

THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 31-2007

AMMONIA ICE PLANT REPLACEMENT AT TERRY SAWCHUK INDOOR ARENA – 901 KIMBERLY AVENUE

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 AMMONIA ICE PLANT REPLACEMENT AT TERRY SAWCHUK INDOOR ARENA – 901 KIMBERLY AVENUE

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, February 20, 2007.
- B2.2 Proposal Submissions determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Contract Administrator or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 Further to GC.2.01, the Contract Administrator or an authorized representative will be available at the Site from 9:00 a.m. to 10:30 a.m. on February 6, 2007 to provide Bidders access to the Site.
- B3.2 The Bidder shall not be entitled to rely on any information or interpretation received at the Site investigation unless that information or interpretation is the Bidder's direct observation, or is provided by the Contract Administrator in writing.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Contract Administrator identified in D3.1.
- B4.2 If the Bidder finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Bidder shall notify the Contract Administrator of the error, discrepancy or omission, or request a clarification as to the meaning or intent of the provision at least five (5) Business Days prior to the Submission Deadline.
- B4.3 Responses to enquiries which, in the sole judgment of the Contract Administrator, require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator to all Bidders by issuing an addendum.
- B4.4 Responses to enquiries which, in the sole judgment of the Contract Administrator, do not require a correction to or a clarification of the Request for Proposal will be provided by the Contract Administrator only to the Bidder who made the enquiry.
- B4.5 The Bidder shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 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.
- B5.2 The Bidder shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 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.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B6.2.2 The Bidder is responsible for ensuring that he has received all addenda and is advised to check the Materials Management Branch internet site for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 11 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 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.
- B7.4 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.
- B7.5 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.
- B7.6 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.

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- B7.6.1 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.
- B7.7 If the Contract Administrator approves a substitute as an "approved equal", any Bidder may use the approved equal in place of the specified item.
- B7.8 If the Contract Administrator approves a substitute as an "approved alternative", any Bidder bidding that approved alternative shall base his Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B16.
- B7.9 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.

B8. PROPOSAL SUBMISSION

- B8.1 The Proposal Submission consists of the following components:
 - (a) Form A: Proposal;
 - (b) Form B: Prices;
 - (c) Qualification;
 - (d) Form G1: Bid Bond and Agreement to Bond, or Form G2: Irrevocable Standby Letter of Credit and Undertaking, or a certified cheque or draft.
- B8.2 All components of the Proposal Submission shall be fully completed or provided, and submitted by the Bidder no later than the Submission Deadline, with all required entries made clearly and completely in ink, to constitute a responsive Proposal.
- B8.3 The Proposal Submission shall be submitted enclosed and sealed in an envelope clearly marked with the RFP number and the Bidder's name and address.
- B8.3.1 Samples or other components of the Proposal Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the RFP number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Proposal Submission.
- B8.4 Proposal Submissions submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.5 Proposal Submissions shall be submitted to:

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

B9. PROPOSAL

- B9.1 The Bidder shall complete Form A: Proposal, making all required entries.
- B9.2 Paragraph 2 of Form A: Proposal 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;

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 - (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.
- B9.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Proposal, the Bidder shall identify a contact person who is authorized to represent the Bidder for purposes of the Proposal.
- B9.4 Paragraph 13 of Form A: Proposal 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.
- B9.4.1 The name and official capacity of all individuals signing Form A: Proposal shall be printed below such signatures.
- B9.4.2 All signatures shall be original and shall be witnessed except where a corporate seal has been affixed.
- B9.5 If a Proposal 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 Proposal Submission and the Contract, when awarded, shall be both joint and several.

B10. PRICES

- B10.1 The Bidder shall state the lump sum price in Canadian funds for the Work on Form B: Prices.
- B10.1.1 Notwithstanding GC.9.01(2), the price on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

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;
 - (b) be responsible and not be suspended, debarred or in default of any obligation to the City;
 - (c) be financially capable of carrying out the terms of the Contract;
 - (d) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract;
 - (e) have successfully carried out work, similar in nature, scope and value to the Work;
 - (f) employ only Subcontractors who:

