



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 743-2013

ASSINIBOINE RIVERWALK MISCELLANEOUS SITE REPAIRS

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 ASSINIBOINE RIVERWALK MISCELLANEOUS SITE REPAIRS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, September 25, 2013.

B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

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

B3.2 The Bidder is advised that they should view the Site to determine the nature of Work and accessibility to the various Work areas. The Bonneycastle Park Amphitheatre will have to be accessed via the upper street level and as such the Contractor will have to stockpile materials within the park and restore the damaged surface materials.

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

B5.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B6.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.2.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B7.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.

- B7.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he/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 B15.
- 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 B8.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

B8. BID COMPONENTS

- B8.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
- B8.2 Further to B8.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B7.
- B8.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B8.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B8.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B8.6 Bidders are advised not to include any information/literature except as requested in accordance with B8.1.
- B8.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B15.1(a).
- B8.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B8.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.

B8.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B9. BID

B9.1 The Bidder shall complete Form A: Bid, making all required entries.

B9.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B9.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.

B9.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B9.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/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;
- (d) if the Bidder is carrying on business under a name other than his/her 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: Bid should be printed below such signatures.

B9.4.2 All signatures shall be original.

B9.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B10. PRICES

B10.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B10.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.

B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

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

B11. QUALIFICATION

B11.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

B12.1 Bids will not be opened publicly.

B12.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>

B12.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B13. IRREVOCABLE BID

B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B13.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

B14.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

- B14.1.1 Notwithstanding C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B14.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.
- B14.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B13.2 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.

B15. EVALUATION OF BIDS

- B15.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B7.
- B15.2 Further to B15.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities, if the interests of the City so require.
- B15.3 Further to B15.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B15.4 Further to B15.1(c), the Total Bid Price shall be the sum of the quantities multiplied by the unit prices for each item shown on Form B: Prices.
- B15.4.1 Further to B15.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B16. AWARD OF CONTRACT

- B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B16.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B16.2.1 Without limiting the generality of B16.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;

- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B16.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B15.

B16.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.

B16.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.

B16.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of the repair Work and restoration of paving materials at the Legislative Dock area and various other miscellaneous Site Works at various locations along the Assiniboine Riverwalk.

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

- (a) Installation of missing limestone paving stones
- (b) Supply and installation of clay pavers
- (c) Supply and installation of a decorative granite slab
- (d) Minor amounts of concrete paving
- (e) Supply and installation of limestone Rip-Rap
- (f) Rough grading and placement of topsoil for sod
- (g) Sodding
- (h) Timber retaining walls and steps
- (i) Repairs to an overhead metal roof canopy

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Ken Rech Landscape Architects Inc., represented by:

Ken Rech
Landscape Architect
Telephone No. 204 489-6616
E.mail: kenrech@mymts.net

D3.2 At the pre-construction meeting, Ken Rech will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D3.3 Bids Submissions must be submitted to the address in B8.5.

D4. CONTRACTOR'S SUPERVISOR

D4.1 At the pre-construction meeting, 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. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

- D6.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the facsimile number identified in D3.1.
- D6.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg
Chief Financial Officer
Facsimile No.: 204 949-1174
- D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following facsimile number:
- The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

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

D8. SAFE WORK PLAN

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

D9. INSURANCE

- D9.1 The Contractor, and/or sub-contractors (if requested) shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg and Ken Rech Landscape Architects Inc. added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
 - (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than seven (7) Calendar Days from notification of the award of Contract by Purchase Order.
- D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

- D10.1 If the Contract Price exceeds twenty five thousand dollars (\$25,000.00), the Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D10.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of Purchase Order and prior to the commencement of any Work on the Site.

D11. SUBCONTRACTOR LIST

- D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least

two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

SCHEDULE OF WORK

D12. COMMENCEMENT

D12.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D12.2 The Contractor shall not commence any Work on the Site until:

(a) the Contract Administrator has confirmed receipt and approval of:

- (i) evidence of authority to carry on business specified in D7;
- (ii) evidence of the workers compensation coverage specified in C6.15;
- (iii) the Safe Work Plan specified in D8;
- (iv) evidence of the insurance specified in D9;
- (v) the performance security specified in D10; and
- (vi) the Subcontractor list specified in D11.

(b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D12.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance within twenty five (25) consecutive Working Days of the commencement of the Work as specified in D12.

D13.2 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.

D13.3 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.

D14. TOTAL PERFORMANCE

D14.1 The Contractor shall achieve Total Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D12.

D14.2 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.

D14.3 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.

D15. LIQUIDATED DAMAGES

- D15.1 If the Contractor fails to achieve Substantial or Total Performance in accordance with the Contract by the day fixed herein for Substantial or Total Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Calendar Day for each and every Calendar Day following the day fixed herein for Substantial or Total Performance during which such failure continues.
- D15.2 The amount specified for liquidated damages in D15.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial or Total Performance by the day fixed herein for same.
- D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D16. SCHEDULED MAINTENANCE

- D16.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Topsoil and Sod as specified in E20;
- D16.2 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

D17. JOB MEETINGS

- D17.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D17.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D18. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D18.1 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).

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

- D19.1 Further to B11.3 the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B11.3.

MEASUREMENT AND PAYMENT

D20. INVOICES

D20.1 Further to C12, the Contractor shall submit an invoice for each portion of Work performed. to:

The City of Winnipeg
Corporate Finance - Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg MB R3B 1B9

Facsimile No.: 204-949-0864
Email: CityWpgAP@winnipeg.ca

D20.2 Invoices must clearly indicate, as a minimum:

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

D20.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D20.4 Bids Submissions must be submitted to the address in B8.5.

D21. PAYMENT

D21.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D22. WARRANTY

D22.1 Warranty is as stated in C13.

