



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 564-2005

**SEWER CLEANING AND INSPECTION - HERITAGE AND AINSLIE WASTEWATER
SEWER DISTRICTS - CONTRACT NO. 43**

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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 SEWER CLEANING AND INSPECTION - HERITAGE AND AINSLIE WASTEWATER SEWER DISTRICTS - CONTRACT NO. 43

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, October 28, 2005.

B2.2 Bid Submissions determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.

B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

B3.1 Further to GC:3.1, the Bidder may view the Site without making an appointment.

B3.2 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 Contractors/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 D4.1.

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

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

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

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

B5. ADDENDA

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

B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

- B6.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

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

B7. BID SUBMISSION

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

B8. BID

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

- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.
- B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 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 The Work to be done under the Contract shall consist of the cleaning and inspection of all wastewater sewers and manholes in the Heritage and Ainslie Wastewater Sewer Districts in the City of Winnipeg.

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
- (a) "NAAPI" means North American Association of Pipeline Inspectors ;
 - (b) "WRc" means "Water Research Centre". The NAAPI accepted standard for sewer condition coding and assessment was originally drafted by WRc. ;

D4. CONTRACT ADMINISTRATOR

- D4.1 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
- D4.2 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.

D5. CONTRACTOR'S SUPERVISOR

- D5.1 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.

D6. NOTICES

- D6.1 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.
- D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D6.3 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
- D6.4 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

D7. FURNISHING OF DOCUMENTS

- D7.1 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

D8. SAFE WORK PLAN

- D8.1 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.
- D8.2 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>.

D9. INSURANCE

- D9.1 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;

D9.2 Deductibles shall be borne by the Contractor.

D9.3 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.

D9.4 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.

D10. PERFORMANCE SECURITY

D10.1 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.

D10.1.1 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.

D10.2 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.

D11. SECURITY CLEARANCE

D11.1 Each individual proposed to perform Work:

- (i) on private property;

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

D11.2 Prior to the commencement of any Work, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract

Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform Work within City facilities or on private property.

- D11.3 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.
- D11.4 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.
- D11.5 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

D12. COMMENCEMENT

- D12.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.
- D12.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (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 D8;
 - (iv) evidence of the insurance specified in D9;
 - (v) the performance security specified in D10;
 - (vi) the security clearances specified in D11;
 - (vii) the sample inspection video and data file for each CCTV camera as specified in CW 2145;
 - (viii) operator and coder Certification as specified in CW 2145.
 - (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.
- D12.3 Commencement of the Work shall be at the discretion of the Contractor provided the commencement date will allow for the achievement of Substantial Performance in accordance with D15.

D13. HOURS OF WORK

- D13.1 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.

D13.2 No Work shall be performed outside the hours stated in D13.1 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.

D14. WORKING DAYS

D14.1 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 as specified in D13, these days shall be classified as Working Days.

D14.2 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.

D14.3 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.

D14.4 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.

D14.5 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.

D15. SUBSTANTIAL PERFORMANCE

D15.1 The Contractor shall achieve Substantial Performance within sixty (60) consecutive Working Days of the commencement of the Work as specified in D12 or by October 2, 2006, whichever occurs first.

D15.2 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.

D15.3 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.

D16. TOTAL PERFORMANCE

D16.1 The Contractor shall achieve Total Performance within ten (10) consecutive Working Days of the date of Substantial Performance as specified in D15.

D16.2 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.

D16.3 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.

D17. LIQUIDATED DAMAGES

D17.1 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.

D17.2 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 five hundred dollars (\$500) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

D17.3 The amount specified for liquidated damages in D17.1 and D17.2 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Substantial or Total Performance by the days fixed herein for same.

D17.4 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D18. JOB MEETINGS

D18.1 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.

D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D19.1 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 D10)

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. 564-2005

SEWER CLEANING AND INSPECTION - HERITAGE AND AINSLIE WASTEWATER SEWER DISTRICTS
- CONTRACT NO. 43

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

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

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

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

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

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

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

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

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)**
(See D10)

(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 564-2005

SEWER CLEANING AND INSPECTION - HERITAGE AND AINSLIE WASTEWATER SEWER DISTRICTS
- CONTRACT NO. 43

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding
in the aggregate

_____ Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

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

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

(Date)

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

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

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

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

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

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
D-8211	Water Supply Hose Traffic Ramp
1	Ainslie Wastewater Sewer District
2	Heritage Wastewater Sewer District

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 to allow for completion or inspection the Work.

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:
- Determine the number of hydrants to be used at any one time and arrange for an equal number of "various locations" hydrant use permits to be obtained for the Contract. The number of hydrants used for water supply shall not exceed the number of permits taken out. The Bid Opportunity number shall be noted on each permit.
 - 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.
 - WSD may at their discretion, instruct the Contractor to make the following arrangements for hydrant turn-ons and turn-offs:

- (i) Contact WSD for hydrant turn-ons and turn-offs required between 0800 hours and 1500 hours Monday to Friday. Notice for turn-ons and turn-offs shall be provided on the previous business day.
 - (ii) Contact Emergency Services Branch (986-2626) with a minimum of 2 hours notice for hydrant turn-ons and turn-offs required outside of the above hours.
 - (iii) The Contractor shall wait at the hydrant from the requested turn-on or turn-off time until the City arrives to turn on or turn off the hydrant.
- (f) 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.
- (g) 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.
- (h) 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.
- (i) 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.

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. DEBRIS DISPOSAL

E4.1 This specification amends and supplements specification CW 2140.

E4.2 If the Contractor intends to use a sewer debris transfer/dewatering facility, this facility must meet all Provincial and local government environmental regulations and requirements. If this facility is located within the City of Winnipeg it must also be approved by the Industrial Waste Control Branch of the Water and Waste Department.

E4.2.1 Provide the Contract Administrator with copies of any required licences, permits or relevant documentation prior to the use of any debris transfer facility.

E4.3 Revise clause 3.9.2 to read “Decant excess water from all debris removed from sewers and catch basins. Debris is to have a maximum slump of 150 millimetres, when tested in accordance with CSA A23.2-5C, prior to disposal.”

E4.4 Further to clause 3.9.4, debris removed from City sewers may be taken to the BFI disposal facility in Rosser as an alternate disposal site to the Brady Road Landfill. The City does not guarantee that BFI will accept sewer debris and will not compensate the Contractor for extra travel time for disposal at Brady Road Landfill.

E4.4.1 All liquid, either decanted from debris on site or from any dewatering facility, must be returned to the sewer of origin as soon as possible.

E4.4.2 All vehicles used to transport liquid sewage within City limits must be licensed by the Industrial Waste Control Branch of the Water and Waste Department.

- E4.5 Further to clause 3.9.5, Brady Road Landfill will now be charging the Contractor for the disposal of all debris.
- E4.6 Further to clause 3.10.1, all debris removed from Catch Basins must be handled as specified in section 3.9 and shall be disposed of at a landfill facility as described herein for sewer debris.
- E4.7 Debris disposal shall be measured on a weight basis and paid for at the Contract Unit Price per tonne for "Debris Disposal". The Weight to be paid for shall be the total number of tonnes of sewer debris properly disposed of, accepted and measured by the Contract Administrator, which price shall be payment in full for performing all operations herein described and all other items incidental to the disposal of sewer or catch basin debris.
- E4.7.1 Provide weigh tickets obtained from disposal facility to the Contract Administrator. Payment will only be made upon receipt of weigh tickets.
- E4.7.2 The Contractor is to ensure that the tare weight given to the scale at the landfill includes any onboard flushing water. The Contract Administrator may require that combination units used to dispose of debris be weighed immediately after the debris has been dumped to confirm vehicle tare weights.
- E4.7.3 The Contractor is to ensure that only debris originating from sewers cleaned under this Contract is measured for payment.

E5. SEWER AND MANHOLE INSPECTION

- E5.1 This specification amends and supplements specification CW 2145.
- E5.2 Further to section 3.8, the requirements stated for capture of digital inspections are a minimum only. The Contractor may need to record at a higher resolution in order to achieve the required video quality.
- E5.3 Further to section 3.17, inspections must be made with adequate lighting free of shadows or glare with two full pipe segments illuminated and visible at all times. Picture quality must be such that the condition of the sewer can be accurately assessed. Dark, grainy, out-of-focus inspections will not be accepted.
- E5.4 Further to section 3.17, a flusher must be used during all inspections to remove any debris in the pipe that may have accumulated since cleaning and to reduce the flow in the pipe to a minimum.
- E5.5 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 on-site inspector should be approached for assistance/clarification.
- E5.5.1 The Contractor shall note the exact details and measurements of any discrepancies on a "GIS Error Identification Form" which will be provided in MS Word or another format suitable to the Contractor along with a "PDF" map of the district for use in the Inspection Vehicle.
- E5.5.2 GIS Error Identification Forms should be submitted to the on-site inspector the same day that the error is discovered.

E6. TRAFFIC CONTROL AND MAINTENANCE OF ACCESS

- E6.1 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.

- E6.2 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 and other hours as directed by the Contract Administrator.
- E6.3 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.
- E6.4 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.
- E6.5 The following is a list of the Regional Streets in the Ainslie and Heritage Wastewater Sewer Districts:
- (a) Moray St.
 - (b) Ness Ave.
 - (c) Portage Ave.
 - (d) Saskatchewan Ave.
 - (e) Sturgeon Rd.
- E6.6 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.
- E6.7 Erect signs no sooner than 24 hours before the Work commences at a particular location.
- E6.8 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.
- E6.9 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.
- E6.10 Return signs immediately upon completion of the Work.
- E6.11 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.
- E6.12 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.
- E7. NOTICES TO RESIDENTS**
- E7.1 This specification amends and supplements specifications CW 2140 and CW 2145.
- E7.2 The Contractor shall deliver notices, provided by the Contract Administrator, to residents connected to sewers where high pressure flushing is to be used for either cleaning or inspection.
- E7.2.1 Notices will explain the cleaning and inspection program and how it may affect residences as well as some precautions to take to prevent backup.
 - E7.2.2 Notices will contain the phone numbers of the Contractor's 24-hour cleaning contact as specified in E8 and the Water and Waste Department's Call Centre.

E7.3 Deliver notices 48 hours prior to the use of flushing equipment or as directed by the Contract Administrator.

E7.4 All costs associated with delivering notices shall be included in the price bid for "Sewer Cleaning".

E8. SEWER BACKUP ON RESIDENTIAL SERVICES

E8.1 This specification amends and supplements specifications CW 2140 and CW 2145.

E8.2 Further to section 3.5 of CW 2140, sewer backup or blow-back on residential services resulting from cleaning or inspection activities is not acceptable and shall be avoided at all costs.

