

THE CITY OF WINNIPEG

REQUEST FOR PROPOSAL

RFP NO. 890-2015

REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR THE PROVISION OF PRELIMINARY DESIGN SERVICES FOR MUSSEL CONTROL AT THE SHOAL LAKE AQUEDUCT INTAKE FACILITY

Proposals shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Division 185 King Street, Main Floor Winnipeg MB R3B 1J1

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PART B - BIDDING PROCEDURES

B1. CONTRACT TITLE

B1.1 REQUEST FOR PROPOSAL FOR PROFESSIONAL CONSULTING SERVICES FOR THE PROVISION OF PRELIMINARY DESIGN SERVICES FOR MUSSEL CONTROL AT THE SHOAL LAKE AQUEDUCT INTAKE FACILITY

B2. SUBMISSION DEADLINE

- B2.1 The Submission Deadline is 12:00 noon. Winnipeg time, November 20, 2015.
- B2.2 Proposals determined by the Manager of Materials to have been received later than the Submission Deadline will not be accepted and will be returned upon request.
- B2.3 The Project Manager or the Manager of Materials may extend the Submission Deadline by issuing an addendum at any time prior to the time and date specified in B2.1.

B3. SITE INVESTIGATION

- B3.1 The Project Manager or an authorized representative will conduct a Site Investigation at the existing Shoal Lake Aqueduct Intake Facility on November 6, 2015 and November 13, 2015.
- B3.2 Proponents are requested to register for either (not both) Site Investigations **at least 48 hours** in advance by contacting the Project Manager identified in D2.
- B3.3 The meeting point and time for the Site Investigation will be communicated to proponents at least 48 hours in advance. Signature of a waiver is required for travel via GWWD railway. Directions to the meeting point will be provided upon registration for the Site Investigation.
- B3.4 Proponents will be limited to up to two (2) representatives to attend the Site Investigation. Note there is limited space for proponents to participate in the Site Investigation.
- B3.5 Although attendance at the Site Investigations is not mandatory, the City strongly suggests that Proponents attend.
- B3.6 The Proponent shall not be entitled to rely on any information or interpretation received at the Site Investigation unless that information or interpretation is the Proponent's direct observation, or is provided by the Project Manager in writing.
- B3.7 Proponents registered for the Site Investigation must provide the Contract Administrator identified in D2 with a Public Safety Verification search obtained not earlier than (1) year prior to the Site Investigation.
 - (a) The Public Safety Verification Check may be obtained from BackCheck by visiting <u>http://www.backcheck.net/cityofwinnipeg</u>. Note that the check will take up to 48 hours to complete. See PART E – for further information.
 - (b) The results of the Public Safety Verification Check must be received by the City directly through BackCheck. Proponents must set up an account with BackCheck under their company name and grant BackCheck permission to share the results of the Public Safety Verification Check with the City of Winnipeg.
- B3.8 Proponents are responsible to provide their own personal protective equipment for the Site Investigation. CSA approved safety footwear is required for all personnel attending the Site Investigation.
- B3.9 Proponents will not be allowed to take pictures at the Site Investigation. The proponent may request pictures of specific areas from the Contract Administrator. The pictures will then be issued to all the Proponents registered for the Site Investigation.

B3.10 Proponents are advised that site access is restricted and access to view the site can only be made under supervision of the City.

B4. ENQUIRIES

- B4.1 All enquiries shall be directed to the Project Manager identified in D2.
- B4.2 If the Proponent finds errors, discrepancies or omissions in the Request for Proposals (RFP), or is unsure of the meaning or intent of any provision therein, the Proponent shall promptly notify the Project Manager of the error, discrepancy or omission at least five (5) Business Days prior to the Submission Deadline.
- B4.3 If the Proponent is unsure of the meaning or intent of any provision therein, the Proponent should request clarification as to the meaning or intent prior to the Submission Deadline.
- B4.4 Responses to enquiries which, in the sole judgment of the Project Manager, require a correction to or a clarification of the RFP will be provided by the Project Manager to all Proponents by issuing an addendum.
- B4.5 Responses to enquiries which, in the sole judgment of the Project Manager, do not require a correction to or a clarification of the RFP will be provided by the Project Manager only to the Proponent who made the enquiry.
- B4.6 All correspondence or contact by Proponents with the City in respect of this RFP must be directly and only with the City's Project Manager. Failure to restrict correspondence and contact to the Project Manager may result in the rejection of the Proponents Proposal Submission.
- B4.7 The Proponent shall not be entitled to rely on any response or interpretation received pursuant to B4 unless that response or interpretation is provided by the Project Manager in writing.

B5. CONFIDENTIALITY

- B5.1 Information provided to a Proponent by the City or acquired by a Proponent by way of further enquiries or through investigation is confidential. Such information shall not be used or disclosed in any way without the prior written authorization of the Project Manager. The use and disclosure of the confidential information shall not apply to information which:
 - (a) was known to the Proponent before receipt hereof; or
 - (b) becomes publicly known other than through the Proponent; or
 - (c) is disclosed pursuant to the requirements of a governmental authority or judicial order.
- B5.2 The Proponent shall not make any statement of fact or opinion regarding any aspect of the Request for Proposals to the media or any member of the public without the prior written authorization of the Project Manager.

B6. ADDENDA

- B6.1 The Project Manager may, at any time prior to the Submission Deadline, issue Addenda correcting errors, discrepancies or omissions in the Request for Proposals, or clarifying the meaning or intent of any provision therein.
- B6.2 The Project Manager will issue each addendum at least two (2) Business Days prior to the Submission Deadline, or provide at least two (2) Business Days by extending the Submission Deadline.
- B6.2.1 Addenda will be available on the Bid Opportunities page at The City of Winnipeg, Corporate Finance, Materials Management Division website at <u>http://www.winnipeg.ca/matmgt/bidopp.asp</u>

- B6.2.2 The Bidder is responsible for ensuring that it has received all Addenda and is advised to check the Materials Management Division website for Addenda regularly and shortly before the Submission Deadline, as may be amended by addendum.
- B6.3 The Bidder shall acknowledge receipt of each addendum in Paragraph 9 of Form A: Proposal. Failure to acknowledge receipt of an addendum may render a Proposal non-responsive.

B7. PROPOSAL SUBMISSION

- B7.1 The Proposal shall consist of the following components:
 - (a) Form A: Proposal (Section A) in accordance with B8;
 - (b) Fees (Section B) in accordance with B9;
- B7.2 The Proposal should also consist of the following components:
 - (a) Experience of Proponent and Subconsultants (Section C) in accordance with B10;
 - (b) Experience of Key Personnel Assigned to the Project (Section D), in accordance with B11;
 - (c) Project Understanding and Methodology (Section E) in accordance with B12; and
 - (d) Project Schedule (Section F) in accordance with B13.
- B7.3 Further to B7.1, all components of the Proposal shall be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.4 Further to B7.2, all components of the Proposal should be fully completed or provided in the order indicated, and submitted by the Proponent no later than the Submission Deadline, with all required entries made clearly and completely, to constitute a responsive Proposal.
- B7.5 Proponents should submit one (1) unbound 8.5" x 11" original (marked "original") including drawings and six (6) copies (copies can be in any size format) for sections identified in B7.1 and B7.2.
- B7.6 Proposal format, including type of binding, number of pages, size of pages and, font, etc., will not be regulated, except that the Proposal should be presented in the Sections identified above. Proponents are encouraged to use their creativity to submit a Proposal which provides the requested information for evaluation and other information which illustrates the strength of their team.
- B7.7 Proponents are advised that inclusion of terms and conditions inconsistent with the Request for Proposals, will be evaluated in accordance with B21.1(a).
- B7.8 The Proposal shall be submitted enclosed and sealed in an envelope/package clearly marked with the RFP number and the Proponent's name and address.
- B7.9 Proposals submitted by facsimile transmission (fax) or internet electronic mail (e-mail) will not be accepted.
- B7.10 Proposals shall be submitted to:

The City of Winnipeg Corporate Finance Department Materials Management Division 185 King Street, Main Floor Winnipeg MB R3B 1J1

B7.11 Any cost or expense incurred by the Proponent that is associated with the preparation of the Proposal shall be borne solely by the Proponent.

