



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 850-2015

**REQUEST FOR PROPOSAL FOR A CITY OF WINNIPEG - WATER & WASTE
DEPARTMENT OPERATIONAL MANAGEMENT SYSTEM**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 REQUEST FOR PROPOSAL FOR A CITY OF WINNIPEG - WATER & WASTE DEPARTMENT OPERATIONAL MANAGEMENT SYSTEM

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, February 24th, 2016.

B2.2 Proposals 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. SERVER INFRASTRUCTURE

B3.1 Server Hardware/Operating System: The City uses HP/Intel Windows 2012 Server platforms (with most servers virtualized with VMware) and employs CA Nimsoft to monitor and manage the server environment.

B3.2 Storage: The City has a SAN environment consisting of HDS Storage Subsystems (AMS2500, HUS150) and Brocade switches to support data storage requirements for the production and development database tiers. IBM's TSM Backup/Archive and Veeam are used for backup and recovery services

B3.3 Database: The City uses Oracle 11g/12c Standard Edition and Microsoft SQL Server 2008/2012 Standard Edition. The City has implemented a functional database environment that fulfills all application system functional requirements, provides full online back-up, recovery and reorganization facilities including database transaction logging and up-to-the-minute forward recovery, plus timely automated reporting of actual or potential errors or problems. The City conducts database performance measurement and tuning as necessary.

B3.4 Network: The City of Winnipeg Backbone Network Infrastructure allows TCP/IP data communications between all City departments. This allows approximately 5,000 devices connected through the Backbone Network to be able to communicate with each other, the Internet and with central servers at two corporate data centers. Over 150 remote Sites are connected to the City's Backbone Network at speeds ranging from 100/1000BaseT fiber optic connectivity for large LANs, 10 Mbps for medium sized LANs and 2 Mbps connections for small LANs. Cisco routers and switches are used in the WAN and LAN as well as for VPN remote access. Checkpoint firewall products provide network security.

B3.5 Data Warehouse: The City utilizes Oracle's Enterprise Performance Management (Version 9.1) data warehouse and Cognos (Version 7.3 or higher) to provide in-depth analytical reporting. Extract, Transfer and Load (ETL) functionality is provided by Ascential (Version 7.5 or higher).

B4. ENQUIRIES

B4.1 All enquiries shall be directed to the Contract Administrator identified in D4.1.

B4.2 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.

B4.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.

- B4.4 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.
- B4.5 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.
- B4.6 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Contract Administrator in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a 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.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Bid Opportunity to the media or any member of the public without the prior written authorization of the Contract Administrator.

B6. ADDENDA

- B6.1 The Contract Administrator may, at any time prior to the Submission Deadline, issue addenda correcting errors, discrepancies or omissions in the Request for Proposal, or clarifying the meaning or intent of any provision therein.
- B6.2 The Contract Administrator will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/bidopp.asp>
- B6.2.2 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the Materials Management Division website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Proponent shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B7. SUBSTITUTES

- B7.1 The Work is based on the Plant, Materials and methods specified in the Request for Proposal.
- B7.2 Substitutions shall not be allowed unless application has been made to and prior approval has been granted by the Contract Administrator in writing.
- B7.3 Requests for approval of a substitute will not be considered unless received in writing by the Contract Administrator at least five (5) Business Days prior to the Submission Deadline.
- B7.4 The 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 Plant, Material or method as either an approved equal or alternative;
 - (b) identify any and all changes required in the applicable Work, and all changes to any other Work, which would become necessary to accommodate the substitute;
 - (c) identify any anticipated cost or time savings that may be associated with the substitute;
 - (d) certify that, in the case of a request for approval as an approved equal, the substitute will fully perform the functions called for by the general design, be of equal or superior substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance;
 - (e) certify that, in the case of a request for approval as an approved alternative, the substitute will adequately perform the functions called for by the general design, be similar in substance to that specified, is suited to the same use and capable of performing the same function as that specified and can be incorporated into the Work, strictly in accordance with the proposed work schedule and the dates specified in the Supplemental Conditions for Substantial Performance and Total Performance.
- B7.5 The Contract Administrator, after assessing the request for approval of a substitute, may in his/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.
- B7.6 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.
- B7.6.1 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.
- B7.7 If the Contract Administrator approves a substitute as an “approved equal”, any Proponent may use the approved equal in place of the specified item.
- B7.8 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 B23.
- B7.9 No later claim by the Contractor for an addition to the Total Bid Price because of any other changes in the Work necessitated by the use of an approved equal or an approved alternative will be considered.

B8. PROPOSAL SUBMISSION

- B8.1 The Proposal shall consist of the following components:
- (a) Form A: Proposal;
 - (b) Form B: Prices;
 - (c) Form N: Proponent Proposal.
- B8.2 Further to B8.1 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.
- B8.3 Proponents should submit one (1) **unbound** 8.5” x 11” original (marked “original”) and ten (10) copies (copies can be in any size format) for sections identified in B8.1.

- B8.4 Proposal format, including type of binding, 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 team.
- B8.5 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B23.1(a).
- B8.6 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B8.7 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B8.8 Proposals shall be submitted to:
The City of Winnipeg
Corporate Finance Department
Materials Management Division
185 King Street, Main Floor
Winnipeg MB R3B 1J1
- B8.9 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B9. PROPOSAL

- B9.1 The Proponent shall complete Form A: Proposal, making all required entries.
- B9.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:
- (a) if the 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.
- B9.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B9.2.
- B9.3 In Paragraph 3 of Form A: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B9.4 Paragraph 11 of Form A: 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 and the corporate seal, if the corporation has one, should be affixed;
 - (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.

B9.4.1 The name and official capacity of all individuals signing Form A: Proposal should be printed below such signatures.

B9.5 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.

B10. PRICES

B10.1 The Proponent shall state a price in Canadian funds for each item of the Work identified on Form B: Prices.

B10.1.1 Notwithstanding C11.1.3, prices on Form B: Prices shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.

B10.2 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.

B10.3 The quantities for which payment will be made to the Contractor are to be determined by the Work actually performed and completed by the Contractor, to be measured as specified in the applicable Specifications.

B10.4 Payments to Non-Resident Contractors are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10.5 The Proponent must complete the Approximate Quantity Column for Items 7, 8 and 14 through 19 on Form B: Prices. These quantities are dependent on the service the Proponent proposes.

THE RESPONSES TO THE REQUIREMENTS LISTED IN B11, B12, B13 ARE TO BE SUBMITTED ON FORM N: PROPONENT PROPOSAL

B11. EXPERIENCE OF PROPONENT

B11.1 The Proponent should submit information in sufficient detail for the City to evaluate the qualifications of the Proponent by providing the items listed below. Include any additional information regarding the experience of the Proponent that may be of interest to the City of Winnipeg.

- (a) Brief overview of your organization, company history, professional services offered, markets serviced and customer base;
- (b) Their organization and management structure;
- (c) The number of municipal government contracts similar in size and scope;
- (d) The details of the scope, complexity and value of each contract;
- (e) Three (3) references for recent projects similar in size and scope, preferably for municipal government clients. Each reference should consist of a company name, contact name, email address, phone number, and a brief description of the project.

B12. IMPLEMENTATION

B12.1 Describe your understanding of the Project as defined in Appendix B and the scope of services required. The Proponent should submit information in sufficient detail for the City to evaluate the qualifications of the implementation team by providing the items listed below. Include any information regarding implementation that may be of interest to the City of Winnipeg.

- (a) A description of your approach/methodology for performing implementations through all stages of the project; including Project Management, Requirements Analysis & Design, Configuration Design/Specifications, Configuration of Core/Static data, Configuration of Reports, Quality Assurance, Training, and a timeline/schedule covering all stages of the

project which includes major tasks, durations and resource efforts, identifying key milestones throughout the overall implementation. Include initial assumptions, constraints and a description of risk management procedures and approach, a description of issue management procedures and approach, and a description of change management procedures and approach. This may be different than the high-level draft implementation stages defined in Appendix B and should that be the case, please describe any specific advantages of the proposed alternate approach to WWD. For clarity, please note that City of Winnipeg will undertake responsibility for the formal Organizational Change Management work for the duration of the project, but will expect the successful proponent to support WWD's change management activities as may be required;

- (b) A description of your approach to overall team formation and coordination of team members including anticipated resources from the Proponent and City of Winnipeg including roles and responsibilities and anticipated efforts by resource. Include a breakdown that clearly identifies the amount of time and type of staff resources that the City of Winnipeg will need to provide for each of the project stages;
- (c) Profiles outlining experience and qualifications of the Key Personnel that are typically assigned to projects of this nature in the Canadian market. Include details of projects of comparable size and complexity that each resource has worked on. Roles of each of the Key Personnel in the project should be identified in the organization chart referred to in B11.1(b).
- (d) Explain how the team will accomplish all required tasks and provide quality deliverables within the described timelines.

