



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 501-2010

**ALUMINUM OVERHEAD SIGN SUPPORT STRUCTURES - 2010 MAINTENANCE
WORKS**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 ALUMINUM OVERHEAD SIGN SUPPORT STRUCTURES - 2010 MAINTENANCE WORKS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 6, 2010.

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 Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>

B4.2.2 The Bidder is responsible for ensuring that he 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.

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.
- B5.10 Notwithstanding B5.2 to B5.9, and in accordance with B6.6 deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B14.1(a).

B6. BID COMPONENTS

- B6.1 The Bid shall consist of the following components:
- (a) Form A: Bid;
 - (b) Form B: Prices;

(c) Bid Security

- (i) 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, will be evaluated in accordance with B14.1(a).
- 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 Division
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 should be printed below such signatures.

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.

B8.2 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.

B8.4 Prices from Non-Resident Bidders are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

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 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>

B9.3 The Bidder and/or any proposed Subcontractor (for the portion of the Work proposed to be subcontracted to them) shall:

- (a) have successfully carried out work similar in nature, scope and value to the Work; and
- (b) be fully capable of performing the Work required to be in strict accordance with the terms and provisions of the Contract; and
- (c) have a written workplace safety and health program if required pursuant to The Workplace Safety and Health Act (Manitoba);

- B9.4 Further to B9.3(c), the Bidder shall, within five (5) 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 Division website at <http://www.winnipeg.ca/matmgt>)
- B9.5 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B9.6 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. 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.
- B10.1.3 The Bidder shall sign the Bid Bond.
- B10.1.4 The Surety shall sign and affix its corporate seal on the Bid Bond and the Agreement to Bond.
- 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 be opened publicly, after the Submission Deadline has elapsed, in the office of the Corporate Finance Department, Materials Management Division, or in such other office as may be designated by the Manager of Materials.

B11.1.1 Bidders or their representatives may attend.

B11.2 Following the Submission Deadline, the names of the Bidders and their Total Bid Prices (unevaluated, and pending review and verification of conformance with requirements) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/default.stm>

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 Division website at <http://www.winnipeg.ca/matmgt/default.stm>

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, or acceptable deviation there from (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.

B14.4.1 If there is any discrepancy between the Total Bid Price written in figures, the Total Bid Price written in words and the sum of the quantities multiplied by the unit prices for each item, the sum of the quantities multiplied by the unit prices for each item shall take precedence.

B14.4.2 Further to B14.1(a), in the event that a unit price is not provided on Form B: Prices, the City will determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.

B15. AWARD OF CONTRACT

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

B15.2 The City will have no obligation to award a Contract to a Bidder, even though one or all of the Bidders are determined to be responsible and qualified, and the Bids are determined to be responsive.

B15.2.1 Without limiting the generality of B15.2, the City will have no obligation to award a Contract where:

- (a) the prices exceed the available City funds for the Work;
- (b) the prices are materially in excess of the prices received for similar work in the past;
- (c) the prices are materially in excess of the City's cost to perform the Work, or a significant portion thereof, with its own forces;
- (d) only one Bid is received; or
- (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.

B15.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the lowest evaluated responsive Bid, in accordance with B14.

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 Division website at http://www.winnipeg.ca/matmgt/gen_cond.stm
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix “**C**” designates a section, clause or subclause in the *General Conditions for 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 aluminum overhead sign support structure maintenance works.

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

- (a) Removal and reinstallation of aluminum overhead sign support structures.
- (b) Refurbishment of aluminum overhead sign support structures.
- (c) Miscellaneous aluminum overhead sign support structure repairs.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is Dillon Consulting Limited, represented by:

Sital Rihal, P.Eng.
Project Manager
Suite 200 – 895 Waverley Street
Winnipeg, Manitoba R3T 5P4
Telephone No. (204) 453-2301
Facsimile No. (204) 452-4412

D3.2 At the pre-construction meeting, Sital Rihal 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 Notwithstanding C21., all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following address or facsimile number:

The City of Winnipeg
Chief Financial 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
Internal 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 three (3) 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 Division website at <http://www.winnipeg.ca/matmgt/Safety/default.stm>

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 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;
- 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 thirty (30) 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 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 C4.1 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;

- (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.