B8. PROPOSAL (SECTION A)

- B8.1 The Proponent shall complete Form A: Proposal, making all required entries.
- B8.2 Paragraph 2 of Form A: Proposal shall be completed in accordance with the following requirements:
 - (a) if the Proponent is a sole proprietor carrying on business in his/her own name, his/her name shall be inserted;
 - (b) if the Proponent is a partnership, the full name of the partnership shall be inserted;
 - (c) if the Proponent is a corporation, the full name of the corporation shall be inserted;
 - (d) if the Proponent is carrying on business under a name other than his/her own, the business name and the name of every partner or corporation who is the owner of such business name shall be inserted.
- B8.2.1 If a Proposal is submitted jointly by two or more persons, each and all such persons shall identify themselves in accordance with B8.2.
- B8.3 In Paragraph 3 of Form A: Proposal, the Proponent shall identify a contact person who is authorized to represent the Proponent for purposes of the Proposal.
- B8.4 Paragraph 11 of Form A: Proposal shall be signed in accordance with the following requirements:
 - (a) if the Proponent is a sole proprietor carrying on business in his/her own name, it shall be signed by the Proponent;
 - (b) if the Proponent is a partnership, it shall be signed by the partner or partners who have authority to sign for the partnership;
 - (c) if the Proponent is a corporation, it shall be signed by its duly authorized officer or officers and the corporate seal, if the corporation has one, should be affixed;
 - (d) if the Proponent is carrying on business under a name other than its own, it shall be signed by the registered owner of the business name, or by the registered owner's authorized officials if the owner is a partnership or a corporation.
- B8.4.1 The name and official capacity of all individuals signing Form A: Proposal should be printed below such signatures.
- B8.5 If a Proposal is submitted jointly by two or more persons, the word "Proponent" shall mean each and all such persons, and the undertakings, covenants and obligations of such joint Proponents in the Proposal and the Contract, when awarded, shall be both joint and several.

B9. FEES (SECTION B)

- B9.1 The Proposal shall include a Fixed Fee for all disciplines and/or phases identified in D5 Scope of Services.
- B9.1.1 Fees for Phase II Preliminary Design Services work item D5.3.2 shall be provided based on the following:
 - (a) Phase I Research and Review confirms that copper-ion generation is still the best available technology for mussel control at the Shoal Lake Aqueduct (SLA) Intake Facility.
 - (b) Phase I Research and Review work item D5.2.1 (b) confirms that a copper removal process is required to address:
 - potential copper discharge limits at the SLA Intake (into Falcon Bay); and
 - potential downstream impacts at the Water Pollution Control Centres (WPCCs) in Winnipeg.

- B9.1.2 Fees for Phase II Preliminary Design Services work item D5.3.3 shall be provided based on the following:
 - (a) Phase I Research and Review confirms that decommissioning and replacement of the existing sulfur dioxide system with a Vita-D-Chlor tablet (or similar) dosing system is required.
- B9.1.3 Proponents shall state a separate price for the following items on Form B: Prices:
 - (a) Separate Price Item No. 3 shall be the amount to be deducted from the fees if the Site Investigation to Existing Copper-ion Generation Installation is deleted in accordance with D5.2.1 (c) of the Supplemental Conditions.
- B9.2 Adjustments to Fees will only be considered based on increases to the Scope of Services.
- B9.2.1 The City will not consider an adjustment to the Fees based on changes in the Project budget or the Final Total Construction Cost.
- B9.3 Notwithstanding C1.1(b), Fees shall include costs for out of town travel, related meals and accommodations for the duration of the Project and shall not be considered an Allowable Disbursement.
- B9.4 The Fee Proposal shall also include an allowance for Allowable Disbursements as defined in C1.1(b), but shall exclude the costs of any materials testing, soils and hazardous materials investigation during construction.
- B9.5 Notwithstanding C9.1, Fees submitted shall not include the Goods and Services Tax (GST) or Manitoba Retail Sales Tax (MRST, also known as PST), which shall be extra where applicable.
- B9.6 Payments to Non-Resident Consultants are subject to Non-Resident Withholding Tax pursuant to the Income Tax Act (Canada).

B10. EXPERIENCE OF PROPONENT AND SUBCONSULTANTS (SECTION C)

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

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

- B11.1 Describe your approach to overall team formation and coordination of team members.
- B11.1.1 Include an organizational chart for the Project.

- B11.2 Submit the experience and qualifications of the Key Personnel assigned to the Project for projects of similar complexity, scope and value, including:
 - (a) the principals-in-charge;
 - (b) the Consultants Representative;
 - (c) managers of the key disciplines;
 - (d) lead designers; and
 - (e) any other personnel with over 5% of total project hours.

B11.3 Include:

- (a) educational background and degrees;
- (b) professional recognition;
- (c) job title;
- (d) years of experience in current position;
- (e) years of experience in design and construction; and
- (f) years of experience with existing employer.
- B11.4 Roles of each of the Key Personnel in the Project should be identified in the organizational chart referred to in B11.1.1.
- B11.5 For each person identified, list at least two comparable projects in which they have played a primary role. If a project selected for a key person is included in B10, provide only the project name and the role of the key person. For other projects provide the following:
 - (a) Description of project;
 - (b) Role of the person;
 - (c) Project Owner;
 - (d) Reference information (two current names with telephone numbers per project).

B12. PROJECT UNDERSTANDING AND METHODOLOGY (SECTION E)

- B12.1 Describe your firm's project management approach and team organization during the performance of Services, so that the evaluation committee has a clear understanding of the methods the Proponent will use in the delivery of this Project.
- B12.2 Methodology should be presented in accordance with the Scope of Services identified in D5.
- B12.3 Describe the collaborative process/method to be used by the Key Personnel of the team in the various phases of the Project.
- B12.4 Proposals should address:
 - (a) the team's understanding of the broad functional and technical requirements;
 - (b) the team's understanding of the constraints that will affect the undertaking of the work;
 - (c) the team's understanding of the project deliverables;
 - (d) the City's Project methodology with respect to the information provided within this RFP; and
 - (e) any other issue that conveys your team's understanding of the Project requirements.
- B12.5 For each person identified in B11.2, list:
 - (a) the hourly charge out rate;
 - (b) the total number of hours to be dedicated to the Project;
 - (c) the total number of hours to be dedicated to Phase I and Phase II of the Project; and

- (d) the total number of hours to be dedicated to each sub task of Phase I and Phase II of the Project, as outlined in Section D5 and summarized below:
 - (i) Phase I Research and Review
 - Project Management
 - Review Emerging Technologies
 - Consultation with Provincial Regulators
 - Review Performance of Existing Copper-ion Generation Installations
 - Determine Design Copper Dosing Rate
 - Confirm Operation and Maintenance Requirements for Copper-ion Generation
 - Verify Condition of Existing Facilities and Equipment at the SLA Intake Facility
 - Review Effectiveness of Copper-ion Treatment for Protection Against Biological Fouling
 - Condition Assessment of Sulfur Dioxide Facility with Recommendation
 - Phase I Technical Memorandum
 - (ii) Phase II Preliminary Design Services
 - Project Management
 - Copper-ion Generation Equipment
 - Copper Removal Process
 - Dechlorination System
 - Operation and Maintenance
 - Structural / Architectural
 - Mechanical Systems
 - Electrical Systems
 - Instrumentation and Control
 - Preliminary Design Report

B13. PROJECT SCHEDULE (SECTION F)

- B13.1 Proponents should present a carefully considered Critical Path Method schedule using Microsoft Project or similar project management software, complete with resource assignments (key designers), durations (weekly timescale) and milestone dates or events. The schedule should address each requirement of the Scope of Services.
- B13.2 The Proponent's schedule should include:
 - (a) work breakdown structure;
 - (b) resource assignments (key designers);
 - (c) durations (weekly timescale);
 - (d) milestone dates or events;
 - (e) critical dates for review;
 - (f) anticipated approval processes by the City during the design phase of the Project
 (i) A minimum of three (3) weeks should be allowed for completion of these processes;
 - (g) project meetings;
 - (h) submission of monthly progress reports; and
 - (i) submission dates for required deliverables.

