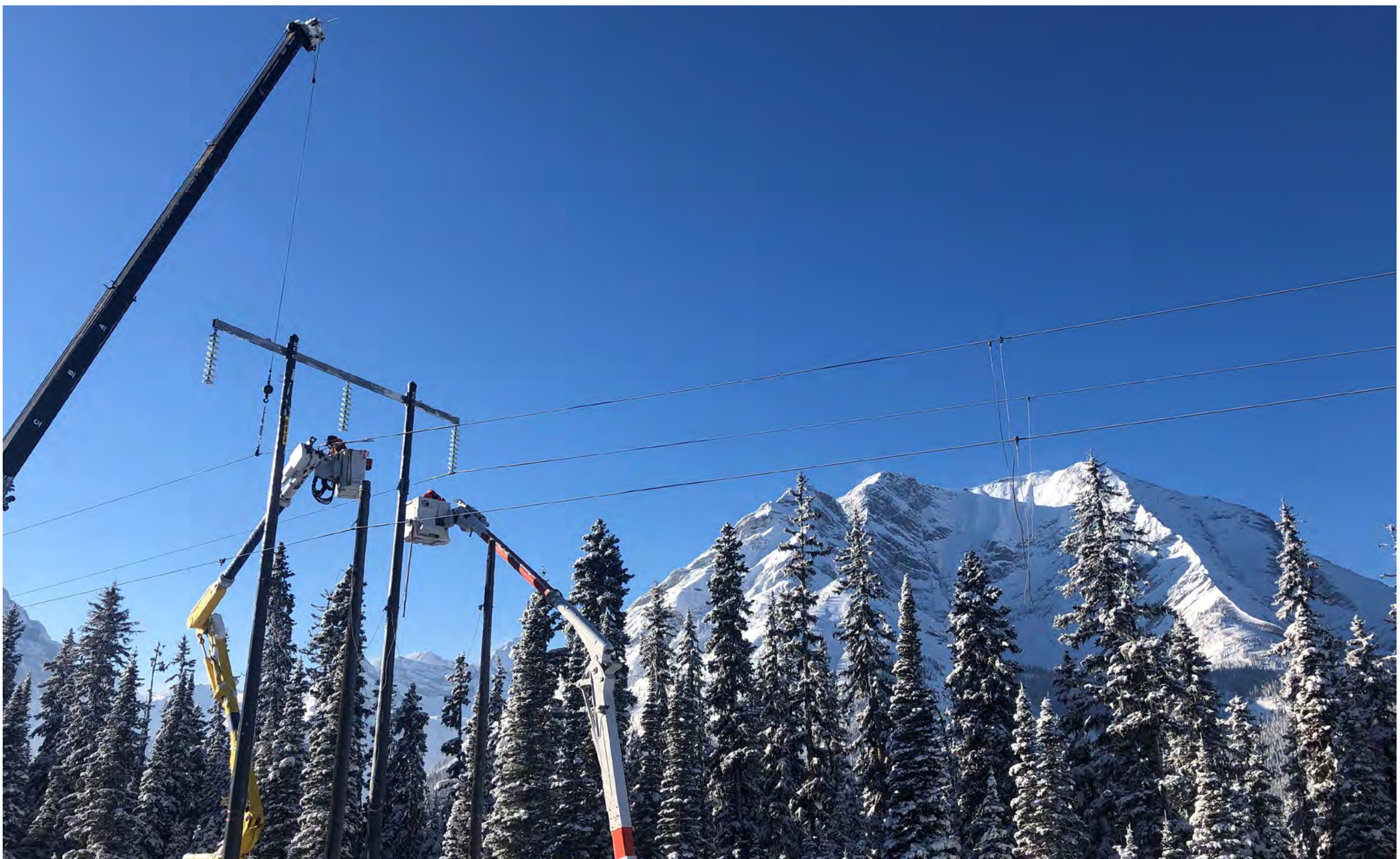


Teck Electrification

Welcome

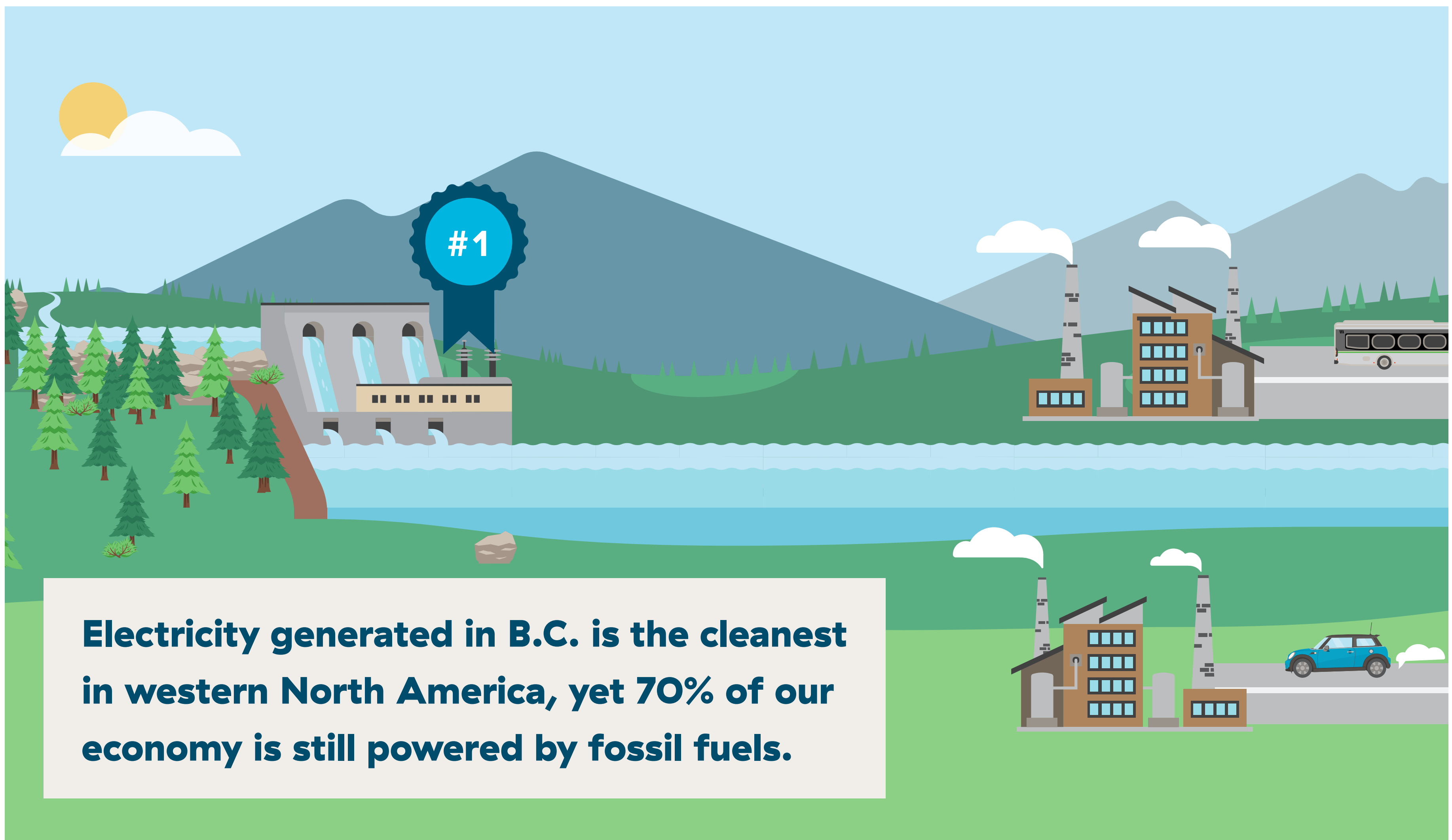
- We plan to build a new transmission line, substation, two new switching stations, and associated infrastructure to support Teck's goal of net-zero carbon emissions by 2050.
- Please review the storyboards and maps to learn more about our plans.
- Project team members are here to answer your questions.



