



THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 943-2020

**PROFESSIONAL CONSULTING SERVICES FOR ARMSTRONG COMBINED
SEWER DISTRICT PRELIMINARY DESIGN**

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 PROFESSIONAL CONSULTING SERVICES FOR ARMSTRONG COMBINED SEWER DISTRICT PRELIMINARY DESIGN

B2. SUBMISSION DEADLINE

B2.1 The Submission Deadline is 12:00 noon Winnipeg time, June 4, 2021.

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.

B2.3 Proposals received later than the Submission Deadline will not be accepted and will be returned upon request.

B3. ENQUIRIES

B3.1 All enquiries shall be directed to the Project Manager identified in D2.

B3.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposal, or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.

B3.3 Responses to enquiries which, in the sole judgment of the 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.

B3.4 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.

B3.5 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.

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

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

B4. CONFIDENTIALITY

B4.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the 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.

B4.2 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.

B5. ADDENDA

B5.1 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.

B5.2 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.

B5.3 Addenda will be available on the MERX website at www.merx.com.

B5.4 The Proponent is responsible for ensuring that he/she has received all addenda and is advised to check the MERX website for addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.

B5.5 The Proponent shall acknowledge receipt of each addendum in Paragraph 10 of Form A: Bid/Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B5.6 Notwithstanding B3B3, enquiries related to an Addendum may be directed to the Project Manager indicated in D2.

B6. PROPOSAL SUBMISSION

B6.1 The Proposal shall consist of the following components:

- (a) Form A: Bid/Proposal (Section A) in accordance with B7;
- (b) Fees (Section B) in accordance with B8.

B6.2 The Proposal should also consist of the following components:

- (a) Experience of Proponent and Subconsultants (Section C) in accordance with B9;
- (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B10;
- (c) Project Understanding and Methodology (Section E) in accordance with B11; and
- (d) Project Schedule and Work Breakdown Structure (Section F) in accordance with B12.

B6.3 Further to B6.1 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.

B6.4 Further to B6.2, 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.

B6.5 Proposal format, including, 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.

B6.6 The Proposal should be twenty-five (25) pages or less in total, excluding appendices.

B6.7 The Proposal shall be submitted electronically through MERX at www.merx.com.

B6.7.1 Proposals will **only** be accepted electronically through MERX.

B6.8 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposal, will be evaluated in accordance with B21.1(a).

B6.9 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B7. PROPOSAL (SECTION A)

B7.1 The Proponent shall complete Form A: Bid/Proposal, making all required entries.

B7.2 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.

B7.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B7.2.

B7.3 In Paragraph 3 of Form A: Bid/Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.

B7.4 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.

B7.4.1 The name and official capacity of all individuals signing Form A: Bid/Proposal should be entered below such signatures.

B7.5 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.

B8. FEES (SECTION B)

B8.1 The Proposal shall include a fixed fee for B8.1 (a), (b) and (c) based on the Work identified in D7 Scope of Services.

- (a) Data Collection and Assessment
- (b) Hydraulic Modelling Assessment
- (c) Preliminary Design
 - (i) There shall be a fixed fee breakdown of the solution development for grey infrastructure, green infrastructure, and real time control components, assuming there will be an initial assessment phase and allowances for taking a grey

infrastructure, up to three (3) GI and two (2) RTC infrastructure solution components to the preliminary design level of detail including all the related design deliverables.

- B8.2 The Proposal should include Form P: Person Hours showing the Work Breakdown identified in B12.3, hourly breakdown and assigned Key Personnel for each Fixed Fee item of work identified in D7 Scope of Services.
- B8.3 The hourly rate schedule for Key Personnel in Form P: Person Hours will be utilized where required for the work identified in D6.5 Geotechnical Work Allowance and D6.6 Additional Work Allowance.
- B8.3.1 The Proponent should include in their Proposal:
- (a) Geotechnical Work Allowance of \$250,000 on Form B: Fees and Form P: Person Hours;
 - (b) Additional Work Allowance of \$250,000 on Form B: Fees and Form P: Person Hours;
 - (c) The Additional Work Allowance and Geotechnical Work Allowance are to be included in the calculation of total Fees proposed by the Proponent.
- B8.3.2 The Additional Work Allowance is to be used for engineering and design services that arise due to unforeseen conditions arising throughout the project.
- B8.3.3 The Additional Work Allowance and Geotechnical Work Allowance shall only be used with written permission of the Project Manager.
- B8.4 Adjustments to Fees will only be considered based on increases to the Scope of Services.
- B8.4.1 The City will not consider an adjustment to the Fees based on changes in the Project budget.
- B8.4.2 Adjustments to the fees will be considered based on adjustments for inflation and annual staffing rate increases.
- B8.5 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.
- B8.6 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.
- B8.7 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.
- B8.8 Payments to Non-Resident Proponents are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).
- B8.8.1 Fees stated shall not include any costs which may be incurred by the Proponent with respect to any applicable funding agreement obligations as outlined in D15. Any such costs shall be determined in accordance with D15.

B9. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)

- B9.1 Proposals should include:
- (a) details demonstrating the history and experience of the Proponent and Subconsultants in providing programming; evaluation, design, management of the project and contract administration services on three (3) projects of similar complexity, scope and value.
 - (i) Priority in evaluation shall be given to projects of similar scope, then of similar complexity, and finally of similar value.
- B9.2 For each project listed in B9.1(a), the Proponent should submit:

- (a) description of the project;
- (b) role of the Proponent;
- (c) scope of the engineering assignment that the Proponent was contracted to perform;
- (d) project's original contracted cost and final cost;
- (e) design and schedule (anticipated Project schedule and actual Project delivery schedule, showing design separately);
- (f) project owner;
- (g) reference information (consisting of two (2) current contact names, email addresses and telephone number contact information associated with each reference project):
 - (i) References may be used to confirm information provided in the Proposal.
 - (ii) Other sources not named in references may be contacted to verify the qualifications, work experience, past projects, applicability of the role, etc.

B9.2.1 Where applicable, information should be separated into Proponent and Subconsultant project listings.

B9.3 The Proposal should include general firm profile information, including years in business, average volume of work, number of employees and other pertinent information for the Proponent and all Subconsultants.

B10. EXPERIENCE OF KEY PERSONNEL ASSIGNED TO THE PROJECT (SECTION D)

B10.1 Describe your approach to overall team formation and coordination of team members.

- (a) Include an organizational chart for the Project

B10.2 All team members, including Key Personnel and their roles as per B10.4 should be included in the organizational chart. Clearly identify any Subconsultants that are part of the work.

- (a) Distinguish roles and Key Personnel for any Subconsultants that are part of the work.

B10.3 The Proponent should provide details of how the Subconsultant Personnel will work with the primary consultant for the execution of the Work. This includes project management, execution of the scope, meeting schedules and deliverables submissions.

B10.4 Key Personnel shall be defined as each person providing support in the technical and project management aspects of the Work specified in PART D - – Supplemental Conditions and D7– Scope of Services.

- (a) Involvement in the technical aspects shall include but not be limited to the following:
 - (i) Deliverable development;
 - (ii) Communication with the City regarding the requirements of the Work.
- (b) Involvement in the project management aspects shall include but not be limited to the following:
 - (i) directing and coordinating efforts of the Proponent team to achieve the specific Project goals and objectives and to meet all City requirements;
 - (ii) Development of project budget estimates and schedules;
 - (iii) Monitoring and controlling work schedule and costs;
 - (iv) Progress reporting in order to track and measure schedule and cost performance for the Scope of Services;
 - (v) Maintaining ongoing communication with the City to coordinate reviews of deliverables and to provide project status;
 - (vi) Quality control/quality assurance of deliverables.

B10.5 Submit the experience and qualifications of the Key Personnel assigned to the Project and identified in the organizational chart as per B10.1., including the following:

- (a) proposed role and responsibilities;
- (b) core capabilities and/or technical skills
- (c) educational background and degrees,
- (d) professional recognition,
- (e) job title,
- (f) years of experience in current position,
- (g) years of experience related to the items identified in PART D - Supplemental Conditions and Scope of Services, and
- (h) years of experience with existing employer.

B10.6 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 B9, provide only the project name and the role of the key person. For other projects, provide the following:

- (a) Description of project;
- (b) Role of the Key Personnel;
- (c) Project Owner;
- (d) Reference information (consisting of one (1) current contact name, email address and telephone number contact information associated with each reference project)
 - (i) References may be used to confirm information provided in the Proposal.
 - (ii) Other sources not named in references may be contacted to verify the qualifications, work experience, past projects, applicability of the role, etc.

B11. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)

B11.1 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.

B11.2 Methodology should be presented in accordance with the Scope of Services identified in D6.

B11.3 Proposals should address:

- (a) the team's understanding of the broad functional and technical requirements;
- (b) the team's understanding of the urban design issues;
- (c) the teams' understanding of International Association for Public Participation (IAP2) processes and principles and how they apply to the Project;
- (d) the proposed Project budget;
- (e) the City's Project methodology with respect to the information provided within this RFP and the City's Project Management Manual at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#2> and templates at <http://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4> ; and;
- (f) any other issue that conveys your team's understanding of the Project requirements.

