

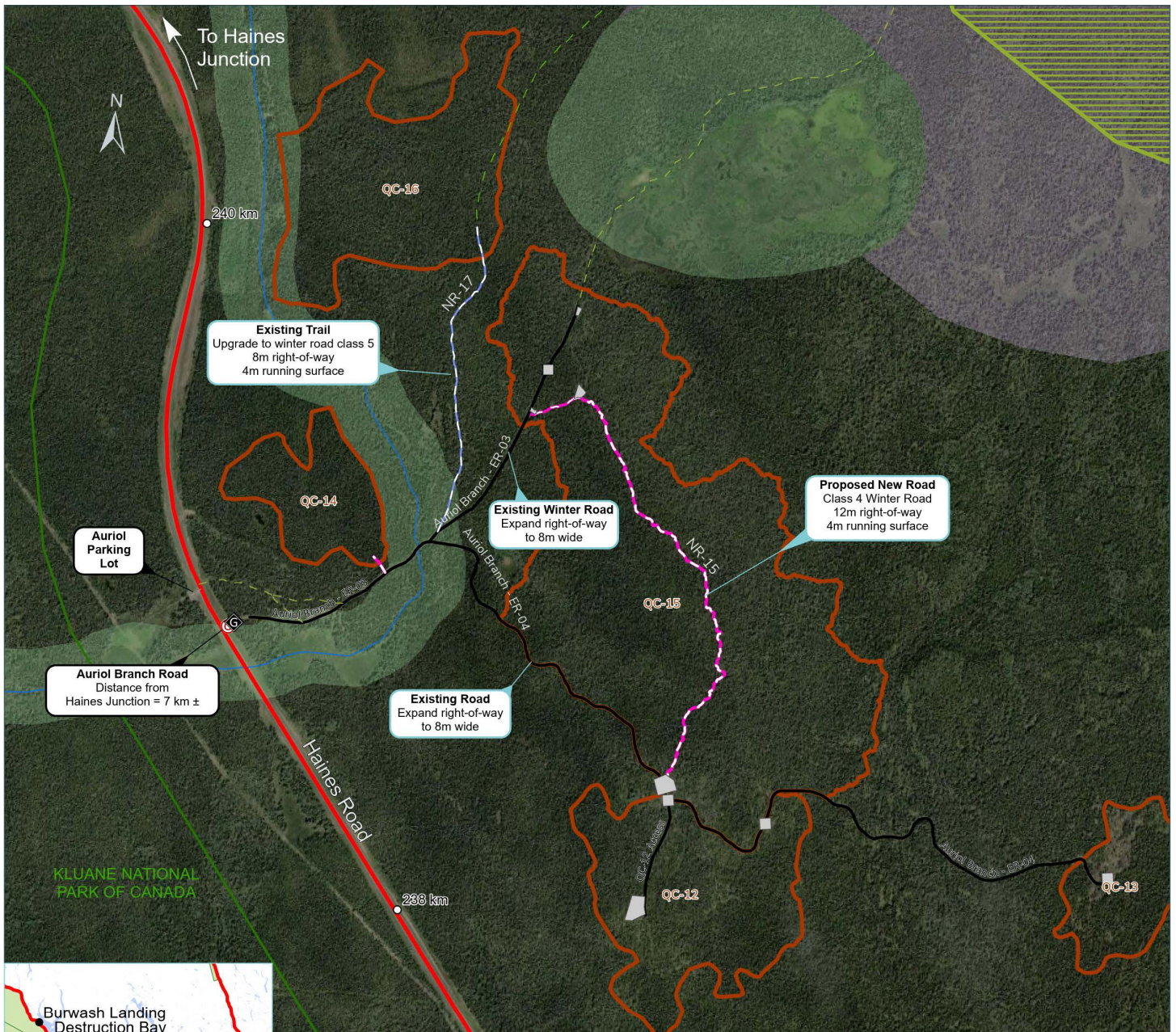
Access Management Plan

Quill Creek Timber Harvest Plan

Auriol Operating Unit



*Public input requested November 7 to Nov 21, 2024



Length of proposed new road:	1.5km
Clearing width:	8m or 12m
Season:	Frozen ground/winter
Active:	Active
Duration:	5-10 years
Deactivation plan:	permanent closure
Open/closed:	gated

Proposed new road	Gate Locations	THPOG Riparian Buffer
Proposed upgrades to existing trail	Existing Landing	CPSG Riparian Connectivity
Forest Resource Road	Grizzly Bear Key Areas	0 400
Public Access	Trails	Metres



OVERVIEW

What is this plan?