- (i) are responsible and not suspended, debarred or in default of any obligation to the City (a list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt); and
- (ii) have successfully carried out work similar in nature, scope and value to the portion of the Work proposed to be subcontracted to them, and are fully capable of performing the Work required to be done in accordance with the terms of the Contract;
- (g) have a written workplace safety and health program in accordance with The Workplace Safety and Health Act (Manitoba).
- B11.2 The Bidder shall complete Form C: Qualification giving a list of previously completed work, similar in nature, scope and value to the Work, in sufficient detail to demonstrate the Bidder's qualification to undertake the Work.
- B11.3 The Bidder shall provide, in his Proposal Submission:
 - (a) A full description of their methodology and experience of their project team for the Work required with respect to the following:
 - (i) Project team approach;
 - (ii) Team organization Provide a brief description of the team makeup and structure including responsibilities and qualifications of each team member;
 - (iii) Communication strategy with client;
 - (iv) Project quality assurance and control;
 - (v) Design experience with respect to Ammonia Ice Plants;
 - (vi) Designing mechanical, lighting, water and building automation and control systems related to this project;
 - (vii) Providing project management services for projects of similar complexity and size;
 - (viii) Demolition and Construction experience with respect to Ammonia Ice Plants;
 - (ix) Commissioning and performance testing experience of Ammonia Ice Plants;
 - (x) Training of employees and the development and implementation of occupant information programs;
 - (xi) Identifying preventive maintenance approaches that will be recommended for the existing, modified and new equipment and systems;
 - (xii) Determining approaches for training of the facility and the City staff in the proper operation and maintenance of all improvements.
- B11.4 The Bidder shall be prepared to submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- 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.

B12. BID SECURITY

B12.1 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 Proposal 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 Proposal 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.
- B12.1.1 If the Bidder submits alternative Proposals, the bid security shall be in the amount of the specified percentage of the highest Total Bid Price submitted.
- B12.2 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.
- B12.2.1 Where the bid security provided by the successful Bidder is in the form of a certified cheque or draft pursuant to B12.1(c), it will be deposited and retained by the City as the performance security and no further submission is required.
- B12.2.2 The City will not pay any interest on certified cheques or drafts furnished as bid security or subsequently retained as performance security.
- B12.3 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 Request for Proposal.

B13. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B13.1 Proposal Submissions will not be opened publicly.
- B13.2 After award of Contract, the name(s) of the successful Bidder(s) and the Contract Amount(s) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- B13.3 To the extent permitted, the City shall treat all Proposal Submissions as confidential, however the Bidder is advised that any information contained in any Proposal Submission may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.

B14. IRREVOCABLE OFFER

- B14.1 The Proposal(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 12 of Form A: Proposal.
- B14.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Bidders and these Bidders shall be bound by their offers on such Work until a Contract for the Work has been duly executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 12 of Form A: Proposal.

B15. WITHDRAWAL OF OFFERS

- B15.1 A Bidder may withdraw his Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B15.1.1 Notwithstanding GC.7.06(2), the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B15.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Bidder's authorized representatives named in Paragraph 13 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B15.1.3 If a Bidder gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials shall:
 - (a) retain the Proposal Submission until after the Submission Deadline has elapsed;
 - (b) open the Proposal Submission to identify the contact person named in Paragraph 3 of Form A: Proposal and the Bidder's authorized representatives named in Paragraph 13 of Form A: Proposal; and
 - (c) if the notice has been given by any one of the persons specified in B15.1.3(b), declare the Proposal withdrawn.
- B15.2 A Bidder who withdraws his Proposal after the Submission Deadline but before his offer has been released or has lapsed as provided for in B14.2 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.

B16. INTERVIEWS

B16.1 The Contract Administrator may, in his sole discretion, interview Bidders during the evaluation process.

B17. NEGOTIATIONS

- B17.1 The City reserves the right to negotiate details of the Contract with Bidders.
- B17.2 Negotiations, if any, are intended to address administrative and technical details of the Contract. The Bidder is advised to present his best offer, not a starting position for negotiations, in his Proposal Submission; the City will not necessarily pursue negotiations with any Bidder.
- B17.3 If, in the course of negotiations pursuant to B17.2 or otherwise, the Bidder amends or modifies a Proposal after the Submission Deadline, the City may consider any amended Proposal as an alternative to the Proposal as originally submitted without releasing the Bidder from the Proposal as originally submitted.