B11.4 Further to B11.3(c), the City considers Foundations of Public Engagement offered by IAP2 an asset. Although IAP2 training is considered an asset, it is not a requirement, and qualifications and experience will be weighted more heavily than training.

B11.5 The Proposal should include Form P: Person Hours for all disciplines and or phases identified in D7 Scope of Services.

B11.5.1 The total Fees on Form P: Person Hours should match Fees submitted in response to B8.

- B11.6 Proponents may use Form P: Person Hours or a table of their own design provided it includes all information requested in accordance with B11.5.
- B11.7 A sample of Form P: Person Hours can be found at <https://winnipeg.ca/matmgt/templates/information.stm>
- B11.8 For each person identified in B10.2, list the percent of the person's time to be dedicated to the Project in accordance with the Scope of Services identified in D7.

B12. PROJECT SCHEDULE AND WORK BREAKDOWN (SECTION F)

- B12.1 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project, 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, including those under the "Additional Work Allowance"
- B12.2 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.
- (a) Refer to D6.2.3 for the minimum timeframes for the City review of specific project deliverables. The minimum timeframes stipulated in D6.2.3 are not exhaustive. The Proponent shall use their judgement for estimating timeframes all other review and approval processes.
- B12.3 The Proponent will present a work breakdown structure in Form P that aligns with the project schedule showing:
- (a) the key personnel and hours assigned to each activity in the schedule;
- (b) the total costs assigned to each activity in the schedule.

B13. DISCLOSURE

- B13.1 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.
- B13.2 The Persons are:
- (a) Jacobs Engineering Group Inc. (Formerly CH2MHILL Ltd.)
- (b) I.D. Engineering Canada Inc.
- (c) Tetra Tech
- B13.3 The following reports were prepared by the organizations identified in B13.2:
- (a) CSO Master Plan, Jacobs Engineering Group Inc. 2019.
- (i) Armstrong District Plan, Jacobs Engineering Group Inc. 2019.
- (b) CSO Master Plan Preliminary Proposal, CH2MHILL Ltd. 2015.Phase 4 of the CSO Monitoring Program Instrumentation Plan, Tetra Tech. 2013
- (c) Sewer Relief Study: Armstrong Combined Sewer District Conceptual Report, I.D. Engineering Canada Inc. 1993.

B14. CONFLICT OF INTEREST AND GOOD FAITH

- B14.1 Proponents, by responding to this RFP, declare that no Conflict of Interest currently exists, or is reasonably expected to exist in the future.
- B14.2 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.

B14.3 In connection with its Proposal, each entity identified in B14.2 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.

B14.4 Without limiting B14.3, 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.

B14.5 Without limiting B14.3, 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 B14.4 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.

B14.6 The final determination of whether a perceived, potential or actual Conflict of Interest exists shall be made by the City, in its sole discretion.

B15. QUALIFICATION

B15.1 The Proponent shall:

- (a) undertake to be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Proponent does not carry on business in Manitoba, in the jurisdiction where the Proponent does carry on business; and
- (b) be financially capable of carrying out the terms of the Contract;
- (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.

B15.2 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>

B15.3 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.

B15.4 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.

B15.5 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.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

B16.1 Proposals will not be opened publicly.

B16.2 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.

B16.3 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).

B16.3.1 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.

B16.4 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.

B17. IRREVOCABLE OFFER

B17.1 The Proposal(s) submitted by the Proponent shall be irrevocable for the time period specified in Paragraph 11 of Form A: Bid/Proposal.

B17.2 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.

B18. WITHDRAWAL OF OFFERS

B18.1 A Proponent may withdraw his/her Proposal without penalty prior to the Submission Deadline.

B19. INTERVIEWS

B19.1 The Project Manager may, in his/her sole discretion, interview Proponents during the evaluation process.

B20. NEGOTIATIONS

B20.1 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.

B20.2 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.

B20.3 If, in the course of negotiations pursuant to B20.2, 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.

B21. EVALUATION OF PROPOSALS

B21.1 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 B15: (pass/fail)
- (c) Fees; (Section B) 35%
- (d) Experience of Proponent and Subconsultant; (Section C) 20%
- (e) Experience of Key Personnel Assigned to the Project; (Section D) 10%
- (f) Project Understanding and Methodology (Section E) 25%
- (g) Project Schedule and Work Breakdown Structure. (Section F) 10%

- B21.2 Further to B21.1(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.
- B21.3 Further to B21.1(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.
- B21.4 If, in the sole opinion of the City, a Proposal does not achieve a pass rating for B21.1(a) and B21.1(b), the Proposal will be determined to be non-responsive and will not be further evaluated.
- B21.5 Further to B21.1(c), Fees will be evaluated based on Fees submitted in accordance with B8.
- B21.6 Further to B21.1(c), the Award Authority may reject a Proposal as being non-responsive if it exceeds the funds available as shown in D6.9.1.
- B21.7 Further to B21.1(d), Experience of Proponent and Subconsultants will be evaluated considering the information provided in response to B9.
- B21.8 Further to B21.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the experience and qualifications of the Key Personnel and Subconsultant personnel on Projects of comparable size and complexity, in accordance with B10.
- B21.9 Further to B21.1(f), Project Understanding and Methodology will be evaluated considering your firm's understanding of the City's Project, project management approach and team organization, in accordance with B11.
- B21.10 Further to B21.1(g), Project Schedule and Work Breakdown Structure will be evaluated considering the Proponent's ability to comply with the requirements of the Project, in accordance with B12.
- B21.11 Notwithstanding B21.1(d) to B21.1(g), where Proponents fail to provide a response to B6.2(a) to B6.2(d), the score of zero may be assigned to the incomplete part of the response.
- B21.12 Proposals will be evaluated considering the information in the Proposal Submission and any interviews held in accordance with B19.
- B21.13 Where references are requested, the reference checks to confirm information provided may not be restricted to only those submitted by the Proponent, and may include organizations representing Persons, known to have done business with the Proponent.

B22. AWARD OF CONTRACT

- B22.1 The City will give notice of the award of the Contract, or will give notice that no award will be made.
- B22.2 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.
- B22.2.1 Without limiting the generality of B22.2, 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.

- B22.3 Where an award of Contract is made by the City, the award shall be made to the qualified Proponent submitting the most advantageous offer.
- B22.4 The City may, at its discretion, award the Contract in phases.
- B22.5 Further to B22.4 the City reserves the right to negotiate and award future phases to the successful Proponent.
- B22.6 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.
- B22.6.1 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.
- B22.7 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(o).
- B22.8 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 D15 shall immediately take effect upon confirmation of such funding, regardless of when funding is confirmed.
- B22.9 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.
- B22.10 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:

Patrick Coote

Senior Project Engineer

Telephone No. 204 986-2456

Email Address: pcoote@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) "ACE" means the Association for the Advancement of Cost Engineering;
- (b) "Class 3 Cost Estimate" means an estimate with an expected accuracy range within -20% to +30%. This estimate is typically associated with the preliminary design level of definition;
- (c) "CAD" means Computer Assisted Drafting;
- (d) "City Stakeholders" means City of Winnipeg Management Staff that are not directly involved in deliverables review, but are directly or indirectly impacted by the findings of this project;
- (e) "CS" means combined sewer;
- (f) "CSD" means combined sewer district;
- (g) "CSO" means combined sewer overflow;
- (h) "DEP" means the District Engineering Plan prepared as part of the 2019 CSO Master Plan;
- (i) "DWF" means dry weather flow;
- (j) "External Stakeholders" means entities that are outside of the City of Winnipeg, including but not limited to organizations, private business entities, private citizens, and/or the public at large which may be directly or indirectly impact by the findings of this project;
- (k) "GI" means Green Infrastructure. It refers to urban sustainability infrastructure that uses natural hydrologic processes to reduce, store, or attenuate surface runoff from entering the combined or land drainage sewer systems.;
- (l) "GIS" means Geographical Information System;
- (m) "Grey Infrastructure" means the traditional and conventional infrastructure such as sewer pipe or storage tanks.;
- (n) "LDS" means land drainage sewer;
- (o) "NEWPCC" means North End Sewage Treatment Plant;
- (p) "North End Catchment" means the collective sewer districts with flows that contribute to the NEWPCC for treatment;

- (q) "PDF" means Portable Document Format electronic file;
- (r) "PDWF" means peak dry weather flow;
- (s) "PWWF" means peak wet weather flow;
- (t) "Professional Engineer" means an engineer registered in the Province of Manitoba;
- (u) "Project Manager" means the City's Project Manager pertinent to the project stated in the Request for Proposal unless specified otherwise in the context;
- (v) "RTC" means real time control;
- (w) "Solution" refers to the overall solution and its components proposed to meet specific Project design requirements, goals and objectives specified in the RFP. Solution components consist of grey, green and real time control infrastructure.;
- (x) "SRS" means storm relief sewer;
- (y) "TM" means Technical Memorandum;
- (z) "Working Group" means the City of Winnipeg staff that are directly involved in deliverables review with the Proponent;
- (aa) "WWD" means City of Winnipeg's Water and Waste Department;
- (bb) "WWF" means wet weather flow; and
- (cc) "WWS" means wastewater sewer.

