

# THE CITY OF WINNIPEG

# **BID OPPORTUNITY**

BID OPPORTUNITY NO. 640-2011
SEWPCC REFURBISHMENT OF GRIT AERATION UNITS

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#### **PART B - BIDDING PROCEDURES**

#### **B1.** CONTRACT TITLE

B1.1 SEWPCC REFURBISHMENT OF GRIT AERATION UNITS

# **B2. SUBMISSION DEADLINE**

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, September 1, 2011.
- 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 Contract Administrator or an authorized representative will be available at the Site from 9:30 am to 11:30 am on August 18, 2011 to provide Bidders access to the Site.
- B3.2 The Bidder is advised that Bidders must be at the front entrance of the SEWPCC facility at 9:30 am sharp to obtain access.
- B3.3 Bidders attending the Site Investigation must wear CSA approved safety footwear and safety glasses while in the process areas of the Site.
- B3.4 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

#### **B4. ENQUIRIES**

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B4.2 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.
- B4.3 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.
- B4.4 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.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

# **B5.** ADDENDA

B5.1 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.

- B5.2 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.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <a href="http://www.winnipeg.ca/matmgt/bidopp.asp">http://www.winnipeg.ca/matmgt/bidopp.asp</a>
- B5.2.2 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.
- B5.3 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.

#### **B6.** SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 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.
- B6.4 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.
- B6.5 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.
- B6.6 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.
- B6.6.1 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.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.

- B6.8 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 B15.
- B6.9 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.
- B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.6 deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

#### **B7.** BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
  - (a) Form A: Bid;
  - (b) Form B: Prices;
  - (c) Bid Security
    - Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft;
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 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.
- B7.4.1 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.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 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 B15.1(a).
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Division 185 King Street, Main Floor Winnipeg MB R3B 1J1

#### B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 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.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 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.
- B8.4 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.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.5 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.

#### B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B9.2 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.
- B9.3 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.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

## **B10. QUALIFICATION**

- B10.1 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.
- B10.2 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 <a href="http://www.winnipeg.ca/matmgt/debar.stm">http://www.winnipeg.ca/matmgt/debar.stm</a>
- B10.3 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);and
  - (d) have previously carried out confined space entry work of a similar nature to the work specified; and
  - (e) have been trained and are qualified to apply the specified coating product.
- B10.4 Further to B10.3(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)
- B10.5 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.
- B10.6 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.

#### **B11.** BID SECURITY

- B11.1 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.
- B11.1.1 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.
- B11.1.2 All signatures on bid securities shall be original.
- B11.1.3 The Bidder shall sign the Bid Bond.
- B11.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B11.2 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.
- B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B11.3 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.

### B12. OPENING OF BIDS AND RELEASE OF INFORMATION

- B12.1 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.
- B12.1.1 Bidders or their representatives may attend.
- B12.2 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 <a href="http://www.winnipeg.ca/matmgt/default.stm">http://www.winnipeg.ca/matmgt/default.stm</a>
- B12.3 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 <a href="http://www.winnipeg.ca/matmgt/default.stm">http://www.winnipeg.ca/matmgt/default.stm</a>
- B12.4 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.

#### **B13.** IRREVOCABLE BID

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B13.2 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.

#### **B14. WITHDRAWAL OF BIDS**

- B14.1 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.
- B14.1.1 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.
- B14.1.2 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.
- B14.1.3 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 B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 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.

#### **B15. EVALUATION OF BIDS**

- B15.1 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 B10 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6.
- B15.2 Further to B15.1(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.
- B15.3 Further to B15.1(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.
- B15.4 Further to B15.1(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.
- B15.4.1 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.

B15.4.2 Further to B15.1(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.

#### **B16.** AWARD OF CONTRACT

- B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B16.2 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.
- B16.2.1 Without limiting the generality of B16.2, 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.
- B16.3 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 B15.
- B16.3.1 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**

# CO. 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 <a href="http://www.winnipeg.ca/matmgt/gen\_cond.stm">http://www.winnipeg.ca/matmgt/gen\_cond.stm</a>
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix "C" designates a section, clause or subclause 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 demolition and refurbishment of identified piping and mechanical components associated with two (2) existing grit aeration units at the SEWPCC. Surface preparation and coating of other identified components is also included.