B18. EVALUATION OF PROPOSALS

- B18.1 Award of the Contract shall be based on the following evaluation criteria:
 - (a) compliance by the Bidder with the requirements of the Request for Proposal:
 - (i) mandatory requirements (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B11:
 - (i) mandatory qualifications (pass/fail);
 - (ii) desirable qualification (30%);
 - (iii) methodology and experience of the Bidder (30%).
 - (c) Total Bid Price (40%);

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 - (d) economic analysis of any approved alternative pursuant to B7.
- B18.2 Further to B18.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal 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 Proposal, or waive technical requirements if the interests of the City so require.
- B18.3 Further to B18.1(b), the Award Authority shall reject any Proposal submitted by a Bidder who does not demonstrate, in his Proposal Submission or in other information required to be submitted, that he is responsible and qualified.
- B18.4 Further to B18.1(c), the Total Bid Price shall be the lump sum price shown on Form B: Prices.
- B18.4.1 If there is any discrepancy between the lump sum price written in figures and the lump sum price written in words, the price written in words shall take precedence.
- B18.5 This Contract will be awarded as a whole.

B19. AWARD OF CONTRACT

- B19.1 The City will give notice of the award of the Contract by way of a letter of intent, or will give notice that no award will be made.
- B19.2 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 Proposals are determined to be responsive.
- B19.2.1 Without limiting the generality of B19.2, 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 Proposal 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.
- B19.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Bidder submitting the most advantageous offer.
- B19.3.1 Following the award of contract, a Bidder will be provided with information related to the evaluation of his Proposal upon written request to the Contract Administrator.

PART C - GENERAL CONDITIONS

CO. GENERAL CONDITIONS

- C0.1 The General Conditions for Construction (Revision 2006 12 15) are applicable to the Work of the Contract.
- C0.1.1 The General Conditions for Construction are available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Branch internet site at http://www.winnipeg.ca/matmgt.
- C0.2 A reference in the Bid Opportunity to a section, clause or subclause with the prefix "C" designates a section, clause or subclause in the *General Conditions for Construction*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

- D2.1 The Work to be done under the Contract shall consist of complete replacement of the existing ammonia ice plant at Terry Sawchuk Indoor Arena 901 Kimberly Avenue
- D2.2 The major components of the Work are as follows:
 - (a) Evaluation of the existing ice plant, related components and mechanical operation (not facility operation);
 - (b) Design a new complete ice plant utilizing new and existing components based on operating conditions provided for this facility;
 - (c) Demolition, design, construction, installation, and commissioning of all new and existing components for the completed ice plant replacement.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Bruce Kazun C.E.T. Supervisor of Community Center Maintenance Main Floor, 100 Main Street Winnipeg, MB R3C 1A4

Telephone No. (204) 794-4409 Facsimile No. (204) 986-7311

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

D4. CONTRACTOR'S SUPERVISOR

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

D5. NOTICES

- D5.1 Except as provided for in C23.2.2, all notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the Contractor shall be sent to the address or facsimile number identified by the Contractor in Paragraph 2 of Form A: Bid.
- D5.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in D5.3, D5.4 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator at the address or facsimile number identified in D3.1.
- D5.3 All notices of appeal to the Chief Administrative Officer shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 949-1174

D5.4 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications required to be submitted or returned to the City Solicitor shall be sent to the following address or facsimile number:

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

Facsimile No.: (204) 947-9155

D6. CONFIDENTIALITY AND OWNERSHIP OF INFORMATION

- D6.1 Information provided to the Contractor by the City or acquired by the Contractor during the course of the Work is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Contract Administrator.
- D6.2 The Contract, all deliverables produced or developed, and information provided to or acquired by the Contractor are the property of the City. The Contractor shall not disclose or appropriate to its own use, or to the use of any third party, all or any part thereof without the prior written consent of the Contract Administrator.
- D6.3 The Contractor shall not make any statement of fact or opinion regarding any aspect of the Contract to the media or any member of the public without the prior written authorization of the Contract Administrator.

