

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 291-2006

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



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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 NORTH END WATER POLLUTION CONTROL CENTRE CENTRATE NUTRIENT TREATMENT – NITROGEN REMOVAL FACILITY

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 20, 2006.
- B2.2 Bid Submissions 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. BIDDERS' CONFERENCE

- B3.1 Further to GC:3.1, the Contract Administrator will hold a Bidders' conference at North End Water Pollution Control Centre from 9:00 AM to 12:00 noon on June 15, 2006.
- B3.2 The Bidder is advised that, at the Bidders' Conference, the Bidder's representatives are expected to print their company name and their own names and affix their signatures to the City's site visit sign-in sheet as evidence of their attendance.
- B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Bidders' Conference unless that information or interpretation is provided by the Contract Administrator in writing.
- B3.4 If the Bidders require additional information or explanation relating to the Work, the Bidders shall apply for the same to the Contract Administrator in accordance with B4.
- B3.5 The Bidders shall be solely responsible for any errors, omissions or misunderstandings resulting from the Bidders' failure to make a thorough examination of the site and obtain such information.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- 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 Branch internet site at http://www.winnipeg.ca/matmgt.
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.
- 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 shall 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.

B7. BID SUBMISSION

- B7.1 The Bid Submission consists of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) 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 All components of the Bid Submission 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 in ink, to constitute a responsive Bid.
- B7.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.3.1 Samples or other components of the Bid Submission 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 Submission.
- B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.5 Bid Submissions shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Branch 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 shall be printed below such signatures.
- B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.
- 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 Submission 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 GC.12.2.3(c), the price on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST), except for the supply and installation of process equipment, for which MRST shall be extra.
- B9.2 Unit Prices: Labour
- B9.2.1 Form B: Prices includes a unit price for software configuration labour. This labour is to be provided by qualified experienced personnel employed by ABB Inc. on an "as required" basis. Labour will be utilized and authorized as required to assist City staff in the completion of software configuration referenced in Division 17. Labour will be paid for on an hourly basis as authorized by the Contract Administrator at the unit price listed in Form B: Prices.
- B9.2.2 Form B: Prices includes unit prices (hourly rates) for Contract changes undertaken by specific trades. These unit rates are to include all mark-ups and MRST, and will be applied to authorized Contract changes (as required) by the Contract Administrator.

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;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out work, similar in nature, scope and value to the Work;
- (f) employ only Subcontractors who:
 - (i) are responsible and not suspended, debarred or in default of any obligation 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 Branch internet site at http://www.winnipeg.ca/matmgt); and
 - (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract:
- (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba);
- (h) The City may require the Bidder to furnish evidence satisfactory to the City that the Bidder has the ability, experience, capital and plant required to undertake and perform the Work successfully, and complete in the time specified. The Bidder shall provide upon request a list of completed work, similar in scope and value in sufficient detail to demonstrate qualification to undertake this Work. The Bidder shall provide specific details of their experience, which will include size and weight of equipment as well as description of the works.
- (i) Where all or any portion or portions of the Work is to be subcontracted or done by anyone other than the successful Contractor, the name, address, and work to be subcontracted by each Subcontractor shall be stated upon request, and the contracts pertaining to the work subcontracted shall be subject to all the items and conditions in the Specification.
- (j) The Bidder shall also provide evidence and commit upon request, that all mechanical work and electrical and control work will be performed by certified journeymen and registered apprentices of their respective trades. Verification will be required by each tradesperson on the Site. This will be a requirement to be abided by all plumbers, steamfitters, millwrights and electricians. In addition, all mechanical and electrical Subcontractors will be required to abide by the journeyman to apprentice ratios as outlined in "The Apprenticeship and Tradesman's Qualification Act", typically three journeymen to one apprentice".
- (k) The Bidder shall be a firm normally engaged and fully competent in the type of work described in this section of the Specification. The firm shall have been continuously and successfully engaged in this business for at least five (5) years. The Bidder shall provide a list of similar projects recently completed and resumes of the instrumentation personnel, or Subcontractor, proposed for the project. The Bidder, or Subcontractor, is to be experienced in the process and instrument requirements of this Contract and to show that it maintains a fully equipped and qualified organization, capable of performing the present Work and of providing warranty service to the system after installation. The Bidder shall provide evidence of same upon request.

