



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 400-2005

**SNOW CLEARING ON REGIONAL AND LOCAL STREETS WITHIN THE SOUTH
AREA (EAST)**

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
-------------	---

PART B - BIDDING PROCEDURES

B1. Project Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Addenda	1
B5. Substitutes	2
B6. Bid Submission	3
B7. Bid	3
B8. Prices	4
B9. Qualification	4
B10. Opening of Bids and Release of Information	5
B11. Irrevocable Bid	5
B12. Withdrawal of Bids	5
B13. Evaluation of Bids	6
B14. Award of Contract	6

PART C - GENERAL CONDITIONS

C1. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Duration of Contract	2
D4. Definitions	2
D5. Contract Administrator	3
D6. Notices	3

Submissions

D7. Insurance	4
D8. Equipment	4
D9. Workers Compensation	5

Schedule of Work

D10. Commencement of Work	5
D11. Priority of Work	5
D12. Completion of Work	5
D13. Total Performance of the Work	6

Control of Work

D14. Contractor's Supervision and Communication	6
D15. Regulations, Acts and By-Laws	6
D16. Traffic Movement and Parking Restrictions	6
D17. Obstructions	7
D18. Citizen Snow Clearing Complaints	7
D19. Extreme Snowfall and Blizzard Conditions	7
D20. Quantities	7
D21. Penalties	8
D22. Damage to Public and Private Property	8

PART E - SPECIFICATIONS

General

E1. General	1
E2. Snow Clearing Requirements	1
E3. Hourly Equipment Services	4
E4. Equipment	5
E5. Measurement and Payment	5

PART F - APPENDICES

PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

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

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, July 21, 2005.
- B2.2 Bid Submissions determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- 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 notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B3.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B3.5 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. ADDENDA

- B4.1 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.
- B4.2 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.
- B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before submitting his Bid.
- B4.3 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.

B5. SUBSTITUTES

- B5.1 The Work is based on the Plant, Materials and methods specified in the Bid Opportunity.
- B5.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B5.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B5.4 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.
- B5.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B5.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.
- B5.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.
- B5.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.
- B5.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B13.
- B5.9 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. BID SUBMISSION

- B6.1 The Bid Submission consists of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;
- B6.2 All components of the Bid Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B6.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B6.3.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B6.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B6.5 Bid Submissions shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg MB R3B 1J1

B7. BID

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 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.
- B7.4 Paragraph 10 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
 - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers;

- (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

B7.4.2 All signatures shall be original.

B7.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

B8. PRICES

B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B8.1.1 Notwithstanding GC.9.01(1), prices on Form B: Prices shall not include the Goods and Services Tax (GST), which shall be extra where applicable.

B8.2 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.

B8.3 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. QUALIFICATION

B9.1 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;
- (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
- (c) be financially capable of carrying out the terms of the Contract;
- (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
- (e) have successfully carried out work, similar in nature, scope and value to the Work;
- (f) employ only Subcontractors who have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
- (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba);
- (h) provide such other pertinent data as may be required by the Contract Administrator.

B9.2 Further to B9.1(g), the Bidder shall, within three (3) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:

- (a) A valid COR certification number under the Certificate of Recognition (COR) Program – Option 1 administered by the Manitoba Heavy Construction Association’s Safety, Health and Environment Program; or
- (b) A valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association; or
- (c) A report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at the City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt.>)

B9.3 The Bidder shall be prepared to submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.

B9.4 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

B10.1 Bid Submissions will be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Branch, or in such other office as may be designated by the Manager of Materials.

B10.1.1 Bidders or their representatives may attend.

B10.2 After the public opening, the names of the Bidders and their Total Bid Prices as read out (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt.>

B10.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt.>

B10.4 The Bidder is advised that any information contained in any Bid Submission may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B11. IRREVOCABLE BID

B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.

B11.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 9 of Form A: Bid.

B12. WITHDRAWAL OF BIDS

B12.1 A Bidder may withdraw his Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.

- B12.1.1 Notwithstanding GC.7.06(2), 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.
- B12.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B12.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:
- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
 - (b) open the Bid Submission to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B12.1.3(b), declare the Bid withdrawn.
- B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

B13. EVALUATION OF BIDS

- B13.1 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;
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9;
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B5.
- B13.2 Further to B13.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements if the interests of the City so require.
- B13.3 Further to B13.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid Submission or in other information required to be submitted, that he is responsible and qualified.
- B13.4 Further to B13.1(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.
- B13.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.
- B13.5 This Contract will be awarded as a whole.

B14. AWARD OF CONTRACT

- B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

- B14.2 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.
- B14.2.1 Without limiting the generality of B14.2, 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.
- B14.3 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.
- B14.4 Notwithstanding GC.3.01 and GC.3.02, the City will issue a Purchase Order to the successful Bidder in lieu of the execution of a Contract.
- B14.5 The Contract Documents, as defined in GC.1.01(7), 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

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for Provision of Services* (Revision 1996 02 05) are applicable to the Work of the Contract.

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Provision of Services*, these Supplemental Conditions are applicable to the Work of the Contract.
- D1.2 The General Conditions are amended by striking out "The City of Winnipeg Act" wherever it appears in the General Conditions and substituting "The City of Winnipeg Charter".
- D1.3 The General Conditions are amended by striking out "Board of Commissioners" or "Commissioner" wherever it appears in the General Conditions and substituting the "Chief Administrative Officer".
- D1.4 The General Conditions are amended by striking out "Tender Package" wherever it appears in the General Conditions and substituting "Bid Opportunity".
- D1.5 The General Conditions are amended by striking out "Tender Submission" wherever it appears in the General Conditions and substituting "Bid Submission".
- D1.6 The General Conditions are amended by striking out "Bidding Instructions" wherever it appears in the General Conditions and substituting "Bidding Procedures".

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. Snow clearing shall be performed on those regional, bus route and collector, and residential streets listed in Appendices A, B and C, where full width snow clearing is required on all or a major portion of the above streets.
- D2.2 The major components of the Work are as follows:
- (a) full width snow clearing and hauling on the Priority I (Regional) Street System identified in Appendix A;
 - (b) full width snow clearing on the Priority II (Bus Routes and Collectors) Street System identified in Appendix B;
 - (c) full width snow clearing on the Priority III (Residential) Street System identified in Appendix C;
 - (d) opening and keeping streets open during a major snowfall and/or snow blizzard;
 - (e) other winter maintenance activities as required between major snowfalls.
- D2.3 The Contract Administrator reserves the right to perform routine winter maintenance on the streets listed in Appendices A, B and C using City forces.
- Routine winter maintenance includes:
- (a) curb lane spot plowing of street sections;
 - (b) full width spot plowing of street sections;
 - (c) curb lane truck plowing;
 - (d) full width truck plowing;
 - (e) widening for snow storage;
 - (f) snow hauling;
 - (g) clearing of drainage inlets in spring.

D3. DURATION OF CONTRACT

- D3.1 Notwithstanding GC.8.01, the Contractor shall perform the Work of this Contract on an "as-required" basis for two winter seasons from October 15, 2005 to April 15, 2006 and October 15, 2006 to April 15, 2007, except as hereinafter specified:
- (a) the Contractor may be required to remove snow which has fallen prior to October 15th in any year of the Contract 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 in any year of the Contract, 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 each Contract year.

