

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 755-2011

MOUNTBATTEN PARK SITE DEVELOPMENT

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 MOUNTBATTEN PARK SITE DEVELOPMENT

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, August 23, 2012.
- 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.
- B3.2 The Bidder is advised that additional fill has been deposited on Site after the Site Survey was taken. The Bidder is required to view the Site a minimum of one (1) time prior to submission deadline to ensure a full understanding of the earthworks involved in the Project.

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. ADDENDA

- B5.1 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.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 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/

- B5.2.2 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.
- B5.2.3 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.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
 - (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 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

- B7.5.1 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.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 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 B14.1(a).
- B7.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 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.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 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.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.4.2 All signatures shall be original.
- B8.5 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.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B:
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. QUALIFICATION

- B10.1 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.
- B10.2 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
- B10.3 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);
- B10.4 Further to B10.3(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/Subcontractors has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
 - (a) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/.
- B10.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

- B11.1 Bids will not be opened publicly.
- B11.2 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
- B11.3 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/
- B11.4 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.

B12. IRREVOCABLE BID

B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B12.2 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.

B13. WITHDRAWAL OF BIDS

- B13.1 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.
- B13.1.1 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.
- B13.1.2 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.
- B13.1.3 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 B13.1.3(b), declare the Bid withdrawn.
- B13.2 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 B12.2 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.

B14. EVALUATION OF BIDS

- B14.1 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 B10 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B6.
- B14.2 Further to B14.1(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.
- B14.3 Further to B14.1(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.
- B14.4 Further to B14.1(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.
- B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B14.4.2 Further to B14.1(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.

B15. AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 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.
- B15.2.1 Without limiting the generality of B15.2, 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.
- B15.3 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 B14.
- B15.3.1 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.
- B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B15.5 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

CO. 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/matmqt/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 Work to be done under the Contract shall consist of the site development of Mountbatten Park, 3191 St. Mary's Road, Winnipeg.
- D2.2 The major components of the Work are as follows:
 - (a) Removal of existing sport stanchions, trees, and debris/rubble;
 - (b) Earthworks and Site Grading;
 - (c) Supply and Installation of Bluegrass Athletic Field Sod and 150mm Depth Topsoil;
 - (d) Supply and Installation of Bluegrass Sod and 100mm Depth Topsoil;
 - (e) Supply and Installation of Fescue Sod and 100mm Depth Topsoil;
 - (f) Supply and Installation of Crushed Limestone Path;
 - (g) Supply and Installation of 8' ht. 2-Bay Swing Set;
 - (h) Supply and Installation of Timber Play Curb;
 - (i) Supply and Installation of Wood Fibre Play Safety Surfacing System;
 - (j) Supply and Installation of Site Furniture;
 - (k) Supply and Installation of Bilingual Park Sign.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is David Wagner Associates Inc., represented by:

David Wagner Landscape Architect 4-430 River Avenue Winnipeg, Manitoba R3L 0C6

Telephone No. 204 452-2426

Email dwagner@dwla.ca

D3.2 At the pre-construction meeting, David Wagner 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 his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. NOTICES

D5.1 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.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the email address identified in D3.1.
- D5.3 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

D5.4 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

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 but in no event later than the date specified in C4.1 for the return of the executed Contract.
- 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, Materials Management Division website at http://www.winnipeg.ca/matmgt/Safety/default.stm

D8. INSURANCE

- D8.1 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 and David Wagner Associates Inc. 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.
- D8.2 Deductibles shall be borne by the Contractor.
- D8.3 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.
- D8.4 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.

D9. PERFORMANCE SECURITY

- D9.1 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.
- D9.1.1 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.
- D9.2 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.

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 but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D11. DETAILED WORK SCHEDULE

- D11.1 The Bidder shall provide a detailed work schedule.
- D11.2 The detailed work schedule shall consist of the following:
 - (a) Start of Work on Site;
 - (b) Rough grading and Site preparation:
 - (c) Topsoil 150mm and 100mm depth;
 - (d) Topsoil and sodding;
 - (e) Crushed limestone pathway:

- (f) Swings and wood fibre play safety surfacing; and
- (g) Site furnishings.

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 D6;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified inD7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;
 - (vi) the Subcontractor list specified in D10; and
 - (vii) the Detailed Work Schedule 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.

