



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 276-2009

**RIVERVIEW COMMUNITY CENTRE PARKING LOT & DRAINAGE IMPROVEMENT
PROJECT
90 ASHLAND AVENUE**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 RIVERVIEW COMMUNITY CENTRE PARKING LOT & DRAINAGE IMPROVEMENT PROJECT
90 ASHLAND AVENUE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, April 30, 2009.
- 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 Contract Administrator or an authorized representative will be available at the Site from 10:00 to 10:30 on April 20, 2009 to provide Bidders access to the Site.
- B3.2 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 Division website 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 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 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 may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with 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 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 10 of Form A: Bid shall be signed in accordance with the following requirements:

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

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 Prices from Non-Resident Bidders are subject to a 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 <http://www.winnipeg.ca/matmgt/debar.stm>

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);

B10.4 Further to B10.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractors 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 administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
- (b) 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 Division website at <http://www.winnipeg.ca/matmgt>)

B10.5 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.

B10.6 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 <http://www.winnipeg.ca/matmgt/bidopp.asp>

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 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 Bid after the Submission Deadline but before his 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 Bid or in other information required to be submitted, that he 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 the 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.

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 Riverview Community Centre – 90 Ashland Parking Lot & Drainage Improvement as per specifications

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

- (a) Demolition / Removal of pavement of concrete as per specifications.
- (b) Site Drainage, sewer work and parking lot reconstruction as per specification.
- (c) Work shall be coordinated with community centre daycare and wading pool activities.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Norm Carrothers
Contracts Officer
100 Main Street

Telephone No. (204) 794-4400

Facsimile No. (204) 986-7311

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

D4. CONTRACTOR'S SUPERVISOR

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

D5. NOTICES

D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

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

The City of Winnipeg
Chief Financial Officer
Administration Building, 3rd Floor
510 Main Street

Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

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

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

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D7. 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) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;
- 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.

D10. SUBCONTRACTOR LIST

D10.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.

SCHEDULE OF WORK

D11. COMMENCEMENT

D11.1 The Contractor shall not commence any Work until he is in receipt of a Purchase Order from the Award Authority authorizing the commencement of the Work.

D11.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence 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;
 - (vi) the Subcontractor list specified in D10; 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.
- (c) The Contractor will not work on May 22, 2009 due to the Community Centre Spring Carnival.

D12. SUBSTANTIAL PERFORMANCE

- D12.1 The Contractor shall achieve Substantial Performance by June 30, 2009.
- D12.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D12.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D13. TOTAL PERFORMANCE

- D13.1 The Contractor shall achieve Total Performance by July 11, 2009.
- D13.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D13.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D14. LIQUIDATED DAMAGES

- D14.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one hundred dollars (\$100.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D14.2 The amount specified for liquidated damages in D14.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D14.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D15. 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).

WARRANTY

D16. WARRANTY

- D16.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.
- D16.2 Notwithstanding C13.2 or D16.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Total Performance if:

- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use; or

D16.2.1 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. 276-2009

RIVERVIEW COMMUNITY CENTRE PARKING LOT & DRAINAGE IMPROVEMENT PROJECT
90 ASHLAND AVENUE

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

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

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 276-2009

RIVERVIEW COMMUNITY CENTRE PARKING LOT & DRAINAGE IMPROVEMENT PROJECT
90 ASHLAND AVENUE

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 <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
08013-C01-R2	Existing Site / Demolition Plan
08013-C02-R2	Proposed Site Plan

E2. SOILS INVESTIGATION REPORT

- E2.1 Further to C3.1, the test holes in Appendix A – Geotechnical Report, and as shown on the drawings, are provided to supplement the Contractor's evaluation of the site conditions within the repair work areas. The information is considered accurate at the locations indicated and at the time of the investigation. However, variation in soil conditions may exist between test holes and fluctuations in ground water levels can be expected seasonally and may occur as a result of construction activities.

E3. WATER USED BY CONTRACTOR

- E3.1 Further to clause 3.7 of CW1120, latest edition, 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.

E4. PERMITS

DESCRIPTION

- E4.1 General
- E4.1.1 Further to GC:6.12, the Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall

submit all plans required by an inspection authority and obtain approval of same before proceeding with the Work, and pay any cost attached to the inspection of such plans.

