



THE CITY OF WINNIPEG

TENDER

TENDER NO. 862-2021

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, January 11, 2022.

B2.2 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D5.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, 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 Tender 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 Tender 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.

B4.6 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

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 Tender 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 Tender, 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.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D5.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- 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 B18.
- 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.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid/Proposal;
 - (b) Form B: Prices;
 - (c) Form G1: Bid Bond and Agreement to Bond.
- B8.2 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.
- B8.3 The Bid shall be submitted electronically through MERX at www.merx.com.
- B8.3.1 Bids will **only** be accepted electronically through MERX.
- B8.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B18.1(a).

B9. BID

- B9.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid/Proposal 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/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

- B9.4 Paragraph 13 of Form A: Bid/Proposal 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;
 - (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/Proposal should be entered 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.
- B10.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in D27. Any such costs shall be determined in accordance with D27.
- 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).
- B10.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.
- B10.5.1 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.
- 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:
- (a) N/A
- B12. CONFLICT OF INTEREST AND GOOD FAITH**
- B12.1 Further to C3.2, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

- B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:
- (a) other commitments;
 - (b) relationships;
 - (c) financial interests; or
 - (d) involvement in ongoing litigation;
- that could or would be seen to:
- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Tender process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.
- B12.3 In connection with its Bid, each entity identified in B12.2 shall:
- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
 - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B12.4 Without limiting B12.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B12.5 Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
 - (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B13. QUALIFICATION

B13.1 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.

B13.2 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 <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>

B13.3 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);

B13.4 Further to B13.3(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) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
 - (i) 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
 - (ii) 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
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).

B13.5 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.

B13.6 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.

B14. BID SECURITY

- B14.1 The Bidder shall include in its Bid Submission bid security in the form of a digital 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 Form G1: Bid Bond and Agreement to Bond, available on The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/MatMgt/templates/files/eBidsecurity.pdf>.
- B14.2 Bid security shall be submitted in a digital format meeting the following criteria:
- (a) The version submitted by the Bidder must have valid digital signatures and seals;
 - (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
 - (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
 - (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
 - (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B14.2(b).
- B14.3 Bonds failing the verification process will not be considered to be valid and the bid shall be determined to be non-responsive in accordance with B18.1(a).
- B14.4 Bonds passing the verification process will be treated as original and authentic.
- B14.4.1 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.
- B14.5 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 formed with the successful Bidder and the contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B14.6 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 Tender.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

- B15.1 Bids will not be opened publicly.
- B15.2 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 MERX website at www.merx.com.
- B15.3 After award of Contract, the name(s) of the successful Bidder(s) and their Contract amount(s) will be available on the MERX website at www.merx.com.
- B15.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B15.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B16. IRREVOCABLE BID

- B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B16.2 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 formed and the contract securities have been 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/Proposal.

B17. WITHDRAWAL OF BIDS

- B17.1 A Bidder may withdraw his/her Bid without penalty at any time prior to the Submission Deadline.

B18. EVALUATION OF BIDS

- B18.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B18.2 Further to B18.1(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.
- B18.3 Further to B18.1(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 qualified.
- B18.4 Further to B18.1(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.
- B18.4.1 Further to B18.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B18.4.2 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.

B19. AWARD OF CONTRACT

- B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B19.2 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 qualified, and the Bids are determined to be responsive.
- B19.2.1 Without limiting the generality of B19.2, 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.

- B19.3 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Bidders are advised that the terms of D27 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B19.4 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B18.
- B19.4.1 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 2020 01 31) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Tender 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. FORM OF CONTRACT DOCUMENTS

D2.1 Notwithstanding C4.1(c) and C4.4, the Contract Documents will be provided to the Contractor electronically and there will be no requirement for execution and return to the City by the Contractor. Accordingly, the provisions under C4.4(a) and C4.4(b) are no longer applicable.

D3. PROJECT BACKGROUND

D3.1 The Jefferson East Combined Sewer Relief project has been under construction since 2011. Contracts 1 through 3 involved relief of sewer catchments, east of Main Street. This work was completed in 2013. Contract 4 and 5 involved the construction of a new 1800 mm (nominal) and 2100 mm (nominal) land drainage sewer (LDS), outfall, gate chamber, and associated sewer laterals on Semple Avenue from Scotia Street to McKenzie Street.

D3.2 The existing combined sewers in the project area convey both wastewater and foundation drainage from sanitary services, and storm water from catch basins in the single pipe system. The design objective for this project is to improve the level of service by redirecting the storm water from road drainage to a new land drainage system. It is imperative that both the sanitary and storm services be maintained during construction, and in particular that the level of basement flooding protection not be negatively impacted during construction.

D4. SCOPE OF WORK

D4.1 The Work to be done under the Contract shall consist of the trenchless construction of new land drainage sewers and appurtenances in accordance with the applicable Specifications and Drawings.

D4.2 The major components of the Work are as follows:

- (a) Construction of approximately 1,146 m of land drainage sewers ranging in size from 300 mm to 900 mm by trenchless methods.
- (b) Connection of the new land drainage sewers to the existing 2,100 mm land drainage sewer at Semple Avenue and Main Street.
- (c) Abandonment of existing catch basin connections to combined sewers.
- (d) Replacement of existing catch basins and connections to the new land drainage sewers.
- (e) Surface restorations and related works.

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is AECOM, represented by:

Jordan Thompson, P.Eng.
Municipal Engineer

Telephone No. (204) 477-5381
Email Address jordan.thompson@aecom.com

D5.2 At the pre-construction meeting, Mr. Thompson will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D6. CONTRACTOR'S SUPERVISOR

D6.1 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.

D7. NOTICES

D7.1 Except as provided for in C22.4, 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/Proposal.

D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D5.

D7.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

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

D8. FURNISHING OF DOCUMENTS

D8.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF format only.

SUBMISSIONS

D9. AUTHORITY TO CARRY ON BUSINESS

D9.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D10. SAFE WORK PLAN

D10.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

D10.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D10.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good

Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

D11. INSURANCE

D11.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability Insurance 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.

D11.2 Deductibles shall be borne by the Contractor.

D11.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, as applicable.

D11.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D12. CONTRACT SECURITY

D12.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond 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; and
- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price.

D12.1.1 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:

- (a) the version submitted by the Contractor must have valid digital signatures and seals;
- (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
- (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
- (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D12.1(b).

- D12.1.2 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in its discretion, exercised reasonably, allows.
- D12.1.3 Digital bonds passing the verification process will be treated as original and authentic.
- D12.2 The Contractor shall provide the City Solicitor with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of an award letter 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 Documents, if applicable.
- D12.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
- (a) give the Subcontractor written notice of the existence of the labour and material payment bond in D12.1(b); and
 - (b) post a notice of the bond and/or a copy of that bond in a conspicuous location at the Site of the Work.

D13. SUBCONTRACTOR LIST

- D13.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

D14. EQUIPMENT LIST

- D14.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

D15. DETAILED WORK SCHEDULE

- D15.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the 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 Documents if applicable.
- D15.2 The detailed work schedule shall consist of the following:
- (a) a critical path method (C.P.M.) schedule for the Work;
 - (b) a Gantt chart for the Work based on the C.P.M. schedule;
- all acceptable to the Contract Administrator.
- D15.3 Further to D15.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path.
- (a) Commencement Date
 - (b) Mobilization
 - (c) Land Drainage Sewers and appurtenances on:
 - (i) Main Street south of Semple Avenue
 - (ii) Main Street north of Semple Avenue
 - (iii) Hartford Avenue
 - (iv) Belmont Avenue

- (v) Kilbride Avenue
- (vi) Kingsbury Avenue
- (vii) Royal Avenue
- (d) Connection of new LDS to 2100 mm LDS at Main Street and Semple Avenue
- (e) Surface Restorations
- (f) Substantial Performance
- (g) Total Performance

D15.4 Further to D15.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D16. COMMENCEMENT

- D16.1 The Contractor shall not commence any Work until he/she is in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D16.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D9;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D10;
 - (iv) evidence of the insurance specified in D11;
 - (v) the contract security specified in D12;
 - (vi) the Subcontractor list specified in D13;
 - (vii) the equipment list specified in D14;
 - (viii) the detailed work schedule specified in D15; and
 - (ix) the direct deposit application form specified in D25
 - (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.
- D16.3 The Contractor shall commence the Work on the Site no later than the date of Total Performance less seventy-five (75) Working Days.
- D16.4 The City intends to award this Contract by February 15, 2021.
- D16.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D17. WORKING DAYS

- D17.1 Notwithstanding C1.1(tt), a Working Day includes a Saturday, Sunday, or a statutory or civic holiday when the Contractor chooses to undertake work requiring the presence of the Contract Administrator and/or City resources. Working Days on Saturdays, Sundays, or statutory holidays may not commence prior to 9:00 am without an approved exemption to the Neighbourhood Liveability By-Law provided by the City. Bidders shall assume that work will not commence earlier than 9:00 am on Saturdays, Sundays, or statutory holidays for the sake of bidding.
- D17.2 Further to C1.1(tt), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at

one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.

