



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 734-2008

**ST. JAMES/BROOKLANDS PLAYGROUND RENOVATIONS –
PLAY EQUIPMENT**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Site Investigation	1
B4. Enquiries	1
B5. Addenda	1
B6. Substitutes	2
B7. Bid Components	3
B8. Bid	3
B9. Prices	4
B10. Design Drawings	4
B11. Component Description	4
B12. Qualification	4
B13. Opening of Bids and Release of Information	5
B14. Irrevocable Bid	5
B15. Withdrawal of Bids	5
B16. Evaluation of Bids	6
B17. Award of Contract	8

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	1
D4. Contract Administrator	1
D5. Contractor's Supervisor	1
D6. Notices	1

Submissions

D7. Authority to Carry on Business	2
D8. Insurance	2
D9. Performance Security	3
D10. Subcontractor List	3
D11. Final Layout of Play equipment	3

Schedule of Work

D12. Commencement	3
D13. Working days	4
D14. Work by Others	4
D15. Substantial Performance	4
D16. Total Performance	5
D17. Liquidated Damages	5

Control of Work

D18. Job Meetings	5
D19. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	5

Measurement and Payment

D20. Payment	6
--------------	---

Warranty

D21. Warranty	6
Form H1: Performance Bond	7
Form H2: Irrevocable Standby Letter of Credit	9
Form J: Subcontractor List	11

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
--	---

General Requirements

E2. Soils Investigation Report	1
E3. Pre-Construction Meeting	1
E4. Site Access	1
E5. Pedestrian Safety and Traffic Management	2
E6. Site Condition	2
E7. Protection of Existing Trees	2
E8. Existing Services and Utilities	3
E9. Protection of Survey Infrastructure	3
E10. Stakes and Marks	4
E11. Site Enclosures	4
E12. Product Approvals	4
E13. Surface Restoration	5
E14. Maintenance Kits	5

Play Equipment

E15. General Comments	5
E16. Play Structures	7
E17. Independent Play Components	10
E18. Swing Standard	11
E19. Foundations	12
E20. Protective Surfacing	13
E21. Site Clean Up	15

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 ST. JAMES/BROOKLANDS PLAYGROUND RENOVATIONS –
PLAY EQUIPMENT

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, October 21, 2008.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. ADDENDA

- B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division 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 Division internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.

B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:

- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
- (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
- (c) identify any anticipated cost or time savings that may be associated with the substitute;
- (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
- (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.

B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.

B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.

B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.

B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.

B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.

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

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Design Drawings (plan, perspective, and other submissions to illustrate the design intent); and
 - (d) Component Description and/or graphic or catalogue reference.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B7.4 The Bid Submission may be submitted by mail, courier or personal delivery.
- B7.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B7.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B7.8 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his 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 should be printed below such signatures.
- B8.4.2 All signatures shall be original.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall include the Manitoba Retail Sales Tax (MRST, also known as PST), but exclude the GST.
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. DESIGN DRAWINGS

- B10.1 The Bidder should submit colour drawings which illustrate the proposed design and play equipment, such as plan, perspective, and any other submissions to illustrate the design intent. Additional drawings may be requested prior to award for more detailed evaluation.

B11. COMPONENT DESCRIPTION

- B11.1 The Bidder shall submit component description and / or graphic or catalogue reference outlining specifications of play equipment components.

B12. QUALIFICATION

- B12.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and

- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City (a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt/debar.stm>).

B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

B12.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B12.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B13. OPENING OF BIDS AND RELEASE OF INFORMATION

B13.1 Bids will not be opened publicly.

B13.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.

B13.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.

B13.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE BID

B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B14.2 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.

B15. WITHDRAWAL OF BIDS

B15.1 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.

- B15.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 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.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B14.2 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.

B16. EVALUATION OF BIDS

- B16.1 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 B12 (pass/fail);
 - (c) Total Bid Price per individual park (20 Points) pursuant to B16.4.4;
 - (d) Design / Submission (80 points) pursuant to B16.6
 - (e) economic analysis of any approved alternative pursuant to B6.
- B16.2 Further to B16.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B16.3 Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B16.4 Further to B16.1(c), the Total Bid Price per individual park shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B16.4.1 If there is any discrepancy between the Total Bid Price per individual park written in figures, the Total Bid Price per individual park written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B16.4.2 Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B16.4.3 Further to B16.1(c) the Award Authority may reject a Bid as being non-responsive if it exceeds the budget as shown on Form B: Prices.
- B16.4.4 The Total Bid Price per individual park shall be evaluated with a weighting of 20 points out of a total of 100 possible points. As such, the lowest Bidder shall receive the full 20 points, and the second lowest Bidder and subsequent Bidders shall be pro-rated accordingly.

