

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 56-2013

BUS STOP UPGRADES 2013

TABLE OF CONTENTS

PART A - BID SUBMISSION
Form A: Bid Form B: Prices
PART B - BIDDING PROCEDURES
 B1. Contract Title B2. Submission Deadline B3. Site Investigation B4. Enquiries B5. Addenda B6. Substitutes B7. Bid Components B8. Bid B9. Prices B10. Qualification B11. Opening of Bids and Release of Information B12. Irrevocable Bid B13. Withdrawal of Bids B14. Evaluation of Bids B15. Award of Contract
PART C - GENERAL CONDITIONS
C0. General Conditions
PART D - SUPPLEMENTAL CONDITIONS
GeneralD1.General ConditionsD2.Scope of WorkD3.Contract AdministratorD4.Contractor's SupervisorD5.Notices
Submissions D6. Authority to Carry on Business D7. Safe Work Plan D8. Insurance D9. Performance Security
Schedule of Work D10. Commencement D11. Substantial Performance D12. Total Performance D13. Liquidated Damages
Control of Work D14. Job Meetings D15. Prime Contractor – The Workplace Safety and Health Act (Manitoba)
Measurement and Payment D16. Payment
Warranty D17. Warranty
Form H1: Performance Bond

Form H2: Irrevocable Standby Letter of Credit

PART E - SPECIFICATIONS

General

Applicable Specifications and Drawings	1
Hazardous Materials	1
Co-ordination with others	1
Truck Weight Limits	1
Pre-Construction Meeting	1
Access	1
Safety Precautions	2
Site Conditions	2
Existing Underground Structures	2
Product Approvals	3
Damage to Streets and Structures	3
Permits, Notices, Licences, Certifications, Laws and Rules	3
Sign Support Clamps	3
Adjustment of Pavement and Boulevard Structures	4
Removals	4
Excavation and Site Grading	5
Concrete Sidewalk	7
Concrete Curb Renewal	7
Topsoil and Finish Grading	7
Sodding	8
	Hazardous Materials Co-ordination with others Truck Weight Limits Pre-Construction Meeting Access Safety Precautions Site Conditions Existing Underground Structures Product Approvals Damage to Streets and Structures Permits, Notices, Licences, Certifications, Laws and Rules Sign Support Clamps Adjustment of Pavement and Boulevard Structures Removals Excavation and Site Grading Concrete Sidewalk Concrete Curb Renewal Topsoil and Finish Grading

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 BUS STOP UPGRADES 2013

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, March 12, 2013.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 Further to C3.1, the Bidder may view the Site without making an appointment.
- B3.2 The Bidder is advised that all stops are within no stopping zones.

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 Division website at <u>http://www.winnipeg.ca/matmgt/</u>
- B5.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.2.3 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.

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/her sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- 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/she 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 may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.
- 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.
- B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B7. BID COMPONENTS

- B7.1 The Bid shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices;
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 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.
- B7.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 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

- B7.5.1 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.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B14.1(a).
- B7.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204 949-1178.
- B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.8.2 Bids submitted by internet electronic mail (e-mail) will not be accepted.

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/her own name, his/her name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- 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 10 of Form A: Bid shall be signed in accordance with the following requirements:
 - (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.4.2 All signatures shall be original.
- 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 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 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

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; 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.
- B10.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/debar.stm</u>
- B10.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) have successfully carried out work similar in nature, scope and value to the Work; and

- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) upon request of the Contract Administrator, obtain Security Clearances in accordance with Appendix A ;
- B10.4 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.
- B10.5 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.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

- B11.1 Bids will not be opened publicly.
- B11.2 Following the submission deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/bidopp.asp</u>
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/
- B11.4 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.

B12. IRREVOCABLE BID

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B12.2 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.

B13. WITHDRAWAL OF BIDS

- B13.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B13.1.1 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.
- B13.1.2 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.
- B13.1.3 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 B13.1.3(b), declare the Bid withdrawn.
- B13.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B12.2 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.

