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Transmission Line Environmental Review Report – Addendum #2

Prepared by:

AECOM Canada Ltd.
5080 Commerce Boulevard
Mississauga, ON L4W 4P2
Canada

T: 905 238 0007
F: 905 238 0038
www.aecom.com

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Authors

Report Prepared By:

Faranak Amirsalari, MES, MCIP, RPP
Environmental Planner
Faranak.Amirsalari@aecom.com

Report Reviewed By:

Sarah Palmer, P.Geo.
Senior Environmental Planner
T: 905-979-1375
sarah.palmer@aecom.com

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List of Acronyms and Glossary

AECOM .....AECOM Canada Ltd.
BMPs.....Best management practices
ELC .....Ecological Land Classification
FIT .....Feed-in-Tariff
HIFN.....Henvey Inlet First Nation
HIW .....Henvey Inlet Wind LP
HIWEC .....Henvey Inlet Wind Energy Centre
HIFN I.R. #2 .....Henvey Inlet First Nation Reserve No. 2
HONI .....Hydro One Networks Inc.
EMF.....Electromagnetic fields
ER .....Environmental Review
ERR.....Environmental Review Report
ESA .....Environmentally Significant Area
kV .....Kilovolts
m .....metre
MOECC.....Ontario Ministry of the Environment and Climate Change
MTO .....Ontario Ministry of Transportation
MW.....megawatt
Nigig. .....Nigig Power Corporation
OPA.....Ontario Power Authority
PPS .....Provincial Policy Statement
PSW .....Provincially Significant Wetland
ROW .....Right-Of-Way
SAR.....Species at Risk
SS .....Switching Station

1. Introduction and Background

1.1 Overview

Nigig Power Corporation (Nigig) received a Feed-in-Tariff (FIT) Contract from the Ontario Power Authority (OPA) in 2011 for a 300 megawatt (MW) wind energy generation centre. Henvey Inlet Wind LP (HIW), a limited partnership between Pattern Renewable Holdings Canada ULC and Nigig is proposing to develop the Henvey Inlet Wind Energy Centre (HIWEC), a 300 MW facility on Henvey Inlet First Nation Reserve No. 2 (HIFN I.R. #2).

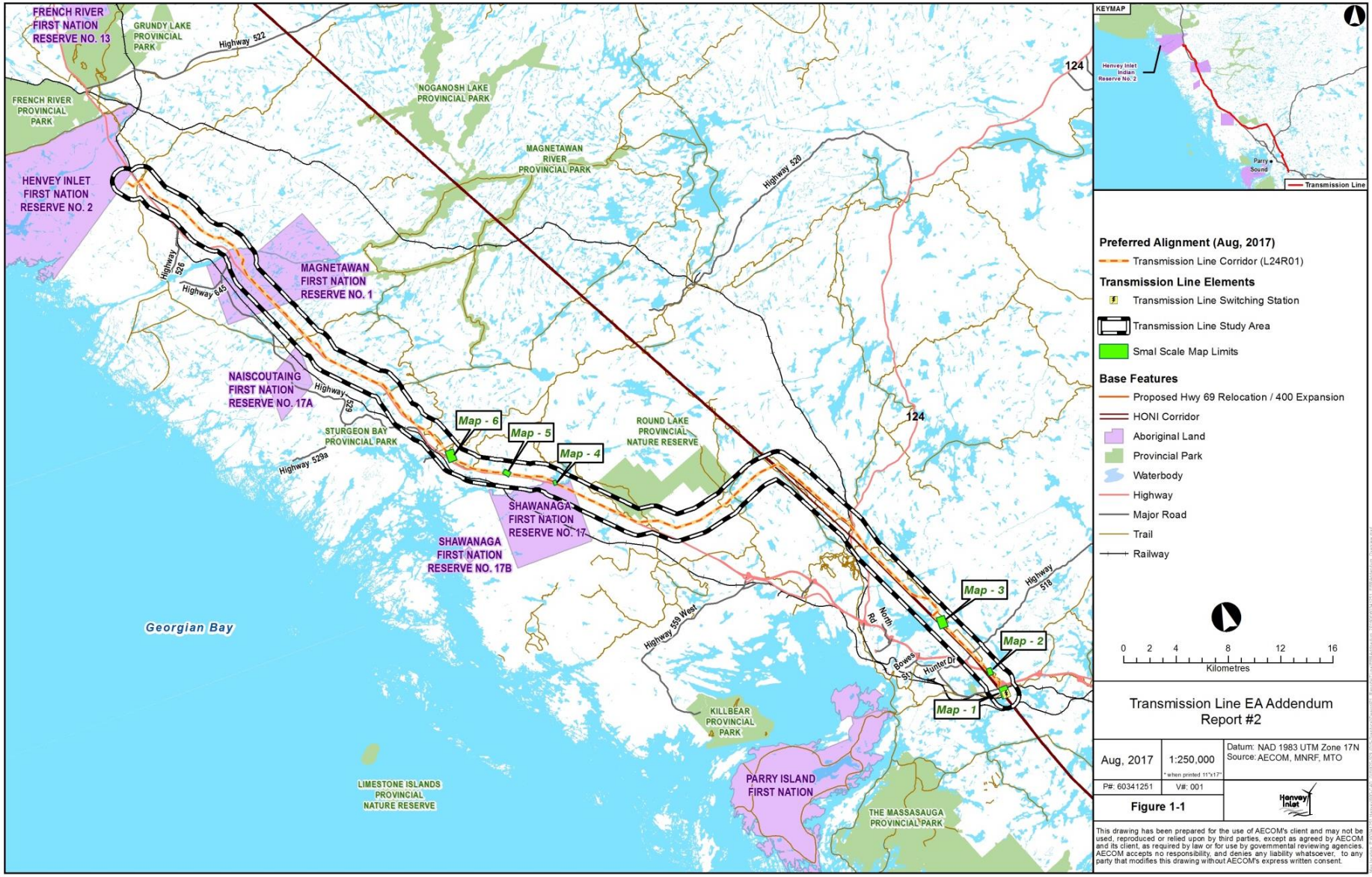
The HIWEC requires a new off-Reserve Transmission Line to deliver the electricity generated by the HIWEC to the Ontario electricity grid. The proposed off-Reserve Transmission Line is subject to an Environmental Screening Process under Ontario Regulation 116/01 (O.Reg. 116/01) and HIW completed an environmental review (ER) under this process.