- B16.5 This Contract maybe awarded as a whole (Alternative 1) or separately by parks (Alternative 2) as identified on Form B: Prices.
- B16.5.1 Notwithstanding B9.1, the Bidder may, but is not required to, bid on both alternatives, or on any one or more items in Alternative 2.
- B16.5.2 The City shall not be obligated to award any park to the responsible Bidder submitting the lowest evaluated responsive Bid for that park and shall have the right to choose the alternative which is in its best interests. If the Bidder has not bid on both alternatives or on all parks in Alternative 2, he shall have no claim against the City if his partial Bid is rejected in favour of an award of the Contract on the basis of an alternative or park upon which he has not bid.
- B16.6 Further to B16.1(d) Design / Submission shall be evaluated with a weighting of 80 points out of a total of 100 possible points. Design / Submission will be evaluated considering the Bidder's Bid Submission and any other information required.
- B16.6.1 The Design shall be evaluated on the following criteria:
- (a) Compliance with CSA Standards (pass/fail);
 - (b) Play value (maximum 43 points):
 - (i) 10 points - Variety of activities provided;
 - (ii) 5 points - Variety of access points & egress points;
 - (iii) 5 points - Provides opportunities for social / interpersonal interaction and cooperative play;
 - (iv) 10 points - Provides for fine and gross motor and sensory development;
 - (v) 4 points – Selection of Play Panels;
 - (vi) 5 points – Inclusion and selection of independent play components OTHER THAN PLAY PANELS;
 - (vii) 4 points - Uniqueness of components as compared to similar playgrounds components within walking distance (400m) of the park.
 - (c) Designed for inclusive play using Universal Design principles (maximum 10 points):
 - (i) Complies with section 4.5.4 of the City of Winnipeg Accessibility Design Standard (http://www.winnipeg.ca/ppd/pdf_files/Access_Design_Standards.pdf) (pass/fail);
 - (ii) 5 points - Layout of the play area for integration of the wheelchair accessible components to promote inclusive play;
 - (iii) 5 points – Layout of the play area and inclusion of components that promote inclusive play for people with visual impairment.
 - (d) Layout/circulation (maximum 17 points):
 - (i) 6 points - Flow and relationship between play elements;
 - (ii) 4 points – Efficient use of allowable play space;
 - (iii) 2 points - Layout / orientation of components on Site and in relation to park entrances;
 - (iv) 2 points - Orientation to provide good visibility to play area from the adjacent road;
 - (v) 3 points - Slide orientation (metal facing north).
 - (e) Durability (maximum 10 points):
 - (i) 3 points - Uses durable / tamper-resistant materials;
 - (ii) 4 points - Low maintenance finishes and connector systems;
 - (iii) 3 points - Ease of repair / replacement.
- B16.7 Further to B16.6.1(a), if Contractor states play equipment components and layouts are compliant with CSA Standards which are not, liquidated damages shall be charged as per

D17.3 should this result in additional design and/or meeting time on the part of the Contract Administrator.

B17. AWARD OF CONTRACT

B17.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B17.2 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.

B17.2.1 Without limiting the generality of B17.2, 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.

B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B16.

B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.

B17.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B17.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at http://www.winnipeg.ca/matmgt/gen_cond.stm.
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

D1.1 In addition to the *General Conditions for Construction*, these Supplemental Conditions are applicable to the Work of the Contract.

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the supply and installation of playground equipment, playground stone and wood fibre surfacing system.

D2.2 The major components of the Work are as follows:

- (a) Supply and installation of play equipment including concrete foundations;
- (b) Supply and installation of wood fibre surfacing system;
- (c) Supply and installation of safety stone (playground stone) surfacing.

D3. DEFINITIONS

D3.1 When used in this Bid Opportunity:

- (a) "**CSA**" means Canadian Standards Association
- (b) "**ASTM**" means American Society for Testing and Materials

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is Scatliff+Miller+Murray Inc., represented by:

Ms. Jennifer Wagner
8th Floor – 136 Market Avenue
Winnipeg, MB
R3B 0P4

Telephone No. (204) 927-3444
Facsimile No. (204) 927-3443

D4.2 At the pre-construction meeting, Ms. Wagner will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

D5.1 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.

D6. NOTICES

D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.

- D6.3 Notwithstanding C21.3, 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 Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

- D6.4 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
Internal Services Department
Legal Services Division
Attn: City Solicitor
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

- D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. INSURANCE

- D8.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance.
- D8.2 Deductibles shall be borne by the Contractor.
- D8.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than twenty-one (21) Calendar Days from notification of the award of Contract by Purchase Order.
- D8.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D9. PERFORMANCE SECURITY

- D9.1 If the Contract Price exceeds one hundred thousand dollars (\$100,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D9.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D9.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D10. SUBCONTRACTOR LIST

- D10.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

D11. FINAL LAYOUT OF PLAY EQUIPMENT

- D11.1 The Contractor shall provide the Contract Administrator with the final layout of all play equipment and the associated safety and non-encroachment zones, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than twenty-one (21) Calendar Days from notification of the award of Contract.
- D11.2 The Play Equipment Contractor shall be responsible for the final layout of all play equipment (including play structures and components functionally linked to structure, individual play components and swingsets) and thus the extent of the protective surfacing required to comply with CSA standards. All play equipment and safety zones to fit within maximum areas of play spaces shown on the Drawings with the exception of proposed ground-level play components with zero (0) fall height such as play panels.
- D11.3 All playground equipment supplied and the method of installation shall be in accordance with the latest edition of the "National Standard of Canada, CAN/CSA-Z614-07".
- D11.4 Final layout of all play equipment has to be approved by Contract Administrator prior to any construction or removal.