- E4.1.2 The Contractor shall comply with all laws, ordinances, rules and regulation that would relate the Work.
- E4.1.3 All notices, consent, approvals, statements, authorizations, documents or communications to the City shall be submitted to the contract Administrator.
- E4.1.4 All Work shall be performed in compliance with the Manitoba Workplace Health and Safety Act.

E5. TEMPORARY UTILITIES

DESCRIPTION

- E5.1 Further to GC:6.12 the Contractor shall 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.
- E5.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E6. LAYOUT OF WORK

DESCRIPTION

- E6.1 General
 - E6.1.1 The Contractor will set control lines and benchmarks by means of stakes, buoys or marks and the Contractor shall make the completed works conform to the lines and marks thus indicated. The Contractor shall furnish all other lines and levels required. The Contractor shall be responsible for the careful preservation of all stakes and marks so set whether relating to his own or to other work. Care must be taken that the Contractor be notified immediately of the disturbance of any such stakes or marks; the cost of correcting any errors arising out of neglect of the Contractor or his agent or his employees, to so notify the Contract Administrator shall be borne entirely by the Contractor.
 - E6.1.2 All layouts shall be reviewed and approved by the Contract Administrator prior to construction.
 - E6.1.3 Before commencing Work the Contractor shall satisfy himself as to the meaning and correctness of all stakes and marks and no claims shall be entertained by the City of Winnipeg on account of any alleged inaccuracies. If any error suspected in the plans, specifications or the direction of the Contract Administrator, Work shall be discontinued until the errors are rectified, but no claims shall be made on account of any delay occasioned thereby.
 - E6.1.4 The Contractor is responsible to determine the location of all underground utilities and obtain clearances prior to construction. Underground structures as shown on the drawings are based on the best information available, but not guarantee is given that all existing utilities are shown or that given locations are exact.

E7. SITE RESTORATION

DESCRIPTION

- E7.1 General
 - E7.1.1 Total Performance of the Work shall not be attained until the Contractor has cleaned up the Site and has removed all plant, tools, equipment, waste, debris and surplus foundation earth to the satisfaction of the Contract Administrator. Unless otherwise specified the

Contractor shall restore all areas of the Site beyond the established limit of Work, which have been disturbed by the Contractor's operations to as good as or better than the original condition to the satisfaction of the Contract Administrator. The Contractor shall pay all costs associated with this work.

- E7.1.2 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contract.

E8. DEMOLITION / REMOVALS

DESCRIPTION

- E8.1 General

- E8.1.1 This Specification shall amend and supplement Specification CW 3110, latest edition.

CONSTRUCTION METHODS

- E8.2 General

- E8.2.1 Demolition / removals shall be as per the construction drawings and as directed by the Contract Administrator.

MEASUREMENT AND PAYMENT

- E8.3 Existing Landscape Ties

- E8.3.1 Removal and salvage of existing landscape ties will be measured on a unit basis and paid for at the Contract Unit Price for "Remove & Salvage Landscape Ties". The amount to be paid for will be the total number of landscape ties removed and salvaged in accordance with this specification and accepted by the Contract Administrator.

- E8.4 Existing Steel Bollards

- E8.4.1 Removal and salvage of existing steel bollards will be measured on a unit basis and paid for at the Contract Unit Price for "Remove & Salvage Steel Bollards". The amount to be paid for will be the total number of steel bollards removed and salvaged in accordance with this specification and accepted by the Contract Administrator.

E9. LAND DRAINAGE SEWER

DESCRIPTION

- E9.1 General

- E9.1.1 This Specification shall amend and supplement Specifications CW 2030 and CW 2130, latest editions.

MATERIALS

- E9.2 Bedding and Backfill

- E9.2.1 Bedding and Backfill will be in accordance with Specification CW 2030 latest edition, with Class 2 Bedding and Backfill used in all pavement.

CONSTRUCTION METHODS

- E9.3 General

- E9.3.1 Land Drainage Sewers will be installed in a trench in accordance with Clause 3.3 of CW 2130, latest edition.

MEASUREMENT AND PAYMENT

- E9.4 Inlet Control Device

- E9.4.1 Supply and installation of inlet control devices will be included in the payment for “Catch Basins” and no additional payment will be made.

E10. PARKING LOT RECONSTRUCTION

DESCRIPTION

E10.1 General

- E10.1.1 This Specification covers reconstruction of an existing asphalt pavement parking lot and shall amend and supplement Specifications CW 3110, CW 3130, CW 3310, CW 3325, CW 3410, CW 3550 and CW 3710, latest editions.

