



THE CITY OF WINNIPEG

TENDER

TENDER NO. 866-2021

**2021 REGIONAL STREET PROGRAM – NAIRN AVENUE RECONSTRUCTION AND
WATERMAIN RENEWAL**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal.

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 25, 2022.

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

B3. ENQUIRIES

B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B3.2 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.

B3.3 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.

B3.4 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.

B3.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B3.6 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

B4. CONFIDENTIALITY

B4.1 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;
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B4.2 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.

B5. ADDENDA

B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.

- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.3 Addenda will be available on the MERX website at www.merx.com.
- B5.4 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.5 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.
- B5.6 Notwithstanding B3, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D4.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed Work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance; and
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed Work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B6.6 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.
- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.

- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B17.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices; and
 - (c) Form G1: Bid Bond and Agreement to Bond.
- B7.2 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.
- B7.3 The Bid shall be submitted electronically through MERX at www.merx.com.
- B7.3.1 Bids will **only** be accepted electronically through MERX.
- B7.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B17.1(a).

B8. BID

- B8.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted; and
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two (2) or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers; and

- (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 If a Bid is submitted jointly by two (2) 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.

B9. PRICES

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 Prices stated on Form B: Prices shall not include any costs which may be incurred by the Contractor with respect to any applicable funding agreement obligations as outlined in D31. Any such costs shall be determined in accordance with D31.

B9.2 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.

B9.3 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.

B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9.5 The Bidder shall enter the Total Bid Price from Form B: Prices into the Total Bid Price field in MERX.

B9.5.1 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

B10. DISCLOSURE

B10.1 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.

B10.2 The Persons are:

- (a) N/A.

B11. CONFLICT OF INTEREST AND GOOD FAITH

B11.1 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.

B11.2 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;
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Tender process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Tender process) of strategic and/or material relevance to the Tender process or to the Work that is not available to other Bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

B11.3 In connection with its Bid, each entity identified in B11.2 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.

B11.4 Without limiting B11.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B11.5 Without limiting B11.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:

- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
- (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B11.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B11.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B12. QUALIFICATION

B12.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
- (b) be financially capable of carrying out the terms of the Contract; and

- (c) have all the necessary experience, capital, organization and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>.

B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out Work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba).

B12.4 Further to B12.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:
 - (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
 - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
- (b) a report or letter to that effect from an independent reviewer acceptable to the City. A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>.

B12.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. BID SECURITY

B13.1 The Bidder shall include in its Bid Submission Bid security in the form of a digital Bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in Form G1: Bid Bond and Agreement to Bond, available on The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://www.winnipeg.ca/MatMgt/templates/files/eBidsecurity.pdf>.

B13.2 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; and
- (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B13.2(a).

B13.3 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 B17.1(a).

B13.4 Bonds passing the verification process will be treated as original and authentic.

B13.4.1 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.

B13.5 The Bid security of the successful Bidder and the next two (2) 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.

B13.6 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.

B14. OPENING OF BIDS AND RELEASE OF INFORMATION

B14.1 Bids will not be opened publicly.

B14.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the MERX website at www.merx.com.

B14.3 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.

B14.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B14.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B15. IRREVOCABLE BID

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

B15.2 The acceptance by the City of any Bid shall not release the Bids of the next two (2) 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.

B16. WITHDRAWAL OF BIDS

B16.1 A Bidder may withdraw his/her Bid without penalty prior to the Submission Deadline.

B17. EVALUATION OF BIDS

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

- (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation therefrom (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
- (c) Total Bid Price; and
- (d) economic analysis of any approved alternative pursuant to B6.

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

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

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

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

B17.4.2 Bidders are advised that the calculation indicated in B17.4 will prevail over the Total Bid Price entered in MERX.

B18. AWARD OF CONTRACT

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

B18.2 The City will have no obligation to award a Contract to a Bidder, even though one (1) or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.

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

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar Work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one (1) Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B18.3 The Work of this Contract is contingent upon Council approval of sufficient funding in the 2022 Capital Budget. If the Capital Budget approved by Council does not include sufficient funding for the Work, the City will have no obligation to award a Contract.

- B18.4 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 D31 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B18.5 Where an award of Contract is made by the City, the award shall be made to the qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B17.
- B18.5.1 Following the award of Contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. FORM OF CONTRACT DOCUMENTS

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

D3. SCOPE OF WORK

D3.1 The Work to be done under the Contract shall consist of:

- (a) Watermain Renewal:
 - (i) Nairn Avenue from Stadacona Street to Allan Street.
- (b) Pavement Reconstruction:
 - (i) Nairn Avenue from Stadacona Street to Watt Street.

D3.2 The major components of the Work are as follows:

- (a) Watermain Renewal:
 - (i) installation of approximately three hundred five (305) metres of two hundred (200) millimetres (mm) diameter PVC watermain by trenchless methods;
 - (ii) abandonment or removal of existing watermains, hydrants and gate valves;
 - (iii) installation of hydrant assemblies, gate valves and other appurtenances;
 - (iv) reconnection of water services;
 - (v) renewal of water services to property line;
 - (vi) connection into existing watermain;
 - (vii) installation of watermain and water service insulation;
 - (viii) temporary pavement surface restorations; and
 - (ix) completion of flushing hydrostatic leakage testing and disinfection of new watermain.
- (b) Pavement Reconstruction:
 - (i) removal of existing pavement;
 - (ii) planing of tie-in asphalt at project limits;
 - (iii) excavation;
 - (iv) compaction of existing subgrade;
 - (v) installation of subdrains;
 - (vi) installation of catch basins and sewer service pipe;
 - (vii) installation of watermain and water service insulation;
 - (viii) repairs to existing manholes;
 - (ix) placement of geotextile fabric and geogrid;
 - (x) placement of sub-base and base course material;
 - (xi) adjustment of existing pavement appurtenances;
 - (xii) construction of two hundred sixty (260) mm plain dowelled concrete pavements;
 - (xiii) construction of concrete curbs, curb ramps, medians/islands and approaches;
 - (xiv) placement of asphalt at tie-ins (fifty (50) mm to one hundred (100) mm thickness);

- (xv) removal of existing sidewalk;
- (xvi) construction of one hundred (100) mm concrete sidewalk with MMA Markings;
- (xvii) installation of detectable warning tiles;
- (xviii) removal of existing trees and stump grinding;
- (xix) completion of boulevard grading; and
- (xx) installation of topsoil and sod.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Dillon Consulting Limited, represented by:

Taran J Peters, P.Eng.
Project Manager

Telephone No. (204) 453-2301
Email Address tpeters@dillon.ca

D4.2 At the pre-construction meeting, Taran J Peters, P.Eng. will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

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

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

D6. NOTICES

D6.1 Except as provided for in C22.4, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid/Proposal.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D4.

D6.3 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

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

D7. FURNISHING OF DOCUMENTS

D7.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF format only.

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

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

D9. SAFE WORK PLAN

D9.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least 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.

D9.2 The Safe Work Plan shall be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>.

D9.3 Notwithstanding B12.4 at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good Standing. A Contractor, who fails to provide a satisfactory COR Certificate or Annual Letter of good Standing, will not be permitted to continue to perform any Work.

D10. INSURANCE

D10.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with the City 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, sudden and accidental pollution 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. Manitoba Hydro and/or BellMTS shall be shown as additional insureds, as required by Contract;
- (b) automobile liability insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The limit of liability shall not be less than two million dollars (\$2,000,000.00) 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; and
- (d) Contractors pollution liability in the amount of no less than one million dollars (\$1,000,000.00) per occurrence and two million dollars (\$2,000,000.00) in the aggregate, should the Contractor be working on the river bank or using it for their laydown area. Such policy will include clean-up costs and transported cargo as a result of pollution conditions arising from the Contractors operations and completed operations and remain in place for a minimum of twelve (12) months following Total Performance.

