

THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 430-2008

SNOW CLEARING ON REGIONAL AND LOCAL STREETS AND BACKLANES WITHIN THE NORTH AREA (WEST)

Summary of Changes from Previous Years' Contracts

1. <u>New</u>

E.11 PRICE ADJUSTMENT – FUEL COSTS

2. Revisions

- D2.1 Two-year contract with a one (1) year extension at the option of the City of Winnipeg.
- E2.4.4 Increased time from 48 hours to 60 hours.
- E13.1.2 Revised penalty clauses for Priority II and Priority III streets and for backlanes. Changed percentage from 50% to 25%.

The City of Winnipeg Bid Opportunity No. 430-2008

PART F - APPENDICES

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SNOW CLEARING ON REGIONAL AND LOCAL STREETS AND BACKLANES WITHIN THE NORTH AREA (WEST)

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, July 8, 2008.
- B2.2 Bids determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. ENQUIRIES

- B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.
- B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.
- B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B3.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B4. 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 Division 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 Division internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- 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 may base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with 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 shall consist of the following components:
 - (a) Form A: Bid;
 - (b) Form B: Prices.

- B6.2 Further to B6.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B5.
- B6.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B6.4 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.5 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, may result in the Bid being determined to be non-responsive.
- B6.6 The Bid may be submitted by mail, courier or personal delivery.
- B6.7 If the Bid is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Division 185 King Street, Main Floor Winnipeg MB R3B 1J1

- B6.7.1 Samples or other components of the Bid which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B6.8 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.

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 should 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 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 C11.1.1, 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; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- B9.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) be responsible and not be suspended, debarred or in default of any obligations to the City a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at http://www.winnipeg.ca/matmgt.
- B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:
 - (a) have successfully carried out Work similar in nature, scope and value to the Work; and
 - (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
 - (c) have a written Workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
 - (d) provide such other pertinent data as may be required by the Contract Administrator.

- B9.4 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 Construction Safety 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)
- B9.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B9.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

- B10.1 Bid Submissions will not be opened publicly.
- B10.2 Following the Submission Deadline, the names of the Bidders and their bid prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division 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 Division internet site at http://www.winnipeg.ca/matmgt.
- B10.4 The Bidder is advised that any information contained in any Bid may be released if required by City policy or procedures, The Freedom of Information and Protection of Privacy Act (Manitoba), or by other authorities having jurisdiction.

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 for 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 C22.5, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

- 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 will:
 - (a) retain the Bid until after the Submission Deadline has elapsed;
 - (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in 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 (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
 - (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 or minor informalities or irregularities 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 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.
- B14.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Bid upon written request to the Contract Administrator.
- B14.4 Notwithstanding C4.1, 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 C1.1(n), 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

CO. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for Supply of Services*, these Supplemental Conditions are applicable to the Work of the Contract.
- 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 for the period of October 15, 2008 to April 15, 2010, with a one (1) year extension at the option of the City, under mutually agreeable terms.
- D2.1.1 Snow clearing shall be performed on those regional, 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. Snow clearing on back lanes as shown on drawings.
- D2.2 The Contractor shall perform the Work of this Contract on an "as-required" basis for two winter seasons from October 15, 2008 to April 15, 2010, except as hereinafter specified:
 - (a) the Contractor may be required to remove snow which has fallen prior to October 15th and is on the streets as of that date;
 - (b) the Contractor shall continue and complete all authorized Work for a snowfall that begins on or before April 15th, notwithstanding that the Work occurs after April 15th; and,
 - (c) the Contractor shall remedy all damage and deficiencies such as curb damage by June 30th following the Contract year;
 - (d) the above requirements will apply also to any extension mutually agreed upon.
- D2.3 The major components of the Work are as follows:
 - (a) full width snow clearing and hauling on the Priority I (Regional) 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 AppendixC:
 - (d) 3.0 metre width snow clearing on backlanes identified on Drawing 1 "Backlanes";
 - (e) opening and keeping streets and lanes open during a major snowfall and/or snow blizzard;

- (f) snow clearing using truck plows on the Priority I, Priority II and Priority III streets noted in Appendices A, B and C:
- (g) other winter maintenance activities as required between major snowfalls.
- D2.4 The Contract Administrator reserves the right to perform routine winter maintenance on the streets listed in Appendices A, B and C and the backlanes shown on Drawing 1 "Backlanes" using City forces. Routine winter maintenance includes:
 - (a) curb lane spot plowing of street sections;
 - (b) full width spot plowing of street sections;
 - (c) spot plowing of backlane sections;
 - (d) curb lane truck plowing;
 - (e) full width truck plowing;
 - (f) widening for snow storage;
 - (g) snow hauling;
 - (h) clearing of drainage inlets in spring.

D3. DEFINITIONS

- D3.1 When used in this Bid Opportunity:
 - (a) "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 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, 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.

- (I) "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 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.
- (u) "Cross Walk" means any sidewalk at street intersections or at signed corridors.
- (v) "Compacted Snow Surface" of backlanes means a level, dense compacted layer of snow that will only allow minimal rutting from vehicular traffic and has a maximum thickness of 200mm from the compacted snow surface to underlying pavement.

D4. CONTRACT ADMINISTRATOR

D4.1 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

D4.2 At the pre-commencement meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D5. CONTRACTOR'S SUPERVISOR

D5.1 Further to C6.19, the Contractor shall employ and keep on the Work, at all times during the performance of the Work, a competent supervisor and assistants, if necessary, acceptable to the Contract Administrator. The supervisor shall represent the Contractor on the Site. The supervisor shall not be replaced without the prior consent of the Contract Administrator unless the supervisor proves to be unsatisfactory to the Contractor and ceases to be in his employ.

- D5.2 Before commencement of Work, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.
- D5.2.1 Further to C5.5 Contract Administrator may give instructions or orders to the Contractor's supervisor and such instructions or orders shall be deemed to have been given to the Contractor.

D6. NOTICES

- D6.1 C22.1 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.
- D6.2 Further to C22.2, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D6.3, D6.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D4.1.
- D6.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

The City of Winnipeg Chief Administrative Officer Secretariat Administration Building, 3rd Floor 510 Main Street Winnipeg MB R3B 1B9

Facsimile No.: (204) 949-1174

D6.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 947-9155

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. INSURANCE

- D8.1 The Contractor shall provide and maintain the following insurance coverage:
 - (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, such liability policy to also contain a cross-liability clause, contractual liability, unlicensed vehicle

- liability (contractors' equipment cover), non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work;
- (b) automobile liability insurance for owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00); automobile insurance with stated limits to be retained at all times during the performance of the Work.
- D8.2 Deductibles must be expressly stated on the certificate of insurance and must not exceed \$5,000.00.
- D8.3 Deductibles shall be borne by the Contractor.
- D8.4 The Certificate must clearly state: "Operations include snow removal on City right-of-ways during winter months" (i.e. insurance to cover snow removal and ice control of streets, roadways, backlanes/alleys, etc.).
- D8.5 The Contractor shall file with the City certificates of insurance, confirming and expressly stating all requirements, in a form satisfactory to the City Solicitor; these certificates must be received by the City and approved, prior to commencement of any Work.
- D8.6 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.
- D8.7 The City shall have the right to alter limits and/or coverages as reasonably required from time to time during the continuance of this agreement.

SCHEDULE OF WORK

D9. COMMENCEMENT

- D9.1 The Contractor shall not commence any Work until he is in receipt of a purchase order from the City authorizing the commencement of the Work.
- D9.2 The Contractor shall not commence any Work on the Site until:
 - (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.14;
 - (iii) evidence of the insurance specified in D8.
 - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D10. TOTAL PERFORMANCE

- D10.1 The Contractor shall achieve Total Performance by June 30, 2010 for Work specified in D2.
- D10.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D10.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D11. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D11.1 Further to C6.23, the Contractor shall be the Prime Contractor and shall serve as, and have the duties of the Prime Contractor in accordance with The Workplace Safety and Health Act (Manitoba).

