



**THE CITY OF WINNIPEG**

# **REQUEST FOR PROPOSAL**

**RFP NO. 781-2021**

**PROFESSIONAL CONSULTING SERVICES FOR ST. CHARLES WASTEWATER  
SEWER DISTRICT PRELIMINARY DESIGN**

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## **PART B - BIDDING PROCEDURES**

### **B1. CONTRACT TITLE**

B1.1 PROFESSIONAL CONSULTING SERVICES FOR ST. CHARLES WASTEWATER SEWER DISTRICT PRELIMINARY DESIGN

### **B2. SUBMISSION DEADLINE**

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, March 4<sup>th</sup>, 2022.

B2.2 The Project Manager or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

### **B3. SITE INVESTIGATION**

B3.1 The Project Manager or an authorized representative will conduct a site investigation tour of the St. Charles Lift Station located at 435 Sansome Avenue on:

(a) February 28<sup>th</sup>, 2022 at 9:00 am or,

(b) March 2<sup>nd</sup>, 2022 at 9:00 am

B3.1.1 Proponents are requested to register for the site investigation by contacting the Project Manager identified in D2.

B3.2 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.

B3.3 The Proponent shall not be entitled to rely on any information or interpretation received at the site investigation unless that information or interpretation is the Proponent's direct observation, or is provided by the Project Manager in writing.

### **B4. ENQUIRIES**

B4.1 All enquiries shall be directed to the Project Manager identified in D2.

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 Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B4.3 Responses to enquiries which, in the sole judgment of the Project Manager, require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager to all Proponents by issuing an addendum.

B4.4 Responses to enquiries which, in the sole judgment of the Project Manager, do not require a correction to or a clarification of the Request for Proposal will be provided by the Project Manager only to the Proponent who made the enquiry.

B4.5 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Project Manager. Failure to restrict correspondence and contact to the Project Manager may result in the rejection of the Proponents Proposal Submission.

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 Project Manager in writing.

B4.7 Any enquiries concerning submitting through MERX should be addressed to:  
MERX Customer Support  
Phone: 1-800-964-6379  
Email: merx@merx.com

## **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 Project Manager. 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 Request for Proposals to the media or any member of the public without the prior written authorization of the Project Manager.

## **B6. ADDENDA**

- B6.1 The Project Manager 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 Project Manager 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.
- B6.3 Addenda will be available on the MERX website at [www.merx.com](http://www.merx.com).
- B6.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.
- B6.6 Notwithstanding B4, enquiries related to an Addendum may be directed to the Project Manager indicated in D2.

## **B7. PROPOSAL SUBMISSION**

- B7.1 The Proposal shall consist of the following components:
- (a) Form A: Bid/Proposal (Section A) in accordance with B8;
  - (b) Fees (Section B) in accordance with B9.
- B7.2 The Proposal should also consist of the following components:
- (a) Experience of Proponent and Subconsultants (Section C) in accordance with B10;
  - (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B11;
  - (c) Project Understanding and Methodology (Section E) in accordance with B12; and
  - (d) Project Schedule (Section F) in accordance with B13.
- B7.3 Further to B7.1 all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely.

B7.5 Proposal format, including number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should contain a table of contents, page numbering and should be in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their proposed solution.

B7.6 The Proposal shall be submitted electronically through MERX at [www.merx.com](http://www.merx.com).

B7.6.1 Proposals will **only** be accepted electronically through MERX.

B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B22.1(a).

B7.8 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

## **B8. PROPOSAL (SECTION A)**

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

B8.2 Paragraph 2 of Form A: Bid/Proposal shall be completed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
- (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
- (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
- (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.

B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2

B8.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

B8.4 Paragraph 13 of Form A: Bid/Proposal shall be signed in accordance with the following requirements:

- (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
- (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
- (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers;
- (d) if the Proponent is carrying on business under a name other than his/her own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.

B8.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

## **B9. FEES (SECTION B)**

B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D6 Scope of Services.

- B9.2 Adjustments to Fees will only be considered based on increases to the Scope of Services.
- B9.2.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.
- B9.3 Notwithstanding C1.1(b), Fees shall include costs for out of town travel, related meals and accommodations for the duration of the Project and shall not be considered an Allowable Disbursement.
- B9.4 The Fee Proposal shall also include an allowance for Allowable Disbursements as defined in C1.1(b), but shall exclude the costs of any materials testing, soils and hazardous materials investigation during construction.
- B9.5 Notwithstanding C11.1, Fees submitted 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.
- B9.6 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B9.6.1 Fees stated shall not include any costs which may be incurred by the Consultant with respect to any applicable funding agreement obligations as outlined in D14. Any such costs shall be determined in accordance with D14.

## **B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)**

- B10.1 Proposals should include:
- (a) details demonstrating the history and experience of the Proponent and Subconsultants in providing programming; design, management of the project and contract administration services on three projects of similar complexity, scope and value.
- B10.2 For each project listed in B10.1(a), the Proponent should submit:
- (a) description of the project;
  - (b) role of the consultant;
  - (c) project's original contracted cost and final cost;
  - (d) design and schedule (anticipated Project schedule and actual project delivery schedule, showing design separately);
    - (i) provide explanations if there are discrepancies between the projected and the actual durations.
  - (e) project owner;
  - (f) reference information (two current names with telephone numbers per project).
- B10.2.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.
- B10.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subconsultants.

## **B11. EXPERIENCE OF KEY PERSONNEL ASSIGNED TO THE PROJECT (SECTION D)**

- B11.1 Describe your approach to overall team formation and coordination of team members.
- B11.1.1 Include an organizational chart for the Project.
- B11.2 Identify the following Key Personnel assigned to the Project:
- (a) project manager;
  - (b) Lead discipline engineers.

- B11.3 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value, including the principals-in-charge, the Consultants Representative, managers of the key disciplines and lead designers . Include educational background and degrees, professional recognition, job title, years of experience in current position, years of experience in design and years of experience with existing employer. Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B11.1.1.
- B11.4 For each person identified, list at least two comparable projects in which they have played a primary role similar to that proposed for this Project. If a project selected for a key person is included in B10, provide only the project name and the role of the key person. For other projects provide the following:
- (a) Description of project;
  - (b) Role of the person;
  - (c) Project Owner;
  - (d) Reference information (two current names with telephone numbers per project).

**B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)**

- B12.1 Describe your firm's project management approach and team organization during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D5.
- B12.3 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B12.4 Proposals should address:
- (a) the team's understanding of the broad functional and technical requirements;
  - (b) Any site challenges and mitigation measures;
  - (c) the proposed Project budget;
  - (d) the City's Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> ; and
  - (e) any other issue that conveys your team's understanding of the Project requirements.
- B12.5 The Proposal should include Form P: Person Hours for all disciplines and or phases identified in D5 Scope of Services.
- B12.5.1 The total Fees on Form P: Person Hours should match Fees submitted in response to B9.
- B12.6 Proponents may use Form P: Person Hours or a table of their own design provided it includes all information requested in accordance with B12.5.
- B12.7 A sample of Form P: Person Hours can be found in Appendix H or <https://winnipeg.ca/matmgt/templates/information.stm>
- B12.8 For each person identified in B11.2, list the percent of the person's time to be dedicated to the Project in accordance with the Scope of Services identified in D5.



**B13. PROJECT SCHEDULE (SECTION F)**

- B13.1 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project or similar project management software, complete with resource assignments (key designers), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.
- B13.2 The Proponent's schedule should include critical dates for review and approval processes by the City and other organizations anticipated during the design and tendering phases of the Project. Reasonable times should be allowed for completion of these processes.