E8.3 The Contractor is responsible for any damage caused to private property as a result of cleaning or inspection operations and the cost of repairs shall be at the Contractors own expense.

E8.4 It is expected that where a possibility exists for sewer service backup or blow-back the Contractor shall take appropriate measures such as turning down the pressure on cleaning equipment and taking additional time to clean such sewers.

E8.5 Upon being notified by a resident or the City of a sewer service backup the Contractor must take immediate action to completely clean and disinfect all flooded or contaminated areas and replace or make any required repairs to contaminated building materials such as drywall, insulation, carpets or sub-floors.

E8.5.1 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.

E8.5.2 The Contractor shall provide the Contract Administrator with a 24hr contact number of a cleaning service or individual for residents to call to arrange for immediate clean-up of sewer service back-ups. This contact number will be included in the residential notices described in E7.

E8.6 If required repairs are not made in a timely manner or to the satisfaction of the Contract Administrator the City may hire a qualified water damage restoration contractor to investigate, cleanup and make any required repairs to residences affected by sewer backups caused by the Contractor. The cost of all repairs and fees shall be deducted from future progress payments owing to the Contractor.

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Ainslie WWSD
Bid Opportunity 564-2005

STREET	ASSET NO.	US_NODE	DS_NODE	SIZE	MATERIAL	LENGTH	FLOW	DEPTH	MAP_KEY
Ainslie ST	MA20005702	MH20005283	MH20005224	600	CONCRETE	103.420	CS	6.806	R8
Ainslie ST	MA20005703	MH20005224	MH20005229	750	CONCRETE	39.675	CS	7.159	R8
Ainslie ST	MA20005711	MH20005229	MH20005230	750	CONCRETE	30.175	CS	7.228	R8
Ainslie ST	MA20005759	MH20005338	MH20005283	600	CONCRETE	88.700	CS	6.371	Q8
Ainslie ST	MA20005815	MH20005339	MH20005336	600	CONCRETE	108.510	CS	6.471	P8
Ainslie ST	MA20005816	MH20005336	MH20005337	600	CONCRETE	88.700	CS	6.788	Q8
Ainslie ST	MA20005817	MH20005337	MH20005338	600	CONCRETE	5.300	CS	0.000	Q8
Ainslie ST	MA20005818	MH20005351	MH20005339	600	CONCRETE	91.470	CS	6.459	P8
Ainslie ST	MA20005830	MH20005350	MH20005351	600	CONCRETE	105.770	WWS	7.060	O8
Ainslie ST	MA20005831	MH20005365	MH20005350	600	CONCRETE	106.970	WWS	6.828	O8
Ainslie ST	MA20006396	MH20005957	MH20005882	600	CONCRETE	112.290	WWS	6.712	N8
Ainslie ST	MA20006402	MH20005882	MH20005365	600	CONCRETE	107.050	WWS	6.477	N8
Ainslie ST	MA20006490	MH20005967	MH20005968	600	CONCRETE	116.590	WWS	6.767	M8
Ainslie ST	MA20006491	MH20005968	MH20005957	600	CONCRETE	98.890	WWS	6.630	M8
Aldine ST	MA20005770	MH20005300	MH20005286	250	CLAY	101.800	CS	4.663	Q7
Aldine ST	MA20005780	MH20005301	MH20005300	250	CLAY	104.020	CS	4.201	Q7
Aldine ST	MA20005781	MH20005305	MH20005301	250	CLAY	104.240	CS	4.194	P7
Aldine ST	MA20005787	MH20005331	MH20005305	250	CLAY	103.940	CS	3.883	P7
Aldine ST	MA20005789	MH20005311	MH20005331	250	CLAY	102.720	WWS	3.755	O7
Aldine ST	MA20005790	MH20005312	MH20005311	250	CLAY	100.910	WWS	3.447	O7
Aldine ST	MA20005791	MH20005891	MH20005312	250	CLAY	101.190	WWS	2.929	N7
Aldine ST	MA20006404	MH20005883	MH20005963	250	CONCRETE	75.900	WWS	2.713	N7
Aldine ST	MA20006486	MH20005962	MH20005965	250	CONCRETE	86.870	WWS	3.810	M7
Aldine ST	MA20006487	MH20005963	MH20005962	250	CONCRETE	91.740	WWS	3.170	M7
Aldine ST	MA20006488	MH20005965	MH20005964	250	CONCRETE	41.140	WWS	4.145	L7
Assiniboine CRES	MA20005005	MH20004596	MH20004597	375	CONCRETE	68.270	CS	3.485	S8
Assiniboine CRES	MA20005006	MH20004597	MH20004911	375	CONCRETE	86.350	CS	3.790	S9
Assiniboine CRES	MA20005062	MH20004630	MH20004632	250	CONCRETE	42.010	CS	2.698	S6
Assiniboine CRES	MA20005064	MH20004632	MH20004633	250	CONCRETE	47.030	CS	2.698	S6
Assiniboine CRES	MA20005065	MH20004633	MH20004634	375	CONCRETE	51.210	CS	3.545	S6
Assiniboine CRES	MA20005066	MH20004634	MH20004647	375	CONCRETE	115.910	CS	5.529	S6
Assiniboine CRES	MA20005081	MH20004647	MH20004648	375	CONCRETE	117.560	CS	5.105	S7

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STREET	ASSET NO.	US_NODE	DS_NODE	SIZE	MATERIAL	LENGTH	FLOW	DEPTH	MAP_KEY
Assiniboine CRES	MA20005082	MH20004648	MH20004596	375	CONCRETE	118.610	CS	4.241	S8
Assiniboine CRES	MA20005364	MH20004911	MH20004922	375	CONCRETE	91.730	CS	3.960	S9
Assiniboine CRES	MA20005370	MH20004918	MH20004917	300	CONCRETE	71.790	CS	4.106	S10
Assiniboine CRES	MA20005371	MH20004919	MH20004918	300	CONCRETE	5.056	CS	3.380	S10
Assiniboine CRES	MA20005372	MH20004917		750	*UNKNOWN	14.110	CS	0.000	S10
Assiniboine CRES	MA20005378	MH20004922	MH20004917	750	*UNKNOWN	35.200	CS	4.113	S9
Assiniboine CRES	MA20005379	MH20004923	MH20004922	750	CONCRETE	10.668	CS	4.078	S9
Assiniboine CRES	MA20005394	MH20004937	MH20004919	300	CONCRETE	123.380	CS	3.237	R10
Assiniboine CRES	MA20005669	MH20005200	MH20004630	250	*UNKNOWN	41.800	CS	4.402	S6
Assiniboine CRES	MA20005671	MH20005191	MH20005190	250	CONCRETE	85.430	CS	3.402	S5
Assiniboine CRES	MA20005680	MH20005190	MH20005200	250	*UNKNOWN	42.440	CS	3.555	S6
Assiniboine CRES	MA20020006	MH20004962	MH20004937	300	CONCRETE	102.730	CS	2.309	R10
Athlone DR	MA20000044	MH20005854	MH20000300	250	CONCRETE	68.580	WWS	3.279	L3
Athlone DR	MA20000116	MH20000073	MH20000072	250	CONCRETE	85.350	WWS	3.384	M2
Athlone DR	MA20000129	MH20000121	MH20000073	250	CONCRETE	79.550	WWS	3.280	M2
Athlone DR	MA20000170	MH20000199	MH20000121	250	CONCRETE	83.670	WWS	2.896	M2
Athlone DR	MA20000267	MH20000299	MH20000211	250	CONCRETE	85.360	WWS	3.109	L2
Athlone DR	MA20000354	MH20000300	MH20000301	250	CONCRETE	104.970	WWS	4.023	L3
Athlone DR	MA20000355	MH20000301	MH20000299	250	CONCRETE	106.680	WWS	3.767	L2
Athlone DR	MA20005628	MH20005149	MH20005148	250	CONCRETE	102.339	WWS	2.865	O3
Athlone DR	MA20005629	MH20005151	MH20005149	250	CONCRETE	71.360	WWS	3.201	O3
Athlone DR	MA20005630	MH20005151	MH20005150	250	CONCRETE	82.390	WWS	3.048	O3
Athlone DR	MA20006341	MH20005826	MH20005827	250	CONCRETE	86.750	WWS	2.713	M4
Athlone DR	MA20006342	MH20005827	MH20005828	250	CONCRETE	88.270	WWS	3.017	M4
Athlone DR	MA20006343	MH20005828	MH20005840	250	CONCRETE	87.720	WWS	3.445	M4
Athlone DR	MA20006353	MH20005839	MH20005838	250	CONCRETE	101.800	WWS	0.000	N3
Athlone DR	MA20006354	MH20005840	MH20005839	250	CONCRETE	93.570	WWS	3.962	M3
Athlone DR	MA20006355	MH20005150	MH20005838	250	CONCRETE	81.080	WWS	0.000	N3
Booth DR	CL20003891	TE70020143	MH70019577	150	*UNKNOWN	18.370	WWS	0.000	O3
Booth DR	MA20000124	MH20000081	MH20000082	450	CONCRETE	92.960	WWS	4.054	M2
Booth DR	MA20000125	MH20000083	MH20000008	450	CONCRETE	78.334	WWS	4.087	N3
Booth DR	MA20000126	MH20000082	MH20000083	450	CONCRETE	80.951	WWS	3.962	N2
Booth DR	MA20000130	MH20000084	MH20000080	450	CONCRETE	95.400	WWS	3.048	M1