D4. BACKGROUND

- D4.1 Armstrong district is located in the northern section of the combined sewer (CS) area to the west of the Red River. The district is bounded by Leila Avenue and the Canadian Pacific Railway (CPR) Winnipeg Beach to the north, McPhillips Street to the west, King Sudbury Avenue to the south, and Main Street to the east. Armstrong district primarily includes residential area with the majority being single-family residential. The residential area is mainly located east of Sinclair Street. This district also includes commercial areas including a section of the Garden City Shopping Centre adjacent to McPhillips Street. The CPR Winnipeg Beach line passes through the southern end of Armstrong District. Salter Street, McGregor Street, McPhillips Street, and Main Street are regional transportation routes running north to south on either side of the district, with Partridge Avenue and Leila Avenue being regional routes running east to west.
- D4.2 Armstrong district has an approximate area of 860 hectares (ha), including approximately 150 ha of CS system and 710 ha of separate sewer systems. It has approximately 24 ha of greenspace including Garden City Park, Margaret Park, and Vince Leah Park.
- D4.3 The Armstrong District Plan, Jacobs Engineering Group Inc. 2019, documents existing information on the district as well as information on the conceptual CSO Master Plan upgrades required in Armstrong to contribute to achieving City wide 85% CSO volume capture.
- (a) A complete sewer separation scheme which involves the installation of a wastewater sewer (WWS) system on Leila Avenue to collect sanitary sewerage and foundation drainage, and the conversion of the existing CS system to a land drainage sewer (LDS) system to collect stormwater and runoff, is proposed to eliminate CSOs for the 1992 Representative Year design event.
 - (i) All sanitary sewerage and foundation drainage are proposed to be directed to the new WWS system to convey flow to the Main Interceptor and the North End Sewerage Treatment Plant (NEWPCC) for treatment.
 - (ii) All stormwater and runoff are proposed to be directed to the converted LDS system to the existing Armstrong outfall to the Red River.
 - (b) The cost estimate for the sewer separation work in 2019 dollars \$67 million, the class 5 AACE estimate is \$134 million.

- (c) Additional allowances of 10% for real time control (RTC) and 10% for Green Infrastructure (GI) of the estimated capital costs are included in the CSO Master Plan for solutions opportunities identified during the Preliminary Design.

- D4.4 District flow monitoring data was collected in 2016, analyzed and documented in Armstrong Combined Sewer District (CSD) Summary Report, City of Winnipeg, 2018.
- D4.5 The Sewer Relief Study: Armstrong Combined Sewer District Conceptual Report (I.D. Engineering Canada Inc, 1993) developed sewer relief options to provide a 5-year level of protection against basement flooding and alternatives to reduce CSO discharges and eliminate CSO pollutant loadings.
- D4.6 Between 2009 and 2015, the City invested \$12 million in the CSO Outfall Monitoring Program. The program was initiated to permanently install instruments in the primary CSO outfalls to monitor and assess CSO performance at CS outfalls. The outfall from the Armstrong Combined Sewer District was included as part of this program. Instruments installed at each of the 39 primary CSO outfall locations have a combination of inflow and overflow level meters and flap gate inclinometers if available. The outfall monitoring instruments were installed at the Armstrong district since 2015. The isometric drawings developed as part of the Phase 4 of the CSO Monitoring Program Instrumentation Plan (Tetra Tech, 2013) that illustrate the instrumentation locations will be provided upon request per requirements stated in D5.3.
- D4.7 The NEWPCC which receives all wastewater from the Armstrong district, is currently undergoing major upgrades to the entire treatment plant. Once these upgrades are complete, the following pumping capacities will be provided:
 - (a) Maximum pumping capacity (raw sewage): 1080 ML/d
 - (b) Firm maximum pumping capacity (largest pump out of service): 720 ML/d
- D4.8 Flooding concerns have been identified in the Amber Trail pond system. Amber Trails is a separate sewer district that is located north of Armstrong, servicing an approximate area of 306 ha. The land drainage flow from Amber Trails currently discharges to the sewer trunk on Leila Avenue, which eventually discharges to the Armstrong CS outfall. To alleviate the flooding concerns at Amber Trails, the increase in outflows to the LDS trunk is proposed. A hydraulic analysis and cost analysis are to be determined to understand the feasibility and impact on the downstream system to accommodate the outflow increases.
- D4.9 Catchment areas, Precinct A and Precinct B are new developments as part of the OurWinnipeg initiative. They encompass an approximate area of 260 ha and 242 ha, respectively. The land drainage system of Precinct A is proposed to be connected to Precinct B's. The combined flows from Precinct A and B are proposed to be discharged to either the existing CS trunk or a new separate land drainage system along Leila Ave. The hydraulic analysis and cost estimates a result of the additional land drainage flows from Precinct A and Precinct B to are to be determined to understand the feasibility and impact on the downstream system to accommodate the flow increases.

D5. RELEVANT DOCUMENTS, DRAWINGS AND DATABASE

- D5.1 The following relevant documents are available at the City of Winnipeg website at: <https://winnipeg.ca/waterandwaste/sewage/csoMasterPlan.stm#tab-documents>
 - (a) Environment Act Licence No. 3042, MB Conservation and Water Stewardship. 2013
 - (b) CSO Master Plan Preliminary Proposal, CH2MHill Ltd. 2015.
 - (c) CSO Master Plan Preliminary Proposal Approval Letter, CH2MHill Ltd. 2015.
 - (d) CSO Master Plan. Jacobs Engineering Group Inc, 2019.
 - (e) CSO Master Plan – Armstrong District Plan, Jacobs Engineering Group Inc. 2019.
 - (f) CSO Master Plan Approval Letter, MB Conservation and Climate. 2019.

- D5.2 Additional relevant documents, drawings and database are available by request to the City's Project Manager after completion of the Non-Disclosure Agreement in Appendix A.
- D5.3 The following information will be released at the sole discretion of the City upon completion of Appendix A per D5.2:
- (a) Armstrong Outfall Gate Chamber Drawing. City of Winnipeg. 1986
 - (b) Sewer Relief Study: Armstrong Combined Sewer District Conceptual Report. I.D. Engineering Canada Inc. 1993
 - (c) CSO Outfall Monitoring Instruments - Armstrong Isometric Drawings, Stantec. 2013.
 - (d) 2016 Flood Manual Primary Line of Defense (PLD) Drawings. 2018
 - (i) PLD111 and PLD 112
 - (e) Armstrong CS District Flow Monitoring Summary Report, City of Winnipeg. 2018
 - (f) Precinct A and B Boundary Figures
 - (g) Amber Trails LDS Catchment Areas Plan, Stantec Consulting Ltd, 2012.
 - (h) InfoWorks ICM version 11 City of Winnipeg Hydraulic Model Database

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) Other reports and documents not involving the practice of professional engineering, such as letters of information and minutes of meetings, may be originated and signed by other personnel engaged by the Consultant and accepted by the City.
- D6.1.2 The Consultant shall, at a minimum, use the most current industry standard sustainable practices and conform to the latest codes, standards, regulations and legislative requirements in effect. The Consultant shall liaise with the Project Manager on the application of codes and standards.
- D6.1.3 The Consultant shall not substitute, replace or add additional Key Personnel throughout the duration of the Project without written approval of the Project Manager.
- (a) Experience and qualifications as specified in B10.5 shall be submitted for all requested substitute(s), replacement(s), or additional Key Personnel.

D6.2 General Requirements for Project Deliverables

- D6.2.1 The Consultant should provide a project share point where all collected data and project deliverables are saved.
- D6.2.2 Deliverables Submission Requirements
- (a) All deliverables shall have incorporated the Consultant's internal quality procedures before being submitted to the City.
 - (b) All supporting documents to the deliverables shall be provided in the native file format (i.e. Microsoft Excel, CAD dwg files, GeoMedia files and etc.), with the exception of hard copies where they can be scanned and converted into an electronic format
 - (c) All draft report deliverables shall be provided in both Microsoft Word format and in searchable PDF format.
 - (d) Comment tracking spreadsheets shall be created as part of draft document revisions and resubmissions process.

- (i) Comment tracking spreadsheet to log specific comments/edits requested by the City working group, the Consultant's response, and City's acceptance/rejection of Consultants response.
- (e) Project Manager must give final approval that all comments have been satisfactorily answered prior to the Consultant printing paper copies
- (f) All final report versions shall be provided in searchable PDF format.
- (g) Two (2) paper copies, with one (1) unbound and one (1) bound shall be submitted of all documents once finalized.

D6.2.3 Draft Deliverables Minimum Submission Requirements.

