REQUEST FOR PROPOSALS (RFP) No. 20-051

French Creek Pollution Control Centre
Environmental Impact Study

ISSUED: December 3, 2020

CLOSING DATE AND TIME:
Submissions must be received at the Closing Location on or before:
3:00 PM (15:00 hrs) Local Time on December 29, 2020

Regional District of Nanaimo (RDN) Contact for Questions:
Shelley Norum, R.P.Bio.
Wastewater Program Coordinator
250-390-6575
snorum@rdn.bc.ca

Questions are requested by December 17, 2020.

Proposals will not be opened in public

Instructions to Proponents

Closing Date/Time/Submission Method

Submissions must be received at the closing location on or before 3:00 PM (15:00 hrs), Local Time, on December 29, 2020.

Submission Method:

> By Email: In PDF format with "20-051 French Creek Pollution Control Centre Environmental Impact Study" as the subject line at this electronic address: snorum@rdn.bc.ca

Please note: Maximum email file size limit is 20MB, or less. The RDN will not be liable for any technological delays of submissions.

Submissions received in any other manner will not be accepted.

Amendment to Proposals

Proposals may be amended in writing and sent via email to the RDN contact person identified on the cover page on or before the closing. Such amendments should be signed by the authorized signatory of the Proponent.

Addenda

If the RDN determines that an amendment is required to this RFP, the RDN will post the Addendum on the RDN (www.rdn.bc.ca) and BC Bid (www.bcbid.gov.bc.ca) websites. Each addendum will be incorporated into and become part of the RFP. No amendment of any kind to the RFP is effective unless it is contained in a written addendum issued by the RDN. It is the sole responsibility of the Proponent to check and ensure all amendments are included prior to submitting their final Proposal submission.

Withdrawal of Proposals

The Proponent may withdraw their Proposal at any time by submitting a written withdrawal email to the RDN contact person identified on the cover page on or before the closing.

Unsuccessful Vendors

The RDN will offer debriefings to unsuccessful Proponents, on request, at a mutually agreeable time.

1. INTRODUCTION

The purpose of this Request for Proposal is to solicit submissions from qualified firms to a) design the Terms of Reference for a marine Environmental Impact Study (EIS) for French Creek Pollution Control Centre (FCPCC), and b) complete the final EIS, based on the Terms of Reference, by April 30, 2021.

2. BACKGROUND

The FCPCC was built in the 1970's and currently provides secondary wastewater treatment for about 27,000 people and businesses between Qualicum Beach and Parksville. FCPCC also treats trucked waste from homes with septic systems and holding tanks. FCPCC discharges an average of 10,000 m^3/d of treated wastewater through an outfall to the marine waters of the Strait of Georgia. The location of FCPCC and its outfall are shown in Figure 1. FCPCC also sends treated effluent to irrigation ponds at Morningstar Golf Course during the summer months.

