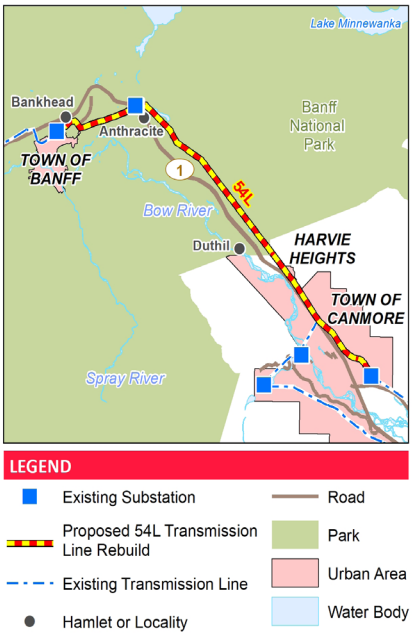
54L Transmission Line Rebuild – Project Overview

AltaLink is proposing to rebuild the 54L Transmission Line, and we want your input.

AltaLink's existing 54L **transmission** line is a single **circuit** 138 **kilovolt (kV)** line, approximately 24 kilometres (km) long, that is located in the Town of Canmore, Banff National Park and the Town of Banff. The line starts in the Town of Canmore at the Canmore **Substation**, continues west through the Hamlet of Harvie Heights, and into the Banff Substation in the Town of Banff. It was originally constructed in 1941 and has reached the end of its lifecycle, so we are proposing to rebuild the line to ensure that a safe and reliable supply of power is available for years to come.

In March 2021, AltaLink submitted a Project Description to Parks Canada for the portion of the proposed project in Banff National Park. In October 2021, AltaLink began consulting with stakeholders on the portion of the proposed project that runs from the Canmore Substation to the Banff National Park boundary. Since then, we have gathered valuable stakeholder feedback and completed further engineering that has supported our project planning.

We have made updates to what we are proposing along portions of the line in and around the Town of Canmore. We are now also gathering feedback on the portion of the line rebuild that runs from the Banff National Park boundary to the Banff Substation, including on the draft Detailed Impact Assessment.



ANTICIPATED PROJECT SCHEDULE

AUGUST - NOVEMBER 2025
Notify and consult with stakeholders

AUG. 1 - SEPT. 30, 2025
DIA engagement period

FALL 2025
Finalize project proposal and DIA for Parks Canada

EARLY 2026
File application with Alberta Utilities Commission (AUC)

LATE 2026 - 2030
Construction if project is approved

Although we attempt to follow the anticipated project schedule it is subject to change. We will continue to provide you with updated schedule information if required as the project progresses.

DEFINITIONS:

Transmission | *Transmission lines are Alberta's electric highway, linking the places where power is generated to where power is used. Transmission lines transport large amounts of power over long distances across the province. The transmission system connects diverse sources of generation.*

Circuit | *A circuit is three wires. Transmission line structures can be single or double circuit, and this affects how much electricity the structure carries. Single circuit transmission lines have three wires strung along the structures. A double circuit transmission line has six wires and carries double the amount of electricity.*

Kilovolt (kV) | *A kilovolt is equal to one thousand volts and is commonly used when describing transmission and distribution lines. AltaLink's transmission lines range from 69 kV (69,000 volts) to 500 kV (500,000 volts). Light bulbs typically range from 120 to 300 volts.*

Substation | *Substations are the connection points between power lines of varying voltages and contain equipment that controls and protects the flow of power.*

Danger trees | *Danger trees are vegetation/trees located under or adjacent to transmission lines that could fall over and contact transmission line conductors or where line conductors could, under windy conditions, blow out and contact the tree producing an electrical flash over to the line.*

Hazard trees | *Hazard trees are defective trees that are at imminent risk of falling on the line, both on and off the right-of-way, and must be immediately removed.*

Project details

The proposed project, subject to consultation, includes:

- rebuilding approximately eight km of existing transmission line in and around the Town of Canmore
- subject to further project development, rebuilding two segments of the line adjacent to Harvie Heights and Elk Run Boulevard in an overhead and/or underground configuration
- rebuilding approximately 16 km of existing transmission line within Banff National Park
- building a temporary transmission line to ensure reliable electricity supply during construction
- vegetation management, including removing **danger** and **hazard** trees in and around the transmission line **right-of-way (ROW)**

AltaLink is proposing to rebuild the majority of the transmission line, which will remain a 138 kV line, along the existing alignment. We are also considering relocating the line for approximately one km to accommodate future development in the Town of Canmore.

