



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 409-2018**

**SNOW CLEARING ON REGIONAL AND LOCAL STREETS AND BACK LANES  
WITHIN THE SOUTH AREA (WEST)**

**Note to Bidders: Please be aware of revisions to B13.4**

## TABLE OF CONTENTS

### PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

### PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Confidentiality	1
B5. Addenda	2
B6. Substitutes	2
B7. Bid Submission	3
B8. Bid	4
B9. Prices	4
B10. Disclosure	5
B11. Conflict of Interest and Good Faith	5
B12. Qualification	6
B13. Opening of Bids and Release of Information	7
B14. Irrevocable Bid	7
B15. Withdrawal of Bids	8
B16. Evaluation of Bids	8
B17. Award of Contract	8

### PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

### PART D - SUPPLEMENTAL CONDITIONS

#### General

D1. General Conditions	1
D2. Scope of Work	1
D3. Definitions	2
D4. Contract Administrator	3
D5. Contractor's Supervisor	3
D6. Ownership of Information, Confidentiality and Non Disclosure	3
D7. Operator's competence and performance	4
D8. Notices	4

#### Submissions

D9. Authority to Carry on Business	4
D10. Insurance	4

#### Schedule of Work

D11. Commencement	5
D12. Total Performance	5

#### Control of Work

D13. Prime Contractor – The Workplace Safety and Health Act (Manitoba)	5
D14. The Workplace Safety and Health Act (Manitoba) – Qualifications	5
D15. Safety	6

#### Measurement and Payment

D16. Payment	6
--------------	---

### PART E - SPECIFICATIONS

#### General

E1. Applicable Specifications and Drawings	1
E2. Snow clearing requirements	1
E3. Hourly Equipment Services	5

E4. Equipment	6
E5. Drivers License for all Hired Hourly Equipment	7
E6. Contractor's Supervision and Communication	7
E7. Extreme snowfall and Blizzard Conditions	7
E8. Quantities	8
E9. Traffic Movement and Parking	8
E10. Measurement and Payment	8
E11. Annual Review – Inflationary Adjustment	12
E12. Price Adjustment – Fuel Costs	12
E13. Damage to Public and Private Property	13
E14. Penalties	14

**APPENDIX A – SOUTH AREA (WEST) PRIORITY I STREETS**

**APPENDIX B - SOUTH AREA (WEST) PRIORITY II STREETS**

**APPENDIX C – SOUTH AREA (WEST) PRIORITY III STREETS**

**APPENDIX D – HISTORICAL WEATHER DATA**

## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

- B1.1 SNOW CLEARING ON REGIONAL AND LOCAL STREETS AND BACK LANES WITHIN THE SOUTH AREA (WEST)

### **B2. SUBMISSION DEADLINE**

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, June 21, 2018.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

### **B3. ENQUIRIES**

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B3.2 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 promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.
- B3.4 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.
- B3.5 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.
- B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

### **B4. CONFIDENTIALITY**

- B4.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:
- (a) was known to the Bidder before receipt hereof; or
  - (b) becomes publicly known other than through the Bidder; or
  - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B4.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

## **B5. ADDENDA**

- B5.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B5.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

## **B6. SUBSTITUTES**

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

- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B6.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B6.10 Notwithstanding B6.2 to B6.9, and in accordance with B7.8, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B15.1(a).

## **B7. BID SUBMISSION**

- B7.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely.
- B7.4 The Bid may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 If the Bid is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg  
Corporate Finance Department  
Materials Management Division  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1
- B7.5.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.6 If the Bid is submitted by facsimile transmission, it shall be submitted to 204-949-1178.
- B7.6.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.7 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.8 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B16.1(a)
- B7.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.

## **B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 11 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;
  - (d) if the Bidder is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.
- B8.4.2 All signatures shall be original.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

## **B9. PRICES**

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.
- B9.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

**B10. DISCLOSURE**

B10.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.

B10.2 The Persons are:

(a) N/A

**B11. CONFLICT OF INTEREST AND GOOD FAITH**

B11.1 Bidders, by responding to this Bid Opportunity, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B11.2 Conflict of Interest means any situation or circumstance where a Bidder or employee of the Bidder proposed for the Work has:

- (a) other commitments;
- (b) relationships;
- (c) financial interests; or
- (d) involvement in ongoing litigation;

that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Bids or award of the Contract; or
- (ii) compromise, impair or be incompatible with the effective performance of a Bidder's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the Bid Opportunity process or the Work; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the Bid Opportunity process) of strategic and/or material relevance to the Bid Opportunity process or to the Work that is not available to other bidders and that could or would be seen to give that Bidder an unfair competitive advantage.

B11.3 In connection with its Bid, each entity identified in B11.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Work;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the Bid Opportunity process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B11.4 Without limiting B11.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Bidder to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.



- B11.5 Without limiting B11.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
- (a) disqualify a Bidder that fails to disclose a perceived, potential or actual Conflict of Interest of the Bidder or any of its employees proposed for the Work;
  - (b) require the removal or replacement of any employees proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
  - (c) disqualify a Bidder or employees proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B11.4 to avoid or mitigate a Conflict of Interest; and
  - (d) disqualify a Bidder if the Bidder, or one of its employees proposed for the Work, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B11.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

## **B12. QUALIFICATION**

- B12.1 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, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and
  - (b) be financially capable of carrying out the terms of the Contract; and
  - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B12.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>
- B12.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
- (a) have successfully carried out work similar in nature, scope and value to the Work; and
  - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract;
  - (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
  - (d) have performed snow clearing services under contract that utilize similar equipment complement as stated in E4.1.
- B12.4 Further to B12.3(c), the Bidder shall, within five (5) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder/Subcontractor has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) Written confirmation of a safety and health certification meeting SAFE Work Manitoba's SAFE Work Certified Standard (e.g., COR™ and SECOR™) or

- (i) a copy of their valid Manitoba COR certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Certificate of Recognition (COR) Program administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
    - (ii) a copy of their valid Manitoba SECOR™ certificate and Letter of Good Standing (or Manitoba equivalency) as issued under the Small Employer Certificate of Recognition Program (SECOR™) administered by the Construction Safety Association of Manitoba or by the Manitoba Heavy Construction Association's WORKSAFELY™ COR™ Program; or
  - (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>).
- B12.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B12.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.
- B13. OPENING OF BIDS AND RELEASE OF INFORMATION**
- B13.1 Bid Submissions will not be opened publicly.
- B13.2 Following the Submission Deadline, the names of the Bidders and their bid prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B13.3 After award of Contract, the name(s) of the successful Bidder(s), their address(es) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/>
- B13.4 The Bidder is advised that any information contained in any Bid may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).
- B13.4.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Bid Submission identified by the Bidder as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.
- B14. IRREVOCABLE BID**
- B14.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B14.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 9 of Form A: Bid.

## **B15. WITHDRAWAL OF BIDS**

- B15.1** A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1** Notwithstanding C22.5, 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.
- B15.1.2** 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 11 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B15.1.3** If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
- (a) retain the Bid until after the Submission Deadline has elapsed;
  - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 11 of Form A: Bid; and
  - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Bid withdrawn.
- B15.2** A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B14.2 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.

## **B16. EVALUATION OF BIDS**

- B16.1** Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
  - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B12 (pass/fail);
  - (c) Total Bid Price;
  - (d) economic analysis of any approved alternative pursuant to B6;
- B16.2** Further to B16.1(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 or minor informalities or irregularities if the interests of the City so require.
- B16.3** Further to B16.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.
- B16.4** Further to B16.1(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.
- B16.4.1** Further to B16.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B16.5** This Contract will be awarded as a whole.

## **B17. AWARD OF CONTRACT**

- B17.1** The City will give notice of the award of the Contract or will give notice that no award will be made.

- B17.2 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.
- B17.2.1 Without limiting the generality of B17.2, 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.
- B17.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid in accordance with B16 .
- B17.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.
- B17.4 Notwithstanding C4.1, the City may issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B17.5 The Contract Documents, as defined in C1.1(n)(ii), in their entirety shall be deemed to be incorporated in and to form a part of the Purchase Order notwithstanding that they are not necessarily attached to or accompany said Purchase Order.

## PART C - GENERAL CONDITIONS

### C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for Supply of Services* (Revision 2007 04 12) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Supply of Services* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at [http://www.winnipeg.ca/matmgt/gen\\_cond.stm](http://www.winnipeg.ca/matmgt/gen_cond.stm)
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Supply of Services*.

## PART D - SUPPLEMENTAL CONDITIONS

### GENERAL

#### D1. GENERAL CONDITIONS

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

#### D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of snow clearing supplemental to the City of Winnipeg's snow clearing operations for the period of October 15, 2018 to April 15, 2022, with a one (1) year extension at the option of the City, under mutually agreeable terms.
- D2.1.1 Snow clearing shall be performed on those regional streets, bus route and collector streets, residential streets, and back lanes listed in Appendix A, Appendix B, Appendix C, shown on Drawing 1, and Drawing 2, where full width snow clearing is required on all or a major portion of the above streets.
- D2.2 The Contractor shall perform the Work of this Contract on an "as-required" basis for four (4) winter season from October 15, 2018 to April 15, 2022 except as hereinafter specified:
- (a) the Contractor may be required to remove snow which has fallen prior to October 15th and is on the streets as of that date;
  - (b) the Contractor shall continue and complete all authorized Work for a snowfall that begins on or before April 15th, notwithstanding that the Work occurs after April 15th; and,
  - (c) the Contractor shall remedy all damage and deficiencies such as curb damage by June 30th following the Contract year;
  - (d) the above requirements will apply also to any extension mutually agreed upon.
- D2.3 The major components of the Work are as follows:
- (a) full width snow clearing and hauling on the Priority I (Regional) Streets System identified in Appendix A and Drawing 1;
  - (b) full width snow clearing on the Priority II (Bus Routes and Collectors) Streets System identified in Appendix B and Drawing 1;
  - (c) full width snow clearing on the Priority III (Residential) Street System identified in Appendix C and Drawing 1;
  - (d) 2.7 metre width snow clearing on back lanes identified on Drawing 2;
  - (e) opening and keeping streets and lanes open during a major snowfall and/or snow blizzard;
  - (f) other winter maintenance activities as required between major snowfalls.
- D2.4 The Contract Administrator reserves the right to perform routine winter maintenance on the streets listed in Appendices A, B and C, shown on Drawing 1, and back lanes shown on Drawing 2 using City forces. Routine winter maintenance includes:
- (a) curb lane spot plowing of street sections;
  - (b) full width spot plowing of street sections;
  - (c) spot plowing of back lane sections;
  - (d) curb lane truck plowing;
  - (e) full width truck plowing;
  - (f) widening for snow storage;
  - (g) snow hauling;

- (h) clearing of drainage inlets in spring.

### D3. DEFINITIONS

#### D3.1 When used in this Bid Opportunity:

- (a) **"User"** means a person, department or other administrative unit of the City authorized by the Contract Administrator to order Work under this Contract.
- (b) **"Highway"** means any place or way, including any structure forming part thereof, which or any part of which the public is ordinarily entitled or permitted to use for the passage of vehicles or pedestrians, with or without fee or charge therefore, and includes all the space between the boundary lines thereof, whether or not used for vehicular or pedestrian traffic; and, without restricting the generality of the foregoing, includes roads, road allowances, streets, lanes, thoroughfares and other means of communication dedicated to the public use as highways as so defined, and also includes all bridges, subways, underpasses, grade separations, piers, wharves, ferries, and squares, and the road improvements thereon, dedicated to the public use.
- (c) **"Roadway"** means the paved portion of the street that is used exclusively for the passage of motorized vehicles.
- (d) **"Street"** means a highway over which the City of Winnipeg has jurisdiction.
- (e) **"Sidewalk"** means the paved portion of the street that is used exclusively for a passage of pedestrians.
- (f) **"Back lane"** means a highway situated wholly within the limits of any city, town or village or restricted speed area or reduced restricted speed area which has been designated, constructed and intended to provide access to and service at the rear of places of residence or business and includes alleys having a right-of-way width of not more than 9 metres.
- (g) **"Boulevard"** means the area between the street line and the nearest edge of a roadway and/or the area separating the roadways or a divided highway.
- (h) **"Street Right-of-Way"** means the limit of the publicly-owned land acquired for and devoted to streets, boulevards, appurtenances, as well as underground facilities.
- (i) **"Private approach"** and **"Approach"** means a roadway, culvert crossing or other structure theretofore and hereafter, erected, installed or maintained in a street between the property of an owner and the nearest curb or edge of a roadway in the said street, for the use or benefit of the owner or occupant of the property adjoining or connected therewith, but does not include a roadway or other structure constructed for such purpose within an alley.
- (j) **"Traffic lane"** means a 3.6 metre or greater width of pavement.
- (k) **"Pavement"** or the adjective **"Paved"** when used to describe a street, road, alley or other area, means an area which has a surface constructed of Portland Cement concrete, asphaltic concrete, brick, tile or similar material.
- (l) **"Bare pavement"** means that the Contractor shall endeavour to completely clear the full pavement width of snow.
- (m) **"Face to face"** of curb on Priority I and II streets means the periodic exposure of the barrier curb vertical face with a maximum horizontal deviation of 150 mm (6 inches). This will enable the full width of the curb lane to be available for vehicular traffic.
- (n) **"Face to face"** of curb on Priority III streets means the periodic exposure of the top of the roll curb with a maximum horizontal deviation of 300 mm (12 inches) from the top of the curb into the traffic lane. Where barrier curb exists on Priority III streets, **"face to face"** curb means the periodic exposure of the barrier curb vertical face with a maximum horizontal deviation of 150 mm (6 inches).
- (o) **"Hauling"** means the relocation of cleared snow volumes by equipment normally employed for the snow clearing activity, but does not include the use of trucks.

- (p) **"Hauling away"** means the relocation of cleared snow volumes by use of trucks for purposes of transporting to a distant storage location.
- (q) **"Snow"** means all forms of frozen precipitation including ice associated with such snow.
- (r) **"Wing Back"** means the Contractor shall push back the windrow to create storage space for snow in future plowing operations.
- (s) **"Cross walk"** means any sidewalk at street intersections or at signed corridors.
- (t) **"Compacted snow surface"** of back lanes means a level, dense compacted layer of snow that will only allow minimal rutting from vehicular traffic and has a maximum thickness of 200mm from the compacted snow surface to underlying pavement.
- (u) **"Clearing Operation"** In this Contract, means each such direction by the Contract Administrator for clearing and hauling services for snow removal and the performance thereof by the Contractor.

#### **D4. CONTRACT ADMINISTRATOR**

**D4.1** The Contract Administrator is:

Jean-Luc Lambert, P.Eng.  
Support Services Engineer

Telephone No. 204- 986-7087

Email Address: jeanlambert@winnipeg.ca

**D4.2** At the pre-commencement 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** Further to C6.19, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his/her employ.

**D5.2** Before commencement of Work, the Contractor shall identify his/her designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

**D5.2.1** Further to C5.5 Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

#### **D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE**

**D6.1** The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

**D6.2** The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

**D6.3** The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and



(c) any statement of fact or opinion regarding any aspect of the Contract.

D6.4 A Contractor who violates any provision of D6 may be determined to be in breach of Contract.

#### **D7. OPERATOR'S COMPETENCE AND PERFORMANCE**

D7.1 The Contractor's operator shall maintain all equipment/trucks in good working order and shall perform all obligations expressed and implied in this Bid Opportunity in a good, safe and workmanlike manner. Where, in the opinion of the City Inspector, an operator fails to meet the obligations expressed or implied in this Bid Opportunity, and without limited the generality of the foregoing, the operator is:

- (a) unqualified, or
- (b) operating in an unsafe manner, or
- (c) not performing a satisfactory amount of Work, or
- (d) engaged in activity outside the City's interests.

D7.2 The equipment/truck and operator may be dismissed immediately and shall not be re-engaged until such time as the inadequacies that resulted in the dismissal have been remedied to the sole satisfaction of the Contract Administrator.

#### **D8. NOTICES**

D8.1 Notwithstanding C22.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer.

### **SUBMISSIONS**

#### **D9. AUTHORITY TO CARRY ON BUSINESS**

D9.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

#### **D10. INSURANCE**

D10.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured; such liability policy to also contain a cross-liability clause, contractual liability, unlicensed equipment liability (Contractor's equipment) non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;
- (b) Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Service. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence;

D10.2 Deductibles for commercial general liability must be expressly stated on the certificate of insurance and must not exceed \$5,000.00.

D10.3 Deductibles shall be borne by the Contractor.

- D10.4 The certificate must clearly state: "Operations include snow removal on City right-of-way's during winter months" (i.e. insurance to cover snow removal and ice control of streets, roadways, back lanes/alleys, sidewalks, etc.). And confirmation that the operations include loading, unloading, hauling and dumping.
- D10.5 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D10.6 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

## **SCHEDULE OF WORK**

### **D11. COMMENCEMENT**

- D11.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D11.2 The Contractor shall not commence any Work on the Site until:
- (a) the Contract Administrator has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D9;
    - (ii) evidence of the workers compensation coverage specified in C6.14; and
    - (iii) evidence of the insurance specified in D10.
  - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

### **D12. TOTAL PERFORMANCE**

- D12.1 The Contractor shall achieve Total Performance by June 30, 2022, for work specified in D2.
- D12.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D12.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

## **CONTROL OF WORK**

### **D13. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

- D13.1 Further to C6.23, 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).

### **D14. THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA) – QUALIFICATIONS**

- D14.1 Further to B12.4, the Contractor/Subcontractor must, throughout the term of the Contract, have a Workplace Safety and Health Program meeting the requirements of The Workplace Safety and Health Act (Manitoba). At any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require updated proof of compliance, as set out in B12.4.

**D15. SAFETY**

- D15.1 The Contractor shall be solely responsible for safety at the Site and for compliance with all laws, rules, regulations and practices required by the applicable safety legislation.
- D15.2 The Contractor shall be solely responsible for securing the Site, and any existing facility thereon, and for the proper care and protection of the Work already performed.
- D15.3 The Contractor shall do whatever is necessary to ensure that:
- (a) no person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Work;
  - (b) the health and safety of all persons employed in the performance of the Work or otherwise is not endangered by the method or means of its performance;
  - (c) adequate medical services are available to all persons employed on the Work and at all times during the performance of the Work;
  - (d) adequate sanitation measures are taken with respect to the Work; and
  - (e) pedestrian and other traffic on any public or private road is not unduly endangered by the performance of the Work.

**MEASUREMENT AND PAYMENT**

**D16. PAYMENT**

- D16.1 Further to C11, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
1	South Area (West) Snow Clearing Priority Streets
2	South Area (West) Snow Clearing Back Lanes

E1.3 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6.

#### E2. SNOW CLEARING REQUIREMENTS

E2.1 General Work

E2.1.1 The entire shoulder width of highway type pavement shall be cleared of snow during the snow clearing operation.

E2.1.2 The entire length of the curb along the centre median shall be cleared to the face of the curb.

E2.1.3 Snow shall be cleared from centre median crosswalks and shall be stored on the side boulevards.

E2.1.4 Snow from centre median openings and traffic storage lanes shall be removed and stored in the side boulevards.

E2.1.5 Windrows at all intersections, cross walks, corridors, railway crossing and private approaches shall be removed in the initial clearing operations. The windrows shall be pushed downstream of traffic or into available storage area on the street right-of-way in order to eliminate blind spots for motorists. Snow shall not be placed on boulevards at or near corners so as to block visibility of vehicles moving through the intersection.

E2.1.6 Windrows at pedestrian corridors shall be cleared for a distance of fifteen (15) metres approaching the corridor and five (5) metres leaving the corridor on undivided roadways and for a distance of fifteen (15) metres approaching the corridor on divided roadways.

E2.1.7 Windrows at bus stops shall be removed to a distance specified in E2.1.7(i) or E2.1.7(ii) from the bus stop sign. The bus stop platform and walk area connecting to the adjacent sidewalk shall be level to provide a safe footing for pedestrians.

(i) At bus stops that accommodates a non-articulated bus the windrow shall be removed to a distance of twelve (12) meters upstream of the bus stop sign;

(ii) At bus stops that accommodates an articulated bus the windrow shall be removed to a distance of eighteen (18) meters upstream of the bus stop sign;

E2.1.8 Snow windrows at hydrants shall be removed one (1) loader bucket width.

E2.1.9 Snow windrows shall be removed a loader bucket width and a path cleared by back blading to a hard surface from the curb to the sidewalk at a limited number of locations designated as handicapped access. Actual addresses will be supplied to the Contractor after Contract award.

