

# THE CITY OF WINNIPEG

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 576-2004** 

FRASER'S GROVE PARK PLAYGROUND REDEVELOPMENT

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# PART B BIDDING PROCEDURES

#### **PART B - BIDDING PROCEDURES**

# **B1.** PROJECT TITLE

B1.1 FRASER'S GROVE PARK PLAYGROUND REDEVELOPMENT

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

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, April 21, 2005.
- B2.2 Bid Submissions determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

#### **B3.** SITE INVESTIGATION

B3.1 Further to GC:3.1, the Bidder may view the Site without making an appointment.

#### **B4. ENQUIRIES**

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

#### B5. ADDENDA

- B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.

- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

#### **B6.** SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
  - (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative:
  - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
  - (c) identify any anticipated cost or time savings that may be associated with the substitute;
  - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
  - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

#### B7. BID SUBMISSION

- B7.1 The Bid Submission consists of the following components:
  - (a) Form A: Bid;
  - (b) Form B: Prices;
- B7.2 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.2.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.3 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.4 Bid Submissions shall be submitted to:

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

## B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
  - (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted:
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
  - (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;

- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.
- B8.4.2 All signatures shall be original.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

#### B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- 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;
  - (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
  - (c) be financially capable of carrying out the terms of the Contract;
  - (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
  - (e) have successfully carried out work, similar in nature, scope and value to the Work;
  - (f) employ only Subcontractors who:
    - (i) are responsible and not suspended, debarred or in default of any obligation to the City (a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt); and
    - (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
  - (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba);
- B10.2 The Bidder shall be prepared to submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B10.3 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

#### **B11. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B11.1 Bid Submissions will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.
- B11.1.1 Bidders or their representatives may attend.
- B11.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B11.4 The Bidder is advised that any information contained in any Bid Submission may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

#### **B12.** IRREVOCABLE BID

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B12.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

#### **B13. WITHDRAWAL OF BIDS**

- B13.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B13.1.1 Notwithstanding GC:23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B13.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:
  - (a) retain the Bid Submission until after the Submission Deadline has elapsed;
  - (b) open the Bid Submission to identify the contact person named in Paragraph 3 of Form
     A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A:
     Bid: and
  - (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.

B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

#### **B14.** EVALUATION OF BIDS

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
  - (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6.
- B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements if the interests of the City so require.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid Submission or in other information required to be submitted, that he is responsible and qualified.
- B14.4 Further to B14.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

#### **B15.** AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:
  - (a) the prices exceed the available City funds for the Work;
  - (b) the prices are materially in excess of the prices received for similar work in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
  - (d) only one Bid is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

- B15.4 Notwithstanding GC:4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B15.5 The Contract, as defined in GC:1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

# **PART C - GENERAL CONDITIONS**

# C1. GENERAL CONDITIONS

- C1.1 The *General Conditions for Construction Contracts* (Revision 2000 11 09) are applicable to the Work of the Contract.
- C1.1.1 The *General Conditions for Construction Contracts* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.

#### **PART D - SUPPLEMENTAL CONDITIONS**

#### **GENERAL**

#### D1. GENERAL CONDITIONS

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

#### D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of grading and excavating the designated area at Fraser's Grove; partially removing the existing timber edging, removing the play components and installing the new play structures, retaining wall with rubber surfacing top, playground stone, and site furnishings in accordance with the requirements attached.

#### D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Stefan Fediuk Landscape Architect City of Winnipeg Parks, Riverbanks and Community Initiatives Branch Planning, Property and Development Department 15-30 Fort St. Winnipeg. MB R3C 4X5

Telephone No. (204) 986-5597 Facsimile No. (204) 986-7524

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

#### D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, the Contractor shall identify 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 GC:23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.
- D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

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

Facsimile No.: (204) 949-1174

D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 947-9155

#### **SUBMISSIONS**

#### D6. INSURANCE

- D6.1 The Contractor shall provide and maintain the following insurance coverage:
  - (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) all inclusive, with The City of Winnipeg being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;
  - (b) automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- D6.2 Deductibles shall be borne by the Contractor.
- D6.3 The Contractor shall provide the City Solicitor with a certified true copy or a certificate of insurance of each policy, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D6.4 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.