D13. SUBSTANTIAL PERFORMANCE

D13.1 The Contractor shall achieve Substantial Performance by October 29, 2010..

D13.2 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.

D13.3 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.

D14. TOTAL PERFORMANCE

D14.1 The Contractor shall achieve Total Performance by November 5, 2010.

D14.2 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.

D14.3 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.

D15. LIQUIDATED DAMAGES

D15.1 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 fifty dollars (\$550) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.

D15.2 The amount specified for liquidated damages in D15.1 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.

D15.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

CONTROL OF WORK

D16. JOB MEETINGS

D16.1 Regular weekly job meetings will be held at the Site. These meetings shall be attended by a minimum of one representative of the Contract Administrator, one representative of the City and one representative of the Contractor. Each representative shall be a responsible person capable of expressing the position of the Contract Administrator, the City and the Contractor respectively on any matter discussed at the meeting including the Work schedule and the need to make any revisions to the Work schedule. The progress of the Work will be reviewed at each of these meetings.

D16.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

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).

WARRANTY

D18. WARRANTY

D18.1 Notwithstanding C13.2, the warranty period shall begin on the date of Substantial Performance and shall expire two (2) years thereafter unless extended pursuant to C13.2.1 or C13.2.2, in which case it shall expire when provided for thereunder.

D18.2 Notwithstanding C13.2 or D18.1, the Contract Administrator may permit the warranty period for a portion or portions of the Work to begin prior to the date of Substantial Performance if:

- (a) a portion of the Work cannot be completed because of unseasonable weather or other conditions reasonably beyond the control of the Contractor but that portion does not prevent the balance of the Work from being put to its intended use.

D18.2.1 In such case, the date specified by the Contract Administrator for the warranty period to begin shall be substituted for the date specified in C13.2 for the warranty period to begin.

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 for

BID OPPORTUNITY NO. 501-2010

ALUMINUM OVERHEAD SIGN SUPPORT STRUCTURES - 2010 MAINTENANCE WORKS

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 as to Principal if no seal)

(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
Internal Services Department
Legal Services Division
185 King Street, 3rd Floor
Winnipeg MB R3B 1J1

RE: PERFORMANCE SECURITY - BID OPPORTUNITY NO. 501-2010

ALUMINUM OVERHEAD SIGN SUPPORT STRUCTURES - 2010 MAINTENANCE WORKS

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 Division website at <http://www.winnipeg.ca/matmgt/Spec/Default.stm>
- 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>
OHSS-10-01	Cover Sheet
OHSS-10-02	Site Locations
OHSS-10-03	Description of Works
OHSS-10-04	A808 Dunkirk Drive N/B, South of Bridge, Kingston Row Exit
OHSS-10-05	Structure No. A808 Details
OHSS-10-06	A813 Lagimodiere Boulevard S/B, North of Overpass, Concordia Avenue Exit
OHSS-10-07	Structure No. A813 Details
OHSS-10-08	Miscellaneous Aluminum Overhead Sign Support Structure Repairs
OHSS-10-09	A804 Stafford Street S/B, West of Pembina Highway – Miscellaneous Aluminum Works

E2. PERMITS, LICENCES, CERTIFICATES, LAWS, AND RULES

- E2.1 The Contractor shall give all necessary notices, obtain all necessary permits and pay all fees in order that the Work may be carried out. The Contractor shall submit all plans required by any inspection authority and obtain approval of same before proceeding with the Work and pay any cost attached to the inspection of such plans.
- E2.2 The Contractor shall comply with all laws, ordinances, rules, and regulations that would relate to the Work.
- E2.3 The Contractor and Subcontractors must be fully aware of all Work involving hazardous materials. All Work must be performed in compliance to the Manitoba Department of Labour Workplace Health and Safety Guidelines and all other applicable codes. The Contractor is responsible for the immediate notification to the Contract Administrator of his/her encountering of suspected hazardous material during their course of Work.

