



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 989-2015

**DESIGN AND CONSTRUCTION OF THE WADING POOL, SPRAY PAD AND
BUILDING MODIFICATIONS AT MACHRAY PARK**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 DESIGN AND CONSTRUCTION OF THE WADING POOL, SPRAY PAD AND BUILDING MODIFICATIONS AT MACHRAY PARK

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon. Winnipeg time, January 14th, 2016.

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 Contract Administrator or an authorized representative will be available at the Site at 10 am on January 5th, 2016 to provide Bidders access to the Site.

B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B3.3 The Bidder is responsible for determining:

- (a) the location of any utility which can be determined from the records or other information available at the offices of any public authority or person, including a municipal corporation and any board or commission thereof, having jurisdiction or control over the utility;
- (b) the nature of the surface and subsurface conditions at the Site;
- (c) the location, nature, quality or quantity of the materials to be removed or to be employed in the performance of the Work;
- (d) the nature, quality or quantity of the Plant needed to perform the Work;
- (e) the location, size and condition of existing trees;
- (f) all matters concerning access to the Site, power supplies, location of existing services, utilities or materials necessary for the completion of the Work; and
- (g) all other matters which could in any way affect this Proposal or the performance of the Work.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the 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 Request for Proposal to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.3 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgmt/bidopp.asp>.
- B6.3.1 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.
- B6.4 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 the Contract Administrator in writing has granted prior approval.
- 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) Detailed Conceptual Site Design in accordance with B11;
 - (b) Detailed Conceptual Building Plans and Elevations in accordance with B12;
 - (c) Project Work Plan as specified in B13.
 - (d) Economic Analysis in accordance with B14.
- B8.3 Further to B8, the Bidder should include the written correspondence from the Contract Administrator approving a substitution in accordance with B8.
- B8.4 All components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.

- (a) 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).
 - (b) Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should be presented in the Sections identified above. Bidders are encouraged to use their creativity to submit a Proposal, which provides the requested information for evaluation and other information, which illustrates the strength of their team.
- B8.5 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 Bidder's name and address.
- 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 (SECTION A)**
- B9.1 The Bidder 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 two or more persons submit a Proposal jointly, 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 Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers 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 Bidder must complete the Approximate Quantities column for items 8 – 10, 25 and 27 on Form B: Prices. These quantities are dependent on the proposed design submitted.

B10.4 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.

B10.5 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B11. DETAILED CONCEPTUAL SITE DESIGN

B11.1 The Bidder's team is requested to develop the detailed concept design and costing for the project based on the information in the RFP, conceptual drawings and other information provided.

B11.2 Drawings shall include, at a minimum:

- (a) Site context drawings including location and configuration of the spray pad, indication of Site services, and any modifications, relocations, and connections that will be considered beneficial.
- (b) Perspective sketches, sections, details and other submissions sufficient to illustrate the nature and overall quality of the design and addressing the following:
 - (i) The overall quality of the design including integration with the surrounding park and amenities;
 - (ii) Concept and functionality of the design and its aesthetic appeal;
 - (iii) Quality, durability and warranty of materials;
 - (iv) Universal design/Inclusive design;
 - (v) How the design will work within the constraints
 - (vi) Overall play experiences.
- (c) Spray pad/water play component description and or graphic.
- (d) Mechanical and Electrical system schematics developed in sufficient detail to describe the intended operation.

B12. DETAILED CONCEPTUAL BUILDING PLANS AND ELEVATIONS

- B12.1 The Bidder's team is requested to develop the detailed concept design and costing for the project based on the information in the RFP, conceptual drawings and other information provided,
- B12.2 Drawings shall include, at a minimum:
- (a) Building floor plans showing room areas and layout of fixtures with dimensions and notes for building materials
 - (b) Colour elevations of all sides of the building showing dimensions, floor heights, materials and finishes meeting or exceeding specifications.
 - (c) Mechanical and Electrical system schematics showing pool, spray, building equipment and systems.
 - (d) Interior elevations showing materials, fixtures, and fittings meetings or exceeding specifications.

B13. PROJECT WORK PLAN

- B13.1 The understanding and approach to the delivery of the project and the tasks to complete the project on time and in budget are critical. The proposal at this stage should demonstrate the rationale of the design, which at a minimum includes:
- (a) An understanding of the functional and technical issues and considerations, on the project requirements and budget.
 - (b) An organization chart identifying the major team members and showing the relationship, roles and responsibilities of the major team members who will perform the work.
 - (c) Provide a detailed methodology for each stage of the project. Specifics are to include a detailed description of tasks, task assignments, and responsibilities.
 - (d) Provide a proposed project work plan including a Gantt chart, identification of major stages of the work, critical dates and project milestones including but not limited to:
 - (i) schedule of drawing submissions and permitting,
 - (ii) schedule for delivery of spray components,
 - (iii) all construction operations,
 - (iv) occupancy and commissioning, and
 - (v) a clear description of the training being proposed including:
 - ◆ identification of training staff,
 - ◆ syllabus,
 - ◆ number of training days for each session,
 - ◆ expected City supplied resources.
 - (e) Sub-contractors coordination should clearly demonstrate 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.

B14. ECONOMIC ANALYSIS

- B14.1 The Bidder's team is requested to perform an economic analysis providing, but not limited to, the following calculations:
- (a) Total cost per season.
 - (b) Total annual operating cost.
 - (c) The expected flow rate (gallons per minute) and resultant daily use in cubic metres.
- B14.2 See Appendix F for blank Water Consumption Estimator & Anticipated Water Consumption tables as a suggested calculation guide.

B15. DISCLOSURE

B15.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B15.2 The Persons are:

- (a) Ful-Flo Industries Ltd.
- (b) Waterplay Solutions Corp.

B16. QUALIFICATION

B16.1 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, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B16.2 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 <http://www.winnipeg.ca/matmgt/debar.stm>.

B16.3 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);
- (d) all Engineers are to be licensed to practise in the province of Manitoba.

B16.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B16.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B16.6 Further to (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/Subcontractor 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 <http://www.winnipeg.ca/matmgt/>).

B16.7 Proposals will not be opened publicly.

B16.8 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/>.

B16.9 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.

B16.10 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 therefrom. (pass/fail)
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B16. (pass/fail)
- (d) Total Bid Price. (20%)
- (e) Detailed Conceptual Site Design. (40%)
- (f) Detailed Conceptual Building Design. (10%)
- (g) Project Work Plan. (20%)
- (h) Economic Analysis. (10%)

B21.2 Further to (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 (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 Further to (d), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.

B21.4.1 Further to B20.1(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 This Contract is to be awarded as a whole.

- B21.6 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.
- B21.7 Further to B21.1(b), the Award Authority shall reject a bid as being non-conformist if it exceeds the budget as shown on Form B: Prices.
- B21.8 Further to B21.1(e), the total bid price shall be evaluated with a weighting 20 points out of a possible 100 points. As such, the lowest bidder shall receive a full 20 points, 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 zero points.
- B21.9 Further to B21.1(e), Detailed Conceptual Site Design will be evaluated in accordance with B11:
- (a) Overall Site connectivity between uses, use of spaces and connection to the existing play areas and park. (10)
 - (b) Quality and nature & diversity of the play events and the interaction between components. Implementation of a consistent theme if a theme is deemed a part of the proposal. (10)
 - (c) Layout of play components in relation to each other and as organised on the spray pad and within the existing play areas and park. Implementation of age appropriate zones is deemed as part of the proposal. (10)
 - (d) Use of universal design principles. (5)
 - (e) Quality, durability and warranty of materials. (5)
- B21.10 Further to B21.1(e), Detailed Conceptual Building Design will be evaluated in accordance with B12:
- (a) Floor plan layout for best use of space and ease of circulation. (3)
 - (b) Use of materials that meet or exceed specifications. Quality, durability and warranty of materials. (3)
 - (c) Use of universal design principles. (4)
- B21.11 Further to B20.1(f) Project Work Plan will be evaluated in accordance with B13:
- (a) Consideration of functional and technical issues. (10)
 - (b) Clarity and appropriateness of Project delivery schedule. (5)
 - (c) Consideration of project delivery methodology. (5)
- B21.12 Further to B20.1(g) Economic Analysis will be evaluated in accordance with B14:
- (a) Description of how spray pad components will operate. (3)
 - (b) Anticipated daily water consumption. (5)
 - (c) Spray feature descriptions and graphic or catalogue reference. (2)

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 the City makes an award of Contract, 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.

B22.4.1 The Contract documents as defined in C1.1(n)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that they are not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

- C1.1 The *General Conditions for Construction* (Revision 2006 12 15) is applicable to the Work of the Contract.
- C1.1.1 The *General Conditions for Construction* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm .
- C1.2 A reference in the Request for Proposal to a section, clause or sub clause with the prefix “**C**” designates a section, clause or sub clause 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.

D1.1 In addition to the *General Conditions*, 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 spray pad with spray features, beach entry wading pool, Site work and building modifications including the demolition of the existing wading pool.

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

- (a) Design of Site works and building modifications.
- (b) Permitting for all works.
- (c) Protection of existing trees.
- (d) Demolition of existing wading pool, unit pavers and fencing.
- (e) New electrical service and wastewater sewer line.
- (f) Construction of spray pad with spray features and all associated fixtures, drains, piping, mechanical and electrical works.
- (g) Construction of beach entry wading pool with all associated fixtures, drains, piping, mechanical and electrical works.
- (h) Construction of Site grading, concrete deck and sidewalks, Site furnishings, fencing, topsoil & sod, tree planting.
- (i) Upgrade existing building to include: two fully accessible washrooms; universal access to building; expanded mechanical room and storage, relocate guard office; repair any existing water damage and replace portions of the existing cladding; install new eaves troughs and downspouts.
- (j) Commission works.

D3. DEFINITIONS

D3.1 When used in this Request for Proposal:

- (a) "Proposal" means the offer contained in the Proposal Submission;
- (b) "Spray Features" means small outdoor aquatic components that stimulate interactive and creative play. Spray features may include spray columns, water cannons, ground sprays, spray faces, spirals, loop-throughs, and themed structures such as flowers, trees, animals, nautical, etc. The spray features are to be incorporated into the beach entry as shown on the Conceptual Drawing. With zero water depth and a flat surface, the spray feature area conforms to Universal Access guidelines and eliminates the risk of drowning. Such Spray Features although usable by all ages, tends to service the 0-10 age group;
- (c) "Design Team" shall refer to the contractors and consultants responsible for the design on the project. This shall include Engineers licensed to practice in Manitoba for each specific component of the project.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is HTFC Planning & Design, represented by:

Robyn Gibson
Landscape Architect
Telephone No.: 204 944 9907
Email: rgibson@htfc.mb.ca

D4.2 Before commencement of Work, Robyn Gibson will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4.3 Bids Submissions must be submitted to the address in B8.8

D5. CONTRACTOR'S SUPERVISOR

D5.1 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.

