Land and Water Boards of the Mackenzie Valley

LAND USE PERMIT APPLICATION FORM

Subsection 19(2) and Schedule 2 of the Mackenzie Valley Land Use Regulations

Use an "X" to indicate which Board the Application is being made to:	Mackenzie Valley Land and Water Board:	X	Sahtu Land and Water Board:	
	Wek'èezhìi Land and Water Board:		Gwich'in Land and Water Board:	

To complete this Form, please refer to the MVLWB *Guide to the Land Use Permitting Process* (Guide) and fill in the grey fields; attach additional pages, as necessary. Indicate N/A in the grey fields for Items or parts of Items that are not applicable. Review the following MVLWB guidance for formatting your Application Package:

- Document Submission Standards
- Standard Outline for Management Plans

Received: June 19, 2024

File #: MV2024S0021

Copied to: TM/Reg

If applicable, provide the existing or current Land Use Permit file number:	New Land Use Permit Application		
Use an "X" to indicate if this Application is accompanied by an Application for a Water Licence:	Water Licence – in a non-federal area:		
	Water Licence – in a federal area:		

1. NAME AND CONTACT INFORMATION – APPLICANT

Applicant's Name:	Adrian Bell		
Position:	Broker of Record		
Mailing Address:	5124 48th Street		
Community:	Yellowknife	Telephone:	1 (867) 446-9800
Prov/Terr:	Northwest Territories	Email:	adrian.bell@century21.ca
Postal Code:	X1A 1N6	Other: Cell	

2. NAME AND CONTACT INFORMATION – APPLICANT'S HEAD OFFICE

Include a Certificate of Corporate Registration from the Government of the Northwest Territories in your Application Package.

Use an "X" to indicate if this information is the same as Item 1 above:	X
Name:	

Position:			
Mailing Address:			
Community:			
Prov/Terr:		Telephone:	
Postal Code:		Email:	
Field Supervisor:		Other:	

3. NAME AND CONTACT INFORMATION – CONTRACTORS AND SUB-CONTRACTORS

Include relevant names, responsibilities, and contact information. An additional table should be added for each contractor and sub-contractor.

Name:	Rob Girvan. P.Eng.		
Position:	Manager – Yellowknife Arctic Group		
Company Name:	Tetra Tech Canada Inc.		
Mailing Address:	P.O. Box 2244, Unit 201, 4916-49 St.		
Community:	Yellowknife	Telephone:	1 (867) 675-0252 / Mobile +1 (867) 444-0657
Prov/Terr:	Northwest Territories	Email:	Rob.Girvan@tetratech.com
Postal Code:	X1A 2P7	Other:	Mobile +1 (867) 444-0657

Name:	Richard Hoos		
Position:	Principal Consultant		
Company Name:	Tetra Tech Canada Inc.		
Mailing Address:	Suite 1000, 10th Floor, 885 Dunsmuir St.		
Community:	Vancouver	Telephone:	604-813-4952
Prov/Terr:	British Columbia	Email:	Rick.Hoos@tetratech.com
Postal Code:	V6C 1N5	Other:	

4. LOCATION OF ACTIVITIES

Use the grey fields below to provide or reference the following information:

Maps and Geographic Information System (GIS) Data: Include a map in your Application Package identifying local geographic features, watercourses and water sources, project structures, and location(s) of any proposed waste deposits. Provide geographic coordinates (latitude and longitude) of project features, and the maximum and minimum project boundary in degrees, minutes, seconds, or decimal degrees. Include GIS data in your Application Package, if applicable. Refer to the MVLWB *Guideline for Geographic Information Systems (GIS) Submission Standard* for providing geographic information.

