

North Kent Wind 1 Project Decommissioning Plan Report

North Kent Wind 1 Project

Decommissioning Plan Report

Prepared for:

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Acronyms and Abbreviations

BMP	Best management practice
km	Kilometres
kV	Kilovolts
LTVCA.....	Lower Thames Valley Conservation Authority
m	Metres
m/s	Metres per second
m ²	Metres squared
MOECC.....	Ontario Ministry of the Environment and Climate Change
MNR.....	Ontario Ministry of Natural Resources and Forestry
MTCS	Ontario Ministry of Tourism, Culture and Sport
MW.....	Megawatts
NHA.....	Natural Heritage Assessment
North Kent Wind 1	North Kent Wind 1 LP, by its general partner, North Kent Wind 1 GP Inc.
O. Reg.	Ontario Regulation
Pattern Development	Pattern Renewable Holdings Canada ULC
Project	North Kent Wind 1 Project
PSA	Project Study Area
REA.....	Renewable Energy Approval
Samsung Renewable Energy	Samsung Renewable Energy Inc.
SCRCA.....	St. Clair Region Conservation Authority

1. Introduction

The North Kent Wind 1 Project (the Project) is being proposed by North Kent Wind 1 LP, by its general partner, North Kent Wind 1 GP Inc. (North Kent Wind 1). North Kent Wind 1 is a joint venture limited partnership owned by affiliates of Pattern Renewable Holdings Canada ULC (Pattern Development) and Samsung Renewable Energy Inc. (Samsung Renewable Energy).

This Decommissioning Plan Report was prepared in accordance with the requirements of the Renewable Energy Approval (REA) process outlined in Ontario Regulation (O. Reg.) 359/09, as amended, and the *Technical Guide to Renewable Energy Approvals* (Ontario Ministry of the Environment and Climate Change (MOECC), 2012; MOECC 2013). At the time of decommissioning, the Decommissioning Plan will be reviewed in accordance with applicable regulations.

The following sections outline the process of the Project's decommissioning phase.

1.1 Summary of Decommissioning Plan Report Requirements

The requirements for the Decommissioning Plan Report as defined under O. Reg. 359/09, as amended, and where those requirements are addressed in this report are provided in the following table (**Table 1-1**).

Table 1-1: Adherence to Decommissioning Plan Report Requirements under O. Reg. 359/09, as Amended

Requirement	Completed	Corresponding Section
Procedures for dismantling or demolishing the facility	Yes	Section 2.1 and 2.2
Activities related to the restoration of any land and water negatively affected by the facility	Yes	Section 2.3
Procedures for managing excess materials and waste	Yes	Section 2.4

This Decommissioning Plan Report was provided to Municipality of Chatham-Kent 90 days in advance of the second public meeting. It was also provided to Aboriginal communities, government agencies and the public for review 60 days in advance of the second public meeting. These timelines align with the distribution requirements outlined in O. Reg. 359/09, as amended, and the *Technical Guide to Renewable Energy Approvals* (MOECC, 2013).

1.2 The Proponent

Applicant:

As noted above, North Kent Wind 1 is a joint venture limited partnership owned by affiliates of Pattern Development and Samsung Renewable Energy. The contacts for the Project are as follows:

