



THE CITY OF WINNIPEG

BID OPPORTUNITY

BID OPPORTUNITY NO. 335-2010

SUPPLY AND DELIVERY OF ELECTROMAGNETIC FLOW METERS

TABLE OF CONTENTS

PART A - BID SUBMISSION

Form A: Bid	1
Form B: Prices	3

PART B - BIDDING PROCEDURES

B1. Contract Title	1
B2. Submission Deadline	1
B3. Enquiries	1
B4. Addenda	1
B5. Substitutes	2
B6. Bid Submission	2
B7. Bid	3
B8. Prices	4
B9. Qualification	4
B10. Opening of Bids and Release of Information	5
B11. Irrevocable Bid	5
B12. Withdrawal of Bids	5
B13. Evaluation of Bids	6
B14. Award of Contract	6

PART C - GENERAL CONDITIONS

C0. General Conditions	1
------------------------	---

PART D - SUPPLEMENTAL CONDITIONS

General

D1. General Conditions	1
D2. Scope of Work	1
D3. Contract Administrator	1
D4. Notices	1

Submissions

D5. Authority to Carry on Business	2
------------------------------------	---

Schedule of Work

D6. Commencement	2
D7. Delivery	2
D8. Liquidated Damages	2
D9. Orders	2
D10. Records	3

Measurement and Payment

D11. Invoices	3
D12. Payment	3

Warranty

D13. Warranty	3
---------------	---

PART E - SPECIFICATIONS

General

E1. Applicable Specifications and Drawings	1
E2. Goods	1
E3. Training	3
E4. Instructional Documents	3

PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND DELIVERY OF ELECTROMAGNETIC FLOW METERS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 4:00 p.m. Winnipeg time, May 17, 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 promptly notify the Contract Administrator of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

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

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

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

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

B4. 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 7 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 materials, equipment, methods and products 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 seven (7) 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 material, equipment, method or product as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.
- 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 B13.
- B5.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.
- B5.10 Notwithstanding B5.2 to B5.9, and in accordance with B6.7, deviations inconsistent with the Bid Opportunity document shall be evaluated in accordance with B13.1(a).

B6. BID SUBMISSION

- B6.1 The Bid shall consist of the following components:

- (a) Form A: Bid;
 - (b) Form B: Prices.
- 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 Submission may be submitted by mail, courier or personal delivery, or by facsimile transmission.
- B6.5 If the Bid Submission is submitted by mail, courier or personal delivery, it shall be enclosed and sealed in an envelope clearly marked with the Bid Opportunity number and the Bidder's name and address, and shall be submitted to:
- The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1
- B6.5.1 Samples or other components of the Bid Submission which cannot reasonably be enclosed in the envelope may be packaged separately, but shall be clearly marked with the Bid Opportunity number, the Bidder's name and address, and an indication that the contents are part of the Bidder's Bid Submission.
- B6.6 Bidders are advised not to include any information/literature except as requested in accordance with B6.1.
- B6.7 Bidders are advised that inclusion of terms and conditions inconsistent with the Bid Opportunity document, including the General Conditions, will be evaluated in accordance with B13.1(a).
- B6.8 If the Bid Submission is submitted by facsimile transmission, it shall be submitted to (204) 949-1178.
- B6.8.1 The Bidder is advised that the City cannot take responsibility for the availability of the facsimile machine at any time.
- B6.9 Bids submitted by internet electronic mail (e-mail) will not be accepted.
- 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 (2) 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 9 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 (2) or more persons, the word "Bidder" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Bidders in the Bid and the Contract, when awarded, shall be both joint and several.

B8. PRICES

- B8.1 The Bidder shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B8.1.1 Prices on Form B: Prices shall include:
- (a) duty;
 - (b) freight and cartage;
 - (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
 - (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.
- B8.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Bids.
- B8.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B9. QUALIFICATION

- B9.1 The Bidder shall:
- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Bidder does not carry on business in Manitoba, in the jurisdiction where the Bidder does carry on business; and
 - (b) be financially capable of carrying out the terms of the Contract; and
 - (c) have all the necessary experience, capital, organization, and equipment to perform the Work in strict accordance with the terms and provisions of the Contract.
- 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 The Bidder shall submit, within three (3) Business Days of a request by the Contract Administrator, proof satisfactory to the Contract Administrator of the qualifications of the Bidder and of any proposed Subcontractor.
- B9.5 The Bidder shall provide, on the request of the Contract Administrator, full access to any of the Bidder's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Bidder's equipment and facilities are adequate to perform the Work.

B10. OPENING OF BIDS AND RELEASE OF INFORMATION

- B10.1 Bids will not be opened publicly.
- B10.2 Following the Submission Deadline, the names of the Bidders and their total bid prices (unevaluated, and pending review and verification of conformance with requirements or evaluated prices) will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt>
- B10.3 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>
- B10.4 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.

