



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 749-2006

2006 COMBINED SEWER CLEANING AND INSPECTION - CONTRACT NO. 36

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APPENDIX A - WORK PROGRAM

PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 2006 COMBINED SEWER CLEANING AND INSPECTION - CONTRACT NO. 36

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, February 1, 2007.

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 the sewers on Linden Avenue are severely back-graded and contain large amounts of debris.

B3.3 The Bidder is advised that sewers may be located in easements through private property or City owned parklands and Right-of Ways where there may exist no paved access. It will be the Bidders responsibility to identify these sewers and arrange for access and to restore any surface damage to private and City owned property.

B4. ENQUIRIES

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

B4.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. ADDENDA

B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.

- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B15.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B7. BID SUBMISSION

- B7.1 The Bid Submission consists of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
 - (c) Form G1: Bid Bond and Agreement to Bond, or
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or
a certified cheque or draft.
- B7.2 All components of the Bid Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B7.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.3.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.5 Bid Submissions shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B8. BID

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;

- (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

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

B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B8.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:

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

B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.

B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

B9. PRICES

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 Notwithstanding GC.12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

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;
- (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.

B16. AWARD OF CONTRACT

- B16.1 The City will give notice of the award of the Contract by way of a letter of intent, or will give notice that no award will be made.
- B16.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.
- B16.2.1 Without limiting the generality of B16.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Work;
 - (b) the prices are materially in excess of the prices received for similar work in the past;
 - (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
 - (d) only one Bid is received; or
 - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B16.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

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

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 Section A

- D2.1.1 The Work to be done under Section A shall consist of the cleaning and inspection of approximately 35,000 metres of combined sewer of various sizes identified as being in poor condition through previous cleaning and inspection programs.

D2.2 Section B

- D2.2.1 The Work to be done under Section B shall consist of the cleaning and inspection of approximately 440 metres of 1350mm diameter combined sewer on Linden Avenue. This sewer is back-graded and contains large amounts of debris. The exact amount and nature of the debris and magnitude of back-grading shall be verified by the Bidder through site inspection prior to submitting a Bid.

D3. CONTRACT ADMINISTRATOR

- D3.1 The Contract Administrator is:
Mr. Nick Clinch, C.E.T.
Design and Construction Technologist
849 Ravelston Road, R3W 1S8
Telephone No. (204) 986-4449
Facsimile No. (204) 986-5345

- 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 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 should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

D8. INSURANCE

- D8.1 The Contractor shall provide and maintain the following insurance coverage:

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

D8.2 Deductibles shall be borne by the Contractor.

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

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

D9. PERFORMANCE SECURITY

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

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

D9.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D9.2 If the bid security provided in his Bid Submission was not a certified cheque or draft pursuant to B11.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in GC:4.1 for the return of the executed Contract.

D10. SECURITY CLEARANCE

D10.1 Each individual proposed to perform Work:

- (a) on private property;

shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence.

D10.2 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to

property offences or crimes against another person, will not be permitted to perform any Work within City facilities or on private property.

D10.3 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.

D10.4 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform Work under the Contract within City facilities or on private property.

SCHEDULE OF WORK

D11. COMMENCEMENT

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

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

(a) the Contract Administrator has confirmed receipt and approval of:

- (i) evidence that the Contractor is in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
- (ii) evidence of the workers compensation coverage specified in GC:6.14;
- (iii) the Safe Work Plan specified in D7;
- (iv) evidence of the insurance specified in D8;
- (v) the performance security specified in D9;
- (vi) the security clearances specified in D10.

(b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D11.3 The Contractor shall commence the Work on a date that will allow for the achievement of Substantial Performance in accordance with D14 taking in to account days lost due to adverse site conditions.

D12. HOURS OF WORK

D12.1 All Work shall be carried out between the hours of 07:00 and 22:00 Monday to Friday and between 09:00 and 21:00 Saturday.

D12.2 No Work shall be performed outside the hours stated in D12.1 or on Sunday or statutory or civic holidays without written permission from the Contract Administrator. Approval will only be granted if it is in the best interests of the City to do so.

D13. WORKING DAYS

D13.1 Further to GC:1.1(gg), should the Contractor choose to work on a Saturday or be permitted to work on Sunday or a statutory or civic holiday these days shall be classified as Working Days.

D13.2 Further to GC:1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at

one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.

- D13.3 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D13.4 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D13.5 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D14. SUBSTANTIAL PERFORMANCE

- D14.1 The Contractor shall achieve Substantial Performance within seventy-five (75) consecutive Working Days of the commencement of the Work as specified in D11 or by July 27, 2007 whichever occurs first.
- D14.2 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.
- D14.3 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.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance within five (5) consecutive Working Days of the date established for Substantial Performance of the Work as specified in D14.
- D15.2 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.
- D15.3 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.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Substantial Performance in accordance with the Contract by the day fixed herein for Substantial Performance, the Contractor shall pay the City one thousand dollars (\$1000) per Working Day for each and every Working Day following the day fixed herein for Substantial Performance during which such failure continues.

- D16.2 The amount specified for liquidated damages in D16.1 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.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.
- D16.1 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 three hundred dollars (\$300) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D17. JOB MEETINGS

- D17.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.
- D17.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D18. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

- D18.1 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. 749-2006

2006 COMBINED SEWER CLEANING AND INSPECTION - CONTRACT NO. 36

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

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

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

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

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

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

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (1993 Revision), International Chamber of Commerce Publication Number 500.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1	COMBINED SEWER REINSPECTIONS - DRAWING No. 1
2	COMBINED SEWER REINSPECTIONS - DRAWING No. 2
3	COMBINED SEWER REINSPECTIONS - DRAWING No. 3
4	COMBINED SEWER REINSPECTIONS - DRAWING No. 4
5	COMBINED SEWER REINSPECTIONS - DRAWING No. 5

E2. CONFINED SPACE ENTRY

- E2.1 The Contractor's attention is drawn to the Province of Manitoba Workplace Safety and Health Act ("the Act"), and the Regulations and Guidelines there-under pertaining to Confined Entry Work and in particular the requirements for conducting hazard/risk assessments and providing personal protective equipment (PPE).
- E2.2 Use Supplied Air Breathing Apparatus conforming to the requirements of the Act, Regulations and Guidelines where confined entry is required in sewers and manholes.

E3. WATER SUPPLY

- E3.1 Further to specifications CW 1120, section 3.1, CW 2140 and CW 2145, water supply for the Work may be taken from City of Winnipeg hydrants in accordance with the following:
- Submit a list of proposed hydrant locations to the City of Winnipeg Water Services Division (WSD) for approval. If a proposed hydrant location is not approved, the Contractor shall submit an alternate hydrant location for approval.
 - Only hydrants approved by WSD shall be used for water supply.
 - The Contractor is permitted to turn approved hydrants on and off provided the Contractor has received training by Water Services Division and the turn-ons and turn-offs are done in the presence of the Contract Administrator.
 - Hydrants approved for use shall be considered to be "in the Contractor's control" from the time the City has turned the hydrant on until the City has turned the hydrant off.
 - Between November 1 and April 30 of any year the Contractor shall take all necessary precautions to prevent freezing of hydrants and related appurtenances for hydrants in their control and shall be responsible to pump out hydrants turned off by Emergency Services.

- (f) If a hydrant or appurtenance is damaged due to freezing or improper turn on or turn off procedures while in the Contractor's control, WSD will assess the damage and determine if WSD will repair the damage or if the Contractor will be responsible to repair the damage. Costs for repairs completed by WSD will be deducted from payments owing the Contractor. Repairs completed by the Contractor will be at the Contractor's expense.
- (g) Erect and maintain signage (bump signs) warning oncoming traffic of hose crossings to the satisfaction of the Contract Administrator and the Manual of Temporary Traffic Control. Construct ramps as shown on attached drawing D-8211.
- (h) WSD may instruct the Contractor to make other arrangements for hydrant turn-ons and turn-offs.

E3.2 Further to Section 3.7 of CW 1120, charges incurred for the permit and water meters shall be paid for by the Contractor when taken out. The Contractor shall forward the invoice to the Contract Administrator for reimbursement. The billing for water usage sent to the Contractor shall be forwarded to the Contract Administrator for payment. The Bid Opportunity number shall be noted on each permit.

