28 – ELECTRIC SAFETY AND SECURITY

Section No. Description

28 13 00 Access Control
28 23 00 Video Surveillance

DIVISION 31 - EARTHWORKS

Section No. Description

31 23 33 Excavating and Backfilling for Buildings

DIVISION 32 - EXTERIOR IMPROVEMENTS

Section No. Description

32 40 10	Bollards
32 93 11	Tree Relocation

DIVISION 33 - UTILITIES

Section No. Description

33 34 00	Sanitary Utility Sewerage Force Mains
33 47 23	Underground Vent Piping

DIVISION 40 - PROCESS INTEGRATION

Section No. Description

40 05 01	Process Control and Instrumentation General Provisions
40 14 00	Control Panels
40 31 01	Instrumentation

DIVISION 44 - POLLUTION CONTROL EQUIPMENT

Section No. Description

44 05 01	Process Control Valves
44 05 17	Process Pipe Welding
44 10 01	Process Pumps
44 20 01	Installation of Process Pipework
44 30 01	Sampling Equipment

APPENDICES

APPENDIX A:

- (a) Geotechnical Investigation and Foundation Engineering Report for Hauled Liquid Waste Facility
- (b) Geotechnical Investigation and Foundation Engineering Report for Hauled Liquid Waste Facility
- (c) Geotechnical Report
South End Water Pollution Control Centre – Proposed Expansion
- (d) Report on Subsoil Investigation
Proposed South End Pollution Control Centre
- (e) Geotechnical Engineering Report
South End Water Pollution Control Centre
- (f) Geotechnical Report North End Water Pollution Control Centre – Disinfection Facility
- (g) Report on Installation of Test Caissons at South End Pollution Control Centre
- (h) Test Holes Drilled at Outfall Stage Associated with South End Pollution Control Centre
- (i) Geotechnical Engineering Report South End Water Pollution Control Centre
- (j) Geotechnical Report Proposed Disinfection Building South End Water Pollution Control Centre
- (k) NEWPCC Centrate Treatment Facility – Phosphorous Removal

APPENDIX B:

Figure 1 – Contractor's Parking

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 NORTH END AND SOUTH END WATER POLLUTION CONTROL CENTRES HAULED WASTEWATER RECEIVING FACILITIES AND ASSOCIATED WORKS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 17, 2010.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

B4. BIDDERS' CONFERENCE

B4.1 Further to C3.1, the Contract Administrator will hold a Bidders' conference at the NEWPCC from 10:00 A.M. to 11:30 A.M. on March 5, 2010. Meet outside the main entrance doors.

B4.2 The Bidder is advised that, at the Bidders' Conference, the overall scope of the Work will be discussed in addition to the connections to the Digester facility and the interceptor.

B4.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Bidders' Conference unless that information or interpretation is provided by the Contract Administrator in writing.

B5. ENQUIRIES

B5.1 All enquiries shall be directed to the Contract Administrator identified in D4.

B5.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B5.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B5.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B5.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B5 unless that response or interpretation is provided by the Contract Administrator in writing.

B6. ADDENDA

B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B6.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) Provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) Identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) Identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) Certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) Certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B7.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B7.10 Notwithstanding B7.2 to B7.9, and in accordance with B8.6 deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B16.1(a).

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Bid Security;
 - (i) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
- (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B10.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. QUALIFICATION

B11.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

- B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B11.4 Further to B11.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>)
- B11.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B11.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B12. BID SECURITY

- B12.1 The Bidder shall provide bid security in the form of:
- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
 - (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.
- B12.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B12.1.2 All signatures on bid securities shall be original.

- B12.1.3 The Bidder shall sign the Bid Bond.
- B12.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B12.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B12.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B12.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B12.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B12.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

- B13.1 Bids will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.
- B13.1.1 Bidders or their representatives may attend.
- B13.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B12 will not be read out.
- B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B15. WITHDRAWAL OF BIDS

- B15.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B16. EVALUATION OF BIDS

- B16.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B16.4 Further to B16.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B16.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B16.4.2 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B17. AWARD OF CONTRACT

- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.
- B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or sub clause with the prefix “**C**” designates a section, clause or sub clause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the following:

- (a) North End Water Pollution Control Centre
 - (i) Hauled Liquid Waste Receiving and Handling Facility;
 - (ii) Leachate Receiving and Handling Facility;
 - (iii) Replacement of existing sludge pumps in Gallery No. 5;
 - (iv) Associated underground piping, roadwork, and landscaping; and
- (b) South End Water Pollution Control Centre
 - (i) Hauled Liquid Waste Receiving and Handling Facility
 - (ii) Associated underground piping, roadwork, and landscaping.