MATERIALS

E10.2 Crushed Sub-Base

- E10.2.1 Crushed Sub-Base will have a maximum aggregate size of 50 millimetres and be supplied in accordance with clause 2.1 of CW 3110, latest edition.

E10.3 Base Course

- E10.3.1 Base Course will be crushed limestone in accordance with Clause 2.2 of CW 3110, latest edition.

E10.4 Asphalt

- E10.4.1 Asphalt material will be Type 1A and will be supplied in accordance with Sections 5 and 6 of CW 3410 latest edition.

E10.5 Concrete Pavement

- E10.5.1 Concrete approach shall be reinforced concrete pavement – Type 1 as per CW 3310 latest edition.
- E10.5.2 Concrete pad for garbage bin shall be reinforced concrete pavement – Type 2 (min.) as per CW 3310, latest edition.

E10.6 Removable Bollards

- E10.6.1 Removable Bollards will be 100 mm diameter, as shown on construction drawing 276-2009-C02.

E10.7 Pinned Parking Curbs

- E10.7.1 Pinned Parking Curbs shall be minimum 1800 mm length recycled rubber curbs pinned with minimum 15 mm dia. X 350 mm long rebar spikes.

CONSTRUCTION METHODS

E10.8 General

- E10.8.1 Excavation will be in accordance with Section 3 of CW 3110, latest edition and will be understood to include removal of all insitu material to a depth of 425 mm below finished asphalt grades as shown on the construction drawings. Additional excavation and placement of sub-base material beyond the identified pavement structure will be completed in accordance with CW 3110 as directed by the Contract Administrator.
- E10.8.2 Sub grade will be prepared in accordance with Clause 3.3 of CW 3110, latest edition. Sub-grade shall be free from any fibrous organics, softened and disturbed soil. The prepared sub-grade shall be proof rolled with a heavy sheep's foot roller (min. 25 passes) and reviewed by the Contract Administrator prior to placement of overlying granular fills.

- E10.8.3 Sub-Base and Base Course will be placed to the compacted thickness as shown on the construction drawings. Sub-Base and Base Course will be in accordance with Clauses 3.3 and 3.4 of CW 3110, lasted edition.
- E10.8.4 Asphalt pavement will be placed to the compacted thickness as shown on the construction drawings and in accordance with Specification CW 3410, latest edition.
- E10.8.5 Construct concrete approach in accordance with SD-232 complete with modified barrier curbs, curb ramps and sidewalk ramps in accordance with SD-299B
- E10.8.6 Reinforced concrete pavement will be placed to a compacted thickness of 300 mm. Granular base structure shall match the granular specifications shown on construction drawing 276-2009-C02 and in accordance with Specification CW 3310, latest edition.
- E10.8.7 Concrete pad shall be constructed as shown on the construction drawings.
- E10.8.8 Removable Bollards shall be constructed as shown on the construction drawings. Bollard alignment tolerance shall be 6 mm from straight-line alignment.
- E10.8.9 Salvaged Bollards shall be re-installed as shown on the construction drawings. Bollard alignment tolerance shall be 6 mm from straight-line alignment.

MEASUREMENT AND PAYMENT

E10.9 Excavation

- E10.9.1 Further to Clause 4.3 of CW 3110, latest edition, the Contractor will be responsible for providing measurement of quantities including field notes of cross-section surveys, for review by the Contract Administrator. Field notes will include surveyors name, date, and description of Work being measured. All notes will be in neat and legible form and will include both raw data and reduced calculation. All surveys will indicate level circuit closures of 10 mm or less.

E10.10 Base course

- E10.10.1 Further to Clause 4.6 of CW 3110-R6, the Contractor will be responsible for providing measurement of quantities including field notes of cross-section surveys, for review by the contract Administrator. Field notes will include surveyors name, date, and description of Work being measured. All notes will be in neat and legible form and will include both raw data and reduced calculation. All surveys will indicate level circuit closures of 10 mm or less.

E10.11 Concrete Pad

- E10.11.1 Concrete Pad will be measured on an area basis and paid for at the Contract Unit Price for "Construction of Concrete Pad Pavement (Reinforced)". The amount to be paid for will be the total number of square metres of concrete pad installed in accordance with this specification and accepted by the Contract Administrator.