B13.3 The schedule shall be based on the critical dates listed in D11.

B14. QUALIFICATION

- B14.1 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.
- B14.2 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 <u>http://www.winnipeg.ca/matmgt/debar.stm</u>
- B14.3 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;
 - (e) undertake to meet all licensing and regulatory requirements of the appropriate governing authorities and associations in the Province of Manitoba;
 - (f) provide proof upon request of the Project Manager of the Security Clearances as identified in PART B ; and
 - (g) Have the knowledge and resources to engineer the Preliminary design of a mussel control system.
- B14.4 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.
- B14.5 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.

B15. ELIGIBILITY

B15.1 Various organizations provided investigative services with respect to this Project. In the City's opinion, this relationship or association does not create a conflict of interest or will not likely

create a perception of conflict of interest because of this full disclosure and related information. The organizations are:

(a) CH2M HILL Companies Ltd.

B16. OPENING OF PROPOSALS AND RELEASE OF INFORMATION

- B16.1 Proposals will not be opened publicly.
- B16.2 After award of Contract, the names of the Bidders and the Contract amount of the successful Bidder will be available on the Closed Bid Opportunities (or Public/Posted Opening & Award Results) page at The City of Winnipeg, Corporate Finance, Materials Management Division website at http://www.winnipeg.ca/matmgt/.
- B16.3 To the extent permitted, the City shall treat all Proposal Submissions as confidential. However, the Proponent is advised that any information contained in any Proposal may be released if required by City policy or procedures, by The Freedom of Information and Protection of Privacy Act (Manitoba), by other authorities having jurisdiction, or by law.
- B16.4 Following the award of Contract, a Proponent will be provided with information related to the evaluation of its 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 10 of Form A: 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 until a Contract for the Services has been duly executed as herein provided, but any offer shall be deemed to have lapsed unless accepted within the time period specified in Paragraph 10 of Form A: Proposal.

B18. WITHDRAWAL OF OFFERS

- B18.1 A Proponent may withdraw its Proposal without penalty by giving written notice to the Manager of Materials at any time prior to the Submission Deadline.
- B18.1.1 The time and date of receipt of any notice withdrawing a Proposal shall be the time and date of receipt as determined by the Manager of Materials.
- B18.1.2 The City will assume that any one of the contact persons named in Paragraph 3 of Form A: Proposal or the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal, and only such person, has authority to give notice of withdrawal.
- B18.1.3 If a Proponent gives notice of withdrawal prior to the Submission Deadline, the Manager of Materials will:
 - (a) retain the Proposal until after the Submission Deadline has elapsed;
 - (b) open the Proposal to identify the contact person named in Paragraph 3 of Form A: Proposal and the Proponent's authorized representatives named in Paragraph 11 of Form A: Proposal; and
 - (c) if the notice has been given by any one of the persons specified in B18.1.3(b), declare the Proposal withdrawn.
- B18.2 A Proponent who withdraws its Proposal after the Submission Deadline but before its offer has been released or has lapsed as provided for in B17.2 shall be liable for such damages as are imposed upon the Proponent by law and subject to such sanctions as the Chief Administrative Officer considers appropriate in the circumstances. The City, in such event, shall be entitled to all rights and remedies available to it at law.

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 or otherwise, the Proponent amends or modifies a Proposal after the Submission Deadline, the City may consider the amended Proposal as an alternative to the Proposal already submitted without releasing the Proponent from the Proposal as originally submitted.

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

B21. EVALUATION OF PROPOSALS

B21.1

	5	
(a)	compliance by the Proponent with the requirements of the Request for Pro acceptable deviation therefrom:	posal or (pass/fail)
(b)	qualifications of the Proponent and the Subconsultants, if any, pursuant to	B14: (pass/fail)
(c)	Fees; (Section B)	40%
(d)	Experience of Proponent and Subconsultants; (Section C)	8%
(e)	Experience of Key Personnel Assigned to the Project; (Section D)	30%
(f)	Project Understanding and Methodology (Section E)	20%
(g)	Project Schedule. (Section F)	2%

- 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 responsible and qualified.
- B21.4 Further to B21.1(c), Fees will be evaluated based on Fees submitted in accordance with B9.
- B21.5 Further to B21.1(d), Experience of Proponent and Subconsultants will be evaluated considering the information provided in response to B10, including but not limited to the following criteria:
 - (a) Ability of proponent to complete the job;
 - (b) Similarity of the Proponent's past projects to this project; and
 - (c) Success of the Proponent on past projects.
- B21.6 Further to B21.1(e), Experience of Key Personnel Assigned to the Project will be evaluated considering the information provided in response to B11, including but not limited to the following criteria:

- (a) Appropriateness of related years of experience of the Key Personnel;
- (b) Relevancy of experience of the Key Personnel; and
- (c) Appropriateness of approach to overall team formation and coordination of team members.
- B21.6.1 Proposals that receive less than half the available evaluation points for Experience of Key Personnel will be rejected in accordance with B21.3.
- B21.7 Further to B21.1(f), Project Understanding and Methodology will be evaluated considering the information provided in response to B12, including but not limited to the following criteria:
 - (a) The appropriateness of the Project Management Approach;
 - (b) The Methodology, including appropriateness of hours assigned to individual tasks;
 - (c) The Proponent's understanding of the Project, including its deliverables and its constraints; and
 - (d) Demonstration of insight beyond the information that was presented in the Request for Proposal.
- B21.7.1 Proposals that receive less than half the available evaluation points for Project Understanding and Methodology will be rejected in accordance with B21.3.
- B21.8 Further to B21.1(g), Project Schedule will be evaluated considering the information provided in response to B13, including but not limited to the following criteria:
 - (a) The completeness of the project schedule; and
 - (b) The appropriateness of the timelines provided.
- B21.9 Notwithstanding B21.1(d) to B21.1(g), where Proponents fail to provide a response to B7.2(a) to B7.2(d), the score of zero may be assigned to the incomplete part of the response.

B22. 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 responsible and 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 responsible and qualified Proponent submitting the most advantageous offer.
- B22.4 The City may, at its discretion, award the Contract in phases.
- B22.5 Notwithstanding Paragraph 6 of Form A: Proposal and C4, the City will issue a Letter of Intent to the successful Bidder in lieu of execution of a Contract.

- B22.5.1 The Contract documents as defined in C1.1(n)(ii) in their entirety shall be deemed to be incorporated in and to form a part of the Letter of Intent notwithstanding that they are not necessarily attached to or accompany said Letter of Intent.
- B22.6 The form of Contract with the City of Winnipeg will be based on the Contract as defined in C1.1(n).
- B22.7 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.
- B22.8 If, after the award of Contract, the Project is cancelled, the City reserves the right to terminate the Contract. The Consultant will be paid for all Services rendered up to time of termination.

PART C - GENERAL CONDITIONS

C1. GENERAL CONDITIONS

- C1.1 The *General Conditions for Consultant Services* (Revision 2010-10-01) are applicable to the Services of the Contract.
- C1.1.1 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 <u>http://www.winnipeg.ca/matmgt/gen_cond.stm</u>.
- C1.2 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:

Jon Goodbrandson, P. Eng.