B14. EVALUATION OF BIDS

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Bid Opportunity or acceptable deviation there from (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B6.
- B14.2 Further to B14.1(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.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B14.4 Further to B14.1(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.
- B14.4.1 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.
- B14.4.2 Further to B14.1(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.

B15. AWARD OF CONTRACT

- B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B15.2 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.
- B15.2.1 Without limiting the generality of B15.2, 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.
- B15.3 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 B14.
- B15.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.
- B15.4 Notwithstanding C4, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B15.5 The Contract, as defined in C1.1, in its entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that it is not necessarily attached to or accompany said Purchase Order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of redevelopment of existing bus stops including construction of concrete curb and sidewalk, and supply and installation of sod.
- D2.2 The major components of the Work are as follows:
 - (a) Supply and install concrete sidewalk,
 - (b) Concrete curb renewal,
 - (c) Supply and install topsoil and sod.

D3. CONTRACT ADMINISTRATOR

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

Jackie Wilkie Vice President

Telephone No.204 956-0396Facsimile No.204 956-1265

- D3.2 At the pre-construction meeting, Ms Wilkie will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.
- D3.3 Bids Submissions must be submitted to the address in B7.5.

D4. CONTRACTOR'S SUPERVISOR

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

D5. 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 facsimile number identified in D3.1.
- D5.3 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

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

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

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. 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 C4.1 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 Division website at http://www.winnipeg.ca/matmgt/Safety/default.stm

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) 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) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Work. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;
 - (c) all risks installation floater, carrying adequate limits to cover all machinery, equipment, supplies and/or materials intended to enter into and form part of any installation.
- D8.2 Deductibles shall be borne by the Contractor.
- D8.3 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.
- D8.4 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.

D9. PERFORMANCE SECURITY

- D9.1 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.
- 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 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.

SCHEDULE OF WORK

D10. COMMENCEMENT

- D10.1 The Contractor shall not commence any Work until he/she is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.
- 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) the Safe Work Plan specified in D7;
 - (iv) evidence of the insurance specified in D8;
 - (v) the performance security specified in D9; and
 - (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.
- D10.4 The City intends to award this Contract by March 22, 2013.
- D10.4.1 If the actual date of award is later than the intended date, the dates specified for Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

D11. SUBSTANTIAL PERFORMANCE

- D11.1 The Contractor shall achieve Substantial Performance by June 14, 2013.
- D11.2 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.

D11.3 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.

D12. TOTAL PERFORMANCE

- D12.1 The Contractor shall achieve Total Performance by June 28, 2013.
- D12.2 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.
- D12.3 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.

D13. LIQUIDATED DAMAGES

- D13.1 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 Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D13.2 The amount specified for liquidated damages in D13.1 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.
- D13.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D14. JOB MEETINGS

- D14.1 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.
- D14.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he/she deems it necessary.

D15. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D15.1 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

D16. PAYMENT

D16.1 Further to C12, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D17. WARRANTY

- D17.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire one (1) year thereafter, except where longer warranty periods are specified in the respective Specification sections, unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D17.1.1 For the purpose of Performance Security, the warranty period shall be one (1) year.
- D17.2 Notwithstanding C13.2, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.
- D17.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

FORM H1: PERFORMANCE BOND

(See 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 for

BID OPPORTUNITY NO. 56-2013

BUS STOP UPGRADES 2013

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____ .

The City of Winnipeg Bid Opportunity No. 56-2013 Template Version: C320120419 - C LR

SIGNED AND SEALED in the presence of:

(Witness as to Principal if no seal)

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

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

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 56-2013

BUS STOP UPGRADES 2013

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.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/Spec/Default.stm</u>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

Drawing No. Drawing Name/Title

- L1.1 Site Works Layout Plans
- L1.2 Site Works Layout Plans

E2. HAZARDOUS MATERIALS

E2.1 If asbestos or other hazardous materials are encountered during the Work of the Contract, the Contractor shall stop all work and notify the Contract Administrator immediately. Removal of hazardous materials shall be dealt with by the City and the Contractor shall await further instruction by the Contract Administrator.