D10.2 Deductibles shall be borne by the Contractor.

D10.3 All policies shall be taken out with insurers licensed in the Province of Manitoba.

D10.4 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 the C4.1 for the return of the executed Contract Documents, as applicable.

D10.5 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D11. CONTRACT SECURITY

D11.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; and
- (b) a labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H2: Labour and Material Payment Bond), in an amount equal to fifty percent (50%) of the Contract Price.

D11.1.1 Where the Contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the Contract security must meet the following criteria:

- (a) the version submitted by the Contractor must have valid digital signatures and seals;
- (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company;
- (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf;
- (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees; and
- (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D11.1(b).

D11.1.2 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in its discretion, exercised reasonably, allows.

D11.1.3 Digital bonds passing the verification process will be treated as original and authentic.

D11.2 The Contractor shall provide the City Solicitor with the required performance and labour and material payment bonds within seven (7) Calendar Days of notification of the award of the Contract by way of an award letter and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract Documents, if applicable.

D11.3 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 D11.1(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.

D12. SUBCONTRACTOR LIST

D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at or prior to a pre-construction meeting, or 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 C4.1 for the return of the executed Contract Documents, if applicable.

D13. EQUIPMENT LIST

D13.1 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 or prior to a pre-construction meeting, or 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 C4.1 for the return of the executed Contract Documents, if applicable.

D14. DETAILED WORK SCHEDULE

D14.1 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 the General Conditions for the return of the executed Contract Documents, as applicable.

D14.2 The detailed Work schedule shall consist of the following:

(a) a Gantt chart for the Work based on the C.P.M. schedule.

D14.3 Further to D14.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or Specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D15. COMMENCEMENT

D15.1 The Contractor shall not commence any Work until he/she is in receipt of an award letter from the Award Authority authorizing the commencement of the Work.

D15.2 The Contractor shall not commence any Work on the Site until:

(a) the Contract Administrator has confirmed receipt and approval of:

- (i) evidence of authority to carry on business specified in D8;
- (ii) evidence of the workers compensation coverage specified in C6.15;
- (iii) the twenty-four (24) hour emergency response phone number specified in D5.2;
- (iv) the Safe Work Plan specified in D9;
- (v) evidence of the insurance specified in D10;
- (vi) the Contract security specified in D11;
- (vii) the Subcontractor list specified in D12;
- (viii) the equipment list specified in D13;
- (ix) the detailed Work schedule specified in D14; and
- (x) the direct deposit application form specified in D28.

(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.

D15.3 The Contractor shall commence the Watermain Renewal Work on the Site no later than April 18, 2022, as directed by the Contract Administrator and weather permitting.

D15.4 The Contractor shall not commence the Pavement Reconstruction Work on the Site before May 24, 2022, as directed by the Contract Administrator and weather permitting.

D15.5 The City intends to award this Contract by April 13, 2022.

D15.5.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D16. WORKING DAYS

D16.1 Further to C1.1(tt);

D16.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his/her assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he/she agrees with the Contract Administrator's determination of the Working Days assessed for the report period.

D16.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "Work" as defined in the definition of a Working Day.

D16.1.3 When the Work includes two (2) or more major types of Work that can be performed under different atmospheric conditions, the Contract Administrator shall consider all major types of Work in determining whether the Contractor was able to work in assessing Working Days.

D16.1.4 Further to D17.1, if a Contractor receives permission from the Contract Administrator for Work to be performed on Saturdays and Sundays, these days will be considered Working Days if the Contract Administrator deems that they are also required on Site.

D17. RESTRICTED WORK HOURS

D17.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission forty-eight (48) hours in advance from the Contract Administrator for any Work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.

D18. WORK BY OTHERS

D18.1 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.

D18.2 Work by others on or near the Site will include but not necessarily be limited to:

- (a) City of Winnipeg Traffic Signals – Work associated with decommissioning and/or installation of traffic signals within the Site;
- (b) City of Winnipeg Transit – The Contractor will be required to coordinate with Transit for the location of temporary stops in order to maintain service that is safe and minimize disruption during construction. Transit will remove and reinstall benches and signage after construction;
- (c) Manitoba Hydro – Manitoba Hydro will oversee excavation and backfilling near Manitoba Hydro poles as well as pole stabilizing during excavation; and
- (d) BellMTS, Shaw, Telus – Adjustment of infrastructure boxes as necessary as well as overseeing of excavation around their specific infrastructure.

D18.3 Further to D18.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others. The Contractor must include and accommodate Work by Others identified in D18.1 or additional parties, in their construction schedule as per D14 and accommodate the necessary area on Site required for the Work by Others to complete the Work.

D19. SEQUENCE OF WORK

D19.1 Further to C6.1, the sequence of Work shall be as follows:

D19.1.1 The Work shall be divided into four (4) stages. Stages are further subdivided into major items of Work.

D19.1.2 **Stage IA** – Watermain renewal in Nairn Avenue Eastbound Curb Lane from Stadacona Street to Allan Street.

(a) The construction of the watermain along the eastbound curb lane at Nairn Avenue must occur prior to starting the pavement reconstruction. Activities from Stage IB may commence prior to the completion of Stage IA upon written approval from the Contract Administrator.

D19.1.3 **Stage IB** – Pavement reconstruction in Nairn Avenue Eastbound lanes from Stadacona Street to Watt Street.

D19.1.4 **Stage II** – Pavement reconstruction in Nairn Avenue Westbound lanes from Stadacona Street to Watt Street.

D19.1.5 **Stage III** – Pavement reconstruction in Nairn Avenue Westbound median lane near Watt Street. Mill and fill at the intersection of Nairn Avenue and Stadacona Street.

D19.1.6 All asphaltic concrete Work shall be performed using a lane-at-a-time method (see E8 for minimum requirements of traffic lanes to be left open at various times).

D19.1.7 At the end of any day, there shall be no drop-off along any longitudinal joint, excepting the longitudinal joint between the gutter and approaches.

D19.1.8 Placing the topsoil and finished grading of all boulevard and median areas shall be completed prior to commencing construction of the asphaltic concrete overlay, including the scratch course.

D19.1.9 Immediately following the completion of the asphaltic concrete Works of each stage, the Contractor shall clean up the Site and remove all plant, surplus material, waste and debris, other than that left by the City or other Contractors in that stage and relocate to the next stage or after Stage III remove items from the Site.

D20. SUBSTANTIAL PERFORMANCE

D20.1 The Contractor shall achieve Substantial Performance within one hundred five (105) consecutive Working Days of the commencement of the Work as specified in D15.

D20.2 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 re-inspected.

D20.3 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.

D21. TOTAL PERFORMANCE

- D21.1 The Contractor shall achieve Total Performance within one hundred ten (110) consecutive Working Days of the commencement of the Work as specified in D15.
- D21.2 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 re-inspected.
- D21.3 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.

D22. LIQUIDATED DAMAGES

- D22.1 If the Contractor fails to achieve Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Substantial Performance – three thousand five hundred dollars (\$3,500); and
 - (b) Total Performance – one thousand five hundred dollars (\$1,500).
- D22.2 The amounts specified for liquidated damages in D22.1 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.
- D22.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D23. COVID-19 SCHEDULE DELAYS

- D23.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Contract Administrator.
- D23.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D23.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. The Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or Work by others.
- D23.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D23.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D23.5 The Work schedule, including the durations identified in D17 to D21 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.