D4. DEFINITIONS

- D4.1 When used in this Bid Opportunity:
- (a) "**Business Day**" means any Calendar Day, other than a Saturday, Sunday, or a Statutory or Civic Holiday;
 - (b) "**Submission Deadline**" and "**Time and Date Set for the Final Receipt of Bids**" mean the time and date set out in the Bidding Procedures for final receipt of Bids;
 - (c) "**User**" means a person, department or other administrative unit of the City authorized by the Contract Administrator to order Work under this Contract.
 - (d) "**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, sidewalks, 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.
 - (e) "**Roadway**" means the paved portion of the street that is used exclusively for the passage of motorized vehicles.
 - (f) "**Street**" means a highway over which the City of Winnipeg has jurisdiction.
 - (g) "**Sidewalk**" means the paved portion of the street that is used exclusively for a passage of pedestrians.
 - (h) "**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.
 - (i) "**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.
 - (j) "**Street Right-of-Way**" means the limit of the publicly-owned land acquired for and devoted to streets, boulevards, sidewalks, appurtenances, as well as underground facilities.
 - (k) "**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.

- (l) **"Traffic Lane"** means a 3.6 metre or greater width of pavement.
- (m) **"Pavement"** or the adjective **"Paved"** when used to describe a street, road, alley, sidewalk or other area, means an area which has a surface constructed of Portland Cement concrete, asphaltic concrete, brick, tile or similar material.
- (n) **"Bare Pavement"** means that the Contractor shall endeavour to completely clear the full pavement width of snow.
- (o) **"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.
- (p) **"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).
- (q) **"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.
- (r) **"Hauling away"** means the relocation of cleared snow volumes by use of trucks for purposes of transporting to a distant storage location.
- (s) **"Snow"** means all forms of frozen precipitation including ice associated with such snow.
- (t) **"Wing back"** means the Contractor shall push back the windrow to create storage space for snow in future plowing operations.

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is:

Mr. Ken Boyd, P. Eng.
Support Services Engineer
Public Works Department
Streets Maintenance Division
104-1155 Pacific Avenue
Winnipeg, MB R3E 3P1

Telephone No. (204) 986-5076
Facsimile No. (204) 986-5566

D5.2 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.

D6. NOTICES

D6.1 GC.7.06 is hereby amended to delete reference to "registered mail" and to replace same with "ordinary mail".

D6.2 GC.7.06 is further amended hereby to include delivery by facsimile transmission (fax) as an acceptable means of delivering notices, consents, approvals, statements, authorizations, documents or other communications required or permitted to be given under this Contract. Deliveries by fax will be deemed to have been received on the day of delivery, if a business day, or if not a business day, on the business day next following the day of delivery.

D6.3 Further to GC.7.06, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.4, D6.5 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

- D6.4 All notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Administrative Officer Secretariat
Administration Building, 3rd Floor
510 Main Street
Winnipeg MB R3B 1B9
Facsimile No.: (204) 949-1174

- D6.5 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

SUBMISSIONS

D7. INSURANCE

- D7.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) all inclusive, with The City of Winnipeg being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;
 - (b) automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance.
- D7.2 Deductibles shall be borne by the Contractor.
- D7.3 The Contractor shall provide the Contract Administrator with a certificate of insurance of each policy at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than seven (7) Calendar Days from notification of the award of Contract.
- D7.4 Deductibles must be expressly stated on the certificate of insurance and must not exceed \$5,000.00.
- D7.5 The Certificate of Insurance shall clearly state that operations of snow removal are covered.
- D7.6 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.
- D7.7 The City shall have the right to alter limits and/or coverages as reasonably required from time to time during the continuance of this Contract.

D8. EQUIPMENT

- D8.1 The Contractor shall provide the following minimum quantity and type of equipment in first class working condition:

- (a) 8 motor graders;
- (b) 10 loaders.

D8.2 All equipment shall be made available for inspection by the Contract Administrator or his designate prior to the award of Contract.

D8.3 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 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.

D9. WORKERS COMPENSATION

D9.1 The Contractor shall be registered with the Workers Compensation Board of Manitoba, shall provide and maintain Workers Compensation coverage throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

SCHEDULE OF WORK

D10. COMMENCEMENT OF WORK

D10.1 When snow accumulation approaches the levels specified in E2 of the Specifications, the Contractor shall be prepared to immediately dispatch the equipment and personnel necessary to perform the work. When heavy precipitation occurs, the Contractor shall be prepared to dispatch additional equipment and personnel in accordance with E2.

D10.2 Work for each snow clearing operation shall commence only upon the instructions of the Contract Administrator.

D10.3 The hour for the end of snowfall will be determined by the Contract Administrator based upon information provided by Environment Canada, Atmospheric Environment Services.

D11. PRIORITY OF WORK

D11.1 Work for each snow clearing operation shall proceed continuously, quickly, promptly and diligently in order that the work be completed in its entirety to the satisfaction of the Contract Administrator within the specified time period following the designated time of commencement of clearing operations on each of the street system categories.

D11.2 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 Contact Administrator may direct otherwise and the Contractor shall conform to all such directives, either oral or written.

D12. COMPLETION OF WORK

D12.1 Work for each full width snow clearing operation shall be completed within the time periods specified in E2 of the Specifications following the authorized time for commencement of work.

D12.2 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.

D12.3 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 operation

with the Contractor's full complement of equipment and continuous effort, the Contract Administrator may, at his sole discretion, extend the time limits specified.

D13. TOTAL PERFORMANCE OF THE WORK

- D13.1 Further to GC.8.06 (2) of the General Conditions, the Contractor shall achieve Total Performance of the Work by June 30, 2007 for the Work specified in D3.1.
- D13.2 When the Contractor and/or Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D13.3 Further to GC8.06 (2) of the General Conditions, the day that the Work has been inspected and certified as being totally performed to the requirements of the Contract documents by the Contract Administrator through the issue of a Certificate of Total Performance is the date that Total Performance of the Work has been achieved.

CONTROL OF WORK

D14. CONTRACTOR'S SUPERVISION AND COMMUNICATION

- D14.1 The Contractor shall have a qualified Supervisor on duty during all snow clearing activities regardless of the type and magnitude of the operation.
- D14.2 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.
- D14.3 The Supervisor, or his designate, shall provide a means of two-way communications with City staff involved in the inspection of contract snow clearing operations. Failure by the Contractor to supply two-way communication to the City staff by first call-out will result in the City furnishing such equipment and deducting costs from the Contract payment.
- D14.4 The Contractor shall have the capability of receiving facsimile transmission (fax machine) and shall supply the facsimile number to the Contract Administrator.

D15. REGULATIONS, ACTS AND BY-LAWS

- D15.1 The Contractor shall comply with all applicable acts and by-laws including but not restricted to, the following: Workplace Health and Safety Act, City of Winnipeg Streets By-law, City of Winnipeg Traffic By-law, Manitoba Highway Traffic Act and Manual of Temporary Traffic Control in Work Areas on City Streets.
- D15.2 Any fines or penalties that may be levied against the Contractor under any Provincial Act or any City By-Law will not be considered part of any liquidated damages in connection with this Contract.

D16. TRAFFIC MOVEMENT AND PARKING RESTRICTIONS

- D16.1 After a significant snowfall, overnight parking may be restricted on all Priority I and Priority II streets with the declaration of the Major Snowfall Parking Ban. This By-Law, when declared by the Mayor, prohibits parking on Priority I and II streets between the hours of midnight and 06:00. The ban will normally last for twenty-four (24) hours but may be extended.
- D16.2 During snow clearing operations, the Contractor shall take all reasonable measures to facilitate the movement of traffic.