E4. SEWER AND MANHOLE INSPECTION

E4.1 This specification amends and supplements specification CW 2145.

E4.2 Further to section 3.13, a paper or "hard copy" of the inspection reports is not required.

E4.2.1 The Contractor shall maintain backup copies of all digital video and inspection data submissions until they have been accepted by the Contract Administrator.

E4.3 The Contract drawings are based on information contained in the City's GIS database. If the Contractor has trouble interpreting the drawings, or if they believe them to be wrong, the Contract Administrator shall be approached for assistance/clarification.

E4.3.1 The Contractor shall assist the Contract Administrator in making any required measurements for the correction of errors found on the drawings.

E4.4 Further to section 3.18, where an intruding service prevents the completion of an inspection the Contractor shall immediately perform a "Reverse Set-Up Inspection". If other services block the inspection in the upstream direction the Contractor shall immediately perform a "Removal of Intruding Service" in order to obtain a complete inspection to the point of original blockage.

E4.5 Further to section 3.19, where a blockage, due to maintenance issues such as roots or encrustation, prevents the completion of an inspection in the downstream direction, the Contractor must immediately perform "Solid Debris Cutting" as required to remove the blockage and then complete the inspection of the sewer in the original direction.

E5. TRAFFIC CONTROL AND MAINTENANCE OF ACCESS

E5.1 Further to section 3.7 of CW 1130 of the General Requirements the Contractor shall be responsible to redirect and maintain traffic with appropriate signing in accordance with The City of Winnipeg, "Manual of Temporary Traffic Control in Work Areas on City Streets" at all times.

E5.2 Work shall not be carried out on Regional Streets between 07:00 to 09:00 hours and 15:30 to 17:30 hours Monday to Friday unless approved by the Contract Administrator.

E5.3 Should the City of Winnipeg require that Work on Regional Streets be carried out at night, on Sundays or on public holidays, the Contractor shall comply without additional compensation being considered to meet these requirements.

- E5.4 Further to section 3.8 of CW 1130 of the General Requirements parking restriction signing on Regional Streets will be done by The City of Winnipeg, Traffic Services Branch.
- E5.5 The Contractor will be responsible for parking restriction signing required to perform the Work on non-regional and local residential streets. "No Parking" signs will be provided for the Contractor's use.
- E5.6 Erect signs no sooner than 24 hours before the Work commences at a particular location.
- E5.7 Record the license plate numbers of vehicles already parked within the limits where the parking restriction signs are placed and fax the information to Winnipeg Police Services, Traffic Branch at 986-6998.
- E5.8 Promptly remove parking restriction signs once the Work at that location is completed. Signs shall not be left in place over a weekend if no Work will be done at that location.
- E5.9 Return signs immediately upon completion of the Work.
- E5.10 Further to section 3.6 of CW 1130 of the General Requirements, maintain safe pedestrian crossing at intersections at all times. Only one pedestrian crossing at an intersection is to be blocked at any one time. If more than one pedestrian crossing is blocked at an intersection at the same time the Contractor shall provide flag persons to safely escort pedestrians across the intersection.
- E5.11 Do not park company or private vehicles inside the signed work zone in a manner that will block sightlines for vehicles and pedestrians approaching and crossing intersections.

E6. NOTICES TO RESIDENTS

- E6.1 Further to CW 2140 section 3.5 and CW 2145, the Contractor shall deliver notices provided by the Contract Administrator to residents on the affected sewer lines 48 hours prior to the use of flushing equipment for either sewer cleaning or sewer inspection.
- E6.2 All costs associated with delivering notices shall be included in the price bid for "Sewer Cleaning" and "Sewer Inspection" and no separate measurement or payment will be made.

E7. DAMAGE TO CITY AND PRIVATE PROPERTY

- E7.1 All damage to City and private property caused by cleaning or inspection operations is the responsibility of the Contractor and shall be repaired to the satisfaction of the Contract Administrator. All costs associated with these repairs shall be at the Contractors own expense.
- E7.2 Notify the Contract Administrator immediately when damage to property occurs.
- E7.3 The Contractor shall provide written reports to the Contract Administrator for each property attended for investigation of damage. Reports shall include photographs of all damage, dates and times, verbal or written agreements with property owner and all actions taken or proposed to rectify the damage.
- E7.4 Sewers may be located in easements through private property or City owned parklands and Right-of Ways where no paved access may exist. It will be the Contractors responsibility to identify these sewers and arrange for access and to restore any surface damage to private and City owned property to the satisfaction of the Contract Administrator.
- E7.5 Sewer backup or "blow-back" on private property resulting from cleaning or inspection activities is not acceptable and shall be avoided at all costs. It is expected that where this possibility

exists the Contractor shall take appropriate measures such as making modifications to cleaning equipment and/or taking additional time to clean such sewers.

- E7.5.1 Cleanup of affected residences shall be done by cleaning professionals Under no circumstances are cleaning equipment operators to enter residences unless they are neat and presentable and the Contract Administrator has received a criminal record search for that individual.
- E7.5.2 Where actual sewage or "grey water" has flooded private property the Contractor shall immediately clean and disinfect all affected areas as well as flush all weeping tile. The Contractor shall immediately hire an independent IICRC certified water damage or flood restoration contractor to assess any damage to contaminated building materials such as drywall, insulation, carpets, weeping tile or sub-floors, and immediately make any required repairs.
- E7.5.3 If a residence is uninhabitable as a result of a sewer back-up the Contractor shall pay for reasonable hotel accommodations and meals for all affected residents.
- E7.6 The Contractor shall provide the Contract Administrator with a 24hr contact number to arrange for immediate clean-up and repair of private property.

E8. LINDEN AVENUE 1350MM SEWER

- E8.1 The Contractor shall completely clean and inspect the three sections of 1350mm diameter sewer on Linden Avenue from Brazier Street to the 1st manhole west of Henderson Highway in accordance with the requirements of CW 2140, CW 2145 and these Specifications.
- E8.2 The Contractor shall note that the Linden Avenue Sewer is severely back-graded at this location and is believed to contain a large amount of debris. Conventional cleaning equipment and practices may not apply to these sections of sewer. The Contractor shall be responsible for determining the nature and amount of debris, extent of back-grading, required equipment and methods of cleaning and inspection.