In some locations along the existing line, AltaLink will require additional ROW in order to safely operate and maintain the line.

Please see the maps included in this package for details about the proposed options near you.

Proposed transmission structures

The existing 54L structures are wood or steel and either monopole or H-frame structures. They are approximately 15 to 20 metres (m) tall and spaced approximately 120 to 200 m apart.

The proposed structures for the rebuilt line:

- will be made of self-weathering steel that will have a natural brown finish
- will be increased to approximately 20 to 30 m tall at approximately 125 to 200 m apart
- will primarily use monopole structures but H-frame structures may be required in some areas based on location and engineering requirements
- may require guy wires for corner or angle structures
- will include an **Overhead Optical Ground Wire** on top of the circuit

Proposed Single Circuit Monopole

Proposed Single Circuit H-frame

Please note: The structures for the rebuilt line will look similar to the those shown in this package.

Potential underground segments

AltaLink considers several factors to find solutions with low overall environmental, social and economic effects. In addition to stakeholder input, we also consider residential, environmental, agricultural and visual impacts, as well as cost.

Underground transmission lines are electrical cables that are installed below ground. Underground transmission cables are typically installed in one metre wide concrete ducts and require trenches to be dug, resulting in increased construction activity, equipment and ground disturbance as compared to overhead lines construction. The concrete ducts will be covered with topsoil excavated from the site and seeded with grass species to match the adjacent undisturbed areas.

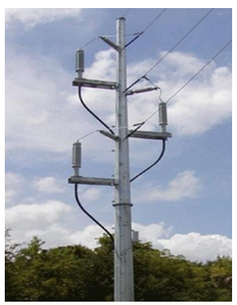
Underground transmission lines can be substantially more expensive than overhead options and as a regulated utility, we have a responsibility to prudently manage our costs for Albertans.

Considering these impacts, AltaLink has identified two potential segments of the transmission line where we are considering locating the proposed line underground: one portion in the Harvie Heights area and one portion adjacent to Elk Run Boulevard in Canmore.

In these areas, the cost to complete the required vegetation management activities and the associated easement is potentially higher than the cost to install the transmission line underground. Placing transmission lines underground is generally only considered when it is a more technically viable or economic option than overhead transmission lines. If AltaLink proceeds with an underground option in these locations, limited vegetation management beyond the existing ROW would be required for construction. We want your feedback on the potential underground options in these areas. Ultimately, the Alberta Utilities Commission (AUC) must approve any underground segments.

If AltaLink proceeds with an underground configuration in these areas and it is approved by the AUC, a riser structure will be required at each end of each underground segment where the underground cable comes above ground to connect to the electrical grid. The riser structures would look similar to the image included below to the left, except with four underground cable arms around the structure compared to the three shown in the photo.

Underground transmission was previously considered for portions of the line within Banff National Park. This is no longer being considered in these areas due to higher estimated costs, increased ground disturbance and reliability considerations when compared to the overhead transmission option.



Example of a riser structure

Example of underground conduit for duct being placed in a trench before concrete is poured

DEFINITIONS:

Right-of-way | *The right-of-way is a strip of land required for the construction and safe operation of a transmission line. A right-of-way refers to the physical space a transmission line encompasses including areas on either side of the line.*

The majority of the right-of-way can still be used by the landowner. Buildings cannot be placed on the right-of-way, but can be built up to the edge of the right-of-way.

Overhead optical ground wire (OPGW) | *Overhead optical ground wire (OPGW) provides lightning protection for a transmission line and is part of the telecommunication network that allows AltaLink to monitor, control, protect and restore the electric system.*

Vegetation management

Safety is AltaLink's top priority. We work with experts to identify high-risk fire areas within our service territory so we can manage our transmission assets safely and responsibly.

Vegetation management is one of the most important ways that AltaLink prevents potential fire risk. Vegetation management near our transmission lines includes removing or trimming danger trees, hazard trees, shrubs or undergrowth along the ROW and Vegetation Control Easements (VCE).

Along the 54L transmission line, AltaLink is proposing to remove danger and hazard trees as required. The removal of trees is intended to reduce the number of outages and the potential fire hazard that could result from tree contacts with the line. There are three areas where we will need to conduct vegetation management activities related to the project:

Provincial Crown land: On Crown land, we will require a VCE that allows AltaLink to remove danger and hazard trees approximately 25 m from the edge of the ROW, as needed.