PART E - SPECIFICATIONS

GENERAL

E1.	GFN	NER	ΔΙ

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.
- 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 placed on boulevards at or near corners so as to block visibility of vehicles moving through the intersection.
- E2.1.6 Windrows at pedestrian corridors shall be cleared for a distance of fifteen (15) metres approaching the corridor and five (5) metres leaving the corridor on undivided roadways and for a distance of fifteen (15) metres approaching the corridor on divided roadways.
- E2.1.7 Windrows at bus stops shall be removed to a distance of 12 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.
- E2.1.9 Snow windrows shall be removed a loader bucket width and a path cleared by back blading to a hard surface from the curb to the sidewalk at a limited number of locations designated as handicapped access. Actual addresses will be supplied to the Contractor after Contract award.
- E2.1.10 Snow shall be removed around all G.R.E.A.T. (Guard Rail Energy Absorbing Terminal), Energite Barrel installations and between the curb and any adjacent guard rail that is within 3m of the curb and in the right-of-way. The G.R.E.A.T. units are used as crash cushions on the ends of guard rails to avoid abrupt stoppage of a vehicle. The Energite Barrel installations are used as crash cushions near overhead signs or any posts which do not have breakaway bases. This Work must be done carefully (by hand where necessary) such that the installations are not hit by snow clearing equipment or left covered in snow. The location of a limited number of installations will be supplied to the Contractor after the award.

- E2.1.11 Where adequate storage exists adjacent to the street, snow spillage onto the street as a result of the snow clearing operation shall be removed immediately by the Contractor. Any snow not removed may be removed by the City and the cost of the Work charged to the Contractor.
- E2.1.12 The City reserves the right, at its sole discretion, to allow windrow snow storage on the curb lane where no storage exists, provided that a reasonable attempt, satisfactory to the Contract Administrator or his designate, is made to minimize the extent of the encroachment during the Contractor's snow clearing operation. This storage shall only be utilized when specifically directed to do so by the Contract Administrator or his designate and only during unusual snow and blizzard conditions.
- E2.1.13 Snow shall not be deposited on islands between a yield or turnoff and the main roadway.
- E2.1.14 Snow shall not be stored or deposited on private property.
- E2.1.15 Snow from snow clearing operations shall not be deposited in sidewalk areas. All blocked sidewalk ends at intersections must be immediately cleared of snow in order to provide access for pedestrians and sidewalk plows.
- E2.1.16 Snow from intersection windrows shall not be placed in bus stop areas.
- E2.1.17 The Contractor shall remove snow from the centre median (median cut) for snow storage and snow thaw purposes as 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.
- E2.1.18 Snow removal at traffic circles shall include the removal of snow from the inner shoulder area, which shall be considered incidental to the full width snow clearing operation.
- E2.1.19 Work for each snow clearing operation shall commence only upon the instructions of the Contract Administrator.
- E2.1.20 Normally, Priority I (Regional) Streets shall receive the highest priority for snow clearing followed by Priority II (Bus Routes and Collectors) Streets and then Priority III (Residential) Streets. However, the Contact Administrator may direct otherwise and the Contractor shall conform to all such directives, either oral or written.
- E2.1.21 Backlane snow clearing operations will normally be undertaken concurrently with street and street priority operations. However, the contract administrator may direct otherwise and the contractor shall conform to all such directives.
- E2.1.22 The Contractor shall respond immediately to rectify snow clearing deficiencies which generate citizens' complaints. If in the opinion of the Contract Administrator, the response is inadequate, then the City shall have the option of performing the necessary Work and the costs of such Work shall be borne by the Contractor.
- E2.2 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) Truck plow snow clearing.
 - (d) Interim plowing during major snowfalls.
 - (e) Other winter maintenance Work.

- E2.2.2 Snow clearing on Priority I streets may be required after:
 - (a) A recent accumulation of 3 cm or more of snowfall.
 - (b) Poor street conditions caused by less than 3 cm of recent snow accumulation accompanied by snow drifting.
 - (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. 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) Truck plow snow clearing.
 - (d) Interim plowing during major snowfalls.
 - (e) Other winter maintenance Work.
- E2.3.2 Snow clearing on Priority II streets may be required after:
 - (a) A recent accumulation of 5 cm or more of snowfall.
 - (b) Poor street conditions caused by less than 5 cm of recent snow accumulation accompanied by snow drifting.
 - (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. Where the Contractor is unable to meet the requirements of this specification due to parked vehicles, he shall arrange for a sign and tow operation with City forces to facilitate completion in these areas.
- E2.3.6 Payment for the full width snow clearing of Priority II streets will be made at the unit price 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 within the same clearing operation as Priority II streets, the Priority III streets shall be completed within sixty (60) hours following the commencement time for the clearing of the Priority II streets.
- E2.4.5 When Priority III streets are plowed within the same snow clearing operation as Priority I and II streets, the Priority III streets shall be completed within seventy-two (72) hours following the commencement time for the snow clearing of the Priority I and II streets.
- E2.4.6 Priority III streets shall be cleared to bare pavement over the full pavement width. The Contractor shall wing back snow windrows in order to create the required storage as directed by the Contract Administrator. Where the Contractor is unable to meet the requirements of this specification due to parked vehicles, he shall arrange for a sign and tow operation with City forces to facilitate completion in these areas.
- E2.4.7 Notwithstanding the requirements of this specification, abnormal snow and ice conditions may make it impossible to adequately clear the Priority III streets to bare pavement. On those occasions, the Contract Administrator shall determine the level of snow clearing required and the time required to complete the operation.
- E2.4.8 Payment for the full width snow clearing of Priority III streets will be made at the unit price 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.
- E2.5 BACKLANES (see Drawing 1)
- E2.5.1 Backlanes shall normally be cleared after:

- (a) A recent snow accumulation of 5 cm or more
- (b) Poor backlane conditions caused by less than 5 cm of recent snow accumulation accompanied by snow drifting
- (c) Gradual accumulation of snowfall resulting in poor backlane conditions
- E2.5.2 Backlanes shall normally be cleared concurrently with Priority I and II street snow clearing operations and shall normally be undertaken during the day shift (0700 hours to 1900 hours) unless otherwise directed by the Contract Administrator.
- E2.5.3 Backlanes shall be completed within a 48 hour period following the commencement time designated by the Contract Administrator.
- E2.5.4 Backlanes shall be cleared to a width of 3m and maintained to a compacted snow surface as defined in D3.
- E2.5.5 Payment for backlane snow clearing will be made at the unit price bid per kilometre and all work herein described shall be considered incidental to the contract and no further compensation will be considered.

E3. HOURLY EQUIPMENT SERVICES

- E3.1 GENERAL
- E3.1.1 Snow clearing equipment shall be supplied on an hourly basis when requested by the Contract Administrator for winter maintenance activities between storms and opening up streets and backlanes 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. vd.
 - (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
 - (g) Truck Plows: As specified in E3.2 and E4.7 of the Specifications
- E3.1.4 Contract supervision shall be as specified in E5.
- E3.1.5 The Contract Administrator may request snow clearing equipment on an hourly basis up to the number and type of pieces of equipment specified in E4.
- E3.1.6 The Contractor shall respond to the assigned location within two hours of official notice from the Contract Administrator or be subject to penalties as outlined in E13.
- E3.1.7 Contractors will be required to fill out approved Work tickets showing hours of Work, type of equipment, equipment model and serial number. All Work tickets must be signed by the City inspector and a representative of the Contractor to be valid.

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

E3.2 TRUCK PLOW CLEARING OPERATIONS

- E3.2.1 Notwithstanding the requirements of E2 of the Specifications, the clearing of snow using truck plows shall be in accordance with the following:
 - (a) Truck plowing on Priority I, Priority II and Priority III streets may be required during and after any measurable snowfall. The decision to perform a snow clearing operation will be made by the Contract Administrator or his designate.
 - (b) Priority I (Regional) streets shall normally receive the highest priority for snow clearing followed by Priority II (Bus Routes and Collectors) streets and then Priority III (Residential) streets. However, there may be circumstances when Collectors and Bus Routes would be cleared before Regional streets. This shall only be done when so directed by the Contract Administrator.
 - (c) Priority I, Priority II and Priority III streets shall be cleared to <u>bare</u> pavement over the full width, excluding median turning lanes and at isolated locations where parked cars make the plowing of the curb lane(s) impossible.
 - (d) Notwithstanding E6 the Contractor may be directed to clear only the travel lanes.
 - (e) Windrows at all intersections, crosswalks, corridors, railway crossings and private approaches shall be removed if the Contract Administrator or his designate deem that they present a hazard to traffic.
 - (f) Reasonable care shall be taken so that snow from the truck plow clearing operations shall not be deposited in sidewalk areas. Snow deposited on the sidewalk areas unnecessarily shall be removed by the Contractor at his expense.
 - (g) Snow may be deposited on centre medians when allowed by the Contract Administrator.