- D17.3 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D17.4 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D17.5 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D18. SUBSTANTIAL PERFORMANCE

- D18.1 The Contractor shall achieve Substantial Performance within sixty-five (65) consecutive Working Days of the commencement of the Work as specified in D16 or by June 10, 2022, whichever comes first.
- D18.2 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.
- D18.3 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.

D19. TOTAL PERFORMANCE

- D19.1 The Contractor shall achieve Total Performance within seventy-five (75) consecutive Working Days of the commencement of the Work as specified in D16 or by June 24, 2022, whichever comes first.
- D19.2 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.
- D19.3 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.

D20. LIQUIDATED DAMAGES

- D20.1 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 – two thousand dollars (\$2,000).
 - (b) Total Performance – one thousand dollars (\$1,000).

- D20.2 The amounts specified for liquidated damages in D20.1 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.
- D20.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D21. COVID-19 SCHEDULE DELAYS

- D21.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Contract Administrator.
- D21.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D21.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or work by others.
- D21.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D21.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D21.5 The Work schedule, including the durations identified in D18 to D19 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D21.6 Where Work not previously identified is being carried over solely as a result of delays related to COVID-19, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to COVID-19, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D21.7 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

CONTROL OF WORK

D22. JOB MEETINGS

- D22.1 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.
- D22.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D23. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D23.1 Further to C6.26, 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).

D24. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D24.1 Further to B13.4, 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 B13.4.

MEASUREMENT AND PAYMENT

D25. PAYMENT

D25.1 Further to C12, the City shall make payments to the Contractor by direct deposit to the Contractor's banking institution, and by no other means. Payments will not be made until the Contractor has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf.

WARRANTY

D26. WARRANTY

D26.1 Warranty is as stated in C13.

THIRD PARTY AGREEMENTS

D27. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

D27.1 In the event that funding for the Work of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.

D27.2 Further to D27.1, in the event that the obligations in D27 apply, actual costs legitimately incurred by the Contractor as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Contractor and not by the valuation method(s) outlined in C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Work under C7.

D27.3 For the purposes of D27:

- (a) "**Government of Canada**" includes the authorized officials, auditors, and representatives of the Government of Canada; and
- (b) "**Government of Manitoba**" includes the authorized officials, auditors, and representatives of the Government of Manitoba.

D27.4 Modified Insurance Requirements

D27.4.1 If not already required under the insurance requirements identified in D11, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.

- D27.4.2 If not already required under the insurance requirements identified in D11, the Contractor will be required to provide builders' risk insurance (including boiler and machinery insurance, as applicable) providing all risks coverage at full replacement cost, or such lower level of insurance that the City may identify on a case-by-case basis, such as an installation floater.
- D27.4.3 The Contractor shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.
- D27.4.4 Further to D11.3, insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Work as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.
- D27.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D27.5 Indemnification By Contractor
- D27.5.1 In addition to the indemnity obligations outlined in C17 of the General Conditions for Construction, the Contractor agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Contractor or arising from this Contract or the Work, or from the goods or services provided or required to be provided by the Contractor, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.
- D27.6 Records Retention and Audits
- D27.6.1 The Contractor shall maintain and preserve accurate and complete records in respect of this Contract and the Work, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Work during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D27.6.2 In addition to the record keeping and inspection obligations outlined in C6 of the General Conditions for Construction, the Contractor shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D27.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- D27.7 Other Obligations
- D27.7.1 The Contractor consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D27.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Contractor, the Contractor represents and warrants that it has filed a return and is registered and in full compliance

with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.

D27.7.3 The Contractor shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Work.

D27.7.4 The Contractor shall properly account for the Work provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

D27.7.5 The Contractor represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.

D27.7.6 The Contractor represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Contractor or of a Subcontractor, and that no such member is entitled to any benefits arising from this Contract or from a contract with the Contractor or a Subcontractor concerning the Work.

FORM H1: PERFORMANCE BOND
(See D12)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

TENDER NO. 862-2021

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

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: LABOUR AND MATERIAL PAYMENT BOND
(See D12)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Principal"), and

_____ ,
his/its heirs, executors, administrators, successors or assigns (hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), for the use and benefit of claimants as herein below defined, in the amount of

_____ dollars (\$_____)

of lawful money of Canada, for the payment whereof we, the Principal and the Surety jointly and severally bind ourselves firmly by these presents.

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

TENDER NO. 862-2021

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

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 promptly make payment to all claimants as hereinafter defined, for all labour, service and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void, otherwise it shall remain in full force and effect subject, however, to the following conditions:

- (a) A claimant is defined as one having a direct contract with the Principal for labour, service and material, or any of them, used or reasonably required for use in the performance of the contract, labour, service and material being construed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment (but excluding rent of equipment where the rent pursuant to an agreement is to be applied towards the purchase price thereof) directly applicable to the Contract;
- (b) The above-named Principal and Surety hereby jointly and severally agree with the Obligee that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work, labour or service was done or performed, or materials were furnished by such claimant, may sue on this bond, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon;
- (c) No suit or action shall be commenced hereunder by any claimant
 - (i) unless claimant shall have given written notice to the Principal and the Surety above-named, within one hundred and twenty (120) days after such claimant did or performed the last of the work, labour or service, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work, labour or service was done or performed. Such notice shall be served by mailing the same by registered mail to the Principal, and Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the Province of Manitoba;

- (ii) after the expiration of one (1) year following the date on which Principal ceased work on said Contract; including work performed under the guarantees provided in the Contract;
 - (iii) other than in a court of competent jurisdiction in the Province of Manitoba.
- (d) The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.
- (e) The Surety shall not be liable for a greater sum than the specified penalty of this bond.

The Principal and Surety hereby agree that The Guarantors' Liability Act (Manitoba) shall apply to this Bond.

IN TESTIMONY WHEREOF, the Principal has hereunto set its hand affixed its seal, and the Surety has caused these presents to be sealed and with its corporate seal duly attested by the authorized signature of its signing authority this

_____ 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 K: EQUIPMENT
(See D14)

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

<p>1. Category/type: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>2. Category/type: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>3. Category/type: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>

FORM K: EQUIPMENT
(See D14)

JEFFERSON EAST COMBINED SEWER RELIEF – CONTRACT 6A

<p>4. Category/type:</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>5. Category/type:</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>
<p>6. Category/type:</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p> <p>Make/Model/Year: _____ Serial No.: _____</p> <p>Registered owner: _____</p>

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 Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LD-11268	COVER
LD-11269	DRAWING INDEX, DESIGN NOTES, LEGEND, & ABBREVIATIONS
LD-11270	MAIN STREET - JEFFERSON AVENUE TO 34m SOUTH OF PERTH AVENUE
LD-11271	MAIN STREET - 14m NORTH OF ST ANTHONY AVENUE TO 32m SOUTH OF HARTFORD AVENUE
LD-11272	MAIN STREET - 30m NORTH OF PERTH AVENUE TO 18m SOUTH OF BELMONT AVENUE
LD-11273	MAIN STREET - 48m NORTH OF HARTFORD AVENUE TO 24m SOUTH OF KILBRIDE AVENUE
LD-11274	MAIN STREET - 42m NORTH OF BELMONT AVENUE TO 14m SOUTH OF SEMPLE AVENUE
LD-11275	MAIN STREET - 60m NORTH OF KILBRIDE AVENUE TO 20m SOUTH OF BURRIN AVENUE
LD-11276	MAIN STREET - 66m NORTH OF SEMPLE AVENUE TO 10m SOUTH OF KINGSBURY AVENUE
LD-11277	MAIN STREET - 8m NORTH OF KINGBURY AVENUE TO ROYAL AVENUE
LD-11278	HARTFORD AVENUE - 122m EAST OF AIKINS STREET TO 143m WEST OF JONES STREET
LD-11279	BELMONT AVENUE - 177m EAST OF AIKINS STREET TO 104m WEST OF JONES STREET
LD-11280	PUBLIC LANE EAST OF MAIN STREET - PULBIC LANE NORTH OF BELMONT AVENUE TO KILBRIDE AVENUE
LD-11281	KILBRIDE AVENUE - MAIN STREET TO 220m WEST OF SCOTIA STREET
LD-11282	KINGSBURY AVENUE - 140m EAST OF AIKINS STREET TO MAIN STREET
LD-11283	ROYAL AVENUE - 60m EAST OF AIKINS STREET TO 75m WEST OF MAIN STREET
LD-11284	ROYAL AVENUE - 210m EAST OF AIKINS STREET TO MAIN STREET
LD-11285	STANDARD DETAILS

