



**REQUEST FOR PROPOSAL FOR
UNNAMED LAKE LIDAR SURVEY**

PROPOSAL CALL: MONDAY, 10 JUNE 2019

PROPOSALS DUE: MONDAY, 24 JUNE 2019

BEFORE 4:00 PM EST

820952-0033 (1.0)

1.0 INFORMATION AND INSTRUCTIONS

1.1 Introduction

The City of Iqaluit Department of Public Works and Engineering (the City), is issuing this Request for Proposals (RFP) for qualified proponents to provide consultancy services to conduct Lidar Survey for Unnamed Lake

The requirements of the submission are outlined in Sections 2 and 3, and scope of work and deliverable of the project are outlined in the scope of work section 6.0.

1.2 Schedule of Works

The study shall be completed in accordance to section 5.0

1.3 Inquiries and Addenda

1.3.1 Inquiries

All inquiries regarding this RFP must be directed to the Administrative Authority specified herein. Inquiries must be provided, in writing (by email) no later than the date outlined in article 1.6 Proposed Schedule of Events. The Administrative Authority will provide answers to inquiries to all Consultant by written addenda throughout the question and answer period without naming the source of the inquiry. The final addendum will be released no later than the date outlined in article 1.6 Proposed Schedule of Events. It is the responsibility of the Consultant to confirm that the Administrative Authority has received their inquiries.

1.3.2 Administrative Authority

Matthew Van Strien

City of Iqaluit, Department of Procurement
City Hall, P.O. Box 460
Iqaluit, NU, X0A 0H0
Telephone: 867-979-5659
Email: M.VanStrien@city.iqaluit.nu.ca

1.3.3 Project Authority

Matthew Hamp, Director of Public Works and Engineering Department,
City of Iqaluit.

1.4 Rights Reserved

- 1.4.1 This RFP does not commit the City to authorize any Offer or pay any costs incurred in the preparation of any offer nor attendance at a meeting with City staff. The City reserves the right to accept or reject any or all offer received, and to seek clarification from one or more Consultant on the contents of their submission.
- 1.4.2 The City of Iqaluit further reserves the right to do any or all the following at its sole and absolute discretion:
- 1.4.2.1 Reject any Offer for any element of it being non-compliant or non-responsive to the requirements set out in this RFP.
 - 1.4.2.2 Waive or correct any minor or inadvertent defect, irregularity or technical error with respect to the RFP document or any Offer received in response thereto either through the evaluation process or during the finalization of the Request for Proposal.
 - 1.4.2.3 Request clarification of any aspect or all offer s received.
 - 1.4.2.4 Pursue its own investigations concerning any Consultant's legal status and/or Financial Viability.
 - 1.4.2.5 Terminate the RFP process at any time prior or subsequent to the closing date and issue a new RFP for the same or a modified requirement.
 - 1.4.2.6 Terminate the RFP process at any time prior or subsequent to the closing date, and not issue a new RFP.
 - 1.4.2.7 Disqualify an Offer based on evidence of conflict of interest or collusion as disclosed by an offer or through any other information discovered by the City.
 - 1.4.2.8 Reject an Offer should it be discovered that Offer is in breach of another agreement or contract with the City of Iqaluit.
 - 1.4.2.9 Not accept bids from companies convicted of corruption, collusion, bid-rigging, or any other anti-competitive activity unless they have received a pardon.

1.5 Consultant Investigations and Responsibilities

1.5.1 By submitting an Offer in response to this RFP, the Consultant shall have certified to the City that:

1.5.1.1 It has carefully examined the RFP documents and has a clear understanding of the requirements of the City as described in this RFP.

1.5.1.2 It is in good standing with its creditors and financial institutions and is financially able to perform and meet any and all duties, liabilities, and obligations as may be required of it under any agreement/contract resulting from this RFP.

1.5.1.3 It has been afforded the full opportunity to make any and all investigations relative to the terms and conditions set out within this RFP understanding that it is the City’s intent that these form the basis and circumstances under which the study could be performed.

1.5.1.4 It has put forth all its comments and / or questions with respect to this RFP over the period that inquiries were allowed for and affirms its agreement that the City has adequately responded to these concerns or questions.

1.5.1.5 It will not, make any claims for extra compensation, damages, or extension of time for completion from the City based on any alleged misunderstanding of this RFP or because of any lack of information concerning, or alleged misrepresentation of, the terms and conditions as set forth in this RFP.

1.6 Proposed Schedule of Events

The following dates are subject to change at the City’s sole discretion.

Event	Date and Local Time
RFP release date	June 10, 2019
Deadline to submit questions to RFP	June 17, 2019
Last day for issuance of Addenda	June 19, 2019
RFP closing date	June 24, 2019 – 4:00pm
Final Survey Report	August 1, 2019

1.7 Disclosure of Information

- 1.7.1 Consultant must not disclose any details pertaining to their RFP Submission to anyone not specifically involved in their submission without prior written approval of the City.
- 1.7.2 Consultant shall not issue a news release or other public announcement pertaining to details of the RFP, their RFP submission, or the selection process, without the prior written approval of the City.

1.8 General Provisions

- 1.8.1 By submitting an offer, it is understood and agreed that:
 - 1.8.1.1 A contractual obligation will come into force only if there is a duly executed agreement.
 - 1.8.1.2 The City's has no liability under this Request for Proposal or any contract arising from it.