E4. EQUIPMENT

- E4.1 The Contractor shall provide the following <u>minimum</u> quantity and type of equipment in first class working condition:
 - (a) 10 motor graders;
 - (b) 12 loaders;
 - (c) 6 truck plows.
- E4.2 All equipment shall be made available for inspection by the Contract Administrator or his designate prior to the award of Contract.
- E4.3 The Bidder is not required to own the equipment at the time of the Submission Deadline. The Bidder shall, however, provide the Contract Administrator, within 72 hours of being requested, the name of the registered owner of each proposed piece of equipment and a copy of a binding contract, or option to purchase or to contract, for the use of the equipment for the duration of the Contract.

E4.4 LIGHTING

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

- E4.4.2 Notwithstanding the generality of the foregoing, the Contractor shall ensure that all equipment is equipped with lighting systems sufficient to facilitate the Work. At a minimum, all equipment must be equipped with the following lighting:
 - (a) at least two headlights;
 - (b) at least two rear running lights;
 - (c) turning signals front and rear;
 - (d) stop light at rear;
 - (e) at least one flashing or oscillating blue or amber light, clearly visible in all directions (360 degrees);
 - (f) if the machine is in excess of 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).

E4.5 IDENTIFICATION

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

E4.6 COMMUNICATION

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

E4.7 TRUCK PLOWS

- (a) The truck plows shall be capable of providing a level of performance consistent with the front-mounted truck plows currently in use by the City.
- (b) The truck plows shall be equipped with a hydraulically reversible straight blade that will ride on the pavement surface.
- (c) The plow blade shall be suitable for clearing a minimum 2.6 m wide path when fully angled (approximately 40°).
- (d) The plow blade and/or cutting edges shall be spring loaded or flexible to allow deflection when an obstacle is encountered. This deflection shall cause the blade to raise to clear manholes, catch basins, curbs and other obstructions protruding above pavement, without damage.

E5. CONTRACTOR'S SUPERVISION AND COMMUNICATION

- E5.1 The Contractor shall have a qualified Supervisor on duty during all snow clearing activities regardless of the type and magnitude of the operation. The Supervisor shall be able to attend, monitor and respond to all operational and equipment concerns throughout the contract area.
- E5.2 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.
- E5.3 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.
- E5.4 The Contractor shall have the capability of receiving facsimile transmission (fax machine) and shall supply the facsimile number to the Contract Administrator.

E6. EXTREME SNOWFALL AND BLIZZARD CONDITIONS

- E6.1 The Contractor shall provide snow clearing equipment to keep streets and backlanes 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.
- E6.2 Time utilized by the Contractor to keep streets and backlanes open during the snow storm shall not be part of the time limits established in E2.2, E2.3, E2.4 and E2.5.
- E6.3 During or after extreme snowfall and/or blizzards, the Contract Administrator may require that Regional and Collector streets and backlanes be opened using both Contract and City forces in order to open such streets and emergency routes as quickly as possible. The Contractor may be required to dispatch his equipment to work inside and outside the contract area with and under the direction of City forces.
- E6.4 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.

E7. QUANTITIES

- E7.1 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 and backlanes are based on the following:
 - (a) Item No. 1 Priority I (Regional) Street System: The approximate quantity is based on 152.70 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 95.10 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 171.60 lane kms of street for three (3) clearing operations of 0-10 cm.
 - (d) **Item No. 4 Backlanes:** The approximate quantity is based on 27.00 linear kms of backlanes for 6 clearing operations of 0-10 cm.
- E7.2 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. Drawing 1 indicates the inventory of backlanes. In the event that streets or backlanes are either added or deleted, then the total length shall be adjusted correspondingly for the purpose of measurement and payment.
- E7.3 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.

E8. TRAFFIC MOVEMENT AND PARKING RESTRICTIONS

- E8.1 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.
- E8.2 During snow clearing operations, the Contractor shall take all reasonable measures to facilitate the movement of traffic in accordance with the Manual of Temporary Traffic Control.

E9. MEASUREMENT AND PAYMENT

- E9.1 This section will govern payment for full width street clearing and backlane clearing of snow and hauling services for snow removal performed by the Contractor which include:
 - (a) Clearing and hauling services for snow after a recent accumulation of snow;
 - (b) Clearing and hauling services after a gradual accumulation of snow where, in the opinion of the Contract Administrator, such clearing and hauling services are warranted;
 - (c) Clearing and hauling services after a recent accumulation of snow combined with a gradual accumulation of snow; and
 - (d) Maintenance snow clearing services between storms and keeping streets and backlanes open during major snow storms and/or blizzards on the streets specified in this Contract.
- E9.2 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".
- E9.3 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.
- E9.4 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 and backlane clearing operations with the Contractor's full complement of equipment and continuous effort, the Contract Administrator may, at his sole discretion, extend the time limits specified.
- E9.5 Payment will be made for backlane clearing operations based on the unit price per kilometre. The payment for such clearing operations will be based on multiplying the unit bid price for Item No. 4 on Form B: Schedule of Prices (Unit Price) by the length in kilometres of backlanes cleared.
- E9.6 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.
- E9.7 Payment will be made for full width clearing and hauling operations on Priority I (Regional) Streets, Priority II (Collector) Streets, Priority III (Residential) streets based on the unit price per lane kilometre and a snow accumulation factor (F) which is dependent on the quantity of snowfall and the type of snow accumulation. The payment for all such clearing operations will be based on multiplying the unit price 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 cleared (L), as determined by the Contract Administrator, multiplied by the snow accumulation factor (F), as determined by the Contract Administrator; or Payment= R x L x F.
- E9.8 The snow accumulation for purposes of payment for a recent accumulation shall be the quantity of snow deemed to be cleared/hauled by the Contractor as determined by the Contract Administrator in accordance with this section. There may be hourly snow hauling, plowing and/or salting operations carried on by others on some portions of the street systems affected by this Contract. Therefore, the depth of the snow accumulation to be used for payment for the removal of a recent accumulation will be that portion of snow that has recently fallen immediately preceding the start of a clearing operation and during the said operation, but not

including cleared or removed by others or by environmental processes, as determined solely by the Contract Administrator. The duration and depth of snowfall will be based on official reports from a weather consulting service. Notice of any dispute by the City arising from the amount of snow accumulation used to calculate payments for a recent clearing operation shall be forwarded to the Contract Administrator within 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.

- E9.9 No payment will be made for gradual accumulation after March 15 of the Contract year in the event that all of the gradual accumulation has completely melted and does not physically exist on the street at the time of a plowing operation initiated by a recent accumulation. This determination will be made by the Contract Administrator.
- E9.10 The snow accumulation factor will be determined by the appropriate formula based on the type of accumulation and the quantity of snowfall. The formula to be used to calculate the snow accumulation factor for each payment scenario are identified in 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 preceding clearing operation, whichever is later.	F = 1.000 or $F = (0.30 x y) / 10$, whichever value is greater, where y is the number of centimetres 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.

E9.10.1 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).

E9.10.2 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).

E9.10.3 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).

E9.10.4 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).
- E9.10.5 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).