D2.2 The major components of the Work are as follows:

- (a) Submission of Shop Drawings;
- (b) Topsoil stripping;
- (c) Construction of a Leachate Receiving Facility at the NEWPCC;
- (d) Construction of a Hauled Wastewater Receiving Facility at both the NEWPCC and the SEWPCC;
- (e) Installation of associated underground piping including watermain, water services wastewater sewers, land drainage sewers, forcemain, and vent piping including all appurtenances;
- (f) Excavation;
- (g) Construction of reinforced concrete road;
- (h) Installation of entrance/exit gates;
- (i) Electrical cable trenching;
- (j) Installation of electrical and instrumentation equipment;
- (k) Installation of hauled wastewater and leachate access controls; and
- (l) Landscaping including tree relocation.

D3. DEFINITIONS

D3.1 Notwithstanding C1.1, when used in this Bid Opportunity:

- (a) "NEWPCC" means North End Water Pollution Control Centre;
- (b) "SEWPCC" means South End Water Pollution Control Centre;

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Stantec Consulting Ltd., represented by:
Al Beghin, P. Eng.
Senior Project Manager

905 Waverley Street
Winnipeg, MB R3T 5P4

Telephone No. (204) 489-5900
Facsimile No. (204) 453-9012

- D4.2 At the pre-construction meeting, Mr. Beghin will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

- D5.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:
- The City of Winnipeg
Internal Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

D7. FURNISHING OF DOCUMENTS

- D7.1 Upon award of the Contract, the Contractor will be provided with six (6) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D9. SAFE WORK PLAN

D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D9.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D10. INSURANCE

D10.1 The Contractor shall purchase and maintain the following insurance coverage:

- (a) Project specific Wrap-up liability insurance in an amount not less than five million (\$5,000,000.00) inclusive per occurrence, ten million (\$10,000,000.00) general aggregate, insuring against bodily injury, personal injury and property damage including loss of use thereof. The insured parties under the policy shall include The Contractor, The City of Winnipeg and all others having an insurable interest in the Project. This policy shall be endorsed to extend to both construction sites and shall cover typical aspects of a project of this nature for which insurance may be purchased, but will at a minimum carry:
 - (i) Products and completed operations liability; the completed operations liability coverage shall remain in effect for a total period of two (2) years after Total Performance;
 - (ii) Owner's and Contractor's protective liability;
 - (iii) Blanket written contractual liability;
 - (iv) Cross liability;
 - (v) Contingent employer's liability;
 - (vi) Non-owned automobile liability.
- (b) Course of construction insurance in the form of an "all risks" builder's risk policy in the amount of one hundred percent (100%) of the total Contract Price, written in the name of The Contractor, The City of Winnipeg and all others having an insurable interest in the Project. This policy shall be maintained at all times during the performance of the Work and until the date of Total Performance. One policy will extend to cover both construction sites, or at option of the Contractor, two policies (one for each site) may be purchased.
- (c) Automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least five million dollars (\$5,000,000.00), to remain in place at all times during the performance of the Work; The Contractor shall require and ensure that each of its Subcontractors on the Project also maintains automobile liability in the amount of at least five million dollars (\$5,000,000.00).
- (d) The Contractor and all Subcontractors engaged by the Contractor for the Project are responsible for insuring their own equipment and tools used on the Project.
- (e) Any other insurances, carrying suitable limits and deductibles, as may be required to cover the scope of the Work.

- D10.2 All policies shall be taken out with insurers licensed to and carrying on business in the Province of Manitoba.
- D10.3 Deductibles shall be borne by the Contractor.
- D10.4 The Contractor shall not cancel, or cause any such policy or policies to lapse without a minimum thirty (30) days prior written notice to the City.
- D10.5 The Contractor shall provide written notice to the City of Winnipeg of any material changes to their policies within thirty (30) days of the change taking effect.
- D10.6 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site.

D11. PERFORMANCE SECURITY

- D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D11.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B12.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D12. SUBCONTRACTOR LIST

- D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at the Pre-construction Meeting but in no event later than the date specified in C4.1 for the return of the executed Contract.

