



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 364-2006

**SUPPLY AND INSTALLATION OF TRANSIT PASSENGER SHELTERS AND
TRANSIT INFORMATION SIGNAGE**

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PART B - BIDDING PROCEDURES

B1. PROJECT TITLE

B1.1 SUPPLY AND INSTALLATION OF TRANSIT PASSENGER SHELTERS AND TRANSIT INFORMATION SIGNAGE

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, July 17, 2006.

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

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

B3. SITE INVESTIGATION

B3.1 Further to GC.2.01, the Bidder may view the Sites without making an appointment..

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

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

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

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

B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. ADDENDA

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

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

B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B5.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda shortly before the Submission Deadline.

B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 8 of Form A: Bid. Failure to acknowledge receipt of an addendum may render a Bid non-responsive.

B6. SUBSTITUTES

B6.1 The Work is based on the materials, equipment, methods and products specified in the Bid Opportunity.

B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.

B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.

B6.4 The Bidder shall ensure that any and all requests for approval of a substitute:

- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the material, equipment, method or product 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 Contract; and
- (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 Contract.

B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his sole discretion grant approval for the use of a substitute as an "approved equal" or as an "approved alternative", or may refuse to grant approval of the substitute.

B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, only to the Bidder who requested approval of the substitute.

B6.6.1 The Bidder requesting and obtaining the approval of a substitute shall be entirely responsible for disseminating information regarding the approval to any person or persons he wishes to inform.

B6.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.

B6.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B14.

B6.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B7. BID SUBMISSION

B7.1 The Bid Submission consists of the following components:

- (a) Form A: Bid; and
 - (b) Form B: Prices.
- B7.2 All components of the Bid Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Bid.
- B7.3 The Bid Submission shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B7.3.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B7.4 Bid Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.5 Bid Submissions shall be submitted to:
The City of Winnipeg
Corporate Finance Department
Materials Management Branch
185 King Street, Main Floor
Winnipeg, MB R3B 1J1
- B8. BID**
- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
 - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted; and
 - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B8.4 Paragraph 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 and the corporate seal, if the corporation has one, should be affixed; and
 - (d) if the Bidder is carrying on business under a name other than his own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid shall be printed below such signatures.

- B8.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.
- B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid Submission and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Prices on Form B: Prices shall include:
- (a) duty;
 - (b) freight and cartage;
 - (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid; and
 - (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B9.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B10. QUALIFICATION

- B10.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business;
 - (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
 - (c) be financially capable of carrying out the terms of the Contract;
 - (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
 - (e) have successfully carried out work, similar in nature, scope and value to the Work; and
 - (f) employ only Subcontractors who:
 - (i) are responsible and not suspended, debarred or in default of any obligation to the City (a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>); and
 - (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract.
 - (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba).

- B10.2 Further to B10.1(g), the Bidder shall, within three (3) Business Days of a request by the Contract Administrator, provide proof satisfactory to the Contract Administrator that the Bidder has a workplace safety and health program meeting the requirements of The Workplace Safety and Health Act (Manitoba), by providing:
- (a) a valid COR certification number under the Certificate of Recognition (COR) Program - Option 1 administered by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or
 - (b) a valid COR certification number under the Certificate of Recognition (COR) Program administered by the Manitoba Construction Safety Association; or
 - (c) a report or letter to that effect from an independent reviewer acceptable to the City, (a list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.)
- B10.3 The Bidder shall be prepared to submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B10.4 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B11. OPENING OF BIDS AND RELEASE OF INFORMATION

- B11.1 Bid Submissions will not be opened publicly.
- B11.2 Following the Submission Deadline, the names of the Bidders and their Total 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 Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B11.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- B11.4 The Bidder is advised that any information contained in any Bid Submission may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B12. IRREVOCABLE BID

- B12.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 9 of Form A: Bid.
- B12.2 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.

B13. WITHDRAWAL OF BIDS

- B13.1 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.
- B13.1.1 Notwithstanding GC.7.05(2), the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

- B13.1.2 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.
- B13.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:
- (a) retain the Bid Submission until after the Submission Deadline has elapsed;
 - (b) open the Bid Submission to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 10 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B13.1.3(b), declare the Bid withdrawn.
- B13.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B12.2 shall be liable for such damages as are imposed upon the Bidder by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law, including the right to retain the Bidder's bid security.

B14. EVALUATION OF BIDS

- B14.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B10 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B6.
- B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements if the interests of the City so require.
- B14.3 Further to B14.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his Bid Submission or in other information required to be submitted, that he is responsible and qualified.
- B14.4 Further to B14.1(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, adjusted, if necessary, as follows:
- (a) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder is within the budgetary provision for the Work, no adjustment will be made to the Total Bid Price bid; or
 - (b) if the lowest evaluated responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the unit prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting prices for units in the following order until a Total Bid Price within the budgetary provision is achieved:
 - (i) Item 19 – Transit Information Poster Kiosks lighting components
 - (ii) Item 22 – Electrical Illuminated Transit Information Poster Kiosks
 - (iii) Item 18 – Illuminated Sign Structures and Sign Boxes (type 2)
 - (iv) Item 20 – Route Markers
 - (v) Item 21 – Bus Stop Marker
 - (vi) Southbound Pembina Highway opposite University Crescent; 8 x 20
 - (vii) Northbound Pembina Highway near-side Plaza Drive; 8 x15

