



Stantec

**GRAND VALLEY WIND FARMS – PHASE 3
WIND PROJECT
DECOMMISSIONING PLAN REPORT**

File Number: 160960698
April 2013

Prepared for:

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1.0 Project Overview

Grand Valley Wind Farms Inc. (GVWF) is proposing to develop, construct, operate and decommission the 40 megawatt (MW) Grand Valley Wind Farms - Phase 3 Wind Project (the Project) in the Town of Grand Valley and Township of Amaranth, Dufferin County in response to the Government of Ontario's initiative to promote the development of renewable electricity in the province.

The Project Study Area is generally bordered on the north by Highway 89, on the south by County Road 109, on the east by 9th Line and on the west by East West Luther Townline. The proposed Project Location includes all parts of the land in, on or over which the Project is proposed (the 'construction area' for the Project). The proposed Project Location and Project Study Area are shown in Figures 1 and 2, Appendix A.

The basic components of the Project include:

- Between 14 and 17 wind turbine generators (Siemens SWT-2.3-113 and/or SWT 3.0-113 turbine) with a total maximum installed nameplate capacity of 40MW. The turbine models are identical in structure, and would be 'de-rated', generating less electricity per turbine to meet the contract nameplate capacity. Noise Assessment Reports have been completed for both turbine models as part of the Renewable Energy Approval (REA) process;
- A 34.5 kV underground power line collector system that would transport the electricity generated from the Project to the Hydro One Networks Inc. (HONI) transmission system;
- Fibre optic cabling laid with the underground collector lines;
- Turbine access roads;
- Crane pads;
- One connection point to the existing HONI electrical transmission system;
- Existing operations and maintenance facilities to be leased by the Project (joining the current facilities for the operation of the Grand Valley Phase 1 and 2 Wind Projects). The currently municipally-serviced office facility is located at 35A Main Street South, Grand Valley and the currently unserviced warehouse facility is located at 27 Mill Street West, Grand Valley;
- Existing parking (owned) and gravel quarry (leased) sites to be used for employee parking and temporary construction trailer sites (174321 and 173395 County Road 25, Grand Valley);
- A 34.5 kV/230 kV 45 MVA transformer station; and,
- Meteorological equipment, including an approximately 100 m MET tower or a ground mounted SoDAR unit.

Temporary components include:

- Work and storage areas during construction at the turbine locations and along the underground power line collector system; and,
- Office, parking and storage areas during construction for the work crews during the construction phase of the Project.

GVWF retained Stantec Consulting Ltd. (Stantec) to prepare the REA application with input from Zephyr North Ltd., and Archaeological Services Inc. The REA application is a requirement under Ontario Regulation 359/09 - Renewable Energy Approvals under Part V.0.1 of the *Environmental Protection Act* (O. Reg. 359/09), as amended. According to subsection 6 (3) of O. Reg. 359/09, the Project is classified as a Class 4 Wind Facility and will follow the requirements identified in O. Reg. 359/09 for such a facility.

1.1 REPORT REQUIREMENTS

The purpose of the Decommissioning Plan Report is to provide the public, Aboriginal communities, municipalities, and regulatory agencies with an understanding of the closure plan for the Project at the end of its useful life, and to describe how the proponent proposes to restore the sites to an acceptable condition for its intended use in consultation with the landowners following the end of operations.

The Decommissioning Plan Report has been prepared in accordance with Item 3, Table 1 of O. Reg. 359/09, and the Ministry of the Environment's (MOE's) *Technical Guide to Renewable Energy Approvals* (MOE 2012). O. Reg. 359/09 sets out specific content requirements for the Decommissioning Plan Report as provided in Table 1.1.