- (I) The Contractor shall perform all instrument hook-ups, calibrations and checkouts with qualified journeyman instrument mechanics who are familiar with the devices being installed and perform all control wiring installation and connections with qualified journeyman electricians. The Bidder shall provide evidence of same upon request.
- B10.2 Further to B10.1(g), the Bidder shall, within three (3) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder 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 Option 1 administered by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
 - (b) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association; or
 - (c) 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 Branch internet site at http://www.winnipeg.ca/matmgt.)
- B10.3 The Bidder shall be prepared to 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.
- B10.4 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.
- B11.2 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 Bid Submissions will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, 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 Bid Submissions determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.
- B12.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (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 Branch internet site 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 Branch internet site at http://www.winnipeg.ca/matmgt.
- B12.4 The Bidder is advised that any information contained in any Bid Submission 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 GC:23.3, 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 shall:

- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
- (b) open the Bid Submission 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 (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 Submission 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 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 Submission 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 unit prices shown on Form B: Prices.
- B15.4.1 If there is any discrepancy between the Total Bid Price written in figures and the Total Bid Price written in words, the price written in words shall take precedence.

B16. AWARD OF CONTRACT

- B16.1 The City will give notice of the award of the Contract by way of a letter of intent, 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.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

- C1.1 The *General Conditions for Construction Contracts* (Revision 2000 11 09) are applicable to the Work of the Contract.
- C1.1.1 The *General Conditions for Construction Contracts* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Construction Contracts*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.4 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.5 The General Conditions are amended by deleting GC:6.16 and GC:6.17. The City of Winnipeg is now within the jurisdiction of the Manitoba Ombudsman pursuant to The Ombudsman Act.

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of the labour, equipment, and materials required to complete the Nitrogen Removal Facility at the North End Water Pollution Control Centre in Winnipeg, Manitoba, all as specified in the Contract Documents.
- D2.2 The major components of the Work are as follows:
 - (a) Construction of new structures with associated mechanical and electrical systems for:
 - (i) Two sequencing batch reactors
 - (ii) One equalization tank
 - (iii) One blower building
 - (iv) One exhaust air fan building
 - (v) One exhaust stack
 - (vi) Chemical storage and feeding facilities
 - (b) Installation of decanters (supplied by the City). A copy of the Bid Opportunity Document is available for viewing in the Contract Administrator's Office.
 - (c) Installation of aeration equipment (supplied by the City). A copy of the Bid Opportunity Document is available for viewing in the Contract Administrator's Office.
 - (d) Tie-ins to the existing plant.
 - (e) Upgrade, additions, and modifications to the electrical supply system and services as detailed in Division 16 Electrical Scope of Work.
 - (f) Upgrades and modifications to the distributed control system (DCS) to control new systems.
 - (g) Sitework and Site Utility Work associated with the new facilities and with the general Site.
 - (h) Heating, Ventilation, and Air Conditioning (HVAC) systems.
 - (i) All other auxiliary equipment, structures, and systems required to complete the Work.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Earth Tech Canada Inc., represented by:

Eric Hutchison, P.Eng. Project Manager 850 Pembina Highway Winnipeg, MB R3M 2T6

Telephone No. (204) 477-5381 Facsimile No. (204) 284-2040

D3.2 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.

D4. CONTRACTOR'S SUPERVISOR

D4.1 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.

D5. NOTICES

- D5.1 Except as provided for in GC:23.2.2, 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.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.
- D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg Chief Administrative Officer Secretariat Administration Building, 3rd Floor 510 Main Street Winnipeg MB R3B 1B9

Facsimile No.: (204) 949-1174

D5.4 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 Corporate Services Department Legal Services Division 185 King Street, 3rd Floor Winnipeg MB R3B 1J1

Facsimile No.: (204) 947-9155

D6. FURNISHING OF DOCUMENTS

D6.1 Upon award of the Contract, the Contractor will be provided with five (5) 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

D7. SAFE WORK PLAN

- D7.1 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 GC:4.1 for the return of the executed Contract.
- D7.2 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 Branch internet site at http://www.winnipeg.ca/matmgt.

