



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 544-2007

FORT GARRY COMMUNITY CENTRE PLAY STRUCTURE SURROUND

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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 FORT GARRY COMMUNITY CENTRE PLAY STRUCTURE SURROUND

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 25, 2007.

B2.2 Bid Submissions 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 GC:3.1, 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. 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.

B5.3 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 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 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 shall base his 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.

B7. BID SUBMISSION

B7.1 The Bid Submission consists of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices;

B7.2 All components of the Bid Submission 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 in ink, to constitute a responsive Bid.

B7.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.

B7.3.1 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.

B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B7.5 Bid Submissions shall be submitted to:

The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1

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 own name, his 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 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 own name, it shall be signed by the Bidder;

- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
- (d) if the Bidder is carrying on business under a name other than his 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 shall be printed below such signatures.

B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.

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 Submission and the Contract, when awarded, shall be both joint and several.

B9. PRICES

B9.1 The Bidder shall state the lump sum price in Canadian funds for the Work on Form B: Prices.

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;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out work, similar in nature, scope and value to the Work;
- (f) employ only Subcontractors who:
 - (i) are responsible and not suspended, debarred or in default of any obligation 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 Branch internet site at <http://www.winnipeg.ca/matmgt>); and
 - (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
- (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba);

B10.2 The Bidder shall be prepared to 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.

B10.3 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 Bid Submissions will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B11.1.1 Bidders or their representatives may attend.

B11.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

B11.4 The Bidder is advised that any information contained in any Bid Submission 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 period specified in Paragraph 9 of Form A: Bid.

B13. WITHDRAWAL OF BIDS

B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B13.1.1 Notwithstanding GC:23.3, 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 shall:

- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
- (b) open the Bid Submission 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 Bid after the Submission Deadline but before his 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, including the right to retain the Bidder's bid security.

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 (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 Submission 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 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 Bid Submission or in other information required to be submitted, that he is responsible and qualified.

B14.4 Further to B14.1(c), the Total Bid Price shall be the lump sum price shown on Form B: Prices.

B14.4.1 If there is any discrepancy between the lump sum price written in figures and the lump sum price written in words, the price written in words shall take precedence.

B15. AWARD OF CONTRACT

B15.1 The City will give notice of the award of the Contract by way of a letter of intent, 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. Subject to B15.2, 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.

- B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his 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. 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

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for Construction Contracts* (Revision 2000 11 09) are applicable to the Work of the Contract.

C1.1.1 The *General Conditions for Construction Contracts* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Construction Contracts*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.4 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.5 The General Conditions are amended by deleting GC:6.16 and GC:6.17. The City of Winnipeg is now within the jurisdiction of the Manitoba Ombudsman pursuant to The Ombudsman Act.

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of a Skateboard Park and associated Site Work.
- D2.2 The major components of the Work are as follows:
- (a) Base preparation and drainage, including subsurface storm water system
 - (b) Poured-in-place concrete works
 - (c) Topsoil and sodding
 - (d) Precast concrete unit retaining wall

D3. CONTRACT ADMINISTRATOR

- D3.1 The Contract Administrator is Hilderman Thomas Frank Cram, represented by:
- Glen Manning
Project Landscape Designer
500-115 Bannatyne Ave. East, Winnipeg, Manitoba R3B 0R3
Telephone No. (204) 944-9907
Facsimile No. (204) 957-1467
- D3.2 At the pre-construction meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator or the City of Winnipeg, 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 designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2 The Site Supervisor shall have authority to make onsite and binding decisions on behalf of the Contractor.

- D4.3 The Site Supervisor will be consistent throughout the length of the project and if removed or replaced by the Contractor for any reason, it must be approved by the Contract Administrator in writing.

D5. NOTICES

- D5.1 Except as provided for in GC:23.2.2, 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 address or facsimile number identified in D3.1.
- D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Administrative Officer Secretariat
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
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 address or facsimile number:

The City of Winnipeg
Corporate Services Department
Legal Services Division
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

D6. FURNISHING OF DOCUMENTS

- D6.1 Upon award of the Contract, the Contractor will be provided with two (2) complete sets of the Bid Opportunity and with one (1) set of the Contract Documents in electronic pdf format. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

SUBMISSIONS

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 GC:4.1 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

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) all inclusive, with The City of Winnipeg and Hilderman Thomas Frank Cram being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the City Solicitor with a certificate of insurance of each policy, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D8.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D9. PERFORMANCE SECURITY

D9.1 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 If the bid security provided in his Bid Submission was not a certified cheque or draft pursuant to **Error! Reference source not found.**, 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 letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

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 the date specified in GC:4.1 for the return of the executed Contract.