Crews working on an existing transmission line north of Elkford.

Electrification overview

- Electrification is a key pathway to achieving the B.C. Government's CleanBC emission reduction targets.
- We're committed to working with industrial customers who want to use our clean electricity to power their operations and reduce their greenhouse gas emissions.

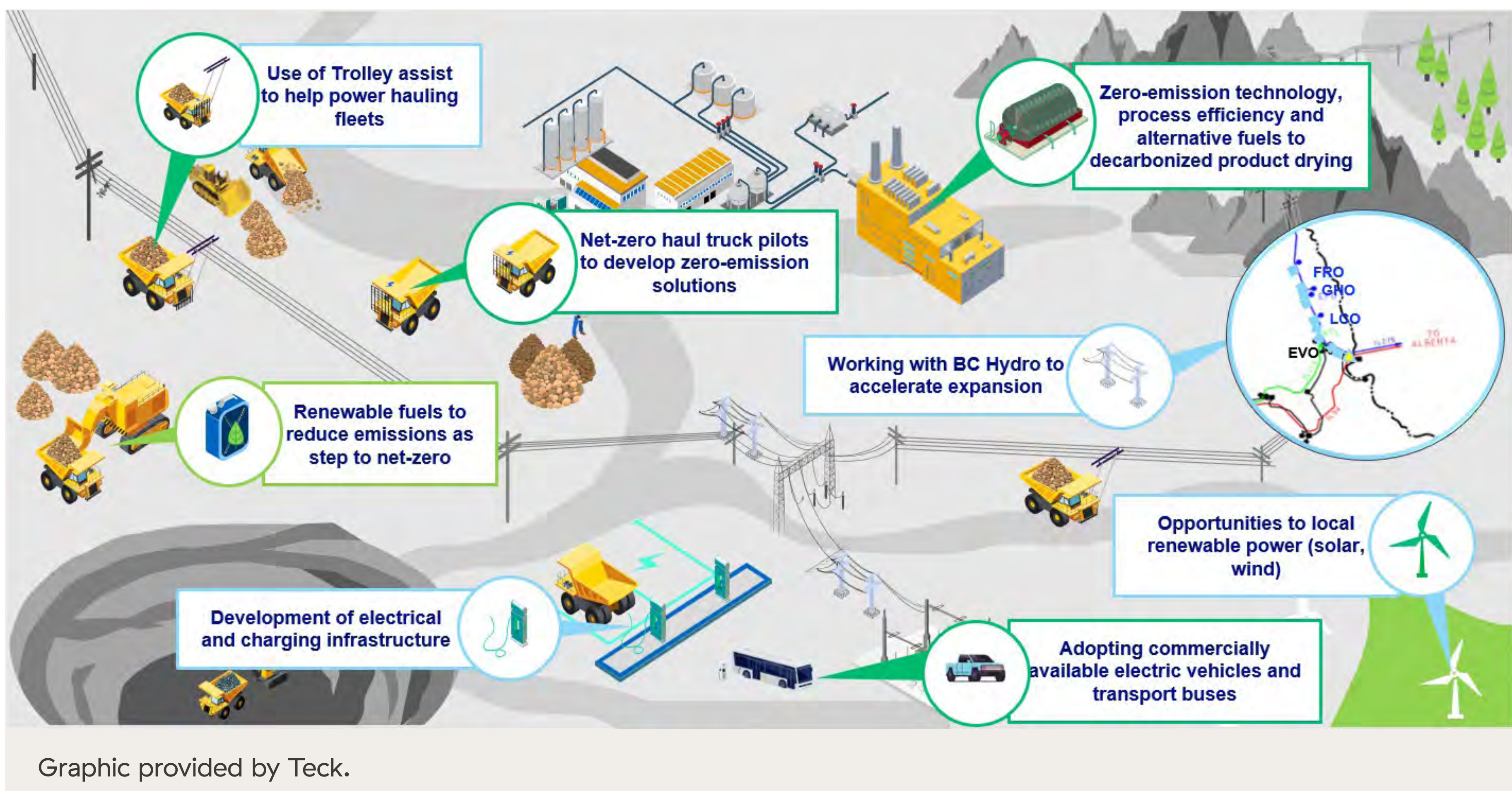


Working in partnership with First Nations and Indigenous communities

- We're working to implement the B.C. Government's commitment to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
- We're building economic relationships with Indigenous peoples, including:
 - Procurement
 - Deeper Indigenous involvement in decision-making
 - Employment and training opportunities
- We're thinking differently about how we do our business, and this new approach is an example of our work to advance reconciliation with First Nations and Indigenous communities.