#### D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
  - (a) "SEWPCC" means South End Water Pollution Control Centre;

#### D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is:

Neil Harrington P. Eng. Project Coordinator City of Winnipeg Water and Waste Department - Engineering Division 110-1199 Pacific Avenue Winnipeg, Manitoba R3E 3S8

Telephone No. (204) 986-3266 Facsimile No. (204) 224-0032

D4.2 At the pre-construction meeting, the Contract Administrator 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 facsimile number:

The City of Winnipeg Chief Financial Officer

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 Legal Services Department Attn: Director of Legal Services 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 three (3) 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 <a href="http://www.winnipeg.ca/matmgt/Safety/default.stm">http://www.winnipeg.ca/matmgt/Safety/default.stm</a>

#### D10. INSURANCE

- D10.1 The Contractor shall provide and maintain the following insurance coverage:
  - (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
  - (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;

- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the City Solicitor 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 but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

#### 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 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 least ten (10) Business Days prior to the commencement of any Subcontractor Work 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 least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than ten (10) Business Days from issuance of the letter of intent of contract award.
- 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 following activities/tasks for each grit aeration unit making up the Work as well as showing those activities/tasks on the critical path:
  - (a) Shop Drawing Submittals
  - (b) Submittal review (allow one week from receipt of submittal)
  - (c) Shop fabrication
  - (d) Site mobilization
  - (e) Date required for completion of aeration grit unit draining (allow one day to drain each grit aeration unit)
  - (f) Grit aeration unit preparation
  - (g) Demolition works
  - (h) Refurbishment works
  - (i) Inspection with Contract Administrator of unit bridge structural steel and baffle for potential structural repairs
  - (j) Three day allowance for potential structural steel repairs
  - (k) Shop surface preparation and coating
  - (I) Field surface preparation and coating
  - (m) Service testing
  - (n) Coating sufficiently cured and grit aeration unit ready to be placed in operation
  - (o) Substantial Performance
  - (p) Total Performance
- 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.

#### **SCHEDULE OF WORK**

#### D14. COMMENCEMENT

- D14.1 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.
- D14.2 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 Subcontractor list specified in D12;
    - (vii) the detailed work schedule specified in D13; and
  - (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.

D14.3.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

#### D15. SUBSTANTIAL PERFORMANCE

- D15.1 The Contractor shall achieve Substantial Performance by February 17, 2012.
- D15.2 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.
- D15.3 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.

#### D16. TOTAL PERFORMANCE

- D16.1 The Contractor shall achieve Total Performance by March 2, 2012.
- D16.2 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.
- D16.3 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.

#### D17. LIQUIDATED DAMAGES

- D17.1 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 Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
  - (a) Substantial Performance Six Hundred dollars (\$600.00);
  - (b) Total Performance One Hundred dollars (\$100.00).
- D17.2 The amounts specified for liquidated damages in D17.1 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.
- D17.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **CONTROL OF WORK**

#### D18. JOB MEETINGS

D18.1 Regular 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.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

# D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D19.1 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**

#### D20. PAYMENT

D20.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

#### **WARRANTY**

#### D21. WARRANTY

D21.1 Warranty is as stated in C13.

# FORM H1: PERFORMANCE BOND (See D11)


\_\_\_\_\_ day of \_\_\_\_\_ , 20\_\_\_\_ .

