



**THE CITY OF WINNIPEG**

# **BID OPPORTUNITY**

**BID OPPORTUNITY NO. 1037-2015**

**SUPPLY AND DELIVERY OF POLYCARBONATE TRAFFIC SIGNAL HEADS**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 SUPPLY AND DELIVERY OF POLYCARBONATE TRAFFIC SIGNAL HEADS

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, December 21, 2015.

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

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

### **B3. ENQUIRIES**

B3.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

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

B3.3 If the Bidder is unsure of the meaning or intent of any provision therein, the Bidder should request clarification as to the meaning or intent prior to the Submission Deadline.

B3.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator to all Bidders by issuing an addendum.

B3.5 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Bid Opportunity will be provided by the Contract Administrator only to the Bidder who made the enquiry.

B3.6 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B3 unless that response or interpretation is provided by the Contract Administrator in writing.

### **B4. CONFIDENTIALITY**

B4.1 Information provided to a Bidder by the City or acquired by a Bidder by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator. The use and disclosure of the confidential information shall not apply to information which:

- (a) was known to the Bidder before receipt hereof; or
- (b) becomes publicly known other than through the Bidder; or
- (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.

B4.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

### **B5. ADDENDA**

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

- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B5.2.2 The Bidder is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 9 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;
  - (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/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Bidder who requested approval of the substitute.
- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Bidders. The Bidder requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Bidder may use the approved equal in place of the specified item.

- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Bidder bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B15.
- 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 shall consist of the following components:
- (a) Form A: Bid;
  - (b) Form B: Prices.
- B7.2 Further to B7.1, the Bidder should include the written correspondence from the Contract Administrator approving a substitute in accordance with B6.
- B7.3 All components of the Bid shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Bid.
- B7.4 The Bid Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B7.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg  
Corporate Finance Department  
Materials Management Division  
185 King Street, Main Floor  
Winnipeg, MB R3B 1J1
- B7.5.1 Samples or other components of the Bid 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.
- B7.6 Bidders are advised not to include any information/literature except as requested in accordance with B7.1.
- B7.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B15.1(a).
- B7.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to 204-949-1178.
- B7.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B7.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.

## **B8. BID**

- B8.1 The Bidder shall complete Form A: Bid, making all required entries.
- B8.2 Paragraph 2 of Form A: Bid shall be completed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Bidder is a partnership, the full name of the partnership shall be inserted;
- (c) if the Bidder is a corporation, the full name of the corporation shall be inserted;
- (d) if the Bidder is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B8.2.1 If a Bid is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.

B8.3 In Paragraph 3 of Form A: Bid, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Bid.

B8.4 Paragraph 11 of Form A: Bid shall be signed in accordance with the following requirements:

- (a) if the Bidder is a sole proprietor carrying on business in his/her own name, it shall be signed by the Bidder;
- (b) if the Bidder is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Bidder is a corporation, it shall be signed by its duly authorized officer or officers 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/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid should be printed below such signatures.

B8.5 If a Bid is submitted jointly by two or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

## **B9. PRICES**

B9.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B9.1.1 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;
- (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.

B9.1.2 Prices on Form B: Prices shall not include Environmental Handling Charges (EHC) or fees, which shall be extra where applicable.

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. DISCLOSURE**

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

B10.2 The Persons are:

- (a) N/A

## **B11. QUALIFICATION**

B11.1 The Bidder shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract; and
- (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.

B11.2 The Bidder and any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/debar.stm>

B11.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program, if required, pursuant to The Workplace Safety and Health Act (Manitoba);
- (d) have demonstrated the ability to supply and deliver work(s) with Quality Control and Assurance Standards according to past contracted delivery requirements and timelines;
- (e) have demonstrated the resources, facilities and capabilities to quickly and efficiently effect repairs or remediation to the satisfaction of contract administrators, or other customers, on issues with Work(s) on previous contract(s) to meet the specifications and requirements of the supplied Work, regardless of time of year or environmental conditions; and
- (f) have demonstrated the ability to supply consistent, high quality products and packaging in commercial grade crates and or pallets.