D8. INSURANCE

- D8.1 The City shall provide and maintain the following Project Insurance Coverages:
- D8.1.1 Builder's Risk Insurance in the amount of one hundred percent (100%) of the total project cost.
 - (a) The Contractor shall be responsible for deductibles up to \$25,000.00 maximum of any one loss.
- D8.1.2 Wrap-Up Liability Insurance in the amount of no less than 10 million dollars (\$10.000.000.00).
 - (a) The Contractor shall be responsible for deductibles up to \$25,000.00 maximum of any one loss.
- D8.2 The City of Winnipeg will carry such insurance to cover all parties engaged in the Work in this Contract. Provision of this insurance by the City of Winnipeg is not intended in any way to relieve the Contractor from his obligations under the terms of the Contract. Specifically, losses relating to deductibles for insurance, as well as losses in excess of limits of coverage and any risk of loss that is not covered under the terms of the insurance provided by the City of Winnipeg remains with the Contractor.
- D8.3 The Contractor shall provide and maintain the following insurance coverage at all times during the performance of the Work:
- D8.3.1 Automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00).
 - (a) Deductibles shall be borne by the Contractor;
 - (b) The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.
 - (c) The Contractor shall provide the Contract Administrator with evidence of insurance of the policy at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the Award of Contract.

D9. PERFORMANCE SECURITY

- D9.1 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.
- D9.1.1 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.
- D9.2 If the bid security provided in his Bid Submission 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 GC:4.1 for the return of the executed Contract.

D10. DETAILED WORK SCHEDULE

- D10.1 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 the date specified in GC:4.1 for the return of the executed Contract.
- D10.2 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.
- D10.3 Further to D10.2(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) Shop Drawing submittal dates;
 - (c) Equipment delivery dates:
 - (d) Testing, Commissioning and Training;
 - (e) Substantial Performance;
 - (f) Total Performance.
- D10.4 Further to D10.2(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

D11. COMMENCEMENT

- D11.1 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.
- D11.2 The anticipated award date for this Bid Opportunity is September 15, 2006.
- D11.3 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - evidence that the Contractor is 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;
 - (ii) evidence of the workers compensation coverage specified in GC:6.14;
 - (iii) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;
 - (vi) the detailed work schedule specified in D10.
 - (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.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance by January 31, 2008.
- D12.2 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.
- D12.3 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.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance by March 15, 2008.
- D13.2 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.
- D13.3 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.

D14. LIQUIDATED DAMAGES

- D14.1 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 thousand five hundred dollars (\$1500) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D14.2 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D15. JOB MEETINGS

- D15.1 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.
- D15.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D16. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D16.1 Further to GC:6.26, 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

D17. PAYMENT SCHEDULE

- D17.1 Further to GC:12, payment shall be in accordance with monthly progress claims. The City shall only be required to pay the Contractor for material and equipment required for the Work upon the installation and total incorporation of same permanently into the Work.
- D17.2 To facilitate payment the Contractor shall provide an acceptable breakdown of the contract price to the Contract Administrator at least 1 day prior to the first progress payment request.

WARRANTY

D18. WARRANTY

D18.1 Notwithstanding GC:13.2, 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 GC:13.2.1 or GC:13.2.2, in which case it shall expire when provided for thereunder.

- D18.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.
- D18.2 Notwithstanding GC:13.2 or D18.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D18.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in GC:13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND

(See D9)

KNOW ALL MEN BY THESE PRESENTS THAT

hereinafter called the "Principal"), and
hereinafter called the "Surety"), are held and firmly bound unto THE CITY OF WINNIPEG (hereinafter called the "Obligee"), in the sum of
dollars (\$
of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of whice sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.
VHEREAS the Principal has entered into a written contract with the Obligee dated the
day of , 20 , for:
BID OPPORTUNITY NO. 291-2006
JORTH END WATER POLITION CONTROL CENTRE CENTRATE NUTRIENT TREATMENT _