Table 1.1: Decommissioning Plan Report Contents: O. Reg. 359/09

Requirements	Completed	Section Reference
Set out a description of plans for the decommissioning of the renewable energy generation facility, including the following:		
1. Procedures for dismantling or demolishing the facility.	✓	2.1 & 2.2
2. Activities related to the restoration of any land and water negatively affected by the facility.	✓	2.3
3. Procedures for managing excess materials and waste.	✓	2.4

2.0 Decommissioning

The components used for the Project have a typical operational lifespan of approximately 20 years. At the end of the equipment's useful life, the Project components, including the wind turbines, will be decommissioned as described herein. If the economics of wind power remain viable at that time, the facility could be "repowered" with new technology. This process may include the replacement and/or upgrading of Project components; however, specific details are unknown at this time as technological improvements over the next 20+ years are currently unknown.

2.1 DECOMMISSIONING DURING CONSTRUCTION (ABANDONMENT OF PROJECT)

In the event that GVWF cannot successfully complete the construction of the Project, the rights to the Project may be sold to allow the Project to be constructed by the purchasing developer.

In the event that a delay occurs in the purchasing of the Project by another developer, GVWF would be responsible for interim environmental protection. In the event that the site has been cleared and/or excavated in preparation for installation of Project infrastructure, appropriate environmental protection measures would be implemented to prevent topsoil erosion and/or watercourse sedimentation. The extent of environmental protection measures required would be dependent on the progress made at the time of Project abandonment, and would be determined through site inspections by qualified specialists. Possible measures would include, as appropriate, erosion and sediment control fencing, filling excavated areas, replacement of topsoil and/or revegetation.

In the event that the Project is not purchased by another developer, GVWF would be responsible for decommissioning of the Project. In such a case, the decommissioning process to be followed and the mitigation measures to be implemented would be the same as those detailed in Section 3.0 for decommissioning after ceasing operation of the Project.

2.2 DECOMMISSIONING AFTER CEASING OPERATION

Project components are expected to be in service for the 20 year term of the power supply agreement between GVWF and the Ontario Power Authority. Following the term of the agreement, a decision would be made regarding whether to extend the life of the Project components or to decommission. Decommissioning would entail the removal of Project components and restoration of the land to meet municipal by-law requirements at the time and to the satisfaction of the landowners.

2.2.1 General Environmental Protection during Decommissioning

During all decommissioning and restoration activities, general environmental protection and mitigation measures would be implemented. Many activities during decommissioning would be comparable to the construction phase.

All decommissioning and restoration activities will be performed according to the requirements of relevant governing agencies, and will be in accordance with all relevant statutes in place at the time of decommissioning.

2.2.2 Pre-Dismantling Activities

At the end of the Project's useful life, it will first be de-energized and isolated from all external electrical lines.

Prior to any dismantling or removal of equipment, turbine staging areas would be delineated at each turbine location. All decommissioning activities would be conducted within this designated area; this includes ensuring that vehicles and personnel stay within the demarcated areas.

Temporary erosion and sedimentation control measures would be implemented during the decommissioning phase of the Project. These measures would be enacted with consideration of industry best management practices.

2.2.3 Equipment Dismantling and Removal

2.2.3.1 Turbines

The turbines can be disassembled into their original component parts. A crane would be used to carry out the reverse sequence of steps that occurred during construction (detailed in the Construction Plan Report), namely:

- Lowering hub and blades
- Lowering nacelle
- Decoupling and lowering the tower sections

Once the components are disassembled and at ground level (within the same staging areas beside each turbine as described in the Construction Plan Report), the materials will be broken down into manageable sizes to enable transport to various salvage facilities (to be determined prior to decommissioning and in discussions with Dufferin County, the Town of Grand Valley and the Township of Amaranth). The main sources of salvage material are steel, copper, fibreglass and plastic which may be sold to recycling facilities. All non-salvageable components will be processed and safely transported to an MOE approved disposal facility.

2.2.3.2 Turbine Transformers

The small transformer associated with each turbine will be removed for reuse, reconditioning or disposal. The foundation associated with each transformer will likely be entirely removed as its depth will be less than 1.0 m below grade.