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Booth DR	MA20003573	MH20003569	MH20005153	600	CONCRETE	110.890	WWS	4.480	P3
Booth DR	MA20003892	MH20003570	MH20003569	600	CONCRETE	107.660	WWS	4.267	O3
Booth DR	MA20004996	MH20000008	MH20003570	600	CONCRETE	106.890	WWS	4.389	O3
Booth DR	MA20005631	MH20005153	MH20005152	600	*UNKNOWN	83.515	WWS	3.981	P3
Booth DR	MA20005633	MH20005152	MH20005154	600	*UNKNOWN	85.952	WWS	0.000	P3
Bourkewood PL	MA20006243	MH20005722	MH20005717	250	CLAY	74.357	CS	5.486	L10
Bourkewood PL	MA20006247	MH20005753	MH20005720	250	CLAY	84.280	CS	3.841	L11
Bourkewood PL	MA20006249	MH20005723	MH20005722	250	CLAY	17.980	CS	4.025	L10
Bourkewood PL	MA20006256	MH20005720	MH20005722	250	CLAY	37.800	CS	4.450	L11
Bourkewood PL	MA20006277	MH20005790	MH20005753	250	CLAY	83.520	CS	3.825	L11
Bourkewood PL	MA20006315	MH20005816	MH20005790	250	CLAY	89.000	CS	4.023	L12
Bourkewood PL	MA20006332	MH20005812	MH20005813	250	CLAY	109.450	CS	2.529	K12
Bourkewood PL	MA20006333	MH20005815	MH20005816	250	CLAY	106.070	CS	3.810	L12
Bourkewood PL	MA20006334	MH20005813	MH20005815	250	CLAY	105.430	CS	3.048	K12
Braintree CR	MA20006084	MH20005586	MH20005583	250	CLAY	76.100	WWS	5.621	L8
Braintree CRES	MA20006070	MH20005596	MH20005571	250	CLAY	79.250	WWS	5.140	L9
Braintree CRES	MA20006088	MH20005605	MH20005587	250	CLAY	109.730	WWS	3.231	J9
Braintree CRES	MA20006100	MH20005670	MH20005599	250	CLAY	103.630	WWS	4.541	L10
Braintree CRES	MA20006101	MH20005599	MH20005596	250	CLAY	101.640	WWS	4.720	L9
Braintree CRES	MA20006186	MH20005697	MH20005670	250	CLAY	42.710	WWS	3.867	L10
Braintree CRES	MA20006545	MH20006019	MH20006018	250	CONCRETE	79.260	WWS	4.602	L8
Braintree CRES	MA20006548	MH20006074	MH20006019	250	CONCRETE	104.700	WWS	4.420	K8
Braintree CRES	MA20006606	MH20005587	MH20006073	250	CONCRETE	111.270	WWS	3.475	J8
Braintree CRES	MA20006607	MH20006073	MH20006074	250	CONCRETE	105.350	WWS	3.718	K8
Braintree RD	MA20006087	MH20005571	MH20005586	250	CLAY	64.790	WWS	4.563	L8
Braintree RD	MA20006544	MH20006018	MH20005586	250	CONCRETE	93.720	WWS	4.030	L8
Bruce AVE	MA20000039	MH20005838	MH20000018	300	CONCRETE	69.440	WWS	3.530	N3
Bruce AVE	MA20000127	MH20000018	MH20000008	300	CONCRETE	71.930	WWS	4.514	N3
Bruce AVE	MA20006056	MH20005552	MH20005558	300	CLAY	70.532	WWS	5.090	N8
Bruce AVE	MA20006064	MH20005566	MH20005552	300	CLAY	98.510	WWS	4.295	N9
Bruce AVE	MA20006346	MH20005876	MH20005837	250	CONCRETE	96.620	WWS	3.170	N4
Bruce AVE	MA20006351	MH20005836	MH20005838	250	CONCRETE	67.970	WWS	3.255	N3

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Bruce AVE	MA20006352	MH20005837	MH20005836	250	CONCRETE	68.580	WWS	3.761	N4
Bruce AVE	MA20006403	MH20005558	MH20005882	300	CONCRETE	95.455	WWS	6.712	N8
Caron AVE	MA20000131	MH20000208	MH20000084	450	CONCRETE	96.100	WWS	3.749	M1
Cornwall BLVD	MA20006106	MH20005605	MH20005604	250	CLAY	112.471	WWS	0.000	J9
Cornwall BLVD	MA20006111	MH20005604	MH20005662	250	CLAY	109.309	WWS	3.139	J10
Cornwall BLVD	MA20006171	MH20005662	MH20005661	250	CLAY	97.270	WWS	3.505	K10
Cornwall BLVD	MA20006187	MH20005660	MH20005670	250	CLAY	96.010	WWS	4.247	L10
Cornwall BLVD	MA20006189	MH20005661	MH20005660	250	CLAY	96.010	WWS	3.963	K10
Cree CRES	MA20006654	MH20006122	MH20006195	250	CONCRETE	110.770	WWS	3.813	G6
Cree CRES	MA20006656	MH20006124	MH20006122	250	CONCRETE	109.660	WWS	3.515	G5
Cree CRES	MA20006657	MH20006125	MH20006124	250	CONCRETE	100.630	WWS	3.301	G4
Cree CRES	MA20006658	MH20006126	MH20006125	250	CONCRETE	94.800	WWS	3.194	G4
Cree CRES	MA20006723	MH20006186	MH20006249	300	CONCRETE	116.430	WWS	3.871	F6
Cree CRES	MA20006724	MH20006188	MH20006187	300	CONCRETE	59.110	WWS	3.676	H6
Cree CRES	MA20006725	MH20006187	MH20006186	300	CONCRETE	116.040	WWS	3.776	G6
Cree CRES	MA20006731	MH20006195	MH20006208	250	CONCRETE	109.350	WWS	2.466	H6
Cree CRES	MA20006745	MH20006208	MH20006188	250	CONCRETE	25.390	WWS	3.444	H6
Easement	MA20000374	MH20000327	MH20000317	250	*UNKNOWN	60.777	WWS	2.683	K2
Easement	MA20000376	MH20000328	MH20000317	300	*UNKNOWN	54.559	WWS	2.683	K2
Easement	MA20006223	MH20005699	MH20005697	250	CLAY	101.514	WWS	3.997	L10
Easement	MA20006224	MH20005698	MH20005699	250	CLAY	105.913	WWS	3.760	K10
Easement	MA20006225	MH20005700	MH20005698	250	CONCRETE	105.996	WWS	3.145	K10
Easement	MA20006567	MH20006035	TE20001212	200	*UNKNOWN	14.623	WWS	0.000	K6
Easement	MA20006746	MH20006188	MH20006209	250	CONCRETE	84.520	WWS	3.581	H7
Easement	MA20006747	MH20006209	MH20006193	300	CONCRETE	119.322	WWS	3.100	H7
Easement	MA70023290	MH70008245	MH70008246	250	CLAY	116.438	WWS	0.000	K10
Easement	MA70023291	MH70008246	MH20005722	250	CLAY	119.790	WWS	0.000	L10
Easement	MA70046248	MH70019577	MH70019575	150	*UNKNOWN	24.000	WWS	3.310	O3
Emerald Grove DR	MA20000419	MH20000363	MH20000362	250	CONCRETE	30.780	WWS	3.032	J2
Emerald Grove DR	MA20000420	MH20000370	MH20000362	250	CONCRETE	16.610	WWS	3.398	J2
Emerald Grove DR	MA20000426	MH20000367	MH20000370	250	CONCRETE	68.880	WWS	3.341	J2
Emerald Grove DR	MA20000427	MH20000368	MH20000367	250	CONCRETE	88.390	WWS	3.490	J2

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Emerald Grove DR	MA20000428	MH20000369	MH20000368	250	CONCRETE	21.030	WWS	3.109	J3
Emerald Grove DR	MA20000429	MH20000369	MH20000374	250	CONCRETE	82.530	WWS	2.896	J2
Emerald Grove DR	MA20000430	MH20000376	MH20000370	300	CONCRETE	91.396	WWS	0.000	J2
Emerald Grove DR	MA20000433	MH20000374	MH20000375	250	CONCRETE	68.430	WWS	3.170	J2
Emerald Grove DR	MA20000434	MH20000375	MH20000376	250	CONCRETE	62.480	WWS	3.582	J2
Emerald Grove DR	MA20000435	MH20000373	MH20000377	250	CONCRETE	77.010	WWS	3.109	J2
Emerald Grove DR	MA20000436	MH20000377	MH20000376	250	CONCRETE	22.710	WWS	3.374	J2
Flamingo AVE	MA20000265	MH20000209	MH20000210	250	CONCRETE	115.820	WWS	5.303	L3
Flamingo PL	MA20000266	MH20000210	MH20000211	250	CONCRETE	85.380	WWS	3.109	L2
Flamingo PL	MA20000275	MH20000211	MH20000223	375	CONCRETE	92.913	WWS	3.697	L2
Golden Gate BAY	MA20005326	MH20004875	MH20004876	250	CONCRETE	101.250	WWS	3.100	O8
Golden Gate BAY	MA20005327	MH20004876	MH20004877	250	CONCRETE	82.320	WWS	3.081	O8
Golden Gate BAY	MA20005328	MH20004877	MH20004885	250	CONCRETE	120.250	WWS	3.990	O8
Harcourt ST	MA20005661	MH20005178	MH20005242	600	CONCRETE	97.392	WWS	5.297	Q5
Harcourt ST	MA20005662	MH20005187	MH20005179	250	CONCRETE	116.740	WWS	2.744	P5
Harcourt ST	MA20005663	MH20005179	MH20005178	250	CONCRETE	115.820	WWS	3.195	Q5
Harcourt ST	MA20005665	MH20005186	MH20005187	250	CONCRETE	119.350	WWS	2.615	O5
Harcourt ST	MA20005692	MH20005209	MH20005186	250	CONCRETE	110.640	WWS	3.535	O5
Harcourt ST	MA20005731	MH20005242	MH20005253	600	CONCRETE	3.929	WWS	0.000	Q5
Harcourt ST	MA20006370	MH20005859	MH20005902	250	CONCRETE	89.960	WWS	2.999	N5
Harcourt ST	MA20006384	MH20005870	MH20005209	250	CONCRETE	114.600	WWS	2.911	N5
Harcourt ST	MA20006419	MH20005902	MH20005903	250	CONCRETE	94.790	WWS	3.060	M5
Harcourt ST	MA20006420	MH20005903	MH20005923	250	CONCRETE	101.500	WWS	3.621	M5
Jameswood DR	MA20006233	MH20005711	MH20005712	250	CLAY	56.390	CS	3.139	J11
Jameswood DR	MA20006234	MH20005760	MH20005712	250	CLAY	110.280	CS	3.078	J11
Jameswood DR	MA20006285	MH20005814	MH20005760	250	CLAY	106.740	CS	2.774	J12
Ladywood DR	MA20006097	MH20005597	MH20005596	250	CLAY	7.619	WWS	4.720	L9
Ladywood DR	MA20006098	MH20005607	MH20005597	250	CLAY	105.760	WWS	4.750	L9
Ladywood DR	MA20006110	MH20005611	MH20005607	250	CLAY	106.680	WWS	3.292	K9
Lake ST	MA20005685	MH20005232	MH20005201	200	CONCRETE	127.710	CS	2.685	S6
Lake ST	MA20005686	MH20005201	MH20004634	200	CONCRETE	114.600	CS	2.534	S6
Leicester SQ	MA20006245	MH20005758	MH20005721	250	CLAY	79.210	CS	3.749	K11