E3. EXISTING SERVICES AND UTILITIES

- E3.1 No responsibility will be assumed by the City for correctness or completeness of the drawings with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of such utilities, pipes and other objects and to make good any damage done to them

E4. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- E4.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing water pipes, gas pipes, electrical wires, cables, conduits, sewers, or other existing facilities and equipment at the Site of the Work. For all damage incurred thereto in the performance of the Work, the Contractor shall, upon instructions from and to the satisfaction of the Contract Administrator, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the cost of which shall be borne entirely by the Contractor.
- E4.2 The Contractor shall also indemnify and save harmless the City from all claims made directly against it in respect to any such damage.
- E4.3 Any damage caused by the negligence of the Contractor or his Subcontractors to the adjacent Works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.

E5. TRAFFIC CONTROL

- E5.1 Further to clauses 3.6 and 3.7 of CW 1130-R1:
- (a) In accordance with the Manual of Temporary Traffic Control, the Contractor ("Agency" in the manual) shall make arrangements with the Traffic Services Section of the City of Winnipeg to place all necessary temporary regulatory signs. The Contractor shall bear all costs associated with the placement of temporary traffic control devices by the Traffic Services Section of the City of Winnipeg in connection with the works undertaken by the Contractor.

E6. TRAFFIC MANAGEMENT

- E6.1 Further to clause 3.7 of CW 1130:
- (a) The Contractor shall limit Work to one lane only at all times, except as stated in (d). The Contractor may use the same lane to store materials and equipment only when Work is occurring at that location.
- (b) Maintain a minimum of one lane of traffic at all times, except as stated in (d).
- (c) Access to exit lanes shall be maintained at all times, except as stated in (d).
- (d) Complete lane closures, for the purposes of removing the existing aluminum overhead sign structures for transportation, for northbound Dunkirk Drive and southbound Lagimodiere Boulevard will only be permitted between the hours of 09:00 AM to 12:00 PM, Monday to Friday. Complete lane closures shall be limited to a maximum of 7 minutes. If the Contractor determines that they are unable to limit the lane closures to the above timeframes, they may apply in writing to the Contract Administrator to determine an alternate schedule.
- (e) Single lane closures, for the purpose of performing miscellaneous aluminum overhead sign support structure Works, will only be permitted between the hours of 09:00 AM to 15:30 PM.
- (f) In addition to E5, the Contractor shall erect temporary work signs, prior to any lane closures, at the nearest upstream intersection. In addition to the temporary work signs, the Contractor shall provide a flagperson immediately before the Work area during full lane closures.
- (g) The Contractor shall call the Lane Closures reporting line at 986-5640 and the Traffic Management Branch at 986-5079 at least one day prior to beginning work on any particular street.

E7. COOPERATION WITH OTHERS

- E7.1 The Contractor's attention is directed to the fact that other Contractors, the personnel of Utilities, and the staff of the City may be working on the approach roadways, adjacent roadways, or rights-of-way. The activities of these agencies may coincide with the Contractor's execution of the Work, and it will be the Contractor's responsibility to cooperate to the fullest extent with other personnel working in the area, and such cooperation is an obligation of the Contractor under the terms of this Contract.
- E7.2 The Contractor is advised that Dunkirk Street Pavement Maintenance Works are occurring on Osborne Street and Durkirk Drive from Jubilee Avenue to Fermor Avenue. It is scheduled ongoing between July and September. The Contractor is advised that Dillon Consulting Limited is also the Contract Administrator for this project and may assist in coordination.
- E7.3 The Contractor is advised that Concordia Overpass Girder Maintenance Works are occurring on the Concordia Overpass. It is scheduled ongoing between July and September. The Contractor is advised that Dillon Consulting Limited is also the Contract Administrator for this project and may assist in coordination.

