



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 145-2005

BCI - VALOUR ROAD STREETSCAPING

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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 BCI - VALOUR ROAD STREETSCAPING

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 2, 2005.

B2.2 Bid Submissions 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 GC:3.1, the Bidder may view the Site without making an appointment.

B4. ENQUIRIES

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

B4.2 If the 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. ADDENDA

B5.1 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.

B5.2 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.

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.

B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.

B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B6.3 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.

B6.4 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.

B6.5 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.

B6.6 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.

B6.6.1 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.

B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative shall 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 B15.

B6.9 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. BID SUBMISSION

B7.1 The Bid Submission consists of the following components:

- (a) Form A: Bid;
- (b) Form B: Prices;
- (c) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft.

B7.2 All components of the Bid Submission 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 in ink, to constitute a responsive Bid.

B7.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.

B7.3.1 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.

B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

B7.5 Bid Submissions shall be submitted to:

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

B8. BID

B8.1 The Bidder shall complete Form A: Bid, making all required entries.

B8.2 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.

B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

B8.3 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.

- B8.4 Paragraph 12 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 and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than 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.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.
- B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.
- B8.5 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 Submission and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.2 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.
- B9.3 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.
- B9.4 The Bidder shall state a separate price in Canadian funds for each of the following items of Work on Form B: Prices:
- (a) Separate Price - Item No. 1 shall be the amount to be deducted from the total bid price if Removal of Concrete: sidewalks, both sides of Valour Road, Portage Avenue north to the lane(s) is deleted in accordance with E5 of the Specifications;
 - (b) Separate Price - Item No. 2 shall be the amount to be deducted from the total bid price if Patterned / Stamped Concrete Paving: area, both sides of Valour Road, Portage Avenue north to the lane(s) is deleted in accordance with E6 of the Specifications;
 - (c) Separate Price - Item No. 3 shall be the amount to be deducted from the total bid price if Plant Material Maintenance is deleted in accordance with E12 of the Specifications.
 - (d) Separate Price - Item No. 4 shall be the amount to be deducted from the total bid price if Patterned / Stamped Concrete Paving: area in the park east of lane and west of Spruce St. is changed from Patterned/Stamped to Standard City Concrete Sidewalk Paving in accordance with E6 of the Specifications.
 - (e) Separate Price - Item No. 5 shall be the amount to be deducted from the total bid price if Patterned / Stamped Concrete Paving: area in Transit Loop west of lane and east of Valour Road is changed from Patterned/Stamped to Standard City Concrete Sidewalk Paving in accordance with E6 of the Specifications.
 - (f) Separate Price - Item No. 6 shall be the amount to be deducted from the total bid price if Standard City Concrete Sidewalk Paving: area in Transit Loop west of lane and east of

Valour Road (Refer to Separate Price - Item No. 5) is changed from Standard City Concrete Sidewalk Paving to Sodding in accordance with E6, E9 and E10 of the Specifications.

B10. QUALIFICATION

B10.1 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;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out work, similar in nature, scope and value to the Work;
- (f) employ only Subcontractors who:
 - (i) are responsible and not suspended, debarred or in default of any obligation 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 Branch internet site at <http://www.winnipeg.ca/matmgt>); and
 - (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
- (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba).

B10.2 Further to B10.1(g), the Bidder shall, within three (3) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) a valid COR certification number under the Certificate of Recognition (COR) Program - Option 1 administered by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
- (b) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association; or
- (c) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.)

B10.3 The Bidder shall be prepared to 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.

B10.3.1 Patterned / Stamped Concrete Work shall be by a qualified applicator with a minimum of 5 years experience. Three references must be supplied within three (3) Working Days upon request of the Contract Administrator.

B10.4 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.

B11. BID SECURITY

B11.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking 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 included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B11.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B11.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B11.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B11.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B11.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B11.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

B12. OPENING OF BIDS AND RELEASE OF INFORMATION

B12.1 Bid Submissions will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B12.1.1 Bidders or their representatives may attend.

B12.1.2 Bid Submissions determined by the Manager of Materials, or his designate, to not include the bid security specified in B11 will not be read out.

B12.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

B12.4 The Bidder is advised that any information contained in any Bid Submission 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 11 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 until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

B14. WITHDRAWAL OF BIDS

B14.1 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.

B14.1.1 Notwithstanding GC:23.3, 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 12 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 shall:

- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
- (b) open the Bid Submission to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 12 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 Bid after the Submission Deadline but before his 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, including the right to retain the Bidder's bid security.