Street	ASSET_NUMBER	Length	MaxMainSize	US_Node	DS_Node	FLOW	MATERIAL	Depth
Aberdeen AVE	MA00017911	59.99	300	MH00013730	MH00014695	CS	CLAY	3.48
Agnes ST	MA20016352	87.48	300	MH20014711	MH20014712	CS	*UNKNOWN	0.00
Agnes ST	MA20016370	32.58	300	MH20014712	MH20014729	CS	*UNKNOWN	0.00
Agnes ST	MA20016381	94.18	300	MH20014738	MH20014739	CS	*UNKNOWN	0.00
Agnes ST	MA20016393	99.06	375	MH20014756	MH20014750	CS	*UNKNOWN	0.00
Aikins ST	MA00013141	125.60	450	MH00011738	MH00011727	CS	*UNKNOWN	0.00
Albert ST	MA70026632	5.40	300	PL70012614	MH20014503	CS	CONCRETE	4.43
Alexander AVE	MA20012510	110.03	300	MH20011422	MH20011421	CS	*UNKNOWN	0.00
Alexander AVE	MA20013035	103.33	300	MH20011860	MH20017453	CS	*UNKNOWN	0.00
Alexander AVE	MA20013151	104.48	375	MH20011421	MH20011357	CS	*UNKNOWN	0.00
Alexander AVE	MA20019083	66.45	300	MH20017120	MH20017191	CS	CLAY	3.31
Alexander AVE	MA20019266	66.18	375	MH20017301	MH20017300	CS	CONCRETE	5.06
Alexander AVE	MA70024734	54.86	300	MH20017325	MH20017269	CS	CONCRETE	0.00
Alexander AVE	MA70025400	80.72	300	MH20017801	MH70008759	CS	PVC	0.00
Alexander AVE	MA70039174	78.03	375	MH20010968	MH20010939	CS	*UNKNOWN	0.00
Alfred AVE	MA00013641	92.57	300	MH00012076	MH00012147	CS	CLAY	3.80
Alfred AVE	MA00014553	100.49	450	MH00012976	MH00012975	CS	CLAY	3.31
Alfred AVE	MA00014875	100.44	300	MH00013307	MH00013342	CS	CLAY	3.95
Alfred AVE	MA00015059	88.87	300	MH00013400	MH00013406	CS	CLAY	3.31
Alfred AVE	MA00015111	93.58	300	MH00013460	MH00013451	CS	CLAY	3.82
Alfred AVE	MA00015116	100.28	375	MH00013488	MH00013469	CS	CLAY	4.63
Alfred AVE	MA00015828	93.42	300	MH00013283	MH00013310	CS	CONCRETE	4.04
Alverstone ST	MA20017028	95.10	450	MH20016013	MH20015591	CS	*UNKNOWN	0.00
Alverstone ST	MA20017371	74.62	300	MH20015585	MH20015588	CS	*UNKNOWN	4.03
Alverstone ST	MA20017387	73.65	450	MH20015598	MH20015592	CS	*UNKNOWN	0.00
Alverstone ST	MA20017903	96.52	450	MH20016037	MH20016013	CS	*UNKNOWN	0.00
Alverstone ST	MA20017917	109.98	300	MH20016077	MH20016030	CS	*UNKNOWN	0.00
Alverstone ST	MA20017963	79.86	300	MH20016071	MH20016072	CS	*UNKNOWN	0.00
Alverstone ST	MA20017973	80.67	300	MH20016072	MH20016076	CS	*UNKNOWN	2.85
Andrews ST	MA00012835	124.41	600	MH00011482	MH00011481	CS	CONCRETE	3.44
Andrews ST	MA00012995	88.41	750	MH00011632	MH00011635	CS	CONCRETE	5.26
Andrews ST	MA00013020	109.96	750	MH00011487	MH00011632	CS	CONCRETE	0.00
Angus ST	MA00015887	73.46	300	MH00014111	MH00014112	CS	*UNKNOWN	2.76
Annabella AT	MA00014099	95.10	375	MH00012578	MH00012233	CS	CLAY	0.00
Annabella ST	MA00014044	71.50	300	MH00012540	MH00012564	CS	CLAY	3.00
Argyle ST	MA20013440	45.72	300	MH20012164	MH20012176	CS	*UNKNOWN	0.00

Street	ASSET_NUMBER	Length	MaxMainSize	US_Node	DS_Node	FLOW	MATERIAL	Depth
Argyle ST N	MA00013961	57.91	300	MH00012458	MH00012459	CS	CLAY	0.00
Arlington ST	MA20013866	79.25	300	MH20012555	MH20012592	CS	*UNKNOWN	5.30
Arlington ST	MA20013891	88.06	300	MH20012592	MH20012599	CS	*UNKNOWN	5.62
Arlington ST	MA20013899	112.41	375	MH20012594	MH20012587	CS	*UNKNOWN	5.71
Arlington ST	MA20015032	123.19	375	MH20012587	MH20013590	CS	*UNKNOWN	6.08
Arlington ST	MA20015066	115.46	375	MH20013629	MH20013590	CS	*UNKNOWN	5.67
Arlington ST	MA20015225	87.78	300	MH20013789	MH20013726	CS	*UNKNOWN	4.20
Arlington ST	MA70028978	117.37	375	MH70010617	MH20013624	CS	*UNKNOWN	4.44
Armoury AVE	MA20009631	21.03	300	PL20002544	MH20008808	CS	*UNKNOWN	0.00
Austin ST N	MA00013588	86.72	300	MH00012113	MH00012112	CS	CLAY	3.29
Balmoral ST	MA20014544	42.98	300	MH20013136	MH20013147	CS	*UNKNOWN	0.00
Balmoral ST	MA20014663	114.00	375	MH20013242	MH20013354	CS	*UNKNOWN	0.00
Balmoral ST	MA20014790	114.61	375	MH20013354	MH20013380	CS	*UNKNOWN	0.00
Balmoral ST	MA20016498	94.14	300	MH20014844	MH20014915	CS	*UNKNOWN	0.00
Balmoral ST	MA20017655	29.92	300	MH20013147	MH20013142	CS	*UNKNOWN	0.00
Balmoral ST	MA20017656	31.35	300	MH20013142	MH20013242	CS	*UNKNOWN	0.00
Balmoral ST	MA70000491	82.51	300	MH70000252	MH20013373	CS	PVC	4.76
Banning ST	MA20015205	101.69	200	MH20015388	MH20013708	CS	*UNKNOWN	4.24
Banning ST	MA70022748	79.85	300	MH70008085	MH20013686	CS	CLAY	5.03
Barber ST	MA00013742	80.62	300	MH00012563	MH00012209	CS	CLAY	2.79
Beverley ST	MA20017153	86.26	375	MH20015424	MH20015396	CS	*UNKNOWN	0.00
Beverley ST	MA20017192	86.26	300	MH20015654	MH20015424	CS	*UNKNOWN	0.00
Beverley ST	MA20017534	96.32	375	MH20015767	MH20015735	CS	*UNKNOWN	0.00
Beverley ST	MA20017587	95.40	450	MH20015783	MH20015782	CS	*UNKNOWN	0.00
Blake ST	MA20012095	82.76	375	MH20011020	MH20011019	CS	*UNKNOWN	0.00
Borrowman PL	MA20014388	69.06	300	PL20004903	MH20013005	CS	CONCRETE	0.00
Braemar AVE	MA50007555	87.80	300	MH50006476	MH50006477	CS	CONCRETE	5.40
Bryce ST	MA60020613	73.15	300	MH60017774	MH60017775	CS	CLAY	3.71
Burnell ST	MA20017358	78.03	300	MH20015571	MH20015574	CS	*UNKNOWN	0.00
Burrows AVE	MA00014541	88.04	300	MH00012986	MH00012958	CS	CLAY	5.68
Burrows AVE	MA70015752	93.53	450	MH00013024	MH70006349	CS	CLAY	3.77
Bury ST	MA20012065	37.80	300	MH20011027	MH20010989	CS	*UNKNOWN	0.00
Bury ST	MA20012109	55.09	300	MH20011026	MH20011027	CS	*UNKNOWN	0.00
Canora ST	MA20013951	94.79	300	MH20012639	MH20012647	CS	CONCRETE	3.88
Canora ST	MA20015402	83.59	1200X1500	MH20013931	MH20013891	CS	CONCRETE	6.42
Canora ST	MA20015405	4.30	1200X1500	MH20013891	TE20005419	CS	CONCRETE	6.47

