



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 817-2019

**SUPPLY AND DELIVERY OF WIRELESS PORTABLE AREA VELOCITY SEWER
FLOW METERS**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 SUPPLY AND DELIVERY OF WIRELESS PORTABLE AREA VELOCITY SEWER FLOW METERS

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, August 7, 2020.

B2.2 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 D5.1.

B3.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent 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 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 Proponents by issuing an addendum.

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

B3.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the Contract Administrator. Failure to restrict correspondence and contact to the Contract Administrator may result in the rejection of the Proponents Proposal Submission.

B3.6 The Proponent 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.

B3.7 Any enquiries concerning submitting through MERX should be addressed to:
MERX Customer Support
Phone: 1-800-964-6379
Email: merx@merx.com

B4. CONFIDENTIALITY

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

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

B4.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposal to the media or any member of the public without the prior written authorization of the Contract Administrator.

B5. ADDENDA

- B5.1 The Contract Administrator may, at any time prior to the Submission deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B5.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B5.3 Addenda will be available on the MERX website at www.merx.com.
- B5.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B5.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.
- B5.6 Notwithstanding B3, enquiries related to an Addendum may be directed to the Contract Administrator indicated in D4.2(a).

B6. SUBSTITUTES

- B6.1 The Work is based on the materials, equipment, methods and products specified in the Request for Proposal.
- B6.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B6.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least seven (7) Business Days prior to the Submission Deadline.
- B6.4 The Proponent shall ensure that any and all requests for approval of a substitute:
- (a) provide sufficient information and details to enable the Contract Administrator to determine the acceptability of the material, equipment, method or product as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the Contract.
- B6.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/her sole discretion grant approval for the use of a substitute as an “approved equal” or as an “approved alternative”, or may refuse to grant approval of the substitute.
- B6.6 The Contract Administrator will provide a response in writing, at least two (2) Business Days prior to the Submission Deadline, to the Proponent who requested approval of the substitute.

- B6.6.1 The Contract Administrator will issue an Addendum, disclosing the approved materials, equipment, methods and products to all potential Proponents. The Proponent requesting and obtaining the approval of a substitute shall be responsible for disseminating information regarding the approval to any person or persons he/she wishes to inform.
- B6.7 If the Contract Administrator approves a substitute as an “approved equal”, any Proponent may use the approved equal in place of the specified item.
- B6.8 If the Contract Administrator approves a substitute as an “approved alternative”, any Proponent bidding that approved alternative may base his/her Total Bid Price upon the specified item but may also indicate an alternative price based upon the approved alternative. Such alternatives will be evaluated in accordance with B22.
- B6.9 No later claim by the Contractor for an addition to the price(s) because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B7. PROPOSAL SUBMISSION

- B7.1 The Proposal shall consist of the following components:
- (a) Form A: Bid/Proposal;
 - (b) Form B: Prices.
- B7.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subcontractors (Section C) in accordance with B9;
 - (b) Technical Data;
 - (c) Supplier Support Plan; and
 - (d) Economic Analysis of Rechargeable Batteries Versus Disposable Batteries.
- B7.3 Further to B7.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.
- B7.5 Proposal format, including number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their proposed solution.
- B7.6 The Proposal shall be submitted electronically through MERX.
- B7.6.1 Proposals will **only** be accepted electronically through MERX.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B22.1(a).
- B7.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL

- B8.1 The Proponent shall complete Form A: Bid/Proposal, making all required entries.

- B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:
- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers;
 - (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.
- B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B9. PRICES

- B9.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.
- B9.1.1 Prices on Form B: Prices shall include:
- (a) duty;
 - (b) freight and cartage;
 - (c) Provincial and Federal taxes [except the Goods and Services Tax (GST) and Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable] and all charges governmental or otherwise paid;
 - (d) profit and all compensation which shall be due to the Contractor for the Work and all risks and contingencies connected therewith.
- B9.1.2 Prices on Form B: Prices shall not include Environmental Handling Charges (EHC) or fees, which shall be extra where applicable.
- B9.2 The quantities listed on Form B: Prices are to be considered approximate only. The City will use said quantities for the purpose of comparing Proposals.