SCHEDULE OF WORK

D12. COMMENCEMENT

- D12.1 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.

- D12.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) evidence of the insurance specified in D8;
 - (iv) the performance security specified in D9;
 - (v) the subcontractor list specified in D10; and
 - (vi) the final layout of all play equipment specified in D11.
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
 - (c) the Contractor has provided a written schedule of work outlining dates and duties to be performed.

D12.3 The Contractor shall commence the Work on the Site no later than June 1, 2009.

D13. WORKING DAYS

- D13.1 Further to C1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of Work while at another time a Working Day may be based on another type of Work. When more than one type of major Work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D13.2 In the event that incidental Work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental Work until such time as it is up to schedule.
- D13.3 When the major type of Work involves restoration of the Site to the condition it was prior to rainfall, Working Days shall not be charged.

D14. WORK BY OTHERS

- D14.1 Works by others on or near the Site will include but not necessarily be limited to:
- (a) Maintenance Work by City of Winnipeg;
 - (b) Site development work and supply and installation of site furnishings by Site Works Contractor;
 - (c) Supply and Installation of trees by other contractor(s).

D15. SUBSTANTIAL PERFORMANCE

- D15.1 The Contractor shall achieve Substantial Performance within ten (10) consecutive Working Days of the commencement of the Work as specified in D12.
- D15.2 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.
- D15.3 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.

D16. TOTAL PERFORMANCE

- D16.1 The Contractor shall achieve Total Performance within fifteen (15) consecutive Working Days of the commencement of the Work as specified in D12.
- D16.2 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.
- D16.3 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.

D17. LIQUIDATED DAMAGES

- D17.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundreds dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D17.2 The amount specified for liquidated damages in D17.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D17.3 If the Contractor misrepresents the CSA compliance of play equipment being installed and this results in additional design and/or meeting time on the part of the Contract Administrator, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day during which such additional work continues.
- D17.4 The amount specified for liquidated damages in D17.3 is based on a genuine pre-estimate of the City's damages in the event that the Contractor causes such additional work.
- D17.5 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D18. JOB MEETINGS

- D18.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D19.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

MEASUREMENT AND PAYMENT

D20. PAYMENT

D20.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D21. WARRANTY

D21.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D21.2 Notwithstanding C13.2 or D21.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:

- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.

D21.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

D21.2.2 Manufacturer's warranties on play equipment and safety surfacing shall apply.

FORM H1: PERFORMANCE BOND
(See D9)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

BID OPPORTUNITY NO. 734-2008

ST. JAMES/BROOKLANDS PLAYGROUND RENOVATIONS –
PLAY EQUIPMENT

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

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

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

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

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

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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

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

(Date)

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

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

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

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
CW 1110-R1	General Instructions
CW 1120-R1	Existing Services, Utilities and Structures
CW 1130-R1	Site Requirements
CW 2160-R7	Concrete Underground Structures and Works
CW 3510-R9	Sodding
CW 3540-R5	Topsoil and Finish Grading for Establishment of Turf Areas

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
PE-GP1	Galmar Park Proposed Siteplan
PE-KS1	King Edward & Silver Playground Proposed Siteplan
PE-MB1	Moray & Bruce Playground Proposed Siteplan
PE-D1	Details

- E1.3.1 Above drawings are available on request in AutoCAD .dwg format from the Contract Administrator.

GENERAL REQUIREMENTS

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, no soil inspection has been done. Contractor to supply soils investigation report if site conditions warrant.

E3. PRE-CONSTRUCTION MEETING

- E3.1 The Contractor shall not begin the Work under this Contract until a pre-construction meeting has been held between representatives of the Play Equipment Contractor, the Site Works Contractor, the City of Winnipeg and the Contract Administrator.

E4. SITE ACCESS

- E4.1 All access to be on the designated routes through the Site. These routes will be determined at the pre-construction meeting.
- E4.2 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.

- E4.3 The Contractor's operation 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. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

E5. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

- E5.1 Further to CW 1130-R1, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress are 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.
- E5.2 Ambulance/ Emergency vehicle access must be maintained at all times.

E6. SITE CONDITION

- E6.1 The Contractor shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E6.2 No responsibility will be assumed by the City 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 City 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.
- E6.3 The Contractor shall set all necessary control lines, benchmarks, survey, elevation stakes and layout in accordance with the individual site conditions and in consultation with the Contract Administrator.