<u>Appendix No.</u>	<u>Title</u>
A	Test Hole Logs
B	Geotechnical Data Report (GDR)

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, Test Hole logs compiled during the design process are provided in Appendix A. The Test Hole logs are provided to supplement the Contractors evaluation of the Site conditions within the Work area. The information is considered accurate at the locations indicated and at the time of the investigation. However, considerable variations in soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally. **Note: Test Hole logs will be issued via Addendum.**
- E2.2 Further to C3.1, a Geotechnical Data Report (GDR) was completed in 2019 for the previous construction contract, Tender 1045-2019B: Jefferson East Combined Sewer Relief – Contract 5 – Semple Trunk Sewer. The GDR summarizes the testing and geotechnical conditions observed at the project site in 2019 along Semple Avenue between Scotia Street and McKenzie Street. This report includes geotechnical data collected at the project site and summary of anticipated subsurface conditions along the alignment. A copy of the GDR is included in Appendix B.

GENERAL REQUIREMENTS

E3. OFFICE FACILITIES

- E3.1 The Contractor shall supply office facilities meeting the following requirements:
- (a) the field office shall be for the exclusive use of the Contract Administrator;
 - (b) the building shall be conveniently located near the Site of the Work at a location approved by the Contract Administrator;
 - (c) the building shall have a minimum floor area of 25 m², a height of 2.4 m with two (2) windows for cross ventilation and a door entrance with a suitable lock;
 - (d) the building shall be suitable for all weather use. It shall be equipped with an electric heater and air conditioner so that the room temperature can be maintained between either 16-18 or 24-25 degrees Celsius;
 - (e) the building shall be adequately lighted with fluorescent fixtures and have a minimum of three (3) wall outlets;
 - (f) the building shall be furnished with one (1) desk, one drafting table, table 3 m X 1.2 m, one (1) stool, one (1) four-drawer legal size filing cabinet, and a minimum of six (6) chairs;
 - (g) a portable toilet shall be located near the field office building. The toilet shall have a locking door.
 - (h) the field office building and the portable toilet shall be cleaned on a weekly basis immediately prior to each Site meeting. The Contract Administrator may request additional cleaning when he/she deems it necessary.
- E3.2 The office facilities will be provided from the date of the commencement of the Work to the date of Substantial Performance.
- E3.3 Measurement and Payment
- (a) The work specified herein will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E4. SITE DEVELOPMENT PLAN

- E4.1 The Contractor shall provide the Contract Administrator with a Site Development Plan at least ten (10) Business Days prior to the commencement of any Work on the Site.
- (a) The Site Development Plan shall at a minimum include:
 - (i) Work areas showing location of all required elements to complete the Work including fencing, gates, drainage and tree protection;

- (ii) Material staging and laydown areas, including fencing and gates;
- (iii) Staging areas for other Work elements;
- (iv) Material Storage;
- (v) Locations of shafts and excavations;
- (vi) Office facility locations for Contract Administrator and Contractor; and
- (vii) Temporary vehicle access/egress locations.

E4.2 Measurement and Payment

- (a) The work specified herein will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E5. SHOP DRAWINGS

E5.1 Description

- (a) This Specification shall revise, amend, and supplement the requirements of CW 1110 of the City of Winnipeg's Standard Construction Specifications.
- (b) Submit all Shop Drawings in accordance with CW 1110 except as modified herein.
- (c) The Contractor shall submit specified Shop Drawings to the Contract Administrator for review. All submissions must be in metric units. Where data is in imperial units, the correct metric equivalent shall also be shown on all submissions.

E5.2 Contractors Responsibility

- (a) Review shop drawings, product data and samples prior to submission and stamp and sign drawings indicating conformance to the Contract requirements.
- (b) Verify:
 - (i) Field Measurements
 - (ii) Field Construction Criteria
 - (iii) Catalogue numbers and similar data
- (c) Coordinate each submission with requirements of Work and Contract Documents. Individual shop drawings will not be reviewed until all related drawings are available.
- (d) Notify Contract Administrator, in writing at time of submission, of deviations from requirements of Contract Documents.
- (e) Responsibility for deviations in submission from requirements of Contract Documents is not relieved by Contract Administrator's review of submission unless Contract Administrator gives written acceptance of specified deviations.
- (f) Responsibility for errors and omissions in submission is not relieved by Contract Administrator's review of submittals.
- (g) The Contractor shall make any corrections required by the Contract Administrator and shall resubmit the required number of corrected copies of Shop Drawings. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Contract Administrator on previous submission.
- (h) After Contract Administrator's review and return of copies, distribute copies to Subcontractors as appropriate.
- (i) Maintain one (1) complete set of reviewed shop drawings, filed by Specification Section Number, at the Site of the Work for use and reference of the Contract Administrator and Subcontractors.

E5.3 Shop Drawings

- (a) Original drawings are to be prepared by Contractor, Subcontractor, Supplier, Distributor, or Manufacturer, which illustrate appropriate portion of Work; showing fabrication, layout, setting or erection details as specified in appropriate sections.

- (b) Shop drawings for the following structural components shall bear the seal of a Registered Professional Engineer in the Province of Manitoba.
 - (i) Shoring
 - (ii) Reinforcing steel
 - (iii) Pre-cast concrete structures
- (c) Additional submittal requirements for each component of Work may be listed within the relevant specification section.

E5.4 Submission Requirements:

- (a) Schedule submissions at least 10 Calendar Days before dates reviewed submissions will be needed and allow for a 10 Calendar Day period for review by the Contract Administrator of each individual submission and re-submission, unless noted otherwise in the Contract Documents.
- (b) Submit one (1) digital copy (PDF) of shop drawings.
- (c) Accompany submissions with transmittal letter, containing:
 - (i) Date
 - (ii) Project title and Bid Opportunity number
 - (iii) Contractor's name and address
 - (iv) Number of each shop drawing, product data and sample submitted
 - (v) Specification Section, Title, Number and Clause
 - (vi) Drawing Number and Detail/Section Number
 - (vii) Other pertinent data
- (d) Submissions shall include:
 - (i) Date and revision dates.
 - (ii) Project title and Bid Opportunity number.
 - (iii) Name of:
 - (i) Contractor
 - (ii) Subcontractor
 - (iii) Supplier
 - (iv) Manufacturer
 - (v) Separate detailer when pertinent
 - (iv) Identification of product of material.
 - (v) Relation to adjacent structure or materials.
 - (vi) Field dimensions, clearly identified as such.
 - (vii) Specification section name, number and clause number or drawing number and detail/section number.
 - (viii) Applicable standards, such as CSA or CGSB numbers.
 - (ix) Contractor's stamp, initialed or signed, certifying review of submission, verification of field measurements and compliance with Contract Documents.
- (e) Shop Drawings not meeting the requirements of CW 1100 or the requirements specified herein will be returned to the Contractor without review for resubmission.
- (f) Shop drawing submissions will be limited to two (2) reviews per shop drawing. This shall include a review of the initial submission and a review of the revised submission. Costs associated with subsequent reviews will be charged to the Contractor.