- D16.3 To meet the requirements of E2 the Contractor may erect temporary "No Parking" signs on streets or portions of street where parked vehicles may obstruct the snow clearing operation. Upon request, the Contract Administrator will have the right to have parked vehicles removed, provided that the signs are installed in accordance with the Public Works Department procedure as shown in Appendix "E".
- D16.4 The Contractor may obtain up to 200 of these temporary signs from area offices.
- D16.5 All of these signs must be returned to the respective area offices after the snow clearing operation is completed. The number of signs returned must correspond to the number that had been originally handed out.
- D16.6 The Contract Administrator will refuse all signs returned which cannot be utilized. The Contractor must reimburse the City of all signs which are rendered useless, or which are missing. Reimbursement cost will be accordance with D21.5.

D17. OBSTRUCTIONS

- D17.1 The Contractor shall allow in his Contract price for all inconvenience and costs which may result from excavation work on the streets, the parking of vehicles on the roadway, vehicle movement, or any other obstruction to his work.

D18. CITIZEN SNOW CLEARING COMPLAINTS

- D18.1 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.

D19. EXTREME SNOWFALL AND BLIZZARD CONDITIONS

- D19.1 The Contractor shall provide snow clearing equipment to keep streets open during the extreme snowfall event 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.
- D19.2 Time utilized by the Contractor to keep streets open during the snow storm shall not be part of the time limits established in E2.2, E2.3 and E2.4.
- D19.3 After extreme snowfall and/or blizzards, the Contract Administrator may determine that Regional Streets in the Contract area be opened using both Contract and City forces in order to open all Regional streets and emergency routes as quickly as possible. The Contractor shall be notified of the streets assigned to City forces.
- D19.4 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 with at least the minimum equipment specified in D8. Additional equipment may be required in order to complete the snow clearing operations within the time limits established by the Contract.

D20. QUANTITIES

- D20.1 Further to B8 of the Bidding Procedures, the estimated quantities identified on Form B: Schedule of Prices (Unit Price) for the clearing and hauling of snow on the Priority I, II and III street systems are based on the following:

- (a) **Item No. 1 - Priority I (Regional) Street System:** The approximate quantity is based on 165.93 lane kms 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 61.46 lane kms 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 175.42 lane kms of street for three (3) clearing operations of 0-10 cm.

D20.2 The total length of lane kilometres, as established by the Public Works Department, are provided in Appendix "A" - Priority I Street System, Appendix "B" - Priority II Street System, and Appendix "C" - Priority III Street System. In the event that streets are either added or deleted from any street system, then the total length of lane kilometres shall be adjusted correspondingly for the purpose of measurement and payment.

D20.3 Appendix "D" showing the precipitation of snow based on the meteorological summary of the Environment Canada Atmospheric Environment Services for the last 40 years, is provided strictly for the information of Bidders.

D21. PENALTIES

D21.1 Where the Contractor does not satisfactorily complete the work on Priority I, II or III streets in accordance with the time and quality requirements specified in E2, the Contractor shall be assessed a penalty in the amount of \$1,500.00 or an amount equal to fifty percent (50%) of the unit price Bid per lane kilometre times the lane kilometres not satisfactorily completed, whichever is greater, for each street priority.

D21.2 Where the Contractor does not supply the minimum number of truck plows identified in D8 within two hours as outlined in E3.2 of the Specifications, the Contractor shall be assessed a penalty of five hundred dollars (\$500.00) per truck plow per call out below the minimum number as specified in D8.

D21.3 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 or his agents, the Contractor shall be requested to rectify the portion of streets found to be unsatisfactory in quality within 36 hours 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.

D21.4 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.

D21.5 Where the Contractor fails to return temporary "No Parking" signs to Area offices by the time indicated in D16, the Contractor shall be assessed seventy five dollars (\$75.00) per sign.

D22. DAMAGE TO PUBLIC AND PRIVATE PROPERTY

D22.1 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 City for verification.

D22.2 Any damage to pavements, boulevards, trees, etc. that in no way present a hazard to either pedestrian or vehicular traffic shall be rectified by the Contractor in accordance with City of Winnipeg specifications prior to June 30 following the snow clearing season. Damages not

rectified by June 30 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.

- D22.3 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.
- D22.4 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 986-2626, so that a repair can be made by City forces. The costs for such repair will be borne totally by the Contractor.
- D22.5 The Contractor shall have in his possession, a sufficient number of City of Winnipeg "blue box" recycling bins to immediately replace any recycling bins destroyed, lost or misplaced by his operations. The cost of replacement of recycling bins for situations herein described shall be borne totally by the Contractor.

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

E1.1 These Specifications shall apply to the Work.

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, except as noted in E2.2 under the Priority I (Regional) street system where the snow must be hauled away as part of the initial clearing operation. In any case, snow shall not be piled on boulevards at 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 of 12 m upstream from the bus stop sign, except for the locations noted in Appendix "F", where the snow windrows shall be removed to a distance of 30 m upstream 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.

E2.1.8 Snow windrows at hydrants shall be removed a loader bucket width and a path cleared to hard surface from the curb to the hydrant.

E2.1.9 Snow windrows shall be removed a loader bucket width and a path cleared to 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) and Energite Barrel installations. 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. Snow shall be removed between the curb and any adjacent guard rail within 3m of the curb within the right-of-way. 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 locations of the 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 Where adequate storage is not available on the boulevard adjacent to the street, and where reasonable care is employed, snow spillage onto adjacent sidewalk area will be removed by the City at its own cost.
- E2.1.13 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.
- E2.1.14 Snow shall not be deposited on islands between a yield or turnoff and the main roadway.
- E2.1.15 Snow shall not be stored or deposited on private property.
- E2.1.16 Snow from snow clearing operations shall not be deposited in sidewalk areas. All sidewalk ends at intersections must be cleared of snow in order to provide access for pedestrians.
- E2.1.17 Snow from intersection windrows shall not be placed in bus stop areas.
- E2.1.18 The Contractor shall remove snow from the centre median (median cut) for snow storage and snow thaw purposes, as and where directed, by the Contract Administrator. The median cut shall be to a width of 0.6m from the curb face and shall not expose, but be within 100mm of the median surface. The median cut shall be carried out with one (1) motor grader working in conjunction with the adjacent grader plow operations, and shall be paid for in accordance with E3 hourly equipment services, for the duration of the median snow removal operation.
- 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) Interim plowing during major snowfalls.
 - (d) 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.
 - (c) A gradual accumulation of snowfall 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. Some Priority I streets in outlying areas may be cleared prior to 1900 hours as shown in Appendix "G".
- 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. **Note: Additional designated streets have been added to the current "Appendix A".** 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 Bid 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) Interim plowing during major snowfalls.
 - (d) 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.
 - (c) Gradual accumulation of snowfall 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 as directed by the Contract Administrator.
- E2.3.6 Payment for the full width snow clearing of Priority II streets will be made at the unit price Bid 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.
 - (c) Gradual accumulation of snowfall resulting 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 subsequent to the clearing operation of Priority II streets, the Priority III streets shall be completed within forty-eight (48) hours following the commencement time for the clearing of the Priority II streets.
- E2.4.5 When Priority III streets are plowed subsequent to the snow clearing of Priority I and 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.
- 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 Bid per lane kilometre and all the Work herein described shall be considered as 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 (including plowing of portions of the Priority I and II streets) and opening up streets 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, SAE Net Horsepower – 75-125 HP, Operating Weight - 15,000-20,000 lbs
Bucket Size – 1.2 – 2.3 cu. yd.
 - (c) **J3 Class Loaders:** Rubber Tired - 4 Wheel Drive Loader, SAE Net Horsepower - 100-150 HP, Oper. Weight - 20,000-25,000 lbs., Bucket Size – 2.3 – 3.2 cu. yd.
 - (d) **J5 Class Loaders:** Rubber Tired - 4 Wheel Drive Loader, SAE Net Horsepower - Minimum 150 HP, Operating Weight - 30,000-38,000 lbs
Bucket Size – 3.2 cu. yd. and over.
 - (e) **K4 Class Motor Graders:** Minimum 140 Flywheel Horsepower
 - (f) **K5 Class Motor Graders:** Minimum 160 Flywheel Horsepower
- E3.1.4 Contract supervision shall be in accordance with D14 of the Supplemental Conditions.
- E3.1.5 The Contract Administrator may request snow clearing equipment on an hourly basis up to the number of pieces of equipment specified in D8.