D13. DETAILED WORK SCHEDULE

- D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at the Pre-Construction Meeting but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D13.2 The detailed work schedule shall consist of the following:
- (a) a critical path method (C.P.M.) schedule for the Work;
 - (b) a Gantt chart for the Work based on the C.P.M. schedule;
- all acceptable to the Contract Administrator.

- D13.3 Further to D13.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the major activities making up the Work as well as showing those activities/tasks on the critical path.
- D13.4 Further to D13.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

D14. SECURITY CLEARANCE

- D14.1 Each individual proposed to perform the following portions of the Work:
- (a) any Work that may be required within the NEWPCC and/or the SEWPCC;
 - (b) any Work within City facilities other than:
 - (i) an underground structure such as a manhole;
 - (ii) in areas and at times normally open to the public;
- shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence.
- D14.2 Prior to the commencement of any Work specified in D14.1, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform such Work.
- D14.3 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person, will not be permitted to perform any Work specified in D14.1.
- D14.4 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- D14.5 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work specified in D14.1.

SCHEDULE OF WORK

D15. COMMENCEMENT

- D15.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D15.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D9;
 - (iv) evidence of the insurance specified in D10;
 - (v) the performance security specified in D11;
 - (vi) the detailed work schedule specified in D13; and
 - (vii) the security clearances specified in D14.

- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D15.2.1 Further to D15.2(a)(vii), subject to all other requirements being met, the Contractor may commence Work that does not involve any personal entering the NEWPCC or the SEWPCC prior to submitting the security clearances.

D15.3 The Contractor may commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D16. SUBSTANTIAL PERFORMANCE

D16.1 The Contractor shall achieve Substantial Performance by December 1, 2010.

D16.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D16.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D17. TOTAL PERFORMANCE

D17.1 The Contractor shall achieve Total Performance by December 20, 2010.

D17.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D17.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D18. LIQUIDATED DAMAGES

D18.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Calendar Day for each and every Calendar Day following the days fixed herein for same during which such failure continues:

- (a) Substantial Performance – One Thousand Seven Hundred dollars (\$1,700.00);
- (b) Total Performance – One Thousand Seven Hundred dollars (\$1,700.00).

D18.2 The amounts specified for liquidated damages in D18.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.

D18.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D19. SCHEDULED MAINTENANCE

D19.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:

- (a) Sod as specified in CW 3510;

- D19.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D20. JOB MEETINGS

- D20.1 Regular bi-weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D20.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D21. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D21.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

MEASUREMENT AND PAYMENT

D22. PAYMENT

- D22.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D23. WARRANTY

- D23.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

BID OPPORTUNITY NO. 822-2009

NORTH END AND SOUTH END WATER POLLUTION CONTROL CENTRES HAULED WASTEWATER RECEIVING FACILITIES AND ASSOCIATED WORKS

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	North End Water Pollution Control Centre
1-0101A-D0001-001	Cover Sheet
1-0101A-D0002-001	Drawing Index
	Civil
1-0101A-C0001-001	Site Plan
1-0101A-C0002-001	Underground Services
1-0101A-C0003-001	Grading and Drainage Plan
1-0101A-C0004-001	Leachate and Sludge Forcemains
1-0101A-C0004-002	Leachate and Sludge Forcemains
1-0101A-C0005-001	Leachate Forcemain
	Structural
1-0101A-S0001-001	Hauled Wastewater Receiving Building General Notes and Schedules
1-0101A-S0002-001	Hauled Wastewater Receiving Building Typical Details
1-0101A-S0003-001	Hauled Wastewater Receiving Building Foundation, Floor, and Roof Plan
1-0101A-S0004-001	Hauled Wastewater Receiving Building Sections and Details
1-0101A-S0005-001	Leachate Receiving Building General Notes and Schedules
1-0101A-S0006-001	Leachate Receiving Building Typical Details
1-0101A-S0007-001	Leachate Receiving Building Foundation, Floor, and Roof Plan
1-0101A-S0008-001	Leachate Receiving Building Sections and Details
	Architectural
1-0101A-B0001-001	Hauled Wastewater Receiving Building Floor Plan/Roof Plan, and Exterior Elevations
1-0101A-B0002-001	Hauled Wastewater Receiving Building Building Sections and Details
1-0101A-B0003-001	Hauled Wastewater Receiving Building