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 (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
- (c) Total Bid Price;

(d) economic analysis of any approved alternative pursuant to B6.

B15.2 Further to B15.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements 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 Bid Submission or in other information required to be submitted, that he 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 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.

B15.4 Further to B15.1(c), the Total Bid Price shall be the total bid price shown on Form B: Prices adjusted, if necessary, as follows:

- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the total price bid; or
- (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the total bid prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting separate prices in the order listed in B9.4 until a Total Bid Price within the budgetary provision is achieved, i.e., Total Bid Price = Total Bid Price - Separate Price No. 1 - Separate Price No. 2 - ... - Separate Price No. 6.

B16. AWARD OF CONTRACT

B16.1 The City will give notice of the award of the Contract by way of a letter of intent, 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.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for Construction Contracts* (Revision 2000 11 09) are applicable to the Work of the Contract.

C1.1.1 The *General Conditions for Construction Contracts* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Construction Contracts*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.4 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.5 The General Conditions are amended by deleting GC:6.16 and GC:6.17. The City of Winnipeg is now within the jurisdiction of the Manitoba Ombudsman pursuant to The Ombudsman Act.

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of Streetscaping of Valour Road including the site development of the Valour/Sargent Transit Loop Park.
- D2.2 The major components of the Work are as follows:
- (a) The supply and installation of decorative sign posts.
 - (b) Concrete sidewalk paving along Valour Road at Portage Avenue.
 - (c) Site development Work at the Valour/Sargent Transit Loop Park, including removal of the existing transit bus loop, development of a new transit bus loop, supply and installation of new concrete curbs and paving, retaining walls, soft landscaping, site furniture, and Tyndall blocks.

D3. CONTRACT ADMINISTRATOR

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

David Wagner
Landscape Architect
4-430 River Avenue
Winnipeg, Manitoba
R3L 0C6

Telephone No. (204) 452-2426
E-mail dwagner@dwla.ca

- D3.2 At the pre-construction meeting, David Wagner 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 GC:23.2.2, 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 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 Administrative Officer Secretariat
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
Corporate Services Department
Legal Services Division
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1
Facsimile No.: (204) 947-9155

D6. FURNISHING OF DOCUMENTS

- D6.1 Upon award of the Contract, the Contractor will be provided with one (1) set of the Bid Opportunity in Adobe Acrobat (.pdf) format. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

SUBMISSIONS

D7. SAFE WORK PLAN

- D7.1 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 GC:4.1 for the return of the executed Contract.
- D7.2 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.

D8. INSURANCE

- D8.1 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) all inclusive, with The City of Winnipeg and David Wagner Associates Inc. being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;
- (b) automobile liability insurance for owned and non-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;

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the City Solicitor with a certified true copy or a certificate of insurance of each policy, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D8.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D9. PERFORMANCE SECURITY

D9.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D9.1.1 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.

D9.2 If the bid security provided in his Bid Submission was not a certified cheque or draft pursuant to B11.1(c), 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 letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D10. SUBCONTRACTOR LIST

D10.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D11. COMMENCEMENT

- D11.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D11.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence that the Contractor is 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;
 - (ii) evidence of the workers compensation coverage specified in GC:6.14;
 - (iii) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9;
 - (vi) the Subcontractor list specified in D10; and
 - (vii) the name of the Contractor's Supervisor specified in D4.
 - (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.
- D11.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance by September 1, 2005.
- 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 by September 15, 2005.
- 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 Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one thousand dollars (\$1000) per Working Day for each and every Working Day following the day fixed herein for Total 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 losses in the event that the Contractor does not achieve Total 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.

D15. SCHEDULED MAINTENANCE

- D15.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
- (a) Sodding as specified in E10.3; and
 - (b) Plant Material as specified in E12.
- D15.2 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

D16. JOB MEETINGS

- D16.1 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.
- D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D17.1 Further to GC:6.26, 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).

WARRANTY

D18. WARRANTY

- D18.1 Notwithstanding GC:13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter unless extended pursuant to GC:13.2.1 or GC:13.2.2, in which case it shall expire when provided for thereunder.
- D18.2 Notwithstanding GC:13.2 or D18.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:
- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D18.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in GC:13.2 for the warranty period to begin.
- D18.3 The warranty period for all Plant Material as specified in E11 shall begin on the date of Total Performance and shall expire two (2) years thereafter.
- D18.3.1 Any plant material, replaced during the warranty period, shall carry an additional two (2) year warranty and two (2) year maintenance period from the date of replacement.

