



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 574-2020

**PROFESSIONAL CONSULTING SERVICES FOR THE DESIGN AND CONTRACT
ADMINISTRATION OF THE SOUTH END SEWAGE TREATMENT PLANT (SEWPCC)
PRIMARY CLARIFIERS REFURBISHMENT WORKS**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

- B1.1 PROFESSIONAL CONSULTING SERVICES FOR THE DESIGN AND CONTRACT ADMINISTRATION OF THE SOUTH END SEWAGE TREATMENT PLANT (SEWPCC) PRIMARY CLARIFIERS REFURBISHMENT WORKS

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon Winnipeg time, November 23, 2020.
- 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 of the primary clarifier area at the South End Sewage Treatment Plant (SEWPCC), located at 100 Ed Spence Drive, Winnipeg, MB, for each individual Proponent during the week of November 2 to November 6, 2020. Investigations are by **appointment only** and for a **maximum of three (3) attendees** per Proponent to maintain current social distancing measures related to the COVID-19 pandemic. The tour will be approximately one hour in duration.
- B3.1.1 Proponents are requested to register for the site investigation by contacting the Project Manager identified in D2, before October 30, 2020 at 4:00pm.
- B3.1.2 Proponents are requested to meet at the reception area of the SEWPCC.
- B3.1.3 Proponents attending the Site Investigation outlined B3.1 are required to provide their own Personal Protective Equipment; at a minimum hard hat, CSA approved safety footwear, safety vest, non-medical mask or face covering and safety glasses. Guidelines on how to safely use a non-medical mask or face covering are provided in Appendix S.
- B3.2 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.
- B3.3 All Proponent attendees are required to review the City's latest revision of a COVID-19 Daily Self-Screening Questionnaire and respond in writing (i.e. mark "yes" or "no" to each question, print date and full name, sign questionnaire, and submit via e-mail) to the Project Manager or authorized representative at least one (1) Business Day prior to the Site investigation. Failure to provide written confirmation to the Project Manager or authorized representative may result in the Proponent attendee being denied access to the Site Investigation. A sample copy of the COVID-19 Daily Self-Screening Questionnaire is provided in Appendix T.
- B3.4 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.
- 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.
- 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 B23.1(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 Proponent Shall Complete Form B: Fees.
- B9.2 The Proposal shall include a Fixed Fee for the following sections identified in D7 Scope of Services and as listed in Form B: Fees:
- (a) Project Management in accordance with D8;
 - (b) Preliminary Design in accordance with D9;
 - (c) Detailed Design in accordance with D10;
 - (d) Primary Clarifier No. 3 Repair Services in accordance with D12;
 - (e) Commissioning Services in accordance with D13; and
 - (f) Post Construction Services in accordance with D14.
- B9.2.1 In addition to the Form B: Fees, proposals shall also include detailed description of the Fixed Fees for all disciplines according to the Scope of Services. Details to include as a minimum:
- (i) the work activities and deliverables of the proposed Services;
 - (ii) the respective number of hours per work activity per task per each proposed individual;
 - (iii) name and role of proposed individuals;
 - (iv) the respective engineering discipline or management function as applicable;
 - (v) the associated disbursements; and
 - (vi) information relating to points (i) to (v) above shall be presented in a matrix form that allows easy understanding of their connections, and the associated Form B: Fees summaries shall be issued from a direct traceable compilation of the matrix input.
- B9.3 The Proposal shall include a Time-Based Fee schedule calculated on a time basis for all disciplines and for the following phases identified in D7 Scope of Services and as listed in Form B: Fees:
- (a) Contract Administration Services in accordance with D11.
- B9.3.1 General Requirements for Time Based Fee Services:
- (a) The number of hours is indicated in the RFP for each time-based line item in Form B: Fees to guide the Proponent in developing their fee proposal.

- (b) The number of hours indicated for each line item is based upon the Proponent utilizing experienced personnel who are familiar with the City's requirements and procedures performing the work.
- (c) The fees proposed by the Proponent in Form B: Fees shall constitute an upset limit. Ensure the hours proposed are sufficient to complete the specified work.

B9.3.2 In addition to the Form B: Fees, proposals shall also include detailed description of the Time-Based Fees for all disciplines according to the Scope of Services. Details to include as a minimum:

- (i) the work activities of the proposed Services;
- (ii) the respective number of hours per work activity per task per each proposed individual;
- (iii) name and role of proposed individuals;
- (iv) the respective engineering discipline or management function as applicable;
- (v) the applicable hourly rates;
- (vi) the associated disbursements; and
- (vii) information relating to points (i) to (vi) above shall be presented in a Matrix form that allows easy understanding of their connections, and the associated Form B: Fees summaries shall be issued from a direct traceable compilation of the Matrix input.

B9.3.3 Form B: Fees, Item 4 – Contract Administration Services

- (a) For Proposal purposes, these fees shall be based on 450 hours of work.

B9.4 The Fee Proposal shall include a Fixed Fee for Primary Clarifier No. 3 Repair Services in Accordance with D12.

B9.4.1 Further to B9.4, a Fixed Fee of \$30,000 associated with Item No. 5 - Primary Clarifier No. 3 Repair Services, as identified in D12, has been included in Form B: Fees as the City's estimate of costs for these repair services.

- (a) The Proponent shall include the Primary Clarifier No. 3 Repair Services fee of \$30,000 in their Proposal.
- (b) The Primary Clarifier No. 3 Repair Services fee is to be used for the costs associated with coordination with Kontzamanis Graumann Smith MacMillan Inc. dba KGS Group Inc. (a professional consulting services firm located in Winnipeg, Manitoba) who the Proponent shall engage as the Primary Clarifier No. 3 Repair Subconsultant under this assignment.
- (c) The Primary Clarifier No. 3 Repair Services fee is to be included on Form P: Person Hours or a table of their own design and in the calculation of total fees proposed by the Proponent.

B9.5 The Proposal shall include an additional work allowance in accordance with D15.

- (i) The Proponent shall include an additional work allowance of \$30,000.00 in their Proposal.
- (ii) The additional work allowance is to be used for engineering and design services that arise due to unforeseen conditions arising in the preliminary stages of the project.
- (iii) The additional work allowance is to be included in the calculation of total Fees proposed by the Proponent.
- (iv) The additional work allowance shall only be used with written permission of the Project Manager and formally documented in a Change in Scope of Services form.

B9.6 There will be no fee escalation allowed for yearly adjustments, promotion, etc. The fee scale shall be fixed for the duration of the Project.

B9.7 Adjustments to Fees will only be considered based on increases to the Scope of Services.

- B9.7.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.
- B9.8 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.
- B9.9 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.
- B9.9.1 Further to B9.9, an allowable disbursement of \$15,000.00 for the cost of any associated sampling, material testing, drilling, hazardous materials investigation, or asset condition assessments has been included on Form B: Fees and Form P: Person Hours as the City's estimate of costs for these disbursements. These are to be included in the calculation of total fees proposed by the Proponent.
- B9.10 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.
- B9.11 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 D22. Any such costs shall be determined in accordance with D22.
- B9.12 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)

- B10.1 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 showing their ability to undertake the current work.
- (a) Information submitted relating to B10.1 should be limited to four (4) pages total for Proponent and Subconsultant.
- B10.2 Proposals should include details demonstrating the history and experience of the Proponent and Subconsultants in providing design, management of construction, and contract administration services on two (2) projects of similar complexity, scope and value:
- (a) If more than two (2) projects are submitted for B10.2, only the first two (2) referenced projects will be evaluated.
- B10.3 For each project listed in B10.2, the Proponent should submit:
- (a) description of the project;
- (i) Include project owner, project objectives, size, and other relevant information;
- (b) role of the consultant;
- (c) project's original contracted cost and final cost;
- (i) Provide this information separately for the value of the Scope of the Consultant Services assignment and the construction.
- (ii) where the original contracted cost and final cost differ, the Proponent should submit an explanation.
- (iii) Identify the amount of scope changes and the reasons for each of them.
- (d) design and construction schedule (include anticipated Project duration and actual project delivery duration, showing design and construction separately;
- (i) Provide explanations if there are discrepancies between the projected and the actual durations; and
- (e) reference information (two current names with telephone numbers per project).

- (i) references should have worked directly on the projects described, such as the Project Manager or Contract Administrator.
- (ii) references may be utilized to confirm the information provided in the proposal.
- (iii) other sources not named in references may be contracted to verify qualifications, work experience, past projects, applicability to the role, etc.

B10.3.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.

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.

- (a) Clearly identify Subconsultants to be engaged by the Proponent on the organizational chart.

B11.2 Identify the following Key Personnel assigned to the Project:

- (a) Project Manager;
- (b) Design Lead Process Mechanical;
- (c) Design Lead Structural;
- (d) Lead Contract Administration; and
- (e) Other Key Personnel with over 5% of the total proposed hours.

B11.2.1 Multiple Key Personnel positions may be filled by one individual, however for evaluation purposes, be sure to identify the experience and qualifications for each role separately.

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 .

B11.3.1 Include the following for each of the Key Personnel:

- (a) educational background and degrees;
- (b) professional recognition;
- (c) job title;
- (d) years of experience in current position;
- (e) years of experience in design and construction; and
- (f) years of experience with existing employer.

B11.3.2 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 (2) 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) Project name and owner;
- (b) Description of project;
- (c) Role of the person; and
- (d) Reference information (two (2) current names with telephone numbers per project).
 - (i) references should have worked directly on the projects described, such as the Project Manager or Contract Administrator.
 - (ii) references may be utilized to confirm the information provided in the proposal.

- (iii) other sources not named in references may be contracted to verify qualifications, work experience, past projects, applicability to the role, etc.

B11.4.1 If more than two (2) projects are submitted for B11.4, only the first two (2) referenced projects will be evaluated.

B11.5 For each Key Personnel identified in B11.2, provide a detailed breakdown of hours proposed in the detailed fee breakdown as requested in B9.2.1 and B9.3.1.

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.

- (a) activities to be performed either by the Proponent's employees or by Subconsultants at an office located outside the Province of Manitoba. Identify proposed arrangements (i.e. conference calls, webinars, travel, communication protocol, etc.) involving out-of-town employees to participate in coordination and review functions; and
- (b) the collaborative process/method to be used by the Key Personnel of the team in various phases of the Project.

B12.2 Methodology should be presented in accordance with the Scope of Services identified in D7.

B12.3 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project which include:

- (a) Inspections of existing structures and systems;
- (b) Design of refurbishment/replacement works;
- (c) Contract Administration including the sequencing and details involving the structural remedial works on Primary Clarifier No. 3 truss; and
- (d) Commissioning.

B12.4 Proposals should address:

- (a) the team's understanding of the Scope of Services and the broad functional and technical requirements;
- (b) the deliverables and the associated task requirements of the Project;
- (c) the work activities and clearly identify all significant assumptions and interpretations;
- (d) the activities and services to be undertaken by the City and equipment and supplies to be provided by the City;
- (e) any potential risks, along with their implications and possible mitigation measures, that could be encountered during inspection.
- (f) any initiative and innovation to be used to perform the Services; and
- (g) any other issue that conveys your team's understanding of the Project requirements.