- (viii) Westbound Killarney Avenue near-side Pembina Highway; 8 x 15
- (ix) Southbound Pembina Highway far-side Windermere Road. 8 x15
- (x) Northbound Pembina Highway near-side Killarney Avenue; 5 x 11
- (xi) Northbound Pembina Highway far-side Dalhousie Drive North; 5 x 11
- (xii) Northbound Pembina Highway near-side Markham Road; 5 x 11
- (xiii) Northbound Pembina Highway near-side opposite Chancellor Drive; 5 x 11
- (xiv) Northbound Pembina Highway near-side University Crescent; 5 x 11
- (xv) Northbound Pembina Highway near-side opposite Manahan Avenue; 5 x 11
- (xvi) Northbound Pembina Highway near-side Crescent Drive; 5 x 11
- (xvii) Northbound Pembina Highway near-side opposite Stafford Avenue; 5 x 11
- (xviii) Northbound Pembina Highway near-side Hugo Street; 5 x 11
- (xix) Northbound Pembina Highway near-side Osborne Street; 5 x 11
- (xx) Southbound Pembina Highway near-side Warsaw Avenue; 5 x 11
- (xxi) Southbound Pembina Highway near-side Scotland Avenue; 5 x 11
- (xxii) Southbound Pembina Highway far-side McGillivray Boulevard; 5 x 11
- (xxiii) Southbound Pembina Highway near-side Clarence Avenue; 5 x 11
- (xxiv) Southbound Pembina Highway far-side opposite Plaza Drive; 5 x 11
- (xxv) Southbound Pembina Highway near-side Southpark Drive; 5 x 11
- (xxvi) Southbound Pembina Highway opposite Dartmouth Drive; 5 x 11
- (xxvii) Northbound Osborne Street near-side Stradbrook Avenue; 8 x 20
- (xxviii) Northbound Osborne Street far-side River Avenue. 8 x 20
- (xxix) Southbound Osborne Street near-side Mostyn Place; 5 x 11
- (xxx) Southbound Osborne Street near-side Wardlaw Avenue; 5 x 11
- (xxxi) Southbound Donald Street far-side Ellice Avenue; 5 x 11
- (xxxii) Southbound Donald Street far-side Stradbrook Avenue; 5 x 11
- (xxxiii) Northbound Donald Street far-side Stradbrook Avenue; 5 x 11
- (xxxiv) Northbound Donald Street far-side River Avenue; 5 x 11
- (xxxv) Item 7 - Illuminated Sign Structures and Sign Boxes (type 1 & 2)
- (xxxvi) Item 8 - Transit Information Poster Kiosks
- (xxxvii) Item 9 - Route Markers
- (xxxviii) Item 10 – Bus Stop Markers
- (xxxix) Eastbound Graham Avenue near-side Donald Street (City Place); 8 x 40
 - (xl) Westbound Graham Avenue near-side Donald Street (City Place). 8 x 40
 - (xli) Eastbound Graham Avenue near-side Fort Street (Winnipeg Square); 8 x 30
 - (xlii) Westbound Graham Avenue near-side Garry Street (Winnipeg Square); 8 x 30
 - (xliii) Eastbound Graham Avenue near-side Edmonton Street (RW Ballet); 8 x 30
 - (xliv) Westbound Graham Avenue near-side Edmonton Street (RW Ballet); 8 x 30
 - (xlv) Westbound Graham Avenue near-side Vaughan Street (The Bay); 8 x 30
 - (xlvi) Eastbound Portage Avenue near-side Tylehurst Street (Polo Park); 8 x 30
 - (xlvii) Westbound Dafoe Road near-side Gillson Street (U of Manitoba). 8 x 30
 - (xlviii) Westbound Portage Avenue opposite Tylehurst Street (Polo Park). 8 x 25
 - (xlix) Northbound Vaughan Street near-side Graham Avenue (The Bay); 8 x 20
 - (i) Westbound Dafoe Road near-side Gillson Street 5 m (U of Manitoba); 8 x 20
 - (ii) Westbound Dafoe Road near-side Gillson Street 70 m (U of Manitoba); 8 x 20
 - (iii) Southbound Henderson Highway near-side Perimeter Highway 5 x 11

B14.4.1

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.

B14.5 This Contract will be awarded as a whole.

B15. AWARD OF CONTRACT

B15.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B15.2 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.

B15.2.1 Without limiting the generality of B15.2, 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.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

C1.1 The *General Conditions for the Supply and Delivery of Goods* (Form 21: 88 03) are applicable to the Work of the Contract.

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

- D1.1 In addition to the *General Conditions for the Supply and Delivery of Goods*, 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 supply and installation of transit passenger shelters (various sizes) and passenger information signage.
- D2.2 The major components of the Work are as follows:
- (a) include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies and all things necessary for the manufacture of transit passenger shelters and transit information signage here within specified.

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;

D4. CONTRACT ADMINISTRATOR

- D4.1 The Contract Administrator is:
- Mr. Alex Regiec, MCIP
Operations Planner
Winnipeg Transit
421 Osborne Street
Winnipeg, MB R3L 2A2
- Telephone No.: (204) 986-6935
Facsimile No.: (204) 986-6863

D5. NOTICES

- D5.1 GC.7.05 is hereby amended to delete reference to "registered mail" and to replace same with "ordinary mail".
- D5.2 GC.7.05 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.
- D5.3 Further to GC.7.05, all notices, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.4, D5.5 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.
- D5.4 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
- D5.5 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:
The City of Winnipeg
Corporate Services Department
Legal Services Division
185 King Street, 3rd Floor
Winnipeg, MB R3B 1J1
Facsimile No.: (204) 947-9155

SUBMISSIONS

D6. AUTHORITY TO CARRY ON BUSINESS

- D6.1 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.