Email: JGoodbrandson@winnipeg.ca

Telephone No. 204 986-2417

Facsimile No. 204 224-0032

- 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.
- D2.3 Proposal Submissions must be submitted to the address in B7.10

D3. DEFINITIONS

- D3.1 When used in this Request for Proposal:
 - (a) "DWQS" means Drinking Water Quality Strategy (CH2M HILL, 2012).
 - (b) "HVAC" means Heating, Ventilation and Air Conditioning.
 - (c) "I/O" means Input / Output
 - (d) "MCC" means Motor Control Centre.
 - (e) "P&ID" means Process and Instrumentation Diagram.
 - (f) "PLC" means Programmable Logic Controller.
 - (g) "SCADA" means Supervisory Control and Data Acquisition.
 - (h) "SLA" means Shoal Lake Aqueduct.
 - (i) "UPS" means Uninterruptable Power Supply.
 - (j) "WBS" means Work Breakdown Structure.
 - (k) "WPCC" means Water Pollution Control Centre.
 - (I) "WWD" means the Water and Waste Department.

D4. BACKGROUND

D4.1 Zebra and quagga mussels have been introduced into North American waterways and are invasive species known for their biofouling capabilities. Zebra mussels were detected in the Red River in North Dakota in 2010 and in Lake Winnipeg in 2013, and quagga mussels have become a dominant species in the Great Lakes. As such, the likelihood of their introduction into Shoal Lake has increased. Should they be detected, the SLA Intake Facility currently has the option to convert to continuous chlorination for mussel control. However, this is not a long term solution due to concerns with the reliability of the existing system, regulatory requirements for disinfection by-products, staff safety, and potential for environmental impact from transporting large amounts of chlorine. The City of Winnipeg Drinking Water Quality Strategy (CH2M HILL, 2012) provides direction for a zebra mussel control approach to address the concerns with the existing system. One key component of this mussel control strategy is to develop a preliminary

design for a copper-ion generating system at SLA Intake Facility. In this manner, the Department will be better prepared if mussels are introduced into Shoal Lake. It is intended to maintain the ability to use continuous chlorination as an interim mussel control measure until the copper-ion generating system is constructed and implemented. The existing continuous chlorination system at the SLA Intake Facility includes a dechlorination facility for process water (includes screen backwashing, pump and genset cooling) discharged to Falcon Bay. The individual process flows range from approximately 20 to 350 L / minute during discharge to Falcon Bay. The dechlorination facility was installed in 1994 and is designed to use sulfur dioxide gas for dechlorination. However, the facility has never been successfully commissioned, reportedly due to problems with sensor fouling.

- D4.2 WWD is conducting a geotechnical investigation at the SLA Intake for location of a future building to house an upgraded chlorination storage and dosing facility, for periodic biofilm control. Space allowance is included for the future mussel control system. Additional Geotechnical review is not anticipated within the scope of this project.
- D4.3 Refer to Appendix "B" for a listing of relevant reference documents which are available electronically by request to the Project Manager.
- D4.4 Relevant historical record drawings for the Shoal Lake Aqueduct Intake Facility are provided for reference and summarized in Appendix "C" of this document.
 - (a) The record drawings provided are for informational purposes only and the City makes no claim or liability to the accuracy of the information provided.

D5. SCOPE OF SERVICES

The Services required under this Contract shall be completed in accordance with the following:

- D5.1 General
- D5.1.1 These Terms of Reference are supplemental to the Standard Terms and Conditions of Consultant Services and the "Definition of Standard Consulting Engineering Services" required by the City of Winnipeg. The "Definition of Standard Consulting Engineering Services" is available for reference in "Appendix A".
- D5.1.2 The consulting services described herein are to be provided for the Water and Waste Department (the Department).
- D5.1.3 The Department will provide assistance towards the following services:
 - Site access to the Shoal Lake Aqueduct Intake Facility.
 - Provision of any available information on operational records (i.e. maintenance records).
- D5.1.4 Preliminary design services will generally follow the approach outlined in the DWQS. The work is to be separated into Phase I and II as described in D5.2 and D5.3.
 - (a) Phase II is to be initiated once Phase I is reviewed and approved by the Department.
- D5.1.5 Project Management
 - (a) Plan, organize, secure and manage resources to bring about the successful completion of specific project goals and objectives.
 - (b) Structure the Project into manageable sub-entities and prepare a Work Breakdown Structure (WBS).
 - (c) Develop a Project schedule identifying Project activities, milestones, responsibility, time lines for each.
 - (d) Establish a protocol for all communication issues throughout the Project including change of management.
 - (e) Establish appropriate levels of review and approvals for all Project deliverables.

- (f) Throughout the preliminary design meet with City's Advisory Committee for the Project to discuss findings, obtain input from City personnel, and discuss the design. Meeting minutes are to be provided within one week of the meeting date. A minimum of two (2) formal meetings will be required:
 - (i) Project Initiation Meeting
 - (ii) Presentation and review of the draft Technical Memorandum for Phase 1
- (g) Submit monthly project status reports of maximum two pages, including the following:
 - (i) Percentage completion of the overall project and of the tasks defined in the WBS;
 - (ii) Budget and actual cost for completed tasks and projected cost for planned tasks; and
 - (iii) Any project issues.
- (h) Provide adequate notice (at least three weeks) prior to any site visit or work / shutdown that will require assistance from City personnel.
- D5.1.6 Zebra mussels are considered the invasive species of primary concern to Winnipeg's water source due to their introduction into Lake Winnipeg in 2013. It is noted that the Preliminary design for mussel control must also consider the potential for the introduction of quagga mussels into Shoal Lake and identify any specific issues or considerations that apply.
- D5.1.7 The preliminary design report and drawings for the mussel control system will provide a guide for future detailed design and construction following the introduction of mussels into Shoal Lake. Future work will be issued as another Request for Proposal at a later date as determined by the Department. The preliminary design report must document the investigations performed, findings, functional design, drawings, recommendations, cost estimates, and a proposed construction schedule.
- D5.1.8 All work is to be completed in accordance with the current versions of the following City of Winnipeg Standards. Copies are noted for reference in Appendix B.
 - (a) The City of Winnipeg Water & Waste Department Electrical Design Guide
 - (b) The City of Winnipeg Water & Waste Identification Standard
 - (c) The City of Winnipeg Water & Waste Department Water and Wastewater Treatment Process – Drawing Standard
- D5.2 Phase I Research and Review
- D5.2.1 Confirm that copper-ion generation is still the best available technology for mussel control at the SLA Intake Facility from a thorough evaluation including the following items:
 - (a) Research and review any new or emerging technologies being used for mussel control to determine if a more applicable solution is now available.
 - (b) Consult with provincial regulators (Manitoba Conservation and Office of Drinking Water) to evaluate the need for a copper removal process to address:
 - (i) Potential copper discharge limits at the SLA Intake (into Falcon Bay); and
 - (ii) Potential downstream impacts at the WPCCs in Winnipeg.
 - (c) Research and review recent performance of existing copper-ion generation facilities for mussel control in drinking water applications.
 - (d) Arrange for a site investigation with two (2) City staff to visit an existing installation where copper-ion generation is being used for mussel control in a drinking water treatment application.
 - (e) Determine the design copper dosing rate.
 - (f) Confirm operation and maintenance requirements for copper-ion generation.
 - (i) Replacement of anodes in the copper-ion generator units;
 - (ii) Annual cost for replacement anodes;
 - (iii) Daily operating electrical consumption;

