



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 781-2016**

**2015 WATERMAIN RENEWAL CONTRACT 8B – STURGEON ROAD**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 2015 WATERMAIN RENEWAL CONTRACT 8B - STURGEON RD

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, September 13, 2016.

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

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

### **B3. SITE INVESTIGATION**

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

B3.2 The Bidder is advised to view the site to account for site access constraints, material laydown and staging areas, and equipment staging areas.

### **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 two (2) 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. CONFIDENTIALITY**

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

## **B6. ADDENDA**

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B6.2.2 The Bidder is responsible for ensuring that he/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.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B7. SUBSTITUTES**

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

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/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 B17.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B7.10 Notwithstanding B7.2 to B7.9, and in accordance with B8.6 deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B17.1(a).

## **B8. BID COMPONENTS**

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices;
  - (c) Bid Security
    - (i) Form G1: Bid Bond and Agreement to Bond, or  
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or  
a certified cheque or draft;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B8.4.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid.
- B8.5 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B17.1(a).
- B8.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Bids shall be submitted to:
- The City of Winnipeg  
Corporate Finance Department  
Materials Management Division  
185 King Street, Main Floor

Winnipeg MB R3B 1J1

**B9. BID**

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/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.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

**B10. PRICES**

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

## **B11. DISCLOSURE**

B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B11.2 The Persons are: not required

(a) N/A

## **B12. QUALIFICATION**

B12.1 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.

B12.2 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>

B12.3 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);

B12.4 Further to B12.3(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 copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; 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 Division website at <http://www.winnipeg.ca/matmgt/>).

B12.5 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.



- B12.6 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.

### **B13. BID SECURITY**

- B13.1 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.
- B13.1.1 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.
- B13.1.2 All signatures on bid securities shall be original.
- B13.1.3 The Bidder shall sign the Bid Bond.
- B13.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- B13.2 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.
- B13.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B13.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B13.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B13.3 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.

### **B14. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B14.1 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.
- B14.1.1 Bidders or their representatives may attend.
  - B14.1.2 Bids determined by the Manager of Materials, or his/her designate, to not include the bid security specified in B13 will not be read out.
- B14.2 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/>

- B14.3 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/>
- B14.4 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.

**B15. IRREVOCABLE BID**

- B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B15.2 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.

**B16. WITHDRAWAL OF BIDS**

- B16.1 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.
- B16.1.1 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.
- B16.1.2 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.
- B16.1.3 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 B16.1.3(b), declare the Bid withdrawn.
- B16.2 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 B15.2 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.

**B17. EVALUATION OF BIDS**

- B17.1 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 B12 (pass/fail);
  - (c) Total Bid Price;

(d) economic analysis of any approved alternative pursuant to B7.

**B17.2** Further to B17.1(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.

**B17.3** Further to B17.1(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.

**B17.4** Further to B17.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

**B17.4.1** Further to B17.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

## **B18. AWARD OF CONTRACT**

**B18.1** The City will give notice of the award of the Contract or will give notice that no award will be made.

**B18.2** 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.

**B18.2.1** Without limiting the generality of B18.2, 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.

**B18.3** 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 B17.

**B18.3.1** 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

### C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at [http://www.winnipeg.ca/matmgt/gen\\_cond.stm](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 installation of a new watermain by trenchless methods to replace the existing watermain crossing Sturgeon Creek parallel to Sturgeon Road.
- D2.2 The major components of the Work are as follows:
- (a) Construction of Shear Key.
  - (b) Supply and installation of 300 mm PVC pipe by trenchless installation methods crossing under Sturgeon Creek; approximately 235 m of pipe.
  - (c) Abandonment of existing 300 mm asbestos cement watermain pipe.
  - (d) Removal or abandonment of existing valves.
  - (e) Installation of valves.
  - (f) Two (2) connections of PVC pipe to existing 300 mm asbestos cement watermain pipe.
  - (g) Watermain commissioning including hydrostatic pressure testing, flushing, and chlorination.
  - (h) Restoration of pavement, boulevard surfaces, riparian vegetation, and other areas damage by watermain installation.