E7. PROTECTION OF EXISTING TREES

- E7.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities:
- (a) All trees will have a 3m radius protective zone calculated from the circumference at the base of the trunk which will remain free of digging, trenching, grade changes, stock piling of materials and soil compaction, except as minimum to construct berm or swales throughout the duration of the Contract. Protective fencing around these areas is required.
 - (b) Trees within and immediately adjacent to proposed construction and those identified to be at risk by the Contract Administrator are to be strapped with 25 x 100 x 2400 mm wood planks, or suitably protected as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1 inch diameter equals 1 foot measured from the 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. They must be properly trimmed with sharp tools to prevent crushing or being pulled by construction equipment. No paint is required. All exposed roots must be mulched until the excavated area is filled with clean earth to avoid exposure to sunlight and desiccation.
 - (d) Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface

directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

- (e) Work on-site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- (f) Repair, replace and maintain tree protection materials during construction until the Project completion.
- (g) Carefully remove safety fencing and strapping material without harming the tree as soon as the construction and restoration Work is complete.

E7.2 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.

E7.3 No separate measurement or payment will be made for the protection of existing structures, trees and property.

E8. EXISTING SERVICES AND UTILITIES

E8.1 This Specification shall amend and supplement CW 1120-R1.

E8.2 Other than required to be done by the Contractor under the Work of this contract, all necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing plant material, pavements, streets, roads, boulevards, light standards, hydro poles, fences, fire hydrants, culverts, 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 or repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to the 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.

E8.3 The Contractor's attention is drawn to the existing underground lines or services that may be located in the area of the Work.

E8.4 The Contractor shall take all necessary precautions when performing the Work to ensure that no damage is done to these existing services.

E8.5 No responsibility will be assumed by the City 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 City 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.

E8.6 All costs in connection with this item including location of the existing service, repairs to any existing services damaged by the construction operation, etc. shall be included in the unit prices bid for supply and installation of the items included under this Contract.

E8.7 The Contractor will be required to 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.

E8.8 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.

E9. PROTECTION OF SURVEY INFRASTRUCTURE

E9.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.

- E9.2 Further to C:6.26 (g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 986-4826 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E9.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E9.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.
- E9.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E10. STAKES AND MARKS

- E10.1 The Contractor will mark, to the extent he determines to be necessary, the location, alignment and elevation of the Work by means of stakes or marks, for review and approval by the Contract Administrator. The Contractor shall make the completed Works conform to the lines and marks thus approved and indicated.
- E10.2 The Contractor shall notify the Contract Administrator immediately of the disturbance of any such stakes or marks. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor, as well as the cost of replacing any disturbed stakes or marks.
- E10.3 Before commencing Work, the Contractor shall satisfy himself as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City on account of any alleged inaccuracies. If any error is suspected in the Drawings, Specifications or the directions of the Contract Administrator, Work shall be discontinued until the errors are rectified, but no claims shall be made on account of any delay occasioned thereby.
- E10.4 The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks

E11. SITE ENCLOSURES

- E11.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E11.2 Site enclosures shall be considered incidental to the Contract Work.

E12. PRODUCT APPROVALS

- E12.1 The Contractor shall, following award, prepare a complete list of all material to be used on the project and submit the list to the Contract Administrator seventy-two (72) hours prior to start of construction.
- E12.2 The Contractor shall only use material which has been approved by City of Winnipeg or by the Contract Administrator. The list shall provide the product, the manufacturer and the supplier.

E12.3 All Workmanship and materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator. The contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of the Specifications.

E12.4 The Contractor shall wholly be responsible for the supply, safe storage, and handling of all materials set forth in this specification, and the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given.

E13. SURFACE RESTORATION

E13.1 Further to Section 3.3 of CW 1130-R1, the Contractor shall temporarily repair any Work commenced and not completed in the 2009 construction season to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E14. MAINTENANCE KITS

E14.1 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.

E14.2 There shall be no payment for the maintenance kits.

PLAY EQUIPMENT

E15. GENERAL COMMENTS

E15.1 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 shown on the Drawings and as herein specified.

E15.2 The Play Equipment Contractor shall be responsible for the final layout of all play equipment (including play structures and components functionally linked to structure, individual play components and swingsets) and thus the extent of the protective surfacing required to comply with CSA standards.

E15.2.1 All playground equipment supplied and the method of installation shall be in accordance with the latest edition of the "National Standard of Canada, CAN/CSA-Z614-07".

E15.2.2 The Play Equipment Contractor shall supply the Contract Administrator and the Site Works Contractor(s) with all dimensions and drawings necessary to accurately show the extents of all safety surfacing and non-encroachment zones required to meet CSA standards.

E15.2.3 Contractor to submit colour drawing of play equipment, colours and frame with Contract Administrator prior to ordering equipment.

E15.2.4 This work to be coordinated with other Contractor(s) responsible for the excavation of play areas and the supply and installation of timber edging for the containment of protective surfacing. Final layout of all play spaces has to be approved by Contract Administrator prior to any construction or removal.