B11. IRREVOCABLE BID

- B11.1 The Bid(s) submitted by the Bidder shall be irrevocable for the time period specified in Paragraph 8 of Form A: Bid.
- B11.2 The acceptance by the City of any Bid shall not release the Bids of the next two lowest evaluated responsive Bidders and these Bidders shall be bound by their Bids on such Work for the time period specified in Paragraph 8 of Form A: Bid.

B12. WITHDRAWAL OF BIDS

- B12.1 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.
- B12.1.1 Notwithstanding C21, the time and date of receipt of any notice withdrawing a Bid shall be the time and date of receipt as determined by the Manager of Materials.
- B12.1.2 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 9 of Form A: Bid, and only such person, has authority to give notice of withdrawal.

- B12.1.3 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 9 of Form A: Bid; and
 - (c) if the notice has been given by any one of the persons specified in B12.1.3(b), declare the Bid withdrawn.
- B12.2 A Bidder who withdraws his Bid after the Submission Deadline but before his Bid has been released or has lapsed as provided for in B11.2 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.

B13. EVALUATION OF BIDS

- B13.1 Award of the Contract shall be based on the following bid evaluation criteria:
- (a) compliance by the Bidder with the requirements of the Bid Opportunity, or acceptable deviation therefrom (pass/fail);
 - (b) qualifications of the Bidder and the Subcontractors, if any, pursuant to B9 (pass/fail);
 - (c) Total Bid Price;
 - (d) economic analysis of any approved alternative pursuant to B5.
- B13.2 Further to B13.1(a), the Award Authority may reject a Bid as being non-responsive if the Bid Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Bid, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B13.3 Further to B13.1(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.
- B13.4 Further to B13.1(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.
- B13.4.1 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.
- B13.4.2 Further to B13.1(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.

B14. AWARD OF CONTRACT

- B14.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B14.2 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.
- B14.2.1 Without limiting the generality of B14.2, 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.

B14.3 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 B13.

B14.3.1 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.

B14.4 Notwithstanding C4 and Paragraph 5 of Form A:Bid, the City will issue a purchase order to the successful Bidder in lieu of the execution of a Contract.

B14.5 The Contract Documents, as defined in C1.1(n) (ii), in their entirety shall be deemed to be incorporated in and to form a part of the purchase order notwithstanding that they are not necessarily attached to or accompany said purchase order.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

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

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF WORK

D2.1 The Work to be done under the Contract shall consist of electromagnetic flow meters from the award of contract until May 31, 2011, with the option of two (2) mutually agreed upon one(1) year extensions.

D2.1.1 The City may negotiate the extension option with the Contractor within sixty (60) Calendar Days prior to the expiry date of the Contract. The City shall incur no liability to the Contractor as a result of such negotiations.

D2.1.2 Changes resulting from such negotiations shall become effective on May 1st of the respective year. Changes to the Contract shall not be implemented by the Contractor without written approval by the Contract Administrator.

D2.2 The Work shall be done on an "as required" basis during the term of the Contract.

D2.2.1 The type and quantity of Work to be performed under this Contract shall be as authorized from time to time by the Contract Administrator and/or Users.

D2.2.2 Notwithstanding C7, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.

D2.3 Notwithstanding D2.1, in the event that operational changes result in substantial changes to the requirements for Work, the City reserves the right to alter the type or quantity of work performed under this Contract, or to terminate the Contract, upon thirty (30) Calendar Days written notice by the Contract Administrator. In such an event, no claim may be made for damages on the ground of loss of anticipated profit on Work.

D3. CONTRACT ADMINISTRATOR

D3.1 The Contract Administrator is:

Jason Enns
Superintendent of Meters
4th Floor – 185 King Street
Winnipeg MB R3B 1J1

Telephone No.: (204) 986-2207

Facsimile No.: (204) 986-6515

D4. NOTICES

D4.1 Notwithstanding C21.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following 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

SUBMISSIONS

D5. AUTHORITY TO CARRY ON BUSINESS

- D5.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

SCHEDULE OF WORK

D6. COMMENCEMENT

- D6.1 The Contractor shall not commence any Work until he is in receipt of a notice of award from the City authorizing the commencement of the Work.
- D6.2 The Contractor shall not commence any Work until:
- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D5;
 - (ii) evidence of the workers compensation coverage specified in C6.16.
 - (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D7. DELIVERY

- D7.1 Goods shall be delivered within ninety (90) Calendar Day(s) of the placing of an order, f.o.b. destination, freight prepaid to:

Water and Waste Department
Door 27 – 552 Plinquet Street
Winnipeg MB

- D7.2 The Contractor shall confirm each delivery with the Contract Administrator or his/her designate, at least two (2) Business Days before delivery.
- D7.3 Goods shall be delivered between 8:30 a.m. and 3:30 p.m. on Business Days.