**B14. DISCLOSURE**

- B14.1 Various Persons provided information or services with respect to this RFP. In the City's opinion, this relationship or association does not create a conflict of interest because of this full disclosure. Where applicable, additional material available as a result of contact with these Persons is listed below.
- B14.2 The Persons are:
- (a) MPE Engineering Ltd
- B14.3 The following report was prepared by MPE Engineering Ltd and is provided in Appendix G.
- (a) St. Charles Wastewater Lift Station Condition Assessment 2020

**B15. CONFLICT OF INTEREST AND GOOD FAITH**

- B15.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B15.2 Conflict of Interest means any situation or circumstance where a Proponent or Key Personnel proposed for the Services has:
- (a) other commitments;
  - (b) relationships;
  - (c) financial interests; or
  - (d) involvement in ongoing litigation;
- that could or would be seen to:
- (i) exercise an improper influence over the objective, unbiased and impartial exercise of the independent judgment of the City with respect to the evaluation of Proposals or award of the Contract; or
  - (ii) compromise, impair or be incompatible with the effective performance of a Proponent's obligations under the Contract;
- (e) has contractual or other obligations to the City that could or would be seen to have been compromised or impaired as a result of its participation in the RFP process or the Project; or
  - (f) has knowledge of confidential information (other than confidential information disclosed by the City in the normal course of the RFP process) of strategic and/or material relevance to the RFP process or to the Project that is not available to other Proponents and that could or would be seen to give that Proponent an unfair competitive advantage.
- B15.3 In connection with its Proposal, each entity identified in B15.2 shall:
- (a) avoid any perceived, potential or actual Conflict of Interest in relation to the procurement process and the Project;

- (b) upon discovering any perceived, potential or actual Conflict of Interest at any time during the RFP process, promptly disclose a detailed description of the Conflict of Interest to the City in a written statement to the Project Manager; and
  - (c) provide the City with the proposed means to avoid or mitigate, to the greatest extent practicable, any perceived, potential or actual Conflict of Interest and shall submit any additional information to the City that the City considers necessary to properly assess the perceived, potential or actual Conflict of Interest.
- B15.4 Without limiting B15.3, the City may, in its sole discretion, waive any and all perceived, potential or actual Conflicts of Interest. The City's waiver may be based upon such terms and conditions as the City, in its sole discretion, requires to satisfy itself that the Conflict of Interest has been appropriately avoided or mitigated, including requiring the Proponent to put into place such policies, procedures, measures and other safeguards as may be required by and be acceptable to the City, in its sole discretion, to avoid or mitigate the impact of such Conflict of Interest.
- B15.5 Without limiting B15.3, and in addition to all contractual or other rights or rights at law or in equity or legislation that may be available to the City, the City may, in its sole discretion:
  - (a) disqualify a Proponent that fails to disclose a perceived, potential or actual Conflict of Interest of the Proponent or any of its Key Personnel;
  - (b) require the removal or replacement of any Key Personnel proposed for the Services that has a perceived, actual or potential Conflict of Interest that the City, in its sole discretion, determines cannot be avoided or mitigated;
  - (c) disqualify a Proponent or Key Personnel proposed for the Services that fails to comply with any requirements prescribed by the City pursuant to B15.4 to avoid or mitigate a Conflict of Interest; and
  - (d) disqualify a Proponent if the Proponent, or one of its Key Personnel proposed for the Project, has a perceived, potential or actual Conflict of Interest that, in the City's sole discretion, cannot be avoided or mitigated, or otherwise resolved.
- B15.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

## **B16. QUALIFICATION**

- B16.1 The Proponent shall:
  - (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
  - (b) be financially capable of carrying out the terms of the Contract;
  - (c) have all the necessary experience, capital, organization, and equipment to perform the Services in strict accordance with the terms and provisions of the Contract;
  - (d) have or establish and staff an office in Winnipeg for the duration of the Project.
- B16.2 The Proponent and any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:
  - (a) be responsible and not be suspended, debarred or in default of any obligations to the City. A list of suspended or debarred individuals and companies is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <https://winnipeg.ca/finance/findata/matmgt/listing/debar.pdf>
- B16.3 The Proponent and/or any proposed Subconsultant (for the portion of the Services proposed to be subcontracted to them) shall:

- (a) have successfully carried out services for the programming; design, management of construction and contract administration for architectural and/or engineering projects of similar complexity, scope and value; and to those required for this Project; and
- (b) be fully capable of performing the Services 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) have the knowledge and resources to administer the requirements of The Workplace Safety and Health Act (Manitoba) during the construction works associated with this Contract; and

undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba.

B16.4 The Proponent shall submit, within three (3) Business Days of a request by the Project Manager, further proof satisfactory to the Project Manager of the qualifications of the Proponent and of any proposed Subconsultant.

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

#### **B17. OPENING OF PROPOSALS AND RELEASE OF INFORMATION**

B17.1 Proposals will not be opened publicly.

B17.2 After award of Contract, the Contract amount and the name of the successful Proponent and their address will be available on the MERX website at [www.merx.com](http://www.merx.com).

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

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

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

#### **B18. IRREVOCABLE OFFER**

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

B18.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Services for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

#### **B19. WITHDRAWAL OF OFFERS**

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

#### **B20. INTERVIEWS**

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

## **B21. NEGOTIATIONS**

- B21.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B21.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B21.3 If, in the course of negotiations pursuant to B21.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

## **B22. EVALUATION OF PROPOSALS**

- B22.1 Award of the Contract shall be based on the following evaluation criteria:
- |  |             |
|--|-------------|
| (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: | (pass/fail) |
| (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B16:                                 | (pass/fail) |
| (c) Fees; (Section B)  | 40%         |
| (d) Experience of Proponent and Subconsultant; (Section C)   | 20%         |
| (e) Experience of Key Personnel Assigned to the Project; (Section D)   | 10%         |
| (f) Project Understanding and Methodology (Section E)  | 20%         |
| (g) Project Schedule. (Section F)  | 10%         |
- B22.2 Further to B22.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B22.3 Further to B22.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is qualified.
- B22.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B22.1(a) and B22.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B22.5 Further to B22.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.
- B22.6 Further to B22.1(c), the Award Authority may reject a Proposal as being non-responsive if it exceeds the funds available as shown in D6.3.
- B22.7 Further to B22.1(d), Experience of Proponent and Subconsultants will be evaluated considering the experience of the organization on projects of similar size and complexity as well as other information requested, in accordance with B10.
- B22.8 Further to B22.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on Projects of comparable size and complexity, in accordance with B11.

- B22.9 Further to B22.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B12.
- B22.10 Further to B22.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B13.
- B22.11 Notwithstanding B22.1(d) to B22.1(g), where Proponents fail to provide a response to B7.2(a) to B7.2(d), the score of zero may be assigned to the incomplete part of the response.
- B22.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B20.
- B22.13 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

### **B23. AWARD OF CONTRACT**

- B23.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B23.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.
- B23.2.1 Without limiting the generality of B23.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the Services;
  - (b) the prices are materially in excess of the prices received for similar services in the past;
  - (c) the prices are materially in excess of the City's cost to perform the Services, or a significant portion thereof, with its own forces;
  - (d) only one Proposal is received; or
  - (e) in the judgment of the Award Authority, the interests of the City would best be served by not awarding a Contract.
- B23.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B23.4 The City may, at its discretion, award the Contract in phases.
- B23.5 Further to B23.4 the City reserves the right to negotiate and award future phases to the successful Proponent.
- B23.6 Further to Paragraph 7 of Form A: Bid/Proposal and C4, the City may issue an award letter to the successful Proponent in lieu of execution of Contract Documents
- B23.6.1 The Contract documents as defined in C1.1(o)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the award letter notwithstanding that they are not necessarily attached to or accompany said award letter.
- B23.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(o).
- B23.8 If funding for the Services is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, proponents are advised that the terms of D14 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.

- B23.9 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its Proposal upon written request to the Project Manager.
- B23.10 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Proponent will be paid for all Services rendered up to time of termination.

## **PART C - GENERAL CONDITIONS**

### **C0. GENERAL CONDITIONS**

- C0.1 The General Conditions for Consultant Services (Revision 2017-03-24) are applicable to the Services of the Contract.
- C0.1.1 The *General Conditions for Consultant 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](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 Consultant Services*.

## PART D - SUPPLEMENTAL CONDITIONS

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

### D2. PROJECT MANAGER

D2.1 The Project Manager is:

Ho Lau, C.E.T.

Telephone No. 204 986-5418

Email Address: hlau@winnipeg.ca

D2.2 At the pre-commencement meeting, the Project Manager will identify additional personnel representing the Project Manager and their respective roles and responsibilities for the Services.