The Quill Creek Timber Harvest Project (2020-0051) was assessed by YESAB. The 2023 decision on that project included direction for all proposed roads to have individual access management plans. Access management plans consider the whole lifespan of a road. They are developed prior to road construction and allow for public input. They consider wildlife and other values and include specifications for road development, control, density, decommissioning and monitoring.

What road development is happening here?

There is a new winter road to be constructed this fall, and minor widening of existing roads to facilitate worker safety. This will only be done where necessary. A quad trail will be upgraded to a road next year if there is demand for the wood it accesses. See map for details.

What is the purpose of these roads?

The primary use of these roads will be to provide access fuelwood harvesting in the Auriol operating unit of Quill Creek. This will involve the cutting and removal of dead trees. Although the roads are not being developed for other activities, a road use permit could be obtained (FMB link), allowing them to provide access to other resources.

How long will these roads be there?

This road system will remain gated at the start of the Auriol Forest Resources Road. Once harvest operations are complete, new roads will be deactivated and existing roads will be left in a similar state. It is anticipated that this will take 5-10 years.

Who can use these roads?

These are resource roads that are managed under the *Forest Resources Act* and not meant for public use. A gate is currently installed at the start of the Auriol Forest Resource Road to limit access to only those who have a road use permit.

What are the concerns in this area?

- a) *Wildfire*: This area is within the Landscape zone of the 2007 Integrated Landscape Plan. Hazard reduction through fuels reduction is the priority within this zone. Enhancing fuel discontinuity through size shape and location of timber harvest projects is the main strategy. YESAB 2020-0051 (Appendix A) specifies several conditions. Road construction may occur between April 1 and September 30, but only when the fire danger rating is low or moderate, and winds are less than 15 km/hour. There is a two-hour fire watch after each working day. Site preparation within the fire season may only occur when the fire danger rating is low. All forest resource roads will be gated to restrict use and to reduce the potential for wildfire ignition.
- b) *Wildlife*: According to the Integrated Landscape Plan, this area has high wildlife values, and is key late-winter habitat for moose. That Plan requires retention of 25 percent of the forest within harvest areas, and following road construction, access to this area is to be restricted, to limit disturbance to moose and other wildlife. The YESAB (2020-0051) (Appendix A) specifies that gaps be created in any snowplough berms, to create easy passage for moose.
- c) *Multi-use area*: Existing trails will be retained for continued use. This area is used for cross country skiing, hiking, and other recreational pursuits. Portions of the existing road will not be available while there are active operations. Signs will be erected during active operations for safety purposes.

What will happen when the road is no longer in use?

The Auriol Forest Resources Road and associated spur roads will be decommissioned to restrict vehicle use. Options for road closure and decommissioning will range from simply blocking access, to retaining them only for ATV or for non-motorized access, to full rehabilitation. Your input now will help us determine the best way to deactivate this road, when the time comes. Existing trails will not be impacted.

What planning work has taken place up to this point?

The Strategic Forest Resource Management Plan (SFMP) is the highest level forest management plan for the area. It is a joint plan between CAFN and Yukon government, coordinated by the Alsek Renewable Resources Council (ARRC) and represents nearly 10 years of community input. The SFMP identifies the Quill Creek area as having a high priority for planning and development.

The Integrated Landscape Plan was subsequently developed as a supplement to the SFMP, and provides a technical assessment of resources, management priorities and guidelines for timber harvest project planning. The Quill Creek timber harvest planning area is within the forest resource management zone; harvesting can occur here with a primary focus on stands with over 30 percent spruce bark beetle mortality.

A Connectivity Corridor Planning map was developed in 2008. The map depicts primary and secondary wildlife habitat and movement corridors. The primary corridors generally fall along significant watercourses and include riparian zones. They are enhanced by key topographic features and ecologically significant features such as areas of high animal concentration. Secondary corridors connect to upland habitat, and provide alternative movement corridors around areas of high disturbance related to development.