D11. DETAILED WORK SCHEDULE

D11.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D11.2 The detailed work schedule shall consist of the following:

- (a) a critical path method (C.P.M.) schedule for the Work; and
 - (b) a daily manpower schedule for the Work
- all acceptable to the Contract Administrator.

D11.3 Further to D11.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:

- (a) Commencement of the work
- (b) Base preparation, site grading and drainage works
- (c) Pour sequencing as per joint plan
- (d) Play structure area work
- (e) Finish landscaping
- (f) Date of Substantial Performance
- (g) Site restoration and demobilization
- (h) Date of Total Performance

D11.4 Further to D11.2(b), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.

SCHEDULE OF WORK

D12. COMMENCEMENT

D12.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent 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 that the Contractor is 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;
 - (ii) evidence of the workers compensation coverage specified in GC:6.14;
 - (iii) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;
 - (vi) the Subcontractor list specified in D10;
 - (vii) the detailed work schedule specified in D11; and

- (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) Working Days of receipt of the letter of intent.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance by October 17, 2007.

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 re-inspected.

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 by October 31, 2007.

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 re-inspected.

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 Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Substantial 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 losses in the event that the Contractor does not achieve Substantial 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) Sodding as specified in E13;

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 deems it necessary.

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

D18.1 Further to GC:6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

FORM H1: PERFORMANCE BOND
(See D9)

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 dated the

_____ day of _____, 20____, for:

BID OPPORTUNITY NO. 544-2007
FORT GARRY COMMUNITY CENTRE PLAY STRUCTURE SURROUND

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)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)
(See D9)**

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO 544-2007

FORT GARRY COMMUNITY CENTRE PLAY STRUCTURE SURROUND

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

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following are applicable to the Work:

SPEC NOTE: List all drawings which apply.

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
	Cover Sheet
L-1	DEMOLITION PLAN
L-2	SITE MATERIALS PLAN
L-3	SITE LAYOUT PLAN
L-4	SITE GRADING PLAN
L-5	SITE DETAILS
SCD 105b	POST FENCING DETAIL

GENERAL REQUIREMENTS

E2. LAYOUT OF WORK

- E2.1 Further to CW 1130-R1, Paragraph 3.15, Stakes and Marks, the Contractor shall set all necessary control lines, benchmarks, survey elevation stakes and layout in consultation with the Contract Administrator as required. Horizontal and vertical layout control will be required in advance of construction, to ensure coordination with play structure installer.

E3. PEDESTRIAN AND TRAFFIC CONTROL

- E3.1 General Description
- E3.1.1 This Specification shall supplement Specification CW 1130-R1 and shall cover the supply, installation, maintenance, and removal of temporary traffic and pedestrian control.
- E3.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

E3.2 Materials

E3.2.1 General

- .1 All barricades, signs, flashers, and other equipment shall be in accordance with the "Manual of Temporary Control in Work Areas on City Streets."

E3.2.2 Snow Fence

- .1 Plastic netting, UV stabilized, high density polyethylene, international orange colour, 1.22 m height, complete with steel stakes to suit size.

E3.3 Construction Methods

E3.3.1 General

- .1 The Contractor shall maintain safe pedestrian access to the building within the area under construction at all times.
- .2 The Contractor will be responsible for the placement of all required signing and barricades, for traffic control in the construction area.

E3.3.2 Snow Fencing

- .1 Erect snow fencing surrounding the areas under construction and any excavations deeper than 500 mm.
- .2 Snow fencing shall be placed so as to present no hazard to vehicles or pedestrians and shall be kept securely fastened and neat in appearance at all times.

E3.4 Quality Control

E3.4.1 All workmanship and all materials furnished and supplied under this Specification are subject to the close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works which are not in accordance with the requirements of this Specification. The Contractor shall maintain all traffic control as specified herein.