E8. REFURBISHMENT OF ALUMINUM OVERHEAD SIGN SUPPORT STRUCTURES

E8.1 General

- (a) The Work covered under this item shall cover all operations related to the removal, transportation, repair, and reinstallation of aluminum overhead sign support structures in accordance with this Specification and as shown on the Drawings.
- (b) The Work to be done by the Contractor under this Specification shall include the furnishing of all superintendence, overhead, labour, materials, equipment, tools, supplies, and all things necessary for and incidental to the satisfactory performance and completion of all Works as hereinafter specified.

E8.2 Materials

E8.2.1 General

- (a) All materials supplied under this Specification shall be subject to inspection and testing by the Contract Administrator.
- (b) The Contractor shall be responsible for the supply, safe storage, and handling of all materials set forth in this Specification. All materials shall be handled in a careful and workmanlike manner, to the satisfaction of the Contract Administrator.

E8.2.2 Structural Aluminum

- (a) Structural aluminum for all components of the overhead sign support structure repairs and reinforcing shall be in accordance with the requirements stated below:
- (i) Extruded aluminum bars, rods, wire, profiles, and tubes shall be 6061-T6 alloy according to ASTM B 221M.
 - (ii) Aluminum sheet and plate shall be 6061-T6 alloy according to ASTM B 209M.
- (b) The Contractor shall provide mill test certificates showing the chemical and physical properties of all structural aluminum prior to the commencement of repairs.

E8.2.3 Stainless Steel Bolts, and Screws

- (a) Stainless steel bolts for flange connection splice plates and screws for miscellaneous repairs shall be in accordance with ASTM A193, Type 316.
- (b) All existing "U" bolts for attaching the chords to the column supports shall be replaced with new stainless steel bolts complete with lock washers and nuts conforming to ASTM A320, AISI Type 304.

E8.2.4 Nuts and Washers for New Flange Bolts and Existing Anchor Bolts

- (a) All new flange bolts and existing anchor bolts for refurbished overhead sign support structures shall be provided with new steel nuts and washers in accordance with CSA G40.21 Grade 300W. The nuts and washers shall be hot-dip galvanized in accordance with ASTM A153.

E8.2.5 Aluminum Welding

- (a) Welding consumables for all processes shall be certified by the manufacturer to be complying with the requirements of CSA W59.2, "Welded Aluminum Construction" and shall be submitted to the Contract Administrator for approval at least two (2) days prior to the commencement of any weld repairs.

E8.2.6 Alkali Resistant Bituminous Paint

- (a) Alkali resistant bituminous paint shall be supplied as per CW 3650.

E8.2.7 Non-shrink Grout

- (a) Grout as specified hereinafter shall be used for the construction of grout pads under sign structure base castings after the structure has been reinstalled.
- (b) High-performance, non-shrink grout shall be Sika 212 HP, or equal as accepted by the Contract Administrator, in accordance with B5.
- (c) The grout shall be of a consistency suitable for the application intended, as approved by the Contract Administrator.
- (d) The grout shall obtain a minimum of 20 MPa compressive strength in 24 hours.

E8.2.8 Sign Panels/Plates

- (a) Any existing sign panels/plates removed during structure removal at designated locations shall be delivered to the City of Winnipeg Traffic Services Sign shop located on Osborne St.
- (b) New sign panels/plates will be supplied and installed by the City of Winnipeg Traffic Services Branch.

E8.2.9 Miscellaneous Materials

- (a) Miscellaneous material incidental to this Work shall be as shown on the Drawings or as approved by the Contract Administrator.

E8.3 Equipment

- (a) All equipment shall be of a type approved by the Contract Administrator

E8.4 Certification

E8.4.1 The Contractor shall be certified in accordance with CSA W47.2 "Certification of Companies for Fusion Welding of Aluminum", Division 2.1. The Contractor shall provide a copy of the certificate a minimum of seven (7) days prior to the commencement of the Works.

