

# 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:		Sahtu Land and Water Board:	
	Wek'èezhìi Land and Water Board:		Gwich'in Land and Water Board:	<b>X</b>

To complete this Form, please refer to the LWB [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. An application package checklist is provided in the Guide. Review the following LWB guidance for formatting your Application Package:

- [Document Submission Standards](#)
- [Standard Outline for Management Plans](#)

If applicable, provide the existing or current Land Use Permit file number:	G21E001		
Use an "X" to indicate if this Application is accompanied by an Application for a Water Licence:	Water Licence – in a non-federal area:		<b>X</b>
	Water Licence – in a federal area:		

### 1. NAME AND CONTACT INFORMATION – APPLICANT

Project Name:	Dempster Highway Culvert Replacement – KM 40.2		
Applicant's Name:	Mahabub Rahman		
Position:	Senior Project Officer		
Company Name:	Government of Northwest Territories		
Mailing Address:	5051 49 <sup>th</sup> Street		
Community:	Yellowknife	Telephone:	867-767-9086 ext. 31150
Prov/Terr:	Northwest Territories	Email:	Mahabub_Rahman@gov.nt.ca
Postal Code:	X1A 2L9	Other:	

**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 this information is the same as Item 1 above:		<b>X</b>	
Name:			
Position:			
Company Name:			
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:	Kyle Sherwin		
Position:	Vice President – Environmental Services		
Company Name:	CCI Inc.		
Mailing Address:	9-214 Grande Blvd W		
Community:	Cochrane	Telephone:	587-227-9475
Prov/Terr:	Alberta	Email:	Kyle.sherwin@ccisolutions.ca
Postal Code:	T4C 2G4	Other:	

	Use an “X” to indicate that contractor and/or subcontractor information is not available at this time.
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**4. LOCATION OF ACTIVITIES**

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

Traditional Place Name: Tt’oo Geeganh

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 LWB [Geospatial Data Submission Standards](#) for providing geographic information.

Minimum latitude:	67.218199	Maximum latitude:	67.218726
Minimum longitude:	-135.505246	Maximum longitude:	-135.503229

NTS Map Sheet No.: Provide the map sheet number: 106M

GIS Data: Use an “X” to indicate if GIS data is attached. Attached: X Not Available:

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

Free Hold/ Private:	<b>X</b>	Commissioner’s/ Territorial Lands:	<b>X</b>	Federal Land:		Municipal Land:	
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## 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):	<b>X</b>
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## 6. RIGHTS AND/OR CONTRACTS TO SUPPORT ELIGIBILITY

Contact Indigenous, federal, and territorial 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 the proposed activities; reference these in your Application Package (e.g., rights, permits, licences, etc.).

GNWT permission obtained.  
 Letter of Advice from Fisheries and Oceans Canada obtained (attached)  
 Works are associated with Land Use Permit G21E001.  
 GTC permit application submitted; preliminary review returned completed application package.

## 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):	<b>X</b>	(SLWB and WLWB only):	
4(a)(ii):		4(b)(ii):		5(a)(ii):		5(b)(ii):			
4(a)(iii):	<b>X</b>	4(b)(iii):		5(a)(iii):					
4(a)(iv):	<b>X</b>	4(b)(iv):		5(a)(iv):					
4(a)(v):				5(a)(v):					
				5(a)(vi):					

## 8. PROJECT DESCRIPTION

Include a project description in your Application Package, or for small-scale projects, describe the proposed activities in the grey field provided below. For each and all proposed water uses, 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<sup>3</sup>/day)).

See attached Design Memo for a detailed breakdown of the Project activities.

The Government of the Northwest Territories Department of Infrastructure (GNWT-INF) aims to upgrade a culvert on Dempster Highway outside of Fort McPherson (Gwich'in area settlement) on an unnamed creek located at (UTM 8W) 478204E 7455805N. The GNWT-INF has flagged the culvert as being structurally compromised. A new 3000 mm by 49.0 m culvert will be installed on the unnamed creek via a trenchless installation methodology, and the existing 2000 mm diameter culvert shall be decommissioned in situ and sealed via grouting. The project will involve rerouting the creek at the crossing location to accommodate flow through the new culvert and avoid potential erosion and further degradation of the existing culvert.

Water for the Project will be withdrawn from the Mackenzie River. A maximum of 79 m<sup>3</sup> of water will be withdrawn for the Project.