- E2.1.10 Snow shall be removed around all G.R.E.A.T. (Guard Rail Energy Absorbing Terminal), Energite Barrel installations and between the curb and any adjacent guard rail that is within 3m of the curb and in the right-of-way. The G.R.E.A.T. units are used as crash cushions on the ends of guard rails to avoid abrupt stoppage of a vehicle. The Energite Barrel installations are used as crash cushions near overhead signs or any posts which do not have breakaway bases. This Work must be done carefully (by hand where necessary) such that the installations are not hit by snow clearing equipment or left covered in snow. The location of a limited number of installations will be supplied to the Contractor after the award.
- E2.1.11 Where adequate storage exists adjacent to the street, snow spillage onto the street as a result of the snow clearing operation shall be removed immediately by the Contractor. Any snow not removed may be removed by the City and the cost of the Work charged to the Contractor.
- E2.1.12 The City reserves the right, at its sole discretion, to allow windrow snow storage on the curb lane where no storage exists, provided that a reasonable attempt, satisfactory to the Contract Administrator or his designate, is made to minimize the extent of the encroachment during the Contractor's snow clearing operation. This storage shall only be utilized when specifically directed to do so by the Contract Administrator or his designate and only during unusual snow and blizzard conditions.
- E2.1.13 Snow shall not be deposited on islands between a yield or turnoff and the main roadway.
- E2.1.14 Snow shall not be stored or deposited on private property.
- E2.1.15 Snow from snow clearing operations shall not be deposited in sidewalk areas. All blocked sidewalk ends at intersections must be immediately cleared of snow in order to provide access for pedestrians and sidewalk plows. Any snow not immediately removed may be removed by the City and the resulting cost of the Work charged against the Contractor.
- E2.1.16 Snow from intersection windrows shall not be placed in bus stop areas.
- E2.1.17 The Contractor shall remove snow from the centre median (median cut) for snow storage and snow thaw purposes as directed by the Contract Administrator. The median cut shall be to a width of 0.6 m from the curb face and shall not expose, but be within 100 mm of the median surface. The median cut shall be carried out in conjunction with the adjacent grader plow operations, and shall be included in the lane km price.
- E2.1.18 Snow removal at traffic circles shall include the removal of snow from the inner shoulder area, which shall be considered incidental to the full width snow clearing operation.
- E2.1.19 Work for each snow clearing operation shall commence only upon the instructions of the Contract Administrator.
- E2.1.20 Normally, Priority I (Regional) Streets shall receive the highest priority for snow clearing followed by Priority II (Bus Routes and Collectors) Streets and then Priority III (Residential) Streets. However, the Contract Administrator may direct otherwise and the Contractor shall conform to all such directives, either oral or written.
- E2.1.21 Back lane snow clearing operations will normally be undertaken concurrently with street and street priority operations. However, the Contract Administrator may direct otherwise and the contractor shall conform to all such directives.
- E2.1.22 The Contractor shall respond immediately to rectify snow clearing deficiencies which generate citizens' complaints. If in the opinion of the Contract Administrator, the response is inadequate, then the City shall have the option of performing the necessary Work and the costs of such Work shall be borne by the Contractor.
- E2.1.23 The Contractor shall coordinate residential plowing location to minimize conflicts with the Waste/Recycling collection. Where conflicts are unavoidable the Contract Administrator will give instructions to the Contractor to relocate Waste/Recycling containers during the plowing operations. The relocation work will consist of moving the container behind area affected by snow clearing and then placing back to original position.

## E2.2 PRIORITY I (REGIONAL) STREETS (See Appendix A)

### E2.2.1 Snow clearing activities on Priority I streets includes:

- (a) full width snow clearing and hauling;
- (b) curb lane snow clearing;
- (c) loader support for truck plow snow clearing done by others;
- (d) interim plowing during major snowfalls; and
- (e) other winter maintenance Work.

### E2.2.2 Snow clearing on Priority I streets may be required after:

- (a) a recent accumulation of 3 cm or more of snowfall;
- (b) poor street conditions caused by less than 3 cm of recent snow accumulation accompanied by snow drifting; and
- (c) a gradual accumulation of snowfall that results in poor street conditions.

### E2.2.3 Priority I streets, shall be completed within a twenty-four (24) hour period for a clearing operation following the time of commencement designated by the Contract Administrator.

### E2.2.4 Snow clearing on the Priority I street system shall normally be undertaken during the night shift (1900 hours to 0700 hours) unless otherwise directed.

### E2.2.5 Priority I streets shall be cleared to bare pavement over the full pavement width and plowed to the sides as shown in Appendix A. The Contractor shall wing back snow windrows in order to create the required storage as directed by the Contract Administrator.

### E2.2.6 The Contractor shall clear and haul away snow from the street and lane intersections, crosswalks, corridors, railroad crossings, private approaches and bus stops on those Priority I streets noted in Appendix A during the initial clearing operation. The snow must be hauled away immediately where there is insufficient site storage. The snow shall be removed to within 300 mm of the existing ground elevation. Where there is on-site storage within the street right-of-way, and the on-site storage will not cause interruptions to either vehicular or pedestrian traffic or create a safety hazard, the snow may be stored for up to seventy-two (72) hours from the time commencement designated by the Contract Administrator for a snow clearing operation on Priority I, II and III streets and up to thirty-six (36) hours for a snow clearing operation on Priority I and II streets and bus loops. Snow from bus stops on those Priority I streets listed for hauling away in Appendix A shall be hauled away immediately and hauling completed by 0700 hours on the day following the commencement.

### E2.2.7 Payment for the full width snow clearing and hauling away of snow on Priority I streets will be made at the unit price per lane kilometre and all the Work herein described shall be considered as incidental to the Contract and no further compensation will be considered.

## E2.3 PRIORITY II (BUS ROUTES/COLLECTORS) STREETS (See Appendix B)

### E2.3.1 Snow clearing activities on Priority II streets includes:

- (a) full width snow clearing and hauling;
- (b) curb lane snow clearing;
- (c) loader support for truck plow snow clearing done by others;
- (d) interim plowing during major snowfalls; and
- (e) other winter maintenance Work.

### E2.3.2 Snow clearing on Priority II streets may be required after:

- (a) a recent accumulation of 5 cm or more of snowfall;
- (b) poor street conditions caused by less than 5 cm of recent snow accumulation accompanied by snow drifting; and
- (c) gradual accumulation of snowfall that results in poor street conditions.

- E2.3.3 Priority II streets shall be completed within a twenty-four (24) hour period for a clearing operation of a recent accumulation following the time of commencement designated by the Contract Administrator.
- E2.3.4 When Priority II streets are plowed within the same snow clearing operation as Priority I streets, the Priority II streets shall be completed within thirty-six (36) hours following the commencement time for the snow clearing operation.
- E2.3.5 Priority II streets shall be cleared to bare pavement over the full pavement width. The Contractor shall wing back snow windrows in order to create the required storage and perform the 0.6 m median cut as directed by the Contract Administrator. Where the Contractor is unable to meet the requirements of this specification due to parked vehicles, he shall arrange for a sign and tow operation with City forces to facilitate completion in these areas.
- E2.3.6 Payment for the full width snow clearing of Priority II streets will be made at the unit price per lane kilometre and all the Work herein described shall be considered as incidental to the Contract and no further compensation will be considered.
- E2.4 PRIORITY III (RESIDENTIAL) STREETS (See Appendix C)
- E2.4.1 Residential streets shall normally be cleared after:
- (a) a recent snow accumulation of 10 cm or more;
  - (b) poor street conditions caused by less than 10 cm of recent snow accumulation accompanied by snow drifting; and
  - (c) gradual accumulation of snowfall that results in poor street conditions.
- E2.4.2 Residential streets shall normally be cleared after Priority I and II streets.
- E2.4.3 Priority III streets shall be completed within a thirty-six (36) hour period following the commencement time designated by the Contract Administrator.
- E2.4.4 When Priority III streets are plowed within the same clearing operation as Priority II streets, the Priority III streets shall be completed within sixty (60) hours following the commencement time for the clearing of the Priority II streets.
- E2.4.5 When Priority III streets are plowed within the same snow clearing operation as Priority I and Priority II streets, the Priority III streets shall be completed within seventy-two (72) hours following the commencement time for the snow clearing of the Priority I and II streets.
- E2.4.6 Priority III streets shall be cleared to bare pavement over the full pavement width. The Contractor shall wing back snow windrows in order to create the required storage as directed by the Contract Administrator. Where the Contractor is unable to meet the requirements of this specification due to parked vehicles, he shall arrange for a sign and tow operation with City forces to facilitate completion in these areas.
- E2.4.7 Notwithstanding the requirements of this specification, abnormal snow and ice conditions may make it impossible to adequately clear the Priority III streets to bare pavement. On those occasions, the Contract Administrator shall determine the level of snow clearing required and the time required to complete the operation.
- E2.4.8 Payment for the full width snow clearing of Priority III streets will be made at the unit price per lane kilometre and all the Work herein described shall be considered as incidental to the Contract and no further compensation will be considered.
- E2.4.9 Prior to October 15<sup>th</sup> of the Contract year:
- (a) the Contract Administrator shall provide to the Contractor a grouping of streets to be completed in each twelve (12) hour shift. Each twelve (12) hour shift will be recognized as a Designated Snow Clearing Zone;

- (b) the Contract Administrator shall assign a letter to each Designated Snow Clearing Zone based upon the Residential Parking Ban. Commencement date and time will determine whether the Designated Snow Clearing Zone is cleared between 0700 to 1900 hours or 1900 to 0700 hours; and
- (c) the Contractor shall provide a start point and equipment deployment schedule for each Designated Snow Clearing Zones.

E2.4.10 The Contractor is responsible to ensure timeframes are adhered to when clearing operations have commenced as per the Residential Parking Ban.

## E2.5 BACK LANES (see Drawing 2)

E2.5.1 Back lanes shall normally be cleared after:

- (a) a recent snow accumulation of 5 cm or more;
- (b) poor back lane conditions caused by less than 5 cm of recent snow accumulation accompanied by snow drifting; and
- (c) gradual accumulation of snowfall resulting in poor back lane conditions.

E2.5.2 Back lanes shall normally be cleared concurrently with Priority I and II street snow clearing operations and shall normally be undertaken during the day shift (0700 hours to 1900 hours) unless otherwise directed by the Contract Administrator.

E2.5.3 Back lanes shall be completed within a forty-eight (48) hour period following the commencement time designated by the Contract Administrator.

E2.5.4 Back lanes shall be cleared to a width of 2.7m and maintained to a compacted snow surface as defined in D3.

E2.5.5 Payment for back lane snow clearing will be made at the unit price per kilometre and all work herein described shall be considered incidental to the contract and no further compensation will be considered.

## E3. HOURLY EQUIPMENT SERVICES

### E3.1 General

- E3.1.1 Snow clearing equipment shall be supplied on an hourly basis when requested by the Contract Administrator for winter maintenance activities between storms and opening up streets, back lanes and sidewalks and keeping them open during major snow storms and blizzards.
- E3.1.2 Snow hauling equipment shall be supplied on an hourly basis when requested by the Contract Administrator for the loading and hauling away of snow between major snowfalls.
- E3.1.3 Any equipment supplied by the Contractor on an hourly basis shall meet the following specifications:
  - (a) **Semi-Trailer Dump Trucks:** Category 3 GVW 36,500 kg;
  - (b) **J2 Class Loaders:** Rubber Tired - 4 Wheel Drive Loader;
    - (i) SAE Net Horsepower Minimum 75 H.P.;
    - (ii) Operating Weight 15,000 - 21,000 lbs. (6803.9 kg – 9525.4 kg); and
    - (iii) Bucket Size 1.5 – 2.25 cu. yd.
  - (c) **J3 Class Loaders:** Rubber Tired - 4 Wheel Drive Loader;
    - (i) SAE Net Horsepower Minimum 100 H.P.;
    - (ii) Operating Weight 21,000 - 30,500 lbs. (9,525.4 kg – 13,834.6 kg); and
    - (iii) Bucket Size 2.25 – 3.0 cu. yd.



- (d) **J5 Class Loaders:** Rubber Tired - 4 Wheel Drive Loader;
  - (i) SAE Net Horsepower Minimum 150 H.P.;
  - (ii) Operating Weight 30,500 – 42,500 lbs. (13,834.6 kg – 19,277.7 kg); and
  - (iii) Bucket Size 2.7m (8'9") width.
- (e) **K4 Class Motor Graders:** Minimum 140 - 159 Flywheel Horsepower;
- (f) **K5 Class Motor Graders:** Minimum 160 – 179 Flywheel Horsepower;
- (g) **K6 Class Motor Graders:** Minimum 180 and over Flywheel Horsepower;

E3.1.4 Contract supervision shall be as specified in E6.

E3.1.5 The Contract Administrator may request snow clearing equipment on an hourly basis up to the number and type of pieces of equipment specified in E4.

E3.1.6 The Contractor shall respond to the assigned location within two (2) hours of official notice from the Contract Administrator or be subject to penalties as outlined in E14.

E3.1.7 Contractors will be required to fill out approved Work tickets showing hours of Work, type of equipment, equipment model and serial number. All Work tickets must be signed by the City inspector and a representative of the Contractor to be valid.

E3.1.8 Payment for hourly equipment will be made based on the hours actually worked and the unit price per hour shown in Form B: Prices. There will be no overtime premium for Work under this Contract.

#### **E4. EQUIPMENT**

E4.1 The Contractor shall provide the following minimum quantity and type of equipment in first class working condition:

- (a) 9 motor graders and;
- (b) 12 loaders.

E4.2 All equipment shall be made available for inspection by the Contract Administrator or his designate prior to the award of Contract.

E4.3 The Bidder is not required to own the equipment at the time of the Submission Deadline. The Bidder shall, however, provide the Contract Administrator, within seventy-two (72) hours of being requested, the name of the registered owner of each proposed piece of equipment and a copy of a binding contract, or option to purchase or to contract, for the use of the equipment for the duration of the Contract.

#### **E4.4 LIGHTING**

E4.4.1 Each vehicle and each piece of equipment shall be provided with all of the necessary lighting prescribed by the motor vehicle laws of the Province of Manitoba.

E4.4.2 Notwithstanding the generality of the foregoing, the Contractor shall ensure that all equipment is equipped with working lighting systems sufficient to facilitate the Work. At a minimum, all equipment must be equipped with the following lighting:

- (a) at least two headlights;
- (b) at least two rear running lights;
- (c) turning signals front and rear;
- (d) stop light at rear;
- (e) at least one flashing or oscillating blue or amber light, clearly visible in all directions (360 degrees);
- (f) if the machine is in excess of two (2) metres wide, at least four clearance lights (one blue or amber light on each side at the front, facing the front, and one red light on each side at the rear facing rear-ward).

- (g) All equipment must maintain proper lighting throughout the entire shift or be removed from hired and contract work.

**E4.5 IDENTIFICATION**

- E4.5.1 All equipment shall be clearly labelled, indicating the Contractor's name and unit number. Letters and numbers used for identification purposes must be a minimum of 100 mm in height and positioned in such a manner as to be clearly visible when standing at either side of the machine.

**E4.6 COMMUNICATION**

- E4.6.1 At least one piece of equipment in a crew working in a specific area must have a means of two-way communications with the Contractor's Supervisor and office.

**E5. DRIVERS LICENSE FOR ALL HIRED HOURLY EQUIPMENT**

- E5.1 The City requires that the Contractor's supervisor is to ensure all drivers and operators have the appropriate driver's license for all Hired Hourly and Contract Equipment supplied under this contract.

**E6. CONTRACTOR'S SUPERVISION AND COMMUNICATION**

- E6.1 The Contractor shall have a qualified Supervisor on duty during all snow clearing activities regardless of the type and magnitude of the operation. The Supervisor shall be able to attend, monitor and respond to all operational and equipment concerns throughout the contract area.
- E6.2 The Contractor's Supervisor shall have two-way communications with the Contractor's office and field crews, and continuously direct, coordinate and inspect the work of the field crews.
- E6.3 The Supervisor, or his designate, shall provide a means of cellular communications with City staff involved in the inspection of contract snow clearing operations. Failure by the Contractor to provide cellular communication to the City staff by first call-out will result in the City furnishing such equipment and deducting costs from the Contract payment.
- E6.4 The Contractor shall have the capability of receiving email, text, and facsimile transmission (fax machine) and shall supply the email address, cellular number, and facsimile number to the Contract Administrator.

**E7. EXTREME SNOWFALL AND BLIZZARD CONDITIONS**

- E7.1 The Contractor shall provide snow clearing equipment to keep streets and back lanes open during extreme snowfall events if requested by the Contract Administrator. The Contract Administrator shall evaluate field conditions and at his discretion, continue or terminate the hourly snow clearing operations.
- E7.2 Time utilized by the Contractor to keep streets and back lanes open during the snow storm shall not be part of the time limits established in E2.2, E2.3, E2.4, and E2.5.
- E7.3 During or after extreme snowfall and/or blizzards, the Contract Administrator may require that Regional and Collector streets and back lanes be opened using both Contract and City forces in order to open such streets and emergency routes as quickly as possible. The Contractor may be required to dispatch his equipment to work inside and outside the contract area with and under the direction of City forces.
- E7.4 Once notified by the Contract Administrator of the official start time for the formal snow clearing operations following extreme snowfall and/or blizzards the Contractor shall immediately initiate the snow clearing operation.

## **E8. QUANTITIES**

- E8.1 Further to B9 of the Bidding Procedures, the estimated quantities identified on Form B: Prices for the clearing and hauling of snow on the Priority I, II and III street systems and back lanes are based on the following:
- (a) **Item No. 1 - Priority I (Regional) Street System:** The approximate quantity is based on 130.62 lane km of street for one (1) clearing operation of 0-10 cm;
  - (b) **Item No. 2 - Priority II (Bus Routes and Collector) Street System:** The approximate quantity is based on 77.82 lane km of street for three (3) clearing operations of 0-10 cm;
  - (c) **Item No. 3 - Priority III (Residential) Street System:** The approximate quantity is based on 216.01 lane km of street for three (3) clearing operations of 0-10 cm;
  - (d) **Item No. 4 – Back Lanes:** The approximate quantity is based on 93.88 linear km of back lanes for six (6) clearing operations of 0-10 cm;
- E8.2 The total length of lane kilometres, as established by the Public Works Department, are provided in Appendix A - Priority I Streets, Appendix B - Priority II Streets, and Appendix C - Priority III Streets. Drawing 1 indicates the inventory of streets. Drawing 2 indicates the inventory of back lanes. In the event that streets or back lanes are either added or deleted, then the total length shall be adjusted correspondingly for the purpose of measurement and payment.
- E8.3 Appendix D showing the annual accumulation of snow based on the meteorological summary of the Records kept by the City of Winnipeg for the last forty one (44) years is provided strictly for the information of Bidders.

## **E9. TRAFFIC MOVEMENT AND PARKING**

- E9.1 After a significant snowfall, overnight parking may be restricted on Priority I and II streets with the declaration of the Declared Snow Route Parking Ban. This By-Law, when declared by the Director of Public Works, prohibits parking on Priority I and Priority II streets between the hours of midnight and 07:00 am. The ban will normally last for twenty-four (24) hours but may be extended.
- E9.2 During snow clearing and hauling operations, the Contractor shall take all reasonable measures to facilitate the movement of traffic in accordance with the Manual of Temporary Traffic Control.

## **E10. MEASUREMENT AND PAYMENT**

- E10.1 This section will govern payment for full width street clearing and back lane clearing of snow and hauling services for snow removal performed by the Contractor which include:
- (a) clearing and hauling services for snow after a recent accumulation of snow;
  - (b) clearing and hauling services after a gradual accumulation of snow where, in the opinion of the Contract Administrator, such clearing and hauling services are warranted;
  - (c) clearing and hauling services after a recent accumulation of snow combined with a gradual accumulation of snow; and
  - (d) maintenance snow clearing services between storms and keeping streets and back lanes open during major snow storms and/or blizzards on the streets specified in this Contract.
- E10.2 If there is additional precipitation before the expiration of the specified time period, the Contract Administrator will define the end of the most recent snowfall and will set another time limit based on the quantity of precipitation.
- E10.3 Where in the opinion of the Contract Administrator the amount of snowfall and/or accompanying severe drifting conditions makes it impractical to complete the full width snow clearing, sidewalk clearing and back lane clearing operations with the Contractor's full complement of equipment and continuous effort, the Contract Administrator may, at his sole discretion, extend the time limits specified.

- E10.4 Payment will be made for back lane clearing operations based on the unit price per kilometre. The payment for such clearing operations will be based on multiplying the unit bid price for Item No. 4 on Form B: Prices by the length in kilometres of back lanes and sidewalk cleared.
- E10.5 The Contract Administrator will have the authority to determine whether any clearing and hauling operation constitutes a recent accumulation, a gradual accumulation or a combination of the two. The guideline to be utilized by the Contract Administrator for determining whether a clearing operation is a recent accumulation or a gradual accumulation will be that, where 5 cm or more of snow has fallen over the forty-eight (48) hour period preceding the direction to commence clearing services, the accumulation will be considered a recent accumulation. Otherwise, the clearing operation will be considered a gradual accumulation.
- E10.6 Payment will be made for full width clearing and hauling operations on Priority I (Regional) Streets, Priority II (Collector) Streets, Priority III (Residential) streets based on the unit price per lane kilometre and a snow accumulation factor (F) which is dependent on the quantity of snowfall and the type of snow accumulation. The payment for all such clearing operations will be based on multiplying the unit price (R) for Item No. 1, 2, or 3, on Form B: Prices, as the case may be, by the length in kilometres cleared (L), as determined by the Contract Administrator, multiplied by the snow accumulation factor (F), as determined by the Contract Administrator; or  $\text{Payment} = R \times L \times F$ .
- E10.7 The snow accumulation for purposes of payment for a gradual accumulation or combination of a recent and gradual accumulation shall be the quantity of snow deemed to be cleared/hailed by the Contractor as determined by the Contract Administrator in accordance with this section. There may be hourly snow hauling, plowing and/or salting operations carried on by others on some portions of the street systems affected by this Contract. Therefore, the depth of the snow accumulation to be used for payment for the removal of a gradual accumulation will not include snow that has been melted by environmental affects, chemical action, or both as determined by the Contract Administrator.
- E10.8 The snow accumulation for purposes of payment for a recent accumulation shall be the quantity of snow deemed to be cleared/hailed by the Contractor as determined by the Contract Administrator in accordance with this section. There may be hourly snow hauling, plowing and/or salting operations carried on by others on some portions of the street systems affected by this Contract. Therefore, the depth of the snow accumulation to be used for payment for the removal of a recent accumulation will be that portion of snow that has recently fallen immediately preceding the start of a clearing operation and during the said operation, but not including cleared or removed by others or by environmental processes, as determined solely by the Contract Administrator. The duration and depth of snowfall will be based on official reports from a weather consulting service. Notice of any dispute by the City arising from the amount of snow accumulation used to calculate payments for a recent clearing operation shall be forwarded to the Contract Administrator within fifteen (15) days of the City notifying the Contractor of the amounts used for payment for a given clearing operation. Failure by the Contractor to give notice of such dispute within the time specified shall preclude the Contractor from disputing the amount for which the City will pay.
- E10.9 No payment will be made for gradual accumulation after March 15 of the Contract year in the event that all of the gradual accumulation has completely melted and does not physically exist on the street at the time of a plowing operation initiated by a recent accumulation. This determination will be made by the Contract Administrator.
- E10.10 The snow accumulation factor will be determined by the appropriate formula based on the type of accumulation and the quantity of snowfall. The formula to be used to calculate the snow accumulation factor for each payment scenario are identified in Table 1 below and are further detailed in E10.10.1, E10.10.2, E10.10.3, E10.10.4, and E10.10.5.