#### **D3. CONTRACT ADMINISTRATOR**

- D3.1 The Contract Administrator is WSP Canada Inc., represented by:
- Kelly Groff, EIT  
Project Administrator
- Telephone No. 204.477.6650  
Email kelly.groff@wspgroup.com
- D3.2 At the pre-construction meeting, Kelly Groff will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B8.8

#### **D4. CONTRACTOR'S SUPERVISOR**

- D4.1 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.

#### **D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE**

- D5.1 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.

- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 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.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

## **D6. NOTICES**

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 Notwithstanding C21, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg  
Chief Financial Officer  
Facsimile No.: 204 949-1174
- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg  
Legal Services Department  
Attn: Director of Legal Services  
Facsimile No.: 204 947-9155
- D6.5 **Bids Submissions** must be submitted to the address in B8.8

## **D7. FURNISHING OF DOCUMENTS**

- D7.1 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/her at cost.

## **SUBMISSIONS**

### **D8. AUTHORITY TO CARRY ON BUSINESS**

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

## **D9. SAFE WORK PLAN**

- D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least three (3) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D9.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

## **D10. INSURANCE**

- D10.1 The Contractor shall 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, broad form property damage cover 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) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D10.2 Deductibles shall be borne by the Contractor.
- D10.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D10.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

## **D11. PERFORMANCE SECURITY**

- D11.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
  - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
  - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D11.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

- D11.2 If the bid security provided in his/her Bid was not a certified cheque or draft pursuant to B13.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

## **D12. SUBCONTRACTOR LIST**

- D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at 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 the General Conditions for the return of the executed Contract.

## **D13. DETAILED WORK SCHEDULE**

- D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D13.2 The detailed work schedule shall include of the following activities:
- (a) Project start - mobilization;
  - (b) Construction of Shear Key;
  - (c) Installation of watermain below high water mark;
  - (d) Installation of watermain above high water mark;
  - (e) Site restoration;
  - (f) Demobilization.

## **SCHEDULE OF WORK**

### **D14. COMMENCEMENT**

- D14.1 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.
- D14.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D8;
    - (ii) evidence of the workers compensation coverage specified in C6.15;
    - (iii) the Safe Work Plan specified in D9;
    - (iv) evidence of the insurance specified in D10;
    - (v) the performance security specified in D11;
    - (vi) the Subcontractor list specified in D12; and
    - (vii) the detailed work schedule specified in D13.
  - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D14.3 Commencement of the Work shall be at the discretion of the Contractor provided the commencement date will allow the achievement of the Substantial Performance of the Work in accordance with D15, and Total Performance of the Work in accordance with D16.
- D14.4 The City Intends to award this contract by the week of October 11, 2016.



**D15. SUBSTANTIAL PERFORMANCE**

- D15.1 The Contractor shall achieve Substantial Performance by November 15, 2016.
- D15.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D15.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

**D16. TOTAL PERFORMANCE**

- D16.1 The Contractor shall achieve Total Performance by August 1, 2017.
- D16.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D16.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

**D17. LIQUIDATED DAMAGES**

- D17.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Substantial Performance – One Thousand Five Hundred dollars (\$1,500);
  - (b) Total Performance – One Thousand dollars (\$1,000).
- D17.2 The amounts specified for liquidated damages in D17.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance or Total Performance by the days fixed herein for same.
- D17.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

**D18. SCHEDULED MAINTENANCE**

- D18.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Landscape as specified in CW 3510.
- D18.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

## **CONTROL OF WORK**

### **D19. JOB MEETINGS**

- D19.1 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.
- D19.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

### **D20. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D20.1 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).

