



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 615-2008

OLD EX PARK - SGT. TOMMY PRINCE PARK PATHWAY CONNECTION PHASE 1

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 OLD EX PARK - SGT. TOMMY PRINCE PARK PATHWAY CONNECTION PHASE 1

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, August 20, 2008.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B3.2 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.
- B3.3 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.
- B3.4 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.
- B3.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. ADDENDA

- B4.1 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.
- B4.2 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.
- B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Division internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B4.2.3 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.

B5. SUBSTITUTES

- B5.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 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.
- B5.4 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.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B5.6 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.
- B5.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B13.
- B5.9 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.

B6. BID COMPONENTS

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 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.
- B6.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.5 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
- B6.5.1 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.
- B6.6 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B6.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

B7. BID

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 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.
- B7.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B7.4.2 All signatures shall be original.

B7.5 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.

B8. PRICES

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.2 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.

B8.3 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.

B8.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B9. QUALIFICATION

B9.1 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.

B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

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

B9.3 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);

B9.4 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B9.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

B10.1 Bids will not be opened publicly.

B10.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.

B10.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.

B10.4 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.

B11. IRREVOCABLE BID

B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B11.2 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.

B12. WITHDRAWAL OF BIDS

B12.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

B12.1.1 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.

B12.1.2 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.

B12.1.3 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 B12.1.3(b), declare the Bid withdrawn.

- B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

B13. EVALUATION OF BIDS

- B13.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B5.
- B13.2 Further to B13.1(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.
- B13.3 Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid or in other information required to be submitted, that he is responsible and qualified.
- B13.4 Further to B13.1(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.
- B13.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B13.4.2 Further to B13.1(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.

B14. AWARD OF CONTRACT

- B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B14.2 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.
- B14.2.1 Without limiting the generality of B14.2, 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.
- B14.3 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 B13.

- B14.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.
- B14.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B14.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of the redevelopment of residential lots and back lane into park area with pathway.
- D2.2 The major components of the Work are as follows:
- a) Sawcut, excavate, remove and dispose of existing back lane pavement;
 - b) Sawcut, Excavate, remove and dispose of existing concrete sidewalk;
 - c) Excavate, remove and stockpile existing limestone pathway for reuse;
 - d) Remove and dispose of existing debris/fill;
 - e) Supply and install sod and topsoil including rough grading;
 - f) Supply and install native grass seeding (including rough grading, erosion control, weed control, and remedial seeding);
 - g) Supply and installation of CSP culverts;
 - h) Supply and install crushed limestone pathway.

D3. CONTRACT ADMINISTRATOR

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

Ms. Susan Russell,
200-120 Fort St. Winnipeg, R3C 1C7
Telephone No. (204) 956-0396
Facsimile No. (204) 956-1265

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

D4. CONTRACTOR'S SUPERVISOR

- D4.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

D5. NOTICES

- D5.1 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.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise

required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

- D5.3 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

- D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 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.

D7. INSURANCE

- D7.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- D7.2 Deductibles shall be borne by the Contractor.
- D7.3 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.
- D7.4 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.

D8. PERFORMANCE SECURITY

- D8.1 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.
- D8.1.1 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.
- D8.2 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.

D9. DETAILED WORK SCHEDULE

- D9.1 The Contractor shall provide the Contract Administrator with a detailed work schedule at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D9.2 The detailed work schedule shall consist of the following:
- (a) a Gantt chart for the Work based on the C.P.M. schedule acceptable to the Contract Administrator.
- D9.3 Further to D9.2(a), the Gantt chart shall show the time on a weekly basis, required to carry out the Work of each trade, or specification division. The time shall be on the horizontal axis, and the type of trade shall be on the vertical axis.

SCHEDULE OF WORK

D10. COMMENCEMENT

- D10.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- D10.2 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 D6;
 - (ii) evidence of the workers compensation coverage specified in C6.15;
 - (iii) evidence of the insurance specified in D7;
 - (iv) the performance security specified in D8;
 - (v) detailed work schedule specified in D9.
 - (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.

- D10.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the Purchase Order.

D11. WORK BY OTHERS

- D11.1 Work will be done under separate contract on Site before, during and following construction under this Contract as shown on the Drawings. The work shall include:

- (a) removal of existing fencing;
- (b) supply of new fencing;
- (c) supply and installation of a catch basin and lead;
- (d) lowering of two existing catch basins.

- D11.2 The Contractor shall coordinate with all other trades on site in order to minimize disruptions.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance within thirty (30) consecutive Working Days of the commencement of the Work as specified in D10.

- D12.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

- D12.3 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.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance within thirty five (35) consecutive Working Days of the commencement of the Work as specified in D10.

- D13.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

- D13.3 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.

D14. LIQUIDATED DAMAGES

- D14.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one thousand dollars (\$1000.00) per Calendar Day for each and every Calendar Day following the day fixed herein for Substantial Performance during which such failure continues.

- D14.2 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.

- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D15. JOB MEETINGS

- D15.1 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.
- D15.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D16. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D16.1 Further to C6.24, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

MEASUREMENT AND PAYMENT

D17. PAYMENT

- D17.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D18. WARRANTY

- D18.1 Warranty is as stated in C13.

FORM H1: PERFORMANCE BOND
(See D8)

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. 615-2008

OLD EX PARK - SGT. TOMMY PRINCE PARK PATHWAY CONNECTION PHASE 1

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 D8)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 615-2008

OLD EX PARK - SGT. TOMMY PRINCE PARK PATHWAY CONNECTION PHASE 1

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 (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.2 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.3 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.4 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following are applicable to the Work:

<u>Specification No.</u>	<u>Specification Title</u>
L1.1	Layout Plan
L1.2	Layout Plan - Dimensions
L2	Grading Plan
L3	Details

GENERAL REQUIREMENTS

E2. SITE CONDITION

- E2.1 The Contractor shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E2.2 Surface and sub-surface conditions shown on the Drawings and included herein are provided for general information and variations there from shall not affect the terms of the Contract.
- E2.3 The Contractor shall set all necessary control lines, benchmarks, survey, elevation stakes and layout in accordance with the individual Site conditions and in consultation with the Contract Administrator.

