

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 350-2006

PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 12, 2006.
- 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.
- B3.2 The Bidder is advised that a Bidders' Conference will be held on June 27, 2006 at 1:30 p.m. at the Earth Tech offices at 1000 Waverley Street.
- B3.3 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

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 website 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, hard copy;
 - (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. The envelope shall be 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.
- B7.3.2 A hard copy of Form B: Prices must be submitted with the Bid Submission. If there is any discrepancy between the Adobe PDF version of Form B: Prices and the Microsoft Excel version of Form B: Prices, the PDF version shall take precedence.
- 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, shall 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.
- B9.1.1 For the convenience of Bidders, and pursuant to B7.3.2 and B15.4.2, an electronic spreadsheet Form B: Prices in Microsoft Excel (.xls) format is available along with the Adobe PDF documents for this Bid Opportunity on the Bid Opportunities page at the Materials Management Branch internet website at http://www.winnipeg.ca/matmgt.
- 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.

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; and
- (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.
- B10.4 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.

B15.4.2 The electronic Form B: Prices and the formulas imbedded in that spreadsheet are only provided for the convenience of Bidders. The City makes no representations or warranties as to the correctness of the imbedded formulas. It is the Bidder's responsibility to ensure the extensions of the unit prices and the sum of Total Bid Price performed as a function of the formulas within the electronic Form B: Prices are correct.

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.
- C1.2 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:
 - (a) Preventative Maintenance: Partial Depth Concrete Pavement Joint Repairs
 - (i) Lindenwood Drive West Northbound: McGillivray Boulevard to Lindenwood Drive East
 - (ii) Main Street Northbound: Disraeli Freeway to Higgins Avenue
 - (iii) Nairn Avenue Eastbound: Grey Street to Panet Road
 - (iv) Kenaston Boulevard Northbound: Scurfield Boulevard to McGillivray Boulevard
 - (v) Sargent Avenue Westbound: Balmoral Street to Langside Street
 - (vi) Portage Avenue Westbound: Fort Street to Smith Street
- D2.2 Lindenwood Drive West will be the initial Site to allow the Contractor to become familiar with all procedures and equipment required to complete Partial Depth Concrete Pavement Joint Repairs.
- D2.3 The manufacturer's representative will be on Site during the initial work on Lindenwood Drive West to provide clarifications for mixing and placement for the concrete repair material.
- D2.4 The major components of the Work are as follows:
 - (a) Concrete removal;
 - (b) Sandblasting;
 - (c) Placement of bond breaker;
 - (d) Placement of concrete repair material;
 - (e) Curing;
 - (f) Joint sealing;
 - (g) Full depth repair of existing concrete pavement slabs and joints where applicable.

- D2.5 The average depth of repair for Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres) is estimated to be 50 mm.
- D2.6 The average depth of repair for Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres) is estimated to be 75 mm.
- D2.7 The locations of Full Depth Repairs are noted on the drawings.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Earth Tech (Canada) Inc., represented by:

Mr. James R. McCutchon, P. Eng. Senior Project Manager, Transportation 1000 Waverley Street, Winnipeg, Manitoba R3T 0P3

Telephone No.(204) 478-6082Facsimile No.(204) 478-7856

D3.2 At the pre-construction meeting, Mr. James R. McCutchon, P. Eng. 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.
- D4.2 At least two (2) business days prior to the commencement of any Work on the site, the Contractor shall provide the Contract Administrator with a phone number where the supervisor identified in D4.1 or an alternate can be contacted 24 hours a day to respond to an emergency.

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 five (5) complete sets of the Bid Opportunity. 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 shall 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 being named 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 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 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 the 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 and in no event later than the date specified in the 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 or prior to a pre-construction meeting, or 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 GC:4.1 for the return of the executed Contract.

D11. DETAILED WORK SCHEDULE

D11.1 The Contractor shall provide the Contract Administrator with a detailed work schedule (Form L: Detailed Work Schedule) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in the General Conditions for the return of the executed Contract.

SCHEDULE OF WORK

D12. COMMENCEMENT

- D12.1 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.
- D12.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - 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 twenty-four (24) hour emergency response phone number specified in D4.2.
- (iv) the Safe Work Plan specified in D7;
- (v) evidence of the insurance specified in D8;
- (vi) the performance security specified in D9;
- (vii) the subcontractor list specified in D10;
- (viii) the detailed work schedule specified in D11.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D12.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D13. WORKING DAYS

- D13.1 Further to GC:1.1(gg);
- D13.1.1 The Contract Administrator will determine daily if a Working Day has elapsed and will record his assessment. On a weekly basis the Contract Administrator will provide the Contractor with a record of the Working Days assessed for the preceding week. The Contractor shall sign each report signifying that he agrees with the Contract Administrator's determination of the Working Days assessed for the report period.
- D13.1.2 Work done to restore the Site to a condition suitable for Work, shall not be considered "work" as defined in the definition of a Working Day.