E3.1.6 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.

E3.1.7 Payment for hourly equipment will be made based on the hours actually worked and the unit price per hour shown in Form B: Schedule of Prices. There will be no overtime premium for Work under this Contract.

E4. EQUIPMENT

E4.1 LIGHTING

E4.1.1 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.

E4.1.2 Notwithstanding the generality of the foregoing, the Contractor shall ensure that all equipment is equipped with 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;
- (f) if the machine is in excess of 2 metres wide, at least four clearance lights (one green 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).

E4.2 IDENTIFICATION

E4.2.1 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.

E4.3 COMMUNICATION

E4.3.1 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. MEASUREMENT AND PAYMENT

E5.1 This section will govern payment for full width 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 open during major snow storms and/or blizzards on the streets specified in this Contract.

- E5.2 In this Contract, each such direction by the Contract Administrator for clearing and hauling services for snow removal and the performance thereof by the Contractor shall be referred to as a "clearing operation".
- E5.3 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 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.
- E5.4 Payment will be made for full width clearing and hauling operations on Priority I (Regional) Streets, Priority II (Collector) Streets and 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 clearing operations will be based on multiplying the unit price Bid (R) for items (1) to (3), on Form B: Schedule of Prices (Unit Price), as the case may be, by the length in kilometres of traffic lanes cleared (L), as determined by the Contract Administrator, multiplied by the snow accumulation factor (F), as determined by the Contract Administrator; or $\text{Payment} = R \times L \times F$.
- E5.5 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 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 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.
- E5.6 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.
- E5.7 The snow accumulation factor will be determined by the appropriate formula based on the type of accumulation and the quantity of snowfall. The formulae to be used to calculate the snow accumulation factor for each payment scenario are identified in the following table and are further detailed in the sections and examples following the table:

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 centimetres of recent accumulation snowfall.
(3) Gradual	Up to but not including Dec. 15 of Contract year or since the	$F = 1.000$ or $F = (0.30 \times y) / 10$, whichever value is greater, where y is the number of centimetres

	preceding clearing operation, whichever is later.	of gradual accumulation snowfall.
(4) Combination of recent and gradual	0-10.0 cm (x) of recent and y cm of gradual up to but not including Dec. 15 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 centimetres of recent accumulation snowfall and y is the number of centimetres of gradual accumulation snowfall.
(5) Combination of recent and gradual	Greater than 10.0 cm of recent (x) and y cm of gradual up to but not including Dec. 15 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 centimetres of recent accumulation snowfall and y is the number of centimetres of gradual accumulation snowfall.

E5.7.1 For a clearing operation required as a result of a recent accumulation of ten (10) cm or less (0-10 cm), the accumulation factor (F) is 1.00. Payment will be made at the unit price Bid 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 Bid x lane kilometres x 1.000).

E5.7.2 For a clearing operation required as a result of a recent accumulation in excess of ten (10) cm, the accumulation factor will be determined by adding 1.000 (which is the factor for the first ten (10) cm) to 90% of the snow accumulation in excess of 10 centimetres divided by 10. Payment will be made at the unit price Bid 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 Bid x lane kilometres x 1.387).

E5.7.3 For a clearing operation required as a result of a gradual accumulation, the snow accumulation factor would be 1.000 or 30% of the gradual accumulation divided by 10, whichever value is greater. Payment will be made at the unit price Bid multiplied by the length in kilometres of traffic lanes cleared multiplied by the snow accumulation factor.

Example: Assume that, on February 28, 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 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 Bid x lane kilometres x 1.000).

E5.7.4 For a clearing operation required as result of a recent accumulation of 10.0 cm or less (0-10 cm) and where there has also been gradual accumulation measured up to but not including December 15 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 10, whichever value is greater. Payment will be made at the unit price Bid 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 of 5.0 cm with severe winds, and in the opinion of the Contract Administrator, there is need for a snow clearing operation. Assume further that 14.5 centimetres of snow has gradually accumulated between December 15th and the commencement of the recent accumulation

on January 20th. 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 Bid x lane kilometres x 1.000).

Assume that in the above scenario the snowfall on January 20th 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 Bid x lane kilometres x 1.235).

E5.7.5 For a clearing operation required as result of a recent accumulation of greater than 10.0 cm and where there has also been gradual accumulation measured up to but not including December 15 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 ten (10) cm of recent accumulation) to 90% of the recent snow accumulation in excess of 10 centimetres divided by 10 and then adding 30% of the gradual accumulation and divided by 10. Payment will be made at the unit price Bid 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 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 15th and the commencement of the recent accumulation on January 20th. 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 snow 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 Bid x lane kilometres x 2.227).

E5.8 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 hourly rate Bid per equipment class on Form B: Schedule of Prices (Unit Price), as the case may be, multiplied by the hours actually worked for each specific class as determined by the Contract Administrator.

E5.9 Payment for wings, ice blades, and/or straight blades for Motor Graders engaged in a full width snow clearing operation shall be included in the unit price Bid per lane kilometre.

E5.10 Those attachments specifically requested 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 Streets and Transportation Department - 2005/2006 and 2006/2007 for respective Snow Season".

E5.11 The City shall guarantee to pay to the Contractor a minimum amount (referred to as the "guaranteed minimum amount") equal to 40% of the Bid price for each Contract year shown on Form B: Schedule of Prices (Unit Price).

E5.12 Payment for Work done shall be as provided in D20 and all such payments shall be deducted from the guaranteed minimum amount.

E5.13 On December 31st of the Contract year, 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

foresaid 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.

- E5.14 On February 28th of the Contract year, 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 25% of the Total Bid Price. If the total of the payments received is less than 25% 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.
- E5.15 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.
- E5.16 The Contractor shall note that on the Regional Streets System portion of this Contract, the unit price Bid shall include the cost of all necessary hauling for Priority I (Regional) Streets as specified in the Contract.
- E5.17 It is the City of Winnipeg's intent to hold back five (5) percent of progress estimates for all Work performed under this Contract as a damage deposit relating to D22 of the Specifications. These funds will be released when damages are rectified in accordance with D22.

