



THE CITY OF WINNIPEG

TENDER

TENDER NO. 355-2026

KILCONA DOG PARK IMPROVEMENT – PHASE ONE

TABLE OF CONTENTS

PART A - BID SUBMISSION

- Form A: Bid/Proposal
- Form B: Prices
- Form G1: Bid Bond and Agreement to Bond

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Confidentiality	2
B6. Addenda	2
B7. Substitutes	2
B8. Bid Components	3
B9. Bid	3
B10. Prices	4
B11. Disclosure	5
B12. Conflict of Interest and Good Faith	5
B13. Qualification	6
B14. Bid Security	7
B15. Opening of Bids and Release of Information	8
B16. Irrevocable Bid	8
B17. Withdrawal of Bids	8
B18. Evaluation of Bids	8
B19. Award of Contract	9

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	2
D4. Contractor's Supervisor	2
D5. Furnishing of Documents	2

Submissions

D6. Authority to Carry on Business	2
D7. Safe Work Plan	2
D8. Insurance	2
D9. Contract Security	3
D10. Subcontractor List	4
D11. Equipment List	5
D12. Detailed Work Schedule	5
D13. Requirement for Site Accessibility Plan	6

Schedule of Work

D14. Commencement	7
D15. Work By Others	7
D16. Working Days	8
D17. Critical Stages	8
D18. Substantial Performance	8
D19. Total Performance	8
D20. Liquidated Damages	9
D21. Scheduled Maintenance	9

Control of Work

D22. Job Meetings	9
D23. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	9
D24. The Workplace Safety and Health Act (Manitoba) – Qualifications	9
D25. Site Cleaning	10
D26. Inspection	10
D27. Deficiencies	10

Warranty

D28. Warranty	11
---------------	----

Indemnity

D29. Indemnity	11
Form J: Subcontractor List	13
Form L: Detailed Work Schedule	16
Form L: Detailed Work Schedule	17

PART E - SPECIFICATIONS

General

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS	1
CITY OF WINNIPEG DETAILS	1
CITY OF WINNIPEG SPECIFICATIONS	1
E2. DRAWINGS AND SPECIFICATIONS	2
E3. COMPLETE PROJECT	2
E4. HAZARDOUS MATERIALS	2
E5. EXISTING SERVICES AND UTILITIES	2
E6. ACCESS TO SITE	3
E7. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES	3
E8. MOBILIZATION AND DEMOBILIZATION PAYMENT	4
E9. PEDESTRIAN AND DOG SAFETY	4
E10. WATER OBTAINED FROM THE CITY	4
E11. SURFACE RESTORATIONS	4
E12. PROTECTION OF EXISTING TREES AND SITE INFRASTRUCTURE	5
E13. SITE ENCLOSURES	7
E14. SHOP DRAWINGS	7
E15. SAMPLES	8
E16. TEST REPORTS	8
E17. REMOVALS	8
E18. SETTING OUT THE WORK	9
E19. OWNER FURNISHED MATERIALS	9
E20. SITE GRADING	10
E21. RIP RAP	11
E22. CULVERTS	11
E23. CAST-IN-PLACE CONCRETE FOUNDATIONS	12
E24. CONCRETE PAVING	14
E25. ASPHALT PAVING	15
E26. CHAIN LINK FENCING	16
E27. POWDER COATING	17
E28. SITE FURNITURE	18
E29. SIGNAGE	19
E30. SITE CARPENTRY & TIMBER CONSTRUCTION	24
E31. PLANTING MEDIUM AND FINISHED GRADING	26
E32. TOPSOIL & SODDING	29
E33. TREE PLANTINGS	30
E34. INSTALLATION OF OWNER SUPPLIED MULCH PATHWAYS	31
E35. MOWN PATHWAYS	32
E36. SITE RESTORATION	32
E37. LANDSCAPE MAINTENANCE	32

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 KILCONA DOG PARK IMPROVEMENT – PHASE ONE

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 10th, 2026.

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

B3. SITE INVESTIGATION

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

B3.2 The Bidder is responsible for inspecting the Site, the nature of the Work to be done and all conditions that might affect their Bid or their performance of the Work, and shall assume all risk for conditions existing or arising in the course of the Work which have been or could have been determined through such inspection.

B3.3 The Bidder is responsible for determining:

- (a) The location of any utility which can be determined from the records or other information available at the office of any public authored or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
- (b) The nature of the surface and subsurface conditions at the Site;
- (c) The location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
- (d) The nature, quality or quantity of the Plant needed to perform the Work;
- (e) All matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
- (f) All other matters which could in any way affect their Bid or the performance of the Work.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Tender, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Tender will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Tender will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B4.6 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support

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

B5. CONFIDENTIALITY

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

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Tender, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the MERX website at www.merx.com.
- B6.4 The Bidder is responsible for ensuring that they have received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D3.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Tender.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;

- (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
- (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in their sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.

B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons they wish to inform.

B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base their Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B18.

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

B8. BID COMPONENTS

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

- (a) Form A: Bid/Proposal;
- (b) Form B: Prices;
- (c) Form G1: Bid Bond and Agreement to Bond.

B8.2 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.

B8.3 The Bid shall be submitted electronically through MERX at www.merx.com.

B8.3.1 Bids will **only** be accepted electronically through MERX.

B8.4 Bidders are advised that inclusion of terms and conditions inconsistent with the Tender document, including the General Conditions, will be evaluated in accordance with B18.1(a).

B9. BID

B9.1 The Bidder shall complete Form A: Bid/Proposal, making all required entries.

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

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.1.1 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 C24. Any such costs shall be determined in accordance with C24.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- (a) The Bidder shall state a separate price in Canadian funds for each of the following items of Work on Form B Prices:
 - (i) Separate Price to be deducted from Total Bid Price – Item No. 7 shall be the amount deducted from the Total Bid Price if the Granular Roadway Top Up are deleted;
 - (ii) Separate Price to be deducted from Total Bid Price – Item No. 12 shall be the amount deducted from the Total Bid Price if the Park Name Letters are deleted;
 - (iii) Separate Price to be deducted from Total Bid Price – Item No. 11 shall be the amount deducted from the Total Bid Price if the Wooden Notice Boards are deleted;
 - (iv) Separate Price to be deducted from Total Bid Price – Item No. 20 shall be the amount deducted from the Total Bid Price if the Installation of the Owner Supplied Mulch are deleted;

B11. DISCLOSURE

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

B11.2 The Persons are:

(a) None.

B11.3 Additional Material:

(a) None.

B12. CONFLICT OF INTEREST AND GOOD FAITH

B12.1 Further to C3.3, Bidders, by responding to this Tender, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B12.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

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

B12.3 In connection with their Bid, each entity identified in B12.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Tender process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B12.4 Without limiting B12.3, the City may, in their sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in their sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be

acceptable to the City, in their sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

- B12.5 Without limiting B12.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in their sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of their employees proposed for the Work;
 - (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in their sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B12.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Bidder if the Bidder, or one of their employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B12.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in their sole discretion.

B13. QUALIFICATION

- B13.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B13.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>
- B13.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) have completed the Accessible Customer Service online training required by the Accessibility for Manitobans Act (AMA) (see B13.5 and C6.19).
- B13.4 Further to B13.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) in the form of:

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

B13.5 Further to B1.1(a), the Bidder acknowledges that they and all Subcontractors have obtained training required by the Accessibility for Manitobans Act (AMA) available at <https://accessibilitymb.ca/resources-events-and-training/online-training.html> for anyone that may have any interaction with the public on behalf of the City of Winnipeg.

B13.6 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B13.7 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B14. BID SECURITY

B14.1 The Bidder shall include in their Bid Submission bid security in the form of a digital bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in Form G1: Bid Bond and Agreement to Bond, available at: <https://www.winnipeg.ca/media/4929/>

B14.2 Bid security shall be submitted in a digital format meeting the following criteria:

- (a) The version submitted by the Bidder must have valid digital signatures and seals;
- (b) The version submitted by the Bidder must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
- (c) The version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
- (d) The verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
- (e) The results of the verification must provide a clear, immediate and printable indication of pass or fail regarding B14.2(b).

B14.3 Bonds failing the verification process will not be considered to be valid and the bid shall be determined to be non-responsive in accordance with B18.1(a).

B14.4 Bonds passing the verification process will be treated as original and authentic.

B14.4.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B14.5 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly

formed with the successful Bidder and the contract securities are furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

- B14.6 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Tender.

B15. OPENING OF BIDS AND RELEASE OF INFORMATION

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

B16. IRREVOCABLE BID

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

B17. WITHDRAWAL OF BIDS

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

B18. EVALUATION OF BIDS

- B18.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Tender, or acceptable deviation therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B13 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B18.2 Further to B18.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.

- B18.3 Further to B18.1(c) the Award Authority may reject a Bid as being non-responsive if it exceeds the funds available as shown in D2.4.
- B18.4 Further to B18.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in their Bid or in other information required to be submitted, that they are qualified.
- B18.5 Further to B18.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices adjusted, if necessary, as follows:
- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price; or
 - (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting item(s) Separate Price Item 07 – Granular Roadway Top Up, Separate Price Item 12 – Park Name Letters, Separate Price Item 11 – Wood Notice Boards, and Separate Price Item 20 – Installation of Owner Supplied Mulch.
- B18.5.1 Further to B19.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B18.5.2 Where MRST is shown on Form B as a separate line item, if that Line item is not completed, the MRST shall be considered to be included in the Total Bid Price.
- B18.5.3 Bidders are advised that the calculation indicated in B19.5 will prevail over the Total Bid Price entered in MERX.

B19. AWARD OF CONTRACT

- B19.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B19.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be qualified, and the Bids are determined to be responsive.
- B19.2.1 Without limiting the generality of B19.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with their own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B19.3 The Work of this Contract is contingent upon Council approval of sufficient funding in the 2026 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.
- B19.4 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 C24 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B19.5 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 B18.

B19.5.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of their Bid upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2025 11 01) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at 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. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of improvements to the Kilcona Dog Park, located at the intersection of Lagimodiere Boulevard and Springfield Road in Winnipeg, Manitoba.

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

- (a) Protection of existing wood fencing;
- (b) Protection of existing trees;
- (c) Removal of sod, topsoil and subgrade to the depths required to accommodate new construction;
- (d) Removal of asphalt in parking lot to accommodate new accessible ramp and entry node;
- (e) Relocation & Installation of in-ground and surface mounted benches and waste bins;
- (f) Earthwork and Grading, including grading of owner supplied clay fill and finished grading in preparation for native grass seeding;
- (g) Erosion control mats on any finishing grading surfaces that exceed 33% slopes;
- (h) Construction of accessible entrances and vestibules complete with wood fencing;
- (i) Construction of 1.8m high chain link fences, pedestrian and vehicle access gates;
- (j) Construction of Wooden Information Kiosks;
- (k) Construction of Metal Signage;
- (l) Construction of granular walking trails;
- (m) Installation of owner supplied mulch trails;
- (n) Placement of tree pits with clay-rich planting medium and mulch;
- (o) Supply & Installation of trees;
- (p) Installation of sodding;
- (q) Mowing of new walking trails; and
- (r) Two (2) year landscape maintenance.

D2.3 The following shall apply to the Services:

- (a) City of Winnipeg Green Building Policy: New City-Owned Buildings and major additions;
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=5989>
- (b) Universal Design Policy
<http://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=2&DocId=3604>

D2.4 The funds available for this contract are \$900,000.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:
Shannon Loewen, MALA, CSLA
Senior Associate
HTFC Planning & Design
Telephone No. 204-944-9907
Email Address sloewen@htfc.ca

D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify their designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. FURNISHING OF DOCUMENTS

D5.1 Upon award of the Contract, the Contractor will be provided with 'issued for construction' Contract Documents electronically, including Drawings in PDF format only.

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

D6.1 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.

D7. SAFE WORK PLAN

D7.1 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.

D7.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D7.3 Notwithstanding B13.4 at any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require an updated COR Certificate or Annual Letter of good 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.

D8. INSURANCE

D8.1 The Contractor shall provide and maintain the insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, contractual liability, unlicensed motor vehicle liability (contractor's equipment), non-owned automobile liability and products and completed operations

endorsement, to remain in place at all times during the performance of the Work and throughout the Warranty period;

- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.
- (c) all risks course of construction insurance in the amount of one hundred percent (100%) of the total Contract Price, written in the name of the Contractor and The City of Winnipeg, at all times during the performance of the Work and until the date of Total Performance.

D8.2 Deductibles shall be borne by the Contractor.

D8.3 All policies shall be taken out with insurers licensed to carry on business in the Province of Manitoba.

D8.4 The Contractor shall provide:

- (a) The certificate of insurance, in a form satisfactory to the Supervisor of Insurance, to:

The City of Winnipeg
Risk Management
Insurance Section
185 King Street, 3rd Floor
Winnipeg, MB R3B 1J1

- (b) The Contract Administrator with a copy of the certificate of insurance.

At least two (2) Business Days of notification of the award of the Contract prior to the commencement of any Work on the Site.

D8.5 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 Supervisor of Insurance.

D9. CONTRACT SECURITY

D9.1 The Contractor shall provide and maintain the performance bond and the labour and material payment bond until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the amount of fifty percent (50%) of the Contract Price; and
- (b) labour and material payment bond of a company registered to conduct the business of a surety in Manitoba, in an amount equal to fifty percent (50%) of the Contract Price.