1.9 No Lobbying

- 1.9.1 Consultant and/or Team Members and advisors must not engage in any form of political or other lobbying whatsoever with respect to the outcome of the RFP process. In the event of any such lobbying, the City, at its sole discretion, may at any time, disqualify a Consultant or reject any submission by any Consultant without further consideration. **All correspondence or communication by Consultant must be directed to the Administrative Authority.**

2.0 OFFER SUBMISSION REQUIREMENTS

2.1 Submission of Offer

Proponents must submit electronic (PDF) copies of their Proposal(s) before 3:00:00 pm EST on May 31, 2019 addressed to:

Matthew Van Strien
Purchasing Department, City of Iqaluit
M.VanStrien@city.iqaluit.nu.ca

Copy: Ella Levin: E.Levin@city.iqaluit.nu.ca

Emails should be clearly marked in the subject line with “**City of Iqaluit – Unnamed Lake Lidar Survey**” and the Proponent name.

Proponents shall submit one (1) Technical Submission for the services being requested, and one (1) Cost Submission identifying the corresponding costs.

This RFP is being conducted to reflect use of a two (2) envelope system to separate the review of technical and cost components. Technical Submission and the Costing Submission must therefore be submitted as separate PDF files that are clearly marked “**Technical Submission – Unnamed Lake Lidar Survey, Proponent name**” and “**Costing Submission, Proponent name**”.

The total size of email submissions should be less than 9MB in size to facilitate delivery and adequate time must be allowed for delivery. It is the Proponent’s responsibility to confirm successful receipt of the email submission prior to the deadline.

The final decision on whether to accept late Proposals is at the City’s discretion.

2.2 Inquiries and Amendments

All inquiries are concerning this RFP are to be directed by email only to:

Matthew Van Strien
M.VanStrien@city.iqaluit.nu.ca

The deadline for submitting inquiries is 5 business days prior to the date and time of the submission deadline.

To ensure consistency and fairness to all Bidders, all firms who have received the RFP will receive any information with respect to significant inquiries in the form of written addenda. Verbal explanations or instructions will not be provided.

2.3 Bidder Requirements

The successful Bidder(s) must have a valid City of Iqaluit Business License prior to award of any Contract.

2.4 Solicitation of Council Members, City Staff and City Consultants

Bidders and their agents will not contact any member of the City Council, City Staff or City Consultants with respect to this RFP, other than the those named in Section 2.2, at any time prior to the award of a contract or the cancellation of this RFP.

2.5 Terms and Conditions

- 2.5.1 Submission of a Bid constitutes acknowledgement that the Bidder has read and agrees to be bound by all the terms and conditions of this RFP.
- 2.5.2 The City will not make any payments for the preparation of a response to this RFP. All costs incurred by a Bidder will be borne by the Bidder.
- 2.5.3 This is not an offer. The City does not, by virtue of this Bid call, commit to an award of a Bid, nor does it limit itself to accepting the lowest price or any Bid submitted, but reserves the right to award this Bid in any manner deemed to be in the City's best interest.
- 2.5.5 The City has the right to cancel this RFP at any time and to reissue it for any reason whatsoever, without incurring any liability and no Bidder will have any claim against the City as a result of the cancellation or reissuing of the RFP.
- 2.5.6 The City will not be responsible for any Bid that does not indicate the RFP reference, and the Bidder's name.
- 2.5.7 The City will not be responsible for any Bid that is delivered to any address or in any manner other than that provided in Section 2.1 of this RFP.
- 2.5.8 If a contract(s) is to be awarded as a result of this RFP, it will be awarded to the Bidder whose Bid for each service, in the City's opinion, provides the best potential value to the City and is capable in all respects to perform fully the contract requirements and has the integrity and reliability to assure performance of the contract obligations.
- 2.5.9 If the City decides to award a contract(s) based on a submission received in response to this RFP, the Successful Bidder(s) will be notified of the intent to award in writing, and the subsequent execution of a written agreement shall constitute the making of a Contract. Bidders will not acquire any legal or equitable rights or privileges whatsoever until a Contract is signed by both parties.
- 2.5.10 In the event of any inconsistency between this RFP, and any ensuing Contract(s), the Contract shall govern.

2.5.11 Any Contract(s) will be in the form of the City's standard "City of Iqaluit Services Agreement" and it will contain the relevant provisions of this RFP, the accepted Bid as well as such other terms as may be mutually agreed upon, whether arising from the accepted Bid or as a result of any negotiations prior or subsequent thereto. The City reserves the right to negotiate modifications with any Bidder who has submitted a Bid.

A copy of the Services Agreement is included as Appendix C.

2.5.12 Any amendment made by the City to the RFP will be issued in writing and sent to all who have received the documents via addenda.

2.5.13 An Evaluation Committee will review each Bid. The City reserves the exclusive right to determine the qualitative aspects of all Proposals relative to the evaluation criteria.

2.5.14 Proposals will be evaluated as soon as practicable after the closing time. No detail of any Bid will be made public except the names of all parties submitting Proposals.

2.5.15 Bidders must acknowledge receipt of any addenda issued by the City in their Bid.

2.6 Offer Validity

Offer shall remain open for acceptance by the City for a period of no less than sixty days (60) calendar days from the RFP closing Date.