### **D21. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS**

- D21.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

## **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.

### **D23. WATER USED ON CITY OF WINNIPEG CONSTRUCTION PROJECTS**

- D23.1 Further to Section 3.7 of CW 1120, charges incurred for the permit and water meters shall be paid for by the Contractor when taken out. The Contractor shall forward the invoice to the Contract Administrator for reimbursement. The billing for water usage sent to the Contractor shall be forwarded to the Contract Administrator for payment. The Bid Opportunity number shall be noted on each permit.

## **WARRANTY**

### **D24. WARRANTY**

- D24.1 Notwithstanding C13.2, 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) 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.
- D24.1.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

**FORM H1: PERFORMANCE BOND**  
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

\_\_\_\_\_  
(hereinafter called the "Principal"), and

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

\_\_\_\_\_ dollars (\$\_\_\_\_\_)

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

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

BID OPPORTUNITY NO. 781-2016

2015 WATERMAIN RENEWAL CONTRACT 8B – STURGEON RD

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

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

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

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

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

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

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

SIGNED AND SEALED  
in the presence of:

\_\_\_\_\_  
(Witness as to Principal if no seal)

\_\_\_\_\_  
(Name of Principal)

Per: \_\_\_\_\_ (Seal)

Per: \_\_\_\_\_

\_\_\_\_\_  
(Name of Surety)

By: \_\_\_\_\_ (Seal)  
(Attorney-in-Fact)

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

\_\_\_\_\_  
(Date)

The City of Winnipeg  
Legal Services Department  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 781-2016  
2015 2015 WATERMAIN RENEWAL CONTRACT 8B – STURGEON ROAD

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.

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

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

\_\_\_\_\_  
(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

\_\_\_\_\_  
(Name of bank or financial institution)

Per: \_\_\_\_\_

(Authorized Signing Officer)

Per: \_\_\_\_\_

(Authorized Signing Officer)

(See D12)

2015 WATERMAIN RENEWAL CONTRACT 8B - STURGEON RD

[illegible]

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	Cover Sheet
D-13410	Index
D-13411	General Plan
D-13412	Test Hole Locations, Profiles and Rockfill Shear Key
D-13413	Sturgeon Road - 34.8m NNL of Portage Ave to 141.1m NNL of Portage Ave
D-13414	Sturgeon Road - 141.1m NNL of Portage Ave to 119.1 SSL of Hallonquist Dr

#### E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, a geotechnical soils investigation was completed in the vicinity of the proposed Works to determine the character of the subsurface soil.
- E2.2 The Contractors are responsible for any interpretation they place on the supplied information and are expected to make such additional investigation of the soil as they feel necessary to satisfy themselves with the conditions as it relates to the Work. No separate measurement or payment will be made for any additional soil investigation, and will be considered incidental to the Works of the project.
- E2.3 Any additional investigation by the contractor shall be done in accordance with the requirement of the appropriate authority of the City of Winnipeg. Bidders shall notify the Contract Administrator prior to starting any soil boring operation.
- E2.4 No separate measurement or payment will be made for any additional soil investigation, and will be considered incidental to the Works of the project.

### GENERAL REQUIREMENTS

#### E3. WATERWAY BY-LAW

- E3.1 The Contractor shall note that all Works within 76m (250 feet) of the creek bank are within the jurisdiction of the City of Winnipeg Waterway By-Law.
- E3.2 The Contract Administrator is in the process of obtaining the Winnipeg Waterway Authority Permit for the project. Once the permit is obtained the Contract Administrator shall provide the contractor with a copy of the permit for the project and the Contractor shall be governed by the Permit's requirements.



- E3.3 No works shall commence until Winnipeg Waterway Authority is received unless approved by the contract administrator.
- E3.4 Under no circumstances will stockpiling of any material be permitted within 76m (250 feet) of the creek bank.