D14. RESTRICTED WORK HOURS

- D14.1 Further to clause 3.10 of CW 1130, the Contractor shall require written permission 48 hours in advance from the Contract Administrator for any work to be performed between 2000 hours and 0700 hours, or on Saturdays, Sundays, Statutory Holidays and or Civic Holidays.
- D14.2 The following work hour restrictions shall also apply:
 - (a) Construction activities are to be coordinated as per Section E3. Traffic Management.

D15. WORK BY OTHERS

- D15.1 Work by others on or near the site will include but not be limited to:
 - (a) Joint Maintenance Contractor on Main Street, Kenaston Boulevard, Portage Avenue and Sargent Avenue.

D16. SEQUENCE OF WORK

- D16.1 Further to GC 6.1, the sequence of work shall comply with the following:
- D16.1.1 Initial Work shall commence on the Collector Street Lindenwood Drive West in the northbound curb lane starting immediately north of the McGillivray Boulevard intersection. The Contractor shall undertake to perform the concrete joint repairs on this initial section in order to ensure their construction procedures are acceptable prior to undertaking Work on the remaining Regional Streets.
- D16.1.2 The Contractor will not be allowed to begin operations on the Regional Streets until the Contract Administrator is satisfied that the Contractor can successfully complete Partial Depth Concrete Pavement Joint Repairs.

- D16.1.3 Providing that the Work on each street is completed in a similar order to the order that the Work was commenced in, the Contractor will be permitted to have a maximum of two (2) streets under construction at any one time.
- D16.1.4 Where the Contractor utilizes two (2) or more crews that work independently on the same major component of the Work as identified in D2, the Contract Administrator may approve an increase to the maximum number of streets under construction at any time.

D17. SUBSTANTIAL PERFORMANCE

- D17.1 The Contractor shall achieve Substantial Performance within forty (40) consecutive Working Days of the commencement of the Work as specified in D12.
- D17.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.
- D17.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D18. TOTAL PERFORMANCE

- D18.1 The Contractor shall achieve Total Performance within forty-five (45) consecutive Working Days of the commencement of the Work as specified in D12.
- D18.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be re-inspected.
- D18.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D19. LIQUIDATED DAMAGES

- D19.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.
- D19.2 The amount specified for liquidated damages in D19.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial Performance by the day fixed herein for same.
- D19.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D20. JOB MEETINGS

- D20.1 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, and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, 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.
- D20.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D21. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D21.1 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).

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. 350-2006

PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

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____ , 20____ .

SIGNED AND SEALED in the presence of:

(Witness)

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

RE: PERFORMANCE SECURITY – BID OPPORTUNITY NO. 350-2006

PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

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)

FORM J: SUBCONTRACTOR LIST (See D10)

PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

Portion of the Work	<u>Name</u>	Address	
SURFACE WORKS:			
Supply of Materials:			
Concrete Repair Material			
Bond Breaker			
Joint Sealant			
Curing Compound			
Portland Cement Concrete			
Installation/Placement:			
Full Depth Concrete Pavement Joint Re	pairs		
Joint Sealing			

FORM L: DETAILED WORK SCHEDULE

(See D11)

PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS - VARIOUS LOCATIONS

For each item of Work, indicate the cumulative percentage proposed to be completion is achieved.	completed b	y the end o	of each tim	e period ur	ntil 100%
Items of Work		Time Period in Working Days			
	0 - 10		20 - 30		
i) Lindenwood Drive West Northbound: McGillivray Boulevard to Lindenwood Drive East					
ii) Main Street Northbound: Disraeli Freeway to Higgins Avenue					
iii) Nairn Avenue Eastbound: Grey Street to Panet Road					
iv) Kenaston Boulevard Northbound: Scurfield Boulevard to McGillivray Boulevard					
v) Sargent Avenue Westbound: Balmoral Street to Langside Street					
vi) Portage Avenue Westbound: Fort Street to Smith Street					

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:

Drawing No.	Drawing Name/Title	Drawing (Original) Sheet Size
CT03	Partial Depth Concrete Joint Repairs – Nairn Avenue Eastbound: Grey Street to Panet Road	11" x 17"

E2. TRAFFIC CONTROL

- E2.1 Further to clauses 3.6 and 3.7 of CW 1130-R1:
 - (a) In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the works undertaken by the Contractor.

