

THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 558-2018

HARBOURVIEW PLAYGROUND UPGRADES

Note to Proponents: Please be aware of revisions to B16.3

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 HARBOURVIEW PLAYGROUND UPGRADES

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 6, 2018
- B2.1 Proposals 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.
- B2.2 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 Proponent may view the Site without making an appointment.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Proponent finds errors, discrepancies or omissions in the proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B4.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator to all Proponents by issuing an addendum.
- B4.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator only to the Proponent who made the enquiry.
- B4.6 The Proponent 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. CONFIDENTIALITY

- B5.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
 - (a) was known to the Proponent before receipt hereof; or
 - (b) becomes publicly known other than through the Proponent; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 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.
- B6.3 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/bidopp.asp.
- B6.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal nonresponsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 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.
- B7.4 The Proponent 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.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her 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.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Proponent who requested approval of the substitute.

- B7.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Proponents. The Proponent requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B7.7 If the Contract Administrator approves a substitute as an "approved equal", any Proponent may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an "approved alternative", any Proponent bidding that approved alternative may base his/her 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 B21.
- B7.9 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.

B8. PROPOSAL SUBMISSION

- B8.1 The Proposal shall consist of the following components:
 - (a) Form A: Proposal;
 - (b) Form B: Prices;
- B8.2 The Proposal should also consist of the following components:
 - (a) Design Drawings in accordance with B11;
 - (b) Component Description, in accordance with B12;
- B8.3 Further to B8.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.4 Further to B8.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B8.5 Proponents should submit one (1) unbound 8.5" x 11" original (marked "original") including drawings and six (6) copies (copies can be in any size format) for sections identified in B8.1 and B8.2.
- B8.6 Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their team.
- B8.7 The Bid Submission may be submitted by mail, courier or personal delivery.
- B8.8 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 Proponent'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

B8.8.1 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 Proponent's name and address, and an indication that the contents are part of the Proponent's Bid Submission.

- B8.9 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B21.1(a).
- B8.9.1 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. PROPOSAL (SECTION A)

- B9.1 The Proponent shall complete Form A: Proposal, making all required entries.
- B9.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:
 - (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B9.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B9.4 Paragraph 12 of Form A: Proposal shall be signed in accordance with the following requirements:
 - (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Proponent is carrying on business under a name other than its 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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Proposal should be printed below such signatures.
- B9.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B10.1.1 Notwithstanding C12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Proposals.

- B10.3 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.
 - (a) The Bidder must complete the Approximate Quantity column for items 1, 3, 10, 14, 15 and 16 on Form B Prices. These quantities are dependent on the proposed design submitted.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DESIGN DRAWINGS

B11.1 The Proponent should submit drawings that illustrate the proposed design and play equipment, such as plan, perspective and any other submissions to illustrate the design intent. Included in this should be a plan showing the proposed play equipment and associated safety zones within the proposed play area and site, drawn to scale. Additional drawings may be requested prior to award for more detailed information.

B12. COMPONENT DESCRIPTIONS

B12.1 The Proponent should submit component description and/or graphic or catalogue reference outlining specifications of play equipment components.

B13. DISCLOSURE

- B13.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B13.2 The Persons are:

(a) N/A

B14. CONFLICT OF INTEREST AND GOOD FAITH

- B14.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B14.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel

proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
- compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or

- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other proponents and that could or would be seen to give that Proponent an unfair competitive advantage.
- B14.3 In connection with its Proposal, each entity identified in B14.2 shall:
 - (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
 - (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Project Manager; and
 - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B14.4 Without limiting B14.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B14.5 Without limiting B14.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
 - (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
 - (b) require the removal or replacement of any Key Personnel proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
 - (c) disqualify a Proponent or Key Personnel proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B14.4 to avoid or mitigate a Conflict of Interest; and
 - (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B14.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B15. QUALIFICATION

- B15.1 The Proponent 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, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; 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.
 - B15.2The Proponent 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 website at http://www.winnipeg.ca/matmgt/debar.stm.
- B15.3 The Proponent 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);
 - (d) have a valid Canadian Certified Playground Inspector.
- B15.4 The Proponent 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 Proponent and of any proposed Subcontractor.
- B15.5 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.
- B15.6 Further to B15.3(c), the Proponent shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Proponent /Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
 - (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR[™] and SECOR[™]) or
 - a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY[™] COR[™] Program; or
 - (ii) a copy of their valid Manitoba SECOR[™] certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR[™]) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY[™] COR[™] Program or
 - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/</u>.
- B15.7 The Proponent 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 Proponent and of any proposed Subcontractor.
- B15.8 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B16.1 Proposals will not be opened publicly.
- B16.2 After award of Contract, the name(s) of the Proponents and the Contract amount of the successful Proponent and their address(es) 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 website at http://www.winnipeg.ca/matmgt/.

- B16.3 The Proponent is advised any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B16.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.
- B16.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Contract Administrator.

B17. IRREVOCABLE OFFER

- B17.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.
- B17.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B18. WITHDRAWAL OF OFFERS

- B18.1 A Proponent may withdraw his/her Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B18.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B18.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 12 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B18.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
 - (a) retain the Proposal until after the Submission Deadline has elapsed;
 - (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 12 of Form A: Proposal; and
 - (c) if the notice has been given by any one of the persons specified in B18.1.3(b), declare the Proposal withdrawn.
- B18.2 A Proponent who withdraws his/her Proposal after the Submission Deadline but before his/her offer has been released or has lapsed as provided for in B17.2 shall be liable for such damages as are imposed upon the Proponent 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.

B19. INTERVIEWS

B19.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B20. NEGOTIATIONS

- B20.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B20.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B20.3 If, in the course of negotiations pursuant to B20.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B21. EVALUATION OF PROPOSALS

B21.1 Award of the Contract shall be based on the following evaluation criteria:

(a)	(a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)		
(b)	qualifications of the Proponent and the Subconsultants, if any, pursuant	to (pass/fa	B15: ail)
(c)	Total Bid Price;	10%	
(d)	Design Drawings/Component Descriptions	90%	

- (e) Economic analysis of any approved alternative pursuant to B7
- B21.2 Further to B21.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal 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 Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B21.3 Further to B21.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B21.4 Further to B21.1(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.
- B21.4.1 Further to B21.1(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.
- B21.4.2 Further to B21.1(c), the Award Authority may reject a Bid as being non-responsive if it exceeds the budget as shown on Form B: Prices.
- B21.4.3 The Total Bid Price shall be evaluated with a weighing of 10 points out of a total of 100 possible points. As such, the lowest Proponent shall receive the full 10 points, and the second lowest Proponent and subsequent Proponents shall be pro-rated accordingly.
- B21.5 Further to B21.1(d) Design Drawings/Component Descriptions shall be evaluated with a weighting of 90 points out of a total of 100 possible points as per B11 and B12.
- B21.5.1 The Design shall be evaluated on the following criteria:
 - (a) compliance with CSA Standards (pass/fail);
 - (b) play value (maximum 40 points):

- 6 points Gross Motor Play Experience(s) (Climbing, balancing, etc.) to include two (2) climbing elements for 5-12 year old and three (3) balancing elements for 5-12 year old;
- (ii) 5 points Motion Component(s)- to include at minimum three (3) riding elements and three (3) spinning elements;
- (iii) 5 points Provides opportunities for appropriate social / interpersonal interaction and co-operative play;
- (iv) 5 points Imaginative/ Cognitive Play Component(s), including fine motor skills;
- (v) 5 points Sliding Component(s) for 18 month to 5 year old;
- (vi) 4 points Variety of play Components.
- (vii) 10 points Uniqueness of components related to a strong thematic element for the playground. Use of wetland thematic elements relating to aquatics, emergent zones and upland forests are encouraged.
- (c) Designed for inclusive play using Universal Design principles Accessible Play Area only (maximum 14 points):
 - (i) Complies with section 2.3.5 of the 2010 City of Winnipeg Accessibility Design Standards (www.winnipeg.ca/ppd/Universal_Design.stm)(pass/fail);
 - (ii) 6 points Provision of tactile and auditory play experiences;
 - (iii) 5 points Layout of the play area for integration of wheelchair accessible components to promote inclusive play;
 - (iv) 3 points Layout of the play area for persons with visual impairment.
- (d) Layout/circulation (maximum 23 points):
 - (i) 5 points Flow and relationship between play area activities;
 - 5 points Layout/orientation of components on Site and in relation to seating areas;
 - (iii) 5 points Orientation to provide good visibility to play area from adjacent pathways
 - (iv) 5 points Efficient use of space within and between elements;
 - (v) 3 points Slide orientation north or east.
- (e) Materials and Durability (maximum 10 points):
 - 5 points Use of durable/tamper-resistant materials, low maintenance finishes and connector systems and ease of repair/replacement of the products used with the playground area.
 - (ii) 5 points- Use of natural materials (rock, wood stumps etc.) to create play elements
- (f) Drawing and Design Submission Clarity (maximum 3 points):
 - (i) 1 point Drawing Submission including complete Site Plan, clearly showing the location of all play equipment, play edging, pathways and seating areas.
 - (ii) 2 points Clarity of drawings, supportive imagery and literature that serve to effectively communicate the intent of the play structures design and function.
- B21.6 Further to B21.5.1(a), if Contractor states play equipment components are compliant with CSA Standards which are not, liquidated damages shall be charged as per D16 should this result in additional design and/or meeting time on the part of the Contract Administrator.