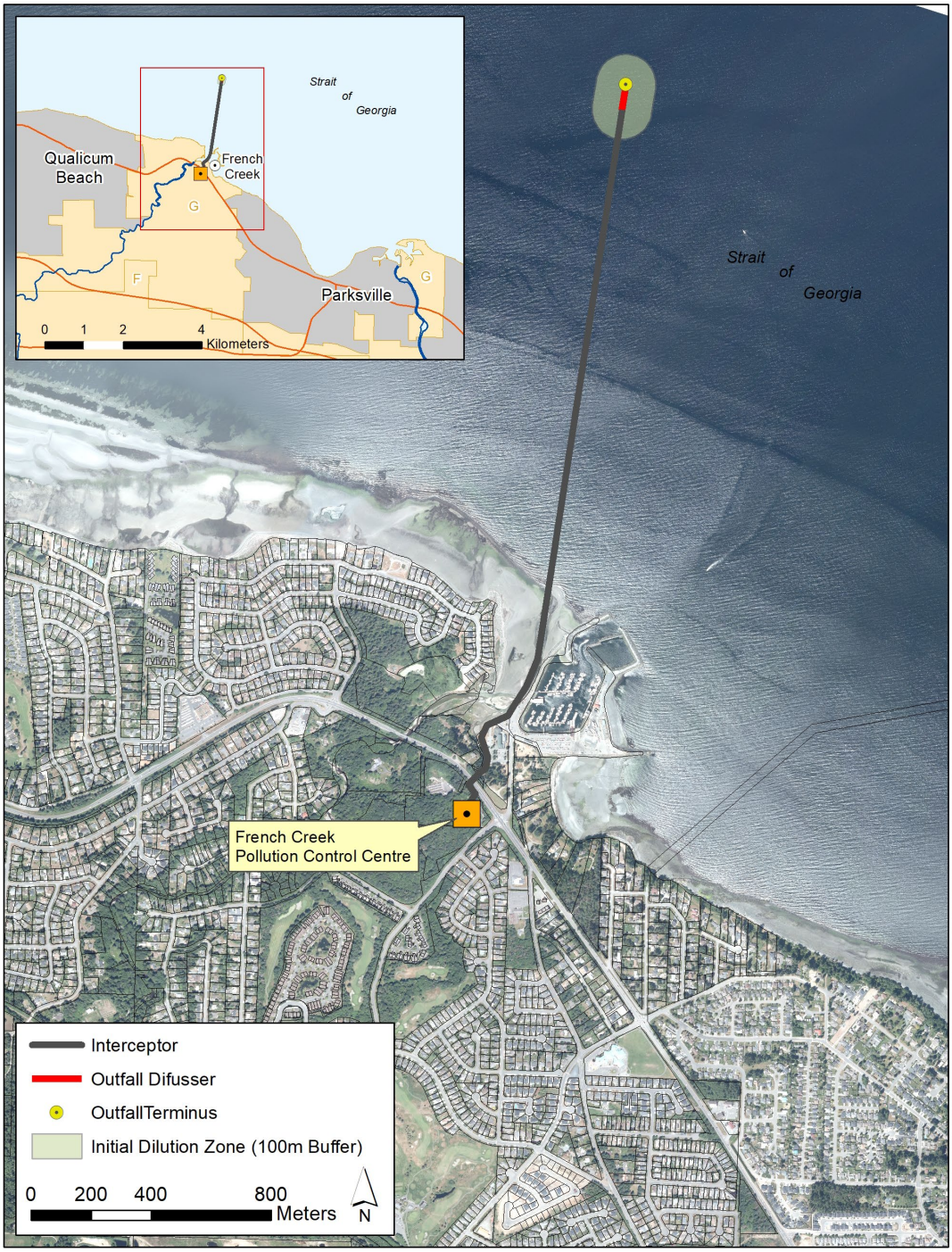
The RDN is planning a FCPCC Expansion and Odour Control Upgrade Project to:

- increase plant capacity by about 30% and meet the service area demands to 2040
- improve operational efficiency and replace aging infrastructure
- provide extensive odour control upgrades
- contribute to carbon neutrality.

FCPCC currently operates under a permit with the Ministry of Environment and Climate Change Strategy (ENV) and the expansion will trigger the need to repermit the facility. The RDN has completed the Preliminary Applicaton process process for Registration under the Municipal Wastewater Regulation and through that process, ENV has provided an Information Requirements Table identifying the documents required to complete the Final Registration Application. An EIS of the marine receiving enviornment is among those documents.

REGIONAL DISTRICT OF NANAIMO

Figure 1. FCPCC Outfall and Diffuser Location



3. SCOPE OF SERVICES

The proponent shall provide a proposal to a) design the Terms of Reference for a marine Environmental Impact Study (EIS) for FCPCC, and b) complete the final EIS, based on the Terms of Reference.

Task 1 – EIS Terms of Reference

The Terms of Reference will describe a detailed scope of work for the marine EIS for FCPCC. The EIS Terms of Reference will meet the requirements of the Municipal Wastewater Regulation and be submitted to ENV for comment before it is finalized. Modifications to the Terms of Reference may be required to address gaps identified by ENV.