E3. LAYOUT OF WORKS

- E3.1 The Contractor will Work from layout information provided in the construction drawings and will be responsible to provide a full time experienced survey crew to layout and continuously check the locations and elevations of all components and paving patterns of the Work included in this Contract.
- E3.2 The Contractor must provide all necessary survey equipment in good operating conditions.
- E3.3 The Contractor shall supply all materials (painting, stakes, ribbon, markers, etc) and labour necessary for the accurate location and setting out of the Work.
- E3.4 From time to time the Contract Administrator may have a survey crew on the Site, but they will check the Work done by the Contractor's survey personnel only. The checking of the Work by the Owner's surveyors will not relieve the Contractor of any responsibility of the correctness of the Work. Should any structure or paving or any part thereof be installed in any location other than that shown on the Drawings, then the error shall be rectified by the Contractor all at his

own expense and at the satisfaction of, and in a manner specified by the Contract Administrator.

- E3.5 All costs associated with this item of Work shall be included in the unit prices bid for the supply and installation of the various items in the contract.

E4. PROTECTION OF SURVEY INFRASTRUCTURE

- E4.1 Notwithstanding clause 4 "Protection of Survey Bars" of the Standard Provisions: Current legislation, The Surveys Act, places the onus on those undertaking construction to protect the Survey Infrastructure from damage as a result of their activity.
- E4.2 Further to C6.26(g), at least 72 hours prior to the commencement of the On-Site Work the Contractor shall contact the City of Winnipeg, Geomatics Services Branch at 986-4826 (8:00 am to 4:00 pm Monday to Friday excluding holidays) to obtain underground clearance. Geomatics Services will locate and mark all known outline survey monuments and geodetic control monuments and confirm the physical condition of those monuments upon completion of construction, at no cost to the Contractor.
- E4.3 Where a survey post, bar or control monument lies in the line of the proposed Work and must be disturbed, the Contractor shall provide the Contract Administrator with 48 hours notice to permit referencing for future replacement, at no cost to the Contractor. Failure to provide the specified notice shall result in the Contractor paying for all costs associated with replacing or relocating the disturbed outline survey monuments and geodetic control monuments.
- E4.4 Survey monuments and geodetic control monuments at or adjacent to the Site, not in the line of the proposed construction, that are damaged or disturbed by the Contractor shall be replaced or relocated by the City or its agent and all associated costs shall be paid for by the Contractor. An approximate estimate of the costs involved to restore a legal survey monument is \$1,000 per bar and \$3,000 per control monument. Contractors must ensure their landscaping and other subcontractors are aware of this clearance procedure and the potential restoration costs.
- E4.5 Where possible, amounts owed to the City in accordance with the above will be deducted from any Protection of survey infrastructure payments to be made by the City to the Contractor.

E5. PROTECTION OF EXISTING TREES

- E5.1 The Contractor shall take the following precautionary steps to prevent damage from construction activities.
- E5.2 All trees will have a protective zone at the dripline of the crown, which will remain free of digging, trenching, grade changes, stock piling of materials and soil compaction, throughout the duration of the Contract. Protective snow fencing around these areas is required.
- E5.3 Trees within and immediately adjacent to proposed construction areas and those identified to be at risk by the Contract Administrator, will require 25 x 100 x 2400mm wood planks strapped to the tree trunk to completely protect the tree trunk from impact damage during the entire construction period or as agreed upon by the Contract Administrator. (Smaller trees will be similarly protected using proportionally sized wood planks.)
- E5.4 Excavation shall be performed in a manner that minimizes damage to the existing root systems. Where possible, excavation shall be carried out such that the edge of the excavation shall be a minimum of 3m 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 by an arborist certified to practice in the Province of Manitoba. They must be properly trimmed with sharp tools to prevent crushing or being pulled up by construction equipment. No paint is required. All exposed roots must be mulched until the excavated area is filled with clean earth to avoid exposure to sunlight and desiccation.

- E5.5 Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform the Work required. Equipment shall not be parked, repaired, refuelled; construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.
- E5.6 Work on-Site shall be carried out in such a manner so as to minimize damage to existing tree branches. Where damage to branches does occur, they shall be neatly pruned.
- E5.7 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the City Forester or his designate.
- E5.8 No separate measurement or payment will be made for the protection of trees.
- E5.9 Auguring under existing trees will be the only acceptable method of underground installations. Any other excavations must be approved by the Forestry Branch.

E6. PEDESTRIAN SAFETY AND TRAFFIC MANAGEMENT

- E6.1 During the project, pedestrian access shall be maintained at all times on public right of way and on adjacent properties. A clear pathway unobstructed from any materials or equipment must be provided. No pedestrian access is required on the construction site.
- E6.2 Vehicle access must be maintained at all times on public right of way and on adjacent properties.

E7. CONSTRUCTION FACILITIES AND STAGING

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

E8. ALL-WEATHER DUMP SITE

- E8.1 The Contractor shall have access to an all-weather dump site throughout the duration of the project. Prior to the start of construction, the Contractor shall provide the Contract Administrator with details in regards to the location of the all-weather dump site.