The Final Environmental Review Report (ERR), including a review of existing conditions, potential effects, mitigation measures, stakeholder input and a description of consultation activities undertaken during the Environmental Assessment (EA) process was published for public and agency review and comment for 30 days, from September 30 to October 30, 2015. On June 7, 2016 the Minister of the Environment and Climate Change (MOECC) granted HIW permission to proceed with the implementation of the HIW Transmission Line. HIW filed a Statement of Completion for the ERR on June 17, 2016.

Since the publication of the Final ERR in September 2015, minor changes have been made to the alignment of the Transmission Line. Addendum #1 was issued in August 2016 to address changes where the Transmission Line alignment moved outside of the original 50 m easement but remained within the Transmission Line study area documented in the Final ERR.

The purpose of Addendum #2 is to address changes to the Transmission Line alignment and interconnect siting (see **Figure 1-1**) introduced after the publication of Addendum #1. The alignment changes outlined in this Addendum were undertaken based on requirements identified in detailed design and micro-siting and address issues such as wetland avoidance, Hydro One (HONI) infrastructure requirements and improved alignment with proposed infrastructure. The changes addressed within this Addendum remain within the Transmission Line study area documented in the final ERR; therefore, the environmental effects associated with the changes are similar to those identified in the Final ERR.

Figure 1-1: Transmission Line Realignment Overview



1.2 Ontario Regulation 116/01 Addendum Provisions

The Guide to Environmental Assessment Requirements for Electricity Projects (the Guide) describes the addendum provisions under O.Reg. 116/01. An addendum is required when a proponent decides that the project should be implemented differently than described in the completed ERR and there are negative environmental effects associated with the changes. According to **Section B.5.2** (page 51) of the Guide "the purpose of the addendum provisions is to require proponents to consider the environmental significance of minor modifications to projects, and to require consultation on changes that are environmentally significant." (MOECC, 2011)

To determine if the proposed changes will result in negative environmental effects, HIW has applied the Screening Criteria (Appendix C of the Guide) to the proposed changes. **Table 1-1** provides the completed Screening Criteria checklist for the proposed alignment changes.

Table 1-1: Screening Criteria (Appendix C of the Guide)

Criterion	Yes	No	Additional Information
1. Surface and Groundwater			
1.1 Have negative effects on surface water quality, quantities or flow?	✓		• Construction is proposed away from surface waterbodies but has the potential to affect adjacent waterbodies. • Surface water quality has the potential to be impacted by sedimentation and/or spills during construction.
1.2 Have negative effects on groundwater quality, quantity or movement?	✓		• Potential impacts to groundwater quality impacts could occur where excavation is required for tower foundations.
1.3 Cause significant sedimentation, soil erosion or shoreline or riverbank erosion on or off-site?		✓	• Best management practices (BMPs) for vegetation removal near waterbodies will be applied during construction. There is the potential for some sedimentation to occur, however the use of BMPs will avoid significant sedimentation.
1.4 Cause potential negative effects on surface or groundwater from accidental spills or releases to the environment?	✓		• Spills of fuels, lubricating oils and other fluids have the potential to occur during construction and operation of the facility.
2. Land			
2.1 Have negative effects on residential, commercial or institutional land uses within 500 metres of the site?	✓		• The alignment of the transmission line requires some private land crossings and could result in negative impacts.
2.2 Be inconsistent with the Provincial Policy Statement, provincial land use or resource management plans?		✓	• The transmission line is predominantly on Crown land and is consistent with the Provincial Policy Statement (PPS) and provincial plans. • The PPS does not apply to any sections of the transmission corridor within First Nation Reserve lands.
2.3 Be inconsistent with municipal land use policies, plans and zoning by-laws?		✓	• The transmission line is anticipated to be consistent with municipal land use policies and zoning by-laws. • Municipal policies, plans and zoning by-laws are not applicable to any sections of the transmission corridor within First Nation Reserve lands.
2.4 Use hazard lands or unstable lands subject to erosion?		✓	• It is not anticipated that any transmission components will be located within hazard lands.
2.5 Have potential negative effects related to the remediation of contaminated land?		✓	• Known contaminated sites will be avoided.
3. Air and Noise			
3.1 Have negative effects on air quality due to emissions of nitrogen dioxide, sulphur dioxide, suspended particulates, or other pollutants?	✓		• Diesel and gasoline-powered equipment will be used during construction phase of the Transmission Line. • Limited use of diesel and gasoline-powered service vehicles will occur during the maintenance phase.
3.2 Cause negative effects from the emission of greenhouse gases (CO_2, methane)?	✓		• Greenhouse gas emissions will be limited to construction equipment during the construction phase of the Transmission Line and service vehicles during the maintenance phase.

Table 1-1: Screening Criteria (Appendix C of the Guide)