D23.6 Where Work not previously identified is being carried over solely as a result of delays related to COVID-19, as confirmed by the Contract Administrator, the cost of temporary works to maintain the Work in a safe manner until Work recommences, will be considered by the Contract Administrator. Where the Work is carried over only partially due to COVID-19, a partial consideration of the cost of temporary works will be considered by the Contract Administrator.

D23.7 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

D24. SCHEDULED MAINTENANCE

D24.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:

- (a) reflective crack maintenance as specified in CW 3250-R7; and
- (b) sodding (maintenance period) as specified in CW 3510-R9;

D24.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D25. JOB MEETINGS

D25.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one (1) representative of the Contract Administrator, one (1) representative of the City and one (1) 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.

D25.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D26. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D26.1 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).

D27. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D27.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

MEASUREMENT AND PAYMENT

D28. PAYMENT

D28.1 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

D29. WARRANTY

- D29.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D29.2 Notwithstanding C13.2 or D29.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D29.2.1 In such case the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

D30. DISPUTE RESOLUTION

- D30.1 The entire text of C21.4 is deleted, and amended to read: "Intentionally Deleted".
- D30.2 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 his written Appeal Form, in the manner and format set out on the City's Materials Management 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 his Appeal Form.
- D30.3 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; and
 - (iii) Department Head.
- D30.3.1 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 pre-commencement or kick off meeting.
- D30.3.2 As these negotiations are not an adjudicative hearing, neither party may have legal counsel present during the negotiations.

- D30.3.3 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.
- D30.3.4 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 D30.3.3, 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.

THIRD PARTY AGREEMENTS

D31. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D31.1 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.
- D31.2 Further to D31.1, in the event that the obligations in D31 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.
- D31.3 For the purposes of D31:
- (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.
- D31.4 Modified Insurance Requirements
- D31.4.1 If not already required under the insurance requirements identified in D10, the Contractor will be required to provide wrap-up liability insurance in an amount of no less than two million dollars (\$2,000,000.00) inclusive per occurrence. Such policy will be written in the joint names of the City, Contractor, Consultants and all sub-contractors and sub-consultants and include twelve (12) months completed operations. The Government of Manitoba and its Ministers, officers, employees, and agents shall be added as additional insureds.
- D31.4.2 If not already required under the insurance requirements identified in D10, 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.
- D31.4.3 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.
- D31.4.4 Further to D10.4, 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.
- D31.4.5 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D31.5 Indemnification By Contractor

- D31.5.1 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.
- D31.6 Records Retention and Audits
- D31.6.1 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.
- D31.6.2 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 D31.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- D31.7 Other Obligations
- D31.7.1 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.
- D31.7.2 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.
- D31.7.3 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.
- D31.7.4 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.
- D31.7.5 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.
- D31.7.6 The Contractor represents and warrants that no member of the House of Commons or of the Senate of Canada or of the Legislative Assembly of Manitoba is a shareholder, director

or officer of the Contractor or of a Subcontractor, and that no such member is entitled to any benefits arising from this Contract or from a Contract with the Contractor or a Subcontractor concerning the Work.

FORM H1: PERFORMANCE BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

TENDER NO. 866-2021

2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal which is by reference made part hereof and is hereinafter referred to as the "Contract".

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

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

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

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

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

_____ day of _____, 20_____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

FORM H2: LABOUR AND MATERIAL PAYMENT BOND
(See D11)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

TENDER NO. 866-2021

2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal

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

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

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

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

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

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

_____ day of _____, 20_____.

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

FORM J: SUBCONTRACTOR LIST
(See D12)

2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal

<u>Portion of the Work</u>	<u>Name</u>	<u>Address</u>
SUPPLY OF MATERIALS (SURFACE WORKS):		
Concrete		
Asphalt		
Base Course and Sub-Base		
Separation/Filtration Geotextile Fabric		
Geogrid		
Sod		
INSTALLATION/PLACEMENT:		
Concrete		
Asphalt		
Base Course and Sub-Base		
Separation/Filtration Geotextile Fabric		
Geogrid		
Sod		
SUPPLY OF MATERIALS (UNDERGROUND WORKS):		
Watermain Pipe		
Valves		
Hydrants		
Catch basins/Manholes		
Connection Pipe		
Sub drains		
INSTALLATION/PLACEMENT:		
Watermain Pipe		
Valves		
Hydrants		
Catch basins/Manholes		
Connection Pipe		
Sub drains		
OTHER:		

FORM K: EQUIPMENT
(See D13)

2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal

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

FORM K: EQUIPMENT
(See D13)

2021 Regional Street Program – Nairn Avenue Reconstruction and Watermain Renewal

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

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6. 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 B6.
- E1.4 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>	<u>Drawing (Original) Sheet Size</u>
	Cover Sheet	A1
P-3556-01	NAIRN AVE – CONTROL LINE GEOMETRY AND JOINT LAYOUT (1 OF 2)	A1
P-3556-02	NAIRN AVE – CONTROL LINE GEOMETRY AND JOINT LAYOUT (2 OF 2)	A1
P-3556-03	NAIRN AVE – PLAN-PROFILE (START TO STA. 1+130)	A1
P-3556-04	NAIRN AVE – PLAN-PROFILE (STA. 1+130 TO 1+290)	A1
P-3556-05	NAIRN AVE – PLAN-PROFILE (STA. 1+290 TO 1+450)	A1
P-3556-06	NAIRN AVE – PLAN-PROFILE (STA. 1+450 TO END)	A1
P-3556-07	STADACONA ST – PLAN-PROFILE (SOUTHBOUND)	A1
P-3556-08	STADACONA ST – PLAN-PROFILE (NORTHBOUND)	A1
P-3556-09	MISC. PLAN-PROFILES	A1
P-3556-10	NAIRN AVE – SECTIONS	A1
P-3556-11	NAIRN AVE – TRAFFIC STAGING – STAGE 1 (1 OF 3)	A1
P-3556-12	NAIRN AVE – TRAFFIC STAGING – STAGE 1 (2 OF 3)	A1
P-3556-13	NAIRN AVE – TRAFFIC STAGING – STAGE 1 (3 OF 3)	A1
P-3556-14	NAIRN AVE – TRAFFIC STAGING – STAGE 2 (1 OF 2)	A1
P-3556-15	NAIRN AVE – TRAFFIC STAGING – STAGE 2 (2 OF 2)	A1
P-3556-16	NAIRN AVE – TRAFFIC STAGING – STAGE 3 (1 OF 2)	A1
P-3556-17	NAIRN AVE – TRAFFIC STAGING – STAGE 3 (2 OF 2)	A1
P-3556-18	STADACONA ST – WATERMAIN RENEWAL	A1
P-3556-19	NAIRN AVE – WATERMAIN RENEWAL (START TO STA. 1+110)	A1
P-3556-20	NAIRN AVE – WATERMAIN RENEWAL (STA. 1+110 TO 1+235)	A1
P-3556-21	NAIRN AVE – WATERMAIN RENEWAL (STA. 1+235 TO END)	A1

E2. REQUIREMENTS FOR SITE ACCESSIBILITY PLAN

- E2.1 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.

- E2.2 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 (1) crossing in each direction for each intersection (one (1) north/south crosswalk and one (1) east/west crosswalk);
 - (b) how the Contractor will maintain access to bus stops within the Site;
 - (c) how the Contractor will maintain access to residents and businesses unless otherwise noted in the Contract; and
 - (d) any required detour signage at adjacent crossings to facilitate sidewalk or active transportation pathway closures.
- E2.3 The Accessibility Plan may also include figures, sketches or Drawings to demonstrate the proposed plan.
- E2.4 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; and
 - (d) Detour Signage.
- E2.5 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.
- E2.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.
- E2.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.
- E2.8 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; and
 - (c) Third and subsequent Offences – A pay reduction will be issued in the amount of two hundred fifty dollars (\$250.00) per instance and per day.