### D3. DEFINITIONS

D3.1 When used in this Request for Proposal:

- (a) **"AACE"** means the Association for the Advancement of Cost Engineering;
- (b) **"Class 3 Cost Estimate"** means an estimate with an expected accuracy range within - 20% to +30%. This estimate is typically associated with the preliminary design level of definition;
- (c) **"Class 4 Cost Estimate"** means an estimate with an expected accuracy range within - 30% to +60%. This estimate is typically associated with the feasibility study of definition;
- (d) **"City"** means City of Winnipeg;
- (e) **"CS"** means combined sewer;
- (f) **"D/S"** means downstream;
- (g) **"DWF"** means dry weather flow;
- (h) **"GIS"** means Geographic Information System;
- (i) **"HP"** means horsepower;
- (j) **"LDS"** means Land Drainage System;
- (k) **"LS"** means lift station;
- (l) **"MH"** means manhole;
- (m) **"NEWPCC"** means North End Sewage Treatment Plant;
- (n) **"PDWF"** means Peak Dry Weather Flow;
- (o) **"PWWF"** means Peak Wet Weather Flow;
- (p) **"SCADA"** means Supervisory Control and Data Acquisition;
- (q) **"SEWPCC"** means South End Sewage Treatment Plant;
- (r) **"SRS"** means Storm Relief Sewer;
- (s) **"TM"** means technical memorandum;
- (t) **"U/S"** means upstream;
- (u) **"WEWPCC"** means West End Sewage Treatment Plant;
- (v) **"WWF"** means Wet Weather Flow;
- (w) **"WWS"** means wastewater sewer.



#### D4. BACKGROUND

- D4.1 St. Charles Lift Station is located along Sansome Avenue between Gagnon Street and St. Charles Avenue and services the St. Charles Separated Sewer District (see *Figure 1 below*). Discharge from St. Charles Lift Station flows via the West Interceptor to the Westwood Lift Station and then is pumped again to Community Row Lift Station where it is then pumped to the Perimeter Road Pumping Station for treatment at WEWPC.



*Figure 1: St. Charles Separated Sewer District*

- D4.2 St. Charles Lift Station services a population of 2,096 people in the St. Charles Separated Sewer District, which accounts for 2.64% of the WEWPC service population. This district has a catchment area of approximately 34.63 ha in West Winnipeg zoned for single family areas, multi-family residential areas and commercial areas.
- (a) This information should be evaluated, confirmed and/or further refined as part of the work identified in E1.2(a)
- D4.3 Currently the flow from St. Charles LS discharges into a 150 mm force main which is pumped to the Westwood LS and then pumped again to Community Row LS where it is then pumped to the Perimeter Road Pumping Station before treatment at the WEWPC. The station and associated force main may be redundant and a review has indicated a potential gravity option.

The force main has failed twice in the last few years and the condition of the remaining pipe cannot be determined.

- D4.4 St. Charles Lift Station is serviced by two (2) Aurora 664A Dry Pit Solids Handling Pumps with an operating range of 20 L/s which are powered by 600V, 10 HP motors. The pumps are appropriately sized but are not operating correctly. Both pumps should not be operating concurrently as the downstream sewer system is not sized to pump more than the design DWF. The proper operation of the pumps should be consecutively.
- D4.5 Based on the selected feasibility option, the future work would entail an upgrade to the lift station and construction a new force main or the construction of a new diversion structure and gravity system to the West Perimeter sewer district.

## **D5. RELEVANT DOCUMENTS AND DRAWINGS**

- D5.1 Relevant documents, drawings and files/data are available by request to the City's Project Manager.
- D5.2 The following documents, drawings will be released at the sole discretion of the City:
- (a) St. Charles Lift Station Intake, record drawing. City of Winnipeg. 1961.
  - (b) St. Charles Lift Station Site Plan & Architectural, record drawing. City of Winnipeg.
  - (c) St. Charles Lift Station Desktop Assessment Report v4.1. City of Winnipeg. 2020
- D5.3 The following files/data will be released at the sole discretion of the City when requested by the Consultant:
- (a) City InfoWorks ICM hydraulic model database with the associated model files
  - (b) City flow monitoring work for St. Charles Separated Sewer District

## **D6. GENERAL PROJECT SCOPE SUMMARY**

- D6.1 To review and confirm the construction of a new lift station or diversion structure and gravity system to the West Perimeter sewer district.
- D6.2 The Services required under this Contract shall consist of an external consultant provide Preliminary Engineering Design to confirm the options listed in E1.1(a) in accordance with the following:
- (a) Assess the available data and model representation to ensure any data gaps and model improvements are identified.
  - (b) Collect additional data and undertake model improvements to deem the model fit for purpose to represent the project needs and develop a solution to address the needs. This will be submitted as a standalone technical memorandum.
  - (c) Assess options of gravity versus pumping station solutions based on background data and model improvements completed. This will be submitted as a standalone technical memorandum.
  - (d) All third-party risks will be addresses and signed off as part of the Preliminary Design review meeting requirements as stated in D7.3.
  - (e) A preliminary design report will be complete that will include at minimum the documentation and design deliverable requirements as outlined in the City Preliminary Design Report Template.
  - (f) Design drawings in AutoCAD using City of Winnipeg standards shall be produced to a 60% and 90% level of completion. Preliminary design drawings at minimum shall include:
    - (i) Cover Sheet (showing map of physical sewer project area)
    - (ii) Drawing List
    - (iii) Scaled Site Plans (Civil, Structural, Mechanical, Electrical, process, etc)

- (iv) Scaled Section Views
  - (v) Electrical Single Line
  - (vi) Motor Schematics (separate for each motor)
  - (vii) Grounding and Hazardous Locations
  - (viii) Equipment Layouts
  - (ix) Process & Instrumentation Diagrams
  - (x) Equipment Lists/Schedules (Mechanical, Electrical, Automation, Process, etc)
- (g) A class 3 cost estimate for all options and meet the American Association of Cost Engineering (AACE) requirements for an estimate of this class. Include detailed engineering along with contract administration for engineering services of each option.

D6.2.1 The Services required under D6.2 shall be in accordance with the City's Project Management Manual <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> . Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the Project Manager's attention any aspect of the City's Project Management Manual or templates which the Consultant is of the opinion is not consistent with good industry practice.

D6.3 The funds available for this Contract are \$500,000.

## **D7. GENERAL REQUIREMENTS**

### **D7.1 General Requirements of the Consultant**

- D7.1.1 The Consultant shall ensure that the Scope of Services is performed under direct supervision of a Professional Engineer.
- (a) All drawings, reports, recommendations and other documents involving the practice of professional engineering shall bear the stamp or seal and signature of a qualified engineer as required by the Engineering and Geoscientific Professions Act of the Province of Manitoba and By-laws of the Engineers Geoscientists Manitoba.
  - (b) Other reports and documents not involving the practice of professional engineering, such as letters of information, minutes of meetings, may be originated and signed by other personnel engaged by the Consultant and accepted by the City.
- D7.1.2 The Consultant shall, at a minimum, use the most current industry standard sustainable practices and conform to the latest codes, standards, regulations and legislative requirements in effect. The Consultant shall liaise with the City's Project Manager on the application of codes and standards.
- D7.1.3 Consultants shall not substitute, replace or add additional Key Personnel throughout the duration of the Project without written approval of the City's Project Manager.
- (a) Experience and qualifications as specified in B11 shall be submitted for all requested substitute(s), replacement(s), or additional Key Personnel.

### **D7.2 General Requirements for Project Deliverables**

- D7.2.1 All Deliverables shall have incorporated the Consultant's internal quality procedures before being submitted to the City.
- D7.2.2 Draft Documents Minimum Submission Requirements.
- (a) This sequence of document submission is required at minimum over the course of the Project. The Consultant to determine if additional submission stages beyond those listed below are required, and include these meetings in their Proposal.
    - (i) Hydraulic Model Update Technical Memorandum