As described in Section 6 of the Design Memo, the Project will be completed in the following phases:

**Phase I – Site Preparation**

- Access to the tunnelling area on the upstream and downstream sides of the culvert will be constructed as per the drawing package. The site will be graded level to allow for safe maneuvering of equipment.

**Phase II – Installation**

- Installation will be completed using a Tunnel Boring Machine (TBM), or an equivalent Excavator Boring Shield Machine (EBS).

**Phase III – Grouting**

- The annular space between the tunnel wall and the new culvert pipe will need to be grouted to mitigate short term settlement and ensure the culvert is restrained in place for its lifecycle. Grout samples should be collected so they can be tested after the full cure cycle has been completed to verify the strength.

**Phase IV – Final Reclamation**

- Site reclamation will commence once the trenchless installations and grouting activities are complete. Final grade and contouring shall be completed as per the design drawing to ensure the inlet area channels water directly into the culverts.

Indicate the total number of hectares to be used in each phase of the project, as well as through the life of the project.

Throughout Phase I to Phase IV, a total of 0.36 ha of temporary workspace will be required. The project is located partially within the Dempster Highway right of way (30 m on either side of the centreline of the highway). Once installed, the culvert will be located below Dempster Highway, entirely within the right of way.

Of the total 0.36 ha, 0.21 ha of temporary workspace is located outside of the Dempster Highway right of way.

## 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.

Camp details will be provided upon contractor award. Camp may be required through the duration of construction.

## 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	<b>X</b>
	No	<b>X</b>		No	

The project site will be accessed via the existing Dempster Highway.

## 11. PROPOSED WASTE MANAGEMENT METHODS

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

Waste Management Plan: Include a Waste Management Plan in your Application Package, if applicable, or for small-scale projects, describe the proposed waste management activities in the grey fields provided below. A template for the Plan can be found in the LWB [Guidelines for Developing a Waste Management Plan](#).

Waste Type	Management Method(s)
Garbage:	Please refer to G21E001 WMP (Section 6.1.1)
Sewage (Sanitary and greywater):	Please refer to G21E001WMP (Section 6.2.1)
Brush and trees:	Please refer to G21E001 WMP (6.1.2)
Overburden (Organic soils, waste material, etc.):	Overburden (i.e., gravel, cuttings, etc.) disposal has been coordinated with GNWT. All overburden will be delivered to infrastructure projects for reuse.
Other (describe):	Please refer to G21E001 WMP for all other waste disposal measures.

Off-site Disposal: If waste is proposed to be disposed of off-site within the NWT, written confirmation (e.g., an email, letter, etc.) from the facility/facilities indicating they will accept the waste is required. Include it/these in your Application Package. Please note this information will be required by the Board prior to commencement of activities.

## 12. EQUIPMENT

Identify the types of equipment proposed to be used.

Number	Type/Description	Size (weight in tonnes)	Proposed use
1	Truck - F150 4 x 4 Crew Cab or Equal	1/2	Civil Works
3	Truck - F250 4 x 4 Crew Cab or Equal	3/4	Civil Works
1	Truck - F350 4 x 4 CC Flat Deck or Equal	1	Civil Works
1	Excavator - JD 450/470G LC or Equal	50	Civil Works
1	Excavator - JD 350G LC or Equal	35	Civil Works
1	Dozer - Cat. D6R LGP or Equal	20.5	Civil Works
4	Truck - Dump, Tandem Axel	15	Civil Works
1	S.Boom - Cat. 594H or Equal	55	Civil Works

1	Crane - 40 ton Wheeled	40	Civil Works
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### 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 (e.g., barrel, tank, tidy-tank)	Proposed storage or staging location(s)
Diesel:	1	62566 L (20,000 L Tank)	Tank	Project Temporary Workspace
Gasoline:	1	23365 L (20,000 L Tank)	Tank	Project Temporary Workspace
Aviation Fuel:	N/A	N/A	N/A	N/A
Propane:	N/A	N/A	N/A	N/A
Other: (describe)	N/A	N/A	N/A	N/A

### 14. METHODS OF FUEL TRANSFER

Describe the proposed methods to transfer fuel.

All personnel will be informed and understand their responsibilities with respect to fuelling/servicing. Refuelling will occur via fuel tanks stored onsite.