D9.1.1 Bonds are available at:

- (a) Performance Bond <https://www.winnipeg.ca/media/4928/>
 - (i) Performance Bond – Schedule A - Form of Notice
<https://www.winnipeg.ca/media/4831/>
 - (ii) Performance Bond – Schedule B – Surety's Acknowledgement
<https://www.winnipeg.ca/media/4832/>
 - (iii) Performance Bond – Schedule C – Surety's Position
<https://www.winnipeg.ca/media/4833/>
- (b) Labour & Material Payment Bond <https://www.winnipeg.ca/media/4930/>
 - (i) L&M Bond – Schedule A – Notice of Claim
<https://www.winnipeg.ca/media/4834/>
 - (ii) L&M Bond – Schedule B – Acknowledgement of a Notice

<https://www.winnipeg.ca/media/4835/>

(iii) L&M Bond – Schedule C – Surety's Position

<https://www.winnipeg.ca/media/4836/>

- D9.1.2 Where the contract security is a performance bond, it may be submitted in hard copy or digital format. If submitted in digital format the contract security must meet the following criteria:
- (a) the version submitted by the Contractor must have valid digital signatures and seals;
 - (b) the version submitted by the Contractor must be verifiable by the City with respect to the totality and wholeness of the bond form, including: the content; all digital signatures and digital seals; with the surety company, or an approved verification service provider of the surety company.
 - (c) the version submitted must be viewable, printable and storable in standard electronic file formats compatible with the City, and in a single file. Allowable formats include pdf.
 - (d) the verification may be conducted by the City immediately or at any time during the life of the bond and at the discretion of the City with no requirement for passwords or fees.
 - (e) the results of the verification must provide a clear, immediate and printable indication of pass or fail regarding D9.1(b).
- D9.1.3 Digital bonds failing the verification process will not be considered to be valid and may be determined to be an event of default in accordance with C18.1. If a digital bond fails the verification process, the Contractor may provide a replacement bond (in hard copy or digital format) within seven (7) Calendar Days of the City's request or within such greater period of time as the City in their discretion, exercised reasonably, allows.
- D9.1.4 Digital bonds passing the verification process will be treated as original and authentic.
- D9.2 The Contractor shall provide:
- (a) the required Contract Security to:

The City of Winnipeg
Legal Services Department
185 King Street, 3rd Floor
Winnipeg, MB R3B 1J1
 - (b) The Contract Administrator with copies of the required Contract Security.

within seven (7) Calendar Days of notification of the award of the Contract and prior to the commencement of any Work on the Site.
- D9.3 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 D9.1(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.
- D10. SUBCONTRACTOR LIST**
- D10.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site.

D11. EQUIPMENT LIST

- D11.1 The Contractor shall provide the Contract Administrator with a complete list of the equipment which the Contractor proposes to utilize (Form K: Equipment List) at least two (2) Business Days prior to the commencement of any Work on the Site.

D12. DETAILED WORK SCHEDULE

- D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) at least two (2) Business Days prior to the commencement of any Work on the Site.
- D12.1 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.
- D12.2 The detailed work schedule shall consist of the following:
- (a) a critical path method (C.P.M.) schedule for the Work;
 - (b) a Gantt chart for the Work based on the C.P.M. schedule;
 - (c) a daily manpower schedule for the Work;
- all acceptable to the Contract Administrator.
- D12.3 Further to D13.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path.
- (a) Permitting;
 - (b) Procurement of Site Furnishings;
 - (c) Fabrication of Metal Letters;
 - (d) Fabrication of chain link fencing;
 - (e) Commencement of work at Kilcona Park;
 - (f) Installation of chain link fencing;
 - (g) Parking Lot Demolition;
 - (h) Excavation and Site Preparation;
 - (i) Rough Grading
 - (j) Installation of concrete works for entrance vestibules and accessible entrance node in west parking lot;
 - (k) Installation of asphalt repair works;
 - (l) Installation of granular pathways;
 - (m) Finished Grading;
 - (n) Installation of sod;
 - (o) Installation of tree plantings;
 - (p) Installation of mulch trails;
 - (q) Installation of Site Furnishings;
 - (r) Installation of Metal Letters; and
 - (s) Mowing of informal trails.
- D12.4 Further to D13.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

- D12.5 Further to D13.2(c), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.

D13. REQUIREMENT FOR SITE ACCESSIBILITY PLAN

- D13.1 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.
- D13.2 The Accessibility Plan shall demonstrate how the Contractor will accommodate the safe passage of pedestrians and cyclists in accordance with the Manual of Temporary Traffic Control, the Contract Drawings, Staging Plans, and Streets By-Law No. 1481/77 at all times for the duration of the Construction. Unless noted in the Contract, the Accessibility Plan must include a written plan for the following:
- (a) How the Contractor will maintain at least one crossing in each direction for each intersection.
 - (b) Any required detour signage at adjacent crossings to facilitate pathway or active transportation pathway closures.
- D13.3 The Accessibility Plan may also include figures, sketches, or drawings to demonstrate the proposed plan.
- D13.4 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
 - (i) Including signage noting that Off-Leash Dog Park areas are On-Leash Dog Park during working hours (specify hours) and which days of the week this applies (specify working days).
 - (b) Temporary Ramping
 - (c) Detour Signage
- D13.5 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.
- D13.6 Any changes to the Accessibility Plan must be approved by the Contract Administrator.
- D13.7 Upon request from the Contract Administrator, the Contractor shall provide records demonstrating that the site has been maintained.
- D13.8 Deficiencies as a direct result of actions by the Contractor that are not immediately corrected and/or failure to produce records that demonstrate that the site was maintained in compliance with the Accessibility Plan may result in a pay adjustment via the monthly Progress Payment. The rate of pay adjustment will be as per the following schedule:
- (a) First Offence – A warning will be issued and documented in the weekly or bi-weekly site meeting.
 - (b) Second Offence - A field instruction to immediately correct the site will be issued by the Contract Administrator.
 - (c) Third and subsequent Offences – A pay reduction will be issued in the amount of \$250.00 per instance and per day.

SCHEDULE OF WORK

D14. COMMENCEMENT

- D14.1 The Contractor shall not commence any Work until they are in receipt of an award letter from the Award Authority authorizing the commencement of the Work.
- D14.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D6;
 - (ii) evidence of the workers compensation coverage specified in C6.17;
 - (iii) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) evidence of the contract security specified in D9;
 - (vi) the detailed prices specified in D10;
 - (vii) the Subcontractor list specified in D11;
 - (viii) the equipment list specified in D12;
 - (ix) the detailed work schedule specified in D13;
 - (x) the Requirement for Site Accessibility Plan in D14; and
 - (xi) the direct deposit application form specified in C12.20
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D14.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the award letter.
- D14.3 The Contractor shall not commence the Work on the Site before all permits have been acquired.
- D14.4 The City intends to award this Contract by June 1, 2026.
- D14.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement, Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D15. WORK BY OTHERS

- D15.1 Further to C6.26, 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.
- D15.2 Work by others on or near the Site will include but not necessarily be limited to:
- (a) Proposed roadway works located to the north of the project extents, which include tie-ins to proposed walkways and trails, roadways, and entrances;
 - (b) City of Winnipeg Parks Maintenance Staff;
 - (c) Dog Park is to remain as a functioning dog park at all times during construction. Off Leash areas will become On-Leash areas during working hours. Safety of dogs to remain the priority of all ongoing construction works.
- D15.3 Further to D16.1 the Contractor shall cooperate and coordinate all activities with all parties performing required Work by Others identified in D16.1 and accommodate the necessary area on Site required for the Work by Others to complete the Work

D16. WORKING DAYS

- D16.1 Further to C1.1, the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D16.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D16.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D16.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D17. CRITICAL STAGES

- D17.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:
- (a) Fence Installation, August 30, 2026
 - (b) Sod Installation, October 1, 2026
 - (c) Tree Installation, October 1, 2026

D18. SUBSTANTIAL PERFORMANCE

- D18.1 The Contractor shall achieve Substantial Performance by October 15, 2026.
- D18.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D18.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D19. TOTAL PERFORMANCE

- D19.1 The Contractor shall achieve Total Performance by June 30, 2027.
- D19.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D19.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D20. LIQUIDATED DAMAGES

- D20.1 If the Contractor fails to achieve Critical Stages, Substantial Performance or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
- (a) Critical Stages – five hundred dollars (\$500.00);
 - (b) Substantial Performance - five hundred dollars (\$500.00);
 - (c) Total Performance - five hundred dollars (\$500.00).
- D20.2 The amounts specified for liquidated damages in D21.1 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.
- D20.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D21. SCHEDULED MAINTENANCE

- D21.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sodding as specified in E27;
 - (b) Tree Planting as specified in E26.
- D21.2 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

D22. JOB MEETINGS

- D22.1 Regular bi-weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D22.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever they deem it necessary.

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

- D23.1 Further to C6.27, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

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

- D24.1 Further to B13.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at their sole discretion and acting reasonably, require updated proof of compliance, as set out in B13.4.

D24.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.

D24.3 The Contractor shall do whatever is necessary to ensure that:

- (a) no person, animal, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
- (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of their performance;
- (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
- (d) adequate sanitation measures are taken and facilities provided with respect to the Work;
- (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
- (f) fire hazards in or about the Work are eliminated.

D25. SITE CLEANING

D25.1 The Contractor shall maintain the Site and the Work in a tidy condition and free from the accumulation of waste and debris, other than that caused by the City or by other contractors.

D25.1.1 As the Work progresses, the Contractor shall remove any Plant and Material not required for the performance of the remaining Work. He shall also remove waste and debris other than that caused by the City or other contractors, and leave the Site and the Work clean and suitable for occupancy by the City unless otherwise specified.

D25.1.2 The Contractor shall take every precaution to ensure work, materials, and debris do not enter into the existing ponds. If required, soil erosion or debris fencing must be put up around existing ponds to prevent any water contamination.

D25.1.3 Total Performance shall not be considered to have been achieved until the Contractor has cleaned up the Site and has removed all Plant, surplus Material, waste and debris, other than that left by the City or other contractors.

D26. INSPECTION

D26.1 Before beginning or resuming operations upon any portion of the Work, the Contractor shall notify the Contract Administrator so as to enable him to arrange for inspection. If the Contractor fails to notify the Contract Administrator, the Contractor shall, if and when required by the Contract Administrator, forthwith take down or expose and redo that portion of the Work required to facilitate inspection. The cost of such taking down or exposure, and redoing, if any, shall be borne by the Contractor.

D26.2 If and when required by the Contract Administrator, the Contractor shall take down or expose forthwith any portion of the Work where the Contract Administrator determines that the Work is not in accordance with the Contract. The cost of such taking down or exposure, and redoing, if any, shall fall upon the City if the taking down or exposure indicates that the portion exposed was properly performed, but if otherwise the cost shall be borne by the Contractor.

D27. DEFICIENCIES

D27.1 Further to C11, the Contract Administrator may order the Contractor to alter or improve their methods, to increase or improve their Plant, to furnish additional or more suitable Material, or to employ additional or more qualified labour if, at any time, the Contract Administrator determines that:

- (a) the Work is not being, or will likely not be, performed satisfactorily; or
- (b) progress is not being, or will likely not be, maintained in accordance with the work schedule.

- D27.2 If the Work or any part thereof is taken out of the Contractor's control pursuant to C19.7, all Plant and Material, and the interest of the Contractor in all licences, powers and privileges acquired, used or provided by the Contractor under the Contract shall be assigned by the Contractor to the City without compensation to the Contractor.
- D27.3 The City shall have the right to take possession of and use any of the Contractor's material and property of every kind provided by the Contractor for the purpose of the Work, and to procure other Plant or Material for the completion thereof.
- D27.4 When the Contract Administrator certifies that any Plant, Material or any interest of the Contractor referred to in D29.2, is no longer required for the purposes of the Work, or that it is not in the best interest of the City to retain that Plant, Material or interest, it shall revert to the Contractor.

WARRANTY

D28. WARRANTY

- D28.1 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.
- D28.2 Notwithstanding C13.2 or D30.1, 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.
- D28.2.1 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

INDEMNITY

D29. INDEMNITY

- D29.1 Indemnity shall be as stated in C17.

FORM J: SUBCONTRACTOR LIST

(See D11)

KILCONA DOG PARK IMPROVEMENT – PHASE ONE

<u>Portion of Work</u>	<u>Name</u>	<u>Address</u>
<u>__ Chain Link</u>		
Fencing		
<u>__ Concrete</u>		
Paving		
<u>__ Asphalt</u>		
Paving		
<u>__ Granular</u>		
Paving		
<u>__ Wood</u>		
Carpentry		
<u>__ Metal Works & Powder</u>		
Coating		
<u>__ Rough</u>		
Grading		
<u>__ Sodding</u>		
<u>__ Tree</u>		
Planting		
<u>__ Mowing & Mulch</u>		
Installation		
<u>Other:</u>		

(See D13)

KILCONA DOG PARK IMPROVEMENT – PHASE ONE

For each item of Work, indicate the cumulative percentage proposed to be completed by the end of each time period until 100% completion is achieved.