Type of Accumulation	Snowfall Measurement	Snow Accumulation Factor Calculation
(1) Recent	0-10.0 cm	$F = 1.000$
(2) Recent	Greater than 10.0 cm	$F = 1 + (0.90 \times (x - 10) / 10)$ where $x$ is the number of centimeters of recent accumulation snowfall. $F = 1 + \left[ 0.90 \left( \frac{x - 10}{10} \right) \right]$
(3) Gradual	Starting after December 15 <sup>th</sup> of Contract year or since the preceding clearing operation, whichever is later.	$F = 1.000$ or $F = (0.30 \times y) / 10$ , whichever value is greater, where $y$ is the number of centimeters of gradual accumulation snowfall.
(4) Combination of Recent and Gradual	0-10.0 cm ( $x$ ) of recent and ( $y$ ) cm of gradual starting after December 15 <sup>th</sup> of Contract year or since the preceding clearing operation, whichever is later.	$F = 1.000$ or $F = (x + (0.30 \times y)) / 10$ , whichever value is greater, where $x$ is the number of centimeters of recent accumulation snowfall and $y$ is the number of centimeters of gradual accumulation snowfall.
(5) Combination of Recent and Gradual	Greater than 10.0 cm of recent ( $x$ ) and ( $y$ ) cm of gradual starting after December 15 <sup>th</sup> of Contract year or since the preceding clearing operation, whichever is later.	$F = 1 + (0.90 \times (x - 10) / 10) + ((0.30 \times y) / 10)$ , where $x$ is the number of centimeters of recent accumulation snowfall and $y$ is the number of centimeters of gradual accumulation snowfall.

E10.10.1 For a clearing operation required as a result of a Recent Accumulation of 10 cm or less (0-10 cm), the accumulation factor (F) is 1.00. Payment will be made at the unit price multiplied by the length in kilometres of traffic lanes cleared multiplied by 1.000.

Example: The total payment for a clearing operation after 9.3 cm of Recent Accumulation would be unit price x lane kilometres x 1.000).

E10.10.2 For a clearing operation required as a result of a Recent Accumulation in excess of 10 cm, the accumulation factor will be determined by adding 1.000 (which is the factor for the first 10 cm) to 90% of the snow accumulation in excess of 10 cm divided by ten (10). Payment will be made at the unit price multiplied by the length in kilometres of traffic lanes cleared multiplied by the snow accumulation factor.

Example: The snow accumulation factor for a clearing operation after 14.3 cm of Recent Accumulation, would be based on the calculation,  $F = 1 + (0.9 \times (14.3 - 10)/10) = 1.387$ . The total payment for the clearing operation would be (unit price x lane kilometres x 1.387).

E10.10.3 For a clearing operation required as a result of a Gradual Accumulation, excluding salted or chemically cleared snow, the snow accumulation factor would be 1.000 or 30% of the Gradual Accumulation divided by ten (10), whichever value is greater. Payment will be made at the unit price multiplied by the length in kilometres of traffic lanes cleared multiplied by the snow accumulation factor.

Example: Assume that, on February 28<sup>th</sup>, the condition of the Priority III streets was such that a plowing operation was required and that no snowfall had occurred in the past 48 hours. The date of the last clearing operation was January 28<sup>th</sup> and 19 cm of snowfall (Gradual Accumulation) had fallen since that date. The snow accumulation factor would be 30% of 19 cm divided by 10, or  $F = (0.30 \times 19) / 10 = 0.570$ . Since the calculated factor is less than 1.000, the greater value of 1.000 would be used and the total payment for the clearing operation would be (unit price x lane kilometres x 1.000).

- E10.10.4 For a clearing operation required as result of a Recent Accumulation of 10 cm or less (0-10 cm) and where there has also been Gradual Accumulation, excluding Gradual Accumulation that was salted or chemically treated, measured starting after December 15<sup>th</sup> of the Contract year or since the immediately preceding clearing operation, whichever is later, the snow accumulation factor will be 1.000 or the value calculated by adding the recent accumulation to 30% of the Gradual Accumulation and dividing the sum by ten (10), whichever value is greater. Payment will be made at the unit price multiplied by the length in kilometres of traffic lanes cleared multiplied by the snow accumulation factor.

Example: Assume that during the Contract year there has been a snowfall on January 20<sup>th</sup> of 5.0 cm with severe winds, and in the opinion of the Contract Administrator, there is a need for a snow clearing operation. Assume further that 14.5 cm of snow has Gradually Accumulated between December 15<sup>th</sup> and the commencement of the Recent Accumulation on January 20<sup>th</sup>. The snow accumulation factor and payment would be calculated as follows:

- (i) The Recent Accumulation of 5.0 cm is added to 30% of the Gradual Accumulation of 14.5 cm and the sum divided by 10 or  $F = (5.0 + (0.30 \times 14.5)) / 10 = 0.935$ . Since the calculated factor is less than 1.000, the total payment for the clearing operation would be (unit price  $\times$  lane kilometres  $\times$  1.000).

Assume that in the above scenario the snowfall on January 20<sup>th</sup> was 8.0 cm. Then the snow accumulation factor and payment would be calculated as follows:

- (ii) The Recent Accumulation of 8.0 cm is added to 30% of the Gradual Accumulation of 14.5 cm and the sum divided by 10 or  $F = (8.0 + (0.30 \times 14.5)) / 10 = 1.235$ . The total payment for the clearing operation would be (unit price  $\times$  lane kilometres  $\times$  1.235).

- E10.10.5 For a clearing operation required as result of a Recent Accumulation of greater than 10 cm and where there has also been Gradual Accumulation measured starting after December 15<sup>th</sup> of the Contract year or since the immediately preceding clearing operation, whichever is later, the snow accumulation factor will be determined by adding 1.000 (which is the factor for the first 10 cm of Recent Accumulation) to 90% of the Recent Accumulation in excess of 10 cm divided by ten (10) and then adding 30% of the Gradual Accumulation and divided by ten (10). Payment will be made at the unit price multiplied by the length in kilometres of traffic lanes cleared multiplied by the snow accumulation factor.

Example: Assume that during the Contract year there has been a snowfall on January 20<sup>th</sup> of 16.8 cm and, in the opinion of the Contract Administrator, there is need for a snow clearing operation. Assume further that 20.5 cm of snow has Gradually Accumulated between December 15<sup>th</sup> and the commencement of the Recent Accumulation on January 20<sup>th</sup>. The snow accumulation factor and payment would be calculated by adding 1.000 for the first 10 cm of Recent Accumulation to 90% of 6.8 cm (which is the Recent Accumulation in excess of 10 cm) divided by 10 and then adding 30% of 20.5 cm (which is the Gradual Accumulation) divided by 10, or  $F = 1.000 + (0.90 \times (16.8 - 10) / 10) + ((0.30 \times 20.5) / 10) = 2.227$ . The total payment for the clearing operation would be (unit price  $\times$  lane kilometres  $\times$  2.227).

- E10.11 Payment shall be made for snow clearing services, such as truck plowing or maintenance snow clearing between snow storms and snow clearing during major storms/blizzards, as specified in E3 of the Specifications at the Bid hourly rate per equipment class on Form B: Prices, as the case may be, multiplied by the hours actually worked for each specific class as determined by the Contract Administrator.
- E10.12 Payment for wings, ice blades, and/or straight blades for Motor Graders engaged in snow clearing operations shall be included in the unit price per lane kilometre or kilometre respectively in Form B: Prices, Item no. 1, 2, and 3.
- E10.13 Ice blades and wings specifically requested for Hourly work by the Contract Administrator or his designate will be compensated for at the same rate per hour as those specified in the "Hourly Rental Rate for Public Works Department for the 2018 to 2019 Snow Season".

- E10.14 The City shall guarantee to pay to the Contractor a minimum amount, referred to as the "Guaranteed Minimum Amount", equal to 60% of the unit price shown on Form B: Prices.
- E10.14.1 Payment for Work done shall be as provided in E8 and all such payments shall be deducted from the Guaranteed Minimum Amount.
- E10.14.2 On December 31<sup>st</sup>, all payments received by the Contractor under this Contract will be totalled and the total compared with 10% of the Total Bid Price. If the total of the payments received is less than 10% of the Total Bid Price, then the difference between the aforesaid figures will be paid to the Contractor as an advance on the Guaranteed Minimum Amount. The amount of the advance will be set off against subsequent payments for work done by the Contractor.
- E10.14.3 On February 28<sup>th</sup>, all payments received by the Contractor under this Contract for Work done and as an advance on the Guaranteed Minimum Amount will be totalled and that total compared with 35% of the Total Bid Price. If the total of the payments received is less than 35% of the Total Bid Price, then the difference will be paid to the Contractor as an advance on the Guaranteed Minimum Amount. The amounts of any advances received by the Contractor will be set off against subsequent payments for Work done by the Contractor pursuant to the Contract.
- E10.14.4 At the conclusion of the Contract year, all payments received by the Contractor or under this Contract for Work done or as an advance on the Guaranteed Minimum Amount will be totalled and that total compared with the Guaranteed Minimum Amount. Only when the total of the payments received is less than the Guaranteed Minimum Amount will additional monies be payable by the City to the Contractor under the terms of this Contract.
- E10.14.5 The Contractor will not be compensated for any inconvenience and costs which may result from excavation Work on the streets, sidewalks or back lanes, the parking of vehicles on the roadway, vehicle movement, or any other obstruction to his Work.
- E10.14.6 The Contractor shall note that on the Regional Streets System portion of this Contract, the unit price shall include the cost of all necessary hauling for Priority I (Regional) Streets as specified in the Contract, identified in Appendix A with an asterisk.
- E10.14.7 The Contractor shall note that on the Priority I and Priority II street system portion of this Contract, the unit price bid shall include the cost of the 0.6 m median cut as specified in the contract.
- E10.14.8 It is the City of Winnipeg's intent to hold back five percent (5%) of progress estimates for all Work performed under this Contract as a damage deposit relating to E13 of the Specifications. These funds will be released when damages are rectified in accordance with E13.

## **E11. ANNUAL REVIEW – INFLATIONARY ADJUSTMENT**

- E11.1 The unit prices specified on Form B: Prices will be adjusted on the first Contract anniversary date, and subsequent anniversary dates based on the percentage increase or decrease in unit prices for the Contract year from the All-items Consumer Price Index for Winnipeg, normally referred to by Statistics Canada as Table 326-0001. The calculation of the adjustment will be based on October 1<sup>st</sup> of the previous year to October 1<sup>st</sup> of the current year. The first inflationary adjustment shall occur on October 1, 2019. The maximum annual adjustment shall not exceed ten percent (10%).
- E11.2 The index used will be that prepared by Statistics Canada. Since the index may not be available until sometime after the adjustment date, the adjustment will be retroactive.

## **E12. PRICE ADJUSTMENT – FUEL COSTS**

- E12.1 Notwithstanding C11.2, price adjustments for unforeseen fuel cost changes will include increases or decreases in the price of diesel fuel.

- E12.2 The City of Winnipeg will determine the Base Price of fuel costs based on the average diesel fuel price for the month of July of 2018 charged to the Streets Maintenance Division by the City of Winnipeg Fleet Management Agency.
- E12.3 Price adjustments will be assessed on October 1<sup>st</sup> and on January 1<sup>st</sup> of each contract year.
- E12.3.1 Price adjustments will only be made for any fuel price increase or decrease in excess of three percent (3%).
- E12.3.2 The actual diesel fuel price (Actual Price) will be determined on the dates indicated in E12.3 using the average fuel price of the previous month (e.g. for October 1<sup>st</sup> the average price for the month of September will be used and for January 1<sup>st</sup> the average price for December will be used).
- E12.4 Price adjustments will be applied to seventeen percent (17%) of the unit price by the Contractor on all items, which is the portion of the bid price that is attributable to fuel.
- E12.4.1 If fuel prices increase by more than three percent (3%) of the Base Price identified in E12.2, then a price adjustment for fuel will be made and paid for based on the quantity of eligible work on each progress estimate following the date of adjustment in accordance with the following formula:
- $$\text{Price Adjustment} = (\text{Actual Price} - (1.03 \times \text{Base Price}))$$
- E12.4.2 If fuel prices decrease by more than three percent (3%) of the Base Price, then a price adjustment for fuel will be made and paid for based on the quantity of eligible Work on each progress estimate following the date of adjustment in accordance with the following formula:
- $$\text{Price Adjustment} = ((0.97 \times \text{Base Price}) - \text{Actual Price})$$
- E12.4.3 Unit Price is as follows:
- $$\text{Unit Price Adjustment} = \text{Unit Price} - (\text{Price Adjustment} \times 0.17 \times \text{Unit Price}).$$

### **E13. DAMAGE TO PUBLIC AND PRIVATE PROPERTY**

- E13.1 The Contractor will be held responsible for any damage to City or private property sustained as a result of his snow clearing operation. Prior to commencement of the first clearing operation, the Contractor shall document and/or photograph all existing damage to pavements, curbs, utilities, street furniture, street signs, parking meters, etc., and shall provide this information to the Contract Administrator for verification.
- E13.2 The Contractor shall immediately report damages to City or private property to the Contract Inspector.
- E13.3 Any damage to pavements, boulevards, trees, etc. that in no way present a hazard to either pedestrian or vehicular traffic shall be reported to the Contract Administrator and rectified by the Contractor in accordance with City of Winnipeg specifications prior to June 30<sup>th</sup> following the snow clearing season. Damages not rectified by June 30<sup>th</sup> may be rectified by the City or its agents and all costs shall be borne by the Contractor and shall be deducted from monies owing.
- E13.4 The Contractor shall repair all curbs damaged as a result of snow clearing operations. The repairs will be conducted at the exact locations at which the curb damage was assessed. The Contractor shall remove and dispose of any loose curb material prior to April 15<sup>th</sup> of each year.



- E13.5 Any damage to street appurtenances such as, but not limited to, street light standards, signal lights, hydrants, valve boxes, railway signal arm protective devices shall be rectified immediately. If in the process of clearing snow from a street, the Contractor dislodges a manhole frame, it must be restored immediately. Failure to rectify damages immediately may result in the damages being rectified by the City or its agents and the associated costs borne by the Contractor. In the event that the manhole frame is damaged beyond replacement, the Contractor shall immediately install temporary warning devices to protect pedestrians and vehicles and notify the City at 311, so that a repair can be made by City forces. The costs for such repair will be borne totally by the Contractor.
- E13.6 The Contractor shall repair any sod damage caused by his snow clearing operations with top soil and seed or with sod as directed by the Contract Administrator. All restorations shall be in accordance with City of Winnipeg Standard Construction Specifications.
- E13.7 The Contractor shall replace with equal, any recycling bins or refuse containers destroyed, lost or misplaced by his operations at least one (1) day prior to the next refuse day cycle.

#### **E14. PENALTIES**

- E14.1 Where the Contractor does not satisfactorily complete the Work on Priority I, II or III streets, sidewalks or back lanes in accordance with the time and quality requirements specified in E2, the Contractor shall be assessed a penalty.
- E14.1.1 For Priority I streets, the penalty shall be in the amount of \$3,000.00 or an amount equal to fifty percent (50%) of the unit price per lane kilometre multiplied by the lane kilometres not satisfactorily completed multiplied by the snow accumulation factor, whichever is greater.
- E14.1.2 For Priority II and Priority III streets, the penalty shall be in the amount of \$2,000.00 or an amount equal to twenty-five percent (25%) of the unit price per lane kilometre multiplied by the lane kilometres not satisfactorily completed multiplied by the snow accumulation factor, whichever is greater.
- E14.1.3 For back lanes, the penalty shall be in the amount of \$1,500.00 or an amount equal to twenty-five percent (25%) of the unit price per kilometre times the kilometres not satisfactorily completed, whichever is greater for each back lane.
- E14.1.4 Streets and back lanes that the Contract Administrator deems to be deficient in whole and not in part will be considered incomplete and may be subject to the above penalty.
- E14.2 Where the Contractor does not supply up to the minimum quantity and type of equipment identified in E4 within two hours as outlined in E3.1.6 of the Specifications, the Contractor shall be assessed a penalty of five hundred dollars (\$500.00) per piece of equipment per call out below the minimum number as specified in E4. The minimum requirement shall apply throughout the duration of the operation from call-out to release of equipment.
- E14.3 Where the Contractor does not satisfactorily perform any snow clearing operation in accordance with the requirements of E2, particularly in reference to the quality of the Work following an inspection by the Contract Administrator the Work shall be declared a deficiency. The Contractor shall be requested to rectify the portion of streets, sidewalks or back lanes found to be unsatisfactory in quality within twenty-four (24) hours of notification or in a time period to be agreed to by the Contract Administrator. Failure to respond may result in the City performing the required Work and charging the cost of such Work back to the Contractor.
- E14.4 Any performance deficiency related to E2 such as, but not limited to, depositing snow in unauthorized locations, depositing snow on private property, or not removing snow windrows from approaches, shall be rectified immediately by the Contractor. Failure to respond will result in the City or its agent rectifying the deficiencies and charging the costs back to the Contractor.
- E14.5 Where the Contractor fails to replace recycling bins or refuse containers as described in E13.7, the City will replace these items and assess a penalty of \$100.00 per item.