3.0 BID REQUIREMENTS AND EVALUATION

3.1 Mandatory Requirements

Bidders must satisfy the following mandatory requirements in their Proposal in accordance with the requirements of this RFP. Bidders shall submit the following:

- a) Fully executed and unconditional Cost Submission Form

3.2 Financial

Submit a properly executed and unqualified Cost Submission Form. The fixed price shall include all disbursements / expenses.

3.3 Evaluation Process

The Owner will appoint an Evaluation Committee for the purpose of evaluating Proposals.

The Proposal evaluation follows a two-step process:

- a) Validation of mandatory requirements;
- b) Technical evaluation, 70 points available;
- c) Financial evaluation, 30 points available;

Proposals that do not meet the mandatory requirements will not be considered further.

3.4 Technical Evaluation

Total Value 70 Points

Designated Project Manager (10 Points Available)

The designated project manager will be the Bidders staff who is responsible for the delivery and successful completion of the project. They will be the primary point of contact with the City's Project Manager.

Years of Experience: 10+ years (2 points)
1 to 10 years (1 point)

Education/ Certification: Engineering Degree/ Professional Engineer (1 points)

Reference Projects: Provide two completed reference projects of similar scope and budget, including project outcomes, budget, location and reference contact number. (2 points)

Technical \Site Team (10 Points Available)

The Site team will be onsite while work is being executed and will be responsible for ensuring the project is delivered safely and overseeing the completion of the work.

Years of Experience: 15+ years (2 points)
1 to 15 years (1 point)

Reference Projects: Provide two completed reference projects of similar scope and budget, including project outcomes, budget, location and reference contact number. (3 points)

Methodology and Schedule (40 Points Available)

Proponent are to provide details the methodology to be used to complete the scope of work. It should include

- List of key relevant tools, with certifications and qualified personnel to apply the tool. Information on calibration should be included if applicable. Where an equipment is to be leased, preliminary arrangement to that effect should be included in the offer
- Management of logistics, delivery and retrieval tools and personnel to and from work site during the survey should be stated
- Provide a detail project schedule that shows how the dates identified in the RFP will be satisfied
- List (2) reference projects of similar scope, complexity and magnitude
- Demonstrate understanding and experience of working in the Northern Territories in General and Nunavut in particular

Project Specific Health and Safety Plan (10 Points Available)

The plan must be specific to this project and include, at a minimum, the following information:

- Identify any hazards associated with the work and provide measures to mitigate or eliminate the risk.
- Identify how the Bidder will communicate with the City for any issues encountered during the completion of the work.
- If applicable, identify how public traffic will safely interact with the project.

3.5 Financial Evaluation

Total Value 30 Points

Points will be awarded based on the fixed fee Proposal and the allocation of fees based on the various Phases required of the project.

Each Bidder will receive a percentage of the total possible points allocated to price based on the following formula:

Lowest Price/Bidder Price x 30 Points = Bidders Points.

4.0 TERMS OF PAYMENT

The Consultant shall be reimbursed monthly for works completed for each service provided.

The invoice shall include the project title, **the Service Contract number**, a description of the work completed, and a billing summary. The summary shall include the tasks as set forth in the costing submission, the proposed costs, costs to date, percentage invoiced to date, and the percentage of work completed to date for each task.

No payment will be made for the cost of work incurred to remedy errors or omissions for which the Consultant is responsible.

5.0 SCHEDULE

DATE	ACTION
June 10, 2019	<ul style="list-style-type: none"> Opening date for RFP
June 24, 2019 4:00:00 pm EST	<ul style="list-style-type: none"> Closing date for RFP
June 28, 2019	<ul style="list-style-type: none"> Anticipated Award date
July 1, 2019	<ul style="list-style-type: none"> Anticipated Project Start / Kick-Off Meeting
August 1, 2019	<ul style="list-style-type: none"> Final Report

6.0 SCOPE OF WORK FOR UNNAMED LAKE LIDAR SURVEY

The City of Iqaluit obtains its fresh water supply from the Lake Geraldine water reservoir. Typically, the reservoir is recharged during the annual spring freshet, and through precipitation during the summer months, providing the required volume of water to supply the municipality for the year, until the following spring freshet cycle.

Last year, the City identified a shortage of water in the reservoir following the 2018 spring freshet. As such, the City was required to supplement its drinking water supply from another water source. This was executed in August 2018, whereby water was pumped from the Apex River to Lake Geraldine. The water reservoir was replenished in time before the winter freeze-up.

As part of the City of Iqaluit efforts to develop a sustainable long-term water supply solution, the City is investigating alternative options for supplementary water supply for the Lake Geraldine water reservoir. The City had previously conducted studies on the long-term viability of other water sources such as Apex River and Sylvia Grinnell; however, no such investigation was ever conducted for Unnamed Lake. The intent of the investigation is to assess Unnamed lake, located at approximately 3km northeast of Lake Geraldine reservoir (coordinates: 63° 46' 46" N, 68° 26' 35" W), as a potential source of long-term supplemental to the City of Iqaluit. The minimum area of coverage is shown in red outline below.





REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED
LAKE

The scope of work is to conduct Lidar survey of the Unnamed lake watershed to provide an accurate resolution of the topography of the lake watershed. The watershed topography is required to develop an accurate reservoir water balance and survey data can subsequently be used to inform the pipeline configuration. LiDAR data must be collected up to <0.5m resolution and develop a detailed orthophoto as required by the Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut (DFO, 2010).

Aerial survey work is expected to take place during snow-free conditions in 2019 and during climate conditions favorable to data acquisition. The contractor will identify a window of predicted favorable flying conditions prior to mobilizing. It is assumed that the resolution at summer will be more accurate than winter, proponent must be willing, resourced and available to perform the Lidar survey this summer.

The successful proponent will be required to obtain all necessary permissions to conduct the survey within the necessary airspace. Data is to be provided in .las, .dem and shx file formats downloadable from an ftp or similar shared site.



APPENDIX A

Cost Submission Form

Bidder NAME: / Date / Address

_____ / _____ / _____

Provide the following cost breakdown for the services detailed herein that the Bidder is proposing to offer the City of Iqaluit*. Services not being offered should be left blank.

Item	Description	Pricing	Cost
1.0	Mobilization and Demobilization	Lump sum	
2.0	Lidar Survey of Unnamed lake	Lump Sum	\$
3.0	Two Sets of Hard and Electronic report	Lump sum	
4.0	Others (Consultant MUST specify)	Lump sum	
	GST		\$
TOTAL FIXED FEE (INCL. GST):			
Amount in Words:			

Name _____ / Sign _____

All disbursements shall be included in the associated Lump Sum costs above



APPENDIX B

CONTRACTUAL ACKNOWLEDGEMENT

The Consultant hereby agrees to be legally bound by the provisions of the resulting Request for Proposal. The Consultant further acknowledges and agrees that the final terms of any resulting Contract with the City will be concluded and become legally binding on both parties upon receipt and acceptance by the Consultant of a Purchase Order or Letter of Intent issued by the City. The Consultant further agrees that acceptance of the Purchase Order will be deemed to take place five (5) business days after receipt of a Purchase Order, unless the Consultant provides the City with a written objection to, or refusal of, the Purchase Order within the said five (5) business day period.

SIGNED this _____ day of _____

Signature	Name and Title (Print)	Has the authority to bind the Corporation
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Company Name

Company Address

Telephone No.

Facsimile No.

Email Address

HST Number



APPENDIX C

CITY OF IQALUIT SERVICES AGREEMENT

BETWEEN: THE MUNICIPAL CORPORATION OF THE CITY OF IQALUIT
(hereinafter referred to as the "CITY OF IQALUIT")

OF THE FIRST PART

AND: ###
(hereinafter referred to as the "Consultant")

OF THE SECOND PART

WHEREAS the CITY OF IQALUIT has requested the Consultant to provide certain services in a Request for Bid (RFP) dated ##### and titled "#####";

AND WHEREAS the Consultant has agreed to provide such services to the CITY OF IQALUIT in its response to the Request for Bid (Bid) dated #####;

AND WHEREAS the CITY OF IQALUIT and the Consultant wish to set out the terms and conditions relating to the provision of such services;

THEREFORE, the CITY OF IQALUIT and the Consultant agree as follows:

1. SERVICES AND PAYMENT
 - 1.1 The Consultant agrees to provide to the CITY OF IQALUIT those services set out in the Terms of Reference of the Request for Bid for #####. A copy of the RFP is attached as Appendix "A".
 - 1.2 The CITY OF IQALUIT agrees to pay for the services described above, a total amount not greater than ##### plus GST, for the provision of professional services based on the Bid dated ##### and as attached in Appendix "B" hereto.
2. TERM
 - 2.1 This Contract shall commence on the ##^{set} of #####, ##### and terminates on the ##st of #####, ##### unless otherwise terminated in accordance with the provisions of this Contract.
3. NOTICE AND ADDRESS
 - 3.1 Any notice required to be given herein or any other communication required by this contract shall be in writing and shall be personally delivered, sent by facsimile, or posted by prepaid registered mail and shall be addressed as follows:



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

i) If, to the CITY OF IQALUIT:

####

Reference:

ii) If to the Consultant at:

####

3.2 Every such notice and communication, if delivered by hand, shall be deemed to have been received on the date of delivery or if sent by prepaid registered mail shall be deemed to have been received on the seventh day after posting, or if by facsimile, 48 hours after the time of transmission, excluding from the calculation weekends and statutory holidays.

4. COMPLETE AGREEMENT

4.1 This Contract and its attachments constitute the complete Contract between the parties. Except as provided herein, it supersedes and shall take effect in substitution for all previous agreements. It is subject to change only by an instrument executed in writing by the City.

4.2 If this Contract arises from a request for Proposals or tender call, the provisions of the request for Proposals or tender call and the Consultant's bid or Bid submission are incorporated into this Contract and may be used to clarify, explain or supplement this Contract, but shall not be used to contradict any express terms of this Contract.

4.3 In the event of a conflict between this Contract, the Consultant's bid or Bid submission, and the City's original tender bid instructions or Request for Proposals, the more recently prepared document shall govern to the extent of such inconsistency.