- ◆ Summarize work required to update/refine hydraulic model to ensure it is fit for purpose of work.
- ◆ Schedule time allowance for implementation of model update work.
- (ii) Options Analysis Technical Memorandum
  - ◆ Recommend a solution based off of the options listed in E1.1(a)
  - ◆ List advantages, disadvantages, class 4 capital cost estimates (including detailed engineering design) with each option.
  - ◆ Draft of the TM shall be submitted to the Project Manager at least fifteen (15) Business Days prior to the Options Analysis Meeting.
- (ii) Template project management documents
- (iii) Preliminary Design Report Table Of Contents
  - ◆ Initial Table Of Contents for Preliminary Design Report shall be submitted to the Project Manager following the Preliminary Design Report Initiation Meeting.
- (iii) Geotechnical Work Allowance Proposal
- (iv) Risk Register/Framework
  - ◆ Risk Register/Framework draft shall be submitted to the Project Manager, at least ten (10) Business Days prior to the Risk & Opportunities Identification Meeting.
- (v) Preliminary Design Report
  - ◆ Provide further details of the design and impacts to the existing system. Geotechnical investigations to confirm the suitability of the solutions.
  - ◆ Provide details on any upgrades to utility (hydro, natural gas, water, BellMTS, etc) services required.
  - ◆ Reference any applicable bylaws, standards and codes that would apply.
  - ◆ Develop an AACE Class 3 cost estimate for the work required for construction along with an anticipated detailed design and construction schedule.
  - ◆ 60% complete draft of Preliminary Design Report shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the 60% Draft Review Meeting.
  - ◆ 90% complete draft of Preliminary Design Report shall be submitted to the Project Manager, at least twenty (20) Business Days prior to the 90% Draft Review Meeting.
  - ◆ All review meetings with City personal shall included Consultant project manager and lead discipline engineers.
  - ◆ 100% complete draft of Preliminary Design Report shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the final meeting.
- (b) For all document submissions, the following review schedule shall be followed:
  - (i) First draft review – 10 business day review period for the City and 5-10 business days for Consultant to update based on City feedback.
  - (ii) Second draft review – 5 business days for City to review and 5 business days for Consultant to update.
  - (iii) Third draft review – 1 to 2 business days for City to review and 1 to 2 days for Consultant to finalize.
- (c) Submit searchable PDF copy and native file format of all documents submitted for review.
- (d) Submit comment tracking spreadsheet as part of draft document revisions and resubmissions.

- (i) Comment tracking spreadsheet to log specific comments/edits requested by the City working group, the Consultant's response, and City's acceptance/rejection of Consultant's response.
- (ii) Template of comment tracking spreadsheet to be agreed upon by all parties during Project Kick-off.

**D7.2.3 Final Documents Submission Requirements**

- (a) Submit PDF copy of final documents for City review so the City can verify that all comments from the 90% draft have been incorporated.
- (b) Project Manager must give final approval that all comments have been satisfactorily answered prior to the Consultant printing paper copies.
- (c) Two (2) paper copies, with one (1) unbound and one (1) bound shall be submitted of all documents once finalized.
- (d) Submit searchable PDF copy and native file format document of all final documents.

**D7.2.4 Models**

- (a) Consultant to submit all model files in native file format in addition to other requirements outlined in E4 and Appendix F.
- (b) Model files showing updates completed to be submitted to the City at agreed upon intervals during the project development.

**D7.2.5 Drawings**

- (a) The City will provide comments on the draft drawings where required. Comments shall be reviewed and incorporated into the final drawings. Final submitted drawings shall be in CAD format along with sealed pdf files.

**D7.2.6** The City of Winnipeg will require the Consultant and any Subconsultants to provide, within sixty (60) Calendar days of the provision of the final Preliminary Design Report, electronic copies of all background notes, calculations, working notes, research, field logs, working copy spreadsheets, model inputs, survey notes, etc. pertinent to the Conceptual and Preliminary Design Report work. The intent is to provide all background documentation used for the report development, so that the City has a complete understanding of all details related to this Project.

- (a) The format for the provided materials may take multiple formats, but should be provided in electronic format (spreadsheets, CAD drawings, scans, etc.) in an organized electronic filing system.
- (b) Our rationale for requiring this information is that we (The City, or Consultants working for the City) on subsequent work related to this project may need to refer to specific details in the future.

**D7.3 General Requirements for Meetings**

**D7.3.1** Various project meetings will be required throughout the Project in order to track the Consultant's progress, review the Project work plan, address Project issues and allow for technical reviews with the City. The Consultant will be responsible for the coordination of all meetings and should clearly indicate in their Proposal Submission, locations, number of meetings and proposed meeting schedule associated with meetings for each of the various tasks/work activities.

**D7.3.2** An agenda shall be sent to the City's Project Manager at least two (2) Business Days prior to any meeting.

**D7.3.3** The Consultant shall take minutes at all meetings and workshops in which they attend. Minutes are to be forwarded to the City's Project Manager within five (5) Business Days.

**D7.3.4** Mandatory meetings listed below to be attended by the Consultant's Project Manager and any relevant Key Personnel at minimum.

- (a) Project Initiation Meeting

- (i) This meeting may be completed remotely, or at the City's offices.
  - (ii) This meeting will at minimum discuss:
    - ◆ Sequence of tasks expected by the Consultant to complete the project.
    - ◆ City's goals for project. Ensure the City's goals as part of this meeting are clearly documented in the meeting minutes.
    - ◆ Milestone dates.
    - ◆ Key personnel on project and their role.
    - ◆ Project communications.
    - ◆ Procedures for modifications to project scope, key personnel, scheduled dates.
  - (iii) All Consultant Key Personnel required at this meeting.
- (b) Options Analysis Meeting
- (i) This meeting may be completed remotely, or at the City's offices.
  - (ii) This meeting will be conducted once a first draft of the Option Technical Memorandum is complete.
  - (iii) This meeting will at minimum:
    - ◆ Summarize the criteria used by the Consultant to make a recommendation.
    - ◆ Summarize the criteria which were suggested to be excluded, and reasoning for exclusion.
    - ◆ Summarize the option selected for further review as part of the Preliminary Design Report, to meet City goals.
    - ◆ Summarize how the Consultant believes this option will meet City goals.
    - ◆ Present the initial thoughts on the methodologies proposed to be utilized to determine cost for the option selected.
    - ◆ Present the initial thoughts on the methodologies proposed to be utilized to determine benefits for the option selected.
    - ◆ Allow for City working group's feedback.
  - (iv) All Consultant Key Personnel are required at this meeting.
- (c) Project Initiation Meeting – Preliminary Design Report Phase
- (i) This meeting may be completed remotely, or at the City's offices.
  - (ii) This meeting will at minimum discuss:
    - ◆ Sequence of tasks expected by the Consultant to complete the remainder of the project.
    - ◆ Changes from initial Proposal submission sequence of tasks.
    - ◆ Milestone dates.
    - ◆ Key personnel on project and their role.
  - (iii) All Consultant Key Personnel required at this meeting.
- (d) 60% Draft Review Meeting – Preliminary Design Report Phase
- (i) This meeting will be completed remotely, or in person at the City's offices.
  - (ii) An appropriate internal review period for the 60% complete preliminary design report by the City working group will occur prior to this meeting.
  - (iii) This meeting will at minimum discuss:
    - ◆ Summary of methodology to be used to produce AACE Class 3 cost estimate for the solution selected.
    - ◆ Summary of work to date as part of preliminary design work.
    - ◆ Summary of unknowns remaining at this point in relation to preliminary design work.



- ◆ Allow for City working group's feedback.
- (iv) All Consultant Key Personnel are required at this meeting.
- (e) Risk & Opportunities Identification Meeting – Preliminary Design Report Phase
  - (i) This meeting will be conducted remotely or in person at the City's offices.
  - (ii) A framework/register in which risks and opportunities are to be identified will be submitted at minimum ten (10) Business Days prior to this meeting.
    - ◆ This submitted framework/register will also have a "first pass" of risks and opportunities applicable to the solution completed by the Consultant.
  - (iii) This meeting will at minimum:
    - ◆ Allow for brainstorming among City working group and Consultant of Risks and Opportunities applicable to the solution currently under preliminary design.
    - ◆ Document of risks and opportunities identified during the meeting.
    - ◆ Discuss and documentation of response plan of action and an owner or owners responsible for each risk and opportunity identified.
- (f) 90% Draft Review Meeting – Preliminary Design Report Phase
  - (i) This meeting may be completed remotely, or at the City's offices.
  - (ii) A minimum fifteen (15) day internal review period of the City working group will occur prior to this meeting.
  - (iii) This meeting will at minimum discuss:
    - ◆ Specific content of sections of the report, where applicable.
    - ◆ Outstanding work for detailed design report development.
    - ◆ Milestone dates upcoming.
    - ◆ Allow for City feedback.
    - ◆ Allow for City working group's feedback.
  - (iv) All Consultant Key Personnel required at this meeting.
- (g) Monthly Progress Meetings
  - (i) These meetings will be completed by teleconference, throughout the Project duration.
  - (ii) The City Project Manager, or a designate to act on behalf of the City Project Manager, along with the Consultant's Key Personnel considered appropriate are to attend this meeting.
- (h) Weekly Progress Meetings
  - (i) These meetings will be completed by teleconference, throughout the Project duration.
  - (ii) Meeting with the City's Project Manager on a weekly basis (at a minimum) to provide Project status.

