

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 573-2012

NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO. 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO. 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, November 23, 2012.
- 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, a Site meeting will be held at 10:00 a.m.. on November 8, 2012 to provide Bidders access to the Site.
- B3.2 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.
- B3.3 The Bidder shall note that the following personal protective equipment is required to enter the site:
 - (a) Hard hat (CSA / ANSI approved)
 - (b) Steel toe footwear (CSA / ANSI approved)
- B3.4 The Bidder shall note that the Digester and Sludge Holding Tanks are confined spaces and if the Bidder wishes to enter the Digester or Sludge Holding Tank during the Site Investigations the Bidder is required to abide by The Manitoba Workplace Safety and Health Act Regulations for confined space entry. The Bidder is required to provide their own confined space entry equipment.

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 http://www.winnipeg.ca/matmgt/bidopp.asp
- B5.2.2 The Bidder is responsible for ensuring that he/she 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/her 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/she 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/her 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/her own name, his/her 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/her 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/her 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/her 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 the lump sum price in Canadian funds for the Work 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 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 http://www.winnipeg.ca/matmgt/debar.stm
- 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);
- 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.
- B12.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B11 will not be read out.
- 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 http://www.winnipeg.ca/matmgt/
- 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 http://www.winnipeg.ca/matmgt/
- 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/her 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/her Bid after the Submission Deadline but before his/her 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/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B15.4 Further to B15.1(c), the Total Bid Price shall be the lump sum price shown on Form B: Prices.

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/her 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 http://www.winnipeg.ca/matmgt/gen_cond.stm
- 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 following:
 - (a) Digester No. 11
 - (i) Rehabilitation of Digester No. 11;
 - (ii) Installation of pre-selected pumped mixing system for Digester No. 11;
 - (iii) Miscellaneous works including modifications to the gas handling system.
 - (b) Sludge holding Tank No. 5 and 7
 - (i) Rehabilitation of Sludge Holding Tank No. 5 and 7;
 - (ii) Miscellaneous works including modifications to the gas handling system.
- D2.2 The major components of the Work are as follows:
 - (a) Submission of shop drawings;
 - (b) Decommissioning of the existing gas mixing system for Digester No. 11;
 - (c) Construction of a new cast-in-place roof slab on Digester No. 11;
 - (d) Concrete restoration on the interior of Digester No. 11 and installation of a protective coating;
 - (e) Concrete restoration on the interior of Sludge Holding Tank No. 5 and 7 and the installation of a protective coating;
 - (f) Upgrades to gas handling systems for Digester No. 11 and Sludge Holding Tanks No. 5,6, 7 and 8;
 - (g) Installation of pre-selected mechanical mixing systems for Digester No. 11;
 - (h) Strengthening of existing Digester Gallery No. 5 floor with structural steel beams;
 - (i) Installation of electrical, instrumentation and control.

D3. DEFINITIONS

- D3.1 Notwithstanding C1.1, when used in this Bid Opportunity:
 - (a) "NEWPCC" means North End Water Pollution Control Centre;
 - (b) "SHT" means Sludge Holding Tank;

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Stantec Consulting Ltd., represented by:

Jamie Brewster, M.Sc.

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

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

D4.3 Bids Submissions must be submitted to the address in B7.8.

D5. CONTRACTOR'S SUPERVISOR

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

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
 - (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract. Notices.

D7. NOTICES

- D7.1 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 facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3, D7.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at facsimile number identified in D4.1.
- D7.3 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

D7.4 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 facsimile number:

The City of Winnipeg Legal Services Department Attn: Director of Legal Services Facsimile No.: 204 947-9155

D8. FURNISHING OF DOCUMENTS

D8.1 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

D9. AUTHORITY TO CARRY ON BUSINESS

D9.1 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.

D10. SAFE WORK PLAN

- D10.1 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.
- D10.2 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

D11. INSURANCE

- D11.1 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) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
 - (c) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance.
- D11.2 Deductibles shall be borne by the Contractor.
- D11.3 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.
- D11.4 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.

D12. PERFORMANCE SECURITY

- D12.1 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.
- D12.1.1 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.
- D12.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B11.1(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.

D13. DETAILED PRICES

- D13.1 The Contractor shall provide the Contract Administrator with a detailed price breakdown (Form I: Detailed Prices) at least two (2) 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.
- D13.2 The Contractor shall state a price for each item or sub-item of the Work identified on Form I: Detailed Prices. The detailed prices must be consistent with the price(s) provided in the Contractor's Bid.

