



THE CITY OF WINNIPEG

TENDER

TENDER NO. 630-2019

NEWPCC DIGESTER 11 ELECTRICAL AND AUTOMATION UPGRADES

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 NEWPCC DIGESTER 11 ELECTRICAL AND AUTOMATION UPGRADES

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, August 30, 2019.

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

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

B3. SITE INVESTIGATION

B3.1 Further to C3.1, the Contract Administrator or an authorized representative will be available at the Site at 1:30 pm on August 20, 2019 to provide Bidders access to the Site.

B3.1.1 Bidders are requested to register for the Site Investigation by contacting the Contract Administrator identified in D4, via e-mail, before 4:00 pm on August 19, 2019.

B3.1.2 Bidders are requested to meet at the reception area at the Administration Building of the NEWPCC.

B3.1.3 Bidders attending the Site Investigation are required to provide their own Personal Protective Equipment; at a minimum hard hat, CSA approved safety footwear, hearing protection and safety glasses

B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

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

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 Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B6.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. 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 D4.

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 B17.

B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

B8.1 The Bid shall consist of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices;

B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.

B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.

B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.

B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Tender number and the Bidder's name and address, and shall be submitted to:

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

B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Tender number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.

- B8.6 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204-949-1178.
- B8.6.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time or guarantee the successful receipt of a faxed Bid Submission.
- B8.7 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.8 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B17.1(a).
- B8.8.1 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 11 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.4.2 All signatures shall be original.
- 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 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B10.1.2 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 D28. Any such costs shall be determined in accordance with D28.
- B10.2 Form B, Item 5: The Bidder shall enter the cost of the Standardized Goods to be supplied from Mine Safety Appliances Company, LLC (MSA) as part of the Standardized Gas Detection Systems agreement identified in E19. The cost shall be the base cost received from MSA, without any mark-up or taxes applied.
- B10.2.1 Any mark-up to the supply of the Standardized Goods shall be deemed to be included in other applicable Form B lines.
- B10.3 The Bidder shall state a labour rate for Form B, Item 6, for additional labour. The rate shall be inclusive of:
- (a) All burdens, including additional general requirements including mobilization, safety, ventilation, hoisting equipment, indirect supervision, etc.
 - (b) Any potential overtime that may be required.
- B10.4 The maximum permissible labour rates for additional work are shown on Form B.
- B10.4.1 In the event that the labour rate indicated on Form B, is greater than the specified maximum rate, the maximum rate will be utilized for the purpose of bid evaluation and payment.
- B10.5 The labour rates and specified material mark-up factor specified shall apply to all additional work, including additional work covered under Contract Change Orders.
- B10.6 Escalation shall not apply to the labour rates.
- B10.7 Form B, Item 7 is an allowance for additional material that may be required due to unforeseen changes to the work. Prices for material shall be based upon mark-ups as defined in E17.
- B10.8 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.
- B10.9 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.
- B10.10 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DISCLOSURE

- B11.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B11.2 The Persons are:
- (a) N/A.

B12. CONFLICT OF INTEREST AND GOOD FAITH

- B12.1 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;
- (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;
- (d) have experience installing electrical equipment in an Class I hazardous location in accordance with the Canadian Electrical Code.

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 at <https://winnipeg.ca/finance/findata/matmgt/listing/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™) or
 - (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. OPENING OF BIDS AND RELEASE OF INFORMATION

B14.1 Bids will not be opened publicly.

B14.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B14.3 After award of Contract, the name(s) of the successful Bidder(s), their address(es) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B14.4 The Bidder is advised that any information contained in any Bid may be released if required by 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).

B14.4.1 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.

B15. IRREVOCABLE BID

B15.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B15.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B16. WITHDRAWAL OF BIDS

B16.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B16.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

B16.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 11 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B16.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 11 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B16.1.3(b), declare the Bid withdrawn.

B16.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B15.2 shall be liable for such damages as are

imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B17. EVALUATION OF BIDS

B17.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the 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.

B17.2 Further to B17.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

B17.3 Further to B17.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is qualified.

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

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

B18. AWARD OF CONTRACT

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

B18.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.

B18.2.1 Without limiting the generality of B18.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B18.3 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 D28 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.

B18.4 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 B17.

B18.4.1 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.

- B18.5 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B18.6 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

- C1.1 The *General Conditions for Construction* (Revision 2019-01-15) are applicable to the Work of the Contract.
- C1.1.1 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
- C1.2 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. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of electrical and automation upgrades to the North End Sewage Treatment Plant Digester 11 installation and the associated Digester East Gas Room.

D2.2 The major components of the Work are as follows:

- (a) Replace the motors for the Digester 11 mixing pumps, D375-P and D376-P, with Class I, Zone 1 rated explosion-proof motors. Connect new thermistors and replace the existing emergency stop switches. Salvage the existing 200A local disconnect switches.
- (b) Upgrade the Digester 11 electrical and automation installation to meet Class I, Zone 1 requirements.
- (c) Install a new combustible gas detection and alarming system for the Digester East Gas Room.
- (d) Reinforce the Gallery 5 structural beams.

D3. DEFINITIONS

D3.1 When used in this Tender:

- (a) "**Commissioning**" means the process of verifying that equipment, systems and subsystems are installed, tested and capable of being operated and maintained to perform in conformance with the drawings and specifications. Commissioning includes, but is not limited to, training, testing, demonstration, and performance verification for all equipment required under the Work;
- (b) "**DCS**" means Distributed Control System;
- (c) "**GFWP**" means Gas Free Work Permit;
- (d) "**ISA**" means International Society of Automation;
- (e) "**NEWPCC**" means North End Sewage Treatment Plant;
- (f) "**PLC**" means Programmable Logic Controller;
- (g) "**PPE**" means Personal Protective Equipment;
- (h) "**Standardized Goods**" means the respective goods identified in D8 that have been standardized by the City;
- (i) "**Standardization Vendor**" means a contractor or supplier of Standardized Goods, as identified in D8.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is CENGYS LTD., represented by:

Curtis Reimer P.Eng. PMP

Telephone No. 431-337-0181

Email Address curtis.reimer@cengys.com

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

D4.3 Bids Submissions must be submitted to the address in B8.