2.2.3.3 Turbine Foundations

The turbine foundations will be partially removed to a depth of approximately 2.0 m below grade, in accordance with the land lease agreements. This depth enables normal agricultural practices to resume over the foundation areas following soil remediation. The concrete will be removed from the site by dump truck. No blasting is anticipated to remove the turbine foundations. The costs for removal of the turbines and foundations will be the responsibility of the owner of the Project or the purchaser of the turbine materials.

2.2.3.4 Electrical System

Underground collector lines on optioned properties and in municipal road right-of-way (ROW) would likely remain in place, with both ends that come to the surface excavated to approximately 1.0 m below grade.

Belowground wires, buried at a depth of greater than 1.0 m, do not present a significant hazard to the environment if left in place; removal of the buried wires may present more of a disturbance to the local environment and agricultural activities due to the required excavation. The decision of whether to remove the cables from the ground or leave them buried will be to the satisfaction of the municipalities and landowners, acting reasonably, taking into account the potential salvage value of the cables.

2.2.3.5 Temporary Staging Areas

A temporary staging area at each turbine location would be used for storage of the turbine components, parking, and the foundation spoil pile. The turbine staging area used in the decommissioning phase will be the same as the areas used in construction. This area would not be excavated or graveled and would be restored to meet municipal by-law requirements at the time and to the satisfaction of the landowners following the end of decommissioning.

Additional lands may be required for office, parking and storage areas for the work crews during the decommissioning phase of the Project. The nature and location of these lands would be determined at the time of decommissioning.

2.2.3.6 Access Roads and Crane Pads

To facilitate disassembly of the turbines, access roads may be upgraded with geotextile and aggregate material if deemed necessary.

All crane pads and turbine access roads would be removed; this includes any geotextile material beneath the pads and access roads and granular material. All granular and geotextile materials would be removed from the site by dump truck. The exception to removal of the crane pads and access roads, or their related material, would be upon specific written request from the landowner to leave all or a portion of these facilities in place for future use by the landowner.

Culverts would be removed if requested by the landowner. Such removal will be done to the satisfaction of the landowner, municipality, Grand River Conservation Authority (GRCA) and/or Fisheries and Oceans Canada, acting reasonably.

2.2.3.7 Transformer Station and Met Tower

The transformer station and met tower will be removed for reuse, recycling or disposal. The transformer station foundation will likely be entirely removed as its depth will be less than 1 m below grade. This area would be restored to meet municipal by-law requirements at the time and to the satisfaction of the landowners following the end of decommissioning.

2.2.3.8 Operations and Maintenance Building

As the operations and maintenance building is currently leased for joint use with the existing Grand Valley Wind Farms Phase 1 and Phase 2 projects, decommissioning of the facility will not be required as a part of the present Project.

2.2.4 Watercourses

Any proposed decommissioning works within or near watercourses and/or aquatic habitat will be discussed with the GRCA to determine any site specific mitigation and/or remediation plans. It is envisioned that the same mitigation and monitoring measures implemented during construction will be utilized for the decommissioning of the Project.

Where Project infrastructure has been removed, disturbed areas will be seeded with quick growing native species to prevent topsoil erosion; the seed mixture would be determined at that time in consultation with the landowner, Dufferin County, the Town of Grand Valley, the Township of Amaranth and/or the GRCA. Erosion and sediment control measures at ditches would be left in place until seed is fully established.

2.2.5 Agricultural Lands

Agricultural lands that have become compacted due to operation or decommissioning activities, such as turbine staging areas, crane pads and access roads, would be decompacted using chisel ploughing and/or subsoiling, as determined by an environmental advisor or landowner.

Any agricultural tile drains capped or modified during construction, and/or damaged during decommissioning, would be repaired by a drainage tile contractor chosen by the landowner.

Topsoil would be re-graded or added to similar depth as surrounding areas, where necessary. If necessary and approved by the landowner, imported topsoil may be added to agricultural areas and would be of the same or similar soil type and texture as pre-construction conditions and/or adjacent lands and would be inspected and/or tested to prevent transmission of agricultural pests from one area to another.