E3. TRAFFIC MANAGEMENT

- E3.1 Further to clause 3.7 of CW 1130-R1:
- E3.1.1 The Contractor shall schedule construction activities to meet the following:
 - (a) Lindenwood Drive West Northbound McGillivray Boulevard to Lindenwood Drive East. Maintain a minimum of one lane of traffic at all times. Access to frontage roads and all intersections must be maintained during construction at all times.
 - (b) Main Street Northbound Disraeli Freeway to Higgins Avenue. Maintain a minimum of two lanes of traffic at all times. East/West traffic at intersections must be maintained during construction at all times. The entire roadway is to be open to traffic during the P.M. peak.
 - (c) Nairn Avenue Eastbound Grey Street to Panet Road. Maintain a minimum of one lane of traffic at all times. North/South traffic at intersections must be maintained during construction at all times. Private approach access shall be maintained at all times. The entire roadway is to be open to traffic during the P.M. peak except during Full Depth Concrete Repairs.
 - (d) Kenaston Boulevard Northbound Scurfield Boulevard to McGillivray Boulevard. Maintain a minimum of two continuous lanes for traffic at all times. East/West traffic at intersections must be maintained during construction at all times. Private approach

access shall be maintained at all times. Two continuous lanes are to be open to traffic during the A.M. and P.M. peaks.

- (e) Sargent Avenue Westbound Balmoral Street to Langside Street. Maintain a minimum of one lane of traffic at all times. North/South traffic at all intersections must be maintained during construction at all times. Private approach access shall be maintained at all times.
- (f) Portage Avenue Westbound Fort Street to Smith Street. Maintain a minimum of two lanes of traffic at all times. North/South traffic at intersections must be maintained during construction at all times. The entire roadway is to be open to traffic during the A.M. and P.M. peaks except during full-depth repairs.
- (g) Where left-turn lanes exist, work shall be scheduled and arranged accordingly to maintain left-turn movements.
- (h) Should the Contractor be unable to maintain pedestrian or vehicular access to a residence or a business, the Contractor shall review the planned disruption with the residence or business owners and the Contract Administrator and take reasonable measures to minimize the impact of the work. The Contractor shall provide a minimum of 24 hours notification to the affected residence or business and the Contact Administrator prior to the disruption of the access.
- (i) Pedestrian and ambulance/emergency vehicle access must be maintained at all times.

E4. WATER USED BY CONTRACTOR

E4.1 Further to clause 3.7 of CW 1120-R1, the Contractor shall pay for all costs associated with obtaining water in accordance with the Waterworks By-law. Sewer charges will not be assessed for water obtained from a hydrant.

E5. SURFACE RESTORATIONS

E5.1 Further to clause 3.3 of CW 1130-R1, when Total Performance is not achieved in the year the Contract is commenced, the Contractor shall temporarily repair any Work commenced and not completed to the satisfaction of the Contract Administrator. The Contractor shall maintain the temporary repairs in a safe condition as determined by the Contract Administrator until permanent repairs are completed. The Contractor shall bear all costs associated with temporary repairs and their maintenance.

E6. PARTIAL DEPTH CONCRETE PAVEMENT JOINT REPAIRS

E6.1 DESCRIPTION

E6.1.1 General

- (a) This specification covers the partial depth concrete repair of transverse and longitudinal pavement joints as a Research Project.
- E6.1.2 Referenced Standard Construction Specifications
 - (a) CW 1130 Work Site Requirements
 - (b) CW 3230 Full Depth Patching of Existing Slabs and Joints
 - (c) CW 3250 Joint and Crack Maintenance
 - (d) CW 3310 Portland Cement Concrete Pavement

E6.2 MATERIALS

- E6.2.1 Concrete Repair Materials
 - (a) Concrete repair material will be ThoRoc 10-60 Rapid Mortar manufactured by Degussa Building Systems and supplied by Brock White Canada or an equal approved by the Public Works Department, Research and Standards Engineer.
- E6.2.2 Bond Breaker
 - (a) Bond Breaker will be 6mm wide Styrofoam SM manufactured by the Dow Chemical Company. The depth of the material will vary with the joint repaired.
- E6.2.3 Hot Poured Joint Sealer
 - (a) Hot poured joint sealer will be low modulus Type IV Material in accordance with ASTM D 6690-01, Specification for Joint and Crack Sealants, Hot-poured, for Concrete and Asphalt Pavements.
 - (b) Use only those materials listed as Approved Products for Surface Works. The Approved Products are available in Adobe Acrobat (.pdf) format at the City of Winnipeg, Corporate Finance, Material Management Internet site at: <u>http://www.winnipeg.ca/matmgt/info.stm</u>
- E6.2.4 Liquid Membrane-Forming Curing Compound
 - (a) Curing compound will be Type 2, white-pigmented, and water based liquid membraneforming curing in accordance with ASTM C309.