The Quill Creek THP is nested under these higher level plans and is the result of many years of planning and collaboration. Prior to public consultation for the Quill Creek THP, other government departments reviewed the draft: the Department of Environment made recommendations to ensure that best wildlife practices would be followed. This THP was submitted to YESAB in 2020 for an executive level screening, which included further opportunities for public input.

While the Quill Creek THP identifies roads and harvest areas, exact road locations were undetermined at the time it was developed. AMP's are developed as the need for access development arises, and as road locations are field verified. They outline the details of specific road systems and allow for additional public input.

How can I provide input?

We are seeking input from November 7th to 21st . Please submit your comments or questions to Mark.Pedersen@Yukon.ca, or 867-335-9068.

ACCESS MANAGEMENT PLAN (AMP)

1. Background

In March 2020, Government of Yukon's Forest Management Branch (FMB) (the proponent) submitted a draft Quill Creek Timber Harvest Plan (THP) to the Yukon Environmental and Socio-economic Assessment Board (YESAB) Executive Committee (project number 2020-0051). The purpose of submitting the draft plan to YESAB was to have stakeholders provide input on the entire project. In September 2021 a Final Screening Report was published, including recommendations for thirty mitigations and five monitoring protocols. These mitigations and protocols were incorporated into the final Quill Creek Timber Harvest Plan. The decision body for this project is the Government of Yukon, Executive Council Office, Major Projects Yukon Branch. The decision body accepted the recommendations and issued a decision document in November 2021.

Mitigation 1 of the final screening report states that: The proponent shall develop an Access Management Plan (AMP) with the Champagne and Aishihik First Nations (CAFN) and the ARRC, and shall provide an opportunity for local stakeholder and public input into the draft plan.

Upon request, the proponent provided information regarding the location of proposed roads, scheduling of road construction, harvesting of blocks, and road decommissioning. The Executive Committee recommended mitigations in relation to those components, which were incorporated into the final THP, however the development of this AMP ensures an avenue for participation by CAFN, the ARRC and local stakeholders. This AMP provides guidance on the development, management, control, and decommissioning of access roads in the project area, beyond and in conjunction with the recommended mitigations. The effectiveness of the AMP and

recommended access-related mitigations will be monitored and adapted. The plan includes the following:

- a) A description of all proposed access, including:
 - new roads,
 - classifications of existing roads (see Table 1),
 - upgrades and associated changes to classifications (see Table 1), and
 - overview maps.

Table 1 : Road Classifications

FRR Classification Table						
ROAD CLASS	Road Type	Duration	Subgrade/ Running Surface (m)	Road Prism (m)	Clearing Width (m)	Permitted Right of Way (m)
1	Primary Roads (Mainlines)	Long term >10 years	10	20	26	35
2	Secondary Roads (Branch)	Medium term <10 years	8	14	20	30
3	Haul Roads (Spur)	Short term 1-3 years	6	10	16	25
4	Light Haul Roads (Spur)	Short term 1-3 years	4	7	12	15

FRR Classification Table					
ROAD CLASS	Description	Minimum Sight Distance (m)	Max Favorable Grade (%)	Max Adverse Grade (%)	Speed Limit km/h
1	General access in a forest planning area	85	11	6	60
2	Access to and within operating areas	44	15	8	40
3	Access to and within harvest blocks	30	18 / 15 winter	10 / 8 winter	30
4	Not suitable for large logging trucks	30	30 / 20 winter	15	30

- b) **A notification system:** The proponent shall create a notification system to update CAFN, the ARRC, local stakeholders and operators on the following, prior to any authorization including:

- site permitting,



- locations of anticipated new roads, central processing areas, and landings,
 - construction and use of roads, central processing areas, and landings, and
 - road restrictions and decommissioning.
- c) **Community/stakeholder input:** The proponent shall provide multiple user-friendly, accessible mechanisms (i.e., online, in person, by phone) for feedback and issue identification, and to provide information related to further opportunities for input.
- d) **Access control:** Controlling access to new and existing roads within the project area is key to controlling and reducing adverse effects to forests and wildlife. As such, the AMP shall discuss the use of access control measures in addition to the installation of gates.
- e) **Access development and density thresholds:** The proponent shall provide and maintain a current road density index within the planning area. This figure shall be accessible to CAFN and the ARRC. As areas are opened to harvesting activities, new roads are built, and old roads decommissioned, this information will support the parties' review and facilitate decision-making prior to site preparations and/or road construction activities. As such, the AMP shall provide a platform for discussion and revision of proposed access development, as agreed to by all parties.
- f) **Road decommissioning and rehabilitation:** Road decommissioning and rehabilitation is critical to reducing a suite of potential impacts, including increased risk of forest fires, habitat fragmentation and associated wildlife disturbance. The proponent shall create a clear schedule, sequencing, and methods/standards of anticipated road decommissioning and rehabilitation after harvest applications are received. The proponent shall provide an opportunity for discussion and revisions, as agreed upon by all parties.
- g) **Wildlife:** The AMP shall include:
- a description of wildlife habitat and overview maps of access in key wildlife habitat;
 - scheduling of access development, use and rehabilitation (in relation to wildlife), and

- protocols (i.e., reporting methods, actions required) for operators to follow when wildlife is sighted.
- h) **Monitoring:** The proponent shall convey results from monitoring to both CAFN and the ARRC and will ensure that these parties will be invited to meet and discuss on-going monitoring results and/or to participate in monitoring efforts. This process will inform ongoing decisions around access management measures.

2.0 Access Management Plan Procedure & Protocols:

Harvest areas in the Quill Creek Timber Harvest Plan (THP) will be developed as needed. Due to the unpredictable number and schedule of harvest licence applications, an AMP for all proposed roads is not included in the THP.

This dynamic AMP will integrate new roads as forestry licence applications are received. It will be adaptive and involve discussion with CAFN and the ARRC. Not all proposed new roads included in the Quill Creek THP will necessarily be constructed, but many of them will and this AMP will provide certainty for road locations, construction timelines, harvesting schedules, and decommissioning plans. Timber harvest applications to the FMB will trigger the development of an AMP when they require:

- development of a new forest resource road,
- upgrades to existing forest resources roads, or
- upgrades to existing public access.

2.1 Notification System:

When FMB receives a permit application for the Quill Creek THP and road construction is required to access a harvest area, the FMB works with the applicant to develop an AMP. An AMP should be developed within two weeks of receipt of an application, although an additional two weeks may be granted, when required.

CAFN, ARRC, and local stakeholders must be notified of the new AMP development. CAFN and the ARRC will receive email notification. FMB also holds monthly operational

meetings with CAFN, which provides an opportunity to discuss proposed roads. FMB attends ARRC meetings to exchange forestry news and information, including the development of AMPs.

Local stakeholders and community members can be made aware of new AMPs on the yukon.ca website, specifically on the 'Review forestry harvest licence applications' webpage. The AMPs will be physically posted at the Haines Junction Compliance Monitoring and Inspections (CMI) office and the Whitehorse FMB office, as well as various locations around Haines Junction.

CAFN will make AMPs available via social media and physical copies upon request. The ARRC will also distribute AMPs for the notification period through physical or online mechanisms.

Stakeholders will be given 14 days to provide feedback on the proposed new road(s).

Feedback will be considered for the development and decommissioning of all new roads. Feedback can be received in person at the Haines Junction CMI office or the Whitehorse FMB office, by phone to the Haines Junction Area Forester, by letter or by email. Feedback can also be provided to CAFN via social media outlets or other mechanisms, and these will be forwarded to the Haines Junction area foresters for consideration.

2.2 Notification on Public Roads

Existing access is comprised of forest resource roads and public roads (classified as unmaintained highways). Forest resource roads are not public and are managed by the FMB, which has the authority to control access using gates or other measures.

All existing public roads are managed under the authority of the Department of Highways and Public Works (HPW). The FMB does not have the authority to manage access or conduct decommissioning on public roads.

A permit from HPW is required to upgrade or maintain public roads or highway rights-of-way. Activities include brushwork, installation of infrastructure, road surface work, earthwork beside the roadway, and road maintenance.

Public road upgrades will be included in AMPs however, the FMB does not have jurisdiction over any public roads.

2.3 Road Monitoring Protocol

Road monitoring is the responsibility of Natural Resource Officers and FMB foresters.