During fuelling, the following mitigation measures will be implemented:

- A drip tray, impregnable tarp or other fluid resistant structures shall be placed underneath the vehicle/machine while fuelling/servicing in case of a spill.
- All containers, hoses, nozzles will be free of leaks.
- All fuel nozzles will be equipped with automatic shutoffs.
- Always have operators stationed at both ends of the hose during fueling.
- Have a spill kit onsite and be trained on the appropriate methods to clean up a spill.

### 15. SPILL CONTINGENCY PLAN

Include a 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](#).

See attached Watercourse Crossing Environmental Protection Plan (WCEPP) for the Spill Contingency Plan (Section 5).

### 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 1, 2024	Completion Date:	December 31, 2025
Clearing for the Project is anticipated to commence on August 17, 2024. Once clearing is complete, construction will commence immediately, followed by reclamation. Clean up of the site is expected to be complete by November 29, 2024. If construction cannot occur in 2024 due to supply chain delays, construction will occur in 2025.			



Term of Permit Requested:	2 years
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### 17. POTENTIAL ENVIRONMENTAL IMPACTS OF THE PROJECT AND PROPOSED MITIGATIONS

If the proposed project, or parts of the proposed project, may be exempt from preliminary screening, describe the rationale for the exemption in the grey field below. Include the date of the most recent screening, and/or the environmental assessment or impact review number.

See attached WCEPP and table below for further environmental impacts and their proposed mitigation measures.

Unless the project could be exempt from preliminary screening, 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. Use landscape orientation if preferred.

Potential Impacts <i>Use an "X" to indicate which apply</i>	X	Potential Project Impacts and Proposed Mitigations <i>Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.</i>
<b>ABIOTIC COMPONENTS</b>		
<b>Land</b>		
Soil contamination	X	Soil contamination could occur during culvert replacement through leaks or spills of equipment. Please refer to spill contingency plan (Section 5, WCEPP) for mitigation measures.
Soil compaction		N/A
Destabilization/erosion	X	There is a potential for the stream banks to erode or become destabilized due to construction. To mitigate this issue, willow staking will be implemented on the watercourse banks to stabilize disturbed areas and promote growth. Additionally, seeding and installation of coconut matting to promote expedited regrowth and stabilization of the project footprint.
Change in soil structure		N/A
Inability to support vegetation		N/A
Other		N/A
<b>Water</b>		
<b>Groundwater</b>		
Water table alteration		N/A
Infiltration changes		N/A
Changes in water quality		N/A
Temperature changes		N/A

<b>Potential Impacts</b> <i>Use an "X" to indicate which apply</i>	<b>X</b>	<b>Potential Project Impacts and Proposed Mitigations</b> <i>Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.</i>
Other		N/A
<b>Permafrost</b>		
Loss or change in extent		N/A
Changes in seasonal fluctuations		N/A
Change in persistence		N/A
Other		N/A
<b>Surface Water</b>		
Water flow or level changes (permanent, temporary, seasonal)	X	The installation of a temporary isolation dam could potentially alter water flow and subsequently result in water level changes. To mitigate this impact, the worksite dewatering system will be set up with a pump that will be inserted into the accumulated water within the worksite. The water will be discharged on the outside of the downstream side of the work area, filtered, deposited, and reintroduced into the downstream flow at an equal or better quality than extracted baseline values.
Drainage pattern changes		N/A
Temperature changes		N/A
Changes in water quality	X	Installation of culvert may cause localized sediment increases. To mitigate this, surficial soils will be from the work area will be stockpiled away from the watercourse. In addition, grade cuts from the work area will be removed and stockpiled separately from the surficial soils. Furthermore, silt fencing will be installed on the edge of the work area to alleviate potential sedimentation from entering watercourse.
Wetland impairment		N/A
Changes to aquatic habitat (see Biotic section below)		N/A
Other		N/A
<b>Air</b>		
Changes in air quality		N/A
Harm to living things		N/A
Increased greenhouse gases		N/A
Other		N/A
<b>BIOTIC COMPONENTS</b>		
<b>Vegetation</b>		
Direct loss of vegetation	X	There is a potential for loss of vegetation due to the construction process along the stream bank. To mitigate this issue, willow staking will be conducted on the watercourse banks to stabilize disturbed areas and promote growth. Additionally, seeding and installation of coconut matting to promote expedited regrowth and stabilization of the project footprint.
Loss of Species at Risk or may-be-at-risk plants		N/A
Change in species composition		N/A