E3. MOBILIZATION AND DEMOBILIZATION PAYMENT

DESCRIPTION

- E3.1 This Specification shall cover all operations relating to the mobilization and demobilization of the Contractor to the project location(s).
- E3.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things

necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

- E3.3 The inclusion of a payment item for the Work under this Specification shall not release or reduce the responsibilities of the Contractor under any other Specification in this Contract.

SCOPE OF WORK

- E3.4 Further to C12 of the General Conditions, where Mobilization and Demobilization is included as a Bid item, it shall consist of the following, as applicable:

- (a) Mobilization shall include, but not be limited to:
- (i) all activities and associated costs for transportation of the Contractor's personnel, equipment and operating supplies to the Site, and/or Sites, and/or between Sites;
 - (ii) establishment of offices, buildings, other necessary general facilities and equipment parking/staging areas for the Contractor's operations at the Site or Sites;
 - (iii) premiums paid for performance and payment bonds including coinsurance and reinsurance agreements as applicable;
 - (iv) general cleanup and housekeeping needed maintain a neat and orderly project Site and/or Sites; and
 - (v) other job related items.
- (b) Demobilization shall include, but not be limited to:
- (i) all activities and costs for transportation of personnel, equipment and supplies not used in the project from the Site, and/or Sites, and/or between Sites;
 - (ii) disassembly, removal and Site cleanup and restoration of offices, buildings and other facilities assembled on the Site and/or Sites;
 - (iii) repair of access roads, temporary haul roads, and equipment parking areas leaving the project Site in the same or better condition than at the start of the project; and
 - (iv) general cleanup and housekeeping needed to restore a neat and orderly project Site.

- E3.5 Access to the Site, equipment parking and staging areas are limited to that shown on the Drawings or as approved by the Contract Administrator.

MEASUREMENT AND PAYMENT

- E3.6 The lump-sum price for the Mobilization and Demobilization Bid item shall not exceed five percent (5.00%) of the total Bid price for the Contract.

- E3.6.1 Further to B9, B17, C12 and E3.6, should the lump sum price exceed five percent (5%) of the Total Bid Price the lump sum price will be reduced to five percent (5%) of the Total Bid Price, the Total Bid Price will be determined using the reduced lump sum price and payment will be based on the reduced lump sum price.

- E3.7 Payment for Mobilization:

- (a) Sixty percent (60%) of the lump-sum price will be paid to the Contractor for Mobilization on the first Progress Estimate for the Contract.

- E3.8 Payment for Demobilization:

- (a) The remaining forty percent (40%) of the lump-sum price will be paid upon:
- (i) restoration of the Site and/or Sites to the satisfaction of the Contract Administrator; and
 - (ii) distribution of the Declaration of Total Performance.

- E3.9 Mobilization and Demobilization will be paid only once (to a maximum of one hundred percent (100%)), regardless of the number of times the Contractor mobilizes to the Site and/or Sites.

E4. GEOTECHNICAL REPORT

E4.1 Further to C3.1, the geotechnical report is provided to aid the Contractor's evaluation of the pavement structure and/or existing soil conditions. The geotechnical report is contained in Appendix 'A'.

E5. OFFICE FACILITIES

E5.1 The Contractor shall supply office facilities meeting the following requirements:

- (a) the field office shall be for the exclusive use of the Contract Administrator;
- (b) the building shall be conveniently located near the Site of the Work;
- (c) the building shall have a minimum floor area of twenty-five (25) square metres, a height of 2.4 metres with two (2) windows for cross ventilation and a door entrance with a suitable lock;
- (d) the building shall be suitable for all weather use. It shall be equipped with an electric heater and air conditioner so that the room temperature can be maintained between either sixteen (16) to eighteen (18) degrees Celsius or twenty-four (24) to twenty-five (25) degrees Celsius;
- (e) the building shall be adequately lighted with fluorescent fixtures and have a minimum of three (3) wall outlets;
- (f) the building shall be furnished with one (1) desk, one (1) drafting table, table three (3) metres by 1.2 metres, one (1) stool, one (1) four (4) drawer legal size filing cabinet and a minimum of twelve (12) chairs;
- (g) a portable toilet shall be located near the field office building. The toilet shall have a locking door and be for the exclusive use of the Contract Administrator and other personnel from the City; and
- (h) the field office building and the portable toilet shall be cleaned on a weekly basis immediately prior to each Site meeting. The Contract Administrator may request additional cleaning when he/she deems it necessary.

E5.2 The Contractor shall be responsible for all installation and removal costs, all operating costs and the general maintenance of the office facilities.

E5.3 The office facilities will be provided from the date of the commencement of the Work to the date of Total Performance.

E5.4 On a one (1) time basis, where directed by the Contract Administrator, the Contractor shall relocate the office facilities to a location more convenient for the remaining Work.

E6. PROTECTION OF EXISTING TREES

E6.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing boulevard trees within the limits of the construction area:

- (a) the Contractor shall not stockpile materials and soil or park vehicles and equipment on boulevards within two (2) metres of trees;
- (b) trees identified to be at risk by the Contract Administrator are to be strapped with twenty-five (25) by one hundred (100) by two thousand four hundred (2,400) mm wood planks, or suitably protected as approved by the Contract Administrator;
- (c) excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation;

- (d) operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located; and
- (e) Work on Site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.

E6.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

E6.3 No separate measurement or payment will be made for the protection of trees.

E6.4 Except as required in clause E6.1(c) and E6.1(e), Elm trees shall not be pruned at any time between April 1 and July 31.

E7. TRAFFIC CONTROL

E7.1 Further to clauses 3.6, 3.7 and 3.8 of CW 1130:

- (a) where directed by the Contract Administrator, the Contractor shall construct and maintain temporary asphalt ramps to alleviate vertical pavement obstructions such as manholes and planing drop-offs to the satisfaction of the Contract Administrator. Payment shall be in accordance with CW3410;
- (b) in accordance with the Manual of Temporary Traffic Control on City Streets (MTTC), the Contractor ("Construction Agency" in the manual) shall be responsible for supplying, placing, maintaining and removing the appropriate temporary traffic control devices as specified by the MTTC, the Contract Drawings, Staging Plans and Traffic Management Plans or by the Traffic Management Branch of the City of Winnipeg Public Works Department. The Contractor shall bear all costs associated with the supply, placement and maintenance of temporary traffic control devices by their own forces or Subcontractor;
- (c) in addition, the Contractor shall be responsible for removing, placing and maintaining all regulatory signing including but not limited to:
 - (i) parking restrictions;
 - (ii) stopping restrictions;
 - (iii) turn restrictions;
 - (iv) diamond lane removal;
 - (v) full or directional closures on a Regional Street;
 - (vi) traffic routed across a median; and
 - (vii) full or directional closure of a non-regional street where there is a requirement for regulatory signs (turn restrictions, bus top relocations, etc.) to implement the closure.
- (d) the Contractor shall remove and stockpile any regulatory signage not required during construction such as, but not limited to, parking restrictions, turn restrictions and loading restrictions.

E7.2 Further to E7.1(c) the Contractor shall make arrangement with the Traffic Services Branch of the City of Winnipeg to supply regulatory signs as required.

E7.3 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the Site has been maintained.

E7.4 Further to E7.1(c) and E7.1(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.

E7.5 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.