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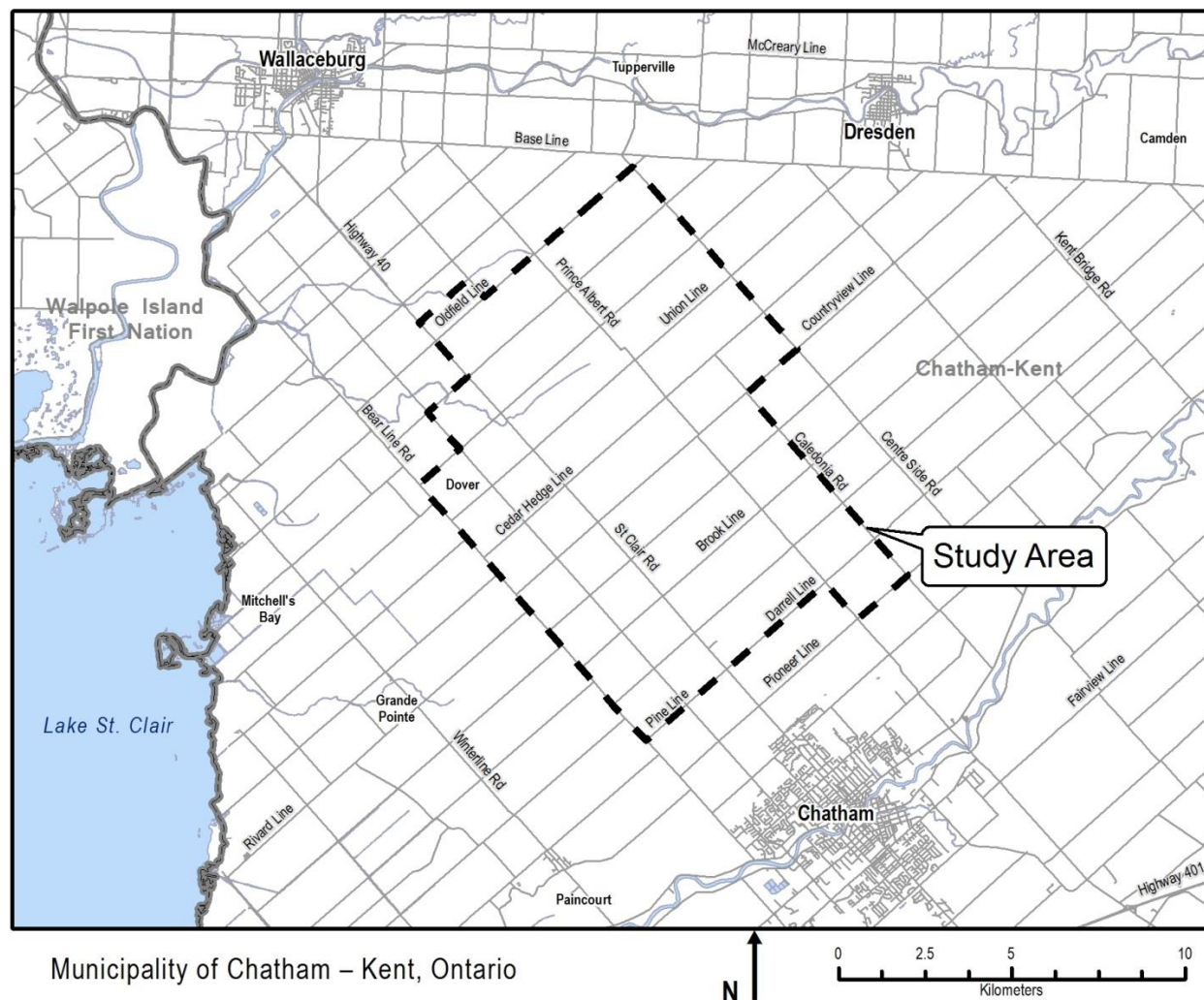
1.3 Project Location

North Kent Wind 1 is proposing to develop a wind energy project located north of the City of Chatham in the Municipality of Chatham-Kent, Ontario. The Project will be located on both public and private lands. The location of the Project was developed based on interest expressed by local landowners, municipal support for the Project, the availability of wind resources and the availability of existing infrastructure for connection to the electrical grid.

According to O. Reg. 359/09, as amended, the Project Location is “a part of land and all or part of any building or structure in, on, or over which a person is engaging in or proposes to engage in the project and any air space in which a person is engaging in or proposes to engage in the project”. As described therein, the Project Location boundary is the outer limit of where site preparation and construction activities will occur (i.e., disturbance areas described below) and where permanent infrastructure will be located, including the air space occupied by turbine blades.

The Project is generally bounded by Oldfield Line to the north, Bear Line Road to the west, Pioneer Line and Pine Line / Darrell Line to the south and Centre Side road and Caledonia Road to the east. The area encompassed by these boundaries is referred to as the Project Study Area (PSA). **Figure 1-1**, below, shows a map of the PSA. To see the location of the Project within Ontario, please see **Figure 1-2**.