D13. SUBSTANTIAL PERFORMANCE

- D13.1 The Contractor shall achieve Substantial Performance within twenty-five (25) 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 thirty (30) 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) Sod maintenance as specified in E15.3.
- 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.

D17. SITE RESTORATION

D17.1 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.

CONTROL OF WORK

D18. JOB MEETINGS

- D18.1 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.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D19. DRAWINGS AND SPECIFICATIONS

- D19.1 The Contractor shall maintain one full size set of Drawings and Specifications on Site at all times during construction.
- D19.2 The Contractor shall maintain a set of record drawings on Site marking all Changes in Work to be submitted to the Contract Administrator at Total Performance.

D20. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D20.1 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).

MEASUREMENT AND PAYMENT

D21. PAYMENT

D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

- D22.1 Warranty is as stated in C13.
- D22.2 Manufacturer's warranties on play equipment and safety surfacing shall apply.

FORM H1: PERFORMANCE BOND

(See D9)

KNOW ALL	MEN BY	/ THESE	PRESEN	NTS THAT

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. 755-2011			
MOUNTBATTEN PARK SITE DEVELOPMENT			
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: (Attorney-in-Fact)	(Seal)

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

(See D9)

(Date)
The City of Winnipeg Legal Services Department 185 King Street, 3rd Floor Winnipeg MB R3B 1J1
RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 755-2011
MOUNTBATTEN PARK SITE DEVELOPMENT
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 fo 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 the present or any future expiry date, upless at least 30 days prior

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 (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name	of bank or financial institution)
Per:	
	(Authorized Signing Officer)
Per:	
	(Authorized Signing Officer)

FORM J: SUBCONTRACTOR LIST

(See D10)

MOUNTBATTEN PARK SITE DEVELOPMENT

<u>Name</u>	<u>Address</u>

PART E - SPECIFICATIONS

GENERAL

E1.	APPLICABLE SPECIFICATIONS AND	DRAWINGS
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- 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>
L1	Site Survey
L2	Existing Conditions and Removals Plan
L3	Grading Plan
L4	Development and Materials Plan
L5	Layout Plan
L6	Details 1
L7	Details 2

GENERAL REQUIREMENTS

E2. SITE ACCESS

- E2.1 Access to the Site will be determined at the pre-construction meeting. The access shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E2.2 The Contractor shall be restricted to the Site access locations and routes only so that there is a minimum of disturbance to the existing ground surface. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

E3. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E3.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fess 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.
- E3.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would related to the Work.
- E3.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E3.4 All Work shall be performed in compliance with Manitoba Workplace Safety and Health.

- E3.5 All Work shall be performed in compliance with Manitoba Workplace Safety and Health Fall Protection guidelines.
- E3.6 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 Safety and Health 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.

E4. PROTECTION OF SURVEY INFRASTRUCTURE

- E4.1 Further to CW1130 Clause 3.14, the approximate locations of the survey monuments have been shown on Drawings L1 Site Survey and L2 Existing Conditions and Removals Plan.
- E4.2 The Contractor is to contact the Geomatics Branch at (204) 918-1360 at least five (5) Working Days in advance of construction to schedule an appointment to provide the required monument protection services. The Geomatics Job Number is 20120033.

E5. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

E5.1 Further to C17, 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 Sites of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator and the owners thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the owners thereof. The cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and David Wagner Associates Inc. from all claims made directly or indirectly against it in respect to any such damage.

E6. PROTECTION OF EXISTING TREES

- E6.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing 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 25x100x2440 mm wood planks, or other suitable protection as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1 inch diameter equals 1 foot measured from the closest edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned, by a licensed arborist, 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 entire ground surface located directly beneath the tree and radiating out to 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.

- (e) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (f) Carefully remove safety fencing and strapping material without harming the trees as soon as the construction and restoration Work is complete.
- E6.2 Obtain approval from the Contract Administrator to excavate within 2.0 M of a tree.
- E6.3 Take precautions to ensure tree limbs overhanging the Work area are not damaged by construction equipment. Contact the Forestry Branch for consultation or pruning of overhanging or damaged limbs and branches and other unanticipated problems with trees during the construction of the Works.
- E6.4 All damage or pruning required to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the Forestry Branch. Damages must be repaired by an Individual with a Manitoba Arborist Licence or by the Forestry Branch.
- E6.5 Protection of existing trees, repair of trees and pruning of damaged limbs will not be measured for payment and is to be included with the Underground or Surface Works. Removal and replacement of existing trees by the Forestry Branch deemed to have died or that are dying due to damage from carelessness during construction, will be at the Contractor's cost. The Contractor will be invoiced for the cost, or have the cost deducted from any payments owing.