- (iv) Routine inspections; and
- (v) Inspection / adjustment of the amperage to each unit.
- (g) Verify the condition of existing facilities and equipment at the SLA Intake Facility, including diffusers and solution lines, for their application with the mussel control strategy.
- (h) Provide a recommendation regarding the effectiveness and potential use of copperion treatment for providing protection against biological fouling (biofilm formation) in the SLA.
- D5.2.2 Complete a condition assessment of the existing sulfur dioxide dechlorination facility at the SLA Intake Facility and provide a recommendation for commissioning and continued use of the facility, or abandonment and replacement with an alternative dechlorination system within the existing building, such as Vita-D-Chlor tablet dosing as is currently used within the City's Regional Pumping Stations.
- D5.2.3 Provide a Technical Memorandum in electronic PDF format summarizing the findings from 5.2.1 and 5.2.2, complete with recommendations, to the Department. Allow three (3) weeks for review by the Department. In the event that the mussel control strategy is confirmed and accepted by the Department, it is anticipated that Phase II will be initiated to complete the preliminary design of the mussel control and dechlorination systems.
- D5.3 Phase II Preliminary Design Services
- D5.3.1 Phase II will be given authority to proceed after the work completed in Phase I (D5.2) is approved by the Department.
- D5.3.2 Provide a preliminary design for the mussel control system.
 - (a) Copper-Ion Generation Equipment
 - Required number of copper-ion generator units for current and future water demand, including stand-by for periods of maintenance and anode replacement.
 - (ii) Preliminary design of required pumping and piping to provide a raw water stream to the copper-ion generating system.
 - (iii) Preliminary design of discharge piping from the copper-ion generating system with diffuser application points for the copper-ion feed located in front of the gate house to prevent mussel attachment and fouling of the intake screens.
 - The design must maintain application points upstream of the intake screens for continuous chlorination during construction of, and as a back-up to, the mussel control system.
 - (iv) Determine the range of operating conditions (i.e. number of units, dosage / concentration, run times) in proportion to SLA flow rate.
 - (v) Provide operational flexibility to switch between copper-ion dosing and continuous chlorination for periods when the copper-ion system is offline.
 - (b) Copper Removal Process
 - (i) Preliminary design of a suitable copper removal process to address copper discharge limits at the SLA Intake (into Falcon Bay) and downstream impacts at the WPCCs in Winnipeg, as required.
 - (ii) As indicated in the DWQS, an ion-exchange process would be preferred for copper removal at the SLA Intake Facility.
 - Include consideration for the disposal of brine from resin regeneration.
 - It is anticipated that an ion exchange system would be located within the existing dechlorination building at the SLA Intake Facility.
 - (iii) Determine operating parameters for the ion exchange system based on maintenance records for water discharged to Falcon Bay, and historical and projected SLA flow rates, as required.
 - (c) Dechlorination System

- (i) Evaluate the required dosing rate and chemical delivery requirements based on operating records for the process water discharged to Falcon Bay.
- (ii) Evaluate reuse of existing process equipment and piping as practical;
- (iii) Consider reuse of the existing dechlorination building to house the new system.
- (iv) Identify components of the sulfur dioxide system for decommissioning and abandoned as required.
- D5.3.3 The following work areas are to be included in the preliminary design for the copper-ion generation, copper removal, and dechlorination systems described in Section D5.3.2, as required.
 - (a) Operation and Maintenance
 - (i) Identify maintenance requirements and estimated operating costs.
 - (b) Structural / Architectural
 - (i) Verify the horizontal and vertical building space requirements to adequately accommodate all equipment associated with the mussel control systems, with provisions for anticipated future water demand.
 - (c) Mechanical HVAC System
 - (i) Evaluate the HVAC requirements for the mussel control systems.
 - (d) Electrical
 - (i) Evaluate electrical load and equipment requirements for the mussel control systems.
 - (ii) Confirm capacity within existing UPS to accommodate the mussel control systems
 - (iii) Confirm the existing back-up generator has sufficient capacity to accommodate the mussel control systems.
 - (iv) Verify physical space in the existing MCC at the SLA Intake Facility to accommodate the mussel control systems.
 - (v) Provision for portable standby power.
 - (vi) Provide a design basis for the following, as required:
 - General and environmental requirements,
 - Power Factor Correction,
 - Grounding,
 - Identification of Specific Implementation Requirements.
 - (vii) All electrical code requirements are to be satisfied.
 - (viii) In addition to the preliminary design report, the deliverables will include:
 - Single Line Diagram with preliminary arc flash values,
 - Plan layout drawings of electrical distribution. Include major automation control panels.
 - (e) Instrumentation and Control
 - (i) Evaluate Instrumentation and Control requirements for the mussel control systems.
 - (ii) Identify I/O requirements for the mussel control systems
 - (iii) Note that P&ID drawings for the SLA Intake Facility were completed in 2013 as part of a preliminary design for PLC upgrades to the regional water supply system. Detailed design for the PLC upgrades is ongoing in 2015. Replacement of two (2) existing Station Master PLC units at the SLA Intake Facility is planned for 2016.
 - (iv) Note that the Department is currently beginning a major upgrade to the existing Regional SCADA system under separate budget.
 - (v) Provide P&ID drawings for the mussel control systems.

- D5.3.4 Preliminary Design Report and Deliverables:
 - (a) General
 - (i) Collect and review all available existing information about the sites including files, reports, drawings, condition assessments, etc.;
 - (ii) Where necessary conduct field investigations to verify existing conditions and to supplement available information;
 - (iii) Examine site constraints for the recommended upgrades considering:
 - Required shutdown of facilities and impact to operations;
 - Site access;
 - Lead times for delivery of new equipment; and
 - A high level construction work plan addressing site constraints.
 - (iv) Identify all permits necessary for construction.
 - (v) Provide unequivocal recommendations on the mussel control system, including:
 - Construction methodologies;
 - A timeline for construction;
 - Cost estimates;
 - Operational considerations; and
 - An economic analysis, including life cycle costing, of all options presented.
 - (vi) Include all considerations that led to the recommendations in the report.
 - (vii) Include the following as appendices to the report:
 - All data collected during the project; and
 - Procedures used to collect the data.
 - (b) Draft Preliminary Design Report
 - Submit three (3) hard copies and one (1) electronic Microsoft Word copy of the "Draft Preliminary Design Report". All drawings, except for the P&IDs, will be attached to the report as an appendix in an 11x17 format;
 - Submit three (3) 11x17 hard copies and one (1) electronic PDF copy of the draft P&ID drawings; and
 - (iii) Allow a minimum three (3) weeks for City review of the Draft Preliminary Design Report.
 - (c) Final Preliminary Design Report
 - (i) Upon receipt of City review comments on the draft report prepare a final report to present the results of the preliminary design;
 - (ii) Include the following as appendices to the report:
 - All data collected during the project; and
 - Procedures used to collect the data.
 - Submit five (5) hard copies and two (2) electronic PDF copy of the 'Final Preliminary Design Report'. All drawings, except for the P&IDs, will be attached to the report as an appendix in an 11x17 format; and
 - (iv) Submit five (5) 11x17 hard copies and one (1) electronic PDF copies of the final P&ID drawings. In addition, submit an AutoCAD file for each P&ID drawing, formatted as per the City's standards.
- D5.3.5 Cost Estimate
 - (a) Provide an AACE Class 4 cost estimate for the proposed work.
 - (b) Provide a breakdown of the fees for the work identified in this section by discipline.

D6. OWNERSHIP OF INFORMATION, CONFIDENTIALITY AND NON DISCLOSURE

- D6.1 The Contract, all deliverables produced or developed, and information provided to or acquired by the Consultant are the property of the City and shall not be appropriated for the Consultants own use, or for the use of any third party.
- D6.2 The Consultant shall not make any public announcements or press releases regarding the Contract, without the prior written authorization of the Project Manager.
- D6.3 The following shall be confidential and shall not be disclosed by the Consultant to the media or any member of the public without the prior written authorization of the Project Manager;
 - (a) information provided to the Consultant by the City or acquired by the Consultant during the course of the Work;
 - (b) the Contract, all deliverables produced or developed; and
 - (c) any statement of fact or opinion regarding any aspect of the Contract.
- D6.4 A Consultant who violates any provision of D6 may be determined to be in breach of Contract.