- (a) This sequence of deliverable submission is required at minimum over the course of the Project, unless specified otherwise by the Project Manager. The Consultant can determine if additional submission stages beyond those listed below are required. Proposed additional submission stages shall be included in the Proposal.
- (b) Specific requirements to each of the following sections are identified in D7 Scope of Services.
 - (i) 60% Draft Data Collection and Assessment Technical Memorandum (TM)
 - ◆ Draft TM shall be submitted to the Project Manager at least fifteen (15) Business Days prior to the 60% Data Collection and Assessment Review Meeting to discuss the draft TM.
 - ◆ The draft TM shall document the data collection and assessment phase, and include proposed survey work for the preliminary design phase and for the proposed model improvements for review and approval by the City.
 - (ii) 60% Draft Hydraulic Modeling TM
 - ◆ Draft TM shall be submitted to the Project Manager at least fifteen (15) Business Days prior to the 60% Hydraulic Modelling and Assessment Review Meeting to discuss the draft TM.
 - ◆ The draft TM shall document the model assessment and proposed model improvements for review and approval by the City.
 - (iii) 95% Draft Data Collection and Assessment TM
 - ◆ Draft TM shall be submitted to the Project Manager at least fifteen (15) Business Days prior to the 95% Data Collection and Assessment Review Meeting to discuss the draft TM
 - ◆ The draft TM shall address any comments from the 60% review and document the completed survey work.
 - ◆ Any additional survey work shall be documented.
 - (iv) 95% Draft Hydraulic Modeling TM
 - ◆ Draft TM shall be submitted to the Project Manager at least fifteen (15) Business Days prior to the 95% Hydraulic Modelling and Assessment Review Meeting to discuss the draft TM
 - ◆ The draft TM shall address any comments from the 60% Hydraulic Modelling TM review and document the approved model improvement work in accordance with City modeling guidelines, CoW Modeling Guidelines Rev1.0, see Appendix I.
 - ◆ Any additional potential further model improvements shall be documented.
 - (v) Model Databases
 - ◆ Model databases and associated files shall be submitted as per the model guidance requirements, Appendix I - City Modelling Guidelines for this phase at least fifteen (15) Business Days prior to the 95% Hydraulic Modeling and Assessment Review Meeting to discuss the 95% draft Hydraulic Modeling TM.

- (vi) GI Opportunities and Decision Matrix
 - ◆ A draft of the proposed GI Opportunities and Decision Matrix shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the GI Opportunities and Decision Matrix Review Meeting.
 - ◆ The GI Decision Matrix template and structure shall be approved by the Project Manager prior to preparing a draft.
 - ◆ This task can start at anytime followed by the 95% Draft Data Collection and Assessment TM submission.
 - ◆ The GI Opportunities and Decision Matrix shall be included as part of the 60% Preliminary Design Report submission, 95% Preliminary Design Report submission and Final Preliminary Design Report submission.
- (vii) Real Time Control (RTC) Opportunities and Decision Matrix
 - ◆ A draft of the proposed RTC Opportunities and Decision Matrix shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the RTC Opportunities and Decision Matrix Review Meeting.
 - ◆ The RTC Decision Matrix template and structure shall be approved by the Project Manager prior to preparing a draft.
 - ◆ This task can start at anytime followed by the 95% Draft Data Collection and Assessment TM submission.
 - ◆ The RTC Opportunities and Decision Matrix shall be included as part of the 60% Preliminary Design Report submission, 95% Preliminary Design Report submission and Final Preliminary Design Report submission.
- (viii) 60% Preliminary Design Report
 - ◆ 60% complete draft of Preliminary Design Report shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the 60% Draft Review Meeting.
 - ◆ The preliminary design report shall be completed using the City Preliminary Design Report Template Rev1.0 in Appendix B, any modifications to the provided template shall require approval from the Project Manager for inclusion.
- (ix) Risk Register
 - ◆ A draft Risk Register shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the Risks and Opportunities Identification Meeting.
 - ◆ The Risk Register shall be completed using the template in the City Preliminary Design Report Template Rev1.0 in Appendix B. Any modifications to the template will require approval from the Project Manager.
 - ◆ This task can start at anytime followed by the 60% Preliminary Design Report submission.
 - ◆ The Risk Register template and structure shall be approved by the Project Manager prior to preparing a draft.
 - ◆ The Risk Register shall be included as part of the 95% Preliminary Design Report submission and Final Preliminary Design Report submission.
- (x) Stakeholder Engagement Plan
 - ◆ A draft Stakeholder Engagement Plan shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the Stakeholder Identification and Engagement Meeting.
 - ◆ This task can start at anytime followed by the 60% Preliminary Design Report submission.
 - ◆ The Stakeholder Engagement Plan shall be completed using the template in the City Preliminary Design Report Template Rev1.0 in

Appendix B. Any modifications to the template will require approval from the Project Manager.

- ◆ The Stakeholder Engagement Plan shall be included in the 95% Preliminary Design Report submission and Final Preliminary Design Report submission.
 - (xi) 95% Preliminary Design Report and Presentation
 - ◆ 95% complete draft of Preliminary Design Report shall be submitted to the Project Manager, at least fifteen (15) Business Days prior to the 95% Preliminary Design Review Meeting, which shall include a presentation of the Preliminary Design
 - ◆ Preliminary Design Report Presentation Slides shall be submitted and reviewed by the City Working Group at least fifteen (15) Business Days prior to the scheduled 95% Preliminary Design Review Meeting.
 - (xii) Drawings
 - ◆ Solution Preliminary Design drawings shall be provided in conjunction with the 60% Preliminary Design Report, 95% Preliminary Design Report and Final Preliminary Design Report submissions.
 - ◆ Refer to D7.16 for specific drawing requirements.
 - (xiii) Monthly Progress Reports
 - ◆ Progress reporting shall be submitted to the City on a monthly basis, a minimum of two (2) Business Days prior to the Monthly Progress Meetings.
 - ◆ Monthly progress meetings and reporting shall meet additional requirements specified in D7.6.3 (a).
- D6.2.4 Reporting will be completed in a format consistent with the Consultant's Work Breakdown Structure (WBS) and be reconcilable with the accounting and invoicing system.
- D6.2.5 Final Deliverables Submission Requirements
- (a) Final Documents
 - (i) Final documents shall address all comments from the draft documents review.
 - (ii) Final approvals from the Project Manager shall be provided to ensure that all comments have been satisfactorily addressed prior to the Consultant printing paper copies.
 - (iii) Two (2) paper copies, with one (1) unbound and one (1) bound copy shall be submitted of all documents once finalized.
 - (iv) Searchable PDF copy and native file format document of all final documents shall be submitted.
 - (b) Model Databases
 - (i) Hydraulic model shall be updated to reflect on the most updated information per the City Modelling Guidelines in Appendix I.
 - (ii) Consultant shall submit all model files in native file format in addition to other requirements outlined in D7.8 and Appendix I.
 - (c) Drawings
 - (i) Final drawings shall incorporate all comments from the draft drawing review.
 - (ii) Drawings shall be submitted in both PDF and native file format.
- D6.2.6 The Consultant shall provide, within sixty (60) Calendar days of the provision of the final Preliminary Design Report, electronic copies of all supporting documents pertinent to the final deliverables such that the deliverables' outcome can be reproduced.
- D6.3 The format of the deliverables and supporting documents should be provided in native file format. General Requirements for Meetings

- D6.3.1 Various project meetings will be required throughout the Project in order to track the Consultant's progress, review the Project work plan, address Project issues and allow for technical reviews with the City. The Consultant will be responsible for the coordination of all meetings and should clearly indicate the locations, number of meetings and proposed meeting schedule associated with meetings for each of the various tasks/work activities in their Proposal Submission.
- D6.3.2 An agenda shall be sent to the Project Manager at least two (2) Business Days prior to any meeting.
- D6.3.3 The Consultant shall take minutes at all meetings and workshops in which they attend. Minutes are to be forwarded to the Project Manager within five (5) Business Days.
- D6.3.4 Meetings may be completed, through phone or video conference, remotely, or at the City's offices.
- D6.3.5 Mandatory meetings listed below to be attended by the Consultant's Project Manager and any relevant Key Personnel at minimum.
- (a) Project Initiation Meeting
 - (i) This meeting will at minimum cover:
 - ◆ Project communications,
 - ◆ Milestone dates,
 - ◆ Risks and Opportunities,
 - ◆ Data collection, and
 - ◆ City guidelines, templates and process
 - (b) Monthly progress meetings
 - (i) These meetings will be completed by teleconference, throughout the Project duration.
 - (c) Solution Appraisal and Design Consideration Workshop
 - (d) Data Collection and Assessment Review Meetings
 - (i) 60% draft TM review meeting
 - (ii) 95% draft TM review meeting
 - (e) Hydraulic Modelling and Assessment Review Meetings
 - (i) 60% draft TM review meeting
 - (ii) 95% draft TM review meeting
 - (f) Preliminary Design Review Meetings
 - (i) 60% draft report review meeting
 - (ii) 95% draft report and Preliminary Design Phase review meeting
 - (g) GI Opportunities and Decision Matrix Review Meeting
 - (h) RTC Opportunities and Decision Matrix Review Meeting
 - (i) Risks and Opportunities Identification Meeting
 - (j) Stakeholder Identification and Engagement Plan Meeting
- D6.3.6 The Consultant is to determine if additional meetings beyond the mandatory meetings listed above are required, they shall include these proposed meetings in their Proposal.
- D6.4 Relevant Design Standards
- D6.4.1 The following design standards shall be applicable to this project:
- (a) WWD Electrical Design guide (Appendix D);
 - (b) WWD Identification Standard (Appendix E);
 - (c) WWD HMI Layout and Animation Plan (Appendix F);