D7. WORKERS COMPENSATION

- D7.1 The Contractor shall be registered with the Workers Compensation Board of Manitoba, shall provide and maintain Workers Compensation coverage throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

D8. INSURANCE

- D8.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) all inclusive, with The City of Winnipeg being added as an additional

insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations endorsement to remain in place at all times during the performance of the Work and throughout the warranty period;

- (b) automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance;

D8.2 Deductibles shall be borne by the Contractor.

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

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

SCHEDULE OF WORK

D9. COMMENCEMENT

D9.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

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 that the Contractor is in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
 - (ii) evidence of the workers compensation coverage specified in D7; and
 - (iii) evidence of the insurance specified in D8.

D9.3 The Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting..

MEASUREMENT AND PAYMENT

D10. PAYMENT SCHEDULE

D10.1 Further to GC.9.01 and GC.9.03, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

WARRANTY

D11. WARRANTY

D11.1 Notwithstanding GC.10.01, the warranty period shall begin after the date of total installation and shall expire one (1) year thereafter unless extended pursuant to D11.2, in which case it shall expire when provided for thereunder.

D11.2 If a defect or deficiency prevents the full and normal use or operation of the Work or any portion thereof, for purposes of calculating the warranty period, time shall be deemed to cease to elapse for the defective or deficient portion, and for any portion of the Work whose use or operation is prevented by such defect or deficiency, as of the date on which the defect or deficiency is observed or the use or operation is prevented and shall begin to run again when

the defect or deficiency has been corrected or the Work may be used or operated to the satisfaction of the Contract Administrator.

- D11.3 Notwithstanding GC.10.01, GC.10.02, D11.1, and D11.2 if any law of Manitoba or of the jurisdiction in which the Work was manufactured requires, or if the manufacturer provides, a longer warranty period or a warranty which is more extensive in its nature, then the provisions of such law or manufacturer's warranty shall apply.

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

E1.1 These Specifications shall apply to the Work.

E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
TS:1	General design and layout 5' (ft) x 11' (ft) and 8' (ft) x 15' (ft)
TS:2	General design and layout 8' (ft) x 20' (ft) and 8' (ft) x 25' (ft)
TS:3	General design and layout 8' (ft) x 30' (ft) and 8' (ft) x 40' (ft)
LS-1	Illuminated Sign Type 1
LS-2	Illuminated Sign Type 2
LS-3	Transit Poster Information Kiosk
LS-4	Route and Stop Markers

E2. TRANSIT PASSENGER SHELTERS

E2.1 The Contractor shall supply deliver and install transit passenger shelters (various sizes) in accordance with the requirements hereinafter specified.

E2.2 Item No. 1 – passenger shelter shall be 8' (ft) x 40' (ft) as specified:

E2.2.1 The Contractor shall provide all columns (6" diameter), glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' (ft) x 40' (ft) shelter on site on an existing concrete bases at the bus stops located at:

- (a) Eastbound Graham Avenue near-side Donald Street (City Place); and
- (b) Westbound Graham Avenue near-side Donald Street (City Place).

E2.2.2 The 8' (ft) x 40' (ft) dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 " (in). Minimum headroom within shelter and at entrances must be 84" (in). The enclosed area for shelters (a) and (b) will be approx. 8' (ft) x 30' (ft), with an open canopy area of approx. 8' (ft) x 10' (ft).

E2.2.3 The passenger shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles or approved equal. Doors to be on both end walls of the shelters. Doors to be hinged to open inwards. Hinges to be pivot type hinges. Doors to be equipped with safety stops. Doors to be 36-3/8" (in) wide X 82-7/8" (in) minimum tall. Doors are to be equipped with door sweeps on bottom and flip-down legs to hold doors open when necessary.

E2.3 Item No. 2 – passenger shelter shall be 8' (ft) x 30' (ft) as specified:

E2.3.1 The Contractor shall provide all columns (6" diameter), glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' (ft) x 30' (ft) shelter on site on an existing concrete bases at the bus stops located at:

- (a) Eastbound Graham Avenue near-side Fort Street (Winnipeg Square);
- (b) Westbound Graham Avenue near-side Garry Street (Winnipeg Square);
- (c) Eastbound Graham Avenue near-side Edmonton Street (RW Ballet);
- (d) Westbound Graham Avenue near-side Edmonton Street (RW Ballet);
- (e) Westbound Graham Avenue near-side Vaughan Street (The Bay);
- (f) Eastbound Portage Avenue near-side Tylehurst Street (Polo Park); and

(g) Westbound Dafoe Road near-side Gillson Street (U of Manitoba).