FORM H1: PERFORMANCE BOND
(See D9)

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 dated the

_____ day of _____, 20____, for:

BID OPPORTUNITY NO. 145-2005

BCI - VALOUR ROAD STREETSCAPING

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)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)
(See D9)**

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 145-2005

BCI - VALOUR ROAD STREETSCAPING

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, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *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>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing</u>
L1	Portage Avenue Poles & Paving
L2	Existing Conditions - Intersections
L3	Proposed Ornamental Poles - Intersections
L4	Transit Loop Park – Existing Conditions/Removals
L5	Transit Loop Park – Layout
L6	Transit Loop Park – Planting/Paving
L7	Transit Loop Park – Grading
L8	Transit Loop Park – Details
ValourRoad-32	32 Foot Dodecagonal Banner Pole
ValourRoad-15	15 Foot Octagonal Banner Pole
Broadway	Broadway Decorative Casting
MPA-C	Screw Base Anchor

E2. ACCESS TO SITE AND DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- E2.1 Access to the Sites as required by the Contractor shall be provided and maintained by the Contractor at his own expense and approved by the Contract Administrator.
- E2.2 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 thereto in the performance of the Work, the Contractor shall upon instructions from and to the satisfaction of the City thereof, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the City thereof and the cost of which shall be borne entirely by the Contractor. The Contractor shall also indemnify and save harmless the City and David Wagner Associates Inc. from all claims made directly or indirectly against them in respect to any such damage.
- E2.3 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 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.

E2.4 Care shall be taken to protect existing trees and their root systems from damage, compaction, and contamination resulting from construction to the satisfaction of the Contract Administrator. No heavy equipment shall be driven or parked on the area within the drip line of any trees.

E3. PROTECTION OF SURVEY INFRASTRUCTURE

E3.1 Refer to CW 1130-R1, Site Requirements, Clause 3.14. Contractors must ensure their Sub-contractors are aware of this clearance procedure and potential restoration costs.

E4. SCHEDULING OF WORK

E4.1 Work on the Valour/Sargent Transit Loop Park must be completed in a timely fashion in order that disruption to the Transit operations on the Site are minimized. Scheduling of Work shall be to the satisfaction of the Contract Administrator and Winnipeg Transit.

E4.2 The Contract Administrator is to be given sufficient notification of the commencement of Work so that Winnipeg Transit may remove the existing bus shelter.

E5. REMOVALS

E5.1 General Description

(a) This specification shall cover the removal of concrete approaches, concrete paving and the existing asphalt transit loop as specified on the Drawings.

E5.2 Location and Itemization of Work

(a) Valour Road at Portage Avenue

(i) Removal of concrete sidewalks and bus stop areas as shown on Drawing L1.

(b) Valour/Sargent Transit Loop Park

(i) Removal of concrete approaches, sidewalks, curbs and roadway as shown on Drawing L4.

(ii) Removal of asphalt paving from the existing transit loop.

E5.3 Execution

(a) As per CW 3110-R7.

E5.4 Basis of Payment

(a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of excavation, removal, and disposal.

(b) Items of Work:

(i) Removal of Concrete

(ii) Removal of Asphalt Transit Loop

E6. CONCRETE WORK

E6.1 General Description

(a) Further to CW 3110-R7, CW 3310-R9 and CW 3325-R2, this specification shall cover the supply and installation of concrete curbs, sidewalks, approaches, concrete paving and patterned / stamped concrete paving as shown on the Drawings.

E6.2 Location and Itemization of Work

- (a) Valour Road at Portage Avenue
 - (i) Patterned/stamped concrete sidewalks.
- (b) Valour/Sargent Transit Loop Park
 - (i) Concrete approaches c/w curbs for the new transit loop.
 - (ii) Concrete paving for the new transit loop and the road widening at Sargent Avenue and Valour Road.
 - (iii) Concrete sidewalks c/w curbs on boulevard areas.
 - (iv) Patterned/stamped concrete paving in park.
 - (v) Edge curbs around planting beds.
 - (vi) Bases for Tyndall stone blocks.