B13. TRAINING

B13.1 The Proponent should describe their training methodology and approach, including all relevant information regarding knowledge transfer to City of Winnipeg staff. Include any additional information regarding training that may be of interest to the City of Winnipeg.

- (a) Methodology: Describe the proposed schedule, participants, and curriculum and include any prerequisite knowledge required of each of the user types: Administrator, End User (various roles), Technical, Report Users (read-only access to reporting features, not the core application). Specify whether on-site or off-site and include any logistical requirements e.g. classroom, white board, internet access, etc.;
- (b) System Manuals: Provide a listing of all user, administrator, and installation/IT manuals, along with any other associated instructional reference materials that will be made available to the City once the Contract is awarded.

B14. DISCLOSURE

B14.1 Various Organizations 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.

B14.2 The Organizations are:

- (a) Accela;
- (b) Azteca Systems Inc. – CityWorks;
- (c) Intergraph Corporation;
- (d) Cartegraph/Applied Geologies (AGL).

B15. QUALIFICATION

B15.1 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.
- B15.2 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 <http://www.winnipeg.ca/matmgt/debar.stm>
- B15.3 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);
 - (d) upon request of the Contract Administrator , obtain Security Clearances in accordance with PART F - Security Clearance.
- B15.4 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.
- B15.5 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.

B16. FORM N: PROPONENT PROPOSAL

- B16.1 The Proponent shall submit Form N: Proponent Proposal. The Proponent should provide responses to each requirement listed on Form N: Proponent Proposal.
- B16.2 The Proponent should provide their proposal responses according to the following rules:
- (a) The RFP response should be prepared in a clear and concise manner, using the table format where provided.
 - (b) Indicate which solution alternative you are responding to, as per the instructions in Form N: Proponent Proposal.
 - (c) Do not refer in the answer to another question and do not refer to other documents.
 - (d) Include any additional information that you feel may be helpful, either following the tables, in separate sections of your response, or in an appendix at the end of the proposal.
- B16.3 Proponents are expected to examine the entire RFP including all specifications, standard provisions, and instructions.
- B16.4 The Proponent must make it very clear where exceptions are taken to the specifications and how the Proponent will provide alternatives. Therefore, exceptions, conditions, or qualifications to the provisions of the City's specifications must be clearly identified as such together with reasons for taking exception, and inserted into the Proposal. If the Proponent does not make it clear that an exception is being taken, the City shall assume the Proponent is responding to and will meet the specification as written.

B17. CITY'S PROJECT TEAM

- B17.1 The City has appointed a Project Team to oversee all aspects of the procurement and implementation of the Project.
- B17.2 The Project Team consists of:
- (a) Contract Administrator and 2 Division Managers from The City of Winnipeg Water and Waste Department (IST and Water Services Division);
 - (b) Staff of Water Services Division, assisted by key City staff;
 - (c) Information and Technology Services (IST) division of the Water and Waste Department, assisted by staffing resources contracted from external IT services agencies.
- B17.2.1 The external agencies are:
- (a) Integrationworx Ltd, and
 - (b) 5020565 Manitoba LTD. (DBA Smart PlanIT).

B18. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B18.1 Proposals will not be opened publicly.
- B18.2 After award of Contract, the names of the Proponents and the Contract amount of the successful Proponent 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/>
- B18.3 To the extent permitted, the City shall treat all Proposal Submissions as confidential, however the Proponent is advised that any information contained in any Proposal 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.
- B18.4 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.

B19. IRREVOCABLE OFFER

- B19.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 10 of Form A: Proposal.
- B19.2 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 executed and the performance security furnished as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B20. WITHDRAWAL OF OFFERS

- B20.1 A Proponent may withdraw his/her Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B20.1.1 Notwithstanding C22.5, the time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B20.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B20.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:

- (a) retain the Proposal until after the Submission Deadline has elapsed;
- (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal; and
- (c) if the notice has been given by any one of the persons specified in B20.1.3(b), declare the Proposal withdrawn.

B20.2 A Proponent who withdraws his/her Proposal after the Submission Deadline but before his/her offer has been released or has lapsed as provided for in B19.2 shall be liable for such damages as are imposed upon the Proponent 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.

B21. INTERVIEWS

B21.1 The Contract Administrator may, in his/her sole discretion, interview Proponents during the evaluation process.

B21.2 The Contract Administrator may, in his/her sole discretion, ask Proponents to provide product demonstrations to given scenarios. It is the City's intention to hold these product demonstrations, if required, in April 2016.

B22. NEGOTIATIONS

B22.1 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.

B22.2 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.

B22.3 If, in the course of negotiations pursuant to B22.2 or otherwise, 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.

B23. EVALUATION OF PROPOSALS

B23.1 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 B15.3: (pass/fail)
- (c) Total Bid Price; (Section B) 40%
- (d) Form N: Proponent Proposal 60%

B23.2 Further to B23.1(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.

- B23.3 Further to B23.1(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 responsible and qualified.
- B23.4 Notwithstanding B23.1(d), where Proponents fail to provide a response to requirements on Form N: Proponent Proposal the score of zero may be assigned to the incomplete part of the response.
- B23.5 Further to B23.1(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.
- B23.5.1 The approximate quantities proposed by the Proponent, for Items 14 through 19 on Form B: Prices will be multiplied by the unit prices for each item.
- B23.5.2 Further to B23.1(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.
- B23.6 Further to B23.1(d), Form N: Proponent Proposal shall be evaluated considering the information submitted in response to B11, B12, B13, E4, E5, and E6.
- B23.7 This Contract will be awarded as a whole.
- B23.8 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B23.1(a) and B23.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B24. AWARD OF CONTRACT**
- B24.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B24.2 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 responsible and qualified, and the Proposals are determined to be responsive.
- B24.2.1 Without limiting the generality of B24.2, 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.
- B24.3 Where an award of Contract is made by the City, the award shall be made to the responsible and qualified Proponent submitting the most advantageous offer.
- B24.3.1 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.
- B24.4 Notwithstanding C4 and Paragraph 6 of Form A: Proposal, the City may issue a purchase order to the successful Proponent in lieu of the execution of a Contract.
- B24.5 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 Supply of Services* (Revision 2007 04 12) are applicable to the Work of the Contract.
- C0.1.1 The *General Conditions for Supply of Services* 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 Services*.

PART D - SUPPLEMENTAL CONDITIONS

GENERAL

D1. GENERAL CONDITIONS

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

D2. SCOPE OF SERVICES

D2.1 The Work to be done under the Contract shall consist of the supply and implementation of an Operational Management System (OMS) for the Water and Waste Department.