- B9.3 Further to B22.2, the Proponent has the option of bidding on either Items 9 and 10 OR Item 11 depending on if the Proponent is providing rechargeable batteries or disposable batteries in their proposal.
- B9.4 Further to B9.3, if the Proponent is bidding on disposable batteries they must complete the Approximate Quantity column for Item 11 on Form B: Prices. Approximate Quantities for Item 11 shall be based on operating five (5) Wireless Portable Area Velocity Sewer Flow Meters during three (3) months of summer conditions and three (3) months of winter conditions with daily modem uploads. Logging intervals for summer and winter conditions shall be as specified in B13.1(a) and B13.1(b).
- B9.5 Further to B22.2, the Proponent has the option of bidding on either Items 14 and 15 OR Items 16 and 17 depending on if the Proponent is providing cable extensions or long cables in their proposal.
- B9.6 Further to B22.2, the Proponent has the option of bidding on Item 18 and Item 19. Proposals which do not bid on Item 18 and Item 19 will still be considered for Evaluation of Proposals.
- B9.7 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.
- B9.8 Where applicable to the Request for Proposal, payments for services to Non-Resident Proponents are subject to a Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. EXPERIENCE OF PROPONENT AND SUBCONTRACTORS (SECTION C)

- B10.1 Proposals should include:
- (a) details demonstrating the history and experience of the Proponent and Subcontractors on three projects of similar complexity, scope and value which use the Wireless Portable Area Velocity Sewer Flow Meters proposed.
- B10.2 For each project listed in B10.1(a), the Proponent should submit:
- (a) description of the project;
 - (b) project owner;
 - (c) reference information (two current names with telephone numbers per project).
- B10.2.1 Where applicable, information should be separated into Proponent and Subcontractor project listings.
- B10.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subcontractors.

B11. TECHNICAL DATA

- B11.1 The Proponent should provide the specifications of the proposed products in their proposal. Proposed products specifications shall conform with Part E - Specifications.

B12. SUPPLIER SUPPORT PLAN

- B12.1 The Proponent should provide a detailed outline of the support provided for the proposed products in their proposal.
- B12.2 The Proponent should outline the Quality Assurance/Quality Control procedure used by the manufacturer to ensure product compliance.

- B12.3 The proponent should outline the anticipated level of support provided for the Wireless Portable Area Velocity Sewer Flow Meters:
- (a) initial training and setup;
 - (b) failure or malfunction of equipment; and
 - (c) support for trouble shooting, equipment, and software queries.

B13. ECONOMIC ANALYSIS OF RECHARGABLE BATTERIES VERSUS DISPOSABLE BATTERIES

- B13.1 Proponents that are bidding disposable batteries should provide the City with an outline of the cost to operate the Wireless Portable Area Velocity Sewer Flow Meters with disposable batteries over the course of a five (5) year span. The outline should take into account the life expectancy during summer and winter conditions with daily (once per day) modem uploads. The Proponent should state the type of battery capacity (mAh) used in their outline.
- (a) 6 month Summer Conditions – 5 minute flow meter logging intervals;
 - (b) 6 month Winter Conditions – 15 minute flow meter logging intervals under -20° Celsius weather.
- B13.2 Proponents that are bidding rechargeable batteries should indicate the time a flow meter can operate under summer and winter conditions with daily (once per day) modem uploads on a single charge.
- (a) Summer Conditions – 5 minute flow meter logging intervals;
 - (b) Winter Conditions – 15 minute flow meter logging intervals under -20° Celsius weather.

B14. DISCLOSURE

- B14.1 Various Persons provided information or services with respect to this Work. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B14.2 The Persons are:
- (a) ADS LCC provided information on their sensor mounting hardware, sensors, and flow meter products;
 - (b) Avensys Solutions inc. provided information on sensor mounting hardware, sensors, and their flow meter products;
 - (c) Detectronic Ltd provided information on their flow meter products.

B15. CONFLICT OF INTEREST AND GOOD FAITH

- B15.1 Further to C3.2, Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B15.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel proposed for the Work has:
- (a) other commitments;
 - (b) relationships;
 - (c) financial interests; or
 - (d) involvement in ongoing litigation;
- that could or would be seen to:

- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
 - (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract.
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or
- (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other proponents and that could or would be seen to give that Proponent an unfair competitive advantage.

B15.3 In connection with its Proposal, each entity identified in B15.2 shall:

- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;
- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Contract Administrator; and
- (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.

B15.4 Without limiting B15.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.

B15.5 Without limiting B15.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:

- (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
- (b) require the removal or replacement of any Key Personnel proposed for the Work that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
- (c) disqualify a Proponent or Key Personnel proposed for the Work that fails to comply with any requirements prescribed by the City pursuant to B15.4 to avoid or mitigate a Conflict of Interest; and
- (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.

B15.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B16. QUALIFICATION

B16.1 The Proponent 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 Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent 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.

B16.2 The Proponent 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 <https://www.winnipeg.ca/matmgt/Templates/files/debar.pdf>

B16.3 The Proponent 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);

B16.4 The Proponent 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 Proponent and of any proposed Subcontractor.

B16.5 The Proponent shall provide, on the request of the Contract Administrator, full access to any of the Proponent's equipment and facilities to confirm, to the Contract Administrator's satisfaction, that the Proponent's equipment and facilities are adequate to perform the Work.