[illegible]

(See D13)

KILCONA DOG PARK IMPROVEMENT – PHASE ONE

[illegible]

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in their entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Purchasing Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Tender shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B7.
- E1.4 The following are applicable to the Work:

DRAWINGS

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
355-2026_Drawing_L-100	Cover Sheet
355-2026_Drawing_L-101	West Existing Conditions & Demolition Plan
355-2026_Drawing_L-102	East Existing Conditions & Demolition Plan
355-2026_Drawing_L-103	West Material, Layout, Site Furnishing & Planting Plan
355-2026_Drawing_L-104	East Material, Layout, Site Furnishing & Planting Plan
355-2026_Drawing_L-105	West Grading Plan
355-2026_Drawing_L-106	East Grading Plan
355-2026_Drawing_L-201	Wood Fence Plans & Elevations
355-2026_Drawing_L-301	General Details
355-2026_Drawing_L-302	Wood Fence & Planting Details
355-2026_Drawing_L-303	Signage Details 1
355-2026_Drawing_L-304	Signage Details 2

CITY OF WINNIPEG DETAILS

<u>Detail No.</u>	<u>Detail Name</u>
SCD-105B	Post Bollard
SCD-121A	Tache Bench Composite with Arms (in-ground mount)
SCD-121E	Tache Bench Composite with Arm (surface mount)
SD-229A	Curb Ramp for 1500 Sidewalk at Intersections
SCD-612A	Culvert Installation Under Walkway with Rip Rap
SCD-648	Park Pathway Asphalt
SD-243	Sodding Details

CITY OF WINNIPEG SPECIFICATIONS

<u>Specification No.</u>	<u>Specification Title</u>
--------------------------	----------------------------

CW 1110	General Instructions
CW 1130	Site Requirements
CW 3010	Clearing and Grubbing
CW 3110	Sub-Grade, Sub-Base and Base Course Construction
CW 3170	Earthwork and Grading
CW 3310	Portland Cement Concrete Pavement Works
CW 3410	Asphalt Concrete Pavement Works
CW 3510	Sodding
CW 3540	Topsoil and Finish Grading for Establishment of Turf Areas
CW 3550	Chain Link and Drift Control Fence

E2. DRAWINGS AND SPECIFICATIONS

- E2.1 The Contractor shall maintain one full size set of Drawings and Specifications on site at all times during construction. This shall include the Contractor's final design and shop drawings, complete construction details, schematic diagrams and plan and elevation views of the spray pad mechanical system, change orders and any other information pertinent to the construction of the project. The drawings shall be printed in colour if colour is used to convey information.
- E2.2 The Contractor shall maintain a set of Record Drawings on site, marking all changes in work. These are to include but not be limited to buried line locations and runs dimensioned from existing site features. The information shall be transferred to a CAD drawing and submitted to the Contract Administrator at Total Performance. There shall be no separate payment for record drawings but they shall be considered a part of the Commissioning.

E3. COMPLETE PROJECT

- E3.1 The Contractor is to deliver a complete project including all permits, inspections, demolition/removals, connections, tie-ins, and restorations required to operate and maintain the project.

E4. HAZARDOUS MATERIALS

- E4.1 If leachate, methane or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E5. EXISTING SERVICES AND UTILITIES

- E5.1 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.
- E5.2 Prior to the commencement of construction, the Contractor shall inspect the Site and examine all available records and contact all relevant utilities as necessary to determine the location of all existing surface and underground works. Locations of underground structures if shown are based on the best information available. No guarantee is given that all existing locations are exact.
- E5.3 The Contractor shall be responsible for and take all necessary precautions to preserve and protect all public utilities (i.e. telephone lines and cables, hydro lines and cables, gas lines, sewer mains and services, watermains and services, etc.) existing drains and surface drains or parts thereof which may be affected by their operations.

- E5.4 The Contractor shall make all requests directly to each utility for the location of their existing works prior to the start of construction in the area.
- E5.5 The Contractor shall indemnify and save harmless the City and the Contract Administrator or their Sub-Consultants against damages for consequential loss and against any claim made against the City or the Contract Administrator of any such main, line, conduit or other such structure or utility for any loss or damage in respect of third party claims or which may be suffered by any such City because of damage to any such main, line, conduit, or other such structure or utility, in any way caused by the operations of the Contractor in the performance of this Contract.

E6. ACCESS TO SITE

- E6.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at their own expense and approved by the Contract Administrator.
- E6.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and they shall be responsible for all damage resulting from their Work on private property.
- E6.3 The Contractor shall co-operate with the City so as to cause the least inconvenience throughout the area at all times. The Site contains an off-leash dog park with associated amenities that will be in operation during the construction of this project. The Contractor shall minimize impacts on these operations. Signage requesting that the dog park changes to an on-leash dog park during the times of construction is strongly recommended for the safety and security of both the users, their dogs, and the contractors. Signage to be provided at the parking lots and park entrances at the contractors expense and should outline the times and days which the dog park should become on-leash.
- E6.4 The Contractor's operations shall be limited to the minimum area necessary for undertaking the work and they shall be responsible for all damage resulting from their work on private property.
- E6.5 Confine apparatus, the storage of products and the operations of workers to limits indicated by laws, ordinances, permits and by directions of the Contract Administration.
- E6.6 Do not unreasonably encumber Site with materials or equipment.
- E6.7 Do not load or permit to be loaded any part of the work with a weight, load or force that will endanger its safety.
- E6.8 Obtain, pay for, and maintain on site sanitary facilities from startup to Total Performance.
- E6.9 Maintain the project site during construction.
- E6.10 Be responsible for damage due to weather, vandalism, etc.
- E6.11 Complete works in a manner that shall result in good surface drainage during periods of precipitation.
- E6.12 Assume full responsibility for the protection and safekeeping of products under the Contract, stored on the Site.

E7. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E7.1 Further to C6.13, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E7.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

- E7.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E7.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E7.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E7.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of their encountering of suspected hazardous material during their course of Work.

E8. MOBILIZATION AND DEMOBILIZATION PAYMENT

- E8.1 Description
- (a) This Specification shall govern mobilization and demobilization from site.
- E8.2 Measurement and Payment
- E8.2.1 Mobilization and Demobilization
- (a) Mobilization and demobilization will be measured on a lump sum basis and paid for at the Contract Lump Sum Price for "Mobilization and Demobilization". Payment for Mobilization and demobilization shall include all costs associated with mobilization and demobilization, site set up, and cleanup. Payment will be made on the following schedule:
- (b) 25% payment of the Mobilization and Demobilization lump sum price will be paid once sewer cleaning and preparation crews arrive on site and commence with cleaning and sewer preparation works.
- (c) 50% payment of the Mobilization and Demobilization lump sum price will be paid once lining crews arrive on site and commence CIPP liner installations.
- (d) 100% of the Mobilization and Demobilization lump sum price will be paid subsequent to completion of the liner installation, liner repairs (if necessary), and site cleanup.

E9. PEDESTRIAN AND DOG SAFETY

- E9.1 During the project, the Contractor shall ensure that proper and adequate signage and barricades are in place during pathway and vestibule construction to direct any pedestrians within the construction zone either around the construction area or to avoid the construction areas completely. The Contractor may also be required to install snow fencing to protect and keep pedestrians and dogs safely away from the construction area or to ensure a secured area if fences are erected prior to installation of pedestrian or vehicle gates. The Contractor shall be responsible for maintaining the signage, barricades, and snow fence in a proper working condition, to the satisfaction of the Contract Administrator. No measurement for payment shall be made for this work.

E10. WATER OBTAINED FROM THE CITY

- E10.1 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.

E11. SURFACE RESTORATIONS

- E11.1 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.

E12. PROTECTION OF EXISTING TREES AND SITE INFRASTRUCTURE

- E12.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing buildings, trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, transformers, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.
- E12.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
- (a) A 2.4m Tree Protection Zone shall be fenced off for all trees within the construction limits of work using plastic UV stabilized, high density polyethylene web snow fencing, international orange colour, 1.2m in height, and supported by rolled steel T-bar fence posts, or approved equal material strong enough to remain erect during inclement weather. The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2.4m metres of trees.
 - (b) All trees within the construction limits of work and withing 5 metres beyond the limits of construction and as identified on the Drawings, are to be strapped with 25 x 100 x 2400mm wood planks, or suitable protection as approved by the Contract Administrator, and are to remain protected from damage throughout the duration of construction.
 - (c) Obtain approval from the Consultant of proposed barrier locations and materials prior to installation.
 - (d) All forest protection snow fencing is to be in place prior to start of site works and shall stay in place until construction completion. Consultant to review protected forest prior to demolition work commences. Repair, replace and maintain tree protection snow fence during construction of the Work
 - (e) For trees outside of forest protection areas, wood strapping and snow fencing is to be in place prior to start of site works and shall stay in place until construction completion. Consultant to review protected trees prior to demolition work commences. Repair, replace, and maintain tree protection wood strapping and snow fence during construction of the Work.
 - (f) For trees greater than 100mm caliper, attach wood strapping material having a minimum thickness of 25mm and minimum length of 2440mm around tree trunks in a manner that will not harm the trees. Do not use nails or other fasteners that penetrate into trees. The width of strapping should suit the size of the tree being protected. Length of strapping may be reduced to suit tree being protected as approved by the Consultant.
 - (g) For trees less than 100mm caliper, install snow fencing around the tree to a 2.0 meter radius complete with installation hardware. The 2.0 meter radius of the snow fencing may be reduced to suit the tree being protected as approved by the Consultant.
 - (h) 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.
 - (i) Operation of equipment within the drip line of the trees shall be kept to a 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 drip lines of trees. The drip line 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.

- (j) Do not place in excess of 6" of fill over existing tree root zones defined by their drip lines. Do not excavate or dig under existing tree canopies in dry or excessively hot weather.
- (k) The Contractor will water and fertilize trees within limit of work zone regularly and as directed by the Contract Administrator to maintain tree health especially during extended periods of heat with no precipitation or if the tree shows signs of stress. Signs of stress will be flagged by the Contract Administrator during regular field visits.
- (l) Repair, replace and maintain tree protection materials during construction until the project completion.
- (m) Carefully remove safety fencing and strapping materials without harming the trees as soon as the construction and restoration work is complete.

E12.3 Root Protection, Cutting and Care

- (a) If roots are exposed for an extended period of time, cover exposed roots with approved temporary root cover material such as soil, mulch, or damp burlap immediately after exposure. Temporary root covers shall be kept damp as long as they are in place.
- (b) No excavation, tunnelling or trenching is permitted within the drip line of the trees or within the monument protection zone, without approval from Consultant.
- (c) Avoid cutting roots. If root cutting appears to be necessary, obtain approval from the Contract Administrator before proceeding. If required and approved, root pruning must be performed under the direction of the Forestry Branch.
- (d) If roots are encountered during excavation under drip lines and root pruning is required, work is to be done by a Certified Arborist or Canadian Certified Horticultural Technician (CCHT), to be approved by the Consultant.
- (e) Cut roots cleanly with sharp, sterilized hand tools to promote quick wound closure and regeneration.
- (f) Minimize damage by avoiding excavation during hot, dry weather.
- (g) Keep protected plants well watered before and after digging.
- (h) Cover exposed roots with approved temporary root cover materials such as soil, mulch, or damp burlap immediately after exposure. Temporary root covers shall be kept damp as long as they are in place.

E12.4 Pruning

- (a) American elm trees are not to be pruned between April 1st and August 1st and Siberian elm trees between April 1st and July 1st of any year under provisions of The Dutch Elm Disease Act.
- (b) Ensure no tree pruning is done inside drip line. If pruning inside drip line is required, work is to be done by a Certified Arborist or Canadian Certified Horticultural Technician (CCHT), to be approved by the Consultant.

E12.5 Acceptance

- (a) The Consultant will inspect the placement of tree protection barriers when initially installed and determine acceptance.
- (b) Tree protection measures will be reviewed regularly to ensure they remain in place during heavy construction activities on site.
- (c) Tree protection will be taken down for finish grading and feathering and soft landscape installation adjacent to or under their canopies.

E12.6 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 their designate.

- E12.7 Should any trees on site be found to be damaged beyond salvage the Contract Administrator will apply a financial tree replacement penalty equal to the replacement value of the tree in question based on the current replacement cost of the same sized tree. *Note when trees are in excess of 7.5m high and 300mm ø caliper, replacement cost penalties may be as high as \$25,000 per tree.
- E12.8 Remove wood strapping and snow fencing material without harming trees as soon as construction is completed.
- E12.9 **Materials**
- (a) Barrier Material: plastic UV stabilized, high density polyethylene web snow fence, international orange colour, 1.22 meter height, or approved equal.
 - (b) Snow Fence Supports: rolled steel T-bar fence posts, or approved equal.
 - (c) Wood Strapping: 25mm x 100mm x 2400mm wood planks.
- E12.10 No separate measurement or payment will be made for the protection of trees.

E13. SITE ENCLOSURES

- E13.1 Temporary site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E13.2 Site enclosures shall, at a minimum, consist of section 1.8m high, non-climbable metal fencing. Site enclosure to be maintained by overnight security from first installation of underground pipe utilities until final cover and cure of concrete and asphalt surfaces.
- E13.3 Site enclosures shall be considered incidental to the Contract Work.

