# Pointe du Bois to Whiteshell (PW75) Transmission Project

# Additional Information

Prepared by Manitoba Hydro

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Asset Planning and Delivery

Transmission & Distribution
Environment and Engagement

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Prepared for:

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Manitoba Hydro

# Land acknowledgement

Manitoba Hydro has a presence across Manitoba, on Treaty 1, Treaty 2, Treaty 3, Treaty 4, and Treaty 5 lands – the original territories of the Anishinaabe, Anishininew, Cree, Dakota, and Dene peoples – and on the National Homeland of the Red River Métis. We acknowledge these lands and pay our respects to the ancestors of these territories.

The proposed Pointe du Bois to Whiteshell Transmission Project is on Treaty 1 and Treaty 3 lands, the original territories of the Anishinaabe, Anishininiwag and Cree peoples, and the National Homeland of the Red River Métis. We acknowledge these nations, who have occupied and cared for these lands for thousands of years and recognize the importance of learning and considering the unique perspectives these nations share throughout the project.

# 1.0 Introduction

Manitoba Hydro filed its Environment Act Proposal (EAP) for the development of a transmission line from Pointe du Bois to Whiteshell Station on July 7, 2023. Through ongoing engagement with Indigenous communities, landowners and interested parties, Manitoba Hydro has learned additional concerns related to the route alignment of the final preferred route presented in the EAP and is proposing three route adjustments.

This report describes three major route alterations being proposed including engagement activities that have taken place about the proposed adjustments and the ways the proposed adjustments may differently interact with the biophysical, socioeconomic, and cultural environment as compared to the final preferred route presented in the Manitoba Hydro's July 2023 EAP.

The proposed adjustments were reviewed against the valued components assessed in the EAP and the residual effects characterizations presented within to understand the net increase or decrease in effects anticipated to result from the project as a result of the route alterations. In the following sections, each route alteration is considered separately followed by an evaluation of the overall proposed adjusted route, including all three proposed adjustments described.

## 1.1 Petroform route adjustment

This route adjustment is the result of Manitoba Hydro and Peguis First Nation undertaking heritage resource impact assessment field activities in late September 2023. Petroforms and petroform remnants were discovered within, and immediately adjacent to, the right-of-way of the proposed final preferred route (FPR) that was presented in the environmental assessment report. Manitoba Hydro notified all engaged Indigenous communities of this discovery and sought support from communities with respect to ceremonial activities and a potential route adjustment and/or additional mitigation that could be undertaken to eliminate potential project-related effects to the known petroforms or petroform remnants.

### 1.1.1 Description of route adjustment

From the existing right-of-way between Pointe du Bois and Lee River Distribution Supply Centre (DSC), the proposed adjustment continues south following a path that angles more easterly than the original final preferred route for approximately 1.3 km before travelling southwest for approximately 2 km, running in between two areas in

which petroforms and petroform reminants were discovered, before proceeding south (SSW) to reconnect with the final preferred route presented in the EAP.

Alternaitive routes were considered to the east of the final preferred route but were rejected due to known and potential petroforms and remnants, federal land ownership, accessibility for long term maintenance, wetlands, exsiting alignment hower the

A map of this route adjustment is included in the appendix.

### 1.1.2 Engagement activities

Manitoba Hydro supported the following activities with Indigenous communities and Historic Resources Branch to understand the extent of the area that could contain petroforms and to inform the location of the proposed route adjustment.

- September 25-29, 2023: petroforms initially discovered by Manitoba Hydro's project archaeologist (InterGroup Consultants Ltd.) and Peguis First Nation.
- October 19, 2023: Historic Resources Branch visited the site with the project archaeologist.
- October 24, 2023: Manitoba Hydro notified all engaged First Nation and Métis audiences that a ceremony was being held along the proposed right-of-way.
- October 29, 2023: A ceremony was held at the petroforms complex. At this ceremony, participants expressed a desire to host a spring ceremony to continue to honour the site.
- November 3, 2023: A field tour was held at the petroforms complex with attendance from Sagkeeng Anicinabe First Nation and Black River First Nation.
- December 7, 2023: Manitoba Hydro notified all engaged First Nation and Métis audiences that petroforms had been identified along the proposed right-of-way and offered to coordinate tours to the site if there was any interest.
- January 31, 2024: The petroforms complex and potential mitigation measures were discussed at a meeting with Sagkeeng Anicinabe First Nation. Sagkeeng Anicinabe First Nation expressed an interest in holding a spring ceremony at the site and that they would need to look into the area in more detail before sharing feedback on how best to protect the area.
- May 15, 2024: A field investigation was held to determine whether it would be possible to move the proposed PW75 transmission line right of way to avoid the recorded petroforms, or whether the surrounding area was also host to other rock formations likely to be petroforms. Additional rock formations were identitfied.
- May 29, 2024: A ceremony and joint community meeting was held at the petroforms complex. The ceremony included a pipe ceremony and a water

ceremony. The community meeting included a discussion on how best to protect the petroforms.
    - During the joint community meeting, participants proposed moving the final preferred route to avoid the petroforms, and drew an alternative segment to the west of the petroforms complex. Participants asked Manitoba Hydro to investigate potential re-alignment options to avoid the petroforms complex.
- November 22, 2024: Using the suggestions provided at the May 29, 2024 joint community meeting, Manitoba Hydro formally shared a proposed corridor that was being considered for re-alignment around the petroforms to all engaged First Nation and Métis audiences through email. In the email, Manitoba Hydro asked for feedback on the proposed re-alignment and if there any route options within the re-alignment that should be considered. Manitoba Hydro also asked for receipients if there were suggested mitigation measures for the petroforms complex if the final preferred route did not move.
- November 25, 27 & 28, 2024: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed corridor for feedback and also presented mitigation measures that have been used at cultural sites on other transmission line projects that could be used to protect the petroforms complex.
- February 3-5, 2025: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed corridor for feedback and also presented mitigation measures that have been used at cultural sites on other transmission line projects that could be used to protect the petroforms complex.