#### D7. PERFORMANCE SECURITY

- D7.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
  - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
  - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
  - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D7.1.1 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.
- D7.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

#### D8. SUBCONTRACTOR LIST

D8.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

## **SCHEDULE OF WORK**

#### D9. COMMENCEMENT

- D9.1 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.
- D9.2 The Contractor shall not commence any Work on the Site until:
  - (a) the Contract Administrator has confirmed receipt and approval of:
    - evidence that the Contractor is in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
    - (ii) evidence of the workers compensation coverage specified in GC:6.14;
    - (iii) evidence of the insurance specified in D6;
    - (iv) the performance security specified in D7;
    - (v) the Subcontractor list specified in D8;

- (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.
- D9.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

#### D10. SUBSTANTIAL PERFORMANCE

- D10.1 The Contractor shall achieve Substantial Performance within twenty (20) consecutive Working Days of the commencement of the Work as specified in D9.
- D10.2 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.
- D10.3 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.

#### D11. TOTAL PERFORMANCE

- D11.1 The Contractor shall achieve Total Performance within twenty-five (25) consecutive Working Days of the commencement of the Work as specified in D9.
- D11.2 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.
- D11.3 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.

#### D12. LIQUIDATED DAMAGES

- D12.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City four hundred dollars (\$400) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D12.2 The amount specified for liquidated damages in D12.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D12.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

# **CONTROL OF WORK**

- D13. PRIME CONTRACTOR THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)
- D13.1 Further to GC:6.26, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

# FORM H1: PERFORMANCE BOND (See D7)

#### KNOW ALL MEN BY THESE PRESENTS THAT

(hereinafter called the "Principa	l"), and	
(hereinafter called the "Surety' called the "Obligee"), in the sun	'), are held and firmly bound unto <b>THE CITY OF \</b> n of	, <b>WINNIPEG</b> (hereinafter
	dollars (\$	)
•	e paid to the Obligee, or its successors or assigns, for ety bind themselves, their heirs, executors, administ mly by these presents.	
WHEREAS the Principal has er	ntered into a written contract with the Obligee dated t	he
day of	, 20 , for:	
BID OPPORTUNITY NO. 576-2	2004	

FRASER'S GROVE PARK PLAYGROUND REDEVELOPMENT

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

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

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

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

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

IN WITNESS WHEREOF the Prince	sipal and Surety have signed and sealed this bond th	ne
day of	, 20	
SIGNED AND SEALED in the presence of:	(Name of Principal)	(0.2.1)
(Witness)	Per: Per:	
	(Name of Surety)  By:  (Attorney-in-Fact)	(Seal)

# FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT (PERFORMANCE SECURITY) (See D7)

(Date)	
The City Corpora Legal So 185 King	of Winnipeg se Services Department strvices Division Street, 3rd Floor g MB R3B 1J1
RE:	PERFORMANCE SECURITY - BID OPPORTUNITY NO. 576-2004
	FRASER'S GROVE PARK PLAYGROUND REDEVELOPMENT
Pursuar	t to the request of and for the account of our customer,
(Name of	Contractor)
in the ac	
demand Letter of paymen	Canadian dollars.  ndby Letter of Credit may be drawn on by you at any time and from time to time upon writter for payment made upon us by you. It is understood that we are obligated under this Standby Credit for the payment of monies only and we hereby agree that we shall honour your demand fo without inquiring whether you have a right as between yourself and our customer to make sucl and without recognizing any claim of our customer or objection by the customer to payment by us.
	ount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon or by formal notice in writing given to us by you if you desire such reduction or are willing that it be
Partial d	rawings are permitted.
	age with you that all demands for payment made within the terms and currency of this Standby Credit will be duly honoured if presented to us at:
(Address)	
and we	confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