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

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

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

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner:
- (c) make all the payments whether to the Obligee or to others as therein provided;
- 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	d Surety have signed and sealed this bond the	
day of	, 20	
SIGNED AND SEALED in the presence of: (Witness)	(Name of Principal) Per:	(Seal)
	(Name of Surety) By: (Attorney-in-Fact)	(Seal)

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

(See D9)

(Date)
The City of Winnipeg Corporate Services Department Legal Services Division 185 King Street, 3rd Floor Winnipeg MB R3B 1J1
RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 291-2006
NORTH END WATER POLLUTION CONTROL CENTRE CENTRATE NUTRIENT TREATMENT – NITROGEN REMOVAL FACILITY
Pursuant to the request of and for the account of our customer,
(Name of Contractor)
(Address of Contractor) WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate
Canadian dollars.
This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.
The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.
Partial drawings are permitted.
We engage with you that all demands for payment made within the terms and currency of this Standby Letter 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.

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

(Date)			

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

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

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

(Name	of bank or financial institution)
Per:	
	(Authorized Signing Officer)
Per:	
	(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 The City of Winnipeg Standard Construction Specifications is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

Drawing No.	Drawing Name/Title
CIVIL	
C1.01	TOPOGRAPHIC SURVEY PLAN
C1.02	CONTRACTOR HAUL ROUTE & CONSTRUCTION AREA PLAN
C2.01	GENERAL ARRANGEMENT SITE UTILITIES
C2.02	PART PLAN AND DETAILS - CHEMICAL UNLOADING AREAS
C3.01	WATERMAINS - PLAN AND PROFILE SHEET 1
C3.02	WATERMAINS - PLAN AND PROFILE SHEET 2
C4.01	CENTRATE FEED LINE AND TREATED CENTRATE RETURN LINE - PLAN AND PROFILE - SHEET 1
C4.02	CENTRATE FEED LINE AND TREATED CENTRATE RETURN LINE - PLAN AND PROFILE - SHEET 2
C5.01	RAS, WAS, AND FLUSHING WATER PLAN AND PROFILE
C6.01	LAND DRAINAGE PLAN AND PROFILE
C8.01	PAVING AND GRADING PLAN
C8.02	ROADWAY PROFILES AND DETAILS

ARCHITECTURAL

A1.01	UPPER ROOF PLAN
A1.02	UPPER LEVEL PLAN
A1.03	CODE ANALYSIS AND SCHEDULES
A1.04	REFLECTED CEILING PLAN
A2.01	EXTERIOR ELEVATIONS
A3.01	BUILDING SECTION & DETAILS
A3.02	BUILDING SECTION
A4.01	DETAIL SECTIONS
A4.02	DETAIL SECTIONS
A4.03	MISCELLANEOUS DETAILS

STRUCTURAL

S0.01	SBR BUILDING GENERAL NOTES
S0.02	SBR BUILDING STANDARD DETAILS
S0.03	SBR BUILDING STANDARD DETAILS & SCHEDULES
S0.04	SBR BUILDING STANDARD DETAILS

S1.01	SBR BUILDING PILING PLAN
S2.01	SBR BUILDING FLOOR ELEVATION @ ELEV. 223.910
S2.02	SBR BUILDING FOUNDATION PLAN ABOVE @ ELEV. 230.000
S2.03	SBR BUILDING LOWER ROOF FRAMING PLAN
S3.01	SBR BUILDING UPPER ROOF FRAMING PLAN
S3.02	SBR BUILDING BUILDING SECTIONS
S3.03	SBR BUILDING BUILDING SECTIONS & ELEVATION
S3.04	SBR BUILDING BUILDING SECTIONS & ELEVATION
S3.05	SBR BUILDING BUILDING DETAILS
S3.06	SBR BUILDING BUILDING DETAILS
S3.07	SBR BUILDING STAIR PLANS, SECTION & DETAILS
S3.08	SBR BUILDING BUILDING DETAILS AND SECTIONS
S3.09	SBR BUILDING FRP COVER PLAN, SECTIONS & DETAILS
S4.01	METHANOL FACILITY PILING/FOUNDATION PLAN & SCHEDULES
S4.02	METHANOL FACILITY CONCRETE SLAB PLAN, SECTION & DETAIL
S4.03	METHANOL FACILITY SERVICE PLATFORM FRAMING PLAN
S4.04	METHANOL FACILITY SERVICE PLATFORM RAILING PLAN, DETAILS & SECTION
S4.05	METHANOL FACILITY STAIR PLAN, SECTIONS & DETAILS
S4.06	METHANOL FACILITY SERVICE PLATFORM ELEVATIONS
S5.01	SODA ASH FACILITY FOUNDATION PLAN, DETAILS, SCHEDULES & SECTIONS
S6.01	STACK PAD FOUNDATION PLAN, SECTIONS, SCHEDULES & DETAILS
S7.01	TRANSFORMER FOUNDATION PLAN, SCHEDULES & SECTION