B12.5 The Proposal should include Form P: Person Hours or a table of their own design for all disciplines and or phases identified in D7 Scope of Services.

B12.5.1 The total Fees on Form P: Person Hours or a table of their own design 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 at <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 D7.

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 identified in D7.

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.

B13.3 Unless otherwise indicated, the review period for City deliverables should be fifteen (15) Business Days and commensurate to the number of pages and complexity of the document.

B13.4 The Proponent should develop the most effectual schedule attainable using their experience and experience to meet the requirements of the City. In the circumstance that the Proponent's schedule contrasts with any milestone listed in D21 Critical Stages, the Proponent should provide detailed commentary on their justification.

B14. ELIGIBILITY

B14.1 As a result of their involvement in the Winnipeg Sewage Treatment Program (WSTP) in relation to this Project, Veolia Water North America (VWNA) Winnipeg Inc. (Veolia) or their affiliates are not eligible to be a Proponent, participate as team members of a Proponent, or act as advisors to a Proponent or to any of its team members or to otherwise participate in the development and preparation of Proposals for the Project:

B14.2 A Proponent may be disqualified if any of the above-noted ineligible persons participate in the development and preparation of the Proponent's Proposal for Professional Consulting Services for South End Sewage Treatment Plant Primary Clarifiers Refurbishment Works (RFP-574-2020).

B15. DISCLOSURE

B15.1 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.

B15.2 The Persons are:

- (a) Kontzamanis Graumann Smith MacMillan Inc. (KGS Group)
- (b) Testlabs International Ltd.
- (c) DMS Industrial Constructors Inc.

B15.3 The following reports were prepared by the organizations identified in B15.2 and are also listed in Appendix B-F.

- (a) DMS Industrial Constructors Inc. Primary Clarifier #2 and Primary Clarifier #1 Inspection reports dated November 20, 2019 and December 9, 2019 respectively. (Appendix B)
- (b) KGS Group – Primary Clarifier No. 2 Travelling Bridge Rail Wear Investigation (attached as Appendix C)
- (c) KGS Group – Primary Clarifier No.3 Truss Analysis and Crack Repair (Rev B_February 5, 2020 attached as Appendix D).
- (d) Testlabs – Final Report Radiographic (X-ray) Inspection of the Aluminum Alloy Primary Clarifier Bridge #3 At the South End Sewage Treatment Plant attached as Appendix E.

- (e) KGS Group – South End Sewage Treatment Plant (SEWPCC) Primary Clarifier Travelling Bridges Preliminary Design and Condition Assessment Summary Report (Dated August 2018 and attached as Appendix F).

B16. CONFLICT OF INTEREST AND GOOD FAITH

B16.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.

B16.2 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.

B16.3 In connection with its Proposal, each entity identified in B16.2 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.

B16.4 Without limiting B16.3, 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.

B16.5 Without limiting B16.3, 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 B16.4 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.

B16.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B17. QUALIFICATION

B17.1 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.

B17.2 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>

B17.3 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
- (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba.

B17.4 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.

B17.5 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.

B18. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B18.1 Proposals will not be opened publicly.
- B18.2 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.
- B18.3 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).
- B18.3.1 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.
- B18.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of his/her submission upon written request to the Project Manager.

B19. IRREVOCABLE OFFER

- B19.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.
- B19.2 The acceptance by the City of any Proposal shall not release the Proposals of the other responsive Proponents and these Proponents shall be bound by their offers on such Services for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B20. WITHDRAWAL OF OFFERS

- B20.1 A Proponent may withdraw his/her Proposal without penalty prior to the Submission Deadline.

B21. INTERVIEWS

- B21.1 The Project Manager may, in his/her sole discretion, interview Proponents during the evaluation process.

B22. NEGOTIATIONS

- B22.1 The City reserves the right to negotiate details of the Contract with any Proponent. Proponents are advised to present their best offer, not a starting point for negotiations in their Proposal Submission.
- B22.2 The City may negotiate with the Proponents submitting, in the City's opinion, the most advantageous Proposals. The City may enter into negotiations with one or more Proponents without being obligated to offer the same opportunity to any other Proponents. Negotiations may be concurrent and will involve each Proponent individually. The City shall incur no liability to any Proponent as a result of such negotiations.
- B22.3 If, in the course of negotiations pursuant to B22.2, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

B23. EVALUATION OF PROPOSALS

- B23.1 Award of the Contract shall be based on the following evaluation criteria:

- (a) compliance by the Proponent with the requirements of the Request for Proposal or acceptable deviation therefrom: (pass/fail)
 - (b) qualifications of the Proponent and the Subconsultants, if any, pursuant to B17: (pass/fail)
 - (c) Fees; (Section B) 40%
 - (d) Experience of Proponent and Subconsultant; (Section C) 10%
 - (e) Experience of Key Personnel Assigned to the Project; (Section D) 15%
 - (f) Project Understanding and Methodology (Section E) 20%
 - (g) Project Schedule. (Section F) 15%
- B23.2 Further to B23.1(a), the Award Authority may reject a Proposal as being non-responsive if the Proposal Submission is incomplete, obscure or conditional, or contains additions, deletions, alterations or other irregularities. The Award Authority may reject all or any part of any Proposal, or waive technical requirements or minor informalities or irregularities if the interests of the City so require.
- B23.3 Further to B23.1(b), the Award Authority shall reject any Proposal submitted by a Proponent who does not demonstrate, in its Proposal or in other information required to be submitted, that it is qualified.
- B23.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B23.1(a) and B23.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B23.5 Further to B23.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.
- B23.6 Further to B23.1(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, including but not limited to the following criteria:
- (a) Similarity of the Proponent's past projects to this Project;
 - (b) Success of the Proponent on past projects; and
 - (c) Past performance on City of Winnipeg projects, including but not limited to:
 - (i) adherence to project budget;
 - (ii) adherence to project schedule;
 - (iii) quality of work; and
 - (iv) overall satisfaction with the Proponent.
- B23.6.1 Proponents that have not worked with the City of Winnipeg before will be evaluated based on the information provided in response to B10.
- B23.7 Further to B23.1(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, considering the information provided in B11, including but not limited to the following criteria:
- (a) appropriateness of related years of experience of the Key Personnel;
 - (b) relevancy of experience of the Key Personnel; and
 - (c) appropriateness of approach to overall team formation and coordination of team members.
- B23.7.1 Proposals that receive less than half the available evaluation points for Experience of Key Personnel Assigned to the Project (Section D) will be rejected in accordance with B23.2 and B23.3.
- B23.8 Further to B23.1(f), Project Understanding and Methodology will be evaluated considering the information provided in response to B12, including but not limited to the following criteria:

- (a) appropriateness of the Project Management Approach;
 - (b) consistency and completeness of the Methodology;
 - (c) appropriateness of hours assigned to individual tasks per Person;
 - (d) proponent's understanding of the Project, including its deliverables and constraints; and
 - (e) demonstration of insight beyond the information that was presented in this RFP.
- B23.8.1 Proposals that receive less than half the available evaluation points for Project Understanding and Methodology (Section E) will be rejected in accordance with B23.2 and B23.3.
- B23.9 Further to B23.1(g), Project Schedule will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B13, including but not limited to the following criteria:
- (a) completeness and consistency of the Project Schedule;
 - (b) logic and sequencing of the tasks; and
 - (c) appropriateness of the timelines provided.
- B23.10 Notwithstanding B23.1(d) to B23.1(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.
- B23.11 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B21.
- B23.12 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.

B24. AWARD OF CONTRACT

- B24.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B24.2 The City will have no obligation to award a Contract to a Proponent, even though one or all of the Proponents are determined to be qualified, and the Proposals are determined to be responsive.
- B24.2.1 Without limiting the generality of B24.2, the City will have no obligation to award a Contract where:
- (a) the prices exceed the available City funds for the 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.
- B24.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B24.4 The City may, at its discretion, award the Contract in phases.
- B24.5 Further to B24.4 the City reserves the right to negotiate and award future phases to the successful Proponent.

- B24.6 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
- B24.6.1 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.
- B24.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(o).
- B24.8 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 D22 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B24.9 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.
- B24.10 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.
- 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

GENERAL

D1. GENERAL 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:

Tim Turzak, C.E.T.

Telephone No. 204 986-3760

Email Address: tturzak@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 AACE International (formerly the Association for the Advancement of Cost Engineering);
- (b) "**BO 976-2016**" means Bid Opportunity for the South End Sewage Treatment Plant (SEWPCC) Upgrading / Expansion Project - Contract 4 – Site wide Mechanical, Electrical, Concrete and Site Works;
- (c) "**CAD**" means Computer Assisted Drawing;
- (d) "**Class 1 Cost Estimate**" means an estimate within an expected accuracy within -10% to +15%;
- (e) "**Class 3 Cost Estimate**" means an estimate within an expected accuracy within -20% to +30%;
- (f) "**Commissioning**" means a process by which equipment, a facility or a plant is tested to verify if it functions according to design and functional requirements;
- (g) "**HMI**" means Human Machine Interface;
- (h) "**HVAC**" means Heating, Ventilation, and Air Conditioning;
- (i) "**ILD**" means Instrument Loop Diagram;
- (j) "**Native format**" means the original format from which a deliverable was generated (i.e. MS Word, MS Excel, AutoCAD, etc.);
- (k) "**NDT**" means Non-Destructive Testing;
- (l) "**NMS**" means National Master Specifications;
- (m) "**O&M**" means Operation and Maintenance;
- (n) "**OWAM**" means Oracle Work and Asset Management;
- (o) "**P&ID**" means Process and Instrumentation Diagram;
- (p) "**PLC**" means Programmable Logic Controller;
- (q) "**Professional Engineer**" means an engineer registered in the Province of Manitoba;
- (r) "**Program Team**" means the team consisting of both City of Winnipeg and Veolia;
- (s) "**RFI**" means Request for Information;

- (t) “**Scope of Services**” means all Services executed under the Contract;
- (u) “**SEWPCC**” means South End Sewage Treatment Plant;
- (v) “**VT**” means Visual Inspection of equipment and structures using either or all of raw human senses such as vision, hearing, touch and smell and/or any non-specialized inspection equipment. Inspections requiring Ultrasonic, X-Ray, or Infra-red based equipment are not typically regarded as Visual Inspection as these inspection methodologies require specialized equipment, training and certification;
- (w) “**WBS**” means Work Breakdown Structure;
- (x) “**WSTP**” means Winnipeg Sewage Treatment Program; and
- (y) “**WWD**” means Water and Waste Department.