D5. CONTRACTOR'S SUPERVISOR

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

D5.2 At least two (2) business days prior to commencement of any work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D5.1 or an alternate can be contacted twenty-four (24) hours a day to respond to an emergency.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D6.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

D7. NOTICES

D7.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D7.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D7.3, D7.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D4.

D7.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following:

The City of Winnipeg
Attn: Chief Financial Officer
Office of the Chief Administrative Officer
Susan A. Thompson Building
2nd Floor, 510 Main Street
Winnipeg MB R3B 1B9

D7.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

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

D7.1 Bids Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B8.

STANDARDIZATION

D8. STANDARDIZED GOODS

D8.1 The following goods have been standardized by the City and will be supplied by the Contractor:
(a) Standardized Gas Detection Systems as per E19.

D9. CONTRACTUAL ARRANGEMENT

D9.1 Each Standardization Vendor shall be a Subcontractor of the Contractor.

D9.2 The City's contract with each of the Standardization Vendors defines the prices and general terms of supply to the Contractor. Each Standardization Vendor is obligated to enter into a contract with the Contractor, based upon such prices and general terms of supply.

D9.2.1 The City is not a party to any contract between a Standardization Vendor and the Contractor, or any Subcontractor.

D9.3 In the event that a potential dispute arises between the Contractor and a Standardization Vendor, the Contract Administrator shall be notified.

D10. PAYMENT OF STANDARDIZATION VENDORS

D10.1 The Contractor is obligated to pay the Standardization Vendors in accordance with general terms of supply applicable to such Standardization Vendor.

D10.2 The Contractor's payment terms to the Standardization Vendor, in respect of Standardized Gas Detection Systems identified in E19, include the following:

D10.2.1 Payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Standardization Vendor's invoice.

SUBMISSIONS

D11. AUTHORITY TO CARRY ON BUSINESS

D11.1 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.

D12. QUOTATIONS

D12.1 The Contractor shall provide the Contract Administrator with copies of the quotations provided by Standardized Equipment Suppliers identified in E19.

D13. SAFE WORK PLAN

- D13.1 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.
- D13.2 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/matmgmt/Safety/default.stm>

D14. INSURANCE

- D14.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
 - (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D14.2 Deductibles shall be borne by the Contractor.
- D14.3 The Contractor shall provide the Contract Administrator 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 seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- D14.4 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.

D15. CONTRACT SECURITY

- D15.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain contract security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; 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; or
 - (c) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H3: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (d) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

- D15.1.1 Where the contract security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as contract security.
- D15.2 The Contractor shall provide the City Solicitor with the required contract security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.
- D15.3 Where the Contract Security is provided in accordance with D15.1(a) and D15.1(b), 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 D15.1(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.

D16. DETAILED WORK SCHEDULE

- D16.1 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.
- D16.2 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.
- D16.3 Further to D16.2(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) Mobilization
 - (b) Shop Drawing and Submittal Reviews
 - (c) Digester 11 Electrical Work
 - (d) Digester 11 Automation Work
 - (e) Gas Detection Systems
 - (f) Commissioning
 - (g) Training
 - (h) Supply of Operations and Maintenance Manuals
 - (i) Substantial Performance
 - (j) Total Performance
- D16.4 Further to D16.2(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.
- (a) Show all interfaces with the City;
 - (b) Show all items where the City of Winnipeg ongoing operation of the sewage treatment plant will be impacted, including but limited to any power outages.
- D16.5 The schedule shall indicate any planned non-working days, including holidays and Contractor non-working days, such as a holiday shutdown between Christmas and New Year's Eve.
- D16.6 Update the detailed work schedule to reflect actual progress on a regular basis. Update the schedule at least once every two (2) weeks and as requested by the Contract Administrator.

D16.7 Following submission of the detailed work schedule, but prior to the commencement of any Works, the Contractor shall attend a scheduling meeting with the Contract Administrator and the City. The Contract Administrator will advise the Contractor of the meeting time and location. The purpose of this meeting will be to review the Contractor's schedule and to address any scheduling concerns that may arise during review of the schedule.

SCHEDULE OF WORK

D17. COMMENCEMENT

D17.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D17.2 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 D11;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D13;
 - (iv) evidence of the insurance specified in D14;
 - (v) the contract security specified in D15; and
 - (vi) the detailed work schedule specified in D16.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D17.3 The City intends to award this Contract by October 4, 2019.

D17.3.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D18. SUBSTANTIAL PERFORMANCE

D18.1 The Contractor shall achieve Substantial Performance by February 21, 2020.

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 by March 21, 2020.

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 hundred fifty dollars (\$250);
 - (b) Total Performance – one hundred dollars (\$100).
- 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.

CONTROL OF WORK

D21. JOB MEETINGS

- D21.1 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.
- D21.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D22. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D22.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

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

- D23.1 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.

D24. COOPERATION WITH OTHERS

- D24.1 The Contractor will not have exclusive use of the Site. The Contractor shall coordinate activities with others and minimize disruptions to others, where possible.
- D24.2 The Contractor's attention is directed to the fact that other contractors, and the staff of the City may be working within the Site. The activities of these agencies may coincide with the Contractor's execution of the Work, and it will be the Contractor's responsibility to cooperate to the fullest extent with other personnel working in the area, and such cooperation is an obligation of the Contractor under the terms of this Contract.
- D24.3 The Contractor is advised that the following work is occurring at or in the vicinity of the project Site:
- (a) NEWPCC Digester 11 Relining (722-2018)

- D24.4 In addition, the following work is also occurring on the NEWPCC site, in addition to other unplanned work required to maintain plant operation:
- (a) NEWPCC Boiler Control Design and Replacement (757-2018)
 - (b) NEWPCC Power Supply Upgrade (599-2015B)

MEASUREMENT AND PAYMENT

D25. PAYMENT

- D25.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D26. PAYMENT SCHEDULE

- D26.1 The City's payment to the Contractor, associated with Standardized Goods, will be in accordance with C12.
- D26.2 Further to C12, payment shall be in accordance with the following payment schedule:
- (a) A maximum of 90% of Form B, Item 1 may be submitted for progress payments prior to total completion of all associated work, including commissioning.
 - (b) A maximum of 90% of Form B, Item 2 may be submitted for progress payments prior to total completion of all associated work, including commissioning.
 - (c) A maximum of 90% of Form B, Item 3 may be submitted for progress payments prior to total completion of the gas detection and alarming system, including commissioning.
 - (d) A maximum of 90% of Form B, Item 4 may be submitted for progress payments prior to total completion of the structural work.
- D26.3 Note that the Builders Liens Act and associated holdbacks will apply to the Work. The holdbacks identified above are prior to, and do not include, additional holdbacks as required by the Builder's Liens Act.