	Wall Sections and Details
1-0101A-B0004-001	Leachate Receiving Building Floor Plan/Roof Plan, and Exterior Elevations
1-0101A-B0005-001	Leachate Receiving Building Building Sections and Details
1-0101A-B0006-001	Leachate Receiving Building Wall Sections and Details
	Process
1-0101A-P0001-001	Hauled Wastewater Receiving Building Process Flow Schematic
1-0101A-P0002-001	Hauled Wastewater Receiving Building Floor Plan And Sections
1-0101A-P0003-001	Leachate Receiving Building Process Flow Schematic
1-0101A-P0004-001	Leachate Receiving Building Floor Plan and Sections
1-0101A-P0005-001	Leachate Receiving Building Gallery 2 and 3 Plans
	Mechanical
1-0101A-M0001-001	Hauled Wastewater Receiving Building Mechanical Site Plan
1-0101A-M0002-001	Hauled Wastewater Receiving Building Mechanical Plans
1-0101A-M0003-001	Hauled Wastewater Receiving Building Mechanical Sections
1-0101A-M0004-001	Hauled Wastewater Receiving Building Mechanical Details
1-0101A-M0004-002	Hauled Wastewater Receiving Building Mechanical Details
1-0101A-M0005-001	Hauled Wastewater Receiving Building Mechanical System Schematics
1-0101A-M0006-001	Hauled Wastewater Receiving Building Mechanical Schedules
1-0101A-M0007-001	Leachate Receiving Building Mechanical Site Plan
1-0101A-M0008-001	Leachate Receiving Building Mechanical Plans
1-0101A-M0009-001	Leachate Receiving Building Mechanical Sections
1-0101A-M0010-001	Leachate Receiving Building Mechanical Details
1-0101A-M0010-002	Leachate Receiving Building Mechanical Details
1-0101A-M0011-001	Leachate Receiving Building Mechanical System Schematics
1-0101A-M0012-001	Leachate Receiving Building Mechanical Schedules
	Electrical
1-0101A-E0005-001	Hauled Wastewater and Leachate Receiving Buildings Site Plan, Trench Details
1-0101A-E0006-001	Hauled Wastewater and Leachate Receiving Buildings Hauled Wastewater Building Floor Plan Leachate Building Floor Plan
1-0101A-E0007-001	Hauled Wastewater and Leachate Receiving Buildings Single Line Diagrams, Panel Schedules
1-0101A-E0008-001	Hauled Wastewater and Leachate Receiving Buildings Motor Schedules

Instrumentation	
1-0101A-A0002-001	Hauled Wastewater Receiving Building Control Panel Wiring, DCS I/Os
1-0101A-A0003-001	Leachate Receiving Building Control Panel Wiring, DCS I/Os
1-0101A-A0004-001	Digester Gallery Control Panel Wiring, DCS I/Os
1-0101A-A0005-001	Hauled Wastewater, Leachate, and Digester Receiving Buildings Miscellaneous Wiring Details
1-0101A-A0006-001	Digester Gallery Site Plan, Miscellaneous Wiring Details
1-0101A-A0007-001	Hauled Wastewater and Leachate Receiving Buildings Process and Instrumentation Diagram
1-0101A-A0008-001	Hauled Wastewater and Leachate Receiving Buildings SCADA System Architecture

South End Water Pollution Control Centre

1-0102A-D0003-001	Cover Sheet
1-0102A-D0004-001	Drawing Index
Civil	
1-0102A-C0006-001	Site Plan
1-0102A-C0007-001	Underground Services
1-0102A-C0008-001	Grading and Drainage Plan
Structural	
1-0102A-S0010-001	Hauled Wastewater Receiving Building General Notes and Schedules
1-0102A-S0011-001	Hauled Wastewater Receiving Building Typical Details
1-0102A-S0012-001	Hauled Wastewater Receiving Building Foundation, Floor, and Roof Plan
1-0102A-S0013-001	Hauled Wastewater Receiving Building Sections and Details
Architectural	
1-0102A-B0003-001	Hauled Wastewater Receiving Building Floor Plan/Roof Plan, and Exterior Elevations
1-0102A-B0004-001	Hauled Wastewater Receiving Building Building Sections and Details
1-0102A-B0005-001	Hauled Wastewater Receiving Building Wall Sections and Details
Process	
1-0102A-P0001-001	Hauled Wastewater Receiving Building Process Flow Schematic
1-0102A-P0002-001	Hauled Wastewater Receiving Building Floor Plan and Sections
1-0102A-P0003-001	Hauled Wastewater Receiving Building Process Sections and Details
Mechanical	
1-0102A-M0002-001	Hauled Wastewater Receiving Building Mechanical Site Plan
1-0102A-M0003-001	Hauled Wastewater Receiving Building Mechanical Plans
1-0102A-M0004-001	Hauled Wastewater Receiving Building Mechanical Sections
1-0102A-M0005-001	Hauled Wastewater Receiving Building Mechanical Details