E7. TEMPORARY UTILITIES

- E7.1 Further to C6.12, the Contractor shall make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- E7.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E8. SITE ENCLOSURES

- E8.1 Temporary Site enclosures, if determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E8.2 Site enclosures shall be considered incidental to the Contract Work.

E9. LAYOUT

- E9.1 The Contractor is responsible for the layout of all Work.
- E9.2 The Contract Administrator shall be advised of the staking of the layout at least twenty-four (24) hours in advance in order that the layout may be inspected and adjusted as required prior to construction.

E10. CANADIAN STANDARDS ASSOCIATION

E10.1 All playground equipment supplied and the method of installation shall be in accordance with the latest edition of the "National Standard of Canada, CAN/CSA-Z614-07".

E11. MAINTENANCE KITS

E11.1 All play equipment shall include, at no extra cost, the supply of maintenance kits. Maintenance kits shall include maintenance manuals, complete manufacturer's parts lists, touch-up paint, PVC repair paint, 10% extra of each bolt, washer and any other hardware utilized on the play equipment, and all special tools necessary for assembly and maintenance.

WORKS

E12. REMOVALS

E12.1 General Description

(a) This specification shall cover the removal of sport stanchions and trees as scheduled for removal and shown on the Drawings. It shall also cover any demolition and removal necessary to construct the project, which may be considered incidental to other items of Work.

E12.2 Removals

- (a) Existing soccer goals and baseball backstops are to be removed, including any foundations in their entirety.
- (b) Trees are to be cleared and grubbed and their roots removed to the satisfaction of the Contract Administrator.
- (c) All other extraneous materials, fill, rubble, rocks, concrete, etc. left from previous uses or added to the site since the site survey, which is not suitable clean fill for Earthwork and grading, is to be removed.
- (d) All removals are to be disposed of in a safe and legal manner.

E12.3 Site Restoration

- (a) Any holes left by the removal of posts or foundations shall be filled with compacted clean clay fill to meet the adjacent grades and be restored to match surrounding conditions to the satisfaction of the Contract Administrator.
- (b) Any site restoration required due to removals, and not shown on the Drawings as areas for new development, shall be considered incidental to the removal Work.

E12.4 Basis of Payment

- (a) Payment for Work specified under this section shall be for the removal of sport standards, trees, and debris/rubble. It shall be paid for at the Lump Sum Price, which price shall include all costs of removal and proper disposal, and any associated Site restoration.
- (b) Items of Work:
 - (i) Removals

E13. EXCAVATION, EARTHWORK AND GRADING

E13.1 General Description

- (a) Further to CW 3170, this specification shall cover the Site grading, including:
 - (i) The removal of existing turf for the purposes of rough grading.
 - (ii) The cut and fill required to achieve the rough grades and drainage patterns as shown on the Drawings.

E13.2 Site Survey

- (a) The site survey was done in 2011.
- (b) Since the site survey was done, +/- fifty (50) truckloads of fill have been deposited on Site.
 - (i) Most of the loads contained clean fill, which may be used for earthwork and rough grading.
 - (ii) Some loads contained debris, which may be unsatisfactory as fill and may be subject to removal.

E13.3 Methods

- (a) Bench marks or control points shall be set up and maintained on the Site so that subgrade, topsoil grades and finished sod grade can be verified throughout construction and as specified herein and on the Drawings.
- (b) The existing turf shall be removed from the construction area by stripping, rotovating or other method as determined in consultation with the Contract Administrator.
- (c) 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 treatment as indicated on Drawings and as specified herein.
 - (ii) Sports field grading shall be achieved through the use of a grader or laser selfadjusting mechanical conveyance suitably sized to do the job intended and to achieve smooth and constant grades.
- (d) Wherever the proposed Site grading is to meet existing Site grades, the grades are to match and positive Site drainage is to be maintained.
- (e) In fill areas, the Contractor shall scarify the existing ground to a minimum depth of 150mm prior to the placement of any fill.
- (f) Compaction shall include the use of sheep's foot or other suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 95% Proctor Density.
- (g) All surplus materials shall be disposed of as per CW 3170.
- (h) The rough grading shall be completed and reviewed by the Contract Administrator prior to installation of other Works.