D7.3.5 The Consultant is to determine if additional meetings beyond the mandatory meetings listed above are required, and include these meetings in their Proposal.

#### **D7.4 Relevant Design Standards**

D7.4.1 The following design standards shall be applicable to this project:

- (a) WWD Electrical Design guide (Appendix A);
- (b) WWD Identification Standard (Appendix B);
- (c) WWD HMI Layout and Animation Plan (Appendix C);
- (d) WWD Wastewater Treatment Facilities Automation Design Guide (Appendix D);
  - (i) These design requirements will also be applied to the collection system where relevant and useful.

- (e) WSTP Electrical and Instrumentation Standardization Summary (Appendix E);
  - (i) The City of Winnipeg has standardized on specific electrical and automation manufacturers. The Consultant should use standardized equipment in their preliminary design where applicable.
  - (ii) Computer Assisted Drafting (CAD) and Geographic Information System (GIS) Standards and templates can be found here :  
[https://winnipeg.ca/waterandwaste/dept/cad\\_gis.stm;](https://winnipeg.ca/waterandwaste/dept/cad_gis.stm;)
- (f) Modeling Standards;
  - (i) See E4 and Appendix F for specific modeling requirements as part of the scope of work.
- (g) City of Winnipeg Wastewater Flow Estimation And Servicing Guidelines:  
<https://winnipeg.ca/waterandwaste/dept/wastewaterFlow.stm>
- (h) CSO Master Plan District Engineering Plans (DEPs)
  - (i) <https://winnipeg.ca/waterandwaste/pdfs/sewage/2019CSOMasterPlan.pdf>
    - ◆ Refer to page 342 of the document linked above.
- (i) The City's Project Management Manual:  
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#3>
- (j) The City's Project Management templates:  
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#5>
- (k) The City's Investment Planning templates:  
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>

D7.4.2 Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the City's Project Manager's attention any aspect of the City's standards, manuals, guidelines or templates which the Consultant is of the opinion is not consistent with good industry practice.

#### **D7.5 Investment Planning Templates**

D7.5.1 Templates used by the City Of Winnipeg's Asset Management Group as part of the Investment Planning process shall be utilized as much as possible during this project.

D7.5.2 At minimum, the following Investment Planning Templates shall be utilized by the Consultant:

- (a) The latest version of the Basis Of Estimate (BoE) template shall be used by Consultant as part of the Preliminary Design Study Development. This will be as part of the development of the AACE Class 3 Estimate for the solution recommended.

#### **D7.6 Geotechnical Work Allowance**

D7.6.1 The general requirements for the Geotechnical Work Allowance are as follows:

- (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Geotechnical Work Allowance when defined and approved.
- (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Geotechnical Work Allowance, the Consultant shall follow the requirements as stated in D7.
- (c) The Consultant shall apply a maximum of ten (10) percent markup on all work performed by a Sub Consultant or Contractor.



- (d) Expenditures under the Geotechnical Work Allowance must be authorized by the City's Project Manager.
- (e) Where the actual cost of performing the services under the Geotechnical Work Allowance is less than the amount of the Geotechnical Work Allowance, the City will be credited for the unexpended portion of the Geotechnical Work Allowance, but not for the Consultant's overhead and profit on such amount.
- (f) The Contract price will be adjusted by written order to provide for a difference between the amount of the Geotechnical Work Allowance and the actual cost of the work.
- (g) The City reserves the right to delete any or all of the Geotechnical Work Allowance from the Contract if the Work intended to be covered by the Geotechnical Work Allowance is not required, or if the Works intended are found to be more extensive than the provisional Geotechnical Work Allowance.

## **D7.7 Additional Work Allowance**

D7.7.1 The general requirements for the Additional Work Allowance are as follows:

- (a) The Consultant shall include in Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Additional Work Allowance when defined and approved.
- (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Additional Work Allowance, the Consultant shall follow the requirements as stated in D7.
- (c) The Consultant shall apply a maximum of ten (10) percent markup on all work performed by a Sub Consultant.
- (d) Expenditures under the Additional Work Allowance must be authorized by the City's Project Manager.
- (e) The City reserves the right to delete any or all of the Additional Work Allowance from the Contract if the Work intended to be covered by the Additional Work Allowance is not required, or if the Works intended are found to be more extensive than that provisioned by the Additional Work Allowance.

## **D7.8 Invoicing**

D7.8.1 Fixed Fee scope of work items as described in B9.1, excluding Project Management, shall only be invoiced once the City Project Manager has accepted and received all deliverables for that scope except the following:

- (a) Project Management activities as described in E3 shall be invoiced on a monthly basis. Payment by the City will not be made until all monthly Project Management deliverables have been submitted by the Consultant.

D7.8.2 If any Additional Work Allowance scope items are approved to be completed on an hourly basis utilizing Form P. The Consultant shall submit monthly invoices for that scope of work.

## **SUBMISSIONS**

### **D8. AUTHORITY TO CARRY ON BUSINESS**

D8.1 The Consultant 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 Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Project Manager with evidence thereof upon request.

## **D9. INSURANCE**

- D9.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.
- D9.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:
- (a) Comprehensive or Commercial General Liability Insurance including:
    - (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
    - (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
    - (iii) coverage for Products/Completed Operations, Blanket Contractual, Consultant's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, Employees as Additional Insureds, and Non-Owned Automobile Liability;
    - (iv) a Cross Liability clause and/or Severability of Interest clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured.
  - (b) if applicable, Automobile Liability Insurance covering all motor vehicles, owned and operated and used or to be used by the Consultant 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.
  - (c) Professional Errors and Omissions Liability Insurance including:
    - (i) an amount not less than \$ 2,000,000 per claim and \$ 2,000,000 in the aggregate.
- D9.2.1 The Consultant's Professional Errors and Omissions Liability Insurance shall remain in force for the duration of the Project and for twelve (12) months after Total Performance.
- D9.3 The policies required in D9.2(a) shall provide that the City is named as an Additional Insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the City.
- D9.4 The Consultant shall require any Consultants hired to perform geo technical drilling and sample collecting or closed-circuit television to procure and maintain, at its own expense and cost, comparable insurance to that set forth under D9.2(a) and D9.2(b).
- D9.5 The Consultant shall require each of its Subconsultants hired for design, architectural or engineering services as outlined in the Scope of Services to provide comparable insurance to that set forth under D9.2(a) and D9.2(c).
- D9.6 The Consultant shall provide the Project Manager 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 Services, but in no event later than the date specified in C4.1 for the return of the executed Contract. Such certificates shall state the exact description of the Services and provide for written notice in accordance with D9.9.
- D9.7 The Consultant may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall be at no expense to the City.

- D9.8 All insurance, which the Consultant is required to obtain with respect to this Contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the Province of Manitoba.
- D9.9 The Consultant shall not cancel, materially alter, or cause any policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the City.

## **SCHEDULE OF SERVICES**

### **D10. COMMENCEMENT**

- D10.1 The Consultant shall not commence any Services until it is in receipt of a notice of award from the City authorizing the commencement of the Services.
- D10.2 The Consultant shall not commence any Services until:
- (a) the Project Manager has confirmed receipt and approval of:
    - (i) evidence of authority to carry on business specified in D8;
    - (ii) evidence of the insurance specified in D9.
  - (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D10.3 The City intends to award this Contract by June 2<sup>nd</sup>, 2022.

### **D11. CRITICAL STAGES**

- D11.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Finalized Options Analysis TM by third quarter of 2022;
  - (b) Submission of final Preliminary Design Report with all comments from the City incorporated and accepted by the first quarter of 2023.

### **D12. COVID-19 SCHEDULE DELAYS**

- D12.1 The City acknowledges that the schedule for this Contract may be impacted by the COVID-19 pandemic. Commencement and progress of the Services shall be performed by the Consultant with due consideration to the health and safety of workers and the public, directives from health authorities and various levels of government and in close consultation with the Project Manager.
- D12.2 If the Consultant is delayed in the performance of the Services by reason of the COVID-19 pandemic, the Services schedule may be adjusted by a period of time equal to the time lost due to such delay and costs related to such delay will be determined as identified herein.
- D12.3 A minimum of seven (7) Calendar Days prior to the commencement of Services, the Consultant shall declare whether COVID-19 will affect the start date. The Consultant shall provide sufficient evidence that the delay is directly related to COVID-19, including but not limited to evidence related to availability of staff, availability of material or work by others.
- D12.4 For any delay related to COVID-19 and identified after Services have commenced, the Consultant shall within seven (7) Calendar Days of becoming aware of the anticipated delay declare the additional delay and shall provide sufficient evidence as indicated in D12.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D12.5 The Services schedule, including the durations identified in the Contract, will be adjusted to reflect delays accepted by the Project Manager.
- D12.6 Any time or cost implications as a result of COVID-19 and in accordance with the above, as confirmed by the Project Manager, shall be documented in accordance with C8.