Street	ASSET_NUMBER	Length	MaxMainSize	US_Node	DS_Node	FLOW	MATERIAL	Depth
Canora ST	MA20015437	100.52	1200X1550	MH20013920	MH20013921	CS	CONCRETE	6.23
Canora ST	MA20015446	93.60	1200X1550	MH20013921	MH20013931	CS	CONCRETE	6.43
Carlton ST	MA70028206	57.33	450	MH70010180	MH20014078	CS	CLAY	3.65
Carriere AVE	MA50007564	27.24	1000X1500	MH50006478	MH50006482	CS	CONCRETE	7.41
Carriere AVE	MA70003181	48.10	1000X1500	MH50006482	MH50006483	CS	CONCRETE	0.00
Carrierre AVE	MA50007561	104.81	1000X1500	MH50006481	MH50006478	CS	CONCRETE	8.00
Charles ST	MA00013216	123.12	600	MH00011793	MH00011827	CS	CONCRETE	3.68
Charles ST	MA00013536	71.63	300	MH00012063	MH00012064	CS	CLAY	3.90
Chestnut ST	MA20013971	86.87	300	MH20012656	MH20013553	CS	PVC	0.00
Cooper AVE	MA20014873	78.64	450	MH20013484	MH20013436	CS	*UNKNOWN	5.88
Cornish AVE	MA20013631	13.61	1500	MH20012340	TE20004548	CS	CONCRETE	8.47
Cornish AVE	MA20013632	38.93	1500	TE20004548	MH20012367	CS	CONCRETE	8.09
Cornish AVE	MA20013653	104.67	1500	MH20012366	MH20012418	CS	CONCRETE	8.14
Cornish AVE	MA20013654	50.89	1500	MH20012367	MH20012366	CS	CONCRETE	8.15
Cornish AVE	MA20013706	108.16	1500	MH20012418	MH20012417	CS	CONCRETE	8.25
Disraeli ST	MA00013722	75.89	450	MH00012554	MH00012226	CS	CLAY	2.92
Disraeli ST	MA00014079	88.70	300	MH00012555	MH00012554	CS	CLAY	2.73
Disraeli ST	MA70029896	88.78	300	MH00012556	MH00012555	CS	PVC	4.14
Dominion ST	MA20010166	81.08	300	MH20009269	MH20009281	CS	*UNKNOWN	0.00
Dominion ST	MA20010196	104.55	300	MH20009310	MH20009363	CS	CLAY	0.00
Dominion ST	MA20010256	104.24	300	MH20009363	MH20009418	CS	*UNKNOWN	0.00
Dominion St	MA20010911	96.32	300	MH20010559	MH20009989	CS	*UNKNOWN	3.99
Dominion ST	MA20011005	96.32	375	MH20010033	MH20010051	CS	*UNKNOWN	4.83
Donald ST	MA20015760	53.34	300	MH20014187	MH20014186	CS	CLAY	3.09
Downing ST	MA20009606	96.01	*UNKNOWN	MH20008782	MH20008783	CS	*UNKNOWN	0.00
Downing ST	MA20010127	82.30	375	MH20009280	MH20009247	CS	*UNKNOWN	0.00
Downing ST	MA20010306	96.32	375	MH20009410	MH20009414	CS	*UNKNOWN	0.00
Downing ST	MA20010310	96.32	375	MH20009414	MH20009448	CS	*UNKNOWN	0.00
Dublin AVE	MA20011692	99.97	300	MH20010648	MH20010673	CS	*UNKNOWN	0.00
Dublin AVE	MA20011695	99.97	300	MH20010649	MH20010648	CS	*UNKNOWN	0.00
Dublin AVE	MA20011696	57.30	300	MH20010650	MH20010649	CS	*UNKNOWN	0.00
Dufferin AVE	MA00012821	100.75	300	MH00011465	MH00011452	CS	CLAY	3.47
Dufferin AVE	MA00012822	93.45	300	MH00011463	MH00011483	CS	CLAY	3.47
Dundurn PL	MA20015050	45.98	300	MH20013567	MH20013568	CS	CLAY	5.14
Edmonton ST	MA20014051	80.47	300	MH20012728	MH20012729	CS	CLAY	3.53
Edmonton ST	MA20014052	79.86	375	MH20012729	MH20012730	CS	CLAY	4.36

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Edmonton ST	MA20015568	2.60	375	MH20014043	MH70016166	CS	CLAY	0.00
Edmonton ST	MA20015572	63.40	300	MH20014129	MH20014043	CS	CLAY	3.56
Einarson AVE	MA20015209	99.97	300	MH20013714	MH20013767	CS	CLAY	4.79
Einarson AVE	MA20015220	37.89	300	PL20005306	MH20013714	CS	CLAY	6.34
Elgin AVE	MA70013073	43.04	375	MH20017187	MH70005215	CS	CLAY	0.00
Elgin AVE	MA70013363	87.17	300	MH20016676	MH20016766	CS	CONCRETE	0.00
Elgin AVE	MA70023192	59.22	300	MH70006135	MH70008225	CS	*UNKNOWN	0.00
Ellice AVE	MA20017410	88.81	600	MH20015620	MH20015668	CS	*UNKNOWN	0.00
Ethelbert ST	MA20013933	111.33	300	MH20012616	MH70006099	CS	*UNKNOWN	2.99
Ethelbert ST	MA20013947	78.03	300	MH20012633	MH20012649	CS	*UNKNOWN	5.20
Ethelbert ST	MA20015326	83.52	300	MH20013846	MH20013813	CS	*UNKNOWN	4.23
Euclid AVE	MA00013756	68.58	300	MH00012247	MH00012246	CS	CLAY	3.40
Euclid AVE	MA00013971	81.01	375	MH00012450	MH70013754	CS	CLAY	0.00
Evanson ST	MA20013853	75.59	300	MH20012551	MH20012552	CS	*UNKNOWN	3.51
Evanson ST	MA20013854	78.03	300	MH20012574	MH20012552	CS	*UNKNOWN	3.03
Evanson ST	MA20013877	24.26	300	MH20012574	MH20012576	CS	*UNKNOWN	3.29
Evanson St	MA20013878	54.99	300	MH20012576	MH20012582	CS	*UNKNOWN	0.00
Evanson ST	MA20015068	82.34	375	MH20013633	MH20013591	CS	CLAY	5.38
Evanson ST	MA20015230	69.19	300	MH20013784	MH20013730	CS	CLAY	4.02
Flora AVE	MA00012996	92.96	300	MH00011642	MH00011659	CS	*UNKNOWN	3.98
Flora AVE	MA00013275	100.62	375	MH00011856	MH00011962	CS	CLAY	4.49
Flora AVE	MA00013415	73.64	375	MH00011962	MH70006705	CS	CLAY	5.28
Flora AVE	MA00014128	64.86	300	MH00012606	MH00012607	CS	CLAY	0.00
Flora PL S	MA70017836	100.50	225	MH70006710	MH00008904	CS	CLAY	0.00
Fort ST	MA20014207	67.06	375	MH20012836	MH20012842	CS	CLAY	4.52
Fort ST	MA20014218	64.62	300	MH20012897	MH20012836	CS	CLAY	3.78
Fort ST	MA70001530	37.30	300	MH70005217	MH20014533	CS	PVC	0.00
Furby PL	MA20016442	62.79	300	MH20014821	MH20014780	CS	*UNKNOWN	0.00
Furby ST	MA20013726	15.39	300	MH70011695	MH70011694	CS	CLAY	0.00
Furby ST	MA20014494	83.79	375	MH20013083	MH20013081	CS	*UNKNOWN	3.61
Furby ST	MA20014580	108.19	450	MH20013165	MH20013217	CS	*UNKNOWN	5.19
Furby ST	MA20014659	98.46	300	MH20013238	MH20014778	CS	*UNKNOWN	0.00
Furby ST	MA20016427	71.02	300	MH20014780	MH20014885	CS	*UNKNOWN	0.00
Furby ST	MA20016543	5.45	300	MH20014881	MH20014884	CS	*UNKNOWN	0.00
Furby ST	MA20016605	99.67	450	MH20015052	MH20014939	CS	*UNKNOWN	4.27
Furby ST	MA20016822	90.83	375	MH20015139	MH20015121	CS	*UNKNOWN	0.00