Figure 1-1: Project Study Area



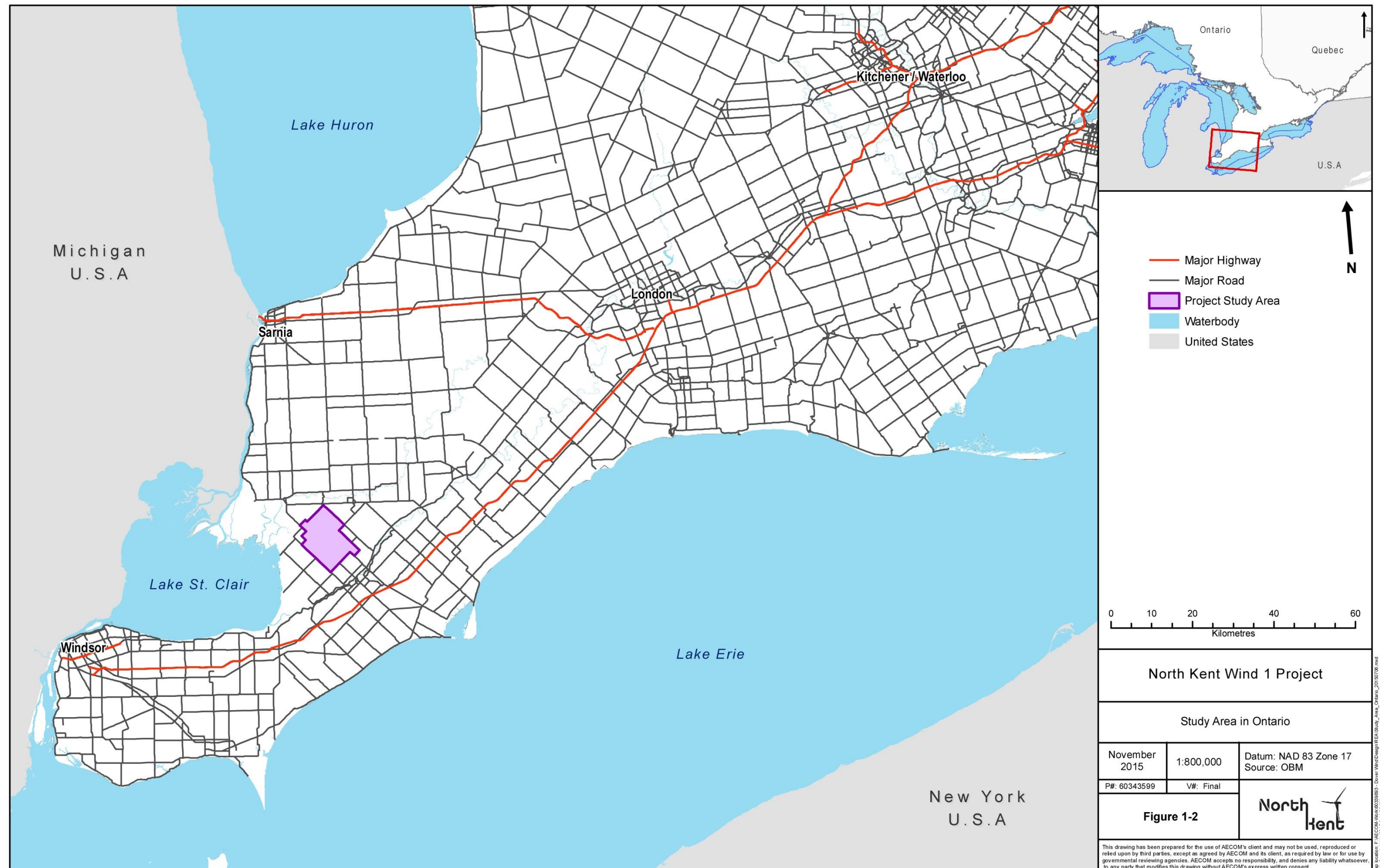
The PSA covers approximately 30,400 acres¹ of land that is predominantly designated for agricultural use according to the Municipality of Chatham-Kent's Official Plan (2014). The PSA also consists of fragmented areas of forest and riparian habitat associated with small creeks or farm drains. The PSA represents the area being assessed as part of the REA process. The following co-ordinates define corners of the external boundaries of the PSA:

Table 1-2: External Boundaries of the Project Study Area

Longitude	Latitude
-82.270	42.573
-82.343	42.490
-82.262	42.424
-82.171	42.468

1. Metric units are used throughout REA reports when describing the size of Project infrastructure, except in instances describing areas of land. When describing land size, acres (imperial) will be used rather than hectares (metric) because it is the measuring unit most commonly used by the local community. It is assumed that 1 hectare of land is equal to 2.47 acres of land.

Figure 1-2: Study Area in Ontario



The Project will be located primarily on privately owned land with some components (e.g., electrical collector lines) being placed along public right-of-ways. The Project is not located on Crown land. Legal descriptions of the land parcels to be used for the Project are provided in **Appendix A** of the Project Description Report (PDR).

1.4 Summary of Key Project Information

A summary of key Project information is presented in the table below.