D7. PHOTOGRAPHS

- D7.1 All photos submitted to the City as part of the Project shall include captions with the following information:
 - (a) Date photo was taken;
 - (b) Location photo was taken; and
 - (c) A brief description of what is depicted by the photo.

SUBMISSIONS PRIOR TO START OF SERVICES

D8. AUTHORITY TO CARRY ON BUSINESS

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

D9. INSURANCE

- D9.1 The Consultant shall procure and maintain, at its own expense and cost, insurance policies with limits no less than those shown below.
- D9.2 As a minimum, the Consultant shall, without limiting its obligations or liabilities under any other contract with the City, procure and maintain, at its own expense and cost, the following insurance policies:
 - (a) Comprehensive or Commercial General Liability Insurance including:
 - (i) an inclusive limit of not less than \$2,000,000 for each occurrence or accident with a minimum \$2,000,000 Products and Completed Operations aggregate and \$5,000,000 general aggregate;
 - (ii) the City of Winnipeg added as an additional insured, and including a cross-liability clause and reference to specify transportation via railway;
 - all non-City of Winnipeg personnel will be required to sign the GWWD Railway Waiver Form prior to GWWD Railway use.
 - (iii) 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;

- (iv) 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;
- 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) Professional Errors and Omissions Liability Insurance including:
 - (i) an amount not less than \$2,000,000 per claim and \$2,000,000 in the aggregate.
- D9.2.1 The Consultant's Professional Errors and Omissions Liability Insurance shall remain in force for the duration of the Project and for twelve (12) months after total performance.
- D9.3 The policies required in D9.2(a) shall provide that the City is named as an Additional Insured thereunder and that said policies are primary without any right of contribution from any insurance otherwise maintained by the City.
- D9.4 The Consultant shall require each of its Subconsultants to provide comparable insurance to that set forth under D9.2(a).
- D9.5 The Consultant shall provide the Project Manager with a certificate(s) of insurance for itself and for all of its Subconsultants, in a form satisfactory to the City Solicitor, at least two (2) Business Days prior to the commencement of any Services, but in no event later than the date specified in C4.1 for the return of the executed Contract. Such Certificates shall state the exact description of the Services and provide for written notice in accordance with D9.10.
- D9.6 The Consultant may take out such additional insurance as it may consider necessary and desirable. All such additional insurance shall be at no expense to the City.
- D9.7 All insurance, which the Consultant is required to obtain with respect to this Contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the Province of Manitoba.
- D9.8 If the Consultant fails to do all or anything which is required of it with regard to insurance, the City may do all that is necessary to affect and maintain such insurance, and any monies expended by the City shall be repayable by and recovered from the Consultant.
- D9.9 The failure or refusal to pay losses by any insurance company providing insurance on behalf of the Consultant or any Subconsultants shall not be held to waive or release the Consultant or Subconsultants from any of the provisions of the insurance requirements or this Contract. Any insurance deductible maintained by the Consultant or any Subconsultants under any of the insurance policies is solely for their account and any such amount incurred by the City will be recovered from the Consultant as stated in D9.8.
- D9.10 The Consultant shall not cancel, materially alter, or cause any policy to lapse without providing at least thirty (30) Calendar Days prior written notice to the City.

SCHEDULE OF SERVICES

D10. COMMENCEMENT

- D10.1 The Consultant shall not commence any Services until it is in receipt of a notice of award from the City authorizing the commencement of the Services.
- D10.2 The Consultant shall not commence any Services until:
 - (a) the Project Manager has confirmed receipt and approval of:

- (i) evidence of authority to carry on business specified in D8;
- (ii) evidence of the insurance specified in D9;
- (b) the Consultant has attended a meeting with the Project Manager, or the Project Manager has waived the requirement for a meeting.
- D10.3 The City intends to award this Contract within 60 Calendar Days of the Request for Proposal closing.

D11. CRITICAL STAGES

- D11.1 The Consultant shall achieve critical stages of the Services for this Contract in accordance with the following requirements:
 - (a) Submission of the Technical Memorandum summarizing Phase I Research and Review described in D5.2 no later than 90 Calendar Days from award.
 - (b) Submission of the Draft Preliminary Design Report described in D5.3 no later than 240 Calendar Days from award.
 - (c) Submission of the Final Preliminary Design Report described in D5.3 no later than 270 Calendar Days from award.

D12. FUTURE WORK

- D12.1 This Preliminary design project may lead to a future detailed design and construction project at the SLA Intake Facility following the detection of mussels in Shoal Lake.
- D12.2 Any future engineering work resulting from recommendations made as part of this project will be posted as a separate Request for Proposal for engineering services.
- D12.3 The future engineering work will not be posted until the Final Preliminary Design Report is completed and accepted by the Department.

PART E - SECURITY CLEARANCE

E1. SECURITY CLEARANCE

- E1.1 Each individual proposed to perform Work under the Contract shall be required to obtain a Criminal Record Search Certificate from the police service having jurisdiction at his place of residence and Public Safety Verification Checks.
 - (a) Any cost or expense incurred by the Proponent that is associated with obtaining the required security clearances shall be borne solely by the Proponent.
- E1.2 A Criminal Record Search Certificate can be obtained from one of the following;
 - (a) police service having jurisdiction at his/her place of residence; or
 - (b) BackCheck, as described in E1.4; or
 - (c) Commissionaires (Manitoba Division), forms to be completed can be found on the website at: <u>http://www.commissionaires.mb.ca/</u>.
- E1.3 Public Safety Verification Checks may be obtained from BackCheck as described in E1.4.
- E1.4 To use BackCheck for obtaining security clearance, a company must be registered as a City of Winnipeg vendor, which can be arranged as follows:
 - (a) The Bidder can set up an account with BackCheck under their company name by completing the form at <u>http://www.backcheck.net/cityofwinnipeg/</u>. A primary contact person for the company is required, who will receive within 48 hours account information and instructions for requesting checks through BackCheck.
 - (b) With the account information and instruction provided, the Bidder can begin requests for a Criminal Record Check and/or Public Safety Verification for individuals.
 - (c) Each individual must provide the necessary information to complete a security check request. BackCheck will have results available for the City of Winnipeg and the company within 24 hours of submission.
 - (d) If a Bidder is unsure if their company already has a City of Winnipeg vendor, Linda Ferens can be contacted via the e-mail below (and cc <u>dmeyer@backcheck.net</u>) to request a check for a vendor account under their company name.
 - (e) If additional assistance is required to obtain security clearance through BackCheck, the Bidder may contact the following BackCheck Representative:

Linda Ferens Email: <u>Iferens@backcheck.net</u> Phone: (204) 999-0912

- E1.5 The original Criminal Record Search Certificate (Form P–253) will be provided by the Winnipeg Police Service to the individual applicant. The original has a validation sticker from the Winnipeg Police Service in the top right hand corner. The applicant shall:
 - (a) Provide the original Criminal Record Search Certificate (Form P–253) to the Contract Administrator, unless clearances are obtained through BackCheck as described in E1.4.
- E1.6 Prior to the commencement of any Work, and during the term of the Contract if additional or replacement individuals are proposed to perform Work, the Contractor shall supply the Contract Administrator with a Criminal Record Search Certificate obtained not earlier than one (1) year prior to the Submission Deadline, or a certified true copy thereof, for each individual proposed to perform the Work.
- E1.7 Any individual for whom a Criminal Record Search Certificate is not provided, or for whom a Criminal Record Search Certificate indicates any convictions or pending charges related to property offences or crimes against another person will not be permitted to perform any Work.

