

## THE CITY OF WINNIPEG

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 582-2007** 

PLAYGROUND RENOVATIONS - COLUMBIA, CARON AND SMITHDALE PARKS

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## **PART B - BIDDING PROCEDURES**

#### **B1.** CONTRACT TITLE

B1.1 PLAYGROUND RENOVATIONS - COLUMBIA, CARON AND SMITHDALE PARKS

#### **B2. SUBMISSION DEADLINE**

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, September 7, 2007.
- 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 Sites 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 regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 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 may 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 B15.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

#### **B7.** BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
  - (a) Form A: Bid;

- (b) Form B: Prices;
- (c) Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft.
- 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 shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.4.1 Samples or other components of the Bid 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.
- B7.5 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.6 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.8 Bids 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 12 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 should 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 and the Contract, when awarded, shall be both joint and several.

#### B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST), but exclude GST.
- 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.

#### **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 Branch internet site at <a href="http://www.winnipeg.ca/matmgt">http://www.winnipeg.ca/matmgt</a>).
- 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 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.
- B10.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

#### **B11.** BID SECURITY

- B11.1 The Bidder shall provide bid security in the form of:
  - (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
  - (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking 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 included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
  - (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.
- B11.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B11.1.2 All signatures on bid securities shall be original, and shall be witnessed or sealed as required.
- B11.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.
- B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B11.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

#### B12. OPENING OF BIDS AND RELEASE OF INFORMATION

- B12.1 Bids 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.
- B12.1.1 Bidders or their representatives may attend.
- B12.1.2 Bids determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.

- B12.2 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 Branch internet site at http://www.winnipeg.ca/matmgt.
- B12.3 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.
- B12.4 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.

#### **B13.** IRREVOCABLE BID

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid.
- B13.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

#### **B14. WITHDRAWAL OF BIDS**

- B14.1 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.
- B14.1.1 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.
- B14.1.2 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 12 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 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 12 of Form A: Bid; and
  - (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B13.2 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.

#### **B15.** EVALUATION OF BIDS

- B15.1 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.
- B15.2 Further to B15.1(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.
- B15.3 Further to B15.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B15.4 Further to B15.1(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 and will be adjusted, if necessary, as follows:
  - (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price or:
  - (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Price of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting the following items in the order listed until a Total Bid Price within the budgetary provision is achieved:
    - (i) Item 31 Sand Box c/w Sand
    - (ii) Item 10 Saddle Spinner,
    - (iii) Item 30 Accessible Play Panel Type I
    - (iv) Item 11 Accessible Play Panel Type II
- B15.5 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.

## **B16.** AWARD OF CONTRACT

- B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B16.2 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.
- B16.2.1 Without limiting the generality of B16.2, 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.
- B16.3 Subject to B16.2, 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.
- B16.3.1 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.

## **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 Branch internet site at http://www.winnipeg.ca/matmgt.
- 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 renovation of the playgrounds at Columbia, Caron and Smithdale Parks.
- D2.2 The major components of the Work are as follows:
  - (a) Removals of existing play equipment, timber edging, and safety surfacing,
  - (b) Supply and installation of play equipment,
  - (c) Supply and installation timber edging and playground safety surfacing,
  - (d) Granular and concrete paving including installation of a concrete cub cut,
  - (e) Lifting and re-installation of unit paving,
  - (f) Connection to an existing catch basin,
  - (g) Supply and installation of benches.

#### D3. CONTRACT ADMINISTRATOR

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

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

Telephone No. (204) 452-2426 E-Mail. llamb@dwla.ca

D3.2 At the pre-construction meeting, Laurie Lamb 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 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 address or e-mail address identified in D3.1.

D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

The City of Winnipeg
Chief Administrative Officer Secretariat
Attn: Chief Administrative Officer
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 Attn: City Solicitor 185 King Street, 3rd Floor Winnipeg MB R3B 1J1

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. INSURANCE

- D7.1 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, broad form property damage cover and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
  - (b) automobile liability insurance for 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;
- D7.2 Deductibles shall be borne by the Contractor.
- D7.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract.

D7.4 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.

#### D8. PERFORMANCE SECURITY

- D8.1 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.
- D8.1.1 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.
- D8.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B11.1(c), 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 C4.1 for the return of the executed Contract.

## D9. SUBCONTRACTOR LIST

D9.1 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 the General Conditions for the return of the executed Contract.

#### D10. DETAILED WORK SCHEDULE

- D10.1 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.
- D10.2 The detailed work schedule shall consist of the following dates:
  - (a) Start date:
  - (b) Excavation of holes for the play equipment posts:
  - (c) Arrival of play equipment to the Site;
  - (d) Concrete pouring;
  - (e) Expected completion.
- D10.3 Other milestone dates appropriate to this project should also be included.

## **SCHEDULE OF WORK**

#### D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a purchase order from the Award Authority authorizing the commencement of the Work.
- D11.2 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) evidence of the insurance specified in D7;
    - (iv) the performance security specified in D8;
    - (v) the Subcontractor list specified in D9; and
    - (vi) the Work Schedule specified in D10.
  - (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.
- D11.3 The Contractor shall order the play equipment within five (5) Working Days of receipt of the purchase order and commence the Work on the Site five (5) Working Days prior to the scheduled installation of the equipment.

#### D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance within 20 (twenty) consecutive Working Days of the commencement of the Work as specified in D11.
- D12.2 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.
- D12.3 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.

#### D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance within 30 (thirty) consecutive Working Days of the commencement of the Work as specified in D11.
- D13.2 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.
- D13.3 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.

