



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 250-2016

TYNDALL PARK COMMUNITY CENTRE OUTDOOR CLASSROOM

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 TYNDALL PARK COMMUNITY CENTRE OUTDOOR CLASSROOM

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, May 12, 2016.

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

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

B3. SITE INVESTIGATION

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

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 Bid Opportunity, 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 Bid Opportunity 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 Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

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

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

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

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity 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 Bid Opportunity, 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.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Price.
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a).
- B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

- B9.1 The Bidder shall complete Form A: Bid, making all required entries.
- B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B9.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B9.4.2 All signatures shall be original.
- B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

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) NA

B12. QUALIFICATION

B12.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; 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.

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

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

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

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

B12.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

B13.1 Bids will not be opened publicly.

B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B15. WITHDRAWAL OF BIDS

B15.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.

B15.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B16. EVALUATION OF BIDS

B16.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B7.

B16.2 Further to B16.1(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.

B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

- B16.4 Further to B16.1(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.
- B16.4.1 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B17. AWARD OF CONTRACT**
- B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B17.2 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 responsible and qualified, and the Bids are determined to be responsive.
- B17.2.1 Without limiting the generality of B17.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.
- B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.
- B17.4 Notwithstanding C4, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B17.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity 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 major components of the Work are as follows:

- (a) Supply and Install asphalt pathway;
- (b) Supply and Install limestone block retaining wall;
- (c) Site grading and sodding.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:
Shauna Prociuk
Landscape Architect
Telephone No. 204-986-3938
Email: shaunaprociuk@winnipeg.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.

D3.3 Bids Submissions must be submitted to the address in B8.5.

D4. CONTRACTOR'S SUPERVISOR

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

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

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

D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174
- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155
- D6.5 Bids Submissions must be submitted to the address in B8.5.**

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

- D7.1 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.

D8. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

D9. INSURANCE

- D9.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed

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

- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

D10.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D11. SUBCONTRACTOR LIST

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

SCHEDULE OF WORK

D12. COMMENCEMENT

D12.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

- D12.2 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 D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10; and
 - (vi) the Subcontractor list specified in D11.
 - (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.

D12.3 The Contractor shall commence the Work on the Site within seven (7) Calendar Days of receipt of the Purchase Order.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance within fifteen (15) consecutive Working Days of the commencement of the Work as specified in D12.

D13.2 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.

D13.3 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.

D14. TOTAL PERFORMANCE

D14.1 The Contractor shall achieve Total Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D12.

D14.2 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.

D14.3 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.

D15. LIQUIDATED DAMAGES

D15.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

D15.2 The amount specified for liquidated damages in D15.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.

D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D16. SCHEDULED MAINTENANCE

- D16.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Topsoil and sod as specified in E15.
- D16.2 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

D17. JOB MEETINGS

- D17.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D17.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D18. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D18.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

D19. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

- D19.1 The Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance.

MEASUREMENT AND PAYMENT

D20. PAYMENT

- D20.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D21. WARRANTY

- D21.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 250-2016

TYNDALL PARK COMMUNITY CENTRE OUTDOOR CLASSROOM

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

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

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

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

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

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

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D10)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 250-2016
TYNDALL PARK COMMUNITY CENTRE OUTDOOR CLASSROOM

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

(Name of Contractor)

(Address of Contractor)

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

_____ Canadian dollars.

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

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

Partial drawings are permitted.

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

(Address)

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

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

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

(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
T.3-B1-R0	Tyndall Park CC Outdoor Classroom - Existing and Proposed
T.3-B2-R0	Tyndall Park CC Outdoor Classroom - Grading
T.3-B3-R0	Tyndall Park CC Outdoor Classroom - Details
T.3-B4-R0	Tyndall Park CC Outdoor Classroom - Layout
SCD-647-R1	Park Path Asphalt

GENERAL

E2. EXISTING SERVICES AND UTILITIES

- E2.1 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.

E3. ACCESS TO SITE

- E3.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E3.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property.