E3.4.2 If, in the opinion of the Contract Administrator, the traffic control is not in accordance with this Specification, the Work in the affected area shall be stopped and shall not resume until such time as the traffic control deficiencies are corrected to the satisfaction of the Contract Administrator. No contract time extensions will be granted as a result of lost time due to Work stoppages because of inadequate traffic control by Contractor.

E4. TREE PROTECTION

E4.1 Description

E4.1.1 This Specification shall cover the protection of existing trees including boulevard trees, within the limits of Work as indicated on the Drawings.

E4.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and in accordance with E5: Sitework Demolition, Removals and Relocations.

E4.2 Materials

E4.2.1 In accordance with the Drawings.

E4.3 Construction Methods

- E4.3.1 The Contractor shall protect existing trees in areas where excavation Work is being done.
- E4.3.2 The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 m of the base of small trees, or outside the dripline of larger trees as identified by the Contract Administrator.
- E4.3.3 Mature tree trunks of existing trees shall be strapped with 25 x 150 x 2,400 mm wood planks. Smaller trees shall be similarly protected using appropriately sized wood planks.
- E4.3.4 Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- E4.3.5 Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- E4.3.6 Work on Site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to tree branches does occur, the Contractor shall prune the damaged branch and coat the cut with an appropriate wound dressing to prevent infection.
- E4.3.7 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 designate.

E5. SITEWORK DEMOLITION, REMOVALS AND RELOCATIONS

E5.1 General Description

- E5.1.1 This Specification shall supplement CW 3010-R4 and CW 3110-R10, and shall cover the requirements for demolition, salvage, removal and disposal wholly or in part of various items designated to be removed or partially removed and for backfilling resulting trenches, holes and pits.
- E5.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.
- E5.1.3 Contact the following City of Winnipeg staff, two (2) weeks prior to demolition:
Superintendent of Centralized Services, Mr. Rob Zanewich at 986-5084 and
Foreman of Centralized Services, Mr. J. Martin at 986-3835.

E5.2 Equipment

- E5.2.1 All equipment shall be of a type reviewed by the Contract Administrator and shall be kept in good working order.
- E5.2.2 The size, weight, and destructive capabilities of the equipment shall be matched to the type of removal to be done.

E5.3 Construction Methods

E5.3.1 Scope of Work

- .1 The Work under this Specification shall include the following items as shown within the limit of Work on the Drawings or otherwise directed by the Contract Administrator:

- (a) Removal and disposal of existing steel post and chain fencing;
- (b) Removal and salvage for pick up by City, of existing volleyball posts
- (c) Removal and salvage for re-use on site of play sand

E5.3.2 Fees and Permits

- .1 The Contractor shall obtain and pay for all licenses and permits necessary for the demolition Work.
- .2 The Contractor shall comply with all Municipal, Provincial, and Federal Government regulations relating to the demolition of structures.

E5.3.3 Safety Precautions

- .1 The Contractor shall provide flagmen, barricades, railings, and whenever necessary, warning signs at excavation holes, plywood access ramps and /or other construction necessary to secure the safety of workers, the public, and personnel alike and shall comply with all Provincial Statutes applicable to the Work of this nature. The Contractor shall provide all other protective measures as may be required by any law in force in Manitoba.

E5.3.4 Protection of Existing Structures

- .1 Protect existing items designated to remain and materials designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of the City and at no cost to the City.

E5.3.5 Preparation of Site

- .1 Inspect Site and verify with Contract Administrator items designated for removal, disposal, salvage and items to remain.
- .2 Locate and protect utility lines. Preserve in operating condition active utilities traversing Site.
- .3 **Notify utility companies before starting demolition. Utilities to provide clearance before any excavation is done.**
- .4 **Notify Geomatics Service Branch at 986-4826 to obtain clearance and mark survey infrastructure before any excavation.**

E5.3.6 Removals

- .1 Remove items as indicated on the Drawings and as directed by the Contract Administrator. Do not disturb adjacent items designated to remain in place.

E5.3.7 Pick-up of Materials

- .1 Materials designated to be removed and/or picked up by others shall be detached and stored on Site. Contractor shall protect said items from damage and shall provide five (5) working days notice of date items are available for pick-up to:

E5.3.8 Relocations

- .1 N.A.

E5.3.9 Disposal of Materials

- .1 The Contractor shall promptly dispose of materials not designated for salvage or re-use in Work, off-site.