Criterion	Yes	No	Additional Information
3.3 Cause negative effects from the emission of dust or odour?	✓		• Dust will be created during construction of the Transmission Line, but will be limited to areas in the vicinity of the work and is not anticipated to impact other activities.
3.4 Cause negative effects from the emission of noise?	✓		• Noise emissions will be temporary in nature and limited to construction equipment during construction phase. • Any noise generated during operations is expected to be very limited; however there could be some noise associated with the switching station (SS).
4. Natural Environment			
4.1 Cause negative effects on rare, threatened or endangered species of flora or fauna or their habitat?	✓		• Rare, threatened and endangered species have been recorded and confirmed within the study area and the species and their habitat have the potential to be disrupted.
4.2 Cause negative effects on protected natural areas such as Area of Natural and Scientific Interests (ANSIs), Environmentally Significant Areas (ESAs) or other significant natural areas?		✓	• No ANSIs, ESAs or other protected natural areas are known to occur within the transmission corridor.
4.3 ESAs or other significant natural areas?	✓		• Wetland complexes are found throughout the study area and have the potential to be disrupted during construction activities.
4.4 Have negative effects on wildlife habitat, populations, corridors or movement?	✓		• Wildlife habitat, populations and movement corridors may be affected during construction activities.
4.5 Have negative effects on fish or their habitat, spawning, movement or environmental conditions (e.g., water temperature, turbidity, etc.)?	✓		• Some vegetation removal may be required in shoreline areas and the potential for associated erosion and sedimentation has the potential for negative effects.
4.6 Have negative effects on migratory birds, including effects on their habitat or staging areas?	✓		• Clearing of vegetation has the potential to affect migratory birds and their habitat.
4.7 Have negative effects on locally important or valued ecosystems or vegetation?	✓		• Infrastructure has the potential to be sited in areas that could impact valued ecosystems and vegetation communities.
5. Resources			
5.1 Result in inefficient (below 40%) use of a non-renewable resource (efficiency is defined as the ratio of output energy to input energy, where output energy includes electricity produced plus useful heat captured)?		✓	• The Transmission Line is not expected to result in inefficient use of non-renewable resources.
5.2 Have negative effects on the use of Canada Land Inventory Class 1-3, specialty crop or locally significant agricultural lands?		✓	• The Transmission Line is not located on significant agricultural lands.
5.3 Have negative effects on existing agricultural production?		✓	• The Transmission Line is not expected to affect agricultural production.
5.4 Have negative effects on the availability of mineral, aggregate or petroleum resources?		✓	• Neither construction activities nor the location of the Transmission Line infrastructure are anticipated to impact the availability of mineral, aggregate or petroleum resources.
5.5 Have negative effects on the availability of forest resources?	✓		• The study area is within the French-Severn Forest Management Unit and will result in some tree clearing for the transmission right-of-way (ROW).
5.6 Have negative effects on game and fishery resources, including negative effects caused by creating access to previously inaccessible areas?	✓		• Some previously inaccessible areas may become accessible through the creation of the transmission corridor.
6. Socio-economic			
6.1 Have negative effects on neighbourhood or community character?	✓		• Transmission Line towers and conductors may alter the community character where the line is in proximity to populated areas.
6.2 Have negative effects on local businesses, institutions or public facilities?		✓	• Local businesses are expected to benefit from an influx in demand for services during the construction phase. • No long-term effects are anticipated.
6.3 Have negative effects on recreation, cottaging or tourism?		✓	• The alterations to the visual landscape resulting from the Transmission Line that could impact tourism are expected to be minimal.

Table 1-1: Screening Criteria (Appendix C of the Guide)

Criterion	Yes	No	Additional Information
6.4 Have negative effects related to increases in the demands on community services and infrastructure?		✓	• The Transmission Line does not require water or wastewater services so no additional demands on community infrastructure will occur.
6.5 Have negative effects on the economic base of a municipality or community?		✓	• During construction of the Transmission Line, local suppliers will be used to the extent possible which will generate additional local revenues.
6.6 Have negative effects on local employment and labour supply?		✓	• Local labour will be used to the extent possible during construction activities.
6.7 Have negative effects related to traffic?		✓	• The Ontario Ministry of Transportation (MTO) permits will be obtained for access and egress from Highway 69 and Highway 522. • The majority of all other road traffic will occur within the transmission ROW or construction/maintenance access roads.
6.8 Cause public concerns related to public health and safety?		✓	• Public concerns related to safety may include aspects related to electromagnetic fields (EMFs) associated with transmission station and Transmission Lines. • Current scientific research does not demonstrate that EMFs cause or contribute to adverse health effects.
7. Heritage and Culture			
7.1 Have negative effects on heritage buildings, structures or sites, archaeological resources, or cultural heritage landscapes?	✓		• The Transmission Line will be designed to avoid or minimize impacts to areas of cultural importance that were identified through the Traditional Knowledge Study and archaeological assessments.
7.2 Have negative effects on scenic or aesthetically pleasing landscapes or views?	✓		• Transmission line towers and conductors will alter the visual landscapes in some sections of the alignment. • Most sections follow the existing infrastructure ROW (i.e., Hwy 69 or Hwy 522) and are less likely to have negative effects on the visual landscape.
8. Aboriginal			
8.1 Cause negative effects on First Nations or other Aboriginal communities?		✓	• First Nation community members will be consulted as part of the EA process.
9. Other			
9.1 Result in the creation of waste materials requiring disposal?	✓		• Waste materials will be created during the construction and maintenance of the Transmission Line. • Waste materials will be disposed of at an approved facility.
9.2 Cause any other negative environmental effects not covered by the criteria outlined above?		✓	N/A

This Addendum has been prepared because the review of screening criteria indicates potential negative environmental effects associated with the proposed changes. However, the potential effects identified through this evaluation are the same, or similar, to those identified and appropriately mitigated in the Final ERR.

Section 2 provides a description of the six proposed changes and the circumstances necessitating each change. Section 3 provides a summary of the environmental effects associated with the changes, including reference to the appropriate sections of the Final ERR where effects are similar.

2. Description of Changes

As shown in **Figure 1-1**, there are six changes proposed along the HIW Transmission Line infrastructure. All changes are within the original study area as defined in the Final ERR. Ecological Land Classification (ELC) mapping was reviewed and confirmed that the project infrastructure shifts do not affect additional ELC; therefore the environmental effects associated with the changes can be determined using the existing ERR data. **Table 2-1** provides a description of each proposed change corresponding with **Figures 2-1** to **2-6** and provides a description of the circumstances necessitating the changes. **Figures 2-1** through **2-6** provide a detailed illustration of the individual realignments, identified as Transmission Line Infrastructure (L24R01), in comparison to the approved project alignment, identified as Transmission Line Infrastructure (L19R00).

Table 2-1: Assessment of Proposed Realignments

Description of Realignment	Circumstances Necessitating the Realignment
Realignment 1 (**Figure 2-1**), Southern limit of the Transmission Line, north of Otter Lake. This alteration of the project addresses the lands required for Hydro One facilities and the project switching station. The HONI land requirement adds approximately 2.73 ha. The switching station alteration increases the required area by 1.08 ha.	HONI Lands expanded to accommodate updated design from HONI for tap infrastructure required to connect the Henvey Inlet Wind Switching Station to the 230kV HONI Line.
Realignment 2 (**Figure 2-2**), East of Highway 400 within Seguin Township. This realignment is approximately 450 m long and 100 m east.	The easement has been relocated to the east to avoid Ministry of Transportation (MTO) Highway controlled lands east of the existing Highway 400.
Realignment 3 (**Figure 2-3**), East of Mill Lake. This realignment is 800 m long with a 260 m shift to the east.	The easement has been relocated to the east to avoid a non-participating private landowner.
Realignment 4 (**Figure 2-4**), East of Rock Island Lake, adjacent to Shawanaga First Nation Land Reserve. This realignment is approximately 300 m long and 80 m east.	The easement has been realigned to remove the need for a structure within the MTO Controlled lands along Highway 69.
Realignment 5 (**Figure 2-5**), North of Shawanaga First Nation Land Reserve This realignment is approximately 670 m long and 200 m east.	The easement has been relocated to the east to avoid interference with an existing Department of Fisheries and Oceans (DFO) communications tower.
Realignment 6 (**Figure 2-6**), South of Pointe au Baril. This realignment is approximately 770 m long and 200 m east.	The easement has been realigned to ensure avoidance of a habitat feature identified by the Ministry of Natural Resources and Forestry.