E14. SHOP DRAWINGS

- E14.1 Further to CW 1110, the Contractor shall provide within 30 Calendar Days of award, at minimum the following shop drawings:
- (a) Chain link fence plans and layout, including pedestrian and vehicle access gates;
 - (b) Wood fence plans and layout, including gates, latching and hinge hardware;
 - (c) CIP Concrete vestibule slabs and reinforcing diagrams;
 - (d) Metal letter signage details;
 - (e) Wooden Information Kiosks and Map Signage.
- E14.2 Shop drawings will be reviewed by the Contract Administrator and the City Project Manager for general conformance to the City's requirements and the design intent only. All detailed drawings shall be drawn to a suitable scale and include scale, north arrow, dimensions and appropriate elevations and cross-sections.
- E14.3 The level of detail and scope of information provided on the shop drawings shall be sufficient to satisfy construction needs and permitting requirements. Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- E14.4 Adjustments made on shop drawings by the Contract Administrator are not intended to change Contract Price. If adjustments affect the value of Work, state such in writing to the Contract Administrator prior to proceeding with Work.
- E14.5 There shall be no separate measurement of payment for shop drawings or record drawings.

E15. SAMPLES

E15.1 Samples called for in the Specification or requested by the Contract Administrator shall be submitted within fifteen (15) Calendar Days of request.

- (a) Identify samples with name of project, date, name of Contractor, name of supplier/manufacturer and use of material represented by sample.
- (b) Do not proceed with delivery of materials until samples are reviewed by the Contract Administrator. No deviation is permitted after approval of sample.
- (c) Approval of samples does not imply acceptance of finished Work.
- (d) Where required, submit a range of samples, as may be reasonable.

E16. TEST REPORTS

E16.1 Where required by the Contract Administrator, the Contractor shall provide certified copies of tests upon materials to be used in construction of the Work, indicating that the materials comply with the Specifications.

E16.2 Submit test results to the Contract Administrator within ten (10) Calendar Days of request.

E16.3 All testing costs shall be the responsibility of the Contractor, and there shall be no separate measurement of payment for testing.

E17. REMOVALS

E17.1 General Description

- (a) This specification shall cover the removal of:
 - (i) existing site pavement surfacing;
 - (ii) existing site furniture; and
 - (iii) existing topsoil & sod.
- (b) All items to remain shall be protected during construction to the satisfaction of the Contract Administrator.

E17.2 Methods

- (a) Equipment to be used for breaking up of concrete and removals shall be approved by the Contract Administrator.
- (b) All concrete and asphalt shall be removed entirely. Base materials may be left in place to the satisfaction of the Contract Administrator.
- (c) Benches are to be removed as indicated on Drawings.
- (d) Supplemental to CW 3010, topsoil and sod to be removed to depths required by Works.
- (e) All materials, to be demolished and removed, are to be removed from the Site and disposed of in a safe and legal manner. Excavated materials shall be recycled or legally disposed of off-site.

E17.3 Method of Measurement and Basis of Payment

E17.3.1 Method of Measurement shall be as follows:

- (a) Removals will be measured on a lump sum basis for:
 - (i) "Clearing & Grubbing" on Form B: Prices.

E17.4 Basis of Payment

- (a) Removals will be paid for on a lump sum basis. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E18. SETTING OUT THE WORK

E18.1 General Description

- (a) This specification shall cover setting out and layout of the work for Contract Administrator review prior to starting excavation or site grading works.

E18.2 Methods

- (a) The Contractor shall be responsible for setting control and completing all grading, underground services, utilities and other work executed under this contract to all lines, elevations, reference points and measurements based on plans, specifications, basic control points and benchmark(s) supplied by Contract Administrator.
- (b) The Contractor shall employ competent person(s) to lay out work.
- (c) If requested, the Contract Administrator will provide the Contractor with the basic layout plan in CAD format. The Contract Administrator will not provide any survey points, survey data, contours, or DTMs.
- (d) Supply Contract Administrator all survey data utilized upon request of Contract Administrator.
- (e) The Contractor will mark, to the extent they determine to be necessary, the location, alignment and elevation of the Work by means of stakes or marks, for review and approval by the Contract Administrator. The Contractor shall make the completed Works conform to the lines and marks thus approved and indicated.
- (f) The Contractor shall notify the Contract Administrator immediately of the disturbance of any such stakes or marks. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor, as well as the cost of replacing any disturbed stakes or marks.
- (g) Before commencing Work, the Contractor shall satisfy themselves as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City on account of any alleged inaccuracies. If any error is suspected in the Drawings, Specifications or the directions of the Contract Administrator, Work shall be discontinued until the errors are rectified, but no claims shall be made on account of any delay occasioned thereby.
- (h) The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks.
- (i) The Contract Administrator shall be advised of the staking of the work layout at least forty-eight (48) hours in advance in order that the layout may be inspected and adjusted as required prior to construction. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor.
- (j) The Contract Administrator shall only review the stakes and marks for general conformance to the proposed design. The Contractor shall not rely on this review as authoritative or comprehensive review of the staking and shall remain responsible for conformance to the design intent and drawings following this review.

E18.3 Method of Measurement and Basis of Payment

E18.3.1 Method of Measurement

- (a) There shall be no separate payment for the layout of the works or the provision of stakes or marks, these items being considered incidental to the items of work being laid out.

E19. OWNER FURNISHED MATERIALS

E19.1 General Description

- (a) Materials supplied by Owner to be incorporated into the Work.

E19.2 Materials

- (a) The following materials are supplied by the Owner:
 - (i) Wood Chip Mulch for Mulch Pathways (NOT FOR THE TREE MULCH RINGS)
 - (i) from disease free hardwood trees;
 - (ii) varying in size from 50mm to 76mm long and 6mm to 15mm thick;
 - (iii) clean, free of debris, soil, friable materials and contaminants.

E19.3 Methods

- (a) The Wood Chip Mulch to be provided by owner and received by the Contractor.
- (b) The Contractor shall be responsible for the verification of the suitability of the materials for the intended use, and the safe handling and installation.
- (c) The Contractor accepts responsibility for the condition of the materials once delivered to the site, accepts full responsibility for the quality of the supply and installation of the finished product.
- (d) Contact client (City of Winnipeg Project Manager) for delivery coordination of the Wood Chip Mulch.

E19.4 Method of Measurement and Basis of Payment

E19.4.1 Method of Measurement shall be as follows:

- (a) No separate measurement for Owner Furnished materials shall be made for Wood Chip Mulch, as materials are incidental to the Works therein.

E19.4.2 Basis of Payment shall be as follows:

- (a) No separate measurement for Owner Furnished materials shall be made for Wood Chip Mulch, as materials are incidental to the Works therein.

E20. SITE GRADING

E20.1 General Description

- (a) Further to CW 3170, this specification shall cover site grading, including:
 - (i) The cut and fill required to achieve the proposed site grades, and
 - (ii) The owner supplied fill used for levelling low spots located at the top of the landfill.

E20.2 Methods

- (a) The construction area is to be excavated or filled to achieve rough grade.
 - (i) Rough grade by cutting or filling and shaping to levels, profiles, and contours allowing for surface treatments and finishes as indicated on the Drawings using unfrozen fill materials.
 - (ii) Maximum slopes on site shall not exceed 1:2.5 or 40% slope.
 - (iii) Inspect sub-grade exposed by topsoil stripping with the Contract Administrator and identify any problem areas that will require remediation. Cut out these 'soft areas' of sub-grade not capable of compaction and fill with clean fill or granular as directed by geotechnical engineer.
 - (iv) Remove any areas found to be contaminated with fossil fuels or chemicals.
 - (v) Systematically place fill material to allow maximum time for natural settlement. Do not place fill over porous, wet, frozen or spongy sub-grade surfaces.
 - (vi) Place fill material in equal continuous layers not to exceeding 150mm. Compact each lift to required density prior to adding new layer.
 - (vii) Employ a placement method that does not disturb or damage other work. Use a mini sheepsfoot roller where the Site is open enough to accommodate such equipment. Where areas are too small to be compacted with large machinery use vibratory compaction equipment or hand rollers to achieve required compaction. Obtain the Contract Administrator's approval of alternate equipment prior to use.

- (viii) Compact final subgrade layers maintaining optimum moisture content of in-situ and fill materials to attain required compaction density.
- (ix) All surplus or unsuitable materials shall be disposed of off Site in a legal manner and as directed by the Contractor.
- (x) Following rough grading and compaction, the Work area shall be fine graded to provide a maximum deviation of 25mm in 10mm from the design grade with no low areas to hold water. The finished surface of all disturbed areas shall be dragged smooth in such a manner that there are no loose soil particles greater than 25mm in maximum dimensions.

E20.3 Basis of Payment

- (i) Payment for the Work, specified under this section, shall be as per item "Rough Grading", as indicated on Form B: Prices, and shall be deemed to include payment in full for establishing design rough grades, excavation, fill, and any other works necessary to meet design grades.

E21. RIP RAP

E21.1 General Description

- (a) Requirements and procedures for installing rip rap around culverts.

E21.2 Materials

- (a) Hard, dense, round field stone free from seams, cracks or other structural defects, to meet following size distribution for use intended:
 - (i) Minimum size of individual stones 250mm ø, Maximum size of individual stones 325mm ø.

E21.3 Methods

- (a) Placing
 - (i) Place boulder rip-rap to form retaining edges as necessary to complete the smaller rock mulch work. Hand place rock to form a stable mass with minimal gaps as indicated on the drawings.
 - (ii) Infill between larger boulders by hand to hide all remaining open spots where the subgrade can be seen.
 - (iii) Ensure finished stone drainage channels and embankments form stable masses that do not wobble or roll.

E21.4 Method of Measurement and Basis of Payment

- (a) Method of Measurement shall be as follows:
 - (i) Rip Rap will be measured on a lump sum basis for:
 - (i) "Rip Rap on Form B: Prices.
- (b) Basis of Payment
 - (i) Rip Rap will be paid for on a lump sum basis. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E22. CULVERTS

E22.1 General Description

- (a) The supply and installation of landscape culverts as indicated on the drawings.

E22.2 Materials

- (a) Corrugated Steel Pipe: 6.5mm thk, 200mm ø, 38x65mm corrugations.

E22.3 Construction Methods

(a) Site Conditions

- (i) Locate all underground utilities that may interfere with the works. Ensure the location of all known utilities are staked prior to the start of construction.

(b) Protection

- (i) Prevent damage to fencing, trees, landscaping, natural features, bench marks, existing buildings, existing pavement, existing paths, surface or underground utilities which are to remain. Make good any damage.

(c) Supervision and Inspection

- (i) The Contractor shall provide preliminary staking for all drainage works for approval by the Contract Administrator. The Contractor will stake all modifications approved by the Contract Administrator as works are in progress.
- (ii) The Contract Administrator or designated representative will provide periodic review of subgrade drainage installation as they are being undertaken and will provide direction to the Contractor.
- (iii) Ensure rough grades and drainage area profiles conform with the drawings and will achieve positive drainage to outlets as indicated on the drawings before placing drainage material. Report any discrepancies to the consultant immediately.

(d) Installation

- (i) Install per manufacturers written specifications and the drawings ensuring lengths will protrude beyond walkways as shown.
- (ii) Lay on a minimum of 1% slope as indicated on the drawings using well compacted subgrade to achieve bedding condition. Do not use shims or loose fill.
- (iii) Obtain approval of pile installation prior to proceeding with surface works above the culvert.

(e) Acceptance

- (i) Drainage works will be accepted provided all drainage infrastructure is sloped and draining freely as designed.
- (ii) Provide Consultant photographs of the infrastructure and surrounding area immediately after a heavy rain to confirm standard of performance has been achieved.

E22.4 Method of Measurement and Basis of Payment

E22.4.1 Method of Measurement shall be as follows:

- (a) Culverts will be measured on a linear metre basis for:
 - (i) "Culverts", inclusive of base materials, and

E22.4.2 Basis of Payment

- (a) Culverts will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E23. CAST-IN-PLACE CONCRETE FOUNDATIONS

E23.1 General Description

E23.1.1 This Specification shall supplement CW 2160 and cover the supply and installation of cast-in-place concrete foundations for Site Furnishings.

- (a) All underground cast-in-place concrete foundations for Site Furnishings, including bases and anchors are to be set in concrete footings or piles per CW 2160 to ensure stability and prevent frost heaving.

E23.1.2 The Work to be completed by the Contractor under this Specification shall include the supply of all materials, and the furnishings of all superintendence, overhead, labour, equipment, tools, and all other things necessary for and incidental to the satisfactory completion of all the Work shown on the Drawings and specified herein.

E23.2 General Instructions

E23.2.1 Quality Control

(a) Testing and Approval of Materials

- (i) Material testing may be required as per this Specification and as directed by the Contract Administrator.

E23.3 Materials

E23.3.1 All materials as per CW 2160.

(a) Concrete

- (i) Maximum Size of aggregate: 20 mm, nominal;
- (ii) Compression Strength: 28 day compressive strength of 30 Mpa;
- (iii) Slump/Flow: 80 +/- 20mm;
- (iv) Sulphate resistant, Type 50 Cement; and
- (v) Maximum water/cement ratio: 0.49.
- (vi) Air Content: 4-7%

E23.4 Construction Methods

E23.4.1 Construction Methods as per CW 2160.