- (d) WWD Wastewater Treatment Facilities Automation Design Guide (Appendix G);
 - (i) These design requirements will also be applied to the collections system where relevant and useful.
- (e) WSTP Electrical and Instrumentation Standardization Summary (Appendix H);
 - (i) The City of Winnipeg has standardized on specific electrical and automation manufacturers. The Consultant should use standardized equipment in their preliminary design where applicable.
- (f) Computer Assisted Drafting (CAD) and Geographic Information System (GIS) Standards and templates can be found here:
https://winnipeg.ca/waterandwaste/dept/cad_gis.stm;
- (g) Modeling Guidelines
 - (i) See Appendix I for specific modeling requirements as part of the scope of work.
- (h) The City's Project Management Manual:
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#3>
- (i) The City's Project Management templates:
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#5>
- (j) The City's Investment Planning templates:
<https://winnipeg.ca/infrastructure/asset-management-program/templates-manuals.stm#4>

D6.4.2 Notwithstanding the foregoing, the Consultant is being engaged by the City for its professional expertise; the Consultant shall bring to the City's Project Manager's attention for any aspect of the City's standards, manuals, guidelines or templates which the Consultant is of the opinion is not consistent with good industry practice.

D6.5 Geotechnical Work Allowance

D6.5.1 The general requirements for the Geotechnical Work Allowance are as follows:

- (a) The Consultant shall include in the project schedule and Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Geotechnical Work Allowance when defined and approved.
- (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Geotechnical Work Allowance, the Consultant shall follow the requirements as stated in D6.1.3.
- (c) The Consultant shall apply a maximum of ten (10) percent markup on all work performed by a Subconsultant.
- (d) Expenditures under the Geotechnical Work Allowance must be authorized by the City's Project Manager.
- (e) Where the actual cost of performing the services under the Geotechnical Work Allowance is less than the amount of the Geotechnical Work Allowance, the City will be credited for the unexpended portion of the Geotechnical Work Allowance, but not for the Consultant's overhead and profit on such amount.
- (f) The Contract price will be adjusted by written order to provide for a difference between the amount of the Geotechnical Work Allowance and the actual cost of the work.
- (g) The City reserves the right to delete any or all of the Geotechnical Work Allowance from the Contract if the Work intended to be covered by the Geotechnical Work

Allowance is not required, or if the Work intended is found to be more extensive than the provisional Geotechnical Work Allowance.

D6.6 Additional Work Allowance

D6.6.1 The general requirements for the Additional Work Allowance are as follows:

- (a) The Consultant shall include in the project schedule, and Form P: Person Hours the hourly rates of all Key Personnel and non-Key Personnel proposed for this project by role. These rates will be used for the Additional Work Allowance when defined and approved.
- (b) If a member of the Consultant's Key Personnel or non-Key Personnel is not listed by name on Form P, when that staff member is proposed for work under the Additional Work Allowance, the Consultant shall follow the requirements as stated in D6.1.3.
- (c) The Consultant shall apply a maximum of ten (10) percent markup on all work performed by a Subconsultant.
- (d) Expenditures under the Additional Work Allowance must be authorized by the City's Project Manager.
- (e) The City reserves the right to delete any or all of the Additional Work Allowance from the Contract if the Work intended to be covered by the Additional Work Allowance is not required, or if the Work intended is found to be more extensive than that provisioned by the Additional Work Allowance.

D6.7 Invoicing

D6.7.1 Fixed Fee scope of work items as described in B8.1, excluding Project Management, shall only be invoiced on a percent complete process.

- (a) A breakdown of the work tasks items is referenced in D7.2.1 where each phase will be used to measure the percentage complete.
- (b) Where tasks such as Project Management appear in more than one phase, the estimated level of effort shall be appropriately proportioned to the phase.

D6.7.2 Any Additional Work Allowance scope items are approved to be completed on an hourly basis utilizing Form P. The Consultant shall submit monthly invoices for that scope of work.

D6.8 Stakeholders Engagement

D6.8.1 The Consultant shall establish a stakeholder engagement plan as part of the Preliminary Design phase once a hydraulically feasible solution/solutions are developed.

- (a) This engagement plan will document the timing during the project development that stakeholders will be contacted, and by what means.
- (b) The stakeholder engagement plan shall be developed with input from City Communications and Corporate Engagement and be subject to approval by the City's Project Manager.
- (c) Should this project include a public engagement aspect, it will be required to meet: Public Engagement Guidelines

<https://winnipeg.ca/PublicEngagement/pdfs/PublicEngagementRequirements.pdf>

D6.9 AVAILABLE FUNDS

D6.9.1 The funds available for this Contract are \$3 million.

D7. SCOPE OF SERVICES

D7.1 GENERAL PROJECT SCOPE SUMMARY

D7.1.1 To develop a feasible solution to eliminate CSOs in the Armstrong CSD for the 1992 Representative Year Event.

- (a) Data should be collected and assessed to ensure sufficient information is available to achieve the Preliminary Design requirements.
- (b) The model should be considered fit for purpose by the Consultant to assess the district needs and develop and test hydraulically feasible solutions in combination with other design tools as necessary.
- (c) RTC and GI opportunities shall be explored and solutions developed where appropriate.
- (d) Review the proposed solution in the conceptual district plans and determine if the solutions may be carried forward or discarded if no longer viable based on improved information
- (e) The developed solution shall meet the following requirements:
 - (i) Meet the Design Standards specified in D6.4,
 - (ii) Be buildable with location plans, general arrangements considering utilities, ground conditions, land ownership and health and safety.
 - (iii) Pass the Level of Services checks by undertaking detriment assessment. An example template of the detriment assessment is provided in Appendix I City of Winnipeg Modelling Guidelines. Alternative design tool may be used to validate the Level of Service with the Project Manager's approval.
 - (iv) Meet the level of service for a minimum design horizon of 35 years.
- (f) Cost estimation should be developed and contract phasing should be proposed.
- (g) The estimated CSO volume reduction should be provided on a contract by contract basis.
- (h) Review the overall hydraulic impact of the City as a result of the proposed solution, this includes the review of the impact on the districts hydraulically connected to the Armstrong district, specifically the connection at the Newton district.
- (i) Review the hydraulic and the cost estimates impact on the proposed solution to accommodate the additional land drainage flows discharged from other developments, specifically the areas from Amber Trails, Precinct A, and Precinct B. Flow accommodation for Amber Trails should be prioritized before Precinct A and Precinct B.

D7.2 WORK COMPONENTS

D7.2.1 The major components of the Work include the following:

- (a) Project Management as outlined in D7.6
- (b) Data Collection and Assessment as outlined in D7.7;
- (c) Hydraulic Modelling and Assessment as outlined in D7.8;
- (d) Flow Monitoring and Management if required, as outlined in D7.9
- (e) Geotechnical Investigations if required, as outlined in D7.10.
- (f) Needs Assessment as outlined in D7.11;
- (g) Solution Development as outlined in D7.12;
- (h) Preliminary Design Report as outlined in D7.13;
- (i) Risks and Opportunities Identification as outlined in D7.14;
- (j) Stakeholder Engagement as outlined in D7.15;
- (k) Drawing Development as outlined in D7.16;
- (l) Cost Estimation as outlined in D7.17
- (m) Additional Work if required, as outlined in D7.18.

D7.3 The major components of the Work identified in D7.2 shall form the minimum requirements and anticipated high level sequence of work. The Consultant is encouraged to review the major work

components and provide additional information on how the work components could be altered, updated, or sequenced appropriately as part of their Proposal submission.

D7.4 Unless otherwise stated, the document titled "Definition of Professional Consultant Services" and attached as Appendix C shall be applicable to the provision of Professional Engineering services for this Project.

D7.5 Review all applicable information, data, surveys, reports and existing drawings related to the Project including, but not limited to the information contained in this RFP.

D7.6 PROJECT MANAGEMENT

D7.6.1 This Scope of Services item shall include all Project Management activities required to carry out each of the phases of work to achieve the deliverable requirements. Work under this task will include but not limited to the following:

- (a) directing and coordinating efforts of the Consultant team to achieve the specific Project goals and objectives and to meet all City requirements;
- (b) providing advice, engineering services, consultation and oversight with respect to the Scope of Services;
- (c) liaising with the City's Project Manager on a weekly basis (at a minimum) to provide Project status;
- (d) The Consultant Project Manager will be required to provide Progress Reporting in order to track and measure schedule and cost performance for the Scope of Services.