Table 1-3: Summary of Key Project Information²

General	<i>Project Name:</i>	North Kent Wind 1 Project
	<i>Project Ownership and Operation:</i>	North Kent Wind 1 LP
	<i>Project Lifespan (commercial operation):</i>	20 Years
	<i>Project Nameplate Capacity:</i>	Up to 100 Megawatts (MW)
Project Area <i>(as shown in Figure 1-1)</i>	<i>Location of Project:</i>	Public and privately-owned land and public road allowances in the Municipality of Chatham-Kent
	<i>Total Project Study Area:</i>	30,400 acres
	<i>Estimated Total Permanent Area of Project Location:</i>	140 acres
Wind Turbine Generators	<i>Make and Model:</i>	Siemens SWT-3.2-113
	<i>Total Number Permitted:</i>	46 turbines
	<i>Approximate Number Constructed:</i>	36 turbines
	<i>Nominal Turbine Power:</i>	2.772 to 3.2 MW
	<i>Number of Blades:</i>	3
	<i>Blade Length:</i>	55 metres (m)
	<i>Hub Height:</i>	99.5 m
	<i>Rotor Diameter:</i>	113 m
	<i>Cut-in Wind Speed:</i>	3 to 5 metres per second (m/s)
	<i>Cut-out Wind Speed:</i>	32 m/s
	<i>Rated Wind Speed:</i>	12 to 13 m/s
	<i>Swept Area:</i>	10,000 metres squared (m ²)
Access Roads	<i>Access Roads – Operations (includes shoulder, travel width and ditch):</i>	31 kilometres (km) x 8 to 12 m
	<i>Access Roads – Construction (with shoulder):</i>	31 km x 8 to 15 m
Collector Lines	<i>34.5 kilovolts (kV) Collector Lines in Public Right-of-way (total combined length of proposed underground and/or overhead):</i>	160 km x 2 to 6 m
	<i>34.5 kV Collector Lines on Private Lands (underground):</i>	31 km x 2 to 6 m
Other Project Structures and Facilities	<i>Collector Substation:</i>	10 acres
	<i>Operations and Maintenance Building:</i>	7 acres
	<i>Interconnection Station / Point of Interconnection:</i>	10 acres
	<i>Meteorological Towers:</i>	Up to 2
	<i>Microwave Tower:</i>	1
Temporary Land Use (Construction Phase)	<i>Construction Staging Areas:</i>	10 to 15 acres
	<i>Wind Turbine Laydown Area (each turbine):</i>	Up to 5 acres
	<i>Crane Pads:</i>	0.2 acres

2. Dimensions are near approximations.

2. Decommissioning Plan Overview

Following the anticipated 20 year operational phase of the Project, all components are expected to be decommissioned as described in the following sections. In the unlikely event that Project development is stopped during construction, the Project would be decommissioned as described in **Section 2.1**.

In determining the probable future use for the Project there are two primary factors to consider, namely: economics and technological improvements. If an economic evaluation determines that repowering the Project by replacing and/or upgrading Project components is possible, extending the lifespan of the Project may be considered. Any evaluation of repowering the Project will also consider any technological improvements that have been developed during the proposed 20 year operational phase of the Project. If North Kent Wind 1 makes the decision to decommission the Project in lieu of replacing and/or upgrading Project components then the most probable future land use is agricultural. As previously noted the proposed Project is located primarily on agricultural lands and, therefore, following the decommissioning of the Project, lands will be restored so that land use similar to pre-existing conditions can continue.

The decommissioning process will involve removing the wind turbine, including the tower, generator, auxiliary equipment, above ground collector lines / poles and fixtures as well as restoring the premises to conditions similar to what existed prior to the Project. If it is agreed upon with the landowner, access roads and underground collector lines may be left in place. Foundations shall be removed to approximately 1 m below grade and replaced with topsoil. Within approximately 16 months of initiating the decommissioning process, North Kent Wind 1 will have removed the relevant components from the leased land.

The decommissioning of the North Kent Wind 1 Project will be undertaken in compliance with this Decommissioning Plan and the Ontario *Occupational Health and Safety Act* along with any other applicable regulatory requirements and standards of the day, including those from the Ontario Ministry of Natural Resources and Forestry (MNRF), Lower Thames Valley Conservation Authority (LTVCA), St. Clair Region Conservation Authority (SCRCA) and/or Ontario Ministry of Tourism, Culture and Sport (MTCSS). As with construction, a manager responsible for safety will be present on site for the duration of the work.

2.1 Decommissioning During Construction

Although it is unlikely that the Project would be decommissioned before the operations phase, should this occur, the procedures for dismantling the Project would depend upon the state of construction. Dismantling would follow the steps outlined in **Section 2.2.1** of this report. Mitigation measures as described in the Environmental Effects Management Plan (part of the Design and Operations Report) would also be implemented.