To-date, Manitoba Hydro has not received any feedback on the proposed re-alignment corridor that was shared on November 22, 2024.

### 1.1.3 Additional mitigation

- Manitoba Hydro will submit route adjustment for screening by Heritage Resources Branch.
- Manitoba Hydro will conduct and invite Indigenous communities to participate in heritage investigations along route adjustment in sping 2025.
- Manitoba Hydro will work with Indigenous to conduct a ceremony if desired.
- As part of its environmental protection planning the route adjustment area will be surveyed for environmental sensitivities such as stick nests, dens, rare plants.

### 1.1.4 Environmental assessment

The proposed petroform route adjustment was compared to the segment of the final preferred route presented in the EA (Figure 1) and its residual effects characterizations for each valued component.

Figure 1: Petroform route adjustment area. The solid line represents the final preferred route presented in the EAP and the dotted line represents the proposed route adjustment.

Based on comparison with the final preferred route presented in the EAP, the proposed adjustment in the petroform area results in a route that is approximately 270 metres shorter and occupies an area that is approximately 1.6 ha smaller. Potential changes to residual effects on each valued component anticipated as a result of this adjustment are summarized below in Table 1.

Table 1: Summary of potential changes to valued components anticipated as the result of the proposed route adjustment in the petroform area

| Valued component | Potential change in effects |
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| Harvesting and important sites | The proposed adjustment is anticipated to reduce project effects to important sites by avoiding the petroforms complex, an area of known important sites for First Nations peoples and Red River Métis citizens.<br><br>There are no anticipated changes to predicted project effects on access, harvested resources, or the experience of harvesting or visiting important sites. |
| Heritage resources | A reduction in project effects is anticipated by avoiding the petroforms complex, which is now registered with the Historic Resources Branch, and therefore decreasing the number of heritage resources altered or lost as a result of the project. |
| Birds and bird habitat | No anticipated net change in effects on bird habitat or mortality risk.<br><br>Although the route alternative involves slightly more wetland, it slightly reduces the amount of forested habitat, and does not change the areas of lakes/rivers or tame pasture overlapped by the transmission line footprint. |
| Fish and fish habitat | No anticipated net change in effects on fish habitat or mortality risk.<br><br>The proposed adjustment does not result in any changes to the project interactions with riparian areas or water (*i.e.,* lakes/rivers) |
| Wetlands | The right-of-way for the proposed adjustment overlaps < 2 ha of additional wetland when compared to the EAP final preferred route in this area. This represents an increase in the amount of wetlands in the transmission line project footprint of approximately 3%. |

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| Amphibians and reptiles | The assessment of effects on amphibians and reptiles relied on the assessment of project effects on wetlands providing amphibian and reptile habitat. As above, there will be an approximate 3% increase in wetlands intersected by this proposed route adjustment. |
| Vegetation | The proposed route adjustment involves approximately 1 ha less native upland vegetation (coniferous, deciduous, and mixedwood forests). There are no native grasslands or shrublands in the area affected by this proposed route adjustment. |
| Terrestrial wildlife and wildlife habitat | The assessment of effects on terrestrial wildlife and wildlife habitat relied on the assessment of project effects on wetland, shrub, forest, native and tame grasslands as well as habitat intactness.<br>Overall, the proposed route adjustment involves <2 ha more wetland and approximately 1 ha less forest.<br>There are no native grasslands or shrublands in the area affected by this proposed route adjustment. |
| Infrastructure and community services | No changes anticipated. |
| Land and resource use | The proposed adjustment continues to involve a mix of Crown and private lands. Although the route location is shifted to different parcels, no new landowners are affected. The proposed route adjustment shifts the line closer to dwellings along Beluk Road with the closest being approximately 200 m from the proposed alteration. |
| Commercial agriculture | The proposed route adjustment involves approximately 1 ha less agricultural land including annual crop land and hayland. |
| Economic opportunities | No changes anticipated. |

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| Well-being (human health) | No changes to residual effects related to human health (air quality, noise, wild food quality, EMF) are anticipated.<br><br>As it relates to more subjective influences on well-being (*e.g.,* perceived impacts, changes to aesthetics, tranquility, and connection to land), the route adjustment may result in different effects to different subjects. The adjustment is anticipated to reduce residual effects on the well-being of those individuals and communities who place value and importance on the protection of the petroform area, while others may experience an increase in residual effects to well-being if the proposed adjustment has shifted the project to a location that is nearer to their home or areas they visit and will be more readily percieved and experienced. |

## 1.2 Whitemouth Falls Provincial Park route adjustment

This route adjustment is to address concerns Manitoba Hydro heard from Manitoba Parks with respect to the impacts of the development on Whitemouth Falls Provincial Park. Due to the complexity of crossing the Winnipeg River and adjacent transmission lines additional engineering design studies had to be undertaken to determine if a route adjustment requested by Manitoba Parks to minimize land requirements within the park was technically feasible. Manitoba Hydro undertook the necessary engineering studies and engaged with Parks staff to determine a route adjustment that further reduces the land requirements within the park from the Final Preferred Route in our July 2023 proposal. Manitoba Parks is supportive of this route adjustment. While it does not eliminate any presence of the route within the park, it balances their concerns within technical engineering and cost constraints.

### 1.2.1 Description of route adjustment

This adjustment has moved the crossover point of the PW75 transmission line over an existing transmission line further to the north within the corridor, which reduces the right of way land requirements within the park. The adjustment also simplifies the alignment north of the Seven Sisters Generating Station to reduce erosion effects and construction complexities related to the former borrow sites.

A map of this route adjustment is included in the appendix.

### 1.2.2 Engagement activities

In a meeting with Manitoba Parks on September 26, 2024, Manitoba Hydro shared potential re-alignment options to reduce the amount of land being taken up by PW75 within Whitemouth Falls Provincial Park. Manitoba Parks provided feedback on the options provided and shared that their preference was for any option that minimized the amount of trees that needed to be taken out in the park.