E5.5 Measurement and Payment

- (a) The work specified herein will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E6. ENVIRONMENTAL PROTECTION

- E6.1 The Contractor shall plan and implement the Work of this Contract strictly in accordance with the requirements of the environmental protection measures as herein specified.
- E6.2 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work:
- E6.2.1 Federal
- (a) Canadian Environmental Protection Act (CEPA) c.16;
 - (b) Canadian Environmental Assessment Act (CEAA) c.37;
 - (c) Transportation of Dangerous Goods Act and Regulations c.34; and
 - (d) Migratory Birds Convention Act, 1994
- E6.2.2 Provincial
- (a) The Dangerous Goods Handling and Transportation Act D12;
 - (b) The Endangered Species Act E111;
 - (c) The Environment Act c.E125;
 - (d) The Fire Prevention Act F80;
 - (e) The Manitoba Heritage Resources Act H39.1;
 - (f) The Manitoba Noxious Weeds Act N110;
 - (g) The Manitoba Nuisance Act N120;
 - (h) The Public Health Act c.P210;
 - (i) The Workplace Safety and Health Act W120; and
 - (j) And current applicable associated regulations.
- E6.2.3 Municipal
- (a) The City of Winnipeg By-law no. 1/2008;
 - (b) The City of Winnipeg Waterway By-Law no. 5888/92; and
 - (c) Other applicable Acts, Regulations and By-laws.
- E6.3 The Contractor is advised that the following environmental protection measures apply to the Work.
- E6.3.1 Materials Handling and Storage
- (a) Construction materials and debris shall be prevented from entering drainage pipes or channels.
 - (b) Construction materials and debris shall also be prevented from accumulating on local roadways and sidewalks when tracked out of the Site by trucks hauling excavated materials.
 - (c) The Contractor shall provide on-Site measures to mitigate the tracking of sediment off-Site and therefore reduce the amount of street cleaning required. These measures may take the form of a truck wheel wash (automated or manually operated) or other measures as approved by the Contract Administrator.
- E6.3.2 Fuel Handling and Storage
- (a) The Contractor shall obtain all necessary permits from Manitoba Conservation for the handling and storage of fuel products and shall provide copies to the Contract Administrator.
 - (b) All fuel handling and storage facilities shall comply with The Dangerous Goods and Transportation Act Storage and Handling of Petroleum Products Regulation and any local land use permits.

- (c) Fuels, lubricants, and other potentially hazardous materials as defined in The Dangerous Goods and Transportation Act shall be stored and handled within the approved storage areas.
- (d) The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- (e) Products transferred from the fuel storage area(s) to specific Work Sites shall not exceed the daily usage requirement.
- (f) When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheets of suitable material (such as HDPE) and size shall be spread on the ground to catch the fluid in the event of a leak or spill.
- (g) Refuelling of mobile equipment and vehicles shall take place at least 100 metres from a watercourse.
- (h) The area around storage Sites and fuel lines shall be distinctly marked and kept clear of snow and debris to allow for routine inspection and leak detection.
- (i) A sufficient supply of materials, such as absorbent material and plastic oil booms to clean up minor spills shall be stores nearby on-site. The Contractor shall ensure that additional material can be made available on short notice.

E6.3.3 Waste Handling and Disposal

- (a) The construction area shall be kept clean and orderly at all times during and at completion of construction.
- (b) At no time during construction shall personal or construction waste be permitted to accumulate for more than one day at any location on the construction site, other than at a dedicated storage area as may be approved by the Contract Administrator.
- (c) All resulting debris shall be deposited at a Waste Disposal Ground operating under the authority of Manitoba Regulation #150/91. Exceptions are liquid industrial and hazardous wastes which may require special disposal methods (see SC:21.4 D).
- (d) Indiscriminate dumping, littering, or abandonment shall not take place.
- (e) No on-site burning of waste is permitted.
- (f) Waste storage areas shall not be located so as to block natural drainage.
- (g) Run-off from a waste storage area shall not be allowed to cause siltation of a watercourse.
- (h) Waste storage areas shall be left in a neat and finished appearance and/or restored to their original condition to the satisfaction of the Contract Administrator.
- (i) Equipment shall not be cleaned near watercourses; contaminated water from onshore cleaning operations shall not be permitted to enter watercourses.

E6.3.4 Dangerous Goods/Hazardous Waste Handling and Disposal

- (a) Dangerous goods/hazardous waste are identified by, and shall be handled according to, The Dangerous Goods Handling and Transportation Act and Regulations.
- (b) The Contractor shall be familiar with The Dangerous Goods Handling and Transportation Act and Regulations.
- (c) The Contractor shall have on-site staff that is trained and certified in the handling of the dangerous/hazardous goods, when said dangerous/hazardous goods are being utilized on-site for the performance of the Work.
- (d) Different waste streams shall not be mixed.
- (e) Disposal of dangerous goods/hazardous wastes shall be at approved hazardous waste facilities.
- (f) Liquid hydrocarbons shall not be stored or disposed of in earthen pits on-site.

- (g) Used oils shall be stored in appropriate drums, or tankage, until shipment to waste oil recycling centres, incinerators, or secure disposal facilities approved for such wastes.
- (h) Used oil filters shall be drained, placed in suitable storage containers, and buried or incinerated at approved hazardous waste treatment and disposal facilities.
- (i) Dangerous goods/hazardous waste storage areas shall be located at least 100 metres away from the high water line and be diked.
- (j) Dangerous goods/hazardous waste storage areas shall not be located so as to block natural drainage.
- (k) Run-off from a dangerous goods/hazardous waste storage area shall not be allowed to cause siltation of a watercourse.
- (l) Dangerous goods/hazardous waste storage areas shall be left in a neat and finished appearance and/or restored to their original condition to the satisfaction of the Contract Administrator.

E6.3.5 Emergency Response

- (a) The Contractor shall ensure that due care and caution is taken to prevent spills.
- (b) The Contractor shall report all major spills of petroleum products or other hazardous substances with the potential for impacting the environment and threat to human health and safety to the Contract Administrator and Manitoba Environment, immediately after occurrence of the environmental accident, by calling the 24-hour emergency telephone phone number (204) 945-4888. The Contract Administrator shall also be notified.
- (c) The Contractor shall designate a qualified supervisor as the on-site emergency response coordinator for the project. The emergency response coordinator shall have the authority to redirect manpower in order to respond in the event of a spill.
- (d) The following actions shall be taken by the person in charge of the spilled material or the first person(s) arriving at the scene of a hazardous material accident or the on-site emergency response coordinator:
 - (i) Notify emergency-response coordinator of the accident:
 - identify exact location and time of accident
 - indicate injuries, if any
 - request assistance as required by magnitude of accident (Manitoba Environment 24-hour Spill Response Line (204) 945-4888, Police, Fire Department, Ambulance, company backup)
 - (ii) Attend to public safety:
 - ◆ stop traffic, roadblock/cordon off the immediate danger area
 - ◆ eliminate ignition sources
 - ◆ initiate evacuation procedures if necessary
 - (iii) Assess situation and gather information on the status of the situation, noting:
 - personnel on site
 - cause and effect of spill
 - estimated extent of damage
 - amount and type of material involved
 - proximity to waterways and the Aqueduct
 - (iv) If safe to do so, try to stop the dispersion or flow of spill material:
 - approach from upwind
 - stop or reduce leak if safe to do so
 - dike spill material with dry, inert sorbent material or dry clay soil or sand
 - prevent spill material from entering waterways and utilities by diking
 - prevent spill material from entering manholes and other openings by covering with rubber spill mats or diking
 - (v) Resume any effective action to contain, clean up, or stop the flow of the spilled product.

- (e) The emergency response coordinator shall ensure that all environmental accidents involving contaminants shall be documented and reported to the Manitoba Environment according to The Dangerous Goods Handling and Transportation Act Environmental Accident Report Regulation 439/87.
- (f) When dangerous goods are used on-site, materials for containment and cleanup of spill material (e.g. absorbent materials, plastic oil booms, and oversized recovery drums) shall be available on-site.
- (g) Minor spills of such substances that may be contained on land with no significant impact on the environment may be responded to with in-house resources without formal notification to Manitoba Environment.
- (h) City emergency response, 9-1-1, shall be used if other means are not available.

E6.4 Vegetation

- (a) Vegetation shall not be disturbed without written permission of the Contract Administrator. The Contractor shall protect plants which may be at risk of accidental damage. Such measures may include protective fencing or signage and shall be
- (b) Herbicides and pesticides shall not be used adjacent to any surface watercourses.
- (c) All landowners adjacent to the area of application of herbicides or pesticides shall be notified prior to the Work.
- (d) Trees and shrubs shall not be felled into watercourses.
- (e) Areas where vegetation is removed during clearing, construction, and decommissioning activities, shall be revegetated as soon as possible in accordance the requirements outlined herein, or as directed by the Contract Administrator.

