



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**110-2007 BID OPPORTUNITY**

**SUPPLY AND INSTALLATION OF WINNIPEG TRANSIT BUS STOP SIGNAGE  
SYSTEM**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 SUPPLY AND INSTALLATION OF WINNIPEG TRANSIT BUS STOP SIGNAGE SYSTEM

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 pm Winnipeg time, February 20, 2007.

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 D3.1.

B3.2 If the Bidder finds errors, discrepancies or omissions in the Bid Opportunity, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.

B3.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

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

### **B4. ADDENDA**

B4.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Bid Opportunity, or clarifying the meaning or intent of any provision therein.

B4.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.

B4.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

B4.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda 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 10 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 B14.
- 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 COMPONENTS**

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices;
  - (c) Form G1: Bid Bond and Agreement to Bond, or  
Form G2: Irrevocable Standby Letter of Credit and Undertaking, or  
a certified cheque or draft;

- 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, to constitute a responsive Bid.
- B6.4 The Bid shall be submitted enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address.
- B6.4.1 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.
- B6.5 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.6 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.
- B6.7 Bids submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B6.8 Bids shall be submitted to:  
The City of Winnipeg  
Corporate Finance Department  
Materials Management Branch  
185 King Street, Main Floor  
Winnipeg MB R3B 1J1

**B7. BID**

- B7.1 The Bidder shall complete Form A: Bid, making all required entries.
- B7.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, his name shall be inserted;
  - (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
  - (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
  - (d) if the Bidder is carrying on business under a name other than his own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B7.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.
- B7.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.
- B7.4 Paragraph 12 of Form A: Bid shall be signed in accordance with the following requirements:
- (a) if the Bidder is a sole proprietor carrying on business in his own name, it shall be signed by the Bidder;
  - (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
  - (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;

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

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

B7.4.2 All signatures should be witnessed, except where a corporate seal has been affixed.

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 C.12.2.3(c), prices on Form B: Prices shall not include the Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

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; 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/or 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 Branch internet site at <http://www.winnipeg.ca/matmgt>); and
- (b) have successfully carried out work similar in nature, scope and value to the Work; and
- (c) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (d) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

B9.3 Further to B9.2(d), 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/Subcontractor 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 administered by the Manitoba Construction Safety Association or by the Manitoba Heavy Construction Association's Safety, Health and Environment Program; or

- (b) a report or letter to that effect from an independent reviewer acceptable to the City. (A list of acceptable reviewers and the review template are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt.>)

B9.4 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.

B9.5 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. BID SECURITY**

B10.1 The Bidder shall provide bid security in the form of:

- (a) a bid bond, in the amount of at least ten percent (10%) of the Total Bid Price, and agreement to bond of a company registered to conduct the business of a surety in Manitoba, in the form included in the Bid Submission (Form G1: Bid Bond and Agreement to Bond); or
- (b) an irrevocable standby letter of credit, in the amount of at least ten percent (10%) of the Total Bid Price, and undertaking issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form included in the Bid Submission (Form G2: Irrevocable Standby Letter of Credit and Undertaking); or
- (c) a certified cheque or draft payable to "The City of Winnipeg", in the amount of at least fifty percent (50%) of the Total Bid Price, drawn on a bank or other financial institution registered to conduct business in Manitoba.

B10.1.1 If the Bidder submits alternative bids, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.

B10.1.2 All signatures on bid securities shall be original, and shall be witnessed or sealed as required.

B10.2 The bid security of the successful Bidder and the next two lowest evaluated responsive and responsible Bidders will be released by the City when a Contract for the Work has been duly executed by the successful Bidder and the performance security furnished as provided herein. The bid securities of all other Bidders will be released when a Contract is awarded.

B10.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B10.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.

B10.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.

B10.3 The bid securities of all Bidders will be released by the City as soon as practicable following notification by the Contract Administrator to the Bidders that no award of Contract will be made pursuant to the Bid Opportunity.

## **B11. OPENING OF BIDS AND RELEASE OF INFORMATION**

B11.1 Bids will not be opened publicly.

B11.2 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 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 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 11 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 until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid.

## **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 C23.3, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.

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 12 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 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 12 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 B9 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B5.

B14.2 Further to B14.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid 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.

- 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 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; or
  - (b) If the lowest responsive Bid submitted by a responsible and qualified Bidder exceeds the budgetary provision for the Work, the Total Bid Prices of all responsive Bids submitted by responsible and qualified Bidders will be adjusted by progressively deducting items (i) through (v) in the order listed, until a Total Bid Price within the budgetary provision is achieved.
    - (i) Item 10 - Supply and install transit information poster kiosk
    - (ii) Item 9 – Supply and install bus stop totem with flags
    - (iii) Item 8 – Supply and install flag for existing illuminated sign
    - (iv) Item 11 – Supply and install timetable display
    - (v) Item 7 – Supply and install bus stop flag with elite post
- 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.

## **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 Subject to B15.2, 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.
- B15.3.1 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.