E8.4.2 The Contractor and the welders completing the Works shall be certified by the Canadian Welding Bureau (CWB). The Contractor shall provide a copy of the CWB validation letters a minimum of seven (7) days prior to the commencement of the Works.

E8.5 Construction Methods

E8.5.1 Work by City of Winnipeg Traffic Services and Traffic Signals

- (a) The City of Winnipeg Traffic Services and Traffic Signals Branches will also be carrying out other work related to the removal and reinstallation of overhead sign support structures. This work may coincide with the Contractor's execution of the Work, and it will be the Contractor's responsibility to cooperate to the fullest extent with City staff. In addition to the Contract Administrator, the following persons may be contacted by the Contractor for scheduling and coordinating this work:

- (i) Traffic Services Branch - Mr. Jean Belair, Phone: 986-5840 (421 Osborne Street)
- (ii) Traffic Signals Branch - Mr. Nolan Burke, Phone: 986-4195 (821 Elgin Avenue)

E8.5.2 Removal

- (a) The Contractor shall notify the Contract Administrator a minimum of two (2) Working Days prior to the anticipated removal of the existing overhead sign support structures.
- (b) The City of Winnipeg Traffic Services Branch will supply and install temporary sign posts as required. The power supply to the existing overhead sign support structures, designated for removal, will be de-energized by the City of Winnipeg Traffic Signals Branch.
- (c) The sign structures shall be lifted and secured with nylon ropes or other approved methods. Use of steel chains and steel hooks will not be permitted.
- (d) The Contractor shall remove the existing overhead sign support structures, with care and adequate number of lifting anchor points to ensure that damage or overstressing does not occur to the structure during removal.
- (e) The Contractor shall remove the structures with care, to ensure the existing concrete pile foundations and anchor bolts are not damaged.
- (f) The vertical and horizontal supports shall be disassembled prior to transportation.
- (g) The Contractor shall provide blocking and adequate tie-downs to ensure that no damage or overstressing is sustained during transportation.
- (h) The Contractor will be responsible to repair any damage to the structure or adjacent property, sustained during removal or transportation, to the satisfaction of the Contract Administrator.

E8.5.3 Removal of Sign Panels/Plates

- (a) The Contractor shall remove the existing sign panels/plates, including existing steel sign mounting brackets, and deliver all components to City of Winnipeg Traffic Services. Any existing light fixtures and conduits shall be removed and disposed.
- (b) Any damage to the sign panels/plates that has not been identified prior to removal will be repaired by Traffic Services at the Contractor's expense. Removal of sign panels/plates is considered incidental to the removal of the overhead sign support structures and no separate payment will be made.

E8.5.4 Refurbishment of Aluminum Overhead Sign Support Structures

- (a) Prior to carrying out the refurbishment and weld repairs of existing aluminum overhead sign support structures, the Contractor shall supply the repair procedures for approval by the Contract Administrator. The weld repair procedures shall be approved CWB welding procedures. All repair procedures shall be submitted minimum of seven (7) days prior to the commencement of the Works.
- (b) Brace Joint Weld Repairs
 - (i) Field welding will not be permitted, unless otherwise instructed by the Contract Administrator.
 - (ii) The Contractor shall remove and replace any deficient welds identified on the Drawings as well as those identified during the shop inspection.
 - (iii) All welding shall be in accordance with CSA W59.2 "Welded Aluminum Construction".
- (c) Installation of Drainage Holes
 - (i) In the shop, the Contractor shall provide drainage holes in all braces that do not have drainage holes in the proper location, as described below, for Structures No. A808 and A813.
 - (ii) Two drainage holes shall be provided for horizontal braces, located on the underside of each end of the brace.

- (iii) One drainage hole shall be provided for vertical braces, located at the bottom of the brace on the side opposite to oncoming traffic.
 - (iv) One drainage hole shall be provided for diagonal braces, located on the on the bottom on the underside of the brace.
 - (v) The diameter of the drainage holes shall be a maximum of 4 mm. Torching of holes will not be permitted.
- (d) Sealing of Existing Electrical Holes
- (i) The Contractor shall seal all existing electrical holes with waterproof white polyethylene plugs.