#### **E4. WATERWAYS PROTECTION**

- E4.1 All work adjacent to or crossing waterways including creeks and ditches draining into a waterway is regulated by the Federal Department of Fisheries and Oceans (DFO). Contractor must implement Work in accordance to DFO guidelines and regulations.
- (a) Any project where work takes place below the waterway's high water mark is subject review and approval by DFO.
  - (b) No work below the high water mark shall be completed without approval by DFO.
  - (c) The Contract Administrator is in the process of having the project reviewed by the DFO and shall inform the contractor upon receipt of approval.
  - (d) No works shall commence until DFO approval is received unless approved by the contract administrator.
- E4.2 Contractor to follow E8 Environmental Protection, and "The City of Winnipeg Best Management Practices Handbook for Work in and Around the City's Waterways and Watercourses".
- E4.3 No separate measurement or payment will be made for Waterways Protection, and will be considered incidental to the Works of the project.

#### **E5. STURGEON CREEK WATER LEVELS**

- E5.1 Sturgeon Creek water levels are as follows:
- (a) Normal High Water Level: approximately 232.340 (geodetic)
  - (b) Normal Water Level: approximately 231.500 (geodetic)
  - (c) 1:50 Year Flood: approximately 232.890 (geodetic)
  - (d) 1:100 Year Flood: approximately 232.960 (geodetic)

#### **E6. SITE ACCESS**

- E6.1 Access to the construction area north of Sturgeon Creek will be from Sturgeon Road, north of Sturgeon Road Bridge.
- (a) Equipment shall maintain a safe distance from the bridge structure and active transportation retaining wall.
- E6.2 Access to the construction area south of Sturgeon Creek will be from as follows:
- (a) Private access to 3011 Portage Avenue from east approach off of Sturgeon Road, or
  - (b) Private access to 3025 Portage Avenue along Woodlands Crescent.
- E6.3 Contractor must obtain permission from owners to access the construction site from private property.
- E6.4 Any damage caused as a result of the Contractor accessing the site shall be repaired by the Contractor immediately after access is no longer required. Any cost incurred resulting from site access shall be considered incidental to the Works; no separate measurement or payment will be made.

## **E7. SITE CONTAINMENT AND PROTECTION**

- E7.1 An active transportation path is located the north side of Sturgeon Creek. The contractor shall implement measures to contain their work site and protect the general public. Provisions should be provided to allow pedestrian and cyclist traffic around the work site, while still providing adequate protection and space for the work to be performed.
- E7.2 Contractor must maintain and up-keep measures throughout the duration of the project, and shall address concerns raised by the Contractor Administrator immediately.
- E7.3 No separate measurement or payment will be made for Site Containment and Protection, and will be considered incidental to the Works of the project.

## **E8. ENVIRONMENTAL PROTECTION**

- E8.1 Contractor shall ensure no construction related material be introduced into the waterway. Do not use waterway bed for borrow material. Do not dump excavated fill, waste material or debris in waterways.
- E8.2 Pumping water containing suspended materials into waterway is prohibited. Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- E8.3 Do not bury rubbish and waste material on site. Do not dispose of waste or volatile materials into waterways, storm or sanitary sewers.
- E8.4 Pollution control measures in conformance with the applicable sections of the Provincial and Municipal Regulations with respect to air and water pollution control requirements and any necessary dust control measures.
- E8.5 Operation of construction equipment in waterway is prohibited. No temporary crossing allowed.
- E8.6 Construction equipment shall be clean and in good working condition.
- E8.7 Contractor shall have on site any and all clean up and containment materials needed in the event of a spill or contamination.
- E8.8 No in water construction or construction below the high water mark shall occur between April 1 and June 30.
- E8.9 Cost incurred resulting from Environmental Protection shall be considered incidental to the Works; no separate measurement or payment will be made.

## **E9. EROSION AND SEDIMENTATION CONTROL**

- E9.1 Objectives of the Erosion and Sedimentation Control Measures (ESCM) are:
- (a) Minimize disturbance of existing vegetation and soil within the construction site.
  - (b) Prevent the loss of soil from the site resulting from storm water runoff, wind erosion and construction activities.
  - (c) Prevent sedimentation of storm water or receiving waters.
- E9.2 Description of Works
- (a) Temporary ESCM measures: includes the installation and maintenance of temporary control measures to reduce or eliminate the erosion of soil and transport of sediment off-site.
- E9.3 Emergency Procedure and Response

- (a) Contractor shall provide a description and breakdown of potential environment emergency procedures and responses.