D5.2 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.

D5.2.1 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.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D6.1 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.

D6.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

D6.3 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.

D6.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D7. NOTICES

D7.1 Notwithstanding C23.2.2, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174

D7.2 **Bids Submissions** must be submitted to the address in B8.8

SUBMISSIONS

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 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.

D9. SAFE WORK PLAN

D9.1 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.

D9.2 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>.

D10. INSURANCE

D10.1 The Contractor and/or Consultant shall provide and maintain, at its own expense and cost, the following insurance coverage to remain in place at all times during the performance of the Work and throughout the warranty period:

- (a) Builder's risk insurance including testing and commissioning insuring 100% of the total project cost written in the name of the Contractor and/or Consultant and the City; to remain in place at all times during the performance of the Work and until the date of Total Performance;
- (b) General Liability Insurance in an inclusive limit of not less than two million dollars (\$2,000,000.00) for each occurrence of bodily injury, property damage, personal injury and products and completed operations with a minimum five million dollars (\$5,000,000.00) general aggregate. Such policy shall add the City as an additional insured and include a cross liability or severability of interest clause, contractual liability, unlicensed motor vehicle liability, and non-owner auto liability;
- (c) 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 two million dollars (\$2,000,000.00) inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
- (d) The Contractor or sub-consultant(s) involved in the demolition work must provide comparable insurances to that outlined in D10.1(b) and D10.1(c) with the certificate of insurance for the general liability insurance that clearly states that the "operations include demolition work".

D10.2 The Consultant or Sub-consultant(s) shall provide and maintain professional errors and omissions liability insurance in an amount not less than one million dollars (\$1,000,000.00) per claim and one million dollars (\$1,000,000.00) in the aggregate. Such insurance shall remain in force for the duration of the project and for twelve (12) months after total performance.

D10.3 Deductibles shall be borne by the Contractor and/or the Consultant

D10.4 The Contractor shall require each of its sub-contractors to provide insurance comparable to that set forth in D9.1(b) and D9.1(c).

- D10.5 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.
- D10.6 The Contractor and/or sub-contractor may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall not be at the expense of the City.
- D10.7 All insurance policies required shall be with insurance companies registered and licenced to carry on business in the Province of Manitoba.
- D10.8 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.
- D10.9 The City shall have the right to alter the limits and/or coverage as reasonably required from time to time during the continuance of this agreement.

D11. PERFORMANCE SECURITY

- D11.1 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.
- D11.1.1 Where the performance security is in the form of a certified cheque or draft, the City will deposit it. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D11.2 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.

D12. SUBCONTRACTOR LIST

- D12.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D13. DETAILED WORK SCHEDULE

- D13.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site.
- D13.2 The detailed work schedule shall consist of the following:
- (a) SPEC NOTE: Specify the format for the detailed work schedule.
 - (b) a critical path method (C.P.M.) schedule for the Work;
 - (c) a Gantt chart for the Work based on the C.P.M. schedule; and
 - (d) a daily manpower schedule for the Work

(e) All are acceptable to the Contract Administrator.

D13.3 Further to (b), 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) drawing submissions and anticipated submission approvals;
- (b) permit submissions and anticipated approval;
- (c) submittals of shop drawings and samples;
- (d) delivery of materials, spray features and Site furnishings;
- (e) construction start;
- (f) demolition and removals;
- (g) Site power upgrade;
- (h) civil and mechanical piping;
- (i) spray features footing installations;
- (j) Site lighting pile installation;
- (k) Site lighting installation;
- (l) wading pool, spray pad and concrete deck / sidewalk installation;
- (m) installation of spray features
- (n) building interior upgrades;
- (o) building exterior upgrades;
- (p) custom bench installation;
- (q) installation of Site furnishings;
- (r) softscape installation;
- (s) installation of fencing;
- (t) commissioning and training; and,
- (u) anticipated project completion.

D13.4 Further to D13.2(c), 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.

D13.5 Further to D13.2(d), the daily manpower schedule shall list the daily number of individuals on the Site for each trade.

SCHEDULE OF WORK

D14. COMMENCEMENT

D14.1 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.

D14.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) the Safe Work Plan specified in D9;
 - (iv) evidence of the insurance specified in D10;
 - (v) the performance security specified in D11;

- (vi) the Subcontractor list specified in D12;
 - (vii) the detailed work schedule specified in D13; and,
 - (viii) the City has approved the detailed construction drawings.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
 - (c) permitting is in place for all construction.
- D14.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.
- D14.4 The City intends to award this Contract by February 5th, 2016.
- D14.4.1 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.

D15. WORKING DAYS

- D15.1 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.
- D15.2 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.
- D15.3 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.
- D15.4 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.

D16. CRITICAL STAGES

- D16.1 The Contractor shall achieve critical stages of the Work in accordance with the following requirements:
- (a) 66% CD Submission of Wading Pool, Spray Pad and Building Modifications for City review February 26th, 2016.
 - (b) 99% CD Submission of Wading Pool, Spray Pad and Building Modifications for City review March 25th, 2016.
 - (c) Permitting in place and construction start by April 29th, 2016.

D17. SUBSTANTIAL PERFORMANCE

- D17.1 The Contractor shall achieve Substantial Performance, including commissioning & start-up, by August 1st, 2016.
- D17.2 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 re-inspected.

- D17.3 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.

D18. TOTAL PERFORMANCE

- D18.1 The Contractor shall achieve Total Performance by August 15th, 2016.
- D18.2 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 re-inspected.
- D18.3 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.

D19. LIQUIDATED DAMAGES

- D19.1 If the Contractor fails to achieve critical stages, Substantial Performance 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) D16.1(a) - five hundred dollars (\$500.00);
 - (b) D16.1(b) - five hundred dollars (\$500.00);
 - (c) D16.1(c) - one thousand dollars (\$1000.00);
 - (d) Substantial Performance - one thousand five hundred dollars (\$1500.00);
 - (e) Total Performance - one thousand dollars (\$1000.00).
- D19.2 The amounts specified for liquidated damages in D19.1 are based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve critical stages, Substantial Performance or Total Performance by the days fixed herein for same.
- D19.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D20. SCHEDULED MAINTENANCE

- D20.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) First winterisation and spring start-up as specified in E42.2.
 - (b) Sod Maintenance as specified in E36.5.
 - (c) Tree Maintenance as specified in E37.5.
- D20.2 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

D21. WORK BY OTHERS

D21.1 The City of Winnipeg will have regular maintenance and pool staff working in the area. The Contractor is to ensure that all personnel have safe access to complete their works. The consultants are to coordinate with Contract Administrator for all Site design.

D22. JOB MEETINGS

D22.1 Regular weekly job meetings will be held at the Site. A minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor shall attend these meetings. 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.

D22.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D23. DRAWINGS AND SPECIFICATIONS

D23.1 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.

D23.2 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 a DWG 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.

D24. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D24.1 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).

D25. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS

D25.1 Further to B16.6, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B16.6.

D26. SAFETY

D26.1 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.

D26.2 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.

D26.3 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) SPEC NOTE: Never delete (a), (b), or (c) above, add or delete other safety requirements to suit the Work.
- (e) adequate sanitation measures are taken and facilities provided with respect to the Work.
- (f) 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;
- (g) fire hazards in or about the Work are eliminated.

D27. SITE CLEANING

- D27.1 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.
- D27.1.1 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.
- D27.1.2 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.

D28. INSPECTION

- D28.1 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.
- D28.2 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.

D29. DEFICIENCIES

- D29.1 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.
- D29.2 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.

- D29.3 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.
- D29.4 When the Contract Administrator certifies that any Plant, Material or any interest of the Contractor referred to in D29.2, 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

- D29.5 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D30. WARRANTY

- D30.1 Notwithstanding C13.2, the warranty period shall begin on the date of Substantial Performance and shall expire one (1) year thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D30.2 Notwithstanding C13.2 or D30.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Substantial 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.
- D30.2.1 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 D11)

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. 989-2015

DESIGN AND CONSTRUCTION OF THE WADING POOL, SPRAY PAD AND BUILDING
MODIFICATIONS AT MACHRAY PARK

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

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

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

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

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

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

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D11)

(Date)

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

RE: PERFORMANCE SECURITY – RFP NO. 989-2015

DESIGN AND CONSTRUCTION OF THE WADING POOL, SPRAY PAD AND BUILDING
MODIFICATIONS AT MACHRAY PARK

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: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at: <http://www.winnipeg.ca/matmgt/Spec/Default.stm>.
- 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 Request for Proposal shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Appendix</u>	<u>Content</u>
A	Architectural Evaluation Report
B	Structural Assessment
C	Electrical Design Brief & Outline Specification
D	Mechanical Design Brief & Outline Specification
E	Existing System Assessment and Design Concept – Civil
F	Water Consumption Estimator & Anticipated Water Consumption Tables

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
-	Existing Conditions Plan
-	Schematic Site Plan
L1.0	Schematic Layout Plan

DESIGN

E2. DESIGN SERVICES

- E2.1 The Contractor's Design Team shall meet the following qualifications:
- E2.1.1 Utilize professionals where required by legislation;
- E2.1.2 a Professional Engineer registered to practice in the Province of Manitoba shall seal structural, mechanical, civil and electrical design drawings, if required; and
- E2.1.3 utilize other professional expertise as required to design the Work.
- E2.2 The Design Team shall provide consulting services as required in order to:
- E2.2.1 obtain approvals and permitting from the necessary authorities including but not limited to:
- (a) City of Winnipeg, Environmental Health Services Branch;
 - (b) City of Winnipeg Zoning Permits Branch, Water and Waste Dept.; and
 - (c) other agencies as required;
- E2.2.2 prepare design drawings, specifications, documentation and instructions required for completion of the Work; and,

- E2.2.3 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.
- E2.2.4 Design to the City of Winnipeg Accessibility Design Standards
http://www.winnipeg.ca/ppd/Universal_Design.stm
- E2.3 Errors and Omissions shall be the responsibility of the Contractor who at their discretion may obtain Errors and Omissions Insurance.
- E2.4 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:
- E2.4.1 Demolition Plan
- E2.4.2 Site Servicing Plan
- E2.4.3 Site Layout Plan with dimensions
- E2.4.4 Site Grading Plan
- E2.4.5 Structural Site Layout Plan with dimensions
- E2.4.6 Structural Building Layout Plan with dimensions
- E2.4.7 Building Layout Plan with dimensions
- E2.4.8 Building Elevations
- E2.4.9 Details
- E2.5 All consultant services from conceptual design through to project completion are to be included in the Bid Price as per Form B: Prices at the price for Item 35 - "Consultant Services".