All areas would be graded to pre-construction conditions and restored to meet municipal by-law requirements at the time and to the satisfaction of the landowners following the end of decommissioning.

2.2.6 Spills

Although strict spill prevention procedures will be in place during operation, there is the potential through the routine operation, maintenance, and decommissioning process for small spills to occur. Should soil contaminants be noted, the impacted soils will be delineated, excavated and removed, to the standards of the day. The contaminated material will be disposed at an MOE-approved and appropriate facility. The removed soils will be replaced with appropriately compatible material.

No hazardous materials or wastes such as used lubricating oils will be stored on-site. Provided the Project is operated and maintained in-line with industry best practices there should be no significant environmental liabilities associated with cleanup or remediation. As noted above, the costs for removal of Project infrastructure will be the responsibility of the owner of the Project or the purchaser of the reusable materials.

2.3 MANAGING EXCESS MATERIALS & WASTE

Prior to embarking on the dismantling and demolition of the Project, GVWF or the Project operator would complete a waste audit of the materials to be handled and prepare a waste reduction work plan in accordance with *A Guide to Waste Audits and Waste Reduction Work Plans For Construction & Demolition Projects, as required under Ontario Regulation 102/94* (O. Reg. 102/94), as amended or other applicable regulation that is in place at the time.

All wastes would be managed in accordance with *Ontario Regulation 347, General – Waste Management* (O. Reg. 347) and with reference to *Ontario Provincial Standard Specification 180*

- *General Specification For The Management of Excess Materials* (OPSS 180), or relevant regulations and specifications in effect at that time.

Typical waste materials and modes of disposal, recycling or reuse are presented in Table 2.1:

Table 2.1: Typical Facility Decommissioning Waste Materials and Modes of Disposal

Component	Mode of Disposal
Turbine blades	Cut and dispose in landfill
Turbine towers	Recycle
Generators and gearboxes	Salvage for reuse or recycle for scrap
Concrete foundations	Crush and recycle as granular material
Cabling	Recycle
Transformers and switchgear	Salvage for reuse or recycle for scrap
Granular materials (roads, tower sites, etc.)	Reuse or dispose in landfill
Oils/lubricants	Recycle
Hazardous materials	Dispose through licensed hauler
Geotextile material	Dispose in landfill
Miscellaneous non-recyclable materials	Dispose in landfill

Major pieces of equipment, such as steel towers and electrical components, may be recyclable or reusable. Components such as the generators and cabling would have a high resale value due to copper and aluminum content. Concrete from footings could be crushed and recycled as granular fill material. Spent oils could be recovered for recycling through existing oil reprocessing companies.

As much of the Project components would consist of reusable or recyclable materials, there would be minimal residual waste for disposal as a result of decommissioning the Project. Small amounts of registerable waste materials would be managed in accordance with O. Reg. 347 or subsequent applicable legislation. Residual non-hazardous wastes would be disposed at a licensed landfill in operation at the time of decommissioning.

2.4 SITE REHABILITATION/RESTORATION

The operator of the Project will develop a Rehabilitation Plan that is designed to restore habitat in areas affected by Project-related equipment. This plan will be developed in consultation with the appropriate agencies prior to decommissioning.

It is envisioned that the Rehabilitation Plan will include, but not be limited to the following;

- Land will be restored to meet municipal by-law requirements at the time of decommissioning and to the satisfaction of the landowners (i.e., agricultural areas will be restored such that normal farming practices may resume and any damaged tile drains will be fixed).
- Areas such as turbine staging areas, crane pads and access roads which may become compacted during decommissioning will be de-compacted and restored to meet

municipal by-law requirements at the time and to the satisfaction of the landowners following the end of decommissioning.

The Rehabilitation Plan may also involve a monitoring period which allows for the Project site to experience seasonal changes and help determine if additional restoration is required.

2.5 MONITORING

Follow-up monitoring would be conducted for one year after site restoration, to allow for the Project site to experience seasonal changes and help determine if additional restoration is required, as determined by an environmental advisor. A monitoring plan would be prepared prior to decommissioning.