D7.6.2 All Project Management work is to be appropriately included in the cost for the phases of work.

D7.6.3 Deliverables

- (a) Monthly Progress Reports
 - (i) Submit within two (2) weeks of award the proposed progress reporting format for City review and acceptance.
 - (ii) Progress reporting shall follow submission requirements in D6.2.3(b)(xiii).
 - (iii) Progress reports will include the following minimum requirements:
 - ◆ Scope of Work and log of any changes through the project
 - ◆ Financial Status; Budget and Billings, Earned Value Management, Change Management log and contingency management.
 - ◆ Schedule Tracking; baseline and progress schedule, deliverable submission table with proposed dates and updated as needed.
 - ◆ Quality Management,
 - ◆ Issues Log,
 - ◆ Risks; high level risks summary and Risk Register (once developed).

D7.7 DATA COLLECTION AND ASSESSMENT

D7.7.1 Collect and review all available information about the site including files, reports, topography, existing facilities and future land use planning. Obtain utility information, and where necessary conduct field surveys and investigations to verify assumptions, existing conditions and to supplement available information.

D7.7.2 Information pertaining to data collection and its assessment shall be documented in the Data Collection and Assessment TM.

D7.7.3 The Data Collection and Assessment TM shall be delivered in three phases: 60% draft TM, 95% draft TM and Final Data Collection and Assessment TM

D7.7.4 The 60% Draft Data Collection and Assessment TM shall include the following minimum requirements:

- (a) Describe the available information about the district including files, reports, topography, existing facilities and future land use planning.
- (b) Obtain utility information, and where necessary, conduct field surveys and investigations to verify assumptions, existing conditions and to supplement available information.
- (c) Identify any data gap from the data review,
- (d) Describe additional survey or other data collection requirements to confirm the existing condition of the sewer system, and the approaches used to address the data gap, confirm assumptions and to determine site conditions, as applicable.

D7.7.5 Should any of the minimum requirements of the 60% Draft Data Collection and Assessment TM as per D7.7.4 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 60% Draft Review Meeting will be delayed until such time that a 60% Draft including all of the minimum requirements have been provided.

D7.7.6 The 95% complete Data Collection and Assessment TM shall include the following requirements at minimum:

- (a) Updates to all content developed in the 60% complete Data Collection and Assessment Report Draft. See D7.7.4.
- (b) Any pertinent feedback gathered from the 60% draft review process.
- (c) Include the latest available Hydraulic Modelling TM in the appendix

D7.7.7 Should any of the minimum requirements of the 95% Draft Data Collection and Assessment TM as per D7.7.6 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 95% Draft Review Meeting will be delayed until such time that a 95% Draft including all of the minimum requirements has been provided.

D7.7.8 Following the City's review of the 95% complete Data Collection and Assessment TM, the Consultant will address any remaining City comments.

D7.7.9 Following the City's approval that the Consultant has addressed all of the City's comments, a Final 100% complete version of the Data Collection and Assessment TM shall be submitted, see D6.2.4. The Final TM shall include the Final Hydraulic Modelling TM in the appendix.

D7.8 HYDRAULIC MODELLING AND ASSESSMENT

D7.8.1 The hydraulic modeling software to be used is InfoWorks Integrated Catchment Modeller (ICM) 11, the City Modelling Guidelines in Appendix I should be referred to for version control.

D7.8.2 All modelling work should adhere to the City Modeling Guidelines, unless otherwise agreed upon by the Project Manager.

D7.8.3 Verify the InfoWorks hydraulic model is fit for use to assess the district needs and develop solutions. Where model improvements are required, they should be identified and work to update the model proposed to the City for approval.

D7.8.4 A copy of the City InfoWorks ICM hydraulic model database with the associated model files will be made available to the Consultant upon request.

D7.8.5 The Consultant shall complete an evaluation of the conditions and parameters in place with the current City of Winnipeg InfoWorks hydraulic model. The Consultant shall identify all gaps/issues they believe to be within the hydraulic model prior to completing the improvement or any needs assessment required.

D7.8.6 The Consultant shall propose the model improvements for City approval prior to completing the model updates and associated documentation.

- D7.8.7 All gaps/issues identified, and how they were addressed, shall be documented as part of the Hydraulic Modelling TM.
- D7.8.8 The Hydraulic Modelling TM shall be delivered in three phases: 60% draft TM, 95% draft TM and 100% Final Hydraulic Modelling TM. Each of the deliverable submission shall be accompanied by the copy of the updated hydraulic modelling database.
- D7.8.9 If the gaps/issues cannot be addressed appropriately by the City or the Consultant, they shall be documented as such as part of the Data Collection and Assessment TM.
- D7.8.10 The goal of this analysis will be to update the hydraulic model such that it is fit for purpose as part of the conceptual and preliminary design work.
- D7.8.11 The 60% Draft Hydraulic Modelling TM shall include the following minimum requirements:
- (a) Evaluate the existing condition and parameters of the model,
 - (b) Identify any missing information, gaps and issues from the model to represent the existing hydraulic condition of the system, and to meet the Modelling Guidelines (Appendix I) requirements,
 - (c) Identify any additional needs assessment required, where applicable,
 - (d) Document all the changes made to update and improve the representation of the model.
 - (e) Verify the InfoWorks hydraulic model is fit for use to assess the district needs and develop solutions for the conceptual and preliminary design work.
- D7.8.12 Should any of the minimum requirements of the 60% Draft Hydraulic Modelling TM as per D7.8.11 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 60% Draft Review Meeting will be delayed until such time that a 60% Draft including all of the minimum requirements have been provided.
- D7.8.13 The 95% complete Hydraulic Modelling TM shall include the following requirements at minimum:
- (a) Updates to all content developed in the 60% complete Hydraulic Modelling TM Draft. See D7.8.11.
 - (b) Any pertinent feedback gathered from the 60% draft review process.
- D7.8.14 Should any of the minimum requirements of the 95% Draft Hydraulic Modelling TM as per D7.8.13 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 95% Draft Review Meeting will be delayed until such time that a 95% Draft including all of the minimum requirements has been provided.
- D7.8.15 Following the City's review of the 95% complete Hydraulic Modelling TM, the Consultant will address any remaining City comments.
- D7.8.16 Following the City's approval that the Consultant has addressed all of the City's comments, a Final 100% complete version of the Hydraulic Modelling TM shall be submitted, see D6.2.4.
- D7.9 FLOW MONITORING AND MANAGEMENT
- D7.9.1 The Consultant may undertake additional flow monitoring to validate the existing condition of the sewer system if the available flow monitoring data is not sufficient for the Project. Such expense should be part of the Additional Work Allowance.
- D7.9.2 The Consultant shall account for the additional flow monitoring work in the schedule in the Proposal. If the existing available flow monitoring data is sufficient for the Project and no additional flow monitoring work is required, the rest of the Work shall continue to move forward, ahead of the planned schedule.
- D7.9.3 The Consultant shall coordinate with the City if additional flow monitoring work is required.

- D7.9.4 Work items to be considered as part of this Flow Monitoring work include, but are not limited to:
- (i) management of the flow monitoring work, which includes the procurement of a contractor for the flow monitoring work if a suitable qualifying contractor is available,
 - (ii) providing a proposed investigation location plan to be reviewed by the City
 - (iii) conducting flow monitoring work, and
 - (iv) preparation of a Flow Monitoring Report that documents the assessment.

D7.9.5 When conditions arise that require the completion of the Flow Monitoring and Management work listed in D7.9.2 and D7.9.4, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D6.6 and D7.18, in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval.

D7.9.6 No work shall start prior to the approval stated in D7.9.5.

D7.10 GEOTECHNICAL INVESTIGATIONS

D7.10.1 The Geotechnical Investigations are to be used to validate the constructability of solutions, as required.

- (a) Work items to be considered as part of this Geotechnical Investigations include, but are not limited to:
- (i) reviewing existing geotechnical information including:
 - ◆ Reports, borehole logs, etc.
 - (ii) providing a proposed investigation location plan to be reviewed by the City
 - (iii) procurement of a drilling contractor;
 - (iv) verifying that the contractor has all necessary utility locates and work permits;
 - (v) supervision of the investigation activities by qualified personnel;
 - (vi) collection and testing of samples;
 - (vii) groundwater monitoring;
 - (viii) preparation of a Geodetic Base Line Report (GBR);
 - (ix) preparation of a Geodetic Data Report (GDR);
 - (x) preparation of a Geotechnical Engineering Study;
 - (xi) riverbank stability analysis, including riverbank stability analysis report;
 - (xii) conducting Topographic Land Surveys, including preparation of a Topographic Land Survey Report;
 - (xiii) conducting Geophysical Surveys, including preparation of a Geophysical Survey Report; and
 - (xiv) any other activities necessary to characterize the geotechnical condition of the subsurface soils/bedrock and groundwater levels.