E3. CIVIL / MECHANICAL / ELECTRICAL CONDITIONS AND DESIGN REQUIREMENTS

- E3.1 Mechanical Room:
- E3.1.1 All mechanical devices that are required to operate the wading pool and spray pad are to be located in the expanded mechanical room of the existing building.
- E3.1.2 The size and location are to be shown on the Contractor's drawings.
- E3.2 Wading Pool and Spray Pad
- E3.2.1 Civil and mechanical works to follow the recommendations of the J. R. Cousin Consultants Ltd. report, as provided in Appendix E, and as described herein, provided that permitting can be obtained.
- E3.2.2 The location of the meter pit and the method for installing the water line (e.g. open cut or directional bore or other) is to be clearly indicated in the Contractor's submission.
- E3.2.3 The splash pad shall contain drain lines as required by design and applicable code(s) with a minimum of two drains.
- (a) Trench drains may be provided as appropriate to the design.
- (b) Deck drains, shall be cast-iron body with a nickel bronze top.
- (c) Deck drains to be heavy-duty, non-corroding metal alloy or equally durable fiberglass or plastic construction.
- E3.2.4 New fill line from the existing building is required; connection to city line to be made inside building. Air gap in building, gravity pipe to wading pool
- E3.2.5 New fill pipe to be buried 75mm (3") HDPE. Termination point in the pool to have a nickel bronze grate.

- E3.2.6 Filtration system is to include a cartridge filter, pump and chlorinator, per J. R. Cousin Consultants Ltd. report, as provided in Appendix E.
- E3.2.7 Wading pool supply piping to be HDPE complete with saddles, balancing valves and return fittings (eyeball) per J. R. Cousin Consultants Ltd. report, as provided in Appendix E.
- E3.2.8 Wading pool drains (Min. 2) spaced at least 1 meter apart must have anti entrapment drain covers.
- E3.2.9 A seasonal supply line to spray pad's manifold/water distribution system is required in building.
- (a) The supply line may be up sized to 75mm in order to mitigate pressure drop over the distance of delivery.
 - (b) All supply line(s) to spray pad features to gravity drain into mechanical room pit
- E3.2.10 The drain system is to tie into WWS system on per J. R. Cousin Consultants Ltd. report, as provided in Appendix E. The method for installing the sewer line (i.e. open cut or directional bore or other) is to be clearly indicated in the Contractor's submission.
- E3.2.11 The splash pad drain line(s) shall be sized to permit draining of basin to prevent any standing water.
- E3.2.12 All drain line(s) to gravity drain.
- E3.3 Additional Mechanical
- E3.3.1 Rain sensors and automatic shut-off devices are required for the spray pad.
- E3.4 Electrical
- E3.4.1 New electrical feed to be provided to existing building:
- (a) All electrical equipment must be C.S.A. approved.
 - (b) All components within the spray pad area shall be grounded.
 - (c) All electrical controls and equipment are to be in the mechanical room.

E4. BEACH-ENTRY WADING POOL DESIGN

- E4.1 The design of the concrete wading pool shall include:
- E4.1.1 The beach-entry pool basin;
 - E4.1.2 sloped at a maximum of 5% to a depth of 600mm, including sizable (4m minimum) flat ($\pm 2\%$ slope) portions at the top and bottom of the pool;
 - E4.1.3 and compliance with Section 1.4.1 of CWPG's Accessibility Design Standards 2015.
- E4.2 The general configuration of the wading pool is to be as shown on the Concept Drawing. The size of the wading pool may be altered if deemed suitable to the Contractor's design. The Bidder must indicate the size of the proposed concrete wading pool, measured in square metres, on Form B: Prices for Item 8 - "Concrete Beach-Entry Wading Pool".

E5. SPRAY PAD DESIGN

- E5.1 The design of the concrete spray pad shall include:
- E5.1.1 the spray basin,
 - E5.1.2 the minimum 1.8m wide overspray zone.
- E5.2 The layout of the spray components shall be such that the manufacturer's spray zones shall be contained entirely within the spray pad.

- E5.3 The 1.8m wide over spray zone is intended to contain any overspray from the components and provide a dry surface for circulation around the spray pad.
- E5.4 The spray pad is to be divided into two designated zones; the Youth zone (60% of the total spray basin area) and the Toddler zone (40% of total spray basin area). The Toddler designated zone shall be located directly opposite the wading pool.
- E5.5 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 Contractor's design. The Bidder must indicate the size of the proposed concrete spray pad, measured in square metres, on Form B: Prices for Item 9 &10 - "Concrete Spray Basin and Overspray Zone".
- E5.6 The spray pad (spray basin and overspray zone) is to slope to drain to the spray pad drains. The surrounding areas for the benches and picnic tables may drain away from the pad towards the adjacent landscape.

E6. SPRAY COMPONENTS DESIGN

- E6.1 The design for the spray pad components must meet the following requirements:
- E6.1.1 Provide for all age and ability user groups. The spray pad should be zoned with two groupings of components dedicated to Toddlers (children 0-4 yrs) and Youth (5-12 yrs), as indicated on the drawings and per item E4.4 above.
- E6.1.2 Follow City of Winnipeg Accessibility Design Standards.
- E6.1.3 Contain a variety of ground sprays, mid-height components and tall components.
- E6.1.4 Contain a special feature that creates an entrance onto the spray pad, as indicated on the Drawings, and which the community can identify with.
- E6.1.5 Contain a minimum of one "group" or "team" feature that requires multiple user participation to manipulate the type/amount of water being sprayed.
- E6.1.6 Contain "dumping buckets" as space permits.
- E6.1.7 Contain a minimum of one bollard activator.
- E6.1.8 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.
- E6.1.9 Contain a consistent look or theme within the spray pad.
- E6.1.10 Special consideration will be given to products that offer the ability to remove/relocate to other bases.
- E6.2 The design for the spray pad components should not include:
- E6.2.1 Trip, entanglement and strangulation hazards.
- E6.2.2 "Ground Stream" type features, particularly those containing low to the ground / moveable components.
- E6.2.3 Components with moving parts that may pose a hazard or injury.
- E6.2.4 Water cannons / shooting components with high water pressure and / or resemble weapons.
- E6.2.5 Components that contain complicated computerized mechanisms.

E7. BUILDING MODIFICATION DESIGN

- E7.1 Renovations to building interior as follows:
- E7.1.1 Expand mechanical room to house new mechanical system;

- E7.1.2 Wall between two mechanical areas is bearing. Infill and frame openings accordingly;
- E7.1.3 Build new guard office;
- E7.1.4 Renovate washrooms to meet the latest City of Winnipeg Accessibility Design Standards and Manitoba Building Code requirements.
- E7.2 Renovations to the building exterior as follows:
 - E7.2.1 Wall upgrades as per recommendations outlined in Architectural Evaluation Report.
 - E7.2.2 Replace exterior cladding:
 - (a) Upon removal of cladding, inspect all bottom wall plates and studs. Replace rotted studs with new material. Replace all wall bottom plates with pressure treated material. Shore structure as required to complete the work.
 - E7.2.3 Close-up existing window at rear of the building.
 - E7.2.4 Replace exterior doors and enlarge openings as required by the latest City of Winnipeg Accessibility Design Standards and Manitoba Building code requirements.
 - E7.2.5 New lintels will be required in exterior bearing walls for expanded doors.
- E7.3 The general configuration of the building modification is to be as shown on the Concept Drawing. The size of the room may be altered if deemed suitable to the Contractor's design, but must meet current accessibility standards and code requirements. The size of the building modifications is determined by the size of the existing structure.
- E7.4 All building modifications shall follow City of Winnipeg Accessibility Design Standards.

E8. SITE DEVELOPMENT DESIGN

- E8.1 Existing Playgrounds:
 - E8.1.1 Existing playgrounds, including timber edging, play surfacing, play equipment, are to be protected; any damage to existing playgrounds will be made right by the Contractor at no expense to the City.
 - E8.1.2 Removal of pea gravel and replacement with wood fibar complete with drainage system as noted on the drawings; existing timber edging and play structures are to be protected and remain; any damage to existing timber edging or play structures will be made right by the Contractor at no expense to the City.
 - E8.1.3 The general configuration of the wood fibar complete with drainage system to be as shown on the Concept Drawing. The size of the wood fibar complete with drainage system may not be altered; it is determined by existing timber edging of the playground. The size of the wood fibar complete with drainage system, measured in square metres, is to be shown on Form B: Prices for Item 26 - "Wood Fibar c/w Drainage System".
- E8.2 Pathways and Sitting Alcoves:
 - E8.2.1 Concrete pathways allowing for:
 - E8.2.2 circulation around the spray pad and wading pool,
 - E8.2.3 connection to the existing playgrounds, and
 - E8.2.4 access from public sidewalk on Anderson Avenue.
 - E8.2.5 The general configuration of the pathways and sitting alcoves are to be as shown on the Concept Drawing. The size of the pathways and sitting alcoves may be altered if deemed suitable to the Contractor's design. The Bidder must indicate the size of the proposed pathways and sitting alcoves, measured in square metres, on Form B: Prices for Item 25 - "Concrete Pathways and Sitting Alcoves".

- E8.2.6 All transitions between existing pathways / sidewalks and new pathways must be flush. All transitions between new pathways and the top of existing timber edging at the playgrounds must be flush.
- E8.2.7 Building entry door thresholds shall not exceed 13 mm and shall be beveled to facilitate the use of mobility devices.
- E8.2.8 Site grading around the building should provide positive drainage (min. 2%) away from building.
- E8.3 Topsoil and Sod:
- E8.3.1 Topsoil and sod to be installed / repaired as is indicated on drawings and as required by extent of disturbance due to construction.
- E8.3.2 The general configuration of the topsoil and sod are to be as shown on the Concept Drawing. The size of the topsoil and sod may be altered if deemed suitable to the Contractor's design. The Bidder must indicate the size of the proposed topsoil and sod, measured in square metres, on Form B: Prices for Item 27 - "Topsoil and Sod".
- E8.4 All Site development shall follow City of Winnipeg Accessibility Design Standards.

GENERAL REQUIREMENTS

E9. HAZARDOUS MATERIALS

- E9.1 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. The City shall deal with removal of hazardous materials and the Contractor shall await further instruction by the Contract Administrator.