## D14. LIQUIDATED DAMAGES

D14.1 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 seven hundred and fifty

- dollars (\$750) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D14.2 The amount specified for liquidated damages in D14.1 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.
- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### D15. SCHEDULED MAINTENANCE

- D15.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
  - (a) Turf Renovation as specified in E20.
- D15.2 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**

#### D16. JOB MEETINGS

- D16.1 Regular 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.
- D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

## D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D17.1 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**

#### D18. PAYMENT

D18.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

#### **WARRANTY**

#### D19. WARRANTY

D19.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

- D19.2 Notwithstanding C13.2 or D19.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
  - (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D19.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.
- D19.3 Manufacturer's warranties on play equipment and safety surfacing shall apply.

## FORM H1: PERFORMANCE BOND

(See D8)

KNOW ALL MEN BY THESE PRESENTS THAT			
(herei	nafter called the "F	rincipal"), and	
(herei	nafter called the the "Obligee"), in	'Surety"), are held and firmly bound unto <b>THE CITY OF WINNIPEG</b> (hereinafter the sum of	
		dollars (\$	
sum t	he Principal and t	ida to be paid to the Obligee, or its successors or assigns, for the payment of which he Surety bind themselves, their heirs, executors, administrators, successors and rally, firmly by these presents.	
WHE	REAS the Principa	has entered into a written contract with the Obligee dated the	
	day of	, 20 , for:	
BID C	PPORTUNITY NO	. 582-2007	
PLAY	GROUND RENOV	ATIONS – COLUMBIA, CARON AND SMITHDALE PARKS	
which	is by reference m	ade 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) (b) (c) (d) (e)	forth in the Con- perform the Wo make all the pay in every other Contract; and indemnify and semands of every claims, actions Compensation performance of	erform the Contract and every part thereof in the manner and within the times set ract and in accordance with the terms and conditions specified in the Contract; it in a good, proper, workmanlike manner; ments whether to the Obligee or to others as therein provided; respect comply with the conditions and perform the covenants contained in the save harmless the Obligee against and from all loss, costs, damages, claims, and ery description as set forth in the Contract, and from all penalties, assessments, for loss, damages or compensation whether arising under "The Workers Act", or any other Act or otherwise arising out of or in any way connected with the mon-performance of the Contract or any part thereof during the term of the ewarranty period provided for therein;	
		ON SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety able for a greater sum than the sum specified above.	
nothin or rel	ng of any kind or r	ECLARED AND AGREED that the Surety shall be liable as Principal, and that natter whatsoever that will not discharge the Principal shall operate as a discharge the Surety, any law or usage relating to the liability of Sureties to the contrary	
IN WI	TNESS WHEREO	F the Principal and Surety have signed and sealed this bond the	
	day of	20	

The City of Winnipeg Bid Opportunity No. 582-2007 Supplemental Conditions Page 8 of 11

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SIGNED AND SEALED in the presence of:	(Name of Principal)	
	Per:	(Seal)
(Witness)	Per:	
	(Name of Surety)	
	By: (Attorney-in-Fact)	(Seal)

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

(See D8)

(Date)	
Corpo Legal : 185 Ki	ity of Winnipeg rate Services Department Services Division ng Street, 3rd Floor neg MB R3B 1J1
RE:	PERFORMANCE SECURITY - BID OPPORTUNITY NO. 582-2007
	PLAYGROUND RENOVATIONS – COLUMBIA, CARON AND SMITHDALE PARKS
Pursua	ant to the request of and for the account of our customer,
(Name o	of Contractor)
(Addres	s of Contractor)
	EREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding aggregate
	Canadian dollars.
demar Letter payme	Standby Letter of Credit may be drawn on by you at any time and from time to time upon written for payment made upon us by you. It is understood that we are obligated under this Standby of Credit for the payment of monies only and we hereby agree that we shall honour your demand for ent without inquiring whether you have a right as between yourself and our customer to make such and without recognizing any claim of our customer or objection by the customer to payment by us.
	mount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon ou or by formal notice in writing given to us by you if you desire such reduction or are willing that it be
Partial	drawings are permitted.
	ngage with you that all demands for payment made within the terms and currency of this Standby of Credit will be duly honoured if presented to us at:
(Addres	s)
and we	e confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

ΑII	demands for	payment shall	specificall	y state that they	v are drawn	under this	Standby	Letter of	Credit
/\III	acilialias ioi	payment snan	Specifican	y state that the	y arc arawii	under und	Otariaby	LCIICI OI	Or Cuit.

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)	

## FORM J: SUBCONTRACTOR LIST

(See D9)

## PLAYGROUND RENOVATIONS - COLUMBIA, CARON AND SMITHDALE PARKS

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## **PART E - SPECIFICATIONS**

#### **GENERAL**

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 The City of Winnipeg Standard Construction Specifications in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 The City of Winnipeg Standard Construction Specifications is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- 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:

Drawing No.	<u>Drawing Name/Title</u>
0707-1-L1	COLUMBIA PARK – Existing Conditions and Removals
0707-1-L2	COLUMBIA PARK – Playground Renovation
0707-2-L1	CARON PARK – Existing Conditions and Removals
0707-2-L2	CARON PARK – Playground Renovation
0707-3-L1	SMITHDALE PARK – Existing Conditions and Removals
0707-3-L1	SMITHDALE PARK – Playground Renovation
SCD-120A	TACHE BENCH - COMPOSITE
SCD-247A	SANDBOX AND WOOD SEAT DETAILS
SCD-638A	PLAYGROUND TIMBER EDGE DETAIL
19540-2-1	Playstructure – Type I
19540-3-1	Playstructure – Type II