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. WORKERS COMPENSATION

D8.1 The Contractor shall be registered with the Workers Compensation Board of Manitoba, shall provide and maintain Workers Compensation coverage throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

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) all inclusive, with The City of Winnipeg being added as an additional insured, with a cross-liability clause, such liability policy to also contain a contractual liability, an unlicensed motor vehicle liability and a products and completed operations

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- endorsement to remain in place at all times during the performance of the Work and throughout the warranty period:
- (b) automobile liability insurance for owned and non-owned automobiles used for or in connection with the Work in the amount of at least two million dollars (\$2,000,000.00) at all times during the performance of the Work and until the date of Total Performance.
- D9.2 Deductibles shall be borne by the Contractor.
- D9.3 The Contractor shall provide the Contract Administrator with a certificate of insurance of each policy 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 for the return of the executed Contract.
- D9.4 The Contractor shall not cancel, materially alter, or cause each policy to lapse without providing at least fifteen (15) Calendar Days prior written notice to the Contract Administrator.

D10. PERFORMANCE SECURITY

- D10.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:
 - (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Contract Price; or
 - (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Contract Price; or
 - (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Contract Price.
- D10.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.
- D10.2 If the bid security provided in his Proposal Submission was not a certified cheque or draft pursuant to B12.1(c), the Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award of the Contract by way of letter of intent and prior to the commencement of any Work on the Site but in no event later than the date specified in C4 for the return of the executed Contract.

D11. SECURITY CLEARANCE

- D11.1 Each individual proposed to perform Work under the Contract shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence.
- D11.1.1 The Criminal Records Search shall include a Vulnerable Sector Search.
- D11.2 Prior to the commencement of any Work, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform Work.
- D11.3 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person, will not be permitted to perform any Work.

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- D11.4 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- D11.5 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work.

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:
 - evidence that the Contractor is in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba;
 - (ii) evidence of the workers compensation coverage specified in D8;
 - (iii) evidence of the insurance specified in D9;
 - (iv) the performance security specified in D10; and
 - (v) the security clearances specified in D11.
 - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.
- D12.3 The Contractor shall not commence the Work on the Site before April 2, 2007.

D13. WORKING DAYS

- D13.1 Further to C1.1(gg), the Contract Administrator's determination of whether or not atmospheric and Site conditions are such that a Working Day is deemed to have elapsed may be based at one time on one type of work while at another time a Working Day may be based on another type of work. When more than one type of major work is involved, the quantity of equipment that must be able to work in order to meet the requirements of a Working Day may vary considerably from that specified in the General Conditions.
- D13.2 In the event that incidental work is behind schedule which, in the opinion of the Contract Administrator, should have been or could have been carried out by the Contractor in conjunction with or immediately following work of a major type, the City hereby reserves the right to charge Working Days on the incidental work until such time as it is up to schedule.
- D13.3 When the major type of work involves restoration of the site to the condition it was prior to rainfall, Working Days shall not be charged.
- D13.4 The Contract Administrator will furnish the Contractor with a daily record for each major type of work showing various information concerning the equipment, the time it worked, could have worked and Working Days charged. This report is to be signed each day by an authorized representative of the Contractor.

D14. SUBSTANTIAL PERFORMANCE

D14.1 The Contractor shall achieve Substantial Performance by August 10, 2007.

- D14.2 When the Contractor considers the Work to be substantially performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Substantial Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D14.3 The date on which the Work has been certified by the Contract Administrator as being substantially performed to the requirements of the Contract through the issue of a certificate of Substantial Performance is the date on which Substantial Performance has been achieved.

D15. TOTAL PERFORMANCE

- D15.1 The Contractor shall achieve Total Performance by August 17, 2007.
- D15.2 When the Contractor or the Contract Administrator considers the Work to be totally performed, the Contractor shall arrange, attend and assist in the inspection of the Work with the Contract Administrator for purposes of verifying Total Performance. Any defects or deficiencies in the Work noted during that inspection shall be remedied by the Contractor at the earliest possible instance and the Contract Administrator notified so that the Work can be reinspected.
- D15.3 The date on which the Work has been certified by the Contract Administrator as being totally performed to the requirements of the Contract through the issue of a certificate of Total Performance is the date on which Total Performance has been achieved.