E6.5 Measurement and Payment

- (a) The work specified herein will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E7. PROTECTION OF EXISTING TREES

E7.1 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 2 metres of trees.
- (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 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. They must be properly trimmed with sharp tools to prevent crushing or being pulled by construction equipment. No paint is required. All exposed roots must be mulched until the excavated area is filled with clean earth to avoid exposure to sunlight and desiccation.
- (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the work required. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches.
- (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.

- E7.2 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.
- E7.3 Elm trees shall not be pruned at any time between April 1st and July 31st of any year under provisions of The Forest Health Protection Act and The Forest Health Protection Regulations.
- E7.4 Measurement and Payment
- (a) No separate measurement or payment will be made for the protection of trees.

E8. WATER SUPPLY

- E8.1 Further to Section 3.14 of CW 2140 and Section 3.7 of CW 1120 of the General Requirements water supply for the Work may be taken from City of Winnipeg hydrants.
- E8.2 The Contractor shall make the following arrangements for hydrant turn on and turn off.
- (a) Contact City of Winnipeg Water Services Division (WSD) for hydrant turn on and turn off required between 0800 hours and 1500 hours Monday to Friday. Notice for turn on and turn off shall be provided a minimum of 24 hours in advance.
- (b) Contact Emergency Services Branch (204-986-2626) with a minimum of 2 hours notice for hydrant turn on and turn off required outside of the above hours.
- (c) The Contractor shall wait at the hydrant from the requested turn on or turn off time until City staff arrives to turn on or turn off the hydrant.
- E8.3 Hydrants shall be considered to be "in the Contractor's control" from the time the City has turned the hydrant on until the City has turned the hydrant off.
- E8.4 Between November 1 and April 30 of any year, or whenever freezing temperatures are occurring or anticipated the Contractor shall take all necessary precautions to prevent freezing of hydrants and related appurtenances for hydrants in their control and shall be responsible to pump out hydrants turned off by Emergency Services.
- E8.5 If a hydrant or appurtenance is damaged due to freezing or improper turn on or turn off procedures while in the Contractor's control, WSD will assess the damage and determine if WSD will repair the damage or if the Contractor will be responsible to repair the damage. Costs for repairs completed by WSD will be deducted from payments owing the Contractor. Repairs completed by the Contractor will be at the Contractor's expense.
- E8.6 The Contractor shall provide a traffic ramp for hydrant connection hoses that cross roadways. The ramp shall be designed and constructed to not present a hazard to vehicles travelling over it and to ensure that no part of the hose is run over by a motor vehicle.
- E8.7 Measurement and Payment
- (a) Charges incurred for the permits and water meters shall be paid for by the Contractor when the permit is 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.
- (b) All other costs associated with sourcing construction water will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

E9. PRE-CONSTRUCTION BUILDING INSPECTIONS

- E9.1 Description
- (a) The work specified in this Section includes the pre-construction photographic survey of existing structures adjacent to the Work.

E9.2 Submittals

- (a) Submit pre-construction surveys in accordance with E9.3(a), including photographs, video (as needed), field notes, and sketches. Surveys should provide a record of foundation, interior walls, door and window frames, existing cracks or other pre-existing damage, and any other relevant features.
- (b) The collected data shall be made available and be provided to the homeowners or business owners adjacent to the work upon request.

E9.3 Construction

(a) Building Inspection

- (i) The Contractor or their designate shall complete a pre-construction photographic survey of the existing structures adjacent to the work.
 - (i) The pre-construction survey should provide a record of foundation, interior walls, door and window frames, existing cracks or pre-existing damage, and any other relevant features.
 - (ii) Pre-construction surveys shall be conducted in the presence of the Contract Administrator prior to commencement of construction activities.
- (ii) Where the Contractor is entering properties to undertake the photographic survey, notices shall be provided to the businesses or homeowners in advance to arrange for interior inspections. Notices shall be reviewed and accepted by the Contract Administrator and the City prior to issuance.
 - (i) Any individuals entering into a private residence or meeting with citizens as part of this work shall have submitted security clearances to the Contract Administrator in accordance with Part F.
- (iii) Where homeowners of businesses will not permit access to structures for inspection, the Contractor shall duly document attempts to arrange access. Inspections, insofar as possible shall be made from public right-of-way, noting any visual defects observed.
- (iv) The number and location of pre-construction building inspections will depend on the means and methods of the Contractor. The Contract Administrator will provide addresses following review of the Contractor's method statement.

E9.4 Measurement and Payment (Provisional Item)

- (a) Building inspections as specified herein will be measured on unit price basis as listed in Form B: Prices. Payment will be made at the Contract Price for "Pre-Construction Building Inspection".

E10. TRAFFIC MANAGEMENT

E10.1 Description

- (a) This Specification shall revise, amend, and supplement the requirements of CW 1130 of the City of Winnipeg's Standard Construction Specifications.

E10.2 General

- (a) Further to Section 3.7 of CW 1130 of the General Requirements the Contractor shall be responsible to redirect and maintain traffic with appropriate signing in accordance with The City of Winnipeg, "Manual of Temporary Traffic Control in Work Areas on City Streets at all times during construction.
- (b) Maintain access for approaches, driveways, public lanes and crossing streets for all locations.
- (c) Bus traffic must be maintained at all times or as approved by the Contract Administrator.
- (d) The Contractor shall maintain access to all businesses during business hours, except where written authorization has been provided by the business.

- (e) The Contractor shall maintain access to all schools, community centres, and other public buildings at all times.
- (f) Further to Section 3.6 of CW 1130 of the General Requirements, the Contractor shall maintain safe pedestrian crossings at intersections at all times. If possible, only one pedestrian crossing at an intersection is to be blocked by construction at any one time. If more than one pedestrian crossing is blocked by construction at an intersection at the same time the Contractor shall provide flag persons to safely escort pedestrians across the intersection. The Contractor shall leave pedestrian crossing locations safe and free of equipment that may hamper pedestrians when no construction activities are being performed at a particular crossing location.
- (g) Further to Clause 3.7 of CW 1130 of the General Requirements, should the Contractor be unable to maintain pedestrian or vehicular access to a residence or business, he/she shall review the planned disruption with the business or residence and the Contract Administrator, and take reasonable measures to minimize the impact. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contract Administrator, prior to disruption of access.
- (h) The Contractor shall not park company or private vehicles inside the barricaded work zone in a manner that will block sightlines for vehicles and pedestrians approaching and crossing intersections.
- (i) The Contractor is responsible for maintaining safe vehicular and pedestrian traffic through their work site as identified herein. The Contractor shall rectify any unsafe conditions immediately upon notification. This could include but is not limited to, providing flag persons, clearing debris and snow from sites, moving equipment, and erecting additional signage.

E10.3 Regional Street Lane Closures

- (a) Maintain at least two (2) lanes of traffic at all times in each direction.
- (b) Construction activities on Regional Streets shall be restricted to the closed lanes between 07:00 to 09:00 hours and 15:00 to 18:00 hours Monday to Friday and other hours as outlined herein or directed by the Contract Administrator.
- (c) The City reserves the right to restrict or cancel Regional Street lane closures at any time due to the occurrence of special events or conflicting third party work.

E10.4 Residential Streets

- (a) Maintain at least one lane of traffic on residential streets. Where a lane of traffic cannot be maintained, the Contractor shall clearly close the street at the work zone to prevent damage to the boulevard and other surface features. All streets shall be signed as "Road Closed - Local Access Only".
- (b) Where required, the Contractor shall provide notice of complete street shutdowns complete with dates and duration a minimum of five (5) Business Days prior to the street closures.

E10.5 Submissions

E10.5.1 The Contractor shall submit a detailed traffic control plan for works occurring on Main Street and all adjacent streets affected by the Work. The traffic control plan shall be submitted a minimum of ten (10) Business Days prior to commencement of work and include the following:

- (a) Details of lane closures on regional and non-regional streets; detours; access accommodations for local businesses; and access accommodations for pedestrians throughout any and all stages of construction;
- (b) Traffic control coordination, including traffic ramp locations, if required;
- (c) and construction staging/schedule.