<b>Potential Impacts</b> <i>Use an "X" to indicate which apply</i>	<b>X</b>	<b>Potential Project Impacts and Proposed Mitigations</b> <i>Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.</i>
Introduction of non-native (invasive) species	X	Introducing non-native invasive species can be detrimental to the local ecosystem. To mitigate this, equipment will be decontaminated based on best practices (i.e., Alberta Decontamination Protocol 2017). In addition, equipment will be cleaned of all mud, dirt, and vegetation prior to the equipment entering the water body or the area adjacent to the water body. Will remove any visible plant or plant fragments from the equipment
Effects on plant health (dust, metals, toxins)		
Increased risk of fire	X	There is potential for fire caused by equipment. Fire suppression kits will be onsite during times of increased fire risk (i.e., wildfire season). All vehicles will contain a fire extinguisher, and personnel will be competent in recognizing fire risks and use of fire extinguishers.
Compaction of vegetation	X	There is a potential for the compaction of vegetation due to the construction process. To mitigate this issue, willow staking will be conducted on the watercourse banks to stabilize disturbed areas and promote growth. Additionally, seeding and installation of coconut matting to promote expedited regrowth and stabilization of the project footprint. Will minimize footprint by using designated egress and ingress pathways.
Other		N/A
<b>Terrestrial Wildlife Habitat</b>		
Direct loss or removal of habitat, dens, or nests	X	Not anticipated during culvert replacement as the highway is pre-disturbed. If there is the potential of loss or removal, appropriate regulatory authorities (ex. ENR, DFO, ECCC) will be contacted and mitigation measures approved prior to any work taking place.
Loss or removal of keystone species and/or Species at Risk habitat		N/A
Fragmentation of wildlife corridor		N/A
Direct injury or mortality	X	Potential for wildlife collisions along highway. Mitigation measure includes a posted speed based on the safety for travellers. Should wildlife collisions occur appropriate regulatory authorities will be contacted (ex. ENR, ECCC).
Disturbances to key lifecycle stages: breeding, feeding, nesting, staging		N/A
Effects on population abundance		N/A
Change in species diversity		N/A
Effects on wildlife health (toxins, metals, etc.)	X	Spills could occur during culvert replacement through leaks or spills of equipment. Please refer to spill

<b>Potential Impacts</b> <i>Use an "X" to indicate which apply</i>	<b>X</b>	<b>Potential Project Impacts and Proposed Mitigations</b> <i>Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.</i>
		contingency plan (Section 5, WCEPP) for mitigation measures
Changes to migratory movement patterns		N/A
Changes to predator-prey relationships		N/A
Human-wildlife conflicts		Potential for wildlife collisions along highway and potential conflicts during culvert replacement. Should wildlife collisions or occurrences occur, appropriate regulatory authorities will be contacted (ex. ENR, ECCC). A wildlife monitor will be onsite at all times to ensure human-wildlife conflicts are mitigated. Personnel will not approach, harass, or feed wildlife. Personnel will not attempt to move wildlife away from site.
Other		N/A
<b>Aquatic Habitat</b>		
Breeding disturbances	X	Instream work from July 15 to September 15 is being considered to avoid the spring and fall spawning restricted activity windows. Instream work for the open window of July 15 to September 15 will avoid spring/summer spawning time. Habitat for large-bodied fish is limited. Habitat would be available for forage fish species during the early open water season after spring freshet. Spawning habitat is only present for forage species.
Change in species diversity		N/A
Effects on health (toxins, metals, sediment, etc.)	X	Installation of culvert can cause localized sediment increases, which can affect the health of aquatic organisms. To mitigate this, sediment and erosion controls will be implemented as needed.
Changes to migratory movement patterns		N/A
Changes to predator-prey relationships		N/A
Effects on population abundance		N/A
Change in species diversity		N/A
Other		N/A
<b>CULTURAL COMPONENTS</b>		
<b>Wildlife Harvesting</b>		
Loss or reduction in game species populations	X	During construction, there is potential to cause harm and/or loss to fish species. The construction of the Project will be conducted as per best management practices to reduce harm and/or loss, as well as follow the advice presented in the Letter of Advice received from Fisheries and Oceans Canada.
Effects on traditional land use, subsistence, and harvesting rights	X	The site will not be accessible for exercising traditional land use, subsistence, or harvesting rights while construction is underway. Following completion of construction, the site will be re-opened for access and