MISCELLANEOUS

D23. EXISTING SERVICES AND UTILITIES

D23.1 No responsibility will be assumed by the City for correctness or completeness of the Drawings, when provided, with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

D24. GENERAL ACCESS TO SITE

D24.1 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.

D24.2 The Contractor is responsible to correcting all Site damage as a result of their operations, or accessing the Site at no further cost to the City. All repairs must be done to pre-construction conditions.

D24.3 The Contractor's operations shall be limited to the minimum area necessary for undertaking the Work and he shall be responsible for all damage resulting from his Work on private property.

D25. PERMITS, NOTICES, LICENSES, CERTIFICATES, LAWS AND RULES

D25.1 Further to C6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

D25.2 The Contractor shall comply with all laws, ordinances, rules and regulations that would relate to the Work.

D25.3 All notices, consents, approvals, statements, authorizations, documents or other communications to the City shall be submitted to the Contract Administrator.

D25.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.

D25.5 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Fall Protection guidelines.

D25.6 The Contractor and Sub-contractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance with the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

D26. DAMAGE TO EXISTING STRUCTURES, TREES AND PROPERTY

D26.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing trees, shrubs, sod, pavements, streets, roads, boulevards, poles, hydrants, water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the Site of the Work. For all damage incurred in the performance of the Work (either directly or indirectly), the Contractor shall either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to City of Winnipeg Contract Administrator, and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City from all claims made directly or indirectly against it in respect to any such damage.

D26.2 The Contractor shall take the following precautionary steps to prevent damage from construction activities to existing park trees within the limits of the construction area:

- (a) The Contractor shall not stockpile materials and soil or park vehicles and equipment within 2 metres of trees.
- (b) Trees identified to be at risk by the Contract Administrator are to be strapped with 25x100x2400 wood planks, or suitable protection as approved by the Contract Administrator.
- (c) Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 1.5 times the diameter (measured in inches), with the outcome read in feet, from the closest edge of the trunk. Where roots must be cut to facilitate excavation, they shall be pruned neatly at the face of excavation.
- (d) Operation of equipment within the drip line of the trees shall be kept to a minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the drip lines of trees. The drip line of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

D26.3 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his/her designate.

D26.4 No separate measurement or payment will be made for the protection of trees.

D27. SITE RESTORATION

D27.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified, the Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this Work.

D28. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

D28.1 Further to CW 1130-R1, the Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress is maintained to private properties while he is Working near them. Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.

D28.2 Ambulance/ Emergency vehicle access must be maintained at all times.

D28.3 Temporary Site enclosures: Where any hazards which might affect public safety occur, the Contractor must fence off the Work area with a bright orange safety fence, securely staked to keep the fence in an upright position. This fence shall be installed at the commencement of construction and be maintained until all Work which could create a hazard is finished. All walkways or access points connecting to the Work area must be posted well in advance of the Work area, indicating the walkway is closed ahead.

D28.4 Site enclosures shall be considered incidental to the Contract Work Site enclosures shall be considered incidental to the Contract Work

FORM H1: PERFORMANCE BOND
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

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

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

_____ dollars (\$_____)

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

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

BID OPPORTUNITY NO. 743-2013

ASSINIBOINE RIVERWALK MISCELLANEOUS SITE REPAIRS

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 D10)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 743-2013
ASSINIBOINE RIVERWALK MISCELLANEOUS SITE REPAIRS

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 Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
L-1	Aerial Plans
L-2	CN Bridge Canopy and Area
L-3	Kennedy Step Area
L-4	Legislative Dock Area
L-5	Legislative Dock Paving
L-6	Legislative Dock Paving
L-7	Bonneycastle Park Amphitheatre
L-8	Bonneycastle Park Amphitheatre – Grading Plan
L-9	Bonneycastle Park Amphitheatre – Wood Steps
L-10	Bonneycastle Park Amphitheatre – Access Route

E2. DEPARTMENT OF FISHERIES AND OCEANS JURISDICTION

- E2.1 The Contractor is made aware that they will be working adjacent to the Assiniboine River, and as such, their construction may be monitored by the Federal Department of Fisheries and Oceans.
- E2.2 The Contractor must not deposit or allow any Site materials to erode and wash into the River, including any existing or newly installed ground materials.
- E2.3 The Contractor shall erect a suitable silt fence/curtain, at the base of the Bonneycastle Amphitheatre and any other Site areas where erosion may occur, to prevent any materials from entering the river.
- E2.4 The Contractor must ensure that any newly exposed graded work is protected over Winter and in the Spring, should the sod not be able to be installed this season. Protective measures may entail installation of straw mats pegged to the grade, or other approved alternatives.
- E2.5 The Contractor shall accelerate all work closest to the river in the work schedule, so as to complete the work most affected by the spring flood waters.
- E2.6 Should the Contractor not provide adequate protection to prevent contaminants from entering the river, and should the Department of Fisheries and Oceans levy fines on this project, the Contractor will be responsible for paying for any fines assess against the City of Winnipeg or Ken Rech Landscape Architects Inc.

E2.7 Measurement and Payment. No separate payment will be made for erosion control protection. The Contractor shall include any costs for this Work in the related Site area Works.

E3. GENERAL WORK INFORMATION

E3.1 This Work is generally being undertaken to repair the surface/vertical damage as a result of the 2011 high river water levels.

E3.2 The City will be supplying the limestone pavers only, required for the Legislative Dock area and Kennedy Step Fountain wall, at no cost to the Contractor. The product will be delivered to the street level of Assiniboine Avenue, however the Contractor must unload the material from the truck. The Contractor is responsible to co-ordinate the date the material is required, immediately after being awarded the project. The product quote number with Gillis Quarries is #12-316.

(a) The contact for Gillis Quarries is Mr. Doug Gillis tel: 204 222-2242.