E5.3.10 Backfill

- .1 Backfill in areas as indicated in accordance with Excavation Bedding and Backfill - CW 2030-R7.

E5.3.11 Restoration

- .1 Restore areas and existing works outside areas of demolition to match condition of adjacent undisturbed areas.

E5.3.12 Site Cleanup

- .1 Upon completion of Work, remove debris, trim surfaces and leave Work Site clean.

E6. CLEARING AND GRUBBING

E6.1 General Description

- E6.1.1 This Specification shall cover the removal from the Site of shrubs, stumps, roots, logs, brush, rubbish and all other surface litter within the full limit of the Work, as shown on the Drawings, and the disposal of same in a manner hereinafter specified, and shall supplement CW 3010-R4.

E6.2 Construction Methods

- E6.2.1 Before commencement of any Work, the Contractor shall consult with the Contract Administrator as to which shrubs shall remain on the Site and be protected, if any. Those so designated shall be protected against damage from all construction activity.
- E6.2.2 The Contractor shall restrict his activities strictly to within the limit of the Works, unless receiving prior written approval from the Contract Administrator. The Contractor shall take all precautions to prevent damage to traffic, structure, pole lines, adjacent property and to shrubs designated to remain, and he shall be liable for any damages occurring during the performance of this Work.
- E6.2.3 The Contractor shall cut down all shrubs except those designated by the Contract Administrator to remain, and grub out all stumps and roots. The Contractor shall load and haul all stumps, roots, logs, brush, rubbish and all other surface litter from the Site and dispose of these materials at dumps located by the Contractor and reviewed by the Contract Administrator. Any materials dropped or spilled on any streets during the hauling operations shall be promptly clean up by and at the expense of the Contractor, to the satisfaction of the Contract Administrator.
- E6.2.4 The Contractor shall ensure that upon completion of the clearing and grubbing operations, the Site shall be left free of any hazardous depressions and in a neat condition.

E7. SITE GRADING

E7.1 Description

- E7.1.1 This Specification shall cover the excavation and installation of fill for areas as indicated on the Drawings and in compliance with E7.
- E7.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all other things necessary for and incidental to the satisfactory performance and completion of all Work as specified herein and in accordance with CW 3170-R3 and CW 2130-R10.

E7.2 Materials

- E7.2.1 All materials shall conform to CW 3170-R3.

E7.3 Equipment

- E7.3.1 All equipment to conform to CW 3170-R3.

E7.4 Construction Method

E7.4.1 Rough grade to patterns and elevations as indicated on the Drawings allowing for installation of materials specified and in accordance with CW 3170-R3 Earthwork and Grading.

E8. SUB-SURFACE DRAINAGE SYSTEM

E8.1 Description

E8.1.1 Further to CW 3120-R1, this Specification shall cover the supply and installation of sub-surface collector drainage system. Refer to Section 02720 Drainage for Skatepark subdrainage.

E8.1.2 This Work shall consist of providing and placing drainage system as shown on the Site Drawings. The drainage system shall be in accordance with these Specifications and in reasonably close conformity with the locations and dimensions as shown on the plans or as approved by the Contract Administrator in accordance with B6.

E8.2 Materials

E8.2.1 Area Drains

- .1 SPEE-D BASINS: NDS or approved equal, model to suit no. of required outlets and configuration. Supplied by Consolidated Turf, Phone: (204) 632-7643.
- .2 Grates: Structural foam Polyolefin with UV inhibitor, gray.
 - 6" Ø Round Grate, ADA compliant, NDS or approved equal in accordance with B6
 - 6" Atrium Grate, NDS or approved equal in accordance with B6

E8.2.2 Drain Inlet Protection

- .1 NDS Part No. Gravelbag filled to 1/2 to 3/4 full, with 3/4" crushed gravel or 1/4" pea gravel.

E8.2.3 Connections to Existing LDS

- .1 All materials shall conform to CW Standards.
- .2 Tee: Thermo-molded PVC.

E8.2.4 Leads

- .1 Corrugated Polyethylene drainage pipe (Big "O"), sizes as indicated.
- .2 150mmØ, PVC risers and culverts
- .3 Provide sand bedding and backfill as required to complete the Work.

E8.3 Construction Methods

E8.3.1 The Contractor shall obtain all applicable permits prior to installation and provide notification of scheduled connection work, for any required inspections.