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

- (a) Supply of a Commercial-Off-The-Shelf (COTS) OMS solution and usage licenses:
 - (i) Including software licensing for OMS end-user, mobile, and reporting licenses
 - (ii) See requirements items E4, E5, E6
- (b) Professional Services for software configuration and implementation
 - (i) Including activities and work products to address gathering of detailed requirements, development of solution architecture, technical design and specifications, report development, population of reference data, testing, project management;
 - (ii) See requirements item B12
- (c) Product and Configuration Documentation
 - (i) See requirements items E4, E5, E6
- (d) Product and End-user Training
 - (i) See requirements items B13

D3. DEFINITIONS

D3.1 When used in this Request for Proposal:

- (a) “**311**” means the City of Winnipeg department responsible for triaging all customer initiated service requests. All Service Requests for the Water Services Division are incoming through 311 processes;
- (b) “**API**” means application programming interface;
- (c) “**Application Programming Interface**” means a set of routines, protocols, and tools for building software applications;
- (d) “**Aqueduct**” means the very large gravity pipe used to transport source water from Shoal Lake to the Water Treatment Plant;
- (e) “**Asset Registry System**” means the City’s corporate standard for desktop GIS tooling and spatial data management. This technology platform is the basis for creating and maintaining all underground, linear-based Water and Wastewater network infrastructure assets;
- (f) “**Branch Aqueducts**” means the large pressurized pipes used to convey water to three pumping stations;
- (g) “**City**” means the municipal corporation of the City of Winnipeg;
- (h) “**city**” means the geographical area that falls within the jurisdiction of the City of Winnipeg;
- (i) “**Client**” means an internal City of Winnipeg department, a contractor who is performing or requesting work from the City, or a Customer who is a citizen of the City of Winnipeg. Clients may initiate a Service Request;

- (j) “**Composite Asset**” means an asset necessarily assembled from or comprised of assemblages and/or components;
- (k) “**Core Data**” means configuration data that is core to the functioning of the application, for example inventory items and associated attributes, workflow parameters, audit configuration, templates, contacts and associated attributes, etc.;
- (l) “**COTS**” means a Commercial-Off-The-Shelf system. This is a technology system that is developed by a dedicated software vendor and is publicly available for purchase;
- (m) “**Curb Stop**” means a shut-off valve used to control flow in a service pipe;
- (n) “**Customer**” means a citizen, business of the City of Winnipeg or other city department, who utilizes services and may initiate a Service Request;
- (o) “**Department**” means the Water and Waste Department of the City of Winnipeg;
- (p) “**Director**” means the Director of the Water and Waste Department of the City of Winnipeg;
- (q) “**Feeder Main**” means the medium pressurized pipes used to convey water to Water Mains;
- (r) “**Feeder Main Valve**” means the shut off valves used to control flow in a Feeder Main;
- (s) “**GIS**” means Geographical Information System. This system is used to physically locate above ground and below ground assets owned and operated by the City of Winnipeg;
- (t) “**GPS**” means Global Positioning System. This is a system used to determine the latitude and longitude of an item on Earth;
- (u) “**Ground Strap**” means a copper cable where one end is affixed to a service connection and the other is at or near ground level. Used for thawing metallic pipes by inducing a current;
- (v) “**Hydrant**” means a device connected to the Water Main to provide water primarily for firefighting. Hydrants are also used as a water source for Water Main flushing, or by external Clients for acquiring bulk water for landscaping, street sweeping, and Waste Water sewer flushing;
- (w) “**Hydrant Valve**” means the shut-off valve used to control flow to a fire hydrant;
- (x) “**Information Request**” means a request originating from 311, typically initiated by a Customer. An Information Request may result in a Service Request which, in turn, may result in a Work Order;
- (y) “**IR**” means an Information Request;
- (z) “**Isolatable Water Main**” means the collection of Water Main segments that can be hydraulically isolated from the distribution system to facilitate maintenance;
- (aa) “**KPI**” mean Key Performance Indicators, which is a performance measurement for an organization;
- (bb) “**Maptops**” means the ruggedized laptops the Water Services fleet is equipped with, used for accessing a local copy of the GIS to access asset-related information;
- (cc) “**OCI**” means Overall Condition Index, a measurement of the condition of an asset;
- (dd) “**OMS**” means Operational Management System or Solution, a technology system/solution used to manage work associated to assets;
- (ee) “**Overall Condition Index**” means a measurement of the state of an asset;
- (ff) “**Proponent**” means any Person or Persons submitting a Proposal for Services;
- (gg) “**Pumping Stations**” means the facilities used to pump water into Feeder Mains;
- (hh) “**Repair Marker**” means a visible representation in the City of Winnipeg’s Geographical Information System (GIS) used to locate a repair on a Water Main;
- (ii) “**RFID**” means Radio Frequency Identification, which is the wireless use of electromagnetic fields to transfer data, for the purposes of automatically identifying and tracking tags;
- (jj) “**RFP**” means Request For Proposal;

- (kk) “**RPO**” means Recovery Point Objective, which is the age of files that must be recovered from backup storage for normal operations to resume if a system goes down as a result of a failure;
- (ll) “**RTO**” means Recovery Time Objective, which is the targeted duration of time and a service level within which a business process must be restored after a failure;
- (mm) “**Service Connection**” means a connection point of service pipe to a Water Main;
- (nn) “**Service Pipe**” means a very small pressurized pipe used to convey water to a water meter, typically inside a building;
- (oo) “**Service Request**” means a request originating from 311, typically initiated by a Customer. A Service Request may result in a Work Order being created;
- (pp) “**Shoal Lake**” means The City of Winnipeg’s water source for Aqueduct;
- (qq) “**SLA**” means Service Level Agreement, which is part of a standardized service contract where a service is formally defined;
- (rr) “**SMS**” mean Short Message Service, this is what is commonly known as a text message;
- (ss) “**Sprinkler**” means a dedicated service pipe used to provide water for the purpose of fire suppression;
- (tt) “**Sprinkler Valve**” means the shut-off valve used to control flow in a sprinkler pipe;
- (uu) “**SR**” means a Service Request;
- (vv) “**Static Data**” means data that defines the set of permissible values to be used by other data fields, and is widely re-used and referenced;
- (ww) “**UDF**” means Uni-directional flushing. This is the method currently used to clean water mains;
- (xx) “**Water Main**” means a section of the distribution network, comprised of individual segments of varying size, length, and/or material;
- (yy) “**Water Main Valve**” means the shut-off valve used to control flow in a Water Main;
- (zz) “**Water Meter**” means a device designed to measure and record the volume of water used;
- (aaa) “**Water Tank**” means a 1450 Litre tank of potable water mounted on a tow-behind trailer made available for a limited amount of time;
- (bbb) “**Water Treatment Plant**” means the facility used to treat water for consumption;
- (ccc) “**WO**” means a Work Order;
- (ddd) “**Work Order**” means a mechanism for tracking and assigning related tasks. A Work Order may be initiated based on one or more Service Requests, or may be created by Water Services staff.

D3.2 Notwithstanding C1.1, when used in this Request for Proposal:

- (a) “**Proposal**” means the offer contained in the proposal submission;
- (b) “**Proposal Submission**” means that portion of the Request For Proposal which must be completed or provided and submitted by the Submission Deadline in order to constitute a responsive proposal;
- (c) “**Request For Proposal**” means the Proposal Submission, the Bidding Procedures, the General Conditions, the Supplemental Conditions, the Specifications, the Drawings and all addenda.

D4. CONTRACT ADMINISTRATOR

D4.1 The Contract Administrator is:

Sonali Joshi
WWD IST Business Analyst
Telephone No. 204-803-4921

Email Address: sjoshi@winnipeg.ca

D4.2 At the pre-commencement meeting, the Contract Administrator will identify additional personnel representing the Contract Administrator and their respective roles and responsibilities for the Work.

D4.3 Bids Submissions must be submitted to the address in B8.8

D5. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

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

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

D5.3 The following shall be confidential and shall not be disclosed by the Contractor to the media or any member of the public without the prior written authorization of the Contract Administrator;

- (a) information provided to the Contractor by the City or acquired by the Contractor during the course of the Work;
- (b) the Contract, all deliverables produced or developed; and
- (c) any statement of fact or opinion regarding any aspect of the Contract.

D5.4 A Contractor who violates any provision of D5 may be determined to be in breach of Contract.

D6. NOTICES

D6.1 Notwithstanding C22.3, all notices of appeal to the Chief Administrative Officer shall be sent to the attention of the Chief Financial Officer at the following facsimile number:

The City of Winnipeg
Chief Financial Officer

Facsimile No.: 204- 949-1174

D6.2 **Bids Submissions** must be submitted to the address in B8.8

SUBMISSIONS

D7. AUTHORITY TO CARRY ON BUSINESS

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

D8. INSURANCE

D8.1 The Contractor shall provide and maintain the following insurance coverage:

- (a) commercial general liability insurance, in the amount of at least two million dollars (\$2,000,000.00) inclusive, with The City of Winnipeg added as an additional insured; such liability policy to also contain a cross-liability clause, non-owned automobile liability and products and completed operations cover, to remain in place at all times during the performance of the Work;

- (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Contractor directly or indirectly in the performance of the Service. The Limit of Liability shall not be less than \$2,000,000 inclusive for loss or damage including personal injuries and death resulting from any one accident or occurrence.