Figure 2-1: Transmission Line Realignment 1

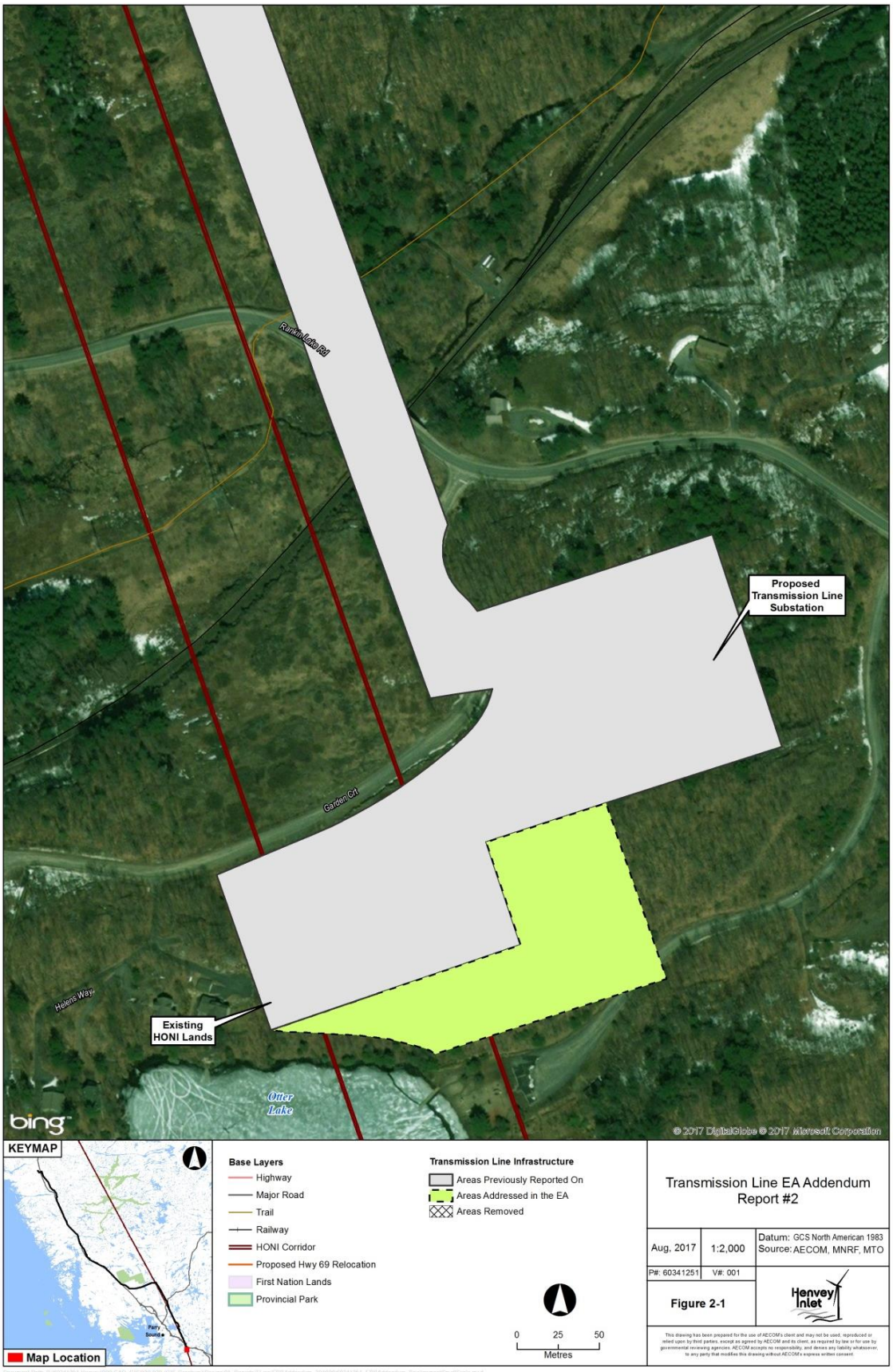


Figure 2-2: Transmission Line Realignment 2

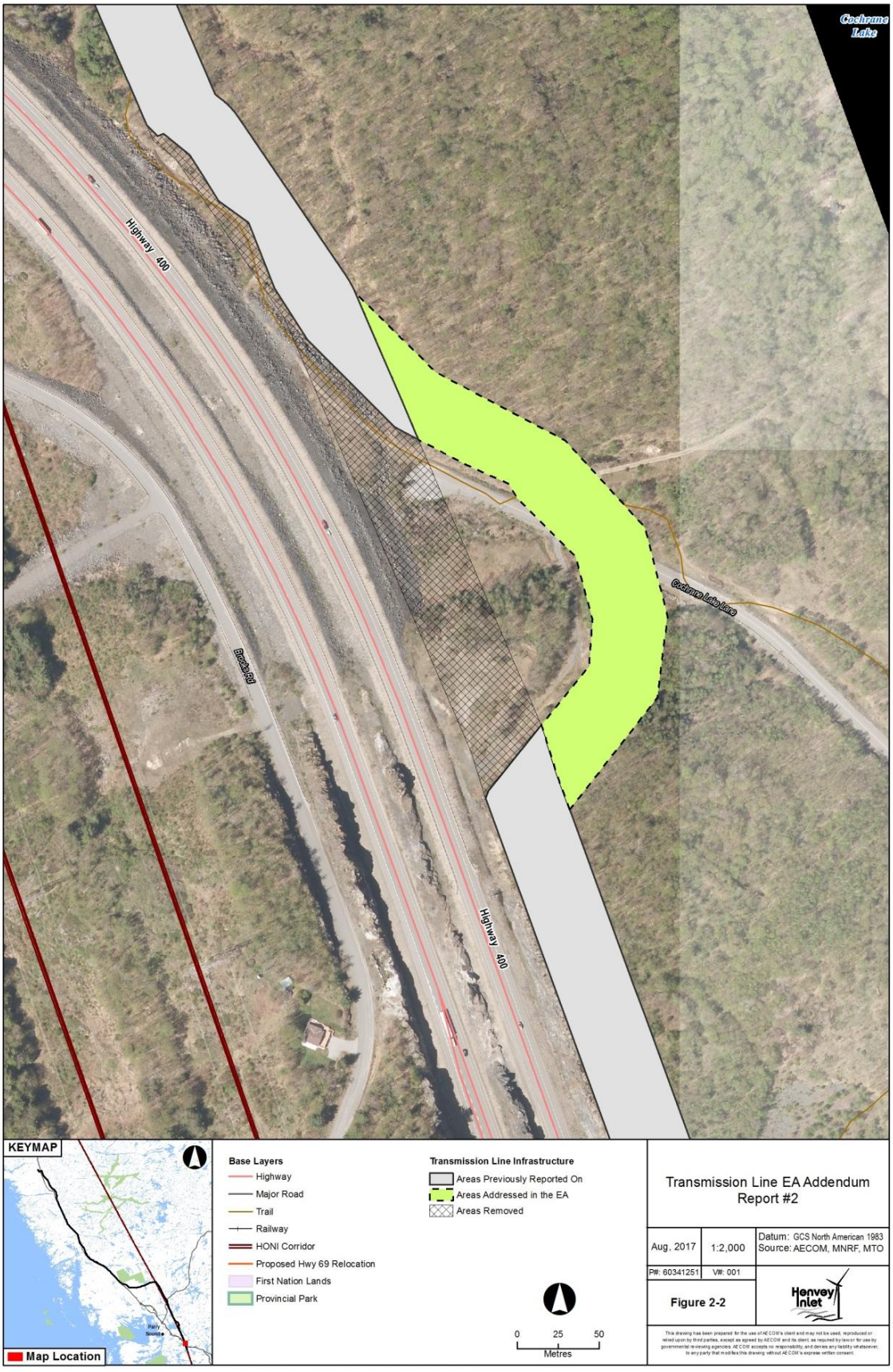
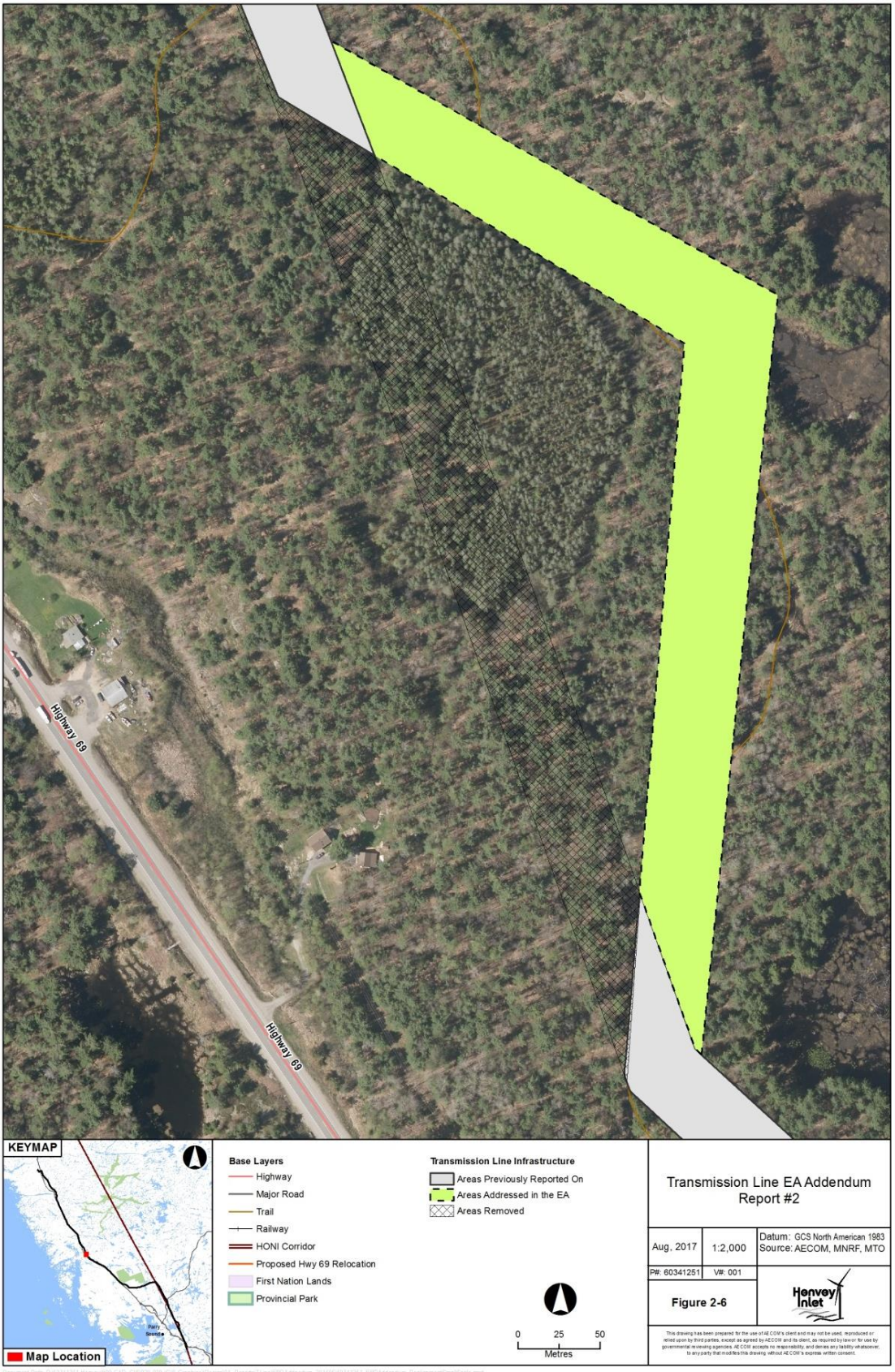


Figure 2-3: Transmission Line Realignment 3

Figure 2-4: Transmission Line Realignment 4

Figure 2-5: Transmission Line Realignment 5

Figure 2-6: Transmission Line Realignment 6



3. Potential Environmental Effects and Mitigation

The potential effects and proposed mitigation measures associated with alignment adjustments are described in **Table 3-1** (construction and decommissioning) and **Table 3-2** (operations). Based on a review of the ELC data for the study area, the proposed alignment changes will affect similar ecological communities to those described in the Final ERR. There are no new ELC communities affected by the proposed changes. Additionally, all proposed construction, operations and decommissioning activities are the same as those described in the Final ERR. Since there are no new ELC communities affected and project activities are consistent with those described in the Final ERR, all potential effects associated with the changes are similar to those identified in the Final ERR and are not considered significant as per the assessment presented in the Final ERR. **Tables 3-1** and **3-2** refer to the applicable sections in the Final ERR for anticipated effects, proposed mitigation measures and monitoring plans.