E15.2.5 The coordination and timing of play area development (including excavation of play areas, supply and installation of play equipment, supply and installation of timber edging and supply and installation of protective surfacing) to be coordinated at the pre-construction meeting.

E15.3 The Contractor shall obtain all approvals including the requisite Development Permit.

E15.4 Galmar Park:

E15.4.1 Area A:

- (a) Heavy Duty Play Structure to be designed for children ages 2-5. Play Structure should express a train / railroad theme;
- (b) The colours of the Play Structure shall be black, red, yellow and/or silver for all Poles, Clamps, Components, Permaline, Accents, etc.;
- (c) Minimum one (1) metal slide – 1.2m to 1.5m height (North orientation preferred, Northwest and East will also be consider as the site is heavily treed);
- (d) Minimum one (1) vertical climber and one (1) horizontal climber;
- (e) Maximum deck height: 1.5m;
- (f) Heavy Duty Play Panels of various types enabling different play experiences;
- (g) To include accessible structure or equipment - may include ramps or transfer platforms as well as ground-level equipment;
- (h) Area(s) under/at the base of the Play Structure for creative/ imaginative play and social interaction;
- (i) A two (2) bay, 2.4m (8') height swing set having two (2) slash-proof infant seats in one bay and two (2) slash-proof belt seats in the other bay. Post colour to be black (first choice) or silver (alternate choice);
- (j) Independent play components which explore movement such as spring toys, spinners / spinning bowls, teeter-totter etc. The colours of the Independent play components shall be consistent with the overall colour scheme of the Play Structure at this location.

E15.5 King Edward & Silver Playground:

E15.5.1 Area A:

- (a) A single (1) bay, 2.4m (8') swing set having two (2) slash-proof infant seats.
- (b) A single (1) bay 3.0m (10') swing set having two (2) slash-proof belt seats.

E15.5.2 Area B:

- (a) Heavy Duty Play Structure to be designed for children ages 2-5;
- (b) Minimum two (2) vertical climbers and one (1) horizontal climber;
- (c) Minimum one (1) metal slide (maximum deck height: 1.5m);
- (d) To include accessible structure or equipment - may include ramps or transfer platforms as well as ground-level equipment that can be accessed from edge of play area;
- (e) Area(s) under/at the base of the Play Structure for creative/ imaginative play and social interaction;
- (f) Heavy Duty Play Panels of various types enabling different play experiences;
- (g) To include spinning element(s) as independent component and/or as play equipment attached to, or functionally linked to the Play Structure. Other elements with circles, loops or waves should also be incorporated;
- (h) Play components should be arranged to encourage fluid movement between elements;
- (i) To include other independent components as budget and space allow.

E15.6 Moray & Bruce Playground:

E15.6.1 Area A:

- (a) A two (2) bay 3.0m (10') swing set having two (2) slash-proof infant seats in one bay and two (2) slash-proof belt seats in the other bay.

E15.6.2 Area B:

- (a) Heavy Duty Play Structure to be designed for children ages 2-12;
- (b) Minimum one (1) vertical climber and one (1) horizontal climber;
- (c) Minimum one metal slide (maximum height 1.8m);
- (d) To include accessible structure or equipment - may include ramps or transfer platforms as well as ground-level equipment;
- (e) Area(s) under/at the base of the Play Structure for creative/ imaginative play;
- (f) Heavy Duty Play Panels of various types enabling different play experiences;
- (g) To include other independent components as budget and space allow.

E15.7 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.

E15.8 Components which are unacceptable are the following:

- (a) Wooden structures;
- (b) Tube (enclosed) slides and crawl tubes;
- (c) Play panels with many small moving parts;
- (d) Cable rides;
- (e) Sand diggers;
- (f) Merry-go-rounds;
- (g) Tire Swings;
- (h) Talk tubes;
- (i) Binoculars / telescopes;
- (j) Barrel rollers; and
- (k) Large number of plastic components.

E16. PLAY STRUCTURES

E16.1 Description

E16.1.1 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 shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and installation of one or more Play Structures

E16.1.2 Further to B16.6.1(b)(vii) which reads "uniqueness of components as compared to similar playgrounds components within walking distance (400m) of the park", the play equipment within walking distance (400m) to the following playgrounds is located at:

- (a) the play equipment within walking distance (400m) to Galmar Park (1839 Midmar Avenue) is located at:
 - (i) Woodsworth Park - NE of King Edward Avenue & Park Lane;
 - (ii) Weston Memorial Community Center – 1625 Logan Avenue;
 - (iii) Pacific Dee Park/ Eldon Ross Pool – 1887 Pacific Avenue;

- (iv) Brookland School & Park – 1950 Pacific Avenue.
- (b) the play equipment within walking distance (400m) to King Edward & Silver Playground (423 King Edward Street) is located at:
 - (i) Bord-Aire Community Center – 471 Hampton Street;
 - (ii) Brooklyn Street Park – Brooklyn Street, S of St. Matthews Avenue;
 - (iii) Kensington Street Park North – Kensington Street between Ness Ave & Silver Ave;
 - (iv) King Edward & Ness Park – King Edward Street & Ness Avenue;
 - (v) David Johnston Memorial Park – Ness Avenue & Brooklyn Street;
 - (vi) Brooklyn Street North Playground - Brooklyn Street between Ness Avenue & Silver Ave.
- (c) the play equipment within walking distance (400m) Moray & Bruce Playground (405 Moray Street) is located at:
 - (i) Ecole Bannatyne School – 363 Thompson Drive.