KNOW ALL MEN BY THESE PRESENTS THAT		
(hereinafter called the "Principal"), and		
(hereinafter called the "Surety"), are held and firmly bound unto <b>THE CITY OF WINNIPEG</b> (hereinaft called the "Obligee"), in the sum of	_ , ter	
dollars (\$	)	
of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of whi sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors a assigns, jointly and severally, firmly by these presents.		
WHEREAS the Principal has entered into a written contract with the Obligee for		
BID OPPORTUNITY NO. 640-2011		
SEWPCC REFURBISHMENT OF GRIT AERATION UNITS		
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:		
<ul> <li>(a) carry out and perform the Contract and every part thereof in the manner and within the times of forth in the Contract and in accordance with the terms and conditions specified in the Contract;</li> <li>(b) perform the Work in a good, proper, workmanlike manner;</li> <li>(c) make all the payments whether to the Obligee or to others as therein provided;</li> <li>(d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and</li> <li>(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, assessment claims, actions for loss, damages or compensation whether arising under "The Worket 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 or any part thereof during the term of the contract or any part thereof during the term of the contract or any part thereof during the term of the contract or any part thereof during the term of the contract or any part thereof during the term of the contract or any part thereof during the contract or any part there</li></ul>	the and ats, ers 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 Sure shall not, however, be liable for a greater sum than the sum specified above.	϶ιy	
AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and the 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 contraint notwithstanding.	ge	
IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the		

SIGNED AND SEALED in the presence of:	(Name of Principal) Per:	(Seal)
(Witness as to Principal if no seal)	Per:	, ,
	(Name of Surety)  By: (Attorney-in-Fact)	(Seal)

# FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT (PERFORMANCE SECURITY) (See D11)

(Date)	
Legal S 185 Kin	y of Winnipeg Services Department ng Street, 3rd Floor eg MB R3B 1J1
RE:	PERFORMANCE SECURITY - BID OPPORTUNITY NO. 640-2011
	SEWPCC REFURBISHMENT OF GRIT AERATION UNITS
Pursuai	nt to the request of and for the account of our customer,
(Name of	Contractor)
WE HE	of Contractor)  REBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding ggregate
	Canadian dollars.
demand Letter of payment	andby Letter of Credit may be drawn on by you at any time and from time to time upon written d for payment made upon us by you. It is understood that we are obligated under this Standby of Credit for the payment of monies only and we hereby agree that we shall honour your demand for the without inquiring whether you have a right as between yourself and our customer to make such d and without recognizing any claim of our customer or objection by the customer to payment by us.
	nount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon u or by formal notice in writing given to us by you if you desire such reduction or are willing that it be
Partial of	drawings are permitted.
	gage with you that all demands for payment made within the terms and currency of this Standby of Credit will be duly honoured if presented to us at:
(Address)	)
and we	confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

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)

# FORM J: SUBCONTRACTOR LIST

(See D12)

# SEWPCC REFURBISHMENT OF GRIT AERATION UNITS

<u>Name</u>	<u>Address</u>	Subcontractor Scope
		<del></del>
		· · · · · · · · · · · · · · · · · · ·

#### **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:

Specification No.	Specification Title
013300	Submittal Procedures
014200	References
014500	Quality Control
015200	Construction Facilities
015600	Temporary Barriers And Enclosures
016100	Common Product Requirements
017303	Execution Requirements
017411	Cleaning
017800	Closeout Submittals
055000	Metal Fabrications
440501	Process Mechanical General Requirements
440505	Installation of Pipework
440517	Pipe Welding

<u>Drawing No.</u> <u>Drawing Name/Title</u>

D1 SEWPCC Grit Aeration Unit Demolition Sheet 1
D2 SEWPCC Grit Aeration Unit Demolition Sheet 2
R1 SEWPCC Grit Aeration Unit Refurbishment Sheet 1
R2 SEWPCC Grit Aeration Unit Refurbishment Sheet 2

Photograph No. Photograph Name/Title

01 to 24 Photographs of SEWPCC Grit Aeration Unit No. 1

# E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

#### E3. SCOPE OF WORK

E3.1 The Contractor shall provide all plant, equipment, labour, supervision, materials, means and methods necessary to demolish existing and fully replace with new, the works identified in these specifications and on the drawings in a safe manner, fit-for-purpose intended. The description of work provided herein is intended to be a general description of work activities to be read in

- conjunction with the drawings, and is not intended to be an exhaustive listing of all tasks necessary to complete the work.
- E3.2 There are two grit aeration units adjacent to each other at the SEWPCC. Unit No. 1 is to the north and Unit No. 2 is to the south.
- E3.3 The scope is applicable to each of the two grit aeration units. Only one grit aeration unit can be out of service at any one time.