D8. LIQUIDATED DAMAGES

- D8.1 If the Contractor fails to achieve delivery of the goods within the time specified in D7 Delivery the Contractor shall pay the City three hundred dollars (\$ 300.00) per Calendar Day for each and every Calendar Day until the goods have been delivered.
- D8.2 The amount specified for liquidated damages in D8.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve delivery by the day fixed herein for same.
- D8.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D9. ORDERS

- D9.1 The Contractor shall provide a local Winnipeg telephone number or a toll-free telephone number at which orders for delivery may be placed.

D10. RECORDS

- D10.1 The Contractor shall keep detailed records of the goods supplied under the Contract.
- D10.2 The Contractor shall record, as a minimum, for each item listed on Form B: Prices:
- (a) user name(s) and addresses;
 - (b) order date(s);
 - (c) delivery date(s); and
 - (d) description and quantity of goods supplied.
- D10.3 The Contractor shall provide the Contract Administrator with a copy of the usage records for each year within thirty (30) Calendar Days of the end of year one (1) and within thirty (30) Calendar Days at the end of any Contract extension period should the Contract be extended.

MEASUREMENT AND PAYMENT

D11. INVOICES

- D11.1 Further to C10, the Contractor shall submit an invoice for each order delivered to:
- The City of Winnipeg
Corporate Finance - Accounts Payable
4th Floor, Administration Building, 510 Main Street
Winnipeg MB R3B 1B9
- Facsimile No.: (204) 949-0864
Email: CityWpgAP@winnipeg.ca
- D11.2 Invoices must clearly indicate, as a minimum:
- (a) the City's purchase order number;
 - (b) date of delivery;
 - (c) delivery address;
 - (d) type and quantity of goods delivered;
 - (e) the amount payable with GST and MRST shown as separate amounts; and
 - (f) the Contractor's GST registration number.
- D11.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D12. PAYMENT

- D12.1 Further to C10, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.
- D12.2 Further to C10, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

WARRANTY

D13. WARRANTY

- D13.1 Warranty is as stated in C11.

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 Bidders are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B5.

E2. GOODS

- E2.1 The Contractor shall supply and deliver electromagnetic flow meters (various sizes) in accordance with the requirements hereinafter specified.
- E2.2 The Contractor shall supply and deliver electromagnetic flow meters with an optional integrated data logger capable of recording interval flow data at a minimum of every fifteen (15) minutes for ninety (90) calendar days.
- E2.3 The Contractor shall supply and deliver electromagnetic flow meters (various sizes), with an optional cost per meter for Factory Mutual Approval for use in Fire Service Applications.
- E2.4 Electromagnetic flow meters shall meet or exceed the requirements of American Water Works Association (AWWA) Standard C-703 for Type II devices (disregard changeover range accuracy).
- E2.5 Electromagnetic flow meters shall accept standard one hundred and twenty (120) volt AC power. Meters shall have a battery backup to provide a minimum of two hundred (200) calendar days power to the meter. Meter shall indicate when battery requires replacement.
- E2.6 Electromagnetic flow meters shall allow for communication with external devices including; data loggers, automated meter reading devices (specifically *Itron* 60w ERT's), and customer's private energy monitoring systems.
- E2.7 For the electromagnetic flow meters specified, the contractor shall supply confirmation that the meters are *Factory Mutual* approved for use in fire service applications within five (5) Business Days from a request by the Contract Administrator.
- E2.8 Electromagnetic flow meters shall be suitable for installation in underground vaults / pits and the meter will be unaffected by submersion in water.
- E2.9 Display unit may be mounted up to sixty (60) metre distance from the water meter.
- E2.10 Electromagnetic flow meters interface shall be password protected to ensure meter settings can not be altered by unauthorized individuals.
- E2.11 Electromagnetic flow meters shall not require the installation of a strainer in a fire service application.
- E2.12 Electromagnetic flow meters accuracy can be determined electronically and shall not require the removal of the water meter. Testing procedure shall be demonstrated to the contract administrator after the installation of the meters. A minimum of two (2) meters shall be tested.
- E2.13 The following requirements are specified for (AWWA C703, section 4.2);
 - (a) the meter will perform to new meter accuracy standards, as specified below, for a period of two (2) years after being placed in service by the City of Winnipeg;