E3. CO-ORDINATION WITH OTHERS

E3.1 The Contractor is to ensure that all shelter work is coordinated with the shelter work Contractor hired under separate contract by the City of Winnipeg. This is to include, but is not limited to, supply and installation of new concrete bases, removal of existing bases, and relocation of electrical conduit.

E4. TRUCK WEIGHT LIMITS

E4.1 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.

E5. PRE-CONSTRUCTION MEETING

E5.1 Further to D10.2 (b), the Contractor shall not begin the Work under this Contract until a preconstruction meeting has been held between representatives of the Contractor, the City of Winnipeg and the Contract Administrator.

E6. ACCESS

- E6.1 Further to C6.3 of the General Conditions, the Contractor shall provide adequate safety protection for pedestrians and vehicular traffic exposed to the Work environment under this Contract.
- E6.2 All access is to be on City Streets and as directed by Contract Administrator.

- E6.3 Access to the Site as required by the Contractor shall be provided, maintained and restored (to as good as or better than existing condition) by the Contractor at his/her own expense and approved by the Contract Administrator.
- E6.4 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/she is working near them. Any damage caused by the negligence of the Contractor or his Subcontractors to the adjacent works or properties, shall be promptly repaired by the contractor at his/her own expense, to the satisfaction of the Contract Administrator.
- E6.5 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.

E7. SAFETY PRECAUTIONS

- E7.1 Further to C6.3 of the General Conditions, the Contractor shall provide adequate safety protection for pedestrians and vehicular traffic exposed to the Work environment under this Contract.
- E7.2 The Contractor must maintain safe pedestrian access to the Site at all times during construction.
- E7.3 The Contractor must restrict vehicular access to the access lanes indicated on the plans and as directed on Site by the Contact Administrator.

E8. SITE CONDITIONS

- E8.1 The Contractor and all Subcontractors shall examine the Site and make themselves familiar with the existing conditions (both above and below grade) and nature of Work to be done.
- E8.2 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.
- E8.3 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.

E9. EXISTING UNDERGROUND STRUCTURES

- E9.1 The Contractor's attention is drawn to the existing underground lines or services that may be located in the area of the Work.
- E9.2 The Contractor shall take all necessary precautions when performing the Work to ensure that no damage is done to these existing services.
- E9.3 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; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of all such utilities, pipes and other objects and to make good any damage done to them.

- E9.4 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.
- E9.5 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.

E10. PRODUCT APPROVALS

- E10.1 The Contractor shall, following award, prepare a complete list of all material to be used on the project and submit the list to the Contract Administrator 72 hours prior to start of construction.
- E10.2 The Contractor shall only use material which has been approved by Specification CW3710 or by the Contract Administrator. The list shall give the product, the manufacturer and the supplier.
- E10.3 All workmanship and materials furnished and supplied under this Specification are subject to close and systematic inspection and testing by the Contract Administrator. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of the Specifications.
- E10.4 The Contractor shall wholly be responsible for the supply, safe storage, and handling of all materials set forth in this specification, and the control of all operations incidental thereto notwithstanding any inspection or approval that may have been previously given.

E11. DAMAGE TO STREETS AND STRUCTURES

E11.1 The Contractor's attention is drawn to the following existing Site features to be retained and protected to the City of Winnipeg Standards:

a) trees, shrubs	e) light standard	i) hydro towers and poles
b) curbs	f) fire hydrants	j) catch basins
c) sidewalk	g) street signs	k) curb inlets
d) sod	h) signal poles	m) underground services including
		land drainage sewer

E12. PERMITS, NOTICES, LICENCES, CERTIFICATIONS, LAWS AND RULES

- E12.1 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.
- E12.2 The Contractor shall comply with all laws, ordinances, rules, and regulations that would relate to the Works.

E13. SIGN SUPPORT CLAMPS

- E13.1 The Contractor shall install all new sign support clamps at the locations as shown on the Drawings or as directed by the Contract Administrator. The City shall supply all sign support clamps.
- E13.2 All existing sign support clamps removed during construction are to be replaced or returned to the City if not required.
- E13.3 All costs in connection with the installation of sign support clamps are incidental to the unit prices bid.