## E3.4 General Requirements

- (a) Include the following items in the unit price bid for General Requirements:
  - (i) Mobilization;
  - (ii) Demobilization;
  - (iii) Insurance; and
  - (iv) Bonding.
- (b) Basis of Payment
  - (i) A maximum of 75% of Form B, Item 1 may be submitted for progress payment after submittals are complete and the Contractor has mobilized on Site. The remaining 25% may be submitted for progress payment upon Total Performance

#### E3.5 Grit Aeration Unit Isolation

(a) In preparation for the work the City will isolate and drain the grit aeration unit to the lowest level achievable using the grit pump and sludge draw off pipe.

#### E3.6 Grit Removal and Disposal

- (a) As necessary to perform the work the contractor shall remove and dispose of residual grit buildup and any remaining wastewater in the unit. Disposal shall be at the Brady Road Landfill. The contractor will be responsible for the Brady Road Landfill tipping fee of \$32.50 per tonne.
- (b) The contractor shall provide a unit rate per tonne on Bid Form B, Item 2 for all costs associated with this work.
- (c) Measurement and Payment
  - (i) The contractor shall submit to the Contract Administrator the original weigh scale receipts, as issued by the Brady Road Landfill, for the disposal of the associated material. Payment will be made based on the weight indicated on the scale receipt(s) and the Bid Form B, Item 2 rate.

#### E3.7 Grit Aeration Unit Preparation

- (a) As necessary to perform the work the contractor shall wash down the grit aeration unit. A hose with supply of plant flushing water will be made available to the contractor in the grit area.
- (b) Once isolated it is anticipated that there will be some minor seepage through the grit aeration unit inlet sluice gate. The contractor shall provide any necessary containment and/or removal of the seepage. It would be acceptable to pump the seepage to the adjacent grit aeration unit.

# E3.8 Demolition

- (a) Provide and install temporary access as needed to perform the work.
- (b) Refer to Drawings D1 and D2
- (c) Prepare and submit a demolition rigging plan for item 11 to the Contract Administrator a minimum of seven days prior to the start of its demolition.
- (d) Temporarily support the 4" airline (item 7) near inside of grit tank wall such that the pipe to remain is restrained from movement.

- (e) Prior to start of demolition coordinate with the Contract Administrator for a shutdown duration of the air system. The maximum allowable duration of the shutdown will be six (6) hours.
- (f) During the shutdown the contractor is to cut the existing airline at a distance of approximately 1'-3" from the inside face of grit unit wall, prepare the pipe and supply and install a flange with blind to seal off the existing airline.
- (g) Demolish item 7 and 8 inside of grit unit up to the new flange, including hangers.
- (h) Temporarily support existing sludge draw off pipe (item 19) so that no movement of the pipe will occur.
- (i) Detach, by cutting and/or grinding, the eductor tube (item 11) from the sludge draw off pipe (item 19) taking care not to damage the sludge draw off pipe.
- (j) The contractor shall record the height/setting of the existing Hudson foot piece (Item 13) prior to it's demolition.
- (k) Demolish existing items 9 (including their upper support channels), 10, 11, 12, 13, 14, 15 and 16.
- (I) Remove all demolished components from the site. Dispose of and/or recycle the components in a lawful manner.