D4. BACKGROUND

- D4.1 The South End Sewage Treatment Plant (SEWPCC) is the second largest of the three (3) sewage treatment plants servicing the City of Winnipeg. The SEWPCC is located at 100 Ed Spencer Drive in Winnipeg, Manitoba. The SEWPCC has three (3) existing rectangular clarifiers which are used to provide for the initial primary treatment of the wastewater after grit removal and screening. Each primary clarifier generally consists of a rectangular concrete tank equipped with a travelling bridge mechanism to collect the sludge at the bottom of the tanks as well as the scum which floats at the surface. The three tanks are located to the west of the existing grit building.
- D4.2 Primary Clarifier Travelling Bridge Nos. 1 and 2, each with a span of approximately ten (10) meters, were manufactured by Walker Process Equipment and installed in 1971 with some rehabilitation work undertaken approximately fifteen years ago and most recently during the winter season of 2019-2020 (Bid Opportunity [682-2018](#)).
- D4.3 Primary Clarifier Travelling Bridge No. 3, with a span of approximately twenty (20) meters, was manufactured by Dorr-Oliver Canada Ltd. and installed as part of a plant expansion in 1992. On October 21, 2019 the City engaged a consultant regarding a crack discovered on Primary Clarifier No. 3 travelling bridge truss. On November 20, 2019 an emergency crack repair was completed, and the City pursued a long-term crack repair plan.
- D4.4 On September 28, 2020 the City provided direction to KGS group to provide design drawings and specifications for the repair/replacement of the damage sections of the aluminum truss on Primary Clarifier No. 3.
- Note:** At the time of writing this RFP the specifications and design drawings on the long-term crack repair plan have not been finalized. Upon finalization, specifications and drawings will be provided by the City to the Consultant to include in a construction tender document.
- D4.5 Primary Clarifier Refurbishment works were completed by DMS Industrial Constructors Inc. as part of Bid Opportunity [682-2018](#). Scope of the refurbishment work included (but not limited to) the following:
- (a) Refurbishment of Primary Clarifier Travelling Bridge Collector No. 3 running rail, cog rail and related drive system components.
 - (b) Minor structural remediation to the aluminum structure of Primary Clarifier Travelling Bridge Collector No.3.
 - (c) Replacement of the festoon cable supports for Primary Clarifier Travelling Bridge Collector No. 1, 2 and 3.
 - (d) Replacement of electrical and automation controls for Primary Clarifier Travelling Bridge Collector’s No. 1, 2 and 3.
- D4.6 Reliable operation of the primary clarifier system is critical to the operation the SEWPCC plant. Additional refurbishment works is required to keep the assets functioning reliably.

- D4.7 Refurbishment works as part of this project include (but no limited to) the following:
- (a) Refurbishment of Primary Clarifier Travelling Bridge Collector Nos 1 and 2 running rail, cog rail and related drive system components.
 - (b) Structural remediation to the aluminum structure of Primary Clarifier Travelling Bridge Collector No 3.
- D4.8 The City of Winnipeg is currently upgrading and expanding the SEWPCC through a separate project to accommodate future wastewater flows and loadings to the plant and to provide enhanced treatment capability to address environmental and public health concerns and regulatory requirements. Coordination of the refurbishments works with the Winnipeg Sewage Treatment Program (WSTP) will be required to minimize operational impacts.
- D4.9 The City has engaged Veolia Water North America to provide advice to the City during the delivery of this Project. Veolia will attend meetings and workshops and assist with reviews throughout the Project. This does not relieve the Consultant of their obligation.

D5. RELEVANT DOCUMENTS

- D5.1 Relevant documents and drawings listed in Appendix A-F are available by request to the City's Project Manager after completion of a Non-Disclosure Agreement. These documents and drawings will be released at the sole discretion of the City.
- D5.2 A list of existing structural, mechanical, electrical, P&IDs, and loop record drawings is attached as Appendix A.
- D5.3 A November 20 and December 9, 2019 inspection reports for Primary Clarifier Travelling Bridge Collector No. 1&2 is attached as Appendix B.
- D5.4 A November 2019 technical memorandum for Primary Clarifier No.2 Travelling Bridge Rail Wear Investigation is attached as Appendix C.
- D5.5 A February 5, 2020 Truss Analysis report on Primary Clarifier No.3. is attached as Appendix D.
- D5.6 A June 8, 2020 Radiographic (X-ray) Inspection report of the Aluminum Alloy Primary Clarifier Travelling Bridge #3 is attached as Appendix E.
- D5.7 KGS Group – South End Sewage Treatment Plant (SEWPCC) Primary Clarifier Travelling Bridges Preliminary Design and Condition Assessment Summary Report (Dated August 2018 and attached as Appendix F)
- D5.8 Drawings, specifications, plans, and other related information for the SEWPCC Upgrading/Expansion project can be viewed and copied from the Materials Management website link for City of Winnipeg Bid Opportunity (BO) 976-2016 South End Sewage Treatment Plant (SEWPCC) Upgrading / Expansion Project - Contract 4 – Sitewide Mechanical, Electrical, Concrete and Site Works at http://www.winnipeg.ca/MatMgt/FolderContents.asp?FOLDER_NAME=976-2016&YEAR=2016

D6. GENERAL REQUIREMENTS

D6.1 General Requirements of the Consultant

- D6.1.1 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) Final design documents irrespective of the level of design shall have an engineer's seal.

- (c) 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.
- D6.1.2 Progress estimates, completion certificates and other reports related to the technical aspects of this Project, shall be endorsed by the Consultant's Representative in a manner acceptable to the City.
- D6.1.3 The Consultant shall, at a minimum, utilize 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 on the application of codes and standards.
- D6.1.4 The Consultant shall not substitute or replace Key Personnel throughout the duration of the Project without the written approval of the Project Manager.
- (a) Experience and qualification as specified in B11 shall be submitted for all requested substitute(s) and replacement(s).
- D6.1.5 As sewage treatment is a continuous operation twenty four hours a day, seven days a week, the Consultant shall maintain close coordination between the Project and WWD engineering staff and plant operations staff so that process disruptions are minimized.
- (a) No work shall take place which will interfere with the continuous plant or plant process operation without written approval of the Project Manager.
- D6.1.6 The Consultant shall maintain close coordination with the SEWPCC upgrade and expansion project team to minimize conflict with the general contractor who will be working on the last major contract for the SEWPCC Upgrading / Expansion (i.e. Contract 4 under City of Winnipeg Bid Opportunity No. 976-2016).
- D6.1.7 The Consultant shall coordinate and obtain approval/permit(s) where required, including but not limited to: Manitoba Hydro, MTS, and City Departments.
- D6.1.8 The Consultant shall comply with the following:
- (a) WSTP design standards, including but not limited to:
- (i) WSTP Architectural Design Guideline – R01 (Appendix G),
 - (ii) WSTP Building Mechanical Design Guideline – R01 (Appendix H),
 - (iii) WSTP Civil Design Guideline – R01 (Appendix I),
 - (iv) WSTP Process Mechanical Design Guideline - RPB (Appendix J), and
 - (v) WSTP Structural Design Guideline – R02 (Appendix K).
- (b) Water and Waste Department (WWD) Identification Standard – R04 (Appendix L) – the Consultant shall request clarification from the Project Manager should undefined identification requirements be encountered;
- (c) WSTP Project Document Numbering Standard (DOCUMENT NUMBER: PG-RC-PC-05) - R2016-02-02 (Appendix M);
- (d) WWD Wastewater Historical Data Retention Standard – R00 (Appendix N)
- (e) WWD Sewage Treatment Plant Tag Naming Standard – R00 (Appendix O);
- (f) Operations Manual Specification - (DOCUMENT NUMBER: CD-CP-TO-06) - 2015-12-11; Final Rev A (Appendix P); and
- (g) WWD Wastewater Services Division Guideline to Document Asset Registry for Maintenance Project (ONLY) (Document Number: OSB-AM-GUI-0003) - R5 2019-12-06 (Appendix U);
- (h) WWD Paint Colour Standard - R01 (Appendix V); and
- (i) City of Winnipeg Water and Waste Department Computer Assisted Drafting (CAD) and Geographic Information System (GIS) Standards, available at http://winnipeg.ca/waterandwaste/dept/cad_gis.stm

- D6.1.9 The Project Manager shall be notified of any conflict between the documents listed under D6.1.8 for resolution.
- D6.1.10 The Consultant and their Subconsultants, and contractors shall be aware of their obligation as stated in the Wastewater Services Division Environmental Preservation and Compliance statements and the Water and Waste Department Environmental Management Policy attached as Appendix Q.

D6.2 General Requirement for Project Deliverables

- D6.2.1 Project deliverables include but are not limited to:
- (a) condition assessment summary, preliminary design report, detailed design, specifications and drawings, and cost estimates.
 - (b) preparation, tendering and contract administration of a separate Bid Opportunity to procure Construction Services for the required refurbishment and replacement work defined under the Preliminary Design phase of this Project.
 - (i) WWD will be procuring critical mechanical components to mitigate risk of equipment failure prior to the full refurbishment, through a separate supply and delivery contract. The Consultant will be responsible for the following tasks:
 - ◆ Reviewing the list of materials associated with the supply and delivery contract.
 - ◆ Commenting on the adequacy of the materials ordered by WWD, and
 - ◆ Provide recommendation to the city if the pre-purchased parts should be used in the Construction tender. This review should take place approximately fifteen (15) weeks in advance of the Consultant posting the bid opportunity documents for the general construction contract.
 - ◆ Where possible the Consultant will make use of available parts.
 - ◆ If the pre-purchased spare parts are not to be used in the Construction tender. The consultant is to provide recommended feasible options for use and/or storage.
- D6.2.2 All Project Deliverables are to be delivered with a document lifecycle approach.
- D6.2.3 Where possible, all documents provided as PDF shall be in a single electronic file and searchable.
- D6.2.4 Unless otherwise indicated, the review period for Project deliverables shall be a minimum of two (2) weeks and correspond to the number of pages and complexity of the document. The Consultant shall indicate these review periods on the Critical Path Method schedule as outlined in B13 Project Schedule (Section F).
- D6.2.5 All deliverables shall have incorporated the Consultant's internal quality procedures before being submitted to the City.
- (a) All Deliverables shall be reviewed by a representative of the Consultant who is proficient in technical writing prior to being submitted to the City.
 - (b) Any Deliverables deemed by the City to be of poor quality shall be rejected and will be required to be revised and resubmitted at no additional cost to the City or additional time to the Project schedule.
- D6.2.6 All draft Deliverables shall be submitted in both native format (MS Word, MS Excel, MS Project etc.) and PDF format while final Deliverables shall be submitted in PDF format.
- D6.2.7 The Deliverables shall be submitted in a substantially completed draft format for review prior to submittal as a final document. All Deliverables shall be submitted to the City's Project Manager. All City review comments shall be considered and incorporated into the final version, if applicable.