- E2.3.2 The 8' (ft) x 30' (ft) dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 " (in). Minimum headroom within shelter and at entrances must be 84" (in). The enclosed area for shelters (a) (b) (c) (d) (e) and (g) will be approx. 8' (ft) x 30' (ft), with an open canopy area of approx. 8' (ft) x 10' (ft).
- E2.3.3 The passenger shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles or approved equal. Doors to be on both end walls of the shelters. Doors to be hinged to open inwards. Hinges to be pivot type hinges. Doors to be equipped with safety stops. Doors to be 36-3/8" (in) wide X 82-7/8" (in) minimum tall. Doors are to be equipped with door sweeps on bottom and flip-down legs to hold doors open when necessary.
- E2.4 Item No. 3 – passenger shelter shall be 8' (ft) x 25' (ft) as specified:
- E2.4.1 The Contractor shall provide all columns (6" diameter), glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' (ft) x 25' (ft) shelter on site on an existing concrete bases at the bus stops located at:
- (a) Westbound Portage Avenue opposite Tylehurst Street (Polo Park).
- E2.4.2 The 8' (ft) x 25' (ft) dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 " (in). Minimum headroom within shelter and at entrances must be 84" (in).
- E2.4.3 The passenger shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles or approved equal. Doors to be on both end walls of the shelters. Doors to be hinged to open inwards. Hinges to be pivot type hinges. Doors to be equipped with safety stops. Doors to be 36-3/8" (in) wide X 82-7/8" (in) minimum tall. Doors are to be equipped with door sweeps on bottom and flip-down legs to hold doors open when necessary.
- E2.5 Item No. 4 – passenger shelter shall be 8' (ft) x 20' (ft) as specified:
- E2.5.1 The Contractor shall provide all columns, glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of 8' (ft) x 20' (ft) shelter on site on an existing concrete bases at the following bus stops:
- (a) Northbound Vaughan Street near-side Graham Avenue (The Bay);
- (b) Westbound Dafoe Road near-side Gillson Street 5 m (U of Manitoba);
- (c) Westbound Dafoe Road near-side Gillson Street 70 m (U of Manitoba);
- (d) Southbound Pembina Highway opposite University Crescent;
- (e) Northbound Osborne Street near-side Stradbrook Avenue; and
- (f) Northbound Osborne Street far-side River Avenue.
- E2.5.2 The 8' (ft) x 20' (ft) dimensions are nominal outside roof dimensions, the actual length and width dimensions may vary by ± 9 " (in). Minimum headroom within shelters and at entrances must be 84" (in).
- E2.5.3 The passenger shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles or approved equal. Doors to be on both end walls of the shelters. Doors to be hinged to open inwards. Hinges to be pivot type hinges. Doors to be equipped with safety stops. Doors to be 36-3/8" (in) wide X 82-7/8" (in) minimum tall. Doors are to be equipped with door sweeps on bottom and flip-down legs to hold doors open when necessary.
- E2.6 Item No. 5 – passenger shelter shall be 8' (ft) x 15' (ft) as specified:
- E2.6.1 The Contractor shall provide all columns, glazing, roof structures (including torsion bars and connecting fins), fasteners and supplies necessary for the installation of shelters on site on an existing concrete bases at the following bus stops:

- (a) Northbound Pembina Highway near-side Plaza Drive;
- (b) Westbound Killarney Avenue near-side Pembina Highway; and
- (c) Southbound Pembina Highway far-side Windermere Road.

E2.6.2 The 8' (ft) x 15' (ft) dimensions are nominal outside roof dimensions the actual length and width dimensions may vary by ± 9 " (in). Minimum headroom within shelters and at entrances must be 84" (in).

E2.6.3 The passenger shelters must be equipped with two (2) doors, glazing with aluminium trims on top and bottom only, pivots and door handles or approved equal. Doors to be on both end walls of the shelters. Doors to be hinged to open inwards. Hinges to be pivot type hinges. Doors to be equipped with safety stops. Doors to be 36-3/8" (in) wide X 82-7/8" (in) minimum tall. Doors are to be equipped with door sweeps on bottom and flip-down legs to hold doors open when necessary.

E2.7 Item No. 6 – passenger shelter shall be 5' (ft) x 11' (ft) as specified:

E2.7.1 Suppliers to provide all columns, glazing, roof structures (including torsion bars and fins), fasteners and supplies necessary for the installation of shelters on site at the following bus stops:

- (a) Northbound Pembina Highway near-side Killarney Avenue;
- (b) Northbound Pembina Highway far-side Dalhousie Drive North;
- (c) Northbound Pembina Highway near-side Markham Road;
- (d) Northbound Pembina Highway near-side opposite Chancellor Drive;
- (e) Northbound Pembina Highway near-side University Crescent;
- (f) Northbound Pembina Highway near-side opposite Manahan Avenue;
- (g) Northbound Pembina Highway near-side Crescent Drive;
- (h) Northbound Pembina Highway near-side opposite Stafford Avenue;
- (i) Northbound Pembina Highway near-side Hugo Street;
- (j) Northbound Pembina Highway near-side Osborne Street;
- (k) Southbound Pembina Highway near-side Warsaw Avenue;
- (l) Southbound Pembina Highway near-side Scotland Avenue;
- (m) Southbound Pembina Highway far-side McGillivray Boulevard;
- (n) Southbound Pembina Highway near-side Clarence Avenue;
- (o) Southbound Pembina Highway far-side opposite Plaza Drive;
- (p) Southbound Pembina Highway near-side Southpark Drive;
- (q) Southbound Pembina Highway opposite Dartmouth Drive;
- (r) Southbound Osborne Street near-side Mostyn Place;
- (s) Southbound Osborne Street near-side Wardlaw Avenue;
- (t) Southbound Donald Street far-side Ellice Avenue;
- (u) Southbound Donald Street far-side Stradbrook Avenue;
- (v) Northbound Donald Street far-side Stradbrook Avenue;
- (w) Northbound Donald Street far-side River Avenue; and
- (x) Southbound Spence Street near-side Ellice Avenue

E2.7.2 The 5' (ft) x 11' (ft) dimensions are nominal outside dimensions the actual length and width dimensions may vary by ± 2 " (in). Minimum headroom within shelters and at entrances must be 80" (in).

E2.7.3 The passenger shelters must include a 30" (in) to 40" (in) wide doorway opening on one 11' (ft) side. Doors are **NOT** to be included. The passenger shelter design must allow for simple conversion from a left side door opening to a right side door opening.

E2.7.4 The 5' (ft) x 11' (ft) shelters are **NOT** required to have electric lighting fixtures.

