



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 42-2006**

**PLAYGROUND REDEVELOPMENT AT PAUFELD PARK**

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## **PART B - BIDDING PROCEDURES**

### **B1. PROJECT TITLE**

B1.1 PLAYGROUND REDEVELOPMENT AT PAUFELD PARK

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 15, 2006.

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.

B3.2 The Bidder is advised that all Sites are to be viewed prior to submitting a Bid to familiarize the Bidder with the nature of the Work area, and Site access restrictions. Bidder shall note that existing trees are to be protected and proximity of trees to the construction area may limit the type of construction equipment utilized. The Bidder is made aware the City Naturalist and Forestry Branch will require financial compensation for trees or plant material damaged by the Contractor.

### **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 Plans, 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 (4) 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 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.

B9.1.1 Notwithstanding GC.12.2.3(c), prices on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST).

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:
- (a) Excavation for play area;
  - (b) Supply and install concrete edging, playstone and play sand;
  - (c) Supply and install the new play equipment;
  - (d) Supply and install gravel pathway and gravel base at the shelter;
  - (e) Supply and install site furniture;
  - (f) Sod repairs.

#### **D3. CONTRACT ADMINISTRATOR**

- D3.1 The Contract Administrator is:
- Stefan Fediuk  
Landscape Architect  
City Of Winnipeg  
Parks, Riverbanks and Community Initiatives Branch  
Planning and Land Use Division  
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 Public Works Department 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. The Contractor's supervisor shall have the authority to make binding on-site decisions for the Contractor. The Contractor shall not change supervisors during the construction phase without written consent from the Contract Administrator.

#### **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 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. SUBCONTRACTOR LIST**

- D7.1 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**

#### **D8. COMMENCEMENT**

- D8.1 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.
- D8.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence that the Contractor is in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
    - (ii) evidence of the workers compensation coverage specified in GC:6.14;
    - (iii) evidence of the insurance specified in D6;
    - (iv) the Subcontractor list specified in D7;
    - (v) the Work Schedule showing completion dates for major stages of the Project such as arrival of play structure, completion of foundations, concrete work etc.
  - (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.
  - (c) the Contractor shall schedule the ordering of equipment (such as play equipment) to ensure all required items are delivered in time to comply with the commencement date.
- D8.3 The Contractor shall commence the Work on the Site by June 7, 2006.

#### **D9. SUBSTANTIAL PERFORMANCE**

- D9.1 The Contractor shall achieve Substantial Performance within Fifteen (15) consecutive Working Days of the commencement of the Work as specified in D8.
- D9.2 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.

D9.3 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.

#### **D10. TOTAL PERFORMANCE**

D10.1 The Contractor shall achieve Total Performance within Twenty (20) consecutive Working Days of the commencement of the Work as specified in D8.

D10.2 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.

D10.3 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.

#### **D11. LIQUIDATED DAMAGES**

D11.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

D11.2 The amount specified for liquidated damages in D11.1 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.

D11.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **CONTROL OF WORK**

#### **D12. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

D12.1 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).

#### **D13. WARRANTY**

D13.1 Notwithstanding GC:13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) years thereafter unless extended pursuant to GC:13.2.1 or GC:13.2.2, in which case it shall expire when provided for there under.

D13.2 Notwithstanding GC:13.2 or D13.1, 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:

D13.2.1 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.

**D14. SITE ACCESS**

- D14.1 Access to the each Site will be determined at the pre-construction meeting. This access area shall be maintained and restored by the Contractor at his own expense and approved by the Contract Administrator.
- D14.2 The Contractor shall be restricted to the Site access location and route only so that there is a minimum of disturbance to the existing ground surface. Damage to areas beyond the marked route shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

**D15. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES**

- D15.1 Further to GC: 6.12, 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.
- D15.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- D15.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- D15.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- D15.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- D15.6 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.

**D16. DAMAGE TO EXISTING STRUCTURES AND PROPERTY AND SERVICES AND UTILITIES**

- D16.1 Further to GC: 17, 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 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 from all claims made directly or indirectly against it in respect to any such damage.
- D16.2 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.
- D16.3 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.