#### **E9.4 Control Measures**

- (a) Construction boundaries shall be provided by the Contract Administrator to limit site disturbance.
- (b) Placement of silt barrier fence:
  - (i) Place silt barrier in a manner to retain sediment at close to right angles of flow. Erect two or more silt barriers where problem areas exist, until control is achieved.
  - (ii) Silt barrier fencing shall be placed above the high water mark wherever possible.
  - (iii) Position silt barrier posts to achieve a naturally taut fence structure with adequate post support into the ground.
  - (iv) Posts are to be positioned downstream.
  - (v) Bury excess geotextile at bottom of silt fence, minimum 150mm on the upstream side to eliminate flow under fence.
  - (vi) Splice lengths of barrier material appropriately to insure fence integrity.

#### **E10. WATERMAIN INSTALLATION**

- E10.1 Trenchless Installation of PVC pipe: in accordance with CW 2110 – Watermains.

#### **E11. WATER FOR CONSTRUCTION WORKS**

- E11.1 Water for construction to be taken from the City of Winnipeg's water system in accordance with section 3.7 of CW 1120 – Existing Utilities, Services and Structures.

#### **E12. NOISE MANAGEMENT**

- E12.1 All work shall be conducted in accordance to the City of Winnipeg Neighborhood Liveability By-Law, Part 5 – Noise Control.
- E12.2 Contractor shall obtain approval from Contract Administrator and City of Winnipeg for operations outside of normal working hours: 7:00 AM – 9:00 PM weekdays and 9:00 AM – 9:00 PM weekends.

#### **E13. PROTECTION OF EXISTING TREES**

- E13.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:
  - (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within two (2) metres of trees.
  - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25mm x 100mm x 2400mm wood planks, or suitably protected as approved by the Contract Administrator.
  - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
  - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

- (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.

E13.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.

E13.3 No separate measurement or payment will be made for the protection of trees.

E13.4 Elm trees cannot be trimmed between April 1 and July 31, inclusive

#### **E14. WORK PRACTICES ON ASBESTOS CEMENT PIPE**

E14.1 Further to BC.6.28(d) the Contractor's attention is directed to the possible health dangers associated with working with asbestos-cement pipe and all work associated with existing asbestos cement watermain shall conform to the following publications:

E14.1.1 "Guidelines for Working With Asbestos", by Manitoba Department of Labour and Immigration, Workplace Health and Safety Branch.  
<http://www.gov.mb.ca/labour/safety/publication.html>.

E14.1.2 "Work Practices for Asbestos-Cement Pipe", AWWA No. M16, published by the American Water Works Association. <http://www.awwa.org/>.

E14.1.3 "Recommended Work Practices for A"C Pipe", 1977, published by the AC Pipe producers Association

#### **E15. STREET LIGHT CABLE**

E15.1 Construction Methods

E15.1.1 At locations where street lighting cable is to be replaced as directed by the Contract Administrator, the Contractor shall, after completion of backfilling and grading of watermain trenches, construct a trench suitable for the placement of street lighting cable or install a 50mm HDPE conduit by coring methods. The HDPE conduit will be supplied by the street lighting utility at no cost to the Contractor.

E15.1.2 The trench or cored pipe shall be constructed on the same alignment as the street light bases or as directed by the Contract Administrator. The bottom of the trench shall be between 600 mm and 750 mm below the top of curb and shall be no more than 150 mm in width. The invert of cored pipe shall be 600 mm and 750 mm below the top of curb.

E15.1.3 The Contractor shall provide 48 hours of notice to the Contract Administrator prior to the commencement of trenching or coring operations in order to allow coordination of the cable installation by the street lighting utility.