Teck's decarbonization plan

- Teck is committed to reducing its greenhouse gas emissions by 33% by 2030 and to achieving net-zero carbon emissions by 2050.
- Teck estimates this will reduce greenhouse gas emissions by 700 kilotons of carbon dioxide equivalents a year by 2050.
- This is the equivalent of taking about 155,000 gas-powered passenger vehicles off the road each year.
- Beginning in 2025, Teck is planning to deploy battery electric haul trucks and electrify more of its processing equipment.
- To power this transition, Teck's Elk Valley mines will need significantly more electricity than they currently use.
- We need to upgrade our existing infrastructure to meet this increased demand at Teck's Elk Valley mines.



New infrastructure

To deliver additional electricity to Teck's Elk Valley operations, we're planning to build a new transmission line, substation, two new switching stations, and associated infrastructure.

Transmission line from Sparwood to Elkford

- A new 230kV transmission line between Sparwood and Elkford—about 85km long—to connect Teck's mines to our substations

Alexander Creek Substation















- A new substation east of Sparwood, close to the B.C./Alberta border

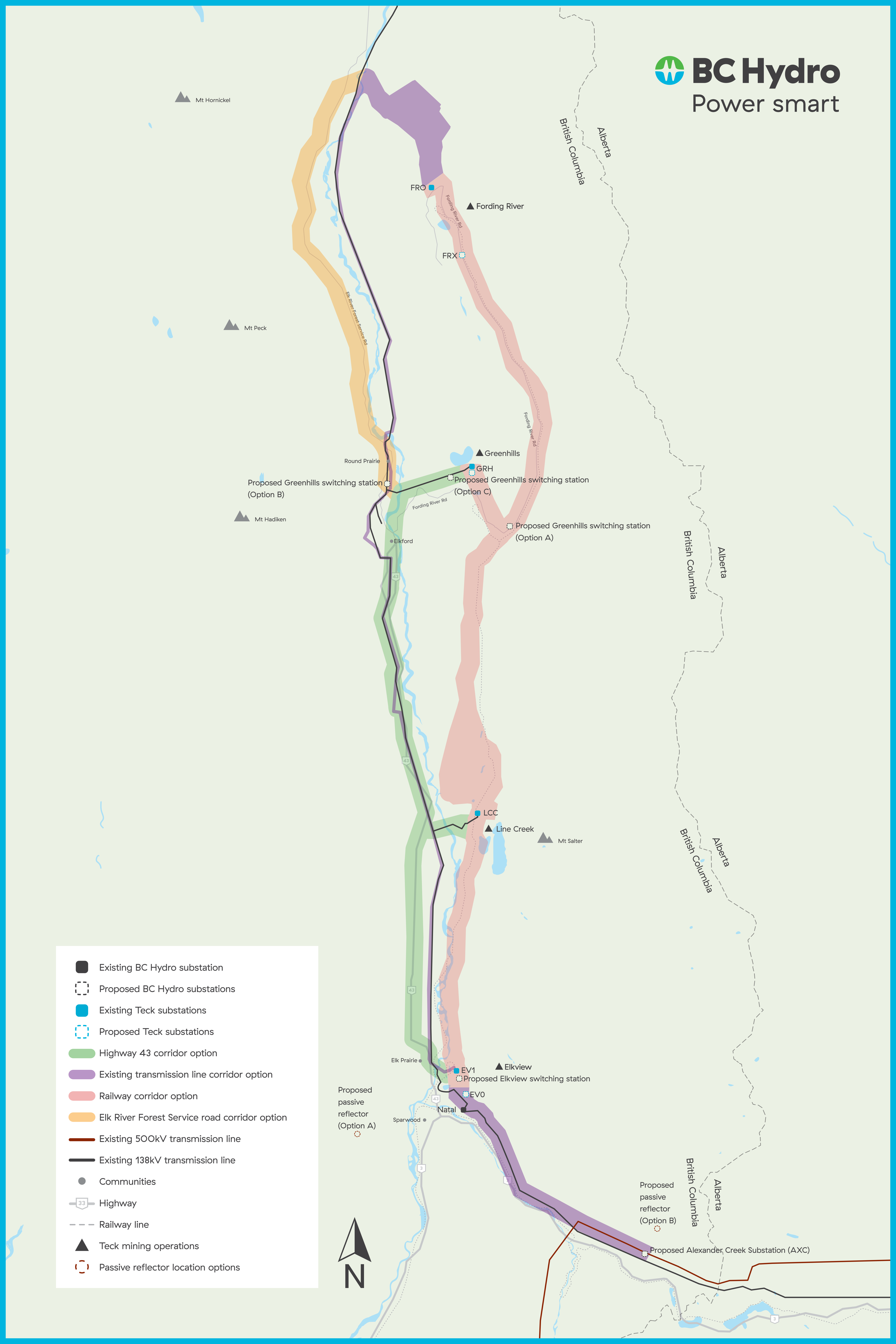
Switching stations

- Two new tap switching stations to connect Teck's mines to the new transmission line
 - At Teck's Elkview Operations in Sparwood
 - At Teck's Greenhills Operations in Elkford

Associated infrastructure

- A passive reflector near Sparwood
- New equipment at Natal Substation in Sparwood
- New equipment at Cranbrook Substation

-  Existing BC Hydro substation
-  Proposed BC Hydro substations
-  Existing Teck substations
-  Proposed Teck substations
-  Highway 43 corridor option
-  Existing transmission line corridor option
-  Railway corridor option
-  Elk River Forest Service road corridor option
-  Existing 500kV transmission line
-  Existing 138kV transmission line
-  Communities
-  Highway
-  Railway line
-  Teck mining operations
-  Passive reflector location options



Power lingo



What is a substation?

A substation brings together power lines of different voltages. Substations contain equipment that can change the voltages of these lines and safely control the flow of power.



What is a switching station?

A switching station is used to segment a transmission line path into sections that make the system more reliable and easier to maintain.

Power lingo



What is a transmission line?

Transmission lines move electricity from one point to another via numerous towers in an electric power system. Transmission lines vary in size with those carrying more electricity at a higher voltage requiring larger towers.



What is a passive reflector?

A passive reflector is a structure usually installed on a high elevation location. It looks like a large billboard and it allows microwave antenna towers at two different locations to communicate with each other.

Alexander Creek Substation

To deliver additional electricity to Teck's Elk Valley operations, we plan to build a new substation named Alexander Creek Substation near Highway 3, close to the B.C./Alberta border.