D7.10.2 When conditions arise that require the completion of the Geotechnical work listed in D7.10, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D6.5, in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval.

D7.10.3 No work shall start prior to the approval stated in D7.9.5.

D7.11 NEEDS ASSESSMENT

D7.11.1 The district needs should be investigated and reported, this should include at a minimum CSO, Flooding, Development and Operational needs.

D7.11.2 The design criteria level of service for protection is the 5-year MacLaren storm event for combined sewer flooding, and 10-year MacLaren storm event for land drainage and wastewater systems.

D7.11.3 To ensure the future design horizon is adequately assessed, an assessment of growth and known proposed development should be documented and represented in a future model network.

D7.11.4 The level of service criteria shall be documented for key assets and any impacts shall be documented.

D7.12 SOLUTION DEVELOPMENT

D7.12.1 The proposed solution from the Conceptual Design phase should be confirmed as hydraulically feasible and buildable or an alternative hydraulically feasible and buildable solution should be developed. The rationale for significant deviation from the proposed Conceptual Design solution with significant being the type of solution or change in location should be raised with the City for approval and subsequently documented as necessary.

D7.12.2 A Solution Appraisal and Design Consideration Workshop shall be undertaken following the project initiation meeting to appraise alternative solutions as a desktop level and any associated data collection requirements. The related design requirements should be discussed along with any feasibility concerns.

D7.12.3 The proposed design solutions should not cause a predicted increased surcharge such that the risk of basement flooding in other parts of the catchment is increased. The proposed design solution should not cause a predicted increase in spill detriment combined sewer.

D7.12.4 The preliminary design solution developed during the preliminary design phase shall be evaluated using standardized Detriment Analysis process as per the Modeling Guidelines (Appendix I) using the City of Winnipeg collections hydraulic model.

D7.12.5 The proposed solution must provide the hydraulic capacity of a 35-year design horizon.

D7.12.6 The proposed preliminary design solution where deemed necessary shall undergo a hazard identification and safety assessment to document the construction and operational hazards and proposed mitigations.

D7.12.7 Separate GI Opportunities Identification and Decision Matrix and a Real Time Control Identification and Decision Matrix shall be undertaken per requirement identified in D7.12.10 and D7.12.11.

D7.12.8 The Consultant shall include for developing up to three (3) individual GI components to the preliminary design level of detail following the initial assessment phase. Based on the GI Opportunities Identification and Decision Matrix, the Project Manager will confirm the number to be developed.

D7.12.9 The Consultant shall include for developing two (2) individual RTC components to the preliminary design level of detail following the initial assessment phase. Based on the Real Time Control Identification and Decision Matrix, the Project Manager will confirm the number to be developed.

D7.12.10 GI Opportunities Identification and Decision Matrix

- (a) The Consultant shall have an allowance to consider three (3) individual GI components as part of the Solution Development in D7.12.8.
- (b) GI shall be considered, and applied in the design and operation of all new and upgraded storm and wastewater infrastructure where feasible.
- (c) GI selection approach shall be documented in the Decision Matrix. Factors to be considered include but not limited to the following:
 - (i) location, land ownership, volume reduction performance, operational requirements, maintenance requirements, partnership opportunities, additional benefits, and cost.
 - (ii) Both static optimizations and mechanical optimizations should be assessed.
 - (iii) The Consultant shall host a workshop to go over the matrix opportunities and the criteria.

- (d) The GI Opportunities and Decision Matrix shall be included as part of the 60% Preliminary Design Report submission, 95% Preliminary Design Report submission and Final Preliminary Design Report submission. Refer to D6.2.3(b)(vi) for additional submission requirements.

D7.12.11 Real Time Control Opportunities Identification and Decision Matrix

- (a) The Consultant shall consider RTC as part of the Solution Development in D7.12.9.
- (b) The Consultant shall review and identify opportunities where RTC can be incorporated in the sewer's infrastructure to optimize the system performance and to improve the system's utilization capacity.
 - (i) The review shall include but not limited to optimization of the weir level where full sewer separation is not achieved.
 - (ii) It shall include an assessment of the Newton connection and its use in regular operation.
 - (iii) It should include operating the Newton connection during high river levels with the utilisation of the Newton flood pump station.
 - (iv) An assessment of a permanent flow monitoring location upstream of the Armstrong diversion structure.
- (c) The Consultant shall host a workshop to go over the matrix opportunities and the criteria.
- (d) For any solutions identified by the Project Manager to be taken forward to Preliminary design, the Consultant shall include the operating logic for the RTC solution in both dry weather flow (DWF) and wet weather flow (WWF) scenarios.
- (e) The proposed RTC opportunities are to:
 - (i) Provide an understanding of the system's operation and provide a basis for a future system that will allow for a better control on a real time basis,
 - (ii) Optimize the system's storage capacity under precipitation events that are spatially distributed,
 - (iii) Improve the operation of the system,
 - (iv) Optimize flows in the system and to the treatment plants.
- (f) The RTC Opportunities and Decision Matrix shall be included as part of the 60% Preliminary Design Report submission, 95% Preliminary Design Report submission and Final Preliminary Design Report submission. Refer to D6.2.3(b)(vii) for additional submission requirements.

D7.12.12 Once the proposed solution is developed and is approved by the Project Manager from the 60% Draft Preliminary Design Report, an additional assessment shall be undertaken to identify the hydraulic and cost impact on the proposed solution as a result of the following components:

- (a) Future densification (both infill and new developments)
- (b) Additional flow contribution from the following catchment areas:
 - (i) Amber Trails,
 - (ii) Precinct A, and
 - (iii) Precinct B.
- (c) Operation at the Newton connection and its impact on the Newton Flood Pump Station during critical storm events at 1:5, 1:10, 1:25 and 1:50 storm return periods.

D7.13 PRELIMINARY DESIGN REPORT

D7.13.1 The 60% Draft Preliminary Design Report shall include the following minimum requirements;

- (a) Certify that the solution and any associated recommendations, conclusions contained in the Conceptual District Plan remain acceptable.

- (b) Additional survey or other data collection requirements and the proposed approach to address missing data, confirm assumptions and to determine site conditions, as applicable.
- (c) Certify the InfoWorks hydraulic model is fit for use;
- (d) Certify a robust hydraulically feasible design has been developed.
- (e) Detailed explanation of steps conducted in order to bring the solution to a preliminary design level of definition.
- (f) The design criteria in which the solution was evaluated during Preliminary Design.
- (g) Hydraulic modeling findings for solution recommended.
- (h) Summary of findings from evaluations completed in relation to preliminary design, which may include the following:
 - (i) Flow Monitoring
 - (ii) Geotechnical Investigations
 - (iii) Topographic Surveys
 - (iv) Land Use Considerations
- (i) Summary of communications completed with external stakeholders to date in regards to the solution development during Preliminary Design, and to align with the Stakeholder Engagement Plan (see D7.15). Summarize all future considerations and/or modifications made to the solution to address external stakeholders' concerns.
- (j) Preliminary design drawings for the proposed solution.

D7.13.2 Should any of the minimum requirements of the 60% Draft Preliminary Design Report as per D7.13.1 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 60% Draft Review Meeting will be delayed until such time that a 60% Draft including all of the minimum requirements have been provided.

D7.13.3 Presentation slides shall be organised to demonstrate how the proposed solution meets all the requirements of the Preliminary Design, summarizing the work completed as part of the Preliminary Design Report. It shall be submitted prior to the 95% Preliminary Design Review Meeting per requirements stated in D6.2.3(b)(xi).

D7.13.4 The 95% complete Preliminary Design Report shall include the following requirements at minimum:

- (a) Updates to all content developed in the 60% complete Preliminary Design Report Draft. See D7.13.1.
- (b) Include the hydraulic and cost impact assessment per requirements stated in D7.12.12.
- (c) Any pertinent feedback gathered from the Preliminary Design Report Presentation.
- (d) Summary of future communication requirements on the project as part of Detailed Design, including any Notification Of Alteration (NOA) requirements for existing Provincial Environmental Act Licences, public engagement, engagement with private entities, as applicable based on the solution selected.
- (e) Verify costs of the solution and that the solution is optimized for cost-effectiveness.
- (f) The basis of estimate process shall utilize the latest Basis of Estimate Investment Planning spreadsheet template identified in D6.4.1(j) to document results. The completed Basis of Estimate spreadsheet shall be included as an appendix to the Preliminary Design Report with any additional Basis of Estimate information.
- (g) Preliminary design drawings for the proposed solution.
 - (i) Include these design drawings as an appendix to the report.
- (h) Cost estimate of additional annual operations and maintenance (O&M) associated with the solution selected and any improvements to the operating and maintenance of the existing district sewer system.

- (i) A summary of the work involved in during the Risk and Opportunities Identification Phase must then be included in the body of the Preliminary Design Report.

D7.13.5 Should any of the minimum requirements of the 95% Draft Preliminary Design Report as per D7.13.4 not be completed sufficiently at submission, the 60% Draft will be submitted back to the Consultant. The 95% Draft Review Meeting will be delayed until such time that a 95% Draft including all of the minimum requirements has been provided.