E6.3 CONSTRUCTION METHODS

- E6.3.1 Concrete Removal
 - (a) Remove all existing AMZ or asphaltic material from the concrete surface adjacent to the area identified for repair.
 - (b) Sawcut 50mm minimum to 100mm maximum beyond the edge of the deteriorated concrete for pavement joints identified for partial depth concrete joint repair and to a depth of 35mm, or as directed by the Contract Administrator. Complete saw cutting utilizing dry cut methods.
 - (c) Remove existing joint sealant 50mm beyond the ends of the repair.
 - (d) Remove all loose or deteriorated concrete with a 13.5 kg chipping hammer within the repair area without damaging the sawcut or the existing joint. Any edges damaged shall be re-sawcut.
 - (e) Sound the concrete with a hammer to determine the presence of additional deteriorated concrete. Complete additional removal of any unsound concrete.
 - (f) Where corrosion of the existing tie bars or dowels is present or the concrete deterioration is detected below or around the existing steel, the joint will be renewed as a full depth joint repair in accordance with CW 3230 as directed by the Contract Administrator.
 - (g) Upon completion of the concrete removal, sawcut 6mm wide along the bottom of the existing joint the full length of the repair area to a depth of 10mm below the deepest part of the deteriorated concrete or to the depth of the steel. The sawcut should extend 50mm beyond the edges of the repair.
 - (h) Sandblast the concrete surface of the repair area including the sawcut runouts to ensure that all concrete surfaces are rough and clean.
 - (i) Dispose of material in accordance with Section 3.4 of CW 1130.

E6.3.2 Placement of Bond Breaker

- (a) Place a 6mm thick Bond Breaker the full length and depth of the sawcut joint and match with the original pavement joint surface. The Bond Breaker will extend into the sawcut at the bottom of the joint and 50mm beyond the edge of the repair.
- E6.3.3 Placement of Concrete Repair Material
 - (a) Use compressed air free of oil having sufficient volume and pressure to remove all dust, loose particles and all other contaminants that could prevent adequate bond from the repair surfaces.
 - (b) Ensure that all surfaces of the concrete repair area are saturated and all standing water is removed prior to application of the concrete repair material.
 - (c) Mix and apply concrete repair material according to manufacturer's instructions.
 - (d) Finish the concrete repair material flush with the surrounding pavement surface in accordance with Clause 9.4 of CW 3230.
 - (e) Ensure that the Bond Breaker remains true to the existing joint line.
 - (f) Place concrete repair material into the sawcut runouts.

E6.3.4 Curing

- (a) Apply curing compound immediately after finishing as per the manufacturer's instructions.
- E6.3.5 Joint Sealing
 - (a) For streets where Joint Maintenance has been identified to be completed by others, sawcut the repaired pavement joint to width and depth to match the original joint.
 - (b) For streets where Joint Maintenance has not been identified to be completed by others, sawcut the pavement joint to width and depth and place hot poured sealant in the repaired pavement joint in accordance with CW 3250. Note that a backer rod will not be required.

E6.3.6 Opening to Traffic

(a) No traffic or construction equipment shall be allowed on the repaired area until the concrete repair material has reached a minimum of 20 MPa. Based on the manufacturer's specifications, a strength of 21 MPa can be achieved after 2 hours when properly mixed at 23° C.

E6.4 MEASUREMENT AND PAYMENT

- E6.4.1 Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres)
 - (a) Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres) will be measured on a unit basis and paid for at the Contract Unit Price per unit for "Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres)". The number of units to be paid for will be the total number of Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres) completed in accordance with this specification, accepted and measured by the Contract Administrator.
 - (b) For streets where Joint Maintenance has not been identified to be completed by others, all costs for placement of the hot poured sealant will be included in the payment for "Partial Depth Concrete Pavement Joint Repairs (less than or equal to 0.1 square metres)".

E6.4.2 Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres)

- (a) Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres) will be measured on an area basis and paid for at the Contract Unit Price per square metre for the "Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres)". The area to be paid for will be the total number of square metres of Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres) repaired in accordance with this specification, accepted and measured by the Contract Administrator.
- (b) For streets where Joint Maintenance has not been identified to be completed by others, all costs for placement of the hot poured sealant will be included in the payment for "Partial Depth Concrete Pavement Joint Repairs (greater than 0.1 square metres)".