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Furby ST	MA20016842	47.59	300	MH20015154	MH20015138	CS	*UNKNOWN	0.00
Furby ST	MA20016847	90.83	375	MH20015138	MH20015139	CS	*UNKNOWN	0.00
Furby ST	MA70033244	109.73	375	MH70011719	MH20013165	CS	PVC	0.00
Gallagher AVE	MA20012049	95.69	375	MH20010979	MH20010980	CS	*UNKNOWN	0.00
Gallagher AVE	MA20013095	151.23	300	MH20011893	MH20011901	CS	*UNKNOWN	0.00
Gallagher AVE	MA20013141	79.65	300	MH20011015	MH20010929	CS	*UNKNOWN	0.00
Garfield ST N	MA20009550	84.11	375	MH20008811	MH20008724	CS	*UNKNOWN	0.00
Garfield ST N	MA20009639	86.00	300	MH20008801	MH20008811	CS	*UNKNOWN	0.00
Garfield ST N	MA20009685	96.01	300	MH20008856	MH20008843	CS	*UNKNOWN	0.00
Garfield ST N	MA20010188	7.07	*UNKNOWN	MH20009305	MH20009299	CS	*UNKNOWN	0.00
Garfield ST N	MA20010211	33.12	300	MH20009306	MH20009305	CS	*UNKNOWN	0.00
Garfield ST N	MA70022296	83.82	300	MH20010364	MH20008628	CS	*UNKNOWN	6.64
Garfield ST S	MA20011585	81.14	300	MH20010549	MH20010548	CS	*UNKNOWN	4.22
Garfield ST S	MA20011586	81.68	300	MH20010548	MH20009954	CS	*UNKNOWN	3.60
Garry ST	MA20014331	57.61	300	MH20012958	MH20012951	CS	CONCRETE	3.59
Gauvin ST	MA50004057	61.16	600	MH50003521	MH50003522	CS	CONCRETE	4.58
Gauvin ST	MA50004058	39.75	600	MH50003522	MH50003523	CS	CONCRETE	4.79
Gauvin ST	MA50004059	38.40	600	MH50003523	MH50003524	CS	CONCRETE	6.91
George AVE	MA20013458	70.41	300	MH20012166	MH20012182	CS	*UNKNOWN	3.21
Gomez ST	MA20013468	94.49	300	MH20012192	MH20012237	CS	*UNKNOWN	3.34
Good ST	MA20014805	127.41	375	MH20013405	MH20013384	CS	CONCRETE	4.54
Good ST	MA20014842	93.27	375	MH20013396	MH20013405	CS	CONCRETE	4.02
Goulding ST	MA20011142	85.95	375	MH20010188	MH20010148	CS	CLAY	4.26
Grace ST	MA20013598	69.49	300	MH20012332	MH20012317	CS	*UNKNOWN	3.75
Graham AVE	MA70023504	23.59	600	MH70000650	MH20014560	CS	WOOD	4.14
Graham AVE	MA70033387	19.97	300	MH20014151	MH20014151	CS	*UNKNOWN	3.01
Granville ST	MA00013764	77.45	300	MH00012257	MH00012269	CS	CLAY	3.11
Granville ST	MA00013773	56.05	300	MH00012266	MH00012267	CS	CLAY	2.45
Greenwood PL	MA20011131	79.25	375	MH20010187	MH20010146	CS	*UNKNOWN	0.00
Greenwood PL	MA20011555	16.42	300	MH20010528	TE20003623	CS	*UNKNOWN	3.23
Grove ST	MA00013880	97.54	300	MH00012379	MH00012378	CS	CLAY	3.26
Gwendoline ST	MA20019844	124.36	300	MH20017847	MH20016813	CS	*UNKNOWN	0.00
Hallet ST	MA00013688	79.09	300	MH00012201	MH00012191	CS	CLAY	3.68
Hallet ST	MA00013709	104.85	300	MH00012268	MH00012201	CS	CLAY	2.86
Hallet ST	MA00013774	110.49	300	MH00012367	MH00012268	CS	CLAY	2.37
Hargrave PL	MA20014085	47.24	375	MH20012812	MH20012749	CS	CONCRETE	2.93

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Hargrave PL	MA70040514	15.10	300	MH70016161	MH20012812	CS	CONCRETE	2.66
Hargrave ST	MA20014190	68.71	300	MH20012832	MH20012831	CS	CONCRETE	2.75
Hargrave ST	MA20014238	31.09	300	MH20012855	MH20012854	CS	*UNKNOWN	0.00
Hargrave ST	MA20014239	15.33	300	MH20012854	MH20012872	CS	CONCRETE	0.00
Hargrave ST	MA20015591	31.99	375	MH20014057	MH20014059	CS	CONCRETE	3.13
Hargrave ST	MA20015592	35.37	375	MH20014060	MH20014057	CS	CONCRETE	0.00
Hargrave ST	MA70021966	61.10	200	MH70007952	MH70007953	CS	CLAY	3.57
Heaton AVE	MA20013451	93.27	300	MH20012189	MH20012176	CS	*UNKNOWN	3.17
Henry AVE	MA20019690	46.33	300	MH20017694	MH20017746	CS	CONCRETE	3.36
Higgins AVE	MA20019395	107.59	300	MH20017420	MH20017421	CS	CLAY	4.09
Hill ST	MA50007515	93.00	600	MH50006439	MH50006440	CS	*UNKNOWN	7.23
Hill ST	MA50007563	15.13	600	MH50006442	MH50006481	CS	*UNKNOWN	7.76
Hill ST	MA70040565	56.60	600	MH70016195	MH50006442	CS	*UNKNOWN	0.00
Hillcrest AVE	MA50004190	109.39	375	MH50003648	MH50003649	CS	CONCRETE	0.00
Hillock AVE	MA20019657	69.10	250	MH20017663	MH20017662	CS	*UNKNOWN	4.05
Home ST	MA20013921	53.78	300	MH20012612	MH20012611	CS	CLAY	2.81
Home ST	MA20015096	43.41	300	MH20013805	MH20013600	CS	*UNKNOWN	0.00
Home ST	MA20015309	77.11	300	MH20013861	MH20013804	CS	*UNKNOWN	3.62
Home ST	MA20015314	33.71	300	MH20013804	MH20013805	CS	*UNKNOWN	4.43
Home ST	MA20015367	84.69	300	MH20013910	MH70013154	CS	*UNKNOWN	4.55
Home ST	MA20015423	90.83	300	MH20013906	MH20013910	CS	*UNKNOWN	3.44
Home ST	MA20015428	108.55	375	MH20015403	MH20013896	CS	AC	6.85
Home ST	MA20017160	82.12	375	MH20015434	MH20015403	CS	AC	0.00
Home ST	MA20017202	3.23	375	MH20015430	MH20015434	CS	AC	0.00
Home ST	MA20017308	85.34	375	MH20015652	MH20015430	CS	AC	0.00
Home ST	MA20017443	85.34	300	MH20015678	MH20015652	CS	AC	0.00
Home ST	MA20017489	96.93	300	MH20015688	MH20015696	CS	*UNKNOWN	0.00
Home ST	MA20017664	104.74	450	MH20013914	MH20013912	CS	CLAY	7.29
Home ST	MA20017899	94.49	375	MH20016110	MH20016015	CS	*UNKNOWN	0.00
Home ST	MA20018038	94.18	375	MH20016186	MH20016134	CS	*UNKNOWN	4.05
Honeyman AVE	MA20015459	11.46	450	MH20013945	MH20013941	CS	PVC	7.83
Huntleigh ST	MA70024288	11.00	300	MH20014034	MH70008431	CS	*UNKNOWN	0.00
Huntleigh ST	MA70024289	98.06	300	MH70008431	MH20014022	CS	*UNKNOWN	2.53
Ingersoll ST	MA20015161	82.60	300	MH20013666	MH20013671	CS	CLAY	3.76
Ingersoll ST	MA20015176	98.45	450	MH20013681	MH20013680	CS	CLAY	6.77
Ingersoll ST	MA20017713	88.39	300	MH20015849	MH20015856	CS	*UNKNOWN	0.00