- (a) If concrete testing is required, do not place concrete until material testing is performed and reviewed by Contract Administrator.
- (b) All concrete foundations for site furnishings as per the Drawings.

E23.4.2 Site Furniture Footing

- (a) Holes for concrete footing for site furnishings must be inspected and approved by the Contract Administrator prior to installation of concrete. Contractor to provide min. three (3) Business Days' notice for inspection.
- (b) All concrete footings for site furnishings shall be in accordance with City of Winnipeg installation details and specifications.
- (c) All posts and supports shall be centred in the concrete footing such that there is a complete collar of concrete around each post and support. Where posts are not perfectly centred there should be a minimum of 50mm (2") concrete at any point around the post.
- (d) The full depth of the City of Winnipeg's specified footing must be below subgrade. If required for specified embedment of post in the footing, footing shall extend in sonotube through the granular drainage layer. Footing must not extend into the concrete or asphalt paving.

E23.4.3 Cold Weather Concreting

- (a) Cold weather concreting shall be as per Section 3.9 of CW 2160 and CSA A23.1.

- (i) All material and equipment needed for adequate protection and curing shall be on hand and ready to use before concrete placement is started.
- (ii) Before concrete is placed all ice, snow, and frost shall be removed from formwork and all surfaces against which concrete will be placed.
 - ◆ Temperatures of adjacent surfaces shall be raised to and maintained at 5° C minimum, prior to and during concreting.
 - ◆ Calcium chloride or other de-icing salts shall not be used as a de-icing agent in the forms.
- (iii) Heating equipment and enclosures shall be per CW 2160 and CSA A23.1.

E23.5 Method of Measurement and Basis of Payment

E23.5.1 Method of Measurement shall be as follows:

- (a) No separate measurement for Cast-in-Place Concrete Foundations shall be made for Site Furnishings, as Foundations are incidental to the Works therein.

E23.5.2 Basis of Payment shall be as follows:

- (a) No additional payment for Cast-in-Place Concrete Foundations shall be made for Site Furnishings, as Foundations are incidental to the Works therein.

E24. CONCRETE PAVING

E24.1 General Description

- (a) Further to CW 3110 and CW 3310, this specification shall cover the supply and installation of 150mm Concrete Paving including excavation, base construction, and concrete paving.

E24.2 Associated Work

- (a) 150mm Concrete Paving, and
- (b) Thickened Edge Concrete Vestibule Pads.

E24.3 Layout and Grading

- (a) The concrete vestibule pads are to be located parallel to the contour lines and are sloped at a maximum grade of 1.5% in the direction of the existing slope to ensure positive drainage.

E24.4 Materials

- (a) Base material to CW 3110:
 - (i) 20mm down crushed stone to depth shown on the Drawings.
- (b) All concrete Work to CW 3310 and as specified on the Drawings.
 - (i) Epoxy coated rebar sized as per Drawings.

E24.5 Methods

- (a) Further to E20 and CW 3170, the construction area is to be excavated or filled to achieve rough grade.
 - (i) Rough grade is to be to levels, profiles and contours allowing for surface treatments.
- (b) Excavated materials are to be removed as per E20.2(a)(x).
- (c) Compacted granular base
 - (i) To CW 3110.
 - (ii) Granular base and formwork are to be reviewed on site by the Contract Administrator prior to pouring concrete.

(d) Concrete

- (i) To CW 3310
- (ii) 150mm Concrete Paving as shown on the Drawings, with thickened edge as indicated on the Drawings.
- (iii) Light broom finish with a slip resistant surface. Contractor to have sample of concrete finish approved by Contract Administrator prior to any concrete being poured.
- (iv) Saw cut locations are to be reviewed by the Contract Administrator prior to implementation.

E24.6 Method of Measurement and Basis of Payment

E24.6.1 Method of Measurement shall be as follows:

- (a) Concrete paving will be measured on a square metre basis for:
 - (i) "Thickened Edge Concrete Paving", inclusive of base and reinforcement materials, and

E24.6.2 Basis of Payment

- (a) Concrete paving will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E25. ASPHALT PAVING

E25.1 General Description

- (a) This specification covers the supply and installation of asphalt repair work in the existing parking lot including all excavation, compaction, geotextile, sub-base and base construction, asphaltic paving, and repair of existing asphalt to ensure a smooth transition to the existing asphalt parking surface.

E25.2 Associated Work

- (a) This specification is supplemental to CW 3110, CW 3170, CW 3410, and SCD-648. Materials, testing, and installation are to conform to these standard specifications.

E25.3 Materials

- (a) Excavated material is to be disposed of off site.
- (b) Sub-base, base materials and depths are as noted on drawing.
 - (i) Recycled concrete will not be acceptable as a base material.
- (c) Asphaltic paving is to be Type 1A. Depth, alignment, grade is as noted on the drawing. Asphalt shall be placed in one lift.

E25.4 Methods

- (a) Except as specifically noted on the drawing pathways are to be constructed so as to function with existing drainage patterns and are to have a minimum cross slope of 1%. Contractor is to stake elevations and ensure that they are satisfactory to the Contract Administrator prior to installing base.
- (b) Sub-base and base courses are to extend past asphalt as shown on the drawing.
- (c) Asphalt is to meet existing asphalt in a neat and precise manner.
- (d) Within 48 hours of installation Asphalt surfaces are to be dusted with concrete dust applied either by sweeping or blowing. Concrete dust that does not adhere to the surface is to be removed.

E25.5 Method of Measurement and Basis of Payment

E25.5.1 Method of Measurement shall be as follows:

- (a) Asphalt paving will be measured on a square metre basis for:
 - (i) "Asphalt Paving", including of base materials on Form B: Prices.

E25.5.2 Basis of Payment

- (a) Asphalt paving will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E26. CHAIN LINK FENCING

E26.1 General Description

- (a) Further to CW 3550, this specification shall cover the supply and installation of new chain link fencing, swinging vehicle gates and pedestrian gates as shown on the Drawings.

E26.2 Materials

- (a) Further to chain link fencing and gates as specified in CW 3550 and on Drawings.
 - (i) Fencing to be 1.8m in height.
 - (ii) Posts, Braces and Rails: To CAN/CGSB-138.2, galvanized steel pipe. Dimensions as indicated: gate posts schedule 40 pipe; end and corner posts .125 wall; line posts .100 wall. Gate, end and corner posts: 89mm diameter. Line posts: 60mm diameter. Rails: Minimum 43mm diameter.
 - (iii) Bottom Tension Wire: To CAN/CGSB-138.1, Table 2, single strand, galvanized steel wire, 5 mm $\varnothing$.
 - (iv) Tie Wire Fasteners: To CAN/CGSB-138.1, Table 2 (steel wire), single strand, galvanized conforming to requirements of fence fabric.
 - (v) Tension Bar: To ASTM A653/A653M, 5 x 20 mm minimum galvanized steel.
 - (vi) Gates: Double sided latching gate latches, lockable as indicated, to CAN/CGSB-138.4.
 - (vii) Gate Frames: To ASTM A 53, galvanized steel pipe, standard weight 45 mm outside $\varnothing$ pipe for outside frame, 35 mm outside $\varnothing$ pipe for interior bracing.
 - (i) Fabricate gates as indicated with electrically welded joints.
 - (ii) Furnish gates with galvanized, malleable iron hinges, latch and latch catch with provision for padlock, which can be attached and operated from either side of the installed gate.
 - (viii) Fittings and Hardware: To CAN/CGSB-138.2, cast aluminium alloy, galvanized steel or malleable or ductile cast iron. Post caps to provide waterproof fit, to fasten securely over posts and to carry top rail.
 - (ix) Organic Zinc Rich Coating: To CAN/CGSB-1.181.

E26.3 Methods

- (a) As per CW 3550 and the Drawings.

E26.4 Method of Measurement and Basis of Payment

E26.4.1 Method of Measurement shall be as follows:

- (a) Chain link fencing will be measured on a liner metre basis for:
 - (i) "Chain Link Fencing and Gates" on Form B: Prices.

E26.4.2 Basis of Payment

- (a) Chain link fencing will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices, including concrete foundations. This price shall be full payment for supplying all labour,

equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E27. POWDER COATING

E27.1 General Description

- (a) Surface preparation and powder coating of arbour and bench seats.

E27.2 Materials

- (a) All metal surfaces shall be powder coated, as indicated on the drawings.
- (b) Powder coating shall be DuraCoat Powder or approved equal.
- (c) The materials shall be kept in their original containers with seals intact, properly identified.
- (d) Materials shall be applied in accordance with the manufacturers printed instructions. All materials shall be of sufficient body and covering capacity to produce a first class finish in all respects.
- (e) Powder coat finishes shall conform to the following specifications:

<u>Properties</u>	<u>Value</u>	<u>Test Method</u>
Specific Gravity	1.2 - 1.8	ASTM D792
Gloss (60%)	35% - 100%	ASTM 5382
Impact	Up to 160 in. lbs.	ASTM D2794
Flexibility	180° 1/8" mandrel	ASTM D522 Method A
Pencil Hardness	H & greater	ASTM D3363
Crosshatch Adhesion	100% pass	ASTM D3359 Method B
Salt Spray	1000+ hours	ASTM B117
Humidity Resistance	1000+ hours	ASTM D2247

All test performed on 24-gauge Bonderite 1000® panels, electrostatically sprayed at 1.8 - 2.2 mils.

- (f) No claim by the Contractor as to unsuitability or unavailability of any material specified or their inability to produce first class work with same will be entertained unless such claims are made in writing.

E27.3 Construction Methods

(a) Workmanship

- (i) All galvanizing, powder coating and finishing shall be done by skilled tradespeople in a workmanlike manner. All materials shall be evenly applied so as to be free from sags, runs, crawls or other defects.
- (ii) No work shall be done under conditions that are unsuitable for the production of good results. Galvanizing and powder coating must be done in shop.
- (iii) All coats shall be thoroughly dry before the succeeding coat is applied.
- (iv) Repair all surface defects in accordance with first class practice. All surface defects shall be corrected prior to application of succeeding coats where applicable.
- (v) Powder coats are intended to cover surfaces perfectly. If surfaces are not all covered, further coats shall be applied. All finishes shall be uniform as to sheen, colour and texture.
- (vi) All surfaces to be powder coated shall be unmarred, free from rough spots or defects that would affect the finished surface.
- (vii) All work where a coat of material has been applied must be inspected and approved by the Consultant before application of the succeeding specified coat; otherwise no

credit for the coat applied will be given and the contractor automatically assumes the responsibility to recoat the work in question at no extra cost.

- (b) Colour Schedule
 - (i) Contractor shall provide colour samples to the Consultant a minimum of 21 days for approval and selection prior to commencing powder coating.
- (c) Surface Preparation – Non-galvanized
 - (i) Thoroughly sandblast all non-galvanized surfaces to near white and powder coat immediately after.
- (d) Surface Preparation - Galvanized
 - (i) Remove dirt, grease and oil from freshly galvanized elements with alkaline cleaning solutions in the pH range of 11 to 12, applied with soft brush. Thoroughly rinse with hot water and let dry completely.
 - (ii) Profile the cleaned galvanized surface using an abrasive sweep or brush blast with organic ballast or approved alternate with a size of 200 to 500 Microns and a Mhos hardness of 5 or lower. Work to be done by experienced applicator.
 - (iii) Consult powder coating applicator on the matched passivation treatment for the galvanized surface prior to final finish.
- (e) Powder Coating Schedule
 - (i) All coats shall be shop applied by powder coating methods.
 - (ii) All coats shall be applied in accordance with manufacturer's specifications.
 - (iii) Apply a minimum of 2 coats for full coverage or any number of additional coats to achieve the specified finish.
 - (iv) Powder coat one sample for approval as standard of finish prior to proceeding with powder coating for all other works in this contract.
- (f) Installation
 - (i) Touch-up all scratched or damaged surfaces in field after completion of arbour and bench installation.

E27.4 Method of Measurement and Basis of Payment

E27.4.1 Method of Measurement shall be as follows:

- (a) No separate measurement for Powder Coating shall be made for Wooden Notice Boards, as powder coat finishes are incidental to the Works therein.

E27.4.2 Basis of Payment shall be as follows:

- (a) No additional payment for Powder Coating shall be made for Wooden Notice Boards, as powder coat finishes are incidental to the Works therein.

E28. SITE FURNITURE

E28.1 General Description

- (a) This specification shall cover the supply and installation of:
 - (i) Benches;
 - (ii) Waste Receptacles; and
 - (iii) Post Bollards.
- (b) This specification shall cover the removal and re-installation of:
 - (i) Benches;
 - (ii) Waste Receptacles; and
 - (iii) Post Bollards.