E10. COMPLETE PROJECT

- E10.1 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.

E11. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

- E11.1 The Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.
- E11.2 The Contractor shall comply with all laws, ordinances, rules and regulations that relate to the Work.
- E11.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.
- E11.4 All Work shall be performed in compliance with Manitoba Workplace Safety and Health.
- E11.5 All Work shall be performed in compliance with Manitoba Workplace Safety and Health Fall Protection guidelines.
- E11.6 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.

E12. EXISTING SERVICES AND UTILITIES

- E12.1 Although the Plans may show the location of existing surface and underground works and services, the City and the Contract Administrator does not assume responsibility for discrepancies between the Plans and the actual locations of the works and services or the completeness of the drawings. The Contractor shall make all requests directly to each utility for the location of their existing works prior to the start of construction in the area.
- E12.2 Prior to the commencement of construction, the Contractor shall inspect the Site and examine all available records and contact all relevant utilities as necessary to determine the location of all existing surface and underground works. Locations of underground structures if shown are based on the best information available. No guarantee is given that all existing locations are exact.
- E12.3 The Contractor shall be responsible for and take all necessary precautions to preserve and protect all public utilities (i.e. telephone lines and cables, hydro lines and cables, gas lines, sewer mains and services, water mains and services, etc.) existing drains and surface drains or parts thereof which may be affected by operations.
- E12.4 The Contractor shall make all requests directly to each utility for the location of their existing works prior to the start of construction in the area.
- E12.5 The Contractor shall indemnify and hold harmless the City and the Contract Administrator or Sub-Consultants against damages for consequential loss and against any claim made against the City or the Contract Administrator of any such main, line, conduit or other such structure or utility for any loss or damage in respect of third party claims or which may be suffered by any such City because of damage to any such main, line, conduit, or other such structure or utility, in any way caused by the operations of the Contractor in the performance of this Contract.

E13. ACCESS TO SITE

- E13.1 Access to the Site will be determined at the pre-construction meeting. The access shall be provided and maintained by the Contractor at own expense and approved by the Contract Administrator.
- E13.2 The Contractor shall be restricted to the Site access locations and routes to minimise 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.

E14. SITE VERIFICATION

- E14.1 Further to C3.1:
- E14.1.1 Prior to commencing actual construction work, check field conditions, obtain and confirm actual Site dimensions, examine surface conditions, etc. as required to ensure correct fabrication and execution of the work.
- E14.1.2 Examine previously constructed work. Notify Contract Administrator in writing of any conditions, which may prejudice proper completion of this work. Commencement of construction constitutes acceptance of existing conditions, and means dimensions have been considered, verified and are acceptable.
- E14.1.3 Contractor shall pay all costs for on Site review and examination.
- E14.2 The City will not be conducting test holes. The Contractor is responsible to make own interpretation of the soils within the construction area.

E15. CONSTRUCTION FACILITIES AND STAGING

E15.1 The Contractor shall be responsible for providing own storage and handling of all construction operations. The use of public right-of-ways is not permitted.

E16. TEMPORARY UTILITIES

E16.1 The Contractor shall make their own arrangements in relation to the temporary use of lighting, power, gas, sewer, water, and other utilities, and pay all associated costs.

E16.2 All necessary permits, fees, and other like expenses, as well as the cost of the temporary connections to existing facilities, shall be arranged and paid for by the Contractor.

E17. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

E17.1 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 or near to the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace or repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to the Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and hold harmless the City and the Contract Administrator and/or sub-consultants from all claims made directly or indirectly against it in respect to any such damage.

E17.2 Location of existing works on public property in some areas may restrict the normal operation of heavy machinery. In these areas the contractor is not relieved of any responsibility from damages caused to private or public property. Take all necessary precautions to prevent damage to existing facilities.

E17.3 When moving heavy equipment protect roads, streets and all property. Use caution when turning heavy equipment on streets to prevent permanent damage. If permanent damage occurs, repair such damage at no expense to the City.

E18. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

E18.1 Further to CW 1130, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while they are Working near them. Any damage caused by the negligence of the Contractor or their Sub-contractors to the adjacent Works or properties, shall be promptly repaired by them at their own expense, to the satisfaction of the Contract Administrator.

E18.2 The Contractor shall, during the construction of this project, maintain safe, accessible, access to the adjacent facilities at all times.

E18.3 The Contractor shall isolate the work Site with temporary fencing. These shall be erected and maintained as required for the duration of the construction period.

E18.3.1 Orange safety fencing will not be accepted as sufficient to isolate the Site.

E18.4 Ambulance/Emergency vehicle access must be maintained at all times.

E18.5 Site enclosures shall be considered incidental to the Contract Work.

E19. SITE ENCLOSURES

E19.1 Temporary Site enclosures, as determined necessary at the pre-construction meeting or as shown on the Drawings, shall be erected and maintained as required for the duration of the construction period.

- E19.2 Site enclosures shall, at a minimum, consist of sectional, 1.8m height, non-climbable metal fencing.
- E19.3 Site enclosure shall be sufficient to isolate and secure the jobsite from the adjacent area.
- E19.4 enclosures shall be considered incidental to the Contract Work and will not be separately measured or paid for.

E20. PROTECTION OF THE SURVEY INFRASTRUCTURE

- E20.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions; Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E20.2 Further to C:6.26 (g), at least seventy-two (72) hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 204-918-1360 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E20.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with forty-eight (48) hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E20.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.
- E20.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any payments to be made by the City to the Contractor.

E21. PROTECTION OF EXISTING TREES

- E21.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:
 - E21.1.1 Install orange safety fencing with a minimum height of 1.2m using t-rail metal stakes at a minimum of 2m o/c; safety fencing shall be securely fastened to the stakes;
 - E21.1.2 not stockpile materials and soil or park vehicles and equipment within 2 metres of trees;
 - E21.1.3 strap all existing trees within in the limits of construction with 25x100x2400mm wood planks, or suitable protection as approved by the Contract Administrator;
 - E21.1.4 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;
 - E21.1.5 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;

E21.1.6 repair, replace and maintain tree protection materials throughout construction until project completion; and

E21.1.7 carefully remove safety fencing and strapping material without harming trees as soon as the construction and restoration work is completed.

E21.2 All damage to existing trees caused by construction activities shall be repaired to the requirements and satisfaction of the Contract Administrator and City Forester having jurisdiction.

E22. LAYOUT

E22.1 The Contractor shall be responsible for setting control and completing all grading, underground services, utilities and other work executed under this contract to all lines, elevations, reference points and measurements based on plans, specifications, basic control points and benchmark(s) supplied by Contract Administrator.

E22.2 The Contractor shall employ qualified person(s) to layout work.

E22.3 The Contractor will mark, to the extent he determines to be necessary, the location, alignment and elevation of the Work by means of stakes or marks, for review and approval by the Contract Administrator. The Contractor shall make the completed Works conform to the lines and marks thus approved and indicated.

E22.4 Before commencing Work, the Contractor shall satisfy themselves as to the meaning and correctness of all stakes and the City on account of any alleged inaccuracies shall entertain marks and no claims. If any error is suspected in the Drawings, Specifications or the directions of the Contract Administrator, Work shall be discontinued until the errors are rectified, but no claims shall be made on account of any delay occasioned thereby.

E22.5 The Contractor shall determine and provide all dimensions and elevations measured from the stakes or marks.

E22.6 The Contract Administrator shall be advised of the staking of the work layout at least twenty-four (24) hours in advance in order that the layout may be inspected and adjusted as required prior to construction. The cost of correcting any errors arising out of neglect of the Contractor to so notify the Contract Administrator shall be borne entirely by the Contractor.

E22.7 The Contract Administrator shall only review the stakes and marks for general conformance to the proposed design. The Contractor shall not rely on this review as authoritative or comprehensive review of the staking and shall remain responsible for conformance to the design intent and drawings following this review.

E22.8 There shall be no separate payment for the layout of the works or the provision of stakes or marks, these items being considered incidental to the items of work being laid out.

E23. SAMPLES

E23.1 Samples called for in the Specification or requested by the Contract Administrator shall be:

E23.1.1 submitted within fifteen (15) Calendar Days of request;

E23.1.2 identify samples with name of project, date, name of Contractor, name of supplier/manufacturer and use of material represented by sample;

E23.1.3 do not proceed with delivery of materials until samples are reviewed by the Contract Administrator; no deviation is permitted after approval of sample;

E23.1.4 approval of samples does not imply acceptance of finished Work; and

E23.1.5 where required, submit a range of samples, as may be reasonable.

E24. TEST REPORTS

E24.1 Where indicated in the Specification, or as 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.

E24.2 Submit test results to the Contract Administrator within ten (10) Calendar Days of request.

E24.3 All testing costs shall be the responsibility of the Contractor.

SITE WORKS

E25. CONSTRUCTION BOUNDARY

E25.1 Contractors are to work only within the Construction Boundary as shown on the Drawings or as directed by the Contract Administrator.

E25.2 Any fencing, not indicated for demolition, that is removed for Site access is to be replaced to CW 3550.

E26. SITEWORK DEMOLITION AND REMOVALS

E26.1 General Description

E26.1.1 This Specification shall supplement CW 3010 and CW 3110 and shall cover the requirements for demolition, salvage, removal and disposal wholly or in part of various items designated to be removed or partially removed and for backfilling resulting trenches, holes and pits.

E26.1.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for and incidental to the satisfactory performance and completion of all Work as hereinafter specified.

E26.2 Equipment

E26.2.1 All equipment shall be of a type approved by the Contract Administrator and shall be kept in good working order.

E26.2.2 The size, weight, and destructive capabilities of the equipment shall be matched to the type of removal to be done.

E26.3 Construction Methods

E26.3.1 Scope of Work

(a) The Work under this Specification shall include the following items as shown within the limit of Work on the Drawings or otherwise directed by the Contract Administrator:

(i) Wading pool and deck.

(ii) Unit paving.

(iii) Trees and shrubs.

(iv) Chain link fence.

(v) Site furnishing (to be returned to owner).

E26.3.2 Fees and Permits

(a) The Contractor shall obtain and pay for all licenses and permits necessary for the demolition work.

- (b) The Contractor shall comply with all Municipal, Provincial, and Federal Government regulations relating to the demolition of structures.

E26.3.3 Safety Precautions

- (a) The Contractor shall provide flagmen, barricades, railings, and whenever necessary, warning signs at excavation holes, plywood access ramps and /or other construction necessary to secure the safety of workers, the public, and personnel alike and shall comply with all Provincial Statutes applicable to the work of this nature. The Contractor shall provide all other protective measures as may be required by any law in force in Manitoba.