D6.3 General Requirements for Drawings

- D6.3.1 Drawings shall be prepared in accordance with the Department's CAD-GIS Specifications.
- D6.3.2 Drawings shall not be prepared using the City's GeoMedia and Google Earth screen captures and instead shall be prepared from the legal plans, certificates of title, as-built records, and topographic survey.
- D6.3.3 All profile components of Drawings shall be in natural scale.
- D6.3.4 The City will provide comments on the draft Drawings. Comments shall be reviewed and incorporated into the final Drawings.
- D6.3.5 Where existing systems are being modified, the existing drawings shall be modified or superseded rather than creating a new drawing only showing a limited portion of the new work. New drawing numbers will be required for all drawings containing new work.
- D6.3.6 All final Drawings shall be Submitted in AutoCAD format version 2012, and in 11x17 hard copy format, unless otherwise specified.
- D6.3.7 The Consultant shall follow WWD construction drawing standards. This standard is available on the "Computer Assisted Drafting (CAD)-Geographic Information System (GIS) Standards" page at https://www.winnipeg.ca/waterandwaste/dept/cad_gis.stm, specifically:
- (a) document named "WWD CAD/GIS STANDARDS (August 4, 2016)" at <https://winnipeg.ca/waterandwaste/pdfs/dept/CAD-GIS-Specifications.pdf>

D6.4 General Requirements for Cost Estimates

- (a) Complete cost estimates as listed in D7 Scope of Services.
- (b) Submit all cost estimates using the latest version of the City's Basis of Estimate template, available on the City Asset Management Program page at The City of Winnipeg, Corporate Finance, Infrastructure Planning Division website: <https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#3>

D6.5 General Requirements for Photographs

- D6.5.1 All photographs submitted to the City as part of the Project shall include captions with the following information:
- (a) date photograph was taken;
 - (b) location and orientation where the photograph was taken; and
 - (c) a brief description of what is depicted by the photograph.
- D6.5.2 All photographs submitted to the City as part of the Project shall have the date and time stamped on the photograph.

D6.6 General Requirements for Preliminary Design Report.

- D6.6.1 The City requires a Preliminary Design Report to be prepared as part of the Consultant's Scope of Services. The report shall include sufficient evaluation documentation, including but not limited to:
- (a) Background Information
 - (b) Review of Options
 - (c) Condition Assessments
 - (d) Inspection reports
 - (e) Recommendations
 - (f) Conclusions
 - (g) Specifications and Drawings (as required)
 - (h) Schedules (as required)
 - (i) Cost Estimates

D6.7 General Requirements for Meetings

- D6.7.1 Schedule and chair Project meetings as listed in D8.5.
- (a) provide an agenda a minimum of two (2) business days before the meeting date.
 - (b) provide meeting minutes within three (3) business days after the meeting date.

D7. SCOPE OF SERVICES

D7.1 The Scope of Work of this RFP generally consists of consulting engineering design and contract administration services to facilitate the following:

- (a) Refurbishment of Primary Clarifier Travelling Bridge Collector Nos 1 and 2 running rail, cog rail and related drive system components.
- (b) Structural remediation to the aluminum structure of Primary Clarifier Travelling Bridge Collector No 3.
 - (i) Technical specifications and design drawings for the structural remediation work on Primary Clarifier Travelling Bridge Collector No.3 will be completed outside of the scope of work of this RFP.
 - ◆ The City intends to provide the specifications and drawings at the time of contract award.
 - (ii) Scope of work of this RFP includes incorporating D7.1(b)(i) into a construction tender package and providing Contract Administration services in completing the structural remedial works. As Contract Administrator you will be responsible for coordinating the repairs with the contractor and Primary Clarifier No. 3 Repair Subconsultant, and ensuring final As-built drawings are provided to the City.

D7.2 The Services required under this Contract shall consist of the following phases and as outlined in D8 to D14 in accordance with the following:

- (a) Project Management in accordance with D8;
- (b) Preliminary Design Services in accordance with D9;
- (c) Detailed Design Services in accordance with D10;
- (d) Contract Administration Services in accordance with D11;
- (e) Contract Administration Services (Primary Clarifier No. 3 Truss Repair) in accordance with D12;
- (f) Commissioning Services in accordance with D13; and
- (g) Post Construction Services in accordance with D14.

D7.2.1 Unless otherwise stated, Appendix R – Definition of Professional Consultant Services (Consulting Engineering Services) shall be applicable to the provision of Professional Engineering services for this Project.

D7.2.2 The Services required in the Contract 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.

D7.2.3 The Scope of Services outlined in D7 to D14 provides a brief description of the Services and is only to be considered a guideline for Proposal preparation. The Consultant is encouraged to use their initiative when developing their Proposal to refine the Scope of Services activities and propose additional or alternative activities which they consider appropriate or beneficial to the Project.

- D7.2.4 The travelling bridge components included in the Scope of Services for the Contract are those elements physically located above the normal top water line and not included in the SEWPCC Upgrading/Expansion project, specifically but not limited to:
- (a) Structural - bridge structural members, joints, welds, previous repairs
 - (b) Mechanical - rails, rail soleplates, cog tracks, wheel assemblies, and bridge drive systems on Primary Clarifiers 1&2. (note: Similar refurbishment work was completed on Primary Clarifier 3 as part of Bid Opportunity [682-2018](#)).
- D7.2.5 Those travelling bridge components which are outside the scope of the Contract are those elements physically located below the normal water line or included under the SEWPCC Upgrading/Expansion project), specifically but not limited to:
- (a) sludge and scum collector systems,
 - (b) primary sludge pumps,
 - (c) scum removal mechanism,
 - (d) scum hopper, and
 - (e) scum pumps
 - (f) control panel and automation, except for work necessary for the efficient construction and re-commissioning of the work within scope.
- D7.2.6 Any additional condition assessments deemed necessary by the Consultant may be completed at any time of the year provided the work is planned, coordinated, and scheduled with WWD engineering and operations staff, does not cause undue disruptions to either the wastewater process or the BO 976-2016 contractor, and follow all health and safety regulations and plant safe work procedures.
- D7.2.7 To minimize the risk of taking the plant out of compliance with the Environment Act Licence, any refurbishment or replacement work shall be undertaken and completed in typical dry weather flow periods of the year (i.e. Winter months of December to February inclusive). The initial construction sequence recommendation is to refurbish and commission Primary Clarifier Travelling Bridges Nos 1 and 2 and then proceed with the structural remedial work on Primary Clarifier Travelling Bridge Truss No. 3.

D8. PROJECT MANAGEMENT

- D8.1 Plan, organize, secure, and manage resources to complete the phases outlined in D9 to D14.
- D8.2 Create and submit a project management plan no later than three (3) weeks after Project Award. The project management plan shall include but not be limited to:
- (a) Scope and Schedule
 - (i) Include the schedule information required in B13.
 - (ii) Provide a Deliverable based Work Breakdown Structure (WBS) that identifies major elements relative to how the assignment will be managed and in terms of tangible and verifiable results (including milestones, critical triggers, Deliverables, etc.).
 - (iii) The refurbishment or replacement work shall be in accordance with D7.2.7.
 - (iv) Provide a Project Schedule, listing all Project activities and milestones. Identify responsibilities, timelines, and dependencies for all activities and milestones.
 - (v) The approved schedule will be used as the Project baseline schedule throughout the Project.
 - (vi) The City's Project Manager may request updates to the Project baseline schedule due to delays in receiving deliverables.
 - (b) Budget
 - (i) Include the information required in B9.
 - (c) Quality Management

- (i) Describe quality management methods used to address quality planning, quality assurance, and quality control for the following:
 - (i) Field surveying procedures and controls;
 - (ii) Data review, verification, and validation;
 - (iii) City reviews;
 - (iv) Corrective action process; and
 - (v) Quality assurance and control of Deliverables.
 - (d) Human Resources
 - (i) Describe the team organizational and management approach
 - (ii) Include an organization chart.
 - (e) Communication
 - (i) Describe communication interfaces (organization, technical, and interpersonal) and the roles and responsibilities of each stakeholder.
 - ◆ Clearly describe communication and planned approach with the Primary Clarifier No. 3 Repair Subconsultant for Primary Clarifier No. 3 truss repair works.
 - (ii) Identify the processes that will be used to liaise with the City throughout the provision of the Services and to provide ample opportunity for input and review by the City's Project team.
 - (f) Change Management Plan
 - (i) Identify the schedule, quality, and budget impacts of any proposed changes.
 - (g) Quality Assurance and Control plan
 - (i) Establish appropriate levels of review and approvals for all Project Deliverables.
 - (h) Risk Management Plan
 - (i) Develop a risk management plan identifying risk event causes, risk event outcomes, degree of certainty, effects on Project objectives, severity of risk, response/action(s) to be undertaken, contingency plan and associated costs to manage risks.
 - (ii) The risk management plan shall be documented using the City's spreadsheet template located on the City's Asset Management Program website located at: <https://www.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm>.
 - (iii) Outline process for updating the risk management plan in various phases of the Project.
- D8.3 Submit quarterly project status reports, including the following:
 - (a) work carried out in the previous quarter;
 - (b) work in progress;
 - (c) work anticipated for the following quarter, including projected person-hours;
 - (d) percentage completion of each task and the overall Project;
 - (e) information requests for the following quarter;
 - (f) issues to date;
 - (g) schedule and quality performance. In particular, report on items that are behind schedule and how they will be addressed;
 - (h) any modifications to the Project Management Plan;
 - (i) budget and actual cost for completed tasks and projected cost for planned tasks; and
 - (j) description, action, and mitigation of extreme and high risk(s).
- D8.3.1 Quarterly project status reports shall be a maximum of two (2) pages and be submitted within three (3) days of the quarter's end.

- D8.4 Coordinate regular project meetings and provide minutes. The meetings shall be used to update the Project Manager on the status of the Project and to discuss other project management issues.
- (a) Meetings shall be held monthly during design stages.
 - (i) If critical design dates outlined in D21 are not achieved during the design stages, regular project meeting frequency shall increase to every two weeks until the design stage is complete. No additional fees will be contemplated for additional meetings.
 - (b) The frequency of meetings may vary based upon the level of project activity.
- D8.5 Schedule and chair milestone meetings and provide minutes at the following stages:
- (a) project kick-off meeting – to be scheduled immediately upon award of the Project;
 - (b) workshop with WWD operations staff to identify operational constraints, potential condition assessment activities, and potential construction issues/concerns.
 - (c) at a minimum of four (4) risk review workshops with the Program Team (i.e. at the beginning and prior to completion of the Preliminary Design Phase, prior to preparation of the Bid Opportunity document, and prior to finalization of the Project Commissioning Plan). The Consultant shall allow for three (3) hours for the initial risk workshop and one (1) hour for each of the three remaining risk workshops.
 - (d) upon completion of the draft preliminary design report;
 - (e) upon completion of the final preliminary design report (if necessary);
 - (f) upon completion of detailed design;
 - (g) upon completion of the draft tender documents; (if necessary);
 - (h) pre-construction meeting (with Program Team, the General Contractor for the scope of work associated with the Contract, and the General Contractor from BO 976-2016);
 - (i) Coordination of repairs meeting with Primary Clarifier No. 3 Repair Subconsultant and the general contractor.
 - (j) weekly construction progress meetings;
 - (k) pre-commissioning meetings (one for each travelling bridge system);
 - (l) meetings to confirm and certify Substantial Performance, Total Performance / warranty period commencement, and Final Acceptance / end of warranty period (with Project Manager and General Contractor)
- D8.5.1 Additional meetings may be required in the event that issues arise during the course of the project.
- D8.6 Provide adequate notice (at least one (1) week) prior to any Site visit or work that will require assistance from City personnel.
- D8.7 Carry out other project management activities as required.
- D9. PRELIMINARY DESIGN**
- D9.1 Review all pertinent background information including, but not limited to:
- (a) drawings;
 - (b) past bid opportunities and tenders;
 - (c) past reports and technical memorandums; and
 - (d) SEWPCC plant operating and maintenance manuals.
- D9.2 The Consultant shall conduct a detailed Site investigation to verify existing drawings and documentation reviewed in D9.1 and to familiarize themselves with the SEWPCC facility and the Primary Clarifier system.