We bought property east of Sparwood in 1987 in case electricity demand in the Elk Valley grew enough that we needed to build another substation and we designed the existing 500kV transmission line to accommodate another substation at this location.

We're conducting a technical study to confirm the suitability of this property, based on the current scope of the project.

The footprint of Alexander Creek Substation is still being determined; however, 500kV/230kV substations are usually about 10 hectares (25 acres). This is about the same size as Cranbrook Substation in Mayook.

Transmission line overview

- We're studying four corridor options for the new transmission line route to meet Teck's request for power.
- The corridor options generally follow existing disturbances on the landscape: the highway, a forestry road, an existing transmission line, and the railway.
- The final route may cross between corridor segments at the mines.
- Routing the new transmission line through these corridors would reduce impacts on fish and wildlife habitat, limit new habitat fragmentation and allow us to use existing access roads.

Steps in building a transmission line

We are here



Planning	Transmission line design	Pre-construction	Construction
<ul style="list-style-type: none">○ Identify route corridors○ Identify right-of-way requirements○ High-level environmental review○ Initial engineering and environmental field studies to determine if line can be built in an area○ Route selection	<ul style="list-style-type: none">○ Detailed engineering and environmental studies○ Permit applications○ Confirm placement of structures○ Confirm new right-of-way○ Acquire property rights including access	<ul style="list-style-type: none">○ Clearing○ Access○ Prepare right-of-way so that foundations and towers can be installed○ Purchase construction materials	<ul style="list-style-type: none">○ Foundations○ Pole structures○ Line stringing○ Restoration

Identifying route corridor options

When we're considering the transmission line route, we'll work to minimize impacts where possible, including environmental and private property impacts.

We're engaging early with stakeholders to share our plans for the project and possible routes for the transmission line.

The project is in its earliest study stage where we assess what is required to deliver power to Teck. We're sharing our plans now. The scope could change as we complete these studies.

To decide on a line route option, we'll compare the options considering:

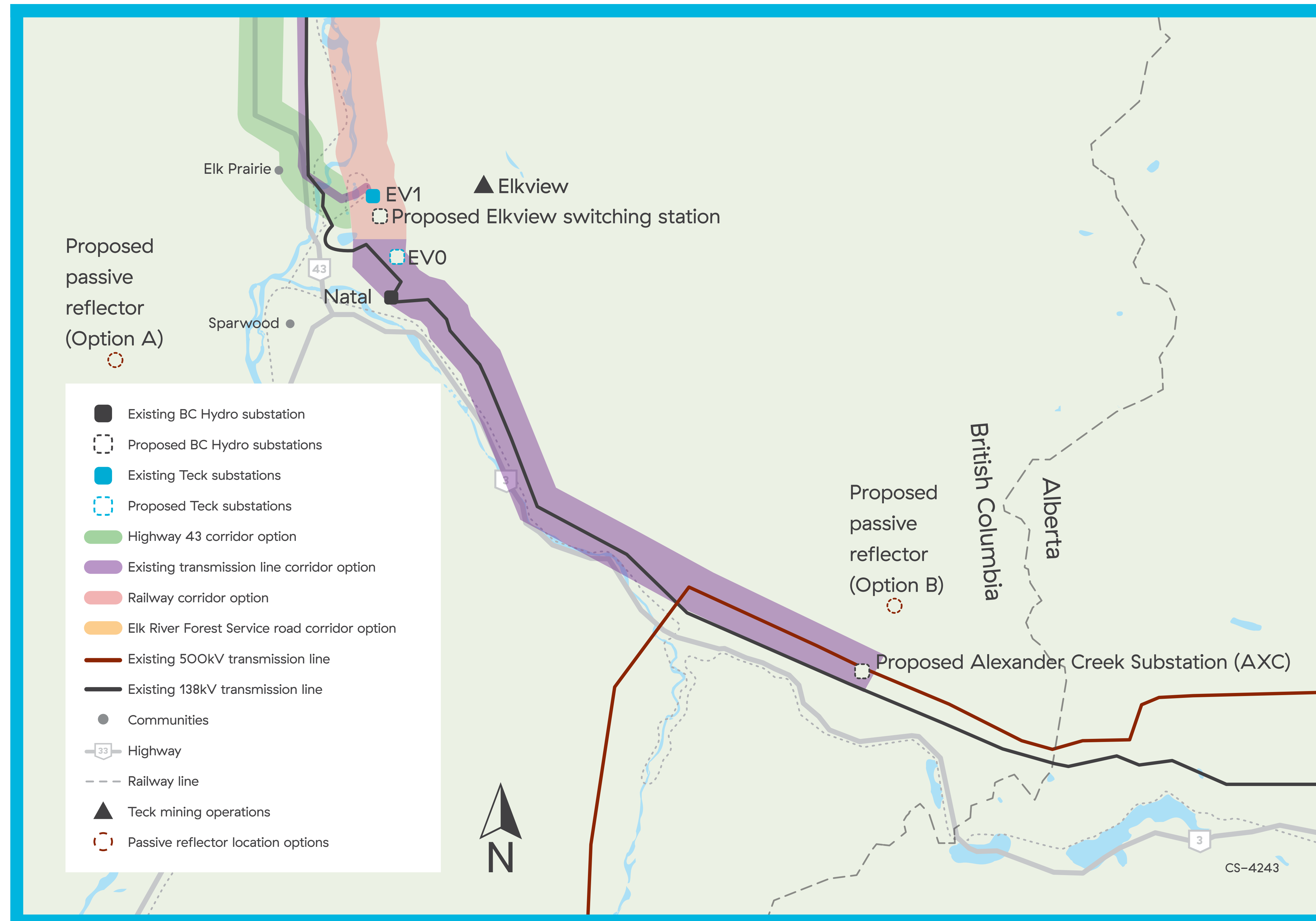
- feedback from First Nations
- feedback from landowners, communities, authorization holders, other interested parties, the public, and specialists in various fields
- impacts on the natural and human environments
- completion date, reliability, and safety risk
- lifecycle costs

We'll work to identify an option that best balances these considerations.

We expect to select a leading route option in summer 2024.

Routing options

Alexander Creek to Elkview



The proposed transmission line route has not been determined. It may be north or south of this corridor.