Manitoba Hydro undertook the following activities with Indigenous communities to explain the route adjustment.

- November 22, 2024: Manitoba Hydro formally shared the proposed realignment with all engaged First Nation and Métis audiences through email and asked for feedback on the proposed re-alignment. Manitoba Hydro shared that the new proposed re-alignment would use less provincial park land and more Manitoba Hydro property, and would reduce the amount of land with high heritage potential traversed by the land.

- November 25, 27 & 28, 2024: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed re-alignment for feedback.
- February 3-5, 2025: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed route adjustment for feedback.

### 1.2.3 Additional mitigation

- Manitoba Hydro will adjust its construction practices to ensure there are no additional clearing requirements for stringing within the Park outside of the ROW.
- Manitoba Hydro will retain treed vegetation within the sliver polygon within the Park between the new ROW and the corridor.
- Tower placement has been designed to not conflict with current trails and roads within the Park.
- Manitoba Hydro will work with Parks staff and notify Park user groups of temporary trail closures to facilitate safe construction.
- As part of environmental protection planning the route adjustment area will be surveyed for environmental sensitivities such as stick nests, dens, rare plants.

### 1.2.4 Environmental assessment

The proposed Whitemouth Falls Provincial Park route adjustment was compared to the segment of the final preferred route presented in the EA (Figure 2) and its residual effects characterizations for each valued component.

Figure 2: Whitemouth Falls Provincial Park route adjustment area. The solid line represents the final preferred route presented in the EAP and the dotted line represents the proposed route alteration.

Based on comparison with the final preferred route presented in the EAP, the proposed adjustment in the Whitemouth Falls Provincial Park area results in a route that is approximately 100 metres shorter and occupies an area that is approximately 0.6 ha smaller. Potential changes to residual effects on each valued component anticipated as a result of this adjustment are summarized below in Table 2.

Table 2: Summary of potential changes to valued components anticipated as the result of the proposed route adjustment in Whitemouth Falls Provincial Park

| Valued component | Potential change in effects |
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| Harvesting and important sites | Based on the anticipated reduction to the amount of land with high heritage potential and the limited changes to land cover types that may support harvesting (*e.g.,* forest and wetlands), residual effects on harvesting and importance sites are anticipated to be slightly less as the result of the proposed adjustment. |
| Heritage resources | It is anticipated that the proposed adjustment will reduce the amount of land with high heritage potential that is traversed by the project. |
| Birds and bird habitat | No anticipated net change in effects on bird habitat or mortality risk.<br>The route adjustment involves slightly more riparian and forest areas, but a reduced area of wetland. There are no grasslands in the area of this proposed adjustment. |
| Fish and fish habitat | No anticipated net change is anticipated to fish and fish habitat. Changes to land cover types traversed by the proposed adjustment are slight, involving approximately 0.3 ha more riparian habitat and a slight increase in the area of water within the right-of-way (~0.1 ha). |
| Wetlands | The right-of-way for the proposed adjustment overlaps approximately 1.4 ha less wetland than the preferred route presented in the EAP. |
| Amphibians and reptiles | The assessment of effects on amphibians and reptiles relied on the assessment of project effects on wetlands providing amphibian and reptile habitat. As above, there will be an approximately 1.4 ha less wetlands intersected by this proposed route adjustment. |

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| Vegetation | The proposed route adjustment involves minimally more native upland vegetation (approximately 0.2 ha of deciduous forest). There are no native grasslands or shrublands in the area affected by this proposed route adjustment. |
| Terrestrial wildlife and wildlife habitat | The assessment of effects on terrestrial wildlife and wildlife habitat relied on the assessment of project effects on wetland, shrub, forest, native and tame grasslands as well as habitat intactness.<br><br>Overall, the proposed route adjustment involves approximately 1.4 ha less wetland and slightly more forest than the final preferred route presented in the EAP. There are no native grasslands or shrublands in the area affected by this proposed route adjustment. No net changes in residual effects on terrestrial wildlife and wildlife habitat are anticipated. |
| Infrastructure and community services | No changes anticipated. |
| Land and resource use | The proposed alteration shifts a greater proportion of the transmission line right-of-way in this area onto property already owned by Manitoba Hydro, occupying less space within Whiteshell Falls Provincial Park. There are no anticipated changes to residual effects on residences or other special features relevant to land and resource use in the area. |
| Commercial agriculture | No changes anticipated. This proposed adjustement does not involve areas used for agriculture. |
| Economic opportunities | No changes anticipated. |
| Well-being (human health) | No changes to residual effects related to human health (air quality, noise, wild food quality, EMF) are anticipated. |

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| | As it relates to more subjective influences on well-being (*e.g.,* perceived impacts, changes to aesthetics, tranquility, and connection to land), the route adjustment may result in different effects to different subjects, however net changes to residual effects on well-being are not anticipated as a result of this proposed adjustment. |

## 1.3 Provincial Road route adjustment

This route adjustment is to address concerns Manitoba Hydro heard from Manitoba Parks with respect to the offset in paralleling the cleared ROW's of Provincial roads 520 and 211. Manitoba Transportation and Infrastructure (MTI) has additional uncleared control zone along PR 520 that Manitoba Hydro is typically not permitted to develop in. This forced the Final Preferred Route further into the Provincial Park and created a sliver of trees between the PW75 ROW and the cleared portion of the Provincial Road. This sliver of trees created concern by resource managers with respect to illegal motorized recreation and hunting as it was not easily patrollable by enforcement officers. Manitoba Hydro had initial conversations with MTI during development of the Final Preferred Route but until final engineering design and available for review MTI was unable to commit to how close the towers could be to the cleared road right of way. We have come to agreement with MTI to eliminating the slivers of uncleared forest and reducing the land requirements within the Whiteshell Provincial Park. Manitoba Parks is supportive of this route adjustment while it does not eliminate any presence of the route within the Park it balances their concerns within technical engineering and cost constraints.

### 1.3.1 Description of route adjustment

This adjustment has shifted the final preferred route 50m west towards PR 520 and 12m south towards PR211.