- E9.11 Payment shall be made for snow clearing services, such as truck plowing or maintenance snow clearing between snow storms and snow clearing during major storms/blizzards, as specified in E3 of the Specifications at the 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.
- E9.12 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 or kilometre respectively.
- E9.13 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 Public Works Department for the 2008 to 2010 Snow Season".
- E9.14 The City shall guarantee to pay to the Contractor a minimum amount (referred to as the "guaranteed minimum amount") equal to 60% of the Bid price shown on Form B: Schedule of Prices (Unit Price).
- E9.14.1 Payment for Work done shall be as provided in E7 and all such payments shall be deducted from the guaranteed minimum amount.
- E9.14.2 On December 31st, all payments received by the Contractor under this Contract will be totalled and the total compared with 10% of the Total Bid Price. If the total of the payments received is less than 10% of the Total Bid Price, then the difference between the aforesaid figures will be paid to the Contractor as an advance on the guaranteed minimum amount. The amount of the advance will be set off against subsequent payments for work done by the Contractor.
- E9.14.3 On February 28th, all payments received by the Contractor under this Contract for Work done and as an advance on the guaranteed minimum amount will be totalled and that total compared with 35% of the Total Bid Price. If the total of the payments received is less than 35% of the Total Bid Price, then the difference will be paid to the Contractor as an advance on the guaranteed minimum amount. The amounts of any advances received by the Contractor will be set off against subsequent payments for Work done by the Contractor pursuant to the Contract.
- E9.14.4 At the conclusion of the Contract year, all payments received by the Contract 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.

- E9.14.5 The Contractor will not be compensated for any inconvenience and costs which may result from excavation Work on the streets or backlanes, the parking of vehicles on the roadway, vehicle movement, or any other obstruction to his Work.
- E9.14.6 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.
- E9.14.7 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 E12 of the Specifications. These funds will be released when damages are rectified in accordance with E12.

E10. ANNUAL REVIEW - INFLATIONARY ADJUSTMENT

- E10.1 The unit prices specified on Form B: Prices will be adjusted on the first Contract anniversary date, and subsequent anniversary dates based on the percentage increase or decrease in unit prices for the Contract year from the All-items Consumer Price Index for Winnipeg, normally referred to by Statistics Canada as Table 326-0001. The calculation of the adjustment will be based on October 1 of the previous year to October 1 of the current year. The first inflationary adjustment shall occur on October 1, 2009. The maximum annual adjustment shall not exceed 10%.
- E10.2 The index used will be that prepared by Statistics Canada. Since the index may not be available until some time after the adjustment date, the adjustment will be retroactive.

E11. PRICE ADJUSTEMENT – FUEL COSTS

- E11.1 Notwithstanding C11.2, price adjustments for unforeseen fuel cost changes will include increases or decreases in the price of diesel fuel.
- E11.2 The City of Winnipeg will determine the Base Price of fuel costs based on the average diesel fuel price for the month of July of 2008 charged to the Streets Maintenance Division by the City of Winnipeg Fleet Management Agency.
- E11.3 Price adjustments will be assessed on October 1 and on January 1 of each contract year.
- E11.3.1 Price adjustments will only be made for any fuel price increase or decrease in excess of three percent (3%).
- E11.3.2 The actual diesel fuel price (Actual Price) will be determined on the dates indicated in E11.3 using the average fuel price of the previous month (e.g. for October 1 the average price for the month of September will be used and for January 1 the average price for December will be used).
- E11.4 Price adjustments will be applied to seventeen percent (17%) of the Unit Price bid by the Contractor on all items, which is the portion of the bid price that is attributable to fuel.
- E11.4.1 If fuel prices increase by more than three percent (3%) of the Base Price identified in E11.2, then a price adjustment for fuel will be made and paid for based on the quantity of eligible work on each progress estimate following the date of adjustment in accordance with the following formula:
 - Price Adjustment = (Actual Price $(1.03 \times Base Price)) \times (.17 \times Unit Price)$
- E11.4.2 If fuel prices decrease by more than three percent (3%) of the Base Price, then a price adjustment for fuel will be made and paid for based on the quantity of eligible Work on each progress estimate following the date of adjustment in accordance with the following formula:

Price Adjustment = ((0.97 x Base Price) – Actual Price) x (.17 x Unit Price)

E12. DAMAGE TO PUBLIC AND PRIVATE PROPERTY

- E12.1 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.
- E12.2 Any damage to pavements, boulevards, trees, etc. that in no way present a hazard to either pedestrian or vehicular traffic shall be reported to the Contract Administrator and rectified by the Contractor in accordance with City of Winnipeg specifications prior to June 30 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.
- E12.3 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. The Contractor shall remove and dispose of any loose curb material prior to the repairs being undertaken and as soon as weather conditions allow.
- E12.4 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.
- E12.5 The Contractor shall repair any sod damage caused by his snow clearing operations with top soil and seed or with sod as directed by the Contract Administrator. All restorations shall be in accordance with City of Winnipeg Standard Construction Specifications.
- E12.6 The Contractor shall replace with equal, any recycling bins or refuse containers destroyed, lost or misplaced by his operations at least (1) day prior to the next refuse day cycle.

E13. PENALTIES

- E13.1 Where the Contractor does not satisfactorily complete the Work on Priority I, II or III streets or backlanes in accordance with the time and quality requirements specified in E2, the Contractor shall be assessed a penalty.
- For Priority I streets, the penalty shall be in the amount of \$1,500.00 or an amount equal to fifty percent (50%) of the unit price Bid per lane kilometre multiplied by the lane kilometres not satisfactorily completed multiplied by the snow accumulation factor, whichever is greater.
- For Priority II and Priority III streets, the penalty shall be in the amount of \$1,500.00 or an amount equal to twenty-five percent (25%) of the unit price bid per lane kilometre multiplied by the lane kilometres not satisfactorily completed multiplied by the snow accumulation factor, whichever is greater.
- E13.1.3 For backlanes, the penalty shall be in the amount of \$1,500.00 or an amount equal to twenty-five percent (25%) of the unit price Bid per kilometre times the kilometres not satisfactorily completed, whichever is greater for each backlane.

- E13.1.4 Streets and backlanes that the Contract Administrator deems to be deficient in whole and not in part will be considered incomplete and may be subject to the above penalty.
- E13.2 Where the Contractor does not supply up to the minimum quantity and type of equipment identified in E4 within two hours as outlined in E3.2 of the Specifications, the Contractor shall be assessed a penalty of five hundred dollars (\$500.00) per piece of equipment per call out below the minimum number as specified in E4. The minimum requirement shall apply throughout the duration of the operation from call-out to release of equipment.
- E13.3 Where the Contractor does not satisfactorily perform any snow clearing operation in accordance with the requirements of E2, particularly in reference to the quality of the Work following an inspection by the Contract Administrator the Work shall be declared a deficiency. The Contractor shall be requested to rectify the portion of streets or backlanes found to be unsatisfactory in quality within 24 hours of notification or in a time period to be agreed to by the Contract Administrator. Failure to respond may result in the City performing the required Work and charging the cost of such Work back to the Contractor.
- E13.4 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.
- E13.5 Where the Contractor fails to replace recycling bins or refuse containers as described in E12.6, the City will replace these items and assess a penalty of \$100.00 per item.

PART F - APPENDICES

APPENDIX A - NORTH AREA (NORTH/WEST) PRIORITY I

Street	From	То	Where to Plow	Kms of Street	No. of Lanes	No. of Lane Kms
Cargo Road	N. of Sargent	S. of Sargent	E/S	0.16	3	0.48
Moray Street	Portage Avenue	Ness Avenue	B/S	1.13	4	4.53
Moray Street	Roblin Boulevard	Portage Avenue	B/S	1.00	4, 5	4.26
Ness Avenue*	Sturgeon Road	Ferry Rd.	B/S	4.26	4, 6	18.00
Portage Ave (P1)	St.James	Toronto	B/S	2.56	8,9	22.78
Portage Avenue*	St. James Street	St. Charles	B/S	8.72	8, 7, 6	72.09
Saskatchewan Ave.	Perimeter Hwy	Lane 500m west of Hamilton	B/S	1.97	2,4	8.38
Saskatchewan Ave.	Lane 500m west of Hamilton	Hamilton Ave.	N/S	0.5	2	1.00
Saskatchewan Ave.	Hamilton Ave.	East Limit	B/S	2.82	2	5.60
Silver Avenue	Sturgeon Rd.	Hamilton Ave.	B/S	0.72	2	1.44
Sturgeon Road	Portage Ave.	Ness Ave.	B/S	0.91	4	4.10
Sturgeon Road	Ness Ave.	Saskatchewan Ave.	B/S	1.44	2	3.24
Sturgeon Road	Saskatchewan Ave.	Selkirk	B/S	6.57	2,3	6.80
				TOTAL PI		152.70