### **D13. PAYMENT**

D13.1 Further to C11.14, the City shall make payments to the Consultant by direct deposit to the Consultant's banking institution, and by no other means. Payments will not be made until the Consultant has made satisfactory direct deposit arrangements with the City. Direct deposit application forms are at [https://winnipeg.ca/finance/files/Direct\\_Deposit\\_Form.pdf](https://winnipeg.ca/finance/files/Direct_Deposit_Form.pdf).

### **THIRD PARTY AGREEMENTS**

#### **D14. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS**

D14.1 In the event that funding for the Services of the Contract is provided to the City of Winnipeg by the Government of Manitoba and/or the Government of Canada, the following terms and conditions shall apply, as required by the applicable funding agreements.

D14.2 Further to D14.1, in the event that the obligations in D14 apply, actual costs legitimately incurred by the Consultant as a direct result of these obligations ("Funding Costs") shall be determined by the actual cost to the Consultant and not by the valuation method(s) outlined in C8.4. In all other respects Funding Costs will be processed in accordance with Changes in Services under C8.

D14.3 For the purposes of D14:

- (a) "**Government of Canada**" includes the authorized officials, auditors, and representatives of the Government of Canada; and
- (b) "**Government of Manitoba**" includes the authorized officials, auditors, and representatives of the Government of Manitoba.

D14.4 Modified Insurance Requirements

D14.4.1 If not already required under the insurance requirements identified in D9, the Consultant will be required to obtain and maintain professional liability insurance in an amount of no less than one million dollars (\$1,000,000) inclusive per claim. Such policy shall be maintained for at least twenty four (24) months after Total Performance.

D14.4.2 The Consultant shall obtain and maintain third party liability insurance with minimum coverage of two million dollars (\$2,000,000.00) per occurrence on all licensed vehicles operated at the Site. In the event that this requirement conflicts with another licensed vehicle insurance requirement in this Contract, then the requirement that provides the higher level of insurance shall apply.

D14.4.3 Further to D9.6 insurers shall provide satisfactory Certificates of Insurance to the Government of Manitoba prior to commencement of Services as written evidence of the insurance required. The Certificates of Insurance must provide for a minimum of thirty (30) days' prior written notice to the Government of Manitoba in case of insurance cancellation.

D14.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.

D14.5 Indemnification By Consultant

D14.5.1 In addition to the indemnity obligations outlined in C13 of the General Conditions for Consultant Services, the Consultant agrees to indemnify and save harmless the Government of Canada and the Government of Manitoba and each of their respective Ministers, officers, servants, employees, and agents from and against all claims and demands, losses, costs, damages, actions, suit or other proceedings brought or pursued in any manner in respect of any matter caused by the Consultant or arising from this Contract or the Services, or from the goods or services provided or required to be provided by the Consultant, except those resulting from the negligence of any of the Government of Canada's or the Government of Manitoba's Ministers, officers, servants, employees, or agents, as the case may be.

#### D14.6 Records Retention and Audits

- D14.6.1 The Consultant shall maintain and preserve accurate and complete records in respect of this Contract and the Services, including all accounting records, financial documents, copies of contracts with other parties and other records relating to this Contract and the Services during the term of the Contract and for at least six (6) years after Total Performance. Those records bearing original signatures or professional seals or stamps must be preserved in paper form; other records may be retained in electronic form.
- D14.6.2 In addition to the record keeping and inspection obligations outlined in C7.16 of the General Conditions for Consultant Services, the Consultant shall keep available for inspection and audit at all reasonable times while this Contract is in effect and until at least six (6) years after Total Performance, all records, documents, and contracts referred to in D14.6.1 for inspection, copying and audit by the City of Winnipeg, the Government of Manitoba and/or the Government of Canada and their respective representatives and auditors, and to produce them on demand; to provide reasonable facilities for such inspections, copying and audits, to provide copies of and extracts from such records, documents, or contracts upon request by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada and their respective representatives and auditors, and to promptly provide such other information and explanations as may be reasonably requested by the City of Winnipeg, the Government of Manitoba, and/or the Government of Canada from time-to-time.
- #### D14.7 Other Obligations
- D14.7.1 The Consultant consents to the City providing a copy of the Contract Documents to the Government of Manitoba and/or the Government of Canada upon request from either entity.
- D14.7.2 If the Lobbyists Registration Act (Manitoba) applies to the Consultant, the Consultant represents and warrants that it has filed a return and is registered and in full compliance with the obligations of that Act, and covenants that it will continue to comply for the duration of this Contract.
- D14.7.3 The Consultant shall comply with all applicable legislation and standards, whether federal, provincial, or municipal, including (without limitation) labour, environmental, and human rights laws, in the course of providing the Services.
- D14.8 The Consultant shall properly account for the Services provided under this Contract and payment received in this respect, prepared in accordance with generally accepted accounting principles in effect in Canada, including those principles and standards approved or recommended from time-to-time by the Chartered Professional Accountants of Canada or the Public Sector Accounting Board, as applicable, applied on a consistent basis.

## PART E - SCOPE OF SERVICES

### E1. GENERAL PROJECT SCOPE SUMMARY

E1.1 To review and confirm the construction of a new lift station or diversion structure and gravity system to the West Perimeter sewer district.

- (a) The Consultant will analyze the following options:
- (i) St. Charles Lift Station to a diversion structure
    - (i) Evaluate the current and an alternate location for the superstructure.
    - (ii) Gravity conveyance to the West Perimeter Sewer District via Augier Av under the PTH 101 (Perimeter Highway) or an alternative path.
    - (iii) Include any temporary by-pass pumping required (for current location).
    - (iv) Include new sewer line routing to/from station along with potential land acquisition (for alternate location).
    - (v) Include any temporary dewatering required.
  - (ii) St. Charles Lift Station
    - (i) Evaluate the current and an alternate for the superstructure.
    - (ii) Pumped flow through force main towards the West Perimeter Sewer District.
    - (iii) Include any temporary by-pass pumping required (for current location).
    - (iv) Include new sewer line routing to/from station along with potential land acquisition (for alternate location).
    - (v) Include any temporary dewatering required.
  - (iii) St. Charles Lift Station to a diversion structure
    - (i) Evaluate the current and an alternate location for the superstructure.
    - (ii) Gravity conveyance to the Westwood Sewer District.
    - (iii) Include any temporary by-pass pumping required (for current location).
    - (iv) Include new sewer line routing to/from station along with potential land acquisition (for alternate location).
    - (v) Include any temporary dewatering required.

E1.2 The Services required under this Contract shall consist the following:

- (a) Assess the available data and model representation to ensure any data gaps and model improvements are identified.
- (b) Collect additional data and undertake model improvements to deem the model fit for purpose to represent the project needs and develop a solution to address the needs. This will be submitted as a standalone technical memorandum.
- (c) Assess options of gravity versus pumping station solutions based on background data and model improvements completed. This will be submitted as a standalone technical memorandum.
- (d) All third-party risks will be addressed and signed off as part of the Preliminary Design review meeting requirements as stated in D7.3.
- (e) A preliminary design report will be complete that will include at minimum the documentation and design deliverable requirements as outlined in the City Preliminary Design Report Template.
- (f) Preliminary Design drawings and deliverables will be produced to a 60% and 90% level of completion.
- (g) A class 3 cost estimate and meet the American Association of Cost Engineering (AACE) requirements for an estimate of this class.