PART F - APPENDICES

APPENDIX A – SOUTH AREA (EAST) PRIORITY I STREETS

Street	From	To	Where to Plow	Kms of Street	No. of Lanes	No. of Lane Kms
Academy *	Stafford	CL Maryland Br.	B/S	0.56	5, 6	2.65
Corydon *	Stafford	Donald	B/S	1.65	4	6.97
Donald *	N/Limit Corydon	River	B/S	0.80	4	3.20
Donald *	River	Broadway	B/S	0.64	4,6	2.85
Grant	Pembina	Stafford	B/S	0.75	4	3.15
Harkness	Mayfair	Stradbrook	B/S	0.28	4	1.10
Jubilee*	Osborne	Pembina	B/S	1.74	4	7.11
Jubilee/Pembina Interchange: W/B Off Ramp S/B Pembina W/B Right Turn N/B Pembina S/B Off Ramp Jubilee E/B N/B Right Turn Jubilee E/B				1.21	1	1.21
Mayfair	Main	Harkness	B/S	0.26	3	0.78
McMillan *	Donald	Osborne	B/S	0.25	4	1.12
Osborne*	Corydon	Jubilee	B/S	1.83	4	7.54
Osborne*	Corydon	Broadway	B/S	1.35	4, 5, 6	6.94
Pembina *	Osborne	PTH 100	B/S	2.83	5, 6	67.66
Pembina	PTH 100	South Limit	B/S	12.29	2, 4, 6	20.56
River	Wellington Cr.	Harkness	B/S	1.32	3, 4	4.86
Smith	Broadway	NL. Midtown Bridge	B/S	0.41	2, 4	1.10
Stafford *	Academy	Pembina	B/S	2.20	4	9.06
Stradbrook	Wellington Cr.	Harkness	B/S	1.32	3, 4	3.96
Stradbrook	Harkness	Main	B/S	0.33		1.32
Taylor *	Pembina	Stafford	B/S	0.15	4	0.70
University	Pembina	Chancellor Matheson	B/S	1.51	4	6.61
Wellington Cr.*	River	Academy	B/S	1.50	2, 3, 4	4.78
Bus Loop	Stafford	Pembina	B/S	0.10	2	0.20
Bus Loop	S. Limit Pembina		B/S	0.10	2	0.20
Bus Loop	Pembina	@ Route 165	B/S	0.10	2	0.20
Bus Loop	Osborne/Corydon/ McMillan/Pembina		B/S	0.10	1	0.10
				35.58		
				TOTAL PI		165.93

NOTE: B/S denotes both sides

* Snow cleared from street and lane intersections, pedestrian crosswalks and corridors, private approaches, railway crossings and bus stops to be hauled away when street is cleared.

APPENDIX B - SOUTH AREA (EAST) PRIORITY II STREETS

St	From	To	Where to Plow	Kms of St	No. of Lanes	No. of Lane Kms
Argue St.	Lilac St.	Berwick Pl.	W/S	0.37	2	0.74
Beaumont St.	Parker Ave.	McGillivray Blvd.	B/S	0.97	3	2.90
Beresford	Daly	Cockburn	B/S	0.35	2	0.70
Berwick Pl.	Argue St.	Daly St	B/S	0.41	2	0.82
Brandon	Churchill	Osborne	B/S	0.25	3	0.76
Churchill	Brandon	Eccles North	N/S	0.72		1.43
Churchill*	Eccles South	Cockburn	S/S	1.91	3	5.74
Cockburn	Rathgar	Churchill	B/S	0.38	2	1.14
Cockburn	Wellington Cr.	Pembina	B/S	0.88	2	1.75
Crane	Pembina	South Drive	B/S	0.77	2	2.31
Crescent Dr.	Pembina	South Drive	B/S	0.71	2	2.15
Daly	Morley	Beresford	B/S	0.49	2	0.98
Dowker	Pembina	South Drive	B/S	0.87	3	2.50
Eccles	Churchill	Churchill	B/S	0.92	2	2.76
Fleet	Stafford	Pembina	B/S	1.14	2	2.28
Hurst Wy	Waverley	Parker Ave.	B/S	0.58	2	1.60
Lilac	Argue St.	Jubilee	B/S	0.10	2	0.20
Lilac	Grosvenor	Pembina	B/S	1.40	2, 4	3.39
Morley	Eccles	Daly	B/S	1.45	2, 3	3.43
Nassau	Roslyn Rd.	Stradbrook	B/S	0.39	2, 3	0.98
Netley St.	Oakenwald	North Dr.	E/S	0.47	2	0.94
North Drive	Netley St.	Point Rd.	B/S	0.27	2	0.54
North Drive	Oakenwald	South Drive	E/S	0.64	2	1.28
Oakenwald	Pembina Highway	Point Road	B/S	1.12	2	2.24
Oakenwald	Point Road	North Drive	N/S	0.84	2	1.69
Parker Ave.	Hurst Wy	Beaumont	B/S	0.60	2	1.20
Point Road	Pembina	South Drive	B/S	1.26	3	3.78
Rathgar	Daly	Cockburn	B/S	0.35	2	0.70

Template Version: S320050301

Riverside Dr. - Including Riverside Dr. E.	Jubilee	North Drive	B/S	0.88	2	1.75
South Drive	North Drive	Crescent Drive	E&S/S	2.54	2	5.08
Roslyn Rd.	Osborne	Nassau	B/S	0.26	3	0.78
Scott	River	Stradbrook	B/S	0.19	3	0.57
Scott	Stradbrook	Donald	B/S	0.31	2,3	0.73
Windermere Ave.	Beaumont St.	Pembina Hwy.	B/S	0.71	2	1.42
Bus Loop	Eccles	Clare	B/S	0.10	2	0.20
				TOTAL		61.46
				PII		

NOTE: B/S denotes both sides
 S/S denotes south side
 N/S denotes north side
 E/S denotes east side

APPENDIX C - SOUTH AREA (EAST) PRIORITY III STREETS

St	From	To	Where to Plow	Kms of St	No. of Lanes	No. of Lane Kms
Arbuthnot	Wellington Cr.	Scotland	B/S	1.01	2	2.02
Arbuthnot	Weatherdon	Pembina	B/S	0.16	2	0.32
Arctic	Stradbrook	Bell	B/S	0.07	2	0.14
Argue	Beresford	South Limit	B/S	0.32	2	0.64
Arnold	Eccles	Hugo	B/S	1.61	2	3.22
Ashland	Churchill	Osborne	B/S	1.23	2	2.46
Avonherst	Harvard	Yale	B/S	0.12	2	0.24
Balfour	Eccles	Osborne	B/S	0.93	2	1.86
Balfour	Darling	Churchill	B/S	0.13	2	0.26
Baltimore	Churchill	Osborne	B/S	1.27	2	2.54
Bartlett	Eccles	Osborne	B/S	0.93	2	1.86
Bathgate	Crane	Crane	B/S	0.36	2	0.72
Beaumont Bay	Beaumont Bay (E/Leg)	Beaumont Bay (W/Leg)	B/S	0.30	2	0.60
Belair Rd.	Marshall Bay	Brisbane Ave.	B/S	0.20	2	0.40
Bell	Main	Clarke	B/S	0.25	2	0.50
Beresford	Cockburn	Argue	B/S	0.47	2	0.94
Beresford	Osborne	Daly	B/S	0.52	2	1.04
Berwick Pl Bay	Berwick Pl	Berwick Pl	B/S	0.13	1	0.13
Biscayne Bay	Biscayne (E/Leg)	Biscayne Bay (W/Leg)	B/S	0.30	2	0.60
Bole	River	Lane South	B/S	0.11	2	0.22
Boston Ave.	Hudson St.	Pembina Hwy.	B/S	0.31	2	0.62
Brandon	Osborne	Lane West	B/S	0.41	2	0.82
Brisbane Ave.	Marshall (W/Leg)	Marshall (E/Leg)	B/S	0.26	2	0.52
Bryce	River	Lane South	B/S	0.12	2	0.24
Bryce	Roslyn Road	River	B/S	0.09	3	0.27
Burgundy Cr.	Waterford Bay	Burgundy (S/Limit)	B/S	0.12	2	0.24
Buxton Road	Dowker	Holly	B/S	0.57	2	1.14
Byng Place	Pembina	Riverside	B/S	0.41	2	0.82