E8.3.2 The layout of the sub-drain system is to be marked on site and approved by the Contract Administrator. Coordinate work with Skatepark drainage.

E8.3.3 The work shall be installed as per CW 3120-R1 and as shown on the drawings.

E8.3.4 Where delays in construction do not allow for immediate seeding and sodding after area drain installation, drain inlet protection shall be installed to prevent erosion.

E9. PRECAST UNIT PAVEMENT

E9.1 General Description

E9.1.1 Further to CW 3330-R3, this specification shall cover the supply and installation of precast unit header between granular service road and granular walkway.

E9.2 Materials

E9.2.1 Concrete Header

.1 "I-con" header. As supplied by Barkman Concrete, or approved equal. Colour: charcoal.

E9.3 Construction Methods

E9.3.1 As per manufacturer's instructions and Drawing Detail.

E10. TOPSOIL AND FINISH GRADING

E10.1 General Description

E10.1.1 This Specification shall cover the supply and installation of topsoil for areas to be sodded, seeded and shrub beds as specified herein and as indicated on the Drawings, and in accordance with CW 3540-R5.

E10.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and in accordance with CW 3540-R5.

E10.2 Protection

E10.2.1 Protect elements surrounding the Work of this section from damage or disfiguration.

E10.2.2 Protect landscaping and other features remaining as final Work.

E10.3 Source Quality Control

E10.3.1 Inform Contract Administrator of proposed source of topsoil to be supplied and provide sample for review by Contract Administrator prior to installation.

E10.3.2 Test topsoil for clay, sand and silt, NPK, Mg, soluble salt content, pH value, growth inhibitors and soil sterilants.

E10.4 Submittals

E10.4.1 Submit 0.5 kg sample of topsoil to testing laboratory and indicate present use and intended use. Prepare and ship sample in accordance with provincial regulations and testing laboratory requirements.

E10.4.2 Submit two (2) copies of soil analysis and recommendations for corrections to Contract Administrator.

E10.5 Delivery and Storage

E10.5.1 Deliver and store fertilizer in waterproof bags accompanied in writing by weight, analysis and name of manufacturer.

E10.6 Materials

E10.6.1 Topsoil: In accordance with CW 3540-R5.

E10.7 Construction Method

E10.7.1 In accordance with CW3540.

Place topsoil for sod areas to depth of 75mm.

E10.7.2 Finish Grading

- .1 Fine grade entire topsoiled area to contours and elevations as indicated on Drawing L-4 "Site Grading." Eliminate rough spots and low areas to ensure positive drainage to catch basins and area drains.
- .2 Prepare loose friable bed by means of rototilling and subsequent raking. Roll lightly and rake wherever topsoil is too loose.
- .3 Leave surface smooth, uniform, firm against deep foot printing, with a fine loose texture.

E10.7.3 Surplus Material

- .1 Dispose of surplus topsoil not required for fine grading and landscaping, off Site.

E11. PLANTING OF SHRUBS – N.A.

E12. SEEDING – N.A.

E13. SODDING

E13.1 General Description

E13.1.1 This Specification shall cover the supply and installation of sod for areas as specified herein and as indicated on the Drawings, and in accordance with CW 3510-R7.

E13.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified and in accordance with CW 3510-R7.

E13.2 Materials

E13.2.1 Nursery sod for general park areas, boulevards, medians and interchange areas, as per CW 3510-R7.

E13.3 Construction Method

E13.3.1 Construction method shall conform to CW 3510-R7.

E14. LANDSCAPE MAINTENANCE – SODDING ONLY

E14.1 General Description

E14.1.1 This Specification shall cover the maintenance of shrub beds, and sodded and seeded areas, as specified herein and as indicated on the Drawings, following acceptance of the Work and issuance of the Certificate of Substantial Performance.

E14.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

E14.1.3 The Contractor shall maintain all areas with the limit of Work as indicated on the Drawings, in accordance with these Specifications, and as directed by the Contract Administrator.

E14.1.4 In general, the Work shall include mowing, weed control, fertilizing, overseeding as required, and maintenance of shrub beds.

E14.2 Maintenance and Guarantee Period

E14.2.1 Maintenance shall occur between the date of installation and up to a period of thirty (30) days from date of the issuance of the Certificate of Substantial Performance, or until turf is established in accordance with CW 3510-R8, for sodded and seeded areas. The guarantee period for nursery plant materials will be one (1) year.