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Ingersoll ST	MA20017767	101.83	375	MH20015892	MH20015889	CS	*UNKNOWN	0.00
Ingersoll ST	MA20017782	82.26	375	MH20015904	MH20015894	CS	*UNKNOWN	0.00
Irysh AVE	MA20012096	75.59	300	MH20011024	MH20011021	CS	CONCRETE	0.00
Isabel ST	MA20018813	113.60	600	MH20016867	TE20006953	CS	BRICK	6.10
Jarvis AVE	MA00012736	91.44	375	MH00011392	MH00011377	CS	*UNKNOWN	3.61
Jarvis AVE	MA00012956	104.69	375	MH00011597	MH00011738	CS	*UNKNOWN	3.93
Kennedy ST	MA20014044	87.17	550	MH20012723	MH20014044	CS	CLAY	3.70
Kennedy ST	MA20014045	45.72	550	MH20012724	MH20012723	CS	CLAY	4.36
Kennedy ST	MA20014046	42.67	550	MH20012725	MH20012724	CS	CLAY	4.66
Kennedy ST	MA20014047	88.70	550	MH20012768	MH20012725	CS	*UNKNOWN	0.00
Kennedy ST	MA20015631	17.15	375	MH20014090	MH20014089	CS	CLAY	3.20
Kennedy ST	MA20016798	14.64	375	MH20015100	MH20015102	CS	*UNKNOWN	0.00
Kennedy ST	MA20016805	69.50	300	MH20015106	MH20015100	CS	*UNKNOWN	0.00
Kennedy ST	MA20016935	99.94	300	MH20015216	MH20015221	CS	*UNKNOWN	0.00
Landside ST	MA20014497	79.53	300	MH20013086	MH20013077	CS	CLAY	4.28
Langside ST	MA20013708	100.79	300	MH20012420	MH20012428	CS	*UNKNOWN	0.00
Langside ST	MA20014486	107.61	375	MH20013077	MH20013109	CS	CLAY	4.28
Langside ST	MA20014681	111.66	450	MH20013261	MH20013275	CS	CONCRETE	0.00
Langside ST	MA20014725	90.53	300	MH20013287	MH20013295	CS	CONCRETE	0.00
Langside ST	MA20016473	77.87	300	MH20014818	MH70012356	CS	PVC	0.00
Langside ST	MA20016763	76.20	450	MH20015092	MH20015068	CS	*UNKNOWN	0.00
Langside ST	MA20016967	105.46	375	MH20015255	MH20015256	CS	*UNKNOWN	0.00
Langside ST	MA20017669	30.67	375	MH20015256	MH20015158	CS	*UNKNOWN	0.00
Lenore ST	MA20013840	81.99	375	MH20012539	MH20012550	CS	CLAY	5.31
Lewis ST	MA60020224	126.80	300	MH60017496	MH60017497	CS	CLAY	7.39
Lily ST	MA70009643	82.71	600	MH70003789	MH20012158	CS	BRICK	4.78
Linden AVE	MA40006681	123.68	1350	MH40006184	MH40006113	CS	CONCRETE	0.00
Linden AVE	MA40006687	160.93	1350	MH40006161	MH40006203	CS	CONCRETE	0.00
Linden AVE	MA40006762	159.76	1350	MH40006203	MH40006184	CS	CONCRETE	0.00
Lipton ST	MA20013794	73.01	300	MH20012511	MH20012492	CS	*UNKNOWN	5.36
Lipton ST	MA20015147	86.55	300	MH20013653	MH20013652	CS	CLAY	4.63
Lisgar AVE	MA00013777	69.06	300	MH00012283	MH00012278	CS	CLAY	6.20
Lizzie ST	MA20019257	14.37	450	MH20017293	TE20007126	CS	CLAY	5.91
Lock ST	MA20012547	79.25	300	MH20011459	MH20011458	CS	CONCRETE	0.00
Logan AVE	MA20019570	116.70	1450X1875	MH20017640	MH20017581	CS	CONCRETE	0.00
Lombard AVE	MA70036366	105.69	900	MH20014664	MH20014665	CS	CONCRETE	0.00

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Lorne AVE	MA00013745	107.24	300	MH00012321	MH00012235	CS	CLAY	3.63
Lusted AVE	MA00013591	83.21	300	MH00012239	MH00012117	CS	CLAY	5.01
Magnus AVE	MA00014521	87.48	300	MH00012929	MH00012964	CS	CLAY	2.66
Main ST	MA20016109	83.06	900	MH20014548	MH20014492	CS	CONCRETE	5.11
Main ST	MA70024938	68.58	750	MH20014615	MH20014614	CS	POLYFELT	0.00
Manitoba AVE	MA00013506	79.90	300	MH00012045	MH00012154	CS	CLAY	3.39
Manitoba AVE	MA00014396	87.48	300	MH00012858	MH00012844	CS	CLAY	3.22
Manitoba AVE	MA00014430	93.44	375	MH00012858	MH00012867	CS	CLAY	5.45
Manitoba AVE	MA00014786	94.65	300	MH00012829	MH00013188	CS	CLAY	3.29
Maryland ST	MA20013618	89.97	1800	MH20012988	MH20012338	CS	CONCRETE	8.16
Maryland ST	MA20013619	86.01	1500	MH20012338	MH20012339	CS	CONCRETE	8.16
Maryland ST	MA20013620	64.01	1500	MH20012339	MH20012340	CS	CONCRETE	8.39
Maryland ST	MA20014350	79.50	1350X1800	MH20012969	MH20012988	CS	*UNKNOWN	7.90
Maryland ST	MA20014351	147.01	1200X1550	MH20012972	MH20012969	CS	CONCRETE	7.82
Maryland ST	MA20016725	46.38	300	MH20015035	MH20015041	CS	*UNKNOWN	0.00
McDermot AVE	MA20017869	87.17	300	MH20016060	MH20015988	CS	*UNKNOWN	0.00
McDermot AVE	MA20017957	86.87	300	MH20016055	MH20016165	CS	*UNKNOWN	0.00
McDermot AVE	MA70026629	7.08	375	MH20014503	MH70009267	CS	CLAY	0.00
McGee ST	MA20014434	78.54	300	MH20013040	MH20013035	CS	CONCRETE	2.84
McGee ST	MA20014439	78.40	300	MH20013040	MH20013039	CS	CONCRETE	3.32
McGee ST	MA20016419	90.22	450	MH20014760	MH20014773	CS	*UNKNOWN	0.00
McGee ST	MA20016699	93.99	375	MH20015013	MH20015012	CS	*UNKNOWN	0.00
McGee ST	MA20016714	94.79	300	MH20015026	MH20015025	CS	*UNKNOWN	0.00
McGee ST	MA70023866	82.14	450	MH70008361	MH20014759	CS		0.00
McKenzie ST	MA00012875	124.39	750	MH00011507	MH00011550	CS	CONCRETE	4.02
McKenzie ST	MA00012920	10.99	900	MH00011550	MH00011555	CS	CONCRETE	4.05
McKenzie ST	MA00015812	108.28	900	MH00011555	TE00005993	CS	CONCRETE	0.00
McPhillips ST	MA20019475	205.13	900X1200	MH20017685	MH20017468	CS		0.00
Metcalfe AVE	MA50004316	35.00	1050X1600	MH50003712	MH50003713	CS	CONCRETE	8.52
Minto ST	MA20009553	64.01	300	MH20008741	MH20008726	CS	*UNKNOWN	0.00
Minto ST	MA20011130	121.92	450	MH20010181	MH20010147	CS	*UNKNOWN	0.00
Minto ST	MA20011349	60.96	300	MH20008637	MH20010343	CS	*UNKNOWN	4.71
Nassau ST N	MA60021607	82.74	900	MH60018466	MH60013635	CS	BRICK	6.43
Newman ST	MA20010889	107.59	300	MH20009937	MH20010024	CS	*UNKNOWN	5.22
Notre Dame AVE	MA20010323	101.80	600	MH20011687	MH20009456	CS	CONCRETE	0.00
Notre Dame AVE	MA20010337	91.56	750	MH20009441	MH20010573	CS	CONCRETE	6.15