5. GENERAL TERMS

5.1 Any information obtained from or concerning any department of the CITY OF IQALUIT or clients of any department of the CITY OF IQALUIT, by the Consultant, its agents or employees in the performance of any contract shall be confidential. The Consultant shall take such steps as are necessary to ensure that any such information is not disclosed to any other person and shall maintain confidential and secure all material and information that is the property of the CITY OF IQALUIT and in the possession of or under the control of the Consultant. This clause survives the termination of this contract.

5.2 Time shall in every respect be of the essence. The Consultant shall deliver the services specified in the contract and according to the project schedule on costs. The CITY OF IQALUIT may grant reasonable extensions to the Consultant for delays, if the Consultant can show those delays were caused by circumstances beyond the control of the Consultant.

5.3 The Consultant is an independent Consultant with the CITY OF IQALUIT and nothing in this contract shall be construed or deemed to create the relationship of employee and employer or of principal and agent between the CITY OF IQALUIT and the Consultant. The Consultant



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

is solely responsible for payments of all statutory deductions or contributions including but not limited to pension plans, unemployment insurance, income tax, workers' compensation and the Nunavut Payroll Tax.

- 5.4 This contract shall be interpreted and governed in accordance with the laws of Nunavut and the laws of Canada as they apply in Nunavut.
- 5.5 No waiver by either party of any breach of any term, condition or covenant of this contract shall be effective unless the waiver is in writing and signed by both parties. A waiver, with respect to a specific breach, shall not affect any rights of the parties relating to other or future breaches.
- 5.6 The failure of either party at any time to require the performance of any provision or requirement of this contract shall not affect the right of that party to require the subsequent performance of that provision or requirement.
- 5.7 Title to any report, drawing, photograph, plan, specification, model, prototype, pattern, sample, design, logo, technical information, invention, method or process and all other property, work or materials which are produced by the Consultant in performing the contract or conceived, developed or first actually reduced to practice in performing the contract (herein called "the Property") shall vest in the CITY OF IQALUIT and the Consultant hereby absolutely assigns to the CITY OF IQALUIT the copyright in the property for the whole of the term of the copyright. The Consultant shall not be responsible for any loss or damage suffered by the City of Iqaluit or any third parties resulting from any unauthorized use or modification of the property, errors in transmission of the property, changes to the Property by others, the consequences of design defects due to the design of others, or defects in contract documents prepared by others, and the City of Iqaluit agrees to defend, indemnify, and hold the Consultant harmless from and against all claims, demands, losses, damages, liability and costs associated therewith. Subject to the foregoing, the Property may be relied by the City of Iqaluit for design and construction work undertaken by other parties with respect to the Services provided that such parties verify the accuracy and completeness of the Property to their satisfaction.
- 5.8 It is intended that all provisions of this agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or a part of one is found to be void, voidable or unenforceable for any reason whatever, then the remainder of the agreement shall be interpreted as if such provision, provisions, or part thereof, had not been included.
- 5.9 This contract may be extended by the written consent of the parties.
- 5.10 The CITY OF IQALUIT may delegate any of its authority and undertaking pursuant to this contract to any employee or Consultant the CITY OF IQALUIT by notice in writing to the Consultant.
- 5.11 This contract shall ensure to the benefit of and be binding on the respective administrators, successors and assignment of each of the parties hereto.



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

6. CONSULTANT RESPONSIBILITIES

- 6.1 The Consultant shall indemnify and hold harmless, the CITY OF IQALUIT, its officers, employees, servants and agents from and against all claims, actions, causes of action, demands, losses, costs, damages, expenses, suits or other proceedings by whomsoever made, brought or prosecuted in any manner based upon or related to the negligent acts, errors, or omissions of the Consultant under this contract.
- 6.2 The Consultant shall be liable to the CITY OF IQALUIT for any loss or damage to property or equipment that is supplied to or placed in the care, custody or control of the Consultant for use in connection with the contract if such loss or damage is attributable to the negligence or deliberate acts of the Consultant or its employees or agents.
- 6.3 If, in the opinion of the CITY OF IQALUIT acting reasonably, the Consultant is in default in respect of any obligation of the Consultant hereunder, the CITY OF IQALUIT may rectify such default and pursue a claim against the Consultant for any direct costs associated with any such remediation, including a reasonable allowance for the use of the CITY OF IQALUIT's own employees or equipment.
- 6.4 The Consultant may not assign or delegate work to be done under this contract, or any part thereof, to any other party without the written consent of the CITY OF IQALUIT. In the case of a proposed assignment of monies owing to the Consultant under this contract, the consent in writing of the CITY OF IQALUIT must be obtained.
- 6.5 The Consultant shall keep proper accounts and records of the services for a period of 3 years after the expiry or termination of this agreement. At any time during the term of this contract or during the three years following the completion or termination of this agreement, the Consultant shall produce copies of such accounts and records upon the written request of the CITY OF IQALUIT.
- 6.6 The Consultant shall notify the CITY OF IQALUIT immediately of any claim, action, or other proceeding made, brought, prosecuted or threatened in writing to be brought or prosecuted that is based upon, occasioned by or in any way attributable to the performance or non-performance of the services under this contract.
- 6.7 If at any time the Consultant considers their estimates indicate costs will exceed the project budget, they will immediately advise the City of Iqaluit. If in the opinion of the City of Iqaluit, acting reasonably, the excess is due to design, costs factors or matters under the control or reasonably foreseeable by the Consultant, the CITY OF IQALUIT may require the Consultant to do everything by way of revision of the design to bring the cost estimate within the project budget. Costs of completing such revisions shall be based upon a level of compensation reasonably appropriate to the circumstances, including the reason for the revisions.
- 6.8 Except as required in the performance of services set out in this agreement, the Consultant must maintain as confidential all data and information made available to the Consultant, the CITY OF IQALUIT, or any other parties which is generated by or results from the Consultant's performance of the Services described in this Contract. All such data and information is the property of the City of Iqaluit. This clause shall survive the termination of the Contract.