## **PART C - GENERAL CONDITIONS**

### **C0. GENERAL CONDITIONS**

- C0.1 The *General Conditions for Construction* (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Construction* 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>.
- 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 Construction*.

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

#### **D1. GENERAL CONDITIONS**

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

#### **D2. SCOPE OF WORK**

D2.1 The Work to be done under the Contract shall consist of the manufacture, supply and installation of transit signage system as shown on the drawings including all electrical connections.

D2.2 The major components of the Work are as follows:

- (a) Supply and installation of bus stop flags c/w route markers and vinyl graphics;
- (b) Supply and installation of Elite pole system;
- (c) Manufacture, supply and installation of Bus Stop Totem;
- (d) Manufacture, supply and installation of Transit Information Poster Kiosks; and
- (e) Supply and installation of timetable displays.

#### **D3. CONTRACT ADMINISTRATOR**

D3.1 The Contract Administrator is McGowan Russell Group, represented by:

Jackie Wilkie  
Landscape Architect  
200-120 Fort St. Winnipeg MB R3C 1C7  
Telephone No. (204) 956 0396  
Facsimile No. (204) 956 1265

D3.2 At the pre-construction meeting, Ms. Wilkie will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

#### **D4. CONTRACTOR'S SUPERVISOR**

D4.1 At the pre-construction meeting, the Contractor shall identify his designated supervisor and any additional personnel representing the Contractor and their respective roles and responsibilities for the Work.

#### **D5. NOTICES**

D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.

D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.

D5.3 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  
Attn: Chief Administrative Officer  
Administration Building, 3rd Floor  
510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: (204) 949-1174

- D5.4 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  
Attn: City Solicitor  
185 King Street, 3rd Floor  
Winnipeg MB R3B 1J1  
Facsimile No.: (204) 947-9155

## **D6. FURNISHING OF DOCUMENTS**

- D6.1 Upon award of the Contract, the Contractor will be provided with five (5) complete sets of the Bid Opportunity. If the Contractor requires additional sets of the Bid Opportunity, they will be supplied to him at cost.

## **SUBMISSIONS**

### **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. SAFE WORK PLAN**

- D8.1 The Contractor shall provide the Contract Administrator with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.
- D8.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.

### **D9. INSURANCE**

- D9.1 The Contractor shall provide and maintain the following insurance coverage:
- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, unlicensed motor vehicle liability, non-owned automobile liability and products and completed operations, to remain in place at all times during the performance of the Work and throughout the warranty period;

- (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) at all times during the performance of the Work and until the date of Total Performance;
- (c) an all risks Installation Floater carrying adequate limits to cover all machinery and equipment utilized during the performance of the Work.

D9.2 Deductibles shall be borne by the Contractor.

D9.3 The Contractor shall provide the City Solicitor with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work but in no event later than the date specified in C4.1 for the return of the executed Contract.

D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

## **D10. PERFORMANCE SECURITY**

D10.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.

D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D10.2 If the bid security provided in his Bid was not a certified cheque or draft pursuant to B10.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

## **D11. SUBCONTRACTOR LIST**

D11.1 The Contractor shall provide the Contract Administrator with a complete list of the Subcontractors whom the Contractor proposes to engage (Form J: Subcontractor List) 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 the General Conditions for the return of the executed Contract.

## **SCHEDULE OF WORK**

### **D12. COMMENCEMENT**

D12.1 The Contractor shall not commence any Work until he is in receipt of a letter of intent from the Award Authority authorizing the commencement of the Work.

D12.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:

- (i) evidence of authority to carry on business specified in D7;
  - (ii) evidence of the workers compensation coverage specified in C6.15;
  - (iii) the Safe Work Plan specified in D8;
  - (iv) evidence of the insurance specified in D9;
  - (v) the performance security specified in D10;
  - (vi) the Subcontractor list specified in D11; and
  - (vii) shop drawings and design drawings for all works as specified in E3.
- (b) the Contractor has attended a pre-construction meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a pre-construction meeting.

D12.3 The Contractor shall commence the Work on the Site within seven (7) Working Days of receipt of the letter of intent.

D12.3 The City intends to award this Contract by February 23, 2007

D12.3.1 If the actual date of award is later than the intended date, the dates specified for Critical Stages, Substantial Performance, and Total Performance will be adjusted by the difference between the aforementioned intended and actual dates.

### **D13. WORKING DAYS**

D13.1 Further to C1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.

D13.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.

D13.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.

D13.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

### **D14. SUBSTANTIAL PERFORMANCE**

D14.1 The Contractor shall achieve Substantial Performance by October 15, 2007.

D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.

D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

### **D15. TOTAL PERFORMANCE**

D15.1 The Contractor shall achieve Total Performance by October 31, 2007.

D15.2 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.

D15.3 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.

**D16. LIQUIDATED DAMAGES**

D16.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City five hundred dollars (\$500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.

D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

**D17. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)**

D17.1 Further to C6.24, 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).