Table 3-1: Potential Effects and Proposed Mitigation Measures - Construction / Decommissioning

Category	Potential Effects	Proposed Mitigation Measures
Soils; Sedimentation and Erosion	• Reduction in soil quality and quantity due to erosion, sedimentation and compaction resulting from excavation, use of heavy equipment and stockpiling of cleared materials. See **Section 6.2.1** (page 128) and **Table 6-2** (page 160) of the Final ERR for further detail regarding potential effects.	See **Table 6-2** (page 160) of the Final ERR for further details regarding proposed mitigation measures.
Contaminated Lands	• Reduction in soil quality due to accidental release of contaminants during construction, heavy equipment and vehicle use, and concrete truck rinsing, etc. • Change in soil quality due to disturbance and remediation of existing contaminated land. See **Section 6.2.2** (page 130) and **Table 6-2** (pages 160-161) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 160-161) of the Final ERR for further details regarding proposed mitigation measures.
Wildlife (including Avifauna) and Wildlife Habitat	• Habitat change: – Disturbance to wildlife due to construction activities, including noise and vibration from sub-surface excavation activities (e.g., blasting). – Fragmentation and / or loss of wildlife habitat due to construction. – Increased erosion and sedimentation into wildlife habitat resulting from construction / decommissioning activities. – Disturbance of topsoil, and increased soil compaction within wildlife habitat from manoeuvring of heavy machinery, and other activity during construction / decommissioning. – Damage to wildlife habitat as a result of accidental soil or water contamination (including groundwater) by oils, gasoline, grease, and other materials from construction/decommissioning equipment, and materials storage and handling. – Change in surface water drainage patterns or obstruction of lateral flows in surface water to wildlife habitat in wetlands (including the Haines Lake Provincially Significant Wetland (PSW)) resulting from Change in land contours during construction. • Change in mortality risk: – Disturbance to wildlife due to construction activities, including noise and vibration from sub-surface excavation activities (e.g., blasting). – Disturbance and possible mortality to terrestrial wildlife due to vegetation clearing during construction. – Mortality to wildlife as a result of vehicles using access roads during construction / decommissioning activities.	See **Table 6-2** (pages 161-163) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-1: Potential Effects and Proposed Mitigation Measures - Construction / Decommissioning

Category	Potential Effects	Proposed Mitigation Measures
	• Change in behaviour: – Disturbance to wildlife due to construction activities, including noise and vibration from sub-surface excavation activities (e.g., blasting). See **Section 6.2.3** (page 131-133) and **Table 6-2** (page 161-163) of the Final ERR for further details regarding potential effects.	
Vegetation and Ecological Communities, Wetlands and Protected Areas	• Change in community and species diversity and change in wetland quantity and function: – Permanent loss of forest cover. – Change in surface water drainage patterns or obstruction of lateral flows in surface water to wetlands resulting in effects to soil moisture and species composition of vegetation. – Increased erosion and sedimentation resulting from construction activity. – Damage to vegetation as a result of soil or water contamination (including groundwater) by oils, gasoline, grease, and other materials from construction equipment, and materials storage and handling during construction / decommissioning activities. – Damage to wetland vegetation due to increased dust accumulation. – Damage to adjacent vegetation while operating equipment, and the introduction of non-native or weed species during construction / decommissioning activities. See **Section 6.2.4** (page 134-136) and **Table 6-2** (pages 163-164) of the Final ERR for further detail regarding potential effects.	See **Table 6-2** (pages 163-164) of the Final ERR for further details regarding proposed mitigation measures.
Species at Risk (SAR)	• Potential effects regarding Avian SAR (Chimney Swift, Least Bittern, Bobolink, Eastern Meadowlark and Whip-poor-will), Turtle SAR (Blanding's Turtle), Snake SAR (Eastern Hog-nosed Snake and Massasauga Rattlesnake), Bat SAR (Little Brown Bat, Eastern Small-footed Myotis and Northern Myotis) and Other Mammal SAR (Mountain Lion / Cougar) include: • Habitat change – Including possible damage or destruction of SAR residences or habitat • Change in behaviour – Due to disturbance of SAR • Change in mortality risk – Including harm See **Section 6.2.6** (pages 136-141) and **Table 6-2** (pages 164-168) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 164-168) of the Final ERR for further details regarding proposed mitigation measures.
Fish and Fish Habitat and Rare Aquatic Species	• Potential for disturbance of aquatic biota (fish and invertebrates) and aquatic habitat during water crossing installation and removal (due to in-water work, alteration to channel bed, banks and riparian areas, due to erosion and sedimentation). • Potential for effects on aquatic biota (fish and invertebrates) and aquatic habitat due to accidents and/or spills including fuels, lubricants and concrete washing near waterbodies. • Potential for disturbance to fish and fish habitat and change in mortality of fish due to construction blasting and/or vibration (includes disturbance to or mortality of fish eggs or larvae). • Potential for changes in mortality of rare aquatic fish species (during works on or adjacent to watercourse banks and riparian areas due to construction blasting and/or vibration (includes disturbance to or mortality of fish eggs or larvae). See **Section 6.2.7** (pages 142-144) and **Table 6-2** (pages 168-170) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 168-170) of the Final ERR for further details regarding proposed mitigation measures.
Surface Water	• Reduction in surface water quality from erosion and sedimentation. • Reduction in surface water quality due to accidental spills including fuels, lubricants and concrete washing near waterbodies. • Potential effects on surface water quality and quantity due to dewatering discharge. See **Section 6.2.8.1** (page 144) and **Table 6-2** (pages 170-171) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 170-171) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-1: Potential Effects and Proposed Mitigation Measures - Construction / Decommissioning