E16.1.3 Play equipment shall be installed in the play areas as shown on the attached Drawings. All play equipment and safety zones to fit within maximum areas of play spaces shown on the Drawings with the exception of proposed ground-level play components with zero (0) fall height such as play panels.

- (a) The proposed design should not necessarily fill the entire available area. Area as shown is the maximum available, not the optimal area. Efficiency and good use of space will be considered in the evaluation of submissions.

E16.2 Materials

E16.2.1 Posts / Caps

- (a) All posts shall be a minimum 5" O.D. round or 4" square tubing.
- (b) 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.
- (c) All posts shall be fabricated from either aluminum (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.
- (d) 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 (hollow caps not accepted).
- (e) 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.

E16.2.2 Decks (if applicable)

- (a) 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'.

E16.2.3 Clamping System

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

E16.2.4 Handrails, Safety Rails and Handloops (if applicable)

- (a) All handrails, safety rails and handloops shall be fabricated using a minimum of 15/16" (24mm) 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.

- (b) 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.

E16.2.5 Hardware

- (a) 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.
- (b) All necessary hardware shall be provided.

E16.2.6 Poly Components

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

E16.2.7 Slides

- (a) Stainless steel is preferred for slide beds, although a plastic slide may be used if there is a stainless steel slide also on the Site. North or east orientation preferred.

E16.2.8 Each Play Structure shall have kick plates and hand loops as required to meet the most recent Canadian Standards Association Standards.

E16.3 Installation

E16.3.1 Play equipment shall be installed as per manufacturer's specifications and in accordance with the most recent Canadian Standards Association Standards.

E16.3.2 All posts and other vertical items shall be plumb and true to vertical, if so designed.

E16.3.3 All decks shall be level, if so designed.

E16.3.4 Concrete footings/ foundation shall be in accordance with E19.

E16.4 Method of Measurement and Basis of Payment

E16.4.1 Method of Measurement shall be as follows:

- (a) Play Structure for Galmar Park will comprise only part of the overall Play Equipment, measured on a lump sum basis for item A1 "New Play Structure ..." as indicated on Form B: Prices. This shall include all play equipment attached to, or functionally linked to the structure, but excluding Independent Play Components and Swing Standard located within the Play Area.
- (b) Play Structure for King Edward & Silver Playground will comprise only part of the overall Play Equipment, measured on a lump sum basis for item B1 "New Play Structure and / or Independent Play Components..." as indicated on Form B: Prices. This shall include all play equipment attached to, or functionally linked to the structure, including Independent Play Components proposed, but excluding Swing Standard located within the Play Areas.
- (c) Play Structure for Moray & Bruce Playground will comprise only part of the overall Play Equipment, measured on a lump sum basis for item C1 "New Play Structure ..." as indicated on Form B: Prices. This shall include all play equipment attached to, or functionally linked to the structure, but excluding Independent Play Components and Swing Standard located within the Play Areas.

E16.4.2 Basis of Payment shall be as follows:

- (a) Play Structures will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for full payment for supplying all labour,

equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E17. INDEPENDENT PLAY COMPONENTS

E17.1 Description

E17.1.1 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 shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

(a) Supply and installation of Independent Play Components.

E17.1.2 Independent Play Components shall be installed as per the proposed design, as the proposed budget will allow.

E17.1.3 Independent Play Components shall be installed in the available areas as shown on Drawings PE-GP1, PE-KS1 and PE-MB1. The Components and their safety zones must fit into the proposed play area with the exception of proposed ground-level play components with zero (0) fall height such as play panels.

E17.2 Materials

E17.2.1 All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials.

E17.2.2 There shall be a minimum (or no) amount of hollow plastic components. Solid plastic is acceptable.

E17.2.3 There shall be a minimum amount of solid elements which limit visibility through the Site.

E17.2.4 Fasteners

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

E17.2.5 Finishes

(a) Finishes 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.

E17.2.6 Slides

(a) If an independent slide is proposed, stainless steel is preferred. If other slides are proposed on the Site one may be plastic. North or east orientation preferred. If independent slide over 4' high is proposed, support posts must be minimum 5" O.D.

(b) Tube (enclosed) slides and plastic spiral slides will not be accepted.