E6.3 Materials and Methods for Standard Concrete Work

- (a) All Work to be to CW 3110-R7, CW 3310-R9 and CW 3325-R2 and as shown on the Drawings.
- (b) Approaches are to be commercial approaches as shown on SD-232 with 150mm depth of concrete paving on 75mm depth of compacted granular base. Curb ramps are to SD-229B and C.
- (c) Sidewalks are to be to standard City requirements with 100mm depth of concrete paving on 50mm depth of compacted granular base.
- (d) Concrete paving for the new transit loop is to be 150mm depth of concrete paving on 75mm depth of compacted granular base. New paving is to tie into and match the existing backlane paving. The road widening at Sargent Avenue and Valour Road is to match and tie into the existing road paving as per SD-207 and SD-208.
- (e) Concrete reinforcement is to be to SD-216 and SD-217.
- (f) The Contractor is to determine the new Site grades prior to construction, to the satisfaction of the Contract Administrator, to ensure positive Site drainage.
- (g) Sawcut control joints are to be approved by Contract Administrator prior to implementation.
- (h) Concrete bases for the Tyndall blocks shall be constructed as shown on the Drawing L8 and coordinated with that Work.

E6.4 Materials and Methods for Patterned/Stamped Concrete Work

- (a) All cement shall be Type 10, Normal Portland Cement.
- (b) The concrete mix shall have the required strength and workability
 - (i) Minimum Specified Compressive Strength at 28 days = 32 MPA.
 - (ii) Minimum Cementitious Content = 340 kg/m³
 - (iii) Minimum Water / Cementitious Ratio = 0.45
 - (iv) Slump = 70 +/- 20mm
 - (v) Aggregate Size = 20mm Nominal
 - (vi) Air Content = 5.0% to 8.0%
- (c) Granular base CW 3110-R7.
- (d) Install 125mm thick concrete paving on 75mm depth of compacted granular base.
- (e) Reinforce concrete with 10m r-bars at 600mm O.C. both ways, minimum 50mm coverage.
- (f) Sawcut control joints to be approved by Contract Administrator prior to implementation.
- (g) Patterned / Stamped Concrete Paving
 - (i) Concrete colour shall be "Cobblestone" colour with a charcoal release. Colour to be finalized at a later date. Colour shall be integral throughout paving.

- (ii) Pattern shall be StampMaster "London Cobblestone #2" TB-2 or approved alternative.
- (iii) Contractor is to supply a colour and pattern concrete sample, one square metre in size, to the satisfaction of the Contract Administrator, prior to installation.
- (iv) Sealer shall be Type 1, non-yellowing, solvent based c/w 25% solids. Provide two (2) coats of sealer. The first coat after installation and power washing. The second coat at 28 days after curing of the concrete. Power wash prior to applying the second coat.

E6.5 Materials and Methods for Edge Curb

- (a) All Work to be to CW 3110-R7 and CW 3310-R9 and as shown on the Drawings.

E6.6 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price for the Items of Work listed below, which price shall include all costs of supply and installation of granular base, concrete, reinforcing, sealers and control joints. All approaches, sidewalks, and paving shall be measured by the square metre and associated curbs shall be considered incidental to the Work. Edge curbs shall be measured by the lineal metre. Concrete bases for the Tyndall blocks shall be considered incidental to that Work. Site restoration Work shall be considered incidental to the Work.
- (b) Items of Work
 - (i) Concrete Approaches c/w Curbs
 - (ii) Concrete Paving
 - (iii) Concrete Sidewalks c/w Curbs
 - (iv) Patterned/Stamped Concrete Paving
 - (v) Edge Curbs

E7. RETAINING WALLS

E7.1 General Description

- (a) This specification shall cover the supply and installation of retaining walls as shown on the Drawings. Construction of the berms behind the walls shall be considered incidental to this Work.

E7.2 Samples

- (a) The Contractor shall submit samples of the Tyndall blocks for approval of the Contract Administrator prior to ordering of materials.

E7.3 Materials

- (a) Tyndall stone split face blocks, 90mm high x 300mm deep x random lengths.
- (b) Granular
 - (i) Base: 19mm diameter down crushed limestone.
- (c) Adhesive
 - (i) Snap Edge, Bond-Loc All Weather Landscape Products Adhesive or approved equal.

E7.4 Method

- (a) Blocks shall be subject to inspection by the Contract Administrator.
- (b) Retaining walls and base shall be installed as per Drawings.