E4. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E4.1 Further to C6.12, 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.
- E4.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E4.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.

- E4.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E4.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E4.6 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 his/her encountering of suspected hazardous material during their course of Work.

E5. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

- E5.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, 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.
- E5.2 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) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protection as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the 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.
- E5.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E5.4 No separate measurement or payment will be made for the protection of trees.

E6. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

- E6.1 Further to CW 1130-R1, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is Working near them. Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.
- E6.2 Ambulance/ Emergency vehicle access must be maintained at all times.

E7. PROTECTION OF THE SURVEY INFRASTRUCTURE

- E7.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E7.2 Further to C:6.26 (g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 918-1360 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E7.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E7.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.
- E7.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E8. SITE RESTORATION

- E8.1 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, the Contractor shall restore all areas of the Site beyond the established limit 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.

E9. SITE ENCLOSURES

- E9.1 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.
- E9.2 Site enclosures shall be considered incidental to the Contract Work.

Site Development

E10. EXCAVATION AND GRADING

- E10.1 General Description
- E10.1.1 This specification shall amend and supplement CW 3110 and CW 3170. The Work to be done by the Contractor under this specification shall include all labour, equipment and material necessary for and incidental to the satisfactory performance and completion of the Work herein specified.
- E10.1.2 Work shall include but not be limited to the following:
- (a) Excavation of material to install:

- (i) granular base for limestone blocks; and
 - (ii) asphalt path.
- (b) Site Grading – as per Drawing T.3-B2 – to build new limestone block retaining wall (outdoor classroom)

E10.2 Construction Methods

- E10.2.1 Excavation includes the removal of items (i.e., sand, earth) as indicated on the Drawings and as directed by the Contract Administrator. Work includes the satisfactory disposal of unsuitable Site material such as clays susceptible to frost-heaving, silts, rock, rubble, rubbish and any surplus suitable Site material.
- (a) Stockpile suitable, approved material on Site for reuse (clean topsoil, clean earth fill,) in a secure location. Remove and dispose of unsuitable material.
 - (b) Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.
 - (c) The Contractor shall excavate or fill to the design grades shown on Drawings less the appropriate allowance for surface treatment.
 - (d) Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.
 - (e) Excavate to the limits shown and as necessary to achieve finish grades as indicated on the Drawings:
 - (i) Granular base for limestone blocks – 150mm depth, in accordance with Drawings and per E12; and
 - (ii) New Asphalt Path – 250 mm depth, in accordance with Drawings and per E14.

- E10.2.2 Site grading to install new limestone block retaining wall (outdoor classroom) shall be as per Drawings.
- (a) The Contractor must ensure that the grading does not create tripping hazards and no areas of standing water remain.
 - (b) The new surface materials shall be installed to meet flush with surrounding grades, and sloped so as not to impede the existing drainage pattern.
 - (c) The design grade shall be considered to be straight grade between finished design elevations shown. Changes in grade shall be gently contoured to allow for ease of grass mowing operations.
 - (d) In fill areas where the difference between the existing ground elevation and the new finished design elevation is less than 300mm, the Contractor shall scarify the existing ground to a minimum depth of 50mm prior to placement of any fill.
 - (e) The Contractor shall construct all sub-grades in accordance with Specification CW 3110. This shall include the use of suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 95% Standard Proctor Density. Lifts shall not exceed a compacted thickness of 150mm.
 - (f) Do not disturb adjacent items designated to remain in place.

E10.3 Method of Measurement and Basis of Payment

- E10.3.1 Method of Measurement shall be as follows:
- (a) Excavation and Grading shall be measured on a square metre basis for:
 - (i) "Site Grading" on Form B: Prices.
 - (b) No measurement will be made for Excavation and Grading for granular base for limestone blocks as these items are incidental to E12.

E10.3.2 No measurement will be made for Excavation and Grading of the new asphalt path as these items are incidental to E14.

