

Birtle Transmission Project

Round 1

Alternative routes and potential border crossings

What is it and why do we need it?

Manitoba Hydro is proposing to construct a 230-kilovolt transmission line to the Manitoba–Saskatchewan border. This transmission line is needed to fulfill a 20-year agreement to sell 100 megawatts (equivalent to powering 40,000 homes) of renewable hydroelectricity to SaskPower, beginning in 2020–2021.

Why does Manitoba Hydro export power?

In 2013–14, Manitoba Hydro export sales totaled \$439 million. These export sales to neighbouring provinces and the United States produce additional revenue for Manitoba Hydro. They offset the revenue needed from Manitoba customers and keep electricity rates lower than they would otherwise be.

Why do we have surplus electricity to export?

We have surplus energy because the construction of new hydroelectric generating stations adds a lot of additional electricity supply to our system all at once. Exports provide an interim outlet for this surplus electricity and an important source of additional revenue as the province's usage catches up.

In addition, Manitoba Hydro's hydroelectric system is designed to meet Manitoba's electricity demand even

during years of low water flows. Most years our water supply has produced more electricity than is required in the province. Export sales provide an outlet for this excess electricity and therefore a revenue stream that helps keep energy prices lower for Manitobans.

For more information on the value of exports, see our video on the project website www.hydro.mb.ca/birtle

Why does Saskatchewan want our power?

SaskPower announced last year it plans to double the percentage of its renewable electricity generation capacity up to 50 per cent by 2030. Meeting this target will significantly reduce greenhouse gas emissions – about 40 per cent below 2005 levels. The plan calls for an expansion of wind power and other renewables, to go along with the Boundary Dam 3 carbon capture project and natural gas generation.

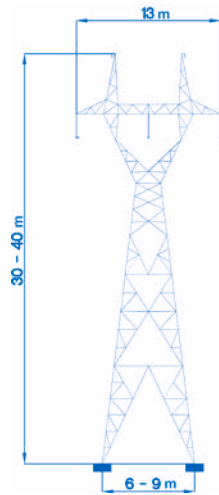
Where is the project located?

The Birtle Transmission Project will originate at the Birtle Station, south of the community of Birtle, to the Manitoba–Saskatchewan border. A map of the alternative routes can be found on the reverse of this newsletter.

What will the line look like?

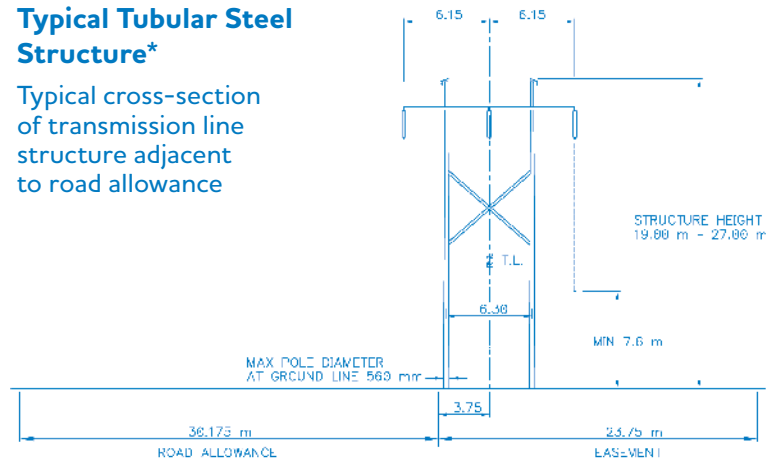
Depending on terrain and the location of the final preferred route, the following tower designs will be used if the project is approved.