E26.3.4 Protection of Existing Structures

- (a) Protect existing items designated to remain and materials designated for salvage. In event of damage to such items, immediately replace or make repairs to approval of the City and at no cost to the City.
- (b) Tree protection, per E20, suitable protection to existing playgrounds and Site enclosure fence, per E18, must be in place prior to any demolition work.

E26.3.5 Preparation of Site

- (a) Inspect Site and verify with Contract Administrator items designated for removal, disposal, salvage and items to remain. The demolition of any items shall not occur until after permission to proceed has been received by the Contract Administrator.
- (b) Locate and protect utility lines per E11. Preserve in operating condition active utilities traversing Site.
- (c) Notify utility companies before starting demolition per E11. Utilities to provide clearance before any excavation is done.
- (d) Notify Geomatics Service Branch per E19.2 to obtain clearance and mark survey infrastructure minimum of 72 hours before any excavation.

E26.3.6 Removals

- (a) Remove items as indicated on the Drawings and as directed by the Contract Administrator. Do not disturb adjacent items designated to remain in place.
- (b) Grassed areas specified for removal shall have the grass surface and growing medium (soil) removed to the elevation of subsurface layer (clay). The excavated material shall be removed from the Site and disposed of or recycled in an environmentally responsible and legal manner.
- (c) In removal of pavements:
 - (i) square up adjacent surface to remain in place by saw-cutting or other method approved by Contract Administrator;
 - (ii) protect adjacent joints and load transfer devices; and
 - (iii) protect underlying granular materials.

E26.3.7 Disposal of Materials

- (a) The Contractor shall promptly dispose of materials not designated for salvage or re-use in Work, off-Site in a legally acceptable manner.
- (b) Trim disposal areas to approval of Contract Administrator.

E26.3.8 Backfill

- (a) Backfill in areas as indicated in accordance with Excavation Bedding and Backfill - CW 2030.

E26.3.9 Restoration

- (a) Restore areas and existing works outside areas of demolition to match condition of adjacent undisturbed areas.

E26.3.10 Site Clean-up

- (a) Upon completion of Work, remove debris, trim surfaces and leave Work Site clean.

E26.4 Basis of Payment

- E26.4.1 Payment shall be per Form B: Prices for item "Excavation & Removals" and shall be deemed to include payment in full for all removal and demolition.

E27. SITE GRADING

E27.1 General Description

- E27.1.1 Further to CW 3170, this specification shall cover the Site grading, including:
 - (a) The cut and fill required to achieve the proposed Site grades.
 - (b) The cut and fill required for the construction of the wading pool and spray pad.

E27.2 Grading Design

- E27.2.1 The wading pool and spray pad is to be set high enough that good positive drainage is achieved, both away from the building and away from the concrete pad, incorporating existing drainage patterns. The surrounding area may have a swale, at a minimum slope of 1%) that follows the existing Site drainage patterns.
- E27.2.2 City of Winnipeg Accessibility Design Standards are to be incorporated.

E27.3 Matching Existing Grades

- E27.3.1 Wherever the proposed paving, or sod meets existing paving or property line, the Contractor shall construct the proposed element to an acceptable grade, as directed by the Contract Administrator, to ensure that proper drainage and accessibility are maintained.

E27.4 Methods

- E27.4.1 The construction area is to be excavated or filled to achieve rough grade
 - (a) Rough grade is to be to levels, profiles and contours allowing for surface treatment as indicated on Drawings.
- E27.4.2 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.
- E27.4.3 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 fill be required, it shall be considered incidental to the Work.
- E27.4.4 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.
- E27.4.5 All surplus or unsuitable materials shall be disposed of off Site in a legal manner and as directed by the Contractor.
- E27.4.6 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.

E27.5 Basis of Payment

- E27.5.1 Payment shall be per Form B: Prices for item "Site Grading" and shall be deemed to include payment in full for all grading.
- E27.5.2 No separate measurement or payment shall be made for excavation and rough grading as this Work is incidental to the unit prices bid for supply and installation of the final surface treatment.

E28. MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS

- E28.1 The pool and wading pool system is to be a straight to drain system with dedicated tanks, filters, u.v. filters, pumps, etc. for the new pool and spray features. Design of the system is to be per J. R. Cousin Consultants Ltd. report, as provided in Appendix E, and approved by the Contract Administrator and City of Winnipeg prior to start of construction.
- E28.2 Primary control system including activation switch, timers, electronic sequencers and wiring schematics, controllers, valves, pressure regulators, ball valves etc. shall be provided.
- E28.3 Electrical works to follow the recommendations of the SMS Engineering report for the Electrical Scope of Work and Code review, as provided in Appendix C, provided that permitting can be obtained.
- E28.4 The plumbing to follow the recommendations of the SMS Engineering report for the Mechanical Scope of Work and Code review, as provided in Appendix D, provided that permitting can be obtained.
- E28.5 Contractor to include supply and installation of outdoor security lighting on existing building.
- E28.6 Contractor to coordinate with Manitoba Hydro to provide new services and service points. All costs from Hydro to be borne by Contractor.
- E28.7 Ventilation systems shall be designed to meet current standards described by A.S.H.R.A.E. and applicable codes.
- E28.8 Work to be performed by journeymen skilled tradesmen to the satisfaction of the Contract Administrator.
- E28.9 All plumbing and electrical must comply to all regulatory authorities that have jurisdiction and manufactures recommended practices.
- E28.10 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.
- E28.11 Designs will respect the use of the areas and ensure the comfort and safety of the occupants.
- E28.12 Mechanical markings to be in accordance with the following and approved by the Contract Administrator:
- E28.12.1 Canadian General Standards Board (CGSB).
 - E28.12.2 CAN/CGSB-1.60[M89], Interior Alkyld Gloss Enamel.
 - E28.12.3 CAN/CGSB-24.3[92], Identification of Piping Systems
 - E28.12.4 CAN/CGSB-149.1[M95].
 - E28.12.5 CAN/CGSB-149.2[M91].
- E28.13 Controls:
- E28.13.1 Low lifecycle cost considering initial investment, daily operations, maintenance and expected lifespan.
 - E28.13.2 System to drain away so that there is no standing water at any time.
 - E28.13.3 Must comply with current Health regulations for water quality.
- E28.14 Piping:
- E28.14.1 Ensure new wastewater sewer is sized to accommodate both spray pad and wading pool systems.
 - E28.14.2 All fittings to be galvanized or PVC. All fasteners to be stainless steel.

- E28.14.3 All water lines to have proper slope and drain capability and blow out valves for fall servicing.
- E28.14.4 Piping to include a shock arrester.
- E28.14.5 Drain lines are to be sized to permit draining of basin to prevent standing water.
- E28.14.6 All PVC underground piping to be minimum of schedule 80.
- E28.14.7 All supply lines to the features to be low pressure poly pipe approved for 100 psi.
- E28.14.8 Drain lines are to gravity drain to facilitate winterization.
- E28.15 Mechanical:
 - E28.15.1 To be incorporated in a new building mechanical room. If the building mechanical room is not completed prior to completion of mechanical works the Contractor is to provide a temporary weather tight enclosure for the mechanical works in a location designated during the design phase. Following completion of the building mechanical room the Contractor is to disassemble the mechanical works and reinstall all equipment in the new location.
 - E28.15.2 Space is to accommodate mechanical systems with adequate clearance space.
 - E28.15.3 Controls must be easily accessible.
 - E28.15.4 Mountings must be structurally designed.
 - E28.15.5 Ensure all equipment, fixtures and devices requiring normal maintenance and or cleaning are to be mounted such that they are fully serviceable. Provide necessary isolation access doors, union fittings and the like.
 - E28.15.6 Pits, if proposed, must be accessible, easy maintenance and operation and have vandal resistant lockable entry point.
 - E28.15.7 Site shall have a rain sensor control to limit the use of the Site during rain events.
 - E28.15.8 Site shall have a wind sensor mounted on the existing lights to limit spray during high wind.
- E28.16 Operations and maintenance manual to be provided.
 - E28.16.1 Provide three (3) bound copies of the operation and maintenance manual detailing the operation and maintenance for all elements of the construction.
- E28.17 Training:
 - E28.17.1 Provide training on the operation and maintenance of the proposed system.
- E28.18 Electrical:
 - E28.18.1 New overhead utility service connection and service entrance panel to be provided.
 - E28.18.2 All equipment must be CSA approved.
 - E28.18.3 Related to the mechanical system requirements.
 - E28.18.4 Related to the Site Lighting.
 - E28.18.5 Grounding of all components within water play area.
 - E28.18.6 To meet all applicable requirements of authorities having jurisdiction.
 - E28.18.7 Power Smart Program: The City has a Power Smart Agreement with Manitoba Hydro. Manitoba Hydro has the right to review the design, specifications, and drawings prior to construction. Contractor shall provided documentation normally required for the City to receive a Power Smart Grant from Manitoba Hydro.
 - E28.18.8 Periodic review during the construction phase:

- E28.18.9 The Design Team shall be responsible for periodic review of construction progress and shall provide the results of said reviews to the Contract Administrator in writing.
- E28.19 The Contractor is to coordinate with Manitoba Hydro and the building contractor for the complete upgrade of the electrical service to the building. The work will include disconnect of existing systems, new feed from new transformer, new distribution panel, all associated wiring and any required subpanels not already included in the electrical works.
- E28.20 Basis of Payment:
- E28.20.1 Mechanical system for pool and spray features will be paid for at the contract lump sum price for "Wading Pool and Spray Pad Mechanical" as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.
- E28.20.2 Electrical system for pool and spray features will be paid for at the contract lump sum price for "Wading Pool and Spray Pad Electrical" as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.
- E28.20.3 Security and Site lighting will be paid for at the contract unit price for "Security and Site Lighting" as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.