## **D17. PROTECTION OF EXISTING TREES**

- D17.1 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.
- D17.2 Obtain approval from the Contract Administrator to excavate within 2.0 M of a tree.
- D17.3 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.
- D17.4 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.
- D17.5 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.
- D17.6 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.
- D17.7 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.

- D17.8 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.
- D17.9 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

**D18. TEMPORARY UTILITIES**

- D18.1 Further to GC: 6.12, 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.
- D18.2 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.



## 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>
P.5-G	PAUFELD PARK Existing Play Area
P.5-H	PAUFELD PARK Proposed Development
SCDP-2	Concrete Playsurface Edging Detail
SCD-624B	Crushed Limestone Walkway Detail
SCD-120A	Tache Style Composite Bench
Sk-1	Play Sense Design 30

#### E2. REMOVAL AND DISPOSAL

- E2.1 In general terms the scope of Work under removal and legal disposal phase of Work is as listed below
- E2.1.1 Removal and legal disposal of existing asphalt as shown on drawings.
- E2.2 Removal and disposal shall be paid for at the Unit Price per unit as mentioned in Form B: Prices, "Items of Work" listed below, measured as specified herein, which price shall be payment in full for supplying all materials and performing all operation herein described and all other items incidental to the work included in this specification.

Items of Work-

- Item no 2- Remove existing asphalt as shown on drawings

#### E3. SITE EXCAVATION

- E3.1 Site Excavation shall be done in accordance with City of Winnipeg's Standard Construction Specification CW 3110 – R6 Sub-Grade, Sub-Base and Base Course Construction and CW 3170-R3 Earthwork and Grading
- E3.2 The Contractor shall excavate for new play area to depth of 100 mm. Refer to SCD-643.
- E3.3 All unsuitable or surplus material as deemed by the Contract Administrator will be removed, hauled off Site and legally disposed of to the satisfaction of the Contract Administrator.
- E3.4 Basis of Payment

- E3.4.1 Excavation will be measured on a volume basis and paid at the Unit Price per cubic metre for "Site Excavation." The volume to be paid for will be the total number of cubic metres of excavation in accordance with this specification, accepted and measured by the Contract Administrator. Contractor shall submit a copy of weigh bill for excavated material to Contract Administrator.

#### **E4. CONCRETE EDGING**

##### **E4.1 General Description**

- E4.1.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the drawings and specifications;
- E4.1.2 This specification shall cover the supply and installation of Concrete Edging to contain the safety surfacing (play stone) for the playground area.

##### **E4.2 Materials and Method**

- (a) Cement Type 50:
- (i) Maximum Course Aggregate: 20 mm;
  - (ii) Minimum Compression Strength at 28 days: +35 Mpa;
  - (iii) Minimum Cement Content: 310 kg/cu. M.;
  - (iv) Maximum Water Cement Ratio: 0.45;
  - (v) Class of Exposure: C-2;
  - (vi) Maximum Slump: 90 mm +/- 20 mm;
  - (vii) Air Entrainment: 5 to 8%;
  - (viii) Flyash Content: Max. 15% of Cementitious Material; and
- (b) Fine aggregate shall consist of natural sand or manufactured sand and shall conform to all requirements of CAN3.A23.1;
- (c) Course aggregate shall consist of hard, strong, uncoated durable particles of crushed stone, gravel or approved combination thereof and shall be free from an excess of thin, elongated or soft pieces, frozen lumps, organic matter or other deleterious matter, and shall conform with all the requirements of CAN3.A23.1. Maximum size of aggregate shall be 20 mm.;
- (d) Water for concrete shall be clean and free from injurious amounts of oil, acid, alkali, salts, silt, organic matter or other deleterious matter. The quality of the water shall be equal to or better than that of potable water;
- (e) A non-detergent type of air-entraining admixture, supplied in liquid form, shall be metered into the mix. The total air in the placed concrete shall be 5% - 8%;
- (f) Reinforcing steel shall be grade 300 deformed bars or as noted on the drawings. Detailing of reinforcing steel shall be in accordance with ACI 315. All bars which require bending shall be bent in shops;
- (g) All reinforcing steel shall be straight, clean and free from paint, oil, mill scale, excess rust and any injurious defects which may affect its strength or bond;
- (h) Ends of reinforcing steel intended for bonding that are to be left exposed for some time shall be protected from injury, oils or moisture;
- (i) Curing compound shall be Sternson Ritcure or approved equal;
- (j) Bonding agent shall be Sternson ST 431 Epoxy Bonding Agent;
- (k) Form coating shall be Sternson's Formseal or approved equal;