B22. AWARD OF CONTRACT

B22.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.

- B22.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be responsible and qualified, and the Proposals are determined to be responsive.
- B22.2.1 Without limiting the generality of B22.2, 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 Proposal 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.
- B22.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Proponent submitting the most advantageous offer.
- B22.3.1 Following the award of contract, a Proponent will be provided with information related to the evaluation of his/her Proposal upon written request to the Contract Administrator.
- B22.4 The City may, at its discretion, award the Contract in phases.
- B22.5 Notwithstanding Paragraph 6 of Form A: Proposal and C4, the City will issue a Letter of Intent to the successful Proponent in lieu of execution of a Contract.
- B22.5.1 The Contract documents as defined in C1.1(n)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the Letter of Intent notwithstanding that they are not necessarily attached to or accompany said Letter of Intent.
- B22.6 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B22.5 Further to Paragraph 6 of Form A: Proposal and C4, the successful Proponent will be provided with Contract documents for execution following issuance of a Letter of Intent.
- B22.6 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B22.7 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Project Manager.
- B22.8 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Contractor will be paid for all Services rendered up to time of termination.

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 website at http://www.winnipeg.ca/matmgt/gen_cond.stm.
- C0.2 A reference in the Request for Proposal 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 supply and installation of play equipment, safety surfacing, wooden dock and ramp system, limestone block steps, site furniture, wood bollards and deciduous trees.
- D2.2 The major components of the Work are as follows:
 - (a) Playground equipment;
 - (b) Engineered Wood Fibre (EWF) safety surfacing;
 - (c) Multiflow Drain System
 - (d) Outfall and Riprap
 - (e) Composite Wooden Dock & Ramp System
 - (f) Limestone Block Steps/ Informal Seating Area
 - (g) Site Furniture
 - (h) Wood Bollards
 - (i) Deciduous Tree Installation

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is McGowan Russell Group, represented by:

Melissa Neirinck Landscape Architect

Telephone No. 204 956-0396 Email address: mneirinck@mcgowanrussell.com

- D3.2 Before commencement of Work, Ms. Neirinck will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B8.

D4. CONTRACTOR'S SUPERVISOR

- D4.1 Further to C6, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his/her employ.
- D4.2 Before commencement of Work, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D4.2.1 Further to C5, Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.
- D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.
- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
 - information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

D6.1 Notwithstanding C23.2.2, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following:

The City of Winnipeg Attn: Chief Financial Officer Office of the Chief Administrative Officer Susan A. Thompson Building 2nd Floor, 510 Main Street Winnipeg MB R3B 1B9

D6.2 Bids Submissions must not be submitted to this address. Bids must be submitted in accordance with B8.

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. SAFE WORK PLAN

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/safety/default.stm.

D9. INSURANCE

D9.1 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; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (c) all risks installation floater, carrying adequate limits to covers all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, referencing the Bid Opportunity number and/or the Scope of Work D2 and Specifications PART E
 to be performed, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D9.4 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

- D10.1 If the Contract Price exceeds twenty-five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
 - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D10.1.1 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.
- D10.2 The Contractor shall provide the City Solicitor with the required performance security within seven
 (7) Calendar Days of notification of the award and prior to the commencement of any Work on the Site.

D11. SUBCONTRACTOR LIST

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D12. DETAILED WORK SCHEDULE

- D12.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.
- D12.2 Detailed Work Schedule shall consist of the following dates:
 - (a) Start date;
 - (b) Excavation for play area;
 - (c) Rough Grading;
 - (d) Installation of sub-surface drainage;
 - (e) Installation of play equipment;
 - (f) Installation of safety surfacing;
 - (g) Installation of wooden dock, ramp and seating areas;
 - (h) Installation of site furniture;
 - (i) Installation of deciduous trees; and
 - (j) Expected completion.
- D12.3 Other milestone dates appropriate to this project should also be included to make the Contract Administrator aware of them.

SCHEDULE OF WORK

D13. COMMENCEMENT

- D13.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D13.2 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) the Safe Work Plan specified in D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10;
 - (vi) the Subcontractor list specified in D11; and
 - (vii) the detailed work schedule specified in D12.
 - (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.
- D13.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.
- D13.4 The City intends to award this Contract by July 20, 2018
- D13.4.1 If the actual date of award is later than the intended date, the dates specified for Commencement, Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D14. SUBSTANTIAL PERFORMANCE

D14.1 The Contractor shall achieve Substantial Performance by **September 13, 2018**

- D14.2 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.
- D14.3 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.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance by September 27, 2018
- D15.2 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.
- D15.3 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.

D16. LIQUIDATED DAMAGES

- D16.1 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 hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 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.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

- D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Tree Planting and Maintenance as specified in E18
- D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

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/she 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).

D20. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D20.1 Further to B15.6, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B15.6.

D21. PLANT AND MATERIALS

- D21.1 Further to C9, the City shall assume the risk of and responsibility for the following Material from the time that the City delivers the Material to the Site until the Material is incorporated in the Work or is removed from the Site:
 - (a) Tache Bench with arms (3)
 - (b) Playground Store Panels
- D21.2 Plant and Material that is the property of the City shall not be removed from the Site, disposed of or used except for the purposes of the Work without the prior consent of the Contract Administrator.
- D21.3 The Contractor shall keep such records of all Plant and Material supplied or placed in the care, custody and control of the Contractor by the City as the Contract Administrator may from time to time require and shall satisfy the Contract Administrator, when requested, that such Plant and Material are at the place and in the condition required by the City.

D22. SAFETY

- D22.1 Further to C6, the Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.
- D22.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- D22.3 The Contractor shall do whatever is necessary to ensure that:
 - (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
 - (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
 - (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
 - (d) adequate sanitation measures are taken and facilities provided with respect to the Work.
 - (e) pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
 - (f) fire hazards in or about the Work are eliminated;

D23. SITE CLEANING

- D23.1 The Contractor shall maintain the Site and the Work in a tidy condition and free from the accumulation of waste and debris, other than that caused by the City or by other contractors.
- D23.1.1 As the Work progresses, the Contractor shall remove any Plant and Material not required for the performance of the remaining Work. He shall also remove waste and debris other than that caused by the City or other contractors, and leave the Site and the Work clean and suitable for occupancy by the City unless otherwise specified.
- D23.1.2 Total Performance shall not be considered to have been achieved until the Contractor has cleaned up the Site and has removed all Plant, surplus Material, waste and debris, other than that left by the City or other contractors.

D24. INSPECTION

- D24.1 Before beginning or resuming operations upon any portion of the Work, the Contractor shall notify the Contract Administrator so as to enable him to arrange for inspection. If the Contractor fails to notify the Contract Administrator, the Contractor shall, if and when required by the Contract Administrator, forthwith take down or expose and redo that portion of the Work required to facilitate inspection. The cost of such taking down or exposure, and redoing, if any, shall be borne by the Contractor.
- D24.2 If and when required by the Contract Administrator, the Contractor shall take down or expose forthwith any portion of the Work where the Contract Administrator determines that the Work is not in accordance with the Contract. The cost of such taking down or exposure, and redoing, if any, shall fall upon the City if the taking down or exposure indicates that the portion exposed was properly performed, but if otherwise the cost shall be borne by the Contractor.