**MEASUREMENT AND PAYMENT**

**D18. PAYMENT**

D18.1 Further to C12, effective January 1, 2007 the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

**WARRANTY**

**D19. WARRANTY**

D19.1 Notwithstanding C13.2, the warranty period shall begin on the date of Total Performance and shall expire five (5) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

**FORM H1: PERFORMANCE BOND**  
(See D10)

KNOW ALL MEN BY THESE PRESENTS THAT

\_\_\_\_\_ ,  
(hereinafter called the "Principal"), and

\_\_\_\_\_ ,  
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

\_\_\_\_\_ dollars (\$\_\_\_\_\_)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee dated the

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, for:

BID OPPORTUNITY NO. 110-2007

SUPPLY AND INSTALLATION OF WINNIPEG TRANSIT BUS STOP SIGNAGE SYSTEM

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

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

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

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

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

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

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

SIGNED AND SEALED  
in the presence of:

\_\_\_\_\_  
(Witness)

\_\_\_\_\_  
(Name of Principal)

Per: \_\_\_\_\_ (Seal)

Per: \_\_\_\_\_

\_\_\_\_\_  
(Name of Surety)

By: \_\_\_\_\_ (Seal)  
(Attorney-in-Fact)

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

\_\_\_\_\_  
(Date)

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

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 110-2007

SUPPLY AND INSTALLATION OF WINNIPEG TRANSIT BUS STOP SIGNAGE SYSTEM

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

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

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

\_\_\_\_\_ Canadian dollars.

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

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

Partial drawings are permitted.

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

\_\_\_\_\_  
(Address)

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

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

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

\_\_\_\_\_  
(Date)

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

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

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

\_\_\_\_\_  
(Name of bank or financial institution)

Per: \_\_\_\_\_  
(Authorized Signing Officer)

Per: \_\_\_\_\_  
(Authorized Signing Officer)



## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.2.1 *The City of Winnipeg Standard Construction Specifications* is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at <http://www.winnipeg.ca/matmgt>.
- E1.2.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.2.3 Further to C2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.3 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
LS-1	Bus Stop Flags
LS-2	Bus Stop Totem
LS-3	Transit Information Poster Kiosk
LS-4	Route Marker & Timetable Display

#### E2. BUS STOP SIGNAGE LOCATIONS

- E2.1 The following chart lists the locations where each type of sign is to be installed. Quantities for each sign type are provided for reference. Bid quantities are as per Form B Unit Prices.

BUS STOP LOCATION	Illuminated Sign Flag sets	Bus Stop Totem	Bus Stop Marker	Tip Kiosk	# of Route Tiles	Time-table display	Route Marker
<b>Graham Avenue Bus Stops:</b>							
WB Graham, N/S Garry	1			1	21	3	
WB Graham, N/S Donald	1			2	24		
WB Graham N/S Edmonton	1			2	27		
WB Graham N/S Vaughan	1			2	24	3	
EB Graham, N/S Edmonton	1			1	27	6	
EB Graham N/S Donald	1			1	30	6	
EB Graham, N/S Fort	1			1	27	2	
<b>Osborne Exchange:</b>							
Westbound	1			1		3	1
Northbound	1					4	1
Southbound	1					2	1
<b>Vaughan Street Bus Stops:</b>							
NB Vaughan, N/S St. Mary			1	1	24	3	
NB Vaughan, N/S Graham	1			1	21	1	
NB Vaughan, N/S Portage			1	1	12		
SB Vaughan, N/S St. Mary			1	2	20		

<b>BUS STOP LOCATION</b>	<b>Illuminated Sign Flag sets</b>	<b>Bus Stop Totem</b>	<b>Bus Stop Marker</b>	<b>Tip Kiosk</b>	<b># of Route Tiles</b>	<b>Time-table display</b>	<b>Route Marker</b>
<b>Portage Avenue Bus Stops:</b>							
WB Portage, N/S Garry	1			2	27		
WB Portage, N/S Donald	1			2	30		
WB Portage, N/S Carlton	1				6	2	
WB Portage, N/S Edmonton	1			1	27	2	
WB Portage N/S Colony			1		24	5	
WB Portage, N/S Spence (UofW)	1			1	9		
WB Portage, N/S Tylehurst (Polo Park)	1			1	12		
EB Portage, N/S Tylehurst (Polo Park)	1			1	18		
EB Portage, N/S Balmoral (UofW)	1			1	18		
EB Portage, N/S Vaughan	1			1	18		
EB Portage, N/S Edmonton	1			2	27	1	
EB Portage, N/S Donald		1		1	30		
EB Portage, N/S Fort	1			2	27	1	
<b>University of Manitoba Terminal:</b>							
4 stops	1		3			10	
<b>Pembina Bus Stops:</b>							
WB Killarney, N/S Pembina	1				9	4	
NB Pembina, N/S Killarney	1				9	3	
NB Pembina, N/S Markham	1				9	3	
NB Pembina, N/S University Cr	1				9	5	
NB Pembina, N/S Plaza	1				9	5	
NB Pembina, N/S Crescent	1				9	3	
NB Pembina, N/S Fletcher	1				9	3	
NB Pembina, N/S Oakenwald	1				9	5	
NB Pembina, N/S Point Rd	1				9	5	
NB Pembina, Opp Stafford		1			10		
NB Pembina, N/S Hugo			1	1	12		
SB Pembina, F/S Warsaw			1		8	3	
SB Pembina, N/S Scotland			1	1	8		
SB Pembina, F/S Grant	1				9	5	
SB Pembina, N/S Stafford	1				12	6	
SB Pembina, F/S Windermere	1				9	5	
SB Pembina, F/S McGillivray	1				9	5	
SB Pembina, N/S Clarence	1				9	5	
SB Pembina, F/S Chevrier	1				9	3	
SB Pembina, F/S Opp Plaza	1				9	5	
SB Pembina, F/S Opp Univ Cr	1				12	7	
SB Pembina, F/S Kirkbridge		1			10		
SB Pembina, N/S Southpark	1				6	2	
<b>Osborne Bus Stops:</b>							
NB Osborne, N/S Stradbrook			1	1	12		
NB Osborne, F/S River		1			15		
SB Osborne, N/S River		1			15		
SB Osborne, N/S Wardlaw			1	1	12	1	