E13.4 Basis of Payment

- (a) Payment for Work specified under this section shall be for the Site grading. It shall be paid for at the Unit Price measured on a square metre basis, which price shall include excavation, supply or removal of fill material, rough grading and any associated Site restoration.
- (b) Items of Work:
 - (i) Excavation, Earthwork and Grading

E14. TOPSOIL AND FINISHED GRADING

E14.1 General Description

(a) Further to CW 3540, this specification shall cover the supply and installation of topsoil for the establishment of turf.

E14.2 Materials

(a) Topsoil: As per CW 3540.

E14.3 Methods

- (a) The topsoil and finish grading shall be installed as per CW3540 or as directed by the Contract Administrator.
- (b) The topsoil shall be installed to the following compacted depths:
 - (i) Bluegrass athletic field sod for the soccer field 150mm
 - (ii) Bluegrass sod for outside the soccer field 100mm
 - (iii) Fescue sod 100mm
- (c) Following inspection of rough grading and compaction, the Work area shall be fine graded to provide a maximum deviation of 25mm in 10 metres 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.

E14.4 Basis of Payment

(a) Payment for Work specified under this section shall not be measured separately but shall be included in the price for the Sodding.

E15. SODDING

E15.1 General Description

(a) Further to CW 3510, this specification shall cover the supply and installation of sod.

E15.2 Materials and Method

- (a) Sodding
 - (i) As per CW 3510.
 - (ii) Kentucky Bluegrass sod shall be mineral base, big roll sod or individual sods.
 - (iii) Kentucky Bluegrass athletic field sod for the soccer field as per CW 3510 for athletic grounds.
 - (iv) Fescue sod shall be Enviro-Green Eco Sod; or sod grown from a seed mix consisting of 20% Chewings fescue(festuca rubra), 20% Sheep fescue (festuca ovina), 20% Hard fescue (Festuca longifolia), 20% Little Blue Stem (Schizachyrium scoparium) & 20% Indian Ricegrass (Achnatherum hymenoides); or sod grown from a Brett Young Reclamation Mixture "RM5", consisting of 18% ARC Butte Rocky Mountain Fescue, 15% Green Needlegrass, 10% Indian Ricegrass, 20% Walsh Western Wheatgrass, 20% Adanac Slender Wheatgrass, 10% Canada Wildrye & 7% ARC Mountain Junegrass.
 - (v) The Contractor is to obtain approval at source from the City of Winnipeg and Contract Administrator, prior to the delivery or installation of both Bluegrass and Fescue Sod.
- (b) Where the new sod meets existing turf, the existing turf is to be cut with a sod cutter to create neat and even edges. The sod is to meet the existing turf in a level manner after rolling. Seams shall be topdressed and seeded.
- (c) Areas to be sodded are as shown on Drawings. Site restoration, outside of those areas, remains the responsibility of the Contractor.

E15.3 Maintenance Period

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

E15.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, proper material installation, maintenance and all other items incidental to the Work.
- (b) Items of Work
 - (i) Bluegrass Athletic Field Sod & 150mm Depth Topsoil
 - (ii) Bluegrass Sod & 100mm Depth Topsoil
 - (iii) Fescue Sod & 100mm Depth Topsoil

E16. CRUSHED LIMESTONE PATH

E16.1 General Description

(a) Further to CW 3110, this specification shall cover the supply and installation of granular paving, including sub-grade preparation for paths and sitting areas.

E16.2 Materials

(a) Granular Paving

- (i) Base Coarse: 150 mm depth of 20 mm down crushed limestone, compacted in two layers over compacted subgrade.
- (ii) Surface: 25 mm depth of 6 mm down crushed limestone, compacted.
- (b) Geotextile: Non-woven geotextile fabric to CW 3130 and installed between compacted subgrade and granular base.

E16.3 Method

- (a) Granular paving shall be constructed as per the Drawings.
- (b) Layout of granular paving shall be approved on site by Contract Administrator prior to installation of fabric or sub-grade.
- (c) This Work shall be coordinated with the installation of site furniture.
- (d) Granular paving shall meet flush with timber edging to provide accessible entrance to the swing area.
- (e) Ensure positive drainage of path with a maximum cross slope of 2%. Where the path runs along the side of a hill, the path is to be cut into the hill with a maximum cross slope of 2%.