Task 2 – EIS

The EIS shall proceed according to the Terms of Refernce developed in Task 1. The EIS will follow all applicable guidelines which may include, but are not limited to:

- Marine Monitoring Guidance Document (Ministry of Environment and Climate Change Strategy, Environmental Protection Division, November 2020)
- Environmental Impact Study Guideline - A Companion Document to the Municipal Sewage Regulation
- Development and Use of Initial Dilution Zones in Effluent Discharge Authorizations
- Guidance on Applications for Permits Under the Environmental Management Act – Technical Assessment, BC Ministry of Environment, September 10, 2010
- BC EAO (2013) Guideline for the Selection of Valued Components and Assessment of Potential Effects
- Approved Water Quality Guidelines
- Contaminated Sites Regulation Numerical Water Standards
- Water and Air Baseline Monitoring Guidance Document for Mine Proponents and Operators, BC Ministry of Environment, October 9, 2012
- British Columbia Field Sampling Manual for Continuous Monitoring and the Collection of Air, Air-Emission, Water, Wastewater, Soil, Sediment, and Biological Samples, BC Ministry of Water, Land and Air Protection, 2013
- BC Environmental Laboratory Manual.

The FCPCC MWR Registration Information Requirements Table also includes many task that must be addressed by the EIS. The IRT tasks are summarized in Table 1, below.

Table 1. EIS tasks from the Information Requirements Table

IRT #	IRT Deliverable
Discharge to Water	
1.7.1	Provide a site plan to scale showing the discharge location, the initial dilution zon (IDZ), other discharges and their IDZ, recreational areas, shellfish harvesting areas, domestic or agricultural water intakes and any other sensitive areas identified in the EIS. MWR Reference: [91(2), 92, 93]
1.7.2	Provide the dilution ratio calculation and identify any additional requirements resulting from this. MWR Reference: [2 (2), 94]

IRT #	IRT Deliverable
1.7.3	Describe the IDZ and demonstrate how the IDZ meets applicable MWR requirements. MWR Reference: [91-93]
1.7.4	Describe the design of the outfall and describe how it meets the requirements of the MWR. MWR Reference: [99]
Overflow	
2.2.2	Establish receiving water beneficial uses and sensitive receptors.
2.2.3	Determine guidelines, referencing BC Approved Water Quality Guidelines (WQG), to protect beneficial uses and sensitive receptors.
2.2.4	Evaluate measures to protect public health and the receiving environment and any treatment needed to designated uses of waters, but as minimal control of floatables and materials of obvious sewage origin.
Characterize the Receiving Environment	
2.4.1.1	Provide a figure at an appropriate scale that shows the location of the outfall terminus, the IDZ and the locations of any sensitive receptors (e.g. recreational areas, water intakes, shellfish beds, protected areas, ecosystems at risk etc.). The figure should include topology (contour lines, bathymetry), dominant current vectors and standard map features (north arrow, scale).
2.4.1.2	Provide a summary of the seasonal hydrological conditions including tides, currents, flow rates, flushing rates.
2.4.1.3	Provide a summary of the seasonal temperatures, precipitation, wind speeds and direction.
2.4.1.4	Provide a summary of the current and future receiving environment water uses and locations of any public areas, private residences, commercial or recreational fisheries, water intakes or traditional food harvesting areas in relation to the discharge location.
Characterize the pre-discharge environmental baseline conditions (thorough desktop review and/or adequate field sampling of water, sediment and biota):	
2.4.2.1	Describe pre-discharge monitoring locations, sampling parameters and frequencies including rational for their selection. MWR Reference: [19(2)(c)]
2.4.2.2	Provide a summary of all existing water quality and sediment quality data compared to applicable water and sediment quality guidelines.
2.4.2.3	Summarize existing benthic community data including species and abundance.
2.4.2.4	Provide an assessment of seasonal current speed and direction through approved methods such as current meter and drogue study.
2.4.2.5	Assess seasonal water column stratification and ambient conditions through approved methods such as depth profiles of temperature, dissolved oxygen, conductivity, pH and salinity.
2.4.2.6	Do a hydrodynamic analysis of minimum available dilution and mixing in the receiving environment using approved methods.
2.4.2.7	Assess flushing rates or lack thereof and determination of any known back eddies.
2.4.2.8	If daily flow is more than or equal to 50 m^3/day then the ammonia discharge limit must be back calculated from the edge of the IDZ. Provide the ammonia back calculation and provide rational for assumptions used in the calculation.