E10.5.2 Street Lane Closures

- (a) The Contractor shall submit all lane closure requests to the Contract Administrator a minimum of five (5) Business Days prior to the planned work. Requests for lane closures shall include all required information for submission required by the City's online request form.
- (b) A link to the form can be found here:
<https://www.winnipeg.ca/publicworks/transportation/roadConstructionLaneClosures.stm>

E10.5.3 All submitted traffic control plans are subject to review and acceptance by City of Winnipeg Traffic Management and Traffic Services divisions.

E10.6 Measurement and Payment

- (a) Traffic management as outlined herein will be considered incidental to the Work and will not be measured for payment. No separate payment will be made.

E11. HYDRO EXCAVATION FOR UTILITY EXPLORATION

E11.1 Description

E11.1.1 General

- (a) This Specification covers all operations relating to the removal of earthen material immediately adjacent to underground utilities infrastructure by means of high pressure water spray, and the recovery of evacuated material by vacuum type means or equivalent method as approved by the Contract Administrator in accordance with B7.
- (b) The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

E11.2 Equipment

E11.2.1 Hydro excavation unit shall be capable of maintaining a minimum working pressure of 10,000 psi, at a rate of flow of 10 to 12 gallons per minute. The unit should be adjustable, so as to provide adequate pressure to remove earthen material.

E11.2.2 Spray head shall be equipped with a rotating type nozzle, in order to provide a wider path of cut.

E11.3 Construction Methods

E11.3.1 Hydro-Removal of Earthen Material

- (a) Earthen material adjacent to utility entity shall be sprayed with high pressure water so as to remove all such material.

E11.3.2 Recovery of Excavated Material

- (a) The recovery of excavated material shall be done using vacuum type method, or other type method as approved by the Contract Administrator.
- (b) The recovery of material shall follow immediately behind the excavation, to avoid excavated areas from filling with excavated material.
- (c) The use of mechanical sweepers will not be allowed.
- (d) Dispose of material in accordance with Section 3.4 of CW 1130.

E11.3.3 Backfill of Hydro Excavated Hole

- (a) The Contractor shall be responsible for the backfill of the hydro excavated hole with flowable cement-stabilized fill or sand backfill upon completion of the work described herein, to the approval of the Contract Administrator.

E11.4 Measurement and Payment (Provisional Item)

E11.4.1 Hydro Excavation for Utility Exploration as specified herein will be measured on unit price basis as listed in Form B: Prices. Payment will be made at the Contract Price for "Hydro Excavation for Utility Exploration".

E12. RED RIVER WATER LEVELS

E12.1 Normal Red River water levels are as follows.

- (a) Normal Summer Water Level (NSWL) (normally early June to late October) – 223.70 geodetic (approximate)
- (b) Winter Water Level (NWWL) (normally late November to late March) – 221.77 geodetic (approximate)

E12.2 Red River water levels rise considerably in the spring (typically mid March) due to ice break-up and snow melt. River crest elevations of 228.00 geodetic or higher are not unusual.

E12.3 River elevation may also increase in the summer due to heavy rainfall in the areas south of Winnipeg. Summer river crests are usually lower and of shorter duration than spring crests.

E12.4 No work on riverbanks or areas potentially in flood plain shall be scheduled after March 15 of a given year. The Contractors shall be prepared at all times to evacuate the work area due to sudden changes in river elevations and flows.

E12.5 The following web site link <http://winnipeg.ca/waterandwaste/sewage/riverlevels/pastYears.stm> lists historic Red River levels month by month back to 1999. The elevations shown are in imperial measurement and are referenced to "James Avenue Datum" which is elevation 221.76 geodetic.

E12.6 The existing 2100 mm LDS on Semple Ave discharges directly to the Red River. The Red River backs up into the 2100 mm LDS under NSWL conditions, therefore isolation of the Work may be necessary depending on means and methods of the Contractor. The Contractor shall be responsible to isolate the work area from elevated river levels by means of plugs, sandbag dykes, or other means. Maintain upstream flows in accordance with E13. Blocking of the 2100 mm LDS is not permitted.

E12.7 Submittals

- (a) The Contractor shall submit a plan documenting the procedures, materials and equipment which will be used to isolate the work site from the river prior to mobilizing to site.

E12.8 Measurement and Payment

- (a) No measurement of payment shall be made for protection of the site from river levels.

E13. MAINTAINING EXISTING SEWER FLOWS, FLOW CONTROL, DIVERSIONS AND BYPASS PUMPING

E13.1 Maintaining Existing Sewer Flows, Flow Control, Diversions and Bypass Pumping required to complete the Works in the Contract shall be incidental to the Contract as per Clause 4.16.1 of CW 2130.

E14. REINFORCED CONCRETE PIPE

E14.1 Description

- (a) This specification covers the requirements where reinforced concrete pipe is installed using jacking methods and in a trench.

E14.2 Materials

E14.2.1 Reinforced Concrete Pipe

- (a) Reinforced concrete pipe shall conform to CW 2130, ASTM C76 and CSA A257;

- (b) Minimum pipe class as shown on Drawings;
- (c) Pipe classes for jacking pipe and pipe in a trench shall be as shown on the Drawings and are for long term design conditions and loading. The Contractor shall verify that the pipe class, strength, reinforcing and joint design are suitable for their proposed installation methods and procedures. Design of any pipe to suit installation methods is the responsibility of the Contractor. Axial load carrying capacity shall be designed in accordance with ASCE 27; for trenchless installations and ASCE 15 of trench installations as detailed on Drawings;
- (d) Reinforcement for pipe intended for trenchless installations must take into account the potential for the pipe to rotate during installation. The design of stirrups and circumferential reinforcement must not result in a preferential installation orientation for the pipe unless appropriate controls are put in place, precluding rotation of the pipe during installation;
- (e) External joint bands of jacking pipe shall conform to CW 2130 and ASTM A36;
- (f) Perform a minimum of one (1) three-edge bearing test in accordance with ASTM C76 and C497 for each size and class of pipe installed. Test shall confirm both the service cracking and ultimate load capacity of the pipe. Test shall be performed in the presence of the Contract Administrator. The pipe supplier shall provide a minimum of seven (7) Calendar Days advance notice to the Contract Administrator prior to undertaking the test.

E14.3 Submittals

E14.3.1 Submit Shop Drawings for reinforced concrete jacking pipe in accordance with ASTM C76 and CW 2160. Shop Drawings shall include the following:

- (a) all pipe and joint dimensions;
- (b) steel reinforcement configuration.

E14.3.2 Submit quality control documentation in accordance with ASTM C76 and CW 2160. Quality control documents shall include the following:

- (a) mill tests for reinforcing steel;
- (b) concrete test results;
- (c) results from three-edge bearing test(s).

E14.4 Construction Methods

- (a) Land drainage sewers shall be installed in accordance with CW 2130 except as specified herein.
- (b) Verification of Utility Elevations as indicated in E15.

E14.5 Measurement and Payment

- (a) Measurement and payment for sewer installation shall be in accordance with CW 2130 as specified.

E15. TRENCHLESS EXCAVATION

E15.1 Further to Clause 3.4.1 of CW 2130, all sewers shall be installed by trenchless methods.

E15.2 Selection of excavation equipment for installation of sewers by trenchless methods shall be the responsibility of the Contractor and shall be made based on the basis of expected soil conditions as detailed on the test hole logs. The Contractor shall make allowances in the choice of equipment to account for reasonable and minor deviations in ground conditions and shall have contingency plans for the removal of boulders and other minor changes in ground conditions.