Minimum latitude: E: 635,911.43		Maximum latitude: E: 635,970.36
Minimum longitude: N: 6,927,270.56		Maximum longitude: N: 6927299.52

NTS Map Sheet No.: Provide the map sheet number:	85J08

Land Types: Use an "X" to indicate the type(s) of the land on which the activities are proposed:

Free Hold/		Commissioner's/		Federal Land:		Municipal Land:	X

Private:		Territorial Lands:					

5. ELIGIBILITY

Refer to section 18 of the Mackenzie Valley Land Use Regulations. Use an "X" to indicate which one applies:

18(a)(i):		18(a)(ii):		18(a)(iii):		18(b):	**X**

6. RIGHTS AND/OR CONTRACTS TO SUPPORT ELIGIBILITY

Contact federal, territorial, and Indigenous governments and other parties to ensure all appropriate rights, authorizations, permissions, dispositions, and contracts have been obtained or are in the process of being obtained (e.g. mineral exploration rights, quarry permits, licences of occupation, leases, access agreements and authorizations, etc.). List and provide confirmation of other authorizations that relate to your activities; reference these in your Application Package (e.g. rights, permits, licences, etc.).

The project will also be applying for a City of Yellowknife Application to Occupy and Perform Geotechnical Testing on Municipal Land

7. PERMIT TYPE AND CRITERIA

Refer to sections 4 and 5 of the Mackenzie Valley Land Use Regulations. Use an "X" to indicate which permitting criteria apply:

Type A				Type B				Type C	
4(a)(i):		4(b)(i):		5(a)(i):		5(b)(i):	X	(SLWB and WLWB only):	
4(a)(ii):		4(b)(ii):	X	5(a)(ii):		5(b)(ii):			
4(a)(iii):		4(b)(iii):		5(a)(iii):					
4(a)(iv):		4(b)(iv):		5(a)(iv):					
4(a)(v):				5(a)(v):					
				5(a)(vi):					

8. PROJECT DESCRIPTION

Include your project description in your Application Package, or for small-scale projects, describe your proposed activities in the grey field provided below. Include the name and type (e.g., lake, river) of water source(s), and the purpose and quantity of water to be used (rates, volumes (m^3/day)). Indicate the total number of hectares to be used in each phase of the project, as well as through the life of the project.

Century 21/Det'on Cho Management LP, on behalf of Yellowknife Condominium Services Ltd., has retained Tetra Tech to conduct a site investigation and provide a geotechnical evaluation report that contains recommendations for the design and construction of a proposed Office Building to be Located at Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife.

Tetra Tech plans to drill four boreholes at the subject site within the proposed building footprint A track mounted auger drill operated by EnviroTech Drilling Solutions Ltd, from Yellowknife is proposed to conduct the drilling. The evaluation will include recording the nature of the materials encountered and collecting representative samples. Groundwater and/or possible ground ice conditions would also be noted.

The drilling program is expected to be carried out as follows:

- Monitor the drilling of four boreholes to 12 m or until bedrock is reached and log results;
- Record borehole locations with a hand-held GPS, along with approximate locations relative to landmarks if/as needed;
- Collect disturbed soil samples at 1.0 m to 1.5 m intervals or at changes in soil stratigraphy;
- Conduct Standard Penetration Tests (SPT's) in unfrozen soils, at selected intervals;
- Install two standpipe piezometers to permit groundwater levels to be measured;
- Backfill boreholes with drill cuttings, and if necessary, imported clean granular material;
- Return all collected samples to Tetra Tech's Yellowknife laboratory for testing purposes, including soil classification, and to determine engineering properties;
- Develop geotechnical recommendations in support of the foundation design, based on analysis of the results of the field investigation and subsequent laboratory testing; and
- Prepare an evaluation report that describes the findings from the site investigation, and associated recommendations for foundation design and construction, as well as geotechnical guidance for site development, and/or additional recommended work based on the findings of the review and/or site investigation.

The details of the site investigation may be modified to suit site conditions.

Before mobilizing to the site, Tetra Tech will develop a project-specific safety plan, in consultation with the drilling contractor so that the safety features and any potential hazards of the equipment being used on the project are included in the Plan. A WSCC Workplace Risk Assessment and Field Level Risk Assessment will be completed prior to commencing work. Any other legislation and public health orders will be adhered to.