E3.3 The Contractor is responsible to supply and install all other materials shown on the drawings.

E3.4 There are four main Work Areas as follows:

(a) Legislative Dock:

- (i) This Site generally involves replacing missing surface pavers which vary in size and generally are either made from limestone or clay pavers.
- (ii) There are 3 larger limestone curbs which are damaged or missing which will be replaced.
- (iii) One missing vertically mounted granite slab is to be replaced on the centre plaza area concrete column.
- (iv) There will be some crushed limestone rip-rap also installed as a surface mulch over one large planter area.

(b) Kennedy Step:

- (i) Work at this location involves repairs to the vertical water fountain wall located on the east side of the existing steps, and installation of surface concrete paving over exposed utility lines on the west side of the steps.
- (ii) The water fountain wall currently no longer functions as a water fountain, and the concrete fountain is damaged. The concrete fountain will be removed and limestone wall tiles installed where the concrete fountain used to be, to match the existing surrounding tiles. There are also 4 metal tiles which are to be replaced with clay tiles.
- (iii) On the west side of the steps, the river waters have removed the soil cover over top of existing utility cables. These cables are to be covered and protected with a new concrete slab, with round boulders embedded into the concrete.

(c) Bonneycastle Amphitheatre:

- (i) This Site areas involves major re-grading of the sloped lands to fill in the currently terraced and sloped lands. The main amphitheatre will be topsoil and sodded.
- (ii) Some of the existing large rectangular limestone blocks will be relocated along the lower Riverwalk edge, including relocating one existing limestone step.
- (iii) There are a few minor areas where walkway paving will be removed.
- (iv) There are two major wood steps which require Work and one step will be totally replaced and the other step repaired.
- (v) Site access to this area will be via Assiniboine Avenue and through the upper existing park areas. The Contractor will be responsible to construct an access road to the Work area and remove and restore the access route to pre-construction condition.

(d) CNR Bridge Canopy located east of the Main Street bridge:

- (i) The existing metal roof canopy which is located above the pedestrian walkway has been damaged by ice.
- (ii) One horizontal structural metal beam is bent and is to be replaced.
- (iii) Six sections of the prefabricated metal roofing are also damaged and will be replaced.
- (iv) There is also a low wood retaining wall which will be replaced with a stronger timber wall

E4. LAYOUT OF WORK

- E4.1 The Contractor shall set control lines and bench marks by means of stakes, buoys or marks and the Contractor shall make the completed works conform to the lines and marks thus indicated. The Contractor shall be responsible for the careful preservation of all stakes and marks. Care must be taken that the Contract Administrator be notified immediately of the disturbance of any such stakes or marks; the cost of correcting any errors arising out of neglect of the Contractor or his agent or his employees, to so notify the Contract Administrator shall be borne entirely by the Contractor, as well as the cost of replacing any disturbed stakes or marks.
- E4.2 All layout work shall be inspected and approved by the Contract Administrator prior to construction.
- E4.3 Before commencing work the Contractor shall satisfy himself as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City of Winnipeg on account of any alleged inaccuracies. If any error is suspected in the plans, 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.
- E4.4 The Contractor shall locate and protect all underground utilities prior to commencing construction.

E5. EXISTING SURVEY INFORMATION

- E5.1 The Site plan is based on drawing data prepared by Ken Rech Landscape Architects Inc. field measurements.
- E5.2 Survey grade elevations were taken on November 1, 2012 by Michalenko Surveys, and Ken Rech Landscape Architects Inc.

E6. GENERAL SITE ACCESS

- E6.1 Access to the Assiniboine Riverwalk, CNR Bridge Canopy, and Legislative Dock plaza area is to be via the Donald Street ramp, located immediately east of the Donald Street bridge. Non-vehicular access to Legislative Dock Area may be via the walkways ramps at the Legislative Docks, only with prior permission from the Provincial Government Legislative grounds maintenance staff.
- E6.2 Access to the Bonneycastle Park Amphitheatre is to via Assiniboine Avenue and will require the Contractor build an access route through the existing Bonneycastle Park and restore the access route to preconstruction condition. This Work is outlined in Section E7 and shown on drawing L-10.
- E6.3 The Contractor must obtain all permits associated with crossing the City sidewalks and pay for the same.

E7. BONNEYCASTLE PARK AMPHITHEATRE SITE ACCESS

- E7.1 This specification will outline the Work involved in building a construction access route from Assiniboine Avenue to the Work area in the Bonneycastle Park Amphitheatre.

- E7.2 Access to the Work area is to be via the upper bank area, due to the volume of new materials that will have to be hauled and installed within the Work area i.e. clay fill, topsoil, sod. Utilizing the upper bank access route will allow the Riverwalk gravel pathway to remain in operation, and along the new material to be more easily placed.
- E7.3 The Contractor must protect all existing walkways and paving along Assiniboine Avenue and in Bonneycastle Park, and shall repair any damage as a result of construction activity at no cost to the City.
- E7.4 Drawing L10 shows a schematic sketch of the proposed walkway route and elements which must be transversed. Should the Contractor want to propose an alternate access route, the route must be pre-approved by the Contract Administrator.
- E7.5 Currently there is a private apartment complex being built immediately to the west of the Bonneycastle Park Site, and that Contractor has protected the City Boulevard with heavy steel sheets. The Contractor for the Bonneycastle Park Site will be able to utilize this same access point over the City Boulevard, but must not restrict, block or damage the access route to the neighbour's site to the west.
- E7.6 The existing upper Bonneycastle Park area is relatively flat and there is a large open area which will be suitable for dumping and stockpiling imported fill or topsoil. Any damage to the sod in this area will have to be restored to preconstruction condition.
- E7.7 There are four (4) large lilac shrubs which will have to be cut down flush with the ground. The Contractor will have to replace these four lilacs with similar plants, which are a minimum 1 metre height at the time of planting.
- E7.8 There is one recently planted Oak tree, approx. 60 mm caliper which will have to be relocated as it is planted in the access route. The new location of this tree will be field located on Site. The Contractor shall install this tree in a new tree pit a minimum of 1.5 metre diameter and 600 mm depth. The top of the tree pit is to be covered with a 100 mm depth of wood chip mulch.
- E7.9 There is an existing asphalt paved walkway, approx. 5 metre width which is surrounded on one side with a raised limestone curb. This walkway and curb is to be protected by installing a layer of 19 mm thick plywood over the surface and then building up the grade over the walkway/wall with crushed limestone. The depth of crushed limestone shall be sufficient to bridge the loads over the walkway and protect the same. The plywood and gravel access road is to be removed upon completion of the Work.
- E7.10 All new fill and topsoil shall be hauled down to the Work area with bucket mounted skidsteer type equipment.
- E7.11 Upon completion of all the Work the Contractor shall restore the entire site surfacing to prior construction condition.