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<b>BUS STOP LOCATION</b>	<b>Illuminated Sign Flag sets</b>	<b>Bus Stop Totem</b>	<b>Bus Stop Marker</b>	<b>Tip Kiosk</b>	<b># of Route Tiles</b>	<b>Time-table display</b>	<b>Route Marker</b>
<b>Donald Bus Stops:</b>							
SB Donald, F/S River		1			10		
NB Donald, F/S River		1			10		
<b>Main Street Bus Stops:</b>							
NB Main, N/S Opp Assiniboine		1			15		
NB Main, F/S Opp Broadway		1			15		
NB Main, N/S Pioneer	1			1	18	2	
NB Main, N/S McDermot			1	2	32		
NB Main, Opp James	1			2	27		
SB Main N/S William	1			1	18		
SB Main, N/S James		1			20		
SB Main, N/S McDermot			1	1	20	1	
SB Main, Opp Lombard			1	1	16	1	
SB Main, F/S Opp Pioneer		1		1	30		
SB Main, F/S St. Mary			1	1	12	9	
SB Main, N/S Broadway	1			1	15	2	
SB Main, N/S Assiniboine		1			15		
EB James, N/S Main			1		4	2	
<b>Henderson Bus Stops:</b>							
SB Henderson, N/S Whellams		1			10	5	
SB Henderson, N/S Opp Sutton			1		4		
SB Henderson, N/S Rowandale			1	1	8		
SB Henderson, F/S Fraser's Gr	1				6	2	
SB Henderson, N/S Kimberley		1			10		
SB Henderson, N/S Opp Johnson		1			10		
SB Henderson, N/S Hespeler			1		4	2	
SB Henderson, N/S Opp Dearborn			1		4	1	
NB Henderson, N/S Johnson			1		4	2	
NB Henderson, N/S Kimberley		1			10		
NB Henderson, N/S Opp Fraser's	1				6	2	
NB Henderson, N/S Edison		1			10		
NB Henderson, F/S Opp Whellam		1			10		
WB Edison, N/S Henderson			1		4	3	
<b>Regent Bus Stops:</b>							
EB Regent, N/S Rougeau			1	1	12		
EB Regent, F/S Opp Stapon			1	1	12	1	
WB Regent, N/S Stapon		1			15		
<b>Smith/Donald Bus Stops:</b>							
NB Donald, F/S Stradbrook			1		8	3	
NB Smith, N/S Graham		1			10		
NB Smith, F/S Broadway		1			10		
SB Donald, F/S Graham			1		8	2	
SB Donald, N/S Broadway	1				9	4	
SB Donald, F/S Ellice			1		4	2	
SB Donald, F/S Stradbrook			1		8	3	
<b>Osborne Bus Stops:</b>							
SB Osborne, N/S Mostyn Place			1	1	12	1	

<b>BUS STOP LOCATION</b>	<b>Illuminated Sign Flag sets</b>	<b>Bus Stop Totem</b>	<b>Bus Stop Marker</b>	<b>Tip Kiosk</b>	<b># of Route Signs</b>	<b>Time-table display</b>	<b>Route Marker</b>
<b>Fort Bus Stops:</b>							
NB Fort, F/S Graham			1	1	16		
NB Fort, N/S Portage		1			15		
<b>Garry Bus Stops:</b>							
SB Garry, N/S Graham		1			10		
<b>Vaughan Bus Stops:</b>							
SB Vaughan, N/S Graham			1	1	16		
SB Vaughan, N/S Portage		1		1	25		
<b>Spence Bus Stops:</b>							
SB Spence, F/S Ellice			1		8	3	
SB Spence, N/S Portage			1		8	4	
<b>Kildonan Place Terminal:</b>							
7 stops including Regent Ave	1		6	1	12	10	
<b>Polo Park Terminal:</b>							
8 stops			11			12	
<b>St. Vital Centre Terminal:</b>							
8 stops			8			11	