Samples collected during the field investigation will be returned to Tetra Tech's Yellowknife geotechnical laboratory for the purposes of soil classification and determination of relevant engineering properties. Laboratory testing will include determination of moisture content, particle size analysis, determination of Atterberg limits, and bulk density.

In the unlikely event of a spill incident, the spill will be responded to and cleaned up in accordance with the Project Spill Contingency Plan. Any wastes generated by the Geotechnical drill program will be managed in accordance with the Project's Waste Management Plan.

9. CAMP

Describe the proposed camp size and layout. Indicate the number of person-days; explain, with rationale, any variations in the number of people that may be on site over the life of the project.

As the geotechnical drilling project will take place in Yellowknife, no camp will be required.

10. ROADS AND ACCESSES

Provide detailed information about the construction, location, and decommissioning of any roads and accesses.

Use an "X" to indicate if this is to be a pioneered road or access:	Yes		Use an "X" to indicate if the route has been laid out or ground-truthed:	Yes	
	No	X		No	

The proposed geotechnical program will take place on Lot 1, Block 44, Plan 3697 located at 4901 52nd Avenue in Yellowknife

11. PROPOSED WASTE MANAGEMENT METHODS

Use the grey fields below to provide or reference the following information:

Waste Management Plan: Include your Waste Management Plan in your Application Package, if applicable, or for small-scale projects, describe your proposed waste management activities in the grey fields provided below. A template for the Plan can be found in the MVLWB.

Waste Type	Management Method(s)
Garbage:	All daily site garbage generated by the Project personnel will be placed in City garbage cans for eventual transfer to the City of Yellowknife Landfill as part of the facility's normal practice. The garbage is anticipated to consist of food scraps and associated packing waste.
Sewage (Sanitary and greywater):	The drill crew members will use locally available public washrooms as needed
Brush and trees:	No trees or vegetation will need to be removed for the geotechnical drilling program.
Overburden (Organic soils, waste material, etc.):	the Geotechnical drilling program will be conducted with track-mounted drilling equipment. No overburden or organic soils will need to removed. The boreholes will be backfilled with drill cuttings. upon completion, no further restoration is anticipated to be required.

A copy of the drilling project's Waste Management Plan is provided with the project application

12. EQUIPMENT

Identify the types of equipment proposed to be used.

See the detailed equipment list in the Project Description. A summary of the larger equipment required is provided as follows

Number	Type/Description	Size (weight in tonnes)	Proposed use

1	Track mounted auger drill operated by EnviroTech Drilling Solutions Ltd	~ 5	Augering/drilling

13. FUEL

Identify all fuel types proposed to be used.

Type of Fuel	Number of containers	Capacity of containers (e.g., litres, pounds)	Type of container (barrel, tank, tidy-tank)	Proposed storage or staging location(s)
Diesel:	1	100 L Fuel tank	Built in fuel tank	Installed in mobile equipment

14. METHODS OF FUEL TRANSFER

Describe the proposed methods to transfer fuel.

No fuel transfers will occur during the drilling program.

15. SPILL CONTINGENCY PLAN

Include your Spill Contingency Plan in your Application Package, if applicable, or for small-scale projects, provide relevant details in the grey field provided below. An example of this Plan can be found in the INAC *Guidelines for Spill Contingency Planning*.

The Project Spill Contingency Plan is provided with the Application Package

16. PROPOSED PROJECT SCHEDULE AND TERM

Indicate the proposed project start and completion dates and the time of year the project activities are planned to occur. Describe any anticipated temporary closure(s) or seasonal shutdowns. Indicate the term requested.