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

7. TERMINATION

- 7.1 The CITY OF IQALUIT may terminate this contract at any time upon giving written notice to this effect to the Consultant if, in the opinion of the CITY OF IQALUIT, the Consultant is unable to deliver the service as required, the Consultant's performance of work is persistently faulty, in the event that the Consultant becomes insolvent or commits an act of bankruptcy, in the event that any actual or potential labor dispute delays or threatens to delay timely performance of the contract or the (Consultant Consultant) defaults or fails to observe the terms and conditions of the contract in any material respect.
- 7.2 This contract shall terminate as of the day for termination set out in the written notice and the Consultant shall forthwith invoice the CITY OF IQALUIT for work performed to the date of termination.
- 7.3 Any invoice submitted by the Consultant pursuant to clause 7.2 shall be reviewed by the CITY OF IQALUIT to assess the amount which is properly due and owing for work done by the Consultant prior to termination.

8. FINANCIAL

- 8.1 The CITY OF IQALUIT, having given written notice of a breach, may withhold or hold back in whole or in part any payment due the Consultant without penalty, expense or liability, if in the opinion of the Contracting Authority, the Consultant has failed to comply with or has in any way breached an obligation of the consultant. Any such hold back shall continue until the breach has been rectified to the satisfaction of the CITY OF IQALUIT.
- 8.2 The CITY OF IQALUIT may set off any payment due the Consultant against any monies owed by the Consultant to the CITY OF IQALUIT.
- 8.3 The City of Iqaluit will pay the Goods and Services Tax (GST).
- 8.4 Provided all terms and conditions on the part of the Consultant have been complied with, each invoice will be paid thirty (30) calendar days after receipt of the invoice, or thirty (30) calendar days after delivery of the services, whichever is later. Invoices from Nunavut Consultant (as defined by the CITY OF IQALUIT NNI Policy) will be paid twenty (20) calendar days after receipt of the invoice, or twenty (20) calendar days after receipt of the services, whichever is later.
- 8.5 The CITY OF IQALUIT may, in order to discharge lawful obligations or to satisfy lawful claims against the Consultant or a Subconsultant arising out of the execution of work, pay any amount, which is due and payable to the Consultant under the contract, if any, directly to the obligee of and the claimants against the Consultant or Subconsultant.

9. INSURANCE AND LIABILITY

- 9.1 The Consultant's liability to the City of Iqaluit for claims arising out of this Agreement, or in any way relating to the Services, will be limited to direct damages and to the re-performance, without additional compensation, of any Services not meeting a normal professional standard of care and such liability will, in the aggregate, not exceed the amount of \$1,000,000.00. The limitations of liability will apply, to the extent permitted by law, whether Consultant's liability



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

arises under breach of contract or warranty; tort, including negligence; strict liability; statutory liability; or any other cause of action, and will extend to and include Consultant's directors, officers, employees, insurers, agents and sub-Consultant.

- 9.2 In no event will either party be liable to the other party for indirect or consequential damages including without limitation loss of use or production, loss of profits or business interruption.
- 9.3 The Consultant shall, without limiting his obligations or liabilities hereto, obtain, maintain and pay for during the period of this agreement, the following insurance with limits not less than those shown:
- a) Workers' Compensation insurance covering all employees engaged in the work in accordance with the statutory requirements of the Territory or Province having jurisdiction over such employees. If the Consultant is assessed any additional levy, extra assessment or super-assessment by a Workers' Compensation Board as a result of an accident causing injury or death to an employee of the Consultant or any sub-consultant, or due to unsafe working conditions, then such levy or assessment shall be paid by the Consultant at its sole cost and is not reimbursed by the CITY OF IQALUIT.
 - b) Employer's liability insurance with limits not less than \$500,000 for each accidental injury to or death of the Consultant's employees engaged in the work. If Workers' Compensation insurance exists, then in such event, the aforementioned Employer's Liability insurance shall not be required but the Comprehensive General Liability policy referred to in item (e) herein shall contain an endorsement providing for Contingent Employers' Liability insurance.
 - c) Motor Vehicle, water craft and snow craft standard liability insurance covering all vehicles and/or craft owned or non-owned, operated and/or licensed by the Consultant and used by the Consultant in the performance of this agreement in an amount not less than one million dollars (\$1,000,000.00) per occurrence for bodily injury, death and damage to property; and with respect to busses limits of not less than one million dollars (\$1,000,000.00) for vehicle hazards and not less than one million dollars (\$1,000,000.00) for Bodily Injury to or death of one or more passengers and loss of or damage to the passengers property in one accident.)
 - d) Comprehensive General Liability Insurance with limits of not less than two million dollars (\$2,000,000.00) (inclusive) per occurrence for bodily injury, death and damage to property including loss of use thereof. Such insurance shall include but not be limited to the following terms and conditions:
 - Products & Completed Operations Liability *
 - Consultant's Protective Liability
 - Blanket Contractual Liability
 - Broad Form Property Damage
 - Personal Injury Liability
 - Cross Liability
 - Medical Payments
 - Non-owned Automobile Liability *
 - Contingent Employers Liability *



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

- Employees as Additional Insureds *
*WHERE APPLICABLE

e) Professional Liability Insurance with limits of not less than two hundred fifty thousand dollars (\$250,000.00) per claim and five hundred thousand dollars (\$500,000.00) in the annual aggregate, to cover claims arising out of the rendering of or failure to render any professional service under this contract or agreement.