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

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

(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

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

# **FORM J: SUBCONTRACTOR LIST**

(See D8)

# FRASER'S GROVE PARK PLAYGROUND REDEVELOPMENT

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

#### **PART E - SPECIFICATIONS**

#### **GENERAL**

# E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
F.1	Fraser's Grove Park Existing Conditions
F.2	Fraser's Grove Park Proposed Playground Redevelopment
F.3	Fraser's Grove Park Layout Plan
F.4	Fraser's Grove Playstructure – Sample Only
SCD-119	Waste Receptacle Metal Slat Type
SCD-120	Tache Bench

#### **PLAY EQUIPMENT**

- E1.3 General Conditions
- E1.3.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the work according to the drawings and specifications.
- E1.3.2 The Contractor shall obtain all approvals including the requisite Development Permit.
- E1.3.3 The specific play equipment is as follows:
  - (a) Play Structure
  - (b) Spring Rockers
  - (c) Seesaws
  - (d) Independent Climbing Apparatus
  - (e) Stepping Pods

#### E1.4 Playstructures

#### E2.2.1 General Description

- (a) This specification shall cover the supply and installation of the Playstructures as specified herein.
- (b) The following variations shall be allowed:
  - (i) Deck heights may vary within the parameters set out in Clause E.2.2.2.

- (ii) Play components and layout as provided are suggestions only. Alternative suggestions are welcome, within the parameters of the play areas outlined.
- (c) The Playstructures shall be installed in the play areas as shown on the attached drawing F.2. The Playstructure and its safety zones must fit into the proposed play area as shown on drawing F.2.

#### E2.2.2 Materials

#### (a) Posts / Caps

- (i) All posts shall be a minimum of 5" O.D. round or 4" square tubing.
- (ii) All posts shall be fabricated from either aluminum (0.125" min. wall thickness) or galvanized steel (0.120" min. wall thickness) tubing 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. The bottom end of the posts is to be sealed with a moisture barrier.
- (iii) 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. Deck shapes and configurations may vary from those shown on Drawing F.3. Deck heights may vary from those shown on Drawing F.3 within a range of 18" to 6'. The deck height increments may range from a minimum of 6" to a maximum of 12" and should be consistent throughout the structure

#### (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. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.

#### (d) Handrails, Safety Rails and Handloops

(i) All handrails, safety rails and handloops 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) Poly Components

- (i) Poly components such as slides and hoods shall be fabricated from U.V. stabilized, rotationally molded linear low-density polyethylene.
- (ii) Poly components such as play panels shall be fabricated from compression molded solid colour, U.V. stabilized, high-density polyethylene.

#### E2.2.3 Play Components

- (a) The following play components are to be included with the Playstructure as per the detailed list below (sample structure plan has been included on the Playstructure Plan (F.3) for information only):
- (b) See playground layout plan F.3
  - (i) four (4) platforms at different levels (minimum)
  - (ii) one (1) Overhead Climber
  - (iii) two (2) Climbing Egresses
  - (iv) one (1) Double Slide or two (2) Single Slides, Stainless Steel preferred with north or east face orientation
  - (v) one (1) Step Ladder or Access Stairs for adult access in case of emergency
  - (vi) any additional item(s) to increase play value will be considered
- (c) Each Playstructure shall have kick plates and hand loops as required to meet the most recent Canadian Standards Association Guidelines.

#### E2.2.4 Installation

- (a) Playstructures shall be installed as per manufacturers specifications and in accordance with the most recent Canadian Standards Association Guidelines.
- (b) All posts and other vertical items shall be plumb and true to vertical.
- (c) All decks shall be level.