Following construction, stockpiles of soil will be managed following best management practices (BMPs) to prevent erosion, runoff and fugitive dust emissions. Vegetation removal will be avoided wherever possible to reduce potential sedimentation of watercourses. If required, vegetation removal adjacent to water bodies will be minimized to the extent agreed to by regulatory agencies. Silt fencing, through consultation with the LTVCA and SCRCA, will be constructed on the closest edge of the construction area from watercourses and wetlands where works are performed within or adjacent to LTVCA and/or SCRCA's Regulated Area. Land will be re-graded to conditions similar to pre-existing land use to allow for natural surface drainage to continue.

Once construction and installation activities cease, excavated soil will be replaced, if necessary, to restore the soil horizons and land uses to a state similar to pre-existing site conditions. Areas with disturbed soils or areas that are re-graded with topsoil will be re-seeded with an annual seed mix to help temporarily stabilize the soil and prevent erosion. Any disturbed field drains or tiling that was present at the commencement of construction will be repaired

or replaced to restore field drainage and return the area to conditions similar to the previous land use (typically agriculture). The condition of the disturbed areas will be discussed with the landowner to address any potential concerns.

The mitigation strategy will be similar to the mitigation strategies used during construction and installation activities. Restoration of the Project would follow the procedures outlined in the Construction Plan Report for post-construction activities of the Project (see Construction Plan Report).

2.2 Decommissioning After Ceasing Operations

Many of the activities completed during decommissioning are similar to those completed during construction and installation activities, but would likely occur in the reverse sequence. Preliminary decommissioning activities will include equipment delivery, topsoil removal, and the creation of temporary staging and laydown areas (including field offices). For a detailed description of these activities, refer to the Construction Plan Report.

A summary of the general timing of Project decommissioning is provided in **Table 2-1**. Decommissioning is expected to span approximately 16 months. The decommissioning duration accounts for minor delays that could result from an extended regulatory process, delayed equipment arrival and potentially adverse weather conditions.

Table 2-1: Timing of Project Decommissioning Activities

	Project Phase and Activity	Duration*
Decommissioning Planning and Permitting	Planning and permitting	12 months
Aboveground Structure Decommissioning	Turbines including dismantling and removal	5 months
	Overhead collector system including dismantling and removal	2 months
	Collector substation including dismantling and removal	2 months
	Operations and maintenance building, including dismantling and removal	2 months
	Access roads including road bed removal and land reclamation	3 months
	Meteorological and microwave towers including dismantling and removal	1 month
	Watercourse crossings including removal and aquatic and riparian habitat reclamation	1 month
Belowground Structure Decommissioning	Pad-mounted transformer including dismantling and removal	2 months
	Turbine foundation removal (including concrete removal to approximately 1 m), transport and disposal of materials to suitable facility	4 months
	Underground collector lines, which will be terminated at connection points and removed to 1.2 m below surface	2 months

**Note: Some decommissioning activities will be completed concurrently and the outlined durations are approximate*

2.2.1 Project Component Dismantling and Removal

At the end of the Project's operational life, all components will be shut down and disconnected. Temporary staging and laydown areas will be constructed and all decommissioning activities will be carried out within these designated areas. During decommissioning activities, erosion and sedimentation control measures will be implemented, as required.

Delivery of decommissioning equipment and transportation of dismantled Project components from the PSA will use Municipality of Chatham-Kent and provincial roads. North Kent Wind 1 will prepare a traffic management plan, if required. The decommissioning contractor will oversee the implementation of the traffic management plan, as required, during the Project decommissioning phase, which may include measures such as signage, road closures, speed restrictions, truck lighting, dust control, load restrictions and equipment inspections. The decommissioning

contractor will ensure that road damage and traffic congestion are avoided, where possible, and suitable repair and mitigation measures are in place.

2.2.1.1 Wind Turbines

Consistent with the approach detailed in the Construction Plan Report, a crane pad and laydown area will be constructed at each turbine location to accommodate the dismantling of the wind turbines. Crane pads will be removed following the dismantling of each wind turbine and the area will be restored so that land uses can be restored to a state similar to pre-existing conditions.

Wind turbines will be dismantled into their component parts, including the hub, nacelle, blades, tower and pad-mounted transformers. Dismantling procedures for the wind turbines will be carried out in reverse order of those described during the construction and installation process (see the Construction Plan Report). Equipment required for decommissioning of wind turbines will include cranes, machinery required to construct roads and crane pads, light-duty trucks, flatbed trucks and trailers.

Wind turbine components will be stored in the temporary staging area prior to removal unless a recycling company can transport these materials directly from the site, or if there are delays attributed to bad weather or other unforeseen circumstances. Prior to disposal or recycling, efforts will be made to re-use equipment and salvage parts. Wind turbine components will be transported to the appropriate landfill, scrap metal yard or recycling facilities by large truck and trailer combinations.