E8.5.5 Erection

- (a) The Contractor shall notify the Contract Administrator a minimum of two (2) Working Days prior to the anticipated delivery to the Site and erection of the overhead sign support structures.
- (b) The Contractor shall provide blocking and adequate tie-downs to ensure that no damage or overstressing is sustained during transportation.
- (c) Prior to erection, the Contractor shall apply two coats of alkali-resistant bituminous paint to the underside of the base castings, each 1 mm in thickness and shall be allowed to dry prior to installation.
- (d) The sign structures shall be lifted and secured with nylon ropes or other approved methods. Use of steel chains and steel hooks will not be permitted.
- (e) The Contractor shall erect the existing overhead sign support structures, with care and adequate number of lifting anchor points to ensure that damage or overstressing does not occur to the structure during erect.
- (f) The Contractor shall supply and install new stainless steel "U" bolts, complete with lock washers and nuts, to anchor the chords to the column supports.
- (g) The Contractor shall supply and install new stainless steel flange bolts, complete with nuts and washers.
- (h) Each anchor bolt shall be provided with two galvanized nuts, complete with washers. One nut and washer shall be installed below the base plate for levelling the structure, and one nut and washer above the base plate for anchoring the structure. The anchor bolts shall have a minimum projection of 25 mm above the anchoring nuts.
- (i) Immediately after erection of the structure is complete, the Contractor shall install a new grout pad under each of the base castings. The grout pad under the base casting shall be a maximum of 50 mm thick and a minimum of 25 mm thick.
- (j) The Contractor shall ensure that the anchoring nuts of the anchor bolts and flange nuts of the flanged bolts are tightened according to the "turn-of-nut" method of the AASHTO Code.
- (k) The Contractor will be responsible to repair any damage to the structure or adjacent property, sustained during transportation or erection, to the satisfaction of the Contract Administrator.

E8.5.6 Installation of Sign Panels/Plates

- (a) The City of Winnipeg will be responsible for installation of sign panels/plates.

E8.5.7 Grout Pads

- (a) New grout pads shall be constructed under the sign structure bases after erection has been completed to the satisfaction of the Contract Administrator and is considered incidental to the erection of the structure.
- (b) New grout pads shall be protected by means of curing blankets and tarps to ensure proper curing conditions are achieved.
- (c) If the ambient temperature is below 5°C, the Contractor shall provide heating and hoarding for the grout pads to ensure proper curing conditions are achieved.

- E8.5.8 Miscellaneous Aluminum Overhead Sign Support Structure Works
- (a) Handhole Covers
 - (i) The Contractor shall supply and install the handhole covers, for various structures, as shown on the Drawings.
 - (ii) The installation of the handhole covers shall be carried out in the field.
 - (b) Shaft Cap
 - (i) The Contractor shall supply and install the shaft cap, for Structure No. A801, as shown on the Drawings.
 - (ii) The installation of the shaft cap shall be carried out in the field.
 - (c) Levelling Shims
 - (i) The Contractor shall remove the existing levelling shims, for Structure No. A804, located on the underside of the arm and back of the shaft at the shaft to arm collar and replace with new aluminum plate shims. To remove and replace the existing shims, the Contractor shall raise the end of the arm, ensuring that the arm is not raised excessively causing damage to the shaft to arm collar.
 - (ii) The new shims shall be bent to fit based on the Contractor's field measurements. The depth of shims installed should provide, under operating conditions, a 90° angle between the arm and the shaft.
 - (iii) Refer to Drawings for photographs of existing levelling shims.
 - (iv) This Work shall be carried out in the field.
- E8.6 Quality Control
- E8.6.1 Weld Testing
- (a) The Contractor shall inspect and test all repaired welds, as stated herein, to ensure they conform to the requirements of the Specification. Testing shall be completed in accordance with CSA W59.2 "Welded Aluminum Construction".
 - (b) The Contractor shall visually inspect all of the weld repairs. Dye Penetrant testing shall be completed on all weld craters on the structure after the weld repairs have been completed.
- E8.7 Quality Assurance
- E8.7.1 General
- (a) All workmanship and all materials furnished and supplied under this Specification 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 approval that may have been previously given. The Contract Administrator reserves the right to reject any materials or Works that are not in accordance with the requirements of this Specification.
 - (b) The Contractor shall be responsible for making a thorough inspection of materials to be supplied under this Contract.
- E8.7.2 Inspection
- (a) After the overhead sign support structures have been transported to the Contractor's shop, the Contractor shall allow the Contract Administrator to re-inspect the structure to identify any additional repairs.
- E8.7.3 Weld Testing
- (a) After all of the aluminum welding has been completed, the Contractor shall provide access for the Contract Administrator to test the repaired welds.
 - (b) Defects in aluminum welding shall be removed and replaced in accordance with this Specification.