The cost for building and restoring the Bonneycastle Park Amphitheatre access route is to be included in Unit Price Item No: D16 "Construction of Bonneycastle Park access route and restoration of same" on Form B: Prices. This cost shall include all costs associated with permit fees for crossing the boulevard, sod restoration, lilac bush replanting, one tree relocation, repairs to the existing asphalt walkway or limestone walls (if required) and all other Work necessary to construct and restore this access route.

E8. DEMOLITION AND SALVAGE

- E8.1 In general terms the following outlines the demolition and salvage work:
- (a) Legislative Dock Plaza Area:
- (i) Demolition is limited to removal of existing a gravel paving and silt which occupies the area where missing pavers are installed, and to the remove of two existing limestone curbs.

- (ii) The old mortar which once held the granite slab will have to be removed as well as modification to the shape of the concrete tower the new slab will be installed on.
 - (iii) There will also have to be some minor removal of silt and weeds where the new limestone rip rap will be installed.
 - (b) Kennedy Step Area:
 - (i) The existing concrete fountain on the fountain wall is to be removed by jack hammering.
 - (ii) Some limestone wall tiles around the old concrete fountain wall will also be removed.
 - (iii) Four existing metal tiles located on the fountain wall are also to be removed.
 - (iv) Some soil around the exposed utility cables on the west side of the steps will have to be removed to allow for the new shape/area of the protective concrete surface
 - (c) Bonneycastle Park Amphitheatre:
 - (i) The existing east wood steps, is to be totally removed and disposed of offsite.
 - (ii) The damaged portion of the existing west steps, is to be removed and disposed of offsite.
 - (iii) The walkway paving located south of the west wood steps, and as shown on drawing detail 1-L7, is to be removed and legally disposed of offsite or used for fill. The paving currently consist of gravel, precast concrete edging, concrete turfstone pavers, and granite pavers.
 - (iv) Some large rectangular limestone blocks are to be salvaged and relocated to the areas shown on detail 1-L7.
 - (v) One limestone step is to be relocated as shown on detail 1-L7 and 3, 4 –L8.
 - (vi) A construction access route will have to be built from Assiniboine Avenue to the Work area, and as such there may be some demolition Work to clear the access route.
 - (d) CNR Bridge Canopy:
 - (i) The existing metal roof structure will require one bent metal cross beam be cut off and replaced with a new beam
 - (ii) Six of the existing metal roof panels are damaged and will need replacement
 - (iii) The existing wood retaining wall plank will have to be removed and disposed of offsite.
- E8.2 Demolition Work associated with the repairs to the CNR Bridge Canopy is outlined in sections E10 and E16.
- E8.3 Demolition Work associated with the repairs to the Bonneycastle Park Amphitheatre wood steps are outlined in section E 16.
- E8.4 Relocation of the large limestone blocks and one limestone step at the Bonneycastle Park amphitheatre are outlined in section E17.
- E8.5 Demolition Work associated with the Kennedy Street Fountain wall is outlined in section E11.
- E8.6 Demolition Work associated with the preparation Work needed for the granite slab at the Legislative Dock Plaza is outlined in section E14
- E8.7 Demolition Work associated with the construction access route to the Bonneycastle Park Amphitheatre is outlined in section E7.
- E8.8 The cost for all demolition at each Site is to be included in the unit price form, of the most applicable Work area. The salvage and reinstallation of the limestone steps at the Bonneycastle Amphitheatre is to be included in Unit Price Item No: D21 "Relocate limestone step" on Form B: Prices. Demolition Work located at the Bonneycastle Amphitheatre is to be

included in Unit Price Item No: D17 "Demolition: remove one timber step, part of second timber step, miscellaneous paving materials, and damaged limestone blocks" on Form B: Prices.