2.2.1.2 Wind Turbine Foundations

Wind turbine foundations, including any rebar or steel anchor bolts, will be removed to a depth of approximately 1 m below grade, so that pre-existing land uses can continue. Excavators mounted with hydraulic hammers and/or hydraulic shears will be used to break up and remove sections of the foundation, and removed concrete may be crushed using a mobile crushing unit before being loaded in dump trucks for disposal at an approved site.

2.2.1.3 Pad-Mounted Transformers

Pad-mounted transformers will be detached from the base of each wind turbine generator and foundation. A small crane will be used to lift the transformer onto a flatbed truck for removal. If possible, the pad-mounted transformers from the Project will be recycled for future use.

2.2.1.4 Wind Turbine Access Roads

Following the decommissioning of select Project components (including wind turbine generators, collector substation, operations and maintenance building, and collector lines), access roads will be removed and lands will be restored so that pre-existing land uses can continue. Any removed / stored topsoil will be replaced and additional clean topsoil will be used to fill remaining areas.

Granular base material and crushed gravel used to construct access roads will be removed from the site by dump truck. In consultation with landowners and agreed upon by North Kent Wind 1, all or portions of wind turbine access roads may be left in place for future use.

Culverts installed during construction and installation activities will also be removed unless otherwise requested by landowners. Any removal of culverts will be completed in consultation with necessary regulatory agencies, as required.

2.2.1.5 *Collector Lines*

Underground collector lines on private lands and municipal right-of-ways will be left in place. It is anticipated that the underground collector lines will have no adverse effects on the soil, environment or cultivation practices since the remaining collector lines will be inert, contain no materials known to be harmful to the environment and will be well below depths required for cultivation. This will avoid disturbing large areas of agricultural land, in comparison to the areas that would be disturbed and the potential environmental effects that would result from removing the collector lines.

At the connection points, where the underground collector lines come to the surface, the collector lines will be cut and excavated to a minimum depth of 1.2 m below grade. Any removal of underground collector lines will be carried out in accordance with landowner agreements. Any collector lines located at directionally drilled watercourse crossings will remain in place; however, the connection point will be severed at a point located outside of the SCRCA and LTVCA Regulated Area, where possible.

Where applicable, overhead collector lines that are not shared with another utility company will be removed. Holes remaining following the removal of any poles will be filled with clean fill and disturbed areas will be restored, as required. In areas where overhead collector lines are mounted on shared-use poles, only the collector lines associated with the Project will be removed, as appropriate. Overhead collector lines will be removed from the PSA and recycled, re-used or disposed of in accordance with regulatory requirements at the time of decommissioning.

2.2.1.6 *Collector Substation*

The collector substation, control building, electrical components and associated infrastructure will be dismantled and decommissioned in accordance with provincial regulatory standards at the time of decommissioning.

The entire area will have the subsoil ripped to alleviate compaction, and topsoil layer will be replaced with clean fill. Soil management will include soil testing for contaminants in accordance with regulatory requirements at the time of decommissioning. If a concrete foundation is used for the substation, it will be removed to approximately 1 m below grade by excavators mounted with hydraulic hammers and/or hydraulic shears.

The concrete may be broken up and crushed using a mobile crushing unit before being loaded in dump trucks and removed from the site. Concrete material will be recycled, where possible, or disposed off-site at an approved and appropriate facility.

2.2.1.7 *Operations and Maintenance Building*

An appropriate re-use or disposal of the building will be determined at time of decommissioning through consultation with the landowner. If dismantling is required, all materials will be removed from site for re-use, recycling or disposal. Gravel will be removed from the site, the entire area will have the subsoil ripped to alleviate compaction, and topsoil layer will be replaced with clean fill. Soil testing for contaminants will be conducted in accordance with regulatory requirements at the time of decommissioning, as required. The area will be re-graded and restored to pre-facility conditions.

2.2.1.8 *Meteorological Towers and Microwave Tower*

The proposed meteorological towers may be left in place to be used by the Municipality of Chatham-Kent or local aviation groups, if agreed upon by North Kent Wind 1. If it is determined that the meteorological towers and/or the

microwave tower need to be removed, they will be dismantled using a crane and the metal components will be recycled. All components that cannot be recycled will be delivered to an appropriate waste facility. The concrete foundations will be removed to approximately 1 m below grade and the concrete may be broken up and crushed using a mobile crushing unit before being loaded in dump trucks and removed from the site. Concrete material will be recycled, where possible, or disposed off-site at an appropriate and approved facility.