D25. DEFICIENCIES

- D25.1 Further to C11, the Contract Administrator may order the Contractor to alter or improve his methods, to increase or improve his Plant, to furnish additional or more suitable Material, or to employ additional or more qualified labour if, at any time, the Contract Administrator determines that:
 - (a) the Work is not being, or will likely not be, performed satisfactorily; or
 - (b) progress is not being, or will likely not be, maintained in accordance with the work schedule.
- D25.2 If the Work or any part thereof is taken out of the Contractor's control pursuant to C18.7, all Plant and Material, and the interest of the Contractor in all licences, powers and privileges acquired, used or provided by the Contractor under the Contract shall be assigned by the Contractor to the City without compensation to the Contractor.
- D25.3 The City shall have the right to take possession of and use any of the Contractor's material and property of every kind provided by the Contractor for the purpose of the Work, and to procure other Plant or Material for the completion thereof.
- D25.4 When the Contract Administrator certifies that any Plant, Material or any interest of the Contractor referred to in D25.2, is no longer required for the purposes of the Work, or that it is not in the best interest of the City to retain that Plant, Material or interest, it shall revert to the Contractor.

MEASUREMENT AND PAYMENT

D26. INVOICES

D26.1 Further to C12, the Contractor shall submit an invoice for each portion of Work performed. to: The City of Winnipeg Corporate Finance - Accounts Payable 4th Floor, Administration Building, 510 Main Street Winnipeg MB R3B 1B9

Facsimile No.: 204-949-0864 Email: <u>CityWpgAP@winnipeg.ca</u>

D26.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) date of delivery;
- (c) delivery address;
- (d) type and quantity of work performed;;
- (e) the amount payable with GST and MRST shown as separate amounts; and
- (f) the Contractor's GST registration number.

D26.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D26.4 Bid Submissions must not be submitted to the above facsimile number. Bids must be submitted in accordance with B8.

D27. PAYMENT

D27.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D28. PAYMENT SCHEDULE

D28.1 Further to C12, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

WARRANTY

D29. WARRANTY

D29.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND

(See D10)

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

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

RFP NO. 558-2018

HARBOURVIEW PLAYGROUND UPGRADES

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

FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT (PERFORMANCE SECURITY) (See D10)

(Date)

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

RE: PERFORMANCE SECURITY - RFP NO. 558-2018

HARBOURVIEW PLAYGROUND UPGRADES

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

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

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

(Date)

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

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

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per:

Per:

(Authorized Signing Officer)

(Authorized Signing Officer)

FORM J: SUBCONTRACTOR LIST

(See D11)

HARBOURVIEW PLAYGROUND UPGRADES

Name	Address

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 website at <u>http://www.winnipeg.ca/matmgt/Spec/Default.stm</u>
- 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:

Specification No.	Specification Title
	Table of Contents
CW 3110	Sub-grade, Sub-base and Base Course
CW 3130	Supply and Installation of Geotextile Fabrics
CW 3170	Earthwork and Grading
CW 3610	Installation of Culverts
CW 3615	Rip Rap
CW 3540	Topsoil and Finish Grading

Drawing No.	Drawing Name/Title
	Cover Sheet
L1.0	Removals- Harbourview Playground
L1.1	Layout- Harbourview Playground
L1.2	Grading- Harbourview Playground
L2.0	Details- Harbourview Playground
SCD-105B	Post Bollard
SCD-121A	Tache Bench Composite with Arms
SCD-612	Culvert Installation under walkway
SCD-650	Engineered Wood Fibre Safety Surfacing Drainage Diagram
SCD-659	Multi-Flow Drainage

E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E3. EXISTING SERVICES AND UTILITIES

E3.1 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.

E4. ACCESS TO SITE

- E4.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his/her own expense and approved by the Contract Administrator.
- E4.2 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he/she shall be responsible for all damage resulting from his/her Work on private property.

E5. PUBLIC SAFETY AND TRAFFIC CONTROL

- E5.1 In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the works undertaken by the Contractor. The requirements shall include the following
 - (a) The Contractor shall barricade the sidewalk surrounding the Work;
 - (b) The Contractor shall maintain traffic flow and ensure that protection is afforded to the road user and that the Contractor's operations shall in no way interfere with the safe operation of traffic.

E6. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E6.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E6.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.
- E6.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E6.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.
- E6.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.
- E6.6 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.

E7. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

E7.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.

- E7.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
 - (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
 - (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protection as approved by the Contract Administrator.
 - (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (d) Operation of equipment within the drip line of the trees shall be kept to a minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- E7.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.
- E7.4 No separate measurement or payment will be made for the protection of trees.

E8. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

- E8.1 Further to CW 1130, 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/she is working near them. Any damage caused by the negligence of the Contractor or his/her Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at his/her own expense, to the satisfaction of the Contract Administrator.
- E8.2 Ambulance/ Emergency vehicle access must be maintained at all times.

E9. PROTECTION OF THE SURVEY INFRASTRUCTURE

- E9.1 Notwithstanding clause 4 "Persons and municipalities to protect Outline Monuments"; under <u>The Surveys Act</u>, of Manitoba, the Contractor shall be responsible to protect the Survey Infrastructure from damage as a result of the Work.
- E9.2 Further to C6.26 (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 204-918-1360 (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. 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.

E9.4 An approximate estimate of the cost to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors shall ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs. Where possible, amounts owed to the City in accordance with the above will be deducted from payments to be made by the City to the Contractor.

E10. SITE ENCLOSURES

- E10.1 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.
- E10.2 Site enclosures shall be considered incidental to the Contract Work.

SITE DEVELOPMENT

E11. EXCAVATION, REMOVALS, AND GRADING

- E11.1 DESCRIPTION
- E11.1.1 This specification shall amend and supplement CW 3110 and CW 3170. It shall cover the excavation and legal disposal of existing sand safety surfacing; excavation for new play areas; and site grading as per Drawings.
- E11.1.2 All extraneous materials are to be removed from the Site and disposed of in a safe and legal manner.
- (a) The Work to be done by the Contractor under this specification shall include all labour, equipment and material necessary for and incidental to the satisfactory performance and completion of the Work herein specified.
- E11.1.3 This Specification shall cover the removal of and disposal of all existing site elements, to build all work as shown on the Drawings, including, but not limited to:
 - (a) Limestone path and associated base material as required;
 - (b) Existing pea gravel and sand safety surfacing;
 - (c) Existing earth and sod material.
 - (d) Wood Bollards
- E11.1.4 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work hereinafter specified.
- E11.2 EQUIPMENT
- E11.2.1 All equipment shall be of a type approved by the Contract Administrator and shall be kept in good Working order.

E11.3 CONSTRUCTION METHODS

- E11.3.1 Excavation includes the removal of items (i.e. sand, earth) as indicated on the Drawings and as directed by the Contract Administrator. Work includes the satisfactory disposal of unsuitable Site material such as clays susceptible to frost-heaving, silts, rock, rubble, rubbish and any surplus suitable Site material.
- (a) Stockpile suitable, approved material on Site for reuse (clean topsoil, clean earth fill) in a secure location. Remove and dispose of unsuitable material.
- (b) Disposal of material shall be understood to mean the hauling of all unsuitable material from the Site and the unloading in a legal manner acceptable to the Contract Administrator. If

arrangements are made in advance excavated material may be disposed of on Site at a location designated by the Contract Administrator.

- (c) Contractor must coordinate with the Contract Administrator to ensure all removals have occurred.
- (d) Excavation should be coordinated with the installation of play equipment and safety surfacing so as not to leave an open excavation area subject to ponding water.
- (e) Excavate to the limits shown and as necessary to achieve finish grades as indicated on the Drawings:
 - (i) New Play Areas depth to accommodate required safety surfacing based on proposed play equipment, in accordance with Drawings and per E12;
- E11.3.2 Site Grading shall be as per Drawings.
- (a) The Contractor must ensure that the rough grading does not create tripping hazards and no areas of standing water remain. The mud grade of all excavated play areas must drain towards the subsurface drainage piping.
- E11.3.3 Do not disturb adjacent items designated to remain in place.
- E11.4 MEASUREMENT AND PAYMENT
- E11.4.1 Method of Measurement shall be as follows:
 - (a) Excavation will be measured on a square metre basis for:
 - (i) Item #1 "Remove and dispose of existing earth and playground surfacing for new and modified play areas" on Form B: Prices.
 - (b) The bidder must indicate for Item #1 on Form B: Prices the required quantity of units, dependent on the submission.
 - (c) Removals will be measured on a lump sum basis for:
 - (i) Item #2 "Remove and dispose of existing wood bollards and wood bollard wall" and item #3 "Remove and dispose of existing bench" on Form B: Prices
- E11.4.2 Method of Payment shall be as follows:
 - (a) Excavation, Removals and Grading will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. 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.
- E11.4.3 No payment will be made the Excavation and Grading for the new limestone path and base material as these items are incidental to E22.