E28.2 Materials

- (a) Benches
 - (i) Tache Composite Benches with Arms, **Surface Mount**, Drawing No. SCD-121E, Product #52501085GLV, 1.8 M length (6'), manufactured by the City of Winnipeg, galvanized finish for metal and cedar tone for the boards.
- (b) Waste Receptacles
 - (i) Full Size Trash Basket Expanded Metal, **Surface Placed** Product #5250105PrdC-i, painted aluminum finish, manufactured by the City of Winnipeg.
- (c) The contact for City of Winnipeg site furniture is:
 - (i) pwd-cps-orderdesk@winnipeg.ca
- (d) Post Bollards
 - (i) Wood Post Bollard per City of Winnipeg Detail SCD-105B available at <https://legacy.winnipeg.ca/ppd/Documents/CityPlanning/Parks/StandardConstructionDetails/100ParkEquipment/SCD-105B-Post-Bollard.pdf>
 - (ii) 190mm – 230mm ø Pressure Treated Wood Post, set 19mm ø crushed limestone backfill, compacted at base and compacted and mounded at grade.

E28.3 Methods

- (a) All City-manufactured site furnishings are to be ordered and picked up from the City. All furnishings are to be installed according to Drawings and manufacturer's specifications, using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.
- (b) All furnishings are to be installed plumb and true to correct elevations. The Contractor shall confirm proposed locations with the Contract Administrator prior to installation.
- (c) Site furnishings are to be kept clean of any granular, concrete or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.

E28.4 Method of Measurement and Basis of Payment

E28.4.1 Method of Measurement shall be as follows:

- (a) Site furnishings will be measured on a per unit basis for:
 - (i) "Supply & Install Waste Receptacles";
 - (ii) "Relocated Waste Receptacles";
 - (iii) "Supply & Install Tache Benches";
 - (iv) "Relocated Tache Benches"; and
 - (v) "Supply & Install Post Bollards"; on Form B: Prices.

E28.4.2 Basis of Payment

- (a) Site furnishings will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E29. SIGNAGE

E29.1 General Description

- (a) This section includes the supply and installation of regulatory and specialty signage.

E29.2 Submittals

E29.2.1 Paint & Engraving

- (a) Submit 2 sets of colour samples of paint colour and engraving styles, 6 inches x 6 inches. One set of samples will be retained by the Owner and/or Consultant, the other returned to contractor as control samples.
- (b) Clearly label each sample and provide a transmittal page.
- (c) Duly reviewed and approved sign samples shall be the minimum workmanship and quality standard for reference until completion of the Work.
- (d) Adjustments made on samples by the Consultant are not intended to change the Contract Price. If adjustments affect the value of the Work, state such in writing for approval by the Owner prior to proceeding with the Work.

E29.2.2 Text and Art Work

- (a) Electronic templates for artwork to be created for each sign type by contractor for consultant review.
- (b) All text and graphic artwork to be submitted in both full size hardcopy and electronic form as Adobe PDF. The Owner reserves the right to add and otherwise modify sign text and lettering layout without increasing sign size during the submittal reviews at no additional cost to the Owner.

E29.2.3 Foundation Shop Drawings

- (a) Submit engineered stamped shop drawings for signs and C.I.P. concrete foundations.
- (b) The contractor shall submit to the Consultant, shop drawings within 30 (thirty) working days of Award of Contract for each and every component of the Work. These will be emailed to the Consultant for review and sign-off.
- (c) Submit shop drawings to illustrate details of Work on maximum sheet size 11"x17". Shop Drawings for each component and assembly are to be 'to scale'.
- (d) Shop drawings to clearly indicate size, assembly, welds, hardware, miscellaneous items to be used, materials, core thicknesses, finishes, connections, joints, method of anchorage, number and size of anchors, supports, reinforcement, installation details, and accessories for all aspects of work.
- (e) Shop drawings to indicate related, adjacent materials, and connections.
- (f) Provide templates, patterns, and fixing diagrams as required for installations.
- (g) Shop drawings, which are to be provided by the contractor, will be used as the final construction documents and must include all construction, engineering, and installation details for the complete implementation of the designs described herein.
- (h) The contractor shall not proceed with any component of the Work nor provide any of the Products without reviewed shop drawings and approved samples. Should any Work be started or completed, or Product supplied, by the contractor contrary to these requirements, the contractor shall be held liable for all correction and cost incurred.
- (i) Allow for ten (10) working days upon receipt by the Consultant for shop drawing review.

E29.3 Materials

E29.3.1 Reflective Metal Signs

- (a) Aluminum Metal Panel: 0.80 gauge thick metal plate, sign grade, aluminum panel 5052 H36 or H38, size and shape as indicated on Drawings.
- (b) Sheetting: 3M Brand Scotchlite Series 3200 Engineering Grade Reflective Sheetting, or equivalent, complete with permanent pressure sensitive adhesive backing. Sheetting colours as noted on Drawings. Sheetting to comply with ASTM D4956-90.
- (c) Inks: Matched, UV stable, waterproof transparent inks as required. 3M Scotchlite 700 series, enamel baked ink system or approved equal.
- (d) Artwork: to be provided in digital (DXF or EPS) format or any other standard, cross-platform required by manufacturer. This artwork is the property of the Owner, and

shall not be reproduced in any quantity or for any purpose outside the parameters of this Contract without the express written permission of the Owner.

- (e) Refer to Landscape Drawings for artwork and quantities.
- (f) Mounting Hardware:
 - (i) Schedule 40, 50mm diameter, round, hot dipped galvanized sign-posts and or post sleeve bases. Refer to drawings.
 - (ii) Hot-dipped galvanized thru bolts capable of securely fixing signage in place. Sizes as noted on Drawings.

E29.3.2 Wooden Signage Boards

- (a) Metals
 - (i) 6mm thick 5052 H32 Aluminum sheet. Ensure detail to withstand shrinkage. Brushed aluminum finish.
 - (ii) 13mm thick 5052 H32 Aluminum base plate.
 - (iii) Sign Structure - As per engineer sealed drawings
- (b) Mounting Hardware
 - (i) Sign frames vary; refer to drawings.
 - (ii) Stainless steel counter-sunk security screws of a suitable size to securely fasten the signs painted to match the finish of the panel.
 - (iii) Weatherproof spacers
 - (iv) Bituminous paint: Nurpaint by Nuroil, or approved equal for all exposed metal surfaces, including bolts and fasteners, below grade.
- (c) Adhesive
 - (i) Double-sided Tape: 3M VHB tape, tape number: 4941(F); colour: grey; thickness: 1.1mm, or approved equal
 - (ii) Acrylic Adhesive: 3M Scotch-Weld Metal Bonder Acrylic Adhesive, bond flexibility: Semi-rigid; colour: grey; product key: D8407NS; viscosity: non-sag, or approved equal.
 - (iii) https://www.3mcanada.ca/3M/en_CA/company-ca/all-3m-products/~3M-Scotch-Weld-Metal-Bonder-Acrylic-Adhesive/?N=5002385+3291834075&preselect
 - (iv) Epoxy: LocTite AA H8003 Adhesive, or approved equal
- (d) Automotive Paint:
 - (i) Paint for structure shall be applied in strict accordance with manufacturer's specifications.
 - (ii) Primer: Epoxy primer, Endura EP-521 Primer or approved Equal. Apply 2 coats as manufacturers specification to minimum film build thicknesses (5.5-9 mils wet) or approved equal.
 - (iii) Finish: All parts to be painted with automotive paint, satin finish. Refer to drawings for colour. Matthews Acrylic Polyurethane (MPC102) or approved equal. Apply 2 full wet coats, allowing proper flash time between coats (3-4 mils per coat wet film thickness) as per manufacturers specification or approved equal.
 - (iv) Clear Coat with Graffiti Guard: Matthews Acrylic Polyurethane 42228SP/01 Satin Clear, or approved equal. Apply 2 full wet coats, allowing proper flash time between coats (3-4 mils per coat wet film thickness) as per manufacturers specification or approved equal.
- (e) Precision Tooled Aluminum Plaque - Laser Etching Black Infill:
 - (i) Black Infill: Painted – Black colour with satin finish
 - (ii) Depth to be confirmed during mock-up process.

E29.4 Construction Methods

E29.4.1 Reflective Metal Signs

- (ii) Provide proposed colour sample to Consultant for approval prior to fabrication.
- (iii) Send proofs of sign graphics and letters at suitable scale for Consultant's approval prior to fabrication.
- (iv) De-bur, degrease, & etch edges of sign plates to accept reflective sheeting decals in accordance with decal manufacturer's recommendations.
- (v) Apply sheeting in accordance with manufacturers written specifications. Decals shall be centered precisely on base plate. Trim sheeting to form clean, smooth edge along perimeter of base plates.
- (vi) Install sign bases:
- (vii) In soft landscape areas, friction drive posts into existing subsoil, compacted fill or base to depths indicated on Drawings.
- (viii) In paved areas, install with galvanized post sleeves and anchors as indicated on Drawings.
- (ix) Fasten signage as indicated on Drawings. Confirm sign locations and orientation on site with Consultant prior to installation.

E29.4.2 Wooden Signage Board Fabrication

- (a) Obtain approval of all associated shop drawings and mock ups prior to commencing fabrication. Mock up review can occur in contractors shop.
- (b) Form work to required shapes and sizes, with true curve lines and angles. Provide necessary rebates, lugs and brackets for assembly of units. Use concealed fasteners whenever and wherever possible. Countersink visible fasteners when necessary and paint to match the finish of the panel.
- (c) Fabricate work square, true, straight, and accurate to required sized, with joints closely fitted and properly secured.
- (d) Shop fabricate all products so far as practicable. Joints are to be fastened flush to conceal reinforcement or welded where thickness or section permits.
- (e) Ensure exposed welds are continuous for length of each joint. File or grind exposed welds smooth and flush.
- (f) All welds shall be min 6mm all around fillet welds.
- (g) All welds, except hidden welds, shall be ground smooth and flush with adjacent surface.
- (h) Provide for thermal movement, heat and moisture dissipation and drainage by approved non-staining, non-oxidizing methods.
- (i) Contact surfaces of connected members to be true. Assemble so joints will be tight and practically unnoticeable, without use of filling compound.
- (j) Signs shall have fine, even texture and be flat and sound. Lines and miters sharp, arises unbroken, profiles accurate and ornament true to pattern. Plane surfaces to be smooth, flat and without oil-canning, free of rack and twist.
- (k) Level or straighten wrought work. Members shall have sharp lines and angles and smooth surfaces.
- (l) Extruded members to be free from extrusion marks. Square turns and corners sharp, curves true.
- (m) All painted surfaces shall be properly primed. Finish coating of paint to have complete coverage with without any substrate or primer to showing. Finished surface to be smooth, free of scratches, gouges, drips, bubbles, thickness variations, foreign matter and other imperfections.
- (n) Movable parts, including hardware, are to be cleaned and adjusted to operate as designed without binding or deformation of members. Doors and covers centered in opening or frame. All contact surfaces fit tight and even without forcing or warping components.

- (o) Provide a suitable non-corroding and structurally sound bond-break between all dissimilar materials to prevent galvanic reaction.
- (p) Product must be made accessible for quality control inspection at any time.
- (q) In so far as practicable, fabrication, assembly and fitting of the work shall be executed in the shop with the various parts or assemblies ready for installation on site; keeping work done on site to a minimal. Work that cannot be shop assembled shall be given a trial fit at the shop to insure a proper and expeditious field assembly.
- (r) The contractor shall not use any hazardous substance in the manufacture of the signs, nor bring on site any hazardous substances regulated under environmental laws unless express written consent has been obtained from Consultant and the Owner.

E29.4.3 Wooden Signage Board Installation

- (a) Sign locations as shown on location drawings are for general information only. Coordinate field location and approval of all signage within this contract with the Consultant and Owner prior to commencing installation.
- (b) Ensure all utilities and services have been located and marked prior to drilling and pouring concrete.
- (c) Do not disturb adjacent items designated to remain in place.
- (d) Coordinate metal fabrication works with concrete installations.
- (e) Exposed fasteners devices to be compatible with material through which they pass.
- (f) Furnish inserts and anchoring devices which must be set in concrete or other material for installation of signs. Provide setting drawings, templates, instructions and directions for installation of anchorage devices which may involve other trades.
- (g) Install concrete and obtain approval. Allow concrete to cure 28 days prior to sign installation unless otherwise authorized by the consultant.
- (h) Mount signs in proper alignment, level, plumb, and securely fastened to foundations and other edges according to the sign location plan and the dimensions given on elevation and sign location drawings. Where otherwise not dimensioned, signs shall be installed where best suited to provide a consistent appearance throughout the project. When exact position, angle, height or location are in doubt, contact the Consultant for placement.
- (i) Once installation of sign assembly is complete, apply bituminous paint to all exposed metal surfaces, including bolts and fasteners, below grade.
- (j) Remove or correct signs or installation work the Consultant deems unsafe or not meeting the drawings and specifications.
- (k) At completion of sign installation, clean exposed sign surfaces. Clean and repair any adjoining surfaces that became soiled or damaged as a result of installation of signs.
- (l) The contractor is to protect goods supplied by him from damage during installation with appropriate insurance against fire, theft, or other damage. They shall also protect from injury the property of the Owner, which may be adjacent, or with which he may come in contact, and they shall make good any such damage occurring through their fault.
- (m) When installing signs in the vicinity of building expansion joints, consideration to be given to the movement created by the joints.
- (n) Any interaction with any existing building condition that is deemed necessary for the proper construction, fabrication or installation of the work under this contract must be brought to the attention of the Owner and Consultant immediately and prior to the commencement of any work. This includes, but is not limited to, any demolition, patching of existing conditions and any disruption or modifications to any building mechanical, electrical or other system.