E7.6 If the Contract Administrator determines that the Contractor is not performing Traffic Control in accordance with this Specification, Traffic Services may be engaged to perform the Traffic Control and the Contractor shall bear the costs associated by Traffic Services Branch of the City of Winnipeg in connection with the Works undertaken by the Contractor.

E8. TRAFFIC MANAGEMENT

E8.1 Further to clause 3.7 of CW 1130:

- (a) the Contractor shall supply and install temporary bus stop loading platforms at all existing Transit stop locations as shown in the 2021 Manual of Temporary Traffic Control on City Streets. This Work will not be paid and shall be incidental to the Project Work;
- (b) the advanced warning signs shall be provided by the City. The Contractor shall supply the framing and be responsible for collecting, installation and removal of the advanced warning signs. The Contractor shall cover up the advanced warning signs when necessary during the Project. This Work will not be paid and shall be incidental to the Project Work;
- (c) the Contractor shall refer to the Traffic Staging Drawings P-3556-11 to P-3556-17 for traffic management details for each stage; and
- (d) any proposed modifications to the construction staging and/or traffic management plans outlined in the Contract Documents must be approved by the Contract Administrator.

E9. REFUSE AND RECYCLING COLLECTION

E9.1 While access to refuse and/or recycling collection vehicles is restricted, on collection day(s) the Contractor shall move all of the affected property owners refuse and/or recycling materials to a nearby common area, prior to an established time, in accordance with E9.2 to permit the normal collection vehicles to collect the materials. Immediately following recycling collection the Contractor shall return recycling receptacles to the addresses marked on the receptacles.

E9.2 Collection Schedule:

Nairn Avenue from Stadacona Street and Watt Street.

Collection Day(s): **Friday**

Collection Time: **0700.**

Common Collection Area: **For on street pickup, Contractor is to relocate bins to common collection point and return back to the property as required.**

E9.3 No measurement or payment will be made for the Work associated with this Specification.

E10. PEDESTRIAN SAFETY

E10.1 During the project, a temporary snow fence shall be installed where hazards exist adjacent to pedestrian facilities, such as open excavations. The Contractor shall be responsible for maintaining the snow fence in a proper working condition. No measurement for payment shall be made for this Work.

E11. WATER OBTAINED FROM THE CITY

E11.1 Further to clause 3.7 of CW 1120, the Contractor shall pay for all costs, including sewer charges, associated with obtaining water from the City in accordance with the Waterworks and Sewer By-laws.

E12. SURFACE RESTORATIONS

E12.1 Further to clause 3.3 of CW 1130, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E13. INFRASTRUCTURE SIGNS

E13.1 The Contractor shall obtain infrastructure signs from the Traffic Services Sign Shop at 421 Osborne Street. The Contractor shall mount each sign securely to a rigid backing material approved by the Contract Administrator. The Contractor shall fasten each sign to a suitable support and erect and maintain one (1) sign at each street as directed by the Contract Administrator. When the Contract Administrator considers the Work on the street complete, the Contractor shall remove and dispose of the signs and supports. No measurement for payment will be made for performing all operations herein described and all other items incidental to the Work described.

E14. SUPPLY AND INSTALL WATERMAIN AND WATER SERVICE INSULATION

DESCRIPTION

E14.1 Notwithstanding 3.12 of CW 2110, this Specification covers the supply and installation of insulation in roadway excavations over watermains and water services and the supply and installation of insulation around catch basins for watermains and water services within two (2) metres.

E14.2 Referenced Standard Construction Specifications:

- (a) CW 2030 – Excavation Bedding and Backfill; and
- (b) CW 3110 – Sub-grade, Sub-base and Base Course Construction.

E14.3 Referenced Standard Details:

- (a) SD-018 – Watermain and Water Service Insulation.

MATERIALS

E14.4 Acceptable insulation is:

- (a) Extruded Polystyrene rigid foam insulation – Type 4, 101.6 mm (four (4) inches) in thickness.
 - DOW – Roofmate or Highload 40
 - Owen’s Corning – Foamular 350 or Foamular 400.
- 50.8 mm (two (2) inches) by 1,219.2 mm (forty-eight (48) inches) by 2,438.4 mm (ninety-six (96) inches), 50.8 mm (two (2) inches) by 609.6 mm (twenty-four (24) inches) by 2,438.4 mm (ninety-six (96) inches), 101.6 mm (four (4) inches) by 609.6 mm (twenty-four (24) inches) by 2,438.4 mm (ninety-six (96) inches).

E14.5 Sand Bedding:

- (a) In accordance with CW 2030.

CONSTRUCTION METHODS

- E14.6 Prior to the installation of any sub-base material or geotextile material, locate all existing water services. Further to SD-018, where directed by the Contract Administrator, excavate the sub-grade to allow the top of the insulation to be installed flush with the surrounding sub-grade. Install the insulation on a level surface centered over the located watermain or water service for the full width of the roadway excavation. Install sand bedding if required to level the surface. Stockpile and dispose of excavated material in accordance with CW 3110. In addition, should a water service be within two (2) metres of a catch basin, insulation shall be placed between the catch basin and the water service, horizontally or vertically, as directed by the Contract Administrator.
- E14.7 Thickness of insulation is one hundred (100) mm (four (4) inches). If using fifty (50) mm (two (2) inches) panels two (2) layers are required. Total width of insulation to be as directed by the Contract Administrator. Place sufficient full width panels to meet or exceed the specified width.
- E14.8 Place insulation panels adjacent to each other over the specified area with no gaps between panels and less than fifteen (15) mm of elevation difference along the adjoined edges. Where fifty (50) mm (two (2) inches) thick panels are being used, offset the top layer to prevent the panel joints from aligning with the joints in the lower layer.
- E14.9 Use full panels of insulation where possible. Where necessary cut insulation panels to obtain coverage to specified lengths. Insulation pieces shall be a minimum of dimension of three hundred (300) mm in width or length.
- E14.10 Take appropriate measures to ensure panels are not displaced when installing geotextiles and during backfilling operations.

MEASUREMENT AND PAYMENT

- E14.11 Watermain and water service insulation will be measured on an area basis and paid for at the Contract Unit Price per square metre of "Watermain and Water Service Insulation". Area to be paid for will be the total square metres of watermain and water service insulation supplied and installed in accordance with this Specification, accepted and measured by the Contract Administrator.
- E14.12 Excavation of the roadway subgrade in accordance with E14.6 will not be measured for payment and will be included in the payment for "Watermain and Water Service Insulation".

E15. WATERMAIN WORKS – CONNECTING TO EXISTING WATER SERVICES

- E15.1 This Specification shall amend clause 4.22 of CW 2110.
- E15.2 Connecting to existing lead water services will be measured and paid for in accordance with Clause 4.13 of CW 2110, "Connecting Existing Copper Water Services to New Watermain" for each connection made, regardless of the material of the existing water service being connected to. Connecting to existing lead water services will not be included in the installation of a curb stop.

E16. WORKING AROUND MANITOBA HYDRO POLES

DESCRIPTION

- E16.1 When excavating for the road within three (3.0) metres of a Manitoba Hydro wood pole, a Safety Watch will be required. The Contractor shall provide a digger truck capable of holding the pole in place while excavation and granular subbase backfill is completed back to original grade.
- the digger truck to be provided by the Contractor shall be to the satisfaction of the Contract Administrator and Manitoba Hydro Safety Watch personnel; and
 - see Appendix 'B' for allowable excavations around existing poles.