- (c) Subgrade preparation shall conform to levels and compaction required to allow for installation of granular base.
- (d) Base shall be compacted to 95% standard Proctor Density.
- (e) Blocks shall be installed true to grade such that the top of the finished wall is level across its entire length. The wall is to step down in equal increments at the wall ends
- (f) Blocks shall be installed with tight joints. The shape of the block shall be adjusted to fit the curved layout.
- (g) The base course blocks shall be levelled and compacted with a mechanical plate vibrator using a 19mm thick plywood or neoprene pad under the plate. Blocks are to be true to grade and free of movement.
- (h) Vertical joints shall be staggered with overlap of blocks to be no less than 225mm.
- (i) The wall shall be backfilled with compacted clean fill in 150mm lifts.
- (j) The top course shall be fixed down with adhesive after the wall has been constructed to the satisfaction of the Contract Administrator.
- (k) The berms behind the walls shall be constructed from clean compacted fill to the grades shown on the Drawings.

E7.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a lineal metre basis, for the Items of Work listed below, which price shall include all costs of material supply including the granular, sub-grade preparation, and proper material installation. Site restoration and berm construction shall be considered incidental to the Work.
- (b) Items of Work
 - (i) Retaining Wall

E8. TYNDALL BLOCKS

E8.1 General Description

- (a) This specification shall cover the supply and installation of Tyndall stone blocks for use of commemorative signs and bases for silhouettes.

E8.2 Materials

- (a) Commemorative Sign Blocks
 - (i) Tyndall stone blocks, natural rough direct from quarry bed, sized as shown on the Drawings, c/w one smooth face cut on a 45° angle.
- (b) Silhouette Base Blocks
 - (i) Tyndall stone blocks, natural rough direct from quarry bed, 450mm high x 750mm deep x 910mm lengths.
 - (ii) Dowels: 18mm diameter steel dowels.

E8.3 Method

- (a) Blocks shall be subject to inspection by the Contract Administrator prior to installation.
- (b) Blocks are to be installed as shown on the Drawings.
- (c) Silhouette base blocks are to be installed in conjunction with the installation of the silhouettes. The silhouettes are not in this contract. There are three (3) blocks for each silhouette. Blocks are to be secured in place with dowels and epoxy.

E8.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply and proper material installation.
- (b) Items of Work
 - (i) Commemorative Sign Blocks
 - (ii) Silhouette Base Blocks

E9. TOPSOIL AND FINISH GRADING

E9.1 General Description

- (a) Further to CW 3540-R4, this specification shall cover the supply and installation of topsoil for sodding, planting and shrub beds.

E9.2 Materials

- (a) Manufactured Topsoil Mix
 - (i) Sodding and Planting Beds: Three-way Mix, 1/3-1/3-1/3 (sand/peatmoss/topsoil).
- (b) Sand: washed, medium to coarse textured.
- (c) Peatmoss:
 - (i) Derived from partially decomposed Sphagnum Moss.
 - (ii) Elastic and homogeneous, brown in colour.
 - (iii) Free of wood and deleterious material which could prohibit growth.
 - (iv) Shredded particle minimum size: 5mm.
- (d) Topsoil: As per CW 3540-R4.
- (e) Fertilizer: Industry accepted standard medium containing nitrogen, phosphorous, potassium and any other micro-nutrients suitable to the specific application and as determined by chemical analysis of the manufactured topsoil mix.

E9.3 Source Quality Control

- (a) The Contractor is responsible for amendments to supply topsoil as specified.
- (b) Testing of the manufactured topsoil mix will be carried out by a testing laboratory designated by the Contract Administrator. Testing shall be for pH, P and K, and for organic matter. Sampling, testing and analysis shall be in accordance with provincial standards.

E9.4 Methods

- (a) The manufactured topsoil mix shall be installed as per CW3540-R4.
- (b) Place manufactured topsoil mix to the following depths after settlement:
 - (i) Sodded areas: as per CW3540-R4.
 - (ii) Shrub Beds: 300mm.

E9.5 Basis of Payment

- (a) Payment for Work specified under this section shall be included with the price for sod and plant material except for:
 - (i) Payment for shrub beds shall be paid for at the contract Unit Price measured by square metre for the Items of Work listed below, which price shall include all costs of excavation and removal of materials, material supply and proper material installation.
- (b) Items of Work

(i) Shrub Beds

E10. SODDING

E10.1 General Description

- (a) Further to CW 3510-R8, this specification shall cover the supply and installation of sod.

E10.2 Materials and Method

- (a) Type 1 – Sodding
- (i) As per CW 3510-R8.
 - (ii) Manufactured Topsoil Mix shall be as per E9.