E15.1.4 Upon completion of the cable installation by the street lighting utility the Contractor shall backfill, compact and grade the boulevard sections disturbed. Backfill shall be Class 4 Backfill in accordance with CW 2030-R5.

E15.2 Method of Measurement and Payment

E15.2.1 Street Light Cable Trenching

- (a) Trenching for the installation of street lighting cable shall be measured on a linear metre basis based on measurements taken by the Contract Administrator. Payment shall be made at the Contract Unit Price for "Street Light Cable - Trenching", measured as specified herein which price shall be payment in full for performing all operations and supply all materials and all other items incidental to the work included in this specification.

E15.2.2 Coring of HDPE Conduit

- (a) The coring and installation of HDPE conduit shall be measured on a linear metre.

- (b) Basis from shaft face to shaft face based on measurements taken by the Contract Administrator. Payment shall be made at the Contract Unit Price for "Street Light Cable - Coring of HDPE Conduit", measured as specified herein which price shall be payment in full for performing all operations and supplying all materials and all other items incidental to the Work included in this specification.

#### **E16. FLUSHING, HYDROSTATIC AND LEAKAGE TESTING, AND DISINFECTION**

E16.1 Ultimately, the Contractor is responsible for a successful pressure test. Both a hydrostatic pressure test and a leakage test to be performed. Do tests in accordance with:

- (a) City of Winnipeg Standard Construction Specification CW 2125 for PVC pipe; and
- (b) AWWA M55 and ASTM 2164 for HDPE pipe.

E16.2 Flushing and disinfection of watermain shall be completed in accordance with CW 2125.

E16.3 Contractor shall not discharge flow used for flushing and disinfection to Sturgeon Creek.

#### **E17. PROVISIONAL ITEMS**

E17.1 The Provisional Items listed in the Schedule of Prices are part of the Contract.

E17.2 The Contractor shall not perform Work included in the Provisional items without prior written authorization from the Contract Administrator. All works included in the Provisional Items will be carried out within the construction areas shown on the drawings.

E17.3 Notwithstanding C.7 the City of Winnipeg reserves the right to diminish all or any portion of the items of work listed in the Provisional Items and no claim shall be made for damages on grounds of loss of anticipated profit or for any other reason.

#### **E18. SURFACE RESTORATIONS**

E18.1 Further to Section 3.3 of CW 1130 of the General Requirements, permanent surface restorations including all sodding and pavement works for each renewal shall be completed within 10 working days from the date that the renewal is completed.

E18.2 Upon successful completion of the watermain installation and subsequent tie-ins, all equipment and materials will be removed from the site and the area will be cleaned up. At a minimum, the Contractor shall:

- (a) Fill in abandoned drill holes to completely seal and stabilize the borehole so as not to affect the new installation;
- (b) Remove all equipment, materials and waste from site;
- (c) Clean-up and restore access, entry/exit work areas, HDD right of way, and layout area to original condition.

E18.3 Restoration needs for riparian vegetation will be assessed once spring water levels have receded to normal.

- (a) Payment for riparian vegetation restoration is included as an allowance in the provisional items.

E18.4 All areas affected by Contractor use shall be restored, and free of contaminations, to the original state prior to construction.

#### **E19. PARTIAL SLAB PATCHES**

E19.1 The Unit Bid Price for the Removal and Replacement of Partial Slab Patches shall include the cost of Drilled Dowels or Tie Bars. No separate payment will be made for Dowels or Tie Bars.

## **E20. MOBILIZATION AND DEMOBILIZATION**

E20.1 Mobilization and Demobilization should cover all costs involved in preparing and maintaining the site for the execution of the work including bonding and insurance; submittals; temporary signs and markings; traffic control or diversion work; site maintenance during the project; moving personnel, materials and equipment to and from the site; setting up temporary facilities; erosion control; environmental and site protection; clearing and grubbing; and preparation and performing of the Work.

