

## THE CITY OF WINNIPEG

# **TENDER**

**TENDER NO. 639-2025** 

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#### **PART B - BIDDING PROCEDURES**

#### **B1. CONTRACT TITLE**

B1.1 CONSTRUCTION OF THE TACHE BOOSTER PUMPING STATION AQUEDUCT DRAIN CHAMBER

#### **B2. SUBMISSION DEADLINE**

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 15, 2025.
- B2.2 The Contract Administrator or the Manager of Purchasing 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 authorized representative will be available at the Site at 9:00 a.m. on August 7, 2025. The Bidder shall register with the Contract Administrator identified in D6, a minimum of 48 hours in advance of the Site Investigation.
- B3.2 The Bidder is advised that the Site has restricted access and the buildings at the Site cannot be accessed without authorization. Persons attending the Site must obtain the Global Sanctions & PEP Check, as indicated in PART F Security Clearance, a minimum of 48 hours in advance of the Site Investigation. Photographs of the Site are not permitted without authorization of the City of Winnipeg. All persons attending will be required to wear personnel protective equipment (PPE) while on site. This includes high visibility vests and safety boots.
- B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.
- B3.4 The Bidder/Proponent is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Bid/Proposal or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection

#### **B4. ENQUIRIES**

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D6.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.
- B4.6 Any enquiries concerning submitting through MERX should be addressed to:

MERX Customer Support Phone: 1-800-964-6379 Email: merx@merx.com

#### **B5.** CONFIDENTIALITY

- B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
  - (a) was known to the Bidder before receipt hereof; or
  - (b) becomes publicly known other than through the Bidder; or
  - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Tender to the media or any member of the public without the prior written authorization of the Contract Administrator

#### B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at <a href="www.merx.com">www.merx.com</a>.
- B6.4 The Bidder is responsible for ensuring that they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D6.

#### **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

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- 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 their 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 they wish 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 their Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B18.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

#### **B8. BID COMPONENTS**

- B8.1 The Bid shall consist of the following components:
  - (a) Form A: Bid/Proposal;
  - (b) Form B: Prices;
  - (c) Form G1: Bid Bond and Agreement to Bond.
- B8.2 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.3 The Bid shall be submitted electronically through MERX at www.merx.com.
- B8.3.1 Bids will **only** be accepted electronically through MERX.
- B8.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B18.1(a).

#### B9. BID

- B9.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
  - (a) if the Bidder is a sole proprietor carrying on business in their own name, their name shall be inserted;

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  - (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 their own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
  - (a) if the Bidder is a sole proprietor carrying on business in their 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 their duly authorized officer or officers;
  - (d) if the Bidder is carrying on business under a name other than their own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

#### B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B10.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.
- B10.5.1 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.

#### **B11. DISCLOSURE**

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

#### B11.2 The Persons are:

(a) Wolseley Canada Inc. - material delivery time and cost estimates.

#### **B12.** CONFLICT OF INTEREST AND GOOD FAITH

- B12.1 Further to C3.2, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:
  - (a) other commitments;
  - (b) relationships;
  - (c) financial interests; or
  - (d) involvement in ongoing litigation;

that could or would be seen to:

- 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 their 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 their 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 their 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 their 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 their 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 their sole discretion:
  - (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of their 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 their 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 their 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 their sole discretion.

#### **B13. QUALIFICATION**

- B13.1 The Bidder shall:
  - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
  - (b) be financially capable of carrying out the terms of the Contract; and
  - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B13.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
  - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf
- B13.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
  - (a) have successfully carried out work similar in nature, scope and value to the Work; and
  - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
  - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
  - (d) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B13.6 and D8)
  - upon request of the Contract Administrator, provide the Security Clearances in accordance with PART F - Security Clearance;
- B13.4 Further to B13.1(a) the Bidder and/or any proposed Subcontractor undertaking the chamber construction must be able to demonstrate the following qualifications. Senior project site personnel (foremen, superintendents, or similar) which can demonstrate the following qualifications will be considered when evaluating the qualifications of the Bidder or Subcontractor:
  - (a) A minimum of one (1) successful installation of shoring within close proximity (within one (1) metre) to critical water pipelines (feeder mains or aqueducts). See E9.2.
  - (b) A minimum of one (1) successful installations of large diameter precast structures (greater than 2.44 metres).
- B13.5 Further to B13.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the

Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
  - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
  - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. A list of acceptable reviewers and the review template are available at <a href="http://www.winnipeg.ca/matmgt/Safety/default.stm">http://www.winnipeg.ca/matmgt/Safety/default.stm</a>.
- B13.6 Further to B13.3(d), the Bidder acknowledges that they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <a href="https://accessibilitymb.ca/resources-events-and-training/online-training.html">https://accessibilitymb.ca/resources-events-and-training/online-training.html</a> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.
- B13.7 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 and key project personnel. The Bidder shall provide documentation demonstrating experience as outlined in B13.4. Experience provided for key project personnel must be accompanied by a project specific submission for each referenced project, complete with all identified reference contact information.
- B13.8 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

#### **B14.** BID SECURITY

- B14.1 The Bidder shall include in their Bid Submission bid security in the form of a digital bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in Form G1: Bid Bond and Agreement to Bond, available: <a href="https://www.winnipeg.ca/media/4929/">https://www.winnipeg.ca/media/4929/</a>.
- B14.2 Bid security shall be submitted in a digital format meeting the following criteria:
  - (a) The version submitted by the Bidder must have valid digital signatures and seals;
  - (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
  - (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
  - (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
  - (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B14.2(a).
- B14.3 Bonds failing the verification process will not be considered to be valid and the bid shall be determined to be non-responsive in accordance with B18.1(a).

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- B14.4 Bonds passing the verification process will be treated as original and authentic.
- B14.4.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B14.5 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly formed with the successful Bidder and the contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B14.6 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Tender.

#### B15. OPENING OF BIDS AND RELEASE OF INFORMATION

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

#### **B16.** IRREVOCABLE BID

- B16.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B16.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly formed and the contract securities have been furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid/Proposal.

#### **B17. WITHDRAWAL OF BIDS**

B17.1 A Bidder may withdraw their Bid without penalty at any time prior to the Submission Deadline.

#### **B18.** EVALUATION OF BIDS

- B18.1 Award of the Contract shall be based on the following bid evaluation criteria:
  - (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation there from (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B7.

- B18.2 Further to B18.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B18.3 Further to B18.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in their Bid or in other information required to be submitted, that they are qualified.
- B18.4 Further to B18.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B18.4.1 Bidders are advised that the calculation indicated in B18.4 will prevail over the Total Bid Price entered in MERX.
- B18.4.2 Further to B18.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

#### **B19. AWARD OF CONTRACT**

- B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B19.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.
- B19.2.1 Without limiting the generality of B19.2, the City will have no obligation to award a Contract where:
  - (a) the prices exceed the available City funds for the Work;
  - (b) the prices are materially in excess of the prices received for similar work in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with their own forces;
  - (d) only one Bid is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B19.3 If funding for the Work is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, Bidders are advised that the terms of D36 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B19.4 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B18.
- B19.4.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of their Bid upon written request to the Contract Administrator.
- B19.4.2 If no Contract is awarded, then the City of Winnipeg will pay the requested Bidder for each of the requested submissions listed in E6.9 for the preparation and delivery of Shop Drawings. Payment will be based on an agreed upon valuation of the actual costs associated with the preparation and delivery of the Shop Drawings in general accordance with the terms provided in C7.4. 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.

## **PART C - GENERAL CONDITIONS**

## CO. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2020-01-31) are applicable to the Work of the Contract.
- C0.1.1 The General Conditions for Construction are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at <a href="http://www.winnipeg.ca/matmgt/gen\_cond.stm">http://www.winnipeg.ca/matmgt/gen\_cond.stm</a>
- C0.2 A reference in the Tender to a section, clause or subclause with the prefix "C" designates a section, clause or subclause in the *General Conditions for Construction*.

#### **PART D - SUPPLEMENTAL CONDITIONS**

#### **GENERAL**

#### D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

#### D2. FORM OF CONTRACT DOCUMENTS

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

#### D3. SCOPE OF WORK

- D3.1 The Work to be done under the Contract shall consist of construction of a precast concrete drain chamber, modifications to the existing drain piping, electrical work, and general site improvements including site grading, replacement of fencing, and a new access gate.
- D3.2 The major components of the Work are as follows:
  - (a) Site mobilization;
  - (b) Supply and installation of shoring system;
  - (c) Excavation;
  - (d) Construction of cast-in-place concrete chamber base;
  - (e) Supply and installation of precast chamber risers and roof slab;
  - (f) Removal of existing pipes;
  - (g) Supply and installation of new piping, valves, fittings and appurtenances;
  - (h) Supply and installation of aluminum roof hatches;
  - (i) Supply and installation of electrical cabling, disconnects, and sump pump;
  - (j) Supply and installation of high water float and level sensor including cabling and connections to SCADA system;
  - (k) Supply and installation of insulation and cladding;
  - (I) Backfill excavations and site grading;
  - (m) Restoration including sodding;
  - (n) Supply and installation of culvert at approach;
  - (o) Supply and installation of asphalt approach;
  - (p) Removal and disposal of sections of existing chain link fence and barbed wire;
  - (q) Supply and installation of new chain link fence and gate;
  - (r) Supply and installation of bollards.

#### D4. SITE INVESTIGATION DUE DILIGENCE AND RISK

D4.1 Notwithstanding C3.1, the Contractor acknowledges that the site investigation reports and other site information included in this Tender have been provided to it and may be relied upon by the Contractor to the extent that the Contractor uses Good Industry Practice in interpreting such report(s) and site information and carries out the Work in accordance with Good Industry Practice based upon such report(s) and the information contained in them and such other site information. In the event that a site condition related to:

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  - (a) the location of any utility which can be determined from the records or other information available at the offices of any public authority or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
  - (b) the Site conditions, including but not limited to subsurface hazardous materials or other concealed physical conditions;
  - (c) the location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
  - (d) the nature, quality or quantity of the Plant needed to perform the Work;
  - (e) all matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
  - (f) all other matters which could in any way affect the performance of the Work;

that could not have been "properly inferable", "readily apparent" and readily discoverable" using Good Industry Practice by the Contractor, results in additional Work which is a direct result of this newly discovered site condition, such additional Work will be considered by the City under Changes in Work.

#### D5. DEFINITIONS

- D5.1 When used in this Tender:
  - (a) "ANSI" means American National Standards Institute;
  - (b) "ASTM" means American Society for Testing and Materials;
  - (c) "AWWA" means American Water Works Association;
  - (d) "The Builders' Liens Act" or "the BLA" means *The Builders' Liens Act*, R.S.M. 1987, c. B91 and any subsequent amendments thereto'
  - (e) "CSA" means Canadian Standards Association;
  - (f) "NSF" means NSF International;
  - (g) "Payment Certification" means the Contract Administrator's statement of the sums certified to be paid by the City to the Contractor with reference to its interim and final progress estimates and/or the Contractor's Proper Invoice;
  - (h) "Proper Invoice" means the definition within *The Builders' Liens Act*, R.S.M. 1987, c. B91 and any subsequent amendments thereto, and also includes the criteria to be included in an invoice, as set out in the Measurement and Payment provisions of the Contract;
  - (i) "Supply Chain Disruption" means an inability by the Contractor to obtain goods or services from third parties necessary to perform the Work of the Contract within the schedule specified therein, despite the Contractor making all reasonable commercial efforts to procure same. Contractors are advised that increased costs do not, in and of themselves, amount to a Supply Chain Disruption;
  - (j) "TBPS" means Tache Booster Pumping Station.

## D6. CONTRACT ADMINISTRATOR

D6.1 The Contract Administrator is AECOM Canada ULC, represented by:

Matthew Krentz, C.E.T. Municipal Technologist

Telephone No. 204 346-4226

Email Address matthew.krentz@aecom.com

D6.2 At the pre-construction meeting, Mr. Krentz will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

#### D7. CONTRACTOR'S SUPERVISOR

D7.1 At the pre-construction meeting, the Contractor shall identify their designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

#### D8. ACCESSIBLE CUSTOMER SERVICE REQUIREMENTS

- D8.1 The Accessibility for Manitobans Act (AMA) imposes obligations on The City of Winnipeg to provide accessible customer service to all persons in accordance with the Customer Service Standard Regulation ("CSSR") to ensure inclusive access and participation for all people who live, work or visit Winnipeg regardless of their abilities.
- D8.1.1 The Contractor agrees to comply with the accessible customer service obligations under the CSSR and further agrees that when providing the Goods or Services or otherwise acting on the City of Winnipeg's behalf, shall comply with all obligations under the AMA applicable to public sector bodies.
- D8.1.2 The accessible customer service obligations include, but are not limited to:
  - (a) providing barrier-free access to goods and services;
  - (b) providing reasonable accommodations;
  - (c) reasonably accommodating assistive devices, support persons, and support animals;
  - (d) providing accessibility features e.g. ramps, wide aisles, accessible washrooms, power doors and elevators;
  - (e) inform the public when accessibility features are not available;
  - (f) providing a mechanism or process for receiving and responding to public feedback on the accessibility of all goods and services; and
  - (g) providing adequate training of staff and documentation of same.

#### D9. SUPPLIER CODE OF CONDUCT

- D9.1 The Contractor has reviewed and understands the City's Supplier Code of Conduct. This document is located at: https://www.winnipeg.ca/media/4891
- D9.2 The Contractor agrees to comply with the Supplier Code of Conduct as it may be amended or replaced from time to time. The Contractor is responsible for periodically checking the above link for updates to the Supplier Code of Conduct. Contract signature on Form A: Bid/Proposal from the Contractor signifies agreement to the Supplier Code of Conduct which comes into effect once the Contract starts.
- D9.3 If there is a conflict between the Contract and the Supplier Code of Conduct the Contract will prevail.

#### D10. UNFAIR LABOUR PRACTICES

- D10.1 Further to C3.2, the Contractor declares that in bidding for the Work and in entering into this Contract, the Contractor and any proposed Subcontractor(s) conduct their respective business in accordance with established international codes embodied in United Nations Universal Declaration of Human Rights (UDHR) <a href="https://www.un.org/en/about-us/universal-declaration-of-human-rights">https://www.un.org/en/about-us/universal-declaration-of-human-rights</a> International Labour Organization (ILO) <a href="https://www.ilo.org/global/lang-en/index.htm">https://www.ilo.org/global/lang-en/index.htm</a> conventions as ratified by Canada.
- D10.2 The City of Winnipeg is committed and requires its Contractors and their Subcontractors, to be committed to upholding and promoting international human and labour rights, including fundamental principles and rights at work covered by ILO eight (8) fundamental conventions and the United Nations Universal Declaration of Human Rights which includes child and forced labour.