E9. EARTHWORK AND GRADING

- E9.1 This specification shall amend and supplement the latest revision of the City Specification CW 3170 and cover the operations relating to the earthwork and grading of the Site as shown on the Construction Drawings.
- E9.2 Earthwork and grading is required at the following locations:
- (a) Kennedy Step:
 - (i) Excavation and removal of the soil to allow the new concrete paving to be installed
 - (b) CNR Bridge Canopy Area:
 - (i) Excavation and backfilling of the area around the new timber wall
 - (c) Bonneycastle Park Amphitheatre Area:
 - (i) This Site will require fairly major earthwork and grading to reshape the entire existing amphitheatre lands to a gentler slope.
 - (ii) Offsite imported clay fill will be required to achieve the new slopes as shown on drawing details 1, 2 –L8.
- E9.3 Any surplus soil fill from the Kennedy Step or CNR Bridge canopy area, may be utilized at the Bonneycastle Park Amphitheatre area. All new imported fill must be clean clay fill and compacted to 95% Standard Proctor Density.
- E9.4 The Contractor shall excavate or fill to the design grades shown less the appropriate allowance for surface treatment, topsoil and sod. Where design grades are not shown, the new surface materials shall be installed to meet flush with surrounding grades, and sloped so as not to impede the existing drainage pattern.
- E9.5 Construction to the new design grades shall be accomplished by the excavation of material from high areas, and using the suitable excavated material along with imported clean earth fill for filling in the low areas as indicated by the elevations shown on Construction Drawings. Backfill shall be placed in a dry, thawed condition and shall be maintained free of moisture or frost.
- E9.6 The design gradient for all other areas shall be considered to be straight grade between the design elevations shown. Changes in grade at swales shall be gently contoured as directed by the Contract Administrator to provide future ease of grass mowing operations.
- E9.7 In fill areas where the difference between the existing ground elevation and the design elevation is less than 300 mm, the Contractor shall scarify the existing ground to a minimum depth of 100 mm prior to placement of any fill.
- E9.8 The Contractor shall construct all sub-grades in accordance with Specification CW 3110. This shall include the use of suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 95% Standard Proctor Density. Lifts shall not exceed a compacted thickness of 150 mm.
- E9.9 Following earthmoving, rough grading and compaction, the Work areas shall be fine graded to provide a maximum deviation of 50 mm in 10 metres from the design grade with no low areas that hold water. The finished surface of all disturbed areas shall be dragged and smoothed in such a manner that there are no loose soil particles greater than 50 mm in maximum dimensions.
- E9.9.1 Method of Measurement shall be as follows:
- (a) Earthwork and Grading shall be measured on a lump sum basis for:
 - (i) Item D18: "Earthwork and Grading" on Form B: Prices.
 - (b) Basis of Payment shall be as follows:

Earthwork and Grading will be paid for on a Lump Sum Basis on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, equipment and materials, importing fill or hauling fill off Site, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E10. METAL WORK

E10.1 This specification shall cover the repairs to the metal framework and roof panels at the CNR Bridge Canopy as shown on drawing L-2.

E10.2 Materials:

(a) Structural Steel:

- (i) The 100 HSS cross beam shall be the size and thickness of the existing crossbeam which is being removed. Hollow structural steel shall conform to the latest edition of CSA Standard G40.21-M 350W.
- (ii) All welds shall be continuous and ground smooth.

(b) Steel Decking

- (i) New decking shall match existing decking and gauge. Contractor to confirm existing decking sizing, profile, gauge and finish.
- (ii) Existing decking appears to be VicWest Roof Deck, "RD 306" 18 gauge galvanized (A275).
- (iii) Fasteners for decking shall be galvanized or stainless steel tex head screws and of sufficient length and size to securely anchor decking to steel framing.

(c) Steel Finish:

- (i) All metal shall be finished with one coat of primer and two coats of enamel paint. Paint colours shall match existing structure colour.

E10.3 Construction Methods:

- (a) The Contractor shall close off the Riverwalk walkway while working on the repairs to the roof structure. Closure of the walkway must be limited to the minimum time required to repair the structure. Walkway closure signage and barriers must be erected not only at the Work Site but also at the first closest walkway connection to the Riverwalk, on each side of the Work area.
- (b) The existing damaged HSS crossbeam is to be removed and replaced with a new beam as shown on drawing detail 2-L2.
- (c) Prior to removing the beam the Contractor shall brace the existing structural framework, to secure it in place, while the damaged section of beam is removed. The existing two steel posts must be secured to one another, to keep them in place and plumb while the beam is removed.
- (d) The existing damaged beam shall be cut each side of the existing posts, and the edges ground to a taper to accept the new welds. The new HSS beam shall also have the edges ground to a taper to accept the new welds.
- (e) All welding must be continuous and of sufficient diameter to meet or exceed the existing welds on the balance of the structure. The welds shall be ground smooth and flush with the surface of both the new and existing beams.
- (f) The existing damaged steel roof decking is to be removed and replaced with new roof decking.
- (g) The new roof decking shall be attached to the supporting metal structural members with screws, located at each valley of the panels, at the top and bottom of the panels, as per the existing fastening system. The screws must be of sufficient length and strength to fully penetrate into the steel supporting beams.

- (h) Where the roof deck seams meet one another, the existing seams are to be crimped together.
- (i) All new metal, except the underside of the roof decking is to be painted with one coat of primer and two coats of paint. Colour of paint is to match the existing structure.

E10.3.1 Method of Measurement shall be as follows:

- (a) Repairs to the CNR Bridge Canopy metal roof will measured on a lump sum basis for:
 - (i) Item A1: "Repair metal roof structure on CNR Bridge Canopy including painting" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Repairs to the metal roof structure will be paid for on a Lump Sum Basis on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, equipment and materials, walkway closure barricades, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E11. LIMESTONE PAVING, TILES AND CURBS

E11.1 Description

E11.1.1 This specification shall cover the installation only of limestone pavers, tiles or curbs as shown in details 1-L3, and drawings L-5 and L-6.

E11.1.2 As per section E3.2 the limestone pavers, tiles and curbs will be supplied at no cost to the Contractor by the City of Winnipeg. The Contractor will have to supply all bedding material, mortar/grout, and sand filler as well as install the product.