During road construction, foresters will conduct site visits to ensure that operations are in accordance with harvest authorities and the AMP. During road construction Natural Resource Officers will ensure that road construction is in compliance with permit terms and conditions.

Over the lifetime of the road, both Natural Resource Offices and foresters will conduct regular permit inspections. All road observations will be recorded and available upon request.

2.4 Wildlife Protocols

- a) Access development will be restricted in key winter habitat for moose. In areas where access is required (i.e. Auriol Branch Road, Quill Creek Road) the number of operators travelling in these areas will be limited and speed limits will be reduced between February 1 and March 31.
- b) Gaps in snow berms are important to allow for wildlife movement, particularly in areas where high snow depths are encountered. Snow plowing terms will be included in snow removal contracts and forest resource road permit terms and conditions, to ensure that periodic gaps are established in snow berms along any winter roads.
- c) Speed limit signs will be posted on forest resource roads through and adjacent to sensitive wildlife areas.

2.5 Wildfire mitigations during road construction

- a) Road construction between April 1 and September 30 will only occur when the fire danger rating is low or moderate, and wind speed is less than 15 km/hour.
- b) There will be a two-hour fire watch after all equipment is shut off.

- c) Site preparation within the fire season may only occur when the fire danger rating is low.

2.6 Road Closure Definitions

Road closure actions will be determined on a case-by-case basis for each road by the AMP working group. The actions listed below are options, and do not pertain to every road.

Temporary Closure: Temporarily prevents the use of a forest resource road. Temporary closures may be seasonal, and may be used when timber resources in an area have not been exhausted but operations are not occurring

Potential Actions:

- Stabilize the road prism and clearing width;
- Temporarily block access to area with a gate or other obstruction;

Decommission/Deactivation: Permanent closure of a road. Access will be prevented and road will no longer be usable.

Potential Actions:

- Stabilize the road prism and clearing width.
- Restore or maintain surface drainage patterns, and make the subsurface drainage consistent with natural drainage patterns.
- Minimize the impact of silt or sediment transport on other resources, reduce water quality degradation and restrict access to resources.
- Sufficiently block access to prevent use. (e.g. Roll back first 25 metres of running surface, and push earth back over switch backs so that they are no longer useable)
- Render the area accessible to small off-road vehicles, but inaccessible to full sized vehicles and forestry equipment.

Rehabilitation: Permanent closure of a road and restoration of ecological function.

Use all potential actions for road decommissioning, including:

- Revegetate the surface through natural regeneration, scarification, tree planting or other mechanisms.
- Restore the road right of way to its original condition.

- Restore ecological function by decompaction of the soil and rolling back organic debris.
- Monitor to ensure success.

3.0 Road Densities

The Integrated Landscape Plan (2007) considers a road density of 0.4 km/km² to match the Kluane National Park Grizzly Bear Management Plan, where there is an absence of additional information. For the purpose of road density as it relates to wildlife management and particularly grizzly bears, it has been shown that open roads travelled by 20 vehicles or more (Northrup et al, 2012) can lead to increased bear mortality through various mechanisms, and that restricting access in areas with existing road densities greater than 0.6km/km² can be beneficial to grizzly bear and wildlife populations.(Proctor et al, 2020)

Road densities in this plan are categorized as open roads or restricted roads. Open roads are public roads that everyone has access to, while restricted roads are not accessible by the public. Table 2 outlines the road densities within the Quill Creek Timber Harvest Plan. The open road density is well below recognised thresholds, and the total road density is below the 2007 Integrated Landscape Plan interim target of 0.4 km/km².


Table 2: Road densities within the Quill Creek Timber Harvest Plan boundary

	Total Km	Km / Km²
Existing restricted roads (FRR)	21.77	0.19
Additional restricted roads (NR-15+ Quad Trail)	2.3	0.019
Total restricted roads	25.0	0.215
Existing open roads	19.65	0.17
Total (restricted + existing open) roads	44.7	0.38



4.0 Roads changes in Auriol Operating Unit

The following are the specific AMP components for NR-15, ER 03, ER-04.