WARRANTY

D27. WARRANTY

- D27.1 Notwithstanding C13.2, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
- (a) a portion of the Work cannot be completed because of conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D27.1.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

THIRD PARTY AGREEMENTS

D28. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D28.1 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.
- D28.2 Further to D28.1, in the event that the obligations in D28 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.

D28.3 For the purposes of D28:

- (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.

D28.4 Modified Insurance Requirements

D28.4.1 If not already required under the insurance requirements identified in D14, 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.

D28.4.2 If not already required under the insurance requirements identified in D14, 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.

D28.4.3 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.

D28.4.4 Further to D14.3, 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.

D28.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

D28.5 Indemnification By Contractor

D28.5.1 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.

D28.6 Records Retention and Audits

D28.6.1 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.

D28.6.2 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 D28.6.1 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.

D28.7 Other Obligations

- D28.7.1 The Contractor consents to the City providing a copy of the Contract to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D28.7.2 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.
- D28.7.3 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.
- D28.7.4 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.

FORM H1: PERFORMANCE BOND
(See D15)

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. 630-2019

NEWPCC DIGESTER 11 ELECTRICAL AND AUTOMATION UPGRADES

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 D15)

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 hereinbelow 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. 630-2019

NEWPCC DIGESTER 11 ELECTRICAL AND AUTOMATION UPGRADES

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
 - (ii) 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;

- (iii) 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;
 - (iv) 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 H3: IRREVOCABLE STANDBY LETTER OF CREDIT
(CONTRACT SECURITY)
(See D15)**

(Date)

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

RE: CONTRACT SECURITY - TENDER NO. 630-2019

NEWPCC DIGESTER 11 ELECTRICAL AND AUTOMATION UPGRADES

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

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

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

(Date)

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

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

Except where they may conflict with the terms and conditions contained in this Letter of Credit, the International Standby Practices 1998 shall apply to this Letter of Credit. This Letter of Credit shall also be governed by and construed in accordance with the laws of the Province of Manitoba and of Canada as applicable therein, except to the extent that such laws are inconsistent with the International Standby Practices 1998. This Letter of Credit is subject to the exclusive jurisdiction of the courts in the Province of Manitoba and all courts competent to hear appeals therefrom.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

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:

Specification No. Specification Title

Division 01 – General Requirements

013119	Project Meetings
013300	Submittal Procedures
014500	Quality Control
015100	Temporary Utilities
015200	Construction Facilities
015600	Temporary Barriers and Enclosures
016100	Common Product Requirements
017300	Execution
017400	Cleaning
017419	Waste Management and Disposal
017800	Closeout Submittals
019113	General Commissioning Requirements

Division 07 – Thermal and Moisture Protection

078400	Fire Stopping
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Division 26 – Electrical

260500	Common Work Results for Electrical
260505	Selective Demolition for Electrical
260521	Wires and Cables (0-1000 V)
260522	Connectors and Terminations
260528	Grounding – Secondary
260529	Hangers and Supports for Electrical Systems
260531	Splitters, Function, Pull Boxes and Cabinets

260532	Outlet Boxes, Conduit Boxes and Fittings
260534	Conduits, Conduit Fastenings and Conduit Fittings
260536	Cable Trays for Electrical Systems
260537	Wireways and Auxiliary Gutters
260581	Motors: 0.746 To 149 Kw
260805	Electrical Commissioning
262816.02	Moulded Case Circuit Breakers

Division 40 – Process Interconnections

400501	Common Work Results – Automation
406633	Network Cabling
408011	Automation Commissioning
409001	Field Pushbuttons, Switches, and Indicators
409050	Gas Detection and Alarms
409513	Control Panels
409574	Automation Junction Boxes

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	General
1-0101D-D0002-001	Project Cover Sheet and Drawing List
1-0101D-G0002-001	Site Plan, Lay-down and Parking Area
	Structural
1-0101D-S0006-001	Structural Plan and Details, Digester Gallery 5
	Electrical
1-0101D-E0011-001	Single Line Diagram, MCC Layout and Control Panel Details
1-0101D-E0020-001	Digester Gallery 6 West Electrical Room Layout
1-0101D-E0021-001	Hazardous Location Plan, Digester East Gas Room
1-0101D-E0022-001	Hazardous Location Plan, Digester 11 Roof and East Gas Room Penthouse
1-0101D-E0023-001	Electrical Equipment Plan Layout, East Gas Room
1-0101D-E0024-001	Electrical Equipment Plan Layout, Digester 11 Roof
1-0101D-E0025-001	Connection Diagram, D375-VFD, Mixing Pump
1-0101D-E0026-001	Connection Diagram, D376-VFD, Mixing Pump
1-0101D-E0027-001	Wiring Diagram, D1112-HTR, Digester 11 Dome Heater
1-0101D-E0028-001	Wiring Diagram, D1113-HTC-1 and D1113-HTC-2, Digester 11 Gas Piping Heat Trace
	Process & Instrumentation Diagrams
1-0101D-A0071-001	Process & Instrumentation Diagram, Digester East Gas Room HVAC
1-0101D-A0081-001	Process & Instrumentation Diagram, Legend and Details
1-0101D-A0082-001	Digester No 11 Mixing Pumps P&ID
1-0101D-A0106-001	Digester No 11 Gas Collection System P&ID
1-0101D-A0112-001	Process & Instrumentation Diagram, Gas Detection and Alarming, East Gas Room
	Automation
1-0101D-A0113-001	Instrument Location Plan, Digester East Gas Room
1-0101D-A0113-002	Instrument Location Plan, Digester East Gas Room
1-0101D-A0113-003	Instrument Location Plan, Digester East Gas Room
1-0101D-A0113-004	Instrument Location Plan, Digester East Gas Room
1-0101D-A0114-001	Instrument Location Plan, Digester 11, Digester 12 Roof and East Gas Room Penthouse
1-0101D-A0115-001	Control Room Layout, Digester Control Room
1-0101D-A0116-001	Loop Diagram, D130-LIT, Digester 11 Foam Level
1-0101D-A0117-001	Loop Diagram, D142-FIT, Digester 11 Gas Flow