#### E1.5 Swing Standard

#### E2.3.1 General Description

- (a) The Contractor shall furnish all labour, materials, equipment and services necessary to complete the work according to the specifications.
- (b) This specification shall cover the supply and installation of a complete swing standard and a refurbishment to an existing swing standard, as specified herein:
  - (i) Three Leg Heavy Duty Swing Frame, 8ft. high, complete with four (4) slash-proof rubber belt seats, heavy-duty chain, swing hangers and "S" hooks / bolt links.
  - (ii) Two (2) slash-proof rubber belt seats, four (4) slash-proof rubber, enclosed infant seats, heavy-duty chain, swing hangers and "S" hooks / bolt links.

#### E2.3.2 Materials

(a) Topbeam

(i) All topbeams shall be fabricated from 3 1/2" O.D. 7 gauge, RS40 galvanized steel pipe with a baked-on polyester powdercoating. 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 powdercoating. Topbeam colour to be yellow.

#### (b) Legs

(i) All legs shall be fabricated from 2 3/8" O.D. 10 gauge, RS40 galvanized steel pipe with a baked-on polyester powdercoating. 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 powdercoating. The bottom end of the posts is to be sealed with a moisture barrier. Leg colour to be yellow.

## (c) Yoke Clamps

(i) All yoke clamps shall be either one piece construction and fabricated from 8 gauge, RS40 galvanized steel pipe or two piece, compression clamping cast aluminum or galvanized metal 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.

#### (e) Swing Chain

(i) All swing chain shall be 4/0 straight link, galvanized steel.

#### (f) 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 slashproof. Infant seats shall be fully enclosed to prevent slipping out and provide extra lower back support.

#### (g) 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 slashproof. The perimeter shall be moulded to form a blunt, impact absorbing edge.

#### (h) 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.

#### E1.6 Independent Climbing Apparatus

#### E2.4.1 General Description

- (a) The Contractor shall furnish all labour, materials, equipment and services necessary to complete the work according to the specifications.
- (b) This specification shall cover the supply and installation of an Independent Climbing Apparatus as specified herein.
  - (i) A free-standing wall climbing system with climbing grips, consisting of two (2) 8' high sections.

#### E2.4.2 Materials

#### (a) Hardware

(i) All fasteners shall be tamper-proof in design and requiring special tools. The hardware shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.

# E1.7 Spring Toys

# E2.5.1 General Description

- E1.7.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the work according to the specifications.
- E1.7.2 This specification shall cover the supply and installation of Spring Toys as specified herein.
  - (i) Style A Spring Toy: An enclosed toddler unit, composed of two (2) side panels and one (1) seat with back support. Predominate panel and body colour shall be red, yellow, blue or green.
  - (ii) Style B Spring Toy, A non-enclosed child unit, composed of an integrated body and seat unit that may be straddled. Predominate panel and body colour shall be red, yellow, blue or green.

#### E1.7.3 Materials

- (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 and requiring special tools. The hardware shall be either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.

#### E1.8 Foundations

- E1.8.1 All 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-R4. Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.
- E1.8.2 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 40mm, nominal
  - (d) maximum water/cement ratio 0.4

#### **E2.** SITE DEVELOPMENT

#### E2.1 Excavation and Removals

#### E2.1.1 Description

(a) This specification shall amend and supplement City of Winnipeg Standard Construction Specifications CW 3110-R7. The work to be done by the Contractor under this specification shall include all labour, equipment and material necessary for and incidental to the satisfactory performance and completion of the Work herein specified.

#### **E2.1.2** Materials

(a) Excavation and removals includes the removal of items (i.e. play structure, timber edging) as indicated on the Drawings and as directed by the Contract Administrator. Work includes the stockpiling of suitable Site material, and the satisfactory disposal of unsuitable Site material such as clays susceptible to frost-heaving, silts, rock rubble rubbish and any surplus suitable Site material. Do not disturb adjacent items designated to remain in place.

#### E2.1.3 Construction Methods

(a) Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.

#### E2.1.4 Method of Measurement and Basis of Payment

(a) Excavation and removals shall be considered incidental to and payment to be included with the prices for earthwork and grading, protective surfacing and segmental retaining wall edging. No payment will be made for material removed outside the limits of excavation.