- D10.3 Upon request from the Contract Administrator, the Contractor shall provide disclosure of the sources (by company and country) of the raw materials used in the Work and a description of the manufacturing environment or processes (labour unions, minimum wages, safety, etc.).
- D10.4 Failure to provide the evidence required under D10.3, may be determined to be an event of default in accordance with C18.
- D10.5 In the event that the City, in its sole discretion, determines the Contractor to have violated the requirements of this section, it will be considered a fundamental breach of the Contract and the Contractor shall pay to the City a sum specified by the Contract Administrator in writing ("Unfair Labour Practice Penalty"). Such a violation shall also be considered an Event of Default, and shall entitle the City to pursue all other remedies it is entitled to in connection with same pursuant to the Contract.
- D10.5.1 The Unfair Labour Practice Penalty shall be such a sum as determined appropriate by the City, having due regard to the gravity of the Contractor's violation of the above requirements, any cost of obtaining replacement goods/ services or rectification of the breach, and the impact upon the City's reputation in the eyes of the public as a result of same.
- D10.5.2 The Contractor shall pay the Unfair Labour Practice Penalty to the City within thirty (30) Calendar Days of receiving a demand for same in accordance with D10.5. The City may also hold back the amount of the Unfair Labour Practice Penalty from payment for any amount it owes the Contractor.
- D10.5.3 The obligations and rights conveyed by this clause survive the expiry or termination of this Contract, and may be exercised by the City following the performance of the Work, should the City determine, that a violation by the Contractor of the above clauses has occurred following same. In no instance shall the Unfair Labour Practice Penalty exceed the total of twice the Contract value.

#### D11. FURNISHING OF DOCUMENTS

D11.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF formal only.

#### **SUBMISSIONS**

#### D12. AUTHORITY TO CARRY ON BUSINESS

D12.1 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.

#### 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 Documents, if applicable.
- 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, Purchasing Division website at <a href="http://www.winnipeg.ca/matmgt/Safety/default.stm">http://www.winnipeg.ca/matmgt/Safety/default.stm</a>
- D13.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good

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

#### 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, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
  - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
  - (c) an all risks Installation Floater carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
  - (d) The Contractor shall provide and maintain CPL insurance in the amount of at least one million dollars (\$1,000,000) per occurrence and one million dollars (\$1,000,000) aggregate insuring against claims for:
    - (i) Bodily injury;
    - (ii) Property damage including diminution in value, and Natural Resource Damages;
    - (iii) Clean-up costs;
    - (iv) Transported cargo and non-owned disposal sites (blanket basis); and,
    - (v) Sudden and gradual pollution conditions including the further disruption of preexisting conditions from the services rendered by the Contractor.
  - (e) CPL insurance is to remain in place during the performance of the Work and during the warranty period.
- D14.2 Deductibles shall be borne by the Contractor.
- D14.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, as applicable.
- 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 The Contractor shall provide and maintain the performance bond and the labour and material payment bond until the expiration of the warranty period in the form of:
  - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the amount of fifty percent (50%) of the Contract Price; and
  - (b) labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in an amount equal to fifty percent (50%) of the Contract Price.
- D15.1.1 Bonds are available at:
  - (a) Performance Bond <a href="https://www.winnipeg.ca//media/4928/">https://www.winnipeg.ca//media/4928/</a>
    - (i) Performance Bond Schedule A Form of Notice <a href="https://www.winnipeg.ca/media/4831/">https://www.winnipeg.ca/media/4831/</a>

- (ii) Performance Bond Schedule B Surety's Acknowledgement https://www.winnipeg.ca/media/4832/
- (iii) Performance Bond Schedule C Surety's Position https://www.winnipeg.ca/media/4833/
- (b) Labour & Material Payment Bond <a href="https://www.winnipeg.ca//media/4930/">https://www.winnipeg.ca//media/4930/</a>
  - (i) L&M Bond Schedule A Notice of Claim https://www.winnipeg.ca/media/4834/
  - (ii) L&M Bond Schedule B Acknowledgement of a Notice https://www.winnipeg.ca/media/4835/
  - (iii) L&M Bond Schedule C Surety's Position https://www.winnipeg.ca/media/4836/
- D15.1.2 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:
  - (a) the version submitted by the Contractor must have valid digital signatures and seals;
  - (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
  - (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
  - (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
  - (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D15.1(b).
- D15.1.3 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in their discretion, exercised reasonably, allows.
- D15.1.4 Digital bonds passing the verification process will be treated as original and authentic.
- D15.2 The Contractor shall provide the Contract Administrator identified in D6 with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of an award letter and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D15.3 The Contractor shall, as soon as practicable after entering into a contract with a Subcontractor:
  - (a) give the Subcontractor written notice of the existence of the labour and material payment bond in 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. SUBCONTRACTOR LIST

D16.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later

than the date specified in the General Conditions for the return of the executed Contract Documents, if applicable.

#### D17. EQUIPMENT LIST

D17.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

#### D18. DETAILED WORK SCHEDULE

- D18.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents if applicable.
- D18.2 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;
  - (c) a daily manpower schedule for the Work;

all acceptable to the Contract Administrator.

- D18.3 Further to D18.2(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) Shoring and excavation;
  - (c) Cast-in-place concrete work;
  - (d) Removal of Aqueduct from service (see Schedule Restrictions);
  - (e) Removal of existing piping;
  - (f) Installation of new precast drain chamber;
  - (g) Installation of piping, valves, fittings and appurtenances;
  - (h) Backfill;
  - (i) Installation of electrical and control equipment;
  - (j) Localized site grading;
  - (k) Removal, replacement, and modifications of existing chain link fence;
  - (I) Installation of new access gate;
  - (m) Restoration of approach with asphalt;
  - (n) Site Restoration.
- D18.4 Further to D18.2(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.
- D18.5 Further to D18.2(c), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.

#### D19. REQUIREMENTS FOR SITE ACCESSIBILITY PLAN

- D19.1 The Contractor shall provide the Contract Administrator with an Accessibility Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.
- D19.2 The Accessibility Plan shall demonstrate how the Contractor will accommodate the safe passage of pedestrians and cyclists in accordance with the Manual of Temporary Traffic Control, the Contract Drawings, Staging Plans, and Streets By-Law No. 1481/77 at all times for the duration of the Construction. Unless noted in the Contract, the Accessibility Plan must include a written plan for the following:
  - (a) How the Contractor will maintain at least one crossing in each direction for each intersection (one north/south crosswalk and one east/west crosswalk).
  - (b) How the Contractor will maintain access to pedestrian corridors and half signals.
  - (c) How the Contractor will maintain cycling facilities.
  - (d) How the Contractor will maintain access to residents and businesses unless otherwise noted in the Contract.
  - (e) Any required detour signage at adjacent crossings to facilitate sidewalk or active transportation pathway closures.
- D19.3 The Accessibility Plan may also include figures, sketches, or drawings to demonstrate the proposed plan.
- D19.4 The Accessibility Plan shall include written details on how the Contractor intends to review, maintain, and document all items related to the Accessibility Plan on-site during Construction, including, but not limited to:
  - (a) Signage
  - (b) Temporary Ramping
  - (c) Transit Stops
  - (d) Detour Signage
- D19.5 At minimum, the Contractor shall review the site conditions on a daily basis to ensure that all features related to the Accessibility Plan are in place. The site review is intended to correct deficiencies as a result of unforeseen events such as wind, traffic, or the general public.

  Deficiencies that are direct result of the Contractors actions must be corrected immediately.
- D19.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.
- D19.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the site has been maintained.
- D19.8 Deficiencies as a direct result of actions by the Contractor that are not immediately corrected and/or failure to produce records that demonstrate that the site was maintained in compliance with the Accessibility Plan may result in a pay adjustment via the monthly Progress Payment. The rate of pay adjustment will be as per the following schedule:
  - (a) First Offence A warning will be issued and documented in the weekly or bi-weekly site meeting.
  - (b) Second Offence A field instruction to immediately correct the site will be issued by the Contract Administrator.
  - (c) Third and subsequent Offences A pay reduction will be issued in the amount of \$250.00 per instance and per day.

#### **SCHEDULE OF WORK**

#### D20. COMMENCEMENT

- D20.1 The Contractor shall not commence any Work until they are in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D20.2 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 D12;
    - (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;
    - (vi) the Subcontractor list specified in D16;
    - (vii) the equipment list specified in D17;
    - (viii) the detailed work schedule specified in D18;
    - (ix) the Requirement for Site Accessibility Plan in D17;
    - (x) the direct deposit application form specified in D31
    - (xi) security clearances as identified PART F Security Clearance.
  - (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.
- D20.3 The City intends to award this Contract by September 18, 2025.
- D20.3.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

#### D21. WORK BY OTHERS

- D21.1 Further to C6.25, the Contractor's attention is directed to the fact that other Contractors, the personnel of Utilities and the staff of the City may be working within the project limit, approach roadway, adjacent roadways or right-of-way. The activities of these agencies may coincide with the Contractors execution of 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 Contract.
- D21.2 Work by others on or near the Site will include but not necessarily be limited to:
  - (a) Operation and Maintenance of the TBPS and piping within the compound.
  - (b) Tender 694-2024: Branch I Aqueduct Underdrain Outfall Repairs November to February 2025.
- D21.2.1 Further to D21.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others identified in D21.1 and accommodate the necessary area on Site required for the Work by Others to complete the Work

#### D22. SCHEDULE RESTRICTIONS

- D22.1 Aqueduct Shutdowns
- D22.1.1 Aqueduct shutdowns will be scheduled based on a number of factors including routine maintenance and repair work, water demand, weather and other factors. The City shall endeavour to make the specified time periods available to the Contractor to schedule their Work requiring isolation and draining of the Branch I Aqueduct, without limiting the City's control over the operation of the regional water system to complete other work, maintain

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adequate system service and maintain the integrity of the infrastructure. The City shall reserve the right to cancel and/or delay these schedule dates at any time, due to any circumstances that could adversely affect water supply system operation, including but not limited to high water demand, abnormal weather, failures of related water system components and/or security concerns.

- D22.1.2 The Contractor shall provide notice to the Contract Administrator in writing, a minimum of fifteen (15) Business Days prior to requiring the shutdown. The City will endeavour to schedule the shutdown as requested, pursuant to D22.1.1.
- D22.1.3 Aqueduct Shutdown Restrictions
  - (a) Aqueduct shutdowns will only be permitted between September 1st and May 15th.
  - (b) The Aqueduct will only be taken out of service for a maximum period of twenty-one (21) Calendar Days, as measured from the time the Aqueduct is drained and turned over to the Contractor, until the time that the Work is constructed to a condition suitable to reinstating flow, as approved by the Contract Administrator.
  - (c) The Branch I Aqueduct will not be taken out of service unless all pipe, valves, connectors, fittings and miscellaneous components required to complete the Branch I installation are on site, tested, and pre-fitted, to ensure that the Branch I pipe can be restored to service within the timeframe noted in D22.1.4.
  - (d) Changes to these criteria will not be permitted without the approval of the City of Winnipeg Water and Waste Department.
  - (e) Contractor shall employ work crews on an extended hour basis and on weekends to meet requirement.

#### D22.1.4 Reinstatement of Aqueduct Flow

- (a) At any time during construction, the Contractor must be prepared to reinstate the Branch I Aqueduct to a serviceable condition within 48 hours of receiving written notification. Reconnection of severed sections of the Branch I Aqueduct can be made by utilizing precast pipe components, valves and other appurtenances intended for permanent installation.
- (b) At the completion of the work, testing and commissioning the Branch I Aqueduct, flow will be restored to the Aqueduct and it will remain in use for the duration of the project.

#### D23. WORKING DAYS

- D23.1 Further to C1.1(tt), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D23.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D23.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D23.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

#### D24. SUBSTANTIAL PERFORMANCE

- D24.1 The Contractor shall achieve Substantial Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D20, or by March 15, 2026, whichever comes first.
- D24.2 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.
- D24.3 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.

#### D25. TOTAL PERFORMANCE

- D25.1 The Contractor shall achieve Total Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D20, or by June 15, 2026, whichever comes first.
- D25.2 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.
- D25.3 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.

#### D26. LIQUIDATED DAMAGES

- D26.1 If the Contractor fails to achieve, Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
  - (a) Substantial Performance Two Thousand Three Hundred Dollars (\$2,300);
  - (b) Total Performance Five Hundred Dollars (\$500).
- D26.2 The amounts specified for liquidated damages in D26.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve, Critical Stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D26.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### D27. SUPPLY CHAIN DISRUPTION SCHEDULE DELAYS

- D27.1 The City acknowledges that the schedule for this Contract may be impacted by the Supply Chain Disruption. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the delivery requirements and schedule identified in the Contract in close consultation with the Contract Administrator.
- D27.2 If the Contractor is delayed in the performance of the Work by reason of the Supply Chain Disruption, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.

- D27.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether a Supply Chain Disruption will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to a Supply Chain Disruption, including but not limited to ordering of Material or Goods, production and/or manufacturing schedules or availability of staff as appropriate.
- D27.4 For any delay related to Supply Chain Disruption and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D27.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D27.5 The Work schedule, including the durations identified in D22 to D25 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator. No additional payment will be made for adjustment of schedules except where seasonal work, not previously identified in the Contract, is carried over to the following construction season.
- D27.6 Where Work not previously identified is being carried over solely as a result of delays related to Supply Chain Disruption, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to Supply Chain Disruption, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.
- D27.7 Any time or cost implications as a result of Supply Chain Disruption and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

#### **CONTROL OF WORK**

#### D28. JOB MEETINGS

- D28.1 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.
- D28.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever they deem it necessary.