- (o) Restore areas and existing works outside areas of demolition and installation disturbed by sign installation activities to match existing condition or condition of adjacent, undisturbed areas as directed by the consultant.

E29.4.4 Warranty

- (a) Aluminum Panels with automotive paint finish, clear coat with graffiti guard, as well as Precision Tooled Aluminum Plaque - Laser Etching Black Infill:
 - (i) A lifetime warranty for installation of signs, under normal use as designed, any such sign fades and/or shows substantial peeling, cracking, flaking, or splitting to the extent that it is not effective for its intended purpose when viewed at normal viewing distances and speeds, the Contractor will remove the defective sign and install a new duplicate sign in exchange for the original at no cost to the user/purchaser.
 - (ii) Damage due to improper use, accidents, negligence, structure settlement, chemical damage, severe weather, improper repairs by others or vandalism will not be subject to warranty repair.
 - (iii) The contractor shall warrant materials, fabrication and installation including work by sub-trades.

E29.5 Method of Measurement and Basis of Payment

E29.5.1 Method of Measurement shall be as follows:

- (a) Regulatory Signage will be measured on a per unit basis for:
 - (i) "Regulatory Signage" on Form B: Prices.
- (b) Park Name Letters will be measured on a per unit basis for:
 - (i) "Park Name Letters" on Form B: Prices.
- (c) Wooden Signage Boards will be measured on a per unit basis for:
 - (i) "Wooden Notice Boards" on Form B: Prices.

E29.5.2 Basis of Payment

- (a) Regulatory Signage will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
- (b) Park Name Letters will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of locations, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
- (c) Wooden Signage Boards will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E30. SITE CARPENTRY & TIMBER CONSTRUCTION

E30.1 General Description

- (a) Provide all labour, materials, methods, equipment and accessories for the supply and installation of wooden fences, wooden post bollards, and wooden notice boards.

E30.2 Submittals

E30.2.1 Samples

- (a) Wooden Notice Boards

- (i) Provide a 140mm x 140mm x 300mm long sample of White Oak Timber products and finishes for approval prior to ordering material. Approved samples will act as the standard of finish for all site carpentry.
- (b) Wooden Fences at Vestibules
 - (i) Provide the following:
 - (ii) 89mm wide x 300mm long sample of Cedar fence board products and finishes for approval prior to ordering material. Approved samples will act as the standard of finish for all site carpentry.

E30.2.2 Shop Drawings

- (a) Provide shop drawings of miscellaneous metal fittings, hinges, handles, and components.

E30.3 Materials

- (a) All wood products are to be No. 2 grade or better cedar free of checks, warping, & major knots. Conforming to requirements of CSA 0141 (latest) and graded in accordance with the national lumber grades authority "standard grading rules". Maximum moisture content of 17%. Sound, square edges, no bark, no rot, no wane on any surface. All wood to be kiln dried. Contractor shall obtain a certificate of grade and origin prior to installing timbers.

E30.3.2 Wooden Notice Boards

- (a) 140mm x 140mm (6x6) White Oak Post, rough sawn.

E30.3.3 Wooden Fence

- (a) 89mm x 89mm (4x4) Exterior No.1 exterior graded PT pine posts, cedar tone brown.
- (b) 38mm x 89mm Cedar Stringers & Braces.
- (c) 140mm x 19mm Cedar Top Cap & Fence Boards.
- (d) 70mm x 19mm Cedar Fence Boards.

E30.3.4 Hardware

- (a) Rust-proof or acid-proof mounting fasteners must be used. Powder Coated aluminum must be used to avoid discolouration of the wood. Galvanized fasteners, handles, or hinges are not acceptable.
- (b) Bolts, nuts, washers, lag screws, to be stainless steel or acid proof where noted, sizes to suit application. Galvanize hardware is not acceptable.
- (c) Use plastic or neoprene washers between disparate materials such as concrete, wood and metal to prevent corrosion.
- (d) Wooden Notice Boards: 76mm Stainless Steel Hook Latch. Colour: Brushed Stainless Steel.
- (e) Wooden Notice Boards: 13mm x 110 mm Black Modern Heavy Duty Handle. Colour: Powder Coated Black.
- (f) Wood Gate Latches: Heavy Duty, Black D&D Technologies Lokklatch Magnetic Gate Lock, or approved equal. Model Number: LLMKABT. Colour: Powder Coated Black.
- (g) Wood Gate Hinges: Heavy Duty, Black D&D Technologies Trueclose HD Adjustable Self Closing Gate Hinge, or approved equal. Model Number: TCHD1S3. Colour: Powder Coated Black.

E30.4 Construction Methods

E30.4.1 Handling and Use

- (a) Handle and use Cedar and PT Wood materials in a manner which will avoid damage or field fabrication, causing alteration in original treatment and finish.

- (b) Treat exposed Cedar and PT Wood products with preservative of the same colour as the original finish in the field.

E30.4.2 Workmanship

E30.4.3 Construct all work to details, using adequate fastening methods to ensure solid, durable finished work suitable for the purpose intended.

E30.4.4 Pre-drill all fasteners. Do all fastening neatly, evenly and thoroughly.

E30.4.5 Install all members true to line, levels and elevations. Set plumb and space uniformly.

E30.4.6 Use timbers of the longest possible length to minimize joints.

E30.5 Method of Measurement and Basis of Payment

(a) Method of Measurement shall be as follows:

- (i) No separate measurement for Site Carpentry & Timber Construction shall be made for Wooden Notice Boards, as materials and methods are incidental to the Works therein.
- (ii) Wooden Vestibules/Fencing (including gates) will be measured on a linear meter basis for:
 - (i) "Wooden Vestibules/Fencing (including gates)", on Form B: Prices.

E30.6 Basis of Payment

- (a) No separate payment for Site Carpentry & Timber Construction shall be made for Wooden Notice Boards, as materials and methods are incidental to the Works therein.
- (b) Site Carpentry & Timber Construction for Wooden Vestibules/Fencing (including gate) will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total linear meter as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E31. PLANTING MEDIUM AND FINISHED GRADING

E31.1 Description

E31.1.1 Provide all labour, materials, methods, equipment and accessories for the supply and installation of planting medium for planting beds.

E31.2 References

E31.2.1 Agriculture and Agri-Food Canada

.1 The Canadian System of Soil Classification, Third Edition, 1998.

E31.2.2 Canadian Council of Ministers of the Environment (CCME) Guidelines.

E31.2.3 The City of Winnipeg Standard Construction Specifications

.1 CW 1130 – Site Requirements

.2 CW 3540 – Topsoil and Finish Grading for Establishment of Turf Areas

E31.3 Submittals

E31.3.1 Submit 0.5kg sample of planting medium to National Testing Laboratory, or approved alternate, and indicate present use and intended use. Prepare and ship sample in accordance with Provincial regulations and testing laboratory requirements.

E31.3.2 Submit two (2) copies of soil analysis and recommendations for corrections to Contract Administrator.

E31.3.3 Submit two (2) litre sample of compost to Contract Administrator with manufacturers literature and material certification that the product meets the CCME guidelines.

E31.4 Quality Assurance

- E31.4.1 This project shall use locally produced planting medium, amended as required.
- E31.4.2 Inform Contract Administrator of proposed source of materials to be supplied and provide a sample for review by Contract Administrator prior to installation.
- E31.4.3 Testing of planting medium to be carried out and paid for by Contractor. Prepare and ship planting medium samples to approved laboratory in accordance with Provincial regulations and laboratory requirements, indicating intended use on each sample.
- E31.4.4 Inspection and testing of planting medium will be carried out by a Testing Laboratory chosen by the Contractor. Testing laboratory to be certified in accordance with CSA A283.
- E31.4.5 A minimum of three (3) tests area required:
- (a) Test 1 – planting medium.
 - (b) Test 2 – amended planting medium based on the results of test 1.
 - (c) Test 3 – re-testing of planting medium if required, to meet specifications.
- E31.4.6 Test planting medium for nutrients N, P, K, micronutrients, soluble salt content, pH value and OM (organic matter).
- E31.4.7 Acceptance of planting medium is subject to an inspection of material and confirmation of test results. Do not commence soft landscaping work until Contract Administrator has accepted planting medium.

E31.5 Delivery, Storage and Handling

- E31.5.1 Store materials in a dry area, protected from freezing, sedimentation and contamination.
- E31.5.2 Deliver and store fertilizer in waterproof bags labeled with weight, analysis and name of manufacturer.

E31.6 Materials

- E31.6.1 Topsoil: In accordance with CW 3540 for topsoil except organic matter to be in the range of 5-10%.
- E31.6.2 Peatmoss: deliver from partially decomposed fibrous or cellular stems and leaves of species of sphagnum mosses. Elastic and homogeneous, brown in colour. Free of wood and deleterious material that could prohibit growth. Shredded particle minimum size: 5 mm.
- E31.6.3 Compost:
- (a) mixture of soil, decomposing organic matter used as fertilizer, mulch or soil conditioner.
 - (b) Dark brown in colour, no objectionable odour.
 - (c) Processed organic matter containing 40% or more organic matter as determined by Walkley-Black or Lost On Ignition (LOI) test.
 - (d) Must be sufficiently decomposed (i.e. stable) so that any further decomposition does not adversely affect plant growth (C:N ratio below 25:1) and contain no toxic or growth inhibiting contaminants.
 - (e) Composed bio-solids to: CCME Guidelines for Compost Quality, Category A.
- E31.6.4 Sand: hard fine silica sand, well washed and free of impurities, chemical or organic matter. Coarse texture, and to the following gradation:

<u>Particle Size (mm)</u>	<u>% Passing through Screen</u>
2.0	100%
1.0	95 to 100%
0.5	80 to 100%

0.25	0 to 30%
0.15	0 to 8%
0.075	0 to 1%

E31.6.5 Planting Medium

- (a) All planting media shall be a thorough blend of the materials noted above in the proportions and to the fertility parameters noted below.
- (b) Keep all materials moist during blending stage to facilitate uniform mixing and to minimize peat, soil and sand separation.
- (c) Final mix shall have a pH of between 6.5 and 8 unless otherwise noted.
- (d) Provide a two (2) gallon sample of the planting medium tested including test results.
- (e) Planting medium for planting beds, tree pits and sod areas to contain (by volume):
 - (i) 40% Topsoil
 - (ii) 35% Peat
 - (iii) 20% Coarse Sand
 - (iv) 5% Compost

E31.6.6 Fertilizer: Synthetic start-up slow release fertilizer with a N-P-K analysis of 12-36-15 ratio at a rate of 4 kg per 100 m² which is 8 pounds per 100 sq ft.

E31.7 Construction Method

E31.7.1 Excavation

- (a) Excavate planting beds by hand or using approved soft digging technology unless otherwise directed by Contract Administrator. Dispose of all rock, clay soils and other deleterious materials off Site.
- (b) Protect bottom of excavations against freezing.
- (c) Remove water that has entered the excavation prior to planting. Notify Contract Administrator if water source is groundwater.
- (d) Verify and obtain approval by Contract Administrator of planting beds prior to compacted soil mound and planting medium placement.

E31.7.2 Planting Medium Placement

- (a) Place planting medium in uniform layers over approved, unfrozen sub-grade, to the depth indicated on the Drawings.
- (b) Eliminate rough spots and low areas, Prepare a loose, friable bed, boot firm and level.

E31.7.3 Soil Amendments

- (a) Apply lime, sulphur, or other soil amendment at a rate determined and recommended from planting medium sample test.
- (b) Mix soil amendment well into full depth topsoil prior to application of fertilizer.

E31.7.4 Finished Grading and Rolling

- (a) Per CW3540.
- (b) Fine grade entire soil area to elevations as indicated on the Drawings. Eliminate rough spots and low areas. Leave surfaces smooth, uniform and firm against foot printing with a fine loose texture.

E31.8 Surplus Material

E31.8.1 Dispose of unused planting medium off site in accordance with CW1130.

E31.9 Cleaning

E31.9.1 Perform cleaning to remove accumulated environmental dirt from all paved surfaces of building faces. Remove surplus materials, rubbish, tools and equipment barriers.

E31.10 Measurement and Payment

E31.10.1 Supply and placement of planting medium shall be measured on a volume basis and paid for at the Contract Unit Price per cubic metre as indicated on Form: B for "Topsoil & Finish Grading for Native Grass Planting". The volume to be paid for shall be the total cubic metre volume installed in accordance with this specification, accepted and measured by the Contract Administrator.

(a) Items of Work:

(i) Planting Medium

E32. TOPSOIL & SODDING

E32.1 General Description

(a) This specification shall cover the site preparation and the supply and installation of topsoil and sod.

E32.2 Materials

(a) Topsoil: As per CW 3540.

(b) Sodding:

(i) As per CW 3510.

(ii) Sod shall be mineral base.

(c) Organic based 3-4-3 starter fertilizer

E32.3 Methods

(a) Areas to be sodded shall be excavated and/or filled with clean fill and graded to meet the grades required for the installation of topsoil and sod and as shown on the Drawings. Surplus materials shall be removed off-site in a legal manner.

(b) Topsoil shall be installed to a minimum of 75mm compacted depth.

(c) Fertilizer Rate: applied at manufacturer's stated rates to topsoil prior to sodding. Bag tags to be supplied to the Contract Administrator.