E9. WATER USED BY CONTRACTOR

- E9.1 Notwithstanding CW 1120.3.7:
- E9.2 Water for use by the Contractor may be obtained from the City of Winnipeg waterworks system.
- E9.3 Should the Contractor wish to obtain water from a City hydrant, he shall make application either in person or by phoning the Permits Clerk at 986-3184 (8:30 am to 4:30 pm Monday to Friday excluding holidays). The Contractor shall advise the Permits Clerk of the hydrant he wishes to use. The Water Services Divisions of the Water and Waste Department will inspect the hydrant to ensure that the location is suitable and that the hydrant is in good working condition. If the requested hydrant is found to be unacceptable, arrangements will be made for the use of an alternate hydrant.
- E9.4 When the application has been approved, the Permits Clerk will contact the Contractor and issue the permit. The permit may not be issued the same day the application is made. The Contractor shall obtain the permit for hydrant use from the Customer Services Division of the Public Works Department, 107-1155 Pacific Avenue. Permit fees will be charged in accordance with the latest version of the Waterworks By-law. All water used shall be metered and protected against contamination by the use of approved backflow prevention devices.

The City will rent the meter to the Contractor at the rate established by the Waterworks By-law. The Contractor shall provide a lockable box, piping, valves, and backflow prevention equipment in accordance with Waterwork's guidelines. The backflow preventer(s) must be tested by a plumber licensed to test backflow preventers. The Permits Clerk can provide a list of licensed plumbers and additional information on the requirements for obtaining a use of hydrant permit.

- E9.5 The Contractor shall pay for all water used in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E10. SURFACE RESTORATIONS

- E10.1 The Contractor shall temporarily repair any Work commenced and not completed in the 2008 construction season to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E11. TEMPORARY RELOCATION OF AFFECTED STRUCTURES

- E11.1 The Contractor shall temporarily relocate any portable structure such as benches, waste receptacles, picnic benches, etc., which will interfere with the construction of the Work and are not identified as items to be relocated. The Contractor Administrator will identify the temporary locations for the portable structures. Following the completion of the applicable Work the Contractor shall replace the structures to the locations designated by the Contract Administrator. These relocations shall be considered incidental to the associated Works and no separate measurement for payment will be made.

E12. TRUCK WEIGHT LIMITS

- E12.1 The City shall not pay for any portion of Material which results in the vehicle exceeding the maximum gross vehicle weight allowed under *The City of Winnipeg Traffic By-Law*, unless such vehicle is operating under special permit.

E13. ACCESS

- E13.1 All access is to be on the designated routes through the Site. These routes will be determined at the Pre-Construction Meeting.
- E13.2 Access to the Site as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E13.3 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. The Contractor shall take such measures as are necessary to ensure safe and convenient pedestrian ingress and egress in 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.
- E13.4 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, the Contract Administrator and the cost of which shall be borne entirely by the Contractor.

E14. EXISTING UNDERGROUND SERVICES

- E14.1 The Contractor's attention is drawn to the existing underground lines or services that may be located in the area of the Work.
- E14.2 The Contractor shall take all necessary precautions when performing the Work to ensure that no damage is done to these existing services.
- E14.3 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, 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.
- E14.4 All costs in connection with this item including location of the existing service, repairs to any existing services damaged by the construction operation, etc. shall be included in the unit prices bid for supply and installation of the items included under this Contract.
- E14.5 The Contractor will be required to make his own arrangements in connection with the temporary use of lighting, power, gas, sewer, water or other utilities, and pay all costs in connection therewith.
- E14.6 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E15. EXPOSING EXISTING UNDERGROUND SERVICES AND UTILITIES

- E15.1 The exact location and depth of some of the existing underground services and utilities within the project limits are unknown.
- E15.2 Therefore, the Contractor shall supply all labour, equipment and materials required to expose all underground services and/or utilities sufficiently far enough in advance of the proposed Works to permit the Contract Administrator where necessary, to adjust the alignment and grade to avoid existing lines and ducts.
- E15.3 All costs in connection with this item of Work shall be included in the unit price bid for the various bid items.

E16. EXISTING CURB STOP BOXES

- E16.1 During the removal and installation of the concrete pavement, limestone pathway, the Contractor shall take all necessary precautions when Working in the vicinity of any existing curb stop boxes.
- E16.2 All existing curb stop boxes not in use as determined by the Contract Administrator shall be abandoned by removing existing curb stop boxes. All costs associated with the abandoning of curb stop boxes are incidental
- E16.3 Any existing curb boxes requiring final adjustments (horizontal and/or vertical) are incidental.
- E16.4 Any curb stop boxes damaged as a result of the Contractor's operation shall be replaced at his own cost.

E17. MATCHING EXISTING GRADES

- E17.1 Wherever the proposed paving, or sod meets existing pathway/pavement, curb edge, or property line, the Contractor shall construct the proposed element to an acceptable grade, as directed by the Contract Administrator, to ensure that proper drainage and accessibility are maintained.

E18. DAMAGE TO STREETS AND STRUCTURES

E18.1 The Contractor is to be advised of the following existing Site features to be retained and protected to the City of Winnipeg Standards:

- | | | |
|-------------|-----------------------------|-----------------|
| a) trees | e) light standards | i) hydro poles |
| b) curbs | f) fire hydrants | j) catch basins |
| c) sidewalk | g) street signs | k) curb inlets |
| d) sod | h) all underground services | l) fences |

E19. PERMITS, NOTICES, LICENCES, CERTIFICATIONS, LAWS, AND RULES

E19.1 The Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

E19.2 The Site Development Permits (including lot grading and damage deposits) will be obtained and paid for by the City of Winnipeg Planning, Property and Development Department prior to commencement of construction. A copy of this permit will be provided to the Contractor upon award of Contract.

E19.3 The Contractor shall comply with all laws, ordinances, rules, and regulations that would relate to the Works.

E20. EXCAVATION AND ROUGH GRADING

E20.1 General

E20.1.1 The "General Conditions and Supplemental Conditions" of this Specification and all documents listed in the Tender shall apply to and govern all phases of the Work hereinafter specified and/or shown on the Drawings.