PROCESS

P1.01	PROCESS FLOW DIAGRAM
P3.01	LOCATION PLAN
P3.02	PIPING CONNECTIONS AND DETAILS SHEET 1
P3.03	PIPING CONNECTIONS AND DETAILS SHEET 2
P4.01	PROCESS AND INSTRUMENTATION DIAGRAMS LEGEND AND DETAILS
P4.02	PROCESS AND INSTRUMENTATION DIAGRAMS LEGEND AND DETAILS
P4.03	PROCESS AND INSTRUMENTATION DIAGRAMS LEGEND AND DETAILS
P5.01	CENTRATE TRANSFER P&ID
P6.01	SBR 1 P&ID
P6.02	SBR 2 P&ID
P6.03	CHEMICAL ANALYZER P&ID
P6.04	SBR 1&2 - MIXERS P&ID
P6.05	SBR 1&2 - PUMPS P&ID
P7.01	EQUALIZATION TANK P&ID
P7.02	EQUALIZATION TANK - MIXERS P&ID
P8.01	AIR BLOWERS P&ID
P8.02	AIR BLOWERS P&ID
P9.01	EXHAUST FAN SYSTEM P&ID
P10.01	SODA ASH BLOWER SYSTEM P&ID
P10.02	SODA ASH SILO P&ID
P10.03	SODA ASH SOLUTION TANK P&ID
P11.01	METHANOL DOSING SYSTEM P&ID
P11.02	METHANOL STORAGE TANK 1 P&ID
P11.03	METHANOL STORAGE TANK 2 P&ID
P13.01	PROCESS TANKS LOWER LEVEL PLAN
P13.02	PROCESS TANKS MAIN LEVEL PLAN
P14.01	PROCESS TANK SECTIONS SHEET 1
P14.02	PROCESS TANK SECTIONS SHEET 2
P14.03	PROCESS TANK SECTIONS & DETAILS SHEET 3
P15.01	BLOWER ROOM & SAMPLING ROOM PLAN & SECTIONS
P16.01	EXHAUST FAN ROOM & STACK - PLAN, SECTION & DETAIL

P17.01	METHANOL STORAGE FACILITY LAYOUT
P17.02	METHANOL SYSTEM SECTIONS & DETAILS
P17.03	METHANOL SYSTEM SECTIONS & DETAILS
P18.01	SODA ASH PIPES PLAN, SECTIONS & DETAILS
P18.02	SODA ASH SYSTEM PLAN & SECTIONS
P19.01	STANDARD DETAILS SHEET 1
P19.02	STANDARD DETAILS SHEET 2
P19.03	STANDARD DETAILS SHEET 3
P19.04	STANDARD DETAILS SHEET 4
P19.05	STANDARD DETAILS SHEET 5
P19.06	STANDARD DETAILS SHEET 6
P20.01	FLUSHING WATER FLOW P&ID
P21.01	SECONDARY CLARIFIERS (RAS PUMPS S909 AND S910) P&ID
P22.01	DEWATERING (CENTRIFUGE DISCHARGE PIPING) P&ID
P23.01	SECONDARY CLARIFIERS (CLARIFIERS 9 AND 10) P&ID
P24.01	OXYGEN REACTORS (REACTOR TANK 1B) P&ID
P25.01	OXYGEN REACTORS (REACTOR TANK 2A) P&ID