## **GENERAL REQUIREMENTS**

#### E2. SITE ACCESS

- E2.1 Access to the Sites will be determined at the pre-construction meeting. These access areas shall be maintained and restored 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 fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E3.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate 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 the Manitoba Workplace Health and Safety Act.
- E3.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety 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 Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

#### E4. DAMAGE TO EXISTING STRUCTURES AND PROPERTY AND SERVICES AND UTILITIES

- E4.1 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.
- E4.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is working near them. Any damage caused by the negligence of the Contractor or his Sub-contractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract administrator.
- E4.3 Existing Services and Utilities

No responsibility will be assumed by the Owner for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the Owner shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

#### E5. PROTECTION OF EXISTING TREES

- E5.1 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) Trees greater than 100 mm diameter or 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.
  - (b) 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 outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.

- (c) Equipment shall not be operated within the drip line without written permission from the Contract Administrator. 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.
- (d) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (e) Carefully remove safety fencing and strapping material without harming the trees as soon as the construction and restoration Work is complete.
- E5.2 Obtain approval from the Contract Administrator to excavate within 2.0 M of a tree.
- E5.3 Excavate in a manner to minimize damage to the tree root systems. Keep exposed roots in excavations and trenches moist or shaded. If stockpiling of excavated soil material is required, stockpile in areas away from the tree roots if possible.
- E5.4 Prune exposed roots with equipment such as trencher, chain saws, root cutters or other methods acceptable to the Contract Administrator in a manner that will leave a neat, clean root end.
- E5.5 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.
- E5.6 The City of Winnipeg Naturalist Branch, also has authority for Natural stands of forested/brush/native grass areas, and may also instruct the Contractor on protective measures to protect the riverbank vegetation.
- E5.7 Further to the Naturalist requirements the Contractor must set up a temporary orange safety fence to define the agreed upon Work area to ensure that additional damage does not occur to adjacent vegetation. Damage to vegetation and established trees beyond the defined Work will result in additional charges based on the Forestry Branch assessment of the tree valuation.
- E5.8 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.
- E5.9 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

#### E6. TEMPORARY UTILITIES

- E6.1 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.
- E6.2 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.

#### E7. SITE ENCLOSURES

- E7.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E7.2 Site enclosures shall be considered incidental to the Contract Work.

#### E8. LAYOUT

- E8.1 The Contractor is responsible for the layout of all Work. The Contractor is to coordinate the layout of all play spaces with the play equipment supplier to ensure that CSA requirements are met.
- E8.2 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.

#### E9. CANADIAN STANDARDS ASSOCIATION GUIDELINES

E9.1 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".

#### E10. MAINTENANCE KITS

E10.1 All play equipment shall include 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**

#### E11. REMOVALS AND SITE PREPARATION

#### E11.1 General Description

(a) This specification shall cover the removal of items such as play equipment, timber edging, safety bases, sand boxes and site furniture, at all three Sites as specified on the Removals Drawings.

## E11.2 Removals

- (a) Play equipment and benches are to be removed including any bases or foundations in their entirety. All play equipment is to be removed and legally disposed of; and, under no circumstances, is any of it to be sold or reused. Removals are to be scheduled such that no partial or unsafe structures are left unsecured.
- (b) Existing safety stone and sand that is deemed suitable for re-use on the Site shall be stockpiled or re-used immediately in such a manner as it does not become contaminated. If the material is not suitable for re-use, it shall be removed and legally disposed of off Site.
  - (i) It is the Contractor's responsibility to examine the existing sand and safety stone surfacing at Columbia and Smithdale Parks to ascertain the suitability of the material for re-use under the existing swings. The Contractor shall obtain the permission of the Contract Administrator for the re-use of existing material.
  - (ii) The recycling of existing material shall be included in the lump sum price of the surfacing material.
- (c) All sand is to be excavated and removed from Caron Park.
- (d) At Columbia Park, the timber edging is to be removed carefully so that adjacent asphalt surfaces are not damaged. Refer to E12.5(c).

- (e) The sand box at Smithdale Park is to be removed in its entirety including the sand that has built up around it. The area is to be levelled for construction of the new sand box.
- (f) All removed materials are to be disposed of off Site in a safe and legal manner.

## E11.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of removal, excavation and disposal.
- (b) Items of Work:
  - (i) Removals

#### E12. TIMBER EDGING

- E12.1 General Description
- E12.2 This specification shall cover the supply and installation of timber edging to contain the safety surfacing for the playground areas.

#### E12.3 Locations

- (a) Columbia Park
  - (i) Timber Edging Type I and II, to replace existing timber edging.
- (b) Caron Park
  - (i) Timber Edging Type I, new edging around play area.
- (c) Smithdale Park
  - (i) Timber Edging Type I, new edging around existing swing set.

#### E12.4 Materials

- (a) Timber Edging Type I
  - Two tier timber edging.
- (b) Timber Edging Type II
  - Single tier timber edging.
- (c) Timber Edging shall be subject to inspection and approval by the Contract Administrator.
- (d) All wood 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. Top edges of all exposed timbers shall have a 8mm (45°) chamfer.
- (e) For timber edging that will be in contact with the ground soil, the wood shall be ACQ treated as approved for use by Environment Canada. All ends and cuts shall be treated with preservative before being secured.
- (f) For exposed timber edging (top row of two tier edging), the wood shall NOT be pressure treated. The wood shall be treated with Bio-Wash Ltd., Mill Glaze Away and Natural Deck Oil as per manufacturer's specifications.

