

Sandy Beach Lagoon Funding and Preliminary Design

November 15, 2021

Rudolf Liebenberg
CAO, Summer Village of Sandy Beach
Box 63 Site 1 RR 1
Onoway, AB
T0E 1V0

via email: svsandyb@xplornet.ca

Dear Mr. Liebenberg;

Re: Proposal for Lagoon Funding and Preliminary Design

Thank you for your interest in the services of Morrison Hershfield Limited (MH). We are very pleased to provide this proposal for support for the Alberta Municipal Water/Wastewater Partnership and/or Water for Life application to fund the Sandy Beach Lagoon Remediation project and to provide preliminary design; simply referred to hereinafter as the "Project".

Background

It is our understanding that the Summer Village would like to apply for funding under the Alberta Municipal Water/Wastewater Partnership and/or Water for Life to remediate the existing lagoon. The existing lagoon has been slowly discharged over the past couple of years to lower the water level below the lagoon freeboard area. However, the extent of any damage to the lagoon can not be determined till further preliminary design and review is carried out on the lagoon. Therefore, we have divided the scope of work into Phase 1 (preliminary design) and Phase 2 (detailed design and construction). It is the intent that Phase 1 funding will be applied for this year and Phase 2 next year in 2022.

Scope of Work

We understand the scope of work for this proposal includes only Phase 1 and the scope of work is listed below:

1. Gather information from sub-consultants
2. Initial site visit to the lagoon
3. Apply for funding to complete Phase 1, before November 30, 2021. Grants/Funding available are the following:
 - a. **Alberta Municipal Water/Wastewater Partnership**

We will include the following documents in the application package:

 - i. a letter to the Regional Director in the Alberta Transportation Regional Office from each member municipality or the regional commission requesting funding
 - ii. request for funding
 - iii. project plan
 - iv. project description
 - v. project rationale (design criteria)
 - vi. proposed implementation schedule
 - vii. detailed cost estimates following the cost estimate requirements
 - viii. outline of how the municipal share of project costs will be funded

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b. Water For Life (Regional Application – Sunrise and Summer Village must apply)

Please note that Water For Life funding is a regional application and will need to be submitted by the Summer Village of Sunrise and Sandy Beach as it is a regional application. We will include the following documents in the application package:

- i. a letter to the Regional Director in the Alberta Transportation Regional Office from each member municipality or the regional commission requesting funding
 - ii. request for funding
 - iii. project description
 - iv. project rationale (design criteria)
 - v. proposed implementation schedule
 - vi. detailed cost estimates following the cost estimate requirements
 - vii. outline of how the municipal share of project costs will be funded (if applicable)
 - viii. proposed rates and the impact on the cost for services for each member municipality
4. Report Summarizing Soil Sampling and Groundwater Sampling and submit to Alberta Environment by December 31, 2021 as part of the Letter of Authorization requirements. It is assumed that the Village will complete these soil and ground samples at the sampling locations described in the discharge application and tested for the required parameters listed in the Letter of Authorization (1137-02-04). Lab results will be provided to MH for submission to Alberta Environment and Parks (AEP).
5. Bathymetric survey of all three cells of the lagoon to determine sludge removal depth/volumes and any issues with the berms below water. Bathymetric Survey of each lagoon will be completed by AquaVision Canada (sub-consultant) as follows:
- a. Utilizing a Remotely Piloted Aircraft System (Drone), AquaVision will obtain current aerial imagery of the lagoon to be surveyed. This process allows us to obtain accurate shoreline readings which can be verified against the client supplied engineering drawings of the lagoon. It also allows AquaVision to develop Bathymetric Missions where current shorelines are essential when preparing the plan.
 - b. AquaVision Canada will establish a surface grid pattern which will be utilized by the company's Remotely Operated Vehicle (ROV).
 - c. Attached to the bottom of the ROV is a sub bottom profiler / transducer. The transducer will utilize soundings to analyze the current bottom profile & sediment of each lagoon. Each sounding will be tagged with a corresponding GPS position that will allow AquaVision to plot the soundings onto a map.
 - d. Soundings collected will then be processed using a software known as HydroMagic. Outputs from this software include the following:
 - i. a) Depths at various intervals