B11.4 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.

### **Requested Samples and Documentation**

B11.5 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.



- B11.6 The Bidder shall supply within twenty five (25) Calendar Days of a request from the Contract Administrator samples and / or technical documentation specific to any item or assembly that would be included in the deliverables.
- B11.6.1 Including but not limited to the ETL Intertek Technical Reports for LED modules to be supplied with Item Numbers 1, 3 and 4 as noted on Form B:Prices.
- B11.6.2 The Bidder is responsible for all freight costs associated with the delivery and return of any requested sample(s) as described in B11.6.
- B11.7 The Bidder may be considered as non-responsive if requested information and / or sample as described in B11.4 or B11.6 is not received within the time frame specified.
- B11.8 Unsolicited samples will be returned at Bidder's expense.
- B11.9 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.

## **B12. OPENING OF BIDS AND RELEASE OF INFORMATION**

- B12.1 Bids will not be opened publicly.
- B12.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements or evaluated prices) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B12.3 After award of Contract, the name(s) of the successful Bidder(s) and the Contract amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B12.4 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.

## **B13. IRREVOCABLE BID**

- B13.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 10 of Form A: Bid.
- B13.2 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 10 of Form A: Bid.

## **B14. WITHDRAWAL OF BIDS**

- B14.1 A Bidder may withdraw his/her Bid without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B14.1.1 Notwithstanding C21, 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.
- B14.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Bid or the Bidder's authorized representatives named in Paragraph 11 of Form A: Bid, and only such person, has authority to give notice of withdrawal.
- B14.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Bid until after the Submission Deadline has elapsed;
- (b) open the Bid to identify the contact person named in Paragraph 3 of Form A: Bid and the Bidder's authorized representatives named in Paragraph 11 of Form A: Bid; and
- (c) if the notice has been given by any one of the persons specified in B14.1.3(b), declare the Bid withdrawn.

B14.2 A Bidder who withdraws his/her Bid after the Submission Deadline but before his/her Bid has been released or has lapsed as provided for in B13.2 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.

## **B15. EVALUATION OF BIDS**

B15.1 Award of the Contract shall be based on the following bid evaluation criteria:

- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
- (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11 (pass/fail);
- (c) Total Bid Price;
- (d) economic analysis of any approved alternative pursuant to B6;

B15.2 Further to B15.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.

B15.3 Further to B15.1(b), the Award Authority shall reject any Bid submitted by a Bidder who does not demonstrate, in his/her Bid or in other information required to be submitted, that he/she is responsible and qualified.

B15.4 Further to B15.1(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.

B15.5 This Contract will be awarded as a whole.

## **B16. AWARD OF CONTRACT**

B16.1 The City will give notice of the award of the Contract or will give notice that no award will be made.

B16.2 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.

B16.2.1 Without limiting the generality of B16.2, 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.

- B16.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B15.
- B16.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his/her Bid upon written request to the Contract Administrator.
- B16.4 Notwithstanding C4 and Paragraph 6 of Form A: Bid, the City may issue a purchase order to the successful Bidder in lieu of the execution of a Contract.
- B16.5 The Contract Documents, as defined in C1.1(n) (ii), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

## **PART C - GENERAL CONDITIONS**

### **C0. GENERAL CONDITIONS**

- C0.1 The *General Conditions for the Supply of Goods* (Revision 2008 05 26) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for the Supply of Goods* are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at [http://www.winnipeg.ca/matmgt/gen\\_cond.stm](http://www.winnipeg.ca/matmgt/gen_cond.stm)
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for Supply of Goods*.

## **PART D - SUPPLEMENTAL CONDITIONS**

### **GENERAL**

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

D1.1 In addition to the *General Conditions for the Supply of Goods*, 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 supply and delivery of polycarbonate traffic signal heads from date of award until November 30, 2016, with the option of four (4) mutually agreed upon one (1) year extensions.