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Leicester SQ	MA20006281	MH20005764	MH20005759	250	CONCRETE	67.604	CS	3.017	K11
Leicester SQ	MA20006282	MH20005759	MH20005758	250	CONCRETE	64.465	CS	3.475	K11
Leicester SQ	MA20006283	MH20005791	MH20005758	250	CLAY	98.340	CS	3.261	K11
Leicester SQ	MA20006289	MH20005804	MH20005764	250	CLAY	67.239	CS	2.712	K11
Leicester SQ	MA20006314	MH20005805	MH20005791	250	CLAY	89.620	CS	2.957	K11
Leicester SQ	MA20006327	MH20005822	MH20005804	250	CLAY	68.280	CS	2.682	K12
Listowel BAY	MA20006546	MH20006020	MH20006019	250	CLAY	79.240	WWS	3.749	K8
Listowel BAY	MA20006547	MH20006075	MH20006020	250	CLAY	82.020	WWS	3.505	K8
Listowel BAY	MA20006608	MH20006076	MH20006075	250	CLAY	73.150	WWS	2.865	K8
Lodge AVE	MA20005832	MH20004885	MH20005351	250	CONCRETE	89.630	CS	4.527	O8
Meadowlark PL	MA20000115	MH20000072	MH20000082	300	CONCRETE	97.530	WWS	3.749	M2
Meadowlark PL	MA20000128	MH20000198	MH20000072	250	CONCRETE	94.490	WWS	3.384	M2
Meadowlark PL	MA20000255	MH20000210	MH20000198	250	CONCRETE	94.340	WWS	3.536	L2
Moray ST	MA20005668	MH20005205	MH20004647	200	CONCRETE	83.829	CS	5.529	S7
Moray ST	MA20005678	MH20005223	MH20005205	200	CONCRETE	73.243	CS	3.530	S7
Moray ST	MA20005712	MH20005231	MH20005223	200	CONCRETE	73.670	CS	3.094	R7
Moray ST	MA20005758	MH20005335	MH20005282	250	CONCRETE	105.830	WWS	4.148	Q7
Moray ST	MA20005761	MH20005282	MH20005285	250	CONCRETE	114.180	WWS	4.539	R7
Moray ST	MA20005814	MH20005340	MH20005335	250	CLAY	114.670	WWS	4.133	P7
Moray ST	MA20005819	MH20005354	MH20005340	250	CLAY	106.280	WWS	3.965	P7
Moray ST	MA20005839	MH20005370	MH20005361	250	CLAY	107.590	WWS	3.322	O7
Moray ST	MA20005840	MH20005361	MH20005354	250	CLAY	107.200	WWS	3.612	O7
Moray ST	MA20005848	MH20005878	MH20005370	250	CLAY	101.960	WWS	2.957	N7
Moray ST	MA20006395	MH20005877	MH20005969	250	CLAY	104.240	WWS	2.941	N7
Moray ST	MA20006492	MH20005969	MH20005970	250	CLAY	106.070	WWS	3.261	M7
Moray ST	MA20006493	MH20005970	MH20006015	250	CLAY	101.350	WWS	6.675	M7
Moray ST	MA20006541	MH20006017	MH20006015	600	CONCRETE	115.640	WWS	6.828	L7
Moray ST	MA20006543	MH20006069	MH20006017	600	CONCRETE	98.282	WWS	6.694	K7
Moray ST	MA20006587	MH20006192	MH20006079	450	CONCRETE	103.814	WWS	5.276	H7
Moray ST	MA20006609	MH20006077	MH20006069	600	CONCRETE	128.014	WWS	6.167	K7
Moray ST	MA20006610	MH20006078	MH20006077	600	CONCRETE	118.872	WWS	6.057	J7
Moray ST	MA20006611	MH20006079	MH20006078	600	CONCRETE	76.548	WWS	5.801	J7

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Moray ST	MA20006627	MH20006095	MH20006307	300	CONCRETE	102.170	WWS	3.030	C7
Moray ST	MA20006628	MH20006096	MH20006095	300	CONCRETE	101.860	WWS	2.849	C7
Moray ST	MA20006629	MH20006094	MH20006096	300	CONCRETE	101.551	WWS	2.853	B8
Moray ST	MA20006729	MH20006193	MH20006192	300	CONCRETE	16.187	WWS	5.365	H7
Moray ST	MA20006730	MH20006194	MH20006192	450	CONCRETE	118.220	WWS	5.365	H7
Moray ST	MA20006735	MH20006241	MH20006199	450	CONCRETE	72.246	WWS	4.813	F7
Moray ST	MA20006736	MH20006199	MH20006194	450	CONCRETE	119.790	WWS	4.795	G7
Moray ST	MA20006780	MH20006242	MH20006241	300	CONCRETE	103.020	WWS	4.807	F7
Moray ST	MA20006808	MH20006266	MH20006242	300	CONCRETE	95.310	WWS	4.358	F7
Moray ST	MA20006810	MH20006288	MH20006266	300	CONCRETE	128.840	WWS	4.225	E7
Moray ST	MA20006830	MH20006289	MH20006288	300	CONCRETE	108.204	WWS	3.475	E7
Moray ST	MA20006850	MH20006307	MH20006306	300	CONCRETE	101.242	WWS	2.966	D7
Moray ST	MA20006851	MH20006306	MH20006289	300	CONCRETE	94.164	WWS	3.758	D7
Murray Park RD	MA20006664	MH20006133	MH20006135	250	CONCRETE	114.300	WWS	3.289	F5
Murray Park RD	MA20006665	MH20006134	MH20006133	250	CONCRETE	115.210	WWS	3.441	F4
Murray Park RD	MA20006667	MH20006135	MH20006182	250	CONCRETE	114.300	WWS	3.079	F5
Murray Park RD	MA20006720	MH20006182	MH20006223	300	CONCRETE	106.670	WWS	2.987	F6
Murray Park RD	MA20006761	MH20006223	MH20006249	300	CONCRETE	121.920	WWS	0.000	F6
Murray Park RD	MA20006787	MH20006249	MH20006260	375	CONCRETE	83.820	WWS	1.036	F7
Murray Park RD	MA20006801	MH20006260	MH20006241	375	CONCRETE	102.920	WWS	4.807	F7
Ness AVE	MA20000350	MH20000298	MH20000291	250	CONCRETE	111.560	WWS	3.270	K2
Ness AVE	MA20000352	MH20000297	MH20000298	250	CONCRETE	110.950	WWS	3.220	K3
Ness AVE	MA20000353	MH20000021	MH20000297	250	CONCRETE	100.120	WWS	3.720	K3
Ness AVE	MA20006083	MH20005588	MH20005583	250	AC	92.810	WWS	5.764	L8
Ness AVE	MA20006089	MH20005603	MH20005588	250	AC	95.050	WWS	5.943	L9
Ness AVE	MA20006105	MH20005651	MH20005603	250	AC	93.880	WWS	5.882	L9
Ness AVE	MA20006242	MH20005743	MH20005717	250	AC	107.530	WWS	4.423	L11
Ness AVE	MA20006268	MH20005797	MH20005743	250	CONCRETE	110.030	WWS	3.379	L11
Ness AVE	MA20006321	MH20005819	MH20005797	250	CONCRETE	101.580	WWS	3.012	L12
Ness AVE	MA20006496	MH20005583	MH20005967	250	CONCRETE	53.600	WWS	6.285	L8
Ness AVE	MA20006497	MH20006015	MH20005967	600	CONCRETE	100.680	WWS	6.285	L8
Ness AVE	MA20006510	MH20005985	MH20006009	375	CONCRETE	120.660	WWS	4.633	L6

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STREET	ASSET NO.	US_NODE	DS_NODE	SIZE	MATERIAL	LENGTH	FLOW	DEPTH	MAP_KEY
Ness AVE	MA20006533	MH20006006	MH20006015	375	CLAY	57.330	WWS	0.000	L7
Ness AVE	MA20006535	MH20006009	MH20006010	375	CLAY	82.000	WWS	4.350	L7
Ness AVE	MA20006536	MH20006010	MH20006006	375	CLAY	41.760	WWS	4.624	L7
Ness AVE	MA70016403	MH20005717	MH70006531	250	AC	91.990	WWS	5.579	L10
Ness AVE	MA70016404	MH70006531	MH20005651	250	AC	99.631	WWS	5.900	L10
Ness AVE	MA70028904	MH20005853	MH20000021	250	CONCRETE	55.170	WWS	3.280	K3
Nightingale RD	MA20005720	MH20005243	MH20005242	250	CONCRETE	106.070	WWS	3.780	Q5
Nightingale RD	MA20005721	MH20005266	MH20005243	250	CONCRETE	106.200	WWS	3.353	P5
Nightingale RD	MA20005743	MH20005265	MH20005266	250	CONCRETE	107.290	WWS	3.627	P5
Nightingale RD	MA20005744	MH20005267	MH20005265	250	CONCRETE	106.680	WWS	4.389	O5
Nightingale RD	MA20005745	MH20005268	MH20005267	250	CONCRETE	106.100	WWS	3.901	O5
Nightingale RD	MA20006378	MH20005867	MH20005268	250	CONCRETE	106.680	WWS	3.536	N5
Nightingale RD	MA20006379	MH20005897	MH20005867	250	CONCRETE	106.680	WWS	3.353	N5
Nightingale RD	MA20006418	MH20005901	MH20005897	250	CONCRETE	106.380	WWS	3.109	M5
Old Mill RD	MA20005620	MH20005143	MH20005214	250	CONCRETE	89.415	CS	2.515	R5
Old Mill RD	MA20005621	MH20005171	MH20005143	250	CONCRETE	65.714	CS	2.649	Q4
Old Mill RD	MA20005693	MH20005211	MH20005210	300	CONCRETE	66.843	CS	3.328	R5
Old Mill RD	MA20005695	MH20005214	MH20005211	300	CONCRETE	67.376	CS	2.956	R5
Old Mill RD	MA20005697	MH20005210	MH20005221	300	CONCRETE	88.010	CS	3.048	R5
Olive ST	MA20005380	MH20004924	MH20004923	750	CONCRETE	56.360	CS	3.764	S9
Olive ST	MA20005381	MH20004942	MH20004924	750	CONCRETE	113.350	CS	3.956	S9
Paisley PL	MA20006246	MH20005730	MH20005721	250	CONCRETE	105.000	CS	3.902	K11
Paisley PL	MA20006248	MH20005721	MH20005720	250	CONCRETE	79.190	CS	3.414	L11
Paisley PL	MA20006255	MH20005712	MH20005730	250	CLAY	105.950	CS	3.353	K11
Pinewood DR	MA20005336	MH20004886	MH20004887	200	CONCRETE	60.500	CS	2.048	S8
Pinewood DR	MA20005337	MH20004887	MH20004912	200	CONCRETE	69.810	CS	3.212	S8
Pinewood DR	MA20005365	MH20004912	MH20004911	200	CONCRETE	83.830	CS	4.822	S9
Pinewood DR	MA20005687	MH20005206	MH20005205	200	CONCRETE	115.320	CS	3.045	S7
Pinewood DR	MA20005688	MH20005206	MH20004886	200	CONCRETE	111.900	CS	2.362	S8
Portage AVE	MA20005333	MH20005233	MH20004883	750	CONCRETE	104.450	CS	7.119	R8
Portage AVE	MA20005334	MH20004833	MH20004898	750	CONCRETE	108.510	CS	7.209	R8
Portage AVE	MA20005349	MH20004898	MH20004942	750	CONCRETE	90.100	CS	6.944	R9