E10.12 Concrete Approach

- E10.12.1 Concrete Approach will be measure on an area basis and paid for at the Contract Unit Price for "Construction of Concrete Approach Pavement (Reinforced)". The amount to be paid for will be the total number of square metres of concrete approach installed in accordance with this specification and accepted by the Contract Administrator. Supply and installation of tie-bars will be included in the payment for "Construction of Concrete Approach Pavement (Reinforced)" and no additional payment will be made.

E10.13 Pinned Paring Curbs

- E10.13.1 Pinned Parking Curbs will be measured on a unit basis and paid for at the Contract Unit Price for "Pinned Parking Curbs". The amount to be paid for will be the total number of pinned parking curbs installed in accordance with this specification and accepted by the Contract Administrator.

E10.14 Bollards

E10.14.1 Removable Steel Bollards will be measured on a unit basis and paid for at the Contract Unit Price for "Removable Steel Bollards". The amount to be paid for will be the total number of removable steel bollards installed in accordance with this specification and accepted by the Contract Administrator.

E10.14.2 Install Salvaged Steel Bollards will be measured on a unit basis and paid for at the Contract Unit Price for "Install Salvaged Steel Bollards". The amount to be paid for will be the total number of salvaged steel bollards installed in accordance with this specification and accepted by the Contract Administrator.

E10.15 Line Painting

E10.15.1 Line Painting will not be measured, but will be paid for at the Contract Unit Price per single (1) lump sum item for "Line Painting" in accordance with this specification, and accepted by the Contract Administrator.

E11. LANDSCAPING

E11.1 General

E11.1.1 This Specification shall amend and supplement Specifications CW 3010, CW 3510, CW 3520, and CW 3540, lasted editions.

CONSTRUCTION METHODS

E11.2 General

E11.2.1 Salvaged Landscape ties shall be re-installed as shown on the construction drawings and pinned securely to the ground or pavement with minimum 20 mm dia. x 500 mm long rebar spikes.

MEASUREMENT AND PAYMENT

E11.3 Install Salvaged Landscape Ties

E11.3.1 Install Salvaged Landscape Ties will be measured on a unit basis and paid for at the Contract Unit Price for "Install Salvaged Landscape Ties". The amount to be paid for will be the total number of salvaged landscape ties installed in accordance with this specification and accepted by the Contract Administrator.

E11.3.2 Topsoil and Sod

E11.3.3 Topsoil and Sod will be measured on an area basis and paid for at the Contract Unit Price for "Topsoil and Sod". The amount to be paid for will be the total number of square metres of topsoil and sod installed in accordance with this specification and accepted by the Contract Administrator.

E12. APPENDIX "A" GEOTHEHNICAL REPORT

The City of Winnipeg
Bid Opportunity No. 276-2009

APPENDIX 'A'
GEOTECHNICAL REPORT



PAVEMENT REPORT

DATE: April 24, 2008 **FILE:** WE 08 013 00 WE

TO: Reynold Cabigting, E.I.T.
 GENIVAR
 Suite 600 - 5 Donald Street
 Winnipeg, Manitoba R3L 2T4
 Tel: (204) 477-6650

FROM: Silvestre S. Urbano Jr., P.Eng.
 GENIVAR
 Suite 600 - 5 Donald Street
 Winnipeg, Manitoba R3L 2T4
 Tel: (204) 477-6650

FAX: (204) 474-2864

PAGES:

RE: Pavement Recommendations for existing Riverview Community Centre Parking Lot in Winnipeg, MB.

PAVEMENT RECOMMENDATIONS

A pavement investigation was conducted to assess the general subsurface conditions for the existing Riverview Community Centre parking lot and a concrete pad for garbage bin. It was requested that pavement recommendations for the existing structures be provided. Two testholes drilled to 4.6m depth revealed a general soil profile of a layer of fill about 1 to 1.8m followed by a thick clay layer, which extended to the depth explored. Detailed descriptions of the testhole logs are attached. No seepage and caving conditions were observed during our investigation.