D8.2 Deductibles shall be borne by the Contractor.

D8.3 The Contractor shall provide the Contract Administrator with a certificate(s) of insurance, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D8.4 The Contractor shall not cancel, materially alter, or cause the policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the Contract Administrator.

D9. PERFORMANCE SECURITY

D9.1 The Contractor shall provide and maintain performance security until the expiration of the warranty period in the form of:

- (a) a performance bond of a company registered to conduct the business of a surety in Manitoba, in the form attached to these Supplemental Conditions (Form H1: Performance Bond), in the amount of fifty percent (50%) of the Professional Services Contract Price; or
- (b) an irrevocable standby letter of credit issued by a bank or other financial institution registered to conduct business in Manitoba and drawn on a branch located in Winnipeg, in the form attached to these Supplemental Conditions (Form H2: Irrevocable Standby Letter of Credit), in the amount of fifty percent (50%) of the Professional Services Contract Price ; or
- (c) a certified cheque or draft payable to "The City of Winnipeg", drawn on a bank or other financial institution registered to conduct business in Manitoba, in the amount of fifty percent (50%) of the Professional Services Contract Price.

D9.1.1 Where the performance security is in the form of a certified cheque or draft, it will be deposited by the City. The City will not pay any interest on certified cheques or drafts furnished as performance security.

D9.2 The Contractor shall provide the City Solicitor with the required performance security within seven (7) Calendar Days of notification of the award and prior to the commencement of any Work on the Site.

SCHEDULE OF WORK

D10. COMMENCEMENT

D10.1 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.

D10.2 The Contractor shall not commence any Work on the Site until:

- (a) the Contract Administrator has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D7;
 - (ii) evidence of the workers compensation coverage specified in C6.14;
 - (iii) evidence of the insurance specified in D8;
 - (iv) the performance security specified in D9;
- (b) the Contractor has attended a meeting with the Contract Administrator, or the Contract Administrator has waived the requirement for a meeting.

MEASUREMENT AND PAYMENT

D11. INVOICES

D11.1 Further to C11, the Contractor shall submit an invoice for each portion of work performed

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 work performed;
- (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.

D11.4 Bids Submissions must be submitted to the address in B8.8

D12. PAYMENT

D12.1 Further to C11, 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 C12.

FORM H1: PERFORMANCE BOND
(See D9)

KNOW ALL MEN BY THESE PRESENTS THAT

_____ ,
(hereinafter called the "Principal"), and

_____ ,
(hereinafter called the "Surety"), are held and firmly bound unto **THE CITY OF WINNIPEG** (hereinafter called the "Obligee"), in the sum of

_____ dollars (\$_____)

of lawful money of Canada to be paid to the Obligee, or its successors or assigns, for the payment of which sum the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has entered into a written contract with the Obligee for

RFP NO. 850-2015

REQUEST FOR PROPOSAL FOR A CITY OF WINNIPEG – WATER AND WASTE DEPARTMENT
OPERATIONAL MANAGEMENT SYSTEM

which is by reference made part hereof and is hereinafter referred to as the "Contract".

NOW THEREFORE the condition of the above obligation is such that if the Principal shall:

- (a) carry out and perform the Contract and every part thereof in the manner and within the times set forth in the Contract and in accordance with the terms and conditions specified in the Contract;
- (b) perform the Work in a good, proper, workmanlike manner;
- (c) make all the payments whether to the Obligee or to others as therein provided;
- (d) in every other respect comply with the conditions and perform the covenants contained in the Contract; and
- (e) indemnify and save harmless the Obligee against and from all loss, costs, damages, claims, and demands of every description as set forth in the Contract, and from all penalties, assessments, claims, actions for loss, damages or compensation whether arising under "The Workers Compensation Act", or any other Act or otherwise arising out of or in any way connected with the performance or non-performance of the Contract or any part thereof during the term of the Contract and the warranty period provided for therein;

THEN THIS OBLIGATION SHALL BE VOID, but otherwise shall remain in full force and effect. The Surety shall not, however, be liable for a greater sum than the sum specified above.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable as Principal, and that nothing of any kind or matter whatsoever that will not discharge the Principal shall operate as a discharge or release of liability of the Surety, any law or usage relating to the liability of Sureties to the contrary notwithstanding.

IN WITNESS WHEREOF the Principal and Surety have signed and sealed this bond the

_____ day of _____, 20____ .

SIGNED AND SEALED
in the presence of:

(Witness as to Principal if no seal)

(Name of Principal)

Per: _____ (Seal)

Per: _____

(Name of Surety)

By: _____ (Seal)
(Attorney-in-Fact)

**FORM H2: IRREVOCABLE STANDBY LETTER OF CREDIT
(PERFORMANCE SECURITY)
(See D9)**

(Date)

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

RE: PERFORMANCE SECURITY – RFP NO. 850-2015

Request for Proposal for a City Winnipeg – Water and Waste Department Operational Management System

Pursuant to the request of and for the account of our customer,

(Name of Contractor)

(Address of Contractor)

WE HEREBY ESTABLISH in your favour our irrevocable Standby Letter of Credit for a sum not exceeding in the aggregate

Canadian dollars.

This Standby Letter of Credit may be drawn on by you at any time and from time to time upon written demand for payment made upon us by you. It is understood that we are obligated under this Standby Letter of Credit for the payment of monies only and we hereby agree that we shall honour your demand for payment without inquiring whether you have a right as between yourself and our customer to make such demand and without recognizing any claim of our customer or objection by the customer to payment by us.

The amount of this Standby Letter of Credit may be reduced from time to time only by amounts drawn upon it by you or by formal notice in writing given to us by you if you desire such reduction or are willing that it be made.

Partial drawings are permitted.

We engage with you that all demands for payment made within the terms and currency of this Standby Letter of Credit will be duly honoured if presented to us at:

(Address)

and we confirm and hereby undertake to ensure that all demands for payment will be duly honoured by us.

All demands for payment shall specifically state that they are drawn under this Standby Letter of Credit.

Subject to the condition hereinafter set forth, this Standby Letter of Credit will expire on

(Date)

It is a condition of this Standby Letter of Credit that it shall be deemed to be automatically extended from year to year without amendment from the present or any future expiry date, unless at least 30 days prior to the present or any future expiry date, we notify you in writing that we elect not to consider this Standby Letter of Credit to be renewable for any additional period.

This Standby Letter of Credit may not be revoked or amended without your prior written approval.

This credit is subject to the Uniform Customs and Practice for Documentary Credit (2007 Revision), International Chamber of Commerce Publication Number 600.

(Name of bank or financial institution)

Per: _____
(Authorized Signing Officer)

Per: _____
(Authorized Signing Officer)

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS

E1.1 These Specifications shall apply to the Work.

E1.2 The following are applicable to the Work:

<u>Appendix No.</u>	<u>Appendix Title</u>
Appendix A	Appendix_A_Solution_Architecture
Appendix B	Appendix_B_Proposed_Implementation_Approach
Appendix C	Appendix_C_OMS_Stakeholders
Appendix D	Appendix_D_Water_Services_Use_Cases
Appendix E	Appendix_E_Wastewater_Services_Use_Cases
Appendix F	Appendix_F_Water_Services_Feature_Classes
Appendix G	Appendix_G_Water_Services_Current_State_Documentation
Appendix H	Appendix_H_Water_Services_Volume_Metrics
Appendix I	Appendix_I_Water_Services_Future_State_Programs

E2. BACKGROUND INFORMATION

E2.1 The Water and Waste Department (WWD) serves the community of Winnipeg by providing and continually improving drinking water, wastewater, land drainage, and solid waste services to the citizens of Winnipeg.

E2.2 The WWD is divided into a number of business “divisions”; the following four of which are business Stakeholders in this RFP:

- (a) Engineering;
- (b) Solid Waste;
- (c) Wastewater Services;
- (d) Water Services.

E2.3 The Information Systems and Technology (IST) Division is an additional division of the WWD, responsible for the following activities:

- (a) Planning, developing and supporting the computerized information systems and information technology for the department; and
- (b) Providing and maintaining all of the department’s hardware, such as personal computers and servers, as well as all software currently used by department employees.