(d) Where Sodding meets existing turf, the edges are to be cut neatly in straight lines using a sod cutter and new sod is to be installed to match the existing grades of the surrounding turf.

(e) Seams between new and old turf are to be top-dressed, seeded and rolled.

E32.4 Maintenance Period

(a) The Contractor shall maintain the sod for thirty (30) Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510.

E32.5 Method of Measurement and Basis of Payment

E32.5.1 Method of Measurement shall be as follows:

(a) Topsoil and sodding will be measured on a square metre basis for: (i) "Topsoil and Sodding" on Form B: Prices.

E32.5.2 Basis of Payment

(a) Topsoil and sodding will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

(b) Payment under this section shall be in accordance with the following:

- (i) Seventy-five percent (75%) following the supply and installation of the topsoil and sod.
- (ii) Twenty-five percent (25%) following termination of the maintenance period.

E33. TREE PLANTINGS

E33.1 General Description

- (a) This specification shall cover the site preparation, the supply and installation of trees, and tree warranty.

E33.2 Materials

- (a) Trees
 - (i) The size and type as specified on the Drawings, and in no case less than 65mm Ø.
 - (ii) Plant material shall be of quality and sizing consistent with all sections of "Canadian Guide for Nursery Stock" latest edition as published by the Canadian Nursery Trades Association. Plants are to be measure when in their natural position. Height and spread dimensions refer to the main body of the plant and not to the distance from branch tip to branch tip. Measurement of calliper is to be at a height of 15cm above the base of the tree as measured in the nursery. All other measurements are to be as per Canadian Guide for Nursery Stock.
 - (iii) Trees shall be number one grade having only sturdy stems that are reasonably straight for type, a well-balanced crown, and a single dominant leader. Trees shall be well branched, true to type, and structurally sound. Contract Administrator reserves the right to reject any trees that do not meet these criteria or show signs of disease, mechanical damage, insect or rodent damage, sunscald, or frost cracks. All parts of the tree shall be moist and show live, green cambium beneath the surface of the bark.
 - (iv) Plants from native stands, woodlots, orchards, or abandoned nurseries shall be deem 'collected'. The use of collected plants will not be permitted.
- (b) Planting Medium
 - (i) Planting Medium shall be screened 4-way mix garden soil with a mixture of two parts black loam topsoil, one part sand, and one part peat moss.
- (c) Tree Stakes
 - (i) 3 (three) – 75mm round, firmly anchored pressure-treated wooden stakes per tree, 150mm max from rootball as shown on Drawings.
 - (ii) Tree fixed with woven polypropelene strap to each stake.
- (d) Tree Protection Mesh
 - (i) Galvanized welded wire mesh, 12.5 gauge, 100mm (4") high by 50mm (2") wide openings, 1.22m panel height. Acceptable product: Yardguard welded wire mesh or approved equal.
 - (ii) All trees planted within the fenced area of the On-Leash Dog Park are to have Tree Protection Mesh installed.
- (e) Trunk Collar
 - (i) 100mm ø corrugated HDPE Pipe, 600mm height.
- (f) Watering Saucer
 - (i) Local shredded Natural Wood Chip from locally harvested elm or ash, to depths as indicated on Drawings. Pine Bark Mulch will not be accepted.

E33.3 Methods

- (a) Trees to be planted consistent with the details provided on the Drawings.
- (b) All nursery stock shall be well protected from damage from the time of digging until the time of planting on site. Supply and Installer are to ensure that the root ball is protected from drying out and that all roots have been cleanly cut.

- (c) Transport of nursery stock shall be done in a manner so that trees do not suffer damage. Branches shall be tied to reduce the risk of mechanical damage. Equipment used to handle nursery stock shall be padded. Nursery stock shall be maintained in a moist condition from time of arrival on site until time of planting.
- (d) At the end of the maintenance period, the Contractor is to remove any stakes and tree ties from the Site.

E33.4 Method of Measurement and Basis of Payment

E33.4.1 Method of Measurement for trees and maintenance shall be as follows:

- (a) Trees will be measured on a per unit basis for
 - (i) "Supply & Installation of Trees" on Form B: Prices.

E33.4.2 Basis of Payment

- (a) Trees will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment, and materials, and performing all operations herein described, including mulch, topsoil and installation of tree stakes and welded wire mesh and all other items incidental to the Work and as accepted by the Contract Administrator.

E34. INSTALLATION OF OWNER SUPPLIED MULCH PATHWAYS

E34.1 General Description

- (a) This specification shall cover the installation of owner supplied mulch as shown on the drawings.

E34.2 Materials

- (a) Further to E19, Owner Supplied Wood Mulch shall be clean, free of debris, weeds, soil, and foreign materials.

E34.3 Methods

- (a) Prior to placement, verify that the existing areas are mown, stable, and free of loose debris or standing water.
- (b) Using a skid steer or other approved equipment, uniformly spread the owner supplied wood mulch over the existing compacted trail surface to the depths indicated on the drawings. Thickness shall be measured after final leveling and grading.
- (c) Feather mulch neatly at trail edges to provide a smooth transition to adjacent grades.
- (d) Rake and dress mulch surface as required to achieve a consistent appearance free of mounds, depressions, or exposed underlying trail material.
- (e) No compaction of the mulch shall be performed.

E34.4 Method of Measurement and Basis of Payment

E34.4.1 Method of Measurement for installation of owner supplied mulch shall be as follows:

- (a) Installation will be measured on a square meter basis for
 - (i) "Installation of Owner Supplied Mulch Pathways" on Form B: Prices.

E34.4.2 Basis of Payment

- (a) Installation of Owner Supplied Mulch Pathways will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment, and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E35. MOWN PATHWAYS

E35.1 General Description

- (a) This section covers the mowing and trimming of existing and new trails to provide a safe, clean and unobstructed travel corridor as indicated on the Drawings.

E35.2 Methods

- (a) Prior to commencing work, inspect the trail for hazards or obstructions that may interfere with mowing operations.
- (b) Stake out or spray areas of mowing for Field Review with Contract Administrator prior to mowing any sections of trailways.
- (c) Mow all vegetation within the designated trail corridor using equipment appropriate for the terrain and vegetation density.
- (d) Maintain a uniform cut height of 75 mm unless otherwise directed by the Contract Administrator.
- (e) Trim vegetation around signs, posts, bollards, benches, and other fixed features where mechanical mowing cannot achieve a complete cut.
- (f) Remove woody vegetation, saplings, and volunteer growth up to **25 mm (1 inch)** in diameter that encroach into the trail corridor.
- (g) Mowing shall produce a clear travel corridor free from vegetation that impedes pedestrian or maintenance access.
- (h) Grass clippings and finely mulched vegetation may remain in place, provided they do not accumulate on the trail surface or obstruct drainage. Excessive windrows or piles of cut material shall be evenly dispersed or removed from the trail surface.
- (i) Exercise care to prevent damage to adjacent trees, shrubs, utilities, signs, fencing, and other infrastructure. Any damage caused by the Contractor shall be repaired or replaced at no additional cost to the Owner.

E35.3 Method of Measurement and Basis of Payment

E35.3.1 Method of Measurement for installation of owner supplied mulch shall be as follows:

- (a) Installation will be measured on a square meter basis for
 - (i) "Mown Pathways" on Form B: Prices.

E35.3.2 Basis of Payment

- (a) Mown Pathways will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment, and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E36. SITE RESTORATION

- E36.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, and as a condition of Total Performance the Contractor shall restore all areas of the Site beyond the established limited of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

E37. LANDSCAPE MAINTENANCE

E37.1 Description

- E37.1.1 Provide all labour, materials, methods, equipment and accessories for the maintenance of trees and sod following acceptance of the plant material to start warranty.
- E37.1.2 In general, the Work shall include:
- (a) Fertilizing
 - (b) Watering
 - (c) Weed Control
 - (d) Pest and disease Control
 - (e) Winter Preparation
- E37.1.3 Maintenance shall be performed on a bi-weekly basis at a minimum.
- E37.1.4 Mowing will be performed by City staff, following acceptance as outlined in City of Winnipeg Standard Specification CW 3510.
- E37.2 Maintenance and Warranty Period
- E37.2.1 Thirty (30) days after the planting installation has been completed, the Contract Administrator shall perform an inspection of the plant material to determine if the plant material is acceptable to start warranty.
- E37.2.2 The maintenance and warranty period shall begin following acceptance of plant material by Contract Administrator and shall be for a period of two (2) years.
- E37.3 Submittals
- E37.3.1 Submit maintenance log to Contract Administrator indicating date, times, employee, start time, stop time and maintenance activities.
- E37.3.2 Payment will not be processed without receipt of maintenance logs.
- E37.4 Materials and Equipment
- E37.4.1 Materials shall conform to the requirements of related Specification sections.
- E37.4.2 Provide all equipment to properly execute Work. Maintain such equipment in a workable, safe condition while in use during this project.
- E37.4.3 Contract Administrator shall review equipment to be used to execute Work prior to execution.
- E37.5 Method
- E37.5.1 General
- (a) Provide watering service within 24 hours, weeding services within 48 hours of the request by the Contract Administrator. Monitor the Site and advise the Contract Administrator of conditions that might void the Contractor's warranty responsibilities.
 - (b) Provide maintenance schedule to Contract Administrator prior for the two (2) year maintenance period.
 - (c) Contractor shall notify Contract Administrator of the exact time Contractor proposes to commence each application.
 - (d) Schedule operations in accordance with growth, health, weather conditions, and use of Site.
 - (e) Perform each operation continuously and completely within a reasonable time period.
 - (f) Store equipment and materials off Site.
 - (g) Collect and dispose of debris or excess material on the day the maintenance is undertaken.
- E37.5.2 Maintenance of Trees:

- (a) Fertilizing: Apply fertilizer only at frequency, ratio and rates as recommended by manufacturer. Water immediately after fertilizing. Apply fertilizer no later than May 30th of each maintenance year.
- (b) Watering: Apply water as required to supplement rainfall and to maintain optimum growing conditions. In general, water once a week to achieve rates as indicated. Allow soil to adequately dry between watering to prevent over saturation without creating water stress. Subject to the above-noted requirements, the Contractor must water at least once a week between May 1st and October 15th inclusive. A complete record is to be kept of each series of waterings for all planted trees noting location and date of watering. This record is to be given to the Contract Administrator when requested. Apply 40 litres of water per 25 mm calliper per application using a deep root feeder or low pressure open flow nozzle and hose. The water stream must not gouge the soil.
- (c) Weed Control: Inspect and undertake weed control weekly during the first year of maintenance and monthly during the second year. By hand, remove all weeds with their roots from tree pits and tree beds and dispose of off Site. When weeding operation is complete, replace and rake displaced soil to its original condition.
- (d) Pests and Diseases: Obtain written approval of Contract Administrator prior to using any pesticide. Control pests and disease through pruning or application of pesticides. Use species specific pesticides where possible. Use only pesticides of low mammalian toxicity. Strictly follow manufacturer's written instructions.
- (e) Pruning: The Contractor shall provide a person with a Manitoba Arborists Certificate for each work crew or Work Site. Prune as required to remove dead, broken or damaged limbs. Prune back to healthy growth while maintaining balanced crown shape. Employ clean sharp tools. Make cuts smooth and flush with outer edge of branch collar near the main stem or branch. Cuts must be smooth and sloping to prevent accumulation of water on cut. Do not leave little stumps ("horns") on trunks or main branches. Prune according to accepted horticultural practices as outline in "The Pruning Manual", Publication No. 1505-1977 by Agriculture Canada.
- (f) Winter Preparation: Ensure adequate moisture in tree root zones prior to freeze-up.

E37.6 Maintenance Period

- (a) All trees installed as part of this Contract shall be guaranteed for a minimum period of two years from the recognized completion date. Any trees found in poor condition or dead during this period shall be subject to replacement with stock meeting the original specification and using methods/techniques consistent with the original specification, without cost to the City. During the growing season, the removal of said tree shall occur within two weeks of the Contractor being notified of the condition of the tree and the planting hole restored. The replacement tree shall be planted as it becomes available and at a time deemed most suitable for that specific tree species, as determined by the Contract Administrator. Excepted are materials or items damaged due to accidental causes or vandalism, which will not be subject to warranty.
- (b) Contract Administrator reserves the right to extend the Contractor's warranty obligations for an additional one year period if, at the end of the initial warranty period leaf development and growth are not sufficient to ensure future survival.
- (c) Replacement trees installed under the terms of the warranty shall be maintained for a period of two (2) years from the date that the replacement plant is installed.

E37.7 Measurement and Payment

E37.7.1 Method of Measurement shall be as follows:

- (a) Landscape Maintenance will be measured on a monthly percentage based on the date of Substantial Completion in relation to the total time of Landscape Maintenance Period, as indicated on Form B: Prices.
- (b) Maintenance on trees will be measured on a yearly basis, to a maximum of two years even if the maintenance period is extended following replacement, for
 - (i) "Maintenance and Warranty on Trees" on Form B: Prices

E37.7.2 Basis of Payment

- (a) Landscape Maintenance will be paid for as a percentage completed based on total time. This price shall be full payment for supplying all labour, equipment and materials including water and fertilizer, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
- (b) Maintenance on trees will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. This price shall be full payment for supplying all labour, equipment, and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.