E12. PROTECTIVE SURFACING AND SUB-SURFACE DRAINAGE

- E12.1 GENERAL DESCRIPTION
- E12.1.1 This specification shall cover the supply and install of wood fibre safety surfacing, gravel drainage course and associated sub-surface drainage.
- E12.1.2 OUTFALL AND RIPRAP
- E12.1.3 Description
 - (a) Outfall and Riprap to be installed to City of Winnipeg Specifications CW 3610 and SCD-612
- E12.1.4 WOOD FIBRE SURFACING
- E12.1.5 Description
 - (a) This specification shall cover the supply and installation of Wood Fibre Protective Surfacing within the Play Equipment Area.

- (b) This specification shall cover the supply and installation of Wood Fibre Protective Surfacing to drain externally as per Drawing SCD-650.
- (c) This specification shall cover the supply and installation of Multi-Flow Drainage and outflow as per Drawing SCD-659.

E12.2 MATERIALS

- (a) Wood Fibre product shall be either Zeager Woodcarpet or Fibar System 200 or 300 products or approved substitute in accordance with B6.
 - 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 200 or 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 under swings and the ends of slides.
- (c) Granular base for below engineered wood safety surfacing to be 19 mm diameter, clean crushed limestone regardless of which wood fibre product is used.
- (d) Non-woven Geotextile/Filter Fabric to be Armtec 200, or product supplied by engineered safety surfacing manufacturer or in accordance with section B7 Substitutes.

E12.2.1 CONSTRUCTION METHODS

- (e) Wood Fibre shall be installed within the play areas, as defined by the timber/concrete edging to a minimum depth of 300 mm (after compaction). In the case where proposed play equipment includes a maximum fall height greater than 2.4m (8'), depth of material to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications.
- (f) The installation of the Wood Fibre shall be done immediately after the play equipment has been installed.
- (g) 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.
- (h) Subsurface drainage lines shall be graded to drain to the existing catch basin. The cost for the underground drainage line, gravel base and surface repairs shall be included in the price for the wood fibre supply and installation.
- (i) 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.

E12.3 SUB-SURFACE DRAINAGE

E12.3.1 DESCRIPTION

(a) This Work shall consist of providing and placing a geo-composite prefabricated drain system as required in the design submission and as described on the drawings and herein. Drainage system shall be installed in accordance with these specifications and in close conformity with the locations and dimensions as shown on the plans or specified by the Contract Administrator. The quantities of drain as shown may be increased or decreased at the direction of the Contract Administrator based on actual Site conditions that occur during construction of the project. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the Work.

E12.3.2 MATERIALS

- (a) Drainage pipe shall be Multi-Flow, or 100 mm perforated pvc pipe or approved substitute in accordance with B6. If Multi-Flow pipe use 150 mm (6") wide strips. The manufacturer will size and approve all fittings for use with Multi-Flow or approved substitute drainage pipe. The Multi-Flow pipe may be installed horizontally.
- (b) The drain conduit shall be of flexible, prefabricated, rounded rectangular shaped, composite product. The drain conduit will be wrapped with a non-woven geotextile and will be a non-woven needle-punched construction and consist of long-chain polymeric fibres composed of polypropylene, polyethylene or polyamide. The fibres will be oriented into a multi-directional stable network whereby they retain their positions relative with each other and allow the passage of water as specified. The fabric will be free of any chemical treatment or coating, which reduces permeability and will be inert to chemical commonly found in soil. The geotextile will conform to the following minimum average roll values.

E12.4 MEASUREMENT AND PAYMENT

- E12.4.1 Method of Measurement shall be as follows:
 - (a) Protective surfacing will be measured on a square metre basis for:
 - (i) "Supply and install Wood Fibre Protective Surface with Multi-flow subsurface drainage" on Form B: Prices.
 - (b) The bidder must indicate for Item #4 on Form B: Prices the required quantity of units, dependent on the submission.
 - (c) Riprap and Outfall will be measured on a lump sum basis for:
 - (i) Item #5 "Supply and Install Outfall and Riprap. Connect to existing ditch and drainage system"
- E12.4.2 Method of Payment shall be as follows:
 - (a) Protective Surfacing will be paid for at the Contract Unit Prices. The amount to be paid for shall be the total number of units, as indicated on Form B: Prices. 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

Weight	ASTM D-3776	3.0 - 4.0
Tensile Strength	ASTM D-4632	100 - 130
Elongation %	ASTM D-4632	50 - 70
Puncture, lb	ASTM D-751	35 - 60
Mullen Burst, psi	ASTM D-3786	110 - 215
Trapezoidal Tear, lb	ASTM D-4533	40 - 42
Coefficient of Permeability	ASTM D-4491	.24 cm/sec
Flow Rate, gpm/ft2	ASTM D-4491	100 - 140
Permittivity, 1/sec	ASTM D-4491	1.3 – 2.0
Apparent Opening Size	ASTM D-4751	60/70 Max. US Std
		Sieve Opening

Seam Strength, lb/ft	ASTM D-4595	100
Fungus	ASTM G-21	No Growth

(b) The drainage core shall be made of a high-density polyethylene. The core shall be constructed using interconnected corrugated pipes that define and provide the flow channels and structural integrity of the drain. The geotextile shall function only as a filter. The core of the edge drain shall conform to the following physical property requirements.

Thickness, inches	ASTM D-1777	1.0
Flow Rate, gpm/ft*	ASTM D-4716	29
Compressive Strength, psf	ASTM D-1621 (modified	6000
	sand method)	
Pipe Stiffness, pii	ASTM D-2412	100

* At gradient = 0.1, pressure = 10 psi for 100 hours.

- (c) Fittings
 - (i) The fittings used with the edge drain shall be of a snap together design. In no case shall any drainage product be joined without the use of the manufacturers connector designed specifically for the purpose. Cleanouts will be provided as indicated on the drawing.

E12.4.3 Backfill for Trenches

(a) Backfill will be coarse sand whose particle size is defined as less than 5% retained on a # 10 screen and less than 5% passing through a # 30 (US Std Sieve) In no case will more than 1% pass a # 60 screen.

E12.4.4 CONSTRUCTION METHODS

- (a) The layout of the sub-drain is to be marked on Site and approved by the Contract Administrator. Trenches shall be a min. 150mm in width. The trenches are to be installed to drain the water to the existing catch basin.
- (b) Sub-drain is to be laid on the prepared surface to facilitate cross movement of water. Sub-drain shall be installed below geotextile and in conformance with details provided. The sub-drain shall be sloped working from the low end of the side by the concrete catch basin and sloping upwards towards the play area.
- (c) Contractor is to protect sub-drain from excessive weight during the duration of construction and to repair and make good any pipe collapsed prior to acceptance.
- (d) Fittings for the drain will be installed in accordance with the manufacturer's recommendations and Specification.
- (e) Any damaged edge drain or outlet lateral will be replaced or repaired by splicing in an undamaged section of drain at the Contractor's expense. The repair must be in accordance with the manufacturer's specification and to the satisfaction of the Contract Administrator.
- (f) Outlet ends of drainage pipe shall have the geotextile fabric trimmed off flush with the drainage pipe to prevent vandals from pulling the pipe out of the ground.
- (g) Connection of Subdrain to Existing Catchbasins
 - (i) Connect drainage pipe to existing catchbasins as shown on the Drawings or as directed by the Contract Administrator.
 - (ii) Cut neat hole in wall of catchbasin to a maximum of 25 millimetres larger than the outside diameter of the drainage pipe.
 - (iii) Ensure drainage pipe does not protrude more than 150 millimetres beyond inside wall of catchbasin.
 - (iv) Grout connection of drainage pipe to catchbasin with cement patching compound to form a watertight and structurally sound connection.

(v) No bends greater than 45° will be permitted to alter the grade or alignment of the drainage pipe for the catch basin connection.

E12.5 MEASUREMENT AND PAYMENT

E12.5.1 No payment will be made the Multi-Flow subsurface drainage material as these items are incidental to E24.

E13. SITE FURNITURE

E13.1 GENERAL DESCRIPTION

- E13.1.1 The Work of this section comprises the furnishing of all labour, equipment and materials required to complete the supply and installation of site furniture as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
 - (a) Pick up and installation of 'Tache' style benches;
 - (b) Pick up and installation of existing playground Store Panels including new foundations
- E13.1.2 Store units in a protected location, immediately upon arrival on the Site.
- E13.1.3 Remove from Site any units which have been damaged during transportation and replace.
- E13.2 MATERIALS
- E13.2.1 Park Bench on asphalt path to be in-ground mounted Tache Bench Composite with Arms as per City of Winnipeg detail SCD-121A. Please email: <u>pwd-cps-orderdesk@winnipeg.ca</u>
- E13.2.2 Park Bench on wooden dock to be surface mounted Tache Bench Composite with Arms as per City of Winnipeg detail SCD-121A Please email: <u>pwd-cps-orderdesk@winnipeg.ca</u>

E13.3 CONSTRUCTION METHODS

- E13.3.1 Install in-ground mounted park benches as per City of Winnipeg detail SCD-121A.
- E13.3.2 Install surface mounted park benches on dock. Contractor to provide mounting details to Contract Administrator to be reviewed and approved by City of Winnipeg.
- E13.3.3 Install Store panels including new concrete bases. Refer to E18. Contractor to provide installation details to Contract Administrator to be reviewed and approved by City of Winnipeg.