E2.4 The IST division currently hosts a number of software systems used in various capacities for the purpose of managing the day-to-day corrective and preventative maintenance activities associated with the operations of the water distribution and wastewater collection systems. Many of the challenges and pain points experienced by the Stakeholder divisions are symptoms resulting from the creation of disparate systems that have evolved over many years of operation and that were not designed to work as one cohesive solution. In addition to the heterogeneous nature of the system landscape, many business units employ the use of paper-based communication and data collection processes within day-to-day operations which lead to fragmented, delayed and inconsistent views of information and inefficient re-entry of information.

E2.5 In order to address these challenges, the IST division is proceeding with a strategic initiative to modernize many of its information management and analysis capabilities within the department, as it pertains to asset and work order management activities. The initiative is known as the Utility Asset Management (UAM) program.

- E2.6 The UAM program lays out a multi-year roadmap to deliver a set of modern, integrated business solutions for the Water, Wastewater, Solid Waste and Engineering divisions and to support the transition of staff from current practices in a controlled and managed process to best leverage these solutions. The UAM initiative ultimately aims to provide improvements to technology and processes within the WWD that better facilitate the collection, management, delivery and quality of information used by business stakeholders and supports more confident and timely decision making.
- E2.7 A key success factor identified within the UAM initiative is the introduction of several foundational components to the WWD enterprise architecture. One such component is a new Operations Management Solution (OMS) that will provide tools for managing day-to-day operations for the Water Distribution and Wastewater Collection Networks while establishing reusable building blocks for future use by other operational business units within WWD. The OMS will serve as a central point for the division to record, track and manage customer service requests, operational incidents, work activities and resources and coordinate related asset management activities of the city's underground, linear-based assets.
- E2.8 The purpose of this RFP is to procure commercial off-the-shelf (COTS) software for the proposed OMS and to retain the professional services of an experienced organization to work with the City's WWD on the first of several phases of implementation.

E3. PROJECT OBJECTIVES

- E3.1 The project to which this RFP applies consists of two (2) main objectives:

- (a) The procurement of an OMS technology platform for WWD; and
- (b) OMS implementation for Water Services Division, Distribution branch (aka Phase 1).

After the completion of Phase 1, the City will continue to leverage the OMS technology platform to deliver additional capabilities to other department stakeholders through additional phases (2, 3 and so on).

OMS Technology Platform Procurement

- E3.2 The first objective of the project (and this RFP) is to select and procure a "Commercial-Off-The-Shelf" (COTS) software solution designed for asset and work order management of linear-based, underground assets. The solution will establish a common technology platform for use by "back-office" staff (supervisors, work planners, dispatchers, etc.) and by operational work crews working in the field.
- E3.3 The primary application of this solution is targeted at the City's "*Linear-based*" Water and Wastewater assets. A secondary application of the solution may be used (in future phases) to address the needs of other operational business areas within the department that similarly manage and maintain geospatial assets, such as solid waste refuse and recycling bins and the city's main supply aqueduct.
- Note: The term "Linear-based" assets refers to the network of underground and ground-level assets responsible for the distribution of potable water and the collection of wastewater from city residences and businesses. As such, this excludes so-called "Plant-based" assets used within the city's Water Treatment Plant and Pollution Control Centres.
- E3.4 The focus of the OMS is to support the delivery of business-oriented functions and improved data management capabilities to stakeholder groups responsible for the day-to-day operations of managing the water distribution and wastewater collections to Winnipeg customers. This focus aligns with several high-level goals established under the Utility Asset Management (UAM) Program which aims to improve overall responsiveness to customers, reduce errors, reduce manual efforts, improve analytical capabilities, and improve customer service. An overview of the UAM program is included in Appendix A Solution Architecture.
- E3.5 In seeking a COTS-based software solution the main functional areas that the OMS will need to address include:

- (a) Service Request and Incident Management;
- (b) Work Order and Task Management;
- (c) Resource Cost and Time tracking;
- (d) Asset Record Tracking;
- (e) Asset Operational Status Tracking;
- (f) Asset Lifecycle Management;
- (g) Preventive Maintenance Planning and Scheduling;
- (h) Parts/Supplies Inventory Management;
- (i) Operational Reporting;
- (j) System Integration Capabilities.

E3.6 Critical features of the OMS include, but are not limited to the following:

- (a) A map-based user interface to visualize locations of incidents, work and assets;
- (b) Alignment of core “out-of-the-box” features to the desired functional areas (E3.5);
- (c) Designed for use on both desktop and mobile computing platforms;
- (d) Architecture that promotes “configuration” over “customization” to ensure simple, expedient updates of software updates and enhancements;
- (e) Support for a variety of system integration methods; and
- (f) A comprehensive and easy to use reporting platform.

OMS Implementation – Phase 1

E3.7 The implementation of the OMS for WWD will occur over a series of phases; each focused on a primary business operational unit within the WWD.

E3.8 The Phase 1 implementation is subdivided into a series of three (3) “stages”, each designed to provide discrete functional capability and value to the business, in an incremental and timely fashion. The scope of each stage are:

- (a) Stage 1 – Visualization of Incidents and Work Locations;
- (b) Stage 2 – Management of Service Requests and Operational Status;
- (c) Stage 3 – Management of Work Orders and Asset Maintenance.

E3.8.1 A more detailed description of each stage is provided in Appendix B Proposed Implementation Approach.

Note: The sequencing and scope of stages above represents the City’s proposed approach to implement the OMS. The rationale for this approach is ultimately intended to provide some value to the business in shorter time frames, and to mitigate risks associated with a larger, all-encompassing “big-bang” approach. Respondents to this RFP may propose an alternate implementation approach, keeping in mind the city’s desire to deliver value in shorter, timeframes and mitigate change management risks.

E3.9 The successful implementation of Phase 1 is intended to deliver the following benefits to the Stakeholder:

- (a) Situational awareness of incidents and work for managers, supervisors and back-office staff;
- (b) Up-to-date information regarding assigned work, incidents and asset conditions;
- (c) Reduction in the use of paper-based forms in the field;
- (d) Simplified access to operational reports for managers and decision makers;

- E3.10 Some critical success factors for the implementation include, but are not limited to the following:
- (a) Active engagement with both business and IT Stakeholders;
 - (b) Subject matter expertise and experience in similar water and waste water operational environments;
 - (c) Incremental delivery of capabilities to the business in short time frames;
 - (d) Proven approach to transition Stakeholder from current to target state business processes.

THE RESPONSES TO THE REQUIREMENTS LISTED IN E4, E5, AND E6 ARE TO BE SUBMITTED ON FORM N: PROPONENT PROPOSAL

E4. MANDATORY REQUIREMENTS

- E4.1 The system shall provide features to support work order and asset management of linear based underground assets for the water and wastewater industry.
- E4.2 The system shall provide the ability to associate activity (incidents, work orders, service requests, inspections, etc.) to Assets.
- E4.3 The system shall provide a map-based user interface within the core solution that integrates directly with Work Order and Asset Management functions.
- E4.4 The system shall provide the ability to access and update Asset Information within the City's Corporate Geographical Information System (GIS).
- E4.5 The system shall be designed to implement business rules and workflows through administrative configuration tools.
- E4.6 The system shall provide the ability to automatically generate work orders based on predefined schedules or business rules.
- E4.7 The system shall provide the ability to operate the software from mobile computing platforms.
- E4.8 The system shall be designed with Application Programming Interfaces (APIs) to facilitate integration with external systems (E5.5(b)(i) and E5.5(b)(ii)).
- E4.9 The system shall provide a robust inventory management function that includes the ability to store inventory items, manage inventory, and decrement inventory based on work.

E5. BUSINESS REQUIREMENTS

- E5.1 Asset Management
- (a) Manage Asset Information: Explain how your system provides the ability to add, update and manage asset information stored within the Operational Management System (OMS) and/or integrated to the OMS from a geospatial database. Include any additional information regarding asset information management that may be of interest to the City of Winnipeg.
 - (i) Asset Feature Classes; The system should have the ability to manage asset types commonly found in use within Canadian water distribution and wastewater collection networks and potentially other feature classes pertinent to water and wastewater industry operations.
 - (ii) Asset Location Data; The system should have the ability to locate and work with assets using variety of location-based reference points, including but not limited to street address, Global Positioning System (GPS) coordinates, location description, intersection, etc.
 - (iii) Overall Condition Indicator; The system should have the ability to configure an Overall Condition Index (OCI) calculation for all assets of any feature class in the system, including user defined user classes.