1-0101D-A0118-001	Loop Diagram, D379-XV, Mixing Pump Discharge Valve
1-0101D-A0119-001	Loop Diagram, D380-XV, Mixing Pump Discharge Valve
1-0101D-A0120-001	Loop Diagram, D384-XV-1 and D384-XV-2, Flushing Water Solenoids
1-0101D-A0121-001	Loop Diagram, D386-PIT, Mixing Pump Discharge Pressure
1-0101D-A0122-001	Gas Detection Schedule, D939-GDC, East Gas Room
1-0101D-A0123-001	Loop Diagram, D939-AIT-1 AND D939-AIT-2, East Gas Room Gas Detection
1-0101D-A0124-001	Loop Diagram, D939-AIT-3 AND D939-AIT-4, East Gas Room Gas Detection
1-0101D-A0125-001	Loop Diagram, D939-AIT-5 AND D939-AIT-6, East Gas Room Gas Detection
1-0101D-A0126-001	Loop Diagram, D939-GDC Strobes, Sirens and Ventilation Control, East Gas Room Gas Detection
1-0101D-A0126-002	Loop Diagram, D939-GDC Strobes, Sirens and Ventilation Control, East Gas Room Gas Detection
1-0101D-A0127-001	Loop Diagram, D939-GDC, DCS Alarms
1-0101D-A0128-001	Loop Diagram, D638-DF3, DCS and Gas Detection Control
1-0101D-A0129-001	Loop Diagram, D512-DF12, DCS and Gas Detection Control
1-0101D-A0130-001	Loop Diagram, D613-DF13, DCS and Gas Detection Control
1-0101D-A0131-001	Installation Details, Combustible Gas Detection
1-0101D-A0132-001	Junction Box Layout, JBA-D939-1 and JBA-D939-2, Combustible Gas Detection
1-0101D-A0133-001	Network Diagram, Field Network, Digester Gallery PLC Panel
1-0101D-A0134-001	Panel Layout, CP-D91 Gas Detection Panel

Appendices

630-2019_Appendix_A_Shop_Drawings	Mixing Pump Shop Drawings
630-2019_Appendix_B_Instrument_List	Instrument List
630-2019_Appendix_C_Lamacoid_Schedule	Lamacoid Schedule
630-2019_Appendix_D_Testing_Forms	Testing Forms

E2. EXPIDITED SHOP DRAWINGS

- E2.1 In order to expedite Shop Drawings with critical timeliness, the Lowest Responsive Bidder, as outlined in B17, will be permitted, after receiving written approval from the Contract Administrator, to arrange for the preparation of Shop Drawings for the following items with critical timelines:
- (a) Motors.
- E2.2 If Award is made to the Lowest Responsive Bidder, then no specific payment for the preparation of Shop Drawings will be made.
- E2.3 If no contract is awarded, then the City of Winnipeg will pay the requested Bidder up to a maximum of one thousand dollars (\$1000.00) for the complete set of requested submissions noted above, for the preparation and delivery of Shop Drawings. Delivery of the Shop Drawings to the City and payment of the above amounts will constitute full and final consideration of each party to the other, and neither party will have any further liability to the other with respect to this Tender.

E3. HAZARDOUS MATERIALS

- E3.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.
- E3.2 Asbestos is known to be present on the insulated ductwork. Ensure that all existing asbestos is undisturbed. The Contractor is responsible for all requirements associated with working around asbestos.

- E3.3 The East Gas Room contains biogas piping and compressors and the Digester roof contains biogas piping and potential for gas. While biogas is normally contained, there is a risk of unexpected biogas leakage.
- E3.3.1 Biogas hazards include:
- (a) Fire and explosion;
 - (b) Asphyxiation;
 - (c) Gas poisoning (H₂S and NH₃);
 - (d) High-pressure gas leaks;
 - (e) Disease from pathogens.
- E3.3.2 The Contractor is responsible for providing a safe work environment that addresses possible risks of biogas leakage in their Safe Work Plan. Minimum requirements include:
- (a) Provide portable gas detectors within a close vicinity of all personnel working in the East Gas Room. Portable gas detectors must be approved to detect both combustible gasses and H₂S.
 - (b) Training of all personnel on response to a gas leakage event.
- E3.3.3 The Contractor is responsible for working safely within the site to avoid potential disturbances to the digester gas infrastructure. The Contract shall take precautions to avoid any risk of damage or potential release of digester gas.
- E3.3.4 Provide notices on the East Gas Room Door regarding requirements for portable gas detection.

E4. LOCATION AND ACCESS TO FACILITIES

- E4.1 The Work specified hereinafter will take place at the NEWPCC, located at 2230 Main Street, Winnipeg, MB.
- E4.2 Normal work hours will be between 07:30 am and 3:30 pm, Monday to Friday inclusive, excluding Statutory Holidays and Civic Holidays.
- E4.3 Where work is required outside of normal working hours, it shall be coordinated with designated City Operations personnel a minimum of 24 hours in advance where the Contractor intends to carry out Work outside normal working hours. It is anticipated that work outside of the normal work hours will typically be permitted, except for unforeseen operating or maintenance conditions.
- E4.4 Do not initiate work outside normal working hours without City Operations approval except when the Work is unavoidable or absolutely necessary for:
- (a) Preventing injury to any person or saving the life of any person; or
 - (b) Preventing damage to property where the circumstances placing the property in danger could not reasonably have been foreseen and where the immediate carrying out of such Work is necessary in order to prevent damage to that property.
- E4.5 Coordinate activities with City personnel and any other contractors that may be working concurrently on the Site.
- E4.6 Additional details and requirements regarding facility access will be provided to the Contractor. The Contractor must comply with all City policies set forth in this document, and detailed instructions provided after the Work is awarded.