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- ii. b) Sediment values of each lagoon as compared to engineered drawings / client supplied reports
 - iii. c) Matrix of each lagoon/cell assessed.
 - e. AquaVision will manually verify water levels at the time of the Bathymetric Survey using a GPS RTK base station and handheld rover. This will ensure accurate volumes of liquid / sediment are calculated as part of the final report submission.
 - f. AquaVision will prepare a final report delivered electronically with a link to a secure online folder which will include high resolution imagery captured during the assessment.
- 6. Environmental Support by Parkland Geo-Environmental Ltd. Scope of work includes the following:
 - a. Groundwater monitoring of all four (4) existing wells. Two trips are planned for groundwater monitoring. Each well will be monitored during the two trips.
 - a. Initial site visit will monitor well headspace hydrocarbon vapour, depth to groundwater, and the presence or absence of phase-separated hydrocarbon product. Each well will be purged by bailing at least 3 well volumes of groundwater or until dry.
 - b. On the second monitoring event the wells would be sampled. Groundwater analyses program for the wells would consist of VOC, Routine Potability, Nutrients (P,K,N), total metals, total fecal coliforms and E.Coli.
 - b. Sludge Sampling Program to determine if the sludge is impacted and what disposal options are available:
 - a. Sludge analysis would consist of a sample from each cell and would include parameter tests for Salinity, Solids Content, TKN, Nitrogen, Ammonium Nitrogen, Total Phosphorus, Total Metals, Total fecal coliforms and E.Coli.
- 7. Topographic survey of entire lagoon for detailed design. Survey will include everything above the lagoon water level but limited to the fence boundary.
- 8. A technical memo summarizing lagoon remediation plan based on the bathymetric survey, topographic survey, and groundwater/sludge samples including one review meeting with the summer village. Cost estimates in the range of +/- 30% will be provided in the memo.
- 9. We will discuss proposed remediation plan with AEP to determine what approvals will be required.

General Assumptions & Exclusions

1. Regulatory Approvals by Alberta Environment and Parks are not included in budget.
2. Survey and Bathymetry work will be completed during non-snow or non-freezing conditions.

MH is fully capable of providing services for the above listed exclusions. Additional revision(s) to the MH Fee Proposal can be provided if it is later decided to add any of the excluded items and modify the proposed scope of work.

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Schedule

Due to current workload demands, we would be available to begin the engineering work within one (1) week of receipt of Authorization to Proceed (attached).

Fees

Based on the above scope and including all normal disbursements we are proposing a **Lump sum** fee to be in the order of **\$41,530** to provide these professional services and a breakdown is summarized below:

Gather Info and Apply for Funding Support	\$ 6,048
Progress Reporting and Start-up Meeting	\$2,226
Preliminary Design	\$33,256
Total	\$ 41,530

Fees indicated do not include value added taxes, such as GST, all taxes will be added. **We can begin this project by applying for funding support before the end of November 2021 for a total of \$6,048.** If funding is secured or obtained, the remainder of the work will be completed.

Services beyond the scope above will be carried out on a time and materials fee based on the attached Rate Schedule. Additional services may also be further defined in detail and a mutually agreed fixed fee determined.

Closing

Thank you again for allowing us to submit a proposal on this project. We trust what you are looking for is found within our proposal above and we look forward to working with you on this project. Should you have any questions, please don't hesitate to contact us.

You may signify acceptance of this proposal and attached terms by any one of the following:

1. By signing in the Authorization Form attached.
2. By issuing a Purchase Order and returning a copy of this letter for our files.
3. By sending an email from an authorized representative of the Client that issues authorization and acceptance of our proposal references our proposal number and fee.
4. By signature a letter of commitment that indicates we are to proceed in accordance with our proposal until a formal contact agreement is finalized.

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Yours truly,

Morrison Hershfield Limited



Chad Newton, MBA, PMP, Principal
PM Department Manager West,
Senior Project Manager



Nedal Barbar, P.Eng
Project Engineer

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2020 PROFESSIONAL SERVICES AGREEMENT TERMS AND GENERAL CONDITIONS

All professional services provided by Morrison Hershfield Limited ("**Morrison Hershfield**") to the client identified in the attached proposal (the "**Client**"), are subject to the terms and conditions set forth in this Professional Services Agreement.

i) Scope of Services and Standard of Care. Morrison Hershfield will provide the services outlined in the attached proposal (the "**Services**"). The Services shall include any assumptions, exclusions or schedules that form part of the attached proposal and shall be limited to those Services expressly set forth therein. If a service, work or activity is not specifically identified, it is expressly excluded. Morrison Hershfield will perform the Services in a manner consistent with that level of care and skill ordinarily exercised by other members of the engineering and science professions currently practicing in the same or similar locality, under the same or similar conditions, subject to the time limits and financial, physical or any other constraints applicable to the Services. No other warranty, express or implied, is made or intended to be made with respect to the Services and the same are specifically disclaimed.

ii) Reimbursable Expenses: Reimbursable expenses and services not directly provided by Morrison Hershfield will be charged at 1.1 times the applicable rate or cost.

iii) Instructions and Approvals. Client shall name an authorized representative at or before the start of the work who shall be responsible for providing information, instructions, and approvals on Client's behalf. Such representative shall be available to Morrison Hershfield at all reasonable times. Client shall be responsible for all delays in performance of the Services caused by or arising out of Client's unavailability or its failure to timely provide information, instructions, or approvals.