B17. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

B17.1 Proposals will not be opened publicly.

B17.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at www.merx.com.

B17.3 The Proponent is advised that any information contained in any Proposal Submission may be released if required by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law or by City policy or procedures (which may include access by members of City Council).

B17.3.1 To the extent permitted, the City shall treat as confidential information, those aspects of a Proposal Submission identified by the Proponent as such in accordance with and by reference to Part 2, Section 17 or Section 18 or Section 26 of The Freedom of Information and Protection of Privacy Act (Manitoba), as amended.

B17.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Contract Administrator.

B18. IRREVOCABLE OFFER

B18.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B18.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Work until a Contract for the Work has been duly formed and the contract securities have been furnished as herein provided, but any Bid shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B19. WITHDRAWAL OF OFFERS

B19.1 A Proponent may withdraw his/her Proposal without penalty prior to the Submission Deadline.

B20. INTERVIEWS

B20.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B21. NEGOTIATIONS

B21.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.

B21.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.

B21.3 If, in the course of negotiations pursuant to B21.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B22. EVALUATION OF PROPOSALS

B22.1 Award of the Contract shall be based on the following evaluation criteria:

- (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
- (b) qualifications of the Proponent and the Subcontractors, if any, pursuant to B16: (pass/fail)
- (c) Total Bid Price; 40%
- (d) Experience of Proponent and Subcontractors; (Section C) 15%
- (e) Technical Data; 23%
- (f) Supplier Support Plan; 15%
- (g) Total Optional Bid Price 4%
- (h) Economic analysis of rechargeable batteries versus disposable batteries; 3%
- (i) Economic analysis of any approved alternative pursuant to B6;

B22.2 Further to B22.1(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 or minor informalities or irregularities if the interests of the City so require.

B22.3 Further to B22.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is qualified.

B22.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B22.1(a) and B22.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.

- B22.5 Further to B22.1(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.
- B22.5.1 Further to B22.1(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.
- B22.5.2 Further to B22.5, for Evaluation of Proposal purposes only, Items 18 and 19 shall be excluded from B22.1(c) Total Bid Price and will be evaluated as per B22.1(g).
- B22.6 Further to B22.1(d), Experience of Proponent and Subcontractors will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B10.
- B22.6.1 Further to B22.1(a), in the event that a unit price is not provided on Form B: Prices, the City may determine the unit price by dividing the Amount (extended price) by the approximate quantity, for the purposes of evaluation and payment.
- B22.7 Further to B22.1(e), Technical Data shall be evaluated considering the information provided in accordance with B11.
- B22.8 Further to B22.1(f), Supplier Support Plan shall be evaluated considering the information provided in accordance with B12.
- B22.9 Further to B22.1(h), Economic Analysis of Rechargeable Batteries Versus Disposable Batteries shall be evaluated considering the information provided in accordance with B13.
- B22.10 Further to B22.1(g), the Total Optional Bid Price shall be the sum of the quantities multiplied by the unit price for Items 18 and 19.
- B22.11 Notwithstanding B22.1(d) to B22.1(h), where Proponents fail to provide a response to B7.2(a) to B7.2(d), the score of zero may be assigned as an incomplete response.
- B22.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B20.
- B22.13 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.
- B22.14 The City intends to award the Contract for:
- (a) Items 1-10, 12, 13, 14 and 15;
 - (b) Items 1-10, 12, 13, 16 and 17;
 - (c) Items 1-8, 11, 12, 13, 14 and 15; or
 - (d) Items 1-8, 11, 12, 13, 16 and 17.
- Items 18 and 19 are optional items and may be added to any of the above for the purposes of award.

B23. AWARD OF CONTRACT

- B23.1 The City will give notice of the award of the Contract or will give notice that no award will be made.
- B23.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.
- B23.2.1 Without limiting the generality of B23.2, 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.

B23.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.

B23.4 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an award letter to the successful Proponent in lieu of execution of Contract Documents

B23.4.1 The Contract documents as defined in C1.1(o)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the award letter notwithstanding that they are not necessarily attached to or accompany said award letter.

B23.5 Following the award of contract, a Proponent will be provided with information related to the evaluation of his/her Proposal upon written request to the Contract Administrator.

B23.6 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C0. GENERAL CONDITIONS

- C0.1 The *General Conditions for the Supply of Goods* (Revision 2020-01-31) 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 Request for Proposal 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 the supply and delivery of portable area velocity sewer flow meters and wireless telemetry modems rated Class 1 Zone 2 hazardous locations complete with software, mounting hardware and battery chargers for the period from the date of award until December 31, 2020, with the option of two (2) mutually agreed upon two (2) year extensions.