- D9.3 Review relevant tender documents for City of Winnipeg Bid Opportunity No. 976-2016 for the SEWPCC Upgrading/Expansion project (reference http://www.winnipeg.ca/MatMgt/FolderContents.asp?FOLDER_NAME=976-2016&YEAR=2016) including but not limited to the following:
- (a) drawings and specifications related to minor upgrades in the primary clarifiers (Area P),
 - (b) BO-976-2016-Appendix N – Process Control Narratives (Document Number A-0102-PPCN-P901 Process Mechanical, Area P, Primary Clarifiers),
 - (c) BO-976-2016-Appendix T - Manual Control Details (Document Number S0926-01CA-PRO-0003, Area P, Primary Clarifiers (CP-P820-1/2/3/4)). The need for the details provided in this document will depend on when the primary clarifier refurbishment and replacement work is undertaken.
- D9.4 The Consultant shall meet with the Program Team and identify their general strategy for completing the project.
- D9.5 The Consultant shall lead a workshop with SEWPCC operations staff to identify any operational constraints with planned condition assessment inspections or potential refurbishment and replacement construction.
- D9.6 The Consultant shall define all travelling bridge components and related systems that meet the Project scope criteria.
- D9.7 Risk Review – Initial Workshop
- D9.8 Condition Assessment Summary
- (a) For the purpose of the Work and Fees proposed for the Scope of Services for the Contract the Consultant shall summarize the condition of the SEWPCC Primary Clarifier Collectors Nos 1, 2, and 3 based on the following information:
 - (i) Structural
 - (i) The Consultant shall conduct a structural condition assessment of all support structures for the travelling bridge collectors based on visual inspection (VT). Support structures shall include but not be limited to the floors beneath the rails and wall sections where the festoon system is mounted).
 - (ii) Provide an opinion on the expected remaining useful life (RUL) of the structure and any recommended remedial work to achieve fifteen (15) years life.
 - (iii) Summarize the current condition of all support structures for travelling bridge collectors and related systems.
 - (iv) Summarize the current condition for all travelling bridge structural components listed in D7.2.4(a).
 - (ii) Mechanical
 - (i) Review the previous mechanical condition assessment included in B15.3.
 - (ii) Review of potential concerns identified by WWD operations.
 - (iii) Summarize the current condition for all travelling bridge mechanical components listed in D7.2.4(b).
 - (b) Electrical and Automation
 - (i) Note any anecdotal evidence from operations staff and any observed concerns/issues with existing electrical and automation equipment.
 - (b) For condition assessment work beyond inspections based solely on the VT NDT method, the City shall pay the Consultant from B9.9.1B9.9.1 Allowable Disbursements outlined in and listed in Form B: Fees and Form P: Person Hours.
- D9.9 Schedule
- (a) Provide a preliminary level critical path schedule from Detailed Design to turnover.

- (i) The level of detail shall be such that it clearly conveys the significant activities related to the various Project components with their inter-dependencies.
 - (ii) The breakdown of the work shall be into logical phases to accommodate sewage treatment plant operations,
 - (iii) The schedule shall be configured suitable for use by Microsoft® Office Project 2010.
 - (b) Indicate deliverables and milestones.
 - (c) Indicate sequence of construction, process shutdown schedules, including magnitude and duration, and Manitoba Conservation notification requirements, if applicable.
 - (d) Indicate commissioning and training requirements.
 - (e) Identify site constraints and develop installation strategies considering:
 - (i) Lead time for delivery of equipment,
 - (ii) Site access, and
 - (iii) Evaluation of overall impact on plant operations throughout construction.
- D9.10 The Consultant shall prepare a preliminary design report (PDR) which documents all of the following:
 - (a) A summary for the overall condition assessment for the in scope travelling bridge and related components including:
 - (i) examination approaches utilized
 - (ii) assumptions made
 - (iii) inspection and testing results and observations
 - (iv) conclusions
 - (v) recommendations for future inspections and testing
 - (b) A summary of all feasible refurbishment or replacement options.
 - (c) Preliminary designs, drawings, and specifications for the recommended refurbishment and replacement work,
 - (d) An outline commissioning plan to provide a high-level approach to commissioning and identify overall sequence and any constraints to commissioning that need to be addressed in the Detailed Design phase.
 - (e) Schedule for the recommended refurbishment and replacement work including:
 - (i) A breakdown of the work into logical phases to accommodate sewage treatment plant operations, and
 - (ii) The schedule for the Consultant to complete the remaining Scope of Services outlined in D7 to D14.
 - (f) Class 3 cost estimate for all recommended refurbishment and replacement work. The estimate shall be broken down into logical construction phases defined in D9.10(e)(i).
- D9.11 The Consultant shall submit a draft copy of the PDR to the Project Manager two (2) weeks prior to a Preliminary Design review meeting scheduled by the Project Manager.
- D9.12 The Consultant shall present and discuss their recommendations with the Program Team at the Preliminary Design review meeting. The Program team will provide feedback on the PDR and direction to the Consultant regarding overall refurbishment and replacement options to take forward to Detailed Design.
- D9.13 The Consultant shall resubmit the final PDR after incorporating City review comments, or comments that may arise during the preliminary design review meeting.

D10. DETAILED DESIGN

D10.1 General Requirements

- (a) Provide a comprehensive set of detailed design documents and tender services to allow the City to engage a contractor to construct the work. The development of the Detailed Design shall be based upon the final Preliminary Design deliverables and recommendations.
 - (i) The Detailed Design shall be based on both existing process control narratives and functional requirement specifications for the SEWPCC primary clarifiers as well as those developed for the upgraded / expanded plant outlined in the documents available for City of Winnipeg Bid Opportunity 976-2016
 - (ii) The Detailed Design shall address technical and operational issues, reliability and safety concerns, and all current and applicable code requirements.
- (b) The Detailed Design shall include all requirements including but not limited to: site development, civil, structural, architectural, process, HVAC, plumbing, mechanical, electrical, automation, temporary facilities and operational consumables as applicable to the final design scope.
- (c) Where necessary, conduct field surveys and investigations to verify the existing conditions and to supplement all available information. Notify the City's Project Manager if existing conditions are found to deviate from City records.
- (d) Organize meetings with City staff to ensure all required information, issues, and concerns are accounted for.
- (e) Identify all permits necessary for construction.
- (f) Provide any other information applicable to the design.
- (g) Unless otherwise stated, the indicated deliverables and any other deliverables which, in the opinion of the Project Manager are typical of a Detailed Tender Package, shall be prepared by the Consultant. Delegation of deliverables to the construction contractor will not be accepted.
- (h) Ensure all applicable WWD and WSTP standards, such as color uniformity to the WWD Paint Colour Standard, are incorporated into the Detailed Design as outlined in D6.1.8(a) WSTP design standards. Deviations to the WWD and WSTP standards shall only be incorporated into the final design with written approval of the City Project Manager via a WWD\WSTP Standards Deviation Form (Appendix W).

D10.2 Technical Specifications

- (a) Provide a comprehensive specification package for all disciplines and the entire scope of work in NMS specification format. Ensure that the following are included:
 - (i) All submittal requirements.
 - (ii) All quality assurance requirements.
 - (iii) All commissioning requirements. Note that the Consultant is responsible for leading commissioning, however it is anticipated that the contractor will perform various tasks to assist with the commissioning efforts. The consultant will include tasks in the Contractors tender package necessary to support the Consultant's Commissioning plan.

D10.3 Construction Drawings

- (a) Consultant shall follow WWD construction drawing standards. These standards are available on the "Guides and Manuals" page at the City of Winnipeg, Water and Waste Department, Department Information website at <http://www.winnipeg.ca/waterandwaste/dept/manual.stm#wastewater>, specifically:
 - (i) Computer Assisted Drafting (CAD)-Geographic Information System (GIS) Standards at http://www.winnipeg.ca/waterandwaste/dept/cad_gis.stm, and
 - (ii) "Manual for the production of construction drawings" at <http://www.winnipeg.ca/waterandwaste/pdfs/dept/constructionManual.pdf>

- (b) All construction drawings are to have a Water and Waste Department drawing number assigned before the work is tendered. Drawing numbers shall be requested through the Project Manager.

D10.4 Tender Document

- (a) Provide a tender document utilizing the appropriate City template from Materials Management. Identify and comply with all Materials Management policies and requirements.

D10.5 Construction Plan

- (a) Provide a construction plan that details the proposed construction sequence, schedule, and mitigation of site constraints. The plan shall clearly demonstrate how the work will be implemented while maintaining operation of the SEWPCC facility. The plan shall be suitable for both City and contractor use.
 - (i) The construction schedule for the SEWPCC primary clarifier travelling bridges refurbishment/ replacement works shall account for known plant operational constraints as well as coordination with the latest revision of the construction schedule for City of Winnipeg BO 976-2016.
 - (ii) The construction schedule for the SEWPCC primary clarifier travelling bridges refurbishment/ replacement works shall start and end during one continuous dry weather period of December to February to avoid or minimize any remobilization and restart over two separate Winter weather periods.

D10.6 Project Commissioning Plan

- (a) Prepare a Project Commissioning Plan to detail the commissioning processes, roles and responsibilities, commissioning specifications and objectives, procedures, verification and certification requirements and documentation and acceptance criteria for the Project.
 - (i) The plan should show detailed planning, lists, and schedules, not merely a high-level description of commissioning.
 - (ii) Clearly indicate the tasks required and the party responsible for each task.
 - (iii) Include all disciplines and coordination between the disciplines.
 - (iv) Include all pre-commissioning requirements.
 - (v) Integrate a Project training plan within the Project Commissioning Plan. Identify all operations and maintenance training requirements, responsible party (contractor, Consultant, supplier, etc.) and an outline of the content of each training session. As part of the commissioning process, the Consultant shall provide resources to train City personnel on any areas or gaps that are not addressed by the other planned training providers.
- (b) Ensure integration of contractor commissioning requirements into the Detailed Tender Package.

D10.7 Detailed Design Tender Package

- (a) Prepare a detailed tender package that includes:
 - (i) Drawings from all disciplines;
 - (ii) Technical specifications;
 - (iii) The tender document;
 - (iv) Construction Plan
 - (v) Commissioning plan;
 - (vi) Functional Requirement Specifications; if applicable;
 - (vii) Process control narrative(s), updates as applicable;
 - (viii) A major equipment list with reference information to the drawings;
 - (ix) Applicable reference drawings of the existing site; and
 - (x) Any other information required by the contractor.