The pavement recommendation for light duty and heavy-duty traffic at the existing parking lot is discussed below. Based on the Equivalent Single Axle Load (ESAL) of about 22,000 for light duty and 2 61,705 for heavy duty, the recommended pavement construction at this site should be as follows:

Pavement Thicknesses

	Light Duty Traffic	Heavy Duty	% Compaction
Asphaltic Concrete	75 mm	100 mm	98% Marshall
Base Course	150mm	150mm	98% Std Proctor
Subbase(Class ¹ C ¹)	200mm	375mm	98% Std Proctor

The above pavement sections should be constructed on a prepared clay fill subgrade. The approximate site stripping is 425 to 625mm; depth of pavement structure. The prepared



PAVEMENT REPORT

subgrade should be proof rolled with a heavy sheepsfoot roller (min. 20 passes) which translates to at least 95% Std Proctor and inspected by qualified geotechnical engineer prior to the placement of the overlying granular fill.

The granular base course and subbase materials should include organic-free, non-frozen, aggregate conforming to the City of Winnipeg gradation limits. The existing granular fill at the parking lot could be reused as subbase material provided that it is free from organic.

Where soft but dry spots are encountered at the subgrade level, construction traffic should be restricted. Soft but dry spots should be excavated with a large backhoe fitted with a smooth bucket and covered with geotextile, to at least 300mm below the underside of the subbase and replaced with a 300mm thick layer of 100mm crushed limestone. In this regard, the total granular fill thickness would be 650mm for light-duty traffic.

Any saturated subgrade conditions should be dried off quickly by excavation of sump pit or installation of permanent subdrains (600mm below the subgrade level) connected to positive outlet (catch basin) prior to placing the granular fill structure with geotextile. At these locations, the placing of granular fill should follow the geotextile specifications for soft grounds.

The combined aggregate gradation limits and physical requirements of the asphaltic concrete should be in accordance with the City of Winnipeg specification.

For the hot mix asphaltic concrete, gradation analysis of the aggregates (i.e. stone, fines and additive), compaction testing and sampling of at least one representative hot mix asphalt mixture (during construction) for laboratory Marshall testing should be undertaken. This will provide data to confirm that the asphaltic concrete pavement complies with the project specification. Hot mix asphaltic concrete should not be placed at ambient temperatures lower than +4°C. During placement, the temperature of the paving mix should be in the range of +120°C to +150°C and compaction should not take place at paving mix temperatures lower than +85°C.

Sieve analysis and compaction testing of the granular base and subgrade materials should be conducted by qualified geotechnical personnel to ensure that the materials supplied and percent compactions are in accordance with design specifications.

CONCRETE PAD

For any concrete pad, sidewalk, curbs, the pavement structure should consist of 200mm reinforced concrete followed by 300mm of compacted (98% Standard Proctor Density) base course over the compacted subgrade. If a silt layer was encountered as subgrade, the application of woven geotextile over the silt layer is recommended. Exterior, grade supported concrete slabs will be subjected to some seasonal vertical movements related to frost. Exterior concrete slabs should not be tied into rigid structures.

To minimize the movements, consideration should be given to the use of rigid synthetic insulation, outward laterally (minimum 1.8m length and about 100mm thick) and beneath the



PAVEMENT REPORT

structure. In addition, localized subsurface drainage should be provided around the structure.

CLOSURE

The findings and recommendations provided in this report were prepared by GENIVAR (the Consultant) in accordance with generally accepted professional engineering principles and practices. The recommendations are based on the results of field and laboratory investigations and are reflective only of the actual testhole(s) and/or excavation(s) examined. If conditions encountered during construction appear to be different than those shown by the testhole(s) and/or excavation(s) at this site, the Consultant should be notified immediately in order that the recommendations can be reviewed and modified as necessary to address actual site conditions.