E14. ADJUSTMENT OF PAVEMENT AND BOULEVARD STRUCTURES

- E14.1 Further to CW 3210 all existing surface utilities within the area of new sidewalk, interlocking paving and full depth patching of existing pavement are to be adjusted to meet finish grades.
- E14.2 Adjustment of pavement and boulevard structures is incidental to the Work with the exception of manholes, catch basins and curb and gutter inlets noted on the drawings as requiring significant adjustment. The adjustment of these structures is to be measured and paid for at the contract unit price per unit adjusted in accordance with CW 3210 including replace, remove or add precast concrete riser sections and compacted granular backfill as required.
- E14.3 All surface utilities are to be provided with cast in place concrete isolation collars as per standard City of Winnipeg details and as per the Drawings. Collar dimensions and forms are to be confirmed on Site by Contract Administrator prior to construction. Installation of new and renewal of existing isolation collars are incidental to the Work.

E15. REMOVALS

- E15.1 Further to 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.
- E15.2 Further to Specifications CW 3230 and CW 3235, the Contractor shall sawcut and remove existing concrete sidewalk paving as shown on the Drawings and as directed by the Contract Administrator. The removal shall include all existing concrete and base course where applicable.

DESCRIPTION

- E15.3 This Specification shall cover the removal and/or relocation of existing:
 - (a) concrete sidewalk;
 - (b) patio slabs;
 - (c) unit pavers;
 - (d) site furniture;
 - (e) unsuitable subgrade.
- E15.4 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.

EQUIPMENT

E15.5 All equipment shall be of a type approved by the Contract Administrator and shall be kept in good working order.

CONSTRUCTION METHODS

- E15.6 The Contractor shall restrict his activities strictly to within the limits of the Works, unless receiving prior written approval from the Contract Administrator.
- E15.7 The Contractor shall breakout, remove and dispose of existing concrete sidewalk or concrete base for installation of new sidewalk including protection of existing wiring and conduit for use in new sidewalk.
- E15.8 The Contractor shall remove and deliver, patio slabs where shown on the Drawings to 421 Osborne Street. Disposal of sand setting bed and base as required for new construction is incidental to the Work.
- E15.9 The Contractor shall remove, unit pavers where shown on the drawings. Disposal of sand setting bed and base as required for new construction is incidental to the Work.

- E15.10 Contractor to relocate existing waste receptacles and benches to remain as shown on the drawings. Store in safe location during construction. Relocation of site furniture is incidental to the Work.
- E15.11 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.
- E15.12 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.

MEASUREMENT AND PAYMENT

- E15.13 Removal of concrete sidewalk paving will be measured and paid for at the contract square metre price for "Sawcut, remove and dispose of concrete sidewalk", measured as specified herein, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work included in this Specification.
- E15.14 Removal, stockpiling and delivery of existing patio slabs will be measured and paid for at the contract square metre price for "Remove and deliver patio slabs", measured as specified herein, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work included in this Specification.
- E15.15 Removal of existing unit paver will be measured and paid for at the contract per square metre price for "Remove and dispose of unit paver", measured as specified herein, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work included in this Specification.
- E15.16 Removal of unsuitable subgrade and replacement with compacted granular base will be measured and paid for at the contract unit price for "Remove existing unsuitable subgrade and replace with compacted granular base", measured as specified herein, which price shall be payment in full for supplying all materials and performing all operations herein described and all other items incidental to the Work included in this Specification.

E16. EXCAVATION AND SITE GRADING

SCOPE OF WORK

- E16.1 The Work of this section comprises the furnishing of all labour, equipment and materials required to complete the Site grading and related Work including, but not necessarily confined to, the following:
 - (a) Excavation and Grading of the existing Site to the design requirements noted on the Drawings, approved on Site by the Contract Administrator, less the appropriate surface finish allowance.

PROTECTION

E16.2 Prevent damage to surface or underground utility lines, sods, existing trees to remain, etc. which are to remain. The Contractor shall take special care to protect the existing trees, including root systems and trunks. Make good any damage.