NOTE: B/S denotes both sides

E/S denotes east side

^{*} 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 - NORTH AREA (NORTH/WEST) PRIORITY II

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Street	From	То	Where to Plow	Kms of Street	No. of Lanes	No. of Lane Kms
Allard Avenue	Rouge Road	Bedson Avenue	B/S	0.59	2	1.18
Apple Lane	Hamilton Ave.	Quail Ridge Rd.	B/S	0.53	2	1.06
Assiniboine Avenue	Westwood Drive	Bedson Avenue	B/S	1.28	3	3.84
Bedson Avenue	Assiniboine Avenue	Portage Avenue	B/S	1.67	3	5.01
Browning Blvd.	Raquette	Rouge	B/S	0.42	2	0.84
Browning Blvd.	Pinehurst Drive	Rouge Road	B/S	0.82	2	1.64
Buchanan Blvd.	Saskatchewan Ave.	Portage Ave.	B/S	3.89	2	7.78
Cavalier Dr.	Fairlane Ave.	Portage Ave.	B/S	0.32	4	1.28
Cavalier Dr.	Saskatchewan Ave.	Fairlane Ave.	B/S	1.56	3	4.68
Chapman Rd	Hamilton Avenue	South Lake Dr	B/S	0.17	2	0.34
Country Club Boulevard	Meadowside Drive	Portage Avenue	Centre	0.52	4	2.08
Country Club Boulevard	South Limits	Meadowside Drive	B/S	0.80	2	1.60
Crestview Park Dr.	Hamilton Ave.	Cavalier Dr.	B/S	1.22	2	2.44
Fairlane Ave.	Cavalier	Isbister	B/S	1.31	2	2.62
Hallonquist Dr.	Setter St.	Sturgeon Rd.	B/S	0.13	2	0.26
Hamilton Avenue	Saskatchewan Ave.	Isbister	B/S	5.83	2	11.66
Hamilton Avenue	Stradford St	Buchanan Blvd.	B/S	0.27	2	0.54
Heritage Blvd.	Ness Ave.	Valleyview Dr.	B/S	0.62	2	1.24
Heritage Service Rd.	Carriage	Carriage	W/S	0.06	1	0.06
Isbister St.	Risbey Cres.	Portage Avenue	B/S	1.90	2	3.80
Kay Cr	South Lake Dr	Lumsden Ave.	B/S	0.29	2	0.58
Lumsden Ave.	Cavalier Dr.	Lakeridge Blvd.	B/S	0.24	2	0.48
Lumsden Ave.	Lakeridge Rd.	Buchanan Blvd.	B/S	0.54	3	1.62
McBey Avenue	Westwood Drive	Country Club Boulevard	B/S	0.76	2	1.52
McBey Avenue	Country Club Blvd.	Woodlands	B/S	0.12	2	0.24
Morgan Cr	Cavalier Dr.	Cavalier Dr.	B/S	0.91	2	1.82
Muriel St	Portage Ave.	Ness Ave.	B/S	0.68	2	1.36
Ness Ave.	Setter St.	Cavalier Dr.	B/S	1.48	3	4.44
Ness Ave.	Sturgeon Rd.	Setter St.	B/S	0.13	4	0.52
Quail Ridge Rd.	Saskatchewan Ave.	Apple Lane	B/S	0.94	2	1.88
	•		•	•	•	

Quail Ridge Service Rd.	Apple Lane	Quail Ridge	E/S	0.09	1	0.09
Risby Cr	Isbister	Stradford St	B/S	0.09	2	0.18
Rouge Road	Assiniboine Avenue	Portage Avenue	B/S	1.85	3	5.55
Sansome Avenue	Westwood Drive	Bedson Street	B/S	1.01	3	3.03
School Rd.	Ness Ave.	Portage Ave.	B/S	0.77	2	1.54
Silver Ave.	Hamilton	W. End	B/S	0.11	2	0.22
South Lake Dr	Chapman Rd	Kay Cr	B/S	0.08	2	0.16
St. Charles	South Limits	Portage Avenue	B/S	0.96	2	1.92
Stradford St	Risby Cr	Hamilton Avenue	B/S	0.74	2	1.48
Thorton Ave.	Sturgeon Rd.	Carriage Rd.	B/S	0.13	3	0.39
Valley View PI	Valley View Rd	Hamilton Avenue	B/S	0.11	2	0.22
Valley View Rd	Heritage Blvd.	Valley View Pl	B/S	0.35	2	0.70
Voyageur Ave.	Cavalier Dr.	Crestview Dr.	B/S	0.70	2	1.40
Westwood Drive	Carlyle Cr	Portage Avenue	B/S	1.84	4	7.36
Westwood Drive	Assiniboine Avenue	Carlyle Cr	B/S	0.67	3	2.01
Bus Loop	St. Charles	S/Augier	B/S	0.06	2	0.12
Bus Loop	Rouge Rd.	Scalena	B/S	0.05	2	0.10
Bus Loop	Cavalier	Ashern	B/S	0.05	2	0.10
Bus Loop	Buchanan	Lumsden	B/S	0.06	2	0.12
				TOTAL PII		95.10

NOTE: B/S denotes both sides

W/S denotes west side

APPENDIX C - NORTH AREA (NORTH/WEST) PRIORITY III

APPENDIX C – NORTH AREA (NORTH/WEST) PRIORITY III						
Street	From	То	Where to Plow	Kms of Street	No. of Lanes	No. of Lane Kms
Acheson Dr.	Arthur Creek Dr.	Sonnichsen Dr.	B/S	0.10	2	0.20
Acheson Cres.	Sonnichsen Dr.	End	B/S	0.60	2	1.20
Addison Cr.	Raquette	Raquette	B/S	0.59	2	1.18
Addison	Bedson	Addison	B/S	0.09	2	0.18
Alcott St.	Ness Ave.	Amarynth Cres.	B/S	0.17	2	0.34
Aldrich	Shelley	Wordsworth	B/S	0.16	2	0.32
Alguire Ave.	Amarynth Cres.	School Rd.	B/S	0.23	2	0.46
Allard	Twain	Bedson	B/S	0.21	2	0.42
Allard	Gagnon	Buchanan	B/S	0.33	2	0.66
Amarynth Cres.	School Rd./N	School Rd/S	B/S	0.69	2	1.38
Amundsen	Westwood	Westwood	B/S	0.42	2	0.84
Antoine Ave.	Amarynth Cres.	School Rd.	B/S	0.25	2	0.50
Arthur Creek Dr.	Acheson Cres.	Acheson Cres.	B/S	0.47	2	0.94
Ashern Rd.	Lumsdun Ave.	Cavalier Dr.	B/S	0.38	2	0.76
Assiniboine Cr.	West End	Bedson	B/S	0.39	2	0.78
Assiniboine	Westwood	East End	B/S	0.10	2	0.20
Augier	St. Charles	East End	B/S	0.07	2	0.14
Augier	E/PTH 100	Golf Course	B/S	0.31	2	0.62
Bancroft Bay	Bancroft Bay	Cavalier Dr.	B/S	0.09	3	0.27
Bancroft Bay	Bancroft Bay	Bancroft Bay	B/S	0.37	2	0.74
Banting	400' S/Portage	Portage	B/S	0.07	3	0.21
Banting	МсВеу	Portage 400' S.	B/S	0.21	2	0.42
Barron	Assiniboine	Whitegates	B/S	0.55	2	1.10
Belcourt	Whitegates	Whitegates	B/S	0.40	2	0.80
Bellavista Cres.	Rogan Dr./E.	Voyageur Ave.	B/S	0.50	2	1.00
Bering	Cook	Erlandson	B/S	0.26	2	0.52
Bernadine Cres.	Isbister	Downs	B/S	0.95	2	1.90
Best	Allard	Portage	B/S	0.47	2	0.94
Bisset Cres.	Cavalier Dr.	Voyageur Ave.	B/S	0.27	2	0.54