D2.1.1 The City may negotiate the extension option with the Proponent within ninety (90) Calendar Days prior to the expiry date of the Contract. The City shall incur no liability to the Proponent as a result of such negotiations.

D2.1.2 Changes resulting from such negotiations shall become effective on January 1 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 major components of the Work are as follows:

- (a) supply and delivery of Wireless Portable Area Velocity Sewer Flow Meters rated for Class 1 Zone 2 hazardous locations;
- (b) supply and delivery of Flow Meter Software;
- (c) supply and delivery of Software Licenses;
- (d) supply and delivery of Battery Chargers for the Wireless Portable Area Velocity Sewer Flow Meters;
- (e) supply and delivery of Additional Rechargeable Batteries;
- (f) supply and delivery of Additional Disposable Batteries;
- (g) supply and delivery of In-Flow Velocity Sensors rated for Class 1 Zone 2 hazardous locations;
- (h) supply and delivery of In-Flow Level Sensors rated for Class 1 Zone 2 hazardous locations;
- (i) supply and delivery of Sensor Mounting Hardware;
- (j) supply and delivery of Above Flow Velocity Sensors rated for Class 1 Zone 2 hazardous locations;
- (k) supply and delivery of Above Flow Level Sensors rated for Class 1 Zone 2 hazardous locations;
- (l) supply and delivery of Velocity Sensors for Large Diameter Sewer Pipes rated for Class 1 Zone 2 hazardous locations;
- (m) supply and delivery of Level Sensors for Large Diameter Sewer Pipes rated for Class 1 Zone 2 hazardous locations;
- (n) supply and delivery of Direct Connect Barrier Communication Cables rated for Class 1 Zone 2 hazardous locations;
- (o) supply and delivery of Five (5) Year Cellular Data Plans Complete with Web Hosting or suitable alternative;
- (p) supply and delivery of Velocity Sensor Cable Extensions, if applicable;
- (q) supply and delivery of Level Sensor Cable Extensions, if applicable;

- (r) supply and delivery of Long Velocity Sensor Cables, if applicable;
- (s) supply and delivery of Long Level Sensor Cables, if applicable;
- (t) provide initial training and set up; and
- (u) provide support for troubleshooting, failure or malfunction of equipment, and equipment and software inquiries.

D2.3 The Work shall be done on an "as required" basis during the term of the Contract.

D2.3.1 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.

D2.3.2 Subject to C7, the City shall have no obligation under the Contract to purchase any quantity of any item in excess of its actual operational requirements.

D2.4 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. COOPERATIVE PURCHASE

D3.1 The Contractor is advised that this is a cooperative purchase.

D3.2 The Contract Administrator may, from time to time during the term of the Contract, approve other public sector organizations and utilities, including but not limited to municipalities, universities, schools and hospitals, to be participants in the cooperative purchase.

D3.3 The Contract Administrator will notify the Contractor of a potential participant and provide a list of the delivery locations and estimated quantities.

D3.4 If any location of the potential participant is more than ten (10) kilometres beyond the boundaries of the City of Winnipeg, the Contractor shall, within fifteen (15) Calendar Days of the written notice, notify the Contract Administrator of the amount of any additional delivery charge for the location.

D3.5 If any additional delivery charges are identified by the Contractor, the potential participant may accept or decline to participate in the cooperative purchase.

D3.6 The Contractor shall enter into a contract with each participant under the same terms and conditions as this Contract except:

- (a) supply under the contract shall not commence until the expiry or lawful termination of any other contract(s) binding the participant for the same goods;
- (b) a participant may specify a duration of contract shorter than the duration of this Contract;
- (c) a participant may specify that only some items under this Contract and/or less than its total requirement for an item are to be supplied under its contract; and
- (d) any additional delivery charge identified and accepted in accordance with clause D3.4 and D3.5 will apply.

D3.7 Each participant will be responsible for the administration of its contract and the fulfilment of its obligations under its contract. The City shall not incur any liability arising from any such contract.

D3.8 No participant shall have the right or authority to effect a change in the Contract, or of any other participant in this Contract.