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STREET	ASSET NO.	US_NODE	DS_NODE	SIZE	MATERIAL	LENGTH	FLOW	DEPTH	MAP_KEY
Portage AVE	MA20005707	MH20005230	MH20005233	750	CONCRETE	60.330	CS	7.567	R8
Prairie View RD	MA20000045	MH20005857	MH20000333	250	CONCRETE	87.480	WWS	3.536	K3
Prairie View RD	MA20000388	MH20000362	MH20000328	300	CONCRETE	76.910	WWS	0.416	J2
Prairie View RD	MA20000389	MH20000335	MH20000328	250	CONCRETE	23.770	WWS	2.914	K2
Prairie View RD	MA20000393	MH20000332	MH20000335	250	CONCRETE	109.120	WWS	3.600	K2
Prairie View RD	MA20000394	MH20000333	MH20000332	250	CONCRETE	105.920	WWS	3.596	K3
Public Lane	MA20000387	MH20000334	MH20000327	250	*UNKNOWN	94.000	WWS	3.475	K2
Public Lane	MA20000391	MH20005856	MH20000331	250	*UNKNOWN	95.921	WWS	2.987	K3
Public Lane	MA20000392	MH20000331	MH20000334	250	*UNKNOWN	93.726	WWS	3.048	K3
Public Lane	MA20005626	MH20005146	MH20005178	600	CONCRETE	138.850	WWS	4.807	Q4
Public Lane	MA20005632	MH20005154	MH20005145	600	*UNKNOWN	81.380	WWS	2.972	P3
Public Lane	MA20005644	MH20005185	MH20005147	250	CONCRETE	106.980	WWS	0.000	O4
Public Lane	MA20005704	MH20005285	MH20005224	600	CONCRETE	107.700	CS	7.236	R7
Public Lane	MA20005718	MH20005239	MH20005275	600	CONCRETE	127.850	CS	5.974	Q6
Public Lane	MA20005732	MH20005253	MH20005239	600	CONCRETE	114.180	WWS	5.420	Q5
Public Lane	MA20005762	MH20005286	MH20005285	600	CONCRETE	106.070	CS	6.410	R7
Public Lane	MA20005771	MH20005275	MH20005286	600	CONCRETE	87.340	CS	6.666	Q6
Public Lane	MA20006364	MH20005851	MH20005852	250	CONCRETE	87.750	WWS	2.987	L4
Public Lane	MA20006365	MH20005852	MH20005922	250	CONCRETE	85.400	WWS	2.956	L4
Public Lane	MA20006366	MH20005855	MH20005856	250	*UNKNOWN	41.096	WWS	3.018	K3
Public Lane	MA20006444	MH20005922	MH20005923	250	CONCRETE	84.980	WWS	2.988	L5
Public Lane	MA20006445	MH20005923	MH20005924	300	CONCRETE	88.120	WWS	4.023	L5
Public Lane	MA20006489	MH20005964	MH20006006	250	CONCRETE	49.669	WWS	4.328	L7
Red Robin PL	MA20006344	MH20005829	MH20005840	250	CONCRETE	103.940	WWS	3.338	M4
Red Robin PL	MA20006345	MH20005830	MH20005829	250	CONCRETE	107.590	WWS	2.734	M4
Rita ST	MA20005350	MH20004899	MH20004898	250	CONCRETE	87.170	CS	5.217	R9
Rita ST	MA20005351	MH20004908	MH20004899	250	CONCRETE	111.570	CS	3.529	R9
Rita ST	MA20005361	MH20004910	MH20004908	250	CONCRETE	111.250	CS	3.484	Q9
Rita ST	MA20005363	MH20005037	MH20004910	250	CONCRETE	111.250	CS	3.209	P9
Rita ST	MA20005492	MH20005026	MH20005025	250	CONCRETE	100.400	WWS	3.243	O9
Rita ST	MA20005493	MH20005025	MH20005566	250	CLAY	100.890	WWS	3.234	N9
Rita ST	MA20005494	MH20005035	MH20005026	250	CONCRETE	100.330	WWS	3.328	O9

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Rita ST	MA20005504	MH20005035	MH20005036	250	CONCRETE	18.285	CS	2.878	O9
Rita ST	MA20005505	MH20005036	MH20005037	250	CONCRETE	111.840	CS	2.609	P9
Rita ST	MA20006049	MH20005569	MH20005568	250	CLAY	101.230	WWS	2.847	M9
Rita ST	MA20006066	MH20005568	MH20005566	250	CLAY	99.970	WWS	3.615	N9
Rita ST	MA20006067	MH20005602	MH20005569	250	CLAY	102.020	WWS	2.871	M9
Ronald ST	MA20005623	MH20005167	MH20005144	250	CONCRETE	106.680	WWS	3.414	P4
Ronald ST	MA20005624	MH20005144	MH20005145	250	CONCRETE	106.980	WWS	2.972	P4
Ronald ST	MA20005625	MH20005145	MH20005146	600	*UNKNOWN	10.704	WWS	4.511	P4
Ronald ST	MA20005627	MH20005147	MH20005148	250	CONCRETE	12.008	WWS	0.000	O4
Ronald ST	MA20005638	MH20005159	MH20005160	200	*UNKNOWN	51.816	WWS	0.000	Q4
Ronald ST	MA20005639	MH20005160	MH20005146	200	*UNKNOWN	45.720	WWS	0.000	Q4
Ronald ST	MA20005645	MH20005165	MH20005148	250	CONCRETE	92.350	WWS	2.865	O4
Ronald ST	MA20005646	MH20005166	MH20005165	250	CONCRETE	90.220	WWS	2.950	O4
Ronald ST	MA20005647	MH20005148	MH20005167	250	CONCRETE	49.987	WWS	3.048	O4
Ronald ST	MA20006360	MH20005844	MH20005166	250	CONCRETE	92.050	WWS	3.523	N4
Saskatchewan Ave	MA20006612	MH20006080	MH20006081	250	*UNKNOWN	53.340	WWS	1.813	B5
Saskatchewan AVE	MA20006613	MH20006081	MH20006089	250	*UNKNOWN	106.730	WWS	2.316	B5
Saskatchewan AVE	MA20006620	MH20006087	MH20006105	250	*UNKNOWN	106.375	WWS	2.957	B6
Saskatchewan AVE	MA20006622	MH20006089	MH20006087	250	*UNKNOWN	106.070	WWS	2.636	B6
Saskatchewan AVE	MA20006624	MH20006092	MH20006094	300	*UNKNOWN	114.910	WWS	2.765	B8
Saskatchewan AVE	MA20006625	MH20006093	MH20006094	300	*UNKNOWN	63.094	WWS	2.917	B8
Saskatchewan AVE	MA20006638	MH20006105	MH20006092	250	*UNKNOWN	106.680	WWS	2.424	B7
Saulteaux CRES	MA20006762	MH20006224	MH20006257	300	CONCRETE	108.200	WWS	3.780	E6
Saulteaux CRES	MA20006786	MH20006248	MH20006249	300	CONCRETE	99.974	WWS	0.457	F6
Saulteaux CRES	MA20006798	MH20006257	MH20006248	300	CONCRETE	98.380	WWS	3.871	F6
Saulteaux CRES	MA20006799	MH20006273	MH20006257	250	CONCRETE	35.786	WWS	3.780	E6
Saulteaux CRES	MA20006809	MH20006269	MH20006266	250	CONCRETE	112.780	WWS	3.524	E7
Saulteaux CRES	MA20006814	MH20006270	MH20006271	250	CONCRETE	30.480	WWS	3.151	D7
Saulteaux CRES	MA20006815	MH20006271	MH20006272	250	CONCRETE	88.090	WWS	3.322	E6
Saulteaux CRES	MA20006816	MH20006272	MH20006273	250	CONCRETE	92.540	WWS	3.658	E6
Saulteaux CRES	MA20006823	MH20006281	MH20006289	250	CONCRETE	84.730	WWS	3.749	D7
Saulteaux CRES	MA20006831	MH20006308	MH20006289	250	CONCRETE	114.300	WWS	3.109	D8