Brendalee West End Gagnon B.S 0.05 2 0.10 Buchanan Portage Allard B.S 0.27 2 0.54 Buffie Bay Goswell Rd. Goswell Rd. B.S 0.03 2 0.06 Byrd Rouge Westwood B.S 0.04 2 0.64 Byron Kirkfield Kirkfield B.S 0.05 2 0.06 Capine Place North Limit Carriage Rd. B.S 0.05 2 0.06 Cance Bay Sumach Buss 0.03 2 0.76 Capulet Cres. Stradford Isbister B.S 0.03 2 0.66 Carridge Bay West End Westwood B.S 0.04 2 0.68 Carridge Bay Westwood Westwood B.S 0.03 2 0.66 Carriage Rd. Heritage Blvd. Vestwood B.S 0.13 2 0.26 Carriage Rd. <	Braid	Pinevalley	East End	B/S	0.07	2	0.14
Buffle Bay Goswell Rd. Goswell Rd. B/S 0.30 2 0.80	Brendalee	West End	Gagnon	B/S	0.05	2	0.10
Byrd Rouge Westwood B/S 0.42 2 0.84 Byron Kirkfield Kirkfield B/S 0.32 2 0.64 Calpine Place North Limit Carriage Rd. B/S 0.05 2 0.10 Cance Bay Sumach Surnach B/S 0.38 2 0.76 Capulet Cres. Stradford Isbister B/S 0.43 2 0.86 Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.04 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.03 2 0.66 Carn Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Bd. Heritage Blvd. Valleyview Pl. B/S 0.12 0.58 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.64 2 1.28	Buchanan	Portage	Allard	B/S	0.27	2	0.54
Byron Kirkfield Kirkfield B/S 0.32 2 0.64 Calpine Place North Limit Carriage Rd. B/S 0.05 2 0.10 Canoe Bay Sumach Sumach B/S 0.38 2 0.76 Capulet Cres. Stradford Isbister B/S 0.43 2 0.86 Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.44 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.033 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.64 2 1.28 Carroll Assiniboine Woodsworth B/S 0.64 2	Buffie Bay	Goswell Rd.	Goswell Rd.	B/S	0.30	2	0.60
Calpine Place North Limit Carriage Rd. B/S 0.05 2 0.10 Cance Bay Sumach Sumach B/S 0.38 2 0.76 Capulet Cres. Stradford Isbister B/S 0.43 2 0.86 Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.44 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 0.13 2 0.26 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.043 <t< td=""><td>Byrd</td><td>Rouge</td><td>Westwood</td><td>B/S</td><td>0.42</td><td>2</td><td>0.84</td></t<>	Byrd	Rouge	Westwood	B/S	0.42	2	0.84
Canoe Bay Sumach Sumach B/S 0.38 2 0.76 Capulet Cres. Stradford Isbister B/S 0.43 2 0.86 Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.44 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 0.13 2 0.26 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.64 2 1.28 Carron Bay Carson Bay Morgan Cres. B/S 0.06 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.	Byron	Kirkfield	Kirkfield	B/S	0.32	2	0.64
Capulet Cres. Stradford Isbister B/S 0.43 2 0.86 Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.44 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 0.128 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 <	Calpine Place	North Limit	Carriage Rd.	B/S	0.05	2	0.10
Carberry Cr. Crestview Park Dr. Crestview Park Dr. B/S 0.44 2 0.88 Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.06 2 0.58 Carson Bay Carson Bay B/S 0.08 3 0.24 1.28 Carson Bay Carson Bay B/S 0.08 3 0.24 1.28 Carson Bay Carson Bay B/S 0.07 2 0.14 <td>Canoe Bay</td> <td>Sumach</td> <td>Sumach</td> <td>B/S</td> <td>0.38</td> <td>2</td> <td>0.76</td>	Canoe Bay	Sumach	Sumach	B/S	0.38	2	0.76
Carlyle West End Westwood B/S 0.05 2 0.10 Carlyle bay Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.64 2 1.28 Columpton West En	Capulet Cres.	Stradford	Isbister	B/S	0.43	2	0.86
Carlyle bay Westwood B/S 0.33 2 0.66 Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson B/S 0.04 2 1.28 Columbus Rouge Carroll B/S 0.64 2 1.28 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood<	Carberry Cr.	Crestview Park Dr.	Crestview Park Dr.	B/S	0.44	2	0.88
Caron Ave. Sturgeon Rd. Setter St. B/S 0.13 2 0.26 Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14	Carlyle	West End	Westwood	B/S	0.05	2	0.10
Carriage Rd. Heritage Blvd. Valleyview Pl. B/S 1.28 2 2.56 Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Connor West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Col	Carlyle bay	Westwood	Westwood	B/S	0.33	2	0.66
Carriage Bay Heritage Blvd. Heritage Blvd. B/S 0.29 2 0.58 Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Compton West End Pinehurst B/S 0.05 2 0.10 Cond Westwood East End B/S 0.07 2 0.14 Cook Columbus	Caron Ave.	Sturgeon Rd.	Setter St.	B/S	0.13	2	0.26
Carroll Assiniboine Woodsworth B/S 0.64 2 1.28 Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.64 2 1.28 Compton West End Pinehurst B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.16 2 0.32 Cor	Carriage Rd.	Heritage Blvd.	Valleyview Pl.	B/S	1.28	2	2.56
Carson Bay Carson Bay Morgan Cres. B/S 0.08 3 0.24 Carson Bay Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.06 2 0.72 <t< td=""><td>Carriage Bay</td><td>Heritage Blvd.</td><td>Heritage Blvd.</td><td>B/S</td><td>0.29</td><td>2</td><td>0.58</td></t<>	Carriage Bay	Heritage Blvd.	Heritage Blvd.	B/S	0.29	2	0.58
Carson Bay Carson Bay Carson Bay B/S 0.43 2 0.86 Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06	Carroll	Assiniboine	Woodsworth	B/S	0.64	2	1.28
Chapman Rd. Costello Dr. South Lake Dr. B/S 0.07 2 0.14 Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.19 2 0.38	Carson Bay	Carson Bay	Morgan Cres.	B/S	0.08	3	0.24
Coleridge Pk. Drive Bedson Bedson B/S 0.64 2 1.28 Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32	Carson Bay	Carson Bay	Carson Bay	B/S	0.43	2	0.86
Columbus Rouge Carroll B/S 0.55 2 1.10 Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Chapman Rd.	Costello Dr.	South Lake Dr.	B/S	0.07	2	0.14
Compton West End Pinehurst B/S 0.05 2 0.10 Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.56 2 1.12	Coleridge Pk. Drive	Bedson	Bedson	B/S	0.64	2	1.28
Connor Westwood East End B/S 0.07 2 0.14 Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Columbus	Rouge	Carroll	B/S	0.55	2	1.10
Cook Columbus Erlandson B/S 0.28 2 0.56 Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Compton	West End	Pinehurst	B/S	0.05	2	0.10
Cora Maureen Whitegates B/S 0.16 2 0.32 Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Connor	Westwood	East End	B/S	0.07	2	0.14
Corbett Dr. Goswell Rd. Gowler Rd. B/S 0.65 2 1.30 Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Cook	Columbus	Erlandson	B/S	0.28	2	0.56
Cortez Bay Erlandson Erlandson B/S 0.36 2 0.72 Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Cora	Maureen	Whitegates	B/S	0.16	2	0.32
Costello Dr. Corbett Dr. Chapman Rd. B/S 0.03 2 0.06 Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Corbett Dr.	Goswell Rd.	Gowler Rd.	B/S	0.65	2	1.30
Costello Dr. Chapman Rd. Gowler Rd. B/S 0.35 2 0.70 Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Cortez Bay	Erlandson	Erlandson	B/S	0.36	2	0.72
Costello Dr. Gowler Rd. Corbett Dr. B/S 0.19 2 0.38 Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Costello Dr.	Corbett Dr.	Chapman Rd.	B/S	0.03	2	0.06
Cub Rd. Saskatchewan Ave. Apple Lane B/S 0.16 2 0.32 Daer McBey Portage B/S 0.56 2 1.12	Costello Dr.	Chapman Rd.	Gowler Rd.	B/S	0.35	2	0.70
Daer McBey Portage B/S 0.56 2 1.12	Costello Dr.	Gowler Rd.	Corbett Dr.	B/S	0.19	2	0.38
	Cub Rd.	Saskatchewan Ave.	Apple Lane	B/S	0.16	2	0.32
Danbury Bay Danbury Bay Cavalier Dr. B/S 0.09 3 0.27	Daer	МсВеу	Portage	B/S	0.56	2	1.12
	Danbury Bay	Danbury Bay	Cavalier Dr.	B/S	0.09	3	0.27