Category	Potential Effects	Proposed Mitigation Measures
Groundwater	• Reduction in groundwater quality due to accidental contaminant spills, vehicle and machinery operation, and concrete truck rinsing. • Reduction in groundwater quality (turbidity), quantity and physical damage to groundwater supply wells due to agitation of the subsurface during construction blasting (including potential release of soluble substances used during blasting). • Reductions in groundwater recharge quantities due to increases in impervious surfaces. See **Section 6.2.8.2** (page 145) and **Table 6-2** (pages 171-172) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 171-172) of the Final ERR for further details regarding proposed mitigation measures.
Hazard Lands	• Disturbance to hazard lands, including rock and soil instability, due to blasting and use of heavy machinery. See **Section 6.2.8.3** (page 146) and **Table 6-2** (page 172) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 172) of the Final ERR for further details regarding proposed mitigation measures.
Air Quality	• Vehicle and equipment combustion emissions contributing to a reduction in local air quality. • Nuisance effects related to dust generated from vehicle access and construction activity contributing to a reduction in local air quality. See **Section 6.2.9** (page 147) and **Table 6-2** (page 172) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 172) of the Final ERR for further details regarding proposed mitigation measures.
Economic Base	• Positive effect on economic base, specifically for the "construction" and "retail" industries as a result of revenue generation. • Positive indirect and induced economic benefits based on an increase of the local work force for the construction and decommissioning phases. See **Section 6.2.11** (page 148) and **Table 6-2** (page 172) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 172) of the Final ERR for further details regarding proposed mitigation measures.
Employment and Labour Supply	• Positive effects as jobs are created for local workers. See **Section 6.2.11** (page 148) and **Table 6-2** (page 173) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 173) of the Final ERR for further details regarding proposed mitigation measures.
Local Businesses, Institutions and Public Facilities	• Positive effect on local businesses (specifically construction suppliers and services). • Increased demand for local goods and services. See **Section 6.2.11** (page 148) and **Table 6-2** (page 173) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 173) of the Final ERR for further details regarding proposed mitigation measures.
Neighbourhood and Community Character	• Disturbance to local permanent and seasonal residents due to construction and decommissioning noise and vibration. See **Section 6.2.12** (page 149) and **Table 6-2** (page 173) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 173) of the Final ERR for further details regarding proposed mitigation measures.
Community Service and Infrastructure	• Increased demand on medical services in Parry Sound and Sudbury. See **Section 6.2.13** (page 150) and **Table 6-2** (pages 173-174) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 173-174) of the Final ERR for further details regarding proposed mitigation measures.
Traffic	• Delays in traffic during construction and decommissioning phases. See **Section 6.2.14** (pages 150-151) and **Table 6-2** (page 174) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 174) of the Final ERR for further details regarding proposed mitigation measures.
Recreation, Cottaging and Tourism	• Avoidance of recreational areas near Transmission Line due to noise and vibration. • Avoidance of recreational areas near Transmission Line due dust. • Temporary disruption of access to existing recreational trails that will be used for construction access. See **Section 6.2.15** (pages 151-152) and **Table 6-2** (page 174) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 174) of the Final ERR for further details regarding proposed mitigation measures.
Public Health and Safety	• Increased potential for traffic related incidents on Highway 69/400 and regional roads. See **Section 6.2.16** (pages 152) and **Table 6-2** (page 174) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 174) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-1: Potential Effects and Proposed Mitigation Measures - Construction / Decommissioning

Category	Potential Effects	Proposed Mitigation Measures
Non-Renewable Resources	• Reduction in the licensed area and the quantity of extractable resources. See **Section 6.2.17** (page 153) and **Table 6-2** (page 174) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 174) of the Final ERR for further details regarding proposed mitigation measures.
Forestry Resources	• Loss of harvestable forest resources due to vegetation clearing. See **Section 6.2.18** (page 154) and **Table 6-2** (page 175) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 175) of the Final ERR for further details regarding proposed mitigation measures.
Game and Fishery Resources	• Decline in available game resources for recreational hunters due to sensory disturbance of wildlife and loss of wildlife habitat. See **Section 6.2.19** (pages 154-155) and **Table 6-2** (page 175) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 175) of the Final ERR for further details regarding proposed mitigation measures.
Residential, commercial, Institutional lands	• Change in land use on private property. See **Section 6.2.20** (page 155) and **Table 6-2** (page 175) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 175) of the Final ERR for further details regarding proposed mitigation measures.
Aboriginal Land Use and Resources	• Disturbance to current users of traditional lands from construction / decommissioning noise and vibration. • Loss of available lands used for Aboriginal traditional activities due to loss of wildlife habitat and disturbance to wildlife. See **Section 6.2.22** (page 156) and **Table 6-2** (pages 175-176) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (pages 175-176) of the Final ERR for further details regarding proposed mitigation measures.
Waste	• Increase in waste material on the landscape. See **Section 6.2.23** (page 157) and **Table 6-2** (page 176) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 176) of the Final ERR for further details regarding proposed mitigation measures.
Archaeological Resources	• Discovery or disturbance to archaeological resources, previously unknown within the Transmission Line study area following Stage 1 and Stage 2 Archaeological Assessments. See **Section 6.2.24** (page 158) and **Table 6-2** (page 176) of the Final ERR for further details regarding potential effects.	See **Table 6-2** (page 176) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-2: Potential Effects and Proposed Mitigation Measures – Operations

Category	Potential Effects	Mitigation
Contaminated Lands	• Reduction in soil quality due to accidental release of contaminants during operation, etc. See **Section 6.2.2** (page 131) and **Table 6-3** (page 177) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 177) of the Final ERR for further details regarding proposed mitigation measures.
Wildlife and Wildlife Habitat	• Change in mortality risk – Possible bird and bat mortality as a result of collision with overhead transmission lines and poles. – Possible bird and bat mortality as a result of vegetation removal during routine maintenance of transmission lines or poles. – Possible mortality of wildlife as a result of collisions with vehicles using access roads, as well as the maintenance of access roads and transmission line infrastructure. • Change in behaviour – Disturbance to wildlife caused by noise from maintenance activities, and possible avoidance of the area. See **Section 6.2.3** (pages 133-134) and **Table 6-3** (pages 177-178) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 177-178) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-2: Potential Effects and Proposed Mitigation Measures – Operations