E13.4 MEASUREMENT AND PAYMENT

- E13.4.1 Park benches shall be measured and paid on a per unit basis for "Pick up and install 'Tache' bench". The number to be paid shall be the total number of units installed in accordance with the Drawings and Specifications and as measured and accepted by the Contract Administrator.
- E13.4.2 Store Panels shall be measured and paid on a per unit basis for "Pick up and install existing store panels". The number to be paid shall be the total number of units installed in accordance with the Drawings and Specifications and as measured and accepted by the Contract Administrator.

E14. LIMESTONE BLOCKS- DRY LAID ROCK

E14.1 GENERAL DESCRIPTION

- E14.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified, including, but not necessarily confined to the following:
 - (a) Install Limestone Block Steps
- E14.3 Reference Standards

- (a) City of Winnipeg Specification CW3110 Sub-Grade, Sub-Base and Base Course Construction
- (b) City of Winnipeg Specification CW3130 Supply and Installation of Geotextile Fabrics
- E14.4 MATERIALS
- E14.4.1 Limestone blocks to be locally sourced- Minimum 500mm x 500mm x125mm in size
- E14.5 CONSTRUCTION METHODS
- E14.6 Grade existing soil, eliminating uneven areas and low spots, ensuring positive drainage with minimal disturbance of existing trees. Remove debris, broken roots, branches, stones in excess of 50mm diameter and other deleterious materials. Remove subsoil that has been contaminated with oil, gasoline or calcium chloride. Dispose of removed materials as off site.
- E14.7 Install limestone blocks on granular base and non-woven geotextile fabric as per locations and details shown on the drawings.
- E14.8 MEASUREMENT AND PAYMENT
- E14.8.1 The Limestone Blocks will be measured and paid for on a lump sum basis for:
 - (a) Supply and install limestone blocks c/w base course and non-woven geotextile
- E14.8.2 No measurement and payment will be made for excavation, removal, disposal, rough grading, supply and installation of granular base courses, non-woven geotextile fabric and compaction as these items are incidental to this specification.

E15. LANDSCAPE ROCK- PLAYGROUND EDGE

- E15.1 Scope Of Work
- E15.1.1 The following list generally describes the scope of this Section:
 - (a) Supply and install rock boulders for playground edge
- E15.2 Samples
- E15.2.1 Submit to the Contract Administrator samples of the following materials:
 - (a) Rock: 1 -350mm-450mm O.D.
 - (b) Non-woven Geotextile: 1 sq.m
- E15.3 Products
- E15.3.1 Limestone and granite rock to be from a Manitoba quarry, colour to be approved by Contract Administrator. Match existing on site. Size range to be: 350mm-450mm O.D. – 50% 550mm-600mm O.D. – 40% 650mm-800mm O.D. – 10%
- E15.4 Subgrade Inspection
- E15.4.1 Verify grades of compacted subgrade (to 95% SPD) and adjacent features for conformity with existing grades before placing boulder.
- E15.4.2 Remove and dispose of unsuitable subgrade material as directed by Contact Administrator.
- E15.5 Placement and Compaction of Landscape Rock
- E15.5.1 Place landscape rock in locations specified by Contract Administrator for use as retaining wall. Install as per Drawings to fill in gaps around playground edge where boulders may have been removed. Supply and install non-woven geotextile beneath landscape rock. The cost to supply and install geotextile is incidental to the Work in this section.

- E15.5.2 Excavate and backfill with compacted granular base around boulder. Tamper down in 150mm lifts and compact to 95% SPD. Supply and installation of granular base is incidental to the Work in this section.
- E15.6 Method of Measurement
- E15.6.1 Rock Boulders shall be measured on a volume basis. The items to be paid for shall be the total cubic metres that are placed in the completed Work in accordance with this specification, acceptable to the Consultant.
- E15.7 Basis of Payment
- E15.7.1 Rock Boulders will be paid for at the Contract Unit Price per cubic metre for "Supply and Install Rock Boulders for playground edge", measured as specified herein, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work included in this specification.

E16. WOOD DECKING

- E16.1 Description
- E16.1.1 In general Works are applicable to a wood dock and ramp structure.
- E16.2 References
 - (a) CSA B111-1974 Wire Nails, Spikes and Staples.
 - (b) CAN/CSA-O80 Series-97 (R2002) Wood Preservation.
 - (c) CAN/CSA-O80.20-97 Fire-Retardant Treatment of Lumber by Pressure Processes.
 - (d) CAN3-O86-M84 Engineering Design in Wood (Working Stress Design).
 - (e) NLGA Standard Grading Rules for Canadian Lumber-2003
- E16.3 Quality Assurance
- E16.3.1 Lumber identification: by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.
- E16.4 Setting Out of Work
- E16.4.1 Contractor shall provide a layout of Work on Site for review and approval by Contract Administrator prior to construction.
- E16.4.2 Contractor shall be responsible for setting control and completing all grading, alignment and other Work executed under this Contract to all lines, elevations, reference points and measurements based on plans, specifications, basic control points and benchmark(s) as shown on the Drawings.
- E16.4.3 Contractor shall employ competent person(s) to lay out Work.
- E16.4.4 Contractor shall rectify all errors in position, levels, alignment or dimensions at no cost to the City.
- E16.5 Cutting, Fitting and Patching
- E16.5.1 Execute cutting, fitting and patching required to make Work fit properly together.
- E16.5.2 Make cuts with clean, true, smooth edges. Make patches inconspicuous in final assembly.
- E16.5.3 Prevent electrolytic action between dissimilar metals. Use non-corrosive fasteners, anchors and spacers for securing Work.
- E16.5.4 Space anchors within limits of load bearing or shear capacity and ensure that they provide positive permanent anchorage.

- E16.5.5 Keep exposed fastenings to minimum, space evenly and lay out neatly.
- E16.5.6 Fastenings which cause splintering or cracking of material to which anchorage is made are not acceptable.
- E16.6 Work
- E16.6.1 Do Work in accordance with rules and regulations of authorities having jurisdiction
- E16.6.2 Employ qualified tradesman for all Work.
- E16.6.3 Install all vertical members true and plumb.
- E16.7 Codes and Standards
- E16.7.1 Perform Work and obtain permits in accordance with the National Codes of Canada and any other code of provincial or local application. In any case of conflict or discrepancy the more stringent requirements shall apply.
- E16.7.2 Obtain permits and complete Work to meet or exceed the requirements of standards, codes and other documents referred to in this specification.
- E16.7.3 Where the specifications contained herein are more stringent than the applicable code or standard utilize the most stringent.
- E16.7.4 When requested by Contract Administrator, submit proof that materials or Workmanship, or both, meet or exceed requirements of referenced codes or standards.
- E16.7.5 Where a standard or code of any type is referred to anywhere in the document, the standard or code utilized for all Work shall be the most recent whether or not the most recent is specifically shown or listed.
- E16.8 Shop Drawings
- E16.8.1 Submit shop drawings to Contract Administrator stamped and signed by Structural Engineer licenced to practice in the Province of Manitoba
- E16.9 Materials
- E16.9.1 All materials as shown on the drawings and approved shop drawings.
- E16.9.2 Wood Decking: to NGLA standard Grading Rules for Canadian Lumber Select Grade, AC2 Pressure Treated Spruce, 38x140mm laid with 3mm (1/8") gap between boards.
- E16.9.3 Joists: to be of NGLA standard Grading Rules for Canadian Lumber Select No. 1 Structural Grade, Pressure Treated Spruce, 38x89mm size.
- E16.9.4 Screws: to CSA B111, hot dipped galvanized finish; sizes as recommended in CAN3-086.
- E16.10 Construction
- E16.10.1 Set pressure treated posts into pre-drilled holes and backfill with granular base course as indicated in the Drawings
- E16.10.2 Install pier on pressure treated posts as indicated in the Drawings
- E16.11 Field Quality Control
- E16.11.1 Testing moisture content of delivered material will be by moisture meter with adjustments for species and temperature.
- E16.11.2 Costs of tests will be at Contractors expense as part of bid price for Work under this section.
- E16.12 Cleaning
- E16.12.1 Remove tool marks, bruises, and scratches.

