



# WELCOME

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# ALTALINK

# OPEN HOUSE

## CHAPEL ROCK TO PINCHER CREEK AREA TRANSMISSION DEVELOPMENT

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We have started to develop the Chapel Rock to Pincher Creek Area Transmission Development and the Intertie Restoration Project and we want your input.





# Who is AltaLink?

**Our transmission lines transport the power you use every day.**

Headquartered in Calgary, with offices in Edmonton, Red Deer and Lethbridge, AltaLink is Alberta's largest electricity transmission provider. AltaLink is partnering with its customers to provide innovative solutions to meet the province's demand for reliable and affordable energy.

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](http://www.altalink.ca)**





# Information about previous projects in the area

## What about previous versions of this project? How is this different?

- The Castle Rock Ridge to Chapel Rock Transmission Project began in 2014
- It included a double circuit 240 kV transmission line
- We anticipated filing an application with the Alberta Utilities Commission (AUC) in late 2015 for that project
- We stopped all work on the project in December 2017 as we were not directed by the Alberta Electric System Operator (AESO) to proceed

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We have now been directed by the AESO to prepare an application for a new project in the Pincher Creek area that will be called the Chapel Rock to Pincher Creek Area Transmission Development and we want your input.

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# Project details

## The Chapel Rock to Pincher Creek Area Transmission Development includes:

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A new 240 kV transmission line, between 35 and 47 km long, connecting a new proposed substation to be called the Chapel Rock Substation, to either the existing Goose Lake Substation or Castle Rock Ridge Substation, both located north of Pincher Creek.

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The new proposed Chapel Rock Substation will connect the new transmission line with the existing 1201L transmission line, which is the Alberta/British Columbia intertie.

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To connect the Chapel Rock Substation and 1201L transmission line, some modifications to the existing 500 kV structures or a new 500 kV line up to 13 km long may be required.

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# New proposed Chapel Rock Substation

The new proposed Chapel Rock Substation will be located NW of Pincher Creek

It will:

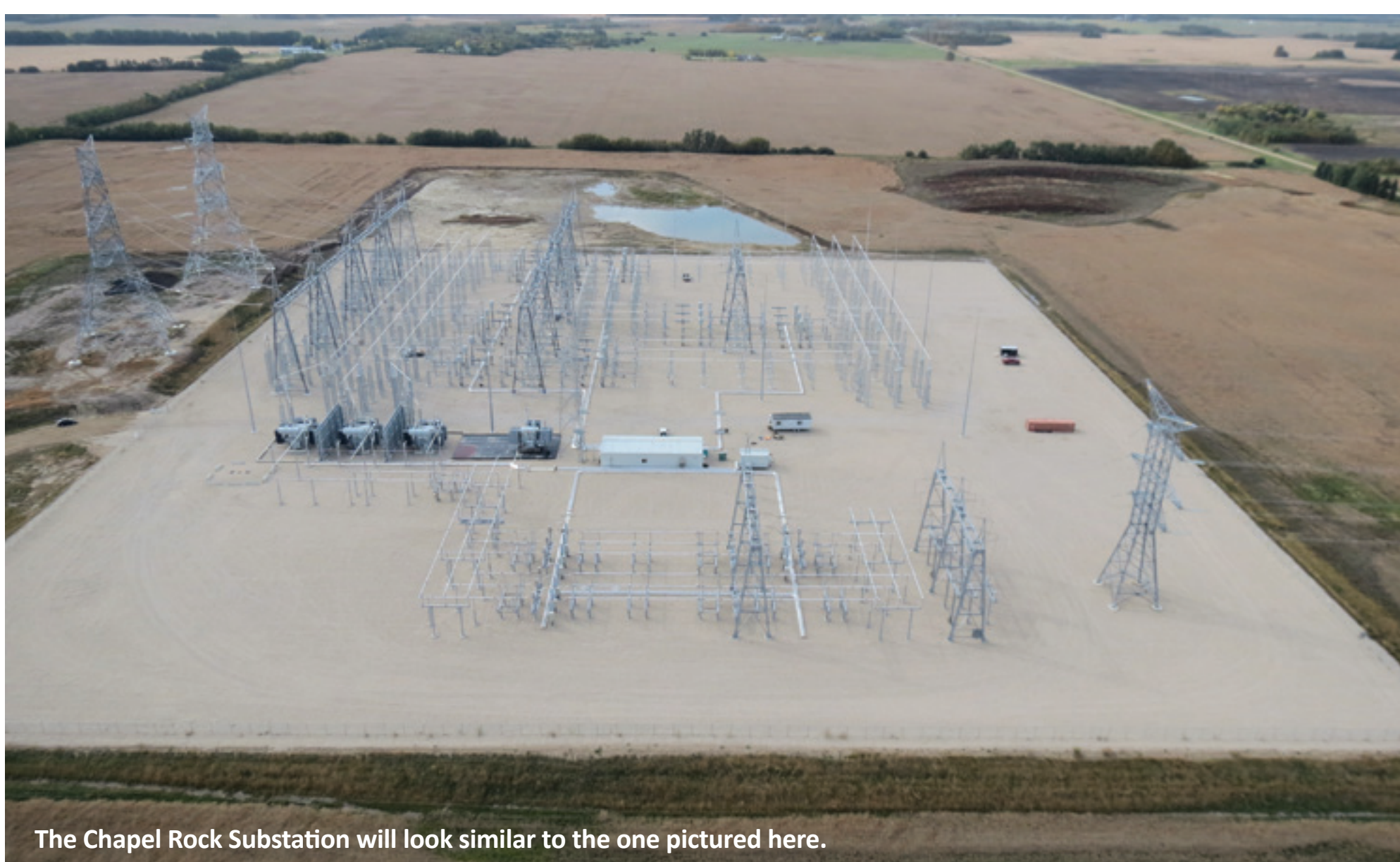
- be approximately 165 by 215 metres in size
- include a telecommunications tower that supports equipment that transmits data to our system control centre, allowing us to monitor and operate the electric system

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## Telecommunications tower

The tower:

- will be approximately 30 to 80 metres tall depending on the landscape of the location selected
- will be a self-supporting or guyed steel lattice structure
- may be painted and have aircraft lighting to comply with Transport Canada's requirements



The Chapel Rock Substation will look similar to the one pictured here.



# Work at existing substations

There are two potential substations that the new transmission line could connect to: Castle Rock Ridge or Goose Lake.

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## Castle Rock Ridge Substation

- Substation would be expanded approximately 35 metres by 90 metres to the east
  - Will only occur if the proposed transmission line connects to this substation
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## Goose Lake Substation

- Substation will be expanded by approximately 65 metres by 85 metres to accommodate new equipment that will help regulate the electric system
  - If the proposed transmission line connects to this substation, no additional expansion will be required
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# Community workshops: What we heard

We held community workshops in April 2018 to receive feedback about the options for the project.

Thank you to everyone who attended or provided their feedback online. Here is what we heard.

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## Structure placement

- Participants indicated they generally prefer locating structures within road allowances
  - There was also a preference to locate structures along quarter lines when structures are on private property
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## Structure types

- Participants indicated they generally prefer monopole structures because they:
    - Can be placed within road allowance
    - Require less land and right-of-way
    - Are viewed as the most visually appealing
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# Progress we've made

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Since the workshops in April 2018, the Alberta Electric System Operator (AESO) revised the need for the project to include only one new 240 kV transmission line

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We have identified potential transmission line routes based on stakeholder feedback and further analysis from the technical and engineering perspectives

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The potential transmission line routes will be refined further based on stakeholder feedback and analysis – if the project is approved, only one line will be built

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# Structure types

## Single Circuit Monopole



|  |              |
|--|--------------|
| Approximate height   | 30 - 36 m    |
| Approximate ROW width:<br>Within road allowance<br>(private property land requirements)<br>On private property | 11 m<br>22 m |
| Average span length  | 150m - 250m  |
| Can be placed within road allowance  | Yes          |
| Can be placed on private property  | Yes          |