E3. ILLUMINATED SIGN STRUCTURES AND SIGN BOXES

E3.1 Description

E3.1.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the illuminated signs and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:

- (a) Supply and installation of Type 1 and Type 2 Illuminated Signs including structure as per design Drawings.
- (b) Supply, fabrication and installation of two (2) two-sided illuminated stop identification displays per structure as per design Drawings for both Type 1 and Type 2 signs.

E3.1.2 The Contractor shall submit stamped engineer's drawings for review and approval with when requested by the Contract Administrator. Engineer's drawings shall show all details of construction and fastenings for erections and shall be as specified or approved.

E3.1.3 The Contractor shall submit full colour design drawings of sign faces and sign boxes including materials, lighting components, connections and fastenings for review and approval when requested by the Contract Administrator.

E3.1.4 Autocad files of the design drawings shall be made available upon request by e-mail to the Contract Administrator.

E3.2 Materials

E3.2.1 The Illuminated Transit Structures to be aluminium 6016-T6 structural tubing with architectural 6063-T5 angles.

E3.2.2 All fastenings and hardware to be stainless steel.

E3.2.3 All steel plates to be E coated and finished with powder paint.

E3.2.4 All paint to be powder paint.

E3.2.5 Illuminated sign boxes:

- (a) Materials shall be free from defects impairing strength, durability or appearance, and be of best commercial quality for use intended.
- (b) Materials and methods used to assemble Work of this section shall be of such properties and construction to safely sustain the loads normally imposed thereon, as would be required of this type of installation.
- (c) All exposed fastenings shall be of the same material, colour and finish as the metals to which these are supplied, unless otherwise specified or called for on the Drawings.
- (d) All metal shall be free from scale, buckles, pits and other defects.
- (e) Sign components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
- (f) Identification signs to be constructed of 20 ga. sheet metal with 12.5 mm F-Section vinyl retainers. Cabinet to be painted to match sign structure. General Paint - Match silver powder paint on shelters.
- (g) Lamps to be T5 bright white fluorescent tubes. Bidder to provide lighting schematic including ballast. Lamps and ballasts to be high output.
- (h) Acrylic to be SG (sign grade).

- (i) Lexan face to be 4.6 mm (3/16") clear lexan.
- (j) Background to be 3M blue vinyl to match Pantone #286.
- (k) Logo to be white vinyl.
- (l) Copy to be 50 - 125 mm high Frutiger Bold as per the design Drawings.

E3.3 Fabrication

- E3.3.1 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E3.3.2 Vinyl graphics to be applied to second surface of Lexan background.
- E3.3.3 The workmanship shall meet established practice in modern shops.
- E3.3.4 If damage occurs during fabrication, the Contract Administrator shall be notified to facilitate the implementation of remedial measures. Remedial repair measures will be subject to the approval of the Contract Administrator. Their cost will be paid by the Contractor.
- E3.3.5 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

E3.4 Clean Material

- E3.4.1 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.

E3.5 Finish

- E3.5.1 All portions of the Work shall be neatly finished. Shearing, cutting, chipping and machining shall be done neatly and accurately. Finished members shall be true to line, free from twists, bends open joints, sharp corners and edges.
- E3.5.2 Painting
- E3.5.3 Clean all metal thoroughly and apply recommended primer.
- E3.5.4 All aluminium to be sanded prior to powder painting.
- E3.5.5 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E3.5.6 All coats must be thoroughly dry before applying succeeding coats.
- E3.5.7 All Work where a coat of material has been applied, must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacture is not in Winnipeg all contractor to supply digital photos via email of each step for review and approval.

E4. TRANSIT INFORMATION POSTER KIOSKS

E4.1 Description

- E4.1.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the signs and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
 - (a) Supply and Installation of Transit information poster kiosks as per design Drawings.
 - (b) Supply and Installation of lighting components for Transit information poster kiosks as per design Drawings and in accordance with E4.7.

E4.2 Materials

E4.2.1 The structure to be aluminium 6016-T6 structural tubing with architectural 6063-T5 angles.

E4.2.2 All fastenings and hardware to be stainless steel.

E4.2.3 All steel plates to be E coated and finished with powder paint.

E4.2.4 All paint to be powder paint.

E4.2.5 Sign boxes:

- (a) Materials shall be free from defects impairing strength, durability or appearance, and be of best commercial quality for use intended.
- (b) Materials and methods used to assemble Work of this section shall be of such properties and construction to safely sustain the loads normally imposed thereon, as would be required of this type of installation.
- (c) All exposed fastenings shall be of the same material, colour and finish as the metals to which these are supplied, unless otherwise specified or called for on the Drawings.
- (d) All metal shall be free from scale, buckles, pits and other defects.
- (e) Sign components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
- (f) Cabinet to be extruded aluminium. Cabinet to be powder painted to match shelters.
- (g) Acrylic to be SG (sign grade).
- (h) Lexan face to be 4.6 mm (3/16") clear lexan.
- (i) Background to be 3M blue vinyl to match Pantone #286.
- (j) Logo and symbols to be white vinyl.
- (k) All glass to be tempered.

E4.3 Fabrication

E4.3.1 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.

E4.3.2 Vinyl graphics to be applied to second surface of Lexan background.

E4.3.3 The workmanship shall meet established practice in modern shops.

E4.3.4 If damage occurs during fabrication, the Contract Administrator shall be notified to facilitate the implementation of remedial measures. Remedial repair measures will be subject to the approval of the Contract Administrator. Their cost will be paid by the Contractor.

E4.3.5 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

E4.4 Clean Material

E4.4.1 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.