#### E3.9 Refurbishment Works

- (a) Provide and install temporary access as needed to perform the work.
- (b) Refer to Drawings R1 and R2.
- (c) Supply and install new replacement components for airline, item 7, including new hangers.
- (d) Supply and install a flanged spool section, 1'-0" long face to face, as indicated on drawing R1.
- (e) Supply and install flange for airline connection to spool section.
- (f) Install replacement valve, item 8, provided by the City to the contractor at the site. Contractor to supply and install dielectrically insulated flange connections between item 7 and item 8.
- (g) Prepare and submit an installation rigging plan for item 11 to the Contract Administrator a minimum of seven days prior to the start of its installation.
- (h) Supply, fabricate and install new replacement items 9 (including upper supporting channels), 10, 11, 12, 13, 14, 15 and 16, as per specifications. Field measure/verify existing as required.
- (i) The height/setting of the replacement Hudson foot piece (Item 13) shall be that recorded in E3.8 (j).
- (j) All carbon steel replacement items to be coated as per specification 055000.
- (k) Prepare and coat item 7 up to interior face of grit aeration unit wall.
- (I) Prepare and coat both bridge beams (item 1), including all interconnecting members, as per specification 05500 Clause 2.3. Remove and reinstall handrails and grating as required. Supply new handrail fasteners of same type as were the original. Supply any missing grating clips and bolts of same type as the original.
- (m) Prepare and coat baffle items 17 and 18 and sludge draw off pipe, item 19, as per specification 055000 Clause 2.3.
- (n) Protect existing components and surfaces from sandblasting and coating overspray.
- (o) With respect to E3.9 (I) and (m). Initially perform surface preparation to SSPC-SP7 on the components to be coated. Visually inspect the components for sign of structural deterioration. Report to and perform a visual review with the Contract Administrator of any components showing indication of structural deterioration. Under the direction of the Contract Administrator the contractor may be asked to perform remedial repairs, prior to recoating. Repairs would be performed by the contractor as per E5. Upon acceptance by

- the Contract Administrator of the components for coating the contractor may continue with final surface preparation and coating.
- (p) Coordinate with Contract Administrator for a shutdown of the air service for tie-in. Maximum duration of shutdown to be no longer two (2) hours.
- (q) During the shutdown connect refurbished airline to the existing airline flange.
- (r) Service test airline, item 7. Check all piping joints for leaks. Repair any deficiencies found.
- (s) Service test the operation of items 8, 12 and 13. Make repair and/or adjust as required.
- (t) Close item 8 valve after service testing.
- (u) Provide signed and dated service test report(s) to Contract Administrator.
- (v) Touchup, as per specification, any coating damaged during installation.
- (w) Remove all temporary works and construction residue from the grit aeration unit.
- (x) Advise Contract Administrator when the grit aeration unit is ready to be placed back into service.

#### E4. WORK BY OTHERS

- E4.1 As per E3.5 (a)
- E4.2 SEWPCC personnel may perform some wall thickness testing on the sludge draw off pipe, item 19, after the initial SSPC-SP7 surface preparation is completed by the contractor.
- E4.3 Supply of two (2) valves, Item 8 on drawing R1.

#### E5. CASH ALLOWANCE FOR REPAIRS

- E5.1 Description
  - (a) The Cash Allowance For Repairs is intended to be used for remedial repairs directed and authorized by the Contract Administrator under E3.9 (m).
  - (b) The City reserves the right to delete any or all of the Cash Allowance from the contract if the Work intended to be covered by the Cash Allowance is not required, or if the Works intended are found to be more extensive than the provisional Cash Allowance.
- E5.2 Method of Measurement and Basis of Payment
  - (a) Cost of repairs shall be evaluated by the methods outlined in C7.4, and a Change Order prepared by the Contract Administrator. Cost of the Change Order will be paid on the Progress Estimate and deducted from the Cash Allowance. If the valuation of the authorized work exceeds the Value of the Cash Allowance, the Contract Value will be adjusted by the shortfall.

#### E6. LOCATION AND ACCESS TO FACILITIES

- E6.1 The Work specified hereinafter will take place at the SEWPCC, located at 100 Ed Spencer Drive Winnipeg, MB, R2N 4G3.
- E6.2 Access to the facility will be between 7:45 am and 3:45 pm, Monday to Friday, excluding statutory holidays.
- E6.3 Inform the Contract Administrator at least 24 hours in advance where the Contractor intends to carry out Work outside normal working hours. Do not initiate work outside normal working hours without the Contract Administrator's approval except when the Work is unavoidable or absolutely necessary for:
  - (a) Preventing injury to any person or saving the life of any person; or

- (b) Preventing damage to property where the circumstances placing the property in danger could not reasonably have been foreseen and where the immediate carrying out of such Work is necessary in order to prevent damage to that property; in which case the
- E6.4 Contractor shall immediately advise the Contract Administrator in writing that such Work outside the normal working hours is necessary and of the reasons for this. He shall also state the nature and extent of Work to be carried out.
- E6.5 Coordinate activities with City personnel and any other contractors that may be working concurrently on the Site.
- E6.6 Additional details and requirements regarding facility access will be provided to the Contractor. The Contractor must comply with all City policies set forth in this document, and detailed instructions provided after the Work is awarded.