## APPENDIX A – SOUTH AREA (WEST) PRIORITY I STREETS

STREET NAME	FROM STREET	TO STREET	SNOW ROUTE	PRIORITY	LANE KM
* Academy Rd	Brock St	Queenston St	Regional	P1	0.37
* Academy Rd	Elm St	Montrose St	Regional	P1	0.39
* Academy Rd	Oxford St	Waverley St	Regional	P1	0.42
* Academy Rd	Lanark St	Renfrew St	Regional	P1	0.39
* Academy Rd	Oak St	Elm St	Regional	P1	0.40
* Academy Rd	Oxford St	Cambridge St	Regional	P1	0.40
* Academy Rd	Kenaston Bv	Lockwood St	Regional	P1	0.42
* Academy Rd	Lindsay St	Renfrew St	Regional	P1	0.75
* Academy Rd	Ash St	Oak St	Regional	P1	0.40
* Academy Rd	Ash St	Waterloo St	Regional	P1	0.40
* Academy Rd	Niagara St	Queenston St	Regional	P1	0.37
* Academy Rd	Harrow St	Guelph St	Regional	P1	0.70
* Academy Rd	Campbell St	Cordova St	Regional	P1	0.38
* Academy Rd	Harrow St	Stafford St	Regional	P1	0.67
* Academy Rd	Brock St	Cordova St	Regional	P1	0.36
* Academy Rd	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
* Academy Rd	Wilton St	Cambridge St	Regional	P1	0.39
* Academy Rd	Wellington Cr S	Lanark St	Regional	P1	0.55
* Academy Rd	Beaverbrook St	Wellington Cr S	Regional	P1	0.06
* Academy Rd	Borebank St	Lindsay St	Regional	P1	0.40
* Academy Rd	Borebank St	Campbell St	Regional	P1	0.40
* Academy Rd	St James Bridge SB	Centennial St	Regional	P1	0.38
* Academy Rd	Lockwood St	St James Bridge	Regional	P1	0.13
* Academy Rd	Centennial St	Academy Rd WB	Regional	P1	0.16
* Academy Rd	Academy Rd WB	Beaverbrook St	Regional	P1	0.19
* Academy Rd	Waterloo St	Niagara St	Regional	P1	0.38
* Academy Rd	Guelph St	Wilton St	Regional	P1	0.41

* Academy Rd	Waverley St	Montrose St	Regional	P1	0.41
* Academy Rd WB	Academy Rd	Centennial St	Regional	P1	0.34
Access Rd (To Superstore)	Grant Av	Grant Av	Regional	P1	0.03
Alcrest Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Ash St	Corydon Av	Corydon Av	Regional	P1	0.03
Ash St	Grant Av	Grant Av	Regional	P1	0.03
Assiniboine Park Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Barnstaple Cv	Roblin Bv	Roblin Bv	Regional	P1	0.03
Batchelor Av	Roblin Bv	Roblin Bv	Regional	P1	0.03
Beaverbrook St	Taylor Av	Taylor Av	Regional	P1	0.03
Beaverbrook St	Grant Av	Grant Av	Regional	P1	0.03
Beaverbrook St	Corydon Av	Corydon Av	Regional	P1	0.03
Berkley St	Roblin Bv	Roblin Bv	Regional	P1	0.03
Borebank St	Corydon Av	Corydon Av	Regional	P1	0.03
Borebank St	Grant Av	Grant Av	Regional	P1	0.03
Boreham Bv	Corydon Av	Corydon Av	Regional	P1	0.02
Bower Bv	Grant Av	Grant Av	Regional	P1	0.03
Bower Bv	Corydon Av	Corydon Av	Regional	P1	0.03
Bramble Dr	Grant Av	Grant Av	Regional	P1	0.03
Brock St	Corydon Av	Corydon Av	Regional	P1	0.03
Brock St	Grant Av	Grant Av	Regional	P1	0.03
Buckingham Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Bus Loop	Tuxedo Av	Tuxedo Av	Regional	P1	0.10
Cambridge St	Taylor Av	Taylor Av	Regional	P1	0.03
Cambridge St	Grant Av	Grant Av	Regional	P1	0.03
Campbell St	Corydon Av	Corydon Av	Regional	P1	0.03
Campbell St	Grant Av	Grant Av	Regional	P1	0.03
Carlotta Cr	Roblin Bv	Roblin Bv	Regional	P1	0.05
Carpathia Rd	Corydon Av	Corydon Av	Regional	P1	0.03
Cathcart St	Grant Av	Grant Av	Regional	P1	0.03
Cathcart St	Roblin Bv	Roblin Bv	Regional	P1	0.02

Centennial St	Corydon Av	Corydon Av	Regional	P1	0.03
Centennial St	Grant Av	Grant Av	Regional	P1	0.03
Centennial St	Taylor Av	Taylor Av	Regional	P1	0.03
Chalfont Rd	Grant Av	Grant Av	Regional	P1	0.03
Chalfont Rd	Roblin Bv	Roblin Bv	Regional	P1	0.02
Charleswood Rd	Roblin Bv	Roblin Bv	Regional	P1	0.02
Chataway Bv	Tuxedo Av	Tuxedo Av	Regional	P1	0.03
Commissary Rd	Corydon Av	Corydon Av	Regional	P1	0.02
Community Rw	Roblin Bv	Roblin Bv	Regional	P1	0.03
Cordova St	Corydon Av	Corydon Av	Regional	P1	0.03
Cordova St	Grant Av	Grant Av	Regional	P1	0.03
* Corydon Av	Campbell St	Borebank St	Regional	P1	0.20
* Corydon Av	Laidlaw Bv	Bower Bv	Regional	P1	0.22
* Corydon Av	Lindsay St	Borebank St	Regional	P1	0.20
* Corydon Av	Borebank St	Campbell St	Regional	P1	0.20
* Corydon Av	Tuxedo Av	Grenfell Bv	Regional	P1	0.02
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.03
* Corydon Av	Edgeland Bv	Southport Bv	Regional	P1	0.05
* Corydon Av	Grenfell Bv	Handsart Bv	Regional	P1	0.21
* Corydon Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
* Corydon Av	Queenston St	Niagara St	Regional	P1	0.18
* Corydon Av	Carpathia Rd	Lockwood St	Regional	P1	0.21
* Corydon Av	Centennial St	Lockwood St	Regional	P1	0.26
* Corydon Av	Lindsay St	Angelo Grande Bocce Wy	Regional	P1	0.38
* Corydon Av	Renfrew St	Lindsay St	Regional	P1	0.38
* Corydon Av	Lockwood St	Centennial St	Regional	P1	0.26
* Corydon Av	Southport Bv	Edgeland Bv	Regional	P1	0.44
* Corydon Av	Grenadier Dr	Kenaston Bv	Regional	P1	0.18
* Corydon Av	Edgeland Bv	Southport Bv	Regional	P1	0.44
* Corydon Av	Doncaster St	Edgeland Bv	Regional	P1	0.41
* Corydon Av	Southport Bv	Tuxedo Av	Regional	P1	0.17

* Corydon Av	Edgeland Bv	Doncaster St	Regional	P1	0.43
* Corydon Av	Lanark St	Angelo Grande Bocce Wy	Regional	P1	0.20
* Corydon Av	Montrose St	Waverley St	Regional	P1	0.20
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.02
* Corydon Av	Bower Bv	Laidlaw Bv	Regional	P1	0.22
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.03
* Corydon Av	Edgeland Bv	Southport Bv	Regional	P1	0.05
* Corydon Av	Edgeland Bv	Southport Bv	Regional	P1	0.08
* Corydon Av	Ubique Cr	Grenadier Dr	Regional	P1	0.14
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.03
* Corydon Av	Park Bv N	Hosmer Bv	Regional	P1	0.20
* Corydon Av	Shaftesbury Bv	Bower Bv	Regional	P1	0.26
* Corydon Av	Guelph St	Harrow St	Regional	P1	0.69
* Corydon Av	Montrose St	Elm St	Regional	P1	0.19
* Corydon Av	Oxford St	Cambridge St	Regional	P1	0.20
* Corydon Av	Ash St	Oak St	Regional	P1	0.20
* Corydon Av	Handsart Bv	Lamont Bv	Regional	P1	0.21
* Corydon Av	Ubique Cr	Doncaster St	Regional	P1	0.22
* Corydon Av	Carpathia Rd	Kenaston Bv	Regional	P1	0.21
* Corydon Av	Kenaston Bv	Grenadier Dr	Regional	P1	0.17
* Corydon Av (Bus Loop)	Corydon Av	Corydon Av	Regional	P1	0.15
* Corydon Av	Lamont Bv	Handsart Bv	Regional	P1	0.21
* Corydon Av	Lockwood St	Carpathia Rd	Regional	P1	0.21
* Corydon Av	Grenadier Dr	Ubique Cr	Regional	P1	0.13
* Corydon Av	Conservatory Dr	Conservatory Dr	Regional	P1	0.03
* Corydon Av	Elm St	Oak St	Regional	P1	0.20
* Corydon Av	Corydon Av	Tuxedo Av	Regional	P1	0.04
* Corydon Av	Lamont Bv	Park Bv N	Regional	P1	0.23
* Corydon Av	Beaverbrook St	Centennial St	Regional	P1	0.18
* Corydon Av	Boreham Bv	Kelvin Bv	Regional	P1	0.21
* Corydon Av	Shaftesbury Bv	Shaftesbury Bv	Regional	P1	0.03

* Corydon Av	Bower Bv	Conservatory Dr	Regional	P1	0.26
* Corydon Av	Laidlaw Bv	Boreham Bv	Regional	P1	0.21
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.02
* Corydon Av	Waverley St	Oxford St	Regional	P1	0.21
* Corydon Av	Borebank St	Lindsay St	Regional	P1	0.20
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.02
* Corydon Av	Corydon Av	Corydon Av	Regional	P1	0.03
* Corydon Av	Boreham Bv	Laidlaw Bv	Regional	P1	0.21
* Corydon Av	Grenfell Bv	Southport Bv	Regional	P1	0.21
* Corydon Av	Cambridge St	Oxford St	Regional	P1	0.20
* Corydon Av	Kelvin Bv	Hosmer Bv	Regional	P1	0.21
* Corydon Av	Handsart Bv	Grenfell Bv	Regional	P1	0.21
* Corydon Av	Waverley St	Montrose St	Regional	P1	0.20
* Corydon Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
* Corydon Av	Tuxedo Av	Tuxedo Av	Regional	P1	0.03
* Corydon Av	Centennial St	Beaverbrook St	Regional	P1	0.18
* Corydon Av	Lanark St	Beaverbrook St	Regional	P1	0.30
* Corydon Av	Beaverbrook St	Lanark St	Regional	P1	0.30
* Corydon Av	Guelph St	Wilton St	Regional	P1	0.69
* Corydon Av	Harrow St	Stafford St	Regional	P1	0.69
* Corydon Av	Rockwood St	Wilton St	Regional	P1	0.69
* Corydon Av	Park Bv N	Lamont Bv	Regional	P1	0.22
* Corydon Av	Hosmer Bv	Park Bv N	Regional	P1	0.22
* Corydon Av	Hosmer Bv	Kelvin Bv	Regional	P1	0.21
* Corydon Av	Rockwood St	Thurso St	Regional	P1	0.69
* Corydon Av	Renfrew St	Lanark St	Regional	P1	0.20
* Corydon Av	Kelvin Bv	Boreham Bv	Regional	P1	0.21
* Corydon Av	Queenston St	Brock St	Regional	P1	0.18
* Corydon Av	Niagara St	Queenston St	Regional	P1	0.18
* Corydon Av	Waterloo St	Niagara St	Regional	P1	0.20
* Corydon Av	Campbell St	Cordova St	Regional	P1	0.19

* Corydon Av	Cordova St	Brock St	Regional	P1	0.18
* Corydon Av	Brock St	Queenston St	Regional	P1	0.18
* Corydon Av	Oak St	Ash St	Regional	P1	0.20
* Corydon Av	Ash St	Waterloo St	Regional	P1	0.20
* Corydon Av	Niagara St	Waterloo St	Regional	P1	0.20
* Corydon Av	Oxford St	Waverley St	Regional	P1	0.21
* Corydon Av	Brock St	Cordova St	Regional	P1	0.18
* Corydon Av	Cordova St	Campbell St	Regional	P1	0.19
* Corydon Av	Elm St	Montrose St	Regional	P1	0.19
* Corydon Av	Oak St	Elm St	Regional	P1	0.20
* Corydon Av	Waterloo St	Ash St	Regional	P1	0.20
* Corydon Av	Cambridge St	Thurso St	Regional	P1	1.10
* Corydon Av	Kenaston Bv	Carpathia Rd	Regional	P1	0.21
* Corydon Av	Doncaster St	Ubique Cr	Regional	P1	0.19
Coventry Rd	Grant Av	Grant Av	Regional	P1	0.03
Dale Bv	Roblin Bv	Roblin Bv	Regional	P1	0.02
Dale Bv	Roblin Bv	Roblin Bv	Regional	P1	0.02
Dieppe Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Doncaster St	Corydon Av	Corydon Av	Regional	P1	0.05
Doncaster St	Tuxedo Av	Tuxedo Av	Regional	P1	0.02
Edgeland Bv	Grant Av	Grant Av	Regional	P1	0.03
Edgeland Bv	Tuxedo Av	Tuxedo Av	Regional	P1	0.02
Edgeland Bv	Corydon Av	Corydon Av	Regional	P1	0.03
Elm St	Grant Av	Grant Av	Regional	P1	0.03
Elm St	Corydon Av	Corydon Av	Regional	P1	0.03
Elmhurst Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Elmhurst Rd	Grant Av	Grant Av	Regional	P1	0.03
Elmvale Cr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Fairmont Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Fairmont Rd	Grant Av	Grant Av	Regional	P1	0.03
* Grant Av	Oak St	Elm St	Regional	P1	0.20

* Grant Av	Park Bv E	Park Bv W	Regional	P1	0.29
* Grant Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
* Grant Av	Bramble Dr	Laxdal Rd	Regional	P1	0.48
* Grant Av	Wilton St	Harrow St	Regional	P1	0.69
* Grant Av	Haney St	William R Clement Pw	Regional	P1	0.24
* Grant Av	Oxford St	Waverley St	Regional	P1	0.21
* Grant Av	Renfrew St	Lanark St	Regional	P1	0.20
* Grant Av	Inverness Bv	Portsmouth Bv	Regional	P1	0.03
* Grant Av	Lanark St	Renfrew St	Regional	P1	0.20
* Grant Av	Inverness Bv	Portsmouth Bv	Regional	P1	0.09
* Grant Av	Wilton St	Nathaniel St	Regional	P1	1.19
* Grant Av	Centennial St	Access Rd	Regional	P1	0.34
* Grant Av	Access Rd	Centennial St	Regional	P1	0.34
* Grant Av	Access Rd	Kenaston Bv	Regional	P1	0.33
* Grant Av	William R Clement Pw	Oakdale Dr	Regional	P1	0.43
* Grant Av	Park Bv E	Portsmouth Bv	Regional	P1	0.43
* Grant Av	Renfrew St	Lindsay St	Regional	P1	0.38
* Grant Av	Elmhurst Rd	Laxdal Rd	Regional	P1	0.51
* Grant Av	Chalfont Rd	Shaftesbury Bv	Regional	P1	2.91
* Grant Av	Kenaston Bv	Access Rd	Regional	P1	0.33
* Grant Av	Kenaston Bv	Edgeland Bv	Regional	P1	0.78
* Grant Av	Laxdal Rd	Bramble Dr	Regional	P1	0.48
* Grant Av	Kelvin Bv	Park Bv W	Regional	P1	0.29
* Grant Av	Edgeland Bv	Kenaston Bv	Regional	P1	0.78
* Grant Av	Holland Bv	Kelvin Bv	Regional	P1	0.21
* Grant Av	Laxdal Rd	Elmhurst Rd	Regional	P1	0.51
* Grant Av	Bower Bv	Laidlaw Bv	Regional	P1	0.22
* Grant Av	Edgeland Bv	Portsmouth Bv	Regional	P1	0.72
* Grant Av	Shaftesbury Bv	Chalfont Rd	Regional	P1	2.91
* Grant Av	Nathaniel St	Cambridge St	Regional	P1	0.81
* Grant Av	William R Clement Pw	William R Clement Pw	Regional	P1	0.05



* Grant Av	Grant Av	Kenaston Bv	Regional	P1	0.07
* Grant Av	Beaverbrook St	Centennial St	Regional	P1	0.18
* Grant Av	Borebank St	Campbell St	Regional	P1	0.20
* Grant Av	William R Clement Pw	William R Clement Pw	Regional	P1	0.05
* Grant Av	William R Clement Pw	Haney St	Regional	P1	0.24
* Grant Av	Elmhurst Rd	Cathcart St	Regional	P1	0.38
* Grant Av	Cambridge St	Nathaniel St	Regional	P1	0.82
* Grant Av	Harrow St	Stafford St	Regional	P1	0.35
* Grant Av	Kelvin Bv	Holland Bv	Regional	P1	0.21
* Grant Av	Fairmont Rd	Coventry Rd	Regional	P1	0.44
* Grant Av	Portsmouth Bv	Edgeland Bv	Regional	P1	0.72
* Grant Av	Harrow St	Wilton St	Regional	P1	0.69
* Grant Av	Centennial St	Ramp	Regional	P1	0.03
* Grant Av	Portsmouth Bv	Park Bv E	Regional	P1	0.43
* Grant Av	Grant Av	Grant Av	Regional	P1	0.04
* Grant Av	Beaverbrook St	Lanark St	Regional	P1	0.31
* Grant Av	Grant Av	William R Clement Pw	Regional	P1	0.08
* Grant Av	Fairmont	Oakdale Dr	Regional	P1	0.50
* Grant Av	Montrose St	Elm St	Regional	P1	0.19
* Grant Av	Grant Av	Kenaston Bv	Regional	P1	0.06
* Grant Av	Park Bv W	Kelvin Bv	Regional	P1	0.29
* Grant Av	Park Bv W	Park Bv E	Regional	P1	0.29
* Grant Av	Laidlaw Bv	Bower Bv	Regional	P1	0.22
* Grant Av	Laidlaw Bv	Holland Bv	Regional	P1	0.22
* Grant Av	Stafford St	Harrow St	Regional	P1	0.35
* Grant Av	Brock St	Queenston St	Regional	P1	0.18
* Grant Av	Bower Bv	Shaftesbury Bv	Regional	P1	0.27
* Grant Av	Oakdale Dr	William R Clement Pw	Regional	P1	0.43
* Grant Av	Borebank St	Lindsay St	Regional	P1	0.20
* Grant Av	Lindsay St	Renfrew St	Regional	P1	0.38
* Grant Av	Lindsay St	Borebank St	Regional	P1	0.20

* Grant Av	Grant Av	Grant Av	Regional	P1	0.04
* Grant Av	Oak St	Ash St	Regional	P1	0.20
* Grant Av	Coventry Rd	Roblin Bv	Regional	P1	0.08
* Grant Av	Oakdale Dr	Denton Pl	Regional	P1	0.17
* Grant Av	Coventry Rd	Fairmont Rd	Regional	P1	0.44
* Grant Av	Waverley St	Montrose St	Regional	P1	0.20
* Grant Av	Elm St	Montrose St	Regional	P1	0.19
* Grant Av	Roblin Bv	Roblin Bv	Regional	P1	0.03
* Grant Av	Shaftesbury Bv	Shaftesbury Bv	Regional	P1	0.02
* Grant Av	Holland Bv	Laidlaw Bv	Regional	P1	0.22
* Grant Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
* Grant Av	Roblin Bv	Roblin Bv	Regional	P1	0.03
* Grant Av	Haney St	Bramble Dr	Regional	P1	0.34
* Grant Av	Denton Pl	Fairmont Rd	Regional	P1	0.32
* Grant Av	Shaftesbury Bv	Bower Bv	Regional	P1	0.27
* Grant Av	Shaftesbury Bv	Shaftesbury Bv	Regional	P1	0.02
* Grant Av	Waverley St	Waverley St	Regional	P1	0.02
* Grant Av	Lanark St	Beaverbrook St	Regional	P1	0.31
* Grant Av	Oxford St	Cambridge St	Regional	P1	0.20
* Grant Av	Ash St	Oak St	Regional	P1	0.20
* Grant Av	Cathcart St	Chalfont Rd	Regional	P1	0.45
* Grant Av	Grant Av	Grant Av	Regional	P1	0.03
* Grant Av	Chalfont Rd	Cathcart St	Regional	P1	0.44
* Grant Av	Bramble Dr	Haney St	Regional	P1	0.34
* Grant Av	Montrose St	Waverley St	Regional	P1	0.19
* Grant Av	Cathcart St	Elmhurst Rd	Regional	P1	0.38
* Grant Av	Grant Av	Grant Av	Regional	P1	0.03
* Grant Av	Cordova St	Brock St	Regional	P1	0.18
* Grant Av	Campbell St	Borebank St	Regional	P1	0.20
* Grant Av	Coventry Rd	Roblin Bv	Regional	P1	0.09
* Grant Av	Centennial St	Beaverbrook St	Regional	P1	0.18

* Grant Av	Grant Av	Grant Av	Regional	P1	0.03
* Grant Av	Waterloo St	Ash St	Regional	P1	0.20
* Grant Av	Waverley St	Oxford St	Regional	P1	0.20
* Grant Av	Queenston St	Brock St	Regional	P1	0.18
* Grant Av	Niagara St	Queenston St	Regional	P1	0.18
* Grant Av	Cordova St	Campbell St	Regional	P1	0.19
* Grant Av	Brock St	Cordova St	Regional	P1	0.18
* Grant Av	Cambridge St	Oxford St	Regional	P1	0.20
* Grant Av	Ash St	Waterloo St	Regional	P1	0.20
* Grant Av	Campbell St	Cordova St	Regional	P1	0.19
* Grant Av	Waterloo St	Niagara St	Regional	P1	0.20
* Grant Av	Niagara St	Waterloo St	Regional	P1	0.20
* Grant Av	Queenston St	Niagara St	Regional	P1	0.18
* Grant Av	Elm St	Oak St	Regional	P1	0.20
* Grant Av	Nathaniel St	Wilton St	Regional	P1	1.19
Greenbrier Av	Roblin Bv	Roblin Bv	Regional	P1	0.03
Grenadier Dr	Corydon Av	Corydon Av	Regional	P1	0.03
Guelph St	Taylor Av	Taylor Av	Regional	P1	0.03
Handsart Bv	Corydon Av	Corydon Av	Regional	P1	0.04
Haney St	Grant Av	Grant Av	Regional	P1	0.03
Harrow St	Grant Av	Grant Av	Regional	P1	0.03
Harrow St	Taylor Av	Taylor Av	Regional	P1	0.03
Harstone Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Hendon Av	Roblin Bv	Roblin Bv	Regional	P1	0.03
Holland Bv	Grant Av	Grant Av	Regional	P1	0.03
Hosmer Bv	Corydon Av	Corydon Av	Regional	P1	0.02
Hunterspoint Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Jaymorr Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Kelvin Bv	Grant Av	Grant Av	Regional	P1	0.03
Kelvin Bv	Corydon Av	Corydon Av	Regional	P1	0.02
Kenaston Bv	Taylor Av	Taylor Av	Regional	P1	0.02