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Pacific AVE	MA20013382	78.33	225	MH20012130	MH20012109	CS	CLAY	0.00
Pacific AVE	MA20018712	82.30	300	MH20016773	MH20016768	CS	*UNKNOWN	3.38
Pacific AVE	MA20018727	77.94	375	MH20016798	MH20016788	CS	*UNKNOWN	4.07
Pacific AVE	MA20019248	72.67	375	MH20017284	MH20017304	CS	CONCRETE	4.27
Palmerston AVE	MA20011576	84.58	300	MH70008170	MH20010547	CS	*UNKNOWN	0.00
Palmerston AVE	MA20013859	88.24	300	MH20012563	MH20012612	CS	*UNKNOWN	3.20
Palmerston AVE	MA20013863	69.82	300	MH20012560	MH20012559	CS	*UNKNOWN	3.34
Palmerston AVE	MA20013920	51.82	300	MH20012626	MH20012612	CS	*UNKNOWN	2.63
Palmerston AVE	MA20013925	104.73	300	MH20012617	MH20012616	CS	*UNKNOWN	2.59
Palmerston AVE	MA20013938	51.98	300	MH20012626	MH20012616	CS	*UNKNOWN	2.59
Parr ST	MA00012735	60.91	375	MH00011377	MH00011511	CS	CLAY	0.00
Parr ST	MA00014622	4.47	600	MH00013035	MH00013038	CS	CLAY	3.92
Parr ST	MA70012385	38.58	600	MH00013065	MH70004960	CS	CLAY	0.00
Parr ST	MA70012386	42.46	600	MH70004960	MH00013035	CS	CLAY	0.00
Portage AVE	MA20010973	77.79	600	MH20010003	MH20010046	CS	*UNKNOWN	8.64
Portage AVE	MA20011016	81.47	600	MH20010044	MH20010041	CS	*UNKNOWN	6.33
Portage AVE	MA20011127	77.08	900	MH20010140	MH20010155	CS	*UNKNOWN	7.73
Portage AVE	MA20015185	81.68	900	MH20013741	MH20013700	CS	*UNKNOWN	0.00
Portage AVE	MA20015187	1.63	900	MH20013700	MH20013692	CS	*UNKNOWN	0.00
Portage AVE	MA20015246	38.11	900	MH20013746	MH20013741	CS	*UNKNOWN	0.00
Portage AVE	MA20015441	32.78	600	MH20013919	MH20013920	CS	CONCRETE	6.44
Portage AVE	MA20015737	94.62	900	MH20014261	MH20014163	CS	CONCRETE	5.17
Portage AVE	MA20015829	17.20	900	MH20014254	MH20014250	CS	CONCRETE	4.78
Portage AVE	MA20016224	41.42	600X900	MH20014593	MH20014594	CS	*UNKNOWN	0.00
Portage AVE	MA20016571	109.82	900	MH20014905	TE20005897	CS	CONCRETE	0.00
Portage AVE	MA20016572	101.03	900	MH20014918	MH20014905	CS	CONCRETE	5.27
Portage AVE	MA20016587	6.80	900	MH20014085	MH20014918	CS	CONCRETE	0.00
Powers ST	MA00013122	88.99	750	MH00011713	MH70006706	CS	CONCRETE	0.00
Powers ST	MA00014872	12.83	600	MH00013247	MH00013249	CS	CONCRETE	0.00
Preston AVE	MA20015224	86.97	300	MH20013726	MH20013854	CS	CLAY	4.59
Preston AVE	MA20015234	34.35	300	PL20005314	MH20013735	CS	CLAY	6.77
Preston AVE	MA20015397	74.11	1200X1550	MH20013889	MH20013884	CS	*UNKNOWN	7.13
Preston AVE	MA20015403	88.60	1200X1550	MH20013890	MH20013889	CS	CONCRETE	5.04
Preston AVE	MA20015405	4.30	1200X1500	TE20005419	MH20013890	CS	CONCRETE	0.00
Princess ST	MA20019361	60.35	375	MH20017435	MH70003651	CS	CLAY	4.03
Pritchard AVE	MA00014316	88.70	300	MH00012750	MH00012778	CS	CLAY	2.86

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Pritchard AVE	MA70035583	106.17	900	MH00012831	MH00012832	CS	CONCRETE	4.48
Purcell AVE	MA20015373	151.44	1200X1550	TE20005403	MH20012972	CS	CONCRETE	7.22
Qu'appelle AVE	MA20016754	65.55	300	MH20015113	MH20015060	CS	*UNKNOWN	0.00
Qu'appelle AVE	MA20016812	52.13	300	MH20015100	MH20015113	CS	*UNKNOWN	0.00
Qu'appelle AVE	MA20016816	48.36	300	MH20015117	MH20015100	CS	*UNKNOWN	3.13
Robinson ST	MA00012928	116.27	300	MH00011569	MH00011838	CS	CLAY	4.57
Robinson ST	MA00012944	120.68	300	MH00011559	MH00011569	CS	CLAY	0.00
Rorie ST	MA70013767	60.96	225	MH20014674	MH20014677	CS	CONCRETE	3.45
Ross AVE	MA20018426	82.91	450	MH20016497	MH20016578	CS	*UNKNOWN	3.78
Ross AVE	MA20018622	76.20	300	MH20016678	MH20016774	CS	*UNKNOWN	3.12
Ross AVE	MA70013847	18.08	375	MH20016490	MH70005555	CS	*UNKNOWN	0.00
Ross AVE	MA70037241	81.26	375	MH20016415	MH20016441	CS	CLAY	0.00
Rover AVE	MA70003255	87.78	450	MH70001441	MH00012385	CS	PVC	1.59
Rover AVE	MA70031307	103.15	600	MH00012385	MH00012227	CS	CONCRETE	3.67
Ruby ST	MA20013823	82.30	375	MH20012514	MH20012515	CS	CLAY	5.13
Schultz ST	MA00013221	60.05	300	MH00011798	MH00011902	CS	CLAY	4.54
Selkirk AVE	MA00014347	98.52	600	MH00012794	MH00012786	CS	CONCRETE	4.36
Selkirk AVE	MA00014350	99.48	600	MH00012786	MH00012808	CS	CONCRETE	4.19
Sherbrook ST	MA20016429	87.22	375	MH20014788	MH20014783	CS	*UNKNOWN	4.10
Sherbrook ST	MA70033987	84.41	450	MH70012355	MH20014861	CS	CLAY	4.61
Sherburn ST	MA20013732	83.52	300	MH20012442	MH20012452	CS	*UNKNOWN	3.38
Sherburn ST	MA20013738	77.11	300	MH20012449	MH20012447	CS	*UNKNOWN	4.39
Sherburn ST	MA20014956	77.38	300	MH20013504	MH20012461	CS	*UNKNOWN	3.48
Sherburn ST	MA20014987	90.83	300	MH20013534	MH20013535	CS	CLAY	4.17
Sherburn ST	MA20017069	86.26	300	MH20015351	MH20015326	CS	*UNKNOWN	0.00
Sherburn ST	MA20017712	92.66	300	MH20015847	MH20015864	CS	*UNKNOWN	0.00
Sherburn ST	MA20017728	82.01	300	MH20015862	MH20015898	CS	*UNKNOWN	0.00
Sherburn ST	MA20017737	93.27	300	MH20015864	MH20015862	CS	*UNKNOWN	0.00
Sherburn ST	MA20017759	82.91	375	MH20015886	MH20015912	CS	*UNKNOWN	0.00
Sherburn ST	MA20017790	82.91	375	MH20015912	MH20015915	CS	*UNKNOWN	0.00
Sherburn ST	MA70021946	34.07	300	MH20012452	MH70007946	CS	*UNKNOWN	4.16
Simcoe ST	MA20015499	99.30	750	MH20015399	MH20013987	CS	CONCRETE	5.71
Simcoe ST	MA20015503	100.28	750	MH20013984	MH20013983	CS	CONCRETE	6.29
Simcoe ST	MA20015506	99.97	750	MH20013987	MH20013984	CS	CONCRETE	6.18
Simcoe ST	MA20017032	95.10	450	MH20016022	MH20015731	CS	*UNKNOWN	0.00
Simcoe ST	MA20017156	89.31	750	MH20015537	MH20015399	CS	CONCRETE	0.00