E20.2 Description

E20.2.1 This specification is supplemental to CW 3110 and CW 3170. The Work of this section comprises the furnishing of all labour, equipment and materials required to complete the excavation and related Work including, but not necessarily confined to, the following:

- (a) Excavation, removals, disposal, subgrade compaction and rough grading of the existing Site for the construction of limestone pathways, sodded and seeded areas, etc. to the design requirements noted on the Drawings, approved on Site by the Contract Administrator, less the appropriate surface finish allowance.
- (b) Stockpile suitable, approved material on Site for reuse (clean topsoil and clean earth fill). Remove and dispose of unsuitable material.
- (c) Earthwork and Grading of the existing Site (cut and fill including compaction of subgrade and fill material) to ensure positive drainage in all paved areas, swales and adjacent sodded/seeded areas.

E20.3 Materials

E20.3.1 All fill materials shall conform to CW 3170.

E20.4 Construction Methods

E20.4.1 The Contractor shall construct the Site within the limits indicated on the Drawings, less the appropriate surface treatment depths specified and shall excavate, remove and dispose of all unsuitable materials of whatever nature encountered.

E20.4.2 The Contractor shall construct all sub-grades in accordance with Specification CW 3110, including removal of unsuitable excavated material and surplus materials.

- E20.4.3 The Contractor shall restrict his activities strictly to within the limits of the Work, unless receiving prior written approval from the Contract Administrator. The Contractor shall take all precautions to prevent damage to traffic structures, pole lines, existing trees, Site services and adjacent property and he shall be liable for any damages occurring in the performance of this Work.
- E20.4.4 The Contractor shall examine the Site and make themselves familiar with the existing conditions and the nature of the Work to be done.
- E20.4.5 Prevent damage to surface or underground utility lines which are to remain. Make good any damage.
- E20.4.6 The Contractor shall excavate to the design grades shown less the appropriate allowance for surface treatment and shall excavate, remove and dispose of all unsuitable materials of whatever nature encountered.
- E20.4.7 Excavated or graded materials to be approved before use as fill for grading Work. Protect such approved material from contamination. Stockpile in approved locations on Site. Protection and stockpiling are incidental to unit prices bid for excavation, removals and rough grading.
- E20.4.8 The Contractor shall ensure that upon completion of the earthwork and grading operations the Site is left in a neat condition free from debris, etc. for approval by the Contract Administrator prior to placing base courses and clean fill.
- E20.4.9 Construction to the new design grades shall be accomplished by the placement of clean fill in areas as indicated on the Drawings.
- E20.4.10 Areas of Fill
- (a) Fill low areas in subgrade of paved areas with compacted gravel sub-base material compacted to 98% SPD. Cost incidental to unit price bid for paved areas.
 - (b) Fill low areas in sodded/planting bed areas with clean earth fill suitable for plant growth (from Site excavations or imported as required) free from roots, muskeg, organic or cohesive matter, building debris, waste materials, rubble, rubbish, frozen portions, soluble materials and rocks larger than 25mm (1") in diameter and capable of sustaining plant and seed growth. Compact to 95% S. P. D. in 150mm (6") lifts.
 - (c) Construct sloped areas using clean earth fill suitable for plant growth (from Site excavations or imported as required) free from roots, muskeg, organic or cohesive matter, building debris, waste materials, rubble, rubbish, frozen portions, soluble materials and rocks larger than 25mm (1") in diameter and capable of sustaining plant and seed growth. Compact to 95% S. P. D. in 150mm (6") lifts.
 - (d) Prior to placing fill over existing ground, scarify surface to depth of 150mm. Maintain fill and existing surface at approximately the same moisture content to facilitate bonding.
 - (e) No direct payment will be made for placing and grading of existing fill as all costs for this Work shall be included in the lump sum bid for excavation, removals and rough grading within the limit of the Work.
- E20.4.11 Compaction shall include the use of sheep's foot or other suitable compaction equipment as approved by the Contract Administrator to achieve a minimum compaction of 98% Standard Proctor Density below all paved areas and rock areas, and 95% Standard Proctor Density in all other areas disturbed under this Contract.
- E20.4.12 The Contractor shall construct the sub-grade surface to the following depths below the grades shown on the Drawings for each area:
- (a) Limestone pathway 178mm
 - (b) Sod and topsoil 100mm
 - (c) Naturalization with native grass seeding 200mm