- (b) A detailed design package for the truss repair on Primary Clarifier No. 3 will be provided by the City. The Consultant is to incorporate the truss repair works into the construction tender package for the Primary Clarifier Nos. 1 and 2 refurbishment work.
 - (i) The detailed design package provided by the City includes drawings and specifications.
 - (ii) Modifications to the drawing and specifications may be required to suit the construction tender package.
 - (i) Where required, the Consultant will identify such modifications to the City Project Manager and coordinate modifications to the design documents with the Primary Clarifier No. 3 Repair Subconsultant.
 - (c) Prepare detailed construction sequencing that address site constraints identified in D9.9(e).
 - (d) Prepare detailed shutdown procedures. Include:
 - (i) Pre-Shutdown Requirements,
 - (ii) Operational Notifications - Include required notice periods, department contacts, notification details and responsibilities, including the WWD Environmental Standards Branch,
 - (iii) Contractor Requirements - Include scope of work, action required and responsibilities,
 - (iv) Schedule, and
 - (v) Operational Requirements - Include all process systems affected, action required and responsibility.
 - (e) Attend a Detailed Design review meeting with the City and incorporate changes arising from that meeting.
- D10.8 Submit one (1) electronic copy of the 60% draft detailed tender package for all aspects of the work, including detailed construction Drawings and technical specifications.
- (a) Intermediate review (60%) of the Detailed Tender Package is not required on a formal basis, however, the Consultant is encouraged to submit for review at an earlier stage for any individual components that may be of interest to the City or where City direction is required. Coordinate with the Project Manager as required.
 - (b) The Consultant should allow for a three (3) week review period for the City to provide comments. This should be accounted for and shown in the proposal.
 - (c) Submit electronic copies of the draft tender document and technical specifications in Microsoft Word format.
 - (d) The electronic copies of the draft Drawings shall be submitted in PDF format.
- D10.9 Submit one (1) electronic copy of the 90% draft detailed tender package for all aspects of the work, including all tender package items listed in D10.7.
- (a) the electronic copies of the draft tender document, technical specifications, commissioning plan and process control narrative updates shall be submitted in Microsoft Word format.
 - (b) The electronic copies of the draft Drawings shall be submitted in PDF format.
 - (c) The Consultant should allow for a two (2) week review period for the City to provide comments. This should be accounted for and shown in the proposal.
 - (d) Conduct a meeting to review the City's comments on the 90% draft tender package.
 - (e) Incorporate all City comments into the final tender package.
- D10.10 Progress Meetings
- (a) Throughout the Detailed Design Phase, meet with the City Steering Committee monthly to discuss progress, findings, obtain input from City personnel, and discuss design options.
 - (b) These meetings shall be shown in the Consultant's Project schedule.

- (c) Additional formal meetings can be accommodated to suit the Consultant's requirements, and should be shown in the Consultant's Project Schedule.

D10.11 Class 1 Cost Estimate

- (a) Prepare a Class 1 cost estimate following incorporation of City Review comments of the 90% tender package submission.
 - (i) The Class 1 Cost Estimate shall be submitted at least one (1) week prior to sending the Tender for posting by the Materials Management division.
 - (ii) The Class 1 Cost Estimate shall be completed using the latest version of the City's Basis of Estimate template, available on the City Asset Management Program page at The City of Winnipeg, Corporate Finance, Infrastructure Planning Division website: <https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#3>.

D10.12 Detailed Design Notes and Calculations Package

- (a) Prepare and submit a detailed design notes package including items such as structural, mechanical, and electrical design calculations related to process equipment and building services; process design calculations; instrumentation and process control design calculations; and detailed engineering calculations, drawings and criteria employed in the design(s).
 - (i) Provide Draft Detailed Design Notes and Calculations Package together with the Draft Detailed Tender Package to allow for review in parallel.
 - (ii) Submit two (2) paper copies and one (1) electronic PDF copy of the detailed design notes package, including detailed engineering calculations, Drawings and criteria assumed and employed in the design(s).

D10.13 Tender Services

- (a) After approval by the Project Manager, submit the Detailed Tender Package to Materials Management for public bidding.
 - (i) All tender packages shall be prepared and posted in accordance with the City of Winnipeg Materials Management Division requirements.
 - (ii) Coordinate review of the package with Materials Management and make changes as requested to the tender package.
- (b) Provide appropriate response to bidders and advice to the City during the tender posting period.
- (c) Issue addenda to the tender, as required.
- (d) Arrange for and lead bidder's site visit(s).
- (e) If required, coordinate and lead a pre-award meeting with contractor.
- (f) Complete a review, analysis, comparison, tabulation, calculation, and evaluation of the tenders received. Make recommendations for award of Contract.
- (g) If the bids deviate more than 15% from the Class 1 Cost Estimate, provide justification for the difference in pricing in the award recommendation letter.
- (h) Following tender close, submit one (1) electronic copy of the Final Detailed Tender Package including all addenda.

D10.14 Deliverables from the Detailed Design Phase shall include, but not limited to:

- (a) Detailed Tender Package
- (b) Class 1 Cost Estimate; and
- (c) Detailed Design Notes and Calculations Package.

D11. CONTRACT ADMINISTRATION

D11.1 General Requirements

- (a) Organize meetings with City staff to ensure all required information, issues, and concerns are accounted for.
- (b) The Consultant shall use the processes, procedures, forms and templates throughout the course of the Project. All documents can be found on the City's Infrastructure Planning Office website: <https://www.winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm>

Relevant documents include:

- (i) pre-construction meeting agenda and meeting minutes;
 - (ii) proposed change notice (PCN);
 - (iii) PCN log;
 - (iv) request for information (RFI);
 - (v) RFI log;
 - (vi) field instruction (FI);
 - (vii) FI log;
 - (viii) contract change log;
 - (ix) change work order (CWO);
 - (x) decision log;
 - (xi) daily construction report;
 - (xii) inspection report;
 - (xiii) meeting minutes;
 - (xiv) site meeting minutes;
 - (xv) project status report;
 - (xvi) Certificate of Substantial Performance;
 - (xvii) Certificate of Total Performance; and
 - (xviii) Certificate of Acceptance.
- (a) Use the appropriate or recommended City templates throughout the course of the Project, including but not necessarily limited to those listed in D11.1(b).
 - (b) All personnel provided by the Consultant for either non-resident or resident engineering Contract Administration work shall be experienced and qualified to perform the work.
 - (c) Original photographic records shall have a minimum resolution of twelve (12) megapixel along with date and time stamps. Photos in reports may be reduced in scale. Provide original photos to the City upon request.
 - (d) The City reserves the right to withhold payment of Consultant fees for additional Contract Administration services which result out of errors or omissions in the design work prepared by the Consultant.

D11.2 Contract Administration Services

- (a) Refer to B9.3.3(a) for the City's estimated minimum number of hours for the Consultant to perform the Contract Administration Services.
- (b) Perform project management functions in accordance with the Project Management Manual and City requirements.
- (c) Administer the construction contract.
- (d) Prior to construction, prepare and submit a written and photographic record of the physical condition of the work area, existing facilities, and structures sufficient to equip the City to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law, or by any other party for damages arising from the Project.
- (e) Conduct and chair a pre-construction meeting and provide minutes.

- (f) Make application to public agencies for necessary authorizations and permits, prepare and submit reports and drawings thereto, and appear before the same in support of all applications.
 - (i) Coordinate with the contractor for completion of permits, if applicable in a timely matter.
- (g) Prepare a detailed Vendor Document Requirements (VDR) list based upon the requirements of the drawings and specifications. The list shall in detail identify all contractor submittal requirements.
 - (i) Manage the VDR list and logs of contractor submittals.
 - (ii) Update and forward the VDR list and current logs of submittals to the contractor and Program Team.
- (h) Review and accept contractor submittals (i.e. shop drawings) supplied by the contractor or supplier. Each submittal shall be reviewed by a professional engineer.
- (i) Review and report to the City regarding laboratory, shop and other tests conducted on materials and/or equipment.
- (j) Review and provide recommendations for requests for alternate materials and methods. No alternates shall be approved without written authorization from the City Project Manager.
- (k) Consult and advise the City during the course of construction.
- (l) Submit a copy of all correspondence relating directly or indirectly to the project, originating from or distributed to parties external to the Consultant, immediately following receipt or dispatch by the Consultant.
- (m) Keep a continuous record of Project activities including but not limited to daily reports, photographic record of construction work and equipment, Working Days, teleconferences, emails, inspections and observations sufficient to equip the City to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law, or by any other party for damages thereto arising from the Project.
- (n) Monitor and manage the Contractor's schedule.
- (o) Review extra work or contractual claims submitted by the contractor. Provide backup material to the Project Manager as requested.
- (p) Coordinate and prepare proposed change notice (PCN) regarding the contractor scope of work as required. This may include the preparation of specifications and drawings for the PCN.
- (q) Coordinate and prepare Change Work Order (CWO) forms regarding the contractor scope of work as required and provide backup material to the Project Manager as requested.
- (r) Review acceptability of inspection and test plans from contractors, vendors or manufacturers.
- (s) Review and respond to contractor Request for Information (RFI)'s in a timely manner.
- (t) Prepare contractor site instructions / clarifications / directives as required.
- (u) Interpret technical aspects of contract as requested by the City.
- (v) Coordinate work with the General Contractor for BO 976-2016.
- (w) Coordinate, manage and lead construction shutdown and tie-in protocols where plant operation is impacted. Prepare detailed shutdown or tie-in protocols that detail out a schedule for the work, delegate responsibilities, and clearly identify all operational impacts and plans to address. Review operational and construction risks and plan risk mitigation measures as appropriate. Act as the interface between the contractor and City during the shutdowns and tie-ins.
 - (i) Base the construction shutdown and tie-in protocols on the procedures developed during the Detailed Design phase.
- (x) Allow for four (4) months of significant onsite construction activity.

