

THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 909-2014

DESIGN AND CONSTRUCTION OF GATEWAY COMMUNITY CENTRE SPRAY PAD

TABLE OF CONTENTS

PART A - PROPOSAL SUBMISSION

	A: Proposal B: Prices	1 4
PART B	- BIDDING PROCEDURES	
 B2. B3. B4. B5. B6. B7. B8. B9. B10. B11. B12. B13. B14. B15. B16. B17. B18. B19. B20. B21. B22. 	Contract Title Submission Deadline Site Investigation Enquiries Confidentiality Addenda Substitutes Proposal Submission Proposal Prices Qualification Eligibility Design Drawings and Component Descriptions Project Workplan Systems Integration Opening of Proposals and Release of Information Irrevocable Offer Withdrawal of Offers Interviews Negotiations Evaluation of Proposals Award of Contract	1 1 1 2 2 3 4 4 5 6 6 7 7 7 7 8 8 8 8 8 8 9 10
	- GENERAL CONDITIONS General Conditions	1
	- SUPPLEMENTAL CONDITIONS	
Gene D1. D2. D3. D4. D5.		1 1 1 2 2
D7. D8. D9. D10. D11.	nissions Authority to Carry on Business Safe Work Plan Insurance Performance Security Subcontractor List Detailed Work Schedule	2 3 3 3 4 4
D13. D14. D15. D16. D17. D18.	dule of Work Commencement Working Days Critical Stages Substantial Performance Total Performance Liquidated Damages Scheduled Maintenance	5 5 6 6 6

Control of Work D20. Job Meetings D21. Drawings and Specifications D22. Prime Contractor – The Workplace Safety and Health Act (Manitoba) D23. The Workplace Safety and Health Act (Manitoba) – Qualifications D24. Safety D25. Site Cleaning D26. Inspection D27. Deficiencies	7 7 7 7 7 8 8 8
Measurement and Payment D28. Payment	9
Warranty D29. Warranty	9
Form H1: Performance Bond Form H2: Irrevocable Standby Letter of Credit	10 12
PART E - SPECIFICATIONS	
GeneralE1. Applicable Specifications and DrawingsE2. Complete ProjectE3. Permits, Notices, Licenses, Certificates, Laws and RulesE4. Examination of the siteE5. Existing Services and UtilitiesE6. Site AccessE7. construction facilities and stagingE8. Site EnclosuresE9. Temporary UtilitiesE10. Protection of Survey InfrastructureE11. Damage to Existing Structures and PropertyE12. Protection of Existing TreesE13. LayoutE14. SamplesE15. Test ReportsE16. Hazardous materials	1 1 2 2 2 2 2 2 2 2 2 2 2 2 3 3 3 3 3 3
Design E17. Design Services E18. Civil / Mechanical / Electrical Conditions & Design Requirements E19. Spray Pad Design E20. Spray Components Design E21. Site Development Design	4 5 6 7
Site Works E22. Construction Boundary E23. Removals E24. Site Grading E25. Asphalt Paving E26. Timber Edging E27. Wood Fibre Protective Surfacing E28. Topsoil and Sodding E29. Tree Planting E30. Foundations E31. Site Furniture Spray Pad	7 7 8 9 10 11 13 14 16 16
E32. Concrete Spray Pad E33. Protection E34. Mechanical / Electrical / Plumbing E35. Spray Components	18 19 19 20

E36. Commissioning

20

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 DESIGN AND CONSTRUCTION OF GATEWAY COMMUNITY CENTRE SPRAY PAD

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, October 23, 2014.
- B2.2 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.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.
- B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at a Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the proposal, or is unsure of the meaning or intent of any provision therein, the Bidder 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 Bidder is unsure of the meaning or intent of any provision therein, the Bidder 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 Bidders 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 Bidder who made the enquiry.
- B4.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Bidder by the City or acquired by a Bidder 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 Bidder before receipt hereof; or
 - (b) becomes publicly known other than through the Bidder; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder 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.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/bidopp.asp</u>.
- B6.2.2 The Bidder 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.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

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 Bidder shall ensure that any and all requests for approval of a substitute:
 - (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- 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 Bidder 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 Bidders. The Bidder 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 Bidder 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 Bidder 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.
- B7.10 Notwithstanding B7.2 to B7.9 and in accordance with B8.5, deviations to terms and conditions inconsistent with the Proposal document shall be evaluated in accordance with B21.1(a).

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 and Component Descriptions as per B13;
 - (b) Project Work Plan as per B14; and
 - (c) Systems Integration as per B15.
- B8.3 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.4 All components of the Proposal shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B8.4.2 Bidders 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).
- B8.4.3 Bidders are advised not to include any information / literature except as requested in accordance with B8.1.
- B8.5 Bidders are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B21.1(a).
- B8.6 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B8.6.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.7 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B8.8 Proposals shall be submitted to:

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

B8.9 Any cost or expense incurred by the Bidder that is associated with the preparation of the Proposal shall be borne solely by the Bidder.

B9. PROPOSAL

- 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 Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/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 Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Proposal.
- B9.4 Paragraph 11 of Form A: Proposal shall be signed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than 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 "Bidder "shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Proposal and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder 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.
- B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. QUALIFICATION

- B11.1 The Bidder shall:
 - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/debar.stm</u>
- B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) have successfully carried out work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- B11.4 Further to B11.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractors has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
 - (a) 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
 - (b) 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
 - (c) 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>.
- B11.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B11.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B12. ELIGIBILITY

- B12.1 Various organizations provided investigative services with respect to this Project. In the City's opinion, this relationship or association does not create a conflict of interest or will not likely create a perception of conflict of interest because of this full disclosure and related information. The organizations are:
 - (a) Questic / PlayQuest Recreation
 - (b) Ful Flo Industries

B13. DESIGN DRAWINGS AND COMPONENT DESCRIPTIONS

- B13.1 The Bidder should submit drawings and component descriptions that show:
 - (a) The proposed design of the spray pad, clearly demonstrating the layout of features and how they relate to the site,
 - (b) Separation / location of age appropriate play zones,
 - (c) The overall quality of the design and its aesthetic appeal,
 - (d) Universal design / inclusive design, and
 - (e) Overall play experience.
- B13.2 Design Drawings and Component Descriptions should include at a minimum:
 - (a) A site context plan including:
 - (i) location and configuration of the spray pad in association with the site works,
 - (ii) proposed site works such as playground renovation, pathways, fencing, and site furniture,
 - (iii) indication of site services, and
 - (iv) any connections that are required or will be considered beneficial.
 - (b) A plan of the spray pad clearly showing the location and orientation of all spray components within the context of the site plan including:
 - (i) component spray zones,
 - (ii) spray pad overspray zone,
 - (iii) manifold cabinet location,
 - (iv) drain locations, and
 - (v) schematics of site services and any modifications, relocations and connections.
 - (c) A concise written description of the design rationale,
 - (d) Perspective sketches, renderings, sections, details and other graphic representations sufficient to illustrate the proposed design.
 - (e) An itemized list of proposed spray components with a legend that relates them to their graphic representation on the plan.
 - (f) Component descriptions and/or cut sheets outlining specifications of spray components and the quality, durability and warranty of materials.
- B13.3 Drawings should be submitted in a printed format no greater than tabloid size (11"x17").
- B13.4 Text on printed drawings should be no less than 8 pt. size.

B14. PROJECT WORKPLAN

- B14.1 The Bidder should submit a project work plan that clearly demonstrates the Bidder's understanding of the Work, including a methodology to undertake the Work and a schedule for delivering a fully operational and commissioned spray park by the construction deadline.
- B14.2 The Project Work Plan should include at a minimum:
 - (a) A detailed methodology demonstrating the Bidder's thorough knowledge of the project and the desired deliverables from design and permitting to construction, including a description of the commissioning process and the training being proposed. The methodology should include quality assurance, budget control and assurance, and risk management.
 - (b) A list or chart of key personnel involved in the project, including all subcontractors, detailing their roles, relationships and responsibilities.
 - (c) A proposed project schedule in a Ghant chart format, including but not limited to:
 - (i) a timeframe for drawings and permitting,
 - (ii) a timeframe for spray component delivery,
 - (iii) all construction operations,
 - (iv) commissioning, and
 - (v) all critical dates and project milestones.
 - (d) Subcontractor coordination should be clearly demonstrated in the project schedule. All subcontractors should sign off on the proposed schedule to demonstrate that they have agreed to undertake the Work and can do so in the allotted timeframe. Subcontractors can either sign next to their respective place in the schedule or submit a letter acknowledging said information. The letter(s) can be appended at the end of the proposal.