- (iv) Asset History; The system should have the ability to track all events and activities related to an asset. Users should be able to easily view the history of an asset based on date, type of event / activity and location.
- (b) View Asset Information: The City's Corporate GIS spatial database represents the "source of record" for all asset attribute information (size, make, model, etc.) of water and wastewater underground, linear-based assets. Explain how your system will retrieve and view asset attribute information for use in the OMS. Include any additional information regarding asset information viewing that may be of interest to the City of Winnipeg.
 - (i) Spatial; The system should have the ability to display asset locations on a map-based and tabular views and allow users to access associated attribute information.
 - (ii) Extended Asset Attributes; The system should have the ability to store additional information about an asset, which is not stored within the source of record.
 - (iii) Temporal; The system should have the ability to retrieve asset information for a specified point in time or range of time in the asset lifecycle.
 - (iv) Asset Data Visualization; The system should have the ability to visually differentiate assets based on type, condition, operational status, and other data elements using icons, colors, etc.
 - (v) Asset Search; The system should have the ability to find / locate assets using a variety of methods including attribute search criteria, spatial query, location proximity and connectivity to related asset(s).
 - (vi) Asset Activity; The system should have the ability to display service requests, work orders, and incidents related to an asset when viewing the asset.
 - (vii) Historical Asset Activity; The system should provide the ability to display asset maintenance transactions for a specified point in time or for a range of time when viewing the asset.
- (c) Non-Fixed Assets: A potential future use of the OMS is to track deployment and maintenance activities associated with so-called Non-Fixed Assets. One such application of this feature would be used for the tracking of various bins, carts and containers used by Solid Waste Division for refuse and recycling collection. Explain how your system provides for such assets and supports tracking information and location including GPS location and address, inventory management, and location changes. Include any additional information regarding non-fixed assets that may be of interest to the City of Winnipeg.
 - (i) Identification; The system should have the ability to identify and track non-fixed assets using various technologies such as Bar Codes and Radio Frequency Identification (RFID) tags.
 - (ii) Non-Fixed Asset Inventory; The system should have the ability to define non-fixed asset types with pertinent attribute information and manage instances within the system.
 - (iii) Asset Location Changes; The system should have the ability to update the location of non-fixed assets, including returning the asset to inventory or updating the physical deployed location of the asset.

E5.2 Preventative Maintenance

- (a) Program Management: Explain how your system supports the setup, execution and management of regularly scheduled maintenance programs for assets managed within the OMS. Include any additional information regarding program management that may be of interest to the City of Winnipeg.
 - (i) Applicable Assets; The system should have the ability to create preventative maintenance programs for any type of asset, including but not limited to linear assets, composite assets, non-fixed assets, etc.
 - (ii) Program Maintenance; The system should have the ability to capture and store program information, including but not limited to name, description, purpose, etc. The ability to associate programs to other programs must be available. A program must be modifiable once created.

- (iii) Program Notes; The system should allow for entry of notes for the program and/or assets related to the program and make the notes available for the next preventative maintenance cycle.
- (b) Schedule Management: Explain how your system provides a robust scheduling solution for preventative maintenance program that supports the ability to schedule preventative maintenance based on a number of criteria. Include any additional information regarding schedule management that may be of interest to the City of Winnipeg.
 - (i) Schedule Frequency; The system should have the ability to create preventative maintenance programs based but not limited to time (days, months, quarters, years); season (pre-definable); and meters (odometer, hours), etc.
 - (ii) Schedule Cycles; The system should provide the ability to create overlapping and concurrent cycles for the same preventative maintenance program.
 - (iii) Incomplete Work; The system should have the ability to indicate when preventative maintenance work is not completed by the assigned date.
 - (iv) Calendar View; The system should provide a calendar view of preventative maintenance scheduled activities.
- (c) Automated Work Order Generation: Describe the system's ability to support the automated generation of work orders/tasks, including the ability to generate work orders based on schedule or other criteria. Include any additional information regarding automated work order generation that may be of interest to the City of Winnipeg.
 - (i) Scheduled Work Orders; The system should have options to enable work order generation based on preventative maintenance cycles i.e. work orders are generated at the start of a scheduled time or after the previous preventative maintenance cycle is completed.
 - (ii) Work Order Generation; The system should be able to generate advance scheduling of preventative maintenance work orders based on unique criteria.
- (d) Maintenance Route Management: Explain how your system supports route-based activity management for optimizing work execution pertaining to preventative maintenance programs, daily work activities and routine inspections. Include any additional information regarding maintenance route management that may be of interest to the City of Winnipeg.
 - (i) Route Display; The system should provide the ability to display the specific sequencing of work locations (route) for a set of work activities on a map.
 - (ii) Route Creation; The system should suggest "optimal" routes for a set of selected activities, locations, etc. in order to minimize driving time and/or distance travelled. The system should support the importing of static routes associated with specific activities and/or assets. The OMS should be capable of incorporating, interpreting and displaying route information created in route planning systems outside of the OMS.
 - (iii) Route Management; The system should provide the ability to alter the sequencing of add, remove, and change route points, and re-optimize routes inclusive of any changes.

E5.3 Work Management

- (a) Service Requests and Work Orders/Tasks: Explain how your system provides robust and flexible incident, service request and work order management practices. This should include features to manage the intake of service requests, allocation of work to crews (priority, type, location, etc.), plan daily routing of work, monitoring of in-progress activities, organization of up-coming work, and reporting of service response times and other performance indicators. Include any additional information regarding service requests and work orders that may be of interest to the City of Winnipeg.
 - (i) Work Order Creation; The system should provide the ability to create work orders and associate them to corresponding assets and/or locations. Work orders must be modifiable to allow additional information and/or associations to be recorded against the work order, until it is closed.

- (ii) Service Request Creation; The system should provide the ability to create and associate service requests to work groups, assets, locations, etc. Service Requests must be modifiable to allow additional information and/or associations to be recorded against the work order, until it is closed.
 - (iii) Service Request Grouping; The system should provide the ability to identify redundant service requests (incidents) from customers and associate together to manage as a single unit of work.
 - (iv) Work Dispatching; The system should support the notification of work assignments to crews working in the field via SMS and email-based messages. Messages including work assignments should include context-sensitive links allow crews to easily recall work assignments in the OMS.
- (b) Workflow Management: Explain how your system provides workflow management and monitoring capabilities to execute and govern standard methods, procedures and sequencing of activities within the context of corrective maintenance and preventative maintenance activities. Include any additional information regarding workflow management that may be of interest to the City of Winnipeg.
- (i) Workflow Configuration; The system should provide the ability to create, modify, and deploy workflows for handling service requests, work orders, tasks, reporting, etc.
 - (ii) Workflow Events; The system should have the ability to automate notifications and task generation based on a work order status change or other events related to a work order.
 - (iii) Work Order Definition; The system should have the ability to define common work types, decomposed into one or more activities / tasks with corresponding workflows to govern tracking
 - (iv) Valve Card Workflow; Explain how your system can be leveraged to replace the existing paper-based Valve Card system and processes, as described in Appendix I Water Services Future State Programs, sections 1 and 3.
 - (v) Valve Exercise Program; Explain how your system can be leveraged to implement a new Valve Exercise program, as described in Appendix I Water Services Future State Programs, section 2.
- (c) Inventory Management; Explain how your system provides the ability to manage the WWD stores inventory of parts and supplies. The system should provide features commonly found in inventory management systems such as monitoring and replenishing stock levels, tracking stock locations on shelves and support for various product barcodes. Include any additional information regarding inventory tracking that may be of interest to the City of Winnipeg.
- (i) Tracking; The system should track inventory based on usage, location, status, reorder point quantities, expiration dates, suppliers, etc. Supplies may be returned to inventory if pulled but not used for a job.
 - (ii) Cycle Counts; The system should support robust and flexible parameterized cycle counts.
 - (iii) Transfers; The system should provide the ability to transfer inventory from one location to another and update related records for each inventory location.
 - (iv) Notifications; The system should provide the ability to automatically alert staff when items reach reorder point levels.
 - (v) Inventory Access Control; The system should provide the ability to permit only active supplies to be available for use and the ability to permit access to inventories to only authorized staff.
- (d) Equipment Status Tracking: Explain how your system provides the ability to track specialty equipment and usage related to work activities. Examples of such equipment include Temporary Water Tanks and Water Service Thawing Equipment that are dispatched to various locations on a daily or weekly basis. Include any additional information regarding equipment status tracking that may be of interest to the City of Winnipeg.
- (i) Equipment Deployment Tracking; The system should provide a means to track and display the location of and associate with specific incident(s), service request(s)