#### E2.2 Earthwork and Rough Grading

#### E2.2.1 Description

(a) This Specification shall amend and supplement City of Winnipeg Standard Construction Specification CW 3170-R3. The Work to be done by the Contractor under this Specification shall cover all phases of grading and placement fill material.

#### E2.2.2 Materials

(a) Native Fill Material: Clay fill material shall consist of low to medium plastic clays or mixtures of sand and clay, uniform in texture and suitable for compaction. This material shall be free of contamination by foreign substances.

#### E2.2.3 Construction Methods

#### (a) Rough Grading

- (i) Rough site grading shall be completed within the limits indicated and to the design elevations, gradients and dimensions shown on the construction drawings or as directed by the Contract Administrator. The rough grading shall be within 30 mm of the specified elevations with allowance made for the specified depth of topsoil and sod, or other specified surface treatment.
- (ii) The gradient for all areas shall be considered to be straight grade between the design elevations shown.

#### (b) Fill Material

- (i) Where fill is required to meet rough grade elevations, fill material shall be placed in the designated locations in lifts not exceeding 200 mm and compacted to a minimum of 95% Standard Proctor Density. The material shall be compacted at the optimum moisture content, or as directed by the Contract Administrator.
- (c) Any material dropped or spilled on any streets during the delivery or disposal operations shall be promptly cleaned up by and at the expense of the Contractor, to the satisfaction of the Contract Administrator.

#### (d) Correction of Damage

(i) Restore any area damaged as a result of the Contractor's operations in connection with this project to its original condition or better. Such restoration shall be at the expense of the Contractor and to the satisfaction of the Contract Administrator.

#### E2.2.4 Quality Control

#### (a) Inspection

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

#### (b) Access

(i) The Contract Administrator shall be afforded full access for the inspection and testing of materials, both at the Site of Work and at any plant or borrow pit used for the supply of the materials, to determine whether the material is being supplied in accordance with this Specification.

#### (c) Materials

(i) All materials supplied under this Specification shall be subject to testing and approval by the Contract Administrator in accordance with the requirements of this Specification.

#### (d) Quality of Construction

- (i) The Standard Proctor Density for the fill materials shall be determined at the optimum moisture content in accordance with ASTM Standard D698. The field density of each layer shall be a percentage of the applicable Proctor Density, as specified in this Specification.
- (ii) Quality control tests will be used to determine the acceptability of each layer placed and compacted by the Contractor, before the succeeding layer may be applied.
- (iii) The field density of the compacted layers shall be verified by Field Density Tests in accordance with ASTM Standard D1556, Test for Density of Soil in Place by the Sand-Cone Method, or ASTM Standard D2922, Test for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).
- (iv) The frequency and number of tests to be made shall be as determined by the Contract Administrator.
- (v) Holes made by the removal of samples from the layers shall be promptly filled by the Contractor with appropriate material and thoroughly compacted so as to conform in every way with the adjoining compacted material.

#### (e) Cold Weather Requirements

 Backfill shall be placed in a dry, thawed condition and shall be maintained free of moisture or frost.

#### (f) Corrective Action

(i) The Contractor shall, at his own expense, correct such Work or replace such materials found to be defective under this Specification in an approved manner to the satisfaction of the Contract Administrator.

# E2.2.5 Method of Measurement and Basis of Payment

- (a) Rough grading will be measured and paid for at the Contract unit price for "Earthwork and Rough Grading", measured on an area basis. The area to be paid for shall be the total area in square metres graded in accordance with the construction drawings and this Specification, as computed from measurements made by the Contract Administrator. Measurements for native fill material and for excavation will be considered incidental to the process of grading.
- (b) Payment shall be compensation in full for supplying all labour, equipment, materials and performing all operations associated with excavation and supplying and placing the fill materials to the lines and grades specified.

## E2.3 Segmental Retaining Wall

#### E2.3.1 General Description

- (a) The following list generally describes the scope of this Section:
  - (i) Excavation and foundation soil preparation.
  - (ii) Supply and installation of granular base.
  - (iii) Supply and installation of geotextile filter.
  - (iv) Supply and installation of segmental retaining wall facing units Barkman Concrete Pisa II.
- (b) The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as Hereinafter specified.