D2.2 The City may negotiate the extension option with the Contractor within sixty (60) Calendar Days prior to the expiry date of the Contract. The City shall incur no liability to the Contractor as a result of such negotiations

D2.3 Changes resulting from such negotiations shall become effective on December 1st of the respective year. Changes to the Contract shall not be implemented by the Contractor without written approval by the Contract Administrator.

D2.4 The Work shall be done on an "as required" basis during the term of the Contract.

D2.4.1 The type and quantity of Work to be performed under this Contract shall be as authorized from time to time by the Contract Administrator and/or Users.

D2.4.2 Notwithstanding C7, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.

#### **D3. DEFINITIONS**

D3.1 When used in this Bid Opportunity:

(a) "**AASHTO STANDARDS^**" means compliant to the standard development by the American Association of State Highways and Transportation Officials.;

(b) "**ITE**" means Institute of Transportation Engineers.;

(c) "**ETL**" means Electrical Testing Laboratory, a Division of Intertek Group.

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

D4.1 The Contract Administrator is:

Jonathan Foord, EIT  
Signals Assets Engineer

Telephone No.: 204-986-6619

Email: jfoord@winnipeg.ca

#### **D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE**

D5.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City and shall not be appropriated for the Contractors own use, or for the use of any third party.

D5.2 The Contractor shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Contract Administrator.

- D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;
- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
  - (b) the Contract, all deliverables produced or developed; and
  - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

## **D6. NOTICES**

- D6.1 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:
- The City of Winnipeg  
Chief Financial Officer  
Facsimile No.: 204-949-1174
- D6.2 **Bids Submissions must be submitted to the address in B7.5.**

## **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.

## **SCHEDULE OF WORK**

### **D8. COMMENCEMENT**

- D8.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D8.2 The Contractor shall not commence any Work 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 C6.16;
  - (b) the Contract Administrator has received and approved all requested samples; and
  - (c) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.
  - (d) A Purchase Order has been received from the City of Winnipeg Public Works Stores personnel noting quantity of material required (Please note D2.4).

### **D9. DELIVERY**

- D9.1 Goods shall be delivered f.o.b. destination, freight prepaid to:
- City of Winnipeg Public Works Stores  
1277 Pacific Avenue  
Winnipeg, MB

- D9.2 Goods shall be delivered within forty-five (45) Calendar Day(s) of the placing of an order, unless otherwise allowed by the User at the time of ordering.
- D9.3 The Contractor shall confirm each delivery with the Contract Administrator or his/her designate, at least two (2) Business Days before delivery.
- D9.3.1 Failure to provide notification may result in inability to offload goods on arrival. Offloading delays as a result of the failure of providing notification may extend the delivery timeframe.
- D9.4 Goods shall be delivered between 9:00 a.m. and 2:30 p.m. on Business Days.
- D9.5 Warehouse personnel shall off-load goods at the delivery location. If the goods cannot be unloaded by a 4,000 lb capacity forklift, the Contractor shall supply all necessary equipment and personnel to offload the goods as directed.
- D9.6 Components shall be inspected by the Contract Administrator or designated representative upon receipt.

#### **D10. LIQUIDATED DAMAGES**

- D10.1 If the Contractor fails to achieve delivery of the goods within the time specified in D9.1 Delivery the Contractor shall pay the City one hundred dollars (\$100) per Calendar Day for each and every Calendar Day until the goods have been delivered.
- D10.2 The amount specified for liquidated damages in D10.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Delivery by the day fixed herein for same.
- D10.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

#### **D11. RECORDS**

- D11.1 The Contractor shall keep detailed records of the goods supplied under the Contract.
- D11.2 The Contractor shall record, as a minimum, for each item listed on Form B: Prices:
- (a) user name(s) and addresses;
  - (b) order date(s);
  - (c) delivery date(s); and
  - (d) description and quantity of goods supplied.
- D11.3 The Contractor shall provide the Contract Administrator with a copy of the records for each quarter year within fifteen (15) Calendar Days of a request of the Contract Administrator.