#### E12.5 Methods

- (a) Layout of edging shall be as shown on Drawings and to adequately provide safety surfacing area beneath play equipment, based on the most recent CSA safety zone requirements.
- (b) The layout of the timber edging shall be coordinated with the installation of the play equipment to ensure that the proper safety zones are created around the equipment.

- (c) At Columbia Park, Type II edging shall be coordinated with installation of unit paving. Where timber edging abuts existing asphalt, a clean tight fit shall be achieved and the existing asphalt edge may be saw cut to create a clean edge.
- (d) At Columbia Park, the two tier timber edging is to be at the same levels as existing timbers. The single tier edging around the unit paving is to be flush with adjacent paving.
- (e) At Columbia and Caron Parks, an entrance to the play area shall be created by omitting the top course, as determined with the Contract Administrator.
- (f) Timbers shall be installed as per SCD-638A. Base course timbers shall be pinned with a minimum of two (2) 19mm diameter by 900mm rebar at maximum 1200mm O.C. All rows of timber above base course shall be securely spiked with a minimum of two (2) 12mm diameter by 250mm spikes predrilled at maximum 1200mm O.C.
- (g) All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts shall be stained before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.
- (h) Turf shall be repaired as required around edging in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding. This shall be considered incidental to the timber edging Work.

#### E12.6 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
  - (i) Timber Edging Type I
  - (ii) Timber Edging Type II

#### E13. SUB SURFACE DRAINAGE

#### E13.1 General Description

- (a) This specification shall cover the supply and installation of sub-surface drainage systems, to drain those play areas using wood fibre surfacing systems.
- (b) This sub-surface drainage is to be used in conjunction with the drainage system that is included with the wood fibre surfacing systems in E16.

#### E13.2 Locations

- (a) Caron Park
  - (i) Multi Flow Drain System to rock filled sump.
- (b) Smithdale Park
  - (i) Multi Flow Drain System to rock filled sump.

## E13.3 Materials and Methods

- (a) Granular sump material: 38 mm Diameter Crushed Washed Stone.
- (b) Geotextile: filter cloth.
- (c) Drainage pipe shall be Multi-Flow Drainage System or approved substitute in accordance with B6. Size shall be 150mm as shown on Drawings. All fittings shall be sized to fit and approved by the manufacturer for use with the Multi-Flow or approved substitute.
- (d) Backfill for Trenches
  - (i) Backfill shall be coarse sand whose particle size is defined as less then 5% retained on a #10 screen, and less than 5% passing through a #30 screen. (US Std Sieve) In no case shall more than 1% pass a #60 screen.

- Template Version: C120070404
  - (e) Multi flow drain pipe is to be installed according to manufacturer's specifications.
  - (f) Multi flow drain pipe is to be installed along the lower edge of the play area and the wood fibre drain system is to drain to it.
  - (g) Multi flow drain is to flow to a 1m diameter rock filled sump, 1m deep. The sump shall be located down hill from the play area and as determined on Site with the Contract Administrator.

#### E13.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of material supply, excavation, proper material installation and any associated Site restoration.
- (b) Items of Work
  - (i) Drainage System to Sump

## E14. TORPEDO SAND PLAY SURFACES

## E14.1 General Description

(a) This specification shall cover the supply and installation of torpedo sand, including recycling of existing material, excavation, and removal of unsuitable material, for the areas as shown on the Drawings.

#### E14.2 Locations

- (a) Columbia Park
  - (i) Entire play area.
  - (ii) Existing sand may be recycled for use within play area.
- (b) Caron Park
  - (i) Existing swing set area.

#### E14.3 Materials

- (a) Sand shall be clean Torpedo Sand.
- (b) Samples of the specified material shall be submitted for approval to the Contract Administrator at least seven (7) Calendar Days prior to ordering of the material.

#### E14.4 Method

- (a) Columbia Park
  - Existing sand surfacing may be used to meet the requirements for play surfacing if it is uncontaminated and deemed suitable, upon approval of the Contract Administrator.
  - (ii) Play areas are to be excavated to the depth required for correct depth of sand as shown on the Drawings.
  - (iii) All contaminated and surplus materials shall be disposed of as per Clause 9.3 of CW 3110.
  - (iv) Sand shall be installed within the play areas to a minimum depth of 36 cm (14") as shown on the Drawings.
  - (v) The installation of the sand shall be done immediately after the play equipment has been installed.
  - (vi) Installation shall be done by equipment sized to suit the Work being done and the sand shall be spread by hand in the immediate vicinity of the play equipment so as not to damage the same.
  - (vii) The play equipment shall be swept clean as required after installation of the sand.

## (b) Caron Park

- (i) Sand area for existing swings is to be enlarged to meet CSA requirements plus an additional 30cm, as shown on the Drawings. The area is to be excavated to meet required depth.
- (ii) All surplus materials shall be disposed of as per Clause 9.3 of CW 3110.
- (iii) Edges of the sand area are to be cut in neatly.
- (iv) Sand shall be installed within the swing area to a minimum depth of 36 cm (14") as shown on the Drawings. Depth measurement shall be when the sand is spread level

#### E14.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of recycling existing material, new material supply, excavation and removals, sub-grade preparation, proper material installation and any associated Site restoration.
- (b) Items of Work
  - (i) Torpedo Sand Surfacing

#### E15. SAFETY STONE PLAY SURFACES

#### E15.1 General Description

(a) This specification shall cover the supply and installation of Safety Stone for play areas.