- (a) The bid price for Mobilization and Demobilization for this work shall be relative to the costs involved but shall not exceed 15% of the Tender Price.
- (b) Payment shall be made as follows, as approved by the City of Winnipeg:
  - (i) 50% of the lump sum will be included in the first progress payment certificate;
  - (ii) 50% of the lump sum will be included in the final progress payment certificate.
- (c) The Contract Administrator, at their own discretion, may provide only partial payment if mobilization or demobilization is not complete.

## **E21. ROCKFILL TRENCH SHEAR KEY**

### **E21.1 Description**

This Specification shall cover the installation of the rockfill trench shear key, including excavation, removal of excavated material, supply and placement of rockfill and clay capbackfill, and incidental provisions for handling groundwater infiltration. The work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, and all things necessary for and incidental to the satisfactory performance and completion of all work as hereinafter specified.

### **E21.2 Materials**

#### **E21.2.1 General**

The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification.

#### **E21.2.2 Rockfill Backfill**

Rockfill for backfilling the trench shear key shall consist of blasted or crushed rockfill material, free from organics, roots, sand, silt, clay, snow, ice or any other material that would detract from the strength and drainage characteristics of rockfill. The rockfill for the rockfill trench shear key shall conform to the following specifications:

- (b) minimum bulk gravity of 2.6 (ASTM C127)
- (c) maximum Los Angeles abrasion loss of 30% (ASTM C131)
- (d) maximum soundness of loss 13% (ASTM C88)
- (e) gradation requirements

<b>Canadian Metric Sieve Size (millimetres)</b>	<b>Percent Total Dry Weight Passing Each Sieve</b>
500	100%
300	80-100%
50	20-60%
50	15-45%
5	0-10%

The rockfill shall be durable, comprised of either limestone, granite, or other quality dense rock. Should the contractor choose to use limestone, it shall be durable while crystalline limestone. Softer buff to yellow dolomite or dolostone will not be acceptable. Rock samples shall either be submitted to the Contract Administrator for approval ten (10) days prior to their use, or the Contract Administrator shall visit the quarry for inspection a minimum ten (10) days prior to use. No rockfill will be permitted without providing the source and supplier. Inspection of the source will be performed by the Contract Administrator prior to written acceptance.

The rockfill will be a crushed material. Smooth, rounded, rock or field stones will not be accepted.

#### E21.2.3 Clay Cap

The impervious clay cap at the top of the rockfill trench shear key shall consist of a high plasticity clay material with a liquid limit in excess of 60%. The clay shall be free of deleterious material such as roots, organic material, ice, snow or other unsuitable materials and may be salvaged from the on-site excavation, as approved by the Contract Administrator. Frozen material will not be accepted. The supply and placement of the impervious clay cap shall be considered incidental to the rockfill trench shear key installation, and no separate measurement or payment will be made.

#### E21.3 Equipment

All equipment, implements, tools and facilities used shall be of size and type as required to complete the work in a reasonable time, approved by the Contractor Administrator. The Contractor shall keep all equipment in good working order, and have sufficient equipment available at all times, as required.

#### E21.4 Construction Methods

##### E21.4.1 General

The excavation shall be supervised at all times, and open excavations shall be adequately guarded or covered to protect work safety.

##### E21.4.2 Shear Key Construction

The shear key excavation shall be excavated to the depths and widths, and in the locations shown on the Drawings. An adequate volume of rockfill for backfilling shall be on-site prior to excavation of each incremental length of the trench shear key. The excavation shall proceed in a timely manner and rockfill must be placed as soon as excavation takes place. Stockpiling of excavated material on the riverbank will not be permitted. The maximum open length of the shear key shall be 2 metres along the bottom of the excavation. The Contractor shall be required to prevent surface water from entering the excavation.

In no case shall the shear key be left at the end of the day. The shear key must be filled with rockfill at the end of each day.

Rockfill trench shear key to be compacted in 600mm lifts with vibratory equipment to the satisfaction of the Engineer or using alternative means approved by the Engineer.