#### E7. FACILITY OPERATION REQUIREMENTS

- E7.1 The facilities related to the Work are critical to the treatment of wastewater for the City of Winnipeg. Under no condition shall equipment or power be shut down without prior permission of the Contract Administrator. Similarly, coordination and approval are required prior to returning the equipment back into service. The Contractor is responsible for preparing shutdown schedules in conjunction with the Contract Administrator and the City. The Contractor shall work within the schedule and any procedures given, and shall advise the Contract Administrator of any issues or concerns, prior to performing the Work.
- E7.2 The Work shall be scheduled and performed such that there is minimal disturbance to SEWPCC plant operation.
- E7.3 Hot work shall end no less than one (1) hour prior to end of shift and area inspected prior to daily departure by the Contractor's site supervisor and / or tradesman.
- E7.4 Some of the work will require shutdown of equipment. All equipment shutdown requirements require 24-48 hours notice. Coordinate the work to minimize the amount of time that equipment shutdown will be required. In addition, the Contractor shall be flexible to work around specific City operational requirements. Specific requirements that the Contractor is required to adhere to include:
  - (a) Only one aeration grit unit can be out of service at any one time.
  - (b) In case of accidental equipment shutdown, the Contractor must notify SEWPCC staff immediately for their corrective action. Under no circumstances shall the Contractor stop, start or restart equipment.
  - (c) Other process and safety requirements, as identified by the City or Contract Administrator.
- E7.5 It is possible that equipment failure within the SEWPCC, or another unforeseen condition, could cause an event where construction must be stopped immediately and equipment brought back online. The City, upon their sole discretion, may delay or stop the Work at any time, require the Contractor to return all or equipment into service as soon as possible, and reschedule the Work.

#### E8. SPECIFIC SAFETY REQUIREMENTS

E8.1 Portable H<sub>2</sub>S and combustible gas detection must be utilized continuously while working in the grit aeration units. Contractor to provide and utilize their own equipment.

#### E9. DANGEROUS WORK CONDITIONS

E9.1 Further to clause C 6.26 of the General Conditions, the Contractor shall be aware that the interior of the grit aeration units are considered a confined space and shall follow the "Guidelines for Confined Entry Work" as published by the Manitoba Workplace Safety and Health Division.

- E9.2 The Contractor shall be aware of the potential hazards that can be encountered in underground chambers, manholes and sewers such as explosive gases, toxic gases and oxygen deficiency. The Contractor's Safe Work Plan should address these issues.
- E9.3 The air in a confined space must be tested before entry and continuously during the time that personnel are inside the space. Equipment for continuous monitoring of gases must be explosion-proof and equipped with a visible and audible alarm. The principal tests are for oxygen deficiency, explosion range and toxic gases. Testing equipment must be calibrated in accordance with manufacturer's specifications.
- E9.4 The Contractor is responsible for all testing requirements.
- E9.5 The Contractor shall ventilate all confined spaces including underground chambers, tunnels, pipes and shafts as required and approved by the Manitoba Workplace Safety and Health Act (the "Act"). If no ventilation is supplied, a worker must wear a respirator or supplied air to enter the confined space.
- E9.6 Workers must wear a respirator or supplied air at all times when entering an underground chamber, manhole or sewer where live sewage is present.
- E9.7 The Contractor shall provide a photo-ionization detector (PID) and toxic gas detector (H2S) on site at all times to monitor potential hydrocarbon vapours and hydrogen sulphide in the confined spaces. The gas detector and safety equipment conforming to the Act shall be made available to the Contract Administrator or SEWPCC personnel for their use during inspections or testing.
- E9.8 Gas detection is required at all times when working inside the grit aeration units.
- E9.9 The Contract Administrator may issue a stop work order to the Contractor if the above guidelines are not being followed. The Contractor shall not resume operations until the Contract Administrator is satisfied the Contractor is following the appropriate procedures. The Contractor shall have no claim for extra time or costs due to the stop work order for not following these safety guidelines.