MECHANICAL

M0.01	LEGEND AND ABBREVIATIONS
M1.01	BLOWER BUILDING, SODA ASH AND METHANOL TANKS - PLUMBING PLAN
M1.02	BLOWER BUILDING AND EXHAUST FAN BUILDING HVAC PLANS
M1.03	SBR BUILDING PLUMBING AND HVAC PLAN
M1.04	BLOWER BUILDING - SECTIONS
M2.01	EXHAUST FAN BUILDING - SECTIONS
M3.01	PLUMBING DETAILS
M4.01	HVAC SCHEMATICS BLOWER ROOM
M4.02	HVAC SCHEMATICS SAMPLE, EXHAUST FAN, & CONTROL ROOMS
M4.03	HVAC SCHEMATICS ELECTRICAL ROOM
M4.04	DUPLEX SUMP PUMP SCHEMATICS
M5.01	HVAC DETAILS SHEET 1 OF 2
M5.02	HVAC DETAILS SHEET 2 OF 2

ELECTRICAL

E1.01 E1.02 E1.03 E2.01	LEGEND OVERALL SITE PLAN AREA CLASSIFICATION PLAN SITE PLAN
E2.02	SECONDARY ELECTRICAL ROOM PLAN AND DETAILS
E2.03	BLOWER/ELECTRICAL/CONTROL ROOM PLAN LIGHTING AND SYSTEMS
E2.04	BLOWER/ELECTRICAL/CONTROL ROOM PLAN POWER AND EQUIPMENT
	LOCATION
E2.05	SBR BASIN AND EQUALIZATION TANKS PLAN
E2.06	FAN ROOM PLAN POWER, LIGHTING AND SYSTEMS
E2.07	SBR BASIN AND EQUALIZATION TANKS DETAILS
E2.08	EYEWASH, SODA ASH AND METHANE GROUNDING
E3.01	SINGLE LINE DISTRIBUTION SCHEMATIC
E3.02	SCHEDULES
E3.03	TRANSFORMER LOCATION AND MISCELLANEOUS DETAILS
E3.04	ELECTRICAL/CONTROL ROOM M.C.C. AND DISTRIBUTION
E3.05	MOTOR EQUIPMENT AND CONTROL CENTRE SCHEDULES

INSTRUMENTATION

l1.01	OVERALL LOCATION PLAN
l1.02	BLOWER BUILDING & EXHAUST FAN ROOM INSTRUMENT INSTALLATION PLANS
l1.03	BLOWER BUILDING & EXHAUST FAN ROOM HVAC INSTALLATION PLANS
l1.04	PROCESS TANKS LOWER LEVEL INSTALLATION PLAN
l1.05	PROCESS TANKS UPPER LEVEL INSTALLATION PLAN
l1.06	SODA ASH SYSTEM INSTALLATION PLANS
l1.07	METHANOL DOSING TANKS INSTALLATION PLAN
l2.01	DCS PLANT CONTROL NETWORK LOOP DIAGRAM
12.02	FIBER OPTIC COMMUNICATION LOOP NETWORK DIAGRAM
12.03	NETWORK CONTROL DIAGRAM
l3.01	MISCELLANEOUS P&ID

- E1.3 The following Specifications are applicable to the Work:
 - (a) Division 1 General Requirements
 - (b) Division 2 Site Construction
 - (c) Division 3 Concrete
 - (d) Division 4 Masonry
 - (e) Division 5 Metals
 - (f) Division 6 Wood and Plastics
 - (g) Division 7 Thermal and Moisture Protection
 - (h) Division 8 Doors and Windows
 - (i) Division 9 Finishes
 - (j) Division 11 Equipment
 - (k) Division 13 Special Construction
 - (I) Division 14 Conveying Systems
 - (m) Division 15 Mechanical
 - (n) Division 16 Electrical
 - (o) Division 17 Instrumentation and Control

E2. SOILS INVESTIGATION REPORT

E2.1 Further to GC:3.1, the document entitled "Geotechnical Report, Centrate Nutrient Treatment, Nitrogen Removal Facility, North End Water Pollution Control Centre" date February 2006, prepared by Dyregrov Consultants, is included with this Bid Opportunity.