#### E2.3.2 Materials

- (a) Definitions
  - (i) Modular concrete retaining wall units are dry-cast solid concrete units that form the external facia of a modular unit retaining wall system.
  - (ii) Coping units are the last course of concrete units used to finish the top of the wall.
- (b) Products:
  - (i) Concrete Segmental Retaining Wall Units:

- The concrete wall modules shall be Barkman Concrete Pisa II as shown on the Construction Drawings and as follows:
  - 1. Pisa II Standard Unit 12" D x 6" H x 8" W ('Natural' colour)
  - 2. Pisa II Corner Unit 12" D x 6" H x 9" W ('Natural' colour)
  - 3. Revers-A-Cap Coping Unit 12" D x 3" H x 8" W ('Natural' colour)
- (c) Foundation Soil:
  - (i) The foundation soil shall be the native undisturbed on site soil.
- (d) Granular Base:
  - (i) The footing shall be non-frost susceptible, compacted granular base course material, <sup>3</sup>/<sub>4</sub>" down, in accordance with requirements of base course material specified in CW 3110-R7, to a depth of 8".
- (e) Geotextile Filter:
  - Filter cloth shall be Pro Pex 4530 polypropylene non-woven needle punched fabric.
- (f) Concrete Adhesive:
  - (i) The adhesive is used to permanently secure every course to the course below it as well as the coping stone to the top course of the wall. The adhesive must provide sufficient strength and remain flexible.

#### E2.3.3 Source

(a) Barkman Concrete Pisa II Retaining Wall, sizes and finish as stated above.

Barkman Concrete 909 Gateway Road Winnipeg, MB R3K 3L1 Ph: (204) 667-3310

Fax: (204) 663-4854

#### E2.3.4 Construction Methods

- (a) Excavation:
  - (i) The Contractor must ensure that the extent of all buried utilities and services are located and if necessary, protected, prior to any excavation.
  - (ii) Notify the Contract Administrator immediately upon discovery of any silt pockets or other deleterious material. Over-excavation of any deleterious material and replacement with suitable fill, only upon approval by the Contract Administrator.
  - (iii) The foundation soil shall be excavated to the minimum depth shown on the Drawings. Obtain the Contract Administrator's approval of excavation prior to placement of materials.
- (b) Granular Base:
  - (i) Install filter cloth on top of compacted sub grade for length of wall (13.2m). Width of cloth shall extend 150mm beyond back face of the wall. Pin in place every 750mm O.C. Where joining of fabric pieces is required overlap seam 150mm minimum.
  - (ii) Place granular base material to the lines and grades shown on the drawings. Extend base minimum of 200 mm beyond front and back faces of wall.
  - (iii) Compact material to 98% Standard Proctor Density.