E4.5 Finish

E4.5.1 All portions of the Work shall be neatly finished. Shearing, cutting, chipping and machining shall be done neatly and accurately. Finished members shall be true to line, free from twists, bends open joints, sharp corners and edges.

E4.6 Painting

E4.6.1 Clean all metal thoroughly and apply recommended primer. All aluminium to be sanded prior to powder paint.

- E4.6.2 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E4.6.3 All coats must be thoroughly dry before applying succeeding coats.
- E4.6.4 All Work where a coat of material has been applied, must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacture is not in Winnipeg all contractor to supply digital photos via email of each step for review and approval.
- E4.7 Lighting Components (Item 19 on Form B: Prices)
- E4.7.1 Lamps to be T5 bright white fluorescent tubes. Bidder to provide lighting schematic including ballast. Lamps and ballasts to be high output.

E5. ROUTE MARKERS

- E5.1 Description
- E5.2 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the illuminated signs and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
- (a) Supply and installation of bus route markers as per design Drawings.
- E5.3 Material
- E5.4 Sign boxes:
- (a) Materials shall be free from defects impairing strength, durability or appearance, and be of best commercial quality for use intended.
 - (b) Materials and methods used to assemble Work of this section shall be of such properties and construction to safely sustain the loads normally imposed thereon, as would be required of this type of installation.
 - (c) All exposed fastenings shall be of the same material, colour and finish as the metals to which these are supplied, unless otherwise specified or called for on the Drawings.
 - (d) All metal shall be free from scale, buckles, pits and other defects.
 - (e) Sign components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
 - (f) Route identification signs to be constructed of 20 ga. sheet metal with 12.5 mm F-Section vinyl retainers. Cabinet to be painted to match sign structure. General Paint - Match silver paint on shelters.
 - (g) Lamps to be T5 bright white fluorescent tubes. Bidder to provide lighting schematic including ballast. Lamps and ballast to be high output.
 - (h) Acrylic to be SG (sign grade)
 - (i) Lexan face to be 4.6 mm (3/16") clear lexan.
 - (j) Background to be 3M blue vinyl to match Pantone #286.
 - (k) Copy to be 150 mm high Frutiger Bold as per the design Drawings.
- E5.5 Fabrication
- E5.5.1 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.

- E5.5.2 Vinyl graphics to be applied to second surface of Lexan background.
- E5.5.3 The workmanship shall meet established practice in modern shops.
- E5.5.4 If damage occurs during fabrication, the Contract Administrator shall be notified to facilitate the implementation of remedial measures. Remedial repair measures will be subject to the approval of the Contract Administrator. Their cost will be paid by the Contractor.
- E5.5.5 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.
- E5.6 **Clean Material**
- E5.6.1 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.
- E5.7 **Finish**
- E5.7.1 All portions of the Work shall be neatly finished. Shearing, cutting, chipping and machining shall be done neatly and accurately. Finished members shall be true to line, free from twists, bends open joints, sharp corners and edges.
- E5.8 **Painting**
- E5.8.1 Clean all metal thoroughly and apply recommended primer. All aluminium to be sanded prior to painting.
- E5.8.2 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E5.8.3 All coats must be thoroughly dry before applying succeeding coats.
- E5.8.4 All Work where a coat of material has been applied, must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacture is not in Winnipeg all contractor to supply digital photos via email of each step for review and approval.

E6. BUS STOP MARKER

- E6.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the bus stop markers and related Work as shown on the Drawings and as hereinafter specified, including, but not necessarily confined to the following:
- (a) Supply, fabrication and installation of marker structure.
 - (b) Installation of existing bus stop sign plate.
- E6.2 **Materials**
- E6.2.1 The structure to be aluminium 6016-T6 structural tubing with architectural 6063-T5 angles.
- E6.2.2 All fastenings and hardware to be stainless steel.
- E6.2.3 All steel plates to be E coated and finished with powder paint.
- E6.2.4 All paint to be powder paint.
- E6.2.5 Mounting plate assembly to be galvanized steel.
- E6.3 **Fabrication**
- E6.3.1 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.

- E6.3.2 The workmanship shall meet established practice in modern shops.
- E6.3.3 If damage occurs during fabrication, the Contract Administrator shall be notified to facilitate the implementation of remedial measures. Remedial repair measures will be subject to the approval of the Contract Administrator. Their cost will be paid by the Contractor.
- E6.3.4 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.
- E6.4 Clean Material
 - E6.4.1 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.
- E6.5 Finish
 - E6.5.1 All portions of the Work shall be neatly finished. Shearing, cutting, chipping and machining shall be done neatly and accurately. Finished members shall be true to line, free from twists, bends open joints, sharp corners and edges.
 - E6.5.2 All welds to be ground smooth prior to priming.
 - E6.5.3 All joins to be filled and sanded smooth prior to priming.
- E6.6 Painting
 - E6.6.1 Clean all metal thoroughly and apply recommended primer. All aluminium to be sanded prior to powder painting.
 - E6.6.2 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
 - E6.6.3 All coats must be thoroughly dry before applying succeeding coats.
 - E6.6.4 All Work where a coat of material has been applied, must be inspected and approved by the Contract Administrator before the application of the succeeding specified coat, otherwise no credit for the coat applied will be given, and the Contractor shall then assume the responsibility and recoat the Work in question. Report each coat applied to the Contract Administrator when completed for inspection and approved to comply with the above. Where manufacturer is not in Winnipeg, Contractor shall supply digital photos via email of each step for review and approval.