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Saulteaux CRES	MA20006872	MH20006328	MH20006269	250	CONCRETE	112.260	WWS	3.197	E8
Saulteaux CRES	MA20006874	MH20006330	MH20006308	250	CONCRETE	112.780	WWS	2.676	D9
Saulteaux CRES	MA70026953	MH20006330	MH70009338	150	*UNKNOWN	48.842	WWS	2.336	D9
Silverwood BAY	MA20006069	MH20005590	MH20005571	250	CLAY	104.240	WWS	4.115	L8
Silverwood BAY	MA20006091	MH20005589	MH20005592	250	CLAY	33.280	WWS	2.865	K9
Silverwood BAY	MA20006092	MH20005592	MH20005590	250	CLAY	105.380	WWS	3.719	K8
Sinawik BAY	MA20006051	MH20005550	MH20005559	250	CLAY	89.310	WWS	2.984	M8
Sinawik BAY	MA20006057	MH20005559	MH20005558	250	CLAY	88.390	WWS	3.566	N8
Sinawik BAY	MA20006065	MH20005567	MH20005552	250	CLAY	88.390	WWS	3.322	N9
Sinawik BAY	MA20006068	MH20005567	MH20005567	250	CLAY	75.000	WWS	2.568	M9
Sinawik BAY	MA70047061	MH70019915	MH70019915	150	PVC	3.000	WWS	0.000	M9
Stauss DR	MA20006450	MH20005927	MH20005905	250	CONCRETE	46.939	WWS	3.307	J5
Stauss DR	MA20006451	MH20005973	MH20005927	250	CONCRETE	63.094	WWS	2.836	J5
Strauss DR	MA20006502	MH20005977	MH20005991	300	CONCRETE	27.275	WWS	0.000	K6
Strauss DR	MA20006516	MH20005991	MH20006036	300	CONCRETE	65.960	WWS	4.084	K6
Strauss DR	MA20006537	MH20006011	MH20006035	200	*UNKNOWN	79.035	WWS	0.000	K6
Strauss DR	MA20006565	TE20001212	MH20006036	300	CONCRETE	27.030	WWS	0.000	K6
Strauss DR	MA20006566	MH20006037	TE20001212	300	CONCRETE	46.520	WWS	4.883	K7
Strauss DR	MA20006568	MH20006037	MH20006070	300	CONCRETE	95.540	WWS	5.523	K7
Strauss DR	MA20006577	MH20006025	MH20006046	250	CONCRETE	92.430	WWS	3.843	K7
Strauss DR	MA20006578	MH20006046	MH20006037	250	CONCRETE	68.580	WWS	3.987	K7
Strauss DR	MA20006603	MH20006070	MH20006069	300	CONCRETE	28.931	WWS	6.057	K7
Sturgeon RD	MA20000123	MH20000080	MH20000081	450	CONCRETE	85.344	WWS	3.413	M2
Sturgeon RD	MA20000264	MH20000223	MH20000208	450	CONCRETE	94.790	WWS	3.139	L1
Sturgeon RD	MA20000281	MH20000292	MH20000223	450	CONCRETE	85.470	WWS	3.291	L1
Sturgeon RD	MA20000346	MH20000291	MH20000292	450	CONCRETE	91.990	WWS	3.383	L1
Sturgeon RD	MA20000347	MH20000324	MH20000291	300	CONCRETE	15.516	WWS	3.032	K1
Sturgeon RD	MA20000375	MH20000317	MH20000322	300	CONCRETE	9.446	WWS	3.332	K1
Sturgeon RD	MA20000384	MH20000322	MH20000323	300	CONCRETE	59.860	WWS	2.987	K1
Sturgeon RD	MA20000385	MH20000323	MH20000324	300	CONCRETE	23.927	WWS	3.048	K1
Thompson Dr	MA20005670	MH20005220	MH20005190	300	*UNKNOWN	108.510	CS	2.985	S6
Thompson DR	MA20005699	MH20005241	MH20005220	300	CONCRETE	112.130	CS	3.447	R6
Thompson DR	MA20005717	MH20005238	MH20005239	250	CONCRETE	111.250	CS	0.000	Q6

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Thompson DR	MA20005719	MH20005237	MH20005239	250	CONCRETE	44.740	CS	5.295	Q6
Thompson DR	MA20005730	MH20005251	MH20005241	300	CONCRETE	63.885	CS	3.484	R6
Thompson DR	MA20005733	MH20005256	MH20005238	250	CLAY	115.800	CS	3.963	P6
Thompson DR	MA20005736	MH20005257	MH20005256	250	CLAY	115.520	CS	3.780	P6
Thompson DR	MA20005741	MH20005264	MH20005257	250	CLAY	105.480	WWS	4.176	O6
Thompson DR	MA20005742	MH20005263	MH20005264	250	CLAY	96.400	WWS	3.856	O6
Thompson DR	MA20006369	MH20005936	MH20005866	250	CONCRETE	91.440	WWS	3.505	N6
Thompson DR	MA20006377	MH20005866	MH20005263	250	CLAY	121.920	WWS	3.718	N6
Thompson DR	MA20006421	MH20005905	MH20005904	250	CONCRETE	94.488	WWS	3.780	K5
Thompson DR	MA20006446	MH20005924	MH20005938	300	CONCRETE	119.790	WWS	3.658	L6
Thompson DR	MA20006448	MH20005904	MH20005978	250	CONCRETE	91.550	WWS	4.054	K6
Thompson DR	MA20006461	MH20005937	MH20005936	250	CONCRETE	96.670	WWS	2.774	M6
Thompson DR	MA20006462	MH20005938	MH20005937	250	CONCRETE	81.990	WWS	2.590	M6
Thompson Dr	MA20006463	MH20005938	MH20005985	300	CONCRETE	53.230	WWS	4.170	L6
Thompson DR	MA20006503	MH20005978	MH20005977	300	CONCRETE	34.652	WWS	4.329	K6
Thompson DR	MA20006507	MH20005979	MH20005984	250	CONCRETE	93.574	WWS	3.170	K6
Thompson Dr	MA20006508	MH20005983	MH20005985	300	CONCRETE	63.112	WWS	4.024	L6
Thompson DR	MA20006509	MH20005984	MH20005983	300	CONCRETE	63.094	WWS	4.176	L6
Wallasey ST	MA20005778	MH20005310	MH20005298	250	CLAY	94.530	CS	4.408	P6
Wallasey ST	MA20005779	MH20005298	MH20005299	250	CONCRETE	96.620	CS	4.212	Q6
Wallasey ST	MA20005788	MH20005321	MH20005310	250	CLAY	96.860	CS	3.932	P6
Wallasey ST	MA20005799	MH20005319	MH20005321	250	CLAY	102.690	WWS	3.724	O6
Wallasey ST	MA20005808	MH20005320	MH20005319	250	CLAY	102.100	WWS	3.286	O6
Wallasey ST	MA20006368	MH20005945	MH20005858	250	CLAY	99.670	WWS	3.176	N6
Wallasey ST	MA20006391	MH20005873	MH20005320	250	CONCRETE	101.510	WWS	2.847	N6
Wallasey ST	MA20006460	MH20005944	MH20006009	250	CLAY	108.370	WWS	4.145	M6
Wallasey ST	MA20006468	MH20005945	MH20005944	250	CLAY	95.420	WWS	3.676	M6
Wallasey ST	MA20006889	MH20005299	MH20005275	250	CONCRETE	96.020	CS	4.291	Q6
West Hangar RD	MA20006626	MH20006113	MH20006093	300	*UNKNOWN	39.929	WWS	2.484	B8
Windham RD	MA20005667	MH20005192	MH20004632	200	CONCRETE	89.916	CS	2.698	S6
Windham RD	MA20005672	MH20005216	MH20005192	250	*UNKNOWN	93.580	CS	0.000	S6
Windham RD	MA20005700	MH20005219	MH20005216	200	CONCRETE	92.290	CS	2.667	R6

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Woodbridge RD	MA20005684	MH20005221	MH20005191	250	CONCRETE	69.520	CS	2.859	S5
Woodbridge RD	MA20005698	MH20005240	MH20005218	200	CONCRETE	75.290	CS	2.661	R5
Woodbridge RD	MA20005713	MH20005222	MH20005221	200	CONCRETE	10.670	CS	3.048	R5
Woodbridge RD	MA20005714	MH20005218	MH20005222	200	CONCRETE	83.160	CS	3.000	R5
Woodgreen PL	MA20000431	MH20000371	MH20000373	250	CONCRETE	104.240	WWS	3.384	H2
Woodgreen PL	MA20000432	MH20000372	MH20000371	250	CONCRETE	20.730	WWS	2.908	H2
Woodgreen PL	MA20002604	MH20002389	MH20002390	250	CONCRETE	107.540	WWS	3.090	H2
Woodgreen PL	MA20002605	MH20000390	MH20002373	250	CONCRETE	91.410	WWS	3.341	H2
Woodgreen PL	MA20002606	MH20000389	MH20002372	250	CONCRETE	79.830	WWS	2.847	H2

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STREET	ASSET NO.	US_NODE	DS_NODE	SIZE	MATERIAL	LENGTH	FLOW	DEPTH	MAP_KEY
Acheson DR	MA20002365	MH20002164	MH20002203	250	*UNKNOWN	64.570	WWS	3.618	B3
Acheson DR	MA20002402	MH20002251	MH20002203	250	CONCRETE	82.420	WWS	0.000	B3
Acheson DR	MA20002452	MH20002287	MH20002251	250	CONCRETE	75.900	WWS	5.943	B4
Acheson DR	MA20002461	MH20002258	MH20002260	250	CONCRETE	106.240	WWS	4.919	D4
Acheson DR	MA20002463	MH20002260	MH20002274	300	AC	43.671	WWS	6.608	D4
Acheson DR	MA20002464	MH20002304	MH20002258	250	CONCRETE	75.940	WWS	3.768	C4
Acheson DR	MA20002488	MH20002299	MH20002282	250	CONCRETE	78.030	WWS	2.941	B4
Acheson DR	MA20002493	MH20002282	MH20002287	250	CONCRETE	76.810	WWS	3.661	B4
Acheson DR	MA20002501	MH20002299	MH20002294	250	CONCRETE	92.490	WWS	2.837	C4
Acheson DR	MA20002505	MH20002294	MH20002304	250	CONCRETE	73.150	WWS	3.596	C4
Apple LANE	MA20002507	MH20002305	MH20002292	375	*UNKNOWN	25.568	WWS	0.000	C5
Apple LANE	MA20002508	MH20002342	MH20002305	300	CONCRETE	41.507	WWS	0.000	C5
Apple LANE	MA20002551	MH20002342	MH20002341	300	CONCRETE	7.010	WWS	0.000	C5
Apple LANE	MA20002552	MH20002343	MH20002342	300	CONCRETE	35.108	WWS	0.000	C5
Apple LANE	MA20002553	MH20002490	MH20002343	300	CONCRETE	57.980	WWS	0.000	C5
Apple LANE	MA20002706	MH20002513	MH20002497	300	CONCRETE	114.422	WWS	5.197	B7
Apple LANE	MA20002709	MH20002496	MH20002497	250	CONCRETE	14.630	WWS	0.000	B6
Apple LANE	MA20002710	MH20002497	MH20002490	300	CONCRETE	109.301	WWS	5.368	C6
Apple LANE	MA20002731	PL20000335	MH20002513	250	CONCRETE	15.545	WWS	4.907	B7
Apple LANE	MA20002732	MH20002521	MH20002513	300	CONCRETE	85.010	WWS	5.062	B7
Apple LANE	MA20002733	MH20002514	MH20002520	250	CONCRETE	77.510	WWS	3.360	B7
Apple LANE	MA20002741	MH20002519	MH20002520	250	CONCRETE	53.360	WWS	2.920	B7
Apple LANE	MA20002742	MH20002520	MH20002521	250	CONCRETE	13.412	WWS	3.993	B7
Apple LANE	MA20002743	MH20002524	MH20002521	300	CONCRETE	72.561	WWS	4.789	B7
Arthur Creak DR	MA20002397	MH20002200	MH20002247	250	AC	90.340	WWS	4.285	C3
Arthur Creak DR	MA20002400	MH20002203	MH20002200	250	AC	67.670	WWS	3.700	C3
Arthur Creak DR	MA20002443	MH20002247	MH20002261	250	AC	88.280	WWS	4.743	C3
Arthur Creak DR	MA20002462	MH20002259	MH20002260	250	AC	93.010	WWS	5.626	D4
Arthur Creak DR	MA20002468	MH20002261	MH20002259	250	AC	98.590	WWS	4.307	D4
Calpine PL	MA20002571	MH20002357	MH20002358	200	AC	36.180	WWS	3.213	E5
Caron AVE	MA20000150	MH20000099	MH20000115	250	CONCRETE	52.267	WWS	3.975	L8
Caron AVE	MA20000164	MH20000113	MH20000114	250	CONCRETE	52.850	WWS	0.000	L8