E10.3 Maintenance Period

- (a) The Contractor shall maintain the sod for 30 Calendar Days after the completion of the installation or until such a time as the turf is established in accordance with CW 3510-R8.

E10.4 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a square metre basis, for the Items of Work listed below, which price shall include all costs of material supply, sub-grade preparation, proper material installation, maintenance and all other items incidental to the Work. Payment for Sodding shall be in accordance with the following:
- (i) Seventy-five (75%) following supply and placement.
 - (ii) Twenty-five (25%) following termination of the maintenance period.
- (b) Items of Work
- (i) Sodding

E11. PLANT MATERIAL

E11.1 General Description

- (a) This specification shall cover the supply and installation of trees and shrubs and all materials incidental to their installation.

E11.2 Materials

- (a) Plant Material
- (i) Quality and source is to comply with Canadian Standards for Nursery Stock, Seventh Edition of Canadian Nursery Landscape Association (C.N.L.A.) referring to size and development of plant material and root ball. Measure trees when branches are in their natural position. Height and spread dimensions refer to main body of trees and not from branch top to branch top. Use trees of No. 1 grade. Trees are to have only one, sturdy, reasonably straight and vertical trunk, and a well balanced crown with fully developed leader.
 - (ii) Trees are to be free of disease, insect infestation, rodent damage, sun scald, frost cracks, abrasions, unhealed scars, scars exceeding 5cm in diameter, major forks or crooks in the trunk, broken branches, or angled leaders. Trees having the above defects will not be accepted by the Contract Administrator.
 - (iii) Nursery stock is to be grown in nurseries under proper cultural practices as recommended by the C.N.L.A. Only nursery stock grown for at least the last four (4) years in nurseries located in an Agriculture Canada Plant Hardiness Zone of 2 (a or

b) or 3 (a or b) will be accepted. Nursery stock that has grown in plant hardiness zones 1 and 4 or greater will be rejected.

- (iv) Plant Specification List – on Drawings.
- (b) Planting soil is to Specification E9.
- (c) Water is to be potable and free of minerals which may be detrimental to plant growth.
- (d) Fertilizer is to be a slow release formulation of low nitrogen and high phosphorus e.g. 10-50-12 Apply quantities at rates stated by product manufacturer.
- (e) Staking shall be as shown on Drawings.
- (f) Mulch shall be clean bark or wood chip mulch with chips not less than 15mm or larger than 75mm in size and not more than 20mm thick. Mulch shall be free of leaves, branches and other extraneous matter.

E11.3 Method

- (a) Trees and shrubs are to be planted according to Drawings.
- (b) The Contractor shall obtain all above and below ground clearances from all utilities. Clearances shall be obtained in a timely manner so as not to jeopardize the schedule of the complete planting operation.
- (c) Coordinate shipping of nursery stock and excavation of holes to ensure minimum time laps between digging and planting. Tie branches of nursery stock securely, and protect plants against abrasion, exposure and extreme temperature change during transit. Avoid binding of plants with rope or wire which would damage bark, break branches or destroy natural shape of plant. Give full support to root ball of nursery stock during lifting. Cover plant foliage with tarpaulin, and protect bare roots by means of dampened straw, peat moss, saw dust or other acceptable material to prevent loss of moisture during transit and storage. Remove broken and damaged roots with sharp pruning shears. Make clean cuts, and cover cuts over 10mm diameter with a tree wound dressing.
- (d) Location of nursery stock will be staked out or painted on Site by the Contractor and approved the Contract Administrator prior to planting.
- (e) The Contractor shall coordinate operations, keeping the site clean and the planting holes drained. The Contractor shall immediately remove soil or debris spilled onto street pavement, grass or sidewalk.
- (f) Installation shall be done during periods of suitable weather conditions and in accordance with locally accepted practice. Trees are to be planted within forty-eight (48) hours of excavation from the nursery. No tree pit is to be left open at the end of the Contractor's Work Day. The planting program is to be planned to ensure that trees delivered to the Site at designated planting locations are installed and thoroughly watered the same day as delivery.
- (g) Loosen bottom of planting hole to depth of 100-150mm. Cover bottom of each excavation with minimum of 150 mm topsoil mixture, incorporate with sub-grade material.
- (h) Plant trees vertically. Orient trees and shrubs to give best appearance in relation to structure, roads and sidewalks. Place nursery stock to depth equal to depth they were originally growing in nursery. With balled and burlapped root balls and root balls in wire baskets, loosen burlap and cut away the top 1/3 without disturbing root ball. Do not pull burlap or rope from under root ball. Non-biodegradable wrapping must be removed. Tamp planting soil around root system in layers of 150mm eliminating air voids. Frozen or saturated planting soil is unacceptable. When 2/3 of planting soil has been placed, fill hole with water. After water has completely penetrated into soil, complete backfilling.
- (i) Each tree is to have an earth saucer at its base having a diameter as large as the excavation with a 10cm lip formed at the perimeter of the saucer to retain water. When

planting is completed, give surface of planting saucer dressing of fertilizer and mix fertilizer thoroughly with top layer of planting soil and water in well.