D4. DEFINITIONS

D4.1 When used in this Request for Proposal:

- (a) "**Proponent**" means any Person or Persons submitting a Proposal for Goods;

D4.2 Notwithstanding C1.1, when used in this Request for Proposal:

- (a) "**Class 1**" is defined by the Canadian Electrical Code, Part I as a location where flammable gases or vapours are or may become present in the air in quantities sufficient to produce explosive gas atmospheres.
- (b) "**Hazardous Location**" is defined by the Canadian Electrical Code, Part I as premises, buildings, or parts thereof in which
- (i) an explosive gas atmosphere is present, or may become present, in the air in quantities that require special precautions for the construction, installation, and use of electrical equipment;
 - (ii) dusts are present, or may become present, in the form of clouds or layers in quantities to require special precautions for the construction, installation, and operation of electrical equipment.
- (c) "**Intrinsically safe**" is defined by the Canadian Electrical Code, Part I as conditions that any spark or thermal effect that may occur in normal use, or under any conditions of fault likely to occur in practice, is incapable of causing an ignition of the prescribed flammable gas, vapour, or dust.
- (d) "**RFP**" means request for proposal.
- (e) "**Shall**" as used in Part E – Specifications means the specification is a requirement and must be met.
- (f) "**Should**" as used in Part E – Specifications means the specification is not a requirement and does not need to be met.
- (g) "**Zone 0**" is defined by the Canadian Electrical Code, Part I as a location in which explosive gas atmospheres are present continuously or are present for long periods.
- (h) "**Zone 1**" is defined by the Canadian Electrical Code, Part I as a location in which
- (i) explosive gas atmospheres are likely to occur in normal operation; or
 - (ii) the location is adjacent to a Zone 0 location, from which explosive gas atmospheres could be communicated.
- (i) "**Zone 2**" is defined by the Canadian Electrical Code, Part I as a location in which
- (i) explosive gas atmospheres are not likely to occur in normal operation and, if they do occur, they will exist for a short time only; or
 - (ii) the location is adjacent to a Zone 1 location, from which explosive gas atmospheres could be communicated, unless such communication is prevented by adequate positive-pressure ventilation from a source of clean air, and effective safeguards against ventilation failure are provided.

D5. CONTRACT ADMINISTRATOR

D5.1 The Contract Administrator is:

Ho Lau, C.E.T.

Project Coordinator

Telephone No.: 204 986 5418

Email Address: hlau@winnipeg.ca

D6. NOTICES

D6.1 Except as provided for in C20.4, 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/Proposal.

D6.2 All notices, requests, nominations, proposals, consents, approvals, statements, authorizations, documents or other communications to the City, except as expressly otherwise required in, D6.3 or elsewhere in the Contract, shall be sent to the attention of the Contract Administrator identified in D4.2(a).

D6.3 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 facsimile number:

The City of Winnipeg
Legal Services Department
Attn: Director of Legal Services
Facsimile No.: 204 947-9155.

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

D7.1 The Contractor shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Contractor does not carry on business in Manitoba, in the jurisdiction where the Contractor does carry on business, throughout the term of the Contract, and shall provide the Contract Administrator with evidence thereof upon request.

SCHEDULE OF WORK

D8. COMMENCEMENT

D8.1 The Contractor shall not commence any Work until he/she is in receipt of a notice of award from the City authorizing the commencement of the Work.

D8.2 The Contractor shall not commence any Work until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

D9. DELIVERY

D9.1 Goods shall be delivered within forty-five (45) Business Days of the placing of an order, f.o.b. destination, freight prepaid to:

Ho Lau, C.E.T.
Project Coordinator
360 McPhillips St

Winnipeg, MbThe Contractor shall confirm each delivery with the Contract Administrator or his/her designate, at least two (2) Business Days before delivery.

D9.3 Goods shall be delivered between 8:30 a.m. and 4:30 p.m. on Business Days.

D9.4 The Contractor shall off-load goods as directed at the delivery location.

- (a) Call Ho Lau at 204 232 0292 prior to delivery to ensure a designate will be present to accept the goods;
- (b) On the second floor of the designated building.

D10. LIQUIDATED DAMAGES

- D10.1 If the Contractor fails to achieve delivery of the goods within the time specified in D9, the Contractor shall pay the City fifty dollars (\$50) per Calendar Day for each and every Calendar Day until the goods have been delivered.
- D10.2 The amount specified for liquidated damages in D10.1 is based on a genuine pre-estimate of the City's damages in the event that the Contractor does not achieve Delivery by the day fixed herein for same.
- D10.3 The City may reduce any payment to the Contractor by the amount of any liquidated damages assessed.

D11. COVID-19 SCHEDULE DELAYS

- D11.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Work shall be performed by the Contractor with due consideration to the health and safety of workers and the public and directives from health authorities and various levels of government, and in close consultation with the Contract Administrator.
- D11.2 If the Contractor is delayed in the performance of the Work by reason of the COVID-19 pandemic, the Work schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D11.3 A minimum of seven (7) Calendar Days prior to the commencement of Work, the Contractor shall declare whether COVID-19 will affect the start date. If the Contractor declares that COVID-19 will affect the start date, the Contractor shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of Material or work by others.
- D11.4 For any delay related to COVID-19 and identified after Work has commenced, the Contractor shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D11.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D11.5 The Work schedule, including the durations identified in D9 where applicable, will be adjusted to reflect delays accepted by the Contract Administrator.
- D11.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Contract Administrator, shall be documented in accordance with C7.