D14. SUBCONTRACTOR LIST

D14.1 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 two (2) 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.

D15. DETAILED WORK SCHEDULE

- D15.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the pre-construction meeting but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D15.2 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.
- D15.3 Further to D15.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

- (a) Commencement date;
- (b) Digester No. 11 gas mixing system decommissioning;
- (c) Digester No. 11 interior concrete rehabilitation;
- (d) Digester No. 11 concrete roof slab;
- (e) Digester No. 11 mechanical mixing system installation;
- (f) Digester No. 11 instrumentation and controls;
- (g) Digester No. 11 gas collection system upgrades;
- (h) Digester No. 11 mixing system commissioning;
- (i) SHT No. 5 and 7 interior concrete rehabilitation;
- (j) SHT No. 5, 6, 7 and 8 gas collection system upgrades;
- (k) Start-up and commissioning;
- (I) Operating training;
- (m) Substantial Performance;
- (n) Total Performance.
- D15.4 Further to D15.2(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

D16. COMMENCEMENT

- D16.1 The Contractor shall not commence any Work until he/she is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D16.2 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 D9;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D10;
 - (iv) evidence of the insurance specified in D11;
 - (v) the performance security specified in D12;
 - (vi) the detailed prices specified in D13;
 - (vii) the Subcontractor list specified in D14; and
 - (viii) the detailed work schedule specified in D15.
 - (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.

D17. SUBSTANTIAL PERFORMANCE

- D17.1 The Contractor shall achieve Substantial Performance by August 6, 2013.
- D17.2 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.

D17.3 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.

D18. TOTAL PERFORMANCE

- D18.1 The Contractor shall achieve Total Performance by September 4, 2013.
- D18.2 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.
- D18.3 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.

D19. LIQUIDATED DAMAGES

- D19.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one thousdand seven hundred dollars (\$1,700) per Calendar Day for each and every Calendar Day following the day fixed herein for Substantial Performance during which such failure continues.
- D19.2 The amount specified for liquidated damages in D19.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D19.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

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/she 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 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D23.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.

FORM H1: PERFORMANCE BOND (See D12)

| 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 (hereinafte 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. 573-2012 | | | | | | | |
| NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO. 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7 | | | | | | | |
| 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 see 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: | (Name of Principal) | (01) |
|---------------------------------------|---|--------|
| (Witness as to Principal if no seal) | Per: | (Seal) |
| | (Name of Surety) By: (Attorney-in-Fact) | (Seal) |

FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT (PERFORMANCE SECURITY) (See D12)

| (Date) | |
|---|-------------------|
| The City of Winnipeg Legal Services Department 185 King Street, 3rd Floor Winnipeg MB R3B 1J1 | |
| RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 573-2012 | |
| NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7 |). |
| Pursuant to the request of and for the account of our customer, | |
| (Name of Contractor) | , |
| WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceed in the aggregate | ling |
| Canadian dolla | rs. |
| This Standby Letter of Credit may be drawn on by you at any time and from time to time upon writdemand for payment made upon us by you. It is understood that we are obligated under this Stand Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand payment without inquiring whether you have a right as between yourself and our customer to make submand and without recognizing any claim of our customer or objection by the customer to payment by | dby for uch |
| The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn up it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it made. | |
| Partial drawings are permitted. | |
| We engage with you that all demands for payment made within the terms and currency of this Stand Letter of Credit will be duly honoured if presented to us at: | dby |
| (Address) | |
| and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by o | JS. |

| All demands for payment shall specifically state that they are drawn under this Standby Letter of Ci | redit. |
|--|--------|
|--|--------|

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 I: DETAILED PRICES

(See D13)

NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO. 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7