#### E15.2 Locations

- (a) Smithdale Park
  - (i) Existing swing area.
  - (ii) Stone from existing play area may be recycled to swing area.

#### E15.3 Materials

(a) Safety Stone shall be 6.0mm Playground Stone, composition shall be Typical Birds Hill glacial till material, 100% clean river-washed granite conforming to the following sizes of sieve:

> 100% passing 10mm 45% passing 5mm Up to 10% passing 2.5mm Up to 4% passing 1.25mm 0% passing 0.8mm sieve

(b) Samples of the specified material shall be submitted for approval to the Contract Administrator at least seven (7) Calendar Days prior to ordering of the material.

#### E15.4 Method

- (a) Existing safety stone surfacing may be used to meet the requirements for play surfacing if it is uncontaminated and deemed suitable, upon approval of the Contract Administrator.
- (b) Play areas are to be excavated to the depth required for correct depth of stone as shown on the Drawings.
- (c) All contaminated and surplus materials shall be disposed of as per Clause 9.3 of CW 3110.
- (d) Safety Stone shall be installed within the swing area to a minimum depth of 36 cm (14") as shown on the Drawings.
- (e) Installation shall be done by equipment sized to suit the Work being done and the stone shall be spread by hand in the immediate vicinity of the play equipment so as not to damage the same.

(f) The play equipment shall be cleaned as required after installation of the stone.

## E15.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of recycling existing material, new material supply, excavation and removals, sub-grade preparation, proper material installation and any associated Site restoration.
- (b) Items of Work
  - (i) Safety Stone Surfacing

#### E16. WOOD FIBRE PLAY SURFACES

- E16.1 Description
  - (a) This specification shall cover the supply and installation of Wood Fibre Surfacing.
- E16.2 Location
  - (a) Caron Park
  - (b) Smithdale Park

## E16.3 Materials

- (a) Wood Fibre product shall be either Zeager Woodcarpet or Fibar FibarSystem 300 products or substitute acceptable to Contract Administrator.
  - (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 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

As supplied by:

Playgrounds-R-Us

Ph: (204) 632-7000

(b) Wood Fibre surfacing shall include wood fibre, filter cloth, subsurface drainage system and mats for bottom of slides and under swings.

#### E16.4 Methods

- (a) Caron Park
  - (i) Wood Fibre shall be installed within the play area, as defined by the timber edging, to the depth required by the latest version of CSA and the manufacturer's specification.

(ii) The drainage system and subgrade shall be sloped min. 1% to the lower end of the play area and shall be connected to a sub-surface drainage system as specified in E13. It is to be connected to a rock filled sump.

## (b) Smithdale Park

- (i) The edging for the play area shall be mounded earth sodded as shown on Drawings. Wood Fibre shall be installed within the play area, to the depth required by the latest version of CSA and the manufacturer's specification.
- (ii) The drainage system and subgrade shall be sloped min. 1% to the lower end of the play area and shall be connected to a sub-surface drainage system as specified in E13. It is to be connected to a rock filled sump.
- (c) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (d) Installation of entire system, including fibre, filter cloth, subsurface drainage and mats shall be done according to the manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same. Refer to E13.
- (e) 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.

## E16.5 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 supplied for the wood fibre system, sub-grade preparation, and proper material installation.
- (b) Items of Work:
  - (i) Wood Fibre Surfacing System

#### E17. UNIT PAVING

#### E17.1 General Description

(a) Further to CW 3330-R3, this specification shall cover the removal and re-installation of the existing unit paving at Columbia Park.

#### E17.2 Methods

- (a) Existing unit pavers are to be removed and stockpiled on Site.
- (b) Existing tree grate is to be removed and disposed of off-site in a legal manner.
- (c) Work is to be coordinated with removals and installation of benches and timber edging. Waste receptacle is to remain.
- (d) Unsuitable base materials are to be removed and disposed of off-site in a legal manner.
- (e) The unit pavers are to be re-installed as per CW 3330-R3 and as shown on Drawings.
- (f) The Contractor is to supply additional pavers to match the existing if required.

#### E17.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, and proper material installation.
- (b) Items of Work:
  - (i) Unit Paving Lift and Reinstall

#### E18. CONCRETE WORKS

## E18.1 General Description

- (a) Further to CW 3310-R11 and CW 3325-R2, this specification shall cover the supply and installation of concrete paving including sub-grade preparation, construction of curb cut/barrier free ramp on existing street curb, and ramp curb at the play area.
- (b) The Contractor is responsible for any / all permits required by the City to undertake this Work.

#### E18.2 Materials and Methods

(a) All concrete Work shall be in accordance with City of Winnipeg Standard Specifications for Portland Cement Concrete Pavement Works and Portland Cement Concrete Sidewalk.

## E18.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of material supply for the concrete sidewalk, curb cut and ramp, sub-grade preparation, proper material installation and all associated Site restoration.
- (b) Items of Work:
  - (i) Concrete Work

#### E19. GRANULAR PAVING

#### E19.1 General Description

(a) Further to CW 3110-R10, this specification shall cover the supply and installation of granular paving including sub-grade preparation.

## E19.2 Locations

- (a) Caron Park
- (b) Smithdale Park

#### E19.3 Materials and Method

- (a) Granular Paving
  - (i) Sub-base: 100 mm depth of 50 mm down crushed limestone compacted in two layers over compacted sub-grade.
  - (ii) Base: 50 mm depth of 19 mm down crushed limestone, compacted.
  - (iii) Top: 25 mm of 6 mm down crushed limestone, compacted.