iv) Terms of Payment. Invoices shall be issued by Morrison Hershfield monthly and shall be payable on presentation. Within ten (10) days of receipt of an invoice Client shall notify Morrison Hershfield of any dispute with the invoice. Invoices not paid within thirty (30) days of invoice date shall be subject to a carrying charge of 1.0 percent per month or the maximum rate allowed by law, whichever is less. If the Client fails to pay any invoice within thirty (30) days of the invoice date and such failure continues fifteen (15) days after Morrison Hershfield gives Client notice of such failure, Morrison Hershfield shall have the right to terminate this Professional Services Agreement immediately. Client shall have no right of setoff against any billings of Morrison Hershfield for disputed claims or withholding of services.

v) Data and Information. Morrison Hershfield shall be entitled to rely on the accuracy and completeness of all testing, services, reports, data, and other information furnished by Client or other consultants regarding the project or works that forms the subject of the Proposal (the "**Project**"), the Services, or the location of the Project (the "**Site**") and assumes no responsibility or liability with respect to such information.

vi) Differing Conditions. Prior to commencement of the Services, Client will inform Morrison Hershfield in writing of all known materials categorized as hazardous or toxic by any federal, state, provincial or local law, or regulation and of any conditions existing on or near the Site that are relevant to the Services or that may present a danger to health, the environment or Morrison Hershfield's equipment or personnel. If Morrison Hershfield believes that any condition encountered at the Site or during the course of the Project is inaccurate or differs materially from the conditions disclosed, indicated, reflected or referred to by the Client at the time of the proposal, Morrison Hershfield shall notify Client within a reasonable time. In such a case, Morrison Hershfield shall not be required

to continue performing the Services until such time as a resolution to address the differing condition has been mutually agreed to by Client and Morrison Hershfield, including any change in compensation, time for performance or both. Morrison Hershfield shall have no responsibility for the discovery, presence, handling, removal, disposal of, or exposure of persons to, hazardous materials in any form at the Site, except to the extent directly caused by the negligence of Morrison Hershfield. Morrison Hershfield shall not be liable for any costs or damages resulting from any concealed condition of the Site or other condition of the Site not disclosed to Morrison Hershfield in writing.

vii) Changes and Delays. Morrison Hershfield shall be entitled to an increase in compensation or time or both for performance of the Services where any changes are required or made to the scope of the Services to the extent that such changes do not arise from the negligence of Morrison Hershfield. Morrison Hershfield shall not be required to perform any Services related to a change unless the parties have agreed on the amount of or the basis for calculating the time and compensation associated with such change. Morrison Hershfield shall be entitled to additional time or compensation or both for any delays caused by or resulting from acts of Client, contractors, subcontractors, suppliers, or other third parties over whom Morrison Hershfield has no control so long to the extent such delay is not caused by Morrison Hershfield's negligence.

viii) Insurance. Morrison Hershfield, at its own expense, shall carry insurance in the amounts listed in Exhibit A, Insurance. If Client desires insurance coverage in addition to that carried by Morrison Hershfield at the time this Professional Services Agreement is issued, Morrison Hershfield will cooperate to obtain such additional insurance, if available, at Client's expense. Notwithstanding any other provision in this Professional Services Agreement, nothing shall be construed to void, vitiate or adversely affect the insurance coverage of either party.

ix) Limitation of Liability. Morrison Hershfield and Client each waive their rights to recover from the other any consequential, indirect, or incidental damages (including, but not limited to, loss of use, income, profits, financing or reputation), arising out of, or related to, this Professional Services Agreement, the Project or the performance of the Services. To the maximum extent permitted by law, Morrison Hershfield's liability for any and all causes of action whatsoever, including, without limitation, tort, contract, strict liability, indemnity or otherwise, arising out of, or in connection with, this Professional Services Agreement, the Project or Morrison Hershfield's performance of the Services shall be limited in the aggregate to the total fee paid by the Client to Morrison Hershfield under this Professional Services Agreement. Client further agrees that, to the fullest extent permitted by law, no shareholder, officer, director, partner, principal or employee of Morrison Hershfield shall have personal liability under any provision of this Professional Services Agreement, or for any matter in connection with the Services provided. Client expressly agrees to this limitation of liability.

x) Performance by Contractors, Subcontractors and Suppliers and Construction Means and Safety. The Services do not include supervision or direction of the means, methods or actual work of other consultants, contractors, subcontractors or suppliers not retained by Morrison Hershfield. Morrison Hershfield shall not be required to make exhaustive, extensive, or continuous on-site or off-site inspections of work performed by consultants, contractors, subcontractors or suppliers not retained by Morrison Hershfield. No acceptance or approval by Morrison Hershfield of the work of consultants, contractors, subcontractors or suppliers not retained by Morrison Hershfield, whether express or implied, shall relieve such persons of their obligations to Client for the proper performance of their work and Morrison Hershfield shall have no liability with respect to the work performed by such persons. Morrison