CONSTRUCTION METHOD

- E16.2 The pole rigging sling to be provided by the Contractor shall be to the satisfaction of the Contract Administrator and Manitoba Hydro Safety Watch personnel.
- E16.3 The sling is to be wrapped around the pole and connected it to the winch line of the digger truck. The sling is to be situated just above the halfway mark of the pole between ground level and the top of the pole. The reason for this is to allow the operator to have control of the pole in the event that the pole breaks (due to rot or cracks).
- E16.4 Manitoba Hydro Safety Watch personnel will assist the Contractor in attaching and detaching the pole sling.

MEASUREMENT AND PAYMENT

- E16.5 The Work described in this Specification will be considered incidental to "Excavation" and no measurement or payment will be made.

E17. TREE AND STUMP REMOVAL

DESCRIPTION

- E17.1 This Specification shall amend the City of Winnipeg Standard Construction Specification CW 3010 "Clearing and Grubbing", and shall cover the removal of trees as specified on the Contract Drawings. The City of Winnipeg, Forestry Branch must be contacted prior to removing any trees.

MATERIALS

- E17.2 General
- (a) The grinding of stumps specified by the Contract Administrator shall be done with the use of a mechanical stump grinder.

CONSTRUCTION METHODS

- E17.3 Remove only trees marked and confirmed for removal in the field by the Contract Administrator.
- E17.4 Remove trees in accordance with CW 3010.
- E17.5 The Contractor shall arrange for any Elmwood to be disposed of by the City of Winnipeg.
- E17.6 Stump Removal:
- (a) stumps will be ground a minimum depth of three hundred (300) mm from top of finished median and the material removed from the specified areas as marked and confirmed by the Contract Administrator;
- (b) the Contractor shall take all precautions to prevent damage to traffic, structures, pole lines, adjacent properties and to trees and shrubs designated to be saved; and
- (c) remove and dispose of material as per CW 3010 Clause 9.

MEASUREMENT AND PAYMENT

- E17.7 Removal of trees and stumps will be measured on a unit basis and paid for at the Contract Unit Price per unit item of "Tree Removal". The number to be paid for will be the total number of trees removed and stumps ground in accordance with this Specification and accepted by the Contract Administrator.

E18. WORKING NEAR WATERWAYS

DESCRIPTION

- E18.1 The Contractor shall comply with all rules and regulations stated in the City of Winnipeg Planning, Property and Development Waterway Permit to be provided in advance of construction.
- E18.2 The City will provide the Contractor with the Waterway Permit prior to construction on the Site.
- E18.3 The Work on Nairn Avenue is adjacent to the Red River and must not impact the stability of the riverbank.

CONSTRUCTION METHODS

- E18.4 Due to the susceptibility to movement, the following conditions must be met for the project duration within the identified Nairn Avenue riverbank area:
- (a) no material shall be stockpiled between the curb and the riverbank;
 - (b) no equipment shall be parked between the curb and the riverbank;
 - (c) equipment used for excavation shall work from the roadway only; and
 - (d) no heavy equipment permitted for subgrade compaction, spreading and placement of granular and compaction of granular. A skid-steer would be acceptable to use.

MEASUREMENT AND PAYMENT

- E18.5 No measurement or payments shall be made for working on/around the riverbank.

E19. SUPPLY AND INSTALLATION OF MMA MARKINGS

DESCRIPTION

- E19.1 This Specification covers the supply and installation of Methyl Methacrylate Area (MMA) Marking with Anti-Skid in concrete sidewalk for Nairn Avenue from Stadacona Street to Watt Street.

GENERAL

- E19.2 Drawings and Manuals:
- (a) Drawings: P-3521-04 to P-3521-10; and
 - (b) Attached Manual: Appendix 'B' – Applicable Instructions – MMAX Corundum Area Markings.
- E19.3 Material:
- (a) CycleGrip® MMAX kit – includes CycleGrip® MMAX Resin (black), CycleGrip® MMAX Aggregate and Catalyst.
- E19.4 Source:
- (a) ENNIS-FLINT
Available from:
ENNIS-FLINT
Attention: Deryk Upton
Ph: 604-315-8765
Email: dupton@ennisflint.com
Web: www.ennisflint.com

CONSTRUCTION METHOD

- E19.5 Where the MMA Markings is to be placed, the surface of the concrete sidewalk must be texture grooved to a width of 0.3 metres and a depth of 1.25 mm (min) to 2.5 mm (max). Note: The use

of grooving equipment with gang stacked diamond cutting blades is required for texturing concrete sidewalk surfaces.

- E19.6 Prepare the concrete sidewalk surface in accordance with Manufacturer's application instructions and MMA Area Markings Specification (see Appendix 'C').

MEASUREMENT AND PAYMENT

- E19.7 Supply and installation of MMA marking with anti-skid will be measured on a length basis and paid for at the Contract Unit Price per metre for "Supply and Installation of MMA Marking with Anti-Skid". The length to be paid for will be the total number of metres of MMA marking with anti-skid supplied and installed in accordance with this Specification, accepted and measured by the Contract Administrator.
- E19.8 Grooving and preparation of concrete sidewalk for MMA marking with anti-skid shall be included in the cost for "Supply and Installation of MMA Marking with Anti-Skid" and no separate measurement and payment will be made.

E20. DOWELS AND TIE BARS

- E20.1 Further to Section 9.2.3 of CW 3310, no measurement of payment will be made for dowels or tie bars that are drilled along a joint between new sections of concrete constructed as part of this Contract. Dowels or tie bars that are drilled into new concrete pavement will be considered incidental to the construction of the concrete pavement.

E21. TEMPORARY REMOVAL AND REINSTALL OF EXISTING FENCING

DESCRIPTION

- E21.1 General:
- (a) this Specification covers the reinstall of any fencing that had to be temporarily removed for construction activities, as directed by the Contract Administrator; and
 - (b) the Work done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

CONSTRUCTION METHODS

- E21.2 Fencing is to be reinstalled using the same materials as the existing fencing.
- E21.3 Temporary Removal and Reinstall of Existing Fencing:
- (a) the Contractor shall temporarily remove and reinstall fencing in the event the existing fencing is obstructing construction activities. This includes any gates, posts, concrete post foundations associated with fencing. All concrete rubble shall be removed by the Contractor;
 - (b) the existing fence is to be carefully removed and stored for reinstallation; and
 - (c) where the existing fence cannot be salvaged or is damaged, it is the responsibility of the Contractor to supply new fencing that matches the existing fencing size and shape.

MEASUREMENT AND PAYMENT

- E21.4 Temporary Removal and Reinstall of Existing Fencing:
- (a) the temporary removal and reinstall of existing fencing will be measured on a per linear basis and paid for at the Contract Unit Price per metre for "Temporary Removal and Reinstall of Existing Fencing". The length to be paid for will be the total number of metres of fencing removed and reinstalled in accordance with this Specification, accepted and measured by the Contract Administrator;

- (b) the supply and reinstallation of new fencing shall be considered incidental to "Temporary Removal and Reinstall of Existing Fencing" and no separate measurement or payment will be made; and
- (c) backfilling post holes, disposing of unsalvageable or damaged fencing materials, concrete post foundations and concrete rubble shall be considered incidental to "Temporary Removal and Reinstall of Existing Fencing" and no separate measurement or payment will be made.

E22. RAKED ASPHALT MEDIAN

DESCRIPTION

E22.1 General

- (a) This Specification covers the supply and installation of raked asphalt in medians along Stadacona Street between Nairn Avenue and William Newton Avenue.

E22.2 Referenced Standard Construction

- (a) CW3110 – Sub-Grade, Sub-Base, Base Course Construction; and
- (b) CW3410 – Asphaltic Concrete Pavement Works.

MATERIALS

E22.3 Storage and Handling

- (a) Store and handle material in accordance with Section 5.2 of CW 3410.