| ITEM NO. | DESCRIPTION | SPEC. REF. | UNIT | APPROX. QUANTITY | UNIT PRICE | AMOUNT |
|-------------|--|----------------|-------------|---------------------|---------------|--------|
| 1. | General Requirements | E4, Div 01 | Lump Sum | 1 | | |
| 2. | Digester No. 11 Concrete Tank Restoration and associated works | Div 03, 07, 09 | Lump Sum | 1 | | |
| 3. | SHT No. 5 and 7 Concrete Tank Demolition and Repair | Div 03 | Cubic Meter | 55 | | |
| 4. | SHT No. 5 and 7 Concrete Tank Waterproofing/Lining | Div 09 | Lump Sum | 1 | | |
| 5. | Structural Steel to Strengthen Digester Gallery No.5 | Div 05 | Lump Sum | 1 | | |
| 6. | Heating and Hording | Div 03 | Lump Sum | 1 | | |
| 7. | Selective Site Demolition | Div 02 | Lump Sum | 1 | | |
| 8. | Digester No. 11 Mixing System | Div 46 | Lump Sum | 1 | | |
| 9. | Digester No. 11 Gas Handling System Upgrades | Div 46 | Lump Sum | 1 | | |
| 10. | SHT No. 5, 6, 7 and 8 Gas Handling System Upgrades | Div 46 | Lump Sum | 1 | | |
| 11. | Process Integration | Div 40, 05 | Lump Sum | 1 | | |
| 12. | Electrical | Div 26 | Lump Sum | 1 | | |
| 13. | Integrated Automation | Div 25 | Lump Sum | 1 | | |
| 14. | DCS System | 25 90 01 | Lump Sum | 1 | | |

FORM J: SUBCONTRACTOR LIST

(See D14)

NORTH END WATER POLLUTION CONTROL CENTRE REHABILITATION OF DIGESTER NO. 11 AND SLUDGE HOLDING TANKS NO. 5 AND 7

| <u>Name</u> | <u>Address</u> |
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PART E - SPECIFICATIONS

GENERAL

| E٬ | 1 | ΔΡΙ | 21 I | $C\Delta$ | RI | F | S | PF | CI | FI | Δ | TI | \cap N | 12 | ΔN | JD | DR | Δ | WI | NC | :5 |
|----|---|-----|------|-----------|----|---|---|----|----|----|----------|----|----------|----|----|----|----|---|----|----|----|
| | | | | | | | | | | | | | | | | | | | | | |

- 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:

| Drawing No. | Drawing Name/Title |
|--|---|
| 1-0101D-D0001-001 | General Cover Sheet and Drawing List |
| 1-0101D-C0001-001 | <u>Civil</u> Parking and Laydown Area Site Plan |
| 1-0101D-S0001-001 1-0101D-S0002-001 1-0101D-S0003-001 1-0101D-S0004-001 1-0101D-S0005-001 | Structural General Notes and Schedules Sludge Holding Tank No. 5 & 7 Modifications Digester No. 11 – Plan and Sections Digester No. 11 – Plan and Sections Digester No. 11 – Plan and Sections |
| 1-0101D-M0002-001 1-0101D-M0003-001 1-0101D-M0004-001 1-0101D-M0005-001 1-0101D-M0006-001 1-0101D-M0007-001 1-0101D-M0008-001 1-0101D-M0009-001 1-0101D-M0010-001 1-0101D-M0011-001 | Process Gallery No. 5 – Main Floor Plan Elev. 229.990 – Demolition Plan Gallery No. 5 – Main Floor Plan Elev. 233.820 – Demolition Plan Sludge Gas Recirculation System Demolition Plan Digester No. 11 – Gas Piping Plan and Sections SHT No. 5, 6, 7, 8 Waste Gas Burner Upgrade Digester No. 11 – Mixing System Plan Elev. 233.820 Digester No. 11 – Mixing System Details Digester No. 11 – Mixing System Sections Miscellaneous Mechanical and Metal Details Miscellaneous Details |
| 1-0101D-E0011-001 1-0101D-E0012-001 1-0101D-E0013-001 1-0101D-E0014-001 | Electrical Single Line Diagram and MCC Layout Power, Instrumentation and Control Floor Plan Loop Wiring Diagrams Digester Gallery 6 West Electrical Room Layout |
| 1-0101D-A0081-001 1-0101D-A0081-002 1-0101D-A0081-003 1-0101D-A0082-001 1-0101D-A0229-001-D | Automation / Instrumentation and Control Process and Instrumentation Diagram Legend and Details - 1 Process and Instrumentation Diagram Legend and Details - 2 Process and Instrumentation Diagram Legend and Details - 3 Digester No. 11 Mixing Pumps P&ID Digester No. 11 Gas Collection System P&ID Demolition |

| 1-0101D-A0229-001 1-0101D-A0211-001-D 1-0101D-A0211-001 | Digester No. 11 Gas Collection System P&ID Digester No. 11 Gas Collection System P&ID Demolition Digester No. 11 Gas Collection System P&ID |
|---|---|
| DIVISION OF CENERAL I | DECHIDEMENTS |