- (l) The City of Winnipeg may engage a fully qualified Inspecting Engineer and Testing Laboratory to:
  - (i) Inspect the pile excavations to determine that they have been augured to the specified depth, are of the specified size, are clean and level, and meet the design criteria;
  - (ii) Take test cylinders during concrete placing and carry out compression tests to determine whether concrete produced complies with these Specifications;
  - (iii) Take compaction tests of compacted granular sub-base and sub-grade material;
  - (iv) Submit reports to the Contract Administrator of all materials, concrete, and caisson tests and inspections;
  - (v) Three concrete test cylinders to be taken for pile cast. One cylinder from each group shall be tested at 7 days, one at 14 days, and the remainder at 28 days. Sampling and testing procedures shall be according to CAN3-A23.1 latest edition;
- (m) Concrete shall be installed as per Drawing P.5-H;
- (n) Finished elevations shall ensure that all concrete is smooth and level. Turf shall be repaired as required around edging in accordance with City of Winnipeg Standard Specifications for Topsoil and Seeding;
- (o) The layout of the concrete edging shall be coordinated with the installation of the play equipment to ensure that the proper safety zones are created around the equipment; and
- (p) The Contractor shall set the elevation of the top of the concrete edge which shall be inspected and approved by the Contract Administrator prior to concrete installation.

#### E4.3 Method and Measurement of Payment

- (a) Concrete Edging will be measured on a unit price basis per linear metre; and
- (b) Concrete Edging will be paid for at the Unit Prices for Supply and Install new Concrete Edging. 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. Contractor shall submit a copy of weigh bill for concrete to Contract Administrator.

### **E5. PLAY STONE**

#### E5.1 Description

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

#### E5.2 Materials

- (a) Play Stone shall be 6.0mm Playground Stone, composition shall be Typical Birds Hill glacial till material, 100% clean washed granite and shall comply with the following sieve gradation:
  - (i) 100% passing the 10 mm Sieve;
  - (ii) 15% passing 5 mm Sieve;
  - (iii) 10% passing the 2.5 mm Sieve;
  - (iv) 4% passing the 1.25 mm Sieve; and
  - (v) 1% passing the 0.8 mm Sieve.

#### E5.3 Construction Method

- (a) Play Stone shall be installed within all the play areas, as defined by the concrete edging, to a minimum depth of 250 mm and depths over 300mm will not be paid.

- (b) The installation of the Play Stone shall be done immediately after the playstructure has been installed;
- (c) Installation shall be done by equipment sized to suit the Work being done and the Stone shall be spread by hand as necessary in the immediate vicinity of the playstructures so as not to damage same. The playstructures shall be swept clean to the satisfaction of the Contract Administrator after installation of the Stone.

#### E5.4 Method and Measurement of Payment

- (a) Play Stone surfacing will be measured on a unit price basis per cubic metre; and
- (b) Play Stone surfacing will be paid for at the Unit Prices to Supply and Install 250 mm depth Play stone. 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. Contractor should submit a copy of weigh bill for play stone to Contract Administrator.

### **E6. GRAVEL PATHWAY AND GRAVEL BASE**

#### E6.1 Description

- (a) This Specification shall amend and supplement the City of Winnipeg Specification CW 3110-R7. The Work to be done by the Contractor under this Specification shall cover all phases of supply and placement of crushed limestone surfacing materials necessary to install a Gravel Pathway and Gravel Base at the shelter at Paufeld Park.

#### E6.2 Materials

- (a) New Limestone Pathways shall consist of a 200 mm base coarse depth of 50 mm diameter crushed limestone down, with a 50 mm depth of 19 mm diameter limestone on top and 25 mm depth of 6 mm diameter limestone capping. Refer to SCAD 642-B

#### E6.3 Construction Method

- (a) The Contractor shall survey and stake out pathway prior to the start of construction as shown on the construction drawings. Layout and grades of pathway shall be checked and confirmed with Contract Administrator prior to construction;
- (b) All granular base coarse shall be placed and compacted to the finished thickness as specified on the Drawings;
- (c) Base Coarse and Capping Course shall be compacted to a minimum of Hundred (100%) of Standard Proctor Density.