- (y) Provide a weekly construction report during the course of construction. The weekly construction report shall include, but not be limited to:
 - (i) Working Days and days lost due to inclement weather during the course of the construction;
 - (ii) Written and photographic records of the construction, including construction progress;
 - (iii) Provide brief descriptions of each photograph; and
 - (iv) Project schedule updates along with the baseline schedule to indicate if the project is on schedule or behind schedule.
- (z) Provide qualified personnel with appropriate discipline expertise to perform inspections of the construction, including but not limited to the following:
 - (i) Conduct inspection of construction sufficient to ensure that the construction carried out by the contractor is in conformance with the drawings and specifications, provide report thereof.
- (aa) Provide a specific construction inspection report for each inspection. The construction inspection reports shall be prepared by, or under the supervision of a Professional Engineer and contain appropriate detail to ascertain whether the construction meets the requirements of the drawings and specifications. The specific construction inspection reports shall be in addition to the daily construction reports.
- (bb) Witness quality control procedures implemented by the contractor.
- (cc) Provide reference line and elevation control points for the works and check the contractor's adherence.
- (dd) Arrange for and carry out of testing of materials utilized by the contractor.
 - (i) Notwithstanding C1.1(b), the cost to the Consultant for the provision of third-party testing, as authorized by the Project Manager, will be reimbursed as an Allowable Disbursement.
 - (ii) The Consultant shall ensure that selected third-party services are provided at competitive market rates.
 - (iii) Costs shall be substantiated by the provision of suitable documentation.
- (ee) Prepare, update, maintain, and coordinate a deficiency list of all issues identified during inspections by the Consultant or the Program Team. Coordinate remediation of the deficiency list with the contractor.
- (ff) Coordinate regular construction review meetings. The meetings shall include representatives of the contractor and Program Team.
 - (i) The typical frequency of meetings shall be weekly during the course of construction, although meeting frequency may vary based upon the level of construction activity.
 - (ii) Prepare and distribute comprehensive meeting minutes within three (3) Business Days. Update the meeting minutes with corrections from other parties. Items requiring immediate actions shall be emailed prior to issuance of the meeting minutes.
- (gg) Prepare, certify, and submit progress estimates to the City for payment to the contractor for construction performed in accordance with the Drawings and specifications.
- (hh) Coordinate and lead a comprehensive, detailed inspection prior to substantial performance, including the contractor and the City. Document and report on all issues identified and coordinate completion of the issues.
- (ii) Make a recommendation to the Project Manager when the contractor has achieved Substantial Performance and upon approval, prepare and issue a Certificate of Substantial Performance.
- (jj) Coordinate and lead a comprehensive, detailed inspection prior to Total Performance, including the contractor and the City. Document and report on all issues identified and coordinate completion of the issues.

- (kk) Make a recommendation to the Project Manager when the contractor has achieved Total Performance and upon approval, prepare and issue a Certificate of Total Performance.

D12. PRIMARY CLARIFIER NO. 3 REPAIR SERVICES

D12.1 In addition to the Contract Administration services identified in D11. The Consultant and the Primary Clarifier No. 3 Repair Subconsultant (KGS Group Inc., Winnipeg, Manitoba) shall perform following services for the truss repair on Primary Clarifier No. 3.

D12.1.1 General

- (a) Historical records for structural observations, maintenance, and non-destructive testing work to date are outlined in Relevant Document D5.6.
- (b) Conclusions and recommendations for repair work are outlined in Relevant Document D5.5.
- (c) Detailed specifications and drawings from the Primary Clarifier No. 3 Repair Subconsultant shall be provided to the Consultant when available and shall be included in the tender for refurbishment of Primary Clarifiers Nos. 1 and 2.

D12.1.2 Scope of Recommended Repairs

- (a) Implement repair option “4.3 Replace Damaged Section and Reinforce” as outlined in Relevant Document D5.5.
- (b) Gouge to sound metal and re-weld welds designated as “unacceptable” in Relevant Document D5.6.
- (c) Remove plate at Primary Clarifier No. 3 truss location 10B for re-inspection and recommendation by the Primary Clarifier No. 3 Repair Subconsultant.
- (d) Welding quality control shall include review of welder qualifications and procedures as well as weld inspections before and after all new welding.
- (e) Portions of the cracked tubing removed from Primary Clarifier No. 3 shall be submitted to Testlabs International Ltd. (engineering testing lab located in Winnipeg, Manitoba) for metallurgical failure analysis, reporting, and presentation to City staff.

D12.1.3 Execution of Recommended Repairs

- (a) Coordination between Consultant and Primary Clarifier No. 3 Repair Subconsultant.
 - (i) One (1) meeting with Primary Clarifier No. 3 Repair Subconsultant project manager, mechanical, and structural staff to review and coordinate repairs with the Consultant complete with meeting minutes documentation.
- (b) Review welder qualifications (WPS/PQR).
 - (i) One (1) document set review by Primary Clarifier No. 3 Repair Subconsultant mechanical staff with comments to the Consultant and General Contractor.
- (c) Review Post-Weld Non-Destructive Testing (NDT) results.
 - (i) One (1) document set review by Primary Clarifier No. 3 Repair Subconsultant mechanical staff with comments to the Consultant and General Contractor.
- (d) Site visit to verify weld repairs.
 - (i) One (1) site visit by Primary Clarifier No. 3 Repair Subconsultant complete with report and photographs.
- (e) As-Built Drawings.
 - (i) Three (3) as-built drawings of repairs issued electronically and as hard copy to the City.
- (f) Contact person at the Primary Clarifier No. 3 Repair Subconsultant is Colin Siepman, Structural Department Head (csiepman@ksgroup.com).
- (g) Primary Clarifier No. 3 truss repair work is to be given priority following the Primary Clarifier Nos. 1 and 2 refurbishment work. If required due to operational and other

major project scheduling constraints, the two sets of work may need be scheduled over two (2) separate Winter shutdown periods (i.e. separated by up to one year between these two sets of work).

D13. COMMISSIONING SERVICES

D13.1 General Requirements

- (a) Provide comprehensive leadership to the commissioning of the works. The Consultant has the responsibility to ensure that all commissioning activities are carried out to allow for the delivery of a fully operational facility compliant and complete in every respect.
 - (i) Provide a Commissioning leader appropriately qualified to lead the commissioning work. The Commissioning leader shall be a senior engineer with experience in commissioning Projects.
 - (ii) Provide all qualified resources and organization to perform commissioning related activities pertaining to the Consultant's scope.
- (b) Consult with and advise the City during the course of commissioning.
- (c) Coordinate with City Operations personnel as required. Ensure that City Operations personnel are always aware of the current commissioning status and any upcoming operational requirements or impacts.
- (d) The Consultant is fully responsible for the planning and leadership of the overall commissioning activities. While the contractor and the City may perform specific commissioning tasks, this does not reduce or eliminate the Consultant's responsibilities. Schedule and coordinate all commissioning works in coordination with the contractor's schedule.
- (e) Review all commissioning records and ensure that the overall commissioning records demonstrate compliance to the specifications and overall Project design requirements.
 - (i) Ensure all equipment and control system settings are documented.
- (f) Monitor commissioning activities, witness and certify the accuracy of the reported results.
- (g) Sign-off on all commissioning and training records.
- (h) Ensure all Commissioning Team member have clear definition of their role and understanding of their responsibilities.
- (i) Coordinate with the contractor to ensure appropriate measures regarding safety, health and environmental aspects are implemented throughout the commissioning activities.
- (j) Review commissioning documentation for performance, reliability, durability of operation, accessibility, maintainability, and operation efficiency under all conditions of operation.
- (k) Prepare agenda, lead and record minutes of the commissioning meetings.
- (l) Manage the commissioning documentation.
- (m) Ensure the commissioning process meets effluent licensing requirements. Anticipate any potential commissioning scenarios that impact on licensing compliance and, in conjunction with the Project Manager, liaise with the Wastewater Services with respect to commissioning activities.

D13.2 Planning

- (a) The Consultant is fully responsible for the planning of the overall commissioning activities. This includes but is not limited to:
 - (i) Update the Commissioning Plan prepared during the Detailed Design Phase and issue to all relevant parties.
 - (ii) Define the commissioning activities.
 - (iii) Develop commissioning procedures and protocols to fully commission the facility. Coordinate the review of the documents with the City and contractor, and update as required.

D13.3 Pre-Commissioning

- (a) Pre-Commissioning activities will include the factory acceptance testing, on-site inspection, and testing of equipment incorporated into the Project.
 - (i) Records shall be generated for all pre-commissioning inspections and tests.
- (b) The Consultant is responsible to specify all pre-commissioning requirements as part of the Detailed Design.
- (c) The Consultant's responsibilities include but are not limited to:
 - (i) Managing the overall pre-commissioning requirements and ensuring that all required pre-commissioning work is completed. Prepare and manage a master list of pre-commissioning requirements.
 - (ii) Witness a selected portion of the pre-commissioning tests (approximately a third).
 - (iii) Review all pre-commissioning records, including testing forms.
 - (iv) Organization and filing of all pre-commissioning records with the City.
- (d) The contractor is expected to be responsible for the execution of the majority of the pre-commissioning work, such as pre-start-up testing of equipment.

D13.4 Training

- (a) Coordinate and manage training sessions for City personnel for the operation and maintenance of new facilities and equipment. This includes but not limited to planning and scheduling of training sessions, review of training procedures and training documents prepared by the contractor.
- (b) The Consultant is responsible for the overall packaging and quality assurance of the training program, although delivery of selected portions may be by the contractor or subcontractor.
- (c) Coordinate to ensure video records of each unique training session are provided to the City. Ensure acceptable and uniform standard of video quality.
- (d) In addition to the above, include in the Consultant's scope of work:
 - (i) A training session comprised of up to two (2) hours of mechanical systems classroom training and up to one and a half (1.5) hours of mechanical systems field training shall be provided. The training session shall be repeated once (i.e. total of two (2) identical training sessions) to allow for staff shifts. In the event COVID-19 safety and health considerations prevent in-person training sessions, the Consultant shall provide the training sessions virtually including a pre-recorded virtual tour to the new refurbishment works highlighting important operational and maintenance aspects of the new equipment.
 - (ii) Training materials to be submitted for review and comment prior to on-site training.

D13.5 Process Commissioning

- (a) Be present on-site during commissioning and witness commissioning activities.
- (b) Start-up, test, verify and document that the travelling bridges and all associated controls perform as designed. Representative operating scenarios shall be tested.
- (c) There are aspects of clarifier control and operation that are outside of the scope of the project. The Consultant should consider the associated clarifier control functions in the Commissioning Plan.
- (d) The Consultant is not responsible for proper function of primary clarifier equipment outside the scope of this project.

D13.6 Asset Data Schedule

- (a) The Consultant shall request from the City Representative (Wastewater Services Division Process Improvement Coordinator) the list of the assets (equipment) that are scheduled for maintenance as defined in the project scope. The City Representative will provide the Consultant with both the Asset List and the Guideline to Document Asset Registry.

- (b) The Consultant shall provide a comprehensive list of all maintainable assets along with associated data based on the Guideline to Document Asset Registry. The list shall be in a spreadsheet in a format defined by the City for uploading into the City's Oracle Work and Asset Management (OWAM) system. It is expected that this document will be an amalgamation and reformatting of other information prepared and received by the Consultant.
- (c) The Consultant shall reference the latest revision of the Wastewater Services Division asset registry document outlined in D6.1.8(g).

D13.7 Commissioning Handover Package

- (a) Compile and handover to the City all commissioning documentation, including but not limited to:
 - (i) Commissioning plans and procedures,
 - (ii) Evidence of commissioning verification,
 - (iii) Deficiency reports and corrective actions taken,
 - (iv) Training material and records, and
 - (v) Other commissioning documents.
- (b) The compilation of all commissioning documentation shall be delivered in a comprehensive, organized electronic format with all files and directories structured for simple identification and searchability of the contents.