(c) No repair shall be made until agreed to by the Contract Administrator.

E8.7.4 Damage to the Structure

(a) Any damage to the structure incurred during removal, transportation, storage, and erection shall be repaired to the satisfaction of the Contract Administrator.

E8.7.5 Unacceptable Work

(a) Any Work found to be unacceptable shall be corrected in accordance with this Specification or as directed by the Contract Administrator.

(b) No repair shall be made until agreed to by the Contract Administrator.

E8.8 Measurement and Payment

E8.8.1 Removal and Reinstallation of Aluminum Overhead Sign Support Structures

(a) Removal and reinstallation of aluminum overhead sign support structures will be measured and paid for at the Contract Lump Sum Price per structure for the Items of Work listed here below for aluminum overhead sign support structures removed and reinstalled in accordance with this Specification and accepted by the Contract Administrator.

(i) Items of Work:

Removal and Reinstallation of Aluminum Overhead Sign Support Structures

- ◆ Structure No. A808 – Dunkirk Drive N/B, South of Bridge, Kingston Row Exit
- ◆ Structure No. A813 – Lagimodiere Boulevard S/B, North of Overpass, Concordia Avenue Exit

E8.8.2 Brace Joint Weld Repairs

(a) Aluminum brace joint weld repairs will be measured on a linear centimetre basis of weld around the aluminum braces. The payment length will be based on the out-to-out dimensions of the defective weld. This Item of Work will be paid for at the Contract Unit Price per linear centimetre for “Brace Joint Weld Repairs” completed in accordance with this Specification and accepted by the Contract Administrator.

E8.8.3 Installation of Drainage Holes

(a) Installation of drainage holes will not be measured. This Item of Work will be paid for at the Contract Lump Sum Price for “Installation of Drainage Holes” completed in accordance with this Specification and accepted by the Contract Administrator.

E8.8.4 Sealing of Existing Electrical Holes

(a) Sealing of existing electrical holes will not be measured. This Item of Work will be paid for at the Contract Lump Sum Price for “Sealing of Existing Electrical Holes” completed in accordance with this Specification and accepted by the Contract Administrator.

E8.8.5 Supply and Installation of Handhole Covers

(a) Supply and installation of handhole covers will not be measured. This Item of Work will be paid for at the Contract Lump Sum Price for “Supply and Installation of Handhole Covers” completed in accordance with this Specification and accepted by the Contract Administrator.

E8.8.6 Supply and Installation of Shaft Cap

(a) Supply and installation of shaft cap will not be measured. This Item of Work will be paid for at the Contract Lump Sum Price for “Supply and Installation of Shaft Cap” completed in accordance with this Specification and accepted by the Contract Administrator.

E8.8.7 Supply and Installation of Levelling Shims

- (a) Supply and installation of levelling shims will not be measured. This Item of Work will be paid for at the Contract Lump Sum Price for "Supply and Installation of Levelling Shims" completed in accordance with this Specification and accepted by the Contract Administrator.