D16. LIQUIDATED DAMAGES

- D16.1 If the Contractor fails to achieve Total Performance in accordance with the Contract by the day fixed herein for Total Performance, the Contractor shall pay the City one thousand five hundred dollars (\$1,500.00) per Working Day for each and every Working Day following the day fixed herein for Total Performance during which such failure continues.
- D16.2 The amount specified for liquidated damages in D16.1 is based on a genuine pre-estimate of the City's losses in the event that the Contractor does not achieve Total Performance by the day fixed herein for same.
- D16.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D17. SCHEDULED MAINTENANCE

- D17.1 The Contractor shall perform the following scheduled maintenance in the manner and within the time periods required by the Specifications:
 - (a) Two complete start-ups and shutdowns of the system (two season operation) with scheduling to be determined by the Contract Administrator.
- D17.2 Determination of Substantial Performance and Total Performance shall be exclusive of scheduled maintenance identified herein. All scheduled maintenance shall be completed prior to the expiration of the warranty period. Where the scheduled maintenance cannot be completed during the warranty period, the warranty period shall be extended for such period of time as it takes the Contractor to complete the scheduled maintenance.

CONTROL OF WORK

D18. JOB MEETINGS

D18.1 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.

D18.2 The Contract Administrator reserves the right to cancel any job meeting or call additional job meetings whenever he deems it necessary.

D19. PRIME CONTRACTOR – THE WORKPLACE SAFETY AND HEALTH ACT (MANITOBA)

D19.1 Further to C6, 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

D20. WARRANTY

- D20.1 Notwithstanding C13, the warranty period shall begin on the date of Total Performance and shall expire two (2) years thereafter unless extended pursuant to D20.2, in which case it shall expire when provided for thereunder.
- D20.2 If a defect or deficiency prevents the full and normal use or operation of the Work or any portion thereof, for purposes of calculating the warranty period, time shall be deemed to cease to elapse for the defective or deficient portion, and for any portion of the Work whose use or operation is prevented by such defect or deficiency, as of the date on which the defect or deficiency is observed or the use or operation is prevented and shall begin to run again when the defect or deficiency has been corrected or the Work may be used or operated to the satisfaction of the Contract Administrator.

FORM H1: PERFORMANCE BOND (See D10)

(See D10)

| KNO | W ALL MEN BY T | HESE PRESENTS THAT |
|--------------------------|--|---|
| (here | inafter called the ' | Principal"), and |
| | inafter called the d the "Obligee"), ir | "Surety"), are held and firmly bound unto THE CITY OF WINNIPEG (hereinafter the sum of |
| | | dollars (\$ |
| sum | the Principal and | ada to be paid to the Obligee, or its successors or assigns, for the payment of which the Surety bind themselves, their heirs, executors, administrators, successors and erally, firmly by these presents. |
| WHE | REAS the Princip | al has entered into a written contract with the Obligee dated the |
| | day of | , 20, for: |
| RFP | NO. 31-2007 | |
| AMM AVEN | | REPLACEMENT AT TERRY SAWCHUK INDOOR ARENA – 901 KIMBERLY |
| which | n is by reference n | ade 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) (b) (c) (d) | forth in the Cor perform the Wo make all the pa in every other Contract; and | erform the Contract and every part thereof in the manner and within the times set tract and in accordance with the terms and conditions specified in the Contract; rk in a good, proper, workmanlike manner; yments whether to the Obligee or to others as therein provided; respect comply with the conditions and perform the covenants contained in the |
| (e) | demands of every claims, action Compensation performance of | save harmless the Obligee against and from all loss, costs, damages, claims, and ery description as set forth in the Contract, and from all penalties, assessments, of for loss, damages or compensation whether arising under "The Workers Act", or any other Act or otherwise arising out of or in any way connected with the renon-performance of the Contract or any part thereof during the term of the ewarranty period provided for therein; |
| | | ON SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety able for a greater sum than the sum specified above. |
| nothir or rel | ng of any kind or | DECLARED AND AGREED that the Surety shall be liable as Principal, and that matter whatsoever that will not discharge the Principal shall operate as a discharge the Surety, any law or usage relating to the liability of Sureties to the contrary |
| IN W | ITNESS WHERE | F the Principal and Surety have signed and sealed this bond the |
| | day of | 20 |

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| SIGNED AND SEALED |
|---------------------|
| in the presence of: |

| | Per: _ |
|-----------|------------|
| (Witness) | Per: _ |
| | |

| (Name of Principal) | |
|---------------------|--------|
| Per: | (Seal) |
| Per: | |
| | |
| | |
| | |
| (Name of Surety) | |