E7. ELECTRICAL

- E7.1 Furnish all labour, new material, equipment and services for the complete installation of the electrical Work to connect Transit Poster Information Kiosks to adjacent power pedestals.
- E7.2 Contractor to push all wires under existing paving. Saw cut, remove and dispose of concrete sidewalk and stockpile unit pavers only as required to allow for equipment to push lines. All removals is incidental to the unit prices bid for this contract.
- E7.3 Conform to all Codes and pay all Fees. Upon completion, present a "Certificate of Approval" for electrical Work from the Inspection Department.
- E7.4 Examine the Site and local conditions affecting the Work under this contract.
- E7.5 Refer to associated drawings and specifications for electrical Work in connection therewith.
- E7.6 Install all Work promptly and in advance of concrete pouring and/or construction.
- E7.7 The Electrical Trade shall be responsible to make good all "Cutting and Patching" required by his section of the Contract. Include all trenching and backfilling.

- E7.8 All Work shall be executed in a first class and workmanlike manner. All supports, hangers, and securing devices shall be solid and substantial. All Work shall be laid out neatly in its mechanical appearance. It shall be logically arranged for simplicity of installation and accessibility.
- E7.9 Provide corrected "as-built" drawings on completion of the project. All underground services shall be indicated on as-builts and dimensioned. Provide shop drawings for approval of all major electrical items. Provide three (3) copies of manufacturers maintenance instructions bound in hard covered book for each piece of major electrical equipment.
- E7.10 Provide drawings Stamped by an Electrical Engineer licensed to practice in the Province of Manitoba showing all electrical requirements for E3, E4, and E5.
- E7.11 Identify circuits/equipment with lamacoid nameplates.
- E7.12 "Temporary Lighting and Power" shall be provided by the General Contractor.
- E7.13 All electrical apparatus shall be properly grounded according to the latest edition of the "Canadian Electrical Code"
- E7.14 All equipment, wiring, conduit, grounding, seals, etc., shall be in compliance with the "Canadian Electrical" and local "Codes". Wiring in finished grade shall be in rigid PVC conduits, complete with ground conductor.
- E7.15 Wiring shall be copper, RWU-90, insulated, minimum #12 AWG.
- E7.16 Wire and connect to Transit information poster kiosks from existing power pedestals at each stop, approximately 12m length per stop. Provide lockable, weatherproof disconnect switches for kiosks. Locate as directed on Site.
- E7.17 Co-ordinate installation with Manitoba Hydro. Installation to conform with all requirements.
- E7.18 Provide ground rod and grounding connections to suit Manitoba Hydro and City of Winnipeg Inspection Department.
- E7.19 Repair concrete sidewalk where removed for installation of pushing lines. All work to be to City of Winnipeg Specification CW 3325. Reinstall any unit pavers stockpiled on site for concrete removal. Installation of pavers, including supply and installation of 13mm sand setting bed, is incidental to the unit price for concrete sidewalk repair.

E8. WORKMANSHIP AND MATERIAL

- E8.1 The shelters installation as specified in E2 shall include the following:
- (a) Disassemble existing shelters and load, transport, and off-load to a site to be determined by the Contract Administrator;
 - (b) Procedures for disassembly, loading, transportation and off-loading must not damage any element or impede the re-use of the old shelter in a new location. Any existing fixtures remaining in the concrete base must be removed and the concrete repaired in a manor approved by the Contract Administrator;
 - (c) Drill existing concrete base and install all columns, glazing, doors, roof structures, and lighting units; and
 - (d) Run electrical wiring for lighting (note, wiring runs must be hidden from view within the shelter structure or must be vandalism proof).
- E8.2 The passenger shelter must include fully transparent walls using glazing panels with a minimum of structure between panels and translucent barrel vaulted roofs, as per Winnipeg Transit's current design for the bus stop upgrade projects (see attached drawings).

- E8.3 The passenger shelter structural components must be aluminium, with columns to be ¼" (in) thick aluminium 6061-T6 structural tubing, cut sheet plates to be aluminium 6061-T6, and torsion bars to be aluminium 6360-T6. The shelter walls and roofs must be water-proof. The passenger shelter must be designed to resist damage from vandalism and must be simple to maintain and clean.
- E8.4 The passenger shelter must be designed to stand without any glazing.
- E8.5 The passenger shelter must be designed for easy assembly and must not require any drilling, thread tapping, welding, or painting of structural members or glazing support fixtures.
- E8.6 Fasteners used in accessible locations must be of tamper proof design. Connection plates between shelter roof and columns to be easily accessible and not enclosed.
- E8.7 All fasteners and mounting hardware use to fasten the shelter to the concrete base at ground level must be stainless steel or approved equal.
- E8.8 The passenger shelter must include a base plate with adjustable stainless steel bolts and rods for levelling to accommodate installations on poured concrete pads with imperfections or the slope of the pad surface. Adjustment capabilities must be a minimum of 6" (in). Shelter mounting to the concrete base must meet all applicable codes and regulations governing structures in the public right-of-way, and the design must approved by a registered professional Engineer licensed to practice in the Province of Manitoba.
- E8.9 Shelter and all shelter components except for glazing must be powder painted and sparkling silver in colour.
- E8.10 All aluminium components shall be free of oil, mill scale, rust, pits and other surface defects. All weld splatter and burrs must be ground smooth. Shelters will be installed in a corrosive environment.
- E8.11 The passenger shelter to be equipped with translucent barrel vaulted roofs of ¼" (in) gray tint polycarbonate. End caps of roofs to be aluminium big fin assemblies. Roofs must be shipped fully assembled and sealed.
- E8.12 The passenger shelter end caps must include two (2) 6" (in) louver ventilation openings. Louvers to be painted to match the gray/silver aluminium fin assemblies.
- E8.13 Glazing to be tempered glass, minimum 3/8" (in) thickness, designed for outdoor glazing use. A full width horizontal blue safety line at approximately the middle of the glazing must be included on all sheets. A "**Non Smoking**" logo should be incorporated into the glazing for front and back walls.
- E8.14 The entire bottom perimeter of the shelter must have a 4" (in) aluminium skirting between the glass and the concrete shelter pads to prevent the entry of wind. The bottom perimeter skirting seal must be designed with sufficient opening to allow water to drain out of the low side of the shelter. The skirting seal must allow for easy removal with simple hand tools to allow the quick replacement of glass panels.
- E8.15 The passenger shelter must have electric lighting fixtures; self-ballasted mini-spiral Lamp 13W 120V 60Hz 225mA housed inside a light cabinet that follows the curvature of the roof line.
- E8.16 Proportion items to meet the National Building Code for clause E3, E4, E5, and E6. Items shall support loads recommended by the Code unless specific loads are indicated on the Drawings.
- E8.17 Fabricate work to shape and size with sharp lines, angles and smooth surfaces. Connections shall be securely welded, bolted or riveted. Welds shall be dressed smooth on exposed surfaces. Rabbets, lugs and brackets shall be provided so that the Work can be assembled in a neat substantial manner. Thickness of metal and design of assembly and support shall give ample strength and stiffness.