- and/or work orders. Status must be available for a piece of equipment including but not limited to In Service, Out of Service, Under Repair, etc.
- (ii) Equipment Usage; The system should provide the ability to track equipment usage, including hours used, maintenance work and costs, etc.
- (e) Resource Tracking: Explain how your system provides the ability to track and summarize costs for all labour incurred based on resource usage transactions and/or invoice entries. Include any additional information regarding resource tracking that may be of interest to the City of Winnipeg.
- (i) Labour Tracking; The system should be able to assign and track labour costs for both internal (staff) and external resources (contracted services). Labour may be tracked by time period for both individuals and crews for internal or by invoice total for external resources.
 - (ii) Labour Types; The system should be able to track differentiated labour types including but not limited to standard, overtime, double time, etc. for both individuals and crews.
 - (iii) Crew Management; The system should be able to organize staff into operational crews and manage assignment to activities. The system should support contact information for crews and/or crew members to centralize communications.
 - (iv) Cost Tracking; The system should be able to track and summarize costs associated with all activities and work managed by the OMS. This includes costs for labour time, inventory stock items/materials, contracted services, equipment usage, etc.

E5.4 Mobile Computing

- (a) Field Data Capture: Explain how the system allows crews to record asset and work order information related to activities performed in the field. All data captured from mobile devices must include auditable information such as date/time, user and location. Include any additional information regarding field data capture that may be of interest to the City of Winnipeg.
- (i) Asset Information; The system should provide the ability to update asset information including but not limited to operational status, location references, asset condition photos, and situational comments.
 - (ii) Location Guidance; The mobile platform should provide guidance for locating assets in the field, based on geospatial coordinates.
 - (iii) Activity Information; The system should provide capabilities for crews to add and update information related to work activities (work orders, service requests and incidents).
 - (iv) Device Features; Explain how your solution takes advantage of common features found on mobile computing platforms including camera, audio recorder, GPS, calendar, SMS, barcode scanner, etc.
- (b) Field Dispatched Work: Explain how the system is capable of dispatching and notifying mobile crews of new work assignments and referencing associated assets while in the field, along with associated asset information. Include any additional information regarding field dispatched work that may be of interest to the City of Winnipeg.
- (i) Receipt of Work; The system should provide the ability for a technician in the field to acknowledge a work assignment has been received.
 - (ii) Communications; The system should support the notification of work assignments via Short Message Service (SMS) and email, with links directly to work activities in the OMS.
- (c) Connectivity: Explain what methods the system utilizes to connect mobile features with the main OMS to share information between field crews and back-office staff. Include any limitations of your system to support real-time updates between mobile devices and the main OMS. Include any additional information regarding the upload and download of field data that may be of interest to the City of Winnipeg.
- (i) Online Mode; The system should be capable of transmitting work order and asset information between the OMS when the device has network connectivity.

- (ii) Offline Mode; The system should be capable of operating “offline”, when there is no network connectivity to the main system. Describe how your system operates in such mode and how data is synchronized once network connectivity is re-established.
- (d) Field Resource Access: Explain how the system provides access to support material in the field. Include any additional information regarding field resource access that may be of interest to the City of Winnipeg.
 - (i) Supporting Material; The system should allow access to the following types of resources: work instructions, standard operating procedures, drawings, images, maps, as well as prior work orders, and asset information.
 - (ii) Incident and Asset History; The system should have access to historical records associated with assets and location based incidents, previously recorded in the OMS.

E5.5 Data Integration

- (a) GIS / Asset Registry Integration; The source of record for all underground, linear-based water and wastewater assets is the City’s corporate GIS. Explain how and what methods your system supports for referencing these GIS feature classes (assets) and their related information from the OMS. Provide a description of key considerations for the city to develop an integration strategy for synchronization of information between the OMS and GIS. See section Appendix G Water Services Feature Classes for a listing of proposed assets (feature classes) that should be available from the OMS. Include any additional information regarding asset registry integration that may be of interest to the City of Winnipeg.
- (b) Enterprise Application Integration; Explain how and what methods your solution provides to interface with various systems. Include any additional information regarding enterprise application integration that may be of interest to the City of Winnipeg.
 - (i) Lagan 311; The system must provide capability to interface between the call center system and the OMS to facilitate the exchange of information as described in Appendix A Solution Architecture, section 2(b). Include any industry-based standards used for interfacing.
 - (ii) PeopleSoft; The system must provide capability to interface between the corporate enterprise resource and planning (ERP) system and the OMS to facilitate the exchange of information as described in Appendix A Solution Architecture, section 2(c). Include any industry-based standards used for interfacing.
 - (iii) Other Enterprise Applications; The system should provide capability to interface between applications currently operating in the Water and Waste Department and the OMS to facilitate the exchange of information as it pertains to the overall solution. Describe what tools/methods/approaches are available and any industry-based standards used for interfacing.

E5.6 Reporting

- (a) Reports and Queries: Provide a thorough description of the reporting capabilities of your solution. The system must provide versatile and robust reporting solution that displays OMS data in a variety of formats, allows for drill down, and includes the ability to query work orders, asset information, and other pertinent system data as well as formal predefined reports. Provide a listing of all standard reports that are included with your system “out of the box”. Include any additional information regarding reports and queries that may be of interest to the City of Winnipeg.
 - (i) Export Formats; The system should provide the ability to export tabular data in a variety of formats, including but not limited to: XLS, TXT and CSV.
 - (ii) Simplified Data Access; The system should provide a business-centric logical representation of the main data entities and subject matter managed in the OMS, to facilitate ease in defining data queries and reports by non-technical business users.
 - (iii) Templates; The system should provide the ability to define templates for generating standard reports and documents that incorporate data from the OMS. Such a

- feature may be used for generating form letters and notices residents to notify them of up-coming work activities in their area. Various document formats should be supported such as DOC, PDF, and RTF.
- (iv) Spatial Query Support; The system should provide the ability to display query results in both tabular and spatial representation. The system should be capable of supporting spatial queries on various data entities managed within the OMS. Users may use such capability to identify and display (for example) various types of incidents, service requests, or work orders that match search criteria and/or fall within a user defined polygon and/or time frame.
 - (v) Spatial Data Export; The system should provide the ability to export geospatial data related to core business entities managed within the OMS; including work orders, incidents, complaints, etc.
- (b) Performance Monitoring: Explain how the system is capable of defining and presenting summary level information representing operational business metrics and Key Performance Indicators (KPIs) of various subject areas pertinent to the Water and Waste Department. Include any additional information regarding dashboards and KPIs that may be of interest to the City of Winnipeg.
- (i) Performance Tracking; The system should provide the ability for KPIs to track and display comparisons targets on scorecards and incorporate the use of a variety of graphical and tabular data visualizations, the ability to drill down from KPIs to examine a further level of detail, and the ability to provide automated individual and aggregate workload and productivity reporting on all operational and administrative activities.
 - (ii) User-Defined Dashboards; The system should provide the capability to define standard dashboards, pre-configured for various user roles of the system. Privileged users should have the ability to create user-defined dashboards. Dashboards should be interactive allowing users to filter dashboard metrics and to drill-down into detailed information where applicable.