DIVISION 01 – GENERAL REQUIREMENTS 01 29 00 Measurement and Payment

| 01 29 00 | Measurement and Payment |
|----------|---|
| 01 33 00 | Submittals Procedures |
| 01 45 00 | Quality Control |
| 01 52 00 | Construction Facilities |
| 01 71 00 | Examination and Preparation |
| 01 7411 | Cleaning |
| 01 77 00 | Closeout Procedures |
| 01 78 00 | Closeout Submittals |
| 01 79 00 | Demonstration and Training |
| 01 98 13 | General Commissioning Requirements |

DIVISION 02 - EXISTING CONDITIONS

02 41 13 Selective Site Demolition

DIVISION 03 - CONCRETE

| 03 10 00 Concrete Framework | |
|--|----|
| 03 20 00 Concrete Reinforcement | |
| 03 30 00 Cast-in-Place Concrete | |
| 03 37 13 Shotcrete | |
| 03 70 00 Concrete Restoration | |
| 03 90 00 Concrete Tank Pressure Testin | ng |

DIVISION 05 - METALS

| 05 12 23 | Structural Steel for Buildings |
|----------|--------------------------------|
| 05 50 00 | Miscellaneous Metals |

DIVISION 07 – THERMAL & MOISTURE PROTECTION

| 07 11 13 | Bituminous Dampproofing |
|----------|---|
| 07 21 13 | Board Insulation |
| 07 50 00 | Fully Adhered Reinforced Single Ply Roof Membrane |
| 07 60 00 | Flashing and Sheet Metal |

DIVISION 09 - FINISHES

| 09 77 33 | Tank Lining |
|----------|----------------------------------|
| 09 91 00 | Painting |
| 09 97 19 | Painting Exterior Metal Surfaces |

| DIVISION 25 – INTEGRATED AUTOMATION | | |
|-------------------------------------|---|--|
| 25 05 00 | Common Work Results - Integrated Automation | |
| 25 14 23 | Field Equipment Panels | |
| 25 30 01 | Process Controllers | |
| 25 30 02 | Instruments | |
| 25 31 03 | Instrument Index | |
| 25 31 04 | Asset List | |
| 25 90 01 | DCS System | |
| 25 90 02 | Local Area Network Definition (LANDef) | |
| 25 90 03 | PLC System Input/Output List | |

DIVISION 26 - ELECTRICAL

| 26 05 00 | Common Work Results - Electrical |
|----------|--|
| 26 05 19 | Wire and Cable (0-1000V) |
| 26 05 26 | Grounding and bonding for Electrical Systems |

| 26 05 29 | Fastenings and Support |
|-------------|---|
| 26 05 32 | Outlet Boxes, Conduit Boxes, and Fittings |
| 26 05 33 | Wire and Box Connections (0-1000V) |
| 26 05 33.01 | Wire and Box Connections (0-1000V) - Schedule |
| 26 05 34 | Conduits, Conduit Fastenings and Fittings |
| 26 05 83 | Miscellaneous Mechanical Systems |
| 26 27 01 | Disconnect Switches - Fused and Non-fused |
| 26 28 16 | Circuit Breakers |
| 26 29 23 | Variable Frequency Drives |
| 26 29 34 | Motor Control Wiring |

DIVISION 40 – PROCESS INTEGRATION

| 40 05 00 | Common Work Results for Process Integration |
|----------|---|
| 40 05 23 | Process Valves |
| 40 05 30 | Miscellaneous Process Integration |
| 40 20 00 | Liquid Process Piping |
| 40 41 13 | Heat Trace |

DIVISION 46 – WATER AND WASTEWATER EQUIPMENT

| 46 41 00 | Mixing Equipment |
|----------|--|
| 46 73 20 | Digester Gas Safety Equipment and Specialties |
| 46 73 21 | Sludge Holding Tank Gas Safety Equipment and Specialties |

APPENDIX A - CONSTRUCTION PLAN

APPENDIX B - MIXING SYSTEM SHOP DRAWINGS

APPENDIX C - PROCESS NARRATIVE

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. GENERAL REQUIREMENTS

- E3.1 The Contractor shall include the following items in the unit price bid for "General Requirements":
 - (a) Mobilization to the site;
 - (b) Demobilization from the site;
 - (c) Insurance; and
 - (d) Bonding.
- E3.2 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.