A map of this route adjustment is included in the appendix.

### 1.3.2 Engagement activities

In a meeting with Manitoba Parks on September 26, 2024, Manitoba Hydro shared that conversations with MTI were ongoing to investigate moving the final preferred route closer to PR 520 and PR 211. Manitoba Parks shared that this route adjustment was beneficial since it would eliminate the corridor being created west of the tree line that would be difficult to monitor and enforce illegal motorized recreation and hunting.

Manitoba Hydro undertook the following activities with Indigenous communities to explain the route adjustment.

- November 22, 2024: Manitoba Hydro formally shared a proposed corridor that was being considered for re-alignment around the petroforms to all engaged First Nation and Métis audiences through email. In the email, Manitoba Hydro asked for feedback on the proposed re-alignment. Manitoba Hydro shared that the new proposed re-alignment would reduce the amount of land that needs to be cleared for the transmission line and that the right-of-way for PW75 would overlap with the provincial road right-of-way.
- November 25, 27 & 28, 2024: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed re-alignment for feedback.
- February 3-5, 2025: Manitoba Hydro met with Peguis First Nation as part of the Crown Indigenous consultation process for PW75. Duirng this meeting, Manitoba Hydro presented the proposed re-alignment for feedback.

### 1.3.3 Additional mitigation

- Manitoba Hydro will only use self-supporting towers within MTI's control zone.
- Tower height restricted so that in the event of a collapse, tower would not obstruct travel lane.
- As part of environmental protection planning the route adjustment area will be surveyed for environmental sensitivities such as stick nests, dens, rare plants.

### 1.3.4 Environmental assessment

The proposed provincial road route adjustment was compared to the segment of the final preferred route presented in the EA (Figure 3) and its residual effects characterizations for each valued component.

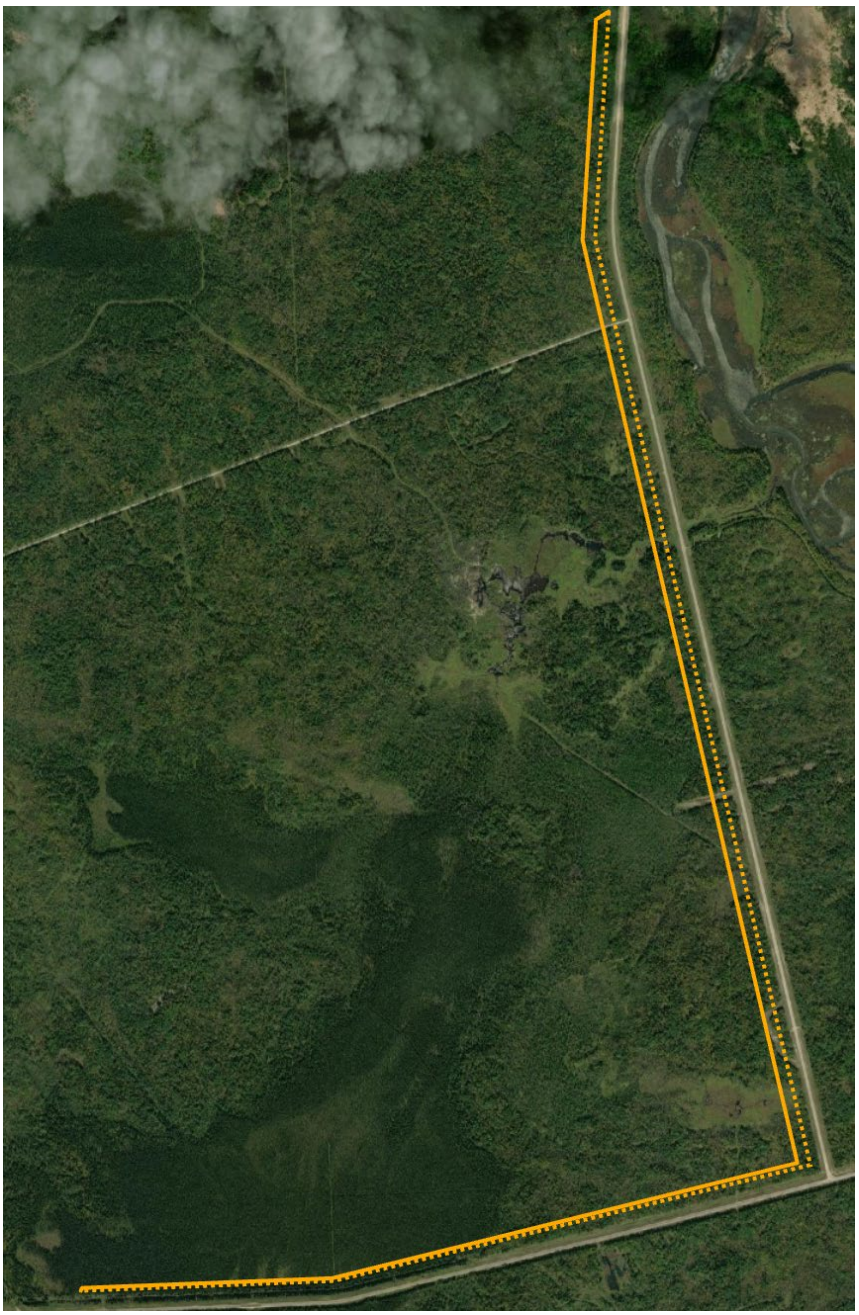

Figure 3: Provincial Road 520 & 211 route adjustment area. The solid line represents the final preferred route presented in the EAP and the dotted line represents the proposed route alteration.

Based on comparison with the final preferred route presented in the EAP, the proposed route adjustment along Provincial Roads 520 & 211 results in a route that is approximately 24 metres longer and approximately 0.1 ha larger. Potential changes

to residual effects on each valued component anticipated as a result of this adjustment are summarized below in Table 3.