- (j) Trees are to be staked as per Details.
- (k) Shrub beds shall be in accordance with E9. Shrubs shall be planted as per details.
- (l) Each tree is to have wood chip mulch spread over the earth saucer to 75mm depth. Shrub beds shall have wood chip mulch to a depth of 75mm.

E11.4 Warranty

- (a) Refer to D18.3.

E11.5 Maintenance Period

- (a) Refer to E12.

E11.6 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply, and proper material installation. The supply and installation of mulch shall be considered incidental to the Work.
- (b) Items of Work
 - (i) Fallgold Ash
 - (ii) Scots Pine
 - (iii) Cotoneaster
 - (iv) Goldmound Spirea
 - (v) Fairy Queen Spirea

E12. PLANT MATERIAL MAINTENANCE

E12.1 Maintenance Period

- (a) The Contractor shall undertake maintenance of all plant material for two (2) years from the date of Certificate of Total Performance.
- (b) Given Total Performance, the Superintendent of Landscape Development Services or his/her designate, shall monitor the Contractor's maintenance. Once completed, a Certificate of Acceptance shall be issued by the Superintendent of Landscape Development Services.
- (c) In general the maintenance shall not commence prior to May 1st and/or terminate after October 15th of each year. In the event of an early spring, whereby weather conditions are conducive to plant growth, the Contractor shall start the maintenance period at such time as they deem necessary. However the City of Winnipeg, Superintendent of Landscape Development Services, must be notified prior to commencing the maintenance period.
- (d) In the event that plant material requires replacement under the warranty period, a two (2) year maintenance period for the replaced material shall commence on the date of replacement.

E12.2 Description of Work

- (a) Irrigate weekly or as required during the growing season following installation by saturating the soil in the root zone area to a depth of 400mm. Water when rainfall is less than 25mm per week for more than three weeks. Irrigate prior freeze-up.
- (b) Apply 2:1:2 soluble fertilizer to root zone of plants in the early spring not later than May 30th. Irrigate to saturate the soil in the root zone area to a depth of 500mm. Apply additional

fertilizers as per standard horticultural practice. Apply at manufacturer's specified rates. Retain and submit material purchase records for all pertinent substances.

- (c) Cultivate soil in earth saucer lightly at beginning of growing season and apply mulch to maintain installed depth of mulch. Weed as necessary during the entire growing season.
- (d) Undertake disease and insect control programs as required to control known and serious pests. Obtain approval from Contract Administrator prior to using any pesticide. The use of chemical pesticides is not permitted on City of Winnipeg properties. Retain and submit material purchase records for all pertinent substances.
- (e) Prune trees during dormant season if possible. Remove dead, diseased, crossing, weak, crowded and unsightly or unshapely branches. Do not head back or shear to control shape.
- (f) Repair all damage to plant material immediately following the discovery of damage and check and re-secure stakes every 2-3 months. Remove all stakes at the end of the maintenance period.
- (g) Record all activities on a daily basis. Submit reports to the Contract Administrator on a monthly basis.

E12.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per yearly basis, for the Items of Work listed below, which price shall include all costs of maintenance and material supply. The year shall start from the date of Certificate of Total Performance.
- (b) Items of Work
 - (i) Plant Material Maintenance

E13. SITE FURNITURE

E13.1 General Description

- (a) This specification shall cover the supply and installation of site furniture as specified on the Drawings.

E13.2 Materials and Method

- (a) Benches shall be DuMor, Inc. Site Furnishings, Bench 137-80. They shall be 2.4m (8') in length. They shall have the surface mount option S-2. Colour shall be Bronze. Benches are to be installed according to Drawings and manufacturer's specifications.
- (b) Benches are to be installed level and are to be shimmed if required. Any damaged surfaces shall be touched-up to the approval of the Contract Administrator.