Routing options

Alexander Creek to Elkview

Route length (km)	14.5
Potential new habitat fragmentation (approximate km)	14.5
Potential water crossings	5
Potential old-growth forest interaction	2 km
Potential ungulate winter range interaction	Yes
Vegetation clearing	<input type="radio"/> Extensive clearing along new right-of-way (adjacent to existing) <input type="radio"/> Clearing is on Teck property
Private properties along the corridor (non-Teck)	6
Conservations areas crossed	Alexander Creek

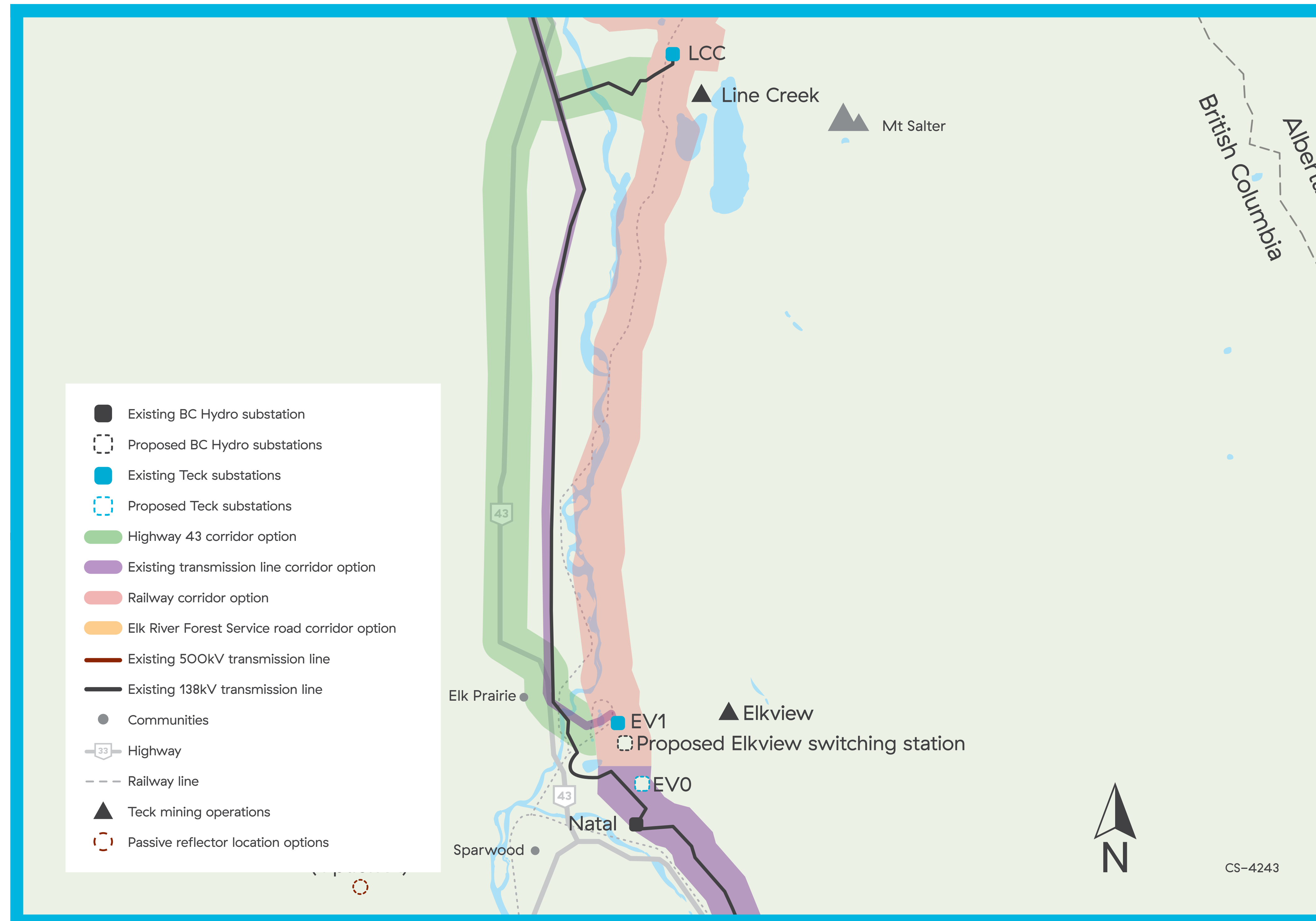
This route corridor:

- require upgrades to existing and creation of new access
- interact with other land users including agricultural and recreation land
- interacts with American badger and whitebark pine critical habitat

We'll carry out further field studies to confirm these impacts and create mitigation and management plans for potential impacts.

Routing options

Elkview to Line Creek



The proposed transmission line route has not been determined.

Routing options

Elkview to Line Creek

The following table provides an overview of differences between the corridor options. **We'll carry out further field studies to confirm these impacts and create mitigation and management plans for potential impacts.**