#### E6.4 Method and Measurement of Payment

- (a) Gravel Pathway will be paid for on a square metre basis Price shall be payment in full for supplying materials and for performing the Work. Contractor should submit a copy of weigh bill for gravel to Contract Administrator.

### **E7. RESTORE THE EXISTING SAND BOX AND ADD SAND**

E7.1 This specification shall cover supply and installation of play sand necessary to top up the existing sandbox and removing the spilled over sand. The Contractor shall furnish all, labour, materials, equipment and services necessary to complete the Work.

E7.2 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. The sand should be 'Playbox' or Fine sand.

- E7.3 The amount to be paid for shall be the lump sum, indicated by the Bidder on Form B: Prices for restoring the existing sand box and adding the sand. 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.

## **E8. SUPPLY AND INSTALLATION OF SITE FURNITURE**

- E8.1 This Specification shall cover the supply and installation of benches, picnic table and associated granular bases and anchors and waste receptacle as indicated on the Drawings. The Bidder is made aware the quantity and type of Site furnishing may vary depending on budgetary constraints.

### **E8.2 Materials.**

- (a) Benches, Picnic Tables and Waste Receptacles to be supplied by the City:

Contact:

Aaron Lennon

Supervisor of Central repair/Manufacturing Facility

City of Winnipeg

Telephone No.: (204) 986-5505

- (i) Benches: Tache style composite bench without a back, Drawing No. SCD-121A, Product No. 52501084 (6');  
(ii) Picnic Table: Tache style metal frame picnic table, wheel chair accessible, Drawing No. SCD-130A, Product No. 52501108;
- (b) Anchors for picnic tables shall be Duckbill Anchor Model 68-ATI as manufactured by Foresight Products, LLC;
- (c) Granular pad for picnic table shall be 150 mm depth granular base composed of 100 mm of well-compacted 19 mm diameter crushed limestone with 50 mm of 6 mm diameter crushed limestone on the top.

### **E8.3 Construction Methods**

- (a) All work is to be located and installed in accordance with the Drawings using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work;
- (b) All furnishings and fixtures to be installed plumb and true to correct elevations and location, as directed the Contract Administrator. The Contractor shall confirm proposed locations of all site furnishings with Contract Administrator prior to installation;
- (c) All furnishings and fixtures to be carefully handled so that no parts will be bent, broken or otherwise damaged. Hammering is prohibited;
- (d) Install as per manufacturer's instructions and the attached drawings;
- (e) Picnic tables shall be installed on gravel pad to the shape shown on the Drawing. Provide 150 mm depth granular base composed of 100 mm of well-compacted 19 mm diameter crushed limestone with 50 mm of 6 mm diameter crushed limestone on the top. Top of granular paving to be flush with the top of the root mass of the sod;
- (f) Secure picnic table to grade with two duckbill anchors (on opposite legs) per picnic table.

### **E8.4 Quality Control**

- (a) 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 work. The Contractor shall be wholly responsible for the control of all

operations incidental thereto notwithstanding any inspection of approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works that are not in accordance with the requirements of these Specifications.

**E8.5 Method of Measurement**

E8.5.1 The supply and installation of all site furnishings shall be measured on a unit basis. The number of site furnishings to be paid for shall be the total number of furnishings that are installed in accordance with this Specification and accepted by the Contract Administrator.

**E8.6 Basis of Payment**

E8.6.1 The supply and installation of all site furnishings shall be paid for at the Contract Unit Price per unit measured as specified herein, which price shall be payment in full for supplying all materials and performing all operation herein described including granular base for picnic table and all other items incidental to the Work included in this Specification.

**E9. PLAY EQUIPMENT**

E9.1 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.

E9.2 Play equipment shall be installed in the play area as shown on the attached Drawing L.31-C. The contractor is responsible to verify that the proposed play structure will fit properly into the proposed play area prior to installation of the concrete curb. The safety zones must be in accordance with the latest edition of CSA standards for Children's Play spaces and Equipment.