E16.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, proper material installation and site restoration.
- (b) Items of Work:
 - (i) Crushed Limestone Path

E17. FOUNDATIONS

- E17.1 All swing equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. The current Standard Construction Specifications of the City of Winnipeg, CW 2160 Concrete Underground Structures and Works, is to be utilized in the installation of the concrete works for all below ground components.
- E17.2 The specific concrete requirements shall be;
 - (a) Sulfate resistant, Type 50 Cement;
 - (b) 28 day compressive strength of 30 Mpa;
 - (c) maximum aggregate size of 20 mm, nominal;
 - (d) slump 80 ±20 mm;
 - (e) maximum water/cement ratio 0.49.

E17.3 Installation

- (a) Contractor shall notify the Contract Administrator at least 48 hours prior to installation of concrete, so that footings may be inspected in advance of concrete being poured.
- (b) Playstructure posts shall have a minimum 300mm (12") diameter concrete footing and shall be centred in the concrete footing to provide a minimum 50mm (2") band of concrete on all sides.
- (c) All concrete footings for play equipment shall be a minimum of 900mm depth or in accordance with manufacturer's specifications, whichever is greater.

E17.4 Basis of Payment

(a) Work under this section is considered incidental to the installation of swings and site furniture.

E18. SWING SET

E18.1 General Description

(a) This specification shall cover the supply and installation of a complete swing set as specified herein.

E18.2 Product

(a) Swings: Tri-pod Leg, Two Bay, Heavy Duty Swing Frame, 2.4 m (8') high, complete with two (2) slash-proof rubber belt seats, two (2) slash-proof rubber enclosed infant seats, heavy duty chain, swing hangers and hammer locks.

E18.3 Materials – Swing Frame

- (a) Topbeam
 - (i) All topbeams shall be fabricated from min. 90mm (3 1/2") O.D. 8 gauge, RS40 galvanized steel pipe or 60mm (2 3/8") O.D. 5 gauge, RS40 galvanized steel pipe with anti-wrap swings. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating.
- (b) Legs
 - (i) All legs shall be fabricated from min. 60 mm (2 3/8") O.D. 10 gauge, RS40 galvanized steel pipe. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating and the bottom end of the posts shall be sealed with a moisture barrier.
- (c) Yoke Clamps
 - (i) All yoke clamps shall be either one piece construction and fabricated from 8 gauge, RS40 galvanized steel or two piece, compression clamping cast aluminum or galvanized metal with baked on polyester powdercoating. They shall be complete with tamper-proof hardware.
- (d) Swing Hangers
 - (i) All swing hangers shall be fabricated from galvanized malleable iron and have oil impregnated bearings pressed in. Swing hangers shall be anti-wrap.
- (e) Colour
 - (i) Any coloured portion of the swing frame shall be red.

E18.4 Materials - Accessories

- (a) Swing Chain
 - (i) All swing chain shall be 4/0 straight link, galvanized steel.
- (b) Enclosed Infant (Bucket) Seats
 - (i) All enclosed infant seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slash proof. Infant seats shall be fully enclosed to prevent slipping out and provide extra lower back support.
- (c) Belt Seats
 - (i) All belt seats shall be moulded of U.V. stabilized, high quality, rubber with a tempered stainless steel reinforcement plate insert moulded inside, rendering the seats slash proof. The perimeter shall be moulded to form a blunt, impact absorbing edge.
- (d) Hardware
 - (i) All fasteners shall be socketed and tamperproof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel. Bolt links and "S" hooks shall be drop forged carbon steel, heat treated and hot dipped galvanized.

- (a) Swings shall be installed as per the Canadian Standards Association Guidelines. Refer to Clause E10.1. For foundations refer to Clause E17.
- (b) Installation of swings shall be coordinated with associated Site development Work. Swings shall be secured and rendered unusable until protective surfacing is in place.
- (c) Swings shall be installed by factory certified installers only and to manufacturer's specifications.

E18.6 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the unit price for the "Items of Work" listed below, which price shall include all costs of supply and installation.
- (b) Items of Work:
 - (i) Swing Set

E19. TIMBER PLAY CURB

E19.1 General Description

(a) This specification shall cover the supply and installation of timber edging to contain the protective surfacing for the swing area.