Danbury Bay	Danbury Bay	Danbury Bay	B/S	0.56	2	1.12
David	Fairlane	Portage	B/S	0.44	2	0.88
Davis	Rouge	Byrd	B/S	0.25	2	0.50
Deerhorn Lane	Voyageur Ave.	Sandlands Pl.	B/S	0.23	2	0.46
Deloraine Dr.	Cavalier Dr.	Ashern Rd.	B/S	0.50	2	1.00
Dennis	West End	Gagnon	B/S	0.04	2	0.08
Dickens	Bedson	Bedson	B/S	0.65	2	1.30
Dohaney Cres.	Hamilton Ave.	Acheson Dr.	B/S	0.34	2	0.68
Doran Bay	Doran Bay	Doran Bay	B/S	0.59	2	1.18
Doran Bay	Morgan Cres.	Doran Bay	B/S	0.07	3	0.21
Downs Ave.	Isbister	Bernadine	B/S	0.19	2	0.38
Drummond Place	Shelley	West End	B/S	0.05	2	0.10
Dundurand Ave.	Optimist Way	Isbister	B/S	0.21	2	0.42
Ericsson	Rouge	Rouge	B/S	0.43	2	0.86
Erlandson	Rouge	Columbus	B/S	0.51	2	1.02
Fieldstone Bay	Heritage Blvd.	Heritage Blvd.	B/S	0.44	2	0.88
Foot Place	Perimeter 101	S.Limit (Saskatchewan)	B/S	1.18	2	2.36
Four Oaks Cove	Oak Forrest	Oak Forrest	B/S	0.26	2	0.52
Franklin Bay	Columbus	Columbus	B/S	0.31	2	0.62
Freemont Bay	Freemont Bay	Fairlane	B/S	0.57	2	1.14
Frost	Carroll	Westwood	B/S	0.22	2	0.44
Gagnon	Augier	Portage South Lane	B/S	0.61	2	1.22
Galbraith Cres.	Kay Cres.	Lumsden Ave.	B/S	0.41	2	0.82
Galinee	Rouge	Rouge	B/S	0.43	2	0.86
Galsworthy Pl.	Coleridge Pk. Drive	East End	B/S	0.10	2	0.20
Gerrond Bay	Cavalier Dr.	Cavalier Dr.	B/S	0.33	2	0.66
Gibraltar Bay	Normandy Dr.	Normandy Dr.	B/S	0.31	2	0.62
Golf	Meadowside	Portage	B/S	0.55	2	1.10
Goodridge Cres.	Acheson Cres.	Arthur Cr/Dr	B/S	0.21	2	0.42
Goswell Rd.	Fairlane Ave.	Costello Dr.	B/S	0.25	2	0.50
Gowler Rd.	Costello Dr.	Costello Dr.	B/S	0.25	2	0.50
Granada Cres.	Carriage Rd.	Carriage Rd.	B/S	0.25	2	0.50
Grand Oaks Cove	Oak Forrest	Oak Forrest	B/S	0.13	2	0.26
	1	1				

Greenacre	Meadowside	Portage	B/S	0.53	2	1.06
Greenway Cres.	Portage Ave.	Portage Ave.	B/S	0.56	2	1.12
Hagen	Country Club	Pinehurst	B/S	0.36	2	0.72
Haliburton	Westwood	Westwood	B/S	0.21	2	0.42
Hamilton	Isbister	Stradford	B/S	0.09	2	0.18
Hamilton	Stradford	Stradford	B/S	0.28	2	0.56
Hamilton Meadows Dr.	Apple Lane	South limit	B/S	0.28	2	0.56
Harvest L.	Heritage Blvd.	Valleyview Dr.	B/S	0.36	2	0.72
Harvlong Ave.	Lakeridge Rd.	Topaz Rd.	B/S	0.16	2	0.32
Haultain	Raquette	Raquette	B/S	0.33	2	0.66
Hedges Bay	Cavalier Cres.	Hollingsworth Ave.	B/S	0.25	2	0.50
Henday	Westwood	Westwood	B/S	0.41	2	0.82
Hidden Oaks Cove	Oak Forrest	Oak Forrest	B/S	0.10	2	0.20
Highcliff Bay	Morgan Cres.	Highcliff Bay	B/S	0.08	3	0.24
Highcliff Bay	Highcliff Bay	Highcliff Bay	B/S	0.57	2	1.14
Hillary Cres.	Muriel St.	Cavalier Dr.	B/S	0.69	2	1.38
Hillary Bay	Hillary Cres.	Hillary Cres.	B/S	0.28	2	0.56
Hollingsworth Ave.	Cavalier Dr.	Normandy Dr.	B/S	0.29	2	0.58
Hollyburn Rd.	Cub Rd.	Quail Ridge Rd.	B/S	0.20	2	0.40
Holt	Bedson	Raquette	B/S	0.36	2	0.72
Inch Bay	Crestview ParkDr.	Crestview Park Dr.	B/S	0.38	2	0.76
Inwood Cr.	Crestview Park Dr.	Crestview Park Dr.	B/S	0.34	2	0.68
Jeannette	West End	Gagnon	B/S	0.04	2	0.08
Jolliett	Rouge	Sansome	B/S	0.43	2	0.86
Kay Cres.	South Lake Dr.	West/End	B/S	0.68	2	1.36
Keats Way	Bedson	Bedson	B/S	0.34	2	0.68
Kilmer	E/Leg Longfellow	Westwood	B/S	0.39	2	0.78
Kirby Dr.	Setter St.	Ness Ave.	B/S	0.47	2	0.94
Kirkfield	Wordsworth	Portage	B/S	0.69	2	1.38
Knox	Portage	Fairlane	B/S	0.55	2	1.10
Knox	Ness	Hamilton	B/S	0.26	2	0.52
Lake Ridge Rd.	Lumsden Ave.	Lumsden Ave.	B/S	0.95	2	1.90
Leacock	Carroll	Westwood	B/S	0.22	2	0.44