E10.4 Basis of Payment shall be as follows:

- (a) Excavation and Grading will be paid for at the Contract Unit Prices on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for 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) No payment will be made for the Excavation and Grading granular base for limestone blocks as these items are incidental to E12.
- (c) No payment will be made for the Excavation and Grading of the new asphalt path as these items are incidental to E14.

E11. LIMESTONE BLOCKS FOR SEATING/ RETAINING WALL

E11.1 Description

E11.1.1 This specification shall cover the supply and installation of limestone seating blocks to build a retaining wall/ seating area to create an outdoor classroom.

E11.2 Materials

E11.2.1 Granular and geotextile shall be as per E12.

E11.2.2 **Limestone Base Blocks** to be from a Manitoba quarry, colour to be approved by Contract Administrator. Rock shall have a fairly smooth top for seating and an approximate size range of:

- (a) Length: approx.850mm to 1.2m
- (b) Height: approx. 650-750mm
- (c) Width: approx. 650-750mm

E11.2.3 **Limestone Top Blocks** to be from a Manitoba quarry, colour to be approved by Contract Administrator. Rock shall have a fairly smooth top for seating and an approximate size range of:

- (a) Length: approx.560mm to 1.2m
- (b) Height: approx. 410-460mm
- (c) Width: 460mm minimum

E11.2.4 PL 2000 masonry adhesive.

E11.2.5 Polymetric sand for between the gaps in the limestone blocks.

E11.3 Construction Methods

E11.3.1 Construction methods to build base for limestone block seating wall shall be as per E12.

E11.3.2 Limestone Base Blocks:

- (a) shall be approximately one third buried.
- (b) The base blocks shall be set in ground at heights indicated on Drawing T.3-B2: Grading. The centre point of the seating circle, directly opposite the entry into the outdoor classroom shall have the limestone base block set with the top of the block 410mm above finished grade. The asphalt path will slope at approximately 2% grade towards the path. The top of the seating blocks shall be level, therefore the top of the edge seating block shall end up approximately 500mm above the finished grade of the asphalt path. **The key is starting with the middle block (directly located across from the outdoor class entry point) set at a height of 410mm above finished grade.**

- (c) The limestone blocks set near the centre of the circle shall be within the Limestone Base Block size and will be install with approx. 1/3 buried on compacted granular as shown on Drawings.

E11.3.3 Limestone Top Blocks:

- (a) Shall be placed overlapping the base blocks, leaving approximately 460mm seating surface on the base block before the overlap. The base blocks shall be place on well compacted granular, as per E12, to ensure no settling or shifting in the block occurs.
- (b) The top elevation of the top blocks could vary slightly as they are not relying on other blocks being stacked on top. The intent though is to provide a fairly consistent elevation as shown on Drawings.

E11.3.4 A generous amount (min. 4 continuous beads) of PL 2000 masonry adhesive is to be applied to the top of the first course where the second course will rest, the cost shall be considered part of the limestone block cost. Contract Administrator to be on site to approve this work.

E11.3.5 Polymetric sand shall be placed in between the blocks and fill in any gaps.

E11.4 Method of Measurement and Basis of Payment

E11.4.1 Method of Measurement shall be as follows:

- (a) Limestone Blocks for Seating/ Retaining Wall shall be measured on a lineal metre basis for:
 - (i) "Supply and Install Limestone Blocks: Base Blocks (per lineal meter of block face)"; and
 - (ii) "Supply and Install Limestone Blocks: Top Blocks (per lineal meter of block face)" on Form B: Prices.
- (b) No measurement will be made for excavation, granular and geotextile as these items are incidental to E12.

E11.4.2 Basis of Payment shall be as follows:

- (a) Limestone Blocks for Seating/ Retaining Wall will be paid for at the Contract Unit Prices on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for 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) No payment will be made for excavation, granular and geotextile as these items are incidental to E12.