2.3 Site Restoration Activities

2.3.1 Land Reclamation

Once all of the turbines and ancillary facilities are removed, the remaining decommissioning work will consist of shaping and grading the areas to a state similar to pre-existing conditions. All areas, including the access roads, transformer pads and crane pads will be restored to a state similar to the original condition with appropriate soils, seeding and fertilization, where feasible. If there is insufficient material on-site, topsoil and/or subsoil will be imported from an acceptable source.

Although spill prevention procedures will be in place, there is the potential through the decommissioning process for small spills of solvents or fuels. The soil surrounding turbine areas will be surveyed to determine if any spills have occurred. If necessary, as a mitigation measure, the contaminated soils will be excavated and removed in accordance with applicable standards. Any removed topsoil will be replaced and additional clean topsoil will be used to fill remaining areas.

Decommissioning may temporarily affect existing land uses around the access roads, substation and turbine locations, but only during their removal. Similar to the construction phase, proper steps will be followed to mitigate erosion and silt / sediment runoff during decommissioning.

Sound levels occurring during decommissioning work may be higher than average, as was experienced during Construction. Proper steps will be followed to minimize this disturbance, such as avoiding work outside of daylight hours, where possible. All decommissioning Project activities will conform to applicable local municipal noise by-laws, unless a noise by-law exemption is provided by the local municipality.

Road traffic in the area will increase temporarily due to crews and heavy equipment movements, similar to the Project's construction phase. If required, a traffic management plan will be prepared to mitigate the effects of increased road traffic.

2.3.2 Water Resources

Decommissioning activities occurring in the vicinity of watercourses or aquatic habitat will be completed in consultation with appropriate regulatory agencies. Mitigation and environmental monitoring procedures in these areas is anticipated to be similar to those described in the Construction Plan Report.

Following the removal of any culverts, the banks and channel bed will be contoured to match the upstream and downstream grade. Native riparian vegetation will be planted to replace any such vegetation disturbed during decommissioning activities to prevent erosion and promote proper riparian function. Any underground watercourse crossings required for collector lines will remain in place after decommissioning activities in order to avoid disturbance to watercourses that would likely occur if collector lines were removed. An Erosion and Sediment Control Plan will be implemented to minimize the potential effects of erosion and sedimentation on water resources, similar to the Project's construction phase.

2.3.3 Cultural Heritage Resources

Prior to decommissioning, previous archaeological assessment reports produced for the Project will be reviewed to confirm whether any archaeological or heritage assessment recommendations apply to decommissioning activities. By following the appropriate mitigation measures, no significant adverse effects on protected properties or archaeological and heritage resources are anticipated.

2.3.4 Accidental Spills

Accidental spills or releases of contaminants (i.e., fuel, lubricating oils and other fluids) may occur during the refuelling, operation or maintenance of decommissioning equipment. In the event that soils are contaminated, the impacted soils will be removed and disposed of at a MOECC approved facility. Removed soils will be replaced with appropriate fill. For more information regarding spill mitigation, please refer to the Natural Heritage Assessment (NHA) Report and the Water Assessment and Water Body Report.

2.4 Management of Waste and Excess Materials

2.4.1 Hazardous Materials

Machinery used to dismantle and remove Project components will require the use of oils, fuels and lubricants. In addition, waste lubricants will be recovered during the dismantling of Project components, including the collector substation, wind turbine generators and operations and maintenance building. These materials will be disposed of through conventional waste-oil and hazardous waste disposal streams in a manner outlined by regulatory agencies, if required, at the time of decommissioning.

Overhead collector lines for the Project, if required, may be constructed on a wooden, steel or concrete monopole structure that are consistent with existing poles within the area, where technically feasible, and meet existing electrical and environmental safety standards. If applicable, North Kent Wind 1 will discuss the recycling of wooden poles with a licensed facility.

2.4.2 Non-hazardous Materials

The major components of the wind turbines (tower, nacelle and blades) are modular items that allow for ease of construction and disassembly of the wind turbines during replacement or decommissioning. Dismantled wind turbines have a high salvage value due to the steel and copper components. These components are easily recyclable and there is a ready market for scrap metals. Transformers typically have a lifespan beyond 20 years so these items could be refurbished and sold for re-use.

Based on construction details for the Siemens wind turbines and associated tower and components, it is assumed that both the tower and nacelle will yield significant salvageable materials. Since the hub assembly and bedplate is manufactured steel, it is anticipated that the hub will yield a significant amount of salvageable metallic materials. Since the rotor / blades are constructed of predominantly non-metallic materials (fiberglass reinforced epoxy and carbon fibres), no salvage for the rotor or blades is currently assumed.

It is assumed that the majority of the aggregate material from the decommissioning of the crane pads can be salvaged for future use as aggregate base course. The remaining materials would be viable for general fill on non-structural fill areas. The geotextile fabric cannot be salvaged.