Kenaston Bv	Taylor Av	Taylor Av	Regional	P1	0.02
Laidlaw Bv	Corydon Av	Corydon Av	Regional	P1	0.02
Laidlaw Bv	Grant Av	Grant Av	Regional	P1	0.03
Lamont Bv	Corydon Av	Corydon Av	Regional	P1	0.04
Lanark St	Grant Av	Grant Av	Regional	P1	0.03
Lanark St	Taylor Av	Taylor Av	Regional	P1	0.03
Lanark St	Corydon Av	Corydon Av	Regional	P1	0.03
Laxdal Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Laxdal Rd	Grant Av	Grant Av	Regional	P1	0.03
Lindsay St	Corydon Av	Corydon Av	Regional	P1	0.03
Lindsay St	Grant Av	Grant Av	Regional	P1	0.03
Lindsay St	Taylor Av	Taylor Av	Regional	P1	0.03
Lockwood St	Corydon Av	Corydon Av	Regional	P1	0.03
Lynbrook Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Malone St	Roblin Bv	Roblin Bv	Regional	P1	0.02
Marlton Cr	Roblin Bv	Roblin Bv	Regional	P1	0.03
McLean St	Roblin Bv	Roblin Bv	Regional	P1	0.03
McQuaker Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Montrose St	Corydon Av	Corydon Av	Regional	P1	0.03
Montrose St	Grant Av	Grant Av	Regional	P1	0.03
Municipal Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Nathaniel St	Taylor Av	Taylor Av	Regional	P1	0.03
Nathaniel St	Grant Av	Grant Av	Regional	P1	0.03
Niagara St	Grant Av	Grant Av	Regional	P1	0.03
Niagara St	Corydon Av	Corydon Av	Regional	P1	0.03
Oak St	Corydon Av	Corydon Av	Regional	P1	0.03
Oak St	Grant Av	Grant Av	Regional	P1	0.03
Oakdale Dr	Roblin Bv	Roblin Bv	Regional	P1	0.02
Oakdale Dr	Grant Av	Grant Av	Regional	P1	0.03
Oxford St	Grant Av	Grant Av	Regional	P1	0.03
Oxford St	Corydon Av	Corydon Av	Regional	P1	0.03

Park Bv E	Grant Av	Grant Av	Regional	P1	0.03
Park Bv N	Corydon Av	Corydon Av	Regional	P1	0.04
Park Bv W	Grant Av	Grant Av	Regional	P1	0.03
Pepperloaf Cr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Portsmouth Bv	Grant Av	Grant Av	Regional	P1	0.03
Poseidon By	Taylor Av	Taylor Av	Regional	P1	0.03
Princeton Bv	Roblin Bv	Roblin Bv	Regional	P1	0.03
PTH 100 NB to Roblin Bv WB	Roblin Bv	Roblin Bv	Regional	P1	0.03
Queenston St	Corydon Av	Corydon Av	Regional	P1	0.03
Queenston St	Grant Av	Grant Av	Regional	P1	0.03
Renfrew By	Taylor Av	Taylor Av	Regional	P1	0.03
Renfrew St	Grant Av	Grant Av	Regional	P1	0.03
Renfrew St	Taylor Av	Taylor Av	Regional	P1	0.03
Renfrew St	Corydon Av	Corydon Av	Regional	P1	0.03
Ridgedale Cr	Roblin Bv	Roblin Bv	Regional	P1	0.03
* Roblin Bv	Roblin Bv	Barker Bv	Regional	P1	0.07
* Roblin Bv	Community Rw	Hunterspoint Rd	Regional	P1	0.25
* Roblin Bv	Hendon Av	McClean St	Regional	P1	0.06
* Roblin Bv	Shenfield Rd	Jaymorr Dr	Regional	P1	0.18
* Roblin Bv	Princeton Bv	Laxdal Rd	Regional	P1	0.23
* Roblin Bv	Marlton Cr	Oakdale Dr	Regional	P1	0.37
* Roblin Bv	Alcrest Dr	William R Clement Pw	Regional	P1	0.45
* Roblin Bv	Paradise Dr	Malone St	Regional	P1	0.20
* Roblin Bv	Assiniboine Park Dr	Chalfont Rd	Regional	P1	0.35
* Roblin Bv	Charleswood Rd	Paradise Dr	Regional	P1	0.25
* Roblin Bv	Mcquaker Dr	William R Clement Pw	Regional	P1	0.36
* Roblin Bv	William R Clement Pw	Haney St	Regional	P1	0.09
* Roblin Bv	Willow Ridge Rd	Barker Bv	Regional	P1	0.23
* Roblin Bv	Shelmerdine Dr	Scotswood Dr	Regional	P1	0.35
* Roblin Bv	Dale Bv	Willow Ridge Rd	Regional	P1	0.23
* Roblin Bv	Conservatory Dr	Commissary Rd	Regional	P1	2.20

* Roblin Bv	Conservatory Dr	Shaftesbury Bv	Regional	P1	2.20
* Roblin Bv	Dieppe Rd	Harstone Rd	Regional	P1	0.49
* Roblin Bv	William R Clement Pw	Mcquaker Dr	Regional	P1	0.37
* Roblin Bv	Grant Av	Fairmont Rd	Regional	P1	0.43
* Roblin Bv	Barker Bv	Stack St	Regional	P1	0.43
* Roblin Bv	Scotswood Dr	Shelmerdine Dr	Regional	P1	0.34
* Roblin Bv	Barnstaple Cv	Marlton Cr	Regional	P1	0.32
* Roblin Bv	Grant Av	Grant Av	Regional	P1	0.03
* Roblin Bv	Hunterspoint Rd	Elmvale Cr	Regional	P1	0.10
* Roblin Bv	Corydon Av	Corydon Av	Regional	P1	0.23
* Roblin Bv	Princeton Bv	Alcrest Dr	Regional	P1	0.24
* Roblin Bv	Willow Ridge Rd	Sparrow Rd	Regional	P1	0.12
* Roblin Bv	Lannoo Dr	William Marshall Wy	Regional	P1	0.32
* Roblin Bv	Royalgate Rd	Cathcart St	Regional	P1	0.08
* Roblin Bv	Lynbrook Dr	Royalgate Rd	Regional	P1	0.10
* Roblin Bv	Grant Av	Buckingham Rd	Regional	P1	0.27
* Roblin Bv	Roblin Bv	Dale Bv	Regional	P1	0.06
* Roblin Bv	Hunterspoint Rd	Community Rw	Regional	P1	0.25
* Roblin Bv	Wexford St	Chalfont Rd	Regional	P1	0.30
* Roblin Bv	Scotswood Dr	Greenbrier Av	Regional	P1	0.40
* Roblin Bv	Mcquaker Dr	Oakdale Dr	Regional	P1	0.25
* Roblin Bv	Fairmont Rd	Grant Av	Regional	P1	0.45
* Roblin Bv	Roblin Bv	Roblin Bv	Regional	P1	0.03
* Roblin Bv	Elmvale Cr	Municipal Rd	Regional	P1	0.30
* Roblin Bv	Charleswood Rd	Berkley St	Regional	P1	0.52
* Roblin Bv	Dale Bv	Dale Bv	Regional	P1	0.02
* Roblin Bv	Malone St	Carlotta Cr	Regional	P1	0.21
* Roblin Bv	Roblin Bv	William R Clement Pw	Regional	P1	0.05
* Roblin Bv	William Marshall Wy	Scotswood Dr	Regional	P1	0.40
* Roblin Bv (Bus Loop)	Roblin Bv	Roblin Bv	Regional	P1	0.13
* Roblin Bv	Ridgedale Cr	Marlton Cr	Regional	P1	0.24

* Roblin Bv	Ridgedale Cr	Batchelor Av	Regional	P1	0.20
* Roblin Bv	Batchelor Av	Ridgedale Cr	Regional	P1	0.20
* Roblin Bv	Haney St	Alcrest Dr	Regional	P1	0.37
* Roblin Bv	Batchelor Av	Jaymorr Dr	Regional	P1	0.34
* Roblin Bv	Varsity View Dr	McLean St	Regional	P1	0.18
* Roblin Bv	Oakdale Dr	Ridgedale Cr	Regional	P1	0.65
* Roblin Bv	Alcrest Dr	Princeton Bv	Regional	P1	0.24
* Roblin Bv	Lynbrook Dr	Elmhurst Rd	Regional	P1	0.18
* Roblin Bv	McLean St	Hendon Av	Regional	P1	0.06
* Roblin Bv	Wexford St	Wexford St	Regional	P1	0.04
* Roblin Bv	Wexford St	Wexford St	Regional	P1	0.04
* Roblin Bv	William R Clement Pw	William R Clement Pw	Regional	P1	0.04
* Roblin Bv	Varsity View Dr	Laxdal Rd	Regional	P1	0.15
* Roblin Bv	Grant Av	Grant Av	Regional	P1	0.03
* Roblin Bv	Assiniboine Park Dr	Commissary Rd	Regional	P1	0.35
* Roblin Bv	Dieppe Rd	Buckingham Rd	Regional	P1	0.45
* Roblin Bv	Municipal Rd	Elmvale Cr	Regional	P1	0.30
* Roblin Bv	Jaymorr Dr	Batchelor Av	Regional	P1	0.34
* Roblin Bv	Wexford St	Cathcart St	Regional	P1	0.12
* Roblin Bv	Carlotta Cr	Charleswood Rd	Regional	P1	0.25
* Roblin Bv	Sparrow Rd	Malone St	Regional	P1	0.23
* Roblin Bv	Malone St	Sparrow Rd	Regional	P1	0.23
* Roblin Bv	Sparrow Rd	Willow Ridge Rd	Regional	P1	0.12
* Roblin Bv	Barker Bv	Barker Bv	Regional	P1	0.02
* Roblin Bv	Greenbrier Av	Pepperloaf Cr	Regional	P1	0.32
* Roblin Bv	Marlton Cr	Fairmont Rd	Regional	P1	0.26
* Roblin Bv	William R Clement Pw	William R Clement Pw	Regional	P1	0.04
* Roblin Bv	Berkley St	Charleswood Rd	Regional	P1	0.52
* Roblin Bv	Roblin Bv	Roblin Bv	Regional	P1	0.03
* Roblin Bv	Jaymorr Dr	Shenfield Rd	Regional	P1	0.18
* Roblin Bv	Shenfield Rd	Barnstaple Cv	Regional	P1	0.10

* Roblin Bv	Marlton Cr	Barnstaple Cv	Regional	P1	0.33
* Roblin Bv	Laxdal Rd	Varsity View Dr	Regional	P1	0.15
* Roblin Bv	Hendon Av	Elmhurst Rd	Regional	P1	0.12
* Roblin Bv	Buckingham Rd	Grant Av	Regional	P1	0.26
* Roblin Bv	Oakdale Dr	Mcquaker Dr	Regional	P1	0.25
* Roblin Bv	Harstone Rd	Lannoo Dr	Regional	P1	0.29
* Roblin Bv	Chalfont Rd	Assiniboine Park Dr	Regional	P1	0.37
* Roblin Bv	Chalfont Rd	Wexford St	Regional	P1	0.30
* Roblin Bv	Laxdal Rd	Princeton Bv	Regional	P1	0.24
* Roblin Bv	Mclean St	Varsity View Dr	Regional	P1	0.18
* Roblin Bv	Elmhurst Rd	Hendon Av	Regional	P1	0.12
* Roblin Bv	Commissary Rd	Assiniboine Park Dr	Regional	P1	0.37
* Roblin Bv	Municipal Rd	Berkley St N	Regional	P1	0.28
* Roblin Bv	Community Rw	Shelmerdine Dr	Regional	P1	0.26
* Roblin Bv	Cathcart St	Wexford St	Regional	P1	0.12
* Roblin Bv	Shelmerdine Dr	Community Rw	Regional	P1	0.27
* Roblin Bv	Elmhurst Rd	Lynbrook Dr	Regional	P1	0.18
* Roblin Bv	Pepperloaf Cr	Harstone Rd	Regional	P1	0.29
* Roblin Bv	Royalgate Rd	Lynbrook Dr	Regional	P1	0.10
* Roblin Bv	Cathcart St	Royalgate Rd	Regional	P1	0.08
* Roblin Bv	Buckingham Rd	Dieppe Rd	Regional	P1	0.45
* Roblin Bv	Fairmont Rd	Marlton Cr	Regional	P1	0.26
* Roblin Bv	Elmvale Cr	Hunterspoint Rd	Regional	P1	0.10
* Roblin Bv	Berkley St N	Municipal Rd	Regional	P1	0.28
* Roblin Bv	Windmill Wy	Barker Bv	Regional	P1	0.56
* Roblin Bv	Harstone Rd	Dieppe Rd	Regional	P1	0.49
* Roblin Bv	Barnstaple Cv	Shenfield Rd	Regional	P1	0.10
* Roblin Bv	PTH 100 NB to Roblin Bv EB	Windmill Wy	Regional	P1	0.12
* Roblin Bv	PTH 100	PTH 100 NB to Roblin Bv EB	Regional	P1	0.39
Royalgate Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Scotswood Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03



Shaftesbury Bv	Grant Av	Grant Av	Regional	P1	0.03
Shaftesbury Bv	Wilkes Av	Shaftesbury Bv	Regional	P1	0.44
Shaftesbury Bv	Wilkes Av	Wilkes Av	Regional	P1	0.02
Shaftesbury Bv	Wilkes Av	Wilkes Av	Regional	P1	0.02
Shaftesbury Bv	Grant Av	West Taylor Bv	Regional	P1	1.46
Shaftesbury Bv	Cuthbertson Av	Mountbatten Av	Regional	P1	0.77
Shaftesbury Bv	Grant Av	Bard Bv	Regional	P1	0.03
Shaftesbury Bv	Shaftesbury Bv	Corydon Av	Regional	P1	0.18
Shaftesbury Bv	Grant Av	Shaftesbury Bv	Regional	P1	0.24
Shaftesbury Bv	Grant Av	Grant Av	Regional	P1	0.03
Shaftesbury Bv	Shaftesbury Bv	Grant Av	Regional	P1	0.35
Shaftesbury Bv	Corydon Av	Corydon Av	Regional	P1	0.02
Shaftesbury Bv	Corydon Av	Corydon Av	Regional	P1	0.03
Shaftesbury Bv	Wilkes Av	West Taylor Bv	Regional	P1	1.36
Shaftesbury Bv	Roblin Bv	Cuthbertson Av	Regional	P1	0.43
Shaftesbury Bv	Mountbatten Av	Grant Av	Regional	P1	0.83
Shelmerdine Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Shenfield Rd	Roblin Bv	Roblin Bv	Regional	P1	0.03
Southport Bv	Corydon Av	Corydon Av	Regional	P1	0.04
Sparrow Rd	Roblin Bv	Roblin Bv	Regional	P1	0.02
* Taylor Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.03
* Taylor Av	Waverley St	Waverley St	Regional	P1	0.02
* Taylor Av	Centennial St	Kenaston Bv	Regional	P1	0.67
* Taylor Av	Renfrew By	Renfrew St	Regional	P1	0.05
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Kenaston Bv	Centennial St	Regional	P1	0.67
* Taylor Av	Taylor Av	Waverley St	Regional	P1	0.33
* Taylor Av	Cambridge St	Poseidon By	Regional	P1	0.49
* Taylor Av	Waverley St	Cambridge St	Regional	P1	0.40
* Taylor Av	Poseidon By	Cambridge St	Regional	P1	0.47
* Taylor Av	Waverley St	Ash St	Regional	P1	0.82

* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Campbell St	Borebank St	Regional	P1	0.09
* Taylor Av	Campbell St	Borebank St	Regional	P1	0.06
* Taylor Av	Poseidon By	Nathaniel St	Regional	P1	1.04
* Taylor Av	Wilton St	Nathaniel St	Regional	P1	1.03
* Taylor Av	Nathaniel St	Wilton St	Regional	P1	1.03
* Taylor Av	Renfrew By	Lindsay St	Regional	P1	0.34
* Taylor Av	Brock St	Campbell St	Regional	P1	0.38
* Taylor Av	Ash St	Brock St	Regional	P1	0.78
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Guelph St	Harrow St	Regional	P1	0.34
* Taylor Av	Lindsay St	Renfrew By	Regional	P1	0.34
* Taylor Av	Lindsay St	Renfrew By	Regional	P1	0.20
* Taylor Av	Stafford St	Harrow St	Regional	P1	0.34
* Taylor Av	Lindsay St	Borebank St	Regional	P1	0.20
* Taylor Av	Taylor Av	Waverley St	Regional	P1	0.05
* Taylor Av	Renfrew St	Renfrew By	Regional	P1	0.05
* Taylor Av	Renfrew By	Renfrew St	Regional	P1	0.13
* Taylor Av	Lanark St	Renfrew By	Regional	P1	0.07
* Taylor Av	Campbell St	Borebank St	Regional	P1	0.11
* Taylor Av	Harrow St	Stafford St	Regional	P1	0.35
* Taylor Av	Guelph St	Wilton St	Regional	P1	0.35
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.04
* Taylor Av	Beaverbrook St	Lanark St	Regional	P1	0.31
* Taylor Av	Centennial St	Beaverbrook St	Regional	P1	0.18
* Taylor Av	Harrow St	Guelph St	Regional	P1	0.34
* Taylor Av	Waverley St	Waverley St	Regional	P1	0.02
* Taylor Av	Lanark St	Beaverbrook St	Regional	P1	0.30
* Taylor Av	Renfrew St	Lanark St	Regional	P1	0.20

* Taylor Av	Wilton St	Guelph St	Regional	P1	0.35
* Taylor Av	Nathaniel St	Poseidon By	Regional	P1	1.05
* Taylor Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.03
* Taylor Av	Cambridge St	Waverley St	Regional	P1	0.40
* Taylor Av	Taylor Av	Taylor Av	Regional	P1	0.03
* Taylor Av	Beaverbrook St	Centennial St	Regional	P1	0.18
Tuxedo Av	Doncaster St	Edgeland Bv	Regional	P1	0.36
Tuxedo Av	Edgeland Bv	Chataway Bv	Regional	P1	0.21
Tuxedo Av	Kenaston Bv	Doncaster St	Regional	P1	0.42
Tuxedo Av	Edgeland Bv	Doncaster St	Regional	P1	0.36
Tuxedo Av	Corydon Av	Chataway Bv	Regional	P1	0.81
Tuxedo Av	Chataway Bv	Girton Bv	Regional	P1	0.45
Tuxedo Av	Doncaster St	Kenaston Bv	Regional	P1	0.42
Tuxedo Av	Girton Bv	Corydon Av	Regional	P1	0.39
Tuxedo Av	Tuxedo Av	Grenfell Bv	Regional	P1	0.04
Tuxedo Av	Tuxedo Av	Tuxedo Av	Regional	P1	0.02
Tuxedo Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
Tuxedo Av	Kenaston Bv	Kenaston Bv	Regional	P1	0.02
Tuxedo Av	Corydon Av	Corydon Av	Regional	P1	0.06
Tuxedo Av	Tuxedo Av	Tuxedo Av	Regional	P1	0.04
Tuxedo Av	Tuxedo Av	Tuxedo Av	Regional	P1	0.03
Tuxedo Av	Tuxedo Av	Tuxedo Av	Regional	P1	0.02
Tuxedo Av	Edgeland Bv	Chataway Bv	Regional	P1	0.19
Ubique Cr	Corydon Av	Corydon Av	Regional	P1	0.03
Varsity View Dr	Roblin Bv	Roblin Bv	Regional	P1	0.03
Waterloo St	Grant Av	Grant Av	Regional	P1	0.03
Waterloo St	Corydon Av	Corydon Av	Regional	P1	0.03
Waverley St	Corydon Av	Corydon Av	Regional	P1	0.03
Waverley St	Grant Av	Grant Av	Regional	P1	0.03
Waverley St	Grant Av	Grant Av	Regional	P1	0.03
Wexford St	Roblin Bv	Roblin Bv	Regional	P1	0.02

Wexford St	Roblin Bv	Roblin Bv	Regional	P1	0.02
William R Clement Pw	William R Clement Pw	Roblin Bv	Regional	P1	0.06
William R Clement Pw	William R Clement Pw	Grant Av	Regional	P1	0.07
William R Clement Pw	Roblin Bv	Grant Av	Regional	P1	1.91
William R Clement Pw	Roblin Bv	Grant Av	Regional	P1	1.91
William R Clement Pw	Grant Av	Grant Av	Regional	P1	0.03
William R Clement Pw	Roblin Bv	Roblin Bv	Regional	P1	0.03
William R Clement Pw	Roblin Bv	Roblin Bv	Regional	P1	0.03
William R Clement Pw	Grant Av	Grant Av	Regional	P1	0.03
Willow Ridge Rd	Roblin Bv	Roblin Bv	Regional	P1	0.02
Wilton St	Grant Av	Grant Av	Regional	P1	0.03
Wilton St	Taylor Av	Taylor Av	Regional	P1	0.03
<b>Total</b>					<b>130.62</b>

---

**Note:** “\*” denotes snow to be cleared from streets and lane intersections, pedestrian crosswalks and corridors, private approaches, railway crossings and bus stops to be hauled away when street cleared.