E5. FACILITY OPERATION REQUIREMENTS

- E5.1 The facilities related to the Work are critical to the treatment of wastewater for the City of Winnipeg. Under no condition shall equipment or power be shut down without prior permission

of the Contract Administrator. Similarly, coordination and approval are required prior to returning the equipment back into service. The Contractor is responsible for preparing shutdown schedules in conjunction with the Contract Administrator and the City. The Contractor shall work within the schedule and any procedures given, and shall advise the Contract Administrator of any issues or concerns, prior to performing the Work.

- E5.2 Digester 11 is currently out of service and the Contractor will not be required to coordinate a shutdown of Digester 11 related equipment until Substantial Performance. After Substantial Performance, the City may put Digester 11 equipment through a commissioning process and/or into service. All work on Digester 11 equipment after Substantial Performance may require a shutdown, along with appropriate coordination as specified.
- E5.3 The Work shall be scheduled and performed such that there is minimal disturbance to NEWPCC plant operation.
- E5.4 Hot work (refer to E12) shall end no less than one (1) hour prior to end of shift and area inspected prior to daily departure by the Contractor's site supervisor and / or tradesman.
- E5.5 Some of the work will require shutdown of equipment. All equipment shutdown requirements require 24-48 hours' notice. Coordinate the work to minimize the amount of time that equipment shutdown will be required. In addition, the Contractor shall be flexible to work around specific City operational requirements. Specific requirements that the Contractor is required to adhere to include:
- (a) All equipment will be isolated by City personnel.
 - (b) Any electrical shutdowns affecting more than one branch circuit must be less than two hours in duration. Any longer shutdown which may be required must be coordinated with the Contract Administrator.
 - (c) In case of accidental equipment shutdown, the Contractor must notify NEWPCC staff immediately for their corrective action. Under no circumstances shall the Contractor start or restart equipment.
 - (d) Other process and safety requirements, as identified by the City or Contract Administrator.
- E5.6 It is possible that equipment failure within the NEWPCC, or another unforeseen condition, could cause an event where construction must be stopped immediately and equipment brought back online. The City, upon their sole discretion, may delay or stop the Work at any time, require the Contractor to return all or equipment into service as soon as possible, and reschedule the Work.
- E5.7 Specific Operational Requirements
- E5.7.1 The following equipment will require notification, but not a coordinated shutdown:
- (a) D130-LIT
 - (b) D142-FIT
 - (c) D375-P
 - (d) D376-P
 - (e) D379-XV
 - (f) D380-XV
 - (g) D384-XV-1 and D384-XV-2
 - (h) D386-PIT
- E5.7.2 Existing East Gas Room gas detection sensor and annunciation
- (a) Sequence work to install and commission new gas detection system prior to decommissioning and demolition of the existing system.
 - (b) Move and connect existing gas detection sensor to the new system once the new system is in service.

- E5.7.3 East Gas Room Ventilation Fans (D638-DF3, D512-DF12, D613-DF13)
- (a) Schedule work for warmest outdoor weather possible.
 - (b) Schedule work such that only one fan is out of service at a time.
 - (c) Map entire East Gas Room using a portable gas detector to ensure no gas leakage prior to the shutdown.
 - (d) Ensure East Gas Room is unoccupied during shutdown. Provide appropriate barricades and signage.
 - (e) Minimize the amount of time that the fan is out of service. Limit shutdown to one-hour intervals.
 - (f) Monitor gas levels using fixed gas detection during the shutdown.
- E5.7.4 Heat Trace D1113-HTC-1 and D1113-HTC-2
- (a) Schedule work for warmest outdoor weather possible.
 - (b) Minimize the amount of time that the heat trace system is out of service.

E6. TEMPORARY USE OF CITY EQUIPMENT

- E6.1 City facilities, systems and equipment shall not be used during construction without the Contract Administrator's written permission. The Contract Administrator reserves the right to withdraw said permission if, in his opinion, proper care and maintenance are not provided.

E7. SECURITY

- E7.1 The Contractor is responsible for all materials and equipment stored on the Site.
- E7.2 Follow the City's procedures regarding facility entrance and exit.

E8. SPECIFIC SCOPE OF WORK CLARIFICATIONS

- E8.1 Where details regarding conduit, cabling, and fittings are shown on the drawings, they are shown for convenience only and do not limit the scope of work. The scope of work includes all additional or replacement conduit, cabling and fittings required to achieve the specified hazardous rating and a complete electrical installation, whether the details are shown on the drawings or not.
- E8.2 Where existing wiring and circuiting is shown on the drawings, it is based upon available information and may not be completely accurate. For all work, confirm existing circuiting and mark-up all circuiting to as-built on the as-built mark-ups, regardless of whether the work was performed by the Contractor or not.
- E8.3 Where equipment is identified within a hazardous location that is not included in the scope of work, provide a clear notice of the deficient equipment to the Contract Administrator.
- E8.4 Fire-stop and seal all cable and conduit penetrations in or out of the classified areas.
- E8.5 Pumps D375-P and D376-P
- (a) Configure the pump VFDs to trip on a high temperature, as detected by the motor thermistors.

E9. WORK BY OTHERS

- E9.1 The East Gas Room hoist installation is known to not be suitable for the hazardous classification and will be addressed by the City of Winnipeg.

- E9.2 Process wet commissioning and start-up of the Digester 11 Mixing System will be by others. This does not eliminate the provision of electrical and automation commissioning, as clarified in the Specifications.
- E9.3 PLC and DCS programming will be by the City of Winnipeg. This does not eliminate the provision of commissioning services indicated, with the support of City personnel.
- (a) The City will provide personnel to provide access to the PLC and DCS logic and I/O state to allow the Contractor to perform the required testing and pre-commissioning.

E10. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- E10.1 Take special care to avoid damage to the existing NEWPCC structures and property during the course of Work.
- E10.2 The Contractor is advised that, the Contract Administrator may develop a Pre-Construction Site Record. The Pre-Construction Site Record will be a record of the project Site conditions by means of photographs or other documentation or media. The Contractor request a copy of the Pre-Construction Site Record.
- E10.3 Any damage caused by the Contractor or his Subcontractors to any part of the NEWPCC, or to the adjacent structures or properties shall be promptly repaired by the Contractor at his own expense to the satisfaction of the Contract Administrator. Prior to Total Performance of the Project, the Contractor, the City and the Contract Administrator may review the Pre-Construction Site Record and ensure that the Site has been restored to its preconstruction state. Any remaining damage shall be repaired by the Contractor at his own expense to the satisfaction of the Contract Administrator.