D13.8 Deliverables from Contract Administration shall include, but not be limited to:

- (a) All Contract Administration documentation such as Meeting Minutes, RFIs, PCNs, CWOs, weekly construction reports, submittals, etc.,
- (b) Commissioning Handover Package; and
- (c) Asset Data Schedule \ Registry Package.

D14. POST CONSTRUCTION SERVICES

D14.1 Confirm and ensure complete turnover of project documentation (shop Drawings, Record Drawings, O&M manuals, design notes and calculations, etc.) to the City by the contractor and verify that the documents are in conformance with the construction contract.

D14.2 **Record Drawings**

- (a) Record Drawings shall adhere to the General Requirements for Drawings as stated in D6.3.
- (b) Record Drawings shall reflect Site verified as-constructed conditions, including contractor markups, contract change orders, RFI's, and markups from resident inspection of the work. Reliance solely on contractor markups without Site verification of as-constructed conditions is not satisfactory.
- (c) Record Drawings shall be authenticated by the engineer-of-record in accordance with the latest revision of the Engineers and Geoscientists of Manitoba document titled "Authentication of Electronic and Hardcopy Document Guideline." For this RFP, the latest revision referenced was "Approved by Investigation Committee December 19, 2019.
- (d) The Consultant shall prepare and submit draft Record Drawings within one (1) month of Total Performance of the construction contract.
 - (i) Submit one (1) electronic PDF copy of the draft Record Drawings for City review.
 - (ii) The draft Record Drawing submission is to consist of a drawing transmittal to the Project Manager, and one (1) complete set of drawings.
 - (iii) The City review comments and/or the marked-up draft Record Drawings will be returned to the Consultant for any corrections and updates in order to comply with the CAD-GIS Standards listed in D6.3.7.

- (iv) After all corrections or updates are completed, the Consultant shall return the marked up draft Record Drawings, and submit one (1) final set of size A1 Mylar and one (1) electronic copy of PDF and AutoCAD files (in .DWG file format) of the final Record Drawings.
- (v) Once the Record Drawings meet the new CAD-GIS Drawing Standards, the drawings will be accepted.
- (vi) Unless the Consultant specifically asks to be notified, WWD Drawing Control Staff will not notify Consultants when Project drawings have been accepted.

D14.3 Provide a **final construction report** to the City within two months of Total Performance. The final construction report shall include the following:

- (a) A brief summary of the project, including:
 - (i) services accomplished, including the initial and final scope of the Project;
 - (ii) issues encountered during the Project and the resolutions achieved;
 - (iii) final or projected final contract cost.
- (b) Appendices, including:
 - (i) cost summary;
 - (ii) photographs – typical pre-construction, during construction, and post-construction photographs;
 - (iii) tabulation of tenders;
 - (iv) change orders;
 - (v) summary of progress payments;
 - (vi) final Contract schedule;
 - (vii) subcontractor list;
 - (viii) daily or weekly reports;
 - (ix) progress meeting minutes;
 - (x) shop Drawings/submittals;
 - (xi) field instructions;
 - (xii) contractor RFI's & responses;
 - (xiii) material test reports;
 - (xiv) warranty information;
 - (xv) validation documentation;
 - (xvi) commissioning documentation; and
 - (xvii) certificates of Substantial Performance & Total Performance.

D14.4 The Consultant shall submit three (3) paper copies and one (1) electronic PDF copy of the Final Construction Report.

D14.5 Training Sessions and Workshops

- (a) Coordinate with the installation contractor and any equipment suppliers to provide on-site training sessions and workshops to provide instruction to City staff on the safe operation of all new equipment including recommended maintenance tasks and schedules.
- (b) The training provided by the contractor shall be in compliance with best practices for operations staff to earn continuing education credits.
- (c) Training materials to be submitted to the City for review and comment prior to the on-site training.
- (d) All training sessions shall be video recorded including both classroom and field-focused training.

- D14.6 Coordinate with the installation contractor and equipment supplier to provide three (3) full sets of all Operation & Maintenance Manuals to the City for all newly installed equipment and devices.
- D14.7 Provide one (1) year warranty services tied to the date of Total Performance. The warranty services shall include but are not limited to the following:
- (a) provision of inspection services, at the request of the City, during the warranty period of the construction contract to advise the City in writing of any deficiencies and the proposed resolution of the deficiencies. Upon approval of the City, provide the contractor appropriate notice to correct the deficiencies;
 - (b) determination if corrective work is part of contractor's warranty;
 - (c) liaison and coordination with the contractor to repair defective work;
 - (d) conduction of the inspection and approval of warranty work;
 - (e) issuance of instructions for correction of deficiencies;
 - (f) review of updates to O&M manuals and resolve deficiencies;
 - (g) respond to requests of the City related to the Project; and
 - (h) provision of a detailed inspection of the Project with the Contractor and the City prior to the end of the warranty period and provide to the City in written form associated itemized deficiency list or appropriate recommendation of acceptance of the construction contract work.
- D14.8 Deliverables from Post Construction Services shall include, but not be limited to:
- (a) Final Record Drawings in both hardcopy (Mylar) and electronic file formats (AutoCAD and PDF files);
 - (b) Operation & Maintenance Manuals in both hard copy and electronic file format;
 - (c) Final Construction Report in both hard copy and electronic file format;
 - (d) End of warranty period site inspection, recommendations, and meeting minutes; and
 - (e) Certificate of Acceptance for construction contract.

D15. ADDITIONAL WORK ALLOWANCE

- D15.1 The additional work allowance is to be used for engineering and design services that arise due to unforeseen conditions arising in the design stages of the Project. When such work arises, the Consultant will prepare a concise scope of work and cost proposal in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval. No additional work shall start prior to this approval.

SUBMISSIONS

D16. AUTHORITY TO CARRY ON BUSINESS

- D16.1 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.

D17. SAFE WORK PLAN

- D17.1 The Consultant shall provide the Project Manager with a Safe Work Plan at least five (5) Business Days prior to the commencement of any Work on the Site but in no event later than the date specified in C4.1 for the return of the executed Contract.

D17.2 The Safe Work Plan should be prepared and submitted in the format shown in the City's template which is available on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <http://www.winnipeg.ca/matmgt/safety/default.stm>

D18. INSURANCE

D18.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.

D18.2 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 \$500,000 per claim and \$1,000,000.00 in the aggregate.

D18.2.1 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.

D18.3 The policies required in D18.2(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.

D18.4 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 D18.2(a) and D18.2(b).

D18.5 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 D18.2(a) and D18.2(c).

D18.6 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 D18.9.

- D18.7 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.
- D18.8 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.
- D18.9 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

D19. COMMENCEMENT

- D19.1 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.
- D19.2 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 D16;
 - (ii) evidence of the insurance specified in D18.
 - (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D19.3 The City intends to award this Contract by January 21, 2021.

D20. COVID-19 SCHEDULE DELAYS

- D20.1 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 with directives from health authorities and various levels of government, and in close consultation with the Project Manager.
- D20.2 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.
- D20.3 Within seven (7) Calendar Days of the award of Contract, the Consultant shall declare whether COVID-19 will affect the start date. If the Consultant declares that 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 or work by others.
- D20.4 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 D20.3. Failure to provide this notice will result in no additional time delays being considered by the City.
- D20.5 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.
- D20.6 The Consultant will recognize the COVID-19 pandemic as a project risk and plan in accordance with:
- (a) The schedule for design services shall minimize activities at the SEWPCC facility and in particular minimize the need for in-person interaction with operations and maintenance staff.
 - (b) The Consultant shall consider mitigations for schedule risk due to COVID-19 and include them in their plans.

D21. CRITICAL STAGES

- D21.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Submission of the project management plan by February 12, 2021.
 - (b) Preliminary Design Services, including review and approval by WWD, finalized by May 28, 2021.
 - (c) Detailed Design Services, including review and approval by WWD, finalized by June 25, 2021;
 - (d) Completion of Procurement Services including submission of Letter of Recommendation for Construction Services tender to City Project Manager by August 06, 2021.
 - (e) Substantial Performance of the construction contract to be achieved by February 28, 2022.
 - (f) Total Performance of the construction contract to be achieved by March 31, 2022.

THIRD PARTY AGREEMENTS

D22. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D22.1 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.
- D22.2 Further to D22.1, in the event that the obligations in D22 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 C7.4. In all other respects Funding Costs will be processed in accordance with Changes in Services under C7.
- D22.3 For the purposes of D22:
- (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.
- D22.4 Modified Insurance Requirements
- D22.4.1 If not already required under the insurance requirements identified in D18, 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.
- D22.4.2 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.
- D22.4.3 Further to D18.6 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.
- D22.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D22.5 Indemnification By Consultant

- D22.5.1 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.
- D22.6 Records Retention and Audits
- D22.6.1 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.
- D22.6.2 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 D22.6.1 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.
- D22.7 Other Obligations
- D22.7.1 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.
- D22.7.2 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.
- D22.7.3 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.
- D22.8 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.

APPENDIX A – LIST OF RELEVANT EXISTING RECORD DRAWINGS

APPENDIX B – DMS PRIMARY CLARIFIER NO 1&2 INSPECTION REPORTS

APPENDIX C – KGS SEWPCC PRIMARY CLARIFIER NO. 2 RAIL WEAR INVESTIGATION

APPENDIX D – KGS PRIMARY CLARIFIER NO. 3 TRUSS ANALYSIS

APPENDIX E – RADIOGRAPHIC X-RAY INSPECTION REPORT

APPENDIX F – PCT BRIDGES PRELIMINARY DESIGN AND CONDITION ASSESSMENT

APPENDIX G – WSTP ARCHITECTURAL DESIGN GUIDELINE

APPENDIX H – WSTP BUILDING MECHANICAL DESIGN GUIDELINE

APPENDIX I – WSTP CIVIL DESIGN GUIDELINES

APPENDIX J – WSTP PROCESS MECHANICAL DESIGN GUIDELINES

APPENDIX K – WSTP STRUCTURAL DESIGN GUIDELINES

APPENDIX L – WWD IDENTIFICATION STANDARD

APPENDIX M – WSTP PROJECT DOCUMENT NUMBERING STANDARD

APPENDIX N – WWD WASTEWATER HISTORICAL DAT RETENTION STANDARD

APPENDIX O – WWD SEWAGE TREATMENT PLANT TAG NAMING STANDARD

APPENDIX P – OPERATIONS MANUAL SPECIFICATION

APPENDIX Q – ENVIRONMENTAL PRESERVATION&COMPLIANCE AND MANAGEMENT POLICY

APPENDIX R – DEFINITION OF PROFESSIONAL CONSULTANT SERVICES

APPENDIX S – HOW TO USE A NON-MEDICAL MASK OR FACE COVERING

APPENDIX T – COVID-19 SCREENING QUESTIONS

APPENDIX U – WWD WSD ASSET REGISTRY

APPENDIX V – WWD PAINT COLOUR STANDARD

APPENDIX W – WSTP STANDARDS DEVIATION FORM