- E20.4.13 The Contractor is advised that all excavations, removals, disposal, rough grading, compaction and related Work for construction of crushed limestone pathway, and planting areas shall be incidental to the unit prices bid for each item as listed in the schedule of prices.
- E20.4.14 If required and at locations directed by the Contract Administrator, the Contractor shall excavate and remove unsuitable subgrade material and replace it with compacted granular material in accordance with Specification CW3110.
- E20.5 Method of Measurement
- E20.5.1 No measurement will be made for excavation, removal, disposal, compaction, rough grading and related Work for construction of limestone pathway, sodded and seeded areas as this Work is incidental to the unit prices bid for each item as listed in the schedule of prices.
- E20.5.2 No measurement will be made for stockpiling suitable topsoil, clean earth fill and granular base course as these items are incidental to this specification.
- E20.5.3 No measurement will be made for filling holes/low areas left by excavation and removals operations as this item shall be incidental to this specification.
- E20.5.4 No measurement will be made for the excavation or compaction of the subgrade as this shall be incidental to this specification.
- E20.5.5 No measurement will be made for the removal and disposal or delivery/reinstallation of signage posts and signage as this shall be incidental to this specification.
- E20.5.6 No measurement will be made for disposing of surplus fill and unsuitable material as this shall be incidental to this specification.
- E20.6 Basis of Payment
- E20.6.1 No payment will be made for excavation, removal, disposal, compaction, rough grading and related Work for construction of crushed limestone pathway, sodded and seeded areas as this Work is incidental to the unit prices bid for each item as listed in the schedule of prices.
- E20.6.2 No payment will be made for stockpiling suitable topsoil, clean earth fill and granular base course as these items are incidental to this specification.
- E20.6.3 No payment will be made for filling holes/low areas left by excavation and removals operations as this item shall be incidental to this specification.
- E20.6.4 No payment will be made for the excavation or compaction of the subgrade as this shall be incidental to this specification.
- E20.6.5 No payment will be made for the removal and disposal or delivery/reinstallation of signage posts and signage as this shall be incidental to this specification.
- E20.6.6 No payment will be made for disposing of surplus fill and unsuitable material as this shall be incidental to this specification.
- E21. REMOVALS AND STOCKPILING**
- E21.1 Further to City of Winnipeg Specification CW 3110 and due to the extent and nature of underground services in the street right-of-way, the Contractor shall be permitted to use only backhoe type equipment when excavating sub-grade material.
- E21.2 Further to City of Winnipeg Specifications CW 3230 and CW 3235, the Contractor shall excavate, remove and dispose existing back lane pavement and existing concrete sidewalk as shown on the Drawings and as directed by the Contract Administrator. The removal shall include all existing concrete and base courses where applicable.

- E21.3 Further to City of Winnipeg Specifications CW 3230 and CW 3235, the Contractor shall excavate, remove and stockpile existing limestone pathway as shown on the Drawings and as directed by the Contract Administrator. Contractor shall reuse existing materials where possible. The removal shall include all existing concrete and base courses where applicable.
- E21.4 Contractor shall remove and dispose existing debris/fill as shown on the Drawings and as directed by the Contract Administrator.
- E21.5 Description
- E21.5.1 This Specification shall cover the removal of existing:
Back lane pavement full depth including base courses
Concrete sidewalk full depth including base courses
Limestone pathway full depth including base courses
Debris/fill from Site
- E21.5.2 The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, equipment, tools, supplies and all other things necessary for and incidental to the satisfactory performance and completion of all Work hereinafter specified.
- E21.6 Equipment
- E21.6.1 All equipment shall be of a type approved by the Contract Administrator and shall be kept in good Working order.
- E21.7 Construction Methods
- E21.7.1 The Contractor shall restrict his activities strictly to within the limits of the Works, unless receiving prior written approval from the Contract Administrator.
- E21.7.2 The Contractor shall excavate, remove and dispose of existing back lane pavement, as indicated on the Drawings. In areas where design grade is lower than existing grade or where the base course is contaminated, base courses must be removed full depth. Base courses removal is incidental to the unit price bid.
- E21.7.3 The Contractor shall excavate, remove and dispose of existing concrete sidewalk as indicated on the Drawings. In areas where design grade is lower than existing grade or where the base course is contaminated, base courses must be removed full depth. Base courses removal is incidental to the unit price bid.
- E21.7.4 The Contractor shall excavate, remove and stockpile existing limestone pathway as indicated on the Drawings. In areas where design grade is lower than existing grade or where the base course is contaminated, base courses must be removed full depth. The Contractor shall reuse existing materials where possible. Base courses removal is incidental to the unit price bid.
- E21.7.5 The Contractor shall remove and dispose of existing debris/fill as indicated on the Drawings.
- E21.7.6 The Contractor shall load and haul all removed material from the Site and dispose of these materials legally at a dump located by the Contractor and approved by the Contract Administrator. Any materials dropped or spilled on any streets during the hauling operations shall be promptly cleaned up at the expense of the Contractor, to the satisfaction of the Contract Administrator.
- E21.7.7 The Contractor shall ensure that upon completion of the removal operations, the Site shall be left free of any hazardous depressions and in a neat condition.
- E21.7.8 If required and at locations directed by the Contract Administrator, the Contractor shall excavate, remove and dispose of unsuitable subgrade material and replace it with compacted granular material in accordance with Specification CW3110.

E21.7.9 The Contractor shall dispose of all unsuitable and excess materials in accordance with City of Winnipeg Specifications. Disposal is incidental to the unit prices bid.

E21.8 Method of Measurement

E21.8.1 The following items will be measured on an area basis for Work completed in accordance with this Specification as determined by the Contract Administrator:

Excavate, remove and dispose of existing back lane pavement

Excavate, remove and dispose of existing concrete sidewalk

Excavate, remove and stockpile existing limestone pathway (for reuse)

E21.8.2 The following items will be measured on a volume basis for Work completed in accordance with this Specification as determined by the Contract Administrator:

(a) Remove and dispose of existing debris/fill

E21.8.3 No measurement will be made for stockpiling suitable topsoil, clean earth fill and granular base course as these items are incidental to this specification.

E21.8.4 No measurement will be made for filling holes/low areas left by excavation and removals operations as this item shall be incidental to this specification.

E21.8.5 No measurement will be made for the excavation or compaction of the subgrade as this shall be incidental to this specification.

E21.8.6 No measurement will be made for disposing of surplus fill and unsuitable material as this shall be incidental to this specification.

E21.9 Basis of Payment

E21.9.1 The following items will be paid for at the contract unit price per square metre for

Excavate, remove and dispose of existing back lane pavement

Excavate, remove and dispose of existing concrete sidewalk

Excavate, remove and stockpile existing limestone pathway (for reuse)

as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.

E21.9.2 The following items will be paid for at the contract unit price per cubic meter for

(a) Remove and dispose of existing debris/fill

E21.9.3 No payment will be made for stockpiling suitable topsoil, clean earth fill and granular base course as these items are incidental to this specification.