Table 3: Summary of potential changes to valued components anticipated as the result of the proposed route adjustment adjacent to Provincial Roads 520 & 211

| Valued component | Potential change in effects |
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| Harvesting and important sites | No anticipated change. |
| Heritage resources | No anticipated change. |
| Birds and bird habitat | No anticipated net change in effects on bird habitat or mortality risk.<br>The route alternative involves slightly more native upland vegetation (forest and shrubland) and water, but a reduced area of wetland. There are no grasslands in the area of this proposed adjustment. |
| Fish and fish habitat | No anticipated net change is anticipated to fish and fish habitat. There is no riparian habitat in the area of the proposed adjustment. |
| Wetlands | The right-of-way for the proposed adjustment overlaps approximately 1 ha less wetland than the preferred route presented in the EAP. |
| Amphibians and reptiles | The assessment of effects on amphibians and reptiles relied on the assessment of project effects on wetlands providing amphibian and reptile habitat. As above, there will be an approximately 1 ha less wetlands intersected by this proposed route adjustment. |
| Vegetation | The proposed route adjustment involves minimally more native upland vegetation (approximately 0.4 ha of deciduous forest, coniferous forest, and shrubland). |

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| | There are no native grasslands in the area affected by this proposed route adjustment. |
| Terrestrial wildlife and wildlife habitat | The assessment of effects on terrestrial wildlife and wildlife habitat relied on the assessment of project effects on wetland, shrub, forest, native and tame grasslands as well as habitat intactness.<br><br>The proposed route adjustment involves approximately 1 ha less wetland and slightly more native upland vegetation than the final preferred route presented in the EAP. There are no native grasslands in the area affected by this proposed route adjustment. No net changes in residual effects on terrestrial wildlife and wildlife habitat are anticipated. |
| Infrastructure and community services | No changes anticipated. |
| Land and resource use | No changes anticipated. |
| Commercial agriculture | No changes anticipated. This proposed adjustement does not involve areas used for agriculture. |
| Economic opportunities | No changes anticipated. |
| Well-being (human health) | No changes to residual effects related to human health (air quality, noise, wild food quality, EMF) are anticipated.<br><br>As it relates to more subjective influences on well-being (*e.g.,* perceived impacts, changes to aesthetics, tranquility, and connection to land), the route alteration may result in different effects to different subjects, however net changes to residual effects on well-being are not anticipated as a result of this proposed adjustment. |

## 1.4 Conclusion

The anticipated overall changes to residual project effects resulting from the proposed adjusted route, including the three proposed route adjustments described above, and following the implementation of proposed additional mitigation measures, are summarized for each valued component in Table 4.

Land cover metrics comparing the transmission line footprint with the three proposed route adjustmants with the transmission line footprint of the final preferred route presented in the EAP are included in the appendix (Table A-1).

Table 4: Summary of potential overall changes to valued components anticipated as the result of the proposed adjusted route

| Valued component | Potential change in effects |
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| Harvesting and important sites | A reduction in project effects to important sites is anticipated as the result of avoidance of the petroform complex area, which is an area of known importance to First Nations peoples and Red River Métis citizens, and the reduction in interactions with areas of high heritage potential resulting from the Whitemouth Falls Provincial Park route adjustment. There are no anticipated net changes to effects on access, harvested resources, or the experience of harvesting or visiting important sites.<br><br>The EAP characterized residual project effects on harvesting and important sites between low and moderate. The effects were deemed not significant. **There is no change to the conclusions of the assessment for harvesting and important sites.** |
| Heritage resources | A reduction in project effects to heritage resources is anticipated as the result of avoidance of the petroforms complex, which is now registered with the Historic Resources Branch, and the reduction in interactions with areas of high heritage potential resulting from the Whitemouth Falls Provincial Park route adjustment.<br><br>The EAP characterized residual project effects on heritage resources as low. The effects were deemed not |

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| | significant. **There is no change to the conclusions of the assessment for heritage resources.** |
| Birds and bird habitat | Overall, the proposed route adjustments result in a route involves small differences to the amount of land cover types providing bird habitat including approximately 0.4 ha more wetland, 1.4 ha more native upland vegetation (forest and shrubland), and 0.3 ha more lake/river cover which may have the potential to concentrate birds. There is no change to tame pasture.<br><br>The adjusted route intersects less bird species at risk habitat for the yellow rail (approximately 0.5 ha), eastern wood-peewee (4.8 ha), eastern whip-poor-will (4.7 ha), barn swallow (0.3 ha), olive-sided flycatcher (2.9 ha), red-headed woodpecker (0.3 ha), common nighthawk (0.1 ha).<br><br>The adjusted route intersects more bird species at risk habitat for rusty blackbird (0.7 ha), short-eared owl (0.6 ha), horned grebe (0.5 ha), and Canada warbler (0.3 ha).<br><br>The EAP characterized residual project effects on birds and bird habitat as low. The effects were deemed not significant.<br><br>The only potential change to the effect characterization identified is for the horned grebe. With the proposed alterations, the project footprint is anticipated to potentially disrupt approximately 6% of horned grebe habitat in the Local Assessment Area (LAA) presented in the EAP. This raises the magnitude of effect from low to moderate for this species given that the threshold defined for a moderate characterization is: project changes 5-10% of habitat for bird species at risk and species of conservation concern in the LAA.<br><br>Pre-construction breeding bird surveys did not provide evidence of horned grebe in LAA |
| Fish and fish habitat | Overall changes to land cover types that may provide fish habitat along the proposed adjusted route are slight, |