E11.2 Materials

- (a) Limestone pavers, tiles and curbs are as per the existing sizes on Site.
- (b) Levelling base below pavers shall be 6 mm dia. crushed limestone down.
- (c) Sand infill for pavers shall be Techniseal Hp Polymeric Sand, Tan colour or in accordance with section B7 Substitutes.
- (d) Mortar (for Kennedy Water Fountain tiles):
 - (i) Type One:
 - (ii) One (1) part white non-staining cement
 - (iii) One (1) part lime
 - (iv) Six (6) parts sand
- (e) Or Type Two:
 - (i) One (1) part approved non-staining cement
 - (ii) Three (3) parts sand

E11.3 Construction Methods

- (a) Where the pavers, curbs or wall tiles are to be installed, the existing gravel infill, broken pavers or curbs are to be removed, down to the concrete subfloor.
- (b) With respect to the Kennedy Step water fountain the existing concrete fountain and wall tiles which are indicated to be removed on the drawing, shall be removed by chipping the product apart and removing it, including all mortar or adhesive behind the tiles, to the concrete wall surface
- (c) The new limestone pavers are to be installed over a levelling base of gravel so the top of the new pavers will meet flush with the top of the existing pavers. The paving pattern shall match the existing surrounding pattern. The void between the pavers shall be filled with polymeric sand in accordance with the manufacturers' recommendation.

- (d) The new limestone curbs shall be installed on the existing concrete subfloor which is cleaned of all debris. The curbs shall be set on a mortar bed, so the top of the curbs are level with the surrounding curbs. The back, sides and ends of the pavers are also to be filled with mortar. Mortar joint finish shall match the existing mortar joints.
- (e) The limestone wall tiles shall be installed on the Kennedy Street Water Fountain to match the existing pattern and alignment with mortar. The mortar joints shall match the existing surrounding joints. After the wall tiles are set the all the existing limestone wall tiles as well as the new tiles are to be sanded with a 40 grit belt sander, to remove the old stains on the existing tiles. The new tiles will only require a light sanding so the finish and sanding lines match the sanding of the existing tiles. The existing tiles will require a heavy belt sanding to remove the stains.

E11.3.1 Method of Measurement shall be as follows:

- (a) The Limestone wall tiles or curbs will measured on a per unit basis for each respective installation and location as noted below:
 - (i) Item C8: "Remove existing damaged limestone curbs, and install only new curbs" on Form B: Prices.
 - (ii) Item B4: "Install only limestone wall tiles" on Form B: Prices.
- (b) The Limestone pavers will measured on a per unit basis for each respective installation and location as noted below:
 - (i) Item C9: "Install only limestone pavers, 95 x 190 size" on Form B: Prices.
 - (ii) Item C10: "Install only limestone pavers, 190 x 190 size" on Form B: Prices.
 - (iii) Item C11: "Install only limestone pavers, 190 x 395 size" on Form B: Prices.
- (c) Basis of Payment shall be as follows:

Installation only of limestone wall tiles, pavers and curbs will be paid for based on a unit price basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, granular or mortar base, infill sand, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

The demolition of the concrete wall fountain and sanding of the existing limestone tiles at the Kennedy Street Water Fountain will be paid for separately as identified in unit prices Items B3 and B5, on Form B: Prices.

E12. ENDICOTT CLAY PAVERS

E12.1 Description

- E12.1.1 This specification shall cover the supply and installation of Endicott pavers at the Legislative Dock area, as shown on drawings L-4, L-5 and L-6.
- E12.1.2 The Bidder is made aware they must purchase the supply this product. The City of Winnipeg will not be supplying this product

E12.2 Materials

- (a) The Bidder is made aware equals will not be permitted for this product as it must match the existing pavers on Site.
- (b) Endicott Pavers shall be: 95 x 190 x 58 mm thickness, Maganese Ironspot pavers as manufactured by Endicott Tile Ltd. Local contact for this product is Alsip's Brick Tile and Lumber Co. Ltd. tel: 204 667-3330.
- (c) Levelling base below pavers shall be 6 mm dia. crushed limestone down.
- (d) Sand infill for pavers shall be Techniseal Hp Polymeric Sand, Grey colour or in accordance with section B7 Substitutes.

E12.3 Construction Methods

- (a) Where the pavers, are to be installed, the existing gravel infill is to be removed, down to the concrete subfloor.
- (b) The Endicott pavers are to be installed over a levelling base of gravel so the top of the new pavers will meet flush with the top of the existing pavers. The paving pattern shall match the existing surrounding pattern. The void between the pavers shall be filled with polymeric sand in accordance with the manufacturers' recommendation.
- (c) Where existing pavers are to be cleaned and reset they shall be removed, washed and reinstalled on a new granular base. Only those areas clearly identified on the drawings to be removed and reinstalled will be part of this Contract.

E12.3.1 Method of Measurement shall be as follows:

- (a) The new endicott pavers will measured on a per unit basis for each respective installation and location as noted below:
 - (i) Item C12: "Supply and install Endicott pavers" on Form B: Prices.
- (b) Resetting the existing pavers will measured on a lump sum basis for Legislative Dock area as noted below:
 - (i) Item C13: "Remove, clean and reinstall existing Endicott pavers" on Form B: Prices.
- (c) Basis of Payment shall be as follows:

Supply and installation of the Endicott pavers will be paid for based on a unit price basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, new pavers, granular base, infill sand, washing of existing pavers and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E13. CLAY WALL TILES

E13.1 Description

E13.1.1 This specification shall cover the supply and installation of clay tiles at the Kennedy Street Water Fountain wall, as shown drawing details 1, 2 –L3.

E13.2 Materials

- (a) Clay tiles shall be 200 x 200 mm, colour to match existing.
- (b) Mortar shall match section E11.2.4.
- (c) Grout shall match existing upper step tile/grout
- (d) Grout joints shall be sealed after curing with suitable water sealant made for exterior use.

E13.3 Construction Methods

- (a) The existing metal tiles are to be removed, being careful not to damage the existing concrete. Clean all adhesive off the back of the tiles and concrete wall.
- (b) Set new clay tiles in place mortaring onto the concrete subsurface.
- (c) Apply grout to the joints after the adhesive has cured and as per the manufacturer's recommendation.
- (d) After the grout has cured applied a water sealer over the grout.