- E1.8 Any Criminal Record Search Certificate obtained thereby will be deemed valid for the duration of the Contract subject to a repeated records search as hereinafter specified.
- E1.9 Notwithstanding the foregoing, at any time during the term of the Contract, the City may, at its sole discretion and acting reasonably, require an updated criminal records search. Any individual who fails to provide a satisfactory Criminal Record Search Certificate as a result of a repeated criminal records search will not be permitted to continue to perform any Work.

APPENDIX A – DEFINITION OF PROFESSIONAL CONSULTANT SERVICES

DEFINITION OF PROFESSIONAL CONSULTANT SERVICES (CONSULTING ENGINEERING SERVICES)

1 INTRODUCTION

- 1.1 It is the intent of the City of Winnipeg, in defining Professional Consultant Services (Consulting Engineering Services), to clarify the role required of consulting Engineers; to more fully identify the services to be rendered by consulting Engineers to the City and to other parties on behalf of the City; and to provide a more clearly determined basis of obligation in respect thereof by consulting Engineers to the City and to third parties in the provision of such services
- 1.2 The services shall be performed in the City of Winnipeg, unless otherwise authorized by the City, under direct supervision of a professional Engineer. All drawings, reports, recommendations and other documents, originating therefrom 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 Association of Professional Engineers and Geoscientists of the Province of Manitoba. Other reports and documents not involving the "practice of professional engineering", such as letters of information, minutes of meetings, construction progress reports, may be originated and signed by other responsible personnel engaged by the consulting Engineer and accepted by the City. Progress estimates, completion certificates and other reports related to the technical aspects of a project, must be endorsed by the Engineer in a manner acceptable to the City.

2 ADVISORY SERVICES

- 2.1 Advisory services are normally not associated with or followed by preliminary design and/or design services, and include, but are not limited to:
 - (a) Expert Testimony;
 - (b) Appraisals;
 - (c) Valuations;
 - (d) Rate structure and tariff studies;
 - (e) Management services other than construction management;
 - (f) Feasibility studies;
 - (g) Planning studies;
 - (h) Surveying and mapping;
 - (i) Soil mechanics and foundation engineering;
 - (j) Inspection, testing, research, studies, or reports concerning the collection, analysis, evaluation; and
 - (k) Interpretation of data and information leading to conclusions and recommendations based upon specialized engineering experience and knowledge.

3 PRELIMINARY DESIGN

- 3.1 Preliminary design services are normally a prelude to the detailed design of a project and include, but are not limited to:
 - (a) Preliminary engineering studies;
 - (b) Engineering investigation;
 - (c) Surface and subsurface site explorations, measurements, investigations, and surveys;
 - (d) Operations studies including drainage studies, traffic studies, etc.;
 - (e) Functional planning;
 - (f) Physical, economical (capital and operating) and environmental studies including evaluation, comparison, and recommendation regarding alternative preliminary designs;

- (g) Preparation and submission of a report and appropriate drawings to the City, fully documenting data gathered, explaining adequately the assessment made, stating with clarity the resulting conclusions, and containing all recommendations which are relevant to this stage of project implementation;
- (h) Special applications to public agencies for necessary authorizations, preparation and submission of reports and drawings thereto and appearance before same in support of the application.

4 DETAILED DESIGN

- 4.1 Detailed design services normally involve preparation of detailed designs, tender specifications and drawings, and analysis of bids and recommendations for contract award, and include, but are not limited to:
 - (a) Addressing alternative methods of accommodating; relocating; avoiding, and/or avoiding injury to Utilities and railways; proposing alternative methods of solution, reviewing same with the appropriate Regulatory approval agencies and stakeholders;
 - (b) Application to public agencies for necessary authorizations, preparation and submission of reports and drawings thereto, and appearance before same in support of the application;
 - (c) Preparation and submission of detailed engineering calculations, drawings, and criteria employed in the design(s), securing review of and an acceptance by the City;
 - (d) Preparation of detailed engineering drawings, specifications and tender documents consistent with the standards and guidelines of the City, securing review of acceptance by the City;
 - (e) Preparation and provision to the City in written form, a fully detailed formal construction contract estimate;
 - (f) Provision of appropriate response to bidders and advice to the City during the bid period and, subject to acceptance by the City, issuing addenda to the tender documents;
 - (g) Submission of a review, analysis, comparison, tabulation, calculation, and evaluation of the bids received, to the City;
 - (h) Preparation of a report including revised contract estimate, identifying and explaining variations from the earlier formal estimate, and containing recommendation regarding contract award identifying the reasons therefore.

5 CONTRACT ADMINISTRATION SERVICES

5.1 Contract administration services are associated with the construction of a project and include the office and field services required to ensure the conduct of the project in accordance with the intent of the City and in conformance with the particulars of the drawings and specifications; and include but are not limited to:

NON-RESIDENT SERVICES

- (a) Consultation with and advice to the City during the course of construction;
- (b) Review and acceptance of shop drawings supplied by the contractor or supplier to ensure that the drawings are in conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (c) Review and report to the City upon laboratory, shop and other tests conducted upon materials and/or equipment placed or installed by the contractor to ensure to the City conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (d) Acceptance of alternate materials and methods, subject to prior acceptance by the City, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (e) Provision to the City of a complete current report on the project status on a monthly basis;
- (f) Provision to the City a current update of revised contract-end cost estimate on a monthly basis, or more frequently if found necessary, with explanation and justification of any significant variation from the preceding contract-end cost estimate;

- (g) Definition and justification of and estimate of cost for additions to or deletions from the contract for authorization by the City;
- (h) Furnishing the City with a copy of all significant correspondence relating directly or indirectly to the project, originating from or distributed to, parties external to the consulting Engineer, immediately following receipt or dispatch of same by the consulting Engineer;
- Provision of adequate and timely direction of field personnel by senior officers of the Consultant;
- (j) Establishment prior to construction and submission to the City of written and photographic records of, and assessment of the physical condition of adjacent buildings, facilities, and structures sufficient to equip the consulting Engineer to provide valid evidence and relevant testimony in settlement of any claim involving the City by any court of law, or by any other party for damages thereto arising from the project;
- (k) Arranging and attending pre-construction meetings and on-site or off-site review meetings, which meetings shall include representatives of the contractor and the City;
- (I) The preparation and submission of:
 - i. a detailed design notes package including items such as structural geotechnical, hydraulic and heating, air-conditioning and ventilation design calculations; mechanical and electrical design calculations related to process equipment and building services; process design calculations; and instrumentation and process control design calculations;
 - ii. approved related shop drawings and equipment process manuals all within one (1) month of completion of each separate installation contract required to complete the Works.