E21.9.4 No payment will be made for filling holes/low areas left by excavation and removals operations as this item shall be incidental to this specification.

E21.9.5 No payment will be made for the excavation or compaction of the subgrade as this shall be incidental to this specification.

E21.9.6 No payment will be made for disposing of surplus fill and unsuitable material as this shall be incidental to this specification.

E22. CSP CULVERT

E22.1 Description

E22.1.1 Further to CW3610 CSP culverts are to be installed as shown on the Drawings and as specified herein.

E22.2 Materials

- E22.2.1 Culvert to be corrugated steel pipe in accordance with CW3610 at 400mm diameter at 6m length.
- E22.2.2 Temporary culverts in accordance with CW3610 at 300mm diameter.
- E22.2.3 Rock rip rap to be in accordance with CW3615.
- E22.2.4 Grout to be in accordance with CW3615.
- E22.3 Construction Methods
- E22.3.1 Following rough grading operation culverts are to be installed in the centre of swales centred on sidewalk locations as shown on the Drawings.
- E22.3.2 Excavate subgrade as required for installation of granular levelling course. Ensure slope and invert elevation of culvert is consistent with swale grades.
- E22.3.3 Set culvert on levelling course and backfill with material as per the Drawings.
- E22.3.4 Following installation of concrete sidewalk complete rip rap work as shown on the drawings.
- E22.3.5 Grout rocks to ensure smooth flow into and out of culvert and that minimal grout is visible.
- E22.3.6 Clean area of all excess rip rap and grout.
- E22.3.7 All riprap, levelling course, grout and other materials required to install the culverts are incidental to the unit price bid per culvert.
- E22.4 Method of Measurement
- E22.4.1 CSP culverts shall be measured on a per item basis. The number to be paid for shall be the total number of units placed in accordance with this Specification and the Construction Drawings, as determined by the Contract Administrator.

E23. CRUSHED LIMESTONE PATHWAY

- E23.1 Description
- E23.1.1 Further to CW 3110 and CW 3130 the Work of this section comprises the furnishing of all labour, equipment and materials incidental and required to complete the construction of limestone pathway as shown on the drawings and as hereinafter specified including, but not necessarily confined to, the following:
- (b) Excavation and removals;
 - (c) Supply and Installation of Limestone Pathway;
 - (d) Supply and Placement of Base Course Material;
 - (e) Supply and Placement of Sub-Base;
 - (f) Supply and Installation of Separation/Reinforcement Geotextile Fabric;
 - (g) Compaction.
- E23.1.2 There will be no separate measurement and payment for Excavation and removals; supply and placement of sub-base; supply and placement of base course material; supply and installation of Separation/Reinforcement Geotextile Fabric; and compaction. All Work shall be considered incidental to the Supply and Placing of Limestone Pathway.
- E23.2 Materials
- E23.2.1 Crushed granular material to meet the following requirements:
- (a) All Materials supplied under this Specification shall be of a type approved by the Contract Administrator and shall be subject to inspection and testing by the Contract Administrator;

- (b) Crushed limestone consisting of hard, durable, angular particles, free from clay lumps, cementation, organic material, frozen material and other deleterious materials.
- (c) Granular Levelling Course - Gradations to be within limits specified below when tested to ASTM C136-83 and have a smooth curve without sharp breaks when plotted on semi-log grading chart;

<u>ASTM Sieve Designation</u>	<u>% Passing</u>
20mm (3/4")	100
12.5mm (1/2")	50-75
9.5mm	30-50
6.0mm	10-20
0.425	0-5
0.18	nil
0.075	nil

- (d) Granular Base Course – 2" (50mm) down limestone
- (e) Crushed Limestone Fines –1/4" (6mm) down

E23.3 If materials have been tested by an independent testing laboratory within previous 2 months and have successfully passed tests equal to requirements of this specification, submit test certificates from testing laboratory showing suitability of materials for this project.

E23.4 Geotextile as per City of Winnipeg Specifications.

E23.5 Construction methods

E23.5.1 Placement and Compaction of Granular and Crushed Limestone

- (b) Place crushed granular base course material to a minimum compacted thickness of 127mm. Compact to 98% standard proctor density.
- (c) Place crushed granular levelling course material to a minimum compacted thickness of 38mm. Compact to 98% standard proctor density.
- (d) Crushed Limestone fines to a minimum compacted thickness of 13mm as finishing course. Compact to 95% standard proctor density.
- (e) Add crushed granular material as required to replace unsuitable subgrade material. Place in layers not exceeding 200mm thickness and compact to 98% standard proctor.
- (f) Finished surface to be within 12mm of specified grade, but not uniformly high or low. Ensure positive drainage on paved areas and in adjacent sodded areas.

E23.6 Field Quality Control

E23.6.1 Inspection and testing of crushed stone paving will be carried out by designated testing laboratory, cost of testing to be paid for by cash allowance as directed by the Contract Administrator.

E23.7 Acceptance

E23.7.1 Any Work not satisfactory as specified herein and as determined by the Contract Administrator for initial testing, shall be rectified by the Contractor. This process of inspection and correction shall continue until the Contract Administrator is satisfied that the Work is 100% complete and as per the construction drawings and specifications. All additional tests for failed or unacceptable results will be borne solely by the Contractor.

E23.8 Method of Measurement

E23.8.1 Crushed Limestone Pathway shall be measured on an area basis. The area to be paid for shall be the total number of square metres for "Supply and Install crushed limestone pathway (including removals, geotextile, base courses, and compaction)" placed in

accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator.

E23.9 Basis of Payment

- E23.9.1 Supply and installing Crushed Limestone Pathway will be paid for at the Contract Unit Price per square metre for "Supply and Install crushed limestone pathway (including removals, geotextile, base courses, and compaction)" measured as specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this Specification.