E13.3.1 Method of Measurement shall be as follows:

- (a) The new clay tiles will measured on a per unit basis as noted below:
 - (i) Item B6: "Supply and install Clay Wall Tiles" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Supply and installation of the Clay pavers will be paid for based on a unit price basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, removal of existing metal tiles and adhesive, new tiles, grout, water sealing, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E14. GRANITE WALL PANEL

E14.1 Description

E14.1.1 This specification shall cover the supply and installation of a granite wall panel, as shown drawing details 3, 4 –L4.

E14.2 Materials

E14.2.1 Granite is to match existing granite, Black colour, finish to match existing, 30 mm thickness, 300 mm width x 1430 mm height.

E14.2.2 Mortar shall match section E11.2.4.

E14.3 Construction Methods

- (a) Sawcut top of existing concrete wall to the shape shown on drawing details 3, 4-L4. After cutting surface grind cut surface to remove sawcut lines.
- (b) Chip away and clean off all old mortar/adhesive.
- (c) Set new granite panel in place mortaring onto the concrete subsurface.
- (d) Apply mortar to the perimeter edge to match the surrounding granite panels.

E14.3.1 Method of Measurement shall be as follows:

- (a) The new granite panel will measured on a per unit basis as noted below:
 - (i) Item C14: "Supply and install new granite panel" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Supply and installation of the granite panel will be paid for based on a unit price basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, reshaping of the existing concrete wall, removal of existing mortar, new granite panel, mortaring panel into place, and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E15. CONCRETE PAVING

E15.1 Concrete paving shall be supplied and installed in accordance with City of Winnipeg's Standard Construction Specification CW 3310.

E15.2 Materials

- (a) Concrete shall be 28 Mpa sulphate resistant.
- (b) Geotextile shall be in accordance with CW 3130 – Supply and Installation of Geotextile Fabric
- (c) Reinforcing steel shall be 15M
- (d) Boulders shall be 150 mm – 300 mm crushed limestone, random sizes and mixture.

E15.3 Construction Method

- (a) The Contractor shall excavate around the existing polyethylene conduits to the shape shown on the drawing to allow the installation of the new concrete and bottom key. The

existing exposed conduits shall be covered with the excavate soil. Any surplus soil shall be hauled to the Bonneycastle Park Amphitheatre Site and utilized on that site.

- (b) The Contractor shall dig in a key at the western and southern edge of the concrete to create a firm foothold.
- (c) A minimum 900 mm width of geotextile fabric is to be installed along the step wall over top of the conduit location.
- (d) The concrete shall be reinforced as per drawing detail 4-L3.
- (e) Finish concrete with a heavy broom finish and insert limestone rip rap a minimum of one third their thickness into the concrete. Touch up concrete around the limestone levelling concrete and providing broom finish. Wipe any concrete splatter off top of limestone rip rap with wet cloth/sponge.
- (f) Replace and compact soil around edge of concrete so concrete edge is not exposed. Taper soil up and over outside edge of the concrete over 1 metre distance, or shorter distance where concrete edge is will be 100 mm below existing grade elevations.

E15.3.1 Method of Measurement shall be as follows:

- (a) The concrete paving will measured on a lump sum basis as noted below:
 - (i) Item B7: "Supply and install concrete paving" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Supply and installation of the concrete paving will be paid for based on a lump sum basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, excavation and rough grading, geotextile, concrete paving and reinforcing, limestone boulders and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E16. TIMBER STEPS AND RETAINING WALLS

E16.1 This Specification shall cover the supply and installation of timber retaining wall at the CNR Bridge Canopy and repairs to one step and construction of another step at the Bonneycastle Park Amphitheatre.

- (a) The CNR Bridge Canopy Work is shown on drawing details 1, 2, and 5-L2.
- (b) The Bonneycastle Park Amphitheatre steps are shown on drawing details 1-L7, and sheet L-9.

E16.2 Materials

- (a) Granular backfill shall be 19 mm diameter crushed limestone. Surface topping for adjacent walkway sections shall be 6 mm diameter crushed limestone.
- (b) All wood shall be green ACQ pressure treated pine, size shown on drawings.
- (c) End cut preservative shall be as manufactured and recommended by wood preservative manufacturer.
- (d) Nails for securing timbers shall be 250 mm long ardox or flat headed spikes. All fastening devices shall be galvanized coated.
- (e) Duckbill anchors shall be as manufactured by Foresight Products Inc., model 88 with 7.9 mm diameter cables, 1.05 metres length.
- (f) Wedge anchors to be concrete suitable, 9 mm diameter, 250 mm length.

E16.3 Construction Method

- (a) The Contractor shall remove the complete east steps and the damaged bottom portion of the west steps at the Bonneycastle Park Amphitheater. The soil grade

under the steps shall be excavated/adjusted to allow the new gravel base and timber sleepers to be installed.

- (b) The existing wood retaining wall is to be removed at the CNR Bridge Canopy location including the appropriate amount of soil behind and below the timber wall to allow for the installation of the new wall.
- (c) The steps shall be constructed to essentially be built into the grade with one point of each step thread being flush with surrounding grade.
- (d) The gravel under the step is to be compacted in lifts as the step is constructed upwards.
- (e) All wood cuts are to be treated with one coat of end cut preservative
- (f) All timbers steps shall be nailed together with a minimum 2 spikes spaced a maximum of 1500 mm apart per timber. Where timber joints occur below adjacent layer, install spikes 150 mm either side of the joint.
- (g) The timber wall at the CNR Bridge Canopy shall be nailed together similarly however the spikes shall be spaced a maximum of 1 metre on centre.
- (h) Install Duckbill Anchors spaced as shown on drawing detail 1-L9 to secure the wood steps to grade. Cables must be driven into grade so cables are completely vertical and tight to prevent any lifting of the timer when flooded.
- (i) Secure the wood retaining wall at the CNR Bridge Canopy to the limestone post bases with concrete wedge anchors as indicated on drawing detail 5-L2. Backfill the back of timber wall with compacted crushed limestone.
- (j) Install gravel paving on step landing and where top and bottom walkways connect to the steps.
- (k) Finish by backfilling step sides with compacted clay.