#### D29. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D29.1 Further to C6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

#### D30. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D30.1 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 their sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

#### **INVOICES & MEASUREMENT AND PAYMENT**

#### D31. MEASUREMENT AND PAYMENT

D31.1 C12.2 is deleted and replaced with the following:

- Template Version: 2025 04 01 C BCivil
  - C12.2 The amounts to be paid by the City to the Contractor shall be as set out in the Payment Certification. In the event the Payment Certification does not align with the Contractor's Proper Invoice and payment by the City to the Contractor is not made, or not going to be made, for the invoiced amount within 28 Calendar Days of receipt of the Proper Invoice, the City will issue a notice of non-payment to the Contractor in accordance with the BLA.
  - C12.2.1 For unit price Contracts, such sums shall be determined by the Contract Administrator upon the basis of the unit prices for the various classes of the Work stated on Form B: Prices. The total amount to be paid to the Contractor for the Work will be the amount arrived at by measuring the amount of each class of the Work listed on Form B: Prices and performed in accordance with the Contract, and pricing the same, in accordance with the unit prices stated thereon.
  - C12.2.2 For lump sum Contracts, such sums shall be determined by the Contract Administrator upon the basis of the lump sum price stated on Form B: Prices, if applicable, but in any event the lump sum price broken down into the percentage completed for each portion of the Work, commonly referred to as detailed prices.
- D31.2 C12.7 to C12.15 are deleted and replaced with the following:
  - C12.7 By the seventh (7) Calendar Day after the end of each month, the Contract Administrator shall issue to the Contractor a progress estimate indicating its opinion of the quantity and value of Work performed during the previous month. The Contractor may use the progress estimate to form part of its Proper Invoice as support of the type and quantity of Work performed. In the event the Contractor choses to produce its own documentation of the type and quantity of Work performed to form part of its Proper Invoice, the content shall be in accordance with C12.2 and the format of such documentation should follow that of a typical progress estimate, including all evidence and records of measurement that the Contract Administrator would require to certify payment. In either event the Contractor shall include such supporting documentation as part of its invoice.
  - C12.8 If the Contractor agrees with the progress estimate provided by the Contract Administrator it should indicate that on its Proper Invoice. If the Contractor does not agree with the progress estimate provided by the Contract Administrator it should attempt to reconcile the discrepancy, which could result in a revised progress estimate to be provided by the Contract Administrator or a revised invoice by the Contractor, so that the progress estimate and the Proper Invoice align. In the event that the discrepancy is not reconciled then the Contractor should detail the items within the progress estimate that it disagrees with in order that the value on the Proper Invoice aligns with and is supported by the progress estimate with noted discrepancies.
  - C12.9 Any payment made by the City to the Contractor on account of a Proper Invoice shall be less any holdback required to be made by The Builders' Liens Act, and such holdbacks or other amounts which the City is entitled to withhold pursuant to the Contract.
  - C12.10 If in the Contractor's opinion the Work performed during the previous month is minimal or does not warrant an invoice, the Contractor is permitted to not submit an invoice on the condition that the Contractor advises the Contractor Administrator in writing.
  - C12.11 Unless agreed to by the Contract Administrator, in writing, on an exception basis, the Contractor shall not submit invoices more frequently than monthly.
  - C12.12 Any reference to payment submittals or payment processes in the NMS Sections of the Contract are deleted and replaced with the payment submittals and payment processes within Section C12 of the General Conditions, as amended by the Supplemental Conditions.

#### **FINAL PAYMENT**

- C12.13 The Contractor shall indicate on its invoice if it is the final invoice for Work performed under the Contract. Payment Certification, in response to receipt of the final Proper Invoice by the Contractor, shall be subject to the following conditions:
  - (a) issuance by the Contract Administrator of a certificate of Total Performance;
  - (b) receipt by the City of a certificate from the Workers Compensation Board stating that full payment has been made to the Board with respect to all assessments owing.
- C12.14 Payment on account of the holdback made by the City pursuant to The Builders' Liens Act, shall be paid to the Contractor when the time for filing liens or trust claims has elapsed, unless the City is in receipt of a lien or trust claim.
- C12.15 Neither the issuance of a certificate of Total Performance nor the payment of the final Proper Invoice shall relieve the Contractor from their responsibilities either under C13 or as a result of any breach of the Contract by the Contractor including, but not limited to, defective or deficient Work appearing after Total Performance, nor shall it conclude or prejudice any of the powers of the Contract Administrator or the Chief Administrative Officer hereunder.
- C12.16 Subject to C12.17, acceptance by the Contractor of payment on account of the final Proper Invoice shall constitute a waiver and release by them of all claims against the City whether for payment for Work done, damages or otherwise arising out of the Contract.
- C12.17 If the Contractor disputes a Payment Certification related to a notice of non-payment by the City to the Contractor in accordance with the BLA, the Contractor may appeal the determination of the Contract Administrator to the Chief Administrative Officer as provided for in C21. If prior to the appeal being concluded, the Contractor gives a notice of adjudication to the City pursuant to the BLA, the appeal process will be discontinued.

#### **INVOICES**

- D31.3 Further to C12, the Contractor:
  - (a) shall submit invoices for Work performed during the previous calendar month in accordance with the instruction on the City's website at: https://www.winnipeg.ca/finance/corporate-accounts-payable.stm; and
  - (b) should copy the Contract Administrator on submission of its invoice.

#### D32. PAYMENT

D32.1 Further to C12, the City shall make payments to the Contractor by direct deposit to the Contractor's banking institution, and by no other means. Payments will not be made until the Contractor has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at https://winnipeg.ca/finance/files/Direct Deposit Form.pdf.

#### **WARRANTY**

#### D33. WARRANTY

D33.1 Warranty is as stated in C13.

#### **DISPUTE RESOLUTION**

#### D34. DISPUTE RESOLUTION

- D34.1 If the Contractor disagrees with any opinion, determination, or decision of the Contract Administrator, the Contractor shall act in accordance with the Contract Administrator's opinion, determination, or decision unless and until same is modified by the process followed by the parties pursuant to D34.
- D34.2 The entire text of C21.4 is deleted, and amended to read: "Intentionally Deleted"
- D34.3 The entire text of C21.5 is deleted, and amended to read:
  - (a) If Legal Services has determined that the Disputed Matter may proceed in the Appeal Process, the Contractor must, within ten (10) Business Days of the date of the Legal Services Response Letter, submit their written Appeal Form, in the manner and format set out on the City's Purchasing Website, to the Chief Administrative Officer, and to the Contract Administrator. The Contractor may not raise any other disputes other than the Disputed Matter in their Appeal Form.
- D34.4 Further to C21, prior to the Contract Administrator's issuance of a Final Determination, the following informal dispute resolution process shall be followed where the Contractor disagrees with any opinion, determination, or decision of the Contract Administrator ("Dispute"):
  - (a) In the event of a Dispute, attempts shall be made by the Contract Administrator and the Contractor's equivalent representative to resolve Disputes within the normal course of project dealings between the Contract Administrator and the Contractor's equivalent representative.
  - (b) Disputes which in the reasonable opinion of the Contract Administrator or the Contractor's equivalent representative cannot be resolved within the normal course of project dealings as described above shall be referred to a without prejudice escalating negotiation process consisting of, at a minimum, the position levels as shown below and the equivalent Contractor representative levels:
  - (i) The Contract Administrator;
  - (ii) Supervisory level between the Contract Administrator and applicable Department Head;
  - (iii) Department Head.
- D34.4.1 Names and positions of Contractor representatives equivalent to the above City position levels shall be determined by the Contractor and communicated to the City at the precommencement or kick off meeting.
- D34.4.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.
- D34.4.3 Both the City and the Contractor agree to make all reasonable efforts to conduct the above escalating negotiation process within twenty (20) Business Days, unless both parties agree, in writing, to extend that period of time.
- D34.4.4 If the Dispute is not resolved to the City and Contractor's mutual satisfaction after discussions have occurred at the final escalated level as described above, or the time period set out in D34.4.3, as extended if applicable, has elapsed, the Contract Administrator will issue a Final Determination as defined in C1.1(v), at which point the parties will be governed by the Dispute Resolution process set out in C21.

## **INDEMNITY**

#### D35. INDEMNITY

D35.1 Indemnity shall be as stated in C17.

- D35.2 Notwithstanding C17.1, the Contractor shall save harmless and indemnify the City in the amount of twice the Contract Price or five million dollars (\$5,000,000), whichever is greater, against all costs, damages or expenses arising from actions, claims, demands and proceedings, by whomsoever brought, made or taken as a result of negligent acts or negligent omissions of the Contractor, their Subcontractors, employees or agents in the performance or purported performance of the Work, and more particularly from:
  - (a) accidental injury to or death of any person whether retained by or in the employ of the contractor or not, arising directly or indirectly by reason of the performance of the Work, or by reason of any trespass on or damage to property;
  - (b) damage to any property owned in whole or in part by the City, or which the City by duty or custom is obliged, directly or indirectly, in any way or to any degree, to construct, repair or maintain;
  - (c) damage to, or trespass or encroachment upon, property owned by persons other than the City;
  - (d) any claim for lien or trust claim served upon the City pursuant to The Builders' Liens Act;
  - (e) failure to pay a Workers Compensation assessment, or Federal or Provincial taxes;
  - (f) unauthorized use of any design, device, material or process covered by letters patent, copyright, trademark or trade name in connection with the Work;
  - (g) inaccuracies in any information provided to the City by the Contractor.
- D35.3 Further to C17, The City shall save harmless and indemnify the Contractor in the amount of twice the Contract Price or five million dollars (\$5,000,000), whichever is greater, against all costs, damages or expenses arising from actions, claims, demands and proceedings, by whomsoever brought, made or taken as a result of negligent acts or negligent omissions of the City, their employees or agents in the performance of its obligation under the Contract.

#### THIRD PARTY AGREEMENTS

#### D36. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D36.1 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.
- D36.2 Further to D36.1, in the event that the obligations in D36 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.
- D36.3 For the purposes of D36:
  - (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.

#### D36.4 Modified Insurance Requirements

D36.4.1 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 their Ministers, officers, employees, and agents shall be added as additional insureds.

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- D36.4.2 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.
- D36.4.3 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.
- D36.4.4 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.
- D36.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D36.5 Indemnification By Contractor
- D36.5.1 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.
- D36.5.2 The Contractor agrees that in no event will Canada or Manitoba, their respective officers, servants, employees or agents be held liable for any damages in contract, tort (including negligence) or otherwise, for:
  - (a) any injury to any person, including, but not limited to, death, economic loss or infringement of rights;
  - (b) any damage to or loss or destruction of property of any person; or
  - (c) any obligation of any person, including, but not limited to, any obligation arising from a loan, capital lease or other long term obligation;

in relation to this Contract or the Work.

#### D36.6 Records Retention and Audits

- D36.6.1 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.
- D36.6.2 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 D36.6.1 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

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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.

#### D36.7 Other Obligations

- D36.7.1 The Contractor consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D36.7.2 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.
- D36.7.3 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.
- D36.7.4 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.
- D36.7.5 The Contractor represents and warrants that no current or former public servant or public office holder, to whom the Value and Ethics Code for the Public Sector, the Policy on Conflict of Interest and Post Employment, or the Conflict of Interest Act applies, shall derive direct benefit from this Contract, including any employment, payments, or gifts, unless the provision or receipt of such benefits is in compliance with such codes and the legislation.
- D36.7.6 The Contractor represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director or officer of the Contractor or of a Subcontractor, and that no such member is entitled to any benefits arising from this Contract or from a contract with the Contractor or a Subcontractor concerning the Work.

#### ADJUSTMENTS FOR CHANGES IN LAW, TAX OR TARIFFS

#### D37. ADJUSTMENTS FOR CHANGES IN LAW, TAX OR TARIFF

- D37.1 Further to C12.4 and subject to C6.13, the Contract Price shall be adjusted if any change in a law or tax imposed under the Excise Act, the Excise Tax Act, the Customs Act, the Customs Tariff, The Mining Tax Act (Manitoba), or The Retail Sales Tax Act (Manitoba), by an act of the Congress of the United States of America, or by Executive Order by the President of the United States under the International Emergency Economic Powers Act of the United States of America or similar legislation:
  - (a) occurs after the Submission Deadline;
  - (b) applies to Material; and
  - (c) affects the cost of that Material to the Contractor.
- D37.2 Further to C12.5, if a change referred to in C12.4 occurs, the Contract Price shall be increased or decreased by an amount equal to the amount that is established, by an examination of the relevant records of the Contractor, to be the increase or decrease in the cost incurred that is directly attributable to that change, and which the Contractor has proven to the Contract Administrator represents the minimum amount of increase necessary in order to obtain necessary Material or Plant. For the avoidance of doubt, the Contractor shall be required to

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provide satisfactory proof that it has investigated alternative options for obtaining equivalent Material or Plant and reducing or eliminating the increase in Contract Price, up to and including entering into purchase agreements with vendors located in other jurisdictions, in order for Contractor to be able to avail itself of the increase in Contract Price permitted.

## **FORM J: SUBCONTRACTOR LIST**

(See D16)

Name	<u>Address</u>
<u>Numo</u>	<u>radioso</u>

## **FORM K: EQUIPMENT**

(See D17)

1. Category/type:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:	· · · · · · · · · · · · · · · · · · ·		
2. Category/type:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:			
3. Category/type:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:			
Make/Model/Year:	Serial No.:		
Registered owner:			

## FORM K: EQUIPMENT

(See D17)

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

## **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 their 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, Purchasing 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
26 05 00	Common Work Results for Electrical
26 05 31	Splitters, Junction, Pull Boxes, and Cabinets
26 28 23	Disconnect Switches Fused and Non-Fused up to 600 V Primary
40 05 01	Common Work Results
40 90 21	Automation Wires and Cables
40 91 01	Automation – Process Measurement Devices

Drawing No.	Drawing Name/Title
1-0660Y-D0001-001	Cover Sheet
1-0660Y-D0002-001	Index Page
1-0660Y-G0001-001	Site Plan
1-0660Y-C0001-001	Sections & Details
1-0660Y-C0002-001	Standard Details
1-0660Y-E0001-001	Electrical Details
1-0660Y-S0001-001	Structural Details

Appendix No. <u>Title</u>

A Geotechnical Investigation
B Foundation Design Memorandum

## E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, a Geotechnical Memorandum, dated April 8, 2022, is included in Appendix A, and is provided to supplement the Bidder's evaluation of the Site conditions within the work areas. The information is considered accurate at the locations indicated and at the time of the investigation. However, variations in soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities or variations in flow level inside the Aqueduct.
- E2.2 An additional Geotechnical Memorandum, dated July 10, 2025, is included in Appendix B, provides additional information and parameters with respect to raft foundation design.

## **GENERAL REQUIREMENTS**

## E3. CASH ALLOWANCE FOR ADDITIONAL WORK

- E3.1 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.
- E3.2 A cash allowance has been included on Form B: Prices.
- E3.3 The City reserves the right to delete any or all of the Cash Allowance from the Contract if the Work intended to be covered by the Cash Allowance is not required, or if the Works intended are found to be more extensive than the provisional Cash Allowance.
- E3.4 Cost of additional work shall be evaluated by the methods outlined in C7.4, and a Change Order prepared by the Contract Administrator. Cost of the Change Order will be paid on the Progress Estimate and deducted from the Cash Allowance. If the valuation of the authorized work exceeds the Value of the Cash Allowance, the Contract Value will be adjusted by the shortfall.
- E3.5 Additional services and/or Work 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 Contractors schedule time to be on Site.
- E3.6 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.
- E3.7 Material Mark-Up Factors in accordance with C7:
  - (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.
  - (c) Where the Contractor is supplying the material, the mark-up on the material is limited to fifteen percent (15%).
  - (d) Where the Contractor's immediate Subcontractor is supplying the material the total markup on the material including all Subcontractors and the Contractor is limited to twenty-five percent (25%)
    - (i) The Subcontractor's mark-up on the material is limited to fifteen percent (15%);
    - (ii) The Contractor's mark-up on the material is limited to ten percent (10%).
  - (e) A Third-Level Subcontractor is a Subcontractor of a Subcontractor of the Contractor.
    - (i) No Third-Level Subcontractors on this project are approved for additional mark-up.
    - (ii) 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.