E16.13 Method of Measurement

- E16.13.1 Supply and Install wooden dock and ramp will be measured on a lump sum basis. The number of each item to be paid for will be the total number supplied and placed in accordance with this Specification and accepted by the Contract Administrator, as measured by the Contract Administrator.
- E16.14 Basis of Payment
- E16.14.1 Supply and install wooden dock and ramps will be paid for at the Contract Lump Sum Price for 'Supply and install wooden dock and ramp', measured as specified herein, which price shall be payment in full for completing all operations herein described and all other items incidental to the Work included in this Specification.

PLAY EQUIPMENT

E17. PLAY EQUIPMENT

- E17.1 This specification shall cover the supply and installation of the Play Equipment as listed below and specified herein.
- E17.2 Products and supply and installation of the Play Structure in accordance with E1.1 Applicable Specifications and Drawings
 - (a) Proponents are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B7.
 - (b) Further to CW 1110 Shop drawing shall be submitted to the Contract Administrator for all the play equipment specified herein.
- E17.3 This specification shall cover the supply and installation of the Play Equipment in accordance with E1.1 Applicable Specifications and Drawings.
- E17.4 The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work in accordance with E1.1 Applicable Specifications and Drawings.
- E17.5 The Contractor shall obtain all approvals including permit if required.
- E17.6 Play Area:
 - (a) Play areas are separated into three (3) zones: The junior area is designed for children aged 18 months to 5 years, the intermediate is designed for ages 2-12 and the senior area is designed for children aged 5-12 years. All areas are to consist of independent components that are geared towards these ages.
 - (b) Play equipment must provide the following play activities:
 - (i) Sensory & Imaginative Play;
 - (ii) Climbing and Crawling;
 - (iii) Riding;
 - (iv) Balancing;
 - (v) Hanging;
 - (vi) Motion (Spinning, Swinging); and Sliding.
 - (c) The design submission shall be evaluated as per B19 and include the following elements:
 - (i) The Junior play area must include one (1) riding/ see-saw element;
 - (ii) The Junior play area must include one (1) play structure to include a Slide element, sensory elements and climbing/ gathering elements;
 - (iii) The Intermediate play area must include three (3) spinning elements;
 - (iv) The Intermediate play area must include two (2) riding elements;

- (v) The Senior play area must include one (1) climbing/ boulder element;
- (vi) The Senior play area must include three (3) balance beam/ log elements;
- (vii) The Senior play area must include one (1) challenge circuit system which shall include one (1) balance element, one (1) climbing element, two (2) hanging elements and one (1) stepping element.
- (d) If a play structure is proposed, it shall include 1 (one) transfer station for access of adult caregiver or reduced mobility access;
- E17.7 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 shall be indicated in the Bid Submission.
- E17.8 Components which are unacceptable are the following:
 - (a) Wooden structures;
 - (b) Tube (enclosed) slides and enclosed crawl tubes;
 - (c) Play panels with many small moving parts;
 - (d) Talk Tubes;
 - (e) Barrel rollers; and
 - (f) Large number of plastic components.
 - (g) Dish Swing
- E17.9 Components which are generally **not accepted but may be considered** are the following:
 - (a) Cable rides;
 - (b) Sand diggers;
 - (c) Merry-go-rounds; and
 - (d) Tire Swings.
- E17.10 Playstructures
- E17.10.1 General Description
 - (a) If a Playstructure is specified, this specification shall cover the supply and installation of it.
 - (b) Play equipment shall be installed in the play areas as shown on the attached Drawing. The play equipment and their safety zones should fit into the proposed play areas. Efficiency and good use of space will be considered in the evaluation of submissions.
- E17.10.2 Materials
 - (a) Posts / Caps
 - (i) All posts shall be a minimum 127 mm (5") O.D. round or 100 mm (4") square tubing for a post and deck structure.
 - (ii) 89 mm (3.5") O.D. round or 73 mm (3") square tubing will be permitted in circumstances where a multi-deck structure has decks of varied heights which are all under 1220 mm (4'-0"), or for structures with 2 decks or less.
 - (iii) All posts shall be fabricated from either aluminum 3 mm (0.125") 11 ga min. wall thickness or galvanized steel 3 mm (0.120") 11 ga 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) In the case of a deckless structure, a minimum size of 60 mm (2 3/8") O.D. round posts fabricated out of steel or aluminum is acceptable.

- (v) 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).
- (vi) 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 1830 mm (6'-0").
- (c) Clamping System
 - (i) 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.
- (d) Handrails, Safety Rails and Handloops (if applicable)
 - All handrails, safety rails and handloops shall be fabricated using a minimum of 24 mm (15/16") O.D. with 3 mm (0.120") 11 ga min. 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 socketed and tamper proof in design and requiring special tool
 - (ii) Hardware shall either be carbon steel plated with zinc/nickel and iridescent chromate finish or stainless steel.
 - (iii) 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) A minimum of one stainless steel slide is required, north or east orientation is preferred.
- (h) Each play structure shall have kick plates and hand loops as required to meet the current version of the Canadian Standards Association (CSA) Standards.
- E17.10.3 Installation
 - (a) Play equipment shall be installed as per manufacturer's specifications and in accordance with the most recent Canadian Standards Association Standards within the designated play equipment area on the drawings.
 - (b) All posts and other vertical items shall be plumb and true to vertical, if so designed.
 - (c) One play equipment installer on site, at minimum, must be a valid Canadian Certified Playground Inspector.
 - (d) All decks shall be level, if so designed.
- E17.11 Independent Components
- E17.11.1 General Description

- (a) The Contractor shall furnish all labour, materials, equipment and services necessary to complete the Work according to the specifications.
- (b) This specification shall cover the supply and installation of Independent Components as specified herein.
- (c) Independent Components shall be installed as per the proposed design, as the proposed budget will allow.
- (d) Independent Components shall be installed in the available areas as shown on Drawings. The Components and their safety zones shall fit into the proposed play area.

E17.11.2 Materials

- (a) All materials shall be structurally sound and suitable for safe play. Durability shall be ensured on all parts and materials.
- (b) There shall be a minimum (or no) amount of hollow plastic components. Solid plastic is acceptable.
- (c) There shall be a minimum amount of solid elements which limit visibility through the Site.
- (d) Fasteners
 - All hardware shall be socketed and 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.
- (e) Finishes
 - (i) 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.
- (f) Slides
 - (i) 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 1220 mm (4'-0") high is proposed, support posts shall be minimum 127 mm (5") O.D.
 - (ii) Tube (enclosed) slides and plastic spiral slides will not be accepted.
- (g) Foundations
 - (i) Shall be as per E18.1.
- (h) Natural Play Elements
 - (i) Acceptable natural play elements include wood stumps, wood logs, boulders etc.

E17.11.3 Installation

- (a) Independent components shall be installed as per manufacturer's specifications and in accordance with the most recent Canadian Standards Association Standards within the designated play equipment area on the Drawings.
- (b) All posts and other vertical items shall be plumb and true to vertical, if so designed.
- (c) One play equipment installer on site, at minimum, must be a valid Canadian Certified Playground Inspector.
- (d) All decks shall be level, if so designed.
- E17.12 Cleaning as per D23.
- E17.13 Method of Measurement and Basis of Payment
- E17.13.1 Method of Measurement shall be as follows:
 - (a) Play Equipment shall be measured on a lump sum basis for:

(i) "Playground Equipment" on Form B: Prices

E18. FOUNDATIONS

- E18.1 General Description
- E18.1.1 All playground equipment posts, bases and anchors are to be set in concrete footings or piles to ensure stability and prevent frost heaving. An alternative to concrete footings or piles that may be approved includes a welded and secured rail mounting system. The current Standard Construction Specifications of the City of Winnipeg, CW 2160 –latest revision Concrete to be used in Underground Works, is to be utilized in the installation of the concrete works for all below ground components.
- E18.2 Materials
- E18.2.1 The specific concrete requirements shall be:
 - (a) Sulphate 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.
- E18.3 Installation
- E18.3.1 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.
- E18.3.2 All concrete footings for play equipment shall be a minimum of 914mm (3') depth, or in accordance with Manufacturer's specifications, whichever is greater.
- E18.4 Method of Measurement and Basis of Payment
- E18.4.1 Method of Measurement shall be as follows:
 - (a) Foundations shall be incidental to the measurement of Play Equipment listed above and as shown on Form B: Prices.
 - (b) Foundations shall be incidental to the measurement included in Item #13 "Pick up and install existing store panels on new foundations" shown on Form B: Prices. Refer also to E13
- E18.4.2 Basis of Payment shall be as follows:
 - (a) No separate payment shall be made for play equipment foundations.