E24. NATURALIZATION WITH NATIVE GRASS SEEDING

E24.1 Description

- E24.1.1 All work to be to City of Winnipeg Naturalist standards.
- E24.1.2 The scope of work includes native seeded prairie grass including all excavation, removals, rough grading, erosion control, weed control, and remedial seeding.

E24.2 Qualification

- E24.2.1 Due to the specialized nature of this work, a qualified local contractor having minimum 3 (three) years of experience and accepted by Natural Services Branch, City of Winnipeg is required.

E24.3 Native Grass Seeding

- E24.3.1 Revegetation activities will include supervision of placement of "A" Horizon growth medium. Depending upon conditions, placement of "A" Horizon may be deferred to late fall 2008. Native grass cover will be seeded in spring 2011.
- E24.3.2 Summary of services provided:
Supervise placement of "A" Horizon growth medium
Seedbed prep after "A" Horizon growth medium has been placed
Permanent stabilization/revegetation with native grass cover 2011
Permanent stabilization/revegetation with native grass cover 2011

E24.4 Excavation and Rough Grading

- E24.4.1 Refer to E21 for excavation and rough grading

E24.5 Erosion Control

- E24.5.1 Erosion control activities will include providing direction to safeguard that construction activities do not leave soil conditions that are conducive to erosion. Ongoing erosion control will be provided until 2011.
- E24.5.2 Summary of services provided:
An erosion Control cover crop will be seeded in 2009/10
Advise on site activities to reduce erosion potential 2008/11
Include material purchase and installation of erosion control products

E24.6 Weed Control

- E24.6.1 An integrated weed control system will be initiated on the Elysian field "A" Horizon growth medium. Frequent inspections and follow up treatments combining integrated weed management, may be necessary for at least one-year post revegetation.
- E24.6.2 Summary of services provided:
Identify weed spectrum, types and distribution

Develop weed treatment strategies and timings

Conduct weed control activities, including the supply and application of pertinent weed control managements as required

2012 post plant weed control not included

E24.7 Remedial Seeding

E24.7.1 An evaluation of the planted area will be made to identify any remedial seeding required. Frequent inspections will be made with a follow up fall dormant seeding to strengthen stand establishment in 2011 if required.

E24.7.2 Summary of services provided:

Stand evaluation 2011

Strengthen stand with fall dormant seeding as required 2011

Remedial seeding does not include areas damaged by third party contractors or geese

E24.8 Responsibilities of the Contractor:

E24.8.1 The consultant shall:

Manage all aspects of the plant materials installation processes

Manage all aspects related to weed control

Communicate with other site contractors regarding The Consultant's' work schedules

Submit written reports to Contract Administrator identifying:

- i) Maintenance Work carried out monthly.
- ii) Development and condition of plant material.
- iii) Preventative or corrective measures required which are outside Contractor's responsibility.
- iv) Annual progress reports (to be submitted by every spring) stating adaptive development of the naturalization process after inspection by a qualified agronomist.

Notify the Client upon completion of the work outlined herein

Develop and implement erosion control plans

Provide an invoice upon the completion of each component of Work based on actual Quantities

E24.9 Warranty

E24.9.1 The Contractor will exercise due diligence in the process of revegetating the work site.

E24.9.2 The Contractor assumes no liability for 'act of God' occurrences such as; water damage or drought stress to plant material, extreme climatic events, goose damage, silt deposition, vandalism, and/or tampering in the establishment or subsequent years, which may cause mortality, of plant material installed by the consultant.

E24.9.3 The Contractor assumes no liability for damage to plant material by third party contractors, nor does the Consultant assume liability for the deposition of refuse, spoilage, debris, etc.

E24.10 Species List Arranged By Scientific Nomenclature

E24.10.1 Western Wheatgrass (*Agropyron smithii*), Tickle Grass (*Agrostis hymnalis*), Side-Oats Gramma (*Bouteloua curtipendula*), Buffalograss (*Bouteloua dactyloides*), Blue Gramma (*Bouteloua gracilis*), White Prairie Clover (*Dalea candida*), Purple Prairie Clover (*Dalea purpurea*), Northern Wheatgrass (*Elymus lanceolatus*), Awned Wheatgrass (*Elymus trachycaulus*), June Grass (*Koeleria pyramidata*), Little Bluestem (*Schizachyrium scoparium*).

E24.11 Method of Measurement

E24.11.1 Native Grass Seeding will be measured on an area basis. The area to be paid for shall be the total number of square metres installed in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator.

E24.12 Basis of Payment

E24.12.1 Native Grass Seeding will be paid for at the Contract Unit Price per square metre measured as specified herein, which price shall be payment in full for completing all operations herein described and all other items incidental to the Work included in this Specification.

E25. TOPSOIL AND FINISH GRADING

E25.1 Description

E25.1.1 Further to CW 3540 this Specification shall cover the screening and placement of on site topsoil and the supply and placing of imported topsoil for areas to be sodded.

E25.2 Materials

E25.2.1 The Contractor shall be responsible for the supply, safe storage and handling of all materials set forth in this Specification. All materials supplied under this Specification shall be subject to inspection and testing by the Contract Administrator and/or the City's designated turf inspector. There shall be no charge to the City for any materials taken by the Contract Administrator or the City's designated turf inspector for inspection and testing purposes.

E25.2.2 All soil utilized shall consist of a screened clay-textured or loam-textured dark topsoil, a fertile, friable material neither of heavy clay nor of very light sandy nature containing by volume, a minimum of 4% for clay loams and 2% for sandy loams to a maximum 25% organic matter (peat, rotted manure or composted material) and capable of sustaining vigorous plant growth. Topsoil shall be free of subsoil contamination, roots, stones over 30 mm in diameter or subsoil clay lumps over 30 mm in diameter and other extraneous matter. Topsoil shall not contain quackgrass rhizomes, Canada thistle roots or other noxious weeds. Salinity rating shall be less than 2.5 mmhos/cm. The pH range shall be between 6.0 - 8.0.