E29. SUB-GRADE, SUB-BASE AND BASE COURSE CONSTRUCTION

- E29.1 General Description
- E29.1.1 This Specification shall supplement CW 3110 and shall cover the requirements for placing, compaction, Site tolerances, and protection.
- E29.2 Placing
- E29.2.1 Begin spreading base material on crown line of high side of one-way slope.
- E29.2.2 Place granular sub-base, base and sand materials using methods which do not lead to segregation or degradation.
- E29.2.3 For spreading and shaping material, use spreader boxes having adjustable templates or screeds which will place material in uniform layers of required thickness.
- E29.2.4 Place material to full width in uniform layers not exceeding 150mm compacted thickness. Contract Administrator may authorize thicker lifts (layers) if specified compaction can be achieved.
- E29.2.5 Shape each layer to smooth contour and compact to specified density before succeeding layer is placed.
- E29.2.6 Remove and replace portion of layer in which material has become segregated during spreading.
- E29.3 Compaction
- E29.3.1 Shape and roll alternately to obtain smooth, even and uniformly compacted base.
- E29.3.2 Apply water as necessary during compaction to obtain specified density.
- E29.3.3 In areas not accessible to rolling equipment, compact to specified density with mechanical tampers approved by Contract Administrator.
- E29.3.4 Correct surface irregularities by loosening and adding or removing material until surface is within specified tolerance.
- E29.4 Site Tolerances

E29.4.1 Finish base surface to be within 10mm of elevation as indicated but not uniformly high or low.

E29.5 Protection

E29.5.1 Maintain finished base in condition conforming to this section until succeeding base is constructed, or until granular base is accepted by Contract Administrator.

E30. CONCRETE PAVING

E30.1 All work to be in accordance with CW 3310 R14

E31. FOUNDATIONS

E31.1 All Site furnishings and spray components, 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.

E31.2 The specific concrete requirements shall be;

E31.2.1 Sulfate resistant, Type 50 Cement;

E31.2.2 28 day compressive strength of 30 Mpa;

E31.2.3 maximum aggregate size of 20 mm, nominal;

E31.2.4 slump 80 ±20 mm;

E31.2.5 maximum water/cement ratio 0.49.

E31.3 Installation

E31.3.1 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.

E32. BEACH-ENTRY WADING POOL CONSTRUCTION

E32.1 The Contractor shall construct a new pool with varying depth and beach entry pool with all required fixtures, ladders, coatings, anchors and markings.

E32.2 Materials to be to CW 3325. Concrete to be Type 2 as per CW 3310.

E32.3 Pool surface to be a minimum of 150mm thick with reinforcing mat. No Calcium Chloride admixture allowed.

E32.4 Concrete must not contain sealants or curing agents that may result in slippery surfaces upon setting.

E32.5 The Contractor shall supply and install a coating system for the entire pool area, including all required markings for lanes, depths, clarity markers etc. as required by the City of Winnipeg and Manitoba Health.

E32.6 Coating system to be Aquafin 2K or approved equal in accordance with B7. Colours to be approved by City prior to construction.

E32.7 Contractor to include all piles as required to support pool and pool walls.

E32.8 Contractor to provide drawings stamped by a Structural Engineer licensed to practice in the Province of Manitoba for all proposed work and connections to existing structures.

E32.9 Contractor to provide detailed information in the Engineering Design plan for all materials and structural designs.

E32.10 Basis of Payment

- E32.10.1 Payment shall be as per Form B: Prices for item "Concrete Beach-Entry Wading Pool". Should the Contractor make adjustments as per item E3.2 there shall be no adjustment in the price.

E33. CONCRETE SPRAY BASIN AND OVERSPRAY ZONE

- E33.1 The Concrete spray basin and overspray zone shall be as sized and laid out per the Drawings.
- E33.2 Site shall be accessible throughout with no curbs blocking access.
- E33.3 All surfaces shall be straight to drain.
- E33.4 Materials to be to CW 3325. Concrete to be Type 2 as per CW 3310.
- E33.5 Pool surface and deck to be a minimum of 150mm thick with reinforcing mat. No Calcium Chloride admixture allowed.
- E33.6 Contractor shall coordinate the layout of the fixtures on the spray basin and overspray zone and the details of construction to ensure that:
- E33.6.1 Spray pad shall collect overspray to a minimum of manufacturers specified overspray.
- E33.6.2 Concrete pad, designed to support light truck use in a wet environment; minimum 150mm thick.
- E33.6.3 Sloped to drain towards return inlets. Maximum slope to be 1:15.
- E33.6.4 Provide a slip resistant surface suitable for use in this type of installation and acceptable to the city.
- E33.6.5 Provide drain lines as required.
- (a) Minimum of 2 drains or trench drains shall be provided for each drainage basin as appropriate to the design.
- (i) Deck drains to be sized appropriately to size of basin and fixtures proposed.
- (ii) Drains to be heavy duty non-corroding metal alloy or equally durable fiberglass or plastic construction.
- (iii) Drain lines are to gravity drain to facilitate winterization.
- (b) Rebar shall be epoxy coated and sized as per the Drawings
- (c) Spray pad shall include an overspray zone which shall drain to the internal drains.
- (d) Overspray zone shall be sized to collect overspray from the spray devices to a minimum of 50% greater than manufactures stated overspray.
- E33.7 Should the Contractors selection and layout of fixtures, or budgetary considerations during the bid process necessitate adjustments in the layout of the spray pad the Contractor shall submit Shop Drawings for the approval of the Contract Administrator with sufficient detail to:
- E33.7.1 Satisfy the permitting authorities.
- E33.7.2 Clearly show that the basin and apron will meet the performance criteria noted in E4.
- E33.7.3 Show that the proposed change is consistent with the project design intent as evidenced by the Drawings.
- E33.8 Concrete and testing shall be as per CW 3310 R14, Type 2.
- E33.9 Contractor shall prepare three samples of concrete finishes 60cm x 60cm with a light, medium and rough finish. Contract Administer and Community Services / PPD to approve finish samples prior to any concrete being poured.

E33.10 Basis of Payment

- E33.10.1 Payment shall be as per Form B: Prices for item "Concrete Spray Basin and Overspray Zone". Should the Contractor make adjustments as per item E4.5 there shall be no adjustment in the price.

E34. SPRAY COMPONENTS

E34.1 General Description

- (a) This specification shall cover the supply and installation of all spray components.

E34.2 Materials and Methods

- (a) Further to E5, 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) 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.
 - (vi) 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.
 - (vii) All active load pipe shall be Schedule 80 PVC or better.
 - (viii) All water supply lines to the features shall be low density poly pipe to 100psi.
 - (ix) All PVC SDR35 pipe sleeves shall be approved in advance of installation by the Contract Administrator and Owner.
 - (x) Qualified tradesmen shall be employed for all work.
 - (xi) 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 supply and installation.
- (b) Items of Work:
- (i) Spray Components

E35. CONCRETE PATHWAYS AND SEATING ALCOVES

- E35.1 Further to City of Winnipeg Specification CW 3325 this section covers the construction of concrete pool deck that is to be a modified concrete sidewalk construction.

E35.1.1 Materials to be to CW 3325.

E35.1.2 Compacted base to be 150mm thick granular A base.

E35.1.3 Sidewalk to be minimum 150mm thick with reinforcing mat. No Calcium Chloride admixture allowed.

E35.1.4 Thickened edge of sidewalk will be incidental to the unit prices bid for concrete pathways.

E35.1.5 Contractor to include section of pool deck design in construction drawings.

E35.2 Basis of Payment

- E35.2.1 Payment shall be as per Form B: Prices for item "Concrete Pathways and Alcoves". Should the Contractor make adjustments as per item E7.2.2 there shall be no adjustment in the price.

E36. WOOD FIBRE PROTECTIVE SURFACING

E36.1 Description

- E36.1.1 This specification shall cover the supply and installation of engineered wood fibre protective surfacing and associated sub-surface drainage.

- (a) Contact for Woodcarpet:
Zeagar Bros. Inc.
4000 East Harrisburg Pike ·
Middletown, PA 17057 USA
Ph: (1-888) 346-8524 or (717) 944-7481 ·
Fax (717) 944-7681
sales@zeager.com
- (b) 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

- E36.1.2 If substitute to Zeagar Woodcarpet or Fibar FibarSystem 200 or 300 is proposed, it must meet the following conditions:

- (a) materials must be IPEMA certified Engineered Wood Fiber
(b) material must consist of random-sized, clean, engineered hardwood chips. Standard wood chips or bark mulch are not acceptable.
(c) materials must meet or exceed ASTM F1292 standards for impact attenuation
(d) materials must be certified by the CSA and approved for playground use
(e) materials must comply with ASTM F1951 for accessibility under the Canadians with Disabilities Act
(f) 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

- E36.1.3 Wood Fibre surfacing shall include wood fibre, non-woven geotextile fabric, subsurface drainage system and mats for bottom of slides and under swings.

- E36.1.4 Wood Fibre surfacing shall be supplied by an authorized distributor and delivery slips are to be submitted to the Contract Administrator prior to installation.

E36.2 Materials – Drainage System

- E36.2.1 The drainage system for under the wood fibre is to be as specified by the wood fibre product manufacturer.

- E36.2.2 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.

- E36.2.3 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.

E36.2.4 Pipe

- (a) 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.
- (b) 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.

E36.3 Methods

- E36.3.1 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.
- E36.3.2 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.
- E36.3.3 100mm drainage pipe, with 300mm minimum cover, shall be installed from the subsurface drainage system within the play area to run outside of the play area perimeter to drain to an existing low spot to the north of the play area. The pipe shall be connected to a protective, solid PVC or HDPE pipe at the outlet point and covered with rodent screen. The cost of this shall be included in the price for the wood fibre supply and installation.
- E36.3.4 Wood fibre shall be installed within the play areas, as defined by the timber edging to a minimum depth of 300 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.
- E36.3.5 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.
- E36.3.6 Geotextile fabric must be cut and fit around playground equipment footings and overlap seams by 300mm.
- E36.3.7 The mats are to be installed directly on top of the geotextile fabric and secured in place with two (2) duckbill anchors per mat.
- E36.3.8 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.

E36.4 Basis of Payment

- E36.4.1 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.
- E36.4.2 The quantity shall be per Form B: Prices for item "Wood Fibar c/w Drainage System". Should the Contractor make adjustments; there shall be no adjustment in the price.
- E36.4.3 Items of Work:
- E36.4.4 Wood Fibre Protective Surfacing System

E37. TOPSOIL AND SOD

E37.1 General Description

E37.1.1 This specification covers the removal of existing grass, topsoil or sand, leveling or excavating the area designated to receive sod, supply and installation of topsoil and sod, the topdressing and seeding of seam, edges and areas of minor Site restoration

E37.2 Materials

E37.2.1 Topsoil and sod are to be supplied and installed as per CW 3510-R9 and CW 3540-R5.

E37.3 Methods

E37.3.1 Areas to be Sodded are to be laid out on Site and approved by Contract Administrator before commencing Work. Work outside the limits approved by the Contract Administrator will not be measured and will not be paid for under this section but considered incidental to the Work. Incidental restoration shall conform to the same Specifications.

E37.3.2 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.

E37.3.3 The compacted depth of topsoil shall be 10 cm.