- (iv) Prepare base to ensure full contact to the base surface of the wall units.
- (c) Barkman Segmental Concrete Retaining Wall Units:
  - (i) The bottom row of retaining wall modules shall be placed on the prepared granular base as shown on the Construction Drawings. Care shall be taken to ensure that the wall modules are aligned properly, levelled form side-to-side and front to back and are in complete contact with the base material.
  - (ii) Follow closely with backfill. Maximum stacked vertical height of wall prior to backfill placement and compaction not to exceed 2 courses.
  - (iii) The wall modules above the bottom course shall be placed such that the tongue and grove arrangement provides the design batter (i.e. setback) of the wall face. Successive courses shall be placed to create a running bond pattern with the edge of all units being approximately aligned with the middle of the unit in the course below it.
  - (iv) The wall modules shall be swept clean before placing additional levels to ensure that no dirt, concrete or other foreign materials become lodged between successive lifts of the wall modules.
  - (v) Wall modules shall be secured to modules below with two 10 mm (3/8 inch) beads of the approved flexible concrete adhesive positioned 50 mm (2 inches) in front and behind the tongue of the previous course of retaining wall units
  - (vi) The Contractor shall check the level of wall modules with each lift to ensure that no gaps are formed between successive lifts.
  - (vii) Care shall be taken to ensure that the wall modules are not broken or damaged during handling and placement.
  - (viii) Top of wall shall be set to the heights shown on the drawings or as directed by the Contract Administrator.
- (d) Geotextile Cloth:
  - Geotextile cloth shall be installed vertically along the back face of the wall, prior to installation of granular backfill.
  - (ii) Fabric shall be folded back overtop of granular backfill, 450mm minimum.
  - (iii) Where joining of fabric is required overlap seams 300mm minimum.
- (e) Finishing Wall:
  - (i) Coping units shall be secured to the top of the wall with two 10 mm (3/8 inch) beads of the approved flexible concrete adhesive positioned 50 mm (2 inches) in front and behind the tongue of the last curse of retaining wall units.
- E2.3.5 Method of Measurement and Basis of Payment
  - (a) Supply and Installation of Barkman Concrete Pisa II Retaining Wall as specified in the Schedule of Prices and as shown on Drawing F.2 will be measured on a lump sum basis. The area to be paid for shall be the Barkman Concrete Pisa II Retaining Wall, installed in accordance with this Specification, accepted by the Contract Administrator, as computed in the field by the Contract Administrator.

# E2.4 Rubber Protective Surfacing

# E2.4.1 General Description

- (a) The following list generally describes the scope of this Section:
  - (i) Supply and installation of segmental recycled rubber protective surfacing units SoftSURFACES, Inc. "SofTILE KrosLOCK"

- (b) Rubber protective surfacing units to be installed on the top face of the concrete retaining wall units as installed above.
- (c) The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as Hereinafter specified.

#### E2.4.2 Materials

- (a) Definitions
  - (i) Modular interlocking playground safety surfacing tiles made from compressionmolded, recycled rubber and binding agents
- (b) Products
  - (i) Segmental Rubber Protective Surfacing Units:
    - i. The protecting surfacing modules shall be "SofTILE KrosLOCK" as shown on the Construction Drawings and as follows:

1. Series: Plus

2. Colour: Turf Green

3. Thickness: Min. 3"

- (ii) Adhesive:
  - The adhesive is used to permanently secure the protective surfacing tile to the top course of the concrete retaining wall. Adhesive is a single-component, 100% solids, waterproof, polyurethane. Adhesive as supplied by manufacturer.

#### E2.4.3 Source

(a) Supplier:

Crozier Agencies

#8 – 1865 Sargent Ave.

Winnipeg, MB

R3H 0E4

Ph: (204) 774-6084 Fax: (204) 774-6099

#### E2.4.4 Construction Methods

- (a) Preparation:
  - (i) Concrete subsurface shall be as specified in E3.3
  - (ii) Ensure concrete units are sound, with no loose material on the surface
- (b) Installation:
  - (i) Install playground safety surfacing tiles in accordance with manufacturer's instructions at location indicated on Drawing F.2
  - (ii) Ensure prepared subsurface and tiles are dry and clean.
  - (iii) Layout tile surface in accordance with manufacturer's instructions.
  - (iv) Install tiles in a single installation session.

 Apply adhesive in accordance with manufacturer's instructions for tile-to-tile and tile-to-base installation.

#### (c) Cleaning:

- Remove adhesive spills from playground safety surfacing tiles in accordance with manufacturer's instructions.
- (ii) Clean tiles in accordance with manufacturer's instructions.

#### (d) Protection:

- (i) Protect playground safety surfacing tiles from foot traffic for a minimum of 12 hours after installation.
- (ii) Protect completed tiles from damage during construction.

#### E2.4.5 Method of Measurement and Basis of Payment

(a) Supply and Installation of SofTILE KrosLOCK, as specified in the Schedule of Prices and as shown on Drawing F.2 will be measured on a per metre basis. The area to be paid for shall be the SofTILE KrosLOCK protective surfacing, installed in accordance with this Specification, accepted by the Contract Administrator, as computed in the field by the Contract Administrator.