## APPENDIX B - SOUTH AREA (WEST) PRIORITY II STREETS

STREET NAME	FROM STREET	TO STREET	SNOW ROUTE	PRIORITY	LANE KM
Academy Rd	Kenaston Bv	Wellington Cr	Non-Regional	P2	0.53
Ash St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Bard Bv	Park Bv S	Park Bv W	Non-Regional	P2	0.14
Borebank St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Brock St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Cambridge St	Ebby Av	Mathers Av	Non-Regional	P2	0.10
Cambridge St	Dorchester Av	Grosvenor Av	Non-Regional	P2	0.23
Cambridge St	Grant Av	Poseidon By	Non-Regional	P2	0.21
Cambridge St	Hector Av	Mathers Av	Non-Regional	P2	0.09
Cambridge St	Corydon Av	McMillan Av	Non-Regional	P2	0.37
Cambridge St	Carter Av	Poseidon By	Non-Regional	P2	0.25
Cambridge St	Carter Av	Hector Av	Non-Regional	P2	0.20
Cambridge St	Fleet Av	Fleet Av	Non-Regional	P2	0.07
Cambridge St	Mulvey Av	Corydon Av	Non-Regional	P2	0.53
Cambridge St	Dorchester Av	McMillan Av	Non-Regional	P2	0.23
Cambridge St	Fleet Av	Mulvey Av	Non-Regional	P2	0.19
Cambridge St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Cambridge St	Fleet Av	Lorette Av	Non-Regional	P2	0.52
Cambridge St	Grant Av	Scotland Av	Non-Regional	P2	0.22
Cambridge St	Ebby Av	Taylor Av	Non-Regional	P2	0.15
Campbell St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Cordova St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Doncaster St	Corydon Av	Ubique Cr	Non-Regional	P2	0.69
Doncaster St	Doncaster St	Corydon Av	Non-Regional	P2	0.07
Doncaster St	Tuxedo Av	Ubique Cr	Non-Regional	P2	0.20
Doncaster St	Tuxedo Av	Willow Av	Non-Regional	P2	0.49
Doncaster St	Wellington Cr	Fulham Av	Non-Regional	P2	0.04

Doncaster St	Fulham Av	Willow Av	Non-Regional	P2	0.27
Edgeland Bv	Corydon Av	Tuxedo Av	Non-Regional	P2	0.73
Elm St	Fleet Av	Grant Av	Non-Regional	P3S	0.77
Elm St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Fleet Av	Harrow St	Stafford St	Non-Regional	P2	0.35
Fleet Av	Cambridge St	Nathaniel St	Non-Regional	P2	0.39
Fleet Av	Dudley Cr	Nathaniel St	Non-Regional	P2	0.32
Fleet Av	Dudley Cr	Rockwood St	Non-Regional	P2	0.52
Fleet Av	Wilton St	Rockwood St	Non-Regional	P2	0.35
Fleet Av	Wilton St	Guelph St	Non-Regional	P2	0.35
Fleet Av	Guelph St	Harrow St	Non-Regional	P2	0.35
Grosvenor Av	Stafford St	Harrow St	Non-Regional	P2	0.35
Grosvenor Av	Lilac St	Wentworth St	Non-Regional	P2	0.35
Grosvenor Av	Grosvenor Av	Cambridge St	Non-Regional	P2	0.03
Grosvenor Av	Arbuthnot St	Lilac St	Non-Regional	P2	0.35
Grosvenor Av	Wellington Cr	Arbuthnot St	Non-Regional	P2	0.07
Grosvenor Av	Stafford St	Wentworth St	Non-Regional	P2	0.35
Grosvenor Av	Thurso St	Rockwood St	Non-Regional	P2	0.35
Grosvenor Av	Guelph St	Wilton St	Non-Regional	P2	0.35
Grosvenor Av	Rockwood St	Wilton St	Non-Regional	P2	0.35
Grosvenor Av	Guelph St	Harrow St	Non-Regional	P2	0.35
Grosvenor Av	Thurso St	Cambridge St	Non-Regional	P2	0.10
Grosvenor Av	Elm St	Montrose St	Non-Regional	P2	0.19
Grosvenor Av	Renfrew St	Lindsay St	Non-Regional	P2	0.38
Grosvenor Av	Borebank St	Campbell St	Non-Regional	P2	0.20
Grosvenor Av	Borebank St	Lindsay St	Non-Regional	P2	0.20
Grosvenor Av	Lanark St	Renfrew St	Non-Regional	P2	0.20
Grosvenor Av	Centennial St	Beaverbrook St	Non-Regional	P2	0.18
Grosvenor Av	Oxford St	Waverley St	Non-Regional	P2	0.21
Grosvenor Av	Brock St	Queenston St	Non-Regional	P2	0.18
Grosvenor Av	Elm St	Oak St	Non-Regional	P2	0.20

Grosvenor Av	Waverley St	Montrose St	Non-Regional	P2	0.20
Grosvenor Av	Grosvenor Av	Cambridge St	Non-Regional	P2	0.06
Grosvenor Av	Beaverbrook St	Lanark St	Non-Regional	P2	0.31
Grosvenor Av	Campbell St	Cordova St	Non-Regional	P2	0.19
Grosvenor Av	Niagara St	Waterloo St	Non-Regional	P2	0.19
Grosvenor Av	Waterloo St	Ash St	Non-Regional	P2	0.20
Grosvenor Av	Brock St	Cordova St	Non-Regional	P2	0.18
Grosvenor Av	Ash St	Oak St	Non-Regional	P2	0.20
Grosvenor Av	Niagara St	Queenston St	Non-Regional	P2	0.18
Grosvenor Av	Oxford St	Cambridge St	Non-Regional	P2	0.21
Guelph St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.05
Harrow St	Carter Av	Weatherdon Av	Non-Regional	P2	0.17
Harrow St	Dudley Av	Garwood Av	Non-Regional	P2	0.17
Harrow St	Scotland Av	Grant Av	Non-Regional	P2	0.12
Harrow St	Kingsway Af	Dromore Av	Non-Regional	P2	0.21
Harrow St	Harvard Av	Yale Av	Non-Regional	P2	0.20
Harrow St	Harvard Av	Harvard Av	Non-Regional	P2	0.06
Harrow St	Hector Av	Carter Av	Non-Regional	P2	0.17
Harrow St	Corydon Av	Jessie Av	Non-Regional	P2	0.20
Harrow St	Ebby Av	Jackson Av	Non-Regional	P2	0.17
Harrow St	Lorette Av	Scotland Av	Non-Regional	P2	0.10
Harrow St	Dudley Av	Lorette Av	Non-Regional	P2	0.17
Harrow St	Harvard Av	Kingsway Af	Non-Regional	P2	0.15
Harrow St	Grosvenor Av	Yale Av	Non-Regional	P2	0.21
Harrow St	Mulvey Av	Fleet Av	Non-Regional	P2	0.16
Harrow St	Grant Av	Weatherdon Av	Non-Regional	P2	0.19
Harrow St	Warsaw Av	Jessie Av	Non-Regional	P2	0.20
Harrow St	Dromore Av	Academy Rd	Non-Regional	P2	0.29
Harrow St	Hector Av	Ebby Av	Non-Regional	P2	0.17
Harrow St	Jackson Av	Taylor Av	Non-Regional	P2	0.16
Harrow St	Harrow St E	Taylor Av	Non-Regional	P2	0.06

Harrow St	Fleet Av	Garwood Av	Non-Regional	P2	0.17
Harrow St	Dorchester Av	Grosvenor Av	Non-Regional	P2	0.20
Harrow St	Dorchester Av	McMillan Av	Non-Regional	P2	0.20
Harrow St	Corydon Av	McMillan Av	Non-Regional	P2	0.20
Harrow St	Mulvey Av	Warsaw Av	Non-Regional	P2	0.18
Harrow St E	Harrow St	Pembina Hw	Non-Regional	P2	0.43
John Brebeuf Pl	Beaverbrook St	Lanark St	Non-Regional	P3S	0.31
Kingsway Af	Harrow St	Guelph St	Non-Regional	P2	0.35
Kingsway Af	Cambridge St	Rockwood St	Non-Regional	P2	0.07
Kingsway Af	Guelph St	Wilton St	Non-Regional	P2	0.35
Kingsway Af	Harrow St	Stafford St	Non-Regional	P2	0.34
Kingsway Af	Rockwood St	Wilton St	Non-Regional	P2	0.35
Kingsway Af	Elm St	Oak St	Non-Regional	P2	0.20
Kingsway Af	Lindsay St	Borebank St	Non-Regional	P2	0.20
Kingsway Af	Elm St	Montrose St	Non-Regional	P2	0.19
Kingsway Af	Waterloo St	Ash St	Non-Regional	P2	0.20
Kingsway Af	Borebank St	Campbell St	Non-Regional	P2	0.20
Kingsway Af	Lanark St	Renfrew St	Non-Regional	P2	0.20
Kingsway Af	Beaverbrook St	Centennial St	Non-Regional	P2	0.17
Kingsway Af	Beaverbrook St	Lanark St	Non-Regional	P2	0.31
Kingsway Af	Brock St	Queenston St	Non-Regional	P2	0.18
Kingsway Af	Lindsay St	Renfrew St	Non-Regional	P2	0.38
Kingsway Af	Waverley St	Montrose St	Non-Regional	P2	0.20
Kingsway Af	Oxford St	Waverley St	Non-Regional	P2	0.21
Kingsway Af	Cambridge St	Oxford St	Non-Regional	P2	0.20
Kingsway Af	Lockwood St	Centennial St	Non-Regional	P2	0.26
Kingsway Af	Campbell St	Cordova St	Non-Regional	P2	0.19
Kingsway Af	Niagara St	Waterloo St	Non-Regional	P2	0.19
Kingsway Af	Niagara St	Queenston St	Non-Regional	P2	0.18
Kingsway Af	Ash St	Oak St	Non-Regional	P2	0.20
Kingsway Af	Brock St	Cordova St	Non-Regional	P2	0.18



Laidlaw Bv	Boreham Bv	Grant Av	Non-Regional	P3S	0.53
Lanark St	John Brebeuf Pl	Grant Av	Non-Regional	P3S	0.77
Lindsay St	Grant Av	Fleet Av	Non-Regional	P2	0.77
Lindsay St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Lindsay St	Mathers Av	Taylor Av	Non-Regional	P2	0.76
Lindsay St	Grosvenor Av	Kingsway Af	Non-Regional	P2	0.77
Lindsay St	Corydon Av	Grosvenor Av	Non-Regional	P2	0.77
Lindsay St	Kingsway Af	Academy Rd	Non-Regional	P2	0.77
Lindsay St	Fleet Av	Corydon Av	Non-Regional	P2	0.75
Lindsay St	Grant Av	Mathers Av	Non-Regional	P2	0.75
Lockston Av	Kenaston Bv	Carpathia Rd	Non-Regional	P3S	0.21
Lockston Av	Carpathia Rd	Lockwood St	Non-Regional	P3S	0.21
Lockwood St	Willow Av	Kingsway Af	Non-Regional	P2	0.16
Lockwood St	Lockston Av	Corydon Av	Non-Regional	P2	0.44
Lockwood St	Tuxedo Av	Grosvenor Av	Non-Regional	P2	0.42
Lockwood St	Willow Av	Fulham Av	Non-Regional	P2	0.11
Lockwood St	Lockston Av	Grosvenor Av	Non-Regional	P2	0.33
Lockwood St	Tuxedo Av	Kingsway Af	Non-Regional	P2	0.35
Lockwood St	Fulham Av	Academy Rd	Non-Regional	P2	0.50
Mathers Av	Mathers By W	Queenston By	Non-Regional	P2	0.18
Mathers Av	Borebank St	Lindsay St	Non-Regional	P2	0.20
Mathers Av	Campbell St	Queenston By	Non-Regional	P2	0.19
Mathers Av	Brock St	Queenston By	Non-Regional	P2	0.18
Mathers Av	Ash St	Mathers By W	Non-Regional	P2	0.20
Mathers Av	Campbell St	Borebank St	Non-Regional	P2	0.20
Mathers Av	Waverley St	Oxford St	Non-Regional	P2	0.20
Mathers Av	Niagara St	Waterloo St	Non-Regional	P2	0.20
Mathers Av	Cambridge St	Oxford St	Non-Regional	P2	0.20
Mathers Av	Mathers By E	Mathers By E	Non-Regional	P2	0.20
Mathers Av	Elm St	Montrose St	Non-Regional	P2	0.19
Mathers Av	Ash St	Mathers By E	Non-Regional	P2	0.20

Mathers Av	Brock St	Queenston By	Non-Regional	P2	0.18
Mathers Av	Montrose St	Waverley St	Non-Regional	P2	0.19
Montrose St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Montrose St	Fleet Av	Grant Av	Non-Regional	P3S	0.77
Nathaniel St	Hector Av	Taylor Av	Non-Regional	P2	0.49
Nathaniel St	Dudley Cr	Fleet Av	Non-Regional	P2	0.17
Nathaniel St	Dudley Av	Dudley Cr	Non-Regional	P2	0.17
Nathaniel St	Dudley Cr	Lorette Av	Non-Regional	P2	0.17
Nathaniel St	Grant Av	Lorette Av	Non-Regional	P2	0.22
Nathaniel St	Grant Av	Hector Av	Non-Regional	P2	0.56
Niagara St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Oak St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Oak St	Grosvenor Av	Kingsway Af	Non-Regional	P3S	0.77
Oxford St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Park Bv E	Grant Av	Lancaster Bv	Non-Regional	P2	0.21
Park Bv E	Swindon Wy	Park Bv S	Non-Regional	P2	0.31
Park Bv E	Bard Bv	Grant Av	Non-Regional	P2	0.58
Park Bv E	Lancaster Bv	Park Bv N	Non-Regional	P2	0.92
Park Bv N	Wellington Cr	Nanton Bv	Non-Regional	P2	0.55
Park Bv N	Nanton Bv	Formal Garden Wy	Non-Regional	P2	0.74
Park Bv N	Cuthbertson Av	Corydon Av	Non-Regional	P2	0.59
Park Bv N	Cuthbertson Av	Park Bv W	Non-Regional	P2	0.43
Park Bv S	Andover Av	Bard Bv	Non-Regional	P2	0.62
Park Bv S	Andover Av	Taylor Av	Non-Regional	P2	0.16
Park Bv W	Park Bv E	Park Bv W	Non-Regional	P2	0.11
Park Bv W	Grant Av	Mountbatten Av	Non-Regional	P2	0.88
Park Bv W	Bard Bv	Grant Av	Non-Regional	P2	0.75
Park Bv W	Hosmer Bv	Mountbatten Av	Non-Regional	P2	0.20
Portsmouth Bv	Dunbar Cr	Coleraine Cr	Non-Regional	P2	0.22
Portsmouth Bv	Dunbar Cr	Coleraine Cr	Non-Regional	P2	0.20
Portsmouth Bv	Swindon Wy	Ramsgate By	Non-Regional	P2	0.49

Portsmouth Bv	Grant Av	Newbury Cr	Non-Regional	P2	0.15
Portsmouth Bv	Coleraine Cr	Swindon Wy	Non-Regional	P2	0.31
Portsmouth Bv	Swindon Wy	Taylor Av	Non-Regional	P2	0.28
Poseidon By	Ebby Av	Hector Av	Non-Regional	P2	0.17
Poseidon By	Ebby Av	Taylor Av	Non-Regional	P2	0.24
Poseidon By	Carter Av	Hector Av	Non-Regional	P2	0.17
Poseidon By	Carter Av	Cambridge St	Non-Regional	P2	0.23
Queenston St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Queenston St	Kingsway Af	Academy Rd	Non-Regional	P3S	0.77
Renfrew St	Grosvenor Av	End	Non-Regional	P3S	0.08
Renfrew St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.02
Rockwood St	Lorette Av	Grant Av	Non-Regional	P3S	0.20
Rockwood St	Dudley Av	Lorette Av	Non-Regional	P3S	0.17
Rockwood St	Fleet Av	Garwood Av	Non-Regional	P3S	0.17
Rockwood St	Dudley Av	Garwood Av	Non-Regional	P3S	0.17
Shaftesbury Bv	Shaftesbury Bv	West Taylor Bv	Non-Regional	P2	0.10
Swindon Wy	Portsmouth Bv	Ramsgate By	Non-Regional	P2	0.20
Swindon Wy	Portsmouth Bv	Ramsgate By	Non-Regional	P2	1.04
Taylor Av	Taylor Av	Kenaston Bv	Non-Regional	P2	0.35
Taylor Av	Taylor Av	Kenaston Bv	Non-Regional	P2	0.10
Taylor Av	West Taylor Bv	Hopwood Dr	Non-Regional	P2	0.22
Taylor Av	Coleraine Cr	Hopwood Dr	Non-Regional	P2	0.20
Taylor Av	Coleraine Cr	Portsmouth Bv	Non-Regional	P2	0.47
Taylor Av	Kenaston Bv	Morpeth Bv	Non-Regional	P2	0.77
Taylor Av	Portsmouth Bv	Morpeth Bv	Non-Regional	P2	0.42
Tuxedo Av	Kenaston Bv	Tuxedo Av	Non-Regional	P2	0.08
Tuxedo Av	Kenaston Bv	Carpathia Rd	Non-Regional	P2	0.21
Tuxedo Av	Carpathia Rd	Lockwood St	Non-Regional	P2	0.21
Waterloo St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Waverley St	Wellington Cr	Wellington Cr	Non-Regional	P2	0.06
Wellington Cr	Harrow St	Academy Rd	Non-Regional	P2	0.12

Wellington Cr	Academy Rd	Academy Rd	Non-Regional	P2	0.12
Wellington Cr	Academy Rd	Academy Rd	Non-Regional	P2	0.12
Wellington Cr	Lanark St	Academy Rd	Non-Regional	P2	0.97
Wellington Cr	Harrow St	Guelph St	Non-Regional	P2	0.52
Wellington Cr	Doncaster St	Academy Rd	Non-Regional	P2	0.33
Wellington Cr	Chataway Bv	Girton Bv	Non-Regional	P2	0.23
Wellington Cr	Grenfell Bv	Handsart Bv	Non-Regional	P2	0.21
Wellington Cr	Wellington Cr	Guelph St	Non-Regional	P2	0.00
Wellington Cr	Girton Bv	Grenfell Bv	Non-Regional	P2	0.23
Wellington Cr	Park Bv N	Lamont Bv	Non-Regional	P2	0.24
Wellington Cr	Handsart Bv	Lamont Bv	Non-Regional	P2	0.22
Wellington Cr	Chataway Bv	Doncaster St	Non-Regional	P2	0.60
Wellington Cr	Cambridge St	Guelph St	Non-Regional	P2	0.34
Wellington Cr	Cambridge St	Guelph St	Non-Regional	P2	0.33
Wellington Cr	Harrow St	Academy Rd	Non-Regional	P2	2.01
Wellington Cr	Oxford St	Waverley St	Non-Regional	P2	0.22
Wellington Cr	Lindsay St	Renfrew St	Non-Regional	P2	0.39
Wellington Cr	Borebank St	Campbell St	Non-Regional	P2	0.20
Wellington Cr	Niagara St	Waterloo St	Non-Regional	P2	0.20
Wellington Cr	Lanark St	Academy Rd	Non-Regional	P2	0.84
Wellington Cr	Brock St	Cordova St	Non-Regional	P2	0.19
Wellington Cr	Ash St	Waterloo St	Non-Regional	P2	0.29
Wellington Cr	Ash St	Waterloo St	Non-Regional	P2	0.26
Wellington Cr	Elm St	Montrose St	Non-Regional	P2	0.11
Wellington Cr	Niagara St	Waterloo St	Non-Regional	P2	0.20
Wellington Cr	Cambridge St	Oxford St	Non-Regional	P2	0.20
Wellington Cr	Cordova St	Campbell St	Non-Regional	P2	0.20
Wellington Cr	Elm St	Montrose St	Non-Regional	P2	0.14
Wellington Cr	Borebank St	Campbell St	Non-Regional	P2	0.20
Wellington Cr	Ash St	Oak St	Non-Regional	P2	0.31
Wellington Cr	Cordova St	Campbell St	Non-Regional	P2	0.20

Wellington Cr	Lindsay St	Renfrew St	Non-Regional	P2	0.38
Wellington Cr	Borebank St	Lindsay St	Non-Regional	P2	0.20
Wellington Cr	Brock St	Queenston St	Non-Regional	P2	0.19
Wellington Cr	Lanark St	Wellington Cr	Non-Regional	P2	0.02
Wellington Cr	Wellington Cr	Renfrew St	Non-Regional	P2	0.18
Wellington Cr	Cordova St	Brock St	Non-Regional	P2	0.19
Wellington Cr	Cambridge St	Oxford St	Non-Regional	P2	0.20
Wellington Cr	Wellington Cr	Renfrew St	Non-Regional	P2	0.18
Wellington Cr	Niagara St	Queenston St	Non-Regional	P2	0.21
Wellington Cr	Niagara St	Queenston St	Non-Regional	P2	0.21
Wellington Cr	Waverley St	Montrose St	Non-Regional	P2	0.21
Wellington Cr	Borebank St	Lindsay St	Non-Regional	P2	0.20
Wellington Cr	Waverley St	Montrose St	Non-Regional	P2	0.21
Wellington Cr	Oxford St	Waverley St	Non-Regional	P2	0.22
Wellington Cr	Elm St	Oak St	Non-Regional	P2	0.24
Wellington Cr	Brock St	Queenston St	Non-Regional	P2	0.19
Wellington Cr	Elm St	Oak St	Non-Regional	P2	0.25
Wellington Cr	Ash St	Oak St	Non-Regional	P2	0.29
West Taylor Bv	Park Bv S	Dumbarton Bv	Non-Regional	P2	0.22
West Taylor Bv	Litchfield Bv	Shaftesbury Bv	Non-Regional	P2	0.40
West Taylor Bv	Shaftesbury Bv	Litchfield Bv	Non-Regional	P2	0.39
West Taylor Bv	West Taylor Bv	Shaftesbury Bv	Non-Regional	P2	0.09
West Taylor Bv	Dumbarton Bv	Holland Bv	Non-Regional	P2	0.52
West Taylor Bv	Holland Bv	Litchfield Bv	Non-Regional	P2	0.22
Wilton St	Scotland Av	Grant Av	Non-Regional	P2	0.12
Wilton St	Grant Av	Weatherdon Av	Non-Regional	P2	0.19
Wilton St	Fleet Av	Mulvey Av	Non-Regional	P2	0.16
Wilton St	Ebby Av	Hector Av	Non-Regional	P2	0.17
Wilton St	Weatherdon Av	Carter Av	Non-Regional	P2	0.17
Wilton St	Taylor Av	Wilton By	Non-Regional	P2	0.16
Wilton St	Garwood Av	Dudley Av	Non-Regional	P2	0.17