Self Supporting Suspension Lattice Steel Structure*



Typical Tubular Steel Structure*

Typical cross-section of transmission line structure adjacent to road allowance



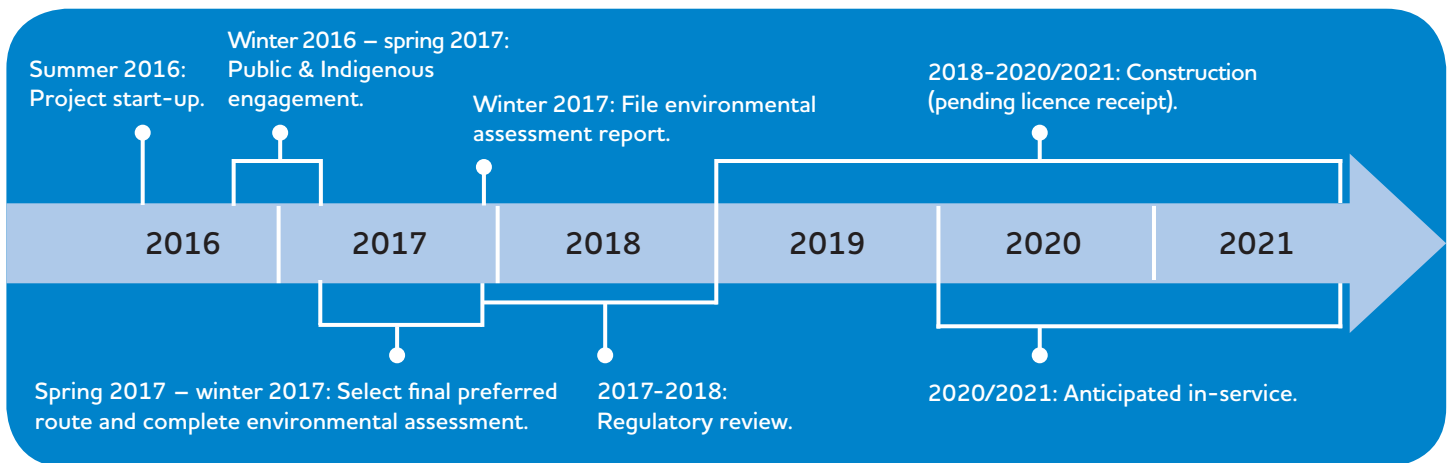
* Tower height and design are estimations and are dependent on terrain and final placement of the transmission line.

Transmission line routing

Feedback received through the engagement and environmental assessment processes will assist in determining a final preferred route for the project. The route selection process considers how well routes balance potential effects to human, technical and natural environments. Data gathering, on the ground fieldwork, and the input of numerous technical specialists, the public, Indigenous communities/organizations, and stakeholders will be taken into account when determining the final placement of the transmission line.

Project timelines

The proposed Birtle Transmission Project schedule (anticipated):



The schedule is subject to change as we progress through the routing and environmental assessment processes.

Environmental assessment

An environmental assessment (EA) report will be developed and submitted to the Environmental Approvals Branch of Manitoba Sustainable Development for review. The project is classified as a Class 2 Project under *The Environment Act*.

The EA report for the project will include:

- a description of the project, through construction, operation, and maintenance;
- study area characterization through fieldwork and background investigation;
- an outline of the public and Indigenous engagement processes, and the feedback received;
- identification and assessment of potential environmental and socio-economic effects; and
- development of mitigation measures to minimize negative effects while enhancing positive effects on people and the environment.

We would like to hear from you.

For more information about the Birtle Transmission Project and to sign up for email notices, please visit www.hydro.mb.ca/birtle.

If you would like further information please contact us at LEAprojects@hydro.mb.ca or call 1-877-343-1631.

How can I be involved?

We welcome feedback as it helps inform the environmental assessment and the routing processes for the project.