E11. DETAILED WORK PLAN

- E11.1 Submit a bi-weekly Detailed Work Plan document for review and approval by the Contract Administrator, indicating the following:
- (a) Detailed description of all work planned for the next two weeks. Where required or requested by the Contract Administrator, provide:
- (i) The proposed construction sequence to be followed including all methods to be employed to ensure that no damage or unintended service outages occur.
 - (ii) A description of all proposed methods of construction to be implemented.
 - (iii) Specialized equipment that may be used.
- (b) Planned shutdowns within the next 2- 4 weeks.
- (c) Any design revisions proposed to accommodate the Contractor's proposed method of construction.
- (d) The Contractor shall respond to any concerns that may be raised by the Contract Administrator's review of the Contractor's construction methods submission.
- E11.2 All shutdowns require detailed planning and approval by the City. The Contractor must submit information required to support the creation of a detailed Shutdown Procedure and Work Plan. The Contract Administrator will assist with coordinating with the City.
- E11.3 No work involving a shutdown shall proceed without the inclusion of the work on a Detailed Work Plan and corresponding approval of the work by the Contract Administrator.

E12. HAZARDOUS LOCATION REQUIREMENTS

- E12.1 Work in areas defined as hazardous locations is subject to the following requirements.
- E12.2 All work must be performed in accordance with Manitoba Department of Labour / Office of the Fire Commissioner requirements. All tools must be appropriately rated for the hazardous location, unless a Gas Free Work Permit (GFWP) system is utilized in accordance with ISA

TR12.13.03-2009 and permitted by Manitoba Department of Labour requirements. Specific requirements include, but are not limited to:

- E12.2.1 A signed Gas Free Work Permit (GFWP) is required to be completed each day that tools without the appropriate ratings are utilized.
- E12.2.2 A sufficient quantity of portable gas detection systems is to be provided and utilized to detect potential combustible gases. At minimum, a gas detection system is to be provided adjacent to each tool or work that could potentially produce an ignition source.
 - (a) Check each portable detection systems for functionality with a known concentration of combustible gas daily.
 - (b) Take initial measurements to confirm the absence of a combustible concentration of gas throughout the work area.
 - (c) Provide continuous gas detection monitoring adjacent to the work.
 - (d) Monitoring of gas detection equipment to be provided by properly trained personnel.
- E12.2.3 Provide and maintain contingency plans for emergencies. Train all personnel in appropriate response to emergencies.
- E12.2.4 Monitor the existing ventilation systems, and provide appropriate response in the event of ventilation failure.
- E12.2.5 Provide additional ventilation as required.
- E12.2.6 All electrical tools that are not rated for the hazardous location and stored or utilized near a classified area shall have a label applied indicating "WARNING—SOURCE OF IGNITION WHEN IN USE".
- E12.2.7 Ensure a means to rapidly and locally disengage power from all tools that are not rated for the classified location, without creating a spark, is provided. This may require the use of a hazardous-rated disconnect switch.
- E12.3 The specific requirements and allowances indicated do not limit the Contractor's responsibility to provide a safe means of construction in compliance with Manitoba Department of Labour / Office of the Fire Commissioner requirements. The Contractor shall take all precautions necessary to prevent the ignition of combustible gasses. This may include use of manual tools, tools fully rated for the hazardous location, or the provision of additional ventilation.

E13. SPECIFIC CONSTRUCTION REQUIREMENTS

- E13.1 The Contractor shall provide all materials, fabrications, finishes, temporary installation, documentation, shop drawings, means and methods necessary to fully install all of the new works identified on the contract drawings in a safe manner, fit-for-purpose intended. The description of work provided herein is intended to be a general description of work activities, and is not intended to be an exhaustive listing of all tasks necessary to complete the scope of installations given on the drawings or specifications.
- E13.2 Exercise care where cutting holes in existing concrete elements so as not to damage existing reinforcing.
 - (a) Minimize the size of holes required.
 - (b) Avoid grouping of holes that would weaken floors and other structural elements.
 - (c) For reinforced concrete floors, locate existing reinforcing utilizing a reinforcing bar locator and mark out on the surface of the concrete prior to cutting.
 - (i) Mark the location of the proposed hole and all adjacent rebar. Relocate holes as required.
 - (ii) Cut hole in a manner to avoid damage to reinforcement.
 - (d) Notify the Contract Administrator if reinforcing is damaged.

- (e) If the Contractor damages the existing reinforcement, the Contractor shall be responsible for all costs, including engineering services, to restore the structural element.

E13.3 The Contractor shall exercise care where installing anchors into existing concrete elements so as not to damage existing reinforcing. All anchors shall be installed utilizing carbide tip drill bits. The existing reinforcing shall be located utilizing a reinforcing bar locator and marked out on the surface of the concrete. The drill holes shall be advanced to the required depth for installation of the anchors. Should reinforcement be encountered while drilling, terminate the hole and reposition to clear the reinforcement. Do not use core bits that can easily intercept and damage/cut the reinforcing during drilling.

E13.4 The Contractor shall abide by the Arc Flash PPE requirements of CSA-Z462, Workplace Electrical Safety, and the arc flash labels on existing facility equipment, where provided.

E13.5 The existing City electric hoist in the East Gas Room shall not be used for the Work.

E13.6 Wire nuts

- (a) Wire nuts are not permitted in conduit bodies.
- (b) Wire nuts are permitted in junction boxes for 10 AWG and smaller power wiring only. Wire nuts are not permitted for automation and control wiring.

E13.7 Supply new junction boxes with terminals, rated for the hazardous location, for all new instrumentation and control junctions.

E13.8 Notify the Contract Administrator if any existing equipment, not identified in the scope of work, is found that is not rated for the indicated hazardous location.