E22.4 Supply of Asphalt Concrete Paving Mix

- (a) Asphalt material will be Type 1A supplied in accordance with Section 7 of CW 3410.

CONSTRUCTION METHODS

E22.5 General

- (a) supply and install raked asphalt in the median of Stadacona Street where noted on Drawings and as directed by the Contract Administrator;
- (b) plane the existing asphalt to the surface of the underlying concrete; and
- (c) the asphalt shall be hand placed and raked to the dimensions on the Drawings. The asphalt shall not be compacted and is to be left to cool as placed.

MEASUREMENT AND PAYMENT

- E22.6 Measurement and payment for Raked Asphalt Median will be measured on an area basis and paid for at the Contract Unit Price per square metre for "Raked Asphalt Median". The area to be paid for shall be the total number of square metres of Raked Asphalt Median supplied and place in accordance with this Specification, accepted and measured by the Contract Administrator.

- E22.7 Planing of existing asphalt shall be measured and paid for in accordance with CW-3450.

E23. REPAIR MANHOLE BENCHING

DESCRIPTION

E23.1 General

- E23.2 This Specification covers the repair of benching in existing manholes.

CONSTRUCTION METHODS

- E23.3 Repair Manhole Benching.

- E23.4 The Contractor shall remove and dispose of existing loose or crumbling benching mortar to the satisfaction of the Contract Administrator.
- E23.5 The Contractor shall bench and channel the manhole floor with mortar or concrete in accordance with CW 2130, SD-010 and SD-011. Flow channels shall curve smoothly and provide a smooth transition between inlet and outlet pipes.

MEASUREMENT AND PAYMENT

- E23.6 Repair of manhole benching will be measured on a unit basis and paid for at the Contract Unit Price for "Repair Benching". The number to be paid for shall be the total number of manholes that have been repaired in accordance with this Specification, accepted and measured by the Contract Administrator.

E24. MANHOLE STABILIZATION

DESCRIPTION

- E24.1 General
- (a) Manhole stabilization shall mean the internal repair of manholes by man entry techniques. Repairs are varied and may consist of manhole base or riser repairs. Manhole stabilization repairs shall be carried out at the locations noted in the Drawings.

MATERIALS

- E24.2 Concrete
- (a) concrete for large internal repairs to manholes shall be in conformance with Table CW 2160.1, Type B;
- (b) patching and grouting of repairs to manholes shall be with a fast hardening high strength concrete repairing compound designed for underwater use:
- (i) Approved products: Duro-Crete by C C Chemicals or approved equal in accordance with B7.
- (c) flowable cement-stabilized fill for external void filling from the ground surface shall be in conformance with Table CW 2160.1, Type D.

CONSTRUCTION METHODS

- E24.3 Equipment Set Up
- (a) the Contractor shall set up the required safety equipment and controls to safely perform the Work;
- (b) specialized equipment to perform the repair Work, such as lights, pressure washers, drills and chipping hammers shall in no way adversely affect the operation of the safety equipment required to perform the Work; and
- (c) subsequent to completion of the repairs the Contractor shall remove all equipment from manholes.
- E24.4 Manhole Repairs and Modifications
- (a) Complete manhole repairs and modifications identified on the Drawings in accordance with CW 2130.

MEASUREMENT AND PAYMENT

- E24.5 Patching the interior of existing manholes will be measured for payment on a vertical metre basis and paid for at the Contract Unit Price for "Patching Existing Manholes". Payment for each vertical metre shall include grouting the full diameter of the manhole base or risers to the limits described in the Contract Documents. Length to be paid for will be the total number of vertical

metres patched in accordance with this Specification, accepted and measured by the Contract Administrator.

E25. CONCRETE CONSTITUENT MATERIALS, MIX DESIGN REQUIREMENTS AND HOT AND COLD WEATHER CONCRETING

E25.1 See Appendix 'D' containing the Specification that shall apply to the Work.

E26. TRAFFIC SIGNALS MATERIALS

E26.1 In addition to CW 3620 3.11.12, Joining of Conduit will not be allowed except:

(a) Where joining of conduit is required for Convenience of Road Construction Sequencing with a maximum of one (1) joint per conduit.

E26.2 In place of CW 3620 3.11.13, Joining of Conduit shall use an approved oversize coupler to connect nominal size 38.1 mm (1.5 inch) or 50.8 mm (two (2) inch) LDPE pipe, IPEX Series 75, installation to follow manufacture's recommendations.

(a) Approved Products:

- (i) Plasson Universal Slip Repair Coupler 60-64, Product Code: 176100060064 for use with nominal 50.8 mm (two (2) inch) LDPE; and
- (ii) Plasson Universal Slip Repair Coupler 48-51, Product Code: 176100048051 for use with nominal 38.1 mm (1.5 inch) LDPE.

(b) Substitutes will not be allowed except:

- (i) Where application has been made to and approval has been provided by Traffic Signals. The Contractor shall provide sufficient information and details to enable the Traffic Signals to determine acceptability.

E26.3 As per CW 3620 4.11.5, no measurement or payment shall be made for Joining of Conduit.

E26.4 Removal of CW 3620 2.10.1 (b) Conduit coupling pipe and gear clamps.

E27. SERVICE BOX PRE-CAST

DESCRIPTION

E27.1 This Specification covers the use and installation of a service box pre-cast 431.8 mm (seventeen (17) inches) by seven hundred sixty-two (762) mm (thirty (30) inches) by 457.2 mm (eighteen (18) inches) and 330.2 mm (thirteen (13) inches) by 609.6 mm (twenty-four (24) inches) by 457.2 mm (eighteen (18) inches).

MATERIALS

E27.2 Materials shall be as per Section 2 of CW 3620.

CONSTRUCTION METHODS

E27.3 Install Pre-Cast Service Box in grass boulevards/medians, and hard surfaced medians or as shown on the Drawings or as directed by the Contract Administrator.

E27.4 Fill bottom of excavation with compacted limestone base course material to set precast service box to grade.

E27.5 Install Pre-Cast Service Box on top of the compacted granular fill material to pavement, sidewalk or boulevard finish grade.

E27.6 All conduits must be bundled into a group in the centre of the Pre-Cast Service Box. Install plastic plugs prior to back fill.

E27.7 Backfill around Pre-Cast Service Box exterior. Back fill shall conform to requirements of SD-342.

E27.8 Pre-Cast Service box shall meet the grade of the sidewalk or boulevard given provided by Contract Administrator.

MEASUREMENT AND PAYMENT

E27.9 Installation of Service Boxes shall be measured on a unit basis and paid for at the Contract Unit Price per unit for "Items of Work" listed below. The number of units to be paid for shall be the total number of Service Boxes installed in accordance with this Specification, accepted and measured by the Contract Administrator.

(a) Service Box Pre-Cast.

E28. INSTALLATION OF EARLY OPEN CONCRETE BASES

DESCRIPTION

E28.1 This Specification shall cover the installation of Early Open Concrete Bases.

MATERIALS

E28.2 Supply concrete for bases in accordance with CW 2160, Table CW 2160.1 Design Requirements for Concrete Used for Underground Structures, for Type A Structures (monolithic sewers and reinforced structures).

E28.3 Further to E28.2, the supplied concrete shall achieve a minimum compressive strength of twenty-two (22) megapascals (MPa) at forty-eight (48) hours.

E28.4 City Supplied Materials shall be as per Section 2.10 of CW 3620 and E26.

CONSTRUCTION METHODS

E28.5 Construction Methods for the installation of Early Open Concrete Bases shall be as per Section 3.7 of CW 3620.