- E15.3 Contractor shall Submit to the Contract Administrator a pipe installation method list indicating Contractor's proposed pipe segments planned to be installed by trenchless methods and include a short description of the proposed trenchless method for each segment.
- E15.4 Pressure grouting or approved alternative methods shall be used to fill voids caused by the installation or if the bored hole diameter is greater than the outside diameter of the pipe by more than 25 mm.
- E15.5 Verification of Utility Elevations
- (a) Prior to construction, the Contractor shall verify at their own cost all buried utility elevations impacted by the Work. Verification shall occur in a minimum of fourteen (14) Calendar Days prior to any construction on the land drainage sewer such that any required grade adjustments can be made. Contractor shall arrange for all required utility locations, safety watches and other required notifications. Contractor shall provide a minimum of five (5) Calendar Days' notice to the Contract Administrator of conducting utility exposures.
- E15.6 In the event that there is a substantial change in the character or nature of the subsurface conditions or that obstructions are encountered, which adversely impact the Contractor's production or construction procedure, the Contractor shall immediately notify the Contract Administrator.
- (a) The notice shall provide details of the change in subsurface soil conditions or obstructions encountered, any proposed construction procedure revision that the Contractor intends to undertake, as well as any other relevant supporting information.
- (b) The Contract Administrator shall review the notice as expeditiously as possible to assess whether the change in conditions and revised construction procedures amount to a Change in Work. In the case of obstructions due to boulders in the silt/till or hardpan strata where that stratum is evident in the test hole logs, no consideration will be made for a Change in Work as boulder obstructions can be reasonably anticipated when working in this stratum. Obstructions such as "random boulders" in the clay strata well above the till interface may be considered as a Change in Work dependent on the level of effort required to facilitate their removal.
- (c) Where the Contract Administrator deems that a Change in Work is necessary, it shall be valued in accordance with the provisions of C7 and the supplementary requirements of E16.

E16. TRENCHLESS EXCAVATION OBSTRUCTIONS

- E16.1 Contingency plans for removal of the obstructions encountered in trenchless excavations must be approved by the Contract Administrator and may consist of but not limited to one of the following.
- (a) Drill or excavate a shaft at the location of the obstruction and remove the obstruction.
- (b) Remove the obstruction through the jacking head or core hole following drilling, splitting or breaking the obstruction into smaller components as required.
- (c) Other removal methods.
- E16.2 Where the Contract Administrator deems that the obstruction encountered represents a Change in Work, the Contractor will be compensated from the allowance under the Contract unit price "Change in Contract Conditions" in accordance with C7.4 and the following supplemental requirements:
- (a) The first four (4) hours of handling obstructions for each occurrence shall be the responsibility of the Contractor.
- (b) Equipment rates for equipment required in support of the obstruction removal shall be compensated at the MHCA rental rates. Equipment not listed in the MHCA rate schedule shall have their rates established by the Contractor prior to the commencement of Work in accordance with the procedure documented in the MHCA rental guide for establishing equipment rental rates and shall be subject to the approval of the Contract Administrator.

- (c) Standby equipment that cannot reasonably be deployed elsewhere during the duration of the obstruction removal shall be compensated at 50% of its established rate as noted in E16.2(b) above.
- (d) Labour rates and material costs associated with obstruction removal shall be compensated as per C7.4 (c) and C7.4.1 with the provision that any removal and replacement of pavements shall be compensated at the Contract Unit Price for such Work.

E17. EXCAVATION, BEDDING AND BACKFILL

E17.1 General

- (a) This Specification shall revise, amend, and supplement the requirements of CW 2030 of the City of Winnipeg's Standard Construction Specifications

E17.2 Submittals

- (a) Submit shoring designs, in accordance with CW 2030.

E17.3 Existing Utilities

- (a) Arrange and pay for any required safety watches around existing utilities as per CW1120.
- (b) Arrange and provide temporary or permanent relocation of existing utilities, and or temporary support of existing utilities required for the excavation of the shafts. Work on private utilities may not occur without submittal and approval of your utility plan to the Contract Administrator and approval from the utility owner.

E17.4 Disposal of Unsuitable or Surplus Excavated Material

- (a) The Contractor is responsible for arranging for a disposal site for all excavated material, including all associated works including transportation and payment of tipping fees. Disposal of all excavated material shall be considered incidental to the Works.

E17.5 Foundation, Bedding and Backfill

- (a) Type 3 foundations shall be used in all shafts.
- (b) Type 3 initial backfill material shall be used in place of sand in all shafts.
- (c) All shafts located within one (1) metre of paved areas on Main Street shall be backfilled with Class 1 backfill as per SD-002.
- (d) All shafts located within one (1) metre of paved areas of Non-Regional Streets shall be backfilled with Class 2 or Class 3 backfill as per SD-002.
- (e) Shafts to accommodate a tunnelling or jacking machine shall be constructed with a concrete foundation of sufficient cross section and trueness to adequately support and align the machine during tunnelling operations.

E17.6 Measurement and Payment

- (a) Excavation, shoring, and backfilling for pipe installation will not be measured for payment. Costs for excavation and shoring shall be included in the price for installation of sewer pipe. No separate measurement or payment will be made.

E18. CONNECTING TO EXISTING 2100 LDS

E18.1 Description

- (a) This Specification supplements and amends City of Winnipeg Standard Construction Specification CW 2130 Gravity Sewers and shall cover the connection of the new land drainage 900 mm and 600 mm land drainage sewers to the existing 2100 LDS, including shoring, excavation, utility support and protection, cutting of pipe openings, reinforced concrete, waterstops, epoxy grout, manhole sections, backfill, and all associated appurtenances.

E18.2 Materials

E18.2.1 Formwork, Reinforcing Steel and Concrete

- (a) As per CW 2160 and Drawings.

E18.2.2 Concrete Mix Design

- (a) As per CW 2160 and Drawings.

E18.2.3 Extrudable Waterstop

- (a) Gun Grade extrudable polyurethane based waterstop, SikaSwell S2 by Sika, or Approved Equal in accordance with B7.

E18.2.4 Manhole

- (a) As per CW 2160 and Drawings.

E18.3 Submittals

E18.3.1 Shoring design in accordance with CW 2030.

E18.3.2 Reinforcing steel Shop Drawings and concrete mix design in accordance with CW 2160.

E18.3.3 Manhole drawings in accordance with CW 2160.

E18.4 Construction Methods

E18.4.1 As per CW 2160 and Drawings.

E18.4.2 Confirm locations and elevations of existing utilities prior to construction. Protect and support existing utilities in accordance with the requirements of the utility owner. Utilities may not be interrupted. Any proposed interruptions or temporary relocations will require permission of utility owner and Contract Administrator.

E18.5 Method of Measurement and Basis of Payment

E18.5.1 The connection of the new 900 mm and 600 mm shall be measured on a lump sum basis and paid for at the Contract Unit Price for "Connecting to Existing 2100 LDS". The lump sum price shall include but not be limited to locating and excavating the existing pipe, locating existing utilities, supporting existing utilities, cutting or coring the existing pipe opening, required new piping and connecting to the existing sewer, shoring, manhole sections, backfill, cast-in-place concrete works and performing all operations necessary to complete the Works as specified and as indicated on the Drawings including all items incidental to the Works.

E19. RE-GRADING OF EXISTING SEWER SERVICES

E19.1 Description

- (a) This Specification shall supplement CW 2110 for the re-grading of existing sewer services that may be required for existing sewer service connections that are in conflict with the proposed LDS alignment.

E19.2 Construction Methods

- (a) The Contractor shall review critical locations to identify areas where sewer services may be in conflict with the LDS alignment. Critical locations shall be established prior to construction of new LDS.
- (b) The Contractor shall locate sewer services in areas of potential conflict with LDS alignment, where LDS is above or in close proximity to combined sewer.
- (c) Contractor shall vertically re-align sewer services where the proposed LDS infringe on City of Winnipeg UGS minimum clearance requirements or where the existing sewer service conflicts with the new LDS.

- (d) Prior to performing the vertical re-alignment of a sewer service, Contractor shall perform all hydro-excavation according to E11 and determine the location of the existing gravity main and review the three-dimensional location of the gravity main with the Contract Administrator. If the location of the gravity main is within the clearance limits required by UGS, the Contractor shall perform the vertical re-alignment of the gravity main.

E19.3 Measurement and Payment (Provisional Item)

- (a) Measurement and payment for Re-Grading of Existing Sewer Services as specified herein will be measured on unit price basis as listed in Form B: Prices. Payment will be made at the Contract Price for "Re-Grading of Existing Sewer Services".
- (b) Measurement and payment for utility exploration will be measured and paid in accordance with E11.