E12. SEATING/ RETAINING WALL BASE AND BACKFILL AND MOW STRIP

E12.1 Description

E12.1.1 This Specification shall amend and supplement the City of Winnipeg Specification CW 3110. This specification shall cover the supply and installation of the granular base, geotextile, subsurface drainage, and excavation work required to build a retaining wall/ seating area to create an outdoor classroom, and the granular mow strip located along the edge where the limestone blocks meet the sod.

E12.2 Materials

E12.2.1 Granular shall be 19mm diameter crushed limestone aggregate;

E12.2.2 Geotextile shall be non-woven and installed as shown on the drawings. It shall have an apparent opening size of between 0.149 mm and .210 mm and a minimum unit weight of 135 grams per sq. m.

E12.2.3 75mm diameter perforated PVC drainage pipe as per E13.

E12.3 Construction Methods

- E12.3.1 The Contractor shall excavate for the base course, as per E10.
- E12.3.2 Shall then compact, install the geotextile, install the base granular and compact to 100% of proctor density.
- E12.3.3 It is important that the granular base below the top blocks be well compacted to avoid shifting of the block.
- E12.3.4 The drainage pipe is to be placed as low as possible behind the limestone retaining wall, while still high enough to be able to allow excess water that gets back there to be able to escape into open air.
- E12.3.5 A Drainage layer shall be constructed between the berm and the blocks using 3/4 " limestone (19mm) aggregate along with a 75mm (3") perforated weeping tile along the base. Refer to Drawings for details.
- E12.3.6 Granular material to be exposed at the surface between the blocks and the sod to create a mow/ wear strip along that edge, as shown on Drawings.
- E12.3.7 Granular material to be used to fill in any gaps between the limestone blocks to avoid any areas where small feet or hands can get stuck.

E12.4 Method of Measurement and Basis of Payment

- E12.4.1 Method of Measurement shall be as follows:
- (a) Seating/ Retaining Wall Base and Backfill shall be measured on lump sum basis for:
 - (i) "Supply and Install granular drainage layer and base for limestone blocks" on Form B: Prices.
 - (b) Seating/ Retaining Wall Base and Backfill shall be measured on square metre basis for:
 - (i) "Supply and Install granular mow strip" on Form B: Prices.
 - (c) No measurement will be made for limestone blocks as these items are incidental to E11.
- E12.4.2 Basis of Payment shall be as follows:
- (a) Seating/ Retaining Wall Base and Backfill will be paid for at the Contract Unit Prices on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for 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) No payment will be made for limestone blocks as these items are incidental to E11.

E13. SUB-SURFACE DRAINAGE

E13.1 Description

- E13.1.1 This Work shall consist of providing and placing perforated drain pipe behind the limestone block retaining wall.

E13.2 Material

- E13.2.1 Drainage pipe will be 75mm diameter perforated flexible drainage pipe.
- E13.2.2 The pipe shall be made of a high-density polyethylene meeting the requirements of ASTM D-2729 or ASTM F-949, or high-density polyethylene pipe meeting the requirements of AASHTO M252.
- E13.2.3 Fittings

- (a) The fittings shall be of a snap together design. In no case shall any drainage product be joined without the use of the manufacturers connector designed specifically for the purpose.

E13.3 Methods

- E13.3.1 Installation of Subdrain is not to proceed until after the excavation/grading has been approved by the Contract Administrator.
- E13.3.2 The layout of the subdrain is to be marked on Site and approved by the Contract Administrator.
- E13.3.3 Subdrain to be inspected by the Contract Administrator prior to backfilling.
- E13.3.4 Pipe is to be placed in the trench and the trench is to be backfilled according to detail Drawings. Backfill is to be lightly tamped into place to eliminate any voids.
- E13.3.5 Fittings for the drain shall be installed in accordance with manufacturer's recommendations.
- E13.3.6 The Contractor shall be responsible for restoration of any surfaces damaged during the Work under this section.
- E13.3.7 Contractor is to protect subdrain from excessive weight during the duration of construction and to repair and make good any pipe collapsed prior to acceptance.
- E13.3.8 Any damaged drain will be replaced or repaired by splicing in an undamaged section of drain at the Contractor's expense. The repair must be in accordance with the manufacturer's specification and to the satisfaction of the Contract Administrator.