IRT #	IRT Deliverable
Impact Assessment	
2.4.3.1	Identify spatial and temporal boundaries for the effects prediction for each phase of the project.
2.4.3.2	Provide an interaction table that identifies potential interactions between the various project phases and activities and the identified receptors. Describe how the phase or activity has the potential to interact with the receptors.
2.4.3.3	Identify human and biological receptors that have potential to interact with the discharge. It is recommended that a Conceptual Site Model (CSM) is used as a framework to describe the environmental conditions, contaminant pathways and linkages between water, groundwater, and sediment, human and ecological receptors.
2.4.3.4	Evaluate and describe each contaminant in the discharge, its pathway through the receiving environment food web including linkages between environmental media types (e.g. water, sediment, groundwater), human and ecological receptors and potential for trophic transfer of contaminants (e.g. bioconcentration and/or bioaccumulation).
2.4.3.5	Provide predicted concentrations of effluent parameters at the edge of the IDZ based on dilution and plume dynamics modelling under various effluent discharge scenarios (e.g. minimum, average and maximum flow) and receiving environment conditions (e.g. seasonal variations, average and storm conditions, tide cycles etc.).
2.4.3.6	Compare predicted concentrations to applicable WQG (e.g. provincial or federal) and other relevant scientific studies of sensitivity estimates of biological effects. Include a comparison to Fecal Coliform limits from MWR s.96. MWR Reference: [51, 96, 100(2)(c)]
2.4.3.7	Provide a detailed discussion of predicted incremental increases in relevant ambient parameters and assess the residual impacts on identified receptors including but not limited to: assessment of acute and chronic toxicity, oxygen depletion, microbiological loading, nutrient loading, thermal effects, biodiversity effects, and bioconcentration or bioaccumulation effects.
2.4.3.8	Establish applicable effluent and receiving environment water quality requirements and demonstrate that the proposed treatment works and discharges from these will not adversely affect public health or the receiving environment and, if necessary, establish additional municipal effluent quality requirements to ensure protection of public health and the environment.
Cumulative Effects	
2.4.4.1	Identify current and future point and non-point sources of the discharge on the receiving environment. MWR Reverence: [19(2)(b)]
2.4.4.2	Assess the impact of combined discharges on identified receptors including incremental changes in receiving environment water and sediment quality and the implication these impacts may have on identified receptors.
2.4.4.3	Based on the EIS, determine which reliability category applies to the proposed wastewater facility.
Receiving Environment Monitoring	
3.2.1	Provide a figure showing the location of the outfall, the IDZ, and all monitoring stations for water, sediment and biota including a reference (control) station.

IRT #	IRT Deliverable
3.2.2	Locate at least one control sampling station upstream, upgradient or outside the influence of the IDZ.
3.2.3	Provide a table that summarizes monitoring station ID, coordinates, water depth, monitoring parameters and frequencies. Include rational for the selection of sites, parameters and frequencies.
3.2.4	Describe sampling equipment, sampling methods, field and laboratory QA/QC methods and criteria, methods of data analysis including comparison to applicable water and sediment quality guidelines, reference sites and/or other established receiving environment benchmarks, data interpretation and reporting cycle.
3.2.5	Follow ENV approved methods for sample collection and analysis of the environmental media type (e.g. water, sediment) and the specific parameters (e.g. 5 samples collected in 30-day period for microbiological and nutrient analysis).
3.2.6	Provide monitoring results in tabular form and compare them to applicable benchmarks and reference sites.
3.2.7	Design post-discharge monitoring to allow for verification of impact assessment predictions, ensure compliance with MWR requirements and monitor trends. MWR Reference: [20, 51]
4.1.3	Include a detailed description of the monitoring program for the discharge and the receiving environment including monitoring [only receiving environment in this scope] schedule, methods and data analysis, quality controls, and reporting requirements.

The final EIS report will:

- Include a statement confirming the EIS was conducted in accordance with the Municipal Wastewater Regulation and the associated *Environmental Impact Study Guideline – A Companion Document to the Municipal Sewage Regulation*.
- Include a signed and stamped Declaration of Competency Form stating that the EIS was completed by a Qualified Professional.
- Include a Conflict of Interest Disclosure Statement
- Include a table identifying the page and section of the EIS that meets each requirement of the FCPCC Information Requirements Table
- Be signed and sealed by a Qualified Professional.