B15. SYSTEMS INTEGRATION

- B15.1 The Bidder should submit:
 - (a) Civil, Mechanical and Electrical system schematics developed in sufficient detail to describe the intended operation of the spray pad. Schematics must include a process flow diagram of the project;
 - (b) Daily water usage and wastewater flow projections for the proposed design based on a sixhour day. Refer to daily maximums as well as reduced flow rates for proposed sequencing; and
 - (c) A maintenance schedule and anticipated maintenance costs associated with the spray pad features and mechanical system being proposed.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B16.1 Proposals will not be opened publicly.
- B16.2 After award of Contract, the names of the Bidders and the Contract amount of the successful Bidder 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 To the extent permitted, the City shall treat all Proposal Submissions as confidential, however the Bidder is advised that any information contained in any Proposal may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.
- B16.4 Following the award of Contract, a Bidder 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 Bidder 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 Bidders and these Bidders 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 Bidder 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 Bidder's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B18.1.3 If a Bidder 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 Bidder's authorized representatives named in Paragraph 11 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 Bidder 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 Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

B19. INTERVIEWS

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

B20. NEGOTIATIONS

- B20.1 The City reserves the right to negotiate details of the Contract with any Bidder. Bidders 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 Bidders submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Bidders without being obligated to offer the same opportunity to any other Bidders. Negotiations may be concurrent and will involve each Bidder individually. The City shall incur no liability to any Bidder as a result of such negotiations.
- B20.3 If, in the course of negotiations pursuant to B20.2 or otherwise, the Bidder 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 Bidder 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) compliance by the Bidder with the requirements of the Request for Proposal or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subconsultants, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price (20 points);
 - (d) Design Drawings and Component Descriptions (40 points);
 - (e) Project Work Plan (20 points);
 - (f) Systems Integration (20 points); and
 - (g) 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 Bidder who does not demonstrate, in its Proposal or in other information required to be submitted, that it is responsible and qualified.
- B21.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B21.1(a) and B21.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B21.5 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.
- B21.5.1 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.
- B21.5.2 The Total Bid Price shall be evaluated with the weighing of 20 points out of a 100 possible points. As such, the lowest Bidder shall receive the full 20 points, and the second lowest Bidder and subsequent Bidders shall be pro-rated accordingly. A Bidder who exceeds the budget shown on Form B: Prices will receive 0 points.
- B21.6 Further to B21.1(d), the Design Drawings and Component Descriptions shall be evaluated with a weighting of 40 points out of a total of 100 possible points.
- B21.6.1 The Design Drawings and Component Descriptions shall be evaluated on the following criteria:
 - (a) The site context plan showing the relationships and connections between the spray pad and the surrounding site, including universal design principles (5 points).
 - (b) The quality, nature and diversity of play components and play experiences on the spray pad (15 points);
 - (c) The design aesthetic, including the implementation of a unique, consistent and appropriate theme if a theme is deemed part of the proposal (5 points);
 - (d) The layout of play components in relation to each other and as organized on the spray pad. Implementation of appropriate age zones are deemed part of the proposal (10 points); and
 - (e) The quality, durability and warranty of materials (5 points).
- B21.7 Further to B21.1(e), the Project Work Plan shall be evaluated with a weighting of 20 points out of a possible 100 points.

- B21.7.1 The Project Work Plan shall be evaluated on the following criteria:
 - (a) The project delivery methodology (10 points);
 - (b) The clarity and appropriateness of the proposed project schedule (5 points); and
 - (c) The organizational chart with Contractor and Subcontractor experience and acknowledgment (5 points).
- B21.8 Further to B21.1(f), the Systems Integration shall be evaluated with a weighting of 20 points out of a possible 100 points.
- B21.8.1 The Systems Integration shall be evaluated on the following criteria:
 - (a) Clarity and completeness of Mechanical and Electrical system schematics (12 points);
 - (b) Daily water usage and wastewater flow projections (5 points); and
 - (c) Maintenance schedule and anticipated maintenance costs (3 points).
- B21.9 Notwithstanding B21.1(c) to B21.1(f) where Proponents fail to provide a response to B8.2 (a) to (c), the score of zero may be assigned to the incomplete part of the response.

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 Bidder, even though one or all of the Bidders 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 Bidder submitting the most advantageous offer.
- B22.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Proposal upon written request to the Contract Administrator.
- B22.4 Notwithstanding Paragraph 6 of Form A: Proposal and C4, the City will issue a Purchase Order to the successful Bidder in lieu of execution of a Contract.
- B22.5 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 Purchase Order notwithstanding that they are not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The General Conditions for Construction are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/gen_cond.stm</u>.
- 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 the design and construction of a straight to drain spray pad for Gateway Community Centre, including related site development.
- D2.2 The major components of the Work are as follows:
 - (a) Design and construction of a straight-to-drain spray pad, including but not limited to all associated fixtures, drains, piping, electrical works and concrete spray basin, complete with all required permitting;
 - (b) Design and construction of site grading, asphalt pathways, site furniture, sodding, tree planting and other associated site development.
 - (c) Renovation of existing playground to include removal of existing edging and pea stone, and the supply and installation of new timber edging and wood fibre safety surfacing.
 - (d) Commission Works

D3. CONTRACT ADMINISTRATOR

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

David Wagner Landscape Architect

Telephone No. 204 452-2426 E-mail Address: dwagner@dwla.ca

- D3.2 Before commencement of Work, David Wagner 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 B8.8

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;
 - (a) 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 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the email address identified in D3.1.
- D6.3 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 facsimile number:

The City of Winnipeg Chief Financial Officer

Facsimile No.: 204 949-1174

D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:

The City of Winnipeg Legal Services Department Attn: Director of Legal Services

Facsimile No.: 204 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

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

D8. 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 and David Wagner Associates Inc.
 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, 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 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 Subcontractor List provided in the Bidder's Project Work Plan shall remain in effect for the duration of the project.

D12. DETAILED WORK SCHEDULE

- D12.1 Within seven (7) Working Days of receipt of the Purchase Order, the Contractor shall review and update the detailed work schedule laid out in the Bidder's Project Work Plan with the Contract Administrator.
- D12.2 The detailed work schedule shall consist of the following:
 - (a) a critical path method (C.P.M.) schedule for the Work; and
 - (b) a Gantt chart for the Work based on the C.P.M. schedule,

all acceptable to the Contract Administrator.

- D12.3 The Contractor shall provide the Contract Administrator with an updated detailed construction schedule at least two (2) Business Days prior to the commencement of any Work on the Site.
- D12.4 Further to D12.2(a), the C.P.M. schedule shall clearly identify the start and completion dates of all of the following activities/tasks making up the Work as well as showing those activities/tasks on the critical path:
 - (a) Final drawing submission,
 - (b) Permitting,
 - (c) Ordering of spray components,
 - (d) Delivery of spray components,
 - (e) Start of Work on Site,
 - (f) Excavation and site preparation,
 - (g) Underground, Mechanical, and Electrical,
 - (h) Concrete pour(s),
 - (i) Installation of spray components,
 - (j) Playground renovation,
 - (k) Site Furnishings and site restoration
 - (I) Commissioning,
 - (m) Substantial Performance,
 - (n) Total Performance, and
 - (o) All other project milestones.
- D12.5 Further to D12.2(b), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

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 Project 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; and,
 - (vi) 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 not commence the Work on the Site before permitting is in place for all Work.
- D13.4 The City intends to award this Contract by November 28, 2014.
- 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. WORKING DAYS

- D14.1 Further to C1.1(jj), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D14.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D14.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D14.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D15. CRITICAL STAGES

- D15.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:
 - (a) Submission of drawings and specifications to Contract Administrator January 15, 2015
 - (b) Submission of Application for Permitting January 30, 2015

D16. SUBSTANTIAL PERFORMANCE

- D16.1 The Contractor shall achieve Substantial Performance by June 18, 2015.
- D16.2 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.
- D16.3 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.