Start Date:	August-September 2024	Completion Date:	September 2024
The proposed 2024 drilling program will be undertaken following receipt of the required MVLWB Land use permit, anticipated to be received in August/September, 2024			
Term of Permit Requested:	two(2) years		

17. POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT AND PROPOSED MITIGATIONS

Using the Impact-Mitigation Table below, or the more detailed Table in Appendix D of the Guide, identify all potential impacts and possible mitigations that are relevant to the proposed project, and indicate whether any of the mitigation measures have been developed as a result of input from affected parties. Possible potential impacts are listed below; however, these lists are not exhaustive and may not apply to all projects. All information provided should reflect the size, scale, and nature of the proposed project. Cumulative impacts and climate change must be considered. Attach additional pages if needed.

Potential Impacts *Use an "X" to indicate which apply*	**X**	**Potential Project Impacts and Proposed Mitigations** *Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.*
ABIOTIC COMPONENTS		
Land		
Soil contamination	X	Potential soil contamination could occur due to a hydrocarbon spill. Any such spills will be immediately contained and cleaned up as per the Project Spill Contingency Plan
Soil compaction		Use of tracked equipment will minimize soil compaction
Destabilization/erosion		Not applicable
Change in soil structure		Not applicable
Inability to support vegetation		Not applicable
Other		Not applicable
Water		
Groundwater		
Water table alteration		Not applicable
Infiltration changes		Not applicable
Changes in water quality		Not applicable
Temperature changes		Not applicable
Other		Not applicable
Permafrost		
Loss or change in extent	X	Permafrost degradation is not anticipated but will be avoided by following best management practices (e.g. drill holes will be backfilled with the drill cuttings
Changes in seasonal fluctuations		Not applicable
Change in persistence		Not applicable
Other		Not applicable
Surface Water		
Water flow or level changes (permanent, temporary, seasonal)		Not applicable
Drainage pattern changes		Not applicable
Temperature changes		Not applicable
Changes in water quality		Not applicable
Wetland impairment		Not applicable
Changes to aquatic habitat (see Biotic section below)		Not applicable
Other		Not applicable
Air		
Changes in air quality	X	Temporary, localized air emissions from the drilling equipment.
Harm to living things		Not applicable
Increased greenhouse gases	X	Minimal increase in greenhouse gases
Other		Not applicable
BIOTIC COMPONENTS		
Vegetation		
Direct loss of vegetation	X	Not applicable

Potential Impacts *Use an "X" to indicate which apply*	**X**	**Potential Project Impacts and Proposed Mitigations** *Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.*
Loss of Species at Risk or may-be-at-risk plants		Not applicable
Change in species composition		Not anticipated to occur
Introduction of non-native (invasive) species		Not applicable
Effects on plant health (dust, metals, toxins)		Not anticipated to occur
Increased risk of fire		Not applicable
Compaction of vegetation		Not anticipated to occur
Other		Not applicable
Terrestrial Wildlife Habitat		
Direct loss or removal of habitat, dens, or nests		Not applicable
Loss or removal of keystone species and/or Species at Risk habitat		Not applicable
Fragmentation of wildlife corridor		Not applicable
Direct injury or mortality		Not applicable
Disturbances to key lifecycle stages: breeding, feeding, nesting, staging		Not applicable
Effects on population abundance		Not applicable
Change in species diversity		Not applicable
Effects on wildlife health (toxins, metals, etc.)		Not applicable
Changes to migratory movement patterns		Not applicable
Changes to predator-prey relationships		Not applicable
Human-wildlife conflicts		Not applicable
Other		Not applicable
Aquatic Habitat		
Breeding disturbances		Not applicable
Change in species diversity		Not applicable
Effects on health (toxins, metals, sediment, etc.)		Not applicable
Changes to migratory movement patterns		Not applicable
Changes to predator-prey relationships		Not applicable
Effects on population abundance		Not applicable
Change in species diversity		Not applicable
Other		Not applicable
CULTURAL COMPONENTS		
Wildlife Harvesting		
Loss or reduction in game species populations		Not applicable
Effects on traditional land use, subsistence, and harvesting rights		Not applicable
Other		Not applicable
Cultural Integrity and Heritage Resources		
Change to or loss of cultural integrity		Not applicable
Change to or loss of traditional lifestyle		Not applicable
Change to or loss of heritage resource		Not applicable
Other		
Social and Economic Well-being		