1-0102A-M0005-002	Hauled Wastewater Receiving Building Mechanical Details
1-0102A-M0006-001	Hauled Wastewater Receiving Building Mechanical System Schematics
1-0102A-M0007-001	Hauled Wastewater Receiving Building Mechanical Schedules
	Electrical
1-0102A-E0014-001	Hauled Wastewater Receiving Building Site Plan
1-0102A-E0015-001	Hauled Wastewater Receiving Building Floor Plan, Single Line Diagram, Panel Schedules
1-0102A-E0016-001	Hauled Wastewater Receiving Building Miscellaneous Wiring Details
	Instrumentation
1-0102A-A0016-001	Hauled Wastewater Receiving Building DCS I/Os
1-0102A-A0017-001	Hauled Wastewater Receiving Building Miscellaneous Wiring Details
1-0102A-A0018-001	Hauled Wastewater Receiving Building Process and Instrumentation Diagram
1-0102A-A0019-001	Hauled Wastewater Receiving Building SCADA System Architecture

E2. SOILS INVESTIGATION REPORT

E2.1 Further to C3.1 of the General Conditions, a geotechnical investigation has been completed in the vicinity of the proposed works to determine the character of the subsurface soil to facilitate the design of the Work. The information is considered accurate at the locations indicated and at the time of the investigation. However, considerable variations in the soil conditions may exist between the test holes and fluctuations in the ground water levels can be expected seasonally. Test hole logs are included with the investigation reports. The following soils investigation reports are found in Appendix A:

- (a) Geotechnical Investigation and Foundation Engineering Report for Hauled Liquid Waste Facility
North End Water Pollution Control Centre
By National Testing Laboratories Ltd. dated December 21, 2009
- (b) Geotechnical Investigation and Foundation Engineering Report for Hauled Liquid Waste Facility
South End Water Pollution Control Centre
By National Testing Laboratories Ltd. dated December 21, 2009
- (c) Geotechnical Report
South End Water Pollution Control Centre – Proposed Expansion
By Dyregrov Consultants dated February 25, 2008
- (d) Report on Subsoil Investigation
Proposed South End Pollution Control Centre
By Ripley, Klohn, and Lenoff International Ltd dated March 8, 1971
- (e) Geotechnical Engineering Report
South End Water Pollution Control Centre
By Dyregrov & Burgess dated April 15, 1988
Geotechnical Report
- (f) North End Water Pollution Control Centre – Disinfection Facility

- By Dyregrov Consultants dated December 21, 2004
 - (i) Report on Installation of Test Caissons at South End Pollution Control Centre
- By Ripley, Klohn, and Lenoff International Ltd dated March 24, 1971
 - (ii) Test Holes Drilled at Outfall Stage Associated with South End Pollution Control Centre
- By Ripley, Klohn, and Lenoff International Ltd dated April 14, 1971
- (g) Geotechnical Engineering Report
South End Water Pollution Control Centre
By Dyregrov Consultants dated April 15, 1988
- (h) Geotechnical Report Proposed Disinfection Building South End Water Pollution Control Centre
By Dyregrov Consultants dated February 1998
- (i) NEWPCC Centrate Treatment Facility – Phosphorous Removal
By Dyregrov Consultants dated September 27, 2005

E2.2 Bidders are responsible for any interpretation they place on the supplied information and are expected to make such additional investigation