Template Version: S320050301

Byng Place	Derek St.	Rockman St.	B/S	0.17	2	0.34
Byng Place	Rockman St.	E/Limit Byng Pl.	B/S	0.15	4	0.60
Byng Place	Pembina Hwy.	E/Limit Byng Pl.	B/S	0.10	2	0.20
Calrossie	Pembina	Riverside	B/S	0.34	2	0.68
Carlaw	Osborne	Daly	B/S	0.52	2	1.04
Carter	Stafford	Pembina	B/S	0.57	2	1.14
Casey	Arnold	Morley	B/S	0.08	2	0.16
Casey	Morley	Churchill	B/S	1.03	2	2.06
Cauchon	River	Lane South	B/S	0.11	2	0.22
Churchill	Eccles North	Eccles South	E/S	1.32	2,3	3.23
Clare	Eccles	Osborne	B/S	0.93	2	1.86
Clarke	River	Donald	B/S	0.15	2	0.30
Cockburn	Kylemore	Rathgar	B/S	0.16	2	0.32
Concord Ave.	Beaumont St.	Burgundy Cr.	B/S	0.14	2	0.28
Crowson Bay	Dowker	Dowker	B/S	0.32	2	0.64
Daly	Beresford	Churchill	B/S	0.38	2	0.76
Daly	Carlaw	Morley	B/S	0.25	2	0.50
Daniel St.	Riverwood Ave.	Heatherdale Ave.	B/S	0.93	2	1.86
Daly	Wardlaw	Lorette	B/S	0.88	2	1.76
Darling	Oakwood	Balfour	B/S	0.20	2	0.40
Derek St.	Windermere Ave.	Heatherdale Ave.	B/S	0.41	2	0.82
Dickson Cr.	Vincent St.	McGillivray Pl.	B/S	0.20	2	0.40
Don	East Limit	Osborne	B/S	0.09	2	0.18
Donnelly St.	Waller Ave.	Clarence	B/S	0.35	2	0.70
Dorchester	Stafford	Wellington Cr.	B/S	0.62	2	1.24
Dove Bay	South Drive	South Drive	B/S	0.06	2	0.12
Dudley	Stafford	Arbuthnot	B/S	0.50	2	1.00
Dudley	W. Limit	E. Limit	B/S	0.43		0.00
Dumas Ave.	Hudson St.	Pembina Hwy.	B/S	0.35	2	0.70
Ebby	Stafford	East Limit	B/S	0.43	2	0.86
Edderton Ave.	Beaumont St.	Wynne St.	B/S	0.70	2	1.40
Edderton Bay	Beaumont St. (W/Limit)	Edderton Bay	B/S	0.06	2	0.12

Template Version: S320050301

Evergreen	Roslyn Rd.	North Limit	B/S	0.07	3	0.21
Farwell Bay	Farwell Bay (N/Leg)	Farwell Bay (S/Leg)	B/S	0.40	2	0.80
Fisher	Arnold	Churchill	B/S	1.08	2,4	2.38
Fleet	Pembina	East Limit	B/S	0.11	2	0.22
Fletcher	Pembina	Dowker	B/S	0.41	2	0.82
Fortune	Stinson	South Limit	B/S	0.04	2	0.08
Garnet Bay	Crane	Crane	B/S	0.35	2	0.70
Garwood	Stafford	Arbuthnot	B/S	0.50	2	1.00
Garwood	Cockburn	E. Limit	B/S	0.48	2	0.96
Gerard	River	Lane South	B/S	0.12	2	0.24
Gertrude	Wellington Cr.	Donald	B/S	1.09	2,3	2.84
Glasgow	East Limit	Osborne	B/S	0.13	2	0.26
Harvard	Stafford	Ruskin Row	B/S	0.22	2	0.44
Hay	Brandon	Montgomery	B/S	1.17	2	2.34
Heatherdale	Daniel St.	Derek St.	B/S	0.17	2	0.34
Hethrington	Osborne	West Limit	B/S	0.60	2	1.20
Hector	Stafford	Pembina Hwy.	B/S	0.47	2	0.94
Holly	Garnet	Crescent Drive	B/S	0.60	2	1.20
Howard Ave.	Hudson St.	Pembina Hwy.	B/S	0.26	2	0.52
Hudson Street	Hudson Street (N/Limit Lane)	S. Limit	B/S	1.10	2	2.20
Hugo	Arnold	Berwick Place	B/S	0.21	2	0.42
Hugo	Wellington Cr.	Pembina Hwy.	B/S	0.83	2	1.66
Jackson	Stafford	Pembina Hwy.	B/S	0.28	2	0.56
Jackson	Pembina Hwy.	East Limit	B/S	0.13	2	0.26
Jessie	Stafford	East Limit	B/S	1.67	2	3.34
Jupiter Bay	Jupiter (N/Leg)	Jupiter (S/Leg)	B/S	0.48	2	0.96
Kebir	Crescent Drive	South Drive	B/S	0.38	2	0.76
Kelsey Ave.	Hudson St.	Pembina Hwy.	B/S	0.24	2	0.48
Kenneth	Dowker	South Limit	B/S	0.09	2	0.18
Kingsway	Stafford	Wellington Cr.	B/S	0.36	2	0.72
Kylemore	Osborne	Cockburn	B/S	0.91	2	1.82
Lagopoulos	Donald	East Limit	B/S	0.21	2	0.42