E13.4 Method of Measurement and Basis of Payment

- E13.4.1 Method of Measurement shall be as follows:
 - (a) No measurement will be made for Subsurface Drainage as these items are incidental to E12.
- E13.4.2 Basis of Payment shall be as follows:
 - (a) No payment will be made for Subsurface Drainage as these items are incidental to E12.

E14. ASPHALT PATH

E14.1 General Description

- E14.1.1 This Specification shall amend and supplement the City of Winnipeg Specification CW 3110, CW 3130, and CW 3410. The Work to be done by the Contractor under this Specification shall cover all phases of Excavation, Sub-base Compaction, Geotextile Fabric, Crushed Limestone Sub-Base, Crushed Limestone Base and Asphaltic Pavement Layer as per Drawing SCD-647 and as indicated below.

E14.2 Excavation

E14.2.1 Description

- (a) This specification shall be done in accordance the City of Winnipeg's Standard Construction Specification CW 3110 – "Sub-Grade, Sub-Base and Base Course Construction" and as per SCD-647.
- (b) Excavation shall be understood to include all removal of existing insitu material necessary to achieve finished grade and as indicated on Drawings, all in accordance with E10.

E14.2.2 Construction Methods

- (a) Excavation shall be performed as outlined in CW 3310 – Item 3.2 – "Excavation".

- (b) If any pavement exists at the limits of the designated area of removal, these shall be saw cut for the full depth of the pavement prior to the demolition and removal operations. All costs in connection with saw cutting are incidental to Asphalt Pathway.
- (c) All excavated material shall be removed, hauled and disposed of off-site to the satisfaction of the Contract Administrator.

E14.3 Sub-base Compaction

E14.3.1 Description

- (a) Sub grade compaction shall be done in accordance with City of Winnipeg's Standard Construction Specification CW 3110 – "Sub-Grade, Sub-Base and Base Course Construction".

E14.3.2 Construction Methods

- (a) Sub-grade compaction shall be performed as outlined in CW 3110 item 3.3 "Preparation of Sub-Grade and Placement of Sub-Base Material".
- (b) Sub-grade shall be free of any fibrous organics, softened and disturbed soil. The prepared sub-grade shall be proof rolled with a heavy sheep's foot roller (min 25 passes) and inspected by the Contract Administrator to detect for any soft spots prior to the placement of overlying granular fills.

E14.4 Geotextile Fabric

E14.4.1 Description

- (a) Geotextile Fabric shall be placed in accordance with City of Winnipeg's Standard Construction Specification CW 3130 "Supply and Installation of Geotextile Fabrics".

E14.4.2 Materials

- (a) The separation/ reinforcement geotextile fabric shall be **Non-Woven** and conform to the Products Approved as listed in City of Winnipeg Specification for Approved Products for Surface Works.

E14.4.3 Construction Methods

- (a) Separation/ Reinforcement geotextile fabric shall be installed as outlined in CW 3110 item 3.1 "Separation/Reinforcement Geotextile Fabric".

E14.5 Crushed limestone sub-base course material

E14.5.1 Description

- (a) Crushed limestone sub-base material shall be supplied and installed in accordance with City of Winnipeg's Standard Construction Specification CW 3110 "Sub-Grade, Sub-Base and Base Course Construction".

E14.5.2 Materials

- (a) Sub Base: 50mm (2") down crushed limestone as per Drawing SCD-647.

E14.5.3 Construction Methods

- (a) Crushed limestone sub-base material shall be supplied and installed as outlined in CW 3110 item 3.4 "Placement of Sub-Base Material with Geotextile Fabric".
- (b) All limestone sub-base material shall be placed and compacted as specified to a finished thickness as shown on the drawings.