The scope of services does not include an Enhanced EIS, according to Section 98 of the Municipal Wastewater Regulation.

The scope of services does not include an assessment of the land-based portions of the wastewater treatment facility.

3.1. Environmental Management System

RDN Wastewater Services uses an ISO 14001 certified Environmental Management System (EMS) to continually improve service and environmental performance. All contractors and/or suppliers working on behalf of Wastewater Services are required to follow environmental procedures outlined in the department's EMS.

For a complete listing of environmental specifications, refer to the ISO 14001 Contractors and Suppliers Environmental Performance Requirements package. These provisions are included in all Wastewater Services contracts and are considered legal requirements. Information on the RDN EMS system can be found on the RDN Wastewater Services website at https://www.rdn.bc.ca/wastewater-contractor-supplier.

4. DELIVERABLES AND OUTCOMES

The scope of services includes the following tasks:

Project Kickoff Meeting, via MS Teams or Zoom	Week of January 11, 2021
Task 1 – Draft EIS Terms of Reference	January 22, 2021
Task 2 – Final EIS Terms of Reference	February 5, 2021
Task 2 – Draft 1 EIS	March 31, 2021
Task 2 – Final EIS	April 30, 2021

5. REFERENCE/BACKGROUND INFORMATION

Information available by request includes:

- Bowser Marine Outfall Environmental Impact Study – STAGE 2 Technical Assessment Report (GreatPacific Engineering and Environment, 2019).
- Regional District of Nanaimo Five Fingers Outfall Replacement Enivornmental Impact Study (GreatPacific Engineering and Environment, 2015).
- Greater Nanaimo Pollution Control Centre Receiving Environment Monitoring Program (GreatPacific Engineering and Environment, 2016).
- Regional District of Nanaimo Receiving Environment Monitoring Final Report (2017-2019) (G3 Consulting Ltd., 2019).
- FCPCC 2019 Annual Report (RDN, 2020).
- Regional District of Nanaimo FCPCC Stage 4 Expansion Project Preliminary Design Report (AECOM, 2018).
- FCPCC MWR Registration Informaiton Requirements Table.

Information available online includes:

- FCPCC Expansion and Odour Control Upgrade Project webstie: www.getinvolved.rdn.ca/french-creek-expansion.
- Information on the environmental procedures all contractors and/or suppliers working on behalf of Wastewater Services must follow are available in the Wastewater Services's Contractor-Supplier Package available at: https://www.rdn.bc.ca/wastewater-contractor-supplier.

6. PROPOSAL SUBMISSION AND EVALUATION

To assist in receiving similar and relevant information, and to ensure your Proposal receives fair evaluation, the RDN asks Proponents to provide the following information and organize the Proposal to reflects the evaluation requirements (i.e. headings for each scoring category).

6.1. Project Team, Experience, and Corporate Commitment

The expectations for this component are:

a) Demonstrate that the firms' organization and proposed team, including sub-consultants and specialists, has the necessary technical and managerial background and experience to carry out the requirements of this project.
b) Include a team organization chart and provide resumes of one page (maximum) per key individual detailing who will be assigned responsibility for each component of the work. The Proponents key team members should have experience performing activities proposed. List staff and/or sub-consultants, who will be assigned to each component, and include their related experience. Subsequent substitution of staff and/or sub-consultants shall be submitted in writing for review and approval by the RDN. Acceptance of staff and/or sub-consultant substitutions will be at the sole discretion of the RDN.
c) Include a list of three (3) similar projects completed by the Proponent including details of which projects were undertaken by members of the proposed project team. Preference will be given to Proponents with multiple recent projects of similar scope and to Proponents whose similar projects were completed by the team members proposed for the RDN's project.
d) Outline the Proponent's corporate commitment to completing this Project within the scope, budget and timelines outlined. Provide details of current and other potential commitments of key team members and assurance that the staff proposed for the work will have sufficient time availability to fulfil their commitment(s) and/or contingency plans to ensure that their role will be adequately covered.