**E9.3 Swing Standard**

**E9.3.1 General Description**

- (a) This specification shall cover the supply and installation of CSA confirming one(1) complete swing standard or approved alternative as specified herein  
Arched Heavy Duty Swing Frame, 2.1-2.4 M (7ft. to 8ft.) high, 1-Bay, complete with two (2) slash-proof rubber, enclosed infant seats, heavy-duty chain, swing hangers and hammer locks / bolt links.

**E9.3.2 Materials**

- (a) Top beam-  
All top beams shall be fabricated from 3 1/2" O.D. 7 gauge, RS40 galvanized steel pipe. All fabrication cuts, drill holes and weld joints shall be sprayed with a corrosion resistant coating.
- (b) Legs  
All legs shall be fabricated from 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. The bottom end of the posts is to be sealed with a moisture barrier.
- (c) Yoke Clamps  
All yoke clamps shall be either one-piece construction and fabricated from 8 gauges, RS40 galvanized steel pipe or two-piece, compression clamping cast aluminium or galvanized metal complete with tamper-proof hardware.
- (d) Swing Hangers.  
All swing hangers shall be fabricated from galvanized malleable iron and have oil impregnated bearings pressed in.
- (e) Swing Chain  
All swing chain shall be 4/0 straight link, galvanized steel.

(f) Enclosed Infant (Bucket) Seats

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.

(g) Hardware

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.

E9.4 Play structure

E9.4.1 General Description

- (a) This specification shall cover the supply and installation of CSA conforming play structure designed for children ages 2-5, specified herein or approved alternative. Play structure by Play Sense –Basic Inc. Design 30, or approved alternative. See enclosed drawing. (# SK-1). Supplier: Playgrounds-R-Us, 250 Transport Rd., Box 7, Grp 582, RR5, Winnipeg, MB, R2C 2Z2. Tel. No. (204) 632 7000.
- (b) If colour is a feature of posts, top caps and panels, the Contract Administrator shall have the ability to modify specified colours from the proposed design after Contract Award. If the price of the equipment in the Bid Submission is subject to the colours of the proposed design, this must be indicated in the Bid Submission.
- (c) The approved equal will be evaluated based on Efficiency and good use of space.

E9.4.2 Materials

(a) Posts / Caps

- (i) All posts shall be a minimum 5" O.D. round or 4" square tubing.
- (ii) 3.5 " O.D. round or 3.0" square tubing will be permitted in circumstances where a multi-deck structure has decks of varied heights which are all under 4', or for structures with 2 decks or less above 4'.
- (iii) All posts shall be fabricated from either aluminium (0.125" min. wall thickness) or galvanized steel (0.120" min. wall thickness) tubing. All fabrication cuts drill holes and weld joints shall be sprayed with a corrosion resistant coating. The bottom end of the posts is to be sealed with a moisture barrier.
- (iv) Top caps shall be made of steel construction and shall be factory installed and secured in place with tamper proof, self-sealing rivets. Plastic top caps will be accepted if made of solid construction.
- (v) If painted colour is a feature of posts and top caps, it shall be a baked-on polyester powder coating. The powder coating finish shall meet or exceed ASTM standards for hardness, adhesion, impact and salt spray resistance.

(b) Decks (if applicable)

- (i) All decks shall be manufactured from vinyl-coated perforated steel or a steel core composite. Deck heights may vary to a maximum height of 6'.

(c) Clamping System

- (i) All deck, rail and play component clamping systems shall be fabricated from zinc plated, galvanized steel, stainless steel or aluminium. Tamper proof, corrosion resistant fasteners shall be used to retain clamping systems.

(d) Handrails, Safety Rails and Hand loops (if applicable)

- (i) All handrails, safety rails and hand loops shall be fabricated using a minimum of 15/16" (24 mm) O.D. with .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.