Category	Potential Effects	Mitigation
Vegetation and Ecological Communities	• Change in species diversity. • Change in community diversity: – Introduction of invasive species due to increased disturbance / edge effects, loss of vegetation cover as a result of trimming under the Transmission Line. • Change in wetland quality and function: – Risk of soil or water contamination from oils, gasoline, grease, and other materials during maintenance activities. See **Section 6.2.4** (page 136) and **Table 6-3** (page 178) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 178) of the Final ERR for further details regarding proposed mitigation measures.
SAR	• Potential effects regarding Avian SAR (Chimney Swift, Least Bittern, Bobolink and Whip-poor-will), Turtle SAR (Blanding's Turtle), Snake SAR (Eastern Hog-nosed Snake and Massasauga Rattlesnake), Bat SAR (Little Brown Myotis, Eastern Small-footed Myotis and Northern Myotis) and Other Mammal SAR (Mountain Lion / Cougar) include: • Habitat change: – Habitat alteration. • Change in behaviour: – Avoidance behaviour by wildlife due to noise disturbance. • Change in mortality risk: – Continued direct mortality from collision with Transmission Line infrastructure, electrocution and/or collision with vehicles on access roads. See **Section 6.2.6** (pages 141-142) and **Table 6-3** (pages 178-180) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (pages 178-180) of the Final ERR for further details regarding proposed mitigation measures.
Groundwater	• Reduction in groundwater quality due to accidental contaminant spills, vehicle and machinery operation during operation. See **Section 6.2.8.2** (pages 145-146) and **Table 6-3** (page 180) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 180) of the Final ERR for further details regarding proposed mitigation measures.
Fish and Fish Habitat and Rare Aquatic Species	• Potential for disturbance to fish habitat due to contaminant spills. • Potential for obstruction of fish passage in waterbodies due to design of replacement water crossings and debris build-up at watercourses. See **Section 6.2.7** (pages 143-144) and **Table 6-3** (page 180) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 180) of the Final ERR for further details regarding proposed mitigation measures.
Surface Water	• Potential effects on surface water quality due to contaminant spills. See **Section 6.2.8.1** (page 145) and **Table 6-3** (page 181) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 180) of the Final ERR for further details regarding proposed mitigation measures.
Neighbourhood and Community Character	• Disturbance to local permanent and seasonal residents due to noise from maintenance activities and noise associated with SS operation. • Effect on the visual character of some communities perceived by permanent and seasonal residents on private lands or community spaces within the study area. See **Section 6.2.12** (pages 149-150) and **Table 6-3** (page 181) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 181) of the Final ERR for further details regarding proposed mitigation measures.
Recreation, Cottaging and Tourism	• Disturbance to recreational users, cottagers and tourists due to noise related to maintenance activities and noise related to SS operation. • Avoidance of nearby recreational areas by tourists and other recreational users due to the changes to the landscape and views. See **Section 6.2.15** (page 152) and **Table 6-3** (page 181) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 181) of the Final ERR for further details regarding proposed mitigation measures.
Non-Renewable Resources	• Reduction in the quantity of prospect extractable resources (future pit / quarry / mineral operations). See **Section 6.2.17** (page 153) and **Table 6-3** (page 181) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 181) of the Final ERR for further details regarding proposed mitigation measures.

Table 3-2: Potential Effects and Proposed Mitigation Measures – Operations

Category	Potential Effects	Mitigation
Forestry Resources	• The sustainable forest license holder could experience changes to current access (physical and/or administrative) due to the presence of Transmission Line infrastructure. See **Section 6.2.18** (page 154) and **Table 6-3** (page 182) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 182) of the Final ERR for further details regarding proposed mitigation measures.
Aboriginal Land Use and Resources	• Disturbance to users of traditional lands due to noise associated with maintenance and noise associated with the SS. • Change in the available lands used for Aboriginal traditional activities and cultural site. See **Section 6.2.22** (page 157) and **Table 6-3** (page 182) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 182) of the Final ERR for further details regarding proposed mitigation measures.
Waste	• Increase in waste material on the landscape. See **Section 6.2.23** (page 157) and **Table 6-3** (page 182) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 182) of the Final ERR for further details regarding proposed mitigation measures.
Built Heritage and Cultural Heritage Landscapes	• Change to the cultural heritage landscape character of Moose Lake Trading Post. See **Section 6.2.25** (pages 158-159) and **Table 6-3** (page 182) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 182) of the Final ERR for further details regarding proposed mitigation measures.
Landscapes and Views	• Change to the existing landscape and views as perceived by recreational land / trail users and permanent and seasonal residents and users of the recreational land and trails. See **Section 6.2.26** (page 159) and **Table 6-3** (page 182) of the Final ERR for further details regarding potential effects.	See **Table 6-3** (page 182) of the Final ERR for further details regarding proposed mitigation measures.

4. Addendum #2 Consultation Requirements

As per the Guide, HIW will distribute a Notice of Filing of Addendum to adjacent landowners and tenants and to all previously involved members of the public and review agencies, including the EA Co-ordinator at the Regional Office of the MOECC. The Notice of Filing of Addendum will also be distributed to all who were notified at the original Notice of Study Completion stage in September 2015 and those notified for Addendum #1 in August 2016. For a complete distribution list, see **Appendix C1 – Stakeholder Contact List** of the Final ERR. The Notice of Filing Addendum will be published at the beginning of the 30 day review period and will be available for review on the HIW website (www.henveyinletwind.com) as well as at the HIFN Band Office – 295 Pickerel River Road, Pickerel, Ontario.

The Notice will advise the public and agencies of their right to request that the change to the project be elevated to an individual EA, and advise them that such request must be submitted to the Director of the Environmental Approvals Branch in writing, with a copy sent to HIW, within 30 calendar days. If no request is received by the Director within the 30 day period, HIW will proceed with implementation and construction subject to any other approval requirements. HIW will keep a copy of the Addendum with all other original project documents required for the life of the project. No work on the Transmission Line will be undertaken that will adversely affect the matters under analysis during the 30 day review period of the Addendum.

5. References

Ministry of the Environment and Climate Change (MOECC), 2011:
Guide to Environmental Assessment Requirements for Electricity Projects. Ontario: Queens Printer.