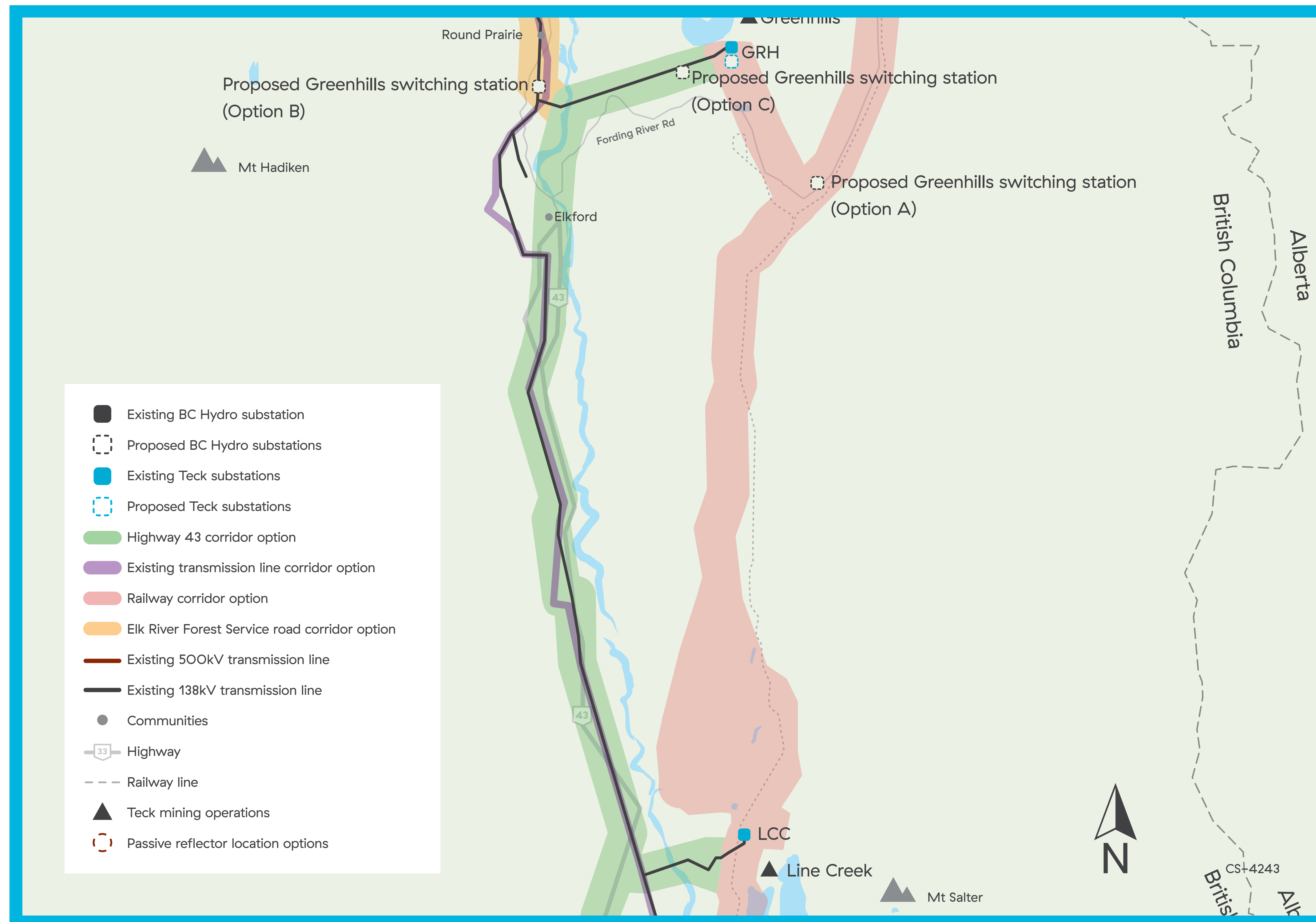
	Highway 43 corridor	Existing transmission line corridor	Railway corridor
Route length (km)	16.5	16.5	16.5
Potential new habitat fragmentation	Lower	Lower	Higher
Potential water crossings	Similar	Similar	Lower
Potential wetland interaction	Similar	Similar	Similar
Potential old-growth forest interaction	Similar	Lower	Similar
Potential ungulate winter range interaction	Similar	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Clearing along new right-of-way ○ Clearing on private property 	<ul style="list-style-type: none"> ○ Clearing along new right-of-way (adjacent to existing) ○ Clearing on private property 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way ○ ~7.5 km follows railway ○ Clearing is on Teck property
Private properties along the corridor (non-Teck)	62	31	9
Conservations areas crossed	Grave Prairie, Big Ranch	Grave Prairie, Big Ranch	Teck's Grave Prairie conservation lands

All route corridors:

- require upgrades to existing and creation of new access
- interact with other land users including agricultural land, traplines
- interact with American badger and whitebark pine critical habitat

Routing options

Line Creek to Greenhills



The proposed transmission line route has not been determined.

Routing options

Line Creek to Greenhills

The following table provides an overview of differences between the corridor options. **We'll carry out further field studies to confirm these impacts and create mitigation and management plans for potential impacts.**

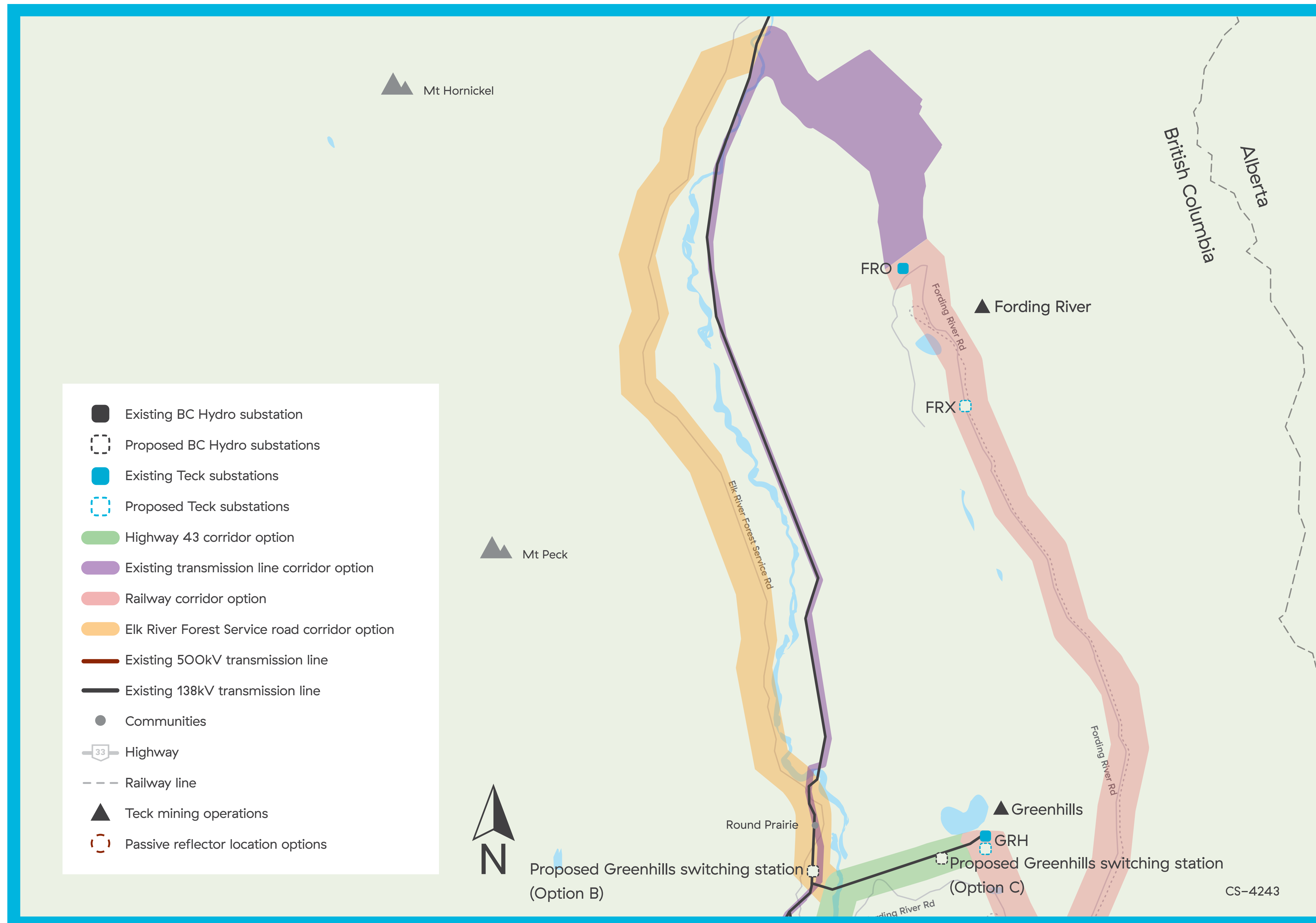
	Highway 43 corridor	Railway corridor
Route length (km)	25–28	22–25
Potential new habitat fragmentation	Lower	Higher
Potential water crossings	Lower	Higher
Potential wetland interaction	Similar	Similar
Potential old-growth forest interaction	Higher	Lower
Potential ungulate winter range interaction	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to existing) ○ ~2.5 km on Teck property ○ Clearing on private property required 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way ○ ~1 km follows railway ○ ~9 km on Teck property ○ ~14 km on Crown land
Private properties along the corridor (non-Teck)	40	3
Conservations areas crossed	Elk River	–