2.5 Emergency Response and Communications Plan

A detailed description of the emergency response plan to address concerns during the operations of the Project is provided in the Design and Operations Report. Where applicable, the emergency response plan will also be implemented during the decommissioning of the Project.

The communications plan outlined in the Design and Operations Report includes details on providing notifications to local residents, the Municipality of Chatham-Kent, First Nation and Aboriginal Communities as well as regulatory agencies. In addition, the communications plan includes details on receiving communications from the public and stakeholders, including a complaint response protocol. During the decommissioning of the Project, the communications plan will be used to inform stakeholders on activities being undertaken in the PSA. In addition, the communications plan will outline how stakeholders are able to contact North Kent Wind 1 and any firm(s) contracted to complete decommissioning activities, as well as the means by which communications will be logged, tracked and addressed.

2.6 Decommissioning Notification

The process for notifying local residents, the Municipality of Chatham-Kent, First Nation and Aboriginal Communities, and regulatory agencies of decommissioning activities occurring in the PSA will follow procedures outlined in the Design and Operations Report. Decommissioning notifications may be distributed in the form of published notices, letters, direct communication, updates on the North Kent Wind 1 website, or equivalent.

2.7 Other Decommissioning Related Approvals

Approvals other than the REA may be required specifically for decommissioning activities. Additional permits may also be required from regulatory agencies. **Table 2-2** indicates some of the authorizations and approvals that may be required at the time of decommissioning based on current regulatory expectations for disposal or recycling of Project components and associated waste materials. The summary provided in **Table 2-3** may not include all possible regulatory requirements for Project decommissioning; however, all authorizations and permitting will be obtained in accordance with regulatory requirements at the time of decommissioning.

Table 2-2: Summary of Potential Decommissioning Permits and Approvals

Permit / Authorization	Administering Agency	Rationale
Entrance Permit	Municipality	Ingress / egress from municipal roads
Road Occupancy Permit	Municipality	Required for work in municipal road allowances
Road Cut Permit	Municipality	May be required for access roads off of county roads or works to county roads
Traffic Management Plan	Municipality	Adherence to road safety and suitability
Record of Site Condition	Ministry of the Environment and Climate Change	Predicted change in land use from industrial / commercial to agricultural
Land use Permit	Ministry of Transportation	Project works undertaken within 180 m of an Ministry of Transportation controlled intersection
Change of Access & Heavy / Oversize Load Transportation Permit	Ministry of Transportation	Compliance with provincial highway traffic and road safety regulations
Special Vehicle Configuration Permit	Ministry of Transportation	Use of non-standard vehicles to transport large components
Notice of Project	Ministry of Labour	Notification to the Ministry of Labour before construction begins

Permit / Authorization	Administering Agency	Rationale
Development, Interference with Wetlands and Alterations to Shorelines and Watercourses, O. Reg. 169/06	St. Clair Region Conservation Authority (SCRCA) / Lower Thames Valley Conservation Authority (LTVCA)	Work within floodplains, water crossings, river or stream valleys, hazardous lands and within or adjacent to wetlands (work within SCRCA / LTVCA's Regulated Area)
<i>Fisheries Act</i> Letter of Advice or Authorization	Fisheries and Oceans Canada	Potential direct or indirect effects to fish habitat as defined under the <i>Fisheries Act</i>
<i>Endangered Species Act</i>	Ministry of Natural Resources and Forestry	Potential disturbance to regulated species or habitats within Project Location

2.8 Conditions of Approval

North Kent Wind 1 will ensure that the decommissioning stage of the proposed Project is carried out in accordance with REA requirements and the measures / practices as described in this report.

3. Summary and Conclusions

This Decommissioning Plan Report has been completed to assist the North Kent Wind 1 in fulfilling regulatory requirements for the decommissioning of the North Kent Wind 1 Project. This report is consistent with the provisions of O. Reg. 359/09, as amended, for a Class 4 Wind facility.

4. References

Municipality of Chatham-Kent, 2014:

Municipality of Chatham-Kent Official Plan. Consolidated May 20, 2014.

Ontario Ministry of the Environment and Climate Change (MOECC), 2012:

Ontario Regulation 359/09. Renewable Energy Approvals under Part V.0.1 of the Environmental Protection Act. Consolidated May 2, 2014.

Ontario Ministry of the Environment and Climate Change (MOECC), 2013:

Technical Guide to Renewable Energy Approvals. Accessed July 2015. Available:

<https://www.ontario.ca/environment-and-energy/technical-guide-renewable-energy-approvals>.