MEASUREMENT AND PAYMENT

E28.6 Installation of Concrete Bases shall be measured on a unit basis and paid for at the Contract Unit Price per unit for "Items of Work" listed below. The number of units to be paid for shall be the total number of concrete bases installed in accordance with this Specification, accepted and measured by the Contract Administrator.

Items of Work:

- (a) Signal Pole Base Early Open – Type A;
- (b) Signal Pole Base Early Open – Type OD;
- (c) Signal Pole Base Early Open – Type G; and
- (d) Signal Pole Base Early Open – Type J.

E28.7 Payment for the items of Work in this Section includes the supply and installation of ready mix or mixed concrete on Site.

E28.8 Payment for the items of Work listed above includes the supply and installation of grounding rods (electrodes) installed with the concrete bases.

E28.9 Payment for the items of Work listed above includes boring.

E28.10 Payment for the items of Work listed above includes top ring forms.

E29. INSTALLATION OF TRAFFIC SERVICES SIGN CLAMPS

DESCRIPTION

- E29.1 General
- E29.2 This Specification covers all operations relating to the Installation of Traffic Services Sign Clamps.
- E29.3 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labor, equipment, tools, supplies and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

MATERIALS

- E29.4 Traffic Services Sign Clamps
- E29.5 The Contract Administrator will arrange for Traffic Service to have the sign clamps delivered to Site. The Contractor is to store the sign clamps in a secure location until the material is ready for installation.

CONSTRUCTION METHODS

- E29.6 Installation
- E29.6.1 Installation of Traffic Services Sign Clamps is to be done in conjunction with the Installation of the one hundred (100) mm Type 5 Concrete Sidewalk and placed into the fresh concrete at locations determined by the City or the Contractor Administrator. The Base Course material is to be prepared at each location to accommodate the Installation of Traffic Services Sign Clamps.

MEASUREMENT AND PAYMENT

- E29.7 Installation of Traffic Services Sign Clamps will be incidental to the installation of "One Hundred (100) mm Type 5 Concrete Sidewalk". No measurement and payment will be made for these Items of Work.

E30. INSTALLATION OF TURFSTONE UNITS

DESCRIPTION

- E30.1 This Specification shall supplement and amend City of Winnipeg Standard Construction Specification CW 3330 "Installation of Interlocking Paving Stones".
- E30.2 Referenced Standard Construction Specifications:
- (a) CW 3110 – Sub-grade, Sub-base and Base Course Construction;
 - (b) CW 3310 – Portland Cement Concrete Pavement Works;
 - (c) CW 3330 – Installation of Interlocking Paving Stones;
 - (d) CW 3520-R7 – Seeding; and
 - (e) CW 3540-R5 – Topsoil and Finish Grading for Establishment of Turf Areas.
- E30.3 Referenced Standard Detail:
- (a) SD-240A – Interlocking Paving Stone Detail.

MATERIALS

- E30.4 Turfstone Units:

- (a) turfstone units shall be Barkman Concrete Turfstone Eco Units or approved equal in accordance with B6;
- (b) turfstone units shall conform to the requirements of CAN3-A231.2, Precast Concrete Pavers; and
- (c) further to CAN3-A231.2.6.1.1, where concrete pavers are shipped for installation before the pavers are twenty-eight (28) days old, the average compressive strength of these pavers at the time of delivery to the Work Site shall be not less than forty (40) MPa.

E30.5 Edge Restraints:

- (a) Edge restraints shall be a two hundred (200) by two hundred fifty (250) poured in place concrete curb. Refer to CW 3310.

E30.6 Topsoil:

- (a) Topsoil shall be in accordance with CW 3540-R5.

E30.7 Grass Seed Mix:

- (a) Grass seed mix shall be in accordance with CW 3520-R7.

E30.8 Other Materials:

- (a) All other materials, including aggregates for the bedding sand and filler sand shall be in accordance with CW 3330.

CONSTRUCTION METHODS

E30.9 Installation of Turfstone Units:

- (a) install turfstone units in accordance with Drawings and CW 3330 and SD-240A; and
- (b) fill turfstone units with topsoil to within thirteen (13) mm of top of turfstone units and install Grass Seed Mix in accordance with CW 3520-R7.

MEASUREMENT AND PAYMENT

- E30.10 Supply and installation of turfstone units shall be measured and paid for at the Contract Unit Price per square meter for "Turfstone Units", which the price shall be payment in full for supplying all materials and performing all operations herein specified.

E31. ESTABLISHMENT OF SEEDED AREAS

DESCRIPTION

- E31.1 This Specification shall amend and supplement City of Winnipeg Standard Construction Specification CW 3520 R7 – Seeding, and shall cover all aspects of supply and installation of seed, including preparation of finish grade and maintenance.

E31.2 Referenced Standard Construction Specifications:

- (a) CW 3520-R7 – Seeding; and
- (b) CW 3540-R5 – Topsoil and Finish Grading for Establishment of Turf Areas.

MATERIALS

- E31.3 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification. All materials supplied under this Specification shall be subject to inspection and testing by the Contract Administrator and/or the City's designated turf inspector. There shall be no charge to the City for any materials taken by the Contract Administrator or the City's designated turf inspector for inspection purposes.

- E31.4 All seed supplied by the Contractor shall be Canada Certified No. 1 or Canada Certified No. 2 and come complete with a Certificate of Analysis verifying that quality standards for Canada Certified No. 1 or Canada Certified No. 2 seed are met. The Contractor shall submit the Certificates of Analysis to the Contract Administrator.
- E31.5 Grass Seed Mix in Turfstone:
- (a) The Grass Seed Mix shall be the blend 'for general park areas, boulevards, medians and interchange areas' found in CW 3520 – Seeding.
- E31.6 Prior to payment for the seeding operation the Contractor shall provide the Contract Administrator with a copy of an invoice or a shipping bill received from the seed distributor specifying the quantities of each type of seed supplied for the Work Site and the delivery date.
- E31.7 Herbicides shall be standard commercial products registered for sale and use in Canada under the Pest Control Products Act.
- E31.8 Insecticides shall be standard commercial products registered for sale and use in Canada under the Pest Control Products Act.
- E31.9 Topsoil as per CW 3540 or as noted on the Drawings.

CONSTRUCTION METHODS

- E31.10 Seeding
- (a) Grass Seed Mix:
- (i) seed shall be sown on forty (40) mm compacted depth of imported topsoil in turfstone areas; and
- (ii) seed at a rate of one (1.0) kilogram per one hundred (100) square metres.
- (b) the Contractor shall sow the seed into the approved seed bed by using seeding equipment suitable for the area involved and to the satisfaction of the Contract Administrator;
- (c) all seeded areas shall be rolled to form a uniform even surface, level with adjoining curbs, sidewalks or sod;
- (d) water shall be applied in sufficient quantities to saturate seeded area to a minimum depth of one hundred (100) mm. All costs to provide water for seeded areas shall be incidental to the Work. These costs may include hydrant permit and meter rental fees;
- (e) seeding operations shall be completed within two (2) Working Days after the commencement of sowing operation. This shall include the application of seed, rolling and watering;
- (f) no seeding shall be done on frozen soil, or when any other conditions unfavourable to successful seed germination exist; and
- (g) the Contractor is to maintain the seeded area with all required watering, mowing, weed removal etc. to establish a healthy plant community for the duration of the growing season.

MEASUREMENT AND PAYMENT

- E31.11 Supply, placement and maintenance of grass seed mix will be measured on an area basis and paid for at the Contract Unit Price per square meter for "Grass Seed Mix". Prices shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work in accordance with this Specification and accepted by the Contract Administrator.