D17. TOTAL PERFORMANCE

- D17.1 The Contractor shall achieve Total Performance by June 25, 2015.
- D17.2 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.
- D17.3 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.

D18. LIQUIDATED DAMAGES

- D18.1 If the Contractor fails to achieve critical stages or Total Performance in accordance with the Contract by the days fixed herein for same, the Contractor shall pay the City the following amounts per Working Day for each and every Working Day following the days fixed herein for same during which such failure continues:
 - (a) Submission of Application for Permitting five hundred dollars (\$500);
 - (b) Total Performance five hundred dollars (\$500).
- D18.2 The amounts specified for liquidated damages in D18.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages or Total Performance by the days fixed herein for same.
- D18.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D19. SCHEDULED MAINTENANCE

- D19.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Sodding as specified in E28.5;
 - (b) Tree Maintenance as specified in E29.5;
 - (c) Winterization and spring start-up as specified in E36.2.
- D19.2 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

D20. JOB MEETINGS

- D20.1 During the construction phase, 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.
- D20.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D21. DRAWINGS AND SPECIFICATIONS

- D21.1 The Contractor shall maintain one full size set of Drawings and Specifications on Site at all times during construction. This shall include the Contractor's final design and shop drawings, complete construction details, schematic diagrams and plan and elevation views of the spray pad mechanical system, change orders and any other information pertinent to the construction of the project. The drawings shall be printed in colour if colour is used to convey information.
- D21.2 The Contractor shall maintain a set of Record Drawings on Site marking all Changes in Work. These are to include but not be limited to buried line locations and runs dimensioned from existing site features. The information shall be transferred to an autocad drawing and submitted to the Contract Administrator at Total Performance. There shall be no separate payment for Record Drawings but they shall be considered a part of the Commissioning.

D22. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D22.1 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).

D23. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D23.1 Further B11.4 to 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 B11.4.

D24. SAFETY

- D24.1 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.
- D24.2 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.
- D24.3 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.

D25. SITE CLEANING

- D25.1 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.
- D25.1.1 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.
- D25.1.2 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.

D26. INSPECTION

- D26.1 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.
- D26.2 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.

D27. DEFICIENCIES

- D27.1 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.
- D27.2 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.
- D27.3 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.
- D27.4 When the Contract Administrator certifies that any Plant, Material or any interest of the Contractor referred to in D27.2, 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

D28. PAYMENT

D28.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D29. WARRANTY

- D29.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D29.1.1 For the purpose of the Performance Security, the warranty period shall be one (1) year.
- D29.2 Notwithstanding C13.2 or D29.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D29.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

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

dollars (\$

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

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

RFP NO. 909-2014

DESIGN AND CONSTRUCTION OF GATEWAY COMMUNITY CENTRE SPRAY PAD

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

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

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

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

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

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

____ day of _____ , 20____ .

SIGNED AND SEALED in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)	
Per:	(Seal)
Per:	
(Name of Surety)	
By: (Attorney-in-Fact)	(Seal)

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. 909-2014

DESIGN AND CONSTRUCTION OF GATEWAY COMMUNITY CENTRE SPRAY PAD

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)

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:

Drawing No.	Drawing Name/Title
L1	Existing Conditions and Removals Plan
L2	Conceptual Design
L3	Details

E2. COMPLETE PROJECT

E2.1 The Contractor is to deliver a complete project including all permits, inspections, demolition/removals, connections, tie-ins, restorations, etc. required to operate and maintain the project.

E3. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E3.1 The Contractor shall give all necessary notices, obtain all necessary permits and pay all fess in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E3.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would related to the Work.
- E3.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E3.4 All Work shall be performed in compliance with Manitoba Workplace Safety and Health.
- E3.5 All Work shall be performed in compliance with Manitoba Workplace Safety and Health Fall Protection guidelines.
- E3.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Safety and Health Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E4. EXAMINATION OF THE SITE

- E4.1 Further to C3.1, prior to commencing actual construction work, the Contractor shall check field conditions, obtain and confirm actual site dimensions, examine surface conditions, etc. as required to ensure correct fabrication and execution of the Work.
- E4.2 Information, if shown on the plans or provided in the specifications, related to past works in the area is based on record information which has been, in part, prepared by others. While this information is believed to be reliable, the Contract Administrator cannot assure its accuracy or for any errors or omissions which may have been incorporated as a result. The Contractor is hereby advised to obtain independent verification of accuracy of all information provided before applying it for any purpose.
- E4.3 Commencement of construction or any part thereof constitutes acceptance of existing conditions, and means dimensions have been considered, verified and are acceptable.
- E4.4 The Contractor shall bear all costs for onsite review and examination.

E5. EXISTING SERVICES AND UTILITIES

E5.1 No responsibility will be assumed by the City or the Contract Administrator 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 and the Contract Administrator shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

E6. SITE ACCESS

- E6.1 Access to the Site will be determined at the pre-construction meeting. The access shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E6.2 The Contractor shall be restricted to the Site access locations and routes only so that there is a minimum of disturbance to the existing ground surface. Damage to areas beyond the marked routes shall be repaired by and at the expense of the Contractor to the satisfaction of the Contract Administrator.

E7. CONSTRUCTION FACILITIES AND STAGING

E7.1 The Contractor shall be responsible for providing its own storage and handling of all its construction operations. The use of public right-of-ways will not be allowed.

E8. SITE ENCLOSURES

- E8.1 Temporary Site enclosures, if determined necessary at the pre-construction meeting, shall be erected and maintained as required for the duration of the construction period.
- E8.2 Site enclosures and protection shall be considered incidental to the Contract Work.

E9. TEMPORARY UTILITIES

- E9.1 The Contractor shall make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- E9.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E10. PROTECTION OF SURVEY INFRASTRUCTURE

E10.1 Further to CW1130, Section 3.14, the Contractor is responsible for having the Site cleared for survey monuments.

E11. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

E11.1 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 Sites of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator and the owners thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the owners thereof. The cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and David Wagner Associates Inc. from all claims made directly or indirectly against it in respect to any such damage.

E12. PROTECTION OF EXISTING TREES

- E12.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing trees within the limits of the construction area and adjacent to construction access points:
 - (a) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2440 mm wood planks, or other suitable protection as approved by the Contract Administrator. Do not use nails or other fasteners that penetrate the tree trunk. The width and length of strapping may be reduced to suit the tree being protected as approved by the Contract Administrator.
 - (b) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches) where 1 inch diameter equals 1 foot measured from the outside edge of the trunk of the tree at 6 inches above grade. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
 - (c) Equipment shall not be operated within the drip line without written permission from the Contract Administrator. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the entire ground surface located directly beneath the tree and radiating out to the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
 - (d) Repair, replace and maintain tree protection materials during construction until the Project completion.
 - (e) Carefully remove safety fencing and strapping material without harming the trees as soon as the construction and restoration Work is complete.

E13. LAYOUT

E13.1 The Contractor is responsible for the layout of all Work. The Contract Administrator shall be advised of the staking of the layout at least twenty-four (24) hours in advance in order that the layout may be inspected and adjusted as required prior to construction.

E14. SAMPLES

E14.1 Samples called for in the Specification or requested by the Contract Administrator shall be submitted within fifteen (15) Calendar Days of request.

- (a) Identify samples with name of project, date, name of Contractor, name of supplier/manufacturer and use of material represented by sample.
- (b) Do not proceed with delivery of materials until samples are reviewed by the Contract Administrator. No deviation is permitted after approval of sample.
- (c) Approval of samples does not imply acceptance of finished Work.
- (d) Where required, submit a range of samples, as may be reasonable.

E15. TEST REPORTS

- E15.1 Where required by the Contract Administrator, the Contractor shall provide certified copies of tests upon materials to be used in construction of the Work, indicating that the materials comply with the Specifications.
- E15.2 Submit test results to the Contract Administrator within ten (10) Calendar Days of request.
- E15.3 All testing costs shall be the responsibility of the Contractor.