E17.3 Method of Measurement and Basis of Payment

E17.3.1 Method of Measurement shall be as follows:

(a) Independent Play Components located within the Play Area of Galmar Park, not including those attached to or functionally linked to the play structure, will be measured on a lump sum basis for Item A2 on Form B: Prices.

(b) As identified in E16.4.1(b) measurement will be incorporated into Items B1 on Form B: Prices. As such, no separate measurement will be made for the Independent Play Components at King Edward & Silver Playground.

(c) Independent Play Components located within the Play Area of Moray & Bruce Playground, not including those attached to or functionally linked to the play structure, will be measured on a lump sum basis for Item C2 on Form B: Prices.

E17.3.2 Basis of Payment shall be as follows:

- (a) Independent Play Components for Galmar Park that are located within the Play Area will be paid for at the Contract Unit Prices as indicated on Form B: Prices. This price shall be full payment for supply all labour, equipment and materials (including concrete foundations), and performing all operation herein described and all other items incidental to the Work and as accepted by the Contract Administrator.
- (b) Independent Play Components for King Edward & Silver Playground, if proposed, shall be included in the lump sum cost for Items B1 on Form B: Prices. No separate payment shall be made.
- (c) Independent Play Components for Moray & Bruce Playground that are located within the Play Area will be paid for at the Contract Unit Prices as indicated on Form B: Prices. This price shall be full payment for supply all labour, equipment and materials (including concrete foundations), and performing all operation herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E18. SWING STANDARD

E18.1 Description

E18.1.1 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 shown on the Drawings and as herein specified.

E18.1.2 This specification shall cover the supply and installation of a complete swing standard, as hereinafter specified, including, but not necessarily confined to the following:

- (a) Galmar Park:
 - (i) Three Leg Heavy Duty Swing Frame, two (2) bay, 2.4m (8') high, complete with two (2) slash-proof rubber enclosed infant seats, two (2) slash-proof belt seats, heavy-duty chain, swing hangers and "S" hooks / bolt links.
- (b) King Edward & Silver Playground:
 - (i) Three Leg Heavy Duty Swing Frame, single bay, 2.4m (8') high, complete with two (2) slash-proof rubber enclosed infant seats, heavy-duty chain, swing hangers and "S" hooks / bolt links;
 - (ii) Three Leg Heavy Duty Swing Frame, single bay, 3.0m (10') high, complete with two (2) slash-proof belt seats, heavy-duty chain, swing hangers and "S" hooks / bolt links.
- (c) Moray & Bruce Playground:
 - (i) Three Leg Heavy Duty Swing Frame, two (2) bay, 3.0m (10') high, complete with two (2) slash-proof rubber enclosed infant seats, two (2) slash-proof belt seats, heavy-duty chain, swing hangers and "S" hooks / bolt links.

E18.2 Materials

E18.2.1 Topbeam

- (a) 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.

E18.2.2 Legs

- (a) 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.

E18.2.3 Yoke Clamps

- (a) 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.

E18.2.4 Swing Hangers

- (a) All swing hangers shall be fabricated from galvanized malleable iron and have oil impregnated bearings pressed in.

E18.2.5 Swing Chain

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

E18.2.6 Enclosed Infant (Bucket) Seats

- (a) 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.

E18.2.7 Belt Seats

- (a) 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.

E18.2.8 Hardware

- (a) 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.

E18.2.9 Concrete Foundations

- (a) Post shall be installed into a concrete footing the composition of which is detailed in E19.

E18.3 Installation

E18.3.1 Installation shall be in accordance with Manufacturer's specifications.

E18.3.2 Top rail is to be level and posts securing anchored in concrete.

- (a) Swing seats shall not be installed until the protective surfacing (in accordance with E20) has been installed.

E18.4 Method of Measurement and Basis of Payment

E18.4.1 Method of Measurement shall be as follows:

- (a) Swing Standard will be measured on a per unit basis for "Swing Standard..." as indicated on Form B: Prices.

E18.4.2 Basis of Payment shall be as follows:

- (a) Swing Standard will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E19. FOUNDATIONS

E19.1 Description

E19.1.1 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 shown on the Drawings and as herein specified.

E19.1.2 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-R7 - Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.

E19.2 Materials

E19.2.1 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 20mm, nominal;
- (d) slump 80 +/- 20mm;
- (e) maximum water/cement ratio 0.49.

E19.3 Installation

E19.3.1 All posts and supports shall be centered in the concrete footing such that there is a complete collar of concrete around each post and support. Where posts are not perfectly centered there should be a minimum of 2" concrete at any point around the post.

E19.3.2 All concrete footings for play equipment shall be a minimum of 3' depth, or in accordance with Manufacturer's specifications, whichever is greater.

E19.4 Method of Measurement and Basis of Payment

E19.4.1 Method of Measurement shall be as follows:

- (a) Foundations shall be incidental to the measurement of Play Structures, Swing Standard and Independent Components listed above and as shown on Form B: Prices.

E19.4.2 Basis of Payment shall be as follows:

- (a) No separate payment shall be made for play equipment foundations.