E20. TEMPORARY SURFACE RESTORATION

E20.1 General

- (a) This specification applies to temporary surface restoration Work.
- (b) Further to clause 3.3 of CW 1130 where permanent surface restorations cannot be made due to cold weather, the Contractor shall temporarily restore surfaces as follows:

E20.2 Construction Methods

- (a) Backfill under Temporary Surface Restoration
 - (i) Backfill and level boulevards and grassed areas to match existing surface elevations,
 - (ii) Use Class 2 backfill in excavation under temporary street pavement and sidewalk where Class 3 backfill cannot be jetted and flooded due to cold weather.
 - (iii) Class 2 backfill may be compacted in 600 mm lifts where backhoe operated pneumatic plate compactors are used.
 - (iv) Jet and flood Class 2, Class 3 and Class 5 backfilled excavations in spring when ground is not frozen prior to permanent restoration.
- (b) Temporary Surface Restoration
 - (i) Cap excavations in concrete pavement with a 100 mm layer of concrete for "Temporary Restoration of Utility Pavement Cuts" as specified in CW 3310.
 - (ii) Cap excavations in sidewalk pavement with a 50 mm layer of concrete for "Temporary Restoration of Utility Pavement Cuts" as specified in CW 3310.
 - (iii) Insulate temporary concrete as required during 48 hour curing period.
 - (iv) Where curb has been removed as part of the pavement cut pour temporary curb using "Concrete for Temporary Restoration of Utility Pavement Cuts" as specified in CW 3310.
 - (v) Remove all temporary pavements prior to permanent restorations.
- (c) Maintenance
 - (i) The Contractor shall monitor and maintain temporarily restored surfaces as required until permanent restoration is complete.
 - (ii) If, in the opinion of the Contract Administrator, temporarily restored surfaces are not being adequately maintained or were not properly constructed and pose a danger to the public, maintenance or reconstruction will be done by the City forces with no advance notification the Contractor.
 - (iii) All costs associated with the maintenance or reconstruction of temporary pavement incurred by the City shall be deducted from future payments to the Contractor.

E20.3 Measurement and Payment (Provisional Item)

- (a) Temporary restoration will be measured on unit price basis as listed in Form B: Prices. Payment will be made at the Contract Price for "Temporary Surface Restorations".

- (b) No extra payment will be made for the installation of Class 2 backfill under temporary street pavement and sidewalk.
- (c) No measurement or payment will be made for the temporary restorations of boulevards and grassed areas.
- (d) No measurement or payment will be made for the removal of temporary pavement prior to permanent restoration.

E21. PERMANENT RESTORATION

E21.1 Description

- (a) This specification identifies the requirements for permanent surface restorations.
- (b) The specification amends the Surface Restorations defined in CW 2130 and places the cost of permanent surface restorations upon the particular Work item being undertaken.

E21.2 General

- (a) The Contractor will follow the City's Street By-law No. 1481/77 and Street Cuts Manual (2017) for all pavement restoration unless otherwise shown on the drawing or specifications or as directed by the Contract Administrator.
- (b) The Street Classification and Surface Type within the project work area are classified as follows:

Street Name	Segment	Priority	Pavement Type	General Condition
Main Street NB	Jefferson Avenue to St Anthony Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Jefferson Avenue to St Anthony Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	St Anthony Avenue to St Anthony Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	St Anthony Avenue to Perth Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	St Anthony Avenue to Perth Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Perth Avenue to Perth Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Perth Avenue to Perth Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Perth Avenue to Hartford Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Perth Avenue to Hartford Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Hartford Avenue to Belmont Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Hartford Avenue to Belmont Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Belmont Avenue to Kilbride Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Kilbride Avenue to Semple Avenue	P1	Asphalt over Portland Cement Concrete	Good

Street Name	Segment	Priority	Pavement Type	General Condition
Main Street SB	Kilbride Avenue to Semple Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Semple Avenue to Burrin Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Semple Avenue to Burrin Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Burrin Avenue to Kingsbury Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Burrin Avenue to Kingsbury Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Kingsbury Avenue to Kingsbury Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Kingsbury Avenue to Kingsbury Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Kingsbury Avenue to Royal Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Kingsbury Avenue to Royal Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Main Street NB	Royal Avenue to Royal Avenue	P1	Asphalt over Portland Cement Concrete	Good
Main Street SB	Royal Avenue to Royal Avenue	P1	Asphalt over Portland Cement Concrete	Fair
Hartford Avenue	Jones Street to Main Street	P2	Asphalt over Portland Cement Concrete	Poor
Hartford Avenue	Aikins Street to Main Street	P1	Asphalt over Portland Cement Concrete	Poor
Belmont Avenue	Jones Street to Main Street	P3	Asphalt over Portland Cement Concrete	Poor
Kilbride Avenue	Scotia Street to Main Street	P3	Asphalt over Portland Cement Concrete	Good
Kingsbury Avenue	Aikins Street to Main Street	P3	Asphaltic Cement	Fair

Note: Values obtained from City of Winnipeg Street Conditions Map available at: <https://winnipeg.ca/publicworks/maps/streetconditions.asp>
Conditions reported at the time of posting may not reflect existing conditions.

- (c) All street segments within the work area impacted by the Work as determined by the Contract Administrator shall be maintained and restored with the following additional requirements.
- (i) Review and record the condition of each street segment with the Contract Administrator and a City Representative from Public Works prior to the initiation of Work.
 - (ii) Review and record the condition of each street segment with the Contract Administrator and a City Representative from Public Works prior to surface restoration. The surface restoration required for each street segment will be agreed upon at this review meeting.
 - (iii) Pavement Restoration Guidelines can be found in the City of Winnipeg Street Cuts Manual.

E21.3 Methods

- (a) The Contractor shall permanently restore all existing surface areas disturbed by construction activities including but not limited to areas disturbed by; construction equipment, placement of equipment trailers and where construction materials were stockpiled, shall be restored as follows:
 - (i) Full depth partial slab patches in accordance with CW 3230.
 - (ii) Boulevards, ditches and grassed areas - sodding using imported topsoil in accordance with CW 3510. The Contractor shall restore all areas disturbed during construction to existing condition or better, using topsoil and sod at its own cost.
 - (iii) Asphalt surfaces – match existing base course and asphalt thickness or a minimum of 150 mm of base course and 75 mm of Type 1A Asphaltic Concrete, whichever is greater, in accordance with CW 3410.
 - (iv) Miscellaneous concrete slabs, including sidewalk - in accordance with CW 3235
 - (v) Interlocking stones – in accordance with CW 3330.
 - (vi) Concrete curb and gutter – in accordance with CW 3240.
 - (vii) Trees - requiring replacement due to construction activities (as directed by the Contract Administrator) shall be installed in accordance with CW 3510. The Contractor will not be reimbursed under a separate pay item for replacing trees damaged by construction activities. The work will be considered incidental to the Work.

E21.4 Measurement and Payment

- (a) Permanent Restoration as a result of sewer installation, including but not limited to the construction of land drainage sewers, shafts, manholes, catch basins, and other related Work, will be measured on unit price basis in accordance with CW 2160 as listed in Form B: Prices. Payment will be made at the Contract Price for “Permanent Restoration”.
- (b) No differentiation will be made for class of patch.
- (c) No separate measurement or payment will be made for Drilled Dowels or Tie Bars
- (d) Boulevard restoration will be considered incidental to the Work in accordance with CW 2130 and will not be measured for payment. No separate payment will be made

E22. PROVISIONAL ITEMS

- E22.1 The Provisional Items listed on Form B: Prices are part of the Contract.
- E22.2 The Contractor shall not perform Work included in the Provisional Items without prior authorization from the Contract Administrator. All Work included in the Provisional Items will be carried out within the construction areas shown on the Drawings.
- E22.3 Notwithstanding GC:7, the City 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 the grounds of loss of anticipated profit or for any other reason.

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 Police Information Check from the police service having jurisdiction at his/her place of residence. Or
- (a) Sterling BackCheck – for existing account holders, log into your account to send individual invitations to employees requiring security clearance. For those that do not have an account, click on the following link to open an account: <https://forms.sterlingbackcheck.com/partners/platform2-en.php?&partner=winnipegcity>; or
 - (b) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home>; or
 - (c) FASTCHECK Criminal Record & Fingerprint Specialists, forms to be completed can be found on the website at: <https://myfastcheck.com>
- F1.2 Prior to the award of Contact, 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 Police Information Check 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.
- F1.3 Any individual for whom a Police Information Check is not provided, or for whom a Police Information Check 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.
- F1.4 Any Police Information Check obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.5 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated Police Information Check. Any individual who fails to provide a satisfactory Police Information Check as a result of a repeated Police Information Check will not be permitted to continue to perform any Work specified in F1.1.