E16. HAZARDOUS MATERIALS

E16.1 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.

DESIGN

E17. DESIGN SERVICES

- E17.1 The Contractor's Design Team shall meet the following qualifications:
 - (a) Utilize professionals where required by legislation;
 - (b) A Professional Engineer registered to practice in the Province of Manitoba shall seal structural, mechanical, civil and electrical design drawings, if required; and
 - (c) Utilize other professional expertise as required to design the Work.
- E17.2 The Contractor shall provide consulting services as required in order to:
 - (a) Obtain approvals and permitting from the necessary authorities including but not limited to:
 - (i) City of Winnipeg, Environmental Health Services Branch,
 - (ii) City of Winnipeg Zoning Permits Branch, Water and Waste Dept., and
 - (iii) Other agencies as required;
 - (b) Prepare design drawings, specifications, documentation and instructions required for completion of the Work; and,
 - (c) Design to the minimum standards set out in *The City of Winnipeg Standard Construction Specifications*. The Contractor shall obtain the Contract Administrator's approval if the design will deviate from *The City of Winnipeg Standard Construction Specifications*.
 - (d) Design to the City of Winnipeg Accessibility Design Standards <u>http://www.winnipeg.ca/ppd/Universal_Design.stm</u>
- E17.3 Errors and Omissions shall be the responsibility of the Contractor who at their discretion may obtain Errors and Omissions Insurance.
- E17.4 The Contractor shall submit final design drawings and specifications to the Contract Administrator for review prior to permitting. They shall include, but not be limited to:
 - (a) Layout Plan with dimensions

- (b) Site Grading Plan
- (c) Site Servicing Plan
- E17.5 All consultant services from conceptual design through to certification are to be included in the Bid Price as per Form B: Prices at the price for Item "Consultant Services".

E18. CIVIL / MECHANICAL / ELECTRICAL CONDITIONS & DESIGN REQUIREMENTS

- E18.1 Vault
 - (a) All mechanical devices that are required to operate the spray pad are to be located in an above ground vault.
 - (i) The vault shall be installed on a concrete foundation.
 - (ii) The size and location are to be shown on the Bidder's drawings.
- E18.2 Water Service
 - (a) A new 50mm water service off Bonner Avenue, to COW SD-012, is required.
 - (b) A 900mm CMP lockable meter pit, SD-241B, is required, complete with :
 - (i) 50mm double check valve,
 - (ii) 50mm meter (by others),
 - (iii) 50mm flange fittings,
 - (iv) 50mm gate valve,
 - (v) blow-out valve, and
 - (vi) 50 x 100 x 200mm bricks as required.
 - (c) A seasonal supply line to spray pad's manifold/water distribution system is required.
 - (i) The supply line may be up sized to 75mm in order to mitigate pressure drop over the distance of delivery.
 - (ii) All seasonal line(s) to gravity drain.
 - (d) The location of the meter pit and the method for installing the water line (eg, open cut or directional bore or other) is to be clearly indicated in the Bidder's submission.
- E18.3 Drain & Sewer Lines
 - (a) The splash pad drain system is to tie into WWS system on Bonner Avenue. The method for installing the sewer line (eg, open cut or directional bore or other) is to be clearly indicated in the Bidder's submission.
 - (b) The splash pad drain line(s) shall be sized to permit draining of basin to prevent any standing water.
 - (c) All drain line(s) to gravity drain.
 - (d) The splash pad shall contain drain lines as required by design and applicable code(s) with a minimum of two drains.
 - (i) Deck drains shall have an anti-vortex cover (secured).
 - (ii) Trench drains may be provided as appropriate to the design.
 - (iii) Deck drains, access lids, frames, etc. to be hot dipped galvanized.
 - (iv) Deck drains to be heavy duty non-corroding metal alloy or equally durable fibreglass or plastic construction.
- E18.4 Additional Mechanical
 - (a) Rain sensors and automatic shut-off devices are required for the spray pad.
- E18.5 Electrical
 - (a) The electrical service is to tie into the Community Centre electrical system.

- (i) All electrical equipment must be C.S.A. approved.
- (ii) All components within the spray pad area shall be grounded.
- (iii) All electrical controls and equipment are to be in a free standing weather proof enclosure.

E19. SPRAY PAD DESIGN

- E19.1 The design of the concrete spray pad shall include:
 - (a) the spray basin,
 - (b) the minimum 2.5m wide overspray zone,
 - (c) associated sitting areas.
- E19.2 The layout of the spray components shall be such that the manufacturer's spray zones shall be contained entirely within the spray basin.
- E19.3 The 2.5m wide over spray zone is intended to contain any overspray from the components and provide a dry surface for circulation around the spray pad.
- E19.4 The general configuration of the spray pad is to be as shown on the Concept Drawing. The size of the spray pad may be altered if deemed suitable to the Bidder's design. The size of the concrete spray pad, measured in square metres, is to be shown on Form B: Prices for Item 9 "Concrete Spray Pad".
- E19.5 The spray pad (spray basin and overspray zone) is to slope to drain to the spray pad drains. The areas for the benches and picnic tables may drain away from the pad towards the surrounding landscape.

E20. SPRAY COMPONENTS DESIGN

- E20.1 The design for the spray pad components must meet the following requirements:
 - (a) Provide for all age and ability user groups. The spray pad should be zoned with three groupings of components dedicated to Toddlers (children 0-4 yrs), Teens (9-12 yrs), and a general Family Zone suitable for all ages, as indicated on the Drawings.
 - (b) Follow City of Winnipeg Accessibility Design Standards.
 - (c) Contain a variety of ground sprays, mid-height components and tall components.
 - (d) Contain a special feature that creates an entrance onto the spray pad, as indicated on the Drawings, and which the community can identify with.
 - (e) Contain a minimum of one "group" or "team" feature that requires multiple user participation to manipulate the type/amount of water being sprayed.
 - (f) Contain "dumping buckets" as space permits.
 - (g) Contain a minimum of one bollard activator.
 - (h) Be complementary (but not necessarily matching) in colour scheme to the existing playground. The Contract Administrator reserves the right to change any or all colours prior to the Contractor ordering the components.
 - (i) Contain a consistent look or theme within the spray pad.
- E20.2 The design for the spray pad components should not include:
 - (a) Trip, entanglement and strangulation hazards.
 - (b) "Ground Stream" type features, particularly those containing low to the ground / moveable components.
 - (c) Components that contain complicated computerized mechanisms.

E21. SITE DEVELOPMENT DESIGN

E21.1 Playground

- (a) The existing playground is to be renovated through the replacement of the edging and safety surfacing to meet current CSA standards. The existing play equipment is to remain.
- E21.2 Pathways and Sitting Areas
 - (a) An asphalt pathway is to be developed connecting the spray pad with the playground, the parking lot and the entrance to the Community Centre building. It shall follow City of Winnipeg Accessibility Design Standards.
 - (b) Sitting areas with site furniture are to be as shown on the Drawings.
 - (c) Shaded, well drained areas are to be provided around the spray pad for users sitting on blankets.

SITE WORKS

E22. CONSTRUCTION BOUNDARY

- (a) Contractors are to work only within the Construction Boundary as shown on the Drawings or as directed by the Contract Administrator.
- (b) Any fencing that is removed for Site access is to be replaced to CW 3550.

E23. REMOVALS

- E23.1 General Description
 - (a) This specification shall cover the removal of the following:
 - (i) Playground pea stone protective surfacing and edging, including sitting area edging and the sandbox,
 - (ii) Granular surfacing in the parking lot and the sitting area,
 - (iii) Benches.
 - (b) It shall also cover any other demolition and removal necessary to construct the project, which may be considered incidental to other items of Work.