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Caron AVE	MA20000165	MH20000114	MH20000115	250	CONCRETE	17.861	WWS	3.865	L8
Carriage BAY	MA20000209	MH20000157	MH20000265	200	CONCRETE	73.760	WWS	3.212	H6
Carriage BAY	MA20000210	MH20000160	MH20000252	200	CONCRETE	62.030	WWS	2.362	J6
Carriage BAY	MA20000211	MH20000157	MH20000159	200	CONCRETE	84.110	WWS	3.228	J6
Carriage BAY	MA20000212	MH20000159	MH20000160	200	CONCRETE	15.510	WWS	2.636	J6
Carriage BAY	MA20000310	MH20000252	MH20000247	200	CONCRETE	54.380	WWS	3.575	J7
Carriage RD	MA20000323	MH20000266	MH20000265	200	CONCRETE	42.950	WWS	3.426	H7
Carriage RD	MA20000324	MH20000315	MH20000266	200	CONCRETE	105.030	WWS	3.932	H7
Carriage RD	MA20000357	MH20000337	MH20000303	200	AC	60.808	WWS	0.000	H8
Carriage RD	MA20000371	MH20000303	MH20000315	200	CONCRETE	41.148	WWS	0.000	H7
Carriage RD	MA20000396	MH20000342	MH20000338	250	PVC	39.625	WWS	0.000	H8
Carriage RD	MA20000401	MH20000347	MH20000342	250	PVC	64.008	WWS	0.000	H8
Carriage RD	MA20002572	MH20002358	MH20002433	200	AC	83.240	WWS	3.082	E5
Carriage RD	MA20002607	MH20002393	MH20002415	200	*UNKNOWN	66.873	WWS	0.000	F7
Carriage RD	MA20002608	MH20002392	MH20002393	250	*UNKNOWN	56.100	WWS	0.000	F8
Carriage RD	MA20002625	MH20002415	MH20002412	200	CONCRETE	8.687	WWS	0.000	F7
Carriage RD	MA20002633	MH20002412	MH20002441	200	AC	89.370	WWS	3.073	F7
Carriage RD	MA20002643	MH20002433	MH20002422	200	AC	76.950	WWS	3.630	E6
Carriage RD	MA20002645	MH20002444	MH20002422	250	AC	81.200	WWS	3.268	F6
Carriage RD	MA20002655	MH20002441	MH20002444	200	AC	81.290	WWS	3.462	F7
Dohaney CRES	MA20002455	MH20002254	MH20002251	250	CONCRETE	36.520	WWS	5.943	B3
Dohaney CRES	MA20002456	MH20002288	MH20002254	250	CONCRETE	62.330	WWS	3.630	C3
Dohaney CRES	MA20002486	MH20002280	MH20002294	250	CONCRETE	93.480	WWS	3.105	C4
Dohaney CRES	MA20002494	MH20002280	MH20002288	250	CONCRETE	88.850	WWS	3.447	C3
Easement	MA20002420	MH20002273	MH20002227	525	*UNKNOWN	89.545	WWS	5.247	D5
Easement	MA20002434	MH20002227	MH20002236	525	*UNKNOWN	75.712	WWS	5.222	E4
Easement	MA20002672	MH20002466	MH20002465	250	CONCRETE	60.960	WWS	5.441	D5
Easement	MA20002673	MH20002467	MH20002466	250	CONCRETE	66.571	WWS	5.228	D5
Fieldstone BAY	MA20002578	MH20002367	MH20002376	200	CONCRETE	79.350	WWS	2.737	F6
Fieldstone BAY	MA20002579	MH20002368	MH20002386	200	CONCRETE	93.270	WWS	2.853	F6
Fieldstone BAY	MA20002580	MH20002369	MH20002368	200	CONCRETE	22.040	WWS	2.990	F6
Fieldstone BAY	MA20002581	MH20002367	MH20002369	200	CONCRETE	88.440	WWS	0.000	F5

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Fieldstone BAY	MA20002588	MH20002376	MH20002384	200	CONCRETE	81.230	WWS	0.000	G6
Fieldstone BAY	MA20002600	MH20002386	MH20002385	200	CONCRETE	97.690	WWS	3.033	F6
Goodridge CRES	MA20002466	MH20002289	MH20002267	200	CONCRETE	93.870	WWS	3.789	C4
Goodridge CRES	MA20002473	MH20002267	MH20002259	200	CONCRETE	32.960	WWS	4.307	D4
Goodridge CRES	MA20002495	MH20002302	MH20002289	200	CONCRETE	65.410	WWS	2.917	C4
Granada CRES	MA20002634	MH20002423	MH20002422	200	CONCRETE	12.405	WWS	3.630	E6
Granada CRES	MA20002635	MH20002458	MH20002425	200	CONCRETE	88.390	WWS	3.282	E6
Granada CRES	MA20002637	MH20002458	MH20002423	200	CONCRETE	105.580	WWS	3.368	E6
Granada CRES	MA20002644	MH20002425	MH20002433	200	CONCRETE	76.760	WWS	3.094	E6
Granada CRES	MA70015648	MH70002422	MH20006323	250	*UNKNOWN	74.460	WWS	0.000	F6
Hamilton AVE	MA20002419	MH20002275	MH20002224	450	*UNKNOWN	75.520	WWS	0.000	E5
Hamilton AVE	MA20002424	MH20002225	MH20002231	450	*UNKNOWN	115.030	WWS	5.776	E5
Hamilton AVE	MA20002436	MH20002224	MH20002225	450	*UNKNOWN	35.448	WWS	0.000	E5
Hamilton AVE	MA20002475	MH20002271	MH20002273	375	*UNKNOWN	98.220	WWS	6.163	D5
Hamilton AVE	MA20002476	MH20002272	MH20002271	375	*UNKNOWN	89.760	WWS	6.020	D5
Hamilton AVE	MA20002477	MH20002300	MH20002272	375	*UNKNOWN	78.610	WWS	5.508	C5
Hamilton AVE	MA20002481	MH20002273	MH20002275	450	AC	22.430	WWS	0.000	D5
Hamilton AVE	MA20002503	MH20002292	MH20002300	375	*UNKNOWN	65.840	WWS	5.859	C5
Hamilton AVE	MA20002506	MH20001456	MH20002292	200	*UNKNOWN	137.010	WWS	3.268	C5
Hamilton Meadows DR	MA20002546	MH20002346	MH20002337	250	CONCRETE	63.500	WWS	4.420	C5
Hamilton Meadows DR	MA20002547	MH20002337	MH20002341	250	CONCRETE	76.100	WWS	4.440	C5
Hamilton Meadows DR	MA20002560	MH20002346	MH20002345	250	CONCRETE	65.220	WWS	3.870	D5
Hamilton Meadows DR	MA20002569	MH20002355	MH20002345	250	CONCRETE	66.150	WWS	3.400	D5
Hamilton Meadows DR	MA20002570	MH20002356	MH20002355	250	CONCRETE	53.240	WWS	3.550	D5
Harvest LANE	MA20000204	MH20002370	MH200000154	200	CONCRETE	96.130	WWS	3.045	G6
Harvest LANE	MA20000206	MH20000154	MH20000155	200	CONCRETE	92.970	WWS	2.972	H6
Harvest LANE	MA20000207	MH20000155	MH20000173	200	CONCRETE	16.110	WWS	0.000	H6
Harvest LANE	MA20000225	MH20000173	MH20000172	200	CONCRETE	68.800	WWS	3.182	H6
Harvest LANE	MA20002512	MH20002370	MH20002308	200	CONCRETE	48.660	WWS	2.965	G6
Harvest LANE	MA20002513	MH20002308	MH20002309	200	CONCRETE	47.270	WWS	3.716	G5
Heritage BLVD	MA20000224	MH20000172	MH20000265	250	*UNKNOWN	66.000	WWS	3.350	H6
Heritage BLVD	MA20000227	MH20000176	MH20000177	250	*UNKNOWN	24.980	WWS	3.044	G6

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Heritage BLVD	MA20000228	MH20002383	MH20000176	250	*UNKNOWN	41.240	WWS	3.017	G6
Heritage BLVD	MA20000231	MH20000177	MH20000172	250	*UNKNOWN	91.440	WWS	3.264	H6
Heritage BLVD	MA20000305	MH20000265	MH20000249	250	CONCRETE	72.240	WWS	4.096	H7
Heritage BLVD	MA20000307	MH20000249	MH20000251	250	CONCRETE	33.250	WWS	4.152	H7
Heritage BLVD	MA20000308	MH20000251	MH20000247	250	CONCRETE	57.760	WWS	4.246	J7
Heritage BLVD	MA20002598	MH20002384	MH20002383	250	CONCRETE	28.190	WWS	2.898	G6
Heritage BLVD	MA20002599	MH20002385	MH20002384	250	CONCRETE	92.930	WWS	3.246	F6
Heritage BLVD	MA20002755	MH20000247	MH20000237	250	CONCRETE	87.170	WWS	3.800	J7
Hollyburn RD	MA20001622	MH20001470	MH20001473	250	CONCRETE	105.200	WWS	3.350	B7
Hollyburn RD	MA20001625	MH20001473	MH20001472	250	CONCRETE	77.600	WWS	3.710	B7
Kirby DR	MA20000178	MH20000240	MH20000132	300	CONCRETE	70.740	WWS	4.907	J7
Kirby DR	MA20000179	MH20000132	MH20000133	300	CONCRETE	85.950	WWS	5.154	J6
Kirby DR	MA20000180	MH20000133	MH20000142	300	CONCRETE	65.090	WWS	5.288	J6
Kirby DR	MA20000191	MH20000142	MH20000143	300	CONCRETE	38.045	WWS	5.569	J6
Kirby DR	MA20000302	MH20000284	MH20000240	200	CONCRETE	103.690	WWS	3.913	J7
Kirby DR	MA20000339	MH20000283	MH20000284	200	CONCRETE	99.360	WWS	3.700	K8
Lonsdale DR	MA20000101	MH20000071	MH20000062	250	CONCRETE	79.020	WWS	4.587	L8
Lonsdale DR	MA20000102	MH20000062	MH20000063	250	CONCRETE	33.230	WWS	4.200	L7
Lonsdale DR	MA20000103	MH20000064	MH20000063	250	CONCRETE	26.800	WWS	4.182	L7
Lonsdale DR	MA20000108	MH20000107	MH20000064	250	CONCRETE	98.150	WWS	4.405	L7
Lonsdale DR	MA20000156	MH20000107	MH20000189	250	CONCRETE	69.350	WWS	5.148	L7
Lonsdale DR	MA20000244	MH20000184	MH20000188	300	CONCRETE	14.600	WWS	4.956	K7
Lonsdale DR	MA20000245	MH20000188	MH20000240	300	CONCRETE	51.880	WWS	5.245	K7
Lonsdale DR	MA20000246	MH20000189	MH20000187	250	CONCRETE	47.310	WWS	5.407	K7
Lonsdale RD	MA20000243	MH20000187	MH20000184	250	CONCRETE	60.810	WWS	5.362	K7
Ness AVE	MA20000189	MH20000161	MH20000143	250	CONCRETE	105.980	WWS	5.011	J6
Ness AVE	MA20000192	MH20000048	MH20000143	200	CONCRETE	28.350	WWS	0.000	J6
Ness AVE	MA20000214	MH20000237	MH20000161	250	CONCRETE	104.960	WWS	4.163	J7
Ness AVE	MA20000291	MH20000285	MH20000237	250	CONCRETE	78.550	WWS	4.167	J7
Ness AVE	MA70013489	MH20000288	MH20000277	250	PVC	53.310	WWS	3.980	J8
Ness AVE	MA70013490	MH20000277	MH20000285	250	PVC	76.780	WWS	0.000	J7
Ness AVE	MA70013493	MH20000293	MH20000274	250	PVC	72.460	WWS	4.260	J8