## Single Circuit H-Frame



|  |              |
|--|--------------|
| Approximate height   | 27 - 30 m    |
| Approximate ROW width:<br>Within road allowance<br>(private property land requirements)<br>On private property | 20 m<br>35 m |
| Average span length  | 150m - 250m  |
| Can be placed within road allowance  | Partially    |
| Can be placed on private property  | Yes          |

## Twinned Single Circuit 500 kV Guyed V



|   |           |
|---|-----------|
| Approximate height  | 26 - 40 m |
| Approximate ROW width   | 120 m     |
| Average span length   | 300 m     |
| Can be placed within road allowance   | No        |
| Can be placed on private property   | Yes       |
| Guy wires are required on all structures and will extend approximately 12-18 m from structure |           |

Please note, all dimensions are approximate and subject to change with further detailed engineering. Guy wires may be required at structures where the transmission line changes direction.



# Project schedule & next steps

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**Notify and consult with stakeholders:**

Fall 2018 to Summer 2019

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**File application with the AUC:**

Fall 2019

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**Start construction if project is approved:**

Fall 2020

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**Anticipated construction completion:**

2022-2023

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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.



# Environment

**An Environmental Evaluation identifies environmental features within the project area through existing data and field surveys.**

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Additional information is gathered from consultation with provincial and federal regulators, landowners and the public.

This information is used to assist in route development. Potential effects from project impacts are identified, so that mitigations can be developed to minimize or eliminate these effects.

**Information within the Environmental Evaluation typically includes:**

- wildlife and vegetation inventories
  - wetland, watercourse and groundwater assessments
  - threatened and endangered species identification
  - terrain and soil evaluations
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# EMF & radio frequency

**AltaLink recognizes that people have concerns about exposure to Electric and Magnetic Fields (EMF) and we take those concerns very seriously.**

Everyone in our society is exposed to EMF from many sources, including:

- power lines and other electrical facilities
- electrical appliances in your home
- building wiring

National and international organizations such as Health Canada and the World Health Organization have been conducting and reviewing research about EMF for more than 40 years. Based on this research, these organizations have not recommended the general public take steps to limit their everyday exposure to EMF from high voltage transmission lines.

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## Radio frequency

Telecommunication towers use Radio Frequency (RF) signals to transmit and receive information. The telecommunication tower for this project will be installed and operated to comply with Health Canada's Safety Code 6, which defines safe levels of exposure.



# Intertie Restoration Project details

The proposed Intertie Restoration Project is located in the areas of Rocky View County, the Municipal District of Ranchland, the Municipal District of Pincher Creek and the Municipality of Crowsnest Pass.