TREE PLANTING

E19. TREE PLANTING GENERAL

- E19.1 This specification shall cover the supply and installation of nursery grown trees in accordance with the working drawings and the Contract documents on all properties that are owned by, or under the jurisdiction of, the City of Winnipeg.
- E19.2 It is understood that the Contract Administrator shall consult with the City Forester on matters which do not conform to, or which are not addressed by, these Specifications or the associated reference documents identified in E1.

E20. TREE PLACEMENT AND LAYOUT

- E20.1 Tree placement locations are to be determined on site by the Contract Administrator or designate.
- E20.2 For Boulevard Trees, locations shall be in compliance with Boulevard Tree Planting Guidelines,
- E20.3 The Contractor shall obtain all necessary utility clearances prior to the commencement of planting and in a timely manner so as not to jeopardize the schedule of the complete tree planting operation.
- E20.4 The Contractor is to comply with the instructions on the utility clearance sheets.

E20.4.1 Where a specified tree placement location conflicts with underground utilities, the Contractor may modify the precise location in compliance with the utility clearances and the following Minimum Distance Guidelines: (see also Clause 4 of the *Boulevard Tree Planting Guidelines*):

- (a) Street Intersections: 6m
- (b) Private approaches: 1.5m;
- (c) Light standards, hydro poles, hydrants, manholes and sewer grates: 3m
- E20.5 Where a tree placement location must be modified by more than 1 metre, the Contractor must receive prior approval from the Contract Administrator or designate.

E21. SUPPLY AND PREPLANTING CARE OF TREES

- E21.1 The Contractor shall be responsible for supplying and transporting trees to the appropriate placement locations.
- E21.2 The Contractor shall coordinate the shipping of trees and excavation of tree pits to ensure no more than a maximum of a 24 hour time lapse has occurred between the plant material arriving on Site and the installation of that plant material.
- E21.2.1 Trees shall be transported with care taken to prevent damage:
 - (a) Protect trees against abrasion, exposure and extreme temperature change during transit
 - (b) Avoid binding of trees with rope or wire that would damage bark, break branches or destroy natural shape of tree;
 - (c) Point of contact with equipment shall be padded;
 - (d) Give full support to root ball of trees during lifting:
 - (i) Each balled specimen shall be handled with sufficient care, so that the root balls shall not be broken;
 - (ii) Broken root balls or root ball consisting of loose soil will not be accepted and shall be replaced;
 - (iii) Broken roots of deciduous stock shall be pruned back prior to planting.
- E21.2.2 Trees with broken or damaged trunks or branches are not acceptable. Trees with damaged trunks, however caused, will be rejected. No exceptions shall be made in this respect.
- E21.2.3 Keep roots moist and protected from sun and wind:
 - (a) Trees that cannot be planted immediately shall be well protected against damage and drying out; if necessary, trees shall be heeled-in in a shaded area and watered well.

E22. LOCATION AND SCHEDULE OF WORK

- E22.1 The Contractor's operations shall be limited to the minimum encroachment on private properties necessary for undertaking the Work.
 - (a) The Contractor shall be responsible for all damage resulting from Work on or over private property.
- E22.2 The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress are maintained to residences.
- E22.3 The Contractor shall promptly report any delay or change that may affect an agreed commencement and/or completion date to the Contract Administrator.

E23. TREE PLANTING MATERIALS

- E23.1 General
- E23.1.1 The Contractor shall be responsible for the supply of:
 - (a) Plant material,
 - (b) The safe handling, pickup and delivery of trees to the planting Sites,
 - (c) The supply of soil, water, trunk protection, and tree supports as set forth in these Specifications.
 - (i) Further to (a), the City of Winnipeg may, at its option, supply the plant material. If the City is supplying the trees, this shall be reflected in the bid price.
 - (ii) The City shall indicate who is to supply the trees in Form B: Prices of this contract document.
- E23.1.2 All materials supplied by the Contractor under these Specifications shall be subject to random inspection and testing by the Contract Administrator.
 - (a) The Contract Administrator may reject any material(s) that do not comply with this specification.
 - (b) There shall be no charge to the City for any material samples taken for testing by the Contract Administrator.

E23.2 Trees

- (a) Trees shall be of the species and sizes noted in *Acceptable Tree Species for Boulevard Planting.* Plant material which does not have the caliper or root ball diameter specified will be rejected.
- (b) All nursery stock supplied shall be from a Canadian prairie nursery grown root or seed stock. Quality shall be in accordance with the *Acceptable Tree Species for Boulevard Planting*.
- (c) Any nursery stock dug from native stands, wood lots, orchards or neglected nurseries and which have not received proper cultural maintenance as advocated by the Canadian Nursery Landscape Association shall be designated as "collected plants". The use of "collected plants" will not be permitted unless approved by the Contract Administrator.
- (d) The Contract Administrator reserves the right to inspect the plant material at their original source, and to instruct the supplier on root and branch pruning requirements.
- (e) Nomenclature of specified nursery stock shall conform to the International Code of Nomenclature for Cultivated Plants and shall be in accordance with the approved scientific names given in the latest edition of Hortus Third. The names of varieties not named therein are generally in conformity with the names accepted in the nursery trades.
- (f) Plants larger than specified may be used if approved by the City Forester or designate. The use of such plants shall not increase the Contract price.

- (g) All nursery stock shall be measured when the branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from branch tip.
- (h) Where trees are measured by caliper (cal.), reference is made to the diameter of the trunk measured 150 mm above ground as the tree stands in the nursery.
- (i) All nursery stock shall be well branched, true to type, structurally sound, possess a welldeveloped, undamaged root system and shall be free of disease, insect infestations, rodent damage, sunscald, frost cracks and other abrasion or scar to the bark. All parts of the nursery stock shall be moist and show live, green cambium when cut.
- (j) All trees shall have one only, sturdy, reasonably straight and vertical trunk and a wellbalanced crown with fully developed leader. All evergreens shall be symmetrically grown and branched from ground level up, and must be balled and burlapped unless noted otherwise on the plant list.
- (k) At least one plant of each variety supplied shall bear a tag showing both the botanical and common name of the plant.
- (I) Protection of Stock
 - (i) All nursery stock shall be well protected from damage and drying out from the time of digging until the time of planting on site. All roots shall be cleanly cut; split roots are not acceptable.
 - (ii) Nursery stock shall be transplanted with care to prevent damage. Points of contact with equipment shall be padded. All nursery stock, which cannot be planted immediately upon arrival at the site, shall be well protected to prevent drying out and shall be kept moist until commencement of planting.
- (m) All nursery stock is to meet the requirements of this specification regardless as to whether it is supplied by the City or the Contractor.

E23.3 Planting Soil

- (a) The planting soil shall be topsoil that complies with CW 3540, Section 5.2.
 - (i) Further to CW 3540 Section 5.2, planting soil shall contain maximum ten percent (10%) organic matter (peat, rotted manure or composted material).
- (b) At the discretion of the Contractor Administrator, planting soil may be subject to tests for nitrate, phosphate, potassium, sulphate, pH, E.C. (salinity), and volume of organic matter, by a testing laboratory designated by the Contract Administrator.
- (c) The Contract Administrator reserves the right to reject planting soil not conforming to the requirements of these Specifications.

E23.4 Water

- (a) The Contractor shall provide water, so that:
 - All costs to provide water for the watering operation and all associated costs shall be borne by the Contractor. These costs may include hydrant permit and meter rental fees.
 - (ii) Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.
- (b) Water shall be free of oils, acids, alkalis, salts and other substances that may be detrimental to plant growth. Water suitable for human consumption shall be acceptable without testing.
- (c) Water from rivers and streams shall not be used without prior approval of the Contract Administrator.
- (d) Should the Contract Administrator determine that water quality testing is necessary, and approved testing laboratory shall perform the test at the sole expense of the Contractor.

E23.5 Trunk Protection and Tree support

- (a) Upon completion of the planting operation, the Contractor shall install trunk protection by slicing open a 100 mm diameter x 600 mm long section of plastic weeping tile material and placing it around the base of each tree trunk.
- (b) Tree support stakes shall be T-rail iron stakes 40 x 40 x 5 x 1540 mm long, primed with 1 brush coat of zinc rich plant paint to CGSB 1-GP-191B. Stakes shall be uniform in style and colour.
- (c) Other products may be used with prior permission in writing from the Contract Administrator.
- (d) The guying straps shall be attached in accordance with the drawings referenced in E1.4 and shall be of a material that is non-abrasive to the tree to prevent girdling injury:
 - (i) Hose-covered wire, flexible belting or any strong, soft wide strips of material is acceptable.
- (e) Where wire is used, ensure ends are twisted tight
 - (i) Protruding ends are unacceptable.