### **E3. DESIGN AND SHOP DRAWINGS**

- E3.1 The Contractor shall submit dimensioned detailed design drawings within five (5) working days when contacted by the Contract Administrator. The drawings shall show all details of construction, fastenings, materials and colours.
- E3.2 The Contractor shall submit stamped Engineer's drawings for review and approval within five (5) working days of Contract Award and prior to commencement of work. Engineer's drawings shall show all details of construction and fastenings for erections and shall be as specified or approved. Engineer shall be a Structural Engineer licensed to practice in Manitoba with experience in large sign construction. Engineer to include concrete base requirements for sign structures.
- E3.3 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 within five (5) working days of Contract Award.
- E3.4 Autocad files of the drawings are available to be emailed upon written request to the Contract Administrator.

### **E4. BUS STOP FLAGS**

#### **Description**

- E4.1 This specification covers the supply and installation of bus stop flags for individual poles, illuminated signs and totem signs.

#### **Design / Shop Drawings**

- E4.2 The Contractor shall submit design and shop drawings as per E3.

#### **Delivery and Storage**

- E4.3 Store units in a protected location, immediately upon arrival on the Site.
- E4.4 Remove from Site any units which have been damaged during transportation and replace.

## Products

- E4.5 Bus stop flags for individual stops to be stainless steel painted enclosed forms with route markers as required as supplied by:

Trueform Engineering.  
Contact: Richard Simpson  
T (604) 603-8207

- E4.6 Flags for illuminated signs to be two piece stainless steel painted forms with route markers as required as supplied by:

Trueform Engineering.  
Contact: Richard Simpson  
T (604) 603-8207

- E4.7 Flags for bus stop totem to be stainless steel painted enclosed forms with route markers as required as supplied by:

Trueform Engineering.  
Contact: Richard Simpson  
T (604) 603-8207

## Samples / Prototypes

- E4.8 A prototype is to be manufactured for each flag type and delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of bus stop flags. 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. If prototype is acceptable it may be used for construction.

## Installation

- E4.9 Install bus stop flag on Elite posts as per E5 as per manufacturer's direction including adjustment of infill strip and installation of top cap. Infill strip and top cap are incidental to the unit price for elite post.
- E4.10 Install flags on existing illuminated sign structures with self taping cadmium coated screws and any required spacers to ensure galvanic corrosion does not occur between steel sign and aluminium structure. Fastenings, spacers and installation are incidental to the unit prices bid.
- E4.11 Install flags for totems on Elite posts of totem directly under illuminated sign top as per manufacturer's direction including adjustment of infill strip. Infill strip is incidental to the unit price for bus stop totem.

## Method of Measurement

- E4.12 Bus stop flags will be measured on a unit basis. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.
- E4.13 Bus stop flag pairs for illuminated signs will be measured on a unit basis for each pair. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.
- E4.14 Bus stop flags for totem signs are incidental to the unit prices bid for supply and installation of bus stop totem.

## Basis of Payment

E4.15 Bus stop flags will be paid for at the Contract Unit Price for each item, which price shall be payment in full for supply of all materials and performing all operations herein described and for all other items incidental to the Work included in this Specification.

E4.16 Bus stop flag pairs for illuminated signs will be paid for at the Contract Unit Price for each item, which price shall be payment in full for supply of all materials and performing all operations herein described and for all other items incidental to the Work included in this Specification.

## **E5. ELITE POST**

### **Description**

E5.1 This specification covers the supply and installation of elite poles for bus stop flags and supply of elite poles for totem signs and transit information poster kiosks.

### **Delivery and Storage**

E5.2 Store units in a protected location, immediately upon arrival on the Site.

E5.3 Remove from Site any units which have been damaged during transportation and replace.

### **Products**

E5.4 Elite posts to be large elite post system in satin silver anodised finish including mounting system, blue infill strip and top cap as supplied by:

Trueform Engineering.  
Contact: Richard Simpson  
T (604) 603-8207

E5.5 Length of posts varies as per the drawings. Contractor to confirm height of poles prior to installation.

E5.6 Elite posts for bus stop flags, bus stop totem and transit information poster kiosk are incidental to the unit prices bid for those items. No separate measurement or payment will be made for any materials or work associated with these poles.

### **Installation**

E5.7 Supply mounting system to Site works Contractor for installation in concrete base to manufacturer's specification.

E5.8 Install Elite posts for bus stop flags as per manufacturer's direction.

E5.9 Elite posts for totem sign and kiosk are to be installed as per details. Provide mounting system to Site works Contractor for installation in concrete base.

## **E6. BUS STOP TOTEM**

### **Description**

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 totems and related Work as shown on the Drawings and as hereinafter specified.

### **Design / Shop Drawings**

E6.2 The Contractor shall submit design and shop drawings as per E3.