<b>Potential Impacts</b> <i>Use an "X" to indicate which apply</i>	<b>X</b>	<b>Potential Project Impacts and Proposed Mitigations</b> <i>Describe the potential impact(s) and the proposed measure(s) to reduce each of these impacts.</i>
		all traditional land uses may resume.
Other		N/A
<b>Cultural Integrity and Heritage Resources</b>		
Change to or loss of cultural integrity		N/A
Change to or loss of traditional lifestyle		N/A
Change to or loss of heritage resource		N/A
Other		N/A
<b>Social and Economic Well-being</b>		
Increased human health hazard and risk		N/A
Economic opportunities or losses (employment, training)		N/A
Change in ecological, cultural, social, or economic values identified for protection in approved Land Use Plans		N/A
Impairment of the recreational or traditional uses of the land or water	X	Temporary impairment of the recreational or traditional uses of land or water will occur during construction. Public access will be restricted during operations because of public safety concerns due to the nature of the work. Following construction, the Project area will be re-opened for full use and access by the general public.
Impairment of the aesthetic quality of the land or water	X	Temporary impairment of the aesthetic quality of the land or water will occur as construction is occurring. Once construction is complete, the aesthetic quality of land and water will mimic pre-construction conditions.
Changes to the use of the area by other non-Indigenous people (e.g., trappers, outfitters, residents, hunters, forest harvesters, other authorized projects)	X	The Project area will not be accessible to the general public during construction due to safety concerns. Following construction, the Project area will be re-opened for full use and access by the general public
Other		N/A

## 18. CLOSURE AND RECLAMATION

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

Closure and Reclamation Plan: Include a Closure and Reclamation Plan in the Application Package, if applicable, or for small-scale projects, describe the proposed closure and reclamation activities in the grey field provided below. Describe any temporary closure(s) and seasonal shutdowns. Please also refer to the LWB/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 Board staff, 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 LWB/GNWT/CIRNAC [Guidelines for Closure and Reclamation Cost Estimates for Mines](#). If the Application is

submitted concurrently with a Water Licence Application, the estimate should include a breakdown of water- and land-related activities and liabilities.

Closure and Reclamation: Please see reclamation plans in the attached WCEPP (Section 4.4.3) and Design Memo (Section 6.5).

The project application is submitted on behalf of the Government of Northwest Territories - closure cost estimate not included.

## 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 LWB [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 for assistance in interpreting the requirements of the relevant land use plan(s). Include a Land Use Plan Conformity Table, or if applicable, written confirmation of conformity from the Tłı̨chǫ Government, in your Application Package, demonstrating how the project meets the requirements of the Land Use Plan, if applicable.

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

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

**Engagement:** Please refer to GNWT-INF Engagement Plan for permit G21E001.

**Land Use Plan:** The Project is located within the Dempster Highway: Transportation Special Management Zone (Dempster Highway: Yukon/NWT Border to Peel River). As the Project will be constructed in support of highway maintenance of the Dempster Highway, the condition to protect tourism value is exempted. Porcupine caribou migration will not be diverted or interfered with during construction. A wildlife monitor will be provided to assess for the presence of migrating caribou. Due to the nature of construction, Porcupine caribou should not be prevented from using the migration corridor. There will be no new barriers to wildlife migration as a result of construction.

**Studies undertaken to date:**

Geotechnical Evaluation of Culvert Crossing NWT Highway 8, km 40.1 – Tetra Tech Canada 2019 (attached)

Hydrotechnical Assessment of Culvert Streams – Tetra Tech Canada 2019 (attached)

Dempster Highway Km 40.2 Fish and Fish Habitat Assessment – Kavik-Stantec Inc (2021) (attached)

Bridge Inspection Form – Government of Northwest Territories (2019) (attached)

Dempster Highway Culvert Replacement Project Design Memo – KM 40.2 – CCI Inc. 2022 (attached)

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**20. FEES**

Refer to the Guide for assistance in determining relevant fees.


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

If fees are submitted separately, indicate how and when they will be delivered to the Board’s office.

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**21. SIGNATURE**

Kyle Sherwin (CCI Inc.) on behalf of GNWT-INF	VP – Environmental Services
Applicant’s Name (print) or Company Name	Position (print)

	June 13, 2024
Signature	Date

Review the application package checklist provided in the Guide, and 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](http://www.mvlwb.com), [www.wlwb.ca](http://www.wlwb.ca), [www.slwb.com](http://www.slwb.com), [www.glwb.com](http://www.glwb.com)).