D12. ORDERS

- D12.1 The Contractor shall provide a local Winnipeg telephone number or a toll-free telephone number at which orders for delivery may be placed.

D13. RECORDS

- D13.1 The Contractor shall keep detailed records of the goods supplied under the Contract.
- D13.2 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, serial numbers and quantity of goods supplied.

D13.3 The Contractor shall provide the Contract Administrator with a copy of the records for each quarter year within fifteen (15) Calendar Days of a request of the Contract Administrator.

MEASUREMENT AND PAYMENT

D14. INVOICES

D14.1 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

Send Invoices to CityWpgAP-INVOICES@winnipeg.ca

Send Invoice Inquiries to CityWpgAP-INQUIRIES@winnipeg.ca

D14.2 Invoices must clearly indicate, as a minimum:

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

D14.3 The City will bear no responsibility for delays in approval of invoices which are improperly submitted.

D15. PAYMENT

D15.1 Further to C10, the City may at its option pay the Contractor by direct deposit to the Contractor's banking institution.

D16. PAYMENT SCHEDULE

D16.1 Further to C10, payment shall be in Canadian funds net thirty (30) Calendar Days after receipt and approval of the Contractor's invoice.

D17. PURCHASING CARD

D17.1 The Contractor shall allow Users to charge items to their purchasing cards at no extra cost.

D17.2 The Contractor's credit card website/gateway shall have appropriate current Payment Card Industry Data Security standards (PCI DSS) certification, (<https://www.pcisecuritystandards.org/index.shtml>). The credit card gateway shall meet the credit card data security requirements outlined by the Payment Card Industry Security Standards Council (PCI SSC) for service providers and/or software vendors.

WARRANTY

D18. WARRANTY

D18.1 Further to C11, 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.

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS AND DRAWINGS

- E1.1 These Specifications shall apply to the Work.
- E1.2 Proponents are reminded that requests for approval of substitutes as an approved equal or an approved alternative shall be made in accordance with B6. In every instance where a brand name or design specification is used, the City will also consider approved equals and/or approved alternatives in accordance with B6.

E2. GOODS

- E2.1 The Contractor shall supply Wireless Portable Area Velocity Sewer Flow Meters in accordance with the requirements hereinafter specified.
- E2.2 Item No. 1 - Wireless Portable Area Velocity Sewer Flow Meters shall be in accordance with the Canadian Electrical Code (C.E.C.), Part 1 Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.2.1 Wireless Portable Area Velocity Sewer Flow Meter data loggers and modems shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.2.2 Wireless Portable Area Velocity Sewer Flow Meters should have the capability to measure flow in egg shaped sewers.
- E2.2.3 Wireless Portable Area Velocity Sewer Flow Meters should be capable of connecting and utilizing In-Flow Velocity and Level Sensors with Above Flow Velocity and Level Sensors simultaneously.
- E2.2.4 Three (3) Wireless Portable Area Velocity Sewer Flow Meter user manuals shall be provided.
- E2.2.5 Wireless Portable Area Velocity Sewer Flow Meters shall come with a wireless telemetry modem rated for Class 1 Zone 2 hazardous locations.
- (i) Wireless modem antenna must be installed within the manhole.
- E2.2.6 Wireless Portable Area Velocity Sewer Flow Meters shall have alarm dial-out capabilities either by SMS text messaging or internet.
- E2.2.7 Wireless Portable Area Velocity Sewer Flow Meters and Wireless Modem enclosure shall be able to withstand surcharged conditions within the sewer and meet minimum environmental standards for NEMA 6, IP67 or equivalent rating.
- E2.2.8 Wireless Portable Area Velocity Sewer Flow Meters shall come equipped with either rechargeable or disposable batteries. Proponent shall state which type of batteries the flow meters require on Form B: Prices.
- E2.2.9 Wireless Portable Area Velocity Sewer Flow Meters, at a minimum, shall be compatible with 4G networks.
- E2.2.10 Wireless Portable Area Velocity Sewer Flow Meters should have the ability to recognize a significant flow event and increase data collection frequency for the duration of the significant flow event.
- E2.2.11 Contractor shall provide on-site training for the installation and use of the flow meters and software at no cost to the City of Winnipeg.
- E2.3 Item No. 2 – In-Flow Velocity Sensors shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.