E3. OFFICE FACILITIES

- E3.1 The Contractor shall supply office facilities at both the NEWPCC and the SEWPCC meeting the following requirements:
- (a) The field office shall be for the exclusive use of the Contract Administrator.
 - (b) The building shall be conveniently located near the site of the Work at a location determined by the Contract Administrator.
 - (c) Inside dimensions minimum 3.6 m long x 3 m wide x 2.4 m high, with floor 0.3 m above grade, complete with 4 opening windows and one lockable door. The Contractor shall supply two keys for the lock.
 - (d) Insulate building and provide heating system to maintain 22 degrees C inside temperature at -30 degrees C outside temperature.
 - (e) Finish inside walls and ceiling with plywood, hardboard or wallboard and paint in selected colours. Finish floor with 19 mm thick plywood.
 - (f) Install electrical lighting system to provide min 750 lx using surface mounted, shielded commercial fixtures with 10 % upward light component.
 - (g) Provide private washroom facilities adjacent to office complete with flush or chemical type toilet, lavatory and mirror and maintain supply of paper towels and toilet tissue.
 - (i) Workers will not be allowed to use the NEWPCC and SEWPCC sanitary facilities.
 - (ii) Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
 - (iii) Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.
 - (iv) Pay for the removal and disposal of sanitary waste at an approved facility.
 - (v) Maintain and pay for adequate supply of disposal sanitary materials.
 - (h) The field office building and the portable toilet shall be cleaned on a weekly basis immediately prior to each site meeting. The Contract Administrator may request additional cleaning when it is deemed necessary.
 - (i) Equip office with 1 x 2 m table, 4 chairs, 2m of shelving 300 mm wide, one – 3 drawer filing cabinet, one plan rack and one coat rack and shelf.

E4. SHOP DRAWINGS

E4.1 Description

- (a) This Specification shall revise, amend and supplement the requirements of CW 1100.
 - (i) The term 'shop drawings' means drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data, including site erection drawings which are to be provided by the Contractor to illustrate details of a portion of the work.
 - (ii) The Contractor shall submit specified shop drawings to the Contract Administrator for review. All submissions must be in metric units. Where data is in imperial units, the correct metric equivalent shall also be show on all submissions for review.
- (b) Shop Drawings
 - (i) Original drawings are to be prepared by Contractor, Subcontractor, Supplier, Distributor, or Manufacturer, which illustrate appropriate portion of work; showing fabrication, layout, setting or erection details as specified in appropriate sections.
 - (ii) Shop drawings showing an engineered design shall bear the seal of a Registered Professional Engineer of Manitoba.
- (c) Contractor's Responsibilities
 - (i) Review shop drawings, product data and samples prior to submission and stamp and sign drawings indicating conformance to the Contract requirements.
 - (ii) Verify:
 - (a) Field measurements
 - (b) Field construction criteria
 - (c) Catalogue numbers and similar data
 - (iii) Coordinate each submission with requirements of work and Contract Documents. Individual shop drawings will not be reviewed until all related drawings are available.
 - (iv) Notify Contract Administrator, in writing at time of submission, of deviations from requirements of Contract Documents.
 - (v) Responsibility for deviations in submission from requirements of Contract Documents is not relieved by Contract Administrator's review of submission, unless Contract Administrator gives written acceptance of specified deviations.
 - (vi) Responsibility for errors and omissions in submission is not relieved by Contract Administrator's review of submittals.
 - (vii) The Contractor shall make any corrections required by the Contract Administrator and shall resubmit the required number of corrected copies of Shop Drawings. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Contract Administrator on previous submission.
 - (viii) After Contract Administrator's review and return of copies, distribute copies to sub-trades as appropriate.
 - (ix) Maintain one (1) complete set of reviewed shop drawings, filed by Specification Section Number, at the site of the work for use and reference of the Contract Administrator and Subcontractors.
- (d) Submission Requirements
 - (i) Schedule submissions at least 14 Calendar days before dates reviewed submissions will be needed, and allow for a 14 Calendar day period for review by the Contract Administrator of each individual submission and re-submission, unless noted otherwise in the Contract Documents.
 - (ii) Submit five (5) paper prints of shop drawings. The Contractor is advised that the Contract Administrator will retain three (3) copies of all submittals and return two (2) copies to the Contractor.