- E8.18 Exposed ends and edges of metal shall be smooth. Joints exposed to the weather shall be formed to exclude water or to drain.
- E8.19 Insofar as possible, fit and shop assemble Work and deliver to the Site in largest practical sections.
- E8.20 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.
- E8.21 Fabricate Work in strict accordance with shop drawings, and in general to details, sizes, materials shown on Drawings and specified herein.
- E8.22 Assembly: Material intended for use in the various assemblies shall be straight, clean, sharply defined profiles, assembled in such a way that no disfigurements will show in the finished work, or impair the strength.
- E8.23 Welding: All welding shall conform to the requirements of the current CSA Standard W.59 and the fabricator shall be fully approved by the Canadian Welding Bureau, in conformance with the requirements of the current CSA Standard W.47. Welding shall be done by currently licensed welders only.
- E8.24 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E8.25 Finish: Fabricated material Work shall be delivered with shop coat primer paint or galvanizing, or other finish as specified.
- E8.25.1 Following installation, apply a touch up coat of shop primer or galvanizing to match finish to all surface where finish has been removed and to installation devices such as bolts, screws, welds and the like.

E9. DRAWING AND ASSEMBLY INSTRUCTIONS

- E9.1 The Contractor shall submit drawings, material list, specifications for clause E2, and descriptive information within five (5) Business Days when called by the Contract Administrator.
- E9.2 In sufficient detail to permit evaluation of the shelters offered, the drawings must clearly show the dimensions of the shelter, the dimensions and arrangement of glass, structural details and assembly details.
- E9.3 The Contractor shall submit stamped structural engineer's drawings as per clause E3, E4, E5, and E6 for review and approval when requested by the Contract Administrator within five (5) Business Days. Engineer's drawings shall show all details of construction and fastenings for erections and shall be as specified or approved.
- E9.4 The Contractor shall submit full colour design drawings of sign faces and sign boxes including materials, lighting components, connections and fastenings for review and approval when requested by the Contract Administrator.
- E9.5 Auto-cad files of the design drawings shall be made available upon request by e-mail to the Contract Administrator.
- E9.6 A complete set of assembly instructions must be included for each shelter with a Section in English.

E10. SAMPLES / PROTOTYPES

- E10.1 The Contract shall supply prototypes for clauses E3, E4, E5 and E6. These prototype's are to be delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of signs. Cost of prototype is to be incidental to the unit prices bid on this project. The prototype shall be the minimum acceptable standard for all materials, workmanship and finishes.

- E10.2 All workmanship and all material furnished and supplied under this Section are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of this Specification.
- E10.3 Manufacturer shall be a member of the Canadian Welding Bureau and be certified to design welds.
- E10.4 All workmanship and all material furnished and supplied under this Bid Opportunity are subject to close and systematic inspection and testing by the Contract Administrator including all operations from the selection and production of materials through to final acceptance of the Work. The Contractor shall be wholly responsible for the control of all operations, incidental thereto notwithstanding any inspection or approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works which are not in accordance with the requirements of this Section.

E11. DELIVERY AND STORAGE

- E11.1 The Contract shall store all units in a protected location, immediately upon arrival on the Site.
- E11.2 The Contract shall remove from Site any units which have been damaged during transportation and replace.

E12. INSTALLATION AND CO-ORDINATION WITH OTHERS

- E12.1 The Contractor is advised of the following:
- (a) Disconnect and disassemble existing illuminated sign structures, load, transport, and off-load to a site to be determined by the Contract Administrator.
 - (b) All illuminated signs to be installed on existing bases. Salvage existing bolt assemblies for reuse.
 - (c) Contractor to make final electrical connection to electrical source at sign base.
 - (d) The Contract Administrator will notify the Contract Administrator of installation date with a minimum of three (3) working days.
 - (e) Any damage to the illuminated structure or signs, incurred during fabrication, delivery, installation etc., is to be repaired to the satisfaction of the Contract Administrator within three (3) working days of installation. All signs to be installed on existing concrete sidewalk paving. Provide installer with bolt and electrical connection template and bolts for installation; and
 - (f) Contractor to supply electrical connection from power pedestal, including all coring, trenching, conduit, wiring, backfill and surface repair.