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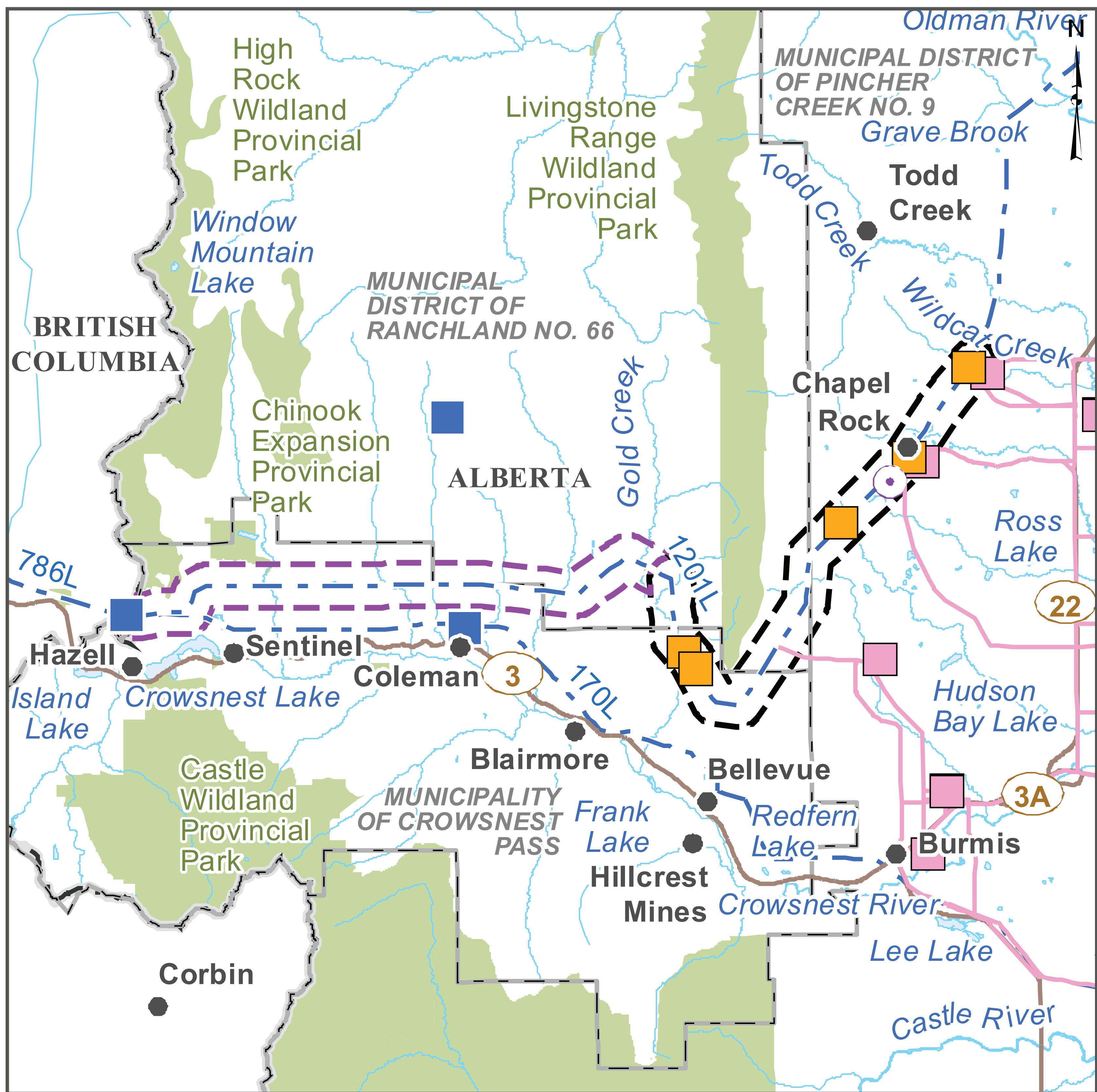
The project involves:

- adding new equipment along the existing 1201L transmission line, including a telecommunications tower and series capacitor (which looks similar to a substation)
  - adding new equipment and expanding the fenceline at the Bennett Substation, which is located southwest of Langdon
  - modifications to some structures along the 1201L may also be required, and the locations of this work will be determined at a later date
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# Intertie Restoration Project map



## LEGEND

- |  |                            |                              |  |
|--|----------------------------|------------------------------|--|
| Potential Series Capacitor Location    | Study Area                 | River or Stream              | <b>Other AltaLink Project</b>                                  |
| Potential Telecommunication Tower Site | Existing Substation        | Park / Other Protected Area  | Potential Chapel Rock to Pincher Creek Substation Target Area  |
| Expanded Study Area                    | Existing Transmission Line | Municipal or County Boundary | Potential Chapel Rock to Pincher Creek Transmission Line Route |
|  | Hamlet or Locality         | Provincial Boundary          |  |
|  | Major Road                 | Water Body                   |  |



# Intertie Restoration Project schedule & next steps

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**Notify and consult with stakeholders:**

Fall 2018 to Summer 2019

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**File application with the AUC:**

Fall 2019

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**Start construction if project is approved:**

Fall 2020

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**Anticipated construction completion:**

Fall 2021

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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.