Potential Impacts *Use an "X" to indicate which apply*	**X**	**Potential Project Impacts and Proposed Mitigations** *Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.*
Increased human health hazard and risk		. Not anticipated to occur
Economic opportunities or losses (employment, training)		Not applicable
Change in ecological, cultural, social, or economic values identified for protection in approved Land Use Plans		Not applicable
Impairment of the recreational or traditional uses of the land or water		Not applicable
Impairment of the aesthetic quality of the land or water		Not applicable
Changes to the use of the area by other non-Indigenous people (e.g. trappers, outfitters, residents, hunters, forest harvesters, other authorized projects)		Not applicable
Other		

18. CLOSURE AND RECLAMATION

Use the grey field below to provide or reference the following information:

Closure and Reclamation Plan: Describe your plans for closure and reclamation, including any temporary closure(s) and seasonal shutdowns. Include your Closure and Reclamation Plan in your Application Package, if applicable, or for small-scale projects, describe the proposed activities in the grey field provided below. Please also refer to the MVLWB/AANDC *Guidelines for the Closure and Reclamation of Advanced Mineral Exploration and Mine Sites in the Northwest Territories*.

Closure Cost Estimate: Prepare a Closure Cost Estimate and include it in your Application Package. Applicants are encouraged to contact the Board, prior to applying, to determine which closure-cost-estimate template is most suited to the activities being applied for. Guidance is provided in section 2.2 of the MVLWB/INAC/GNWT *Guidelines for Closure and Reclamation Cost Estimates for Mines*. If your Application is submitted concurrently with a Water Licence Application, the estimate should include a breakdown of water- and land-related activities and liabilities.

A formal closure and reclamation plan will not be needed for this short-term geotechnical drilling program. Based on the Geotechnical Data obtained, cuttings, a proposed office building will be constructed on this lot

19. ADDITIONAL SUPPORTING INFORMATION

Use the grey field below to provide or reference the following information:

Engagement: Conduct engagement, prepare an Engagement Record and Engagement Plan in accordance with the MVLWB *Engagement Guidelines for Applicants and Holders of Water Licences and Land Use Permits*, and include them in your Application Package. Templates are provided in the Guidelines. Please also refer to *Information for Proponents on MVLWB's Engagement Requirements*.

Land Use Plans: Contact the applicable Land Use Planning Board or the Tłı̨chǫ Government to discuss conformity with the relevant land use plan(s). Include a Land Use Plan Conformity Table in your Application Package, demonstrating how the project meets the requirements of the Land Use Plan, if applicable.

Traditional (Environmental) Knowledge (TEK/TK): Provision of TEK/TK is mandatory for applications to the SLWB. Other applicants are strongly encouraged to include TEK/TK.

Studies Undertaken to Date: List any relevant studies that support the proposed activities and include them in your Application Package.

Engagement with potentially affected parties has been conducted in accordance with the Project's Engagement Plan. The Engagement Records obtained to date are summarized as an appendix to the Plan, which is provided as a supporting document to this Land Use Permit Application.

20. FEES

Refer to section 20 of the Mackenzie Valley Land Use Regulations for assistance in determining relevant fees.

Type of Fee	Amount ($)
Application fee:	150 $
Land-use fees (for federal areas only):	$
Total Fees:	150 $

21. SIGNATURE

Adrian Bell	President
Yellowknife Condominium Services Ltd./Det'on Cho Management LP	Position (print)

	2024/07/02
Signature	Date

Please submit completed applications to the Regulatory Manager or Executive Director identified on the "Contact Us" pages of the respective Land and Water Board (www.mvlwb.com, www.wlwb.ca, www.slwb.com, www.glwb.com).