E37.3.4 No area for Sodding shall be less than the width of a full piece of sod.

E37.3.5 No area for Sodding shall be less than the width of a full piece of sod.

E37.3.6 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.

E37.3.7 Seams between new and old turf are to be top-dressed, seeded and rolled.

E37.4 Maintenance

E37.4.1 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.

E37.5 Basis of Payment

E37.5.1 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 sodding, topsoil and sub-grade preparation.

E37.5.2 The quantity shall be per Form B: Prices for item "Topsoil and Sod". Should the Contractor make adjustments as per item E7.3.2 there shall be no adjustment in the price.

E37.5.3 Items of Work:

- (a) Topsoil and Sod

E38. TREE PLANTING

E38.1 General Description

E38.1.1 This specification shall cover the supply, installation and maintenance of deciduous shade trees.

- (a) The quantities shown on the Drawings are the minimum requirement. More trees may be included in the Contractor's design.

E38.2 Materials – Deciduous Trees

- E38.2.1 Deciduous trees shall be of the size and type specified in the Contractor's submission, but in no case shall they be less than 65mm caliper. Trees shall have a well-formed head branching above 2m height.
- E38.2.2 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 Contractor's submission.
- E38.2.3 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".
- E38.2.4 Plants from native stands, woodlots, orchards or abandoned nurseries shall be deemed "collected" and will not be permitted.
- E38.2.5 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.
- E38.2.6 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.
- E38.2.7 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.
- E38.3 Materials – Miscellaneous
- E38.3.1 Water shall be potable and free of minerals that may be detrimental to plant growth.
- E38.3.2 Planting Soil shall be as per CW 3540.
- E38.3.3 Stakes shall be metal T-Bar, steel, 40 x 40 x 5 x 2440mm. Stakes must be adequately installed into sub-base as to ensure they are not easily removed by vandalism.
- E38.3.4 Guying Wire shall be 3mm diameter multi-strand galvanized steel cable.
- E38.3.5 Guying Collar shall be plastic tube, 13mm diameter, nylon reinforced.
- E38.3.6 Trunk Protection shall be 100mm DIA x 600mm length weeping tile material sliced and wrapped around base of tree.
- E38.3.7 Wood chip mulch: 100mm depth 25-50mm wood chips from local spruce, aspen or ash source.
- E38.3.8 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.
- E38.3.9 Anti-desiccant: wax-like emulsion.
- E38.3.10 Root Ball Burlap shall be 150 g Hessian burlap, biodegradable.
- E38.3.11 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.
- E38.4 Methods
- E38.4.1 Shipment and Pre-Planting Care
- (a) Imported plant material must be accompanied with necessary permits and import licenses, conforming to federal, provincial, or territorial regulations.
 - (b) Coordinate shipping of trees and excavation of holes to ensure minimum time lapse between digging and planting.

- (c) Ensure plant material is acceptable and obtain approval from Contract Administrator prior to planting.
- (d) 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.
- (e) 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.
- (f) Remove damaged roots and branches from plant material.
- (g) Apply anti-desiccant to trees in leaf in accordance with manufacturer's instructions.

E38.4.2

Installation of Trees

- (a) Installation shall be as per City of Winnipeg Standard Detail for Tree Planting SCD-517.
- (b) Planting shall be done during periods of suitable weather conditions and in accordance with locally accepted practice.
- (c) Trees are to be planted within forty-eight (48) hours of excavation from the nursery.
- (d) Stake out location and obtain approval from Contract Administrator prior to excavating.
- (e) Excavate to depth and width as indicated.
- (f) Remove subsoil, rocks, roots, debris and toxic material from excavated material that will be used as planting soil for trees. Dispose of excess material.
- (g) Scarify sides of planting hole.
- (h) Cover bottom of each excavation with fertilizer in amount recommended by manufacturer.
- (i) Remove water which enters excavations prior to planting. Notify Contract Administrator if water source is ground water.
- (j) Trees:
 - (i) 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 without damaging root ball.
 - (ii) Plant vertically in locations as indicated. Orient plant material to give best appearance in relation to structure, roads and walks.
 - (iii) Backfill soil in 150mm lifts. Tamp each lift to eliminate air pockets. When two thirds of depth of planting pit has been backfilled, fill remaining space with water. After water has penetrated into soil, backfill to finish grade.
 - (iv) Form watering saucer as indicated.
 - (v) Water plant material thoroughly.
 - (vi) After soil settlement has occurred, fill with soil to finish grade.
 - (vii) Dispose of burlap, wire, and container material off-site.
- (k) Installation of Trunk Collar:
 - (i) Install trunk collars on deciduous trees prior to installation of tree supports when used.
- (l) Installation of Tree supports:
 - (i) Install tree supports as indicated.
- (m) After tree supports have been installed, remove broken branches with clean, sharp tools.
- (n) Mulching:

- (o) Ensure soil settlement has been corrected prior to mulching.

E38.5 Maintenance

- E38.5.1 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.
- E38.5.2 Water shall be applied to ensure soil moisture conditions for optimum growth and health of plant material without causing erosion.
- E38.5.3 The Contractor shall reform any damaged watering saucers, remove weeds weekly and replace or re-spread damaged, missing or disturbed mulch.
- E38.5.4 For non-mulched areas, cultivate as required to keep top layer of soil friable.
- E38.5.5 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.
- E38.5.6 The Contractor shall apply fertilizer as directed by manufacturer's specifications.
- E38.5.7 The Contractor shall remove dead, broken or hazardous branches from plant material.
- E38.5.8 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.
- E38.5.9 Monthly written reports shall be submitted to Contract Administrator identifying:
 - (a) Maintenance work carried out.
 - (b) Development and condition of plant material.
 - (c) Preventative or corrective measures required which are outside Contractor's responsibility.

E38.6 Warranty of Trees

- E38.6.1 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. "Poor Condition" shall be interpreted as meaning nursery stock on which branches are dead or dying, or have not shown satisfactory growth in leaves. Exempted is nursery stock damaged by accidental causes or vandalism, which shall be replaced at the cost of the Owner.
- E38.6.2 Replacement trees installed under the terms of warranty shall be maintained for a period of two (2) years from the date of replacement.
- E38.6.3 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.
 - (a) Excepted is material or items damaged as a result of accidental causes or vandalism, which will not be subject to warranty.

E38.7 Basis of Payment

- E38.7.1 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.

E38.7.2 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.

E38.7.3 Items of Work

- (a) Deciduous Trees
- (b) Tree Maintenance

E39. SITE CARPENTRY

E39.1 Description

E39.1.1 Work includes construction custom sun bathing platform bench with back.

E39.1.2 Quality Assurance

- (a) Carpentry shall be performed by trained and qualified craftspeople with demonstrable experience in Site carpentry.
- (b) Identify lumber by official grade mark continuing symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which grade and conditions of seasoning at time of manufacture.
- (c) For products treated with preservative by pressure impregnation, submit following information certified by authorized signing officer of treatment plant:
 - (i) Information listed in AWPA.M2 and revisions specified in CAN/CSA-080 Series, Supplementary Requirement to AWPA Standard M2 applicable to specified treatment.
 - (ii) Moisture content after drying following treatment with water-borne preservative.
 - (iii) Acceptable types of paint, stain and clear finishes that may be used over treated materials to be finished after treatment.

E39.1.3 Environmental Protection

- (a) Collect and remove from Site all waste pieces and sawdust from pressure treated wood materials.

E39.2 Materials

E39.2.1 Pressure treated timbers (for deck and shade structure): to CSA 080, pressure treated pine or fir to National Lumber Grades Authority, select grade 2 and better, all dried to a maximum moisture content of 20% prior to treating. Non-incised, ACQ treatment to minimum retention of 4.0 kg/m³ for above ground use and 6.4 kg/m³ for ground contact.

E39.2.2 All wood to be free of defects, any warped, checked or bent materials will be rejected.

E39.2.3 Hardware: bolts, nuts, washers, lag screws, to be hot ceramic coated, sizes to suit application and pressure treatment.

E39.2.4 Preservative: clear type to CSA080

E39.3 Methods

E39.3.1 Obtain Contract Administrator's approval of rough grades and mounting surfaces prior to construction.

E39.3.2 Handling and Use of Treated Lumber.

- (a) Handle and use treated material in a manner which will avoid damage or field fabrication causing alteration in original treatment.
- (b) Treat in field, cuts and damages to surface of treated material with an appropriate, clear preservative as described in CSA 080. Ensure that damaged areas such as

abrasions, nail and spike holes, are thoroughly saturated with field treatment solutions as per CSA080.

E39.3.3 Workmanship

- (a) Construct all work according to details, using adequate fastening methods to ensure solid, durable finished work suitable for the purpose intended.
- (b) Do all nailing and fastening neatly, evenly and thoroughly.
- (c) Install all members true to line, levels and elevations. Set plumb and space uniformly.

E39.4 Basis of Payment

E39.4.1 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.

E39.4.2 The quantity shall be per Form B: Prices for item "Site Furnishings". Should the Contractor make adjustments; there shall be no adjustment in the price.

E39.4.3 Items of Work:

- (a) Custom Platform Bench – supply and install.

E40. SITE FURNISHINGS

E40.1 General Description

E40.1.1 This specification shall cover the supply and installation of benches, picnic tables and waste receptacles as shown on the Drawings.

- (a) The quantities shown are the minimum requirement. More Site furniture may be included in the Contractor's design.

E40.2 Materials

E40.2.1 Benches

- (a) Four (4) Tache Composite Benches with Arms, surface mount, Drawing No. SCD-121E, Product #52501071, manufactured by the City of Winnipeg, black powdercoat finish for metal and cedar tone for the boards.
- (b) Contact for Benches:
Marc Laurin @ 204-479-5489, or Todd Hendry @ 204 470-4834.
Centralized Park Services
City of Winnipeg
960 Thomas Avenue
Winnipeg, R2L 2E1
mlaurin@winnipeg.ca
thendry@winnipeg.ca

E40.2.2 Picnic Tables

- (a) Two (2) Tache Style Metal Frame Picnic Tables, Drawing No. SCD-122, manufactured by the City of Winnipeg.
- (b) One (1) Tache Style Wheelchair Metal Frame Picnic Tables, Drawing No. SCD-122A, manufactured by the City of Winnipeg.
- (c) Colour: Black for metals, cedar tone for boards.
- (d) 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.
- (e) Contact for Picnic Tables:

Marc Laurin @ 204-479-5489, or Todd Hendry @ 204-470-4834.
Centralized Park Services
City of Winnipeg
960 Thomas Avenue
Winnipeg, R2L 2E1
mlaurin@winnipeg.ca
thendry@winnipeg.ca

E40.2.3 Waste Receptacle

- (a) Four (4) Side Opening Metal Slate Waste Receptacles, surface mount, Drawing SCD-119, Product #52501063BKL, manufactured by the City of Winnipeg, black powdercoat finish.
- (b) Contact for Waste Receptacles:
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: ALennon@winnipeg.ca

E40.3 Methods

- E40.3.1 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.
- E40.3.2 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.
- E40.3.3 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.
- E40.3.4 Foundations as per E34.
- E40.3.5 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.