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

| (Date) | |
|--------------------------|--|
| Corpo Legal 185 Ki | y of Winnipeg ate Services Department Services Division ag Street, 3rd Floor eg MB R3B 1J1 |
| RE: | PERFORMANCE SECURITY – RFP NO. 31-2007 |
| | AMMONIA ICE PLANT REPLACEMENT AT TERRY SAWCHUK INDOOR ARENA – 901 KIMBERLY AVENUE |
| Pursua | nt to the request of and for the account of our customer, |
| (Name | Contractor) |
| (Addres | of Contractor) |
| | REBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding ggregate |
| | Canadian dollars. |
| demar Letter payme | andby Letter of Credit may be drawn on by you at any time and from time to time upon writter d for payment made upon us by you. It is understood that we are obligated under this Standby of Credit for the payment of monies only and we hereby agree that we shall honour your demand fo not without inquiring whether you have a right as between yourself and our customer to make such and without recognizing any claim of our customer or objection by the customer to payment by us. |
| | nount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upor u or by formal notice in writing given to us by you if you desire such reduction or are willing that it be |
| Partial | drawings are permitted. |
| | gage with you that all demands for payment made within the terms and currency of this Standby of Credit will be duly honoured if presented to us at: |
| (Addres |) |
| and w | confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us. |

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| All demands for payment shall specifically state that they are drawn under this Standby Lette | er 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. GENERAL

E1.1 These Specifications shall apply to the Work.

E2. DESIGN CRITERIA

- E2.1 The Ice Plant at Terry Sawchuk Arena shall be designed to operate with normal programming from August 1 to April 30 inclusive. The plant shall have sufficient capacity to make ice within 72 hours of start-up to meet the August 1 programming requirements.
- E2.2 The normal ice surface temperature for this facility is 16°F 18°F (Brine Temperature). Flooding intervals for this facility are hourly during regular programming schedule. The normal hours of operation are as follows:

Week Days 3:00 P.M. – 1:00 A.M.

Saturday 7:00 A.M. – 1:00 A.M.

Sunday 7:00 A.M. – 1:00 A.M.

The normal ice thickness ranges from 1" to 1 1/2".

Ice maintenance is performed weekly with an ice edger and ice resurfacer.

The shed lighting comprises of 50 – 400W metal halide light fixtures

- E2.3 After a normal ice resurfacing flooding, ice surface shall be ready for use within 15 minutes. The ice surface shall be completely frozen with no wet patches.
- E2.4 The system shall be designed to operate on a single compressor between November 15 to February 20 rotating with the other compressor(s) to maintain even balance of usage.
- E2.5 The new evaporative condenser(s) shall be a two speed for system operation and shall achieve free air cooling with no additional water at 42°F 45°F outdoor air temperature.
- E2.6 The design of the Ice Plant shall be based on industry standards for this type of construction and utilizing "Best Practice" for maintenance and operation purposes with adequate provision for expansion of equipment to maintain a year round operation.
- E2.7 A Site survey for noise pollution shall be conducted and appropriate modifications and equipment shall be implemented to the design.

E3. POWER SMART INITIATIVE

- E3.1 The City of Winnipeg has entered into a multi-year agreement with Manitoba Hydro to reduce consumption of utilities. As a result of this agreement, Manitoba Hydro has the right to review the design, specifications and drawings prior to construction. Manitoba Hydro may make a financial contribution to the project or may provide an alternative design with a financial contribution. Any additional design costs as a result of the Power Smart Initiative shall be borne by the Contractor.
- E3.2 The Ammonia Ice Plant design shall incorporate and reflect the City of Winnipeg's initiative to reduce consumption of natural gas, hydro electricity and water wherever practical, feasible and economical.