E16.3.2 Method of Measurement shall be as follows:

- (a) The timber walls or steps will measured on a lump sum basis as noted below:
 - (i) Item A2: "Supply and install timber retaining wall" on Form B: Prices.
 - (ii) Item D19: "Repair west timber steps and adjacent surface materials" on Form B: Prices.
 - (iii) Item D20: "Supply and install new east timber steps, and adjacent surface materials" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Supply and installation of the timber walls or steps will be paid for based on a lump sum basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, excavation and rough grading, gravel base, timber work, anchoring devices and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E17. LIMESTONE STEP AND BLOCKS RELOCATION

E17.1 This Specification shall cover the salvaging and relocation of existing limestone steps or large blocks at the Bonneycastle Park Amphitheatre.

- (a) The location of the existing steps and blocks to be salvaged is shown on drawing detail 1-L7.
- (b) The new limestone step construction and location is shown on drawing details 3, 4-L8.

E17.2 Materials

- (a) Granular backfill shall be 19 mm diameter crushed limestone. Surface topping for adjacent walkway sections shall be 6 mm diameter crushed limestone.
- (b) All limestone steps or blocks are existing salvaged materials.

E17.3 Construction Method

- (a) The Contractor shall salvage the existing limestone steps blocks or isolated blocks noted to be reinstalled.
- (b) The steps shall be reconstructed between the east concrete stage wall and the existing west limestone wall.
- (c) New tread depth shall be a minimum 300 mm. Adjust and flip stones where required to have smoothest surface facing up.
- (d) Steps shall be set on compacted granular base, compacting each layer with each step tread.
- (e) The isolated large limestone blocks are to be located to the area shown on detail 1-L7 and 1-L8. Backfill back of east relocated wall, with crushed limestone, up to the top of the new limestone blocks.

E17.3.2 Method of Measurement shall be as follows:

- (a) The relocated limestone steps or blocks will be measured on a lump sum basis as noted below:
 - (i) Item D21: "Relocate limestone step" on Form B: Prices.
 - (ii) Item D22: "Relocate nine (9) limestone blocks" on Form B: Prices.
- (b) Basis of Payment shall be as follows:

Relocation and installation of the limestone steps and blocks will be paid for based on a lump sum basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, excavation and rough grading, gravel base, setting the new blocks, granular backfilling and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E18. LIMESTONE RIP RAP

E18.1 This Specification shall cover the supply and installing of limestone rip rap at the Legislative Dock Area as shown on drawing detail 1-L4.

E18.2 Materials

- (a) Limestone rip-rap shall be 100 – 200 mm diameter crushed limestone down, with an equal amount of all sizes distributed between the sizes indicated above.

E18.3 Construction Method

- (a) The location where the limestone rip rap will be installed will be field located by the Contract Administrator.
- (b) In general terms a 200 mm depth/layer of material will be distributed over the existing stone mulched area to fill in areas where the stone is sparse or has been washed away.
- (c) All new stone shall be gently placed to prevent damage to the precast concrete block walls or limestone walls.
- (d) The limestone blocks, after machine dumping in place, are to be hand placed to fill in any voids where the soil is exposed.

E18.3.2 Method of Measurement shall be as follows:

- (a) The supply and installation of the limestone Rip-Rap will be measured on a lump sum basis, based on twenty (20) cubic metres of material being installed. The Contractor will have to supply way-bills to verify the quantities purchased:

(i) Item C15: "Supply and install 20 cubic metres of limestone rip-rap" on Form B: Prices.

(b) Basis of Payment shall be as follows:

Supply and installation of limestone rip-rap will be paid for based on a lump sum basis as identified on Form B: Prices. The amount to be paid for shall be for full payment for supplying all labour, limestone rip rap, placement of rip-rap and performing all operations herein described and all other items incidental to the Work and as accepted by the Contract Administrator.

E19. TOPSOIL AND FINISH GRADING

E19.1 This specification shall amend CW 3540 Specification for Topsoil and Finish Grading for Establishment of Turf Areas.

E19.2 The Contractor is made aware the topsoil and sodding of the Bonneycastle Park Amphitheatre only, will not be subject to completion in 2013, since the spring river water level would destroy the sod, and could wash away the sod and topsoil. This Work shall be completed as early as possible in the Spring of 2014, after the river water level has dropped below the Work area. The topsoil and sodding of the Bonneycastle Park Amphitheatre will not be subject to achieving Substantial or Total Performance as indicated in section D13 and D14.

E19.3 Topsoil depth below sodded areas shall be 100 mm thickness after reasonable settlement.

E19.3.1 Method of Measurement shall be as follows:

(a) The cost for supply and installation of topsoil is to be included in the unit price cost for D23: Topsoil and Sod. No separate payment will be made for topsoil and finish grading.

E20. SODDING

E20.1 This specification shall amend CW 3510.

E20.2 The Contractor is responsible to repair all sod damage as a result of the construction access route to the Bonneycastle Park Amphitheatre area, based on the lump sum quote indicated in Item D16: "Construction of access route and restoration of same to Bonneycastle Park Amphitheatre" on Form B: Prices.

Measurement and Payment

The cost for supply and installation of sod shall also include the supply of topsoil below the sod. No separate payment will be made for installing the topsoil below the sod. The cost for the supply and installation of Sodding will be paid for on a per square metre basis, and is to be included in Unit Cost Item's No. D23 "Topsoil and Sod" on Form B: Prices.