Canmore and Harvie Heights: On private property, it may be necessary to remove danger and hazard trees up to approximately 25 m from the edge of the ROW. AltaLink is evaluating approaches to addressing access and managing vegetation within this area. Prior to filing a Facility Application with the AUC, we will contact affected stakeholders to discuss which trees may need to be removed.

Banff National Park: Danger and hazard tree removal outside of the ROW within the national park will be conducted subject to Parks Canada's approval of the detailed impact assessment and proposed development.

AltaLink has identified types of trees, shrubs and other plants that are safe to grow near our transmission lines (compatible) and those that are potentially dangerous to grow near our transmission lines (non-compatible). Safe heights for vegetation near transmission lines is determined on a case-by-case basis. AltaLink considers factors such as structure height, transmission line voltage and width of ROW. If requested, AltaLink will provide more information about compatible species which are safe for the Bow Valley and can grow near our transmission lines.

We will contact affected landowners to discuss which danger or hazard trees may need to be removed. This will be discussed on a case-by-case basis.

Temporary transmission line

AltaLink has identified the need for a temporary transmission line (also known as a by-pass) to support portions of the rebuild of the 54L transmission line. The by-pass line is required to maintain the flow of electricity to the Town of Banff while the existing line is being rebuilt. Wooden monopole and H-frame structures are proposed for this temporary line.

The temporary line is proposed to be constructed within the existing ROW, except for approximately four km in the vicinity of Harvie Heights. In this area, the temporary line is proposed along Harvie Heights Road and Palliser Trail.

Brushing of trees and workspace may be required adjacent to portions of the by-pass line to allow for access, construction activities and for the safe operation of the by-pass line. The by-pass line will be removed after construction of the 54L transmission line rebuild is complete.

Access trails and construction workspace

To facilitate rebuilding 54L, access trails, access gates and construction workspace will be required. Access trails are required to move material, equipment and personnel onto the ROW. The proposed access trails can be seen on the maps included in this package. Where possible, we have tried to use existing trails that avoid steep ground, wet areas and other potential impacts.

Construction workspace, in addition to the transmission line ROW, is required for the safe construction of the transmission line. Construction workspace is required to set up or maneuver equipment, remove existing structures or layout, and assemble and erect new structures. The requirements for the construction workspace vary depending on the location.

AltaLink will consult with applicable landowners and/or agencies regarding potential construction workspace and access trails, as shown on the strip maps included in this package.

Ongoing survey work

ENVIRONMENTAL SURVEYS

From now until the end of the project, AltaLink will be conducting seasonal environmental surveys along the route of the proposed transmission line rebuild. When conducting all surveys, we work to minimize disruption to residences, area users and wildlife.

GEOTECHNICAL SURVEYS

Geotechnical surveys are used to determine the ground conditions that will be encountered along the transmission line when installing transmission structures. This information supports the foundation design and provides insight into construction methods that will be required to build the foundations.

AltaLink completed these surveys in fall 2023. Additional surveying may be required as the project progresses.

Electric and magnetic fields (EMF)

We understand that you may have concerns about exposure to EMF and we take those concerns seriously. Everyone is exposed to power frequency EMF from many sources, including power lines, building wiring, or appliances in your home.

Health Canada, the World Health Organization, and other agencies have not recommended that the public needs to take steps to limit their everyday exposure to EMF from high voltage transmission lines. This includes people that live near the edge of a transmission line right-of-way.

If you have any questions about EMF, please contact us:

Website: www.altalink.ca/emf

Email: emfdialogue@altalink.ca

Phone: 1-866-451-7817 (toll-free)

Other project in the area

AltaLink is proposing another project in Banff National Park to ensure we can continue to deliver safe and reliable electricity for years to come.

Project name	551 Line Wildfire Mitigation
Description	Work is in the planning and assessment phase for the existing 551L transmission line in Banff National Park to mitigate wildfire ignition risk.
Status	Ongoing until 2030

Providing your input

Stakeholder, Indigenous and public input is important to us. You can provide your input in one of the following ways.

PARTICIPATE IN A ONE-ON-ONE CONSULTATION

We will contact all occupants, residents and landowners who are on or directly adjacent to the proposed transmission line rebuild, as well as those who may be affected by the rebuild through the direct impact assessment process, to gather input through one-on-one consultations. We will also consult with any stakeholders who wish to participate in AltaLink's consultation process.

During the one-on-one process, we will document the information you provide and respond to any questions or concerns you may have about the project.