#### E2.5 Protective Safety Stone Surfacing

#### E2.5.1 General Description

(a) This specification shall cover the supply and installation of Safety Stone Surfacing within the play structure/swing areas.

#### E2.5.2 Materials

- (a) Play Stone surfacing
  - (i) Safety Stone shall be 6.0mm Playground Stone, composition shall be Typical Birds Hill glacial till material, river washed, 100% granite.
  - (ii) Safety Stone shall be installed within all the play areas, as defined by the timber edging, to a minimum depth of 30 cm.
  - (iii) The installation of the Safety Stone shall be done immediately after the playstructure has been installed.
  - (iv) 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 playstructures so as not to damage the same. The playstructures shall be swept clean as required after installation of the Stone.

# E2.6 Site Furnishings

# E2.6.1 Description

(a) This specification shall cover the supply and installation of Site Furnishings. The Contractor shall furnish all labour, materials, equipment and services necessary to

complete the Work as shown on the drawings and specified herein. These items shall include the supply and installation of:

- (i) Benches
- (ii) Waste Receptacles

#### E2.6.2 Materials

#### (a) General

 (i) All materials supplied under this specification shall be of a type approved by the Contract Administrator, and shall be subject to inspection and testing by the Contract Administrator.

# (b) Products

(i) Bench:

Bench shall be "Tache Park Bench", 8' long, with back, as per SCD 120, Product #52501074, or substitute acceptable to Contract Administrator.

(ii) Waste Receptacle:

Waste receptacle shall be "Metal Slat Trash Receptacle", as per SCD 119, Product # 52501062.

#### (c) Contact

Bill Dowbyhuz
Supervisor of Central Repair/Manufacturing Facility
City of Winnipeg
Fleet Management Agency Division
Public Works Department
215 Tecumseh St
Winnipeg. MB R3E 3S4
Telephone No. (204) 986-5505
Facsimile No. (204) 986-1248

#### E2.6.3 Construction Methods

- (a) General
  - (i) Fit and ship assemble in largest practical section, for delivery to Site.
  - (ii) Supports shall be a minimum 300mm below ground, set in the centre of the hole. Backfilled crushed limestone down shall be crowned or domed to shed water.
  - (iii) All exposed welds shall be ground smooth and flush with adjacent finished surfaces.

#### (b) Benches

(i) Benches shall be set into concrete bases in locations as noted on the plan or as directed by the Contract Administrator and in accordance with the manufacturer's instructions, and shall be set plumb and level.

# (c) Waste Receptacles

(i) Waste receptacles shall be set into concrete bases in locations as noted on the plan or as directed by the Contract Administrator and in accordance with the

manufacturer's instructions. The waste receptacle units shall be secure and level.

# E2.6.4 Method and Measurement of Payment

- (a) Benches and waste receptacles will be measured on a unit price basis.
- (b) Benches and waste receptacles will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, measured as specified herein. This price shall be full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

#### E2.7 Site Restoration

- E2.7.1 Total Performance of the work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the site beyond the established limit of work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this work.
- E2.7.2 Sod and Topsoil (repair to damaged areas). The Contractor shall install mineral sod and a minimum 100mm compacted thickness of topsoil, as required, and in accordance with CW 3510-R8 and CW 3540.
- E2.8 Damage to Existing Structures, Trees and Property
- E2.8.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the site of the work. For all damage incurred in the performance of the work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.
- E2.8.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
  - (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
  - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protected as approved by the Contract Administrator.
  - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with

- the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- (d) Operation of equipment within the drip line of the trees shall be kept to a minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- E2.8.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E2.8.4 No separate measurement or payment will be made for the protection of trees.
- E2.8.5 Elm trees cannot be trimmed between April 1 and July 31 inclusive.
- E2.9 Maintenance Kits
- E2.9.1 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.