## E19.4 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, and proper material installation.
- (b) Items of Work:
  - (i) Granular Paving

## **E20. TURF RENOVATION**

#### E20.1 General Description

(a) This specification shall cover the supply and installation of topsoil and sod for the renovation of turf as shown on the Drawings.

#### E20.2 Materials and Methods

- (a) Topsoil: As per CW 3540-R5.
- (b) Sodding
  - (i) As per CW 3510-R9.
  - (ii) Sod shall be mineral base.
- (c) Areas to be renovated shall be excavated and surplus materials removed off-site in a legal manner.
- (d) Edges are to be cut neatly in straight lines and new sod is to be installed to match the existing grades of the surrounding turf. Positive drainage away from play areas is to be maintained.
- (e) Seams between new and old turf are to be topdressed and seeded.
- (f) Only those areas shown on the Drawings as Turf Renovation shall be paid for under this section. All other Site restoration shall be considered incidental to other Works.

## E20.3 Mounded Play Edging

- (a) At Smithdale Park the perimeter of the play area shall consist of a mounded turf edge as shown on Drawings.
- (b) Any mounding of the turf shall be smooth blended so as not to cause lawn mowers to scalp the turf.

#### E20.4 Maintenance Period

(a) The Contractor shall maintain the sod for thirty (30) Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510-R9.

#### E20.5 Basis of Payment

- (i) 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) Turf Renovation

#### E21. SAND BOX

#### E21.1 General Description

(a) This specification shall cover the supply and installation of a complete Sand Box at Smithdale Park as shown on the Drawings.

#### E21.2 Materials

- (a) All wood 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 and to be full length of sand box side. Sand Box cap board to be 38x184mm and to be full length of sand box side. Top edges of all exposed timbers shall have a 8mm (45°) chamfer. The cap shall be sanded smooth.
- (b) The bottom row of timber edging that will be in contact with the ground soil, the wood shall be pressure treated as approved for use by Environment Canada and treated to CSA 080.83 PWF. All ends and cuts shall be treated with preservative before being secured.
- (c) For exposed timber edging and the sand box cap, the wood shall NOT be pressure treated. The wood shall be treated with Bio-Wash Ltd., Mill Glaze Away and Natural Deck Oil as per manufacturer's specifications.
- (d) Sand: clean sandbox sand.

(i) Samples of the specified sand shall be submitted for approval to the Contract Administrator at least seven (7) Calendar Days prior to installation

#### E21.3 Method

- (a) The sand box shall be constructed according to the Drawings and SCD-247A. The sand box shall be square and sized to be built from 3.6m (12') long timbers and cap.
- (b) A corner seat shall be provided at two opposite corners.
- (c) Turf shall be repaired as required around edges in accordance with City of Winnipeg Standard Specifications for Topsoil and Sodding and made to slope away from the sand box.
- (d) Sand Box shall be filled with sand to a minimum depth of 300mm.

## E21.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of material supply, and proper material installation. Site restoration work shall be considered incidental to the Work.
- (b) Items of Work:
  - (i) Sand Box c/w Sand

#### **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 and Method

- (a) Benches
  - (i) Benches: Tache style composite bench, Drawing No. SCD-120A, Product No. 52501067, 1.8 M length (6'), manufactured by the City of Winnipeg:

Contact:

Aaron Lennon

Supervisor of Central Repair/Manufacturing Facility

City of Winnipeg

Telephone No.: (204) 986-5505

- (ii) Benches are to be purchased from the City and installed according to Drawings and City specifications.
- (b) Benches are to be installed in conjunction with the paving. Tops of concrete footings are to be 200 mm below finished grade of all paving. Site furnishings are to be kept clean of any granular, concrete or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.

## E22.3 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 material supply, and proper material installation. Site restoration work and required foundations shall be considered incidental to the Work.
- (b) Items of Work:
  - (i) Benches

#### E23. FOUNDATIONS

- E23.1 All Site furniture and playground 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-R6 Concrete Underground Structures and Works, is to be utilized in the installation of the concrete works for all below ground components.
- E23.2 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.

#### E23.3 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 90cm depth or in accordance with manufacturer's specifications, whichever is greater.
- (d) Work under this section is considered incidental to the installation of playstructures and Site furniture.

#### E24. PLAYSTRUCTURES

- E24.1 General description
  - (a) This specification shall cover the supply and installation of the Playstructures as shown on the Drawings.

## E24.2 Locations

- (a) Columbia Park
  - (i) Playstructure Type I-A (mirror image of Type I-B)
- (b) Caron Park
  - (i) Playstructure Type II
- (c) Smithdale Park
  - (i) Playstructure Type I-B

#### E24.3 Products

- (a) Type I-A: Landscape Structures Inc, PlayBooster System # 19540-2-1 as depicted on the attached Drawings; or, approved Substitute in accordance with B6. Type I-A is the mirror image of the structure shown on Drawing for Type I.
- (b) Type I-B: Landscape Structures Inc, PlayBooster System # 19540-2-1 as depicted on the attached Drawings; or, approved Substitute in accordance with B6.
- (c) Type II: Landscape Structures Inc, PlayBooster System # 19540-3-1 as depicted on the attached Drawings; or, approved Substitute in accordance with B6.