E19.2 Materials

- (a) Timber Edging shall be subject to inspection and approval by the Contract Administrator.
- (b) Timber Edging shall be as shown on SCD-651.
- (c) All wood for the bottom row shall be spruce, pine or fir, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth and free of rough areas. All timbers to be 150 x 150mm with a minimum length of 1200mm.
- (d) Timbers shall be ACQ pressure treated (P.T.). All ends and cuts shall be treated with preservative before being secured.
- (e) All fasteners used with the ACQ products shall be stainless steel or ceramic coated fasteners.
- (f) For exposed timber edging (top tier), the wood shall be untreated 32 x 150 Pedra, minimum length 1200mm.
- (g) Geotextile fabric shall be in accordance with CW 3130 and installed between the crushed granular base and the protective surfacing.
- (h) Granular base shall conform to CW 3110 and CW 3130.

E19.3 Methods

- (a) Layout of edging shall be as shown on the Drawings or as approved to adequately provide protective surfacing area around swings, based on the most recent CSA safety zone requirements.
- (b) A 3.0 metre (10') offset shall be maintained from all existing trees unless approved by Contract Administrator.
- (c) Grades for the installation of timber edging shall be as shown on Drawings or as determined on Site in consultation with the Contract Administrator.
- (d) Timber Edging shall be installed as per SCD-651.
 - (i) A compacted granular base course shall be installed to a minimum 75mm depth and as required to set the timbers at the correct grade. It is to be compacted to a minimum of 95 percent Proctor Density.
 - (ii) Base course timbers shall be pinned with a minimum of two (2) 19mm diameter by 500mm rebar at maximum 1200mm O.C.

- (iii) The Pedra cap shall be predrilled and screwed with two screws at each end of the timber and at alternating sides at 600mm O.C. Screws shall be treated for ACQ use and sized to suit.
- (e) All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts, except in the cap boards, shall be treated before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.
- (f) All corners and joints shall be lap joints where one layer overlaps the join of the other.
- (g) Topsoil and turf shall be used to bury the outer edge of all treated timbers. This shall be considered incidental to Topsoil and Finished Grading and Sodding.

E19.4 **Basis of Payment**

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a linear metre basis for the Items of Work listed below, which price shall include all costs of material supply, excavation, sub-grade preparation, proper material installation and any associated Site restoration.
- (b) Items of Work
 - Timber Play Curb (i)

E20. **PROTECTIVE SURFACING**

E20.1 **General Description**

(a) This specification shall cover the supply and installation of Wood Fibre Safety Surfacing within the Play Equipment Area, to drain externally as per Drawing SCD 650.

E20.2 Materials

- (a) Wood Fibre product shall be either Zeager Woodcarpet or Fibar Fibar System 200 or 300 products or substitute in accordance with B6.
 - (i) Contact for Woodcarpet:

Zeagar Bros. Inc. 4000 East Harrisburg Pike · Middletown, PA 17057

USA

Ph: (1-888) 346-8524 or (717) 944-7481 · Fax (717) 944-7681

sales@zeager.com

(ii) Contact for FibarSystem 200 or 300:

> The Fibar Group LLC 80 Business Park Drive, Suite 300 Armonk, NY 10504-1705 **USA**

Ph: (800) 342-2721 Fax: (914) 273-8659

info@FibarPlaygrounds.com

- (b) If substitute to Zeagar Woodcarpet or Fibar Fibar System 200 or 300 is proposed, it must meet the following conditions:
 - materials must be IPEMA certified Engineered Wood Fiber
 - material must consist of random-sized, clean, engineered hardwood chips. (ii) Standard wood chips or bark mulch are not acceptable.
 - materials must meet or exceed ASTM F1292 standards for impact attenuation (iii)
 - materials must be certified by the CSA and approved for playground use (iv)

- materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act
- (vi) materials must be covered by \$10,000,000.00 product liability insurance as well as provide a minimum 10 year warranty against loss of resiliency
- (c) Wood Fibre surfacing shall include wood fibre, filter cloth, subsurface drainage system and mats under swings and ends of slides.