E23.2 Methods

- (a) Removal of playground pea stone surfacing and edging
 - (i) The existing edging shall be removed from around the playground and the sitting area, including the sandbox edging. All pins, anchors and other associated materials shall be removed in their entirety.
 - (ii) The pea stone protective surfacing shall be removed from the playground to the depth required for the installation of the new wood fibre protective surfacing.
 - (iii) The existing play equipment is to remain in place and be protected during the construction. Any pre-existing damage to the equipment shall be documented and brought to the attention of the Contract Administrator prior to start of operations.
 - (iv) Removal of the materials in the vicinity of the structures is to be done by hand or machines sized to suit the Work.
- (b) Removal of granular surfacing in the parking lot and the sitting area
 - (i) Granular hard surfaces are to be removed from areas designated on the Drawings.
 - (ii) Existing waste and recycling containers are to be relocated on Site during construction and reinstalled upon completion of paving.
 - (iii) Care is to be taken to preserve existing fencing and adjacent paving surfaces that are to remain.

- (iv) Base materials are to be removed as well as rubble, stones, silt, rubbish and any surplus material as required to prepare the subgrade to receive new surfaces as shown on the Drawings.
- (c) Removal of existing turf or vegetation for the construction of other surfaces shall be considered incidental to the construction of those Works.
- (d) All materials, to be demolished and removed, are to be removed from the Site and disposed of in a safe and legal manner. Excavated materials shall be recycled or legally disposed of off-site.
- E23.3 Site Restoration
 - (a) Any holes left by the removal of posts or foundations shall be filled with compacted clean clay fill to meet the adjacent grades and be restored to match surrounding conditions to the satisfaction of the Contract Administrator.
 - (b) Any site restoration required due to removals, and not shown on the Drawings as areas for new development, shall be considered incidental to the removal Work.
- E23.4 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Lump Sum Price for the Items of Work listed below, which price shall include all costs of removal and proper disposal, and any associated Site restoration.
 - (b) Items of Work:
 - (i) Removals

E24. SITE GRADING

- E24.1 General Description
 - (a) Further to CW 3170, this specification shall cover the Site grading, including:
 - (i) The cut and fill required to achieve the proposed Site grades.
 - (ii) The cut and fill required for the construction of the spray pad.
- E24.2 Grading Design
 - (a) The spray pad is to be set high enough that good positive drainage is achieved, away from the concrete pad, incorporating existing drainage patterns. The surrounding area may have a swale, at a minimum slope of 1%) that to drains to the existing catch basin.
 - (b) City of Winnipeg Accessibility Design Standards are to be incorporated.
 - (i) The sitting area is to be graded such that an accessible entrance is created into the playground area.
 - (c) Base preparation and associated site grading for the concrete spray pad are specified under E32.
- E24.3 Methods
 - (a) The construction area is to be excavated or filled to achieve rough grade.
 - (i) Rough grade is to be to levels, profiles and contours allowing for surface treatment as indicated on Drawings.
 - (b) Wherever the proposed Site grading is to meet existing Site grades, the grades are to match and positive Site drainage is to be maintained. Where sloped areas meet flat areas, at both top and bottom of slopes, the transition shall be rounded to the extent that future maintenance by turf mowing equipment can be easily done.
 - (c) In fill areas, the Contractor shall scarify the existing ground to a minimum depth of 150mm prior to the placement of any fill. Should imported clean fill be required, it shall be considered incidental to the Work.

- (d) Compaction shall include the use of sheep's foot or other suitable compaction equipment as approved by the Contractor to achieve a minimum compaction of 95% Proctor Density.
- (e) All surplus or unsuitable materials shall be disposed of off Site in a legal manner and as directed by the Contractor.
- (f) Following rough grading and compaction, the Work area shall be fine graded to provide a maximum deviation of 25mm in 10m from the design grade with no low areas to hold water. The finished surface of all disturbed areas shall be dragged smooth in such a manner that there are no loose soil particles greater than 25mm in maximum dimensions.
- E24.4 Basis of Payment
 - (a) Payment for Work, specified under this section, shall be incidental to the other Items of Work and no separate payment will be made for Site grading.

E25. ASPHALT PAVING

- E25.1 General Description
 - (a) Further to CW 3110 and CW 3410, this specification shall cover the supply and installation of asphalt paving including excavation, sub-base and base construction, and asphaltic paving.
- E25.2 Materials
 - (a) As per CW 3110 and CW 3410 and Drawings.
 - (b) Clean clay fill material shall be used in areas requiring non-aggregate backfill or to replace unacceptable material excavated from the Site.
 - (c) Granular Sub-base:
 - (i) 50mm down crushed limestone
 - (d) Granular Base:
 - (i) 20mm down crushed limestone
 - (e) Asphalt Type II, 10mm aggregate is to be used in the asphalt mix.
 - (f) Geotextile Fabric: Non woven type, CW 3130

E25.3 Methods

- (a) Excavations
 - (i) As per CW 3110.
 - (ii) All rubble, stones, silt, rubbish and any surplus material shall be legally disposed of off-site.
- (b) Sub-Grade Preparation
 - (i) As per CW 3110.
 - (ii) Clean fill shall be compacted to 98% SPD where necessary to obtain required subgrade elevations.
- (c) Base Courses
 - (i) As per CW 3110.
 - (ii) Sub-Base 150mm depth, compacted.
 - (iii) Base 50mm depth, compacted.
- (d) The layout and grades of the paved areas are to be as shown on the Drawings and as directed by the Contract Administrator. Asphalt is to meet flush with pavement of the parking lot, the concrete of the splash pad, and with the accessible entrance to the playground.
- (e) The Contract Administrator shall inspect the sub-base prior to the installation of asphalt.

(f) The Contractor is to ensure that the adjacent materials and surfaces remain clean and free of asphalt. Over pour of asphalt and excess granular base shall be removed prior to acceptance of the asphalt paving.

E25.4 Crack Sealing

- (a) As a warranty requirement, the Contractor shall rout and seal any and all cracks which may appear during the one-year warranty period. Crack sealing shall conform to CW 3250.
- (b) No separate payment will be made for this item as it is considered a warranty issue.
- E25.5 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price for the Items of Work listed below, which price shall include all costs of excavation, material supply and proper material installation for sub-grade, sub-base and base preparation, and asphaltic paving. Rough and final grading and Site restoration work shall be considered incidental to the Work.
 - (b) The quantity for this Item, based on the Bidder's design, is to be inserted in Form B: Prices.
 - (c) Items of Work:
 - (i) Asphalt Paving

E26. TIMBER EDGING

- E26.1 General Description
 - (a) This specification shall cover the supply and installation of two tier timber edging to contain the protective surfacing for the play area.
- E26.2 Materials
 - (a) Edging shall be subject to inspection and approval by the Contract Administrator.
 - (b) Edging shall be as per SCD-651A.
 - (c) Timber Edging with Composite Cap
 - (i) All wood for the bottom row shall be spruce, pine or fir, No. 2 or better, no wane, bark, checking or splitting permitted. Wood shall be smooth (not rough sawn) and free of rough areas. All timbers to be 150 x 150mm with a minimum length of 1200mm.
 - (ii) Timbers shall be ACQ pressure treated (P.T.). All ends and cuts shall be treated with preservative before being secured.
 - (iii) The cap boards shall be 25 x 140 composite boards with an actual size equal or wider to the timber below. They shall be solid composite square edge boards, minimum length 1200mm. The colour is to be a cedar tone as approved by the Contract Administrator.
 - (d) All fasteners used with the ACQ products shall be stainless steel or ceramic coated fasteners.
 - (e) Geotextile fabric shall be non-woven, in accordance with CW 3130, and installed between the crushed granular base and the protective surfacing.
 - (f) Granular base shall conform to CW 3110 and CW 3130.
- E26.3 Methods
 - (a) Layout of edging shall be as shown on the Drawings, or as approved, to adequately provide protective surfacing area around play equipment, based on the most recent CSA safety zone requirements.
 - (b) Grades for the installation of timber edging shall be set in relationship to the existing play equipment and as determined on Site in consultation with the Contract Administrator.
 - (c) The top of the edging is to be level around the entire play area.