E14.6 Crushed Limestone Base Course Material

E14.6.1 Description

- (a) Crushed limestone base material shall be supplied and installed in accordance with City of Winnipeg's Standard Construction Specification CW 3110 "Sub-Grade, Sub-Base and Base Course Construction".

E14.6.2 Materials

- (a) Base course material shall be 20mm (3/4") down crushed limestone.

E14.6.3 Construction Methods

- (a) Crushed limestone base material shall be supplied and installed as outlined in CW 3110 item 3.4 "Placement of Sub-Base Material with Geotextile Fabric".
- (b) All limestone base course material shall be placed and compacted as specified to finished thickness as shown on the drawings.

E14.7 Asphaltic Pavement

E14.7.1 Description

- (a) Asphaltic Concrete shall be supplied and installed in accordance with City of Winnipeg Standard Construction Specification CW 3410 "Asphaltic Concrete Pavement Works".

E14.7.2 Materials

- (a) Asphaltic Concrete shall be Type 1a as specified and to a thickness of 50mm (2") as shown on the Drawings.

E14.7.3 Construction Methods

- (a) Asphaltic Concrete shall be supplied and installed in accordance with the lines, grades and thickness shown on the Drawings and to City of Winnipeg Construction Specification CW 3410. Asphalt shall be placed in one lift.

E14.8 Crack Sealing

- (a) As a warranty requirement, the Contractor shall rout and seal any and all cracks which may appear during the one-year warranty period. Crack sealing shall conform to the requirements of City of Winnipeg Standard Construction CW 3250.
- (b) No separate payment will be made for this item as it is considered a warranty issue and shall fall under G.C.13- Warranty.

E14.9 Quality Control for Hard Surfaced Areas

- (a) Further to Section 10, Quality Control, of CW 3110 and CW 3410, the Contract Administrator may obtain a qualified independent testing lab to conduct tests on materials to determine the acceptability of the sub-grade, sub-base, base course and asphaltic concrete as placed by the Contractor in accordance with the requirements of this Specification.
- (b) The Contractor shall not proceed with each granular fill placement or asphalt installation until test results have been reviewed and approval to proceed is granted by the Contract Administrator.
- (c) The Contract Administrator will conduct a survey of the operation to verify installation of specified layer thickness.
- (d) Non-conformity with the specified test requirements or compacted layer thickness will constitute sufficient grounds for rejection of the Work.

E14.10 Method of Measurement and Basis of Payment

E14.10.1 Method of Measurement shall be as follows:

- (a) Asphalt Path will be measured on a square metre basis for the following items:
 - (i) "Asphalt Pathway" on Form B: Prices.

E14.10.2 Basis of Payment shall be as follows:

- (a) Asphalt Path 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.

E15. SOIL AND SOD

E15.1 Description

- E15.1.1 This Specification shall amend and supplement the most up to date revisions of City of Winnipeg Specifications CW 3510, CW 3520 and CW 3540. The Contractor shall install mineral sod and a minimum 75mm compacted thickness of topsoil, as required.
- E15.1.2 The Contractor shall install topsoil and sod over all graded areas.
- E15.1.3 Areas to be Sodded are to be laid out on Site and approved by the Contract Administrator before commencing Work. Work outside the limit approved by the Contract Administrator will not be measured and will not be paid for under this section but considered incidental to the Work. Incidental Site restoration shall conform to the same Specifications.
- E15.1.4 Where edges of excavation abut existing turf those edges are to be cut with a sod cutter prior to excavation.
- E15.1.5 Restoration shall be achieved using topsoil and sod unless otherwise directed by the Contract Administrator.
- E15.1.6 Thirty (30) day maintenance period on sod will commence at Total Performance and acceptance.

E15.2 Method of Measurement and Basis of Payment

E15.2.1 Method of Measurement shall be as follows:

- (a) Soil and Sod will be measured on a square metre basis for: "Topsoil and Sod" on Form B: Prices.

E15.2.2 Basis of Payment shall be as follows:

- (a) Soil and Sod 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.