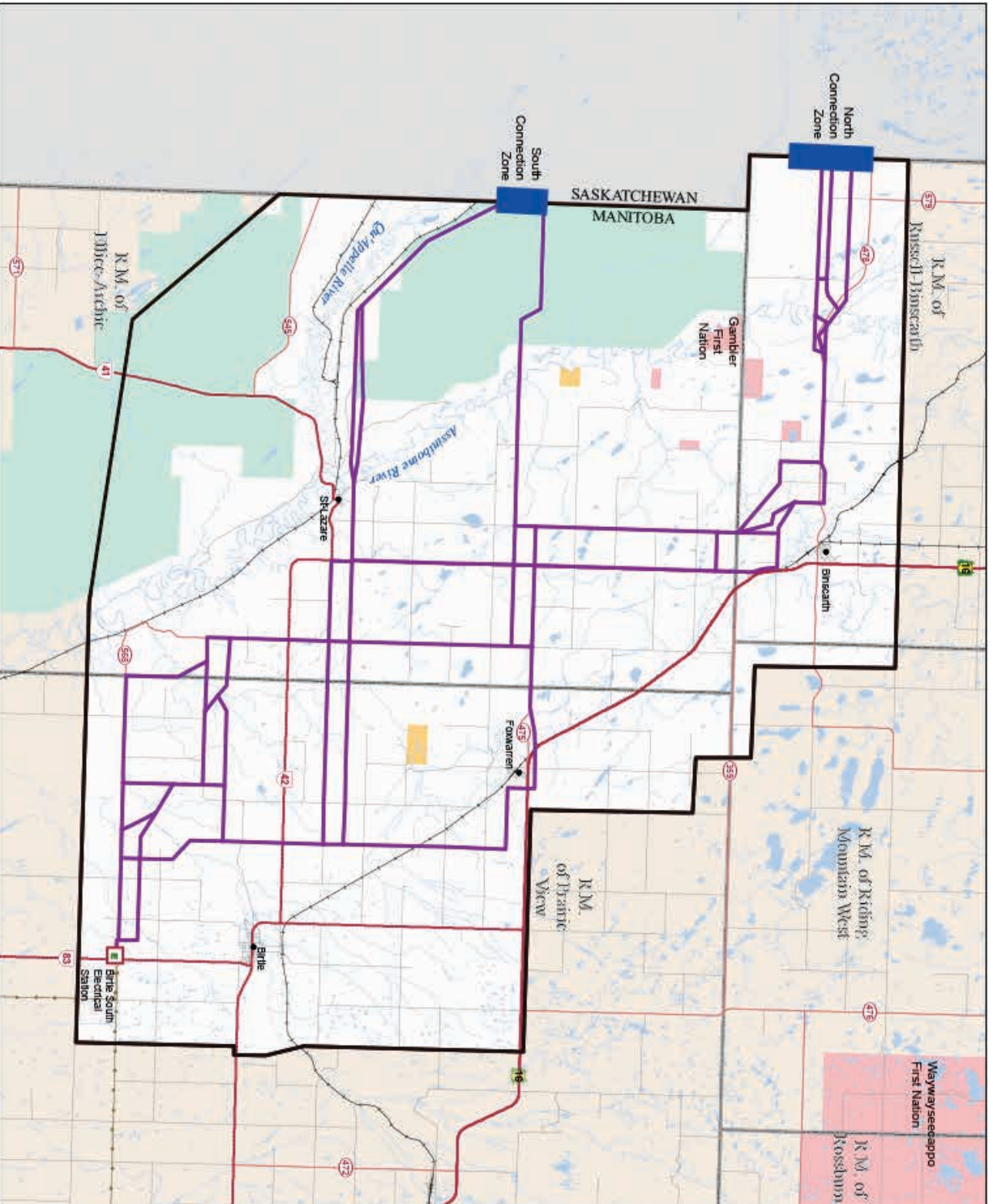
The engagement goals for the Birtle Transmission Project include:

- sharing information;
- learning about and understanding local interests;
- integrating interests and concerns into the assessment process; and
- discussing potential mitigation measures.

These goals will be met by:

- involving the public and Indigenous communities and organizations throughout the routing and environmental assessment stages;
- providing clear, timely, and relevant information and responses;
- delivering engagement processes that are adaptive and inclusive;
- informing the public and Indigenous communities as to how their feedback influenced the project; and
- documenting and reporting on feedback received.

We will use a variety of notification methods to inform Indigenous communities and the public of upcoming project activities.



Birle Transmission Project

- Project Infrastructure
- Alternative Routes
- Border Connection Zone
- Alternative Route Study Area

- Infrastructure
- Birle South Electrical Station
- Transmission Lines

- Landbase**
- Community
- Provincial Trunk Highway
- Provincial Road
- Road (Other)
- Rail
- Rural Municipality
- First Nation
- Wildlife Management Area
- Community Pastures
- Watercourse
- Wetland

Coordinate System: UTM, Zone 14N, NAD83
 Data Source: Manitoba Hydro, Environment Canada, NRCan
 Date Created: October 27, 2015

0 0.5 1 2 4 Kilometres
 0 0.5 1 2 Miles

1:150,000

Alternative Routes