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| | involving approximately 0.3 ha more riparian habitat and 0.8 ha more water.<br><br>The EAP characterized residual project effects on fish and fish habitat negligible and low. The effects were deemed not significant. **There is no change to the conclusions of the assessment for fish and fish habitat.** |
| Wetlands | Overall, the proposed adjusted route involves slightly more wetlands (approximately 0.4 ha or a 0.6% increase).<br><br>Within 50 meters of the right-of-way of the proposed adjusted route, there is approximately 3.2 ha less wetland than the final preferred route presented in the EAP. Wetland within 50 meters of the right-of-way were used to quantify the area at greatest risk of alteration in physical conditions and plant composition following findings of Abib et al. (2019).<br><br>The EAP characterized residual project effects on wetlands between low (for decommissioning) and moderate (for construction and operations). The effects were deemed not significant. **There is no change to the conclusions of the assessment for wetlands.** |
| Amphibians and reptiles | The assessment of effects on amphibians and reptiles relied on the assessment of project effects on wetlands providing amphibian and reptile habitat. As above, overall there will be a slight increase of approximately 0.4 ha in wetlands intersected by the project right-of-way.<br><br>The EAP characterized residual project effects on reptiles and amphibians between negligible (for change in habitat during operations) and low (for change in habitat during construction and changes in mortality risk during construction and operations). The effects were deemed not significant. **There is no change to the conclusions of the assessment for amphibians and reptiles.** |
| Vegetation | Overall, the proposed adjusted route results in an increase of approximately 1.4 ha in native upland vegetation intersected by the project right-of-way. This |

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| | net change includes increases in areas of deciduous forest and shrubland affected and decreases in the area of coniferous and mixedwood forest. The proposed adjusted route does not result in any changes to the area of native grassland affected by the project.<br><br>The right-of-way for the proposed adjusted route intersects approximately 2.9 more ha of intact natural areas. Adverse net changes to linear feature density are not anticipated.<br><br>The EAP characterized residual project effects on vegetation between low and high (for changes in species diversity for plant species of conservation concern). The effects were deemed not significant. **There is no change to the conclusions of the assessment for vegetation.** |
| Terrestrial wildlife and wildlife habitat | The assessment of effects on terrestrial wildlife and wildlife habitat relied on the assessment of project effects on wetland, shrub, forest, native and tame grasslands as well as habitat intactness.<br><br>Overall, the proposed adjusted route involves slight increases in the areas of wetland, shrubland, and forest intersected by the right-of-way (approximately 0.4 ha, 1.1 ha, and 0.3 ha respectively). There is no net change in the area of grasslands affected by the project.<br><br>The EAP characterized residual project effects on terrestrial wildlife and wildlife habitat as low. The effects were deemed not significant. **There is no change to the conclusions of the assessment for terrestrial wildlife and wildlife habitat.** |
| Infrastructure and community services | The EAP characterized residual project effects on infrastructure and community services between negligible (for change in solid waste management facilities) and low (for changes in accommodations, traffic volumes, transportation infrastructure, and health services and emergency response). The effects were deemed not significant. **There is no change to the** |

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| | **conclusions of the assessment for infrastructure and community services.** |
| Land and resource use | The proposed adjusted route does not include any additional residences along the right-of-way (*i.e.,* no relocated residences) nor does it result in a route that interacts with additional proposed developments. The route adjustment in the Whitemouth Falls Provincial Park area reduces the area of designated land intersected by the project.<br><br>The EAP characterized residual project effects on land and resource use between negligible and moderate. The effects were deemed not significant. **There is no change to the conclusions of the assessment for land and resource use.** |
| Commercial agriculture | Overall, the proposed adjusted route involves approximately 1 ha less agricultural land including approximately 0.4 ha less annual crop land and 0.6 ha less hayland. The proposed adjusted route interacts with one less area used for specialty agriculture.<br><br>The EAP characterized residual project effects on commercial agriculture between low and moderate. The effects were deemed not significant. **There is no change to the conclusions of the assessment for commercial agriculture.** |
| Economic opportunities | The EAP characterized residual project effects on economic opportunities to be positive and of low magnitude. The effects were deemed not significant. **There is no change to the conclusions of the assessment for economic opportunities.** |
| Well-being (human health) | The proposed adjusted route is not anticipated to change residual effects to human health, while it may change residual effects to individual and community well-being in different ways depending on their relationship to the environment in which the adjusted route will interact. Those who had concerns that helped inform the |

| | |
|---|---|
| | route adjustments (*e.g.,* those with interests in the petroform area or Whitemouth Falls Provincial Park) may experience a reduction in project effects on well-being, while those who may live or undertake activities in areas closed to the proposed adjusted route may experience greater project effects on their well-being.<br><br>For human health (air quality, noise, wild food quality, and EMF), the EAP characterized residual project effects as negligible. For influences on well-being that are experienced more subjectively (perceived health and stress, aesthetics, tranquility, connection to the land, and healthy populations), the EAP characterized residual project effects as ranging from negligible to high, acknowledging that the project may be uniquely experienced by different subjects.<br><br>In the EAP, effects on well-being, including human health. were deemed not significant. **There is no change to the conclusions of the assessment for well-being (human health).** |

Based on the measures and thresholds used in the EAP, the proposed adjusted route does not change the effects characterizations for any of the valued components with the exception of raising the magniture of potential effect for one specific bird species at risk (horned grebe) from low to moderate as described above.

**The conclusion remains that project effects are predicted to be not significant.**

# 2.0 Appendix

## 2.1 Land cover metrics

Table A-1: Comparison of land cover within: 1) the transmission line footprint with proposed route adjustments, and 2) the transmission line footprint of the final preferred route presented in the EAP