Template Version: S320050301

Lewis	River	Lane South	B/S	0.12	2	0.24
Lorette	Stafford	Daly	B/S	0.97	2	1.94
Lyon	North Drive	Dowker	B/S	0.79	2	1.58
Mable	Arnold	Montgomery	B/S	0.91	2	1.82
Manahan Ave.	Hudson St.	Pembina Hwy.	B/S	0.30	2	0.60
Manchester S.	Wildwood Drive	W/Point Road	B/S	0.42	2	0.84
Manchester N.	Wildwood Drive	W/Point Road	B/S	0.42	2	0.84
Maplewood	Eccles	Osborne	B/S	0.94	2	1.88
Mars Dr.	Somerville Ave.	Beaumont St.	B/S	0.59	2	1.18
Marshall Bay	Marshall (W/Leg)	Marshall (E/Leg)	B/S	0.72	2	1.44
Marshall Cr.	Clarence Ave.	Waller Ave.	B/S	0.75	2	1.50
Maybank Dr.	Donnelly St.	Marshall Dr.	B/S	0.26	2	0.52
Mayfair	River	East Limit	B/S	0.20	2	0.40
McDougall	Holly	Kebir	B/S	0.13	2	0.26
McGillivray Pl.	Vincent St.	Lane E/Beaumont St.	B/S	0.62	2	1.24
McMillan	Stafford	Osborne	B/S	1.33	2	2.66
McNaughton	Osborne	Daly	B/S	0.51	2	1.02
Mercury Bay	Mercury (N/Leg)	Mercury (S/Leg)	B/S	0.39	2	0.78
Merriam	Pembina	Riverside	B/S	0.43	2	0.86
Montague	Osborne	Churchill	B/S	0.44	2	0.88
Montgomery	Churchill	Osborne	B/S	0.87	2	1.74
Morley	Daly	Hugo	B/S	0.16	2	0.32
Mulvey	Stafford	East Limit	B/S	1.27	2	2.54
Mulvey East	East Limit	Osborne	B/S	0.08	2	0.16
Nassau	Stradbrook	Pembina Hwy.	B/S	0.63	2	1.26
Nassau	Brandon	Montague	B/S	1.18	2	2.36
Nassau	Pembina Hwy.	East Limit	B/S	0.13	2	0.26
Neptune Bay	Neptune (N/Leg)	Neptune (S/Leg)	B/S	0.39	2	0.78
Nesbitt Bay	Pembina	Crescent Drive	B/S	0.35	2	0.70
Norquay	River	Lane South	B/S	0.12	2	0.24
North Drive	Pembina	Point Rd.	B/S	0.48	2	0.96
Oakwood	Darling	Osborne	B/S	1.11	2	2.22
Oriole	Crane	Holly	B/S	0.17	2	0.34

Palk	Wellington Cr.	Ruskin Row	B/S	0.15	2	0.30
Parker	Beaumont	Wynne St.	B/S	0.80	2	1.60
Pheasant	Crane	Holly	B/S	0.17	2	0.34
Planet St.	Parker Ave.	Somerville Ave.	B/S	0.44	2	0.88
Planet St.	Somerville Ave.	Mars Dr.	B/S	0.08	2	0.16
Pulford	River	Lane South	B/S	0.12	2	0.24
Radisson Ave.	Hudson St.	Pembina Hwy.	B/S	0.20	2	0.40
Rampart Bay	Rampart Bay (E/Leg)	Rampart Bay (W/Leg)	B/S	0.30	2	0.60
Rathgar	Osborne	Daly	B/S	0.52	2	1.04
Rathgar	Cockburn	Argue	B/S	0.34	2	0.68
Riley	Wicklow	Buxton	B/S	0.51	2	1.02
River	Harkness	East Limit	B/S	0.22	2	0.44
Riverdale	Jubilee	East Limit	B/S	0.08	2	0.16
Riverwood	Pembina	Netley	B/S	1.15	2	2.30
Riverwood	Beaumont	(Railway Track) CNR	B/S	0.27	2	0.54
Riviera Ave.	Pembina Hwy.	Riviera Cres	B/S	0.03	2	0.06
Riviera Cres	Riviera Ave.	South Limit	E/S	0.10	1	0.10
Riviera Cres.	Riviera Ave.	Crescent Drive	B/S	0.28	1	0.28
Rockman St.	Parker Ave.	Windermere Ave.	B/S	0.36	2	0.72
Rockman St.	Windermere Ave.	Pembina Hwy.	B/S	0.24	2	0.48
Rosedale	Osborne	Argue	B/S	1.43	2	2.86
Rosemount Ave.	Beaumont St.	Wynne St.	B/S	0.70	2	1.40
Rosemount Bay	Beaumont St.	W/Limit Rosemount	B/S	0.06	2	0.12
Roslyn Rd.	East Limit	Osborne	B/S	0.36	3	1.08
Roslyn Cr.	Roslyn Rd.	Roslyn Rd.	B/S	0.30	2	0.60
Roslyn Rd.	Nassau	Roslyn Cr.	B/S	0.17	3	0.51
Royse Ave.	Hudson St.	Pembina Hwy.	B/S	0.33	2	0.66
Ruskin Row	Grosvenor	Kingsway	B/S	0.38	2	0.76
Ruttan Bay	Oakenwald	Oakenwald	B/S	0.45	2	0.90
Sandra	Crane	Crane	B/S	0.33	2	0.66
Saturn Bay	Saturn (N/Leg)	Saturn (S/Leg)	B/S	0.39	2	0.78
Scotland	Stafford	Nassau	B/S	0.83	2	1.66
Somerset	Pembina	East Limit	B/S	0.73	2	1.46

Template Version: S320050301

Somerville	Point Road	Riverside	B/S	0.30	2	0.60
Somerville	Planet St.	(W/Limit) Somerville (Lane)	B/S	0.20	2	0.40
Somerville Ave.	Planet St.	Beaumont St.	B/S	0.35	3	1.05
Somerville	Beaumont St.	CNR (Railway Track)	B/S	0.53	2	1.06
Southwood	Pembina	E/Wicklow	B/S	0.47	2	0.94
Southwood Ave.	Beaumont St.	Pembina Hwy.	B/S	0.44	2	0.88
Stinson	Daly	Taft	B/S	0.17	2	0.34
Taft Cr.	Nassau	Lane South	B/S	0.15	2	0.30
Togo	East Limit	Osborne	B/S	0.10	2	0.20
Venus Bay	Beaumont St.	W/Limit Venus Bay	B/S	0.12	2	0.24
Venus Bay	Beaumont St.	E/Limit Venus Bay	B/S	0.13	2	0.26
Vincent St.	McGillivray Pl.	Waller Ave.	B/S	0.19	2	0.38
Viscount Place	Point Road	Netley	B/S	0.24	2	0.48
Walker	Osborne	Argue	B/S	1.12	2	2.24
Waller Ave.	Vincent St.	W/Pembina Hwy.	B/S	0.84	2	1.68
Wardlaw	Wellington Cr.	Donald	B/S	1.01	2	2.02
Warsaw	Stafford	East Limit	B/S	1.49	2	2.98
Waterford	Pembina	Netley	B/S	0.90	2	1.80
Waterford Bay	Waterford (N/Leg)	Waterford (S/Leg)	B/S	0.36	2	0.72
Waterford Ave.	Beaumont St.	Pembina Hwy.	B/S	0.51	2	1.02
Wavell	Fisher	Osborne	B/S	0.55	2	1.10
Weatherdon	Stafford	Pembina	B/S	0.65	2	1.30
Wentworth	L/N Grosvenor	Pembina	B/S	1.51	2	3.02
Wicklow Place	Dowker	South Limit	B/S	0.06	2	0.12
Wicklow	Point	Dowker	B/S	0.80	2	1.60
Wildwood	Oakenwald	South Drive	B/S	0.26	2	0.52
Wilmot	North Limit	South Limit	B/S	0.20	2	0.40
Windermere	Point	Riverside	B/S	0.37	2	0.74
Windermere Bay	Beaumont St.	W/Limit Windermere	B/S	0.06	2	0.12
Wood	Bell	South Lane	B/S	0.05	2	0.10
Woodgrove	Southwood	S/Oakenwald	B/S	0.24	2	0.48
Woodward	East Limit E/Osborne	West Limit W/Osborne	B/S	0.36	2	0.72