After placement of the rockfill to the required dimensions shown on the Drawings, the impervious clay cap shall be placed in layers not exceeding 300 millimetres, and compacted to a minimum of 95% of the Standard Proctor maximum dry density. The clay cap shall be located within undisturbed native material surrounding the trench. Care shall be taken to ensure that an effective seal results between the wall of the excavation and the clay material placed to protect against water infiltration into the trench, as approved by the Contract Administrator.

##### E21.4.3 Supply of Rockfill

The Contractor shall monitor the supply rate of rockfill material to ensure backfilling operations are not delayed.

#### E21.4.4 Stockpiling of Rockfill Material

The stockpiling material on the lower bank will not be permitted at locations where the trench shear key has not been installed. The methodology for the stockpiling of rockfill at the lower bank area at locations where the trench shear key has been installed shall be subject to the approval of the Contract Administrator. The approvals shall be considered incidental to the cost of Rockfill Trench Shear Key.

#### E21.4.5 Contaminated Rockfill Material

Where crushed limestone has been contaminated with silt, clay or other deleterious material, the materials shall be classified as rejected backfill and shall be weighted prior to disposal, for deduction from the total weight of crushed limestone measured for payment.

#### E21.5 Quality Control

##### E21.5.1 Site Review

All workmanship and all materials furnished and supplied under this Specification are subject to close and systematic review and testing by the Contract Administrator, including all operations from the selection and production of materials through the final acceptance of the specified work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given.

The Contract Administrator shall be afforded full access for review of the work and testing of materials at the site to determine whether the material is being supplied and placed in accordance with this Specification.

#### E21.6 Measurement and Payment

##### (i) Shear Key Excavation

Shear key excavation will be measured on a volume basis and will be paid for at the Contract Unit Price per cubic metre for "Common Excavation – Suitable Site Material", which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

##### (ii) Rockfill

Rockfill will be measured on a mass basis and will be paid for at the Contract Unit Price per metric tonne for "Rockfill", which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification and accepted by the Contract Administrator.

The Contractor shall provide the weight tickets to the Contract Administrator for the material supplied to the site at the time of delivery. No payment will be made for any weight tickets which are not supplied at the time of delivery, or which are lost.

#### E22. CASING PIPE

##### E22.1.1 General

The Contractor shall be responsible for the supply, safe storage, handling and installation of Class IV Concrete Casing pipe, complete with manufactured casing spacers and end seals. Casing pipe shall be installed in accordance to CW-2110. Payment shall be included in the watermain installation price, no additional payment will be made.



## PART F - SECURITY CLEARANCE

### F1. SECURITY CLEARANCE

- F1.1 Each individual proposed to perform the following portions of the Work:
- (a) any Work on private property;
  - (b) any Work within City facilities other than:
    - (i) an underground structure such as a manhole;
    - (ii) in areas and at times normally open to the public;
  - (c) communicating with residents and homeowners in person or by telephone;
- F1.1.1 Each Individual shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his/her place of residence. Or
- (a) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/> ; or
  - (b) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <http://www.commissionaires.mb.ca/> .
- F1.2 The following is a link to information for obtaining the Criminal Record Search certificate from the City of Winnipeg Police Service. [http://winnipeg.ca/police/pr/info\\_request.stm](http://winnipeg.ca/police/pr/info_request.stm)
- F1.2.1 The Criminal Record Search shall include a Vulnerable Sector Screening. This can be obtained by following the link below [http://winnipeg.ca/police/pr/info\\_request.stm](http://winnipeg.ca/police/pr/info_request.stm)
- (a) Individuals will need to state in the form, that they may be working in City of Winnipeg pools, libraries and community centres;
- F1.2.2 The original Criminal Record Search Certificate (Form P-253) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner. The applicant shall:
- (a) Provide the original Criminal Record Search Certificate (Form P-253) to the Contract Administrator.
- F1.3 Prior to the award of Contract, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform such Work.
- F1.4 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work specified in F1.1.
- F1.5 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.6 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work specified in F1.1.