# E4. TRAFFIC CONTROL

- E4.1 In accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contract Administrator shall make arrangements with the Traffic Services Branch of the City of Winnipeg to place, maintain, and remove all regulatory signs and traffic control devices authorized and/or required by the Traffic Management Branch in the following situations:
  - (a) Parking restrictions,
  - (b) Stopping restrictions,

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  - (c) Turn restrictions,
  - (d) Diamond lane removal,
  - (e) Full or directional closures on a Regional Street,
  - (f) Traffic routed across a median,
  - (g) Full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus stop relocations, etc.) to implement the closure.
  - (h) Approved Designated Construction Zones with a temporary posted speed limit reduction. Traffic Services will be responsible for placing all of the advance signs and 'Construction Ends' (TC-4) signs. The Contractor is still responsible for all other temporary traffic control including but not limited to barricades, barrels and tall cones.
- E4.2 Further to E4.1(c), the Contractor shall make arrangement with the Traffic Services Branch of the City of Winnipeg to supply regulatory signs as required.
- E4.3 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.
- E4.4 Further to E4.1(c) and E4.1(d) the Contractor shall make arrangements with the Traffic Services Branch of the City of Winnipeg to reinstall the permanent regulatory signs after the Contract Work is complete. At this time the Contractor shall make arrangements to drop off the stockpiled materials to Traffic Services at 495 Archibald Street.
- E4.5 Any changes to the approved traffic management plan must be submitted to the Contract Administrator a minimum of five (5) Working Days prior to the required change for approval.
- E4.6 If the Contract Administrator determines that the Contractor is not performing Traffic Control in accordance with this specification, Traffic Services Branch may be engaged to perform the Traffic Control. In this event the Contractor shall bear the costs associated charged to the project by the Traffic Services Branch of the City of Winnipeg in connection with the required Works undertaken by the Contractor.

#### E5. ENVIRONMENTAL PROTECTION

- E5.1 The Contractor shall plan and implement the Work of this Contract strictly in accordance with the requirements of the environmental protection measures as herein specified.
- E5.2 The Contractor is advised that at least the following Acts, Regulations, and By-laws apply to the Work:
- E5.2.1 Federal
  - (a) Canadian Environmental Protection Act (CEPA) c.16;
  - (b) Canadian Environmental Assessment Act (CEAA) c.37;
  - (c) Transportation of Dangerous Goods Act and Regulations c.34; and
  - (d) Migratory Birds Convention Act, 1994
- E5.2.2 Provincial
  - (a) The Dangerous Goods Handling and Transportation Act D12;
  - (b) The Endangered Species Act E111;
  - (c) The Environment Act c.E125;
  - (d) The Fire Prevention Act F80;
  - (e) The Manitoba Heritage Resources Act H39.1;
  - (f) The Manitoba Noxious Weeds Act N110;
  - (g) The Manitoba Nuisance Act N120;

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  - (h) The Public Health Act c.P210;
  - (i) The Workplace Safety and Health Act W210; and
  - (j) And current applicable associated regulations.

#### E5.2.3 Municipal

- (a) The City of Winnipeg By-law no. 1/2008;
- (b) The City of Winnipeg Waterway By-Law no. 5888/92; and
- (c) Other applicable Acts, Regulations and By-laws.
- E5.3 The Contractor is advised that the following environmental protection measures apply to the Work.

# E5.3.1 Materials Handling and Storage

- (a) Construction materials and debris shall be prevented from entering drainage pipes or channels.
- (b) Construction materials and debris shall also be prevented from accumulating on local roadways and sidewalks when tracked out of the Site by trucks hauling excavated materials.
- (c) The Contractor shall provide on-Site measures to mitigate the tracking of sediment off-Site and, therefore, reduce the amount of street cleaning required. These measures may take the form of a truck wheel wash (automated or manually operated) or other measures as approved by the Contract Administrator.

# E5.3.2 Fuel Handling and Storage

- (a) The Contractor shall obtain all necessary permits from Manitoba Conservation for the handling and storage of fuel products and shall provide copies to the Contract Administrator.
- (b) All fuel handling and storage facilities shall comply with The Dangerous Goods and Transportation Act Storage and Handling of Petroleum Products Regulation and any local land use permits.
- (c) Fuels, lubricants, and other potentially hazardous materials as defined in The Dangerous Goods and Transportation Act shall be stored and handled within the approved storage areas.
- (d) The Contractor shall ensure that all fuel storage containers are inspected daily for leaks and spillage.
- (e) Products transferred from the fuel storage area(s) to specific Work Sites shall not exceed the daily usage requirement.
- (f) When servicing requires the drainage or pumping of fuels, lubricating oils or other fluids from equipment, a groundsheet of suitable material (such as HDPE) and size shall be spread on the ground to catch the fluid in the event of a leak or spill.
- (g) The Contractor shall be aware that the Branch 1 Aqueduct and associated infrastructure is for potable water and no contamination by fuel, chemicals, etc. shall be permitted at any time. Fuels or chemicals shall not be stored within 30 metres of the existing chambers, excavations, etc.
- (h) Refuelling of mobile equipment and vehicles shall take place at least 100 metres from a watercourse.
- (i) The area around storage Sites and fuel lines shall be distinctly marked and kept clear of snow and debris to allow for routine inspection and leak detection.
- (j) A sufficient supply of materials, such as absorbent material and plastic oil booms to clean up minor spills shall be stores nearby on-site. The Contractor shall ensure that additional material can be made available on short notice.

## E5.3.3 Waste Handling and Disposal

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

# E5.3.4 Dangerous Goods/Hazardous Waste Handling and Disposal

- (a) Dangerous goods/hazardous waste are identified by, and shall be handled according to, The Dangerous Goods Handling and Transportation Act and Regulations.
- (b) The Contractor shall be familiar with The Dangerous Goods Handling and Transportation Act and Regulations.
- (c) The Contractor shall have on-site staff that is trained and certified in the handling of the dangerous/hazardous goods, when said dangerous/hazardous goods are being utilized on-site for the performance of the Work.
- (d) Different waste streams shall not be mixed.
- (e) Disposal of dangerous goods/hazardous wastes shall be at approved hazardous waste facilities.
  - (i) Liquid hydrocarbons shall not be stored or disposed of in earthen pits on-site.
- (f) Used oils shall be stored in appropriate drums, or tankage, until shipment to waste oil recycling centres, incinerators, or secure disposal facilities approved for such wastes.
- (g) Used oil filters shall be drained, placed in suitable storage containers, and buried or incinerated at approved hazardous waste treatment and disposal facilities.
- (h) Dangerous goods/hazardous waste storage areas shall be located at least 100 metres away from the high water line and be diked.
- (i) Dangerous goods/hazardous waste storage areas shall not be located so as to block natural drainage.
- Run-off from a dangerous goods/hazardous waste storage area shall not be allowed to cause siltation of a watercourse.
- (k) Dangerous goods/hazardous waste storage areas shall be left in a neat and finished appearance and/or restored to their original condition to the satisfaction of the Contract Administrator.

## E5.3.5 Emergency Response

- (a) The Contractor shall ensure that due care and caution is taken to prevent spills.
- (b) The Contractor shall report all major spills of petroleum products or other hazardous substances with the potential for impacting the environment and threat to human health and safety to the Contract Administrator and Manitoba Environment,

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- immediately after occurrence of the environmental accident, by calling the 24-hour emergency telephone phone number (204) 945-4888 and the WTP Main Control Room at (204) 986-5000. The Contract Administrator shall also be notified.
- (c) The Contractor shall designate a qualified supervisor as the on-site emergency response coordinator for the project. The emergency response coordinator shall have the authority to redirect manpower in order to respond in the event of a spill.
- (d) The following actions shall be taken by the person in charge of the spilled material or the first person(s) arriving at the scene of a hazardous material accident or the on-site emergency response coordinator:
  - (i) Notify emergency-response coordinator of the accident:
    - identify exact location and time of accident
    - · indicate injuries, if any
    - request assistance as required by magnitude of accident (Manitoba Environment 24-hour Spill Response Line (204) 945-4888, Police, Fire Department, Ambulance, company backup)
  - (ii) Attend to public safety:
    - stop traffic, roadblock/cordon off the immediate danger area
    - eliminate ignition sources
    - initiate evacuation procedures if necessary
  - (iii) Assess situation and gather information on the status of the situation, noting:
    - personnel on site
    - · cause and effect of spill
    - estimated extent of damage
    - amount and type of material involved
    - proximity to waterways and the Aqueduct
  - (iv) If safe to do so, try to stop the dispersion or flow of spill material:
    - · approach from upwind
    - stop or reduce leak if safe to do so
    - dike spill material with dry, inert sorbent material or dry clay soil or sand
    - prevent spill material from entering waterways and utilities by diking
    - prevent spill material from entering Aqueduct manholes and other openings by covering with rubber spill mats or diking
  - (v) Resume any effective action to contain, clean up, or stop the flow of the spilled product.
- (e) The emergency response coordinator shall ensure that all environmental accidents involving contaminants shall be documented and reported to the Manitoba Environment according to The Dangerous Goods Handling and Transportation Act Environmental Accident Report Regulation 439/87.
- (f) When dangerous goods are used on-site, materials for containment and cleanup of spill material (e.g. absorbent materials, plastic oil booms, and oversized recovery drums) shall be available on-site.
- (g) Minor spills of such substances that may be contained on land with no significant impact on the environment may be responded to with in-house resources without formal notification to Manitoba Environment.
- (h) City emergency response, 9-1-1, shall be used if other means are not available.

## E5.4 Vegetation

- (a) Vegetation shall not be disturbed without written permission of the Contract Administrator. The Contractor shall protect plants which may be at risk of accidental damage. Such measures may include protective fencing or signage.
- (b) Herbicides and pesticides shall not be used adjacent to any surface watercourses.
- (c) All landowners adjacent to the area of application of herbicides or pesticides shall be notified prior to the Work.
- (d) Trees and shrubs shall not be felled into watercourses.

(e) Areas where vegetation is removed during clearing, construction, and decommissioning activities, shall be revegetated as soon as possible in accordance the requirements outlined herein, or as directed by the Contract Administrator.

# E5.5 Measurement and Payment

(a) The work covered in this section will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

#### E6. SHOP DRAWINGS

- E6.1 Description
  - (a) This Specification shall revise, amend, and supplement the requirements of CW 1110 of the City of Winnipeg's Standard Construction Specifications.
- E6.2 Submit all Shop Drawings in accordance with CW 1110 except as modified herein.
- E6.3 The Contractor shall submit specified Shop Drawings to the Contract Administrator for review. All submissions must be in metric units. Where data is in imperial units, the correct metric equivalent shall also be shown on all submissions for Engineering review.
- E6.4 Submit Shop Drawing submissions within five (5) Calendar days of a request as indicated in E6.9.1 or receipt of Notice of Award in accordance with B19, whichever is earlier.
- E6.5 Allow for a five (5) Business day period for review by the Contract Administrator of each individual submission and re-submission, unless noted otherwise in the Contract Documents.
- E6.6 Shop Drawings not meeting the requirements of CW 1110 or the requirements specified herein will be returned to the Contractor without review for resubmission.
- E6.7 Review of Shop Drawings by the Contract Administrator will be limited two (2) reviews per Shop Drawing. This shall include a review of the initial submission and a review of the revised submission. Costs associated with subsequent reviews will be billed of the Contractor.
- E6.8 Shop drawings for the following structural components shall bear the seal of a Registered Professional Engineer in the Province of Manitoba.
  - (a) Shoring
  - (b) Metal fabrications
  - (c) Pre-cast concrete structures
- E6.9 Expedited Shop Drawings
- E6.9.1 Further to CW 1100, in order to expedite Shop Drawings with critical timelines, the lowest responsive Bidder, as outlined in B18, will be required, after receiving a written request from the Contract Administrator, to arrange for the preparation of Shop Drawings for the following items with critical timelines:
  - (a) Ductile Iron Fittings, as per E12.2.4.
  - (b) Ductile Iron Pipe, as per E12.2.5.
  - (c) Gate Valves, as per E12.2.8.
- E6.9.2 Schedule to submit Shop Drawings listed in E6.9.1 within five (5) Business Days of a request as indicated in E4.5 or receipt of Notice of Award in accordance with B19, whichever is earlier.
- E6.10 Measurement and Payment
  - (a) If Award is made to the lowest responsive Bidder, then the provision of Shop Drawings will be considered incidental to the Work and will not be measured for payment and no

additional payment will be made. If no contract is awarded payment for Shop Drawings prepared will be paid in accordance with B19.4.2.

#### E7. SITE SECURITY AND SAFETY

## E7.1 Security

- E7.1.1 The Contractor shall be responsible for site security and safety, as stated below:
  - (a) A site key will be provided to the Contractor with a \$10,000 holdback applied to the first progress estimate and released upon return of the key to the City.
  - (b) All personnel on site are required to a Global Sanctions & PEP Check and a Police Information Check as included PART F - Security Clearance. The Contractor shall notify the Contract Administrator upon submission of the checks.
  - (c) Contractor shall maintain existing fencing on the Site insofar as practical for the duration of the work. Temporary fences shall be installed around excavations where existing fence must be removed for construction. Fence shall consist of a minimum 1.8 metre chain link fence with lockable access gate. The Contractor shall ensure that all openings to valve chambers are properly secured when off site. Valve chamber hatches shall be locked. Removable concrete cover openings shall be secured with timber framing or other approved temporary cover, properly secured to prevent easy removal. Where access to valve chambers is required, the City shall be permitted to include a "double lock" mechanism whereby the City can add a City of Winnipeg lock, to permit access to City personnel in off hours.
  - (d) When replacing the fence, the Contractor will be permitted to remove the existing fence and replace it with new fence without additional security. The time period for removal and replacement of the fence to a secure, lockable state is limited to five (5) consecutive Calendar Days. Contractor shall complete fence removal and replacement such that there are no delays in the work including weekends or holidays.
  - (e) Report all site trespassing or suspicious activity immediately to Water Treatment Plant Control Centre at 986-5000.
  - (f) Refrain from providing statements with respect to water supply, site security or emergency situations to the media. All media inquiries in this regard shall be directed to the City of Winnipeg Customer Services.
  - (g) Provide secure temporary site storage compound for all specialized components such as valves, fittings and supplies, from the time they are delivered to the Site until they are incorporated into the Works. Permitted locations for on-site storage compounds shall be as generally located on the drawings.
  - (h) Permit access to the Site at all times to City Personnel for operation of Site facilities.