## **E2. WORK COMPONENTS**

- E2.1 The major components of the Work include the following:
- (a) Project Management as outlined in E3;
  - (b) Preliminary Design: Hydraulic Model and Data Gaps TM as outlined in E4;
  - (c) Preliminary Design: Options Analysis TM as outlined in E5;
  - (d) Preliminary Design: Initiation and 60% Draft as outlined in E6;
  - (e) Preliminary Design: Risk and Opportunities Identification as outlined in E7;
  - (f) Preliminary Design: Final Report as outlined in E8;
  - (g) Geotechnical Work Allowance as outlined in E9; and
  - (h) Additional Work Allowance as outlined in E10.
- E2.2 The major components of the Work identified in E2.1 shall form the minimum requirements and anticipated high level sequence of work. The Consultant is encouraged to review the major work components and provide additional information on how the work components could be altered, updated, or sequenced appropriately as part of their Proposal submission.
- E2.3 Unless otherwise stated, the document titled "Definition of Professional Consultant Services" and attached as Appendix A shall be applicable to the provision of Professional Engineering services for this Project.
- E2.4 Review all applicable information, data, surveys, reports and existing drawings related to the Project including, but not limited to the information contained in this RFP.

## **E3. PROJECT MANAGEMENT**

- E3.1 This Scope of Services item shall include all Project Management activities required to carry out each of the phases of the Scope of Services. Work under this task will include but not be limited to the following:
- (a) directing and coordinating efforts of the Consultant team to achieve the specific Project goals and objectives and to meet all City requirements;
  - (b) providing advice, engineering services, consultation and oversight with respect to the Scope of Services;
  - (c) liaising with the City's Project Manager on a weekly basis (at a minimum) to provide Project status;
  - (d) The Consultant Project Manager will be required to provide Progress Reporting in order to track and measure schedule and cost performance for the Scope of Services.
- E3.2 All Project Management work is to be appropriately included in the Fixed Price costs for each phase of work.

## **E4. HYDRAULIC MODEL AND DATA GAPS ANALYSIS TECHNICAL MEMORANDUM**

- E4.1 This phase shall include all activities required to evaluate the City of Winnipeg Hydraulic Model and identify gaps and areas of improvement necessary to utilize the model for Preliminary Design.
- E4.2 A copy of the City InfoWorks ICM hydraulic model database with the associated model files is available to all Consultant during the Tender Phase.

### **E4.3 Literature Review**

- E4.3.1 A thorough review of the previous design study literature will be completed, in relation to methodologies used to create and update the hydraulic model for the Southwest Sewer Catchment.

#### **E4.4 Hydraulic Modelling Standards**

E4.4.1 All hydraulic modelling analysis completed by the Consultant will be in accordance with the City of Winnipeg Hydraulic Modelling Guidelines, see Appendix F.

#### **E4.5 Hydraulic Model Gaps Analysis**

E4.5.1 The Consultant will complete an evaluation of the conditions and parameters in place with the current City of Winnipeg InfoWorks hydraulic model. The Consultant will identify all gaps/issues they believe to be within the hydraulic model prior to completing any benefits evaluation during the Conceptual Design Phase.

E4.5.2 The focus of the hydraulic model gap analysis will be within the St. Charles separate sewer district, West Perimeter separate sewer districts and Westwood sewer district, to ensure they are representative of current conditions and show performance in life with real life conditions.

(a) Model gaps within the downstream sewer network in the WEWPCC Service Area must also be analyzed and presented in the Hydraulic Model and Data Gaps Analysis TM. The City along with the Consultant will then agree on major gaps in downstream network which will require interim model update measures to be completed, or else the model gaps are accepted.

E4.5.3 All gaps/issues identified, and how they were addressed, shall be documented as part of the Hydraulic Model Update Technical Memorandum.

E4.5.4 If the gaps/issues cannot be addressed appropriately by the City or the Consultant, they shall be documented as such as part of the Hydraulic Model Update Technical Memorandum.

E4.5.5 The goal of this analysis will be to update the hydraulic model such that it is fit for purpose as part of the conceptual and preliminary design work.

#### **E4.6 Detriment Analysis Using The Hydraulic Model**

E4.6.1 Each solution developed during the options analysis shall be evaluated using the standardized Detriment Analysis process using the City of Winnipeg collections hydraulic model.

E4.6.2 The detriment analysis will include at minimum:

(a) St. Charles separate sewer district, West Perimeter separate sewer districts and Westwood sewer district.

(b) If the option stated in E1.1(a)(iii) is chosen, the detriment analysis should also include the following districts:

(i) Community Row

(ii) Barker

(iii) Westdale

(iv) Ridgewood South

E4.6.3 The Detriment Analysis process will require the Consultant to run the City of Winnipeg Hydraulic model with the proposed solution(s) included.

(a) The performance of this updated model compared to specific level of service standards will be evaluated, specifically to verify there to be no reduction in level of service within the Hydraulic model as a result of the solution(s) proposed.

(b) Detriment Analysis will be completed for the following level of service standards, as applicable:

(i) Surface Flooding

(ii) Surcharge (Basement Flooding)

(iii) Spill/Overflows



- (c) The Detriment Analysis process will also require that a variation of the solution model be produced over the design horizon for the solution recommended.
  - (i) A minimum design horizon of 35 years is required.
  - (ii) The design horizon selected will be recommended by the Consultant as part of the detriment analysis process for the recommended solution.
  - (iii) This future solution model will have proposed increases in population and impervious areas artificially applied up to the design year for the solution.
  - (iv) The intent is to provide evidence that the solution will also meet requirements without causing detriments over the entire design life for the solution.

E4.6.4 Further details on the Detriment Analysis process, see Appendix F.

#### **E4.7 Updates To Hydraulic Model Development Expectations**

- (a) The hydraulic model must be updated to reflect estimates for dry weather and wet weather flow impacts over the course of the 35 year design horizon to produce the Future Model Network. This will include assessment of development and growth expectations for the area under study.
- (b) The City will support the Consultant where possible in providing reference information on expectations for growth within the area under study.

#### **E4.8 Deliverables**

##### **E4.8.1 Hydraulic Model and Data Gap Analysis Technical Memorandum**

- (a) This TM will include the following minimum requirements:
  - (i) Summary of work completed to update the hydraulic model.
  - (ii) Gaps/issues identified in the hydraulic model, and how they were addressed.
- (a) This TM should be submitted prior to the Options Analysis TM.

##### **E4.8.2 Updated City Of Winnipeg Hydraulic Model Database**

#### **E5. OPTIONS ANALYSIS TECHNICAL MEMORANDUM**

E5.1 The work within this phase may not begin until the work identified in E4 is complete unless approved by the City Project Manager.

E5.2 This phase shall include all activities required to select and analyzed the alternative solutions specified in E1.1(a) to address the City of Winnipeg's needs.

#### **E5.3 Deliverables**

##### **E5.3.1 Options Analysis Technical Memorandum**

- (a) A draft of the Options Analysis Technical Memorandum shall be submitted at minimum fifteen (15) days prior to the Options Analysis Meeting, see D7.3.4(b).
- (b) This TM will include the following at minimum:
  - (i) Summarize the Consultant's understanding of the options identified for analysis.
  - (ii) Summarize the criteria used by the Consultant to make a recommendation.
  - (iii) Summarize the criteria which were suggested to be excluded, and reasoning for exclusion.
  - (iv) Summarize how the Consultant believes this option will meet City goals.
  - (v) Provide a cost analysis of each solution in terms of both capital and operating costs estimates, a Class 4 level suitable for options analysis.
  - (vi) NPV analysis of the options analyzed, using the City of Winnipeg NPV template.

- (c) Further updates to the TM shall be completed based on the City working group's feedback to the draft, and based on feedback during the Alternatives Identification Meeting.
- (d) The City shall verify that all comments made to the Options Analysis TM at this phase are addressed appropriately by the Consultant.

## **E6. PRELIMINARY DESIGN: INITIATION AND 60% DRAFT**

E6.1 This phase shall include all activities required:

- (a) To initiate the Preliminary Design Phase, and
- (b) to prepare the 60% complete Preliminary Design Report, based on a hydraulically feasible and buildable solution.

### **E6.2 Recommended Solution Evaluation**

- (a) The proposed solution should be confirmed as hydraulically feasible and buildable or an alternative hydraulically feasible and buildable solution should be developed. The rationale for significant deviation from the proposed solution with significant being the type of solution or change in location should be raised with the City for approval.

### **E6.3 Recommended Solution Design Refinement**

- (a) The proposed solution is expected to be further analyzed in order to optimize the conceptual solution design put forward during the Options Analysis TM development, and bring it to a preliminary design level of definition.
- (b) Modifications to the design put forward during the Options Analysis phase is expected to occur during the Preliminary Design Stage.
- (c) This may include iterations of the selected solution to be re-evaluated in the hydraulic model based on design changes encountered during preliminary design.