E4. EXISTING FACITY AND EQUIPMENT

- E4.1 The facility was constructed in 1972 and has an approximate area of 25,900 square feet. The rink is an 85' x 200' standard surface on a structural concrete slab.
- E4.2 The existing 50 HP Compressor motor #3 shall be dismantled and stored on Site. Storage site to be determined and contractor shall incur all related shipping and handling expenses to specified location.
- E4.3 The existing 50 HP York R4 Compressor #1 was overhauled in November 2005 and is currently in normal operation.
- E4.4 The existing Brine Header shall be tested and inspected. The header shall remain in the trench and be re-connected by bolted flanges in the machine room in an agreed location. The Brine System to be fully pressure tested, system to be flushed if contaminated, refilled, balanced for normal operating conditions. Verify concentration of brine and adjust mixture to recommended industry value.
- E4.5 The existing electrical distribution is a 1000 AMP 120/208v 3 Phase with a pad mounted transformer adjacent, in the machine room. Evaluate the existing electrical distribution and subpanels and provide replacement to the electrical system to incorporate new and existing equipment to meet current codes. New distribution and sub-panels shall have 25% additional capacity for future loads.
- E4.6 The existing Johnson Control "METASYS"/Cimco guarded status panel was installed in 2002/2003. Contractor shall refurbish and incorporate this system into the new plant management operation system. Additional items to include multiple compressors and all new equipment.
- E4.7 Contractor shall conduct an inspection of all equipment that is not included in demolition to ensure that it will operate as intended with new systems and equipment.
- E4.8 The existing electric heaters and guarded status exhaust fan shall remain and be incorporated in new design.
- E4.9 The existing dehumidifier located in the ice shed spectator is not working. Contractor is to remove and replace with a suitable unit designed for rink operating conditions. Modify existing structure to suit new equipment.
- E4.10 Modify, reconstruct, and refurbish entire machine room to meet all current codes, Acts, By-laws and Regulations. The existing south wall and overhead door shall be removed and be reconstructed, insulated and a removable knock-out panel be incorporated for future removal of equipment. Exterior finishes shall be vandal and graffiti resistant.
- E4.11 The two (2) existing evaporative condensers shall be removed from the Site. The Contractor may re-use and modify the existing concrete columns and steel structure. The Contractor shall verify existing condition and modify the existing stand to suit new equipment.

E5. DETAILED SCOPE OF WORK

- E5.1 The Ammonia Ice Plant replacement at Terry Sawchuk Arena shall include the following as a minimum:
 - (a) A thorough and professional examination and review of the facility's existing systems.
 - (b) Develop, design and prepare detailed working drawings, specifications, control schematics and related documents for the complete Ice Plant operation.
 - (c) The Contractor shall review the construction Work to ensure it meets the original intent, and will not depreciate the value of the buildings, and will not affect the safety of occupants or exceed the agreed impact on the City's operations at any time during or after construction.

- (d) The Contractor shall ensure that all changes in design and operation meet the latest codes, standards and best practices (including, but not limited to, the current provincial building code, WCB regulations, provincial plumbing code, boiler and refrigeration regulations, electrical codes, IES Lighting Handbook (8th Edition), City By-Laws, ASHRAE and SMACNA Standards, and Manitoba Department of Labour Regulations.
- (e) The Contractor shall provide all necessary demolition, removal of all equipment and materials and dispose in a certified disposal area. Personnel shall be qualified and experienced to perform the demolition and construction. Any related damage to existing structure or alterations to the facility to assist demolition shall be restored to original condition at the Contractor's expense. Items to remain are noted in existing facility and equipment section E4.
- (f) The new Ice Plant shall incorporate multiple compressors complete with a Glycol cooling system for compressor head cooling. As a minimum, the design shall be based on reciprocating compressors. Screw compressors may be included in the proposal.
- (g) All component selection shall be based on achieving optimum operation of the Ice Plant and maintaining energy efficiency.
- (h) All compressor drive motors shall be a soft start function.
- (i) Design shall be based on ammonia (NH3 R-717) type refrigeration. All Work shall be done
 in accordance with the requirements of CAN/CSA B52-1999 and the Manitoba Ozone
 Depleting Substances Act.
- (j) Provide all detailed design calculations for all equipment selection.
- (k) Design to include modifications to existing plant room for the installation of new equipment including mechanical ventilation, heating and electrical alterations. Design shall optimize existing space without structural modification, except for south wall reconstruction.
- (I) All drawings shall be sealed and signed by a Professional Engineer registered and licensed and in good standing in the Province of Manitoba. The Contractor must hold, or be eligible to hold a Certificate of Authorization from the Association of Professional Engineers and Geoscientists of Manitoba.
- (m) Three (3) complete sets of construction drawings and specifications for review by the City of Winnipeg, shall include as a minimum demolition and disposal of existing ice plant components, as well as structural, mechanical and electrical details, control wiring for the installation and/or construction of new ice plant components, including identification of asbestos or any other hazardous materials.
- (n) Provide three (3) complete sets of "as built" drawings showing all mechanical, electrical, wiring schematics and structural components of the new refrigeration room and header. All drawings shall be produced on Mylar and the entire document shall be on a CD.
- (o) All ammonia refrigeration piping shall be welded and in accordance with Department of Labour Regulations and ANSI B31. Brine piping and fittings shall be Schedule 80. All piping shall be labelled with service, pipe size and flow direction. Labelling shall be Capital Lettering using fire resistant interior latex paint, waterproof, heat resistant plastic marker tags. Upon completion of the Work all piping shall be cleaned and flushed of debris.
- (p) The Contractor shall submit for approval, at least five (5) sets of detailed shop drawings for all Work for which drawings are required. Approval of Shop Drawings will be general. It shall not relieve the Contractor of responsibility for accuracy of shop drawings, nor for proper fitting, construction of Work or Work required by contract and not indicated on Shop Prints. Shop Prints approval shall not be construed as approving departure from Contract's requirements.
- (q) Contractor shall clean, patch and apply one (1) coat of primer and two (2) coats of paint to entire machine room. Colour shall be determined on Site.