### **Qualifications**

E6.3 Manufacturer shall be a member of the Canadian Welding Bureau and certified to design welds.

## Delivery and Storage

- E6.4 Store units in a protected location, immediately upon arrival on the Site.
- E6.5 Remove from Site any units which have been damaged during transportation and replace.

## Materials

- E6.6 Posts to be large Elite post system as per E5. Length to be as per the Drawings.
- E6.7 Bus stop flags as per E4.
- E6.8 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) Sign box to be constructed of 304 or better stainless steel with mounting bracket, 12.5 mm F-Section vinyl retainers, painted Tiger Drylac 5005 38/40010 (blue).
  - (g) Lamps to be T12 bright white fluorescent tubes. Bidder to provide lighting schematic including ballast. Lamps and ballast to be high output. Lighting output to match lighting levels of sign box on illuminated structures.
  - (h) Acrylic to be SG (sign grade)
  - (i) Polycarbonate face to be 4.6 mm (3/16") clear lexan.
  - (j) Background to be screen printed 3M vinyl.
  - (k) Winnipeg Transit logo to be custom 'chrome' look logo.
- E6.9 Cabinet for Route information posters:
  - (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) Components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
  - (f) Cabinet to be constructed of 304 or better stainless steel with mounting bracket, tempered glass door, painted Protech PM211S11 (sparkle silver).
  - (g) Hinge to be continuous along door.
  - (h) Door closure to have lock-in-place mechanism.
  - (i) Holders for posters to be stainless steel compression clips.
  - (j) Locks to be tamper resistant key locks.

## Workmanship

- E6.10 Proportion items to meet the National Building Code and Manitoba Building Code. Items shall support loads recommended by the Code and local standards for wind and snow loading unless specific loads are indicated on the Drawings.
- E6.11 Fabricate work to shape and size with sharp lines, even curves and smooth surfaces. Connections shall be securely welded, bolted or riveted. Bolted and riveted connections are not permitted in exposed areas of the sign. Welds shall be dressed smooth on exposed surfaces. Welds/joins shall not be visible upon completion of painting operations. Rabbits, 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.
- E6.12 Exposed ends and edges of metal shall be smooth. Joints exposed to the weather shall be formed to exclude water or to drain.
- E6.13 Insofar as possible, fit and shop assemble Work and deliver to the Site in largest practical sections.
- E6.14 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.
- E6.15 Fabricate Work in strict accordance with shop drawings, and in general to details, sizes, materials shown on Drawings and specified herein.
- E6.16 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.
- E6.17 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.
- E6.18 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E6.19 Finish: Fabricated material Work shall be delivered with e-coating, shop coat primer and paint, or other finish as specified.
- E6.20 Following installation, apply a touch up coat of shop primer and paint to match finish to all surface where finish has been removed and to installation devices such as bolts, screws, welds and the like.

## Quality Control

- E6.21 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 Section.

## Fabrication

### General

- E6.22 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E6.23 Vinyl graphics to be applied to second surface of Lexan background.

- E6.24 The workmanship shall meet established practice in modern shops.
- E6.25 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.
- E6.26 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

#### **Clean Material**

- E6.27 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.

#### **Finish**

- E6.28 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.

#### **Painting**

- E6.29 Clean all metal thoroughly and apply recommended primer.
- E6.30 All aluminium to be sanded prior to painting.
- E6.31 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E6.32 All coats must be thoroughly dry before applying succeeding coats.
- E6.33 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.

#### **Samples / Prototypes**

- E6.34 A prototype is to be manufactured and delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of totem. 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. If prototype is acceptable it may be used for construction.

#### **Installation and Co-ordination with Others**

- E6.35 The Contractor is advised of the following:
- (a) All signs to be installed on bases as constructed by Site Works Contractor. Confirm dimensions of sign and base prior to construction.
  - (b) Install bus stop flags prior to installation of sign top.
  - (c) Contractor to make final electrical connection to electrical source at base of sign. Run wiring to power pedestal in existing conduits as required.
  - (d) The Contract Administrator will notify Winnipeg Transit of installation date with a minimum of three (3) working days.
  - (e) Any damage to the 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 at Contractors cost.

### **Method of Measurement**

- E6.36 Supply and Installation of bus stop totem shall be measured on a per item basis as specified herein. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.

### **Basis of Payment**

- E6.37 Supply and Installation of bus stop totem will be paid for at the contract unit price for 'Supply and Install bus stop totem' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.

## **E7. TRANSIT INFORMATION POSTER KIOSK**

### **Description**

- E7.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the transit information poster kiosks and related Work as shown on the Drawings and as hereinafter specified.

### **Design / Shop Drawings**

- E7.2 The Contractor shall submit design and shop drawings as per E3.

### **Qualifications**

- E7.3 Manufacturer shall be a member of the Canadian Welding Bureau and certified to design welds.

### **Delivery and Storage**

- E7.4 Store units in a protected location, immediately upon arrival on the Site.  
E7.5 Remove from Site any units which have been damaged during transportation and replace.