| Land Cover Class | Cover Type[1] | Transmission line footprint[4] with proposed route adjustments (ha) | EAP transmission line footprint[4] (ha) | Difference (+/- ha) |
|---|---|---|---|---|
| Agriculture | Annual Crop | 10.3 | 10.7 | -0.4 |
| | Hayland | 0.4 | 1.0 | -0.6 |
| | Tame Pasture | 4.7 | 4.7 | 0.0 |
| **Agriculture Total** | | **15.4** | **16.3** | **-1.0** |
| Developed | Developed | 2.4 | 2.6 | -0.2 |
| | Electrical Right-of-Way | 44.6 | 46.6 | -2.1 |
| | Industrial/Commercial | 2.7 | 2.7 | 0.0 |
| | Roads/Rail | 2.6 | 4.1 | -1.5 |
| **Developed Total** | | **52.3** | **56.1** | **-3.8** |
| Riparian | Deciduous Forest | 3.1 | 2.8 | 0.3 |
| | Fen - Forested | 1.2 | 1.2 | 0.0 |
| | Fen - Shrubby | 1.7 | 1.7 | 0.0 |
| | Marsh | 0.0 | 0.0 | 0.0 |
| | Native Grassland | 0.4 | 0.4 | 0.0 |
| | Naturally Barren/Rock Outcrop | 0.3 | 0.3 | -0.1 |
| | Swamp - Forested | 0.1 | 0.1 | 0.0 |
| | Swamp - Shrubby | 0.0 | | 0.0 |
| **Riparian Total** | | **6.8** | **6.5** | **0.3** |
| Upland | Coniferous Forest | 38.3 | 42.8 | -4.6 |
| | Deciduous Forest | 77.9 | 68.6 | 9.4 |
| | Mixedwood Forest | 43.4 | 47.9 | -4.5 |
| | Native Grassland | 0.4 | 0.4 | 0.0 |
| | Shrubland | 3.0 | 2.0 | 1.1 |
| **Upland Total** | | **163.0** | **161.6** | **1.4** |
| Water | Ditch/Canal | 1.0 | 0.4 | 0.5 |

Table A-1: Comparison of land cover within: 1) the transmission line footprint with proposed route adjustments, and 2) the transmission line footprint of the final preferred route presented in the EAP

| Land Cover Class | Cover Type[1] | Transmission line footprint[4] with proposed route adjustments (ha) | EAP transmission line footprint[4] (ha) | Difference (+/- ha) |
|---|---|---|---|---|
| | Lakes/Rivers | 4.8 | 4.6 | 0.3 |
| **Water Total** | | **5.8** | **5.0** | **0.8** |
| Wetland | Bog – Forested | 7.2 | 7.8 | -0.6 |
| | Fen – Forested | 16.9 | 16.8 | 0.1 |
| | Fen – Graminoid | 9.6 | 11.1 | -1.6 |
| | Fen – Shrubby | 18.7 | 17.2 | 1.4 |
| | Marsh | 2.5 | 2.4 | 0.1 |
| | Shallow Open Water | 2.9 | 2.2 | 0.7 |
| | Swamp – forested | 3.3 | 3.2 | 0.0 |
| | Swamp – shrubby | 2.0 | 1.9 | 0.2 |
| | Undifferentiated wetland – forested | 7.2 | 7.8 | -0.6 |
| **Wetland Total** | | **63.0** | **62.6** | **0.4** |
| **Grand Total** | | 306.3 | 308.2 | -1.9 |

[1] Based on desktop mapping data.

[2] Based on Land Cover Classification and Forest Resource Inventory data.

[3] Totals many not equal sums of individual values due to rounding.

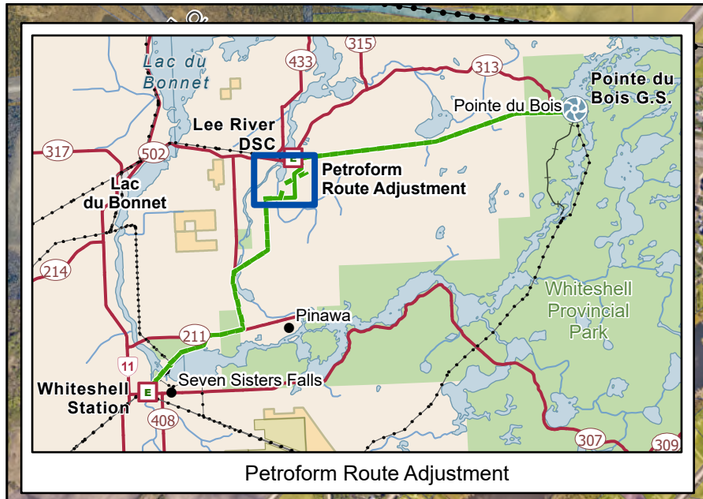
[4] Project footprints presented in this table are based on a 30 metre buffer (the right-of-way width) around the transmission line centerline, *i.e.,* transmission line footprint, rather than the entire PDA from the EAP, which includes the footprint of station components in addition to the transmission line.

## 2.2 Maps

Petroform route adjustment

Whitemouth Falls Provincial Park route adjustment

Provincial Road route adjustment




Petroform Route Adjustment

Lee River DSC

Manitoba Hydro

# Pointe du Bois (PW75) Transmission Project

**Project Infrastructure**
- Final Preferred Route
- Right-of-Way

**Route Adjustment**
- Proposed Route
- Proposed Right-of-Way

**Property Ownership**
- Crown
- Local Government
- Manitoba Hydro
- Private
- Road

**Existing Infrastructure**
- Electrical Station
- Generating Station
- Existing Transmission Line

**Landbase**
- Community
- Railway
- Provincial Highway
- Provincial Road
- First Nation
- Provincial Park
- Ecological Reserve
- Wildlife Management Area

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, ProvMB, NRCAN
Date Created: February 21, 2025