REMOVALS

- E16.3 The Contractor shall load and haul all rubbish and all other surface litter from the Site and dispose of these materials at dumps 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 by and at the expense of the Contractor, to the satisfaction of the Contract Administrator.
- E16.4 The Contractor shall ensure that upon completion of the removal operations, the Site is left in a neat condition free from debris, etc.

MATERIALS

E16.5 Excavated or graded material shall be approved by Contract Administrator before use as fill for grading work. Protect such approved material from contamination.

EARTHWORK AND GRADING

- E16.6 The Contractor shall construct the Site within the limits indicated to the design elevations and gradients noted on the Drawings, less the appropriate surface treatment depths specified and shall excavate, remove and dispose of all unsuitable materials of whatever nature encountered.
- E16.7 The Contractor shall construct all subgrades in accordance with Specification CW 3110. This 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 concrete sidewalk, and 95% Standard Proctor Density in all other areas disturbed under this Contract.
- E16.8 The Contractor is advised that there may be a surplus of fill on the Site after the design subgrade level has been achieved. All surplus material will be disposed of as previously stated. No direct payment will be made for disposing of surplus fill as all costs for this Work shall be included in the lump sum price for Excavation and Grading.
- E16.9 Following earth moving, rough grading and compaction, the Work areas shall be fine graded to provide a maximum deviation of 50mm in 10m from the design grade with no low areas that hold water. The finished surface of all disturbed areas shall be dragged and smoothed in such a manner that there are no loose soil particles greater than 50mm in maximum dimensions.

E16.10 The Contractor shall construct the subgrade surface to the following depths below the design grades shown on the Drawings for each area:

1.	Sod	100mm
2.	Concrete Sidewalk	150mm

- E16.11 The Contractor is advised that all Work under this section is incidental to the unit prices bid under this contract.
- E16.12 All work covered under this specification is incidental to unit prices bid for:
 - (a) Concrete sidewalk;
 - (b) Topsoil and sod.

E17. CONCRETE SIDEWALK

- E17.1 All Work in this section shall be to CW3325 Portland Cement concrete sidewalk.
- E17.2 Blockouts for all paving bands in sidewalk to be constructed as per the Drawings. All forming is incidental to the unit price bid for concrete sidewalk.
- E17.3 Thickened edge of sidewalk will be incidental to the unit prices bid for concrete sidewalk.
- E17.4 Where concrete sidewalk is to be installed as an overlay over existing concrete a bonding agent is to be used to ensure adhesion of concrete overlay to substrate. Concrete overlay is to be a minimum of 73mm thick and the surface elevation is to match the existing adjacent paving.

MEASUREMENT AND PAYMENT

E17.5 Supply and installation of concrete sidewalk will be measured and paid for at the contract square metre price for "Supply and install concrete sidewalk", measured as specified herein, which price shall be payment in full for supplying all materials including compacted base course as required and performing all operations herein described and all other items incidental to the Work included in this specification.

E18. CONCRETE CURB RENEWAL

E18.1 All work to be in accordance with CW 3240.

MEASUREMENT AND PAYMENT

- E18.2 Further to CW 3240 item 4.3 Concrete Curb Renewal:
- E18.2.1 Items of work:
- E18.2.2 Concrete Curb Renewal
 - (i) 150mm ht. Barrier Curb as per SD 206A

E19. TOPSOIL AND FINISH GRADING

E19.1 All Work to be to CW 3510.

MEASUREMENT AND PAYMENT

- E19.2 There shall be no separate measurement for the Work associated with this Specification.
- E19.3 Payment for Work specified under this Specification is to be included with the price for Sodding.

E20. SODDING

E20.1 All Work to be to CW 3510.

MEASUREMENT AND PAYMENT

E20.2 Sodding will be measured on an area basis. The area to be paid for shall be the total number of square meters sodded and maintained in accordance with this Specification and accepted by the Contract Administrator, as computed from measurements made by the Contract Administrator. Sodding will be paid for at the Contract Unit Price per square metre for 'Supply and Install Sod', 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.