### **Materials**

- E7.6 Posts to be large Elite post system as per E5. Length to be as per the Drawings.
- E7.7 Sign box:
- (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) Sign box to be constructed of 304 or better stainless steel with mounting bracket, painted Tiger Drylac 5005 38/40010 (blue).
  - (g) Winnipeg Transit logo to be custom 'chrome' look logo.
- E7.8 Cabinet for transit information posters:
- (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) Components and construction shall be as shown on the Drawings and as approved by the Contract Administrator.
- (f) Cabinet to be constructed of 304 or better stainless steel with mounting bracket, tempered glass door, painted Protech PM211S11 (sparkle silver).
- (g) Hinge to be continuous along door.
- (h) Door closure to have lock-in-place mechanism.
- (i) Holders for posters to be stainless steel compression clips.
- (j) Locks to be tamper resistant key locks.

### **Workmanship**

- E7.9 Proportion items to meet the National Building Code and Manitoba Building Code. Items shall support loads recommended by the Code and local standards for wind and snow loading unless specific loads are indicated on the Drawings.
- E7.10 Fabricate work to shape and size with sharp lines, even curves and smooth surfaces. Connections shall be securely welded, bolted or riveted. Bolted and riveted connections are not permitted in exposed areas of the sign. Welds shall be dressed smooth on exposed surfaces. Welds/joins shall not be visible upon completion of painting operations. Rabbits, 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.
- E7.11 Exposed ends and edges of metal shall be smooth. Joints exposed to the weather shall be formed to exclude water or to drain.
- E7.12 Insofar as possible, fit and shop assemble Work and deliver to the Site in largest practical sections.
- E7.13 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.
- E7.14 Fabricate Work in strict accordance with shop drawings, and in general to details, sizes, materials shown on Drawings and specified herein.
- E7.15 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.
- E7.16 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.
- E7.17 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E7.18 Finish: Fabricated material Work shall be delivered with e-coating, shop coat primer and paint, or other finish as specified.
- E7.19 Following installation, apply a touch up coat of shop primer and paint to match finish to all surface where finish has been removed and to installation devices such as bolts, screws, welds and the like.

## Quality Control

E7.20 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 Section.

## Fabrication

### General

- E7.21 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E7.22 Vinyl graphics to be applied to second finished stainless steel surface.
- E7.23 The workmanship shall meet established practice in modern shops.
- E7.24 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.
- E7.25 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

### Clean Material

E7.26 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.

### Finish

E7.27 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.

### Painting

- E7.28 Clean all metal thoroughly and apply recommended primer.
- E7.29 All aluminium to be sanded prior to painting.
- E7.30 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E7.31 All coats must be thoroughly dry before applying succeeding coats.
- E7.32 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.

### Samples / Prototypes

E7.33 A prototype is to be manufactured and delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of kiosk. 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. If prototype is acceptable it may be used for construction

### **Installation and Co-ordination with Others**

E7.34 The Contractor is advised of the following:

- (a) All signs to be installed on bases as constructed by Site Works Contractor. Confirm dimensions of sign and base prior to construction.
- (b) Contractor to make final electrical connection to electrical source at base of sign. Run wiring to power pedestal in existing conduits as required.
- (c) The Contract Administrator will notify Winnipeg Transit of installation date with a minimum of three (3) working days.
- (d) Any damage to the 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 at Contractors cost.

### **Method of Measurement**

E7.35 Supply and Installation of transit information poster kiosk shall be measured on a per item basis as specified herein. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.

### **Basis of Payment**

E7.36 Supply and Installation of transit information poster kiosk will be paid for at the contract unit price for 'Supply and install transit information poster kiosk' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.

## **E8. ROUTE MARKERS**

### **Description**

E8.1 The Work of this specification comprises the furnishing of all labour, equipment and materials required to complete the supply, fabrication and erection of the route markers and related Work as shown on the Drawings and as hereinafter specified.

### **Design / Shop Drawings**

E8.2 The Contractor shall submit design and shop drawings as per E3.

### **Qualifications**

E8.3 Manufacturer shall be a member of the Canadian Welding Bureau and certified to design welds.

### **Delivery and Storage**

E8.4 Store units in a protected location, immediately upon arrival on the Site.

E8.5 Remove from Site any units which have been damaged during transportation and replace.

### **Materials**

E8.6 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) 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 – PM211S11 (sparkle silver) by Protech.
- (g) Lamps to be T5 bright white fluorescent tubes. Bidder to provide lighting schematic including ballast. Lamps and ballast to be high output. Lighting output to match lighting levels of sign box on structure.
- (h) Acrylic to be SG (sign grade)
- (i) Polycarbonate face to be 4.6 mm (3/16") clear lexan.
- (j) Background to be 3M vinyl. White for regular routes and yellow for express routes.
- (k) Copy to be black 150 mm high Frutiger Bold as per the design Drawings.