E40.4 Basis of Payment

- E40.4.1 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.
- E40.4.2 The quantity shall be per Form B: Prices for item "Site Furnishings". Should the Contractor make adjustments; there shall be no adjustment in the price.
- E40.4.3 Items of Work:
 - (a) Benches – supply and install.
 - (b) Picnic Tables – supply and install.
 - (c) Waste Receptacles – supply and install.

E41. FENCES

E41.1 General Description

E41.1.1 Further to CW 3550 the following list generally describes the scope of this section: (a) Supply and installation of 1.2m ht. chain link fence.

E41.2 Shop Drawings

E41.2.1 Contractor to provide full colour shop drawings for 1.2m ht. chain link fence.

E41.3 Basis of Payment

E41.3.1 Supply and installation of chain link fence will be measured and paid on a linear meter basis. The length to be paid for shall be the total number of metres supplied in accordance with the specifications and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator.

E42. BUILDING UPGRADES

E42.1 This section will cover the design and renovation of the existing building to house a new administrative office, washrooms/change rooms, and mechanical room.

E42.2 Existing Building Condition

E42.2.1 Refer to Architectural Evaluation Report, Appendix A.

E42.3 Facility Function

E42.3.1 This building is to function primarily as a summer outdoor spray pad and wading pool support building to provide services for bathers (families and individuals) and a station/workplace for the staff employed at the facility.

E42.4 Project Specific Priorities

E42.4.1 The building should be economical, durable, and vandal-resistant.

E42.4.2 Materials and systems should be commercial quality and selected for their simplicity, durability, vandal/abuse resistance, low maintenance requirements and low operational costs.

E42.4.3 The building is to be winterized – it will not be occupied during the winter months but the Mechanical Room is to be heated to be kept from freezing.

E42.4.4 The building and its spaces must follow the 2010 City of Winnipeg Accessibility Design Standards.

E42.4.5 Materials and finishes should be designed and selected to discourage climbing.

E42.5 Adaptability and Flexibility

E42.5.1 This facility should be adaptable and flexible.

E42.5.2 Building systems and layouts should accommodate ease of use and minimal operational impact.

E42.5.3 Prefinished elements on the exterior should be restricted to standard colours that are not likely to be discontinued.

E42.6 Environmentally Responsible Design

E42.6.1 This facility shall be designed and constructed in an environmentally responsible manner, utilizing sustainable design concepts, systems and materials to the maximum extent practical, in order to provide a facility that minimizes adverse effects on the exterior environment, enhances the quality of the indoor environment and minimizes consumption of energy, water, construction materials, and other resources.

E42.7 Energy Efficiency

E42.7.1 This facility shall comply to the Manitoba Energy Code for Buildings (MECB).

E42.8 Building Requirements

E42.8.1 The existing building measures approximately 88 square meters in area. The following programs are to be contained within the footprint of the existing building.

- (a) One (1) Administrative Office
- (b) Two (2) Unisex Accessible Individual Washrooms
- (c) One (1) Interior Accessible Corridor
- (d) One (1) Mechanical Room

E42.8.2 The conceptual building plans provided are intended to serve as a reference. The final size and configuration of each room shall be carefully considered to optimize interior space for accessibility, efficiency, and flexibility.

E42.8.3 Floors

- (a) All floors shall be epoxy painted concrete with added slip resistance in pedestrian traffic areas.

E42.8.4 Walls

- (a) Exterior Finishes: Repaint existing wood siding that is to remain. Replace the lower +/- 3'-0" portion of the existing wood siding to address the rotting. Perform localized repairs/replacement of rotten wood studs and base plates. Choose durable finishes that allow for easy graffiti removal, cleaning or repainting. Acceptable material: James Hardie Board or approved equal in accordance with B7.
- (b) Around Mechanical Room Only: Install insulation and vapour barrier
- (c) Interior Finishes: G1S Plywood walls, painted. Wet areas (Washrooms and Mechanical Room) to receive pre-laminated FRP finished walls.

E42.8.5 Roof/Ceiling

- (a) Exterior: Install eaves troughs and downspouts to minimize water accumulation at the base of the building.
- (b) Above Mechanical Room Only: Install blown-in loose-fill insulation, vapour barrier and attic vents.
- (c) Interior Finishes: G1S Plywood ceilings, painted. Wet areas (Washrooms and Mechanical Room) to receive pre-laminated FRP finished walls.

E42.8.6 Doors

- (a) Design to conform to the 2010 City of Winnipeg Accessibility Design Standards (ADS) for Doors Section 3.1.3.
- (b) Doors to be a min. 1000mm wide. Provide appropriately sized access doors for servicing of mechanical components.
- (c) Equip entry doors to Administrative Office and Interior Accessible Corridor with power door operator in conformance with the Manitoba Building Code.
- (d) Material: Steel Door & Frames – heavy duty grade, minimum 14 gauge welded seams for frames, 16 gauge welded seams for doors (mechanical seams not acceptable).

E42.8.7 Hardware

- (a) All hardware to be vandal and tamper proof.
- (b) Keying: "Best Lock" Exterior, "Schlage" locks Interior, all equipment and fencing that require padlocks shall incorporate the use of "Master Lock" model 3KA.
- (c) The keying system for the facility shall be standardized for use of master and sub-master keys for appropriate personnel usage.

E42.8.8 Millwork

- (a) All architectural woodwork and millwork shall be in accordance with the latest Architectural Woodwork Manufacturers Association of Canada (AWMAC) standards.

E42.9 Room Requirements

E42.9.1 Administrative Office

- (a) A secure office for the use of the staff
- (b) Include space for a 30" x 60" desk, task chair, and 2H lateral file cabinet
- (c) Provide three (3) 12"x18"x72" corrosion resistant lockers
- (d) Provide access from exterior.
- (e) Provide direct access to Mechanical Room

E42.9.2 Unisex Accessible Individual Washrooms

- (a) Design to conform to the 2010 City of Winnipeg Accessibility Design Standards (ADS) for Individual Washrooms Section 3.3.7.
- (b) Sufficient space should be allowed for two people and a wheelchair, along with benches and accessories.
- (c) Provide one wall mounted folding baby change table in each room.
- (d) Provide collapsible clothes hooks in each room.
- (e) Provide change bench in each room.
- (f) Provide washroom accessories in conformance to Section 3.3.7 of the ADS
- (g) Door to be equipped with power operator and restroom control kit with emergency call switch and a means of unlocking the door from the outside.
- (h) Provide access from Interior Accessible Corridor.

E42.9.3 Interior Accessible Corridor

- (a) Provide public access from exterior.
- (b) Provide a barrier free path of travel to access the Unisex Accessible Individual Washrooms.
- (c) Provide one (1) barrier free accessible water fountain
- (d) Design to accommodate a 2440 mm (8'-0") accessible turn-around

E42.9.4 Mechanical Room

- (a) A large room to enclose the building's mechanical systems as well as the equipment and mechanical for the splash pad and wading pool, and to provide bulk storage for chemicals, supplies and other bulk items.
- (b) Provide mop sink, mop hooks, and 16" deep storage shelving of 9 linear feet for the storage of janitorial supplies.
- (c) Provide storage shelves.
- (d) Provide access from exterior.
- (e) Provide direct access to/from Administrative Office.

E42.9.5 Mechanical and Electrical Requirements

- (a) Electrical works to follow the recommendations of the SMS Engineering report for the Electrical Scope of Work and Code review, as provided in Appendix C, provided that permitting can be obtained.
- (b) The plumbing to follow the recommendations of the SMS Engineering report for the Mechanical Scope of Work and Code review, as provided in Appendix D, provided that permitting can be obtained.

E42.10 Basis of Payment

- E42.10.1 Building modifications for the upgrades will be paid for at the contract lump sum price for “Building Upgrades” as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.
- E42.10.2 Electrical system for the building will be paid for at the contract lump sum price for “Building Electrical” as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.
- E42.10.3 Mechanical system for the building will be paid for at the contract lump sum price for “Building Mechanical” as specified herein, which price shall be payment in full for performing all operations herein and all other items incidental to the Work included in this Specification.

E43. COMMISSIONING

E43.1 Operation and Maintenance Manuals

- E43.1.1 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:
- (a) Manufacturers’ written instructions, warranties, shop drawings, schedules, wiring diagrams and a listing of persons to contact for repairs during warranty period.
 - (b) Descriptions of day to day operations, preventative maintenance, annual and periodic maintenance, and procedures for seasonal shutdown and start-up.

E43.2 System Start-up, First Year Winterization

- E43.2.1 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.
- E43.2.2 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.
- E43.2.3 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.

E43.3 Staff Training

- E43.3.1 On Site training shall be provided to the City pool staff and maintenance personnel in proper operation and maintenance procedures for the system.
- E43.3.2 Trainers shall be qualified trades persons or consultants knowledgeable of the equipment and familiar with the installation.
- E43.3.3 Legible documentation shall be provided to City staff during training.
- E43.3.4 Training shall be a minimum of one half-day’s duration.

E43.4 Record Drawings

- E43.4.1 Further to D23, the Contractor shall submit the set of Record Drawings to the Contract Administrator at Total Performance.

E43.5 Basis of Payment

- E43.5.1 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 startup.

E43.5.2 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.

E43.5.3 Items of Work:

- (a) Commissioning
- (b) Winterization and Spring Start-up

E44. CONSULTANT SERVICES

E44.1 Consultants on the Design team are to include all required professional Engineers required to design and certify all works for Geotechnical, Civil, Landscape, Structural, Mechanical, and Electrical work to be done on the project.

E44.2 All Drawings for construction are to be stamped by a professional Engineer licensed to practice in Manitoba for each discipline. All Drawings are to be submitted by the date noted in Critical Stages.

E44.3 All consultant services from detailed conceptual design through to certification are to be included in the Bid Price.

E44.4 Payment shall be as per Form B: Prices at the price for item "Consultant Services"

E45. SITE RESTORATION

E45.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, and as a condition of Total Performance the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.