E23.6 Mulch

- (a) The Contractor shall provide mulch. Mulch shall:
 - (i) be a clean bark or wood chip with minimal amount of leaves, branches and other extraneous matter; and
 - (ii) not contain adhesives, wood preservatives or any other chemical contaminants, and
 - (iii) consist of chips not less than 15 mm nor larger than 75 mm in size and not more than 20 mm thick.

E24. PLANTING PERIOD

- E24.1 The Contractor shall not plant trees during periods of extreme heat, at the discretion of the Contract Administrator.
 - (a) The City of Winnipeg reserves the right to refuse acceptance of any or all trees failing to meet the above timing restrictions

E25. PLANTING

- E25.1 The Contractor is expected to plant trees as follows:
 - (a) all trees shall be set plumb and shall be placed in the centre of the tree pit;
 - (b) Trees shall be placed on undisturbed soil and to a depth equal to that at which they were originally growing at the nursery, such that the first order of roots are just below grade.
 - (c) once the tree has been set in its final position, burlap on the root ball shall be cut from the top 1/3 of the root ball:
 - (i) If a wire basket has been used, it shall be folded back or cut off from the top of the root ball.
 - (ii) All twine shall be removed from the root ball.
 - (d) after the root ball is prepared, fill tree pit with planting soil as per E23.3, in layers of 150 mm depth and compact the independent layers of soil by tamping
 - (e) tamp soil around root system to eliminate air voids;
 - (f) grade the area around the tree according to the drainage type; and
 - (g) All planting areas shall be levelled, raked and edged to give a neat appearance.
- E25.2 Upon completion of the planting operation, the Contractor shall:

- (a) install tree trunk protection (as per E23.5(a) around the base of each tree trunk);
- (b) install stakes and straps (see E23.5(b) through E23.5(e)), if deemed necessary;
- (c) if, upon inspection by the Contract Administrator or designate, it is determined that a stake is necessary (e.g. excessive wind) the Contractor shall be responsible for installing the stake and strap as requested;
 - (i) Avoid damaging root ball with stake.
- (d) form a water dish from the soil around the outside edge of the root ball with a berm 100 mm in height:
 - (i) Soil shall not be piled around the tree trunk.
- (e) Install mulch (as per E23.6);
- (f) administer watering:
 - watering must be done slowly to ensure that water does not run away from the root zone and so the top 300 mm of the soil around the root system of the tree are well saturated;
 - (ii) use a low-pressure open flow nozzle and hose; and(iii) The water stream must not gouge out a hole in the soil or mulch.

E26. LONG TERM MAINTENANCE OF NEW TREE PLANTINGS

- E26.1 GENERAL
- E26.1.1 The Contractor shall be responsible for the maintenance of all plant material for a period of two (2) years, or as specified in the Development Agreement, from date of acceptance. Plant material shall be accepted to start warranty when installation in accordance with the Drawings and Specifications is complete and there is no sign of wilting, chlorosis, pest infestation, transplant shock or any conditions deleterious to longevity and appearance. Defective plants shall be replaced within thirty (30) days of notification to the Contract Administrator and shall be further maintained for the established maintenance period.
- E26.1.2 The Contractor shall furnish all labour, materials, equipment and services necessary to perform ongoing care of the plant material, which shall include but not be limited to:
 - (a) Mulching, in accordance with E23.6 and E14.1(d);
 - (b) Watering, in accordance with E23.4 and E14.1(e);
 - (c) Weed Control, in accordance with E26.1(f).

E26.2 METHODS

- E26.2.1 The Contractor shall:
 - (a) program the timing of operations to plant growth, weather conditions and use of the Site;
 - (b) do each operation continuously and complete within a reasonable time period;
 - (c) store equipment and materials off-site;
 - (d) add additional mulch as required to maintain minimum constant depth of mulch;
 (i) clean up edges and contain mulch within the designated area;
 - (e) water trees as follows:
 - (i) immediately upon being planted and every week for the first three (3) weeks after planting;
 - thereafter, watering shall be done every 7 14 days between May and October or as frequently as necessary (compensating appropriately for weather) to sustain vigorous plant growth;

- (iii) by watering slowly to ensure that water does not run away from the root zone and so the top 300 mm of soil around the root system of the tree is well saturated;
- (iv) by using a low pressure open flow nozzle and hose. The water stream must not gouge out a hole in the soil or mulch;
- (v) by using the recognized standard for tree watering as approximately 8-10 times during the growing season with the following amounts of water depending on the caliper of the tree – the rule of thumb is 40 litres of water per 25 mm caliper;
- (vi) by recognizing watering requirements of trees are dependent upon on a number of variables such as tree species, soil type, when planted, and weather including precipitation. These watering requirements are a minimum standard and shall be followed unless otherwise directed by the Contract Administrator or designate.
- (vii) by applying a final watering for all trees, regardless of when planted, that shall be completed after temperatures fall below freezing to ensure adequate moisture in root zone at freeze-up;
- (f) maintain surface of tree pit by hand weeding during the watering process as follows:
 - (i) do not allow weeds to establish for a period longer than two (2) weeks; and
 - (ii) do not use any herbicides for weed control near trees unless authorized by the Contract Administrator.
- E26.2.2 The Contractor must inform the Contract Administrator of watering progress and schedule by 9:00 AM each day of watering.
- E26.2.3 The Contractor must inform the Contract Administrator immediately of any equipment breakdown or delay in watering and maintenance. Once a watering cycle is completed, submit a log-sheet to the Contract Administrator identifying the following:
 - (a) the location where maintenance Work is carried out; and
 - (b) Preventative or corrective measures required which are outside Contractors' responsibility.
- E26.2.4 Any trees planted to replace trees that have died during the maintenance period will receive full 2 years maintenance from the date that the replacement tree was accepted.

E27. TREE PROTECTION/ SUPPORT

- E27.1 Ensure trunk protection collars (weeping tile) and tree supports (staking) are maintained in good condition, serving their intended function and posing no threat to public safety.
- E27.2 The tree protection collars (weeping tile) shall be left on trees after the maintenance period is completed.
 - (a) The Contract Administrator shall assume responsibility for collar removal.
- E27.3 Tree supports shall be removed or left in place at the end of the warranty period as directed by the Contract Administrator.

E28. SITE SAFETY AND TRAFFIC CONTROL

E28.1 Site Safety and Traffic Control measures shall be carried out in all areas on or adjacent to roadways (see E5).

E29. DAMAGE TO PROPERTY

E29.1 The Contractor shall take every precaution not to damage, injure or mark any existing structures or landscaping on the street allowance or adjacent properties.

E29.2 Should any damage be caused by the Contractor, their employees or equipment, it shall be restored or replaced at the Contractor's expense and to the satisfaction of the Contract Administrator. This applies even if damage results from work done in the process of correcting deficiencies.

E30. TREE MORTALITY

- E30.1 City Supplied Trees
 - (a) If a City-supplied tree dies and the Contractor has not been submitting the regular maintenance records in accordance with this contract document, then the cost to supply, plant and maintain a replacement tree, as originally indicated in the contract document, shall be at the sole expense of the Contractor.
 - (b) If a City-supplied tree dies and the Contract Administrator confirms that the tree has been maintained in accordance to this Specification, that tree will be replaced by the City and added to the Contract at the originally specified bid price to be planted and maintained by the Contractor in accordance with this specification.
 - (c) Replacement trees shall receive 2 years maintenance as outlined in the contract document, from the date of replacement.
 - (d) Inspections of replacement trees will be conducted by City of Winnipeg staff.
- E30.2 Contractor Supplied Trees
 - (a) If a Contractor-supplied tree dies and the Contractor has not been submitting the regular maintenance records in accordance with these specifications, then the cost to supply, plant and maintain a replacement tree as originally indicated in the contract document, shall be at the sole expense of the Contractor.
 - (b) If a Contractor-supplied tree dies and the Contractor has been submitting the regular maintenance records in accordance with these specifications, that tree will be added to the Contract at the originally specified bid price to be supplied, planted and maintained by the Contractor in accordance to this specification.
 - (c) Replacement trees shall receive 2 years maintenance as outlined in the contract document, from the date of replacement.
 - (d) Inspections of replacement trees will be conducted by City of Winnipeg staff.

E31. SITE RESTORATION

E31.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

E32. MAINTENANCE KITS

- E32.1 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.
- E32.2 There shall be no payment for the maintenance kits.