Template Version: S320050301

Wynne St.	Edderton Ave.	Parker Ave.	B/S	0.17	2	0.34
Yale	Avonherst	Ruskin Row	B/S	0.11	2	0.22
Yale	Stafford	Avonherst	B/S	0.18	2	0.36
				TOTAL PIII		175.42

NOTE: B/S denotes both sides

APPENDIX "D"
Snowfall - October 1 to April 30

Year	Centimetres
1964-1965	136.40
1965-1966	208.50
1966-1967	124.00
1967-1968	89.70
1968-1969	95.20
1969-1970	159.00
1970-1971	123.40
1971-1972	106.70
1972-1973	81.00
1973-1974	130.80
1974-1975	125.20
1975-1976	136.20
1976-1977	64.40
1977-1978	73.10
1978-1979	148.60
1979-1980	108.00
1980-1981	72.50
1981-1982	77.20
1982-1983	77.40
1983-1984	56.30
1984-1985	93.20
1985-1986	124.20
1986-1987	120.20
1987-1988	65.40
1988-1989	153.60
1989-1990	96.40
1990-1991	120.50
1991-1992	133.00
1992-1993	111.60
1993-1994	82.00
1994-1995	88.60
1995-1996	202.50
1996-1997	211.40
1997-1998	104.10
1998-1999	144.70
1999-2000	71.40
2000-2001	109.70
2001-2002	105.40
2002-2003	90.90
2003-2004	149.80
2004-2005	136.60

APPENDIX "E"

PROCEDURE FOR PLACEMENT OF TEMPORARY "NO PARKING" SIGNS

PROCEDURE NO. P91-01

Page 1 of 3

(1991-03-25)

<u>SUBJECT:</u>	PLACEMENT OF TEMPORARY "NO PARKING" SIGNS
<u>PURPOSE:</u>	To ensure the proper use of temporary "No Parking" signs during snow removal and street cleaning operations.
<u>PROCEDURE:</u>	<p>1.0 <u>SIGN PLACEMENT</u></p> <p>1.1 <u>Timing</u></p> <p>(a) Temporary "No Parking" signs used to prohibit vehicle parking on streets between the hours of 10:00 p.m. and 7:00 a.m. of the following day <u>must</u> be erected by 4:00 p.m. on the day the work is to be carried out.</p> <p>(b) Temporary "No Parking" signs used to prohibit vehicle parking on streets between the hours of 9:00 a.m. and 5:00 p.m. of any day <u>must</u> be erected after 5:00 p.m. and prior to 9:00 p.m. on the day before.</p> <p>(c) In high density residential areas, street work should be done on an "Alternate Street" basis.</p> <p>1.2 <u>Spacing</u></p> <p>(a) The first sign at each location shall be erected approximately 15 metres from the street or lane intersection that traffic on the signed side of the street first approaches.</p> <p>(b) The maximum spacing between temporary "No Parking" signs shall be 60 metres.</p> <p>(c) Intersection with another street or public lane ends the parking ban. Any continuation of signing shall be in accordance with 1.2(a) and 1.2(b).</p> <p>(d) Both sides of one-way streets shall be signed if parking is permitted on both sides.</p> <p>1.3 <u>Alignment</u></p> <p>Temporary "No Parking" signs shall be erected in visible unobstructed locations and at an angle to face oncoming traffic.</p>

APPENDIX "E"

PROCEDURE FOR PLACEMENT OF TEMPORARY "NO PARKING" SIGNS

PROCEDURE NO. P91-01

Page 2 of 3

(1991-03-25)

SUBJECT:

PLACEMENT OF TEMPORARY "NO PARKING" SIGNS

PROCEDURE: (cont'd)

2.0 **ENFORCEMENT**

2.1 **Parked Vehicle Report**

District staff will prepare a "Parked Vehicle Report" recording the necessary information for all vehicles parked prior to the placement of the temporary "No Parking" signs.

Information required is as follows:

- (a) Date
- (b) Time of sign placement
- (c) Location (street number preferred)
- (d) License plate number
- (e) Vehicle description (make, colour, etc.)
- (f) Foreman's name and signature

Information must be written in a clear and legible manner.

2.2 **Street Work List**

District staff will prepare a prioritized list of streets to be cleared/cleaned during the next shift for the information of the Police Department. This list shall be a starting point.

2.3 **Commissionaires**

- (a) The Parked Vehicle Report and the Street Work List shall be faxed to the Commissionaires, c/o Traffic Division, Fax No. 942-4932 at the earliest opportunity.

The top of each page shall be marked as follows:

"For Commissionaires Use"

APPENDIX "E"

PROCEDURE FOR PLACEMENT OF TEMPORARY "NO PARKING" SIGNS

PROCEDURE NO. P91-01
Page 3 of 3

(1991-03-25)

SUBJECT:	PLACEMENT OF TEMPORARY "NO PARKING" SIGNS	
<p><u>PROCEDURE:</u> (cont'd)</p> <p>2.0 <u>ENFORCEMENT</u> (cont'd)</p> <p>2.3 <u>Commissionaires</u> (cont'd)</p> <p>(b) All Commissionaires have police radios in their vehicles and contact and/or inquiries can be made through their office at 986-6281 or 986-5589. If there is no answer at these numbers, contact can be made through the District Police stations.</p> <p>2.4 <u>Towing</u></p> <p>(a) Vehicles parked on the street after the signs have been erected and still parked on the street during the time period displayed on the temporary signs, will be ticketed by the Commissionaires and towed to a compound at the vehicle owner's expense.</p> <p>(b) Vehicles that were parked prior to sign placement and still parked when work commences shall be towed "around the corner" by the Operations Department under the coordination of the District By-Law Enforcement Officer and no tickets shall be issued.</p> <p>2.5 <u>Sign Removal</u></p> <p>When signs are removed, the location of all signs that are down or missing shall be recorded to assist in complaint resolution.</p> <p>3.0 <u>REFERENCE</u></p> <p>By-Law No. 4427/86 (A By-Law to Amend Traffic By-Law No. 1573/77)</p>		
<p><u>Date of Issue:</u> March 25, 1991</p>	<p><u>Supersedes Issue of:</u> NEW</p>	<p>APPROVED:</p> <p>G. K. Stewart, P. Eng. Director of Operations</p>

APPENDIX "F"

SOUTH AREA (EAST)

BUS STOP LOCATIONS TO BE PUSHED - 30m

S/B Pembina @ Bishop Grandin

S/B Pembina @ Bairdmore N. Leg

N/B Pembina @ University Cr.

S/B Pembina @ Osborne (Bus Bay)

S/B Pembina @ Grant

S/B Osborne @ Corydon

N/B Osborne @ Corydon

N/B Osborne @ Stradbrook

N/B Osborne @ River

S/B Donald @ River

S/B Donald @ Stradbrook

N/B Donald @ Stradbrook

N/B Donald @ River

N/B Pembina @ Plaza

N/B Pembina @ Hugo

S/B Pembina @ Scotland

S/B Donald @ Hargrave Place

N/B Smith @ Navy Way

APPENDIX "G"

South Area (East)

REGIONAL - PRIORITY I STREETS IDENTIFIED FOR DAYTIME PLOWING (Between 09:00 and 15:30 Hours)

STREET	FROM	TO
Pembina Hwy.	Merriam Blvd.	South Limit
Grant Ave.	Pembina Hwy.	Stafford