#### **MEASUREMENT AND PAYMENT**

##### **D12. INVOICES**

- D12.1 Further to C10, the Contractor shall submit an invoice for each order delivered to:
- The City of Winnipeg  
Corporate Finance - Accounts Payable  
4th Floor, Administration Building, 510 Main Street  
Winnipeg MB R3B 1B9  
Facsimile No.: 204-949-0864  
Email: [CityWpgAP@winnipeg.ca](mailto:CityWpgAP@winnipeg.ca)
- D12.2 Invoices must clearly indicate, as a minimum:

- (a) the City's purchase order number;
- (b) date of delivery;
- (c) delivery address;
- (d) type and quantity of goods delivered;
- (e) the amount payable with GST, MRST, and any applicable environmental handling charges/fees identified and shown as separate amounts; and
- (f) the Contractor's GST registration number.

D12.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D12.4 Bids Submissions must be submitted to the address in B7.5.

### **D13. PAYMENT**

D13.1 Further to C10, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

### **D14. PAYMENT SCHEDULE**

D14.1 Further to C10, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

## **WARRANTY**

### **D15. WARRANTY**

D15.1 Warranty is as stated in C11.

D15.1 Notwithstanding C11, the warranty period for each item of Work supplied shall begin on the date of successful delivery and expire five (5) years thereafter unless extended pursuant to C11.3, in which case it shall expire when provided for thereunder.

D15.2 The Contractor shall be responsible for all transportation and service charges to repair and / or replace defective head sections supplied under this Contract that fail in normal service within the five (5) year warranty period (as specified above).

D15.3 The Contractor shall be responsible for all transportation and service charges to repair and / or replace defective LED modules supplied under this Contract that fail to operate properly in normal service within the five (5) year warranty period (as specified above).

D15.3.1 LED modules with individual pixels visible that have 4 or more visible pixels failing to operate properly during the warranty period will be considered a warrantable defect.

D15.3.2 Any LED module requiring warranty works will be removed from the head section and shipped to the repair depot.

D15.4 Within 5 business days of the City notifying the Contractor of a LED device malfunction, the Contractor shall issue both a Return Material Authorization (RMA) and return shipping instructions for the defective unit(s).

D15.5 Within one calendar month of the receipt of the defective item(s), the Contractor shall ensure the return delivery of the repaired or replaced item(s).



## PART E - SPECIFICATIONS

### GENERAL

#### E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

E1.1 These Specifications shall apply to the Work.

E1.2 The following are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing Name/Title</u>
BB-1	<i>POLYCARBONATE BACKBOARD</i>

E1.3 The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements which polycarbonate traffic signal heads (either with or without Light Emitting Diode indications) shall meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials which conform to the latest ITE (Institute of Transportation Engineers) Technical Standard. All standards of the most current ITE Specification at time of contract shall still apply. Where there is a variation between this specification and the latest ITE Standard, the provisions of this specification shall still apply. Manufacture of the polycarbonate traffic signal heads must conform to the CSA (Canadian Standards Association).

E1.4 All polycarbonate traffic signal heads shall be designed in accordance with the latest revisions of the requirements of the AASHTO standard specifications for structural supports for highway signs, luminaries and traffic signals. Where there is a variation between this specification and the latest AASHTO Standard, the provisions of this specification shall still apply.

E1.5 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6.

#### E2. GOODS

E2.1 The Contractor shall supply and deliver polycarbonate traffic signal heads in accordance with the requirements hereinafter specified.