Wilton St	Wilton By	Wilton By	Non-Regional	P2	0.17
Wilton St	Mulvey Av	Warsaw Av	Non-Regional	P2	0.18
Wilton St	Lorette Av	Scotland Av	Non-Regional	P2	0.10
Wilton St	Dudley Av	Lorette Av	Non-Regional	P2	0.17
Wilton St	Fleet Av	Garwood Av	Non-Regional	P2	0.17
Wilton St	Jessie Av	Warsaw Av	Non-Regional	P2	0.20
Wilton St	Hector Av	Carter Av	Non-Regional	P2	0.17
Wilton St	Corydon Av	Jessie Av	Non-Regional	P2	0.20
<b>Total</b>					<b>77.82</b>

## APPENDIX C – SOUTH AREA (WEST) PRIORITY III STREETS

STREET NAME	FROM STREET	TO STREET	SNOW ROUTE	PRIORITY	LANE KM
Aldershot Bv	Holdsworth Av	Lancaster Bv	N/A	P3	0.45
Aldershot Bv	Exmouth Bv	Lamont Bv	N/A	P3	0.41
Aldershot Bv	Holdsworth Av	Lamont Bv	N/A	P3	0.52
Aldershot Bv	Exmouth Bv	Southport Bv	N/A	P3	0.15
Ambleside Bv	Park Pl E	Portsmouth Bv	N/A	P3	0.47
Andover Av	Dunbar Cr	Park Bv S	N/A	P3	0.22
Andover Av	Coleraine Cr	Dunbar Cr	N/A	P3	0.20
Angelo Grande Bocce Wy	Corydon Av	Sir John Franklin Rd	N/A	P3	0.08
Ash St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Ash St	Grant Av	Mathers Av	N/A	P3	0.75
Ash St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Ash St	Fleet Av	Corydon Av	N/A	P3	0.75
Ash St	Grant Av	Fleet Av	N/A	P3	0.77
Ash St	Academy Rd	Wellington Cr	N/A	P3	0.82
Ash St	Taylor Av	Mathers Av	N/A	P3	0.50
Ash St	Academy Rd	Kingsway Af	N/A	P3	0.77
Ayr Bv	Kelvin Bv	Holland Bv	N/A	P3	0.44
Bard Bv	Park Bv W	Driscoll Cr	N/A	P3	0.22
Bard Bv	Driscoll Cr	Holland Bv	N/A	P3	0.29
Bard Pl	Holland Bv	End	N/A	P3	0.69
Bardsley Pl	Billingham Pl	End	N/A	P3	0.19
Batoche Av	Doncaster St	Edgeland Bv	N/A	P3	0.10
Beaverbrook St	Grant Av	Mathers Av	N/A	P3	0.75
Beaverbrook St	Mathers Av	Taylor Av	N/A	P3	0.76
Beaverbrook St	Greenlawn St	Kingsway Af	N/A	P3	0.58
Beaverbrook St	Grosvenor Av	Greenlawn St	N/A	P3	0.19
Beaverbrook St	Corydon Av	John Brebeuf Pl	N/A	P3	0.75

Beaverbrook St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Beaverbrook St	Kingsway Af	Academy Rd	N/A	P3	0.77
Beaverbrook St	Grant Av	John Brebeuf Pl	N/A	P3	0.77
Billingham Pl	Bardsley Pl	Holland Bv	N/A	P3	0.22
Billingham Pl	Bardsley Pl	Blackburn Ln	N/A	P3	0.20
Billingham Pl	Blackburn Ln	End	N/A	P3	0.23
Birkenhead Av	Carmarthen Bv	Southport Bv	N/A	P3	0.20
Birkenhead Av	Carmarthen Bv	Devonport Bv	N/A	P3	0.11
Birkenhead Av	Exmouth Bv	Southport Bv	N/A	P3	0.14
Blackburn Ln	Billingham Pl	Burnley Pl	N/A	P3	0.26
Blanche Av	Doncaster St	Grenadier Dr	N/A	P3	0.21
Blanche Av	Edgeland Bv	Doncaster St	N/A	P3	0.36
Borebank St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Borebank St	Academy Rd	Kingsway Af	N/A	P3	0.77
Borebank St	Grant Av	Mathers Av	N/A	P3	0.75
Borebank St	Fleet Av	Corydon Av	N/A	P3	0.75
Borebank St	Taylor Av	End	N/A	P3	0.08
Borebank St	Fleet Av	Grant Av	N/A	P3	0.77
Borebank St	Mathers Av	Taylor Av	N/A	P3	0.76
Borebank St	Academy Rd	Wellington Cr	N/A	P3	0.60
Borebank St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Boreham Bv	Mountbatten Av	Cuthbertson Av	N/A	P3	0.77
Boreham Bv	Cuthbertson Av	Corydon Av	N/A	P3	0.54
Boreham Bv	Laidlaw Bv	Mountbatten Av	N/A	P3	0.40
Boulton By	Kenaston Bv	End	N/A	P3	0.43
Bower Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.43
Bower Bv	Mountbatten Av	Cuthbertson Av	N/A	P3	0.77
Bower Bv	Grant Av	End	N/A	P3	0.27
Bower Bv	Grant Av	Mountbatten Av	N/A	P3	0.82
Brock St	Academy Rd	Wellington Cr	N/A	P3	0.71
Brock St	Grant Av	Mathers Av	N/A	P3	0.75



Brock St	Mathers Av	Queenston By	N/A	P3	0.50
Brock St	Fleet Av	Grant Av	N/A	P3	0.77
Brock St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Brock St	Queenston By	Taylor Av	N/A	P3	0.16
Brock St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Brock St	Academy Rd	Kingsway Af	N/A	P3	0.77
Burnley Pl	Holland Bv	Blackburn Ln	N/A	P3	0.38
Burnley Pl	Blackburn Ln	End	N/A	P3	0.23
Cambridge St	Kingsway Af	Harvard Av	N/A	P3	0.25
Cambridge St	Yale Av	Harvard Av	N/A	P3	0.23
Cambridge St	Dromore Av	Kingsway Af	N/A	P3	0.22
Cambridge St	Academy Rd	Dromore Av	N/A	P3	0.55
Cambridge St	Wellington Cr	Academy Rd	N/A	P3	0.26
Cambridge St	Yale Av	Grosvenor Av	N/A	P3	0.23
Campbell St	Grant Av	Mathers Av	N/A	P3	0.75
Campbell St	Mathers Av	Taylor Av	N/A	P3	0.74
Campbell St	Academy Rd	Wellington Cr	N/A	P3	0.61
Campbell St	Corydon Av	Fleet Av	N/A	P3	0.75
Campbell St	Fleet Av	Grant Av	N/A	P3	0.77
Campbell St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Campbell St	Academy Rd	Kingsway Af	N/A	P3	0.77
Campbell St	Taylor Av	End	N/A	P3	0.10
Campbell St	Grosvenor Av	Corydon Av	N/A	P3	0.77
Carmarthen Bv	Devonport Bv	Edgeland Bv	N/A	P3	0.13
Carmarthen Bv	Birkenhead Av	Devonport Bv	N/A	P3	0.32
Carpathia Rd	Kenaston Bv	Frank St	N/A	P3	0.33
Carpathia Rd	Tuxedo Av	Willow Av	N/A	P3	0.50
Carpathia Rd	Kenaston Bv	Kenaston Bv	N/A	P3	0.02
Carpathia Rd	Lockston Av	Tuxedo Av	N/A	P3	0.76
Carpathia Rd	Kenaston Bv	Willow Av	N/A	P3	0.34
Carpathia Rd	Corydon Av	Kenaston Bv	N/A	P3	0.95

Carthia Rd	Corydon Av	Lockston Av	N/A	P3	0.44
Carter Av	Guelph St	Harrow St	N/A	P3	0.35
Carter Av	Poseidon By	Cambridge St	N/A	P3	0.18
Carter Av	Harrow St	E limit	N/A	P3	0.16
Carter Av	Wilton St	Guelph St	N/A	P3	0.35
Centennial St	Grant Av	Mathers Av	N/A	P3	0.75
Centennial St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Centennial St	Grant Av	John Brebeuf Pl	N/A	P3	0.77
Centennial St	Academy Rd	Kingsway Af	N/A	P3	0.77
Centennial St	Mathers Av	Taylor Av	N/A	P3	0.76
Centennial St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Centennial St	John Brebeuf Pl	Corydon Av	N/A	P3	0.75
Chataway Bv	Nanton Bv	Wellington Cr	N/A	P3	0.80
Chataway Bv	Nanton Bv	Tuxedo Av	N/A	P3	0.03
Colchester By	Holland Bv	Stockton Pl	N/A	P3	0.22
Colchester By	Holland Bv	Stockton Pl	N/A	P3	1.01
Coleraine Cr	Hopwood Dr	Park Pl E	N/A	P3	0.19
Coleraine Cr	Andover Av	Taylor Av	N/A	P3	0.14
Coleraine Cr	Portsmouth Bv	Andover Av	N/A	P3	0.54
Coleraine Cr	Taylor Av	Hopwood Dr	N/A	P3	0.44
Cordova St	Kingsway Af	Academy Rd	N/A	P3	0.77
Cordova St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Cordova St	Fleet Av	Grant Av	N/A	P3	0.77
Cordova St	Kingsway Af	Grosvenor Av	N/A	P3	0.77
Cordova St	Wellington Cr	Academy Rd	N/A	P3	0.66
Cordova St	Corydon Av	Fleet Av	N/A	P3	0.75
Cuthbertson Av	Bower Bv	Laidlaw Bv	N/A	P3	0.23
Cuthbertson Av	Bower Bv	Shaftesbury Bv	N/A	P3	0.26
Cuthbertson Av	Hosmer Bv	Park Bv N	N/A	P3	0.22
Cuthbertson Av	Lamont Bv	Park Bv N	N/A	P3	0.22
Cuthbertson Av	Hosmer Bv	Kelvin Bv	N/A	P3	0.21

Cuthbertson Av	Cuthbertson Pl	Edgeland Bv	N/A	P3	0.22
Cuthbertson Av	Boreham Bv	Laidlaw Bv	N/A	P3	0.22
Cuthbertson Av	Kelvin Bv	Boreham Bv	N/A	P3	0.21
Cuthbertson Av	Lamont Bv	Southport Bv	N/A	P3	0.64
Cuthbertson Av	Cuthbertson Pl	Southport Bv	N/A	P3	0.22
Cuthbertson Pl	Cuthbertson Av	End	N/A	P3	0.21
Daventry Pl	Kerslake Dr	End	N/A	P3	0.19
Dearsley Pl	Litchfield Bv	End	N/A	P3	0.29
Devonport Bv	Birkenhead Av	Carmarthen Bv	N/A	P3	0.22
Devonport Bv	Exmouth Bv	Birkenhead Av	N/A	P3	0.63
Doncaster St	Batoche Av	Blanche Av	N/A	P3	0.22
Doncaster St	Batoche Av	Corydon Av	N/A	P3	0.45
Doncaster St	Doncaster St	Corydon Av	N/A	P3	0.03
Dorchester Av	Harrow St	Stafford St	N/A	P3	0.35
Dorchester Av	Rockwood St	Wilton St	N/A	P3	0.35
Dorchester Av	Guelph St	Wilton St	N/A	P3	0.35
Dorchester Av	Harrow St	Guelph St	N/A	P3	0.35
Dorchester Av	Thurso St	Cambridge St	N/A	P3	0.22
Dorchester Av	Thurso St	Rockwood St	N/A	P3	0.35
Driscoll Cr	Bard Bv	Holland Bv	N/A	P3	0.48
Dromore Av	Cambridge St	Wilton St	N/A	P3	0.29
Dromore Av	Guelph St	Wilton St	N/A	P3	0.35
Dromore Av	Guelph St	Harrow St	N/A	P3	0.35
Dudley Av	Rockwood St	Wilton St	N/A	P3	0.35
Dudley Av	Harrow St	Stafford St	N/A	P3	0.35
Dudley Av	Thurso St S	Rockwood St	N/A	P3	0.35
Dudley Av	Nathaniel St	Thurso St S	N/A	P3	0.50
Dudley Av	Guelph St	Wilton St	N/A	P3	0.35
Dudley Av	Harrow St	Guelph St	N/A	P3	0.35
Dudley Cr	Fleet Av	Nathaniel St	N/A	P3	0.48
Dudley Cr	Nathaniel St	Nathaniel St	N/A	P3	0.79

Dumbarton Bv	Dumfries Pl	Park Pl W	N/A	P3	0.19
Dumbarton Bv	Dumfries Pl	West Taylor Bv	N/A	P3	0.51
Dumfries Pl	Dumbarton Bv	End	N/A	P3	0.19
Dunbar Cr	Portsmouth Bv	Andover Av	N/A	P3	0.87
Ebby Av	Guelph St	Harrow St	N/A	P3	0.35
Ebby Av	Cambridge St	Poseidon By	N/A	P3	0.38
Ebby Av	Wilton By	Guelph St	N/A	P3	0.35
Ebby Av	Harrow St	Stafford St	N/A	P3	0.35
Edgeland Bv	Carmarthen Bv	Maurepas Cr	N/A	P3	0.20
Edgeland Bv	Tuxedo Av	End	N/A	P3	0.06
Edgeland Bv	Grant Av	Keswick Av	N/A	P3	0.19
Edgeland Bv	Keswick Av	End	N/A	P3	0.04
Edgeland Bv	Maurepas Cr	Corydon Av	N/A	P3	0.21
Edgeland Bv	Grenadier Dr	Blanche Av	N/A	P3	0.22
Edgeland Bv	Cuthbertson Av	Maurepas Cr	N/A	P3	0.21
Edgeland Bv	Batoche Av	Blanche Av	N/A	P3	0.23
Elm St	Mathers Av	Grant Av	N/A	P3	0.75
Elm St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Elm St	Academy Rd	Kingsway Af	N/A	P3	0.77
Elm St	Corydon Av	Fleet Av	N/A	P3	0.75
Elm St	Academy Rd	Wellington Cr	N/A	P3	0.46
Erinview Pl	Park Pl W	Park Pl W	N/A	P3	0.13
Exmouth Bv	Aldershot Bv	Birkenhead Av	N/A	P3	0.12
Exmouth Bv	Devonport Bv	Folkestone Bv	N/A	P3	0.20
Exmouth Bv	Folkestone Bv	Holdsworth Av	N/A	P3	0.09
Exmouth Bv	Birkenhead Av	Devonport Bv	N/A	P3	0.20
Fleet Av	Campbell St	Cordova St	N/A	P3	0.19
Fleet Av	Montrose St	Waverley St	N/A	P3	0.20
Fleet Av	Montrose St	Elm St	N/A	P3	0.19
Fleet Av	Brock St	Cordova St	N/A	P3	0.18
Fleet Av	Elm St	Oak St	N/A	P3	0.20

Fleet Av	Niagara St	Queenston St	N/A	P3	0.18
Fleet Av	Ash St	Waterloo St	N/A	P3	0.20
Fleet Av	Niagara St	Waterloo St	N/A	P3	0.20
Fleet Av	Brock St	Queenston St	N/A	P3	0.18
Fleet Av	Campbell St	Borebank St	N/A	P3	0.20
Fleet Av	Borebank St	Lindsay St	N/A	P3	0.20
Fleet Av	Ash St	Oak St	N/A	P3	0.20
Fleet Av	Cambridge St	Oxford St	N/A	P3	0.08
Fleet Av	Oxford St	Waverley St	N/A	P3	0.21
Fleet Av	Oxford St	Cambridge St	N/A	P3	0.21
Folkestone Bv	Glastonbury Bv	Keswick Av	N/A	P3	0.71
Folkestone Bv	Glastonbury Bv	Exmouth Bv	N/A	P3	0.26
Frank St	Fulham Av	Carpathia Rd	N/A	P3	0.03
Frank St	Carpathia Rd	Fulham Av	N/A	P3	0.36
Fulham Av	Frank St	Doncaster St	N/A	P3	0.24
Fulham Av	Doncaster St	Frank St	N/A	P3	0.32
Fulham Av	Kenaston Bv	Lockwood St	N/A	P3	0.07
Fulham Av	Kenaston Bv	Lockwood St	N/A	P3	0.47
Garwood Av	Guelph St	Harrow St	N/A	P3	0.35
Garwood Av	Guelph St	Wilton St	N/A	P3	0.35
Garwood Av	Rockwood St	Wilton St	N/A	P3	0.35
Garwood Av	Harrow St	Stafford St	N/A	P3	0.35
Girton Bv	Nanton Bv	Wellington Cr	N/A	P3	0.80
Girton Bv	Tuxedo Av	Nanton Bv	N/A	P3	0.40
Glastonbury Bv	Folkestone Bv	Holdsworth Av	N/A	P3	0.06
Glastonbury Bv	Lancaster Bv	Keswick Av	N/A	P3	0.28
Glastonbury Bv	Lancaster Bv	Holdsworth Av	N/A	P3	0.20
Grant Av	Grant Av	Grant Av	N/A	P3	0.41
Grant Av	Nathaniel St	Heath St	N/A	P3	0.36
Grant Av	Guelph St	Grant Av	N/A	P3	0.29
Grant Av	Harrow St	Grant Av	N/A	P3	0.66

Grant Av	Wilton St	Rockwood St	N/A	P3	0.34
Grant Av	Rockwood St	Thurso St S	N/A	P3	0.35
Grant Av	Nathaniel St	Grant Av	N/A	P3	1.05
Grant Av	Heath St	Grant Av	N/A	P3	0.34
Grant Av	Wilton St	Guelph St	N/A	P3	0.35
Grant Av	Thurso St S	Grant Av	N/A	P3	0.46
Grant Av Service Rd	Inverness Bv	Keswick Av	N/A	P3	0.55
Grant Av Service Rd	Lancaster Bv	Inverness Bv	N/A	P3	0.88
Greenlawn St	Lanark St	Beaverbrook St	N/A	P3	0.31
Grenadier Dr	Blanche Av	Edgeland Bv	N/A	P3	0.78
Grenadier Dr	Blanche Av	Corydon Av	N/A	P3	0.46
Grenfell Bv	Nanton Bv	Corydon Av	N/A	P3	0.08
Grenfell Bv	Nanton Bv	Wellington Cr	N/A	P3	0.73
Grenfell Bv	Nanton Bv	Corydon Av	N/A	P3	0.66
Grenfell Bv	Corydon Av	End	N/A	P3	0.10
Grosvenor Av	Lockwood St	End	N/A	P3	0.11
Grosvenor Av	End	Centennial St	N/A	P3	0.09
Guelph St	Fleet Av	Garwood Av	N/A	P3	0.17
Guelph St	Grosvenor Av	Yale Av	N/A	P3	0.20
Guelph St	Jessie Av	Corydon Av	N/A	P3	0.20
Guelph St	Dorchester Av	Grosvenor Av	N/A	P3	0.20
Guelph St	Fleet Av	Mulvey Av	N/A	P3	0.16
Guelph St	Warsaw Av	Mulvey Av	N/A	P3	0.18
Guelph St	Grant Av Service Rd S	Weatherdon Av	N/A	P3	0.17
Guelph St	Dudley Av	Garwood Av	N/A	P3	0.17
Guelph St	Carter Av	Weatherdon Av	N/A	P3	0.17
Guelph St	Dorchester Av	McMillan Av	N/A	P3	0.20
Guelph St	Corydon Av	McMillan Av	N/A	P3	0.20
Guelph St	Jessie Av	Warsaw Av	N/A	P3	0.20
Guelph St	Harvard Av	Kingsway Af	N/A	P3	0.21
Guelph St	Ebby Av	Taylor Av	N/A	P3	0.33

Guelph St	Academy Rd	Dromore Av	N/A	P3	0.29
Guelph St	Carter Av	Hector Av	N/A	P3	0.17
Guelph St	Dudley Av	Lorette Av	N/A	P3	0.17
Guelph St	Ebby Av	Hector Av	N/A	P3	0.17
Guelph St	Scotland Av	Lorette Av	N/A	P3	0.10
Guelph St	Harvard Av	Yale Av	N/A	P3	0.21
Guelph St	Academy Rd	Wellington Cr	N/A	P3	0.24
Guelph St	Dromore Av	Kingsway Af	N/A	P3	0.21
Handsart Bv	Nanton Bv	Wellington Cr	N/A	P3	0.70
Handsart Bv	Corydon Av	Nanton Bv	N/A	P3	0.74
Harrow St	Sparling Av	End	N/A	P3	0.08
Harrow St	Wellington Cr	Academy Rd	N/A	P3	0.23
Harrow St	Sparling Av	Harrow St E	N/A	P3	0.42
Harrow St E	Harrow St	Harrow St E	N/A	P3	0.07
Harvard Av	Guelph St	Harrow St	N/A	P3	0.35
Harvard Av	Wilton St	Guelph St	N/A	P3	0.35
Harvard Av	Rockwood St	Cambridge St	N/A	P3	0.20
Harvard Av	Harrow St	Stafford St	N/A	P3	0.34
Harvard Av	Wilton St	Rockwood St	N/A	P3	0.35
Heath St	Grant Av	End	N/A	P3	0.12
Hector Av	Hector By E	Hector By E	N/A	P3	0.18
Hector Av	Hector By E	Hector By W	N/A	P3	0.18
Hector Av	Hector By W	Nathaniel St	N/A	P3	0.19
Hector Av	Guelph St	Harrow St	N/A	P3	0.35
Hector Av	Cambridge St	Poseidon By	N/A	P3	0.28
Hector Av	Hector By E	Wilton St	N/A	P3	0.31
Hector Av	Guelph St	Wilton St	N/A	P3	0.35
Hector Av	Harrow St	Stafford St	N/A	P3	0.35
Hector Av	Hector By W	Hector By W	N/A	P3	0.18
Hector By E	Hector Av	Hector Av	N/A	P3	0.63
Hector By W	Hector Av	Hector Av	N/A	P3	0.63