All policies shall provide that thirty days written notice be given to the CITY OF IQALUIT prior to any cancellations of any such policies.

The Comprehensive General Liability Insurance policies shall name the CITY OF IQALUIT and any permitted sub-Consultant as additional insureds only with respect to the terms of this contract and shall extend to cover the employees of the insureds hereunder.

The Consultant shall be responsible for any deductibles, exclusions and/or insufficiency of coverage relating to such policies.

The Consultant shall deposit with the CITY OF IQALUIT prior to commencing with the work a certificate of insurance evidencing the insurance(s) required by this clause in a form satisfactory to the CITY OF IQALUIT and with insurance companies satisfactory to the CITY OF IQALUIT.

IN WITNESS WHEREOF the parties hereto have set their hand and seals as of the date and year entered below.

FOR THE CITY OF IQALUIT:

FOR THE CONSULTANT:

Name/Title

Name/Title

Signature

Signature

Date

Date

Witness

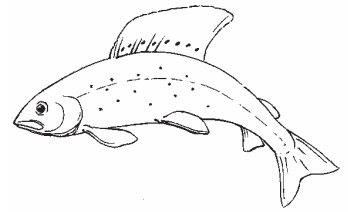
Witness



REQUEST FOR PROPOSAL FOR PROVISION OF LIDAR SURVEY FOR UNNAMED LAKE

APPENDIX D

PROTOCOL FOR WINTER WATER WITHDRAWAL FROM ICE-COVERED WATERBODIES IN THE NORTHWEST TERRITORIES AND NUNAVUT (DFO, 2010).



DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut

Rationale

In the Northwest Territories and Nunavut, winter activities such as access road construction, exploratory drilling and camp operations often require large amounts of water. Excessive amounts of water withdrawn from ice-covered waterbodies can impact fish through oxygen depletion, loss of over-wintering habitat and/or reductions in littoral habitat. The potential for such negative impacts to over-wintering fish and fish habitat has made winter water withdrawal a critical issue for Fisheries and Oceans Canada (DFO) in the Northwest Territories and Nunavut. To mitigate impacts to fish from water withdrawal from ice-covered waterbodies, and to provide standardized guidance to water users, including volume limits for certain water source types, DFO has developed this protocol in conjunction with industry and other regulators.

For the purposes of this protocol, a **waterbody** is defined as any water-filled basin that is potential fish habitat. A waterbody is defined by the ordinary high water mark of the basin, and excludes connecting watercourses.

This protocol will **not** apply to the following:

- Any waterbody that is exempted by DFO (e.g. Great Bear Lake, Great Slave Lake, Gordon Lake, and others as and when determined by DFO), and;
- Any waterbody from which less than 100m³ is to be withdrawn over the course of one ice-covered period.

In order to establish a winter water withdrawal limit for a given waterbody, the following criteria must be adhered to:

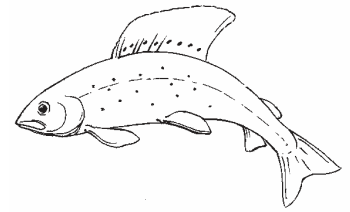
1. In one ice-covered season, total water withdrawal from a single waterbody is not to exceed 10% of the available water volume calculated using the appropriate maximum expected ice thickness provided in Table 1.
2. In cases where there are multiple users withdrawing water from a single waterbody, the total combined withdrawal volume is not to exceed 10% of the available water volume calculated using the appropriate maximum expected ice thickness provided in Table 1. Therefore, consistent and coordinated water source identification is essential.
3. Only waterbodies with maximum depths that are $\geq 1.5\text{m}$ than their corresponding maximum expected ice thickness should be considered for water withdrawal (Table 1). Waterbodies with less than 1.5m of free water beneath the maximum ice are considered to be particularly vulnerable to the effects of water withdrawal.
4. Any waterbody with a maximum expected ice thickness that is greater than, or equal to, its maximum depth (as determined from a bathymetric survey) is exempt from the 10% maximum withdrawal limit (Table 1).

To further mitigate the impacts of water withdrawal, water is to be removed from deep areas of waterbodies (>2m below the ice surface) wherever feasible, to avoid the removal of oxygenated surface waters that are critical to over-wintering fish. The littoral zone should be avoided as a water withdrawal location. Water intakes should also be properly screened with fine mesh of 2.54 mm (1/10") and have moderate intake velocities to prevent the entrainment of fish. Please refer to the *Freshwater Intake End-of-Pipe Fish Screen Guideline* (DFO, 1995) which is available upon request, or at the following internet address: www.dfo-mpo.gc.ca/Library/223669.pdf.