E25.2.3 Topsoil shall be on-site topsoil with appropriate amendments as per this specification or imported soil as required.

E25.2.4 On-site topsoil which has been stockpiled, shall be shredded or screened prior to being respread and shall meet the requirements specified above for topsoil.

E25.2.5 Topsoil utilized will be subject to tests for nitrate, phosphate, potassium, sulfate, pH, E.C. (salinity) and volume of organic matter by a testing laboratory as required and designated by the Contract Administrator. Cost of testing is incidental to the price bid per square metre for sodding.

E25.2.6 The Contract Administrator and/or the City's designated sod inspector will collect as many samples as are deemed necessary to ensure that a good representation of the topsoil utilized is provided for the soil analysis report.

E25.2.7 Imported topsoil shall not be blow dirt taken from wind erosion sites.

E25.2.8 Imported topsoil shall not be taken from fields abandoned to corn production where such soil may contain soil-incorporated herbicides with lasting residual effects such as eradican and atrazine.

E25.2.9 The Contractor shall inform the Contract Administrator of proposed source of imported topsoil and additives to be supplied. The Contract Administrator reserves the right to reject topsoil or additive not conforming to the requirements of this Specification.

E25.3 Construction Methods

- E25.3.1 General site grading of the sub-grade has been completed previously with another contract. The contour elevations are shown on the drawings. Some rough grading is required prior to topsoil addition. The work areas indicated on the plans that require sodding shall be graded to provide a maximum deviation of 50mm in 10m from the existing contour grades 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 50mm in maximum dimensions. Any soil contaminated by toxic materials shall be removed and disposed off site. The Contractor is to bring any deficiencies to the attention of the Contract Administrator prior to grading work as per E14.
- E25.3.2 Where work is to be done in boulevard and median areas adjacent to roadways, the Contractor shall maintain traffic and ensure that protection is afforded to the road user and that the Contractor's operations in no way interfere with the safe operation of traffic.
- E25.3.3 The Contractor shall supply, erect and maintain all applicable traffic control devices in accordance with the provisions of the latest edition of the "Manual of Temporary Traffic Control in Work Areas on City Streets" issued by the Public Works Department of the City of Winnipeg.
- E25.3.4 All surface debris, roots, vegetation, branches and stones in excess of 50 mm shall be removed.
- E25.3.5 Grades on the area to receive topsoil, which have been previously established, under separate contract, in conformance with the Construction Drawings and/or other applicable specifications, shall be maintained in a true and even grade.
- E25.3.6 Topsoil shall not be placed until the sub-grade as has been inspected and approved by the Contract Administrator. The Contractor shall provide the Contract Administrator with a minimum of two (2) working days notice for sub-grade inspection.
- E25.3.7 The Contractor shall not place topsoil on areas that are to be sodded unless the Contract Administrator provides the Contractor with written approval or direction to proceed.
- E25.3.8 Topsoil shall be spread with adequate moisture in uniform layers over the approved, unfrozen sub-grade, where sodding is indicated.
- E25.3.9 Topsoil shall be free of roots, grass, weeds, construction materials, debris, foreign non-organic objects and stones over 30 mm in diameter.
- E25.3.10 The topsoil mix shall be applied to a minimum of 75 mm compacted depth for areas requiring sod.
- E25.3.11 Topsoil shall be manually spread around trees, shrubs and other obstacles.
- E25.3.12 The Contractor shall ensure that topsoil does not come in contact with new asphaltic concrete pavement that is less than two weeks old.
- E25.3.13 The Contractor shall provide the Contract Administrator with a report for each work site indicating the fertilizer formulation used, the rate of application and the date of application.
- E25.3.14 Fertilizer shall be spread uniformly over the entire area of topsoil at a rate to provide 48 kg actual Nitrogen, 96 kg actual Phosphate and 48 kg actual Potassium per hectare.
- E25.3.15 Fertilizer shall be thoroughly mixed into the upper 100 mm of topsoil prior to the commencement of sodding operations.
- E25.3.16 The area shall be fine graded and the topsoil loosened. Eliminate rough spots and low areas to ensure positive drainage. Prepare a loose friable bed by means of cultivation and subsequent raking.
- E25.3.17 Topsoil shall be rolled with 50 kg roller, minimum 900 mm wide, to consolidate it in areas to be seeded or sodded, leaving the surface smooth, uniform, firm against deep foot printing and to the satisfaction of the Contract Administrator.
- E25.3.18 All sidewalks, streets, approaches, driveways and properties near the Work Site shall be kept clean at all times by the Contractor.

E25.3.19 Upon completion of the project, the Contractor shall immediately remove all excess material and debris from the Work Site.

E25.4 Method of Measurement

E25.4.1 There shall be no separate measurement for the work associated with this Specification.

E25.5 Basis of Payment

E25.5.1 Payment for work specified under this Specification is to be included in the unit price bid for 'Supply and install sod and topsoil including rough grading'.

E26. SODDING

E26.1 This specification is supplemental to City of Winnipeg Specifications CW3510 and CW3540 and shall cover the supply and installation of sod.

E26.2 Method of Measurement

E26.2.1 Supply, placement and maintenance of sod will be measured on an area basis. The area to be paid for shall be the total number of square metres placed and maintained in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator.

E26.3 Basis of Payment

E26.4 Supply, placement and maintenance of sod will be paid for at the Contract Unit Price per square metre for 'Supply and install sod and topsoil including rough grading', measured as specified herein, which price shall be payment in full for completing all operations herein described and all other items incidental to the Work included in this Specification.