- (iii) Accompany submissions with transmittal letter, containing:
 - (a) Date
 - (b) Project title and Bid Opportunity number
 - (c) Contractor's name and address
 - (d) Number of each shop drawing, product data and sample submitted
 - (e) Specification Section, Title, Number and Clause
 - (f) Drawing Number and Detail/Section Number
 - (g) Other pertinent data

- (iv) Submissions shall include:
 - (a) Date and revision dates.
 - (b) Project title and Bid Opportunity number.
 - (c) Name of:
 - (i) Contractor
 - (ii) Subcontractor
 - (iii) Supplier
 - (iv) Manufacturer
 - (v) Separate detailer when pertinent
 - (d) Identification of product of material.
 - (e) Relation to adjacent structure or materials.
 - (f) Field dimensions, clearly identified as such.
 - (g) Specification section name, number and clause number or drawing number and detail/section number.
 - (h) Applicable standards, such as CSA or CGSB numbers.
 - (i) Contractor's stamp, initialled or signed, certifying review of submission, verification of field measurements and compliance with Contract Documents.

(e) Other Considerations

- (i) Fabrication, erection, installation or commissioning may require modifications to equipment or systems to conform to the design intent. Revise pertinent shop drawings and resubmit.
- (ii) Material and equipment delivered to the site of the works will not be paid for at least until pertinent shop drawings have been submitted and reviewed.
- (iii) Incomplete shop drawing information will be considered as stipulated deductions for the purposes of progress payment certificates.
- (iv) No delay or cost claims will be allowed that arise because of delays in submissions, re-submissions and review of shop drawings.

E4.2 Measurement and Payment

- (a) Preparation, submittal, and revisions of shop drawings will be included in the unit price bid for each item corresponding to that shop drawing.

E5. GENERAL REQUIREMENTS

E5.1 The Contractor shall include the following items in the unit price bid for "General Requirements":

- (a) Mobilization to both sites;
- (b) Demobilization from both sites site;
- (c) Insurance; and
- (d) Bonding.

E5.2 Mobilization/Demobilization, Bonding and Insurance will be measured on a unit basis and paid for at the Contract Unit Price for "General Requirements".

- (a) General Requirements will be paid on each monthly progress estimate as a percentage of the dollar value of the work completed vs. the original adjusted total contract price bid.

E6. HOLDBACK FOR OPERATION AND MAINTENANCE MANUALS

E6.1 Further to the following specifications, a holdback in the amount of 10% of the unit price bid for the following Form B and section items will be applied:

11 12 00	26 28 21	26 53 00
23 21 13	26 28 23	40 14 00
23 72 00	26 29 10	40 31 01
26 12 17	26 29 11	25 55 02
26 24 17	26 43 13	
26 24 19	26 50 00	
26 27 26	26 52 01	

- (a) B. 42;
- (b) B. 43;
- (c) B. 44;
- (d) B. 45;
- (e) B. 46;
- (f) B. 47;
- (g) C. 32;
- (h) C. 33;
- (i) C. 34;
- (j) C. 35; and
- (k) C. 36

E6.2 The 10% holdback of the unit price bid for each item that requires the submission of Operation and Maintenance Manuals will be paid once the Operation and Maintenance Manuals have been accepted as complete by the Contract Administrator.

E6.3 The initial 90% will be paid in accordance with General Condition C12.

E7. COOPERATION WITH OTHERS

E7.1 The NEWPCC and the SEWPCC will be in service during the construction period. Other contractors and City forces will require unrestricted access to the facility. The Contractor shall not interfere with the daily operation of the plant and shall not impede others from completing their work.

E7.2 The Contractor shall not impede any vehicle traffic

E8. NEWPCC AND SEWPCC BUILDING ACCESS

E8.1 Access to the interior of the NEWPCC and the SEWPCC is restricted to the following times with the exception noted in (c) below:

- (a) Monday to Friday, 7:30 A.M. to 3:30 P.M.
- (b) Saturday and Sunday, no access will be permitted.

- (c) The NEWPCC can be accessed outside of the times noted above by special arrangements and additional coordination with the City. This does not apply to the SEWPCC.

E9. EXISTING FACILITIES

- E9.1 Both the NEWPCC and the SEWPCC have existing receiving facilities. These facilities must be kept in operation until such time as the new facilities have been commissioned and are ready for use. The Contractor shall phase the Work to facilitate this condition.

E10. SITE RESTORATIONS

- E10.1 The Contractor shall remove the temporary Site Office and any storage trailers prior to Total Performance.
- E10.2 The Contractor will be responsible for any damage caused by his forces on existing roadways, accesses, or grassed areas.