- (ii) Smooth all cut edges and weld joints prior to hot dip galvanizing and ensure that all tubing is free from burrs, cracks, defects and other imperfections.
- (e) Hardware
  - (i) All fasteners shall be socket and tamper proof in design, and either carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
  - (ii) All necessary hardware shall be provided.
- (f) Poly Components
  - (i) Poly components such as slides and hoods shall be fabricated from U.V. stabilized, rotationally moulded linear low-density polyethylene.
  - (ii) Poly components such as play panels shall be fabricated from compression moulded solid colour, U.V. stabilized, high-density polyethylene.
- (g) Slides (if applicable)
  - (i) Stainless steel is required for slide beds. North or east orientation preferred.
- (h) Each play structure shall have kick plates and hand loops as required to meet the most recent Canadian Standards Association Guidelines.
- (i) Installation
- (j) Play structures shall be installed as per manufacturers specifications and in accordance with the most recent Canadian Standards Association Guidelines. All Work is to be located and installed in accordance with the Drawings using approved non-rusting, vandal resistant fasteners to ensure solid, durable, finished work suitable for the purpose intended.
- (k) All posts and other vertical items to be installed plumb and true to correct elevations and location, as directed the Contract Administrator. The Contractor shall confirm proposed locations of all play equipment with Contract Administrator prior to installation.
- (l) All decks shall be level, if so designed.
- (m) 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 Work. The Contractor shall be wholly responsible for the control of all operations incidental thereto notwithstanding any inspection of approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or works that are not in accordance with the requirements of these Specifications.

## E9.5 Independent Components

### E9.5.1 General Description

- (a) This specification shall cover the supply and installation of Independent Components as specified herein. or approved equal;
- (b) The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications;
- (c) Independent Components shall be installed as shown on Drawings. The Components and their safety zones must fit into the proposed play area;
- (d) The approved equal will be evaluated based on Efficiency and good use of space.

### E9.5.2 Materials

- (a) All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials:

- (i) Landscape Structures-Mobius 6 panel, item # 150636 Supplier: Playgrounds-R-U, 250 Transport Rd., Box 7, Grp 582, RR5, Winnipeg, MB, R2C 2Z2. Tel. No. (204) 632 7000.
- (ii) Landscape Structures-TuffRiders- Motorcycle # 100013A. Supplier: Playgrounds-R-U, 250 Transport Rd., Box 7, Grp 582, RR5, Winnipeg, MB, R2C 2Z2. Tel. No. (204) 632 7000.

#### E9.6 Maintenance Kits

E9.6.1 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.

E9.6.2 Components which are unacceptable are the following:

- (ii) Wooden structures;
- (iii) Enclosed tube slides and crawl tubes;
- (iv) Play panels or independent elements with many small moving parts;
- (v) Track rides and Glide rides;
- (vi) Merry-go-rounds;
- (vii) Tire Swings;
- (viii) Talk tubes;
- (ix) Binoculars / telescopes;
- (x) Poly roofs; and
- (xi) Barrel rollers.

#### E9.7 Method of Measurement

The supply and installation of all play equipment shall be measured on a unit basis.

#### E9.8 Basis of Payment

The supply and installation of all play equipment shall be paid for at the Unit Price per unit measured as specified herein, which price shall be payment in full for supplying all materials and performing all operation herein described and all other items incidental to the Work included in this specification.

#### E9.9 Foundations

##### E9.9.1 General Description

- (b) 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.
- (c) All posts and supports shall be centred in the concrete footing such that there is a complete collar of concrete around each post and support. Where posts are not perfectly centred there should be a minimum of 2" concrete at any point around the post.
- (d) All concrete footings for play structures shall be a minimum of 3' depth, or in accordance with Manufacturer's specifications, whichever is greater.

E9.9.2 The specific concrete requirements shall be:

- (e) Sulphate resistant, Type 50 Cement
- (f) 28 day compressive strength of 30 Mpa

- (g) Maximum aggregate size of 20mm, nominal
- (h) Slump 80 +/- 20mm
- (i) Maximum water/cement ratio 0.49

## **E10. SEEDING AND TOPSOIL**

### **E10.1 General Description**

E10.1.1 The Contractor shall install seed and a minimum 100mm compacted thickness of topsoil, as required, and in accordance with CW 3510-R8 and CW 3540-R4.

### **E10.2 Method and Measurement of Payment**

#### **(a) Measurement**

- (i) Seed and Topsoil will be measured on a unit price basis per square metre.

#### **(b) Payment**

- (i) Seed and Topsoil 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.

## **E11. SITE RESTORATION**

E11.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all plant, 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 of the site and to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.