E2.2 **Item No. 1** - Signal head, polycarbonate 3 x 12" Yellow head sections with yellow cutaway visors, c/w Red, Amber and Green LED modules

E2.3 **Item No. 2** - Signal head, polycarbonate 3 x 12" Yellow head sections with yellow cutaway visors, Empty (without LED modules)

E2.4 **Item No. 3** - Signal head, polycarbonate 3 x 12" Black head sections with black cutaway visors, c/w Red, Amber and Green Left Arrow LED modules

E2.5 **Item No. 4** - Signal head, polycarbonate 4 x 12" Black head sections with black cutaway visors, c/w Red, Amber and Green LED modules and fourth section empty

E2.6 **Item No. 5** - Signal head, polycarbonate, single 8" Yellow head section with yellow cutaway visor, Empty (without LED module)

E2.7 **Item No. 6** - Backboard, PVC Yellow, 3 x 12" Plumbized, with yellow 3M ReflectORIZED Tape feature (see E4.1(a)(i)), for Item No. 1 or Item No. 2

- E2.8 **Item No. 7** - Backboard, PVC Yellow, 4 x 12" Plumbized, with yellow 3M ReflectORIZED Tape feature (see E4.1(a)(i))
- E2.9 **Item No. 8** - Backboard, PVC Black, 3 x 12" Plumbized, with yellow 3M ReflectORIZED Tape feature (see E4.1(a)(i)), for Item No. 3
- E2.10 **Item No. 9** - Backboard, PVC Black, 4 x 12" Plumbized, with yellow 3M ReflectORIZED Tape feature (see E4.1(a)(i)), for Item No. 4

### E3. MATERIAL

- E3.1 All traffic signal head housings shall be UV stabilized flame retardant polycarbonate in construction.
- (a) The visors shall be UV stabilized flame retardant polycarbonate;
  - (b) Unless otherwise noted, the metallic component of traffic signal head section connecting brackets, visor mounting fasteners, backboard mounting fasteners, hinge pins, reflector pins, door securing bolts and wing-nut hardware shall be stainless steel;
  - (c) Pins used for the door hinge shall be of roll spring type, unless they are user replaceable;
  - (d) Fasteners used for securing the visors and the LED modules shall have a #2 Robertson head style. Fasteners supplied for mounting the backboard shall be **galvanized** self-tapping screws with a slotted 5/16" socket hex-head. Philips head screws are not acceptable fasteners.
- Note:** The screw holes on the polycarbonate traffic signal heads shall be of sufficient depth to accept the screws and hold the backboard firmly in place. Screw size (any applicable washers) must be large enough such that the backboard withstands wind gust velocities up to and including 80 mph (130 kph) without damage.
- (e) Backboards shall be UV stabilized flame retardant polycarbonate.
- E3.2 All Traffic Signal module indications shall be LED type.

### E4. DESIGN STANDARDS

- E4.1 Backboards:
- (a) Each backboard shall be manufactured from a single piece of opaque, not transparent, flat polycarbonate sheet stock.
    - (i) Prior to delivery, the front forward-facing outer edges of all backboards (Item Nos. 6, 7, 8 and 9) shall be supplied with highly reflective Diamond-grade yellow 3M-brand adhesive tape (equivalent to 3M part number 4081, split to 1.5 inches wide) as a permanently-affixed feature that will resist environmental and aging effects.
    - (ii) Peeling of reflectORIZED adhesive tape within the warranty period defined in D15. shall be considered a warrantable defect and that backboard would need to be repaired or replaced.
  - (b) The thickness of the backboards shall be 0.135 inch +0.02/ - 0.00 inch.
  - (c) Where backboard mounting screws are used to secure the backboard to the hinge or door locking bolt shoulders on the polycarbonate traffic signal heads, those shoulders must not break when the backboard screws are inserted and tightened.
  - (d) The "J"-hook mounting of backboards is not acceptable. All polycarbonate traffic signal heads that use this mounting system will be rejected.
  - (e) When equipped with a backboard, all polycarbonate vehicle signal heads attached via nipple must rest on the top of a standard City of Winnipeg specified ten foot high straight shaft pole (designed as described below) without deformation of the backboard.