E6. TECHNICAL AND NONFUNCTIONAL REQUIREMENTS

- E6.1 The Contractor shall supply an Operational Management System in accordance with the technical and non-functional requirements hereinafter specified; including but not limited to:
- (a) Technical Architecture: Describe the system architecture of your proposed solution. Include any models and descriptions necessary to convey an understanding of business function, application components, information/data and technology architectural perspectives of your solution. Include any additional information regarding technical architecture that may be of interest to the City of Winnipeg.
 - (i) Platform & Standards; Include in your description the underlying technology platform and standards incorporated within your solution. Include programming language, software development standards, protocols, etc. Describe the main components of the solution and deployment on hardware hosting platform.
 - (ii) Component Dependencies; Describe the use of any open-source and/or third-party components on which your solution depends, and their respective suppliers.
 - (b) Infrastructure Requirements: Describe your recommendations for a proposed hosting environment for your solution. Include both the Minimum and Recommended resource specifications (RAM, CPU, etc.) for all servers (application, file system, database, web, etc.) to meet the user and workload metrics (Appendix H Water Services Volume Metrics) and projections described in Appendix B. Provide a description and/or diagram explaining the deployment of your main solution components on the recommended server. Indicate how your solution aligns with our current infrastructure described in section B3. Provide a list of any and all hardware and/or software components that are NOT included in your proposal, but will be required to operate your solution in the City of Winnipeg environment (e.g. Database Backup solution, Enterprise Job Scheduler, etc.). Include any additional information regarding infrastructure requirements that may be of interest to the City of Winnipeg.

- (i) Pre-Production; Used for a variety of purposes over lifespan of implementation including training new staff, testing configuration changes, testing software upgrades, etc.
 - (ii) Production; Used by end-users for regular business operations.
- (c) System Management: Describe the system management activities and processes required to operate and maintain the vitality of your proposed solution over time. Include any additional information regarding system management that may be of interest to the City of Winnipeg.
 - (i) Skills; Describe the skillsets and level of expertise required to perform system management activities.
 - (ii) Release Management; Describe your typical software release cycle, addressing scope and frequency of major and minor versions, hot fixes, patches, etc. Describe your recommended release management method used by customers to upgrade to new versions of the software, including roles and responsibilities for City of Winnipeg staff and/or your support group.
 - (iii) Future Needs; Describe how your customers can submit suggestions and/or requests for future enhancements to the base product and how these are incorporated into your product roadmap.
 - (iv) Licensing Model; Describe your licensing model (user-based, server-based, etc.) and how it relates to pricing. If applicable, include any information pertinent to the selection of particular licensing options, such as number of users, volume of data, or access to product features.
 - (v) Configuration; Describe the main configuration points of your solution, designed to accommodate future requirements. This may include, but is not limited to the addition of new asset types/categories, implementation of business rules and/or workflows addition or modification of standard reports, etc.
- (d) Security: Describe the various aspects of your solution that address the security requirements and considerations for the system. Include any additional information regarding security that may be of interest to the City of Winnipeg.
 - (i) Active Directory; The system should provide the ability to integrate with the City of Winnipeg's Corporate User Directory (MS Windows Server 2012 Active Directory).
 - (ii) Standards; The system should provide the ability for data encryption over non-secured network (e.g. internet).
 - (iii) Access; The system should provide the ability to manage authentication and authorization information (users, roles, groups, access control levels, etc.). Describe the features and capabilities used to control access (granted/denied) and user profile and session management.
 - (iv) Audit; The system should provide a configurable and robust audit trail mechanism, capable of recording changes to key information along with the corresponding date, time, user who made the change. Provide a listing of all information that is audited in this manner. Explain how such auditing information is made available for review by end-users and/or system administrators.
- (e) Performance: Describe the typical performance characteristics that the City of Winnipeg should expect from your system when operating under normal operating conditions. Include any differences in performance characteristics that may be recognizable between different operating platforms, such as desktops and mobile devices. Include any additional information regarding performance that may be of interest to the City of Winnipeg.
 - (i) Startup Performance; Describe performance expectations for application startup and user login.
 - (ii) Standard Tasks Performance; Describe performance expectations for updates to work orders, service requests, preventative maintenance programs and refreshing of location-based map view of incidents.
 - (iii) Reporting Performance; Describe performance expectations for standard report generation (standard, pre-defined reports).

- (iv) Scalability; Describe the capability of your solution to scale to accommodate increased user demands, peak load times, and other high volume usage scenarios.
- (v) Bandwidth; Describe any specific requirements your solution may have for network connectivity bandwidth.
- (f) Availability: Describe the capabilities of your solution to meet the availability requirements noted below. Include any additional information regarding availability that may be of interest to the City of Winnipeg.
 - (i) Standard Availability Requirements; All functions of the system must be available for use 24 hours a day, 7 days per week, 365 days per year, excluding scheduled outages.
 - (ii) Recovery; Describe your recommendations and/or requirements for your solution configuration to meet the following objectives in the event of a system failure: Recovery Time Objective (RTO) is return to normal Water Services operations within 4 hours of failure. Recovery Point Objective (RPO) is to return the Water Services business operations to a state within 2 hours prior to system failure.
- (g) Support: Describe the support and maintenance services you plan to offer post implementation, including Service Level Agreements (SLAs), that align with the pricing in Form B. Be specific and include all options for support levels/methods, and time of availability. Include delineation between tasks for which the City of Winnipeg will be responsible vs. those that your support services will provide. Include any additional information regarding support that may be of interest to the City of Winnipeg.
 - (i) Support types; Describe the types of Business and Technical support typically offered to and used by your customers. Include any limitations, restrictions, or constraints for accessing your support services.
 - (ii) Incident Management and Escalation; Describe your customer facing and internal processes for managing incidents, including issue classification and escalation approach.
- (h) Usability: Describe how your solution is designed to be user-friendly and intuitive. Include a robust description of the global design features within the system that assist and guide the user through an aesthetically appealing experience when performing routine tasks. The City of Winnipeg describes usability as the capability of the software to be understood, learned, used, and attractive to the user. In your response, please consider the points below. Include any additional information regarding usability that may be of interest to the City of Winnipeg.
 - (i) Understandability; The system should demonstrate the following characteristics: Descriptions and demonstrations are available to system users. Guides and context sensitive messages are displayed to system users.
 - (ii) Learnability; The system should demonstrate the following characteristics: Functions can be absorbed quickly. Functions and flows within the system are intuitive and require actions that are discreetly defined and apparent.
 - (iii) Operability; The system should demonstrate the following characteristics: There is consistency across functions and screens. Common data elements can be selected rather than entered. Colour coding and conditional formatting is used to indicate status/state of a system artifact or data element. Icons and images are used, where beneficial to the user experience. Data visualization techniques are applied, to facilitate understanding of presented data. Navigation through the system functions is clear. Self-explanatory messages that clearly indicate resolutions are present where appropriate. The ability to undo actions is provided where appropriate.
 - (iv) Attractiveness; The system should demonstrate the following characteristics: Screen layouts are aesthetically pleasing. Aesthetically pleasing colours are used consistency throughout the application. The application has a modern look and feel when using system functions.

E7. HOSTING IN CANADA

E7.1 If the Proponent is submitting a proposal for Solution Alternative 2, the hosting infrastructure, solution components, and system data must reside entirely within Canada.

E8. PROJECT STRATEGIES

E8.1 The City of Winnipeg, Water and Waste Department has identified a number of guiding principles that will be employed in conducting this Project. The Contractor shall keep the following strategies in mind, and consider the interrelationships, when developing the response to the specifications:

E8.2 The City believes that it is in our best interest to select and deploy an Operational Management System with an aggressive delivery schedule, but not so aggressive that it significantly increases risk or sacrifices quality.

E8.3 It is the City's intention to follow industry best practices to be supported by the selected solution.

E8.4 The City recognizes that handling business process change and change management initiatives are critical success factors for the OMS solution. The department will work closely with the selected Contractor to define an approach that addresses the core requirements of the department.

E9. The City shall require user acceptance testing and approval prior to fully deployment of the software.

PART F - SECURITY CLEARANCE

F1. SECURITY CLEARANCE

- F1.1 Each individual proposed to perform Work under the Contract shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence. This can be obtained from one of the following;
- (a) police service having jurisdiction at his/her place of residence; or
 - (b) BackCheck, forms to be completed can be found on the website at: <http://www.backcheck.net/> ; or
 - (c) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <https://www.commissionaires.ca/en/manitoba/home> .
- F1.2 Prior to the award of Contract, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform the Work.
- F1.3 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work.
- F1.4 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- F1.5 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work.