## E24.4 Shop Drawings

- (a) Further to CW 1110-R1, shop drawings shall be submitted to the Contract Administrator for all the play equipment specified in this Section, within fourteen (14) Calendar Days of receipt of a Purchase Order.
- (b) Shop Drawings shall include, but not be limited to:
  - (i) Layout and configuration of equipment including required safety zones
  - (ii) Colours
  - (iii) Custom graphics or products

#### E24.5 Materials

- (a) Posts / Caps
  - (i) All posts shall be a minimum of 127 mm (5") O.D. round tubing. All posts shall be fabricated from aluminum (0.125" min. wall thickness) tubing with a baked-on TGIC polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating prior to powder coating. The bottom end of the posts is to be sealed with a moisture barrier.
  - (ii) Top caps for posts shall be aluminum die cast and powder coated the same as the post colour. All caps shall be factory installed and secured in place with tamper proof, self-sealing rivets.
- (b) Decks
  - (i) All decks shall be manufactured from vinyl-coated, perforated steel.
  - (ii) Deck heights, shapes and configurations shall be as shown on the Drawings; or, approved Substitute in accordance with B6.
  - (iii) Increments between deck heights shall be a min. 200 mm (8") and max. 300 mm (12").
- (c) Clamping System
  - (i) All deck, rail and play component clamping systems shall be fabricated from zinc plated, and galvanized steel, stainless steel or aluminum, and baked-on polyester powdercoated to match post colour unless noted otherwise. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.
- (d) Handrails, Safety Rails and Handloops
  - (i) All handrails and safety rails shall be fabricated using a minimum of 1 1/8" O.D. with a 120" wall thickness steel tubing. After all fabrication activities have occurred including end cuts, drill holes, bends and weld joints, all components shall be hot dipped galvanized and baked-on polyester powdercoated.
- (e) Hardware
  - (i) All fasteners shall be socketed and tamper proof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
- (f) Slides
  - (i) Steel slides are to be 16-gauge 304 stainless steel. Hoods shall be rotationally moulded from U.V. stabilized linear low density polyethylene with built-in handle.

#### E24.6 Play Components – Structure Type I:

- (a) The following play components are to be included on the Playstructure; or, approved Substitute in accordance with B6:
  - (i) one (1) Steel Slide, 56" deck, straight slide with poly hood;
  - (ii) one (1) Transfer Module to 32" Deck;
  - (iii) one (1) Vertical Ascent Climber, 48" deck;
  - (iv) one (1) Driver Panel, permalene panel with graphics c/w one (1) Steering Wheel;

- (v) one (1) Hole Panel, below deck;
- (vi) one (1) 90° Horizontal Ladder c/w End Ladder;
- (vii) one (1) Handhold Leg Lift.
- (viii) one (1) Cascade Climber, 2 sections.
- (b) The playstructure shall have grab bars, kickplates and handhold panels as shown on the Drawings and as required to meet the CAN/CSA -Z614-07.

## E24.7 Play Components – Structure Type II:

- (a) The following play components are to be included on the Playstructure; or, approved Substitute in accordance with B6:
  - (i) one (1) Clatter Bridge, 84" length, 48" deck, c/w barriers;
  - (ii) two (2) Stainless Steel Slides, 48" deck and 72" deck, straight slides with poly hood;
  - (iii) one (1) Sky Rail Climber, 72" deck;
  - (iv) one (1) Cliff Climber, 72" deck;
  - (v) one (1) Centipede Climber, 48" deck;
  - (vi) one (1) Two Step Deck Link;
  - (vii) one (1) Loop Ladder, 48" deck;
  - (viii) one (1) Transfer Module to 40" Deck;
  - (ix) three (3) Pod Climbers, one at 30", one at 20" height and one at 10" height c/w handholds;
  - (x) one (1) Navigator Reach Panel at grade;
  - (xi) one (1) Driver Panel, permalene panel with graphics c/w one (1) Steering Wheel;
  - (xii) one (1) Horizontal Ladder c/w Parallel Bars and Access Landing Seat;
  - (xiii) one (1) Orbitor Spinner, c/w spinning overhead wheel and base;
  - (xiv) one (1) Chimes Panel, 48" deck;
  - (xv) one (1) Store Panel, ground level;
  - (xvi) one (1) Handhold Leg Lift.
- (b) The playstructure shall have grab bars, kickplates and handhold panels as shown on the Drawings and as required to meet the CAN/CSA -Z614-07.

## E24.8 Colours

- (a) Columbia Park (Type I-A)
  - (i) Pine Green Posts;
  - (ii) Red Clamps, Slide Hood, Overhead and Tendertuff;
  - (iii) Yellow with red graphics Panels;
  - (iv) Yellow and Red Cascade Climber;
  - (v) Brown Decks.
- (b) Caron Park (Type II):
  - (i) Pine Green Posts;
  - (ii) Red Clamps, Slide Hood, Tendertuff and metal play components;
  - (iii) Yellow with red graphics Panels;
  - (iv) Brown Decks;
- (c) Smithdale Park (Type I-B)
  - (i) Brown Posts and Decks;
  - (ii) Tan Tendertuff and Slide Hood.
  - (iii) Green with tan graphics Panels;
  - (iv) Green and Tan Cascade Climber;
  - (v) Pine Green Overhead, and Clamps.

#### E24.9 Installation

- (a) Playstructures shall be installed as per the Canadian Standards Association Guidelines. All posts and other vertical items shall be true to vertical. All decks shall be level. For foundations refer to Clause E23.
- (b) Playstructures shall be installed by factory certified installers only and to manufacturer's specifications.
- (c) Installation of playstructures shall be coordinated with associated Site development Work.