# E7.1.2 Lock-out and Tag-out Procedures

- E7.1.3 The City of Winnipeg will endeavor to provide redundant valve closures (double blocking) of pressurized pipelines that enter the work space where possible. However, there are locations within the system where it is impractical to provide double blocking without widespread service disruption. Where the regional water system network does not allow double blocking, non-redundant valve closures (single blocking) will be provided.
- E7.1.4 At locations where only single valve blocking is practical, additional safety measures and monitoring will be required in order to provide a safe work environment for employees.

  Development of adequate safety plans in accordance to the Workplace Safety and Health Act and Regulation 217/06 are the responsibility of the Contractor, but as a minimum shall include:
  - (a) Provision of adequate egress from confined spaces including removal of removable roof slabs and manhole covers, and provision of ladders and other means of site exit.

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  - (b) Use of body harnesses and safety hoisting equipment at all times when pressurized systems are disassembled and protected only by single block valves.
  - (c) Monitor and assess water leakage in closed system prior to disassembly of system. Monitor water leakage rate and advise Contract Administrator immediately of change in inflow rates. Evacuate confined space if necessary.
- E7.1.5 The Contractor, City of Winnipeg Water and Waste Department, and Contract Administrator will all be required to lock out all valves closed in order to facilitate this work. Where site access and lockout space on system valves is limited, the following lockout/tag out procedures will be implemented;
  - (a) Lockout locations for valves will be identified by the City.
  - (b) City of Winnipeg will provide a single lock, chains and other devices to adequately secure valves within pits and chambers. The Contractor has the right to inspect the installation and satisfy that the lockout system is adequate. All locks utilized will be commonly keyed.
  - (c) Key(s) for single locked valves will be placed in secure lock box at the site. City staff, Contractors, and Contract Administrator will place personal/company locks complete with identification and tag out information on this lock box.
  - (d) Key(s) placed within the secure lock box will not be removed until all City staff, Contractor, and Contract Administrator locks have been removed from the lock box, and verified that the work is completed.
  - (e) City staff will then unlock all valves, and will commence with restoration of the systems to service.
- E7.2 Photographs
- E7.2.1 All site photographs required for construction documentation shall be approved by City of Winnipeg Water Services Division representative, as identified by the Contract Administrator.
- E7.3 Safety
- E7.3.1 Be fully responsible for all aspects of site and public safety, in compliance to D29.
- E7.3.2 Arrange for all required safety watches in the vicinity of buried and overhead hydro utilities, and pay all required safety watch fees.
- E7.3.3 Install Contractor's locks on City installed lock-out devices, on Aqueduct valves at the following locations:
  - (a) MacLean Reservoir and Pumping Station
  - (b) McPhillips Reservoir and Pumping Station

## E8. RED RIVER WATER LEVELS

- E8.1 The Red River can have elevated water levels, particularly during Spring freshet and other precipitation events. Elevated river levels may impact work at the site, including but not limited to:
  - (a) Flooding of excavations;
  - (b) Increased leakage into subterranean structures;
  - (c) Increased infiltration into pipelines;
- E8.2 The Contractor shall consider potential river elevations in his work plan.
- E8.3 Historic Spring Flood Levels and dates that peak flood levels occurred, back to 1996, can be viewed at <a href="https://winnipeg.ca/waterandwaste/flood/floodHistory.stm">https://winnipeg.ca/waterandwaste/flood/floodHistory.stm</a>. The elevations shown are in imperial measurement and are referenced to "James Avenue Datum" which is elevation 221.76 metres (727.57 feet) geodetic.

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- E8.4 Normal Red River water levels are as follows.
  - (a) Normal Summer Water Level (NSWL) (normally early June to late October) 223.70 geodetic (approximate) .
  - (b) Winter Water Level (NWWL) (normally late November to late March) 221.77 geodetic (approximate).
- Drain piping connecting to the Red River has an approximate elevation of 224.56 metres. If River levels, as measured at James Street station, are at, or predicted to be above 224.0 metres, work that involves cutting or breaking into the drain pipe or Aqueduct shall not proceed. If the pipeline is breached, and sudden increases in the level of the Red River increase to the levels noted, take immediate action to;
  - (a) Block the drain line inlet with a watertight plug to prevent backflow into the excavation and work area:
  - (b) Block and make watertight the drain connection from the Aqueduct with a suitable plug. All components contacting the Aqueduct side piping shall be suitably disinfected in accordance to AWWA C561.
- E8.6 River elevation may also increase in the summer due to heavy rainfall in the areas south of Winnipeg. Summer river crests are usually lower and of shorter duration than spring crests.
- E8.7 Unforeseen delays at the Site as a result of unexpected changes in the River level shall be immediately reported to the Contract Administrator. Evaluation of the effects of the delay will be evaluated as per the General Conditions.
- E8.8 Measurement and Payment
  - (a) No measurement of payment shall be made for protection of the site from river levels.

## E9. OPERATING CONSTRAINTS FOR WORK IN CLOSE PROXIMITY TO AQUEDUCTS

- E9.1 Description
- E9.1.1 This Section details operating constraints for all work to be carried out in close proximity to the City Aqueducts and other critical water infrastructure. Close proximity shall be deemed to be any construction activity within a 5 m horizontal offset from the centerline of the pipeline, within 5 m of valve chambers and other appurtenances, and any other infrastructure identified below.
- E9.1.2 The following shall be considered critical pipelines and water infrastructure for this project:
  - (a) 1200 mm Branch I Aqueduct.
  - (b) 1050 TBPS Suction Line.
- E9.2 General Considerations for Work in Close Proximity to Aqueducts and Critical Pipelines
- E9.2.1 Aqueducts and Critical Pipelines are a critical component of the City of Winnipeg Regional Water Supply System and work in close proximity to infrastructure shall be undertaken with an abundance of caution. Aqueducts and Critical Pipelines cannot typically be taken out of service for extended periods to facilitate construction and inadvertent damage caused to the pipe would likely have catastrophic consequences.
- E9.2.2 Work around Critical Pipelines shall be planned and implemented to minimize the time period that work is carried out in close proximity to the pipe and to ensure that the pipeline is not subjected to excessive construction related loads, including excessive vibrations and/or concentrated or asymmetrical lateral loads during backfill placement.
- E9.2.3 Large diameter pressure pipe generally has limited ability to withstand increased earth and live loading. Therefore, every precaution must be undertaken to ensure that applied loading during all phases of construction is within accepted loading parameters.

- E9.2.4 The Aqueduct and drain piping adjacent to the work area is cast iron pipe with leaded joints. Care shall be taken to ensure joints are not dislodged.
- E9.2.5 Construction in close proximity to critical infrastructure shall not commence until both the equipment and construction method statements have been submitted, reviewed, and accepted by the Contract Administrator.

#### E9.3 Submittals

- E9.3.1 Submit proposed construction equipment specifications to the Contract Administrator for review a minimum of five (5) Business Days prior to construction. The equipment submission shall include:
  - (a) equipment operating and payload weights;
  - equipment dimensions, including wheel or track base, track length or axle spacing, track widths or wheel configurations; and
  - (c) load distributions in the intended operating configuration.
- E9.3.2 Submit a construction method statement to the Contract Administrator a minimum of five (5) business days prior to construction. The construction method statement shall contain the following minimum information:
  - (a) proposed construction plan including excavation locations, haul routes, excavation equipment locations, and loading positions.
  - (b) excavation plans, including shoring designs, for excavations occurring in close proximity to Critical Pipelines (within 5 m horizontal of the pipe's centerline) where the excavation to be extended below the top of the feeder mains embedment zone (150 mm above the pipe).
  - (c) any other pertinent information required to accurately describe the construction activities in close proximity to the feeder main and permit the Contract Administrator to review the proposed construction plans.

## E9.4 Scheduling Work

- E9.4.1 Due to water demands, work requiring shutdown of the water supply and Aqueduct are limited as outlined in D22.1.
- E9.4.2 Draining of the Aqueduct is facilitated through the 400 mm drain line that is being upgraded as part of this Work. Depending on river levels drain time can take up to 48 hours to complete.
- E9.4.3 Shoring and excavation can take place with Aqueduct in service.
- E9.5 Pre-Work, Planning and General Execution
- E9.5.1 No work shall commence in close proximity to aqueducts, critical pipelines, chambers, and critical infrastructure until the equipment specifications and construction method statement have been submitted and accepted, and aqueduct and critical pipeline locations have been clearly delineated in the field. Work over feeder mains shall only be carried out with equipment that has been reviewed and quantified in terms of its loading implications on the pipe.
- E9.5.2 Contact the City of Winnipeg Water and Waste Department, Construction Services Coordinator at 204-986-4289 prior to construction.
- E9.5.3 Locate feeder mains and confirm their position horizontally and vertically at the proposed the following locations prior to undertaking work in close proximity to the identified feeder mains. Note, exact locations to be identified in the field.
- E9.5.4 Visually delineate all critical infrastructure identified herein on Site by use of paint, staking/flagging, construction fencing, snow fencing, or other suitable methods

- E9.5.5 Only utilize construction practices and procedures that do not impart excessive vibratory loads Critical Pipelines and chambers or that would cause settlement of the subgrade below critical pipelines.
- E9.5.6 Where the existing road structure must be removed, crossing of critical infrastructure shall be prohibited from the time the existing roadway structure is removed until the completion of granular base construction. At all times prior to completion of final paving; reduce equipment speeds to levels that minimize the effects of impact loading to the critical infrastructure.
- E9.5.7 Only equipment and construction practices stipulated in the accepted construction method statement and the supplemental requirements noted herein may be utilized in close proximity to the aqueduct, critical pipelines, chambers, and other critical infrastructure identified herein.
- E9.5.8 Construction operations should be staged in such a manner as to limit multiple construction loads at one time, (e.g., offset crossings sufficiently from each other, rollers should remain a sufficient distance behind spreaders to limit loads. A reasonable offset distance is 3 m between loads).
- E9.5.9 Granular material, construction material, soil, and/or other material shall not be stockpiled on the pipelines or within 5 m of any feeder main, valve chamber, or other critical infrastructure identified herein.
- E9.5.10 Construct access roads, place pads or bridging to facilitate pipeline crossings without surface rutting. Crossing materials shall not increase load over pipeline by more than 6.9 KPa (1 psi).
- E9.5.11 Vibratory equipment shall not be utilized within 5 metres of the centreline of pipelines.
- E9.5.12 The Contractor shall ensure that all crew members understand and observe the requirements of working near aqueducts, feeder mains, valve chambers, and critical infrastructure. Prior to commencement of on-Site work, the Contractor shall jointly conduct an orientation meeting with the Contract Administrator, all superintendents, foreman, and heavy equipment operators to make all workers on the Site fully cognizant of the limitations of altered loading on, the ramifications of inadvertent damage to, and the constraints associated with work in close proximity to feeder mains and critical pipelines. New personnel introduced after commencement of the Project need to be formally orientated as outlined herein. It is recommended that restrictions associated with the crossing, consistent with the Contractor's submitted method statement be posted on Site and near the crossing.

## E9.6 Excavation and Shoring

- E9.6.1 Insulate ground in vicinity of the proposed excavation in advance of freezing temperatures to prevent frost penetration and vibrations associated with frost ripping during excavation activities. Insulation can include the placement of flax bales, insulated tarps, or other methods that would prevent frost penetration in the excavation area.
- E9.6.2 Expose sides of pipelines by hydro excavation prior to installing piles.
- E9.6.3 Pre-bore piles to below invert of pipelines.
- E9.6.4 Minimum offset from closest edge of piles or shoring to pipelines is 300 mm.
- E9.6.5 Shoring shall not impart lateral loads on pipelines.
- E9.6.6 Excavation shall only utilize smooth edge buckets when within 1 metre of the Aqueduct in any direction.
- E9.6.7 Excavation shall proceed evenly such that differential loads are not imparted on shoring or the Aqueduct. A maximum differential elevation of 0.6m shall be maintained.
- E9.6.8 Shoring shall be monitored during excavation and daily while shoring is in place. A maximum of 25 mm differential movement shall be immediately reported to the Contract Administrator.

- E9.6.9 Removal of piles and/or sheeting shall be completed in a way to not result in lateral loading on the Aqueduct.
- E9.7 Craning and Lifting
- E9.7.1 Craning and lifting equipment shall not operate over pipelines.
- E9.7.2 Ancillary mass including counter weights, auxiliary booms, jibs, blocks and other devices shall be assembled on site where practical.
- E9.7.3 Crane pads and working platforms shall be located a minimum of 3 metres from the centreline of pipelines to the closest point of the crane pad or working platform.
- E9.8 Backfill
- E9.8.1 Backfilling shall be completed without use of heavy vibratory compaction equipment or equipment that would impart excessive loads on pipes and joints. Small vibratory compaction equipment such as plate packers up to 350 kilograms will be permitted.
- E9.9 Measurement and Payment
  - (a) Work covered in this section will be considered incidental and will not be measured for payment. No separate payment will be made.

#### E10. DRAIN CHAMBER CONSTRUCTION

- E10.1 Description
  - (a) This Specification shall cover the construction of the Drain Chamber as shown on the Drawings.
- E10.2 Materials
- E10.3 Excavation, Shoring and Backfill
  - (a) Excavation, Shoring and Backfill shall conform to E11.
- E10.4 Precast Concrete
  - (a) Precast concrete components shall be as per CW 2030.
- E10.5 Chamber Piping
  - (a) Chamber Piping shall conform to E12.
- E10.6 Cast-In-Place Concrete
  - (a) Cast-In-Place Concrete shall conform to E13.4.1(a).
- E10.7 Concrete Accessories
  - (a) Concrete Accessories shall conform to E16.
- E10.8 Reinforcing Steel
  - (a) Reinforcing Steel shall conform to E17.
- E10.9 Rough Carpentry
  - (a) Rough Carpentry shall conform to E18.
- E10.10 Aluminum Fabrications
  - (a) Roof Accessories shall conform to E19.
  - (b) Aluminum Fabrications shall conform to E20.

## E10.11 Rigid Insulation

(a) Rigid Insulation shall conform to E21.

## E10.12 Sump Pump

(a) Sump Pump shall conform to E14.