### **E6.4 Deliverables**

#### **E6.4.1 Preliminary Design Report Table Of Contents:**

- (a) A high level listing of the headings and sections anticipated to be included as part of the Preliminary Design Report.
- (b) This shall be completed shortly after beginning the Preliminary Design Report development.
- (c) The City of Winnipeg working group will review the high level Table Of Contents and attempt to identify any areas of concern or clarification regarding the Consultants anticipated work during the Preliminary Design Phases.

#### **E6.4.2 Preliminary Design Report 60% Draft**

- (a) Submit at 60% completion, at minimum fifteen (15) Business Days prior to the formal review meetings.
- (b) The Consultant may propose alternative deliverable completion intervals for submission of Preliminary Design Report, subject to approval by the City.
- (c) The 60% Draft Preliminary Design Report will include the following minimum requirements:
  - (i) Certify that recommendations and conclusions contained in the Conceptual Design Report remain acceptable.
  - (ii) Additional survey or other data collection requirements and the proposed approach to deal with missing data, confirm assumptions and to determine site conditions, as applicable.
  - (iii) Certify the InfoWorks hydraulic model is fit for use.
  - (iv) Certify a robust hydraulically feasible design has been developed.

- (v) Detailed explanation of steps conducted in order to bring the solution to a preliminary design level of definition.
- (vi) The design criteria in which the solution was evaluated during Preliminary Design.
- (vii) Hydraulic modeling findings for solution recommended.
- (viii) Summary of findings from evaluations completed in relation to preliminary design, which may include the following:
  - ◆ Geotechnical Investigations
  - ◆ Topographic Surveys
  - ◆ Land Use Considerations
- (d) Should any of the minimum requirements of the 60% Draft Preliminary Design Report as per E6.4.2(c) not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 60% Draft Review Meeting will be delayed until such time that a 60% Draft including all of the minimum requirements has been provided.

## **E7. PRELIMINARY DESIGN: RISK & OPPORTUNITIES IDENTIFICATION**

E7.1 The work within this phase may not begin until the work identified in E4 and E5 is complete.

E7.2 This phase shall include:

- (a) All activities required to prepare the Risk And Opportunities Framework/Register, and
- (b) Completion of the Risk & Opportunities Identification Meeting with the City Working Group.

### **E7.3 Deliverables**

#### **E7.3.1 Risk and Opportunities Meeting Agenda**

- (a) This will document the Consultants approach to discuss/brainstorm all risks and opportunities for the solution proceeding with Preliminary Design.
- (b) Submit at minimum ten (10) Business Days prior to this meeting.

#### **E7.3.2 Risk And Opportunities Framework/Register**

- (a) This framework/register will allow for appropriate logging of risks and opportunities identified during the Risk and Opportunities Identification Meeting.
- (b) Consultant to make first attempt to compile the risks and opportunities identified to date.
- (c) Submit at minimum ten (10) Business Days prior to this meeting.

#### **E7.3.3 Risk And Opportunities Technical Memorandum**

- (a) This TM will include the following:
  - (i) Summary of processes utilized to identify risks and opportunities with a solution selected for preliminary design.
  - (ii) Summary of major risks and opportunities associated with solution selected for preliminary design.
  - (iii) This TM shall be incorporated into the Preliminary Design Report 90% complete submission as an Appendix.

## **E8. PRELIMINARY DESIGN: FINAL REPORT**

E8.1 The work within this phase may not begin until the work identified in E6 is complete.

E8.2 This phase shall include all activities required to finalize the Preliminary Design Report, and the development of an accompanying presentation.

### **E8.3 Deliverables**

### **E8.3.1 Preliminary Design Report 90% Draft**

- (a) The 90% complete Preliminary Design Report will include the following at minimum:
  - (i) Updates to all content developed in the 60% complete Preliminary Design Report Draft.
  - (ii) Any pertinent feedback gathered from the Preliminary Design Report Presentation.
  - (iii) A capital cost estimate for the remaining detailed design work, and associated construction/contract administration for the solution in question. This capital cost estimate is to be prepared to an AACE Class 3 – 20% to +30% level of accuracy.
  - (iv) Verify costs of the solution and that the solution is optimized for cost-effectiveness.
  - (v) Basis of estimate used to produce AACE Class 3 Capital Cost estimate for remaining detailed design and construction/contract administration works. The basis of estimate shall outline the estimate assumptions, development of material take-offs, source of cost data, allowances, mark-ups/add-ons, exclusion, exceptions, contingencies, and cost risks and opportunities.
    - ◆ The basis of estimate process shall utilize the latest Basis Of Estimate Investment Planning spreadsheet template to document results. The completed Basis of Estimate spreadsheet shall be included as an appendix to the Preliminary Design Report.
  - (vi) Schedule for delivery of project during detailed design and construction stages.
  - (vii) Preliminary design drawings for the solution in question.
    - ◆ These drawings shall include the following at minimum: design inverts, pump sizes, and pipe sizes as applicable.
    - ◆ Include these design drawings as an Appendix to the report.
  - (viii) Cost estimate of additional annual operations and maintenance (O&M) associated with the solution selected.
  - (ix) Include the Risk And Opportunities Technical Memorandum as an Appendix to the report. A summary of the work involved in during the Risk And Identification Phase must then be included in the body of the Preliminary Design Report.
- (b) Should any of the minimum requirements of the 90% Draft Preliminary Design Report as per E8.3.1(a) not be completed sufficiently at submission, the 90% Draft will be submitted back to the Consultant. The 90% Draft Review Meeting will be delayed until such time that a 90% Draft including all of the minimum requirements has been provided.

### **E8.3.2 Updated City Of Winnipeg Hydraulic Model Database With Selected Solution Modeled**

E8.3.3 Following the City's review of the 90% complete Preliminary Design Report, the Consultant will address any remaining City comments.

- (a) Following the City's approval that the Consultant has addressed all of the City's comments, a Final 100% complete version of the Preliminary Design Report shall be submitted. See D7.2.3.

## **E9. GEOTECHNICAL WORK ALLOWANCE**

E9.1 The Geotechnical Allowance is to be used during the Preliminary Design Phase of the Work for specific geotechnical engineering studies to validate the constructability of solutions, as required.

E9.2 Work items to be considered as part of this allowance include, but are not limited to:

- (a) reviewing existing geotechnical information including;
  - (i) Reports, borehole logs, etc.

- (b) providing a proposed investigation location plan to be reviewed by the City;
- (c) procurement of a drilling contractor;
- (d) verifying that the contractor has all necessary utility locates and work permits;
- (e) supervision of the investigation activities by qualified personnel;
- (f) collection and testing of samples;
- (g) groundwater monitoring;
- (h) preparation of a Geodetic Base Line Report (GBR);
- (i) preparation of a Geodetic Data Report (GDR);
- (j) preparation of a Geotechnical Engineering Study;
- (k) riverbank stability analysis, including riverbank stability analysis report;
- (l) conducting Topographic Land Surveys, including preparation of a Topographic Land Survey Report;
- (m) River bathymetric surveys;
- (n) conducting Geophysical Surveys, including preparation of a Geophysical Survey Report; and
- (o) any other activities necessary to characterize the geotechnical condition of the subsurface soils/bedrock and groundwater levels.

E9.3 When conditions arise that require the completion of the Geotechnical work listed in E9.2, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D7.6, in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval.

#### **E10. ADDITIONAL WORK ALLOWANCE**

E10.1 The Additional Work Allowance is to be used during the Modeling and Options Analysis Phases of the Work to be used for additional engineering, flow monitoring work, testing, and design services that arise due to unforeseen conditions.

E10.2 When such unforeseen conditions arise, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D7.7, in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval.

## **APPENDIX A – ELECTRICAL DESIGN GUIDE**

## **APPENDIX B – IDENTIFICATION STANDARD**

## **APPENDIX C – HMI LAYOUT AND ANIMATION PLAN**



## **APPENDIX D – AUTOMATION DESIGN GUIDE**

## **APPENDIX E – ELECTRICAL AND INSTRUMENTATION STANDARDIZATION SUMMARY**

## **APPENDIX F – MODELING GUIDELINES**

## **APPENDIX G – ST. CHARLES WASTEWATER LIFT STATION CONDITION ASSESSMENT**

## **APPENDIX H – FORM P: PERSON HOURS**