Holdsworth Av	Exmouth Bv	Aldershot Bv	N/A	P3	0.36
Holdsworth Av	Glastonbury Bv	Exmouth Bv	N/A	P3	0.26
Holland Bv	Grant Av	Stanford By	N/A	P3	0.24
Holland Bv	West Taylor Bv	Burnley Pl	N/A	P3	0.20
Holland Bv	Driscoll Cr	Stanford By	N/A	P3	0.19
Holland Bv	Bard Bv	Driscoll Cr	N/A	P3	0.16
Holland Bv	Stanford By	Stanford By	N/A	P3	0.18
Holland Bv	Bard Bv	Billingham Pl	N/A	P3	0.18
Holland Bv	Billingham Pl	Burnley Pl	N/A	P3	0.35
Hopwood Dr	Taylor Av	Coleraine Cr	N/A	P3	0.65
Hopwood Dr	Coleraine Cr	Portsmouth Bv	N/A	P3	0.79
Hosmer Bv	Mountbatten Av	Cuthbertson Av	N/A	P3	0.58
Hosmer Bv	Mountbatten Av	Park Bv W	N/A	P3	0.11
Hosmer Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.59
Inverness Bv	Grant Av Service Rd	Keswick Av	N/A	P3	0.19
Inverness Bv	Keswick Av	Lancaster Bv	N/A	P3	0.27
Jackson Av	Harrow St	Stafford St	N/A	P3	0.35
Jessie Av	Guelph St	Harrow St	N/A	P3	0.35
Jessie Av	Wilton St	Rockwood St	N/A	P3	0.35
Jessie Av	Harrow St	Stafford St	N/A	P3	0.35
Jessie Av	Guelph St	Wilton St	N/A	P3	0.35
John Brebeuf Pl	Centennial St	End	N/A	P3	0.09
John Brebeuf Pl	End	Alley	N/A	P3	0.05
John Brebeuf Pl	Lanark St	Renfrew St	N/A	P3	0.20
John Brebeuf Pl	Centennial St	Beaverbrook St	N/A	P3	0.18
John Brebeuf Pl	Renfrew St	End	N/A	P3	0.12
Kelvin Bv	Ayr Bv	Grant Av	N/A	P3	0.51
Kelvin Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.57
Kelvin Bv	Mountbatten Av	Cuthbertson Av	N/A	P3	0.75
Kelvin Bv	Grant Av	Ayr Bv	N/A	P3	0.27
Kerslake Dr	Litchfield Bv	Kerslake Pl	N/A	P3	0.14



Kerslake Dr	Daventry Pl	Kerslake Pl	N/A	P3	0.13
Kerslake Dr	Kerslake Pl	Kerslake Pl	N/A	P3	0.03
Kerslake Dr	Daventry Pl	Park Pl W	N/A	P3	0.32
Kerslake Pl	Kerslake Dr	Kerslake Dr	N/A	P3	0.15
Keswick Av	Folkestone Bv	Glastonbury Bv	N/A	P3	0.19
Keswick Av	Edgeland Bv	Grant Av Service Rd	N/A	P3	0.05
Keswick Av	Edgeland Bv	Folkestone Bv	N/A	P3	0.09
Keswick Av	Glastonbury Bv	Inverness Bv	N/A	P3	0.09
Laidlaw Bv	Cuthbertson Av	Mountbatten Av	N/A	P3	0.77
Laidlaw Bv	Boreham Bv	Mountbatten Av	N/A	P3	0.24
Laidlaw Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.50
Lamont Bv	Nanton Bv	Wellington Cr	N/A	P3	0.62
Lamont Bv	Cuthbertson Av	Aldershot Bv	N/A	P3	0.63
Lamont Bv	Lamont Bv	Lamont Bv	N/A	P3	0.28
Lamont Bv	Nanton Bv	Corydon Av	N/A	P3	0.74
Lamont Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.58
Lanark St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Lanark St	Lanark St	Lanark St	N/A	P3	0.38
Lanark St	Lanark St	Lanark St	N/A	P3	0.36
Lanark St	Lanark St	Lanark St	N/A	P3	0.36
Lanark St	Lanark St	Lanark St	N/A	P3	0.36
Lanark St	Wellington Cr	Wellington Cr S	N/A	P3	0.20
Lanark St	Corydon Av	John Brebeuf Pl	N/A	P3	0.75
Lanark St	Lanark St	Lanark St	N/A	P3	0.36
Lanark St	Lanark St	Lanark St	N/A	P3	0.32
Lanark St	Lanark St	Lanark St	N/A	P3	0.36
Lanark St	Academy Rd	Kingsway Af	N/A	P3	0.77
Lanark St	Academy Rd	Wellington Cr S	N/A	P3	0.34
Lanark St	Lanark St	Lanark St	N/A	P3	0.47
Lanark St	Grant Av	Mathers Av	N/A	P3	0.75
Lanark St	Taylor Av	Mathers Av	N/A	P3	0.76

Lanark St	Kingsway Af	Greenlawn St	N/A	P3	0.58
Lanark St	Greenlawn St	Grosvenor Av	N/A	P3	0.19
Lancaster Bv	Lancaster Bv	Lancaster Bv	N/A	P3	0.39
Lancaster Bv	Glastonbury Bv	Inverness Bv	N/A	P3	0.09
Lancaster Bv	Aldershot Bv	Grant Av Service Rd	N/A	P3	0.18
Lancaster Bv	Lancaster Bv	Inverness Bv	N/A	P3	0.19
Lancaster Bv	Lancaster Bv	Lancaster Bv	N/A	P3	0.36
Lancaster Bv	Grant Av Service Rd	Park Bv E	N/A	P3	0.03
Lancaster Bv	Aldershot Bv	Lancaster Bv	N/A	P3	0.20
Lindsay St	Academy Rd	Wellington Cr	N/A	P3	0.56
Litchfield Bv	West Taylor Bv	Kerslake Dr	N/A	P3	0.23
Litchfield Bv	Park Pl W	End	N/A	P3	0.16
Litchfield Bv	Ike Kraut Pl	Park Pl W	N/A	P3	0.22
Litchfield Bv	Dearsley Pl	Ike Kraut Pl	N/A	P3	0.24
Lorette Av	Rockwood St	Wilton St	N/A	P3	0.35
Lorette Av	Cambridge St	Nathaniel St	N/A	P3	0.69
Lorette Av	Wilton St	Guelph St	N/A	P3	0.35
Lorette Av	Guelph St	Harrow St	N/A	P3	0.35
Lorette Av	Nathaniel St	Thurso St S	N/A	P3	0.50
Lorette Av	Thurso St S	Rockwood St	N/A	P3	0.35
Lorette Av	Harrow St	Stafford St	N/A	P3	0.35
Mathers Av	Centennial St	End	N/A	P3	0.09
Mathers Av	Renfrew St	End	N/A	P3	0.13
Mathers Av	Beaverbrook St	Lanark St	N/A	P3	0.31
Mathers Av	Beaverbrook St	Centennial St	N/A	P3	0.18
Mathers Av	Lanark St	Renfrew St	N/A	P3	0.20
Mathers By E	Mathers Av	Mathers Av	N/A	P3	0.64
Mathers By W	Mathers Av	Mathers Av	N/A	P3	0.99
Maurepas Cr	Edgeland Bv	Edgeland Bv	N/A	P3	0.47
McMillan Av	Wilton St	Guelph St	N/A	P3	0.35
McMillan Av	Harrow St	Stafford St	N/A	P3	0.35

McMillan Av	Cambridge St	Thurso St	N/A	P3	0.33
McMillan Av	Rockwood St	Thurso St	N/A	P3	0.35
McMillan Av	Guelph St	Harrow St	N/A	P3	0.35
McMillan Av	Rockwood St	Wilton St	N/A	P3	0.35
Montrose St	Academy Rd	Kingsway Af	N/A	P3	0.77
Montrose St	Grant Av	Mathers Av	N/A	P3	0.75
Montrose St	Corydon Av	Fleet Av	N/A	P3	0.75
Montrose St	Academy Rd	Wellington Cr	N/A	P3	0.38
Montrose St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Montrose St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Morpeth Bv	Taylor Av	End	N/A	P3	0.69
Mountbatten Av	Bower Bv	Laidlaw Bv	N/A	P3	0.23
Mountbatten Av	Bower Bv	Shaftesbury Bv	N/A	P3	0.26
Mountbatten Av	Boreham Bv	Kelvin Bv	N/A	P3	0.21
Mountbatten Av	Boreham Bv	Laidlaw Bv	N/A	P3	0.22
Mountbatten Av	Hosmer Bv	Park Bv W	N/A	P3	0.14
Mountbatten Av	Hosmer Bv	Kelvin Bv	N/A	P3	0.29
Mulvey Av	Cambridge St	Warsaw Cr	N/A	P3	0.23
Mulvey Av	Guelph St	Wilton St	N/A	P3	0.35
Mulvey Av	Guelph St	Harrow St	N/A	P3	0.35
Mulvey Av	Rockwood St	Thurso St	N/A	P3	0.52
Mulvey Av	Thurso St	Warsaw Cr	N/A	P3	0.39
Mulvey Av	Harrow St	Stafford St	N/A	P3	0.35
Mulvey Av	Rockwood St	Wilton St	N/A	P3	0.35
Nanton Bv	Handsart Bv	Lamont Bv	N/A	P3	0.21
Nanton Bv	Lamont Bv	Park Bv N	N/A	P3	0.23
Nanton Bv	Girton Bv	Grenfell Bv	N/A	P3	0.21
Nanton Bv	Chataway Bv	Girton Bv	N/A	P3	0.22
Nanton Bv	Handsart Bv	Grenfell Bv	N/A	P3	0.21
Newbury Cr	Portsmouth Bv	Swindon Wy	N/A	P3	0.66
Niagara St	Grant Av	Mathers Av	N/A	P3	0.75

Niagara St	Fleet Av	Grant Av	N/A	P3	0.77
Niagara St	Fleet Av	Corydon Av	N/A	P3	0.75
Niagara St	Academy Rd	Kingsway Af	N/A	P3	0.77
Niagara St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Niagara St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Niagara St	Wellington Cr	Academy Rd	N/A	P3	0.82
Oak St	Grant Av	Mathers By E	N/A	P3	0.75
Oak St	Academy Rd	Kingsway Af	N/A	P3	0.77
Oak St	Fleet Av	Corydon Av	N/A	P3	0.75
Oak St	Fleet Av	Grant Av	N/A	P3	0.77
Oak St	Academy Rd	Wellington Cr	N/A	P3	0.65
Oxford St	Grant Av	Mathers Av	N/A	P3	0.75
Oxford St	Corydon Av	Fleet Av	N/A	P3	0.75
Oxford St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Oxford St	Academy Rd	Kingsway Af	N/A	P3	0.77
Oxford St	Academy Rd	Wellington Cr	N/A	P3	0.26
Oxford St	Fleet Av	Grant Av	N/A	P3	0.77
Oxford St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Park Bv S	Taylor Av	Park Pl W	N/A	P3	0.70
Park Pl E	Ambleside Bv	Portsmouth Bv	N/A	P3	0.21
Park Pl E	Coleraine Cr	Park Bv S	N/A	P3	0.46
Park Pl E	Coleraine Cr	Ambleside Bv	N/A	P3	0.35
Park Pl E	Portsmouth Bv	Portsmouth Bv	N/A	P3	0.96
Park Pl W	Erinview Pl	Erinview Pl	N/A	P3	0.06
Park Pl W	Litchfield Bv	Kerslake Dr	N/A	P3	0.41
Park Pl W	Dumbarton Bv	Kerslake Dr	N/A	P3	0.26
Park Pl W	Erinview Pl	Dumbarton Bv	N/A	P3	0.16
Park Pl W	Erinview Pl	Park Bv S	N/A	P3	0.23
Portsmouth Bv	Hopwood Dr	Taylor Av	N/A	P3	0.13
Portsmouth Bv	Park Pl E	Ambleside Bv	N/A	P3	0.09
Portsmouth Bv	Ambleside Bv	Hopwood Dr	N/A	P3	0.18

Portsmouth Bv	Park Pl E	Ambleside Bv	N/A	P3	0.31
Queenston By	Mathers Av	Mathers Av	N/A	P3	0.64
Queenston By	Brock St	Mathers Av	N/A	P3	0.70
Queenston St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Queenston St	Grant Av	Fleet Av	N/A	P3	0.77
Queenston St	Queenston By	Grant Av	N/A	P3	0.75
Queenston St	Corydon Av	Fleet Av	N/A	P3	0.75
Queenston St	Academy Rd	Wellington Cr	N/A	P3	0.73
Queenston St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Ramsgate By	Portsmouth Bv	Swindon Wy	N/A	P3	1.49
Renfrew By	Taylor Av	Taylor Av	N/A	P3	0.53
Renfrew St	Corydon Av	John Brebeuf Pl	N/A	P3	0.75
Renfrew St	Academy Rd	Kingsway Af	N/A	P3	0.77
Renfrew St	Academy Rd	Wellington Cr S	N/A	P3	0.44
Renfrew St	Grant Av	John Brebeuf Pl	N/A	P3	0.77
Renfrew St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Renfrew St	Mathers Av	Taylor Av	N/A	P3	0.76
Renfrew St	Grant Av	Mathers Av	N/A	P3	0.75
Renfrew St	Wellington Cr	Wellington Cr S	N/A	P3	0.06
Renfrew St	Wellington Cr S	Wellington Cr	N/A	P3	0.07
Rockwood St	Jessie Av	Warsaw Av	N/A	P3	0.20
Rockwood St	Mulvey Av	Warsaw Av	N/A	P3	0.18
Rockwood St	Mulvey Av	Fleet Av	N/A	P3	0.16
Rockwood St	Grosvenor Av	Yale Av	N/A	P3	0.20
Rockwood St	Dorchester Av	Grosvenor Av	N/A	P3	0.20
Rockwood St	McMillan Av	Dorchester Av	N/A	P3	0.20
Rockwood St	Harvard Av	Kingsway Af	N/A	P3	0.20
Rockwood St	Corydon Av	McMillan Av	N/A	P3	0.20
Rockwood St	Corydon Av	Jessie Av	N/A	P3	0.20
Rockwood St	Harvard Av	Yale Av	N/A	P3	0.20
Scotland Av	Guelph St	Harrow St	N/A	P3	0.35

Scotland Av	Guelph St	Wilton St	N/A	P3	0.35
Scotland Av	Harrow St	Stafford St	N/A	P3	0.35
Sir John Franklin Rd	Angelo Grande Bocce Wy	End	N/A	P3	0.38
Southport Bv	Aldershot Bv	Birkenhead Av	N/A	P3	0.14
Southport Bv	Corydon Av	Cuthbertson Av	N/A	P3	0.49
Southport Bv	Cuthbertson Av	Aldershot Bv	N/A	P3	0.21
Sparling Av	Harrow St	End	N/A	P3	0.67
Stanford By	Holland Bv	Holland Bv	N/A	P3	0.74
Stockton Pl	Colchester By	End	N/A	P3	0.29
Swindon Wy	Newbury Cr	Park Bv E	N/A	P3	0.22
Swindon Wy	Newbury Cr	Portsmouth Bv	N/A	P3	0.20
Thurso St	Corydon Av	Warsaw Av	N/A	P3	0.52
Thurso St	Dorchester Av	Grosvenor Av	N/A	P3	0.20
Thurso St	Dorchester Av	McMillan Av	N/A	P3	0.20
Thurso St	Dudley Cr	Mulvey Av	N/A	P3	0.16
Thurso St	Corydon Av	McMillan Av	N/A	P3	0.20
Thurso St	Warsaw Av	Mulvey Av	N/A	P3	0.18
Thurso St S	Lorette Av	Grant Av Service Rd N	N/A	P3	0.20
Thurso St S	Dudley Av	Lorette Av	N/A	P3	0.17
Ubique Cr	Corydon Av	Doncaster St	N/A	P3	1.07
Warsaw Av	Rockwood St	Thurso St	N/A	P3	0.52
Warsaw Av	Stafford St	Harrow St	N/A	P3	0.35
Warsaw Av	Guelph St	Wilton St	N/A	P3	0.35
Warsaw Av	Rockwood St	Wilton St	N/A	P3	0.35
Warsaw Av	Thurso St	Warsaw Cr	N/A	P3	0.16
Warsaw Av	Harrow St	Guelph St	N/A	P3	0.35
Warsaw Av	Warsaw Cr	Warsaw Cr	N/A	P3	0.13
Warsaw Cr	Mulvey Av	Warsaw Av	N/A	P3	0.21
Warsaw Cr	Warsaw Av	Warsaw Av	N/A	P3	0.22
Waterloo St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Waterloo St	Grant Av	Mathers Av	N/A	P3	0.75

Waterloo St	Kingsway Af	Academy Rd	N/A	P3	0.77
Waterloo St	Corydon Av	Fleet Av	N/A	P3	0.75
Waterloo St	Fleet Av	Grant Av	N/A	P3	0.77
Waterloo St	Academy Rd	Wellington Cr	N/A	P3	0.86
Waterloo St	Grosvenor Av	Corydon Av	N/A	P3	0.77
Waverley St	Corydon Av	Grosvenor Av	N/A	P3	0.77
Waverley St	Academy Rd	Kingsway Af	N/A	P3	0.77
Waverley St	Fleet Av	Grant Av	N/A	P3	0.77
Waverley St	Grosvenor Av	Kingsway Af	N/A	P3	0.77
Waverley St	Academy Rd	Wellington Cr	N/A	P3	0.31
Waverley St	Corydon Av	Fleet Av	N/A	P3	0.75
Weatherdon Av	Harrow St	Stafford St	N/A	P3	0.35
Weatherdon Av	Guelph St	Wilton St	N/A	P3	0.35
Weatherdon Av	Guelph St	Harrow St	N/A	P3	0.35
Wellington Cr S	Lanark St	Renfrew St	N/A	P3	0.22
Wellington Cr S	Academy Rd	Lanark St	N/A	P3	0.51
West Taylor Bv	West Taylor Bv	West Taylor Bv	N/A	P3	0.53
West Taylor Bv	West Taylor Bv	West Taylor Bv	N/A	P3	0.60
West Taylor Bv	West Taylor Bv	West Taylor Bv	N/A	P3	0.51
West Taylor Bv	West Taylor Bv	West Taylor Bv	N/A	P3	0.30
Willow Av	Carpathia Rd	Kenaston Bv	N/A	P3	0.21
Willow Av	Carpathia Rd	Doncaster St	N/A	P3	0.21
Willow Av	Carpathia Rd	Lockwood St	N/A	P3	0.21
Willow Av	Carpathia Rd	Kenaston Bv	N/A	P3	0.21
Wilton By	Wilton St	Wilton St	N/A	P3	0.40
Wilton St	Dromore Av	Kingsway Af	N/A	P3	0.21
Wilton St	Kingsway Af	Harvard Av	N/A	P3	0.21
Wilton St	Harvard Av	Yale Av	N/A	P3	0.21
Wilton St	Yale Av	Grosvenor Av	N/A	P3	0.20
Wilton St	Grosvenor Av	Dorchester Av	N/A	P3	0.20
Wilton St	Dorchester Av	McMillan Av	N/A	P3	0.20

Wilton St	Corydon Av	McMillan Av	N/A	P3	0.20
Wilton St	Academy Rd	Dromore Av	N/A	P3	0.41
Yale Av	Cambridge St	Rockwood St	N/A	P3	0.32
Yale Av	Rockwood St	Wilton St	N/A	P3	0.35
Yale Av	Guelph St	Harrow St	N/A	P3	0.35
Yale Av	Wilton St	Guelph St	N/A	P3	0.35
Yale Av	Harrow St	Stafford St	N/A	P3	0.34
<b>Total</b>					<b>216.01</b>



## APPENDIX D – HISTORICAL WEATHER DATA

YEAR	TOTAL ANNUAL SNOWFALL [CENTIMETER]
1974-1975	125.2
1975-1976	136.2
1976-1977	64.4
1977-1978	73.1
1978-1979	148.6
1979-1980	108
1980-1981	72.5
1981-1982	77.2
1982-1983	77.4
1983-1984	56.3
1984-1985	93.2
1985-1986	124.2
1986-1987	120.2
1987-1988	65.4
1988-1989	153.6
1989-1990	96.4
1990-1991	120.5
1991-1992	133
1992-1993	111.6
1993-1994	82
1994-1995	88.6
1995-1996	202.5
1996-1997	211.4
1997-1998	104.1
1998-1999	144.7
1999-2000	71.4
2000-2001	109.7
2001-2002	105.4
2002-2003	90.9
2003-2004	149.8
2004-2005	136.6
2005-2006	151.2
2006-2007	135.6
2007-2008	111.9
2008-2009	129.2
2009-2010	81.6
2010-2011	149.1
2011-2012	72.6
2012-2013	151
2013-2014	177
2014-2015	82.0
2015-2016	124.0
2016-2017	81.2
2017-2018	48.8