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Simcoe ST	MA20017315	89.61	750	MH20015648	MH20015537	CS	CONCRETE	0.00
Simcoe ST	MA20017439	91.14	750	MH20015673	MH20015648	CS	CONCRETE	0.00
Simcoe ST	MA20017467	75.75	750	MH20015679	MH20015673	CS	CONCRETE	0.00
Simcoe ST	MA20017520	99.36	600	MH20015720	MH20015715	CS	CONCRETE	0.00
Simcoe ST	MA20017909	95.10	450	MH20016111	MH20016022	CS	*UNKNOWN	0.00
Simcoe ST	MA20018007	87.48	375	MH20016138	MH20016111	CS	CLAY	3.49
Simcoe ST	MA20018095	56.71	300	MH20016194	MH20016188	CS	*UNKNOWN	0.00
Simcoe ST	MA70027223	103.35	750	MH20013983	TE70012953	CS	CONCRETE	6.56
Sinclair ST	MA00014329	85.51	300	MH00012897	MH00012770	CS	CLAY	0.00
Spence ST	MA20014576	64.10	300	MH20013162	MH70016155	CS	*UNKNOWN	0.00
Spence ST	MA20014674	77.75	300	MH20013252	MH20013265	CS	*UNKNOWN	0.00
Spence ST	MA20014675	77.97	300	MH20013253	MH20013326	CS	*UNKNOWN	6.21
Spence ST	MA20014679	78.09	300	MH20013265	MH20013253	CS	*UNKNOWN	0.00
Spence ST	MA20014753	3.40	300	MH20013347	MH70016278	WWS	CONCRETE	0.00
Spence ST	MA20016679	102.09	450	MH70012375	MH20014999	CS	*UNKNOWN	0.00
Spence ST	MA20016925	89.31	375	MH20015240	MH20015211	WWS	*UNKNOWN	0.00
Spence ST	MA20016960	45.30	300	MH20015246	MH20015240	WWS	*UNKNOWN	0.00
Spence ST	MA70023252	76.81	300	MH20014825	MH20014908	CS	CLAY	0.00
Spence ST	MA70040498	13.95	300	MH70016155	MH20013252	CS	*UNKNOWN	0.00
Spence ST	MA70040640	83.77	300	MH70016278	MH20013323	WWS	CONCRETE	0.00
Sprague ST	MA20010922	119.18	300	MH20009964	MH20010014	CS	*UNKNOWN	3.95
Sprague ST	MA20010923	119.79	300	MH20010525	MH20009964	CS	*UNKNOWN	3.61
St Mary AVE	MA20015606	14.62	600	MH20014066	MH20014155	CS	CONCRETE	0.00
St Mary AVE	MA70029825	49.68	450	MH20014438	MH20014448	CS	*UNKNOWN	0.00
St Mary's RD	MA50004085	95.93	1000X1500	MH50003549	MH50003550	CS	*UNKNOWN	8.17
St Mary's RD	MA50004096	66.33	1000X1500	MH50003543	MH50003560	CS	*UNKNOWN	7.76
St Mary's RD	MA50004097	78.83	1000X1500	MH50003560	MH50003561	CS	*UNKNOWN	7.61
St Mary's RD	MA50004098	83.02	1000X1500	MH50003561	MH50003549	CS	*UNKNOWN	7.91
St Matthews AVE	MA20009441	53.37	600	MH20008634	MH20008635	CS	CONCRETE	6.65
St Matthews AVE	MA20014437	32.14	375	MH20013039	MH20013053	CS	CONCRETE	3.37
Stella AVE	MA00012832	100.89	375	MH00011521	MH00011481	CS	CLAY	3.39
Stella AVE	MA00012885	94.49	300	MH00011547	MH00011529	CS	CLAY	2.82
Stella AVE	MA00013021	94.49	300	MH00011622	MH00011648	CS	*UNKNOWN	4.01
Stella AVE	MA00013022	94.49	300	MH00011489	MH00011622	CS	*UNKNOWN	3.50
Stephens ST	MA00015857	68.12	300	MH00014086	MH00014087	CS	CLAY	2.67
Stephens ST	MA00015870	30.12	450	MH00014082	MH00014130	CS	*UNKNOWN	3.21

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Sutherland AVE	MA00012969	95.10	*UNKNOWN	MH00011591	MH00011590	CS	*UNKNOWN	2.99
Sutherland AVE	MA00014059	46.40	750	MH00012528	MH00012527	CS	CONCRETE	0.00
Tecumseh ST	MA20018294	80.77	300	MH20017748	MH20016415	CS	*UNKNOWN	0.00
Toronto ST	MA20015522	108.76	300	MH20014012	MH20013998	CS	CLAY	4.02
Toronto ST	MA20017152	118.00	300	MH20015392	MH20015651	CS	BRICK	0.00
Toronto ST	MA20017441	110.76	375	MH20015649	MH20015656	CS	BRICK	0.00
Toronto ST	MA20017626	80.56	450	MH20015816	MH20015810	CS	BRICK	2.82
Toronto ST	MA20017892	66.02	300	MH20016007	MH20015307	CS	*UNKNOWN	2.98
Vaughan ST	MA70040506	110.60	300	MH70016158	MH20013487	CS	CLAY	0.00
Victor ST	MA20017451	89.92	450	MH20015664	MH20015755	CS	CLAY	0.00
Victor ST	MA20017562	99.06	600	MH20015790	MH20015759	CS	CONCRETE	0.00
Victor ST	MA20017597	99.97	450	MH20015797	MH20015790	CS	CONCRETE	0.00
Victor ST	MA20017602	100.59	450	MH20015792	MH20015797	CS	CONCRETE	0.00
Victor ST	MA20017613	94.18	300	MH20015805	MH20016028	CS	CONCRETE	2.77
Victor ST	MA20017614	94.79	375	MH20015805	MH20015806	CS	CONCRETE	0.00
Victor ST	MA20018031	86.48	375	MH70008229	MH20016152	CS	*UNKNOWN	0.00
Victor ST	MA70001948	74.07	300	MH70000790	MH20013991	CS	*UNKNOWN	2.82
Walnut ST	MA20015049	9.11	375	MH20013568	MH20013569	CS	CLAY	5.35
Walnut ST	MA20015377	131.67	1200X1550	MH20013884	MH20013863	CS	*UNKNOWN	7.42
Wardlaw AVE	MA60018415	77.72	300	MH60013632	MH60013633	CS	CLAY	3.43
Wardlaw AVE	MA60018419	96.39	375	MH60013636	MH60013640	CS	CLAY	0.00
Wardlaw AVE	MA60020147	48.89	300	MH60017458	MH60017459	CS	CLAY	3.04
Wardlaw AVE	MA60020280	87.64	375	MH60017472	MH60017537	CS	CLAY	0.00
Waterfront DR	MA20013461	100.89		MH20012184	MH20012245	CS		0.00
Wellington AVE	MA20017810	6.27	900	MH20015932	MH20015931	CS	CONCRETE	0.00
Wellington AVE	MA20017998	78.71	300	MH20016105	MH20016107	CS	*UNKNOWN	3.12
Wellington AVE	MA20018017	72.54	300	MH20016120	MH20016107	CS	*UNKNOWN	3.28
West Gate	MA20013638	44.20	300	MH20012360	MH20012351	CS	CONCRETE	3.27
West Gate	MA20013645	27.43	300	MH20012358	MH20012359	CS	CONCRETE	2.64
West Gate	MA20013646	37.35	300	MH20012359	MH20012360	CS	CONCRETE	2.92
West Gate	MA20013687	77.11	375	MH20012396	MH20012397	CS	CLAY	4.26
Westminster AVE	MA20015072	77.35	300	MH20013813	MH70022301	CS	PVC	6.02
Westminster AVE	MA20015076	81.00	750	MH20013588	MH20013811	CS	CONCRETE	0.00
William AVE	MA20019491	82.16	300	MH20017498	MH70005321	CS	*UNKNOWN	0.00
Winnipeg AVE	MA20018151	115.82	300	MH20016256	MH20016241	CS	*UNKNOWN	0.00
Wolseley AVE	MA20011547	124.13	300	MH20010523	MH20010528	CS	*UNKNOWN	2.99

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Wolseley AVE	MA20011554	45.40	300	MH20010531	MH20010528	CS	*UNKNOWN	3.17
Wolseley AVE	MA20011570	81.08	375	MH20010549	MH20012447	CS	*UNKNOWN	0.00
Wolseley AVE	MA20013872	70.25	300	MH20012582	MH20012599	CS	*UNKNOWN	0.00
Wolseley AVE	MA20013916	81.19	300	MH20012632	MH20012604	CS	*UNKNOWN	0.00
Wolseley AVE	MA20013953	26.20	300	MH20012640	MH70006098	CS	CLAY	0.00
Wolseley AVE	MA20013970	93.27	300	MH20012646	MH20012658	CS	CLAY	0.00
Wolseley AVE	MA20020028	60.05	300	MH20012640	MH20012646	CS		0.00
Yarwood AVE	MA20010185	84.77	375	MH20009304	MH20009305	CS	*UNKNOWN	0.00
Young ST	MA20014538	72.55	300	MH20013131	MH20013246	CS	*UNKNOWN	0.00
Young ST	MA20014732	90.83	300	MH20013296	MH20013312	WWS	CLAY	0.00
Young ST	MA20014733	94.49	300	MH20013312	MH20013311	WWS	CLAY	0.00
Young ST	MA20016457	88.53	300	MH20014810	MH20014828	CS	*UNKNOWN	0.00
Young ST	MA20016482	134.89	300	MH20014828	MH20014897	CS	*UNKNOWN	0.00
Young ST	MA20016919	121.44	300	MH20015264	MH20015200	CS	*UNKNOWN	0.00