- E2.3.1 In-Flow Velocity Sensors shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.3.2 In-Flow Velocity Sensors shall meet the environmental protection standards IP68 or equivalent rating.
- E2.3.3 In-Flow Velocity Sensors shall measure flow velocity while mounted to the bottom of the sewer.
- E2.3.4 In-Flow Velocity Sensors shall operate and provide readings under reverse flow conditions.
- E2.3.5 Proponent shall indicate In-Flow Velocity Sensor cable length in their Proposal.
- E2.3.6 In-Flow Velocity Sensors shall be capable of connecting a Velocity Sensor Cable Extension or replacing the standard Velocity Sensor cable with a Long Velocity Sensor Cable.
- E2.4 Item No. 3 – In-Flow Level Sensors shall be compatible with the Wireless Portable Area Velocity Flow Meters.
- E2.4.1 In-Flow Level Sensors shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.4.2 In-Flow Level Sensors shall meet the environmental protection standards for IP68 or equivalent rating.
- E2.4.3 In-Flow Level Sensors shall measure flow depth while mounted to the bottom of the sewer.
- E2.4.4 In-Flow Level Sensors should have redundant depth sensors.
- E2.4.5 In-Flow Level Sensors shall operate and provide readings under reverse flow conditions.
- E2.4.6 Proponent shall indicate In-Flow Level Sensor cable length in their Proposal.
- E2.4.7 In-Flow Level Sensors shall be capable of connecting a Level Sensor Cable Extension or replacing the standard Level Sensor cable with a Long Level Sensor Cable.
- E2.5 Item No. 4 – Flow Meter Software shall be the software needed to operate and analyze data gathered by the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.5.1 Flow Meter Software shall be compatible with Windows 10 operating systems.
- E2.6 Item No. 5 – Software User Licenses shall be the user licenses for the Flow Meter Software.
- E2.7 Item No. 6 – Five (5) Year Cellular Data Plan Complete with Web Hosting or approved substitute in accordance with B6, shall be provided.
- E2.7.1 Five (5) Year Cellular Data Plan Complete with Web Hosting, at a minimum, shall be on a 4G network and be compatible with the Wireless Portable Area Velocity Sewage Flow Meters.
- E2.8 Item No. 7 – Direct Connect Barrier Communication Cable rated for Class 1 Zone 2 hazardous locations shall be compatible with Wireless Portable Area Velocity Sewer Flow Meters and have laptop connectivity.
- E2.9 Item No. 8 a) to No. 8 i) – Sensor Mounting Hardware shall be the hardware required for mounting the Velocity Sensors and Level Sensors in the sewer.
- E2.9.1 Sensor Mounting Hardware sizes shall be as indicated on Form B: Prices.
- E2.9.2 Sensor Mounting Hardware shall be compatible with the following Items:
- (a) Item 2 – In-Flow Velocity Sensors
 - (b) Item 3 – In-Flow Level Sensors

- (c) Item 12 – Above Flow Velocity Sensors
 - (d) Item 13 – Above Flow Level Sensors
 - (e) Item 18 – Velocity Sensors for Large Diameter Sewer Pipes
 - (f) Item 19 – Level Sensors for Large Diameter Sewer Pipes
- E2.10 Item No. 9 – Battery Chargers for the Wireless Portable Area Velocity Sewer Flow Meters shall be compatible with the rechargeable batteries supplied with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.11 Item No. 10 – Additional Rechargeable Batteries shall be compatible with the Battery Chargers and Wireless Portable Area Velocity Sewer Flow Meters.
- E2.12 Item No. 11 – Additional Disposable Batteries shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.13 Item No. 12 – Above Flow Velocity Sensors shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.13.1 Above Flow Velocity Sensors shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.13.2 Above Flow Velocity Sensors shall meet the environmental protection standards IP68 or equivalent rating.
- E2.13.3 Above Flow Velocity Sensors shall measure flow velocity while mounted to the top of the sewer.
- E2.13.4 Above Flow Velocity Sensors shall operate and provide readings under reverse flow and submerged conditions.
- E2.13.5 Proponent shall indicate Above Flow Velocity Sensor cable length in their Proposal.
- E2.13.6 Above Flow Velocity Sensors shall be capable of connecting a Velocity Sensor Cable Extension or replacing the standard Velocity Sensor cable with a Long Velocity Sensor Cable.
- E2.14 Item No. 13 – Above Flow Level Sensors shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.14.1 Above Flow Level Sensors shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.14.2 Above Flow Level Sensors shall meet the environmental protection standards IP68 or equivalent rating.
- E2.14.3 Above Flow Level Sensors shall measure flow depth while mounted to the top of the sewer.
- E2.14.4 Above Flow Level Sensors shall have redundant depth sensors.
- E2.14.5 Above Flow Level Sensors shall operate and provide readings under reverse flow and submerged conditions.
- E2.14.6 Proponent shall indicate Above Flow Level Sensor cable length in their Proposal.
- E2.14.7 Above Flow Level Sensors shall be capable of connecting a Level Sensor Cable Extension or replacing the standard Level Sensor cable with a Long Level Sensor Cable.
- E2.15 Item No. 14 – Velocity Sensor Cable Extension shall provide additional Velocity Sensor cable length.