Road Name	NR15- This will be a new Forest Resources Road.
Road Classification/ Season	Class 4 winter road Clearing width: 12 m Running surface: 4 m Total Length: 1.3 km
Construction or upgrade timeline	Right of Way Clearing – Nov 2024 to Feb 2025 during frozen ground conditions.
Access Control Mechanism	Gate at start of Auriol FRR
Signage- at start of Auriol FRR	
Lifespan of Road	Estimated 5-10 years, until resources are utilised.
Decommissioning Plan	Maintain good drainage and access for the life of the fuel break. Decommission to restore natural drainage, reduce road width.
Active /Closed	The road will be active from November 2024 to 2029 or longer while timber harvesting and fuel abatement activities are occurring. The road will be closed outside of frozen ground conditions.
Notification Period	November 7 th to 21 st 2024

Road Name	ER-03 – Existing road that will be widened by 2 meters
Road Classification/ Season	Class 4 winter road Current width: 6 m New proposed width: 8m

	Running surface: 4 m Total Length: 1.3 km
Construction or upgrade timeline	Right of Way Clearing – Nov 2024 to Feb 2025 during frozen ground conditions.
Access Control Mechanism	Gate at start of Auriol FRR
Signage- at start of Auriol FRR	Same as above
Lifespan of Road	Estimated 5-10 years, until resources are utilised.
Decommissioning Plan	Maintain good drainage and access for the life of the fuel break. Decommission to restore natural drainage, reduce road width.
Active /Closed	The road will be active from November 2024 to 2029 or longer while timber harvesting and fuel abatement activities are occurring. The road will be closed outside of frozen ground conditions.
Notification Period	November 7 th to 21 st 2024

Road Name	ER-04 – Existing road that will be widened in some short sections
Road Classification/ Season	Class 4 winter road Current width: 10 m New proposed width: 10-12m Running surface: 5 m Total Length: 1.2 km



Construction or upgrade timeline	Right of Way Clearing – Nov 2024 to Feb 2025 during frozen ground conditions.
Access Control Mechanism	Gate at start of Auriol FRR
Signage- at start of Auriol FRR	Same as above
Lifespan of Road	Estimated 5-10 years, until resources are utilised.
Decommissioning Plan	Maintain good drainage and access for the life of the fuel break. Decommission to restore natural drainage, reduce road width.
Active /Closed	The road will be active from November 2024 to 2029 or longer while timber harvesting and fuel abatement activities are occurring. The road will be closed outside of frozen ground conditions.
Notification Period	November 7 th to 21 st 2024

Road Name	ER-?? – Existing Quad Tral that will be widened
Road Classification/ Season	Class 4 winter road Current width: 1.5 m New proposed Clearing width: 8m Running surface: 4 m Total Length: 1.0 km
Construction or upgrade timeline	Right of Way Clearing – Nov 2025 to Feb 2026 during frozen ground conditions.



Access Control Mechanism	Gate at start of Auriol FRR
Signage- at start of Auriol FRR	Same as above
Lifespan of Road	Estimated 5-10 years, until resources are utilised.
Decommissioning Plan	Maintain good drainage and access for the life of the fuel break. Decommission to restore natural drainage, reduce road width.
Active /Closed	The road will be active from November 2025 to 2029 or longer while timber harvesting and fuel abatement activities are occurring. The road will be closed outside of frozen ground conditions.
Notification Period	November 7 th to 21 st 2024



REFERENCES

- 1) Joseph M. Northrup, Justin Pitt, Tyler B. Muhly, Gordon B. Stenhouse, Marco Musiani, Mark S. Boyce. 2012. Vehicle traffic shapes grizzly bear behaviour on a multiple-use landscape. *Journal of applied Ecology*.
<https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/j.1365-2664.2012.02180.x>
- 2) Michael F. Proctor, Bruce N McLean, Gordon B. Stenhouse, Garth Mowat, Clayton Lamb, Mark S. Boyce. 2020. Effects of roads and motorized human access on grizzly bear populations in British Columbia and Alberta, Canada.
<https://bioone.org/journals/ursus/volume-2019/issue-30e2/URSUS-D-18-00016.2/Effects-of-roads-and-motorized-human-access-on-grizzly-bear/10.2192/URSUS-D-18-00016.2.full#bibr77>
- 3) Resource Assessment Technical Working Group. 2007. Integrated Landscape Plan (ILP).



APPENDIX A - Decision Document 2020-0051