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Hershfield shall have no responsibility for, control, right of control or liability with respect to the means, methods, techniques, sequences, procedures and equipment used or not used by such parties in their performance of any phase of the work at the Site or with respect to any safety precautions or programs related to the Project or the Site.

xi) Ownership of Documents. All plans, designs, drawings, specifications, notes, data, samples, materials, reports, reproductions and other work developed by Morrison Hershfield (the "**Deliverables**") and all patent, trademark, copyright, industrial or other intellectual property rights therein shall remain the property of Morrison Hershfield after the Services have been completed or terminated. Client agrees not to use, reuse, or adapt any Deliverables for any other Project or application. Client shall release, defend, indemnify and hold harmless Morrison Hershfield from all claims, losses, liabilities, damages, expenses, and costs arising out of the unauthorized use, reuse, alteration or relation on the Deliverables.

xii) Termination for Material Breach. Either party may terminate this Professional Services Agreement upon seven (7) days' written notice to the other party and without further liability in the event the other party is in material breach of this Agreement and fails to remedy such breach within seven (7) days of receiving written notice of the breach, provided that the breach was not caused or contributed to by the party seeking to terminate this Professional Services Agreement. Upon termination Client shall pay Morrison Hershfield for all Services performed to the date of termination. All representations, indemnities and obligations shall survive indefinitely the termination of this Professional Services Agreement.

xiii) No Third-Party Beneficiaries. Nothing in this Agreement shall be interpreted or construed as giving any rights or benefits to any person or third party other than Morrison Hershfield and Client.

xiv) Claims and Disputes. Any claim, dispute or matter in question shall be resolved by one or more of the following means in the order listed, until a resolution is arrived at. Unless mutually agreed to in writing by both parties, the means to be used are: a) negotiation, b) mediation, in accordance with the procedures of the ADR Institute of Canada, Inc.,

c) arbitration, in accordance with the procedures of the ADR Institute of Canada, Inc.

xv) Governing Law and Severability. This Professional Services Agreement shall be governed by the law of the State or Province in which the Project is located. If any term, condition or provision of this Professional Services Agreement or the application thereof is determined to be invalid or unenforceable, the remaining provisions of this Professional Services Agreement shall not be affected but shall instead remain valid and fully enforceable. This Professional Services Agreement incorporates and supersedes all prior negotiations, agreements and representations either written or oral. No cancellation, modification, amendment, deletion, addition, waiver or other change in this Professional Services Agreement shall have effect unless specifically set forth in writing and signed by both parties.

xvi) Conflicts. In the event of a conflict between the terms of the Proposal and this Professional Services Agreement, the terms of this Professional Services Agreement shall govern and prevail.

xvii) Confidentiality and Publication. Both parties shall keep all information designated as "confidential", whether disclosed in writing or orally, strictly confidential and shall not disclose any such information to any other person except (i) as required for performance of the Services provided that any person to whom such information is disclosed is subject to similar obligations of confidentiality, or (ii) where required by law. Morrison Hershfield shall have the right to include references to the Project among its promotional and professional materials.

xviii) Waivers. No waiver of any right or remedy shall have effect unless specifically set forth in writing and signed by both parties and no waiver of any right or remedy in respect of any occurrence on one occasion shall be deemed to be a waiver of such right or remedy in respect of such occurrence on any other occasion.

xix) Headings. The headings used in this Professional Services Agreement are for convenience and reference purposes only and are not to be used in interpreting or construing the substantive provisions of the Memorandum.

Exhibit A – Insurance

Morrison Hershfield will carry insurance coverage during the performance of this Professional Services Agreement that is required by law. In addition, Morrison Hershfield maintains the following insurance coverage:

Commercial General Liability Insurance	\$1,000,000 per claim and in aggregate.
Automobile Liability Insurance	\$1,000,000 per claim and in aggregate.
Workers Compensation Insurance	Statutory where required by law, and \$1,000,000 per claim.
Professional Liability Insurance	\$500,000 per claim and per policy period (June 1 thru May 31).

Consultant will provide Client with thirty (30) days advance written notice of any cancellation or material change in its insurance. All insurance is written on a claims-made basis. Consultant will name Client as an additional insured on its general liability policy.

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AUTHORIZATION FORM – 2200409.99

To: Morrison Hershfield Limited, Attn: Brian Fanson
Email: cnewton@morrisonhershfield.com
Fax: 780.484.3883

This proposal to **The Summer Village of Sandy Beach** for funding support and preliminary design services to support project, is accepted and Morrison Hershfield Limited is hereby authorized to provide the services as outlined.

Client

Mailing Address (incl. Postal Code)

Signing Officer Name (Print)

Signature

Position

Date

Telephone

Email