In order to determine the maximum water withdrawal volume from an ice-covered waterbody, and thereby conform to this protocol, the following information must be provided to DFO for review and concurrence prior to program commencement.

Water Source Identification

1. Proposed water sources, access routes, and crossing locations clearly identified on a map, with geographical coordinates (latitude/longitude and/or UTM) included.
2. Any watercourse connectivity (permanently flowing and/or seasonal) between the proposed water source and any other waterbody or watercourse.



DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut

3. Aerial photos or satellite imagery of the water sources.
4. Estimated total water withdrawal requirement for work or activity and estimated total water withdrawal per water source (in m³).

Bathymetric Survey Results

1. For all waterbodies: One longitudinal transect, connecting the two farthest shorelines, is to be conducted regardless of waterbody size. Note: a longitudinal transect may be straight or curved in order to accommodate the shape of a lake (see Figure 1).
2. For waterbodies equal to or less than 1 km in length: a minimum of one longitudinal transect and two perpendicular transects are to be conducted. Perpendicular transects should be evenly spaced on the longest longitudinal transect, dividing the lake into thirds (Figure 1).
3. For lakes greater than 1 km in length: a minimum of one longitudinal transect is to be conducted. Perpendicular transects (minimum of 2) should be evenly spaced on the longest longitudinal transect at maximum intervals of 500 m.
4. Additional transects should be run as required to include irregularities in waterbody shape such as fingers or bays (Figure 1).
5. All longitudinal and perpendicular transects are to be conducted using an accurate, continuous depth sounding methodology, such as open water echo sounding or ground penetrating radar (GPR), that provides a continuous depth recording from one shore to the farthest opposing shore (Figure 1). Any alternative technology should be reviewed by DFO prior to implementing for bathymetric surveys.

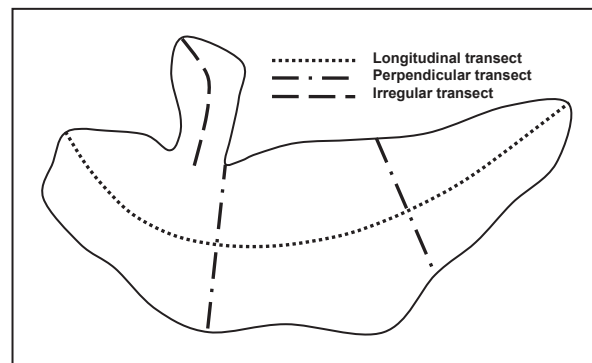
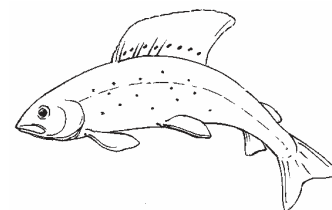


Figure 1. Minimum transect layout for a lake that is less than 1 km in length, with an irregularity.

Volume Calculations

1. Document the methods used to calculate surface area. If aerial photos or satellite imagery were used, provide the date (day/month/year) taken, as surface area may change depending on the time of year. If maps were used, provide the year that they were surveyed.
2. Detail the methods used to determine the total volume of free water, incorporating the relevant bathymetric information.
3. Calculate the available water volume under the ice using the appropriate maximum expected ice thickness, i.e. $Total\ Volume_{lake} - Ice\ Volume_{max\ thickness} = Available\ Water\ Volume$ (see Table 1 for maximum ice thickness).
4. For programs where ice-chipping is used, the total ice volume to be removed from the waterbody should be converted to total liquid volume and incorporated into the estimate of total water withdrawal requirement per water source.



DFO Protocol for Winter Water Withdrawal from Ice-covered Waterbodies in the Northwest Territories and Nunavut

Table 1. Maximum expected ice thickness, and corresponding water depth requirements, for different regions in the Northwest Territories.

Area	Maximum Expected Ice Thickness (m)	Minimum Waterbody depth Required for 10% Water Withdrawal (m)
Above the Tree Line	2.0	≥3.5
Below the Tree Line - North of Fort Simpson	1.5	≥3.0
Deh Cho –South of Fort Simpson	1.0	≥2.5

A brief project summary report documenting and confirming total water volume used per water source and corresponding dates should be submitted to DFO within 60 days of project completion. Information should be provided in the following format (this information would also be useful as part of the project description):

Lake ID	number and/or name
Coordinates	latitude and longitude and/or UTM coordinates
Surface area	in ha
Total Lake Volume	in m ³
Under Ice Volume	in m ³ (based on max ice thickness for region)
Max expected ice thickness value used	in m
Calculated 10% Withdrawal volume	in m ³
Total required water volume extracted	in m ³
Aerial photographs of waterbody	PDF format
Bathymetric Map(s) of waterbody	PDF format

Any requests deviating from the above must be submitted to DFO and will be addressed on a site-specific basis.

Beaver and Muskrat

Many species of animals are highly sensitive to water fluctuations. In areas where beaver and muskrat may occur, the appropriate agencies or organizations should be consulted to determine if harmful effects will result from your activities, and whether these effects can be successfully mitigated through modifications to your plans including best management practices.

Please note that adherence to this protocol does not release the proponent of the responsibility for obtaining any permits, licenses or authorizations that may be required.

For more information contact DFO at (867) 669-4915.