E14. SIGNAGE

E14.1 Provide warning signs, compliant with the latest version of CAN/CSA-Z321, as follows:

E14.1.1 Sign Type 1:

- (a) Line 1: "Warning"
- (b) Line 2: "Hazardous Class I, Zone 1 Location"
 - (i) Minimum text size: 20 mm.
- (c) Line 3: "No sources of ignition permitted."
 - (i) Minimum text size: 10 mm.
- (d) Locate adjacent to each of the three entrances to the East Gas Room.

E14.1.2 Sign Type 2:

- (a) Line 1: "Exit Only"
 - (i) Minimum text size: 20 mm.
- (b) Line 2: "Enter via North entrance"
 - (i) Minimum text size: 10 mm.
- (c) Locate on the south entrance door of the East Gas Room.

E14.1.3 Sign Type 3:

- (a) Line 1: "SIREN INDICATES COMBUSTIBLE GAS DETECTED"
 - (i) Minimum text size: 20 mm;
- (b) Line 2 "IF ACTIVATED, LEAVE AREA IMMEDIATELY"
 - (i) Minimum text size: 20 mm;

E14.1.4 Sign Type 4:

- (a) Line 1: "STROBE INDICATES COMBUSTIBLE GAS DETECTED"

- (i) Minimum text size: 20 mm;
- (b) Line 2" "IF ACTIVATED, LEAVE AREA IMMEDIATELY"
 - (i) Minimum text size: 20 mm;

E14.2 Provide identification lamacoids for all instruments and devices in accordance with the drawings and the lamacoid schedule provided.

E14.3 Provide warning lamacoids next to all replaced E-stop switches. Lamacoids to read:

- (a) Line 1: "Warning"
 - (i) Color: orange text on black
- (b) Line 2: "Pump may start upon reset of this E-Stop."
 - (i) Color: black text on orange.

E14.4 Provide all required mounting framing and hardware for signs.

E15. SALVAGE

E15.1 All removed equipment shall be salvaged in good working condition and leave in a secure location designated but the Contract Administrator. This includes, but is not limited to:

- (a) Disconnect switches;
- (b) Motors;
- (c) Hand switches and pushbuttons with enclosures; and
- (d) Junction boxes.

E15.2 The Contractor remains responsible for all salvaged equipment until formally turned over to the City in accordance with the procedure set forth by the Contract Administrator.

E15.3 The City will remove salvage it wishes to return to stock

E15.4 Once notified by the Contract Administrator, the Contactor shall remove and haul all rejected salvage from the site and legally dispose of or recycle it.

E15.5 Removal and delivery of salvageable and non-salvageable equipment and material shall be considered incidental to the Contract Work and no additional payment will be made for such Work.

E16. COMMISSIONING REQUIREMENTS

E16.1 Commissioning requirements include but are not limited to:

- (a) 01 91 13 – General Commissioning Requirements
- (b) 26 08 05 - Electrical Commissioning
- (c) 40 80 11 - Automation Commissioning

E16.1.1 Provide training in accordance with E19.5.

E17. ADDITIONAL WORK ALLOWANCE

E17.1 Additional work may be necessitated due to unforeseen circumstances that may arise during the course of the project due to:

- (a) Additions to the scope of Work by the Contract Administrator, beyond that defined herein.
- (b) Other issues that occur on site, have been determined by the Contract Administrator to be an addition to the scope of Work, and which require significant Contractor time to address.

E17.2 Additional services will not be initiated for:

- (a) Reasons of lack of performance or errors in execution.
 - (b) Scheduling changes initiated by the City, where at least 24 hours notice is given prior to the Contractor's scheduled time to be on site.
- E17.3 Should it be determined that additional material or services are required, the Contract Administrator shall approve the work, prior to commencement of the additional work.
- E17.4 Additional labour will be reimbursed at the rate specified on Form B: Item 6. The rate will not be adjusted for Subcontractors or individuals with specialized skills, without specific approval of the Contract Administrator.
- E17.5 The Contract Administrator may also request a written quotation for the additional work. For any work, where a written quotation is provided, and subsequently authorized, the valuation of the work shall be as per the quotation, regardless of the actual cost to the Contractor.
- (a) Quotations shall indicate the labour hours and base cost of material, as well as mark-up factors.
 - (b) Labour Rates shall correspond to Form B, unless specifically authorized by the Contract Administrator.
- (a) Material Mark-up Factors shall be consistent with E17.6.
- E17.6 Material Mark-up Factors
- (a) The base cost is to be the wholesale cost of the material, regardless of the Contractor or Subcontractor supplying the material.
 - (b) In general, the party (Contractor or Subcontractor) supplying the material is the party that purchases the material from a supplier who does not perform any work on site, unless otherwise determined by the Contract Administrator.
- E17.6.1 Where the Contractor is supplying the material, the mark-up on the material is limited to fifteen percent (15%).
- E17.6.2 Where a Subcontractor is supplying the material, the total mark-up on the material, including all Subcontractors and the Contractor is limited to twenty-five percent (25%), including the Contractor and all Subcontractors' mark-ups.
- E17.6.3 Where the Contractor's immediate Subcontractor is supplying the material:
- (a) The Subcontractor's mark-up on the material is limited to fifteen percent (15%).
 - (b) The Contractor's mark-up on the material is limited to ten percent (10%).
- E17.6.4 A Third-Level Subcontractor is a Subcontractor of a Subcontractor of the Contractor.
- (a) No Third-Level Subcontractors on this project are approved for additional mark-up.
 - (b) In the event that a Third-Level Subcontractor is utilized, that is not approved for additional mark-up, the Contractor is responsible for coordinating the split of the maximum approved mark-up between the Contractor and Subcontractors.

CONTRACTOR SUPPLIED STANDARDIZED GOODS

E18. GENERAL REQUIREMENTS

- E18.1 Comply with the general requirements of E18 for all Standardized Goods supplied by the Contractor.
- E18.2 Comply with the following Standardization Goods requirements:
- E18.2.1 Gas Detection Systems in accordance with E19.
- E18.3 Contact the Contract Administrator regarding any potential uncertainty as to whether a good is covered under a standardization agreement.