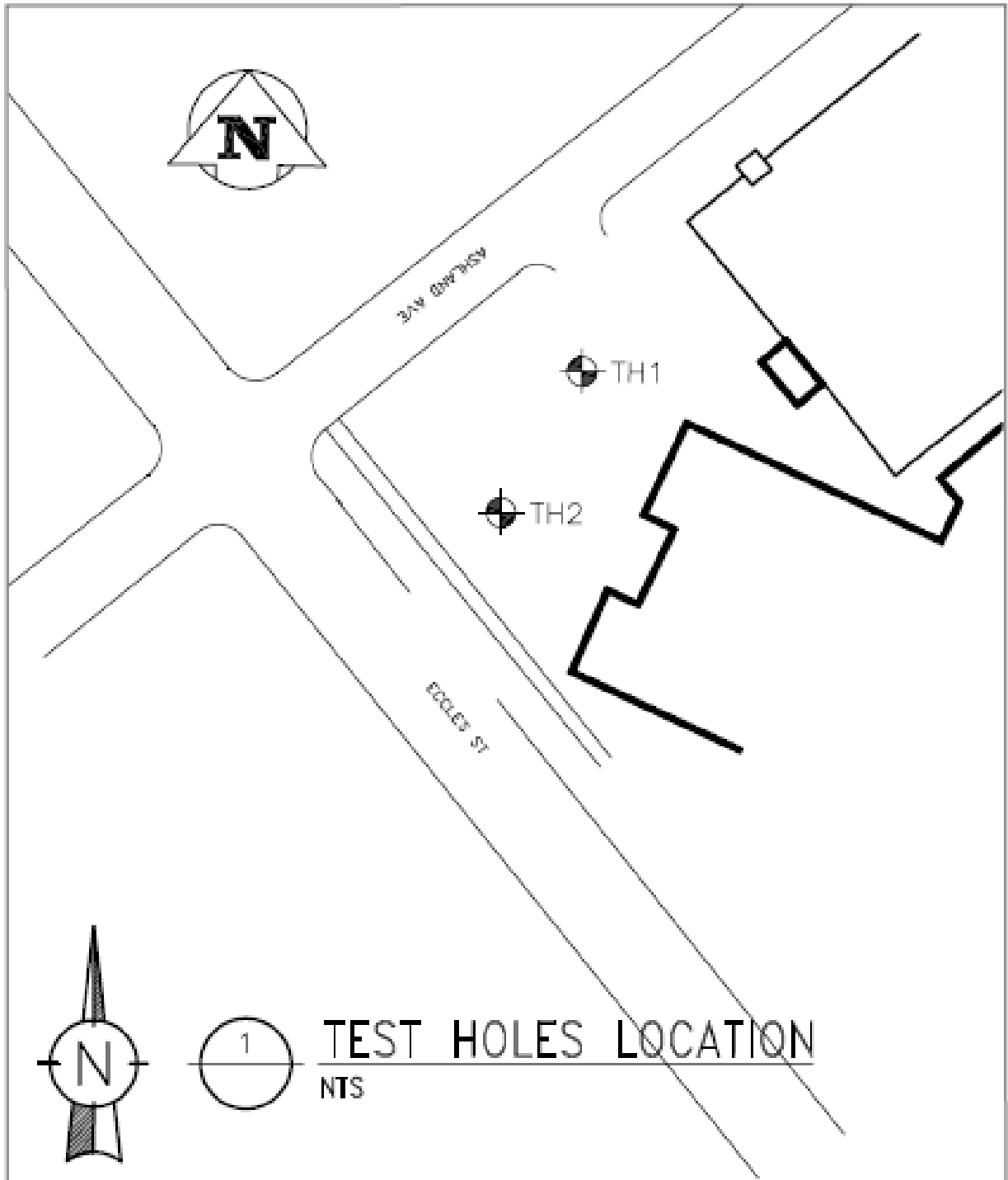
This report is limited in scope to only those items that are specifically referenced in this report. There may be existing conditions that were not recorded in this report. Such conditions were not apparent to the Consultant due to the limitations imposed by the scope of work. The Consultant, therefore, accepts no liability for any costs incurred by the Client for subsequent discovery, manifestation or rectification of such conditions.


This report is intended solely for the Client named as a general indication of the visible or reported physical condition of the items addressed in the report at the time of the geotechnical investigation. The material in this report reflects the Consultant's best judgment in light of the information available to it at the time of preparation.

This report and the information and data contained herein are to be treated as confidential and may be used only by the Client and its officers and employees in relation to the specific project that it was prepared for. Any use a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The Consultant accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

The report has been written to be read in its entirety, do not use any part of this report as a separate entity.

All files, notes, source data, test results and master files are retained by the Consultant and remain the property of the Consultant.



 GENIVAR 600 - 3 DONALD STREET WINNIPEG, MB R2L 2T4 Tel: (204) 77-6880 Fax: (204) 74-3864	RIVERVIEW C.C. PARKING LOT AND SITE DRAINAGE		DATE: 08/03/18
	90 ASHLAND AVENUE WINNIPEG, MANITOBA		APPROVED: S.S.U.
			DRAWN BY: A.O.
			PROJ. NO. WE08013 DWG. NO.