D7.13.6 Following the City's review of the 95% complete Preliminary Design Report, the Consultant will address any remaining City comments.

D7.13.7 Following the City's approval that the Consultant has addressed all of the City's comments, a Final 100% complete version of the Preliminary Design Report shall be submitted. See D6.2.4.

D7.14 RISKS AND OPPORTUNITIES IDENTIFICATION

D7.14.1 This work shall include:

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

D7.15 STAKEHOLDER ENGAGEMENT

D7.15.1 Submit a plan identifying:

- (a) external stakeholders pertinent to the proposed solutions,
- (b) any remaining gaps/study work required during preliminary design to identify all external stakeholders pertinent to the Project;
- (c) the recommended timing during the project development that these stakeholders should be contacted, and
- (d) the means by which communication will take place
- (e) see D6.8 for additional public and stakeholder engagement requirements
- (f) it is anticipated that green infrastructure opportunities and proposed solutions likely require public engagement, which should be developed as part of the Preliminary Design phase and meet the D14 requirements.

D7.16 DRAWING DEVELOPMENT

D7.16.1 Drawings shall include the location and associated properties of the proposed solutions, including but not limited to lengths, slopes and invert levels of the proposed sewers, configuration of the proposed GI and RTC components. Refer to Appendix B, City Preliminary Design Report Template Rev1.0 for specific drawing requirements.

D7.16.2 Drawings should comply with City standards and contain both the City and Consultant's logos.

D7.17 COST ESTIMATION

D7.17.1 Basis of estimate is to be used to produce AACE Class 3 Capital Cost estimate for proposed solution with allowances for design and contract administration. The basis of estimate shall outline the estimate assumptions, development of material take-offs, source of cost data, allowances, mark-ups/add-ons, exclusion, exceptions, contingencies, and cost risks and opportunities.

D7.18 ADDITIONAL WORK ALLOWANCE

D7.18.1 The Additional Work Allowance is to be used for additional data collection, engineering, testing, public engagement, and design services that arise due to unforeseen conditions.

D7.18.2 When such unforeseen conditions arise, the Consultant will prepare a concise scope of work and cost proposal, following requirements as defined in D6.6, in collaboration with the Project Manager. The proposal shall be submitted to the Project Manager for final approval.

D7.18.3 No work shall start prior to the approval stated in D7.18.2.

D8. AUTHORITY TO CARRY ON BUSINESS

D8.1 The Consultant shall be in good standing under The Corporations Act (Manitoba), or properly registered under The Business Names Registration Act (Manitoba), or otherwise properly registered, licensed or permitted by law to carry on business in Manitoba, or if the Consultant does not carry on business in Manitoba, in the jurisdiction where the Consultant does carry on business, throughout the term of the Contract, and shall provide the Project Manager with evidence thereof upon request.

D9. SAFE WORK PLAN

D9.1 The Consultant shall provide the Project Manager with a Safe Work Plan at least five (5) Business Days prior to the commencement of any required field work but in no event later than the date specified in C4.1 for the return of the executed Contract.

D9.2 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>

D10. INSURANCE

D10.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.

D10.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:

(a) Comprehensive or Commercial General Liability Insurance including:

- (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
- (ii) all sums which the Consultant shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting therefrom) sustained by any person or persons or because of damage to or destruction of property caused by an occurrence or accident arising out of or related to the Services or any operations carried on in connection with this Contract;
- (iii) coverage for Products/Completed Operations, Blanket Contractual, Consultant's Protective, Personal Injury, Contingent Employer's Liability, Broad Form Property Damage, Employees as Additional Insureds, and Non-Owned Automobile Liability;
- (iv) a Cross Liability clause and/or Severability of Interest clause providing that the inclusion of more than one Insured shall not in any way affect the rights of any other Insured hereunder in respect to any claim, demand, suit or judgment made against any other Insured.

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

(c) Professional Errors and Omissions Liability Insurance including:

(i) an amount not less than \$2,000,000 . per claim and \$2,000,000 in the aggregate.

- D10.2.1 The Consultant's Professional Errors and Omissions Liability Insurance shall remain in force for the duration of the Project and for thirty-six (36) months after Total Performance.
- D10.3 The policies required in D10.2(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.
- D10.4 The Consultant shall require any Consultant 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 D10.2(a) and D10.2(b).
- D10.5 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 D10.2(a) and D10.2(c).
- D10.6 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 D10.9.
- D10.7 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.
- D10.8 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.
- D10.9 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

D11. COMMENCEMENT

- D11.1 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.
- D11.2 The Consultant shall not commence any Services until:
- (a) the Project Manager has confirmed receipt and approval of:
 - (i) evidence of authority to carry on business specified in D8;
 - (ii) evidence of the insurance specified in D10.
 - (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D11.3 The City intends to award this Contract by second quarter of 2021.

D12. CRITICAL STAGES

- D12.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
- (a) Finalised Data Collection and Assessment TM, along with the Hydraulic Modelling TM, with model updates documentation by the fourth quarter of 2021;
 - (b) Submission of final Preliminary Design Report deliverables, with all comments from the City incorporated and accepted by the fourth quarter of 2022.

D12.2 The Consultant may suggest alternative critical stages within the Proposal, but must also provide reasoning for this based on their understanding of the scope of work. The City may accept deviations from these critical stages if sufficient reasoning is provided.

D13. COVID-19 SCHEDULE DELAYS

D13.1 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 and directives from health authorities and various levels of government, and in close consultation with the Project Manager.

D13.2 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.

D13.3 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.

D13.4 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 D13.3. Failure to provide this notice will result in no additional time delays being considered by the City.

D13.5 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.

D14. PUBLIC ENGAGEMENT

D14.1 The Consultant shall work collaboratively with the City Project Manager and the Office of Public Engagement.

D14.2 The Consultant shall include for hosting four (4) public engagement meetings with the project team.

D14.3 The review of public materials and advance notice of public events require time. The Consultant shall ensure adequate time is accounted for in the Project schedule.

D14.3.1 All public materials must be posted online two (2) weeks prior to an in-person event.

D14.3.2 The anticipated review period for materials by the Office of Public Engagement will be minimum three (3) weeks prior to posting.

D14.3.3 Following review, the translation of final public materials (if required) should be allocated at least one week to complete.

D14.4 The City will cover expenses for public engagement activities, including, for example, venue rental charges, equipment rental, catering for refreshments, translation, printing, postage, courier, newspaper advertising, photocopying, subject to prior approval of costs by the Project Manager. Wherever possible, City facilities will be used to host public events.

Public & Stakeholder Engagement Deliverables

D14.5 The Consultant shall develop and provide the following deliverables in accordance with <https://winnipeg.ca/PublicEngagement>:

- (a) a public engagement strategy that clearly identifies:
 - (i) the public's role in the decision-making process;

- (ii) the decision points/steps within the overall project, and the scope of the decisions to be made at each step;
 - (iii) the need/interest associated with each decision step, along with the recommended level of participation; and
 - (iv) how input will be considered and incorporated where possible.
- (b) event(s) and engagement opportunities;
 - (c) summaries corresponding to engagement phases; and
 - (d) a final public engagement report.

Public & Stakeholder Engagement Expectations

- D14.6 An appropriate level of stakeholder engagement shall be planned based on the proposed solution from the preliminary design.
- D14.7 The public and stakeholder engagement shall be developed with coordination with the Project Manager.

Public & Stakeholder Engagement Outcomes

- D14.8 The execution of the public engagement plan will result in reaching the objectives determined as part of the Preliminary Design phase and the following minimum objectives:
 - (a) participants and the general public have an understanding of the City's current systems and processes;
 - (b) participants and the general public recognize the need for combined sewer overflow to be mitigated;
 - (c) participants' perceptions of sewer system, improvements to mitigate CSO and provide additional benefits. The CSO Master Plan City wide objectives and wider strategic benefits shall be considered and incorporated into the review;
 - (d) participants input in response to terms of reference are collected and considered; and
 - (e) participants understand how their input was considered and incorporated (where possible) into the proposed solution.

THIRD PARTY AGREEMENTS

D15. FUNDING AND/OR CONTRIBUTION AGREEMENT OBLIGATIONS

- D15.1 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.
- D15.2 Further to D15.1, in the event that the obligations in D15 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.
- D15.3 For the purposes of D15:
 - (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.
- D15.4 Modified Insurance Requirements

- D15.4.1 If not already required under the insurance requirements identified in D10, 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.
- D15.4.2 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.
- D15.4.3 Further to D10.6 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.
- D15.4.4 All policies must be taken out with insurers licensed to carry on business in the Province of Manitoba.
- D15.5 Indemnification By Consultant
- D15.5.1 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.
- D15.6 Records Retention and Audits
- D15.6.1 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.
- D15.6.2 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 D15.6.1 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.
- D15.7 Other Obligations
- D15.7.1 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.
- D15.7.2 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.

- D15.7.3 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.
- D15.8 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.