E14.3 Materials and Equipment

E14.3.1 Materials shall conform to E10: Topsoil and Finish Grading, and E13 Sodding.

E14.3.2 Provide all equipment to properly execute Work. Maintain such equipment in a workable, safe condition while in use during this project.

E14.3.3 Contract Administrator shall review equipment to be used to execute Work prior to execution.

E14.4 Construction Method

E14.4.1 General

- .1 Provide weeding services within 48 hours and re-seeding within five (5) days of the request by the Contract Administrator. Monitor the Site and advise the Contract Administrator of conditions that might void the Contractor's warranty.
- .2 The Contractor shall maintain a log noting times, dates, equipment used, and quantity of materials used and areas treated for each maintenance application. Forms shall be provided by Contract Administrator. Submit log to Contract Administrator upon request. Contractor shall notify Contract Administrator of the exact time Contractor proposes to commence each application.
- .3 Schedule operations in accordance with growth, health, weather conditions, and use of Site.
- .4 Perform each operation continuously and completely within a reasonable time period.
- .5 Store equipment and materials off Site.
- .6 Collect and dispose of debris or excess material on daily basis.

E14.4.2 Mowing

- .1 Do not mow areas seeded with grasses during establishment period.
- .2 Mow grass at height of 50 - 60 mm, do not allow to grow past 80 mm. Do not cut more than 1/3 of the grass height at any one mowing, unless otherwise directed by the Contract Administrator.
- .3 Do not remove clippings from grassed areas.

E14.4.3 Weed Control

- .1 The Contractor shall apply herbicide when broadleaf weeds start developing in competition with grasses.
- .2 Apply herbicide in accordance with manufacturer's instructions and the Manitoba Agriculture Guide to Chemical Weed Control latest edition.
- .3 Use 2.4D Amine or MCPA Amine herbicide for susceptible broadleaf weeds.
- .4 Use a mixture containing 2.4-D Amine or MCPA Amine. Mecoprop and Dicamba for 2.4-D resistant plants.
- .5 Avoid use of pure Dicamba solutions near trees.
- .6 Do not apply to newly seeded turf until after the second mowing, or as directed by the Contract Administrator.
- .7 Do not water within 24 hours after application.
- .8 Apply when winds are less than 20 km/h and air temperature is above 10°C.

E14.4.4 Fertilizing

- .1 Apply 2:11 ratio fertilizer at rate of 0.2 kg nitrogen/100 m².
- .2 Apply in early spring as soon as frost is out of ground.
- .3 Make supplementary application of 0.2 kg nitrogen/100 m² towards end of August.
- .4 Use mechanical spreading equipment.
- .5 Check calibration to ensure specified rate is spread evenly. Rectify uneven spreading as soon as it becomes apparent. Spread additional fertilizer over areas affected or rake out excess application.
- .6 Water immediately after fertilizing to obtain moisture penetration of 40-50 mm.

E14.4.5 Reseeding

- .1 Overseed areas by means of broadcasting where germination has failed as directed by the Contract Administrator.
- .2 Seed mixes and rates to E12: Seeding.

E14.4.6 Shrub Beds

- .1 Cultivate shrub beds, keep free of weeds. Eliminate perennial grass and weeds and their roots.
- .2 Water plants weekly; apply sufficient water to saturate root zone.
- .3 Areas with no irrigation system: supply labour, all hoses and attachments necessary to provide adequate watering.
- .4 Water to be obtained from source on Site, supplied by City.
- .5 Maintain mulch to depth of 100 mm.
- .6 Control disease and insects. Where possible use physical methods to eliminate cause of insect infestation. If chemical treatment is necessary apply in accordance with manufacturer's recommendations and government regulations.
- .7 Promptly replace plants which require replacement under specified warranty.

E14.4.7 Extension of Maintenance Period

- .1 At the end of the maintenance period, all sodded and seeded areas must show signs of growth satisfactory to the Contract Administrator and in accordance with E11: Planting of Shrubs, E12: Seeding and E13: Sodding.
- .2 Unsatisfactory areas shall be replaced and maintained by and at the expense of the Contractor, to the satisfaction of the Contract Administrator.
- .3 Warranty for any replaced nursery plant material, shall be extended a full year from date of acceptance of the replaced plants.