RESIDENT SERVICES

- (a) Provision of qualified resident personnel acceptable to the City present at the project site to carry out the services as specified immediately below, without relieving the contractor of his contractual and other legal obligations in respect thereof:
 - i. inspection of all pipe prior to installation;
 - ii. inspection and acceptance of excavation for, and full time inspection at the time of bedding placement, pipe laying and backfilling in respect of installation of watermains, land drainage sewers, and wastewater sewers;
 - iii. inspection of installation of all connections to watermains, sewers, manholes, valves, hydrants or house services, and excavation and/or exposing of all underground services, structures, or facilities;
 - iv. "full time inspection" and/or testing of watermains and sewers;
 - v. inspection of all excavations to determine soil adequacy prior to installation of base and subbase courses for sidewalks, public back lanes, and street pavements. It is to be understood that "full time inspection" will require assignment of a qualified person to each specific location when the referenced work is being undertaken by the contractor.
- (b) Without relieving the contractor of his contractual and other legal obligations in respect thereof, conduct detailed inspection of construction sufficient to ensure that the construction carried out by the contractor is in conformance with the drawings and specifications;
- (c) Co-ordination and staging of all other works on the project site including traffic signal installations, hydro, telephone, and gas utility work, railway work forces and City or developer work;
- (d) In conjunction with the City, provision of notice to adjacent residents and businesses of those stages of construction of the project that will interrupt public services or access thereto, sufficiently in advance of same to permit preparation therefore;
- (e) Enforcement of contractor conformance with the City of Winnipeg Manual of Temporary Traffic Control in Work Areas on City Streets and with reasonable standards of safety for motorists and pedestrians, without relieving the contractor of his contractual and other legal obligations in respect thereof;

- (f) Provision of reference line and elevation to the contractor and checking upon the contractor's adherence thereto, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- (g) Responsible, sensitive, and prompt reaction to the reasonable requests and complaints of citizens regarding the conduct of the project, acting in the interest of the City;
- (h) Arranging for and carrying out of testing of materials utilized by the contractor to ensure conformance with the drawings and specifications, without relieving the contractor of his contractual and other legal obligations in respect thereof;
- Preparation, certification, and prompt submission of progress estimates to the City for payment to the contractor for construction performed in accordance with the drawings and specifications;
- (j) Arrange, attend and prepare and distribute records of and minutes for, regularly held on-site or offsite project review meetings including representatives of the contractor and the City;
- (k) Promptly reporting to the City upon any significant and unusual circumstances;
- Promptly arranging for and taking part in a detailed final inspection of the project with the contractor and the City prior to commencement of the period of contractor maintenance guarantee specified in the contract for the project and providing to the City in written form an appropriate recommendation of acceptance of the constructed or partially constructed project;
- (m) Act as Payment Certifier and administer all contracts as required under the Builder's Liens Act of Manitoba;
- (n) Prepare a Certificate of Substantial Performance;
- Preparation and submission to the City of "as-constructed" drawings for the project within 1 month of project completion;
- (p) Prepare a Certificate of Total Performance;
- (q) Provision of inspection services during the maintenance guarantee period of the contract;
- (r) Undertake a detailed inspection of the project with the contractor and the City prior to the end of the period of contractor maintenance guarantee specified in the contract for the project;
- (s) Keep a continuous record of working days and days lost due to inclement weather during the course of contract works;
- (t) Prepare a Certificate of Acceptance.

6 ADDITIONAL SERVICES

- 6.1 Additional services are in addition to those specified in other Types of Services and may or may not be associated with a construction project, but are not in place of or in substitution for those services elsewhere specified in the Definition of Standard Consulting Engineering Services in respect of other Types or Categories of Services.
 - (a) Revision of completed, or substantially completed, drawings and/or specifications that were in conformance with the original intent of the City or had been accepted by the City;
 - (b) Preparation of operating manuals and/or training of operating personnel;
 - (c) Startup and/or operation of operating plants;
 - (d) Procurement of materials and equipment for the City;
 - (e) Preparation for and appearance in litigation on behalf of the City;
 - (f) Preparation of environmental studies and reports and presentation thereof in public hearings.

APPENDIX B – RELEVANT DOCUMENTS

The following documents are available electronically by request to the Project Manager:

1	SLA Intake Facility Asse	ssment			
	Author: AECOM				
	Published: 2012				
	Library Call Number:	Site inspections and assessment of the SLA Intake Facility			
	REPO TD 398 .A336	with hydraulic review and upgrade strategy.			
	2012				
2	City of Winnipeg Drinkin	g Water Quality Strategy			
	Author: CH2M HILL				
	Published: 2012	The Drinking Water Quality Strategy covers disinfection,			
	Library Call Number: REPO TD 227 .W5 C49 2012	corrosion control, and fluoride addition.			
3	City of Winnipeg Regional Water Supply Preliminary Planning Study Update				
	Author: AECOM				
	Published: 2011	Evaluation of water consumption and future demand, capacity			
	Library Call Number: REPO TD 227 .W5 A336 2011	assessment and evaluation of water quality issues.			
4	Preliminary Design Repo SLA Intake Facility	ort: Zebra Mussel Interim Control System, City of Winnipeg			
	Author: I.D. Engineering				
	Published: 1993	Preliminary design report to examine strategies and			
	Library Call Number:	recommend interim control methods for zebra mussel control			
	REPO TD 392 ,I19 1993A	at the SLA Intake Facility.			
5		LC Replacement & Power Reliability Upgrades Preliminary			
Ũ	Design Report				
	Author: SNC Lavalin				
	Published: 2013	Preliminary Design to upgrade control systems at the pumping			
	Library Call Number: n/a	stations and at the SLA Intake.			
6	The City of Winnipeg Water & Waste Department Water and Wastewater Treatment Process – Drawing Standard				
	Author: City of Winnipeg	The purpose of this manual is to facilitate and standardize the			
	Last Revision: May 2014	The purpose of this manual is to facilitate and standardize the production of drawings at the City of Winnipeg, Water and			
	Library Call Number:	Waste Department.			
7	n/a The City of Winnings We				
	The City of Winnipeg Water & Waste Department Identification Standard				
	Author: SNC Lavalin Last Revision: Jan. 2014	This Water and Waste Department Identification Standard is to			
		The City referenced for consistent and accurate identification for all process, mechanical, electrical, and automation			
	Library Call Number: n/a	equipment.			
8	The City of Winnipeg Water & Waste Department Electrical Standard				
	Author: SNC Lavalin	A reference for consistent design of new electrical systems for			
	Last Revision: Oct. 2013	City of Winnipeg owned facilities. This document provides guidance to department personnel, as well as			
	Library Call Number: n/a	external consultants, regarding electrical design standards and requirements.			

APPENDIX C - SELECTION OF SLA INTAKE FACILITY HISTORICAL RECORD DRAWINGS

The following drawings are included for reference:

Drawing No.	Drawing Name/Title
1-0600A-	SL Intake & Aqueduct Process and Instrumentation Diagram Legend and Details (Sheet 1
P0001-001-	of 3)
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1-0600A-	SL Intake & Aqueduct Process and Instrumentation Diagram Legend and Details (Sheet 2
P0001-002-	of 3)
00	
1-0600A-	SL Intake & Aqueduct Process and Instrumentation Diagram Legend and Details (Sheet 3
P0001-003-	of 3)
00	
1-0600C-	SL Intake & Aqueduct Process & Instrumentation Diagram – Chlorine Building – EVP-
P0002-001	C281
1-0600C-	SL Intake & Aqueduct Process & Instrumentation Diagram – Chlorine Building – EVP-
P0003-001	C282
1-0600C-	SL Intake & Aqueduct Process & Instrumentation Diagram – Chlorine Building – HVAC &
P0004-001	Miscellaneous
1-0600A-	SL Intake Fuel Storage and Delivery System Rehabilitation Electrical Single Line Diagram
E0003-001-	
01	Ol latalia Espilita Ana Elaphi Oturka Elaptrical Ginala Lina Diagrama Langard & Dataila
1-0600M-	SL Intake Facility Arc Flash Study Electrical Single Line Diagram Legend & Details
E0003-001-	
02 1-0600M-	SL Intoka Facility Ara Flach Study Flactrical Single Line Diagram 6001/ MCC 8 120/2081/
E0005-001-	SL Intake Facility Arc Flash Study Electrical Single Line Diagram 600V MCC & 120/208V Distribution Electrical Room
02	
1-0600M-	SL Intake Facility Arc Flash Study Electrical Single Line Diagram 600V Switchgear
E0004-001-	Electrical Room
02	
D-3820	SL Intake Facility Zebra Mussel Control System – Dechlorination System Process and
2 0020	Instrumentation Diagram
D-4235	SL Intake Facility Upgrading – Chlorine Building and Dechlorination Building Cable &
	Conduit Layout