E13.3 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply and proper material installation.
- (b) Items of Work:
 - (i) Benches

E14. BOLLARDS

E14.1 General Description

- (a) This specification shall cover the supply and installation of wood and concrete bollards as specified on the Drawings.

E14.2 Materials and Method

(a) Wood Bollards

- (i) Round wood posts, 190-250mm diameter, solid core, air dried, SPF, smooth but not turned, no bark. Top edge to have 50mm chamfer. Bottoms are to be sharpened for installation. ACQ treated after shaping. Treat all cuts with preservative.
- (ii) Bollards are to be installed by direct burial method at 1.8m O.C. Bollards are to be installed in straight line with each other and as shown on the Drawings. Top of bollards are to be level or as directed by the Contract Administrator.

(b) Concrete Bollards

- (i) Barkman pre-cast concrete bollards, 355mm round, finish to be natural sandblasted.
- (ii) Bollards are to be installed as per manufacturer's specifications at 2.1m O.C. Bollards are to be installed in straight line with each other and as shown on the Drawings.

(c) All bollards are to be set true vertically.

E14.3 Basis of Payment

(a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply and proper material installation.

(b) Items of Work:

- (i) Wood Bollards
- (ii) Concrete Bollard

E15. ORNAMENTAL POLES

E15.1 General Description

- (a) This specification shall cover the supply and installation of ornamental poles as specified on the Drawings.
- (b) All poles are to receive streetscaping signage to be supplied and installed by others upon completion of this Work.

E15.2 Materials

(a) Poles

- (i) Poles shall be dodecagonal and/or octagonal in shape and evenly tapered. Pole and finial details shall be as on Drawings ValourRd-32 for the 9.75m pole and ValourRd-15 for the 5.2m, 4.6m and 4.0m poles.
- (ii) Poles shall be fabricated from minimum A-570- grade 50 hot rolled steel.
- (iii) The pole seam shall be smooth and have a minimum penetration of 60%.
- (iv) Base plate shall be fabricated from steel plate minimum G-40-21-44w.
- (v) The pole shall be designed to support the load as specified for conditions laid out in the National building Code.
- (vi) The complete structure shall be finished in hot dipped galvanize as per ASTM 163.
- (vii) Fabrication shall be carried out by a shop certified by the Canadian Welding Bureau.

(b) Quantities of each pole height are as noted in the Form B: Prices.

(c) Base Covers: Refer to Drawing Broadway – Broadway Decorative Casting.

(d) Finish: Hot apply Protech PS311 NI Semi-gloss Black 7 to 10 mils dry film thickness.

(e) Galvanized Screw Type Bases

- (i) Refer to Drawing MPA-C.
- (ii) Diameter and depth to suite specific poles.
- (iii) Anchor plates and base plates shall meet current City of Winnipeg standards and details.
- (iv) Anchor bolts to be full thread galvanized hex bolts (Grade 5)
- (v) All bolt holes to be drilled and tapped.

E15.3 Method

(a) Installation of Bases

- (i) The Contractor is responsible for obtaining all clearances for all underground utilities prior to location of poles.
- (ii) Pole locations shall be marked out on site and approved by the Contract Administrator prior to construction.
- (iii) All support bases to be set at such a grade as to allow the pole base cover to sit flush, 360° with finished sidewalk or adjacent surface grade.
- (iv) Adjacent surfaces shall be restored to pre-construction condition or better. All site restoration Work shall be considered incidental to the Work.

(b) Installation of Poles

- (i) After finishing and curing of the finish, the poles shall be wrapped with protective cardboard film or other blanketing material to protect the finished product.
- (ii) Poles are to be handled with nylon slings or other protective carrying devices as required for safe transportation and installation.
- (iii) Installation shall be as shown on Drawings. Any damaged surfaces shall be touched-up to the satisfaction of the Contract Administrator.

E15.4 Warranty

- (a) Warranties for paints and finishes shall be to Manufacturer's warranties.

E15.5 Basis of Payment

- (a) Payment for Work specified under this section shall be paid for at the Unit Price, measured on a per unit basis, for the Items of Work listed below, which price shall include all costs of material supply, finishing and proper material installation. Site restoration Work shall be considered incidental to this Work.
- (b) Items of Work:
 - (i) Ornamental Pole – 9.75m
 - (ii) Ornamental Pole – 5.2m
 - (iii) Ornamental Pole – 4.6m
 - (iv) Ornamental Pole – 4.0m