All route corridors:

- interact with American badger and whitebark pine critical habitat
- require upgrades to existing and creation of new access
- interact with other land users including agricultural land, traplines

Routing options

Greenhills to Fording River



The proposed transmission line route has not been determined.

Routing options

Greenhills to Fording River

The following table provides an overview of differences between the corridor options. **We'll carry out further field studies to confirm these impacts and create mitigation and management plans for potential impacts.**

	Elk River Forest Service Road corridor	Existing transmission line corridor	Railway corridor
Route length (km)	38–42	36–40	15–18
Potential new habitat fragmentation	Higher	Lower	Medium
Potential water crossings	Lower	Similar	Similar
Potential wetland interaction	Lower	Similar	Similar
Potential old-growth forest interaction	Similar	Similar	Higher
Potential ungulate winter range interaction	Similar	Similar	Similar
Vegetation clearing	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to forestry road and existing right-of-way) ○ ~6 km on Teck property ○ ~36 km on Crown land 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to existing) ○ ~11 km on Teck property ○ ~29 km on Crown land 	<ul style="list-style-type: none"> ○ Extensive clearing along new right-of-way (adjacent to railway) ○ ~9.5 km on Teck property ○ ~7.5 km on Crown land
Private properties along the corridor (non-Teck)	3	2	0
Conservation areas crossed	–	–	–

All route corridors:

- require upgrades to existing and creation of new access
- interact with other land users including agricultural land, traplines
- interact with American badger and whitebark pine critical habitat

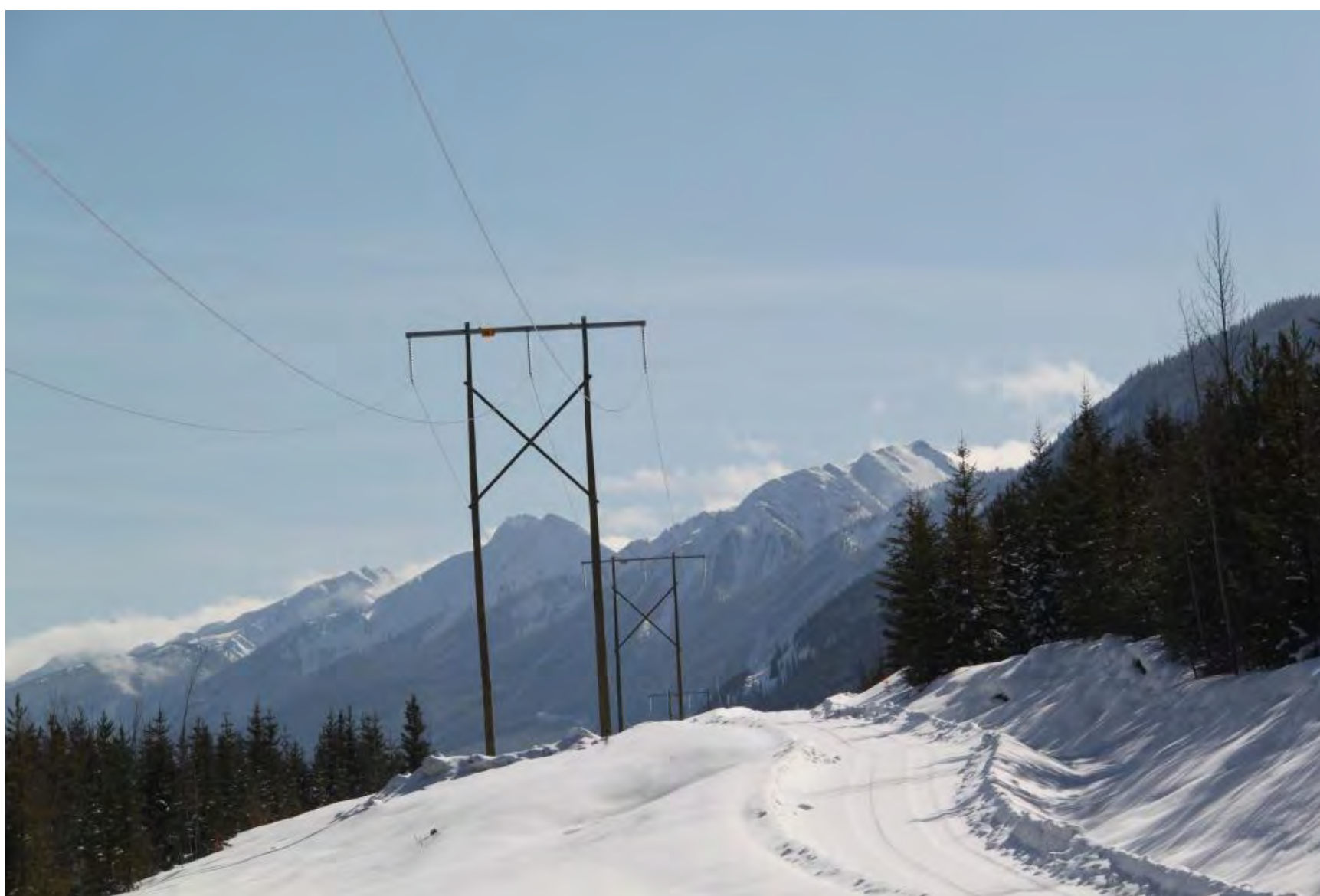
What will the transmission line look like?