- (d) The cap board is to be eliminated for the accessible entrance shown on the Drawings.
- (e) Timber Edging shall be installed as per Drawings.
 - A compacted granular base course shall be installed to a minimum 75mm depth and as required to set the timbers at the correct grade. It is to be compacted to a minimum of 95 percent Proctor Density.
 - (ii) Base course timbers shall be pinned with a minimum of two (2) 19mm diameter by 500mm rebar at maximum 1200mm O.C.
 - (iii) The upper timbers shall be securely spiked with a minimum of two (2) 12mm diameter by 250mm spikes, predrilled at maximum 1200mm O.C.
 - (iv) The cap boards shall be predrilled and screwed with two screws at each end of the timber and two across from each other every 600mm O.C. Screws shall be treated for ACQ use and sized to suit.
- (f) All timbers shall be cut neatly for a proper fit with no spaces or gaps between. All cuts, except in the untreated cap boards, shall be treated before being secured. Finished elevations shall ensure that all timbers are smooth, level, set plumb and spaced uniformly.
- (g) All corners and joints shall be lap joints where one layer overlaps the join of the other.
- E26.4 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a linear metre basis for the Items of Work listed below, which price shall include all costs of material supply, excavation, sub-grade preparation, proper material installation and any associated Site restoration.
 - (b) The quantity for this Item, based on the Bidder's design, is to be inserted in Form B: Prices.
 - (c) Items of Work
 - (i) Timber Edging

E27. WOOD FIBRE PROTECTIVE SURFACING

- E27.1 Description
 - (a) This specification shall cover the supply and installation of engineered wood fibre protective surfacing and associated sub-surface drainage.
 - (i) Wood fibre surfacing to drain externally to the catch basin as per Drawing SCD 650.
- E27.2 Materials Wood Fibre
 - (a) Wood Fibre product shall be either Zeager Woodcarpet or Fibar FibarSystem 200 or 300 products or approved substitute in accordance with B7.
 - (i) Contact for Woodcarpet:

Zeagar Bros. Inc. 4000 East Harrisburg Pike · Middletown, PA 17057 USA Ph: (1-888) 346-8524 or (717) 944-7481 · Fax (717) 944-7681 <u>sales@zeager.com</u>

(ii) Contact for Fibar System 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) If substitute to Zeagar Woodcarpet or Fibar FibarSystem 200 or 300 is proposed, it must meet the following conditions:
 - (i) materials must be IPEMA certified Engineered Wood Fiber
 - (ii) material must consist of random-sized, clean, engineered hardwood chips. Standard wood chips or bark mulch are not acceptable.
 - (iii) materials must meet or exceed ASTM F1292 standards for impact attenuation
 - (iv) materials must be certified by the CSA and approved for playground use
 - (v) materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act
 - (vi) materials must be covered by \$10,000,000.00 product liability insurance as well as provide a minimum 10 year warranty against loss of resiliency
- (c) Wood Fibre surfacing shall include wood fibre, non-woven geotextile fabric, subsurface drainage system and mats for bottom of slides and under swings.
- (d) Wood Fibre surfacing shall be supplied by an authorized distributor and delivery slips are to be submitted to the Contract Administrator prior to installation.
- E27.3 Materials Drainage System
 - (a) The drainage system for under the wood fibre is to be as specified by the wood fibre product manufacturer.
 - (b) Drainage pipe will be Multi-Flow or approved substitute in accordance with B7. Drainage pipe will be 150 mm (6"). The manufacturer will size and approve all fittings for use with Multi-Flow or approved substitute drainage pipe.
 - (c) 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 manufacturer's connector designed specifically for the purpose. Cleanouts will be provided as indicated on the drawing.
 - (d) Pipe
 - Pipe for drain outlet laterals will be either 100 mm (4") PVC pipe meeting the requirements of ASTM D-2729 or ASTM F-949, or high-density polyethylene pipe meeting the requirements of AASHTO M252.
 - (ii) A rodent screen made of 0.3 inch by 0.3-inch square opening size, 0.063-inch gauge, stainless steel or galvanized, welded wire mesh shall be installed in each outlet lateral line. When using galvanized welded wire mesh, the rodent screen shall be galvanized after it has been formed to the shape and dimensions shown on the plans or specified by the Contract Administrator.
- E27.4 Methods
 - (a) The existing play equipment is to remain in place and be protected during the construction. Any pre-existing damage to the equipment shall be documented and brought to the attention of the Contract Administrator.
 - (b) Sub grade preparation shall be inspected by the Contract Administrator prior to installation of safety surfacing. Subsurface of play area shall be graded to drain to one edge of the play area, and area cleared of any debris which inhibit proper drainage or installation of products.
 - (c) 100mm drainage pipe shall be installed from the subsurface drainage system within the play area to run outside of the play area perimeter to drain to the existing catch basin. The pipe shall be connected to the catch basin as per SD-025. The cost of this shall be included in the price for the wood fibre supply and installation.
 - (d) Wood fibre shall be installed within the play areas, as defined by the timber edging to a minimum depth of 200 mm (after compaction). If the existing play equipment includes a maximum fall height greater than 2.4m (8'), depth of material is to directly correspond to maximum fall height of play equipment in accordance with manufacturer's specifications and based on the most recent CSA safety requirements.

- (e) Installation of the entire system, including fibre, geotextile fabric, subsurface drainage and mats shall be done according manufacturer's instructions. Adequate drainage within play equipment area must be ensured as per same.
- (f) Geotextile fabric must be cut and fit around playground equipment footings and overlap seams by 300mm.
- (g) The mats are to be installed directly on top of the geotextile fabric and secured in place with two (2) duckbill anchors per mat.
- (h) 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.

E27.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supplied for the wood fibre system, sub-grade preparation, associated sub-surface drainage, connection to the catch basin and proper material installation.
- (b) The quantity for this Item, based on the Bidder's design, is to be inserted in Form B: Prices.
- (c) Items of Work:
 - (i) Wood Fibre Protective Surfacing System

E28. TOPSOIL AND SODDING

- E28.1 General Description
 - (a) This specification shall cover the site preparation and the supply and installation of topsoil and sod.

E28.2 Materials

- (a) Topsoil: As per CW 3540.
- (b) Sodding
 - (i) As per CW 3510.
 - (ii) Sod shall be mineral base.

E28.3 Methods

- (a) Areas to be sodded shall be excavated and/or filled with clean fill and rough graded to meet the grades required for the installation of topsoil and sod and as shown on the Drawings. Surplus materials shall be removed off-site in a legal manner.
- (b) No area for Sodding shall be less than the width of a full piece of sod.
- (c) Where Sodding meets existing turf, the edges are to be cut neatly in straight lines using a sod cutter and new sod is to be installed to match the existing grades of the surrounding turf.
- (d) Seams between new and old turf are to be topdressed, seeded and rolled.
- E28.4 The Bidder is to determine the area(s) to be sodded for his Bid submission. Additional sodding that may be required due to Site restoration shall be considered incidental.
- E28.5 Maintenance Period
 - (a) The Contractor shall maintain the sod for 30 Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510.
- E28.6 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all

costs of removals and disposal, material supply, sub-grade preparation, proper material installation, maintenance and all other items incidental to the Work.

- (b) The quantity for this Item, based on the Bidder's design, is to be inserted in Form B: Prices.
- (c) Items of Work
 - (i) Topsoil and Sodding