E20.3 Methods

- (a) Wood Fibre shall be installed within the play areas, as defined by the timber edging to a minimum depth of 200 mm (after compaction). In the case where proposed play equipment includes a maximum fall height greater than 2.4m (8'), depth of material to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications.
- (b) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (c) Installation of entire system, including fibre, filter cloth, subsurface drainage and mats under swings shall be done according manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same.
- (d) The mats are to be installed directly on top of the geotextile fabric and secured in place with two (2) duckbill anchors per mat.
- (e) Subsurface of play area shall be graded to drain to one edge of the play area, and area cleared of any debris which inhibit proper drainage or installation of products. 100mm drainage pipe shall be installed from the subsurface drainage system within the play area to run outside of the play area perimeter to drain towards an existing catch basin or low area, as per instruction by the Contract Administrator. The cost of this shall be included in the price for the wood fibre supply and installation.
- (f) Filter fabric must be cut and fit around playground equipment footings and overlap seams by 300mm.
- (g) Installation shall be done by equipment sized to suit the Work being done and the Wood Fibre shall be spread by hand as necessary in the immediate vicinity of the play equipment so as not to damage same. The play equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the Wood Fibre.

E20.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis for the Items of Work listed below, which price shall include all costs of labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work as accepted by the Contract Administrator
- (b) Items of Work:
 - (i) Wood Fibre Protective Surfacing C.W. Sub-Surface Drainage

E21. SUB-SURFACE DRAINAGE

E21.1 General Description

(a) This Work shall consist of providing and placing a geocomposite prefabricated drain system as required in the design submission and as described on the drawings and herein. Drainage system shall be installed in accordance with these specifications and in close conformity with the locations and dimensions as shown on the plans or specified by the Contract Administrator. The quantities of drain as shown may be increased or decreased at the direction of the Contract Administrator based on actual site conditions that occur during construction of the project. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the Work.

E21.2 Materials

- (a) Drainage pipe will be Multi-Flow or approved substitute in accordance with B6. Drainage pipe will be 150 mm (6"). The manufacturer will size and approve all fittings for use with Multi-Flow or approved substitute drainage pipe.
- (b) The drain conduit shall be of flexible, prefabricated, rounded rectangular shaped, composite product. The drain conduit will be wrapped with a non-woven geotextile and will be a non-woven needle-punched construction and consist of long-chain polymeric fibres composed of polypropylene, polyethylene or polyamide. The fibres will be oriented into a multi-directional stable network whereby they retain their positions relative with each other and allow the passage of water as specified. The fabric will be free of any chemical treatment or coating, which reduces permeability and will be inert to chemical commonly found in soil. The geotextile will conform to the following minimum average roll values.

Weight	ASTM D-3776	3.0 - 4.0
Tensile Strength	ASTM D-4632	100 - 130
Elongation %	ASTM D-4632	50 - 70
Puncture, lb	ASTM D-751	35 - 60
Mullen Burst, psi	ASTM D-3786	110 - 215
Trapezoidal Tear, lb	ASTM D-4533	40 - 42
Coefficient of Permeability	ASTM D-4491	.24 cm/sec
Flow Rate, gpm/ft2	ASTM D-4491	100 - 140
Permittivity, 1/sec	ASTM D-4491	1.3 – 2.0
Apparent Opening Size	ASTM D-4751	60/70 Max. US Std Sieve Opening
Seam Strength, lb/ft	ASTM D-4595	100
Fungus	ASTM G-21	No Growth

(c) The drainage core shall be made of a high-density polyethylene. The core shall be constructed using interconnected corrugated pipes that define and provide the flow channels and structural integrity of the drain. The geotextile shall function only as a filter. The core of the edge drain shall conform to the following physical property requirements.

Thickness, inches	ASTM D-1777	1.0
Flow Rate, gpm/ft*	ASTM D-4716	29
Compressive Strength, psf	ASTM D-1621 (modified sand method)	6000
Pipe Stiffness, pii	ASTM D-2412	100

^{*} At gradient = 0.1, pressure = 10 psi for 100 hours.

(d) Fittings

(i) The fittings used with the edge drain 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. Cleanouts will be provided as indicated on the drawing.

(e) Pipe

(i) Pipe for drain outlet laterals will be either 75 mm (3") PVC pipe meeting the requirements of ASTM D-2729 or ASTM F-949, or high-density polyethylene pipe meeting the requirements of AASHTO M252.

(ii) A rodent screen made of 0.3 inch by 0.3-inch square opening size, 0.063-inch gauge, stainless steel or galvanized, welded wire mesh shall be installed in each outlet lateral line. When using galvanized welded wire mesh, the rodent screen shall be galvanized after it has been formed to the shape and dimensions shown on the plans or specified by the Contract Administrator.