# E10.13 Electrical, Instrumentation, & Controls

(a) Electrical, Instrumentation, & Controls shall conform to NMS Specifications.

## E10.14 Measurement and Payment

(a) Construction of Drain Chamber will be measured on a Lump Sum Basis and paid at the Contract Price for "Drain Chamber Construction" which price shall be payment in full for supplying all materials and for performing all operations herein described and all other items incidental to the Work included in this Specification.

## E11. EXCAVATION, SHORING AND BACKFILL

## E11.1 Description

(a) This Specification covers the requirements for excavations and backfilling of trenches, pipelines, and structures.

#### E11.2 Submittals

(a) Shop Drawings for all excavation shoring (where required) shall be prepared and submitted a minimum of five (5) Business Days prior to undertaking the excavation and shoring installation. Shoring Shop Drawings shall be sealed by a Professional Engineer, registered in the Province of Manitoba, experienced in the design of excavation shoring systems.

# E11.3 Approvals

(a) City of Winnipeg Waterways approvals have been submitted and will be in place prior to the start of construction.

## E11.4 Shoring Design

- (a) Shoring shall be provided for excavations in accordance with CW 2030.
- (b) Excavation shoring shall be designed to accommodate the installation of all pipe and fittings.
- (c) Provide sealed Shop Drawings in accordance with E11.2.
- (d) Provide sequence for installation and removal of shoring.
- (e) All shoring systems shall comply with Manitoba Workplace Safety and Health requirements.

#### E11.5 Excavation

- (a) Materials shall not be stockpiled over pipelines or within 5 metres of pipelines.
- (b) Excess excavation material from excavations shall be disposed of off-site.
- (c) Granular bedding in the vicinity of existing pipelines shall be dewatered and stabilized prior to undermining pipes to prevent loss of granular pipe foundation.
- (d) Carefully excavate to expose existing pipelines. Excavation within 1.0 m of the pipe shall be done using soft dig or hand excavation methods to prevent damage to the pipe.
- (e) The Contractor shall undertake all efforts to prevent freezing of soils underlying existing pipelines, bedding and backfilling will not be permitted overtop of frozen soils. Excavations left open when nighttime atmospheric temperatures are expected to drop below 0°C shall be horded and heated as required to keep soils and pipelines from freezing.

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  - (f) See E9 for additional restrictions when working in close proximity to Aqueducts and critical pipelines.
  - (g) Provide heating and hoarding around the lower portion of the excavation and pipe during freezing conditions.

### E11.6 Backfill

- (a) Backfill shall be completed to CW 2030, Class 2 standards using small vibratory equipment.
- (b) The top 600 millimetres of the backfill adjacent to concrete structures shall be insitu clay material completed to CW 2030, Class 4 standards.
- (c) The Contractor shall undertake all efforts to prevent excavated material intended for backfilling from freezing. Backfilling with frozen materials will not be permitted.

## E11.7 Measurement and Payment

(a) Excavation, shoring, and backfilling for excavations will be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

#### E12. CHAMBER PIPING

## E12.1 Description

(a) This Specification shall cover the supply and installation of chamber piping, valves, fittings, and appurtenances.

#### E12.2 Materials

#### E12.2.1 Fasteners

- (a) Bolts for all flange connections shall be ASTM A307 or ASTM F568M, grade B.
- (b) Nuts for all direct bury flange connections shall be ASTM A563 or ASTM A563M, grade B.
- (c) Bolts for all sleeve style couplings and/or restraints shall be ASTM F593 or ASTM F738M, type 316 stainless steel.
- (d) Nuts for all sleeve style couplings and/or restraints shall be ASTM F594 or ASTM F836M, type 316 stainless steel.
- (e) Anti-seize compound shall be used on all bolts.
- (f) For flanged connections, bolt size, type and diameter shall be in accordance to AWWA C207. Bolt length suitable for coupling AWWA C207 Class D flange.
- (g) All buried couplers and connections shall be wrapped in a petrolatum tape coating system in accordance with E12.2.17.

## E12.2.2 Flange Gaskets

- (a) 3mm, full-faced, SBR rubber gaskets or neoprene in accordance with AWWA C207.
- (b) Gaskets shall be one piece construction where possible.
- (c) Segmented gaskets shall be constructed of a minimum number of segments and joints shall be of dovetailed construction, or other jointing methods approved by the Contract Administrator.

# E12.2.3 Blind Flanges

- (a) Ductile iron blind flanges shall be AWWA C115 Class 150.
- (b) Ductile blind flanges shall be fusion bonded epoxy coated in accordance with AWWA C116, E12.2.15, and E12.3.1.

# E12.2.4 Ductile Iron Fittings

- (a) Flanged ductile iron fittings conforming to AWWA C110.
- (b) Fittings shall meet the following minimum criteria:
  - Fittings shall be new.
  - (ii) Permanently installed fittings shall be cement-mortar lined in accordance with AWWA C104.
  - (iii) Temporarily installed fittings shall be liquid epoxy lined to AWWA C210, E12.2.14 and E12.3.1. as a minimum.
  - (iv) All fittings to be liquid epoxy coated to AWWA C210, E12.2.14 and E12.3.1.

# E12.2.5 Ductile Iron Pipe

- (a) Ductile iron pipe conforming to AWWA C151.
- (b) Pipe shall meet the following minimum criteria:
  - (i) Thickness Class 54 (minimum).
  - (ii) Pipe shall be new.
  - (iii) Permanently installed pipe shall be cement-mortar lined in accordance with AWWA C104.
  - (iv) All pipe to be liquid epoxy coated in accordance with AWWA C210, E12.2.14 and E12.3.1.

# E12.2.6 Flanges for Pipe and Fittings

- (a) Steel flanges shall conform to AWWA C207, minimum Class B Flange.
- (b) Threaded ductile iron flanges shall conform to AWWA C115 ASME/ANSI B16.1 Class 125.

## E12.2.7 Pipe Couplings and Flange Adaptors

- (a) Pipe couplings shall conform to AWWA C219.
- (b) Unless otherwise specified, center sleeves for pipe couplings shall be constructed from:
  - (i) Ductile iron or steel for sizes 300 mm and smaller.
  - (ii) Steel for sizes greater than 300 mm.
- (c) Minimum requirements for sleeve couplings are:
  - (i) Center sleeve length: 250 mm.
  - (ii) Center sleeve thickness for steel couplings: 9.5 mm.
  - (iii) Couplings capable of accommodating up to 2 degrees deflection.
  - (iv) Design pressure 150 psi.
- (d) Minimum requirements for flange adaptors:
  - (i) Flanges shall conform to ASME/ANSI B16.1 Class 125.
- (e) Restraining end rings shall be supplied where axial thrust restraint is specified on the Drawings. Restraint rings shall be specifically designed for the material type of the pipes being joined.
- (f) All hardware shall be type 316 stainless steel in accordance with E12.2.1.
- (g) Couplings to be fusion bonded epoxy coated in accordance with E12.2.15, and E12.3.1.
- (h) Couplings to be supplied with two di-electric insulating boots.
- (i) Buried pipe couplings shall be further protected against corrosion by wrapping the assembled coupler with petrolatum tape coating system in accordance with E12.2.17.
- (j) All transition couplings larger than 300 mm in diameter, with differential outside pipe diameters greater than 25 mm, shall be restrained to prevent movement of the coupling due to differential thrust forces. Tie rods placed in compression for the

purpose of restraining differential thrust forces shall be no longer than 150 mm and the Contractor must demonstrate they are capable of withstanding the applied forces.

#### E12.2.8 Gate Valves

- (a) Gate valves shall conform to CW2110, City of Winnipeg Specification AT-4.21.1.7, AWWA C515, and shall be supplied with the following:
  - Flanged joints conforming to AWWA C515.
  - (ii) Fusion bonded epoxy coating conforming to AWWA C550.
  - (iii) 50 mm AWWA operating nut.
  - (iv) All valves clockwise to close.
  - (v) Provide spur gears or bevel gears where noted.
  - (vi) Short term velocity is over 6 metres per second, and in excess of specified maximum velocity in AWWA C515. Sustained velocity in the system is
     4.9 metres per second. Manufacturer shall confirm the valve is suitable for short term exposure to velocities in excess of AWWA Standard. Frequency of operation of these valves in typically infrequent, once per year as a maximum.

#### E12.2.9 Ball Valves

- (a) Ductile-Iron Ball Valves
  - (i) Ductile-Iron ball valve complete with stainless steel ball.
  - (ii) ASME B16.1 Class 125 flanges.
  - (iii) Approved product: Series 4000D as manufactured by American Valve Inc. or approved equal in accordance with B7.

## E12.2.10 Restrained Dismantling Coupling:

- (a) Coupling body (rings) to be constructed from ASTM A36 steel, minimum wall thickness: 9.5 mm.
- (b) AWWA C207, Class D Flanges.
- (c) NBR gasket conforming to ASTM D 2000.
- (d) Fusion bonded epoxy coated in accordance with AWWA C213, and meeting the requirements of ANSI/NSF 61 "Standard for Drinking Water System Components – Health Effects".
- (e) Stainless steel, type 316 tie rods and nuts.
- (f) Approved products:
  - (i) DJ400 Series Dismantling Joint as manufactured by Romac Industries Ltd.,
  - (ii) 7900DJ Series Dismantling Joint manufactured by Robar Industries Ltd.,
  - (iii) Baker Dismantling Joint manufactured by Baker Coupling Products,
  - (iv) or approved equal in accordance with B7.

# E12.2.11 Internal Compression Seals

- (a) Internal compression Seals shall be installed at existing lead caulked joints in the Aqueduct and drain line.
- (b) Compression seals shall be NSF 61 certified for use in potable water systems
- (c) Approved Products Weko Seal by Miller Pipeline Corp., or approved equal in accordance with B7.

#### E12.2.12 Wall Penetration Seals

- (a) Wall penetration seals shall be installed around pipes penetrating chamber walls.
- (b) Hardware for wall penetration seals shall be type 316 stainless steel.
- (c) Approved Products- Link-Seal by Garlock or approved equal in accordance with B7.

# E12.2.13 Coatings

- (a) Unless otherwise specified herein coatings for all metal chamber piping and fittings shall be a liquid epoxy meeting the requirements of E12.2.14. As an alternative to liquid epoxy, the contractor shall have the option to use fusion bonded epoxy in accordance with E12.2.15.
- (b) Field-applied pipe coatings for above ground piping shall be a liquid epoxy meeting the requirements of E12.2.14.

# E12.2.14 Liquid Epoxy Coatings

- (a) Liquid epoxy coatings shall conform to AWWA C210.
- (b) Liquid epoxy coatings shall be NSF 61 certified for immersion service in feeder main and water main pipelines.
- (c) All coatings shall be applied in a minimum of two (2) or more layers (5 mils dry film thickness minimum each coat) for a minimum final coating dry film thickness of the greater of 16 mils or the thickness recommended by the manufacturer for immersion service.
- (d) Exterior coatings for all exposed steel, piping, valves, and actuators shall be Polyamide Epoxy. Approved products: Enviroline 230, Bar-Rust 234P, Specialty Polymer Coatings SP-7888, Tnemec Series 140F Pota-Pox Plus, Amerlock 2 or approved equal in accordance with B7.
- (e) Submit product data for interior lining and exterior coating products in accordance with E6.

# E12.2.15 Fusion Bonded Epoxy Coatings

- (a) Fusion bonded epoxy coatings shall conform to AWWA C213 for steel components and AWWA C116 for ductile iron fittings.
- (b) Fusion bonded epoxies shall be NSF 61 certified for immersion service in feeder main and water main pipelines.
- (c) The final minimum coating thickness shall be the greater of 16 mils or the thickness recommended by the manufacturer for immersion service.
- (d) Submit product data for interior lining and exterior coating products in accordance with E6.

#### E12.2.16 Flange Isolation Kits

- (a) Flange isolation kits shall be used where noted, where dissimilar metal piping or fittings are joined.
- (b) Flange isolation kits shall be to City of Winnipeg specification except as modified below.
- (c) Each kit shall be double flange isolation kit with insulating sleeves and washers for each flange of the bolted connection.
- (d) Bolt sleeves shall be comprised of G10 or G11 epoxy glass.

# E12.2.17 Petrolatum Tape Corrosion Protection System

- (a) All buried pipe couplers and flanged connections shall be protected against corrosion by a petrolatum tape corrosion protection system consisting of the following components:
  - (i) Petrolatum paste primer
  - (ii) Void-filling mastic filler
  - (iii) Petrolatum tape
  - (iv) Protective outerwrap
- (b) Petrolatum tape systems shall conform to AWWA C217.

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  - (c) Approved product: Petrolatum tape system manufactured by Denso North America Inc., Trenton Corporation, Petro Coating Systems Ltd, or approved equal in accordance with B7.
  - (d) Submit Shop Drawings for petrolatum wrapping system in accordance with CW1110.

#### E12.3 Methods

- E12.3.1 Protection of the Branch I Aqueduct from Contamination.
  - (a) The Contractor shall install temporary closures on the existing piping to prevent contamination of the Branch I Aqueduct when not on site or actively working on the piping itself.
- E12.3.2 Temporary closures shall be constructed to prevent the ingress of water, air contaminates, debris, and animals. Closures shall be constructed and installed in such a manner as to prevent in inadvertent puncture, displaced or otherwise damaged in a manner that could result in the contamination of the Branch I Aqueduct.
- E12.3.3 Wall Penetration Seals
  - (a) Accurately mark centreline of proposed pipelines on chamber walls. Core opening in structure. Size of core hole shall be suitable to pipe size installed, and as recommended by the seal manufacturer.
  - (b) Install wall penetration seal as per manufacturers recommendation.

# E12.3.4 Coatings

- (a) Where indicated on the Drawings and directed by the Contract Administrator, prepare metal surfaces for recoating by blast cleaning to near-white metal as specified by Joint Surface Preparation Standard NACE No.2/SSPC-SP10. Remove all dust and loose residues from the prepared surfaces and chamber floor. The surface shall be roughened to a degree suitable for the coating system employed.
- (b) Protect valve seals, machined surfaces, threads, and nameplates from sandblasting.
- (c) Paint prepared surfaces in accordance to AWWA C210.
- (d) Primer coat to follow immediately after completion of sandblasting and prep.
- (e) Provide adequate ventilation and heat to facilitate curing of coatings.
- E12.3.5 Provide adequate ventilation and heat to facilitate curing of coatings.
- E12.3.6 Interior linings for pipes and fittings shall be applied and cured as recommended by the manufacturer prior to placing into service. Linings must be fully cured for immersion service prior to installation and reinstating the line into service. Where accelerated cure times are required for assembly and water immersion, a coating and curing plan shall be submitted to the Contract Administrator in accordance with E6 a minimum of five (5) Business Days prior to application.
- E12.3.7 Installation of Petrolatum Tape Corrosion Protection Systems
  - (a) Install in accordance with AWWA C217 and the manufactures recommendations.
  - (b) For all surfaces to be wrapped with the corrosion protection system, remove loose rust, paint and foreign matter by hand and/or power tool cleaning in accordance with SSPC-SP-2 or SSPC-SP-3.
  - (c) Apply a thin uniform coat of petrolatum paste primer, using a glove or brush, to all surfaces to be wrapped with the corrosion protection system.
  - (d) Apply void-filling mastic filler, by hand, to all flanges designated to be wrapped with the corrosion protection system. Mold the mastic to a rounded configuration around the flange, filling all spaces around fasteners and eliminating sharp edges and irregular shapes.