### **Workmanship**

- E8.7 Proportion items to meet the National Building Code and Manitoba Building Code. Items shall support loads recommended by the Code and local standards for wind and snow loading unless specific loads are indicated on the Drawings.
- E8.8 Fabricate work to shape and size with sharp lines, even curves and smooth surfaces. Connections shall be securely welded, bolted or riveted. Bolted and riveted connections are not permitted in exposed areas of the sign. Welds shall be dressed smooth on exposed surfaces. Welds/joins shall not be visible upon completion of painting operations. Rabbits, 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.
- E8.9 Exposed ends and edges of metal shall be smooth. Joints exposed to the weather shall be formed to exclude water or to drain.
- E8.10 Insofar as possible, fit and shop assemble Work and deliver to the Site in largest practical sections.
- E8.11 Prior to proceeding with shop fabrication, take all necessary field measurements to verify dimensions or calculations from Drawings.
- E8.12 Fabricate Work in strict accordance with shop drawings, and in general to details, sizes, materials shown on Drawings and specified herein.
- E8.13 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.
- E8.14 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.
- E8.15 Welding splatter and other fabrication burrs where exposed shall be ground or filed smooth and left ready for subsequent operations.
- E8.16 Finish: Fabricated material Work shall be delivered with e-coating, shop coat primer and paint, or other finish as specified.

- E8.17 Following installation, apply a touch up coat of shop primer and paint to match finish to all surface where finish has been removed and to installation devices such as bolts, screws, welds and the like.

### **Quality Control**

- E8.18 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 Section.

### **Fabrication**

#### **General**

- E8.19 Fabrication shall be carried out in accordance with these Specifications and Drawings which form a part of this Contract.
- E8.20 Vinyl graphics to be applied to second surface of Lexan background.
- E8.21 The workmanship shall meet established practice in modern shops.
- E8.22 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.
- E8.23 Dimensions and fabrication which control the field matching of parts shall receive careful attention in order to avoid field adjustments.

#### **Clean Material**

- E8.24 The material shall be clean, free from rust, mill scale, and other foreign matter before being worked in the shop.

#### **Finish**

- E8.25 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.

#### **Painting**

- E8.26 Clean all metal thoroughly and apply recommended primer.
- E8.27 All aluminium to be sanded prior to painting.
- E8.28 Apply all materials under adequate illumination, spread evenly and flow on smoothly without runs or sags.
- E8.29 All coats must be thoroughly dry before applying succeeding coats.
- E8.30 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.

### **Samples / Prototypes**

- E8.31 A prototype is to be manufactured and delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of route marker. 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. If prototype is acceptable it may be used for construction.

### **Installation and Co-ordination with Others**

- E8.32 The Contractor is advised of the following:
- (a) All signs to be installed on illuminated sign structures at Osborne Exchange. Modify sign box to suit sign structure construction. Provide shop drawings of sign and structure together.
  - (b) Contractor to make final electrical connection to electrical source at base of sign. Run wiring to power pedestal in existing conduits as required.
  - (c) The Contract Administrator will notify Winnipeg Transit of installation date with a minimum of three (3) working days.
  - (d) Any damage to the 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 at Contractors cost.

### **Method of Measurement**

- E8.33 Supply and Installation of route markers shall be measured on a per item basis as specified herein. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.

### **Basis of Payment**

- E8.34 Supply and Installation of route markers will be paid for at the contract unit price for 'Supply and Install Route Markers' measured and specified herein, which price shall be payment in full for performing all operations herein described and all other items incidental to the Work included in this specification.

## **E9. TIMETABLE DISPLAY**

### **Description**

- E9.1 This specification covers the supply and installation of timetable displays.

### **General**

### **Delivery and Storage**

- E9.2 Store units in a protected location, immediately upon arrival on the Site.
- E9.3 Remove from Site any units which have been damaged during transportation and replace.

### **Products**

- E9.4 Timetable displays to be silver finish with arced top and bottom, tamper proof locking mechanism and tempered glass face as supplied by:

Trueform Engineering.  
Contact: Richard Simpson  
T (604) 603-8207

### **Samples / Prototypes**

- E9.5 A prototype is to be manufactured and delivered to Winnipeg Transit at 421 Osborne Street for review and approval prior to manufacture of timetable displays. 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.

### **Installation**

- E9.6 Install on bus stop flag poles in single double or triple configuration with mounting brackets included with displays at stops indicated . Mounting brackets and installation are incidental to the unit prices bid.
- E9.7 Install on existing illuminated signs with mounting brackets included with displays. Mounting brackets and installation are incidental to the unit prices bid.

### **Method of Measurement**

- E9.8 Timetable displays will be measured on a unit basis. The number of each item to be paid for will be the total number placed in accordance with this Specification and accepted by the Contract Administrator, as computed by the Contract Administrator.

### **Basis of Payment**

- E9.9 Timetable displays will be paid for at the Contract Unit Price for each item, which price shall be payment in full for supply of all materials and performing all operations herein described and for all other items incidental to the Work included in this Specification.