  The playstructures shall be secured and rendered unusable until safety surface is in place.

#### E24.10 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) Playstructure Type I –A
  - (ii) Playstructure Type I B
  - (iii) Playstructure Type II

#### E25. SWINGS

## E25.1 General Description

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

#### E25.2 Location

(a) Caron Park

#### E25.3 Product

(a) SportsPlay Equipment Inc, Model #581-240H: Tri-pod Leg, One Bay, Heavy Duty Swing Frame, 2.4 m (8') high, complete with one (1) slash-proof rubber belt seat, one (1) slash-proof rubber, enclosed infant seat, heavy duty chain, swing hangers and hammer locks; or, approved Substitute in accordance with B6.

#### E25.4 Materials

- (a) Topbeam
  - (i) All topbeams shall be fabricated from min. 90 mm (3 1/2") O.D. 7 gauge, RS40 galvanized steel pipe.
- (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.

#### E25.5 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.

#### E25.6 Installation

- (a) Swings shall be installed as per the Canadian Standards Association Guidelines, refer to Clause E9. For foundations refer to Clause E23.
- (b) Installation of swings shall be coordinated with associated Site development Work. Swings shall be secured and rendered unusable until safety surfacing is in place.
- (c) Swings shall be installed by factory certified installers only and to manufacturer's specifications.

## E25.7 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) Swings

#### **E26. INDEPENDENT PLAY EQUIPMENT**

#### E26.1 General Description

(a) This specification shall cover the supply and installation of independent play equipment as specified herein.

#### E26.2 Location

- (a) Columbia Park
  - (i) Spring Toys Type I and II
  - (ii) Saddle Spinners
  - (iii) Accessible Play Panel Type II
- (b) Smithdale Park
  - (i) Accessible Play Panel Type I

#### E26.3 Products

- (a) Spring Toy Type I: Landscape Structures Inc., "2-Seat Fire Engine Rider", product #120871B, direct bury; or, approved Substitute in accordance with B6.
- (b) Spring Toy Type II: Landscape Structures Inc., "Tugboat", Custom enclosed rider, direct bury; or, approved Substitute in accordance with B6.

- (c) Saddle Spinner: Landscape Structures Inc., product #152179A, direct bury; or, approved Substitute in accordance with B6.
  - (i) Colours to be Red and Yellow, alternating colours for seats and shafts.
- (d) Accessible Play Panel Type I: Landscape Structures Inc., to consist of two (2) posts and one (1) Navigator Reach Panel, surface mount; or, approved Substitute in accordance with B6.
  - Colours to be Pine Green for Posts, Tan with Green graphics for panels, Brown for Clamps, to match the playstructure.
- (e) Accessible Play Panel Type II: Landscape Structures Inc., to consist of three (3) posts and one (1) Navigator Reach Panel and one (1) Chimes Reach Panel, direct bury; or, approved Substitute in accordance with B6.
  - Colours to be Pine Green for Posts, Yellow with Red graphics for panels, Red for Clamps, to match the playstructure.

## E26.4 Materials – Spring Toys

- (a) Panels / Body / Seat
  - (i) Both Spring Toy Styles shall be fabricated from compressed or rotationally moulded, high-density polyethylene with U.V. stabilizers and all edges chamfered. Colours and graphics are to be moulded-in.
- (b) Spring / Mount
  - (i) The spring toys shall be mounted on a pinch-proof, coil spring assembly. The coil spring and mount shall be manufactured from a tempered alloy steel, galvanized and coated with a baked-on polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating prior to powder coating.
- (c) Hardware
  - (i) All fasteners shall be tamper proof in design, requiring special tools. The fasteners shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.

## E26.5 Materials – Saddle Spinners

- (i) Shaft: weldment comprised of 2.875" O.D. RS40 galvanized steel tubing, 1,125" O.D. steel shaft, 12 Ga.HR flat steel, and 1141 or 1144 steel collar; powdercoated.
- (ii) Saddle: rotationally moulded from U.V. stabilized linear low density polyethylene.
- (iii) Rubber gasket: 50 durometer neoprene.
- (iv) All fasteners shall be tamper proof in design, requiring special tools. The fasteners shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.

#### E26.6 Materials – Play Panels

- (a) Posts / Caps
  - (i) All posts shall be a minimum of 127 mm (5") O.D. round tubing. All posts shall be fabricated from aluminum (0.125" min. wall thickness) tubing with a baked-on TGIC polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating.
- (b) Play panels are to be of compressed or rotationally moulded, high-density polyethylene with U.V. stabilizers and all edges chamfered. Colours and graphics are to be moulded-in.

#### E26.7 Installation

(a) All play equipment shall be installed as per the Canadian Standards Association Guidelines, refer to Clause E9;

- (b) All play equipment shall be installed by factory certified installers only and to manufacturer's specifications. For foundations refer to Clause E23.;
- (c) Where items are installed in existing asphalt surfaces, the asphalt is to be neatly cut and patched. All surfaces are to be cleaned to the satisfaction of the Contract Administrator.
- (d) Saddle Spinners are to be set at two heights, 50cm (20") and 60cm (24").

## E26.8 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. Site restoration Work shall be considered incidental to the Work.
- (b) Items of Work:
  - (i) Spring Toy Type I
  - (ii) Spring Toy Type II
  - (iii) Saddle Spinner
  - (iv) Accessible Play Panel Type I
  - (v) Accessible Play Panel Type II