- E2.15.1 Velocity Sensor Cable Extensions shall bring the total Velocity Sensor cable length to a minimum of 15 metres.
- E2.15.2 Velocity Sensor Cable Extensions shall be compatible with the following devices:
- (a) Item 1 - Wireless Portable Area Velocity Sewer Flow Meters
 - (b) Item 2 – In-Flow Velocity Sensors cable
 - (c) Item 12 – Above Flow Velocity Sensors cable
 - (d) Item 18 – Velocity Sensors for Large Diameter Sewer Pipes cable
- E2.16 Item No. 15 – Level Sensor Cable Extensions shall provide additional Level Sensor cable length.
- E2.16.1 Level Sensor Cable Extensions shall bring the total Level Sensor cable length to a minimum of 15 metres.
- E2.16.2 Level Sensor Cable Extensions shall be compatible with the following devices:
- (a) Item 1 - Wireless Portable Area Velocity Sewer Flow Meters
 - (b) Item 3 – In-Flow Level Sensors
 - (c) Item 13 – Above Flow Level Sensors
 - (d) Item 19 – Level Sensors for Large Diameter Sewer Pipes
- E2.17 Item No. 16 – Long Velocity Sensor Cable shall be a minimum 15 metres in length.
- E2.17.1 Long Velocity Sensor Cables shall be compatible with the following devices:
- (a) Item 1 - Wireless Portable Area Velocity Sewer Flow Meters
 - (b) Item 2 – In-Flow Velocity Sensors
 - (c) Item 12 – Above Flow Velocity Sensors
 - (d) Item 18 – Velocity Sensors for Large Diameter Sewer Pipes
- E2.18 Item No. 17 – Long Level Sensor Cable shall be a minimum 15 metres in length.
- E2.18.1 Long Level Sensor Cables shall be compatible with the following devices:
- (a) Item 1 - Wireless Portable Area Velocity Sewer Flow Meters
 - (b) Item 3 – In-Flow Level Sensors
 - (c) Item 13 – Above Flow Level Sensors
 - (d) Item 19 – Level Sensors for Large Diameter Sewer Pipes
- E2.19 Item No. 18 – Velocity Sensors for Large Diameter Sewer Pipes shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.19.1 Velocity Sensors for Large Diameter Sewer Pipes shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.19.2 Velocity Sensors for Large Diameter Sewer Pipes shall meet the environmental protection standards IP68 or equivalent rating.
- E2.19.3 Velocity Sensors for Large Diameter Sewer Pipes should be able to provide velocity readings at flow depths varying from 125 mm to 2250 mm.
- E2.19.4 Velocity Sensors for Large Diameter Sewer Pipes shall operate and provide readings under reverse flow and submerged conditions.
- E2.19.5 Proponent shall indicate Velocity Sensors for Large Diameter Sewer Pipes cable length in their Proposal.

- E2.19.6 Velocity Sensors for Large Diameter Sewer Pipes shall be capable of connecting a Velocity Sensor Cable Extension or replacing the standard Velocity Sensor cable with a Long Velocity Sensor Cable.
- E2.20 Item No. 19 – Level Sensors for Large Diameter Sewer Pipes shall be compatible with the Wireless Portable Area Velocity Sewer Flow Meters.
- E2.20.1 Level Sensors for Large Diameter Sewer Pipes shall be intrinsically safe and in accordance with the Canadian Electrical Code (C.E.C.), Part 1, Section 18 – Hazardous Locations regarding Class 1 Zone 2.
- E2.20.2 Level Sensors for Large Diameter Sewer Pipes shall meet the environmental protection standards IP68 or equivalent rating.
- E2.20.3 Level Sensors for Large Diameter Sewer Pipes shall provide flow depth readings for sewer pipe sizes up to 2250 mm.
- E2.20.4 Level Sensors for Large Diameter Sewer Pipes should have redundant depth sensors.
- E2.20.5 Level Sensors for Large Diameter Sewer Pipes shall operate and provide readings under reverse flow and submerged conditions.
- E2.20.6 Proponent shall indicate Level Sensor for Large Diameter Sewer Pipes cable length in their Proposal.
- E2.20.7 Level Sensors for Large Diameter Sewer Pipes shall be capable of connecting a Level Sensor Cable Extension or replacing the standard Level Sensor cable with a Long Level Sensor Cable.