For agricultural land, potential soil problem areas including trench subsidence, soil erosion and/or stoniness would be noted.

Additional monitoring activities may also be conducted, depending upon the site conditions at the time of decommissioning. If negative impacts are noted during monitoring activities, appropriate remediation measures would be implemented as necessary, and additional follow-up monitoring would be conducted, as determined by an environmental advisor.

3.0 Emergency Response and Communications Plan

The following programs, plans, and procedures described within the Design and Operations Report will be carried forward during decommissioning.

3.1 ENVIRONMENTAL PROCEDURES

- *spills and releases*: identify the specific procedures for the prevention, response, and notification of spills. In addition, establish the general procedures for spill clean-up, personnel training, and material handling and storage to prevent spills.
- *hazardous waste management*: outline the procedures for proper identification, storage, handling, transport, and disposal of hazardous waste. In addition, will outline specific requirements for personnel training, emergency response, product review and approval, and record keeping.
- *non-hazardous waste management*: establish alternative procedures for the management and disposal of used lubricants, used drums, and general waste.

3.2 OCCUPATION HEALTH AND SAFETY PROCEDURES

The firm responsible for decommissioning will ensure employee health and safety is maintained and will also implement the following safety procedures and protocols as appropriate in an effort to ensure employee safety is addressed throughout decommissioning activities:

- personal protective equipment (PPE), including non-slip footwear, eye protection, clothing, and hardhats, will be worn by personnel when on duty;
- elevated platforms, walkways, and ladders will be equipped with handrails, toeboards, and non-slip surfaces; and
- electrical equipment will be insulated and grounded in compliance with the appropriate electrical code.

Incidents in the work place have the potential to cause personal injury and property damage. As appropriate, a master Incident Report that documents illnesses and accidents will be maintained. The Incident Report should document all activities resulting in incapacity to work for at least one full workday beyond the day on which the illness or accident occurred. As required, records will also be maintained noting the total number of days of absence from work as a direct result of the illness or accident.

As appropriate, the firm responsible for decommissioning will develop or have an existing training program to ensure personnel receive appropriate training in relation to decommissioning programs, environmental, health, and safety procedures, and the emergency response plan.

3.3 COMMUNICATIONS PLAN FOR EMERGENCIES

The Plans developed for the construction and operation of the Project will be carried forward and followed during decommissioning of the Project (see the [Construction Plan Report](#) and [Design and Operations Report](#) for additional detail).

3.4 COMMUNICATIONS AND COMPLAINTS RESPONSE AND PUBLIC SAFETY PLANS

The Communications and Complaints Response and Public Safety Plans detailed in the [Design and Operations Report](#) include Project updates/notifications, Complaint Response Protocols and Public Safety Plans. These include actions to be taken during the decommissioning of the Project to inform the public, aboriginal communities, Dufferin County, the Town of Grand Valley and the Township of Amaranth regarding activities occurring at the Project site (including emergencies), means by which stakeholders can contact the decommissioning firm, and means by which correspondence sent to the decommissioning firm and/or the Project owner will be recorded and addressed.

3.5 DECOMMISSIONING NOTIFICATION

As part of the Communications and Complaints Response and Public Safety Plans, actions will be taken prior to and during decommissioning to inform the public, aboriginal communities, and Dufferin County, the Town of Grand Valley and the Township of Amaranth regarding activities occurring at the Project site. Notification of decommissioning will be provided to Dufferin County, the Town of Grand Valley, the Township of Amaranth, aboriginal communities, stakeholders and other interested agencies prior to decommissioning works commencing. Notification may be in the form of letters, newspaper notices, and updates on the Project or company website or direct communications.

As required, this Decommissioning Plan Report will be updated at least six months before decommissioning is anticipated to start, and will be provided to the Director at the MOE for review and comment.

4.0 Other Approvals

Following updating of this Decommissioning Plan as noted above, GVWF or the Project owner would obtain all necessary approvals in effect