(f) Emitter

- (i) Shall be a 3" polyolefin pop-up drainage emitter with elbow joint, product reference no. NDS# 620 or approved substitute in accordance with B6. Multiflow, or approved substitute, shall be connected to emitter by using manufacturer's adaptor for connecting drainage pipe to 75mm or 100mm round orifice on appropriate hardware.
- (ii) Contact for Emitter:

Consolidated Turf 986 Powell Avenue Winnipeg, Manitoba R3H 0H6 Tel: 1-204-633-7276

Fax: 1-204-633-7276

(g) Backfill for Trenches

(i) Backfill will be coarse sand whose particle size is defined as less than 5% retained on a # 10 screen and less than 5% passing through a # 30 (US Std Sieve) In no case will more than 1% pass a # 60 screen.

E21.3 Methods

- (a) The layout of the subdrain is to be marked on Site and approved by the Contract Administrator prior to trenching. Trenches shall be a min. 150mm in width. Optimum location for extending subdrain beyond the play area limits to be determined on site. Bidder shall include approximately 24m of drainage pipe beyond play area limits in cost for sub-surface drainage. Drainage pipe to be capped with emitter as described herein. Cost for emitter shall be included in cost for sub-surface drainage.
- (b) Subdrain is to be laid on the prepared surface to facilitate cross movement of water. Subdrain shall be installed below geotextile and in conformance with details provided.
- (c) 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.
- (d) Fittings for the drain will be installed in accordance with the manufacturer's recommendations and Specification.
- (e) Any damaged edge drain or outlet lateral 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 manufacturers specification and to the satisfaction of the Contract Administrator.

E21.4 Basis of Payment

(a) Sub-surface Drainage shall be incidental to the measurement of Wood Fibre Protective Surfacing C.W. Sub-surface Drainage listed above and as shown on Form B: Prices.

E22. SITE FURNITURE

E22.1 General Description

(a) This specification shall cover the supply and installation of site furniture as shown on the Drawings.

E22.2 Materials

(a) Benches

(i) Tache Composite Bench with Arms, Drawing No. SCD-139, 1.8M length (6'), manufactured by the City of Winnipeg, galvanized finish for the metal and cedar tone for the boards.

(b) Waste Receptacle

- (i) Expanded Metal Basket Waste Receptacle, Drawing No. SCD-106, manufactured by the City of Winnipeg, galvanized finish # 52501051GLV.
- (ii) Chains and locks, sufficient to lock waste receptacles on Site.
- (c) Accessible Picnic Table
 - (i) Tache Style Wheelchair Metal Frame Picnic Table, Drawing No. SCD-122A, manufactured by the City of Winnipeg, galvanized finish for the metal and cedar tone for the boards.
 - (ii) Two (2) duckbill anchors.
- (d) Bilingual Park Sign
 - (i) Double-Sided Bilingual Park Sign w/ Address, Drawing No. SCD-720, manufactured by the City of Winnipeg.
- (e) The contact for benches, waste receptacles, and park sign is:

Aaron Lennon

Supervisor of Central Repair/Manufacturing Facility

City of Winnipeg

Fleet Management Agency Division

Public Works Department 215 Tecumseh Street Winnipeg, MB R3E 3S4 Fax No.: (204) 783-1248

Email: <u>alennon@winnipeg.ca</u>

(f) The contacts for picnic tables are:

Carl Woloshyn and Brian Mayer Centralized Park Services City of Winnipeg 825 Tache Avenue Winnipeg, MB R2H 2C1

Email & Phone No.: CWoloshyn@winnipeg.ca, (204) 986-3835 Email & Phone No.: Bmayer@winnipeg.ca, (204) 470-7747

E22.3 Methods

- (a) All site furnishings are to be ordered and picked up from the City. The cost of supply shall be borne by the Contractor.
- (b) All site furnishings are to be installed according to Drawings and City 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.
- (c) The layout of all site furnishings shall be approved on Site by the Contract Administrator prior to installation.
- (d) 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.
- (e) Site furnishings are to be kept clean of any granular, concrete, asphalt or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.

E22.4 Basis of Payment

(a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of

supply and proper material installation. Site restoration work and required foundations shall be considered incidental to the Work.

- (b) Items of Work:
 - (i) Benches
 - (ii) Waste Receptacles
 - (iii) Accessible Picnic Table
 - (iv) Bilingual Park Sign