You can request to speak to an AltaLink representative by contacting us at: 1-877-267-1453 (toll free) or by email at: stakeholderrelations@altalink.ca.

You can also visit our field office during the following dates and times.

Field office	Available Tuesday and Thursday until Aug. 30, 2025. Additional office hours, including Saturdays, are available upon request. See the 'Contact us' section below for contact details to request a time.	Rocky Mountain Ski Lodge Guides Room 1711 Bow Valley Trail Canmore, Alta.	3 p.m. to 7 p.m.
Banff	Wednesday, Aug. 27, 2025	Banff Caribou Lodge & Spa Woodlands Meeting Room 521 Banff Ave. Banff, Alta.	5 p.m. to 8 p.m.

AltaLink is committed to sharing information about its projects and working with the public to gather and respond to stakeholder input and concerns. A summary of stakeholder comments will be incorporated into the application we submit to the AUC.

ATTEND OUR PUBLIC EVENT

We want to hear your thoughts and concerns to help us understand what is important to you as we move forward with the project. Please join us at our public event in the project area. Members of our consultation, environment, electrical effects and siting teams will be available to discuss the project during the sessions.

PROVIDE WRITTEN FEEDBACK

Written feedback on the project can be provided directly to AltaLink. We can be reached by email at: stakeholderrelations@altalink.ca.

You can also provide written feedback by mail to:

Attn: Stakeholder Relations
2611 – 3rd Avenue SE
Calgary, Alta.
T2A 7W7

Next steps

We will contact landowners, residents and occupants near the proposed project to gather input and address questions or concerns.

After engagement is complete, we will consider all feedback received and release a report summarizing what we heard and outlining how feedback was addressed. We will seek development approval from Parks Canada and file an application with the AUC.

We will notify stakeholders when we file the application and again once the AUC has reached a decision about the project.

Draft Detailed Impact Assessment

In addition to feedback on the project, we are also seeking feedback on AltaLink's draft Detailed Impact Assessment (DIA) for the portion of the project in Banff National Park. AltaLink is required to complete an impact assessment as per the *Impact Assessment Act, 2019*. AltaLink has engaged with Parks Canada to develop a DIA. The DIA identifies baseline conditions within the project area, assesses the potential effects of the project on natural and cultural values, and proposes mitigations to ensure there are no significant adverse effects. The 60-day period to provide input as part of the DIA process is Aug. 1 to Sept. 30, 2025.

Based on stakeholder feedback and in consultation with Parks Canada, AltaLink will consider all input received, finalize the DIA and submit for Parks Canada approval.

To view a complete version of the 54L Transmission Line Rebuild draft DIA and provide your comments, please visit AltaLink's website at: www.altalink.ca/projects/54L.

Contact us

To learn more about the proposed project, please contact:

ALTALINK
1-877-267-1453 (toll free)
E-mail: stakeholderrelations@altalink.ca

AltaLink's transmission system efficiently delivers electricity to 85 per cent of Albertans. Dedicated to meeting the growing need for electricity, AltaLink connects Albertans to renewable, reliable and low-cost power. With a commitment to community and environment, AltaLink is ensuring the transmission system will support Albertans' quality of life for years to come. Learn more at www.altalink.ca.

To view the details of the project, please visit:
www.altalink.ca/projects/54L

To subscribe to project updates, please visit:
www.altalink.ca/projects/54L and complete the fields under 'Subscribe to project updates'. Once the fields are complete, select 'Submit'.

To learn more about the application and review process, please contact:

AUC
780-427-4903 (toll-free by dialing
310-0000 before the number)
Email: consumer-relations@auc.ab.ca

You can also learn more about the AUC process and how you can become involved, by referring to the brochure included in this package titled Participating in the AUC's independent review process to consider facility applications.

The AUC ensures the fair and responsible delivery of Alberta's utility services. AltaLink submits applications for new transmission projects to the AUC and the AUC reviews them in a public process.

PRIVACY COMMITMENT

AltaLink is committed to protecting your privacy. Collected personal information will be protected under AltaLink's Privacy Policy and the Personal Information Protection Act. As part of the regulatory process for new transmission projects, AltaLink may provide your personal information to Alberta Utilities Commission (AUC). For more information about how AltaLink protects your personal information, visit our website at www.altalink.ca/privacy or contact us directly via e-mail privacy@altalink.ca or phone at 1-877-267-6760.

INCLUDED IN THIS INFORMATION PACKAGE:

- Project maps
- Draft DIA Summary
- AUC brochure: *Participating in the AUC's independent review process to consider facility applications*