E29. TREE PLANTING

- E29.1 General Description
 - (a) This specification shall cover the supply, installation and maintenance of deciduous shade trees.
 - (i) The quantities shown on the Drawings are the minimum requirement. More trees may be included in the Bidder's design.
- E29.2 Materials Deciduous Trees
 - (a) Deciduous trees shall be of the size and type specified in the Bidder's submission, but in no case shall they be less than 65mm calliper. Trees shall have a well formed head branching above 2m height.
 - (b) Tree species shall be chosen for their ability to provide shade, their fast rate of growth, their lack of aggressive root growth or other negative characteristics, and their acceptance by the City of Winnipeg Forestry Department. The Contract Administrator reserves the right to require changes to the species chosen in the Bidder's submission.
 - (c) All nursery stock supplied shall be Canadian prairie nursery grown, of the species and sizes indicated on the drawings. Quality shall be in accordance with the latest "Guide Specification for Nursery Stock of the Canadian Nursery Trades Association".
 - (d) Plants from native stands, woodlots, orchards or abandoned nurseries shall be deemed "collected" and will not be permitted.
 - (e) 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.
 - (f) 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 standardized Plant Names. The names of varieties not names therein are generally in conformity with the names accepted in the nursery trades.
 - (g) All trees shall be well branched, true to type, structurally sound, possess a well developed, undamaged root system and shall be free of disease, insect infestations, rodent damage, sunscald, frost cracks and other abrasion or scare to the bark. All parts of the tree shall be moist and show live, green cambium beneath the surface of the bark.
- E29.3 Materials Miscellaneous
 - (a) Water shall be potable and free of minerals which may be detrimental to plant growth.
 - (b) Planting Soil shall be as per CW 3540.
 - (c) Stakes shall be metal T-Bar, steel, 40x40x5x2440mm. Stakes must be adequately installed into sub-base as to ensure they are not easily removed by vandalism.
 - (d) Guying Wire shall be 3mm diameter multi-strand galvanized steel cable.
 - (e) Guying Collar shall be plastic tube, 13mm diameter, nylon reinforced.
 - (f) Trunk Protection shall be plastic perforated spiraled strip.
 - (g) Fertilizer shall be a slow release formulation of low nitrogen and high phosphorus e.g. 10-50-12. Apply quantities at rates stated by product manufacturer.
 - (h) Root Ball Burlap shall be 150 g Hessian burlap, biodegradable.

(i) Wire Baskets shall be horticultural accepted product designed to carry the weight and to contain a burlap-covered root ball. Minimum diameter basket size is to conform to the same minimum diameter of the tree root ball for the respective minimum tree caliper sizes.

E29.4 Methods

- (a) Shipment and Pre-Planting Care
 - (i) Coordinate shipping of trees and excavation of holes to ensure minimum time lapse between digging and planting.
 - (ii) All trees shall be well protected from damage from the time of digging until the time of planting. Supplier and installer are to ensure that the root ball is protected from drying out, and that all roots have been cleanly cut.
 - (iii) Transport of trees shall be done in a manner so that trees do not suffer damage during transport. Branches shall be tied to reduce the risk of mechanical damage. Nursery stock shall be maintained in a moist condition from time of arrival on Site until the time of planting.
- (b) Installation
 - (i) Installation shall be as per planting details on Drawings.
 - (ii) Planting shall be done during periods of suitable weather conditions and in accordance with locally accepted practice.
 - (iii) Trees are to be planted within forty eight (48) hours of excavation from the nursery.
 - (iv) With balled and burlapped root balls and root balls in wire baskets, burlap shall be loosened and cut away from the top 1/3 without disturbing root ball. Wire shall be cut away and removed from the top 1/3 of the root ball. Burlap or rope shall not be pulled from under root ball. Non-biodegradable wrapping shall be removed.
 - (v) After inserting the tree and tamping the root system with topsoil in layer of 150mm, water shall be poured in until the pit is thoroughly soaked. Filling of the hole shall then be completed and the fill-in soil shall be packed firmly around the roots, leaving a concave surface for convenient watering. After filling, the planting shall be watered at frequent intervals.

E29.5 Maintenance

- (a) The Contractor shall be responsible for the maintenance of the trees for a period of two (2) years from the date of Substantial Performance. Any trees planted after September 15th, the maintenance period will commence on May 15th of the following year or such date as mutually agreed upon by all parties. It is expected that the trees be actively maintained from May 15 to October 31 of each year.
- (b) Water shall be applied to ensure soil moisture conditions for optimum growth and health of plant material. The Contractor is to adapt watering frequency to weather conditions and ensure watering techniques do not cause erosion.
- (c) The Contractor shall reform any damaged watering saucers, remove weeds bi-monthly and replace or re-spread damaged, missing or disturbed mulch.
- (d) If required to control insects, fungus and disease, the Contractor shall use appropriate control methods in accordance with Federal, Provincial and Municipal regulations, and obtain product approval from Contract Administrator prior to application.
- (e) The Contractor shall apply fertilizer as directed by manufacturer's specifications.
- (f) The Contractor shall remove dead, broken or hazardous branches from plant material.
- (g) The Contractor shall keep trunk protection and tree supports in proper repair and adjustment, and remove trunk protection, tree supports and level watering saucers at end of warranty period.
- (h) Monthly written reports shall be submitted to Contract Administrator identifying:
 - (i) Maintenance work carried out.
 - (ii) Development and condition of plant material.

- (iii) Preventative or corrective measures required which are outside Contractor's responsibility.
- E29.6 Warranty of Trees
 - (a) Trees shall be under warranty for a period of two (2) years from the recognized completion date for tree planting. Any trees, found in poor condition or dead during this period, shall be removed and replaced with stock meeting the original specifications and using specified methods, without cost to the City.
 - (b) Replacement trees installed under the terms of warranty shall be maintained for a period of two (2) years from the date of replacement.
 - (c) The Contract Administrator reserved the right to extend the Contractor's warranty obligations for an additional one (1) year period if, at the end of the initial warranty period, leaf development and growth are not sufficient to ensure future survival.
 - (i) Excepted is material or items damaged as a result of accidental causes or vandalism, which will not be subject to warranty.

E29.7 Basis of Payment

- (a) Payment for Deciduous Trees specified under this section shall be paid for at the lump sum Unit Price, which price shall include all costs of material supply, proper material installation and all other items incidental to the Work.
- (b) Payment for Tree Maintenance shall be on a yearly basis at the Unit Price shown on Form B: Prices, prorated if necessary to cover that portion of the maintenance actually completed at the end of each growing season.
- (c) Items of Work
 - (i) Deciduous Trees
 - (ii) Tree Maintenance

E30. FOUNDATIONS

- E30.1 All site furnishings, unless otherwise specified, are to be set in concrete footings or piles to ensure stability and prevent frost heaving. The current Standard Construction Specifications of the City of Winnipeg, CW 2160 Concrete Underground Structures and Works, is to be utilized in the installation of the concrete works for all below ground components.
- E30.2 The specific concrete requirements shall be;
 - (a) Sulfate resistant, Type 50 Cement;
 - (b) 28 day compressive strength of 30 Mpa;
 - (c) maximum aggregate size of 20 mm, nominal;
 - (d) slump 80 ±20 mm;
 - (e) maximum water/cement ratio 0.49.
- E30.3 Installation
 - (a) Contractor shall notify the Contract Administrator at least 48 hours prior to installation of concrete, so that footings may be inspected in advance of concrete being poured.
 - (b) Work under this section is considered incidental to the installation of site furniture.

E31. SITE FURNITURE

- E31.1 General Description
 - (a) This specification shall cover the supply and installation of benches, picnic tables and bike loops as shown on the Drawings.

(i) The quantities shown are the minimum requirement. More site furniture may be included in the Bidder's design.

E31.2 Materials

- (a) Benches
 - (i) Surface mount benches are to be used on concrete locations and in-ground mount benches are to be used on asphalt paving.
 - (ii) Two (2) Tache Composite Benches with Arms, in-ground mount, Drawing No. SCD-121A, Product #52501085, 1.8 M length (6'), manufactured by the City of Winnipeg, black powdercoat finish for metal and cedar tone for the boards.
 - (iii) Two (2) Tache Composite Benches with Arms, surface mount, Drawing No. SCD-121E, Product #52501071, 1.8 M length (6'), manufactured by the City of Winnipeg, black powdercoat finish for metal and cedar tone for the boards.
 - (iv) Contact for Benches: Aaron Lennon Supervisor of Central Repair/Manufacturing Facility City of Winnipeg Fleet Management Agency Division Public Works Department 215 Tecumseh Street Winnipeg, MB R3E 3S4 Email: <u>ALennon@winnipeg.ca</u>
- (b) Picnic Tables
 - (i) Two (2) Tache Style Wheelchair Metal Frame Picnic Tables, Drawing No. SCD-122A, manufactured by the City of Winnipeg.
 - (ii) Colour: Black for metals, Cedar for boards.
 - (iii) When ordering tables, the Contractor is to inform the City that the tables will require metal plates welded on for the installation of the tables to concrete pavement.
 - (iv) Contact for Picnic Tables:

Bill Mayer @ 204-470-7747, Marc Laurin @ 204-479-5489, or Tom Hendry @ 204-470-4834.