6.2. Approach and Methodology

The expectations for this component are:

a) Demonstrate the firm's understanding of the scope of services and key issues.
b) Outline the firm's approach to address scope of services and strategy to manage key issues.
c) Include measures to ensure health and safety.
d) Identify quality assurance and quality control measures and applicable guidelines.
e) Include a work breakdown structure.
f) Layout the plan to accomplish the project including timelines and key milestones and deliverables.
g) Identify challenges, constraints and obstacles in the project and advise on the strategy to minimize the challenges.
h) Identify ways your firm's approach will add value to the project
i) Identify any proposed variations to the scope of work. Highlight the benefits and/or capital cost savings from varying the Scope of Service. The RDN reserves the right to accept or reject any or all of the proposed variations.

6.3. Project Management

The Proponent should provide a clear and concise description of their Project Management Plan with sufficient content and detail that describes how they intend to document, monitor and control

the project. Specific detail should be provided that demonstrates how the Proponent will control the scope, schedule and consulting costs. The Proponent should also describe their approach to Risk Management including identification of Project Specific Risks, evaluation of risks, mitigation and monitoring of risks.

6.4. Past Performance and References

The expectations of this component are:

a) Prepare a list, in chronological order, of three (3) similar projects completed by the Proponent team, including details of the projects, and the roles played by members of the proposed project team. Provide the name and telephone number of a contact person from previous projects. For each of the projects provided as references, include a brief outline of the project and its relevance to this project.
b) Clearly identify any sub-consultant(s), why they were selected for the project, and at least one reference from a recent project for either a municipality or professional engineering firm.

Preference will be given to Proponents with multiple recent projects of similar type, scope and magnitude. Preference will also be given to Proponents whose similar projects were completed by the team members proposed for the RDN's project.

6.5. Proposed Fee

Proponents should provide a workforce matrix which identifies all personnel including sub-consultants to be utilized on the project, each charge out rate, and number of hours each will be involved in each of the work activities from the Proponent's Scope of Services (in the Technical Submission), and total fee for each person and each activity. Disbursements shall also be broken down and shown by work activity. Also provide subtotals by hours and by fees for each firm involved.

Transfer the total fees from the workforce matrix into following fixed fee format:

Professional Fees	$	_____
Disbursements	$	_____
GST	$	_____
TOTAL FIXED FEE	$	_____

Pricing shall be in Canadian dollars.

Professional Fees are to include the cost of all sub-consultants. No mark-up for sub-consultant fees will be paid to the prime consultant.

Disbursements: All reasonable and proper expenses incurred by the Proponent shall be reimbursed under this item. No mark-up for disbursements will be paid. Travel disbursements for out-of-town personnel shall be quoted on the most economical travel methods. Travel time shall be included in work activities (no additional payment will be made for travel time as part of disbursements).

The Consultant shall not exceed the Total Fixed Fee. Scope changes requiring fees beyond the Total Fixed Fee must be authorized by the RDN before work begins on the additional work. Scope changes will only be authorized by a formal Change Order signed by the RDN and the Consultant.

Provide hourly rates for staff of the entire Proponent Team for provision of the required services and for any additional services that may be required.

6.6. Proposal Evaluation

The Evaluation Team, formed at the RDN's sole discretion, will apply a score as set out in Table 2. The total available points will be 100; with 60 points available for the technical section and 40 points available for the financial section.

For the financial score, the lowest price proposal will receive full marks for the financial score. Other proposals will receive reduced scores based on the proportion higher than the lowest price. i.e. Score = Min Cost/Cost x Fee Points.

If the Evaluation Team concludes that, in its opinion, the technical component does not substantially satisfy the technical requirements of the Project or if the technical score is not within 20% of the highest technical score, the RDN may, but is not required to, reject the entire Proposal.

Table 2. Submission Evaluation Scoring Table

Categories	Available Points	Score
TOTAL TECHNICAL SCORE		
Project Team, Experience, and Corporate Commitment	20	
Approach and Methodology	25	
Project Management	5	
Past Performance and References	5	____ out of 60
TOTAL FINANCIAL SCORE	40	____ out of 40
TOTAL SCORE		____ out of 100

Proposals submitted should be in enough detail to allow the RDN to determine the Proponent's qualifications and capabilities from the documents received. The RDN may evaluate proposals on a comparative basis by comparing one proponent's proposal to another proponent's proposal. The RDN reserves the right to not complete a detailed evaluation if the RDN concludes the proposal is materially incomplete or, irregular or contain any financial or commercial terms that are unacceptable to the RDN.