**Note: Wording (below) from standard City of Winnipeg Ten Foot (10') High Light Duty Straight Shaft Poles:**

*Ten foot (10') high straight shaft poles shall consist of a straight shaft which tapers uniformly from the base plate to the nipple plate. **Overall height** of the pole from top surface of the nipple plate to the bottom of the base plate shall be **10 feet, + 1 inch.***

*The exterior dimensions of the ten foot (10') pole shaft walls measured "across the flats" shall be as follows:*

- a) exterior dimensions "across the flats" at **top** of the shaft (at nipple plate) shall be **4 3/4 inches +0, -1/8 inch**; and
- b) exterior dimensions "across the flats" at **bottom** of the shaft (at base plate) shall be **7 inches +0, - 1/8 inch.**

*At the top of each ten foot (10') straight shaft pole shall be a nipple plate made of 1/2-inch steel plate. Centered within that plate shall be a 1-1/2 inch IPS non-tapered threaded nipple extending through and projecting 1-1/2 inch (+ 1/8, -0) above the nipple plate. The nipple shall be fastened to the plate with a circumferential weld on the **interior** side of the nipple plate. The nipple shall be aligned within one (1°) degree of the vertical centre line of the pole. The threads shall be continuous and uninterrupted from the top of the nipple to within a distance of 1/16-inch or less, from the top surface of the nipple plate. The nipple plate shall be level and smooth such that a traffic signal head will sit flat and true on the plate.*

*The nipple plate shall be octagonal in shape to match the internal across flats dimension of the ten foot (10') pole shaft and shall be inserted partially into and welded circumferentially to the top of the pole shaft.*

- (f) Backboards designed for plumbizer mounted polycarbonate traffic signal heads shall be continuously adjustable so as to fit any plumbizer bracket ranging from one (1") inch thick to two (2") inches thick (thickness being defined as the separation distance required between the two (2) head sections to accommodate the plumbizer). To provide this adjustability, backboards shall have a detachable tab between the top and middle sections and a second detachable tab above the top section as described in drawing BB-1.

#### E4.2 Polycarbonate traffic signal heads:

- (a) Vehicular polycarbonate traffic signal heads shall be a **maximum** of fourteen (14") inches square, and must meet the current edition of the ITE specification.
- (b) When secured to the nipple on the top of the ten foot (10') high straight shaft pole, the traffic signal heads shall sit flat and true on the nipple plate without using shims or spacers, unless allowed by User.

#### E4.3 Visor Design:

- (a) Visors shall be supplied with these polycarbonate traffic signal head sections and shall be of cut-away design;
- (b) Hardware fasteners used to secure each visor to the door on each display section shall require a #2 Robertson head screwdriver
- (c) Tunnel visors for polycarbonate traffic signal heads are not part of this Contract.

### E5. WIND LOAD

E5.1 All polycarbonate traffic signal heads shall be designed to withstand gust wind velocities up to and including 100 mph (160 kph), equivalent to a wind pressure  $P = 25.6 C_d C_h$  for a single point (top or bottom) head mounting.

E5.2 All backboard mounting shall be designed to withstand gust wind velocities up to and including 80 mph (130 kph).

## **E6. COLOUR**

- E6.1 The polycarbonate traffic signal heads shall be either U.S.A. Standard colour Federal YELLOW as referenced in the ITE Specifications, or BLACK as required and shall match polycarbonate backboards.
- E6.2 The backboards shall be either U.S.A. Standard colour Federal YELLOW as referenced in the ITE Specifications, or BLACK as required and shall match polycarbonate traffic signal heads.
- E6.3 All parts referenced in the ITE specification that must be FLAT BLACK shall conform to the ITE requirements.

## **E7. ASSEMBLY**

- E7.1 All burrs and sharp edges shall be made smooth on polycarbonate traffic signal heads and backboards.
- E7.2 The polycarbonate traffic signals heads and backboards are to be degreased with a suitable solvent or steam cleaned before delivery.
- E7.3 All three- section polycarbonate traffic signal heads shall be assembled, excluding backboard and visors, in the configuration specified in the order.
- E7.4 All single- section polycarbonate traffic signal heads shall be assembled, excluding visors.