Meter Size (Inches)	Accuracy at Maximum Flow Rate	Accuracy at Intermediate Flow	Accuracy at Minimum Flow Rate	Safe Maximum Flow Operating Capacity	Deluge Flow
2*	160 gpm 99.75% - 100.25%	53 gpm 99.75% - 100.25%	2.0 gpm 95% - 101.5%	190 gpm	200 gpm
3	350 gpm 99.75% - 100.25%	115 gpm 99.75% - 100.25%	2.0 gpm 95% - 101.5%	350 gpm	450 gpm
4	700 gpm 99.75% - 100.25%	230 gpm 99.75% - 100.25%	4.0 gpm 95% - 101.5%	700 gpm	900 gpm
6	1,600 gpm 99.75% - 100.25%	530 gpm 99.75% - 100.25%	5.0 gpm 95% - 101.5%	1,600 gpm	2,000 gpm
8	2,800 gpm 99.75% - 100.25%	924 gpm 99.75% - 100.25%	8.0 gpm 95% - 101.5%	2,800 gpm	3,500 gpm

* Note: 2" specifications are City of Winnipeg specifications and are not referenced in the AWWA C703 standard

- (b) should a meter not perform as specified, the contractor shall replace it at no cost to the City of Winnipeg. A meter shall be determined not to be performing as specified if it fails to pass an accuracy test, conducted by the City of Winnipeg according to AWWA standards (for comparable meters) or an electronic test per E2.10 of this specification. The warranty shall not apply to meters that have been damaged due to abnormal circumstances.

E2.14 Electromagnetic flow meters shall be flanged per AWWA C703 section 4.3.4.

E2.15 The electromagnetic flow meters display / register to be furnished with each meter shall be as follows:

- (a) display shall read in cubic metres;
- (b) minimum capacity of 99999999 cubic metres;
- (c) record, totalize and display forward flow in cubic metres;
- (d) record, totalize and display reverse flow in cubic metres;
- (e) record, totalize and display net flow in cubic metres;
- (f) display is user updateable and password protected;
- (g) display will indicate if an empty pipe has occurred which may have affected meter accuracy.

E2.16 Display / registration accuracy shall meet or exceed the requirements of AWWA C703 4.2.6. Accuracy testing of each meter and register (display) shall be performed. Each meter shall be factory tested for accuracy of registration at flow rates and test flow quantities in accordance with Section 4.2.6 of AWWA C703 (Type II Devices) and AWWA Manual M6. The manufacturer shall furnish a certificate(s) showing that each meter and register (display) has (have) been tested for accuracy of registration and that the meter assembly complies with the accuracy and capacity requirements of AWWA C703 (Type II Device) within ten (10) Business Days from a request by the Contract Administrator.

E2.17 Per AWWA, materials shall be constructed of materials selected for their strength and resistance to corrosion and shall not impart to the water objectionable taste or odour nor toxic substances in normalized concentrations exceeding the maximum containment levels (UCL) as defined by the US Environmental Protection Agency or Health Canada.

- E2.18 Electromagnetic flow meters supplied under this Bid Opportunity become the property of the City of Winnipeg and the Contractor acknowledges that the City may use these meters in any way that the City shall decide. Without limiting the foregoing, the City will be able to read all meters purchased under this Bid Opportunity using meter interface units manufactured or otherwise provided by any supplier, vendor or manufacturer of the City's choice at any time in the future. The Contractor acknowledges that such use would not be an infringement on any patent or any other intellectual property rights as may be claimed by the Contractor in any such meters.
- E2.19 The electromagnetic flow meters to be supplied in the Contract are for use in commercial buildings. Meters are often installed in close proximity to the daily activities of the inhabitants. Accordingly, noise levels emitted from the meter should be such that they do not impact on the operations of the business.

E3. TRAINING

- E3.1 The Bidder shall provide, at their expense, four (4) hours of operational and maintenance training by qualified staff for the City of Winnipeg personnel. The training shall be conducted in a combined session for each group of personnel. The one (1) session shall be sufficient to provide adequate familiarization and orientation on the equipment, to the satisfaction of the Contract Administrator.
- E3.2 For the purpose of warranty / equipment repairs, the City requires a service technician and facility to be located within fifteen (15) km of the boundaries of the City of Winnipeg. The technician and facility, or portions thereof, shall be dedicated to the service and maintenance of the type equipment being offered. Upon request of the Contract Administrator the Bidders shall provide within three (3) Business days a description of the number of qualified service staff, years of service experience, service facility including, but not limited to general service capabilities.

E4. INSTRUCTIONAL DOCUMENTS

- E4.1 The Bidder shall ensure the following manuals be supplied with each of the items when delivered, and shall contain a section in **English**:
- (a) operator's manual - one (1) set required to be supplied on a CD / DVD.
 - (b) parts and service manuals, including preventative maintenance schedules for the life of the unit(s) - one (1) set required for each unit to be supplied on a CD / DVD.
- E4.2 The Bidder shall ensure that for each item listed on Form B: Prices the City of Winnipeg will receive support software to be supplied on a CD / DVD.