N

0 0.25 0.5 Kilometers
0 0.125 0.25 Miles

1:15,000

## Petroform Route Adjustment

Map 1

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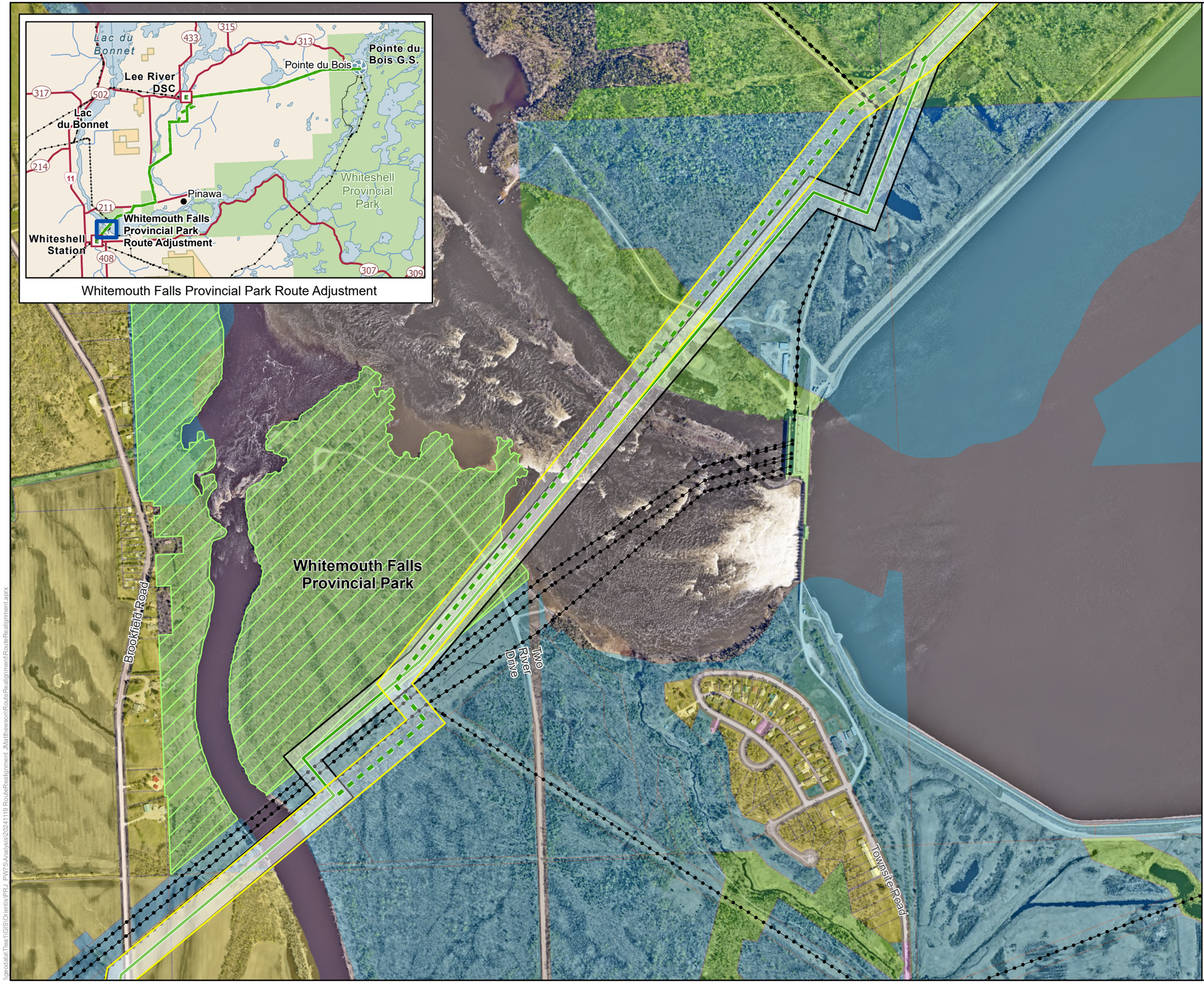


Whitemouth Falls Provincial Park Route Adjustment

Manitoba Hydro

# Pointe du Bois (PW75) Transmission Project

## Project Infrastructure
- Final Preferred Route
- Right-of-Way

## Route Adjustment
- Proposed Route
- Proposed Right-of-Way

## Property Ownership
- Crown
- Local Government
- Manitoba Hydro
- Private
- Road

## Existing Infrastructure
- Electrical Station
- Generating Station
- Existing Transmission Line

## Landbase
- Community
- Railway
- Provincial Highway
- Provincial Road
- First Nation
- Provincial Park
- Ecological Reserve
- Wildlife Management Area

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, ProvMB, NRCAN
Date Created: February 21, 2025

N

0 0.1 0.2 0.3 Kilometers
0 0.05 0.1 Miles

1:8,000

## Whitemouth Falls Provincial Park Route Adjustment

Map 2

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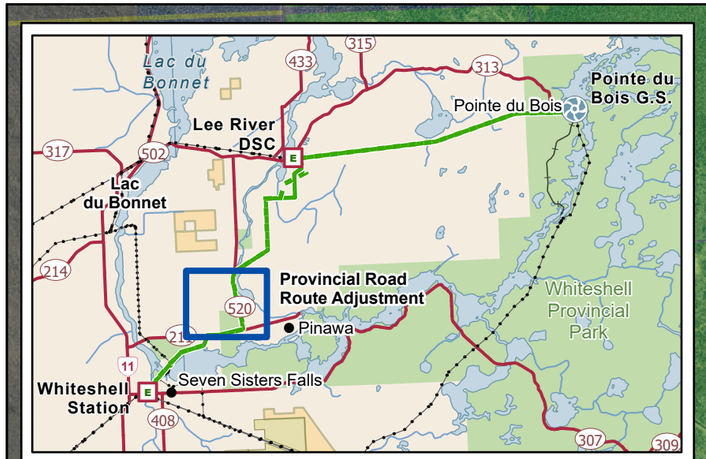

Provincial Road Route Adjustment

Shifting approximately 50 meters closer to PR 520

Shifting approximately 15 meters closer to PR 211

Whiteshell Provincial Park

1st Street Bay South

520

211

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Manitoba Hydro

# Pointe du Bois (PW75) Transmission Project

## Project Infrastructure
- Final Preferred Route
- Right-of-Way

## Route Adjustment
- Proposed Route
- Proposed Right-of-Way

## Property Ownership
- Crown
- Local Government
- Private
- Road

## Existing Infrastructure
- Electrical Station
- Generating Station
- Existing Transmission Line

## Landbase
- Community
- Railway
- Provincial Highway
- Provincial Road
- First Nation
- Provincial Park
- Ecological Reserve
- Wildlife Management Area

Coordinate System: UTM Zone 14N NAD83
Data Source: MBHydro, ProvMB, NRCAN
Date Created: February 21, 2025

N

0 0.25 0.5 0.75 Kilometers
0 0.125 0.25 Miles

1:20,000

# Provincial Road Route Adjustment

Map 3