## **E8. LIGHT EMITTING DIODE DISPLAY MODULES (WHERE APPLICABLE)**

- E8.1 All traffic signal indications shall be LED (Light Emitting Diode) type. LED signal indications shall meet the most current ITE LED signal (or otherwise interim) specification.
- E8.2 All LED modules shall meet the ITE specification for the colour of lens they are displaying.
  - (a) The lens on each ball-type single colour LED module must not be clear.
  - (b) The visible surface on all LED module lenses must be convex.
- E8.3 LED modules shall properly fit within all ITE conforming traffic signal heads for twelve inch (12") signal sections as per design.
- E8.4 All light emitting diodes units shall conform to the current ITE specification for LED signals for Lumen Output and Chromaticity.
- E8.5 LED modules supplied in the polycarbonate traffic signal heads must also conform to the following requirements:
  - E8.5.1 a visible diode string failure rate of no more than 1 for 4, that is, for any individual diode failure no more than four (4) diodes may be out unless the ITE specification for LED signals specifies a lower amount;
  - E8.5.2 design of symbols shall conform to ITE standards for circular (Red/Amber/Green) and Green Arrow displays;
  - E8.5.3 all arrow LED modules shall conform to the Manual of Uniform Traffic Control Devices Canadian Standard with respect to configuration and dimensions for arrow indications;
  - E8.5.4 two secured, colour-coded, 600V, jacketed and stranded wires (min 20AWG) at least 1 metre in length shall be provided on each LED module;
  - E8.5.5 all LED modules shall operate from 90 to 135 volts RMS 60 Hz. Alternating Current and from minus forty degrees (-40°) to plus seventy-five degrees (75°) Celsius and from zero percent (0%) to one hundred percent (100%) humidity;
  - E8.5.6 each LED module shall have a sharp voltage turn-off characteristic, decaying to less than fifteen (15) VAC RMS within two hundred (200) milliseconds of removal of power, over the

full 90 to 135 VAC RMS specified operating voltage range, so as to not to cause false triggering of a traffic signal Conflict Monitor device due to extended turn-off voltage decay;

- E8.5.7 each LED module shall not show any visible light when in the OFF condition when attached to a Model 200 switch pack as used in the 170 type controller 33X control cabinet (Evaluation of this requirement shall be undertaken in total darkness.);
- E8.5.8 each LED module shall be identified with manufacture's name, wattage, voltage range, date of manufacture and unique serial number with numerical and barcode representation. Also each module must come with sticker stating 'This unit complies with the most current ITE VTCSH Specification'.
- E8.5.9 All circuit boards within each LED display module (including LED mounting board) shall be conformally coated.
- E8.5.10 Gasket material shall be placed around the perimeter of all supplied LED modules to reduce the invasion of dust or moisture into the head section.

## **E9. PERFORMANCE RELIABILITY**

- E9.1 The responsibility for the design of each complete item (including LED module where applicable), warranty and performance reliability shall rest upon the Contractor.
- E9.2 The term "*repeat failures*" as used herein is defined to mean that the same component, subassembly, or assembly develops repeated defects, breakdowns and/or malfunctions rendering the item inoperative, or required repeated shop correction, service and/or replacement during the warranty period (described In D15.) applicable for said component, subassembly, or assembly. Minor items or ordinary service adjustments are not included, or considered under the scope of "repeated failures", as well as other factors, such as operational damage due to accidents, misuse or lack of proper maintenance and service attention by not following the manufacturer's preventative maintenance schedules.
- E9.3 Where the item develops "repeated failures" in service, the Contractor shall make any necessary engineering changes (including repairs, alterations or modifications) in order to guarantee reliability of performance.
- E9.4 Any proposed major changes to product supplied shall be reviewed by the Contract Administrator (or designate) to determine if the changed product remains suitable for use.
  - (a) If approved, these changes will be required on all future product supplied under this Contract.