- (e) Spirally wrap the petrolatum tape, using a minimum 25mm overlap, over the primed and mastic-filled pipe and flange surfaces. While wrapping, press out all air pockets and smooth all lap seams.
- (f) Spirally wrap clear outer wrap, using sufficient tension to make a tight-fitting cover, over the petrolatum tape.
- E12.3.8 Bedding
  - (a) All pipes shall be installed in accordance with CW 2030, utilizing a Class B bedding.
- E12.4 Measurement and Payment
  - (a) Work covered in this section will be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

#### E13. WATER MAIN AND FEEDER MAIN DISINFECTION

- E13.1 Description
- E13.1.1 This specification covers the disinfection of aqueduct, water mains, feeder mains, and fittings.
- E13.2 Disinfection
- E13.2.1 All pipe, valves and fittings on the Aqueduct side of the chamber, upstream of the first valve, shall be disinfected by spray disinfection in accordance with CW2125 and AWWA C651.
- E13.2.2 The Contractor shall take every reasonable precaution during construction to prevent debris from entering the pipeline. If, in the opinion of the Contract Administrator, deleterious substances have entered the pipeline, the Contractor shall flush the pipeline with sanitized pipeline cleaning equipment.
- E13.2.3 Further to CW 2125, segments of water mains not disinfected and used as temporary fittings as noted above, shall be disinfected by swabbing as outlined in Section 3.3.16 of CW 2125.
- E13.2.4 All equipment being used within a potable water pipeline shall be spray or swab disinfected using a 200 mg/L free chlorine solution prior to entering or coming in contact with the pipe.
- E13.2.5 The Contractor shall ensure that the selected means of disposing of chlorinated water does not result in unsafe site conditions as a result of freezing atmospheric temperatures.
- E13.3 Disposal of Chlorinated Water
- E13.3.1 Chlorinated water shall be treated by one of the following methods, as recommended in AWWARF Guidance Manual For The Disposal Of Chlorinated Water:
  - (a) Discharged into nearby WWS MH's if possible. Allowable discharge rates for nearby WWS manholes have been provided on the Drawings. The Contractor may store water as required to meet allowable discharge rates.
  - (b) De-chlorination of water with discharge into the LDS system or directly to the river. If discharging directly to the river the Contractor shall take all necessary precautions to prevent erosion of the river bank. De-chlorination may be accomplished using the following:
    - (i) Sodium Ascorbate,
    - (ii) Vita-D-Chlor TM by Integra Chemical,
    - (iii) or approved equal in accordance with B7.
  - (c) Contain chlorinated water on Site until chlorine has dissipated to acceptable limits.
- E13.3.2 The contractor shall submit a chlorinated water disposal plan in writing to the Contract Administrator a minimum of five (5) working days prior to performing any cleaning or flushing of the Aqueduct. The disposal plan shall at a minimum include the following:

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  - (a) Intended means of disposal for each site.
  - (b) Means of de-chlorination (if required).
  - (c) Means of storing water for discharge (if required).

# E13.4 Measurement and Payment

## E13.4.1 Disinfection, Health Testing, and Disposal of Chlorinated Water

(a) Disinfection, health testing, and disposal of chlorinated water will be considered incidental to the Work and will not be measured for payment. No additional payment will be made.

#### E14. SUMP PUMP

## E14.1 Description

(a) This Specification shall cover the supply and installation of a sump pump for the drain chamber sump.

#### E14.2 Submittals

- (a) Shop Drawings
  - (i) Provide Shop Drawings in accordance with E6.

#### E14.3 Materials

(a) Approved product: Meyers ME3F-11P or approved equal in accordance with B7.

# E14.4 Measurement and Payment

(a) Work covered in this section will be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

# E15. CAST-IN-PLACE CONCRETE

## E15.1 Description

- (a) This Specification shall cover the construction of cast-in-place concrete for the valve chamber, which the Contractor shall carry out in accordance with Specification CW 2160 and CSA A23.1, except as amended or supplemented herein.
- (b) Provide heating and hoarding in order to install the materials.

## E15.2 Submittals

- (a) Shop Drawings
  - (i) Provide Shop Drawings in accordance with E6.
  - (ii) Shop Drawings for the Mix Design are to bear the seal of a Professional Engineer, registered in the Province of Manitoba.
- (b) Submit and implement a Quality Control Plan a minimum of four (4) weeks prior to first scheduled concrete casting; the Quality Control Plan shall include:
  - (i) Identify the Quality Control Manager.
  - (ii) Qualifications of construction supervisory personnel.
  - (iii) Quality Control testing plan for concrete.
  - (iv) Third party testing data from trial batching of each Mix Type.
  - (v) Pre-placement procedures and checklists for concrete.
  - (vi) Post-placement procedures and checklists for concrete.
- (c) Submit mix design statements for each type of concrete:

(i) Submit documentation a minimum of four (4) weeks prior to the first scheduled concrete casting demonstrating that the proposed mix designs and materials will achieve the required strength, durability, and performance requirements.

#### E15.3 Materials

- (a) Concrete Mix Types:
  - (i) Provide concrete mixed in accordance with requirements of CAN/CSA-A23.2.
  - (ii) Structural concrete design shall be in accordance with performance specification having the following properties:
    - 1. Walls and Chamber base with sump: Class of Exposure: S-1; Minimum Compressive Strength @ 28 days: 35 MPa.
    - Top Slab: Class of Exposure: C-1: Minimum Compressive Strength @ 28 days: 35 MPa.
  - (iii) Self-consolidating concrete mixes will not be permitted for use on this project.

## E15.4 Cast-in-Place Concrete Construction

(a) A minimum of forty-eight (48) hours notice shall be given to the Contract Administrator prior to the casting of any concrete to allow for inspection of reinforcing steel.

## E15.4.1 Finishing Slab Surfaces

(a) Light broom finish exterior slab top surfaces to achieve nonslip surface conforming to CSA A23.1.

# E15.5 Curing and Protection

- (a) Concrete shall receive moist curing for a period of at least seven (7) Calendar Days. One of the following methods shall be used as soon as the concrete has hardened sufficiently to prevent marring:
  - (i) A liquid membrane forming curing sealer, applied at the rate recommended by the Manufacturer.
  - (ii) Surfaces of concrete that are protected by formwork that is left in place for seven (7) Calendar Days, shall not require any additional curing (except as specified for hot weather). If the formwork is removed in less than seven (7) Calendar Days, the concrete shall receive moist curing as above.
- (b) No concreting will be allowed until all materials required for the curing phase are on-site and ready for use.
- (c) At the end of the curing and protection period, the temperature of the concrete shall be reduced gradually at a rate meeting both the requirements of CSA A23.1 Table 21 for allowable differential temperature in the concrete and ACI 306R Table 5.1 for the allowable rate of temperature change of the edges of the concrete until the outside air temperature has been reached.
- (d) Concrete that is allowed to freeze or attain insufficient curing conditions shall be subject to all necessary investigations and testing as deemed necessary by the Contract Administrator and all such concrete shall be removed and the portion reconstructed as directed by the Contract Administrator, at the Contractor's cost.

## E15.6 Measurement and Payment

(a) Supply and placement of cast-in-place concrete shall be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

#### E16. CONCRETE ACCESSORIES

#### E16.1 Description

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  - (a) This Specification shall cover all concrete accessories work, in accordance with Specification CW 2160, except as amended or supplemented herein.
  - (b) Provide heating and hoarding for the installation of the materials.

## E16.2 Submittals

- (a) Submit the following Shop Drawings; in accordance with E6.
  - (i) Bonding Agent
  - (ii) Waterstop
  - (iii) Lifting System
  - (iv) Davit Mount Sleeve and Cap
  - (v) Grout under Base Plates
  - (vi) Sealants
  - (vii) Bearing Pad
- (b) Submit Shop Drawings in accordance with E6.

#### E16.3 Materials

- (a) Bonding Agent:
- (b) Epoxy bonding adhesive shall be Sikadur 32, Hi Mod by Sika Canada or approved equal in accordance with B7.
- (c) Waterstop.
  - (i) Sika SwellStop or approved equal in accordance with B7.
- (d) Lifting System
  - (i) Lifting System shall be from Dayton Superior with safe working load tension rating of 10,886 kg (24000 lbs) and shall have the following components:
  - (ii) Dayton Superior P-75-H Utility Anchors.
  - (iii) Dayton P76 Utility Anchor Setting Plug # 90P875.
  - (iv) Dayton Superior P101 Fleet Lift Holding Rod.
- (e) Davit Mount Sleeve and Cap
  - (i) Davit mount sleeve shall be DBI Sala Advanced Flush Floor Mount Sleeve, Model # 8512828, stainless steel construction.
  - (ii) Cap shall be DBI Sala Advanced Heavy Duty Sleeve Cap, Model #8510827, stainless steel construction.
- (f) Grout under Base Plates
  - (i) Grout, if required, shall be Sika Embed Standard by Sika Canada Inc. or approved equal in accordance with B7.
- (g) Sealants Horizontal
  - (i) Shall be self-leveling, polyurethane sealant; Sikaflex 1C SL, or approved equal in accordance with B7. Colour: Precast.
- (h) Sealant Vertical and at Stainless Steel Signage
  - Shall be non sag, polyurethane sealant; Sikaflex 2C NSL, or approved equal in accordance with B7. Colour: Precast.
- (i) Backer Rod
  - (i) General: compatible with primers and sealants, outsized 30 to 50%. Polyethylene, urethane, neoprene or vinyl: extruded closed cell foam, Shore A hardness 20, tensile strength 140 to 200 kPa.
- (j) Bond Breaker: pressure sensitive plastic tape, which will not bond to sealants.
- (k) Joint Cleaner: xylol, methylethylketone or non-corrosive type recommended by sealant manufacturer and compatible with joint forming materials.

(I) Bearing Pad: Elastomeric pads for new bearings shall be fabricated from neoprene or natural rubber, AASHTO low temperature Grade 5, with a 60 Durometer Shore A hardness.

### E16.4 Construction Methods

(a) Install materials in accordance with the Manufacturer's written instructions.

## E16.5 Measurement and Payment

(a) Supply and placement of concrete accessories shall be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

## E17. REINFORCING STEEL

## E17.1 Description

(a) This Specification shall cover all reinforcing steel work, in accordance with Specification CW 2160, except as amended or supplemented herein.

# E17.2 Shop Drawings

(a) The Contractor shall submit Shop Drawings in accordance with E6 for the Contract Administrator's approval ten (10) business days prior to the fabrication of any reinforcing steel.

#### E17.3 Materials

## E17.3.1 Reinforcing Steel

(a) Further to CW 2160 Sentence 2.6 Materials: Reinforcing Steel, all reinforcing steel shall conform to the requirements of CSA G30.18, Grade 400.

## E17.3.2 Bar Accessories

(a) Bar accessories shall be of type approved by the Contract Administrator. They shall be made from a non-corroding material, and they shall not stain, blemish, or spall the concrete surface for the life of the concrete. Bar chairs are to be PVC; galvanized bar chairs are not acceptable.

## E17.4 Construction Methods

#### E17.4.1 Placing of Reinforcing Steel

- (a) Reinforcing steel shall be placed accurately in the positions shown on the Contract Drawings. Carefully adjust the location of reinforcing steel adjacent to openings to frame those openings in accordance with good practice, and maintain the bar spacing intent.
- (b) Splices in reinforcing steel shall be made only where indicated on the Contract Drawings. Prior approval of the Contract Administrator shall be obtained where, in the opinion of the Contractor, other splices must be made. All splices shall have Class 'B' top lap splices in accordance with Reinforcing Steel Manual of Standard Practice. Welded splices shall not be used.
- (c) Adjust the location of the reinforcing steel adjacent to openings and in location of the lifting hook in accordance with good practice, and maintain the bar spacing intent.
- (d) Do not use welded splices for reinforcing steel.

## E17.5 Construction Methods

(a) Install materials in accordance with the Manufacturer's written instructions.

# E17.6 Measurement and Payment

(a) Supply and placement of reinforcing steel shall be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

#### E18. ROUGH CARPENTRY

# E18.1 Description

(a) Wood furring and related appurtenances.

#### E18.2 Materials:

- (a) Pressure treated exterior plywood and lumber shall conform to CSA O80, Use Category UC4.2 utilizing:
  - (i) CSA O121M Douglas fir CSA O151M material or Softwood lumber CSA O141.
- (b) Wood preservative pressure treatment: CSA O80M using waterborne preservative with 0.30% retainage, manufactured by Wolman.
- (c) Stainless steel anchorage screws: 410 Stainless Steel Tapcon Screws (4.8 mm diameter x 32 mm embedment) as manufactured by ITW Buildex.

#### E18.3 Construction Method

- (a) Site Applied Wood Treatment
  - (i) Apply preservative treatment in accordance with CSA O80M and the Manufacturer's instructions.
  - (ii) Treat site-sawn ends.
  - (iii) Allow preservative to cure prior to erecting members.
- (b) Erect wood furring members level and plumb.
- (c) Space furring as noted on the Drawings.
- (d) Provide blocking, sized to suit, for support of surface mounted accessories.
- (e) Place miscellaneous blocking, furring, where indicated on Drawings and as required for secure support of anchorage of other materials. Place members true to lines and levels.
- (f) Secure rigidly in place utilizing stainless steel fasteners.

#### E18.4 Measurement and Payment

(a) Supply and installation of rough carpentry components shall be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

## E19. ROOF ACCESSORIES

#### E19.1 Submittals

(a) Submit Shop Drawings in accordance with E6.

## E19.2 Materials

- (a) Access Hatch: Type J-AL 300 PSF as manufactured by The Bilco Company with all standard features and additional features as per Drawings and the below:
  - (i) Cover shall be reinforced to support a minimum live load of 14.4 kPa (300 psf).
  - (ii) Custom flashing over concrete curb with minimum 30 mm vertical cap portion over concrete curb vertical face and minimum 12 mm drip edges.
  - (iii) Custom bent stainless steel anchorage devices to interior concrete curb's vertical face complete with stainless steel anchors.
  - (iv) Frame opening size to be 914 mm x 914 mm and 610 mm x 610 mm.
  - (v) Hold open device with grip handle.