The Evaluation Team may proceed with an award recommendation or the RDN may proceed to enter into negotiations with the highest evaluated proponent with the intent of developing an

agreement. If the parties after having bargained in good faith are unable to conclude a formal agreement, the RDN and the Proponent will be released without penalty or further obligations other than any surviving obligations regarding confidentiality and the RDN may, at its discretion, contact the Proponent of the next best rated Proposal and attempt to conclude a formal agreement with it, and so on until a contract is concluded or the proposal process is cancelled.

The RDN reserves the right to award the assignment in whole or in part or to add or delete any portion of the work. Throughout the evaluation process, the evaluation committee may seek additional clarification on any aspect of the Proposal to verify or clarify the information provided and conduct any background investigation and/or seek any additional information it considers necessary.

7. GENERAL CONDITIONS

7.1. No Contract

By submitting a Request for Proposal and participating in the process as outlined in this RFP, proponents expressly agree that no contract of any kind is formed until a fully executed contract is in place.

7.2. Privilege Clause

The lowest or any proposal may not necessarily be accepted.

7.3. *Acceptance and Rejection of Submissions*

This RFP does not commit the RDN, in any way to select a preferred Proponent, or to proceed to negotiate a contract, or to award any contract. The RDN reserves the right in its sole discretion cancel this RFP, up until award, for any reason whatsoever

The RDN may accept or waive a minor and inconsequential irregularity, or where applicable to do so, the RDN may, as a condition of acceptance of the Submission, request a Proponent to correct a minor or inconsequential irregularity with no change in the Submission.

7.4. Conflict of Interest

Proponents shall disclose in their Proposals any actual or potential Conflict of Interest and existing business relationships it may have with the RDN, its elected officials, appointed officials or employees.

7.5. Solicitation of Board Members and RDN Staff

Proponents and their agents will not contact any member of the RDN Board or RDN Staff with respect to this RFP, other than the RDN Contact named in this document.

7.6. Litigation Clause

The RDN may, in its absolute discretion, reject a Proposal submitted by Proponent, if the Proponent, or any officer or director of the Proponent is or has been engaged either directly or indirectly through another corporation in legal action against the RDN, its elected or appointed officers and employees in relation to:

(a) any other contract for works or services; or

(b) any matter arising from the RDN's exercise of its powers, duties, or functions under the Local Government Act, Community Charter or another enactment within five years of the date of this Call for Proposals.

In determining whether to reject a Proposal under this clause, the RDN will consider whether the litigation is likely to affect the Proponent's ability to work with the RDN, its consultants and representatives and whether the RDN's experience with the Proponent indicates that the RDN is likely to incur increased staff and legal costs in the administration of this Contract if it is awarded to the Proponent.

7.7. *Exclusion of Liability*

Proponents are solely responsible for their own expenses in preparing and submitting a Proposal and for any meetings, negotiations, or discussions with the RDN. The RDN will not be liable to any Proponent for any claims, whether for costs, expense, losses or damages, or loss of anticipated profits, or for any other matter whatsoever, incurred by the Proponent in preparing and submitting a Proposal, or participating in negotiations for a Contract, or other activity related to or arising out of this RFP. Except as expressly and specifically permitted in these Instructions to Proponents, no Proponent shall have any claim for compensation of any kind whatsoever, as a result of participating in this RFP, and by submitting a Proposal each Proponent shall be deemed to have agreed that it has no claim.

7.8. *Ownership of Proposals*

All Proposals, including attachments and any documentation, submitted to and accepted by the RDN in response to this RFP become the property of the RDN.

7.9. Freedom of Information

All submissions will be held in confidence by the RDN. The RDN is bound by the *Freedom of Information and Protection of Privacy Act* (British Columbia) and all documents submitted to the RDN will be subject to provisions of this legislation. The successful vendor and value of the award is routinely released.