Centralized Park Services

City of Winnipeg

960 Thomas Avenue

- Winnipeg, R2L 2E1
- bmayer@winnipeg.ca

mlaurin@winnipeg.ca

thendry@winnipeg.ca

- (c) Bike Loops
 - (i) Six (6) Dero Hoop Bike Racks, Model #HR-EXP-B or approved substitute accordance with B7.
 - (ii) In-ground Mount
 - (iii) Colour: Black
 - (iv) Contact: Playgrounds-R-Us

(204) 632-7000 Email: jodi@pru.ca

E31.3 Methods

(a) All site furnishings are to be installed according to Drawings and manufacturer's specifications, using approved non-rusting, vandal resistant fasteners to ensure solid,

durable, finished work suitable for the purpose intended. Fasteners and assembly hardware shall be incidental to the Work.

- (b) All site furniture is to be installed plumb and true to correct elevations. The Contractor shall confirm proposed locations with the Contract Administrator prior to installation.
- (c) Where site furniture is located on asphalt, the asphalt work is to be completed and inspected prior to installation. The foundation holes are to be neatly formed or cut into the asphalt and the concrete foundations are to be finished cleanly and flush with the asphalt.
- (d) Foundations as per E30.
- (e) Site furnishings are to be kept clean of any granular, concrete, asphalt or other materials. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.
- E31.4 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lump sum basis, for the Items of Work listed below, which price shall include all costs of proper material supply and installation. Site restoration work and required foundations shall be considered incidental to the Work.
 - (b) Items of Work:
 - (i) Site Furniture supply and install

SPRAY PAD

E32. CONCRETE SPRAY PAD

- E32.1 General Description
 - (a) Further to E19, CW 3110 and CW 3310, this specification shall cover the supply and installation of the concrete spray pad including excavation, sub-base and base construction, and concrete paving.
- E32.2 Layout and Grading
 - (a) The concrete spray pad includes the spray basin, the overspray zone and the concrete sitting areas. It is to be sized and laid out as per the approved Drawings.
 - (b) The spray basin and the overspray zone are to be sloped to drain towards basin drains. The maximum slope to be 1:15.
 - (c) All surfaces around the perimeter of the spray pad are to drain away from the spray pad.
- E32.3 Materials
 - (a) Base material to CW 3110 and as specified on the Drawings.
 - (b) Concrete paving to CW 3310 and as specified on the Drawings.
 - (i) Epoxy coated rebar sized as per Drawings.
- E32.4 Methods
 - (a) Further to CW 3170, the construction area is to be excavated or filled to achieve rough grade.

(i) Rough grade is to be to levels, profiles and contours allowing for surface treatments.

- (b) Excavated materials are to be removed as per E23.
- (c) Compacted granular base
 - (i) To CW 3110.
 - (ii) 250mm depth of 20mm down crushed stone.
 - (iii) Granular base and formwork are to be reviewed on Site by the Contract Administrator prior to pouring concrete.

- (d) Concrete spray pad as shown on the Drawings.
 - (i) To CW 3310
 - (ii) 150mm thick reinforced concrete paving.
 - (iii) Light broom finish with a slip resistant surface. Contractor to have sample of concrete finish approved by Contract Administrator prior to any concrete being poured.
 - (iv) Saw cut locations are to be reviewed by the Contract Administrator prior to implementation.
- E32.5 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of base preparation, proper material installation, and any associated Site restoration.
 - (b) The quantity for this Item, based on the Bidder's design, is to be inserted in Form B: Prices.
 - (c) Items of Work
 - (i) Concrete Spray Pad

E33. PROTECTION

- E33.1 The Contractor shall be responsible for protecting their Work until the Work has been completed, fully cured and set; also for protecting other surfaces during execution of Work in accordance with the Specifications. Experience has shown that a security guard is required at all times during the critical concrete curing stages to prevent trespassing onto the Site. Security fencing is not sufficient to prevent such trespassing.
- E33.2 Should the Work be suspended for any cause whatsoever, the Contractor shall assume all responsibility for proper protection during such period.

E34. MECHANICAL / ELECTRICAL / PLUMBING

- E34.1 General Description
 - (a) Further to E18, SD-012 and SD-241B, this specification shall cover the supply and installation of a new water service, sewer connection, and all mechanical, plumbing and electrical required to construct a fully functioning spray pad.
- E34.2 Materials and Methods
 - (a) All mechanical, electrical and plumbing must comply to all regulatory authorities that have jurisdiction, *The City of Winnipeg Standard Construction Specifications,* and manufacturer's recommended practices.
 - (b) All connections to existing services necessary to provide a complete working project shall be included. This includes but is not limited to electrical, water and sewer.
 - (c) All active load pipe shall be Schedule 80 PVC or better.
 - (d) All water supply lines to the features shall be low pressure poly pipe approved for 100psi.
 - (e) All material used as pipe sleeves shall be approved in advance of installation by the Contract Administrator and Owner.
 - (f) Qualified tradesmen shall be employed for all work.
 - (g) The Contractor shall restore all areas 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.
- E34.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the Items of Work listed below, which price shall include all costs of material supply, proper material installation, site restoration, and all other items incidental to the Work.
- (b) Items of Work
 - (i) Water Service / Mechanical / Electrical / Plumbing

E35. SPRAY COMPONENTS

- E35.1 General Description
 - (a) Further to E20, this specification shall cover the supply and installation of all spray components.
- E35.2 Materials and Methods
 - (a) Further to E20, the spray components must meet the following requirements:
 - (i) Be from one manufacturer,
 - (ii) Be durable and vandal resistant,
 - (iii) Have a minimum of moving parts and be easy to maintain,
 - (iv) Have adjustable controls that can be programmed to allow flexibility in the spray sequence, and
 - (v) Have bases/connections that permit component relocation.
- E35.3 Basis of Payment
 - (a) Payment for Work specified under this section shall be paid for at the lump sum Unit Price for the "Items of Work" listed below, which price shall include all costs of supply and installation.
 - (b) Items of Work:
 - (i) Spray Components

E36. COMMISSIONING

- E36.1 Operation and Maintenance Manuals
 - (a) The Contractor shall supply in a format acceptable to the Contract Administrator three (3) bound copies of the manuals, as well as one electronic copy (in pdf format) detailing the operations and maintenance instructions for all elements of the project including:
 - (i) Manufacturers' written instructions, warranties, shop drawings, schedules, wiring diagrams and a listing of persons to contact for repairs during warranty period.
 - (ii) Descriptions of day to day operations, preventative maintenance, annual and periodic maintenance, and procedures for seasonal shutdown and start-up.
- E36.2 System Start-up, First and Second Year Winterization
 - (a) The Contractor is to perform the system start-up in accordance with the information contained in the operations and maintenance manuals in order to have the Work fully operational for public use by the date of Substantial Performance.
 - (b) After the operation of the spray pad for the season, the Contractor shall perform the first year winterization of the Work and the subsequent start-up the following spring.
 - (c) The Contractor shall perform a second year winterization and subsequent spring start-up.
 - (d) The Contractor shall provide the Contract Administrator with 48 hours notice prior to commencing the start-up and winterization procedures in order that City staff may attend.
- E36.3 Staff Training
 - (a) On Site training shall be provided to the City pool staff and maintenance personnel in proper operation and maintenance procedures for the system.

- (b) Trainers shall be qualified trades persons or consultants knowledgeable of the equipment and familiar with the installation.
- (c) Legible documentation shall be provided to City staff during training.
- (d) Training shall be a minimum of one half day duration.
- E36.4 Record Drawings
 - (a) Further to D21, the Contractor shall submit the set of Record Drawings to the Contract Administrator at Total Performance.
- E36.5 Basis of Payment
 - (a) Payment for Commissioning Work specified under this section shall be paid for at the lump sum Unit Price, which price shall include all manuals, training, Record Drawings and start-up.
 - (b) Payment for Winterization and Spring Start-up shall be paid for on a yearly basis at the Unit Price shown on Form B: Prices, and shall include both a fall winterization and a spring start-up.
 - (c) Items of Work:
 - (i) Commissioning
 - (ii) Winterization and Spring Start-up