E6. ICE PLANT CONTROLS

- E6.1 The compressor start-up/shut-down sequencing shall be based on the supply and return temperatures of the Brine Systems.
- E6.2 The system operation shall have a 2°F differential at 16°F for start stop sequencing operation with a variable set point adjustment.
- E6.3 Incorporate existing Johnson Control "METASYS"/Cimco guarded status panel. Ensure that adequate monitoring points are provided and that they are compatible with existing Johnson Control METASYS system.
 - (i) As a minimum, the following points shall be monitored: Ice Plant indication, Compressor status, Brine pumps status, condenser status, exhaust fan status, NH3 alarm status, (from gas monitoring system), CO Alarm status (from gas monitoring system), Propane Alarm status (from gas monitoring system, Brine temperature entering and leaving, ice surface temperature, average rink temperature (minimum four locations).
 - (ii) Control Sequences: The following control sequences exhaust fan shall be interlocked with compressor controller so that the fan will be energized upon compressor being operational.
 - (iii) Ammonia Spill Ventilation: Exhaust fan shall be energized upon NH3 gas monitoring system status indicating alarm mode. Fan shall remain energized until sensor indicates non-alarm condition.
 - (iv) Upgrade control panel to include hour meters for compressors and positive indicator lights for a system operation and status of equipment.

E7. PRODUCTS

E7.1 Approved manufactures of equipment.

(a) Reciprocating compressors: Mycom Viltor

(b) Rotary screw compressors: Frick

(c) Brine chiller - shell and tube: Evapco Cimco - Lewis

Chil-con Ammonia Brine Chiller

(d) Plate Heat Exchangers: Alfa Laval

(e) Evaporative condenser: Balitmore Air-coil

Evapco

(f) Pumps: ITT Bell and Gossett

Grundfos Armstrong

g) Values: Bray

Grinnell Toto

(h) Electrical Components: Federal Pioneer

Schneider

E8. COMMISSIONING/TRAINING

E8.1 The Contractor shall implement the testing and commissioning procedures in accordance with all new and retrofitted systems to ensure that each component meets requirements, and building staff is trained in its use. Commissioning shall be in accordance with the Code of Practice for Commissioning Mechanical Systems in buildings.

- E8.2 Upon completion of commissioning, provide three (3) complete sets of performance testing protocols and reports to the Contract Administrator.
- E8.3 Provide all necessary training to City of Winnipeg personnel for entire Ice Plant operation. Training shall be conducted by approved manufacturer's representatives for each product installed.

E9. PREVENTATIVE MAINTENANCE

- E9.1 At the completion of the project, the Contractor shall provide three (3) sets of preventive maintenance schedules including tasks and frequencies for all new, refurbished and existing components and systems.
- E9.2 The Contractor shall demonstrate to the City of Winnipeg personnel all techniques required to perform maintenance tasks.
- E9.3 Provide sufficient on-site lubricants such as, oils, refrigerant, glycol and brine for maintenance purposes for duration of the Contract.