Leisure Bay	Crestview Park Dr.	Crestview Park Dr.	B/S	0.36	2	0.72
Lepine	Gagnon	East End	B/S	0.13	2	0.26
Livina	East Limit	David	B/S	0.04	2	0.08
Livinia Ave.	Isbister	Knox	B/S	0.29	2	0.58
Livinia Ave.	Parkhill St.	West Limit	B/S	0.15	2	0.30
Longfellow Bay	Assiniboine	Assiniboine	B/S	0.33	2	0.66
Lonsdale Dr.	Setter St.	Kirby Dr.	B/S	0.48	2	0.96
Lumsdun Ave.	Buchanan Blvd.	Russenholt St.	B/S	0.10	3	0.30
Lumsdun Ave.	Russenholt St.	Isbister St.	B/S	0.09	2	0.18
McCarthy St.	Portage	Oxbow Bend	B/S	0.11	2	0.22
Mackie Bay	Gowler Rd.	Gowler Rd.	B/S	0.30	2	0.60
Magnan St.	Portage N. Lane	North Limit	B/S	0.22	2	0.44
Makinak Bay	Crestview Park Dr.	Crestview Park Dr.	B/S	0.31	2	0.62
Manitou Bay	Sumach	Sumach	B/S	0.40	2	0.80
Masefield Pl.	Coleridge Pk.Dr.	East End	B/S	0.09	2	0.18
Maureen	Assiniboine	Barron	B/S	0.33	2	0.66
Meadowside	Golf	Country Club Rd.	B/S	0.20	2	0.40
Magellan	Westwood	Westwood	B/S	0.43	2	0.86
Moccassin Bay	Voyageur Ave.	Cavalier Dr.	B/S	0.27	2	0.54
Mossy Oaks Cove	Oak Forrest	Oak Forrest	B/S	0.18	2	0.36
Muriel St.	Hillary Cres.	Ness	B/S	0.43	2	0.86
Nemy Cres.	Harvlong Ave.	Topaz Rd.	B/S	0.60	2	1.20
Ness	Knox	East limit	B/S	0.04	3	0.12
Ness	Stradford	Knox	B/S	0.38	2	0.76
Normandy Dr.	Lumsden Ave.	Hollingsworth Ave.	B/S	0.55	2	1.10
North Lake Dr.	Kay Cres/N	Kay Cres/S	B/S	0.41	2	0.82
Oak Forest Cres.	Camp Manitou	Bur Oaks Cove	B/S	0.78	2	1.56
Olson Way	Optimist Way	Bernadine	B/S	0.19	2	0.38
Opal Pl.	Hamilton Meadows Dr.	Quail Ridge Rd.	B/S	0.08	2	0.16
Optimist Way	N. of Olson	Magnan	B/S	0.39	2	0.78
Oxbow Bend	McCarthy	St.Charles	B/S	2.76	2	5.53
Park Meadows	Country Club	Meadowside	B/S	0.15	2	0.30
Parkdale St.	Hamilton Ave.	Livinia Ave.	B/S	1.03	2	2.06
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Parkdale St.	Livinia Ave.	Portage Ave.	B/S	0.18	3	0.54
Parkhill St.	Hamilton Ave.	Portage Ave.	B/S	1.19	2	2.38
Peary Cr.	Sansome	Rouge	B/S	0.26	2	0.52
Pebblewood L.	Carriage Rd.	Kirby Ave.	B/S	0.30	2	0.60
Peltier Ave.	Risbey Cres.	Buchanan Blvd.	B/S	0.10	2	0.20
Pinehurst	Country Club	Country Club	B/S	0.77	2	1.54
Pinevalley	Country Club	Country Club	B/S	0.50	2	1.00
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Pontiac	Allard	Allard	B/S	0.28	2	0.56
Poole	West End	Shelley	B/S	0.04	2	0.08
Prairie Oaks Cove	Oak Forrest	Oak Forrest	B/S	0.20	2	0.40
Radar Pl.	Voyageur Ave.	Rogan Dr.	B/S	0.09	2	0.18
Raquette	Assiniboine	Sansome	B/S	0.91	2	1.82
Raquette	Allard	Portage	B/S	0.48	2	0.96
Red Fern Rd.	Kay Cres.	Hamilton Ave.	B/S	0.13	2	0.26
Reynolds	Browning	Whitegates	B/S	0.20	2	0.40
Ridley Street	Ridley Place N/Leg	Ridley Place S/Leg	B/S	0.12	2	0.24
Ridley Street	Fairlane Ave.	Ridley Pl. N/Leg	B/S	0.07	3	0.21
Ridley Place	Ridley St./N	Ridley St./N	B/S	0.55	2	1.10
Risbey Cr.	Stradford	Stradford St.	B/S	1.08	2	2.16
Risbey Cr.	Isbister	Buchanan	B/S	0.28	2	0.56
Robert Service Bay	Westwood	Westwood	B/S	0.35	2	0.70
Rogan Dr.	Hamilton Ave.	Bellavista Cres.	B/S	0.49	2	0.98
Russenholt St.	Risby Cres.	Lumsden Ave.	B/S	0.24	2	0.48
Sabine Cres.	Topaz Rd.	Lumsden Ave.	B/S	0.22	2	0.44
Sage Cres.	Muriel St.	Ness Ave.	B/S	0.32	2	0.64
Sandburg Bay	Westwood	Westwood	B/S	0.21	2	0.42
Sandylands Place	North limits	Voyageur Ave.	B/S	0.14	2	0.28
Sansome	Gagnon	East End	B/S	0.14	2	0.28
Sansome	West End	Bedson	B/S	0.24	2	0.48
Sayer Ave.	Lonsdale Dr.	Setter St.	B/S	0.20	2	0.40
Scalena	Assiniboine	E/Rouge Road	B/S	0.19	2	0.38
School Rd.	North Limit	Ness Ave.	B/S	0.15	2	0.30
Seaton	Allard	Portage	B/S	0.54	2	1.08
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Setter St.	Ness Ave.	Lonsdale Dr.	B/S	0.42	2	0.84
Setter St.	Lonsdale Dr.	South Limit	B/S	0.22	3	0.66
Shakespeare	Bedson	Bedson	B/S	0.33	2	0.66
Shelley	Browning	Portage	B/S	0.98	2	1.96
Sonnichsen PI	Hamilton Ave.	Acheson Cres.	B/S	0.07	2	0.14
South Lake Dr.	Chapman Rd.	Chapman Rd.	B/S	0.25	2	0.50
St. Charles St.	Portage	Bernadine	B/S	0.24	2	0.48
Stewart	Allard	Portage	B/S	0.25	2	0.50
Stewart St.	Hamilton Ave.	Portage Ave.	B/S	1.11	2	2.22
Stillwell St.	Sayer Ave.	Lonsdale Dr.	B/S	0.26	2	0.52
Stradford St.	Hamilton Ave.	Bernadine	B/S	0.56	2	1.12
Sturgeon Service Rd.	Booth	Caron	E/S	0.10	1	0.10
Sturgeon Service Rd.	Caron	Ness	E/S	0.25	1	0.25
Sumach	Allard	Portage	B/S	0.51	2	1.02
Summerlands	МсВеу	Woodlands	B/S	0.32	2	0.64
Summit Rd.	Saskatchewan	Optimist Park Entrance	B/S	0.87	2	1.75
Suzanne	West End	Gagnon	B/S	0.05	2	0.10
Thackeray	Carroll	Westwood	B/S	0.19	2	0.38
Topaz Rd.	Harvlong Ave.	Nemy Cres.	B/S	0.22	2	0.44
Trigwell	Raquette	Raquette	B/S	0.26	2	0.52
Twain	Bedson	Bedson	B/S	0.83	2	1.66
Uplands Cres.	Carriage Rd/E	Carriage Rd/W	B/S	0.38	2	0.76
Valleyview Dr.	Valleyview Pl.	Ness	B/S	0.69	2	1.38
Valleyview Dr.	Heritage Blvd.	Heritage Blvd.	B/S	1.00	2	2.00
Vardon	Pinevalley	East End	B/S	0.08	2	0.16
Vimy Rd.	End	Portage Ave.	B/S	1.48	2	2.96
West Avenue	Maureen	Rouge	B/S	0.24	2	0.48
Westboine Pl.	Conner	South End	B/S	0.04	2	0.08
Wharton Blvd.	Hamilton Ave.	School Rd.	B/S	1.81	2	3.62
Whitegates	Maureen	Sansome	B/S	1.20	2	2.40
Woodlands	Portage	Lane S/Portage	B/S	0.05	4	0.20
Woodlands	Lane S/Portage	Lane S/Portage	B/S	0.91	2	1.82
Wordsworth	Jolliett	Shelley	B/S	1.48	2	2.96
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Wordsworth	West End	Wordsworth	B/S	0.07	2	0.14
				TOTAL PIII		171.56

APPENDIX "D"

Snowfall - October 1 to April 30

Year Centimetr		
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 1983-1984	77.40 56.30	
1984-1985	93.20	
1985-1986	124.20	
1986-1987	124.20	
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	
2005-2006 2006-2007	151.20 135.60	
2006-2007	135.60 111.90	
2007-2000	111.90	

APPENDIX "E"

North Area (West)

BUS STOP LOCATIONS TO BE PUSHED 30 m

E/B Portage @ Tylehurst

E/B Portage @ Arlington

W/B Portage opposite Tylehurst

*W/B Portage @ School Road

*W/B Hamilton @ Knox

*E/B Hamilton @ Knox

APPENDIX "F" North Area (West)

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

Street	From	То	
Moray Street	Portage Avenue	Ness Avenue.	
Sturgeon Road	Portage Avenue	Selkirk Ave. Limit	
Wellington Ave.	St. James St.	Airport Boundary	
Saskatchewan Ave.	Perimeter Hwy.	Sturgeon Road	