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  - (vi) Aluminum composite spring tube and steel compression springs in grease.
  - (vii) Type 316 stainless steel slam lock with fixed interior handle and removable exterior turn/lift handle. Latch release is protected by a flush, gasketed, removable screw plug. Supply two (2) additional turn/lift handles and two (2) removable screw plugs as spare parts.
  - (viii) All exposed welds are to be ground flush.
  - (ix) All components are to be shop fabricated.

### E19.3 Construction Methods

- (a) Install materials in accordance with the Manufacturer's written instructions.
- (b) Field measure site conditions prior to fabricating Work.
- (c) Fabricate all components in the factory, ready for field installation.

## E19.4 Measurement and Payment

(a) Supply and installation of the roof accessories shall be considered incidental "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

#### E20. ALUMINUM FABRICATIONS

## E20.1 Description

(a) This Specification shall cover design, fabrication and installation of aluminum items as shown on the Drawings.

#### E20.2 General

- (a) Design Code and Quality Assurance
  - (i) National Building Code of Canada, 2010.
  - (ii) CAN/CSA-S157, Strength Design in Aluminum.
  - (iii) CSA W59.2, Welded Aluminum Construction.
  - (iv) CSA W47.2, Certification of Companies for Fusion Welding of Aluminum.
  - (v) ASTM F 593, Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
  - (vi) ASTM F 594, Specification for Stainless Steel Nuts.
  - (vii) Aluminum Association Standard SSA-46.

#### (b) Design Requirements

- (i) Use Loads, load combinations and stress levels shown on Drawings and in accordance with the NBC 2010 and the Manitoba Amendments.
- (ii) Connections are to be designed by a Professional Engineer registered in the Province of Manitoba. Design connections for loads indicated on the Drawings as a minimum.

## (c) Qualifications

(i) All work is to be performed by a firm certified by the Canadian Welding Bureau to the requirements of CSA W47.2 in Division 2.

# (d) Inspection and Testing

 Welds will be considered defective if they fail to meet quality requirements of CSA W59.2.

## (e) Submittals

- (i) Shop Drawings and design briefs are to bear the seal of a Professional Engineer, registered in the Province in Manitoba.
- (ii) Submit Shop Drawings for review in accordance with E6.
- (iii) Clearly indicate profiles, sizes, spacing and locations of structural members, connections, attachments, reinforcing, anchorage, framed openings, size and type of

fasteners, cambers and loads, accessories, column anchor bolt locations, setting details.

#### E20.3 Products

## (a) Materials

- (i) All materials shall be new.
- (ii) Aluminum to requirements of CAN/CSA-S157, 6061-T6 or 6063-T6 aluminum alloy. All aluminum shapes based on Alcan structural shapes.
- (iii) Fastening devices connecting aluminum parts to aluminum, concrete, or other materials: stainless steel bolts to ASTM F 593, stainless steel nuts to ASTM F 594, with appropriate isolation devices.
- (iv) Welding materials: conforming to CSA W59.2.
- (v) Bituminous paint: to MPI (Master Paint Institute) EXT 5.5D, without thinner.
- (vi) Concrete anchors: stainless steel Hilti HY-200 Adhesive Anchors, manufactured by Hilti (Canada) Ltd. where indicated.

#### (b) Fabrication

- (i) Fabricate aluminum members in accordance with CAN/CSA-S157 using Alcan structural shapes.
- (ii) Conform to requirements of CSA W59.2 for recommended filler alloy and welding.
- (iii) Verify all Drawing dimensions prior to commencing fabrication.
- (iv) Provide connections for loads indicated on the Drawings as a minimum.
- (v) Provide bolted connections wherever possible. Bolted connections shall be bearing-type connections with the thread excluded from the planes of shear. Welded connections will not be permitted unless acceptable to the Engineer. Inform Engineer if required welding procedures will negatively influence the original yield strength of the members at the compression or tension flange. Adjust welding procedures as required by the Engineer at no additional cost.
- (vi) Provide perimeter banding for grating; banding to be the same size as bearing bars.
- (vii) Provide banding of same size as bearing bars for all required openings through grating as required unless noted. Contractor to coordinate location of openings prior to Shop Drawing submission.
- (viii) Match position of bearing bars and cross bars in adjacent panels to preserve a continuous appearance.
- (ix) Provide removable hold down clip style Type D complete with appurtenances for all grating. At locations were Type D clip is impractical, provide Type C clip.
- (x) Provide minimum four (4) hold-down clips at each end of the panels if not detailed on the Drawings.
- (xi) Clip adjacent grating panels edges together at maximum 1500 mm spacing to prevent differential vertical movement.
- (xii) Install one Ladder Up Safety Post LU-3 as manufactured by The Bilco Company on each ladder assembly.

### (c) Construction Method

- (i) Erect aluminum in accordance with CAN/CSA-S157 and Drawings.
- (ii) Obtain permission of Engineer prior to site cutting or making adjustments that are not part of the scheduled Work.
- (iii) Install items plumb, square, and level; fit accurately and maintain free from distortion or defects detrimental to appearance and performance.
- (iv) Paint aluminum surfaces in contact with concrete with two (2) coats of alkaliresistant bituminous paint. After erection touch up abrasions and damage to bituminous coatings.
- (v) Prevent electrolysis between aluminum and dissimilar metals in contact with appropriate isolation devices.

# E20.4 Measurement and Payment

(a) Supply and installation of fabricated aluminum components shall be considered incidental to "Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

## **E21. RIGID INSULATION**

E21.1 Submittals: Submit Manufacturer's data sheets in accordance with E6.

#### E21.2 Materials

- (a) 50 mm thick rigid insulation CAN/ULC-S701, Type 4 rigid, closed cell type, with integral high density skin, extruded polystyrene insulation, 610 mm wide x 2440 mm long, edge treatment: butt edge and ship lapped. As manufactured by Dow Chemical or Celfortec or approved equal.
- (b) Spray Foam Insulation
  - (i) Spray Foam Insulation: closed-cell foam with water-resistant outer skin when cured, Great Stuff as manufactured by Dow Chemical, or approved equal.

### E21.3 Construction Method

- (a) Verify insulation boards are unbroken, free of damage, with face membrane undamaged.
- (b) Butt edges and ends tight to adjacent board and protrusions.
- (c) Ensure Rigid Insulation panels are tight to the substrate. No void is allowed between the Rigid Insulation panel and the substrate. Cut Rigid Insulation panels to suit substrate profile.
- (d) Secure the Rigid Insulation to the substrate utilizing the Rigid Insulation Manufacturer's recommended wall adhesive for wet substates or other approved securement methods that will not deteriorate under wet conditions.
- (e) Spray foam voids between rigid insulation sheet joints.
- (f) Cover insulation with 12 mm cement board complete with stainless steel fasteners.

## E21.4 Measurement and Payment

(a) Supply and installation of rigid insulation shall be considered incidental to ""Drain Chamber Construction" and will not be measured for payment. No separate payment will be made.

### E22. RESTORATION

## E22.1 Description

(a) This Specification shall cover the restoration of the sites.

## E22.2 Grading

(a) Grade areas around buildings and structures as shown on the Drawings. Material from excavations can be used for grading if required, and exceeds minimum required topsoil thicknesses.

# E22.3 Restoration Works

 (a) Sod all areas impacted by construction, and regrading areas shown on the Drawings in accordance with CW3510.

# E22.4 Measurement and Payment

E22.4.1 Grading of areas around buildings as indicated on the Drawings will not be measured for payment, it shall be considered incidental to the price paid for Sodding.

- E22.4.2 Supply and installation of sod using imported topsoil around buildings indicated on Drawings shall be measured and paid in accordance with CW 3510 at the Contract Price for "Supply and Placement of Sod using Imported Topsoil".
- E22.4.3 Payment for Sodding for chamber construction area, work areas, laydown areas will be limited to areas disturbed to facilitate construction. Surface restoration outside of the designated construction areas shall be at the Contractors expense.

#### E23. CHAIN LINK FENCING

- E23.1 Description
  - (a) This Specification shall cover removal, disposal and installation of chain link fence.
- E23.2 Materials
  - (a) Materials as shown on the Drawings and as per CW 3550-R3.
  - (b) Fabric shall be black vinyl coated.
- E23.3 Measurement and Payment
  - (a) Removal and disposal of the existing chain link fence shall be measured on a Unit Price basis and paid for at the Contract Unit Price for "Removal and Disposal of Existing Chain Link Fence".
  - (b) Supply and installation of the chain link fence shall be measured on a Unit Price basis and paid for at the Contract Unit Price for "Supply and Installation of New Chain Link Fence".
  - (c) Supply and installation of the chain link fence gate shall be measured on a Unit Price basis and paid for at the Contract Unit Price for "Supply and Installation of New Gate".

# **PART F - SECURITY CLEARANCE**

#### F1. SECURITY CLEARANCE

- F1.1 Each individual proposed to perform Work under this Contract within facilities associated with the water supply, treatment and distribution system including the Shoal Lake Intake Facility, Shoal Lake Aqueduct, Deacon Reservoir, Water Treatment Plant, Regional Pumping Stations, and Booster Pumping Stations shall be required to obtain a Global Sanctions & PEP Check **and** a Police Information Check as detailed below.
- F1.1.1 The Global Sanctions & PEP Check must be obtained through Sterling BackCheck.
  - (a) A Sterling BackCheck account must be setup 72 hours prior to individual security clearances to allow sufficient time for activation of the contracting company's account. If the contracting company has an existing City of Winnipeg Sterling Backcheck vendor account, they may skip to (d) below.
  - (b) An authorized individual of the contracting company must complete the Sterling Backcheck Setup Form. There is no cost to the organization to set up the account. Click on the link below, complete the form, and hit submit. \*\*(This form is to be completed by the company, not by the employee requiring the security clearances). <a href="https://forms.sterlingbackcheck.com/partners/platform2-en.php?&partner=winnipegcity">https://forms.sterlingbackcheck.com/partners/platform2-en.php?&partner=winnipegcity</a>
  - (c) Within 48 hours of completing the Sterling Backcheck Setup Form, the authorized individual of the contracting company will receive a Username and Password for Sterling Backcheck. It will appear in their inbox as a "Welcome to Sterling Backcheck" email. Upon receipt, the authorized individual of the contracting company will be asked to login to the Sterling Backcheck website to set their security questions and password. Once completed, individual security clearance requests can be submitted.
  - (d) In order to run a Global Sanctions & PEP Check and/or a Police Information Check, follow the steps below:
    - (i) Click on the sub-tab labelled "Order eConsent".
    - (ii) Fill out the required information about the employee proposed to perform Work under this Contract within City facilities (the person that requires the security clearances).
    - (iii) Select your location under the "Order Information" section and enter the organization's phone number, if required.
    - (iv) Select the required individual service(s) in the dropdown menu under the "Select Services" section. If both the Global Sanctions & PEP Check and the Police Information Check are required, select the Sterling Backcheck Package One (with electronic identity verification). Once selected, both the Global Sanctions & PEP Check and the Police Information Check should have a grey check mark beside them.
    - (v) Scroll down to the bottom and click the blue "Submit" button. The employee proposed to perform Work under this Contract within City facilities will be invited to complete their security clearance.
    - (vi) The employee will receive the invitation and must click on the link and complete their Global Sanctions & PEP Check and/or Police Information Check.
    - (vii) The results of the Global Sanctions & PEP Check and/or Police Information Check will go directly to the City of Winnipeg and to the authorized individual of the contracting company within 24 hours.
  - (e) Any questions related to the Sterling BackCheck process can be directed to Linda Ferens at 204-999-0912 or by email at: linda.ferens@sterlingcheck.com OR managedsupport@sterlingcheck.com
- F1.1.2 The Police Information Check must be obtained from one of the following:
  - (a) Sterling BackCheck;

- (i) See F1.1.1(a) thru (e) for instructions on how to set up an account and submit individuals for security checks; or
- (b) A police service having jurisdiction at their place of residence;
  - (i) The original Police Information Check (Form P–612) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner.
  - (ii) The applicant shall provide the original Police Information Check (Form P–612) to the Contract Administrator; or
- (c) Commissionaires (Manitoba Division);
  - (i) Forms to be completed can be found on the website at: https://www.commissionaires.ca/en/manitoba/home
  - (ii) The applicant shall provide the original Police Information Check to the Contract Administrator; or
- (d) FASTCHECK Criminal Record & Fingerprint Specialists;
  - (i) Forms to be completed can be found on the website at: <a href="https://myfastcheck.com">https://myfastcheck.com</a>
  - (ii) The applicant shall provide the original Police Information Check to the Contract Administrator.
- F1.1 Any individual for whom a Global Sanctions & PEP Check and/or a Police Information Check is not provided will not be permitted to perform any Work.
- F1.2 Individuals for whom a Global Sanctions & PEP Check indicates "CLEAR" and a Police Information Check demonstrates no previous convictions or pending charges will be permitted to perform Work as specified in F1.1.
- F1.3 Individuals for whom a Global Sanctions & PEP Check does not indicate "CLEAR" and/or a Police Information Check demonstrates previous convictions or pending charges may not be permitted to perform any Work as specified in F1.1.
  - (a) Previous convictions or pending charges may be investigated and a determination will be made by the City as to whether the individual will be permitted to perform any Work.
  - (b) Convictions or pending charges that may preclude an individual from performing any Work include but are not limited to:
    - (i) convictions or pending charges related to property offences; and/or
    - (ii) convictions or pending charges related to crimes against another person.
  - (c) Where additional investigation related to a Global Sanctions & PEP Check or a Police Information Check is required by the City, no extension to critical stages, Substantial Performance, or Total Performance, as applicable, will be provided.
  - (d) Additional investigation by the City may take upwards of six weeks.
- Prior to the award of Contract, and during the term of the Contract, if additional or replacement individuals are proposed to perform Work within City facilities, the Bidder/Contractor shall supply the Contract Administrator with a Global Sanctions & PEP Check and a Police Information Check satisfactory to the City obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform the Work.
- F1.5 Any Global Sanctions & PEP Check and Police Information Check determined to be satisfactory to the City will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.1 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require an updated Global Sanctions & PEP Check and/or a Police Information Check. Any individual F1.1 who fails to provide a Global Sanctions & PEP Check and/or a Police Information Check satisfactory to the City as a result of a

repeated records search will not be permitted to continue to perform any Work as specified in F1.1.