- E18.4 The Contractor may utilize a Standardization Vendor to provide other goods required under the Contract, in addition to Standardized Goods.
- E18.5 The Contractor shall separately track all goods supplied under each standardization agreement.
- E18.5.1 In the event that one or more Standardization Vendors are utilized to procure goods not covered under a standardization agreement, the Contractor shall ensure such goods are quoted, ordered, tracked and accounted in a separate manner.
- E18.6 Pricing:
- E18.6.1 The City has obtained discounted pricing for Standardized Goods. Each Standardization Vendor is obligated to sell Standardized Goods to all prospective Contractors at the discounted price, provided the goods are for the City of Winnipeg.
- E18.6.2 The Standardization Vendors may at their option provide lump sum pricing for goods packages. The Standardization Vendor is not required to provide breakout pricing details to the Contractor.
- E18.6.3 The Contractor and Subcontractors shall not utilize the City's agreements with the Standardization Vendors for any purpose other than City work.
- E18.6.4 The City may audit the goods purchased from the Standardization Vendors under the standardization agreements and may identify to the Standardization Vendors any goods procured that are not associated with the Contract.
- E18.7 The Contractor is responsible for ensuring that the Material supplied by the Standardization Vendors meets the requirement of the Contract. The Contractor shall review and confirm quotations supplied by the Standardization Vendors to ensure that all required Material is supplied.
- E18.8 Without limiting or otherwise affecting any other term or condition of the Contract, including (non-exhaustive) D9.2.1:
- E18.8.1 The supply of goods through a Standardization Vendor shall not relieve the Contractor of their obligations.
- E18.8.2 Errors or omissions by a Standardization Vendor shall not be a cause for a Change in Work.
- E18.8.3 Delays by a Standardization Vendor shall not be a cause for a Change in Work where the delay could have been avoided through reasonable planning, contingency allocation, or communication by the Contractor.
- E18.8.4 The Contractor shall engage directly with the persons listed as the Standardized Vendor contact in the following sections E19.6 unless otherwise directed by the Contract Administrator.
- E18.9 Submittals
- E18.9.1 Submittals shall be provided for Standardized Goods in accordance with the Specifications and typical industry practice. Submittals shall not be bypassed for Standardized Goods.

E19. STANDARDIZED GAS DETECTION SYSTEMS

- E19.1 The City has standardized on a specific vendor for the supply and delivery of gas detection systems. The Standardization Vendor was selected via RFP 123-2014 and was awarded to Mine Safety Appliances Company, LLC (MSA) c/o CB Engineering Ltd.
- (a) Copies of the tender documents are available from City of Winnipeg Material Management's website.
- E19.2 Goods to be procured via this standardization agreement include but are not limited to:
- (a) Gas detection sensors;

- (b) Gas detection transmitters;
- (c) Gas detection controllers;
- (d) Gas detection sensor consumables; and
- (e) Associated accessories.

E19.3 The following model series shall be utilized unless otherwise indicated in the Specifications, Drawings or otherwise approved by the Contract Administrator:

- (a) UltimaX gas detection systems.
- (b) GasGard XL controllers.

E19.4 Field setup and commissioning:

E19.4.1 Field setup and commissioning of the gas detection systems may be performed by MSA under the Standardization Agreement. Coordinate with MSA as required to understand the capabilities and limitations of MSA's field setup and commissioning services and provide all remaining services to provide a complete commissioning and start-up.

E19.4.2 The Contractor may provide field setup and commissioning services for the gas detection system via alternate means, provided that this does not result in a reduction of the services or quality of work.

E19.4.3 Where MSA is utilized to provide field setup and commissioning, their scope of work has been standardized as follows:

- (a) Provide the services for a factory-trained instrument technician to setup and commission the gas detection instruments and controllers, as requested by the City. It is expected that setup and commissioning will be required for some, but not all, of the equipment.
- (b) Qualification
 - (i) The personnel provided shall be a factory trained and certified technologist, with a minimum of one year of experience working with the products proposed.
- (c) Services
 - (i) Provide a full eight hours of on-site labour, for each allocated day, to setup and commission the gas detection systems.
 - (ii) Provide all travel and tools required.

E19.5 Training

E19.5.1 Local Training Session

- (a) Overview
 - (i) Provide instruction to designated City personnel in the operation and maintenance of the gas detection equipment.
- (b) Location
 - (i) The location of the training will be in the City of Winnipeg, in a facility provided by the City.
- (c) Travel
 - (i) Provide all travel, meals and accommodations at no additional cost.
- (d) Submittals
 - (i) Submit the names and qualifications of the proposed instructors.
 - (ii) Submit training proposal complete with hour by hour schedule including brief overview of content of each training segment a minimum of 30 Working Days prior to the anticipated date of beginning of training.
- (e) Quality Assurance

- (i) Provide competent instructors thoroughly familiar with all aspects of the gas detection equipment.
 - (ii) The Contract Administrator may reject instructors it determines to not be qualified.
 - (iii) In the event that the training provided is not satisfactory, reduction of payment may be applied.
- (f) Duration
- (i) The training shall be a minimum of eight (8) hours in duration, excluding coffee and lunch breaks.
 - (ii) Each session shall be assumed to be independent of other training sessions, and not necessarily aligned with other on-site work or training.
- (g) Materials
- (i) Provide equipment, visual and audio aids, and materials.
 - (ii) Supply manual for each trainee, describing in detail the information included in each training program.
- (h) Attendees
- (i) The attendees are expected to include, but not be limited to:
 - ◆ Electrical and instrumentation maintenance personnel and
 - ◆ Operations personnel.
- (i) Content
- (i) Overview of the equipment.
 - (ii) Equipment maintenance training including:
 - ◆ Installation,
 - ◆ Configuration,
 - ◆ Troubleshooting, and
 - ◆ Preventative maintenance
- (j) Number of Sessions:
- (i) Provide a minimum of one (1) session.

E19.6 The contact for all quotations and purchases:

Mr. Richard Balt
Territory Sales Manager
12134-154 Street NW
Edmonton, AB
T5V 1J2
Telephone: 1-403-613-2281
E-mail: Richard.Balt@msasafety.com

E19.7 Quotations and orders:

E19.7.1 Reference the following in all quotation requests, quotations \ proposals, purchase orders, and invoices:

- (a) This Bid Opportunity number; and
- (b) A statement indicating:

“This request / purchase order is subject to the Terms and Conditions of City of Winnipeg Request for Proposal RFP 123-2014.”