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Ness AVE	MA70013494	MH20000274	MH20000288	250	PVC	8.603	WWS	3.860	J8
Opal PL	MA20002561	MH20002462	MH20002346	250	CONCRETE	74.400	WWS	3.960	C5
Pebblewood LANE	MA20000341	MH20000308	MH20000285	200	CONCRETE	90.650	WWS	3.444	J7
Pebblewood LANE	MA20000368	MH20000313	MH20000308	200	CONCRETE	89.310	WWS	3.718	J7
Public Lane	MA20000074	MH20000139	MH20000040	750	*UNKNOWN	42.273	WWS	0.000	J6
Public Lane	MA20000372	MH20002391	MH20000316	200	*UNKNOWN	97.070	WWS	0.000	G7
Public Lane	MA20000373	MH20000316	MH20000303	200	*UNKNOWN	99.360	WWS	0.000	H7
Public Lane	MA20000381	MH20000338	MH20000321	250	PVC	112.470	WWS	0.000	J8
Public Lane	MA70031407	MH20000321	MH20000288	250	PVC	80.160	WWS	3.860	J8
Quail Ridge RD	MA20001624	MH20001472	MH20001471	250	*UNKNOWN	5.747	WWS	0.000	B7
Quail Ridge RD	MA20002670	MH20002478	MH20002467	250	CONCRETE	61.264	WWS	4.751	D6
Quail Ridge RD	MA20002677	MH20002472	MH20002490	250	PVC	22.007	WWS	3.930	C6
Quail Ridge RD	MA20002684	MH20002476	MH20002472	250	PVC	95.050	WWS	3.500	C5
Quail Ridge RD	MA20002686	MH20002482	MH20002478	250	CONCRETE	91.135	WWS	4.523	D6
Quail Ridge RD	MA20002691	MH20002487	MH20002482	250	CONCRETE	92.033	WWS	4.795	D7
Quail Ridge RD	MA20002695	MH20002530	MH20002486	250	CONCRETE	76.871	WWS	4.779	C7
Quail Ridge RD	MA20002697	MH20002486	MH20002487	250	CONCRETE	75.194	WWS	5.173	D7
Quail Ridge RD	MA20002722	MH20001471	MH20002524	250	*UNKNOWN	93.270	WWS	4.603	B7
Quail Ridge RD	MA20002747	MH20002529	MH20002524	250	CONCRETE	93.190	WWS	4.572	C7
Quail Ridge RD	MA20002752	MH20002530	MH20002529	250	CONCRETE	77.270	WWS	0.000	C7
Sayer AVE	MA20000240	MH20000190	MH20000184	200	CONCRETE	70.490	WWS	3.847	K7
Sayer AVE	MA20000248	MH20000191	MH20000190	200	CONCRETE	58.220	WWS	3.530	K7
Sayer AVE	MA20000249	MH20000225	MH20000191	200	CONCRETE	80.160	WWS	3.459	K8
Setter ST	MA20000097	MH20000099	MH20000071	250	CONCRETE	70.470	WWS	4.273	L8
Setter ST	MA20000113	MH20000071	MH20000070	250	CONCRETE	88.470	WWS	4.508	M8
Setter ST	MA20000114	MH20000070	MH20003548	250	CONCRETE	93.270	WWS	3.399	M8
Setter ST	MA20000149	MH20000098	MH20000099	200	CONCRETE	43.680	WWS	3.548	L8
Setter ST	MA20000161	MH20000207	MH20000098	200	CONCRETE	98.450	WWS	0.000	L8
Setter ST	MA20000263	MH20000207	MH20000225	200	CONCRETE	61.570	WWS	0.000	K8
Setter ST	MA20000279	MH20000289	MH20000225	250	CONCRETE	63.840	WWS	3.115	K8
Silver AVE	MA20002482	MH20002273	MH20002274	300	AC	111.744	WWS	6.023	D5
Silver AVE	MA20002483	MH20002354	MH20002275	250	*UNKNOWN	44.640	WWS	0.000	D5

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Silver AVE	MA20002567	MH20002465	MH20002354	250	CONCRETE	91.130	WWS	5.743	D5
Stillwell ST	MA20000098	MH20000110	MH20000062	200	CONCRETE	74.650	WWS	0.000	L7
Stillwell ST	MA20000171	MH20000197	MH20000110	200	CONCRETE	74.130	WWS	2.637	L7
Stillwell ST	MA20000253	MH20000196	MH20000191	200	CONCRETE	49.070	WWS	3.493	K7
Stillwell ST	MA20000254	MH20000197	MH20000196	200	CONCRETE	76.450	WWS	3.740	K7
Sturgeon RD	MA20000122	MH20000113	MH20000079	250	PVC	109.000	WWS	3.460	L8
Sturgeon RD	MA20000163	MH20000205	MH20000113	250	PVC	85.000	WWS	0.000	L8
Sturgeon RD	MA20000261	MH20000219	MH20000205	250	PVC	85.620	WWS	3.500	K8
Sturgeon RD	MA20000280	MH20000290	MH20000219	250	PVC	80.470	WWS	3.370	K8
Thorton AVE	MA20000406	MH20000346	MH20000347	250	*UNKNOWN	74.980	WWS	0.000	H8
Uplands CRES	MA20002626	MH20002413	MH20002438	250	AC	95.490	WWS	0.000	F7
Uplands CRES	MA20002654	MH20002453	MH20002444	250	CONCRETE	76.500	WWS	3.203	F7
Uplands CRES	MA20002659	MH20002438	MH20002460	250	AC	52.390	WWS	0.000	F7
Uplands CRES	MA20002662	MH20002461	MH20002452	250	AC	50.320	WWS	3.399	E7
Uplands CRES	MA20002663	MH20002452	MH20002453	250	CONCRETE	63.520	WWS	3.145	E7
Uplands CRES	MA20002668	MH20002460	MH20002461	250	AC	47.580	WWS	0.000	E7
Valley View DR	MA20000068	MH20000037	MH20000039	750	*UNKNOWN	13.180	WWS	0.000	J5
Valley View DR	MA20000075	MH20000040	MH20000037	750	*UNKNOWN	1.917	WWS	0.000	J5
Valley View DR	MA20000079	MH20000046	MH20000137	450	CONCRETE	79.180	WWS	6.715	H5
Valley View DR	MA20000084	MH20000049	MH20000047	450	CONCRETE	69.460	WWS	5.910	G5
Valley View DR	MA20000085	MH20000046	MH20000047	450	CONCRETE	9.289	WWS	0.000	H5
Valley View DR	MA20000181	MH20000137	MH20000134	450	CONCRETE	87.980	WWS	0.000	H6
Valley View DR	MA20000182	MH20000134	MH20000139	450	CONCRETE	93.190	WWS	5.989	J6
Valley View DR	MA20000194	MH20000143	MH20000139	450	CONCRETE	51.709	WWS	6.050	J6
Valley View DR	MA20002514	MH20002310	MH20002309	450	CONCRETE	83.970	WWS	6.139	F5
Valley View DR	MA20002515	MH20002311	MH20002310	450	CONCRETE	88.540	WWS	6.587	F5
Valley View DR	MA20002516	MH20002309	MH20000049	450	CONCRETE	67.970	WWS	5.748	G5
Valley View DR	MA20002518	MH20002324	MH20002311	450	CONCRETE	86.790	WWS	6.754	F5
Valley View DR	MA20002530	MH20002361	MH20002324	250	CONCRETE	53.670	WWS	6.690	F5
Valley View DR	MA20002574	MH20002362	MH20002361	250	CONCRETE	11.280	WWS	0.000	E5
Valley View DR	MA20002575	MH20002434	MH20002362	250	CONCRETE	93.090	WWS	3.889	F6
Valley View DR	MA20002596	MH20002419	MH20002372	250	CONCRETE	100.490	WWS	3.279	F7

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Valley View DR	MA20002597	MH20002406	MH20002385	250	CONCRETE	76.500	WWS	3.344	F7
Valley View DR	MA20002609	MH20002395	MH20002394	200	CONCRETE	92.100	WWS	3.250	F7
Valley View DR	MA20002615	MH20002394	MH20002419	200	CONCRETE	95.710	WWS	2.866	F7
Valley View DR	MA20002619	MH20002395	MH20002406	250	CONCRETE	75.140	WWS	3.530	G7
Valley View DR	MA70015649	MH70002372	MH20006323	250	CONCRETE	67.800	WWS	0.000	F6
Valley View DR	MA70015650	MH20006323	MH70002434	250	CONCRETE	30.490	WWS	0.000	F6
Valley View PL	MA20002423	MH20002230	MH20002231	250	*UNKNOWN	24.510	WWS	0.000	E5
Valley View PL	MA20002425	MH20002331	MH20002223	450	*UNKNOWN	53.290	WWS	6.083	E5
Valley View PL	MA20002533	MH20002323	MH20002324	450	CONCRETE	42.969	WWS	6.690	F5