E20. PROTECTIVE SURFACING

E20.1 General Description

E20.1.1 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 shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and Installation of two distinct types of safety surfacing: safety stone (play stone) and wood fibre.

E20.1.2 Further to E15.2, the extent and layout of protective surfacing shall be the responsibility of the Play Equipment Contractor. The extents and layout of protective surfacing materials shall be provided to the Site Works and Furnishings Contractor prior to the commencement of excavation of play areas.

E20.1.3 If the Play Equipment Contractor is unable to install protective surfacing immediately after play equipment is installed, Play Equipment Contractor shall secure all play areas to prohibit access to the installed play equipment.

E20.2 Safety Stone (Play Stone) Surfacing

E20.2.1 Description

- (a) This specification shall cover the supply and installation of Safety Stone Surfacing within areas indicated on the drawings and as indicated on Form B: Prices.

E20.2.2 Materials

- (a) Safety Stone shall be 6.0mm Playground Stone, composition shall be Typical Birds Hill glacial till material, 100% clean river-washed granite conforming to the following sizes of sieve:
 - 100% passing 10mm
 - 45% passing 5mm
 - Up to 10% passing 2.5mm
 - Up to 4% passing 1.25mm
 - 0% passing 0.8mm sieve

E20.2.3 Construction Methods

- (a) Safety Stone shall be installed within indicated play areas on drawings, as defined by the timber edging (supplied and installed by others), to a minimum depth of 300 mm.
- (b) The installation of the Safety Stone shall be done immediately after the play equipment 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 play equipment so as not to damage same. The play equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the Stone.

E20.3 Wood Fibre Surfacing

E20.3.1 Description

- (a) This specification shall cover the supply and installation of Wood Fibre Surfacing within areas indicated on the drawings and as indicated on Form B: Prices.

E20.3.2 Materials

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

- (i) Contact for Woodcarpet:
 - Zeagar Bros. Inc.
 - 4000 East Harrisburg Pike ·
 - Middletown, PA 17057
 - USA

 - Ph: (1-888) 346-8524 or (717) 944-7481 ·
 - Fax (717) 944-7681
 - sales@zeager.com

- (ii) Contact for FibarSystem 300:
 - The Fibar Group LLC
 - 80 Business Park Drive, Suite 300
 - Armonk, NY 10504-1705
 - USA

Ph: (800) 342-2721
Fax: (914) 273-8659
info@FibarPlaygrounds.com

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

E20.3.3 Construction Methods

- (a) Wood Fibre shall be installed within the play area, as defined by the timber edging (supplied and installed by others), to a minimum depth of 200 mm (after compaction). In play areas where maximum fall height is greater than 2.4m (8'), depth of material to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications.
- (b) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (c) Installation of entire system, including fibre, filter cloth, subsurface drainage and mats shall be done according manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same.
- (d) Installation shall be done by equipment sized to suit the Work being done and the Wood Fibre shall be spread by hand as necessary in the immediate vicinity of the play equipment so as not to damage same. The play equipment shall be swept clean to the satisfaction of the Contract Administrator after installation of the Wood Fibre.

E20.4 Method of Measurement and Basis of Payment

E20.4.1 Method of Measurement shall be as follows:

- (a) Protective Surfacing - safety stone /play stone will be measured on a cubic metre basis for Items A4, B4 and C5 listed as "Playground stone ..." on Form B: Prices.
- (b) Protective Surfacing – wood fibre will be measured on a square metre basis for Items C4 listed as "Wood Fibre Protective Surfacing System in Play Area" on Form B: Prices.

E20.4.2 Basis of Payment shall be as follows:

- (a) Protective Surfacing will be paid for at the Contract Unit Prices as indicated on Form B: Prices. The amount to be paid for shall be the total number of units, measured as specified herein, which price shall be for full payment for supplying all labour, equipment and materials, and performing all operations herein described and all other items incidental to the Work and accepted by the Contract Administrator.

E21. SITE CLEAN UP

E21.1 The Contractor shall, upon the completion of Work each day, load and dispose of all spoiled concrete, reinforcing steel, granular and other material associated with the Works from the Work Site. The Contractor shall secure or remove all of his machinery and equipment at the end of each day from the immediate Work Site. The Contractor will not be permitted to store machinery, equipment, or materials on public roads overnight. Any costs in connection with the above mentioned works are incidental.

E21.2 Unless otherwise specified the Contractor shall restore all areas which have been disturbed by his operations to as good as or better than original condition including removal of all construction debris, repair all vegetation, sod, concrete pavement, concrete curbs, concrete sidewalk and asphalt paving to remain etc. to the satisfaction of the Contract Administrator. Any costs incurred in connection with the above mentioned Work are incidental to unit prices bid under this contract.

E21.3 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.

E21.4 Sod and Topsoil (repair to damaged areas). The Contractor shall install mineral sod and a minimum 75mm compacted thickness of topsoil, as required, and in accordance with CW 3510-R9 and CW 3540-R5.