Typical structures on this type of line are wood poles and 25 metres high.

Right-of-way width will vary depending on location.

- Between the new substation and Sparwood, there will be two lines side by side, which typically has a right of way that's 60 metres wide.
- Between Sparwood and Teck's Elkview, Greenhills, and Fording River operations, there will be a single line, which typically has a right of way that's about 35 metres wide.
- Water crossing spans and other longer spans such as over gullies will have wider rights-of-way and taller structures.

Initial right of way clearing will be wider through vegetated areas to ensure security of the new transmission lines from vegetation. Actual clearing widths vary and are determined at a later stage as transmission line routing is refined and the design advances.

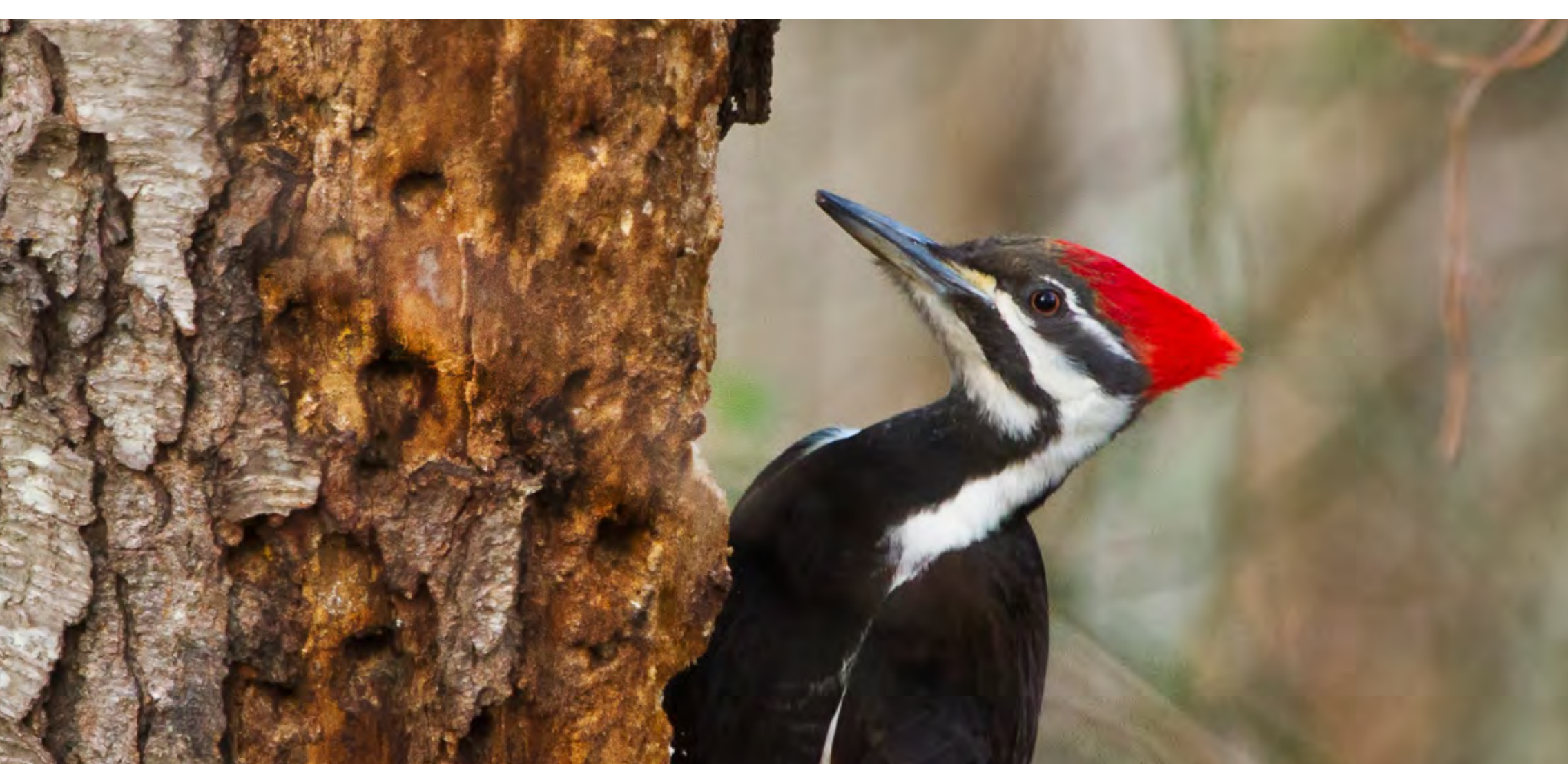


A single circuit span with wooden H frame structures. The line between Sparwood and Elkford is expected to look like this.



A double circuit span with wooden H frame structures. The line between the new substation and Sparwood is expected to look like this.

Environmental studies



During this early stage of the project, we're reviewing the project footprint to understand the high-level environmental risks.

We're working with First Nations to see where archaeological studies have been completed and where more assessments are needed.

There's a lot still to be done, including studies on:

- Wildlife: amphibians, bats, birds, wildlife habitat
- Fish: stream assessments
- Vegetation: Terrestrial Ecosystem Mapping, rare plants
- Archaeology, heritage and cultural resources
- Indigenous traditional knowledge and land use

We'll incorporate these studies as well as input from First Nations, Indigenous communities, and stakeholders to create mitigation and management plans for potential impacts.

Next steps

- Advance project planning
- Continue First Nations consultation and stakeholder engagement
- Identify the best location for the new transmission line, switching stations, and passive reflector
- Confirm suitability of substation site
- Determine regulatory and environmental requirements
- Acquire property rights
- Complete:
 - Required studies
 - Regulatory/environmental processes
 - Planning design

Thank you for attending

Please complete a comment form to share your feedback and leave it with us.

We'll continue to keep you informed as the project advances

For more information, please visit bchydro.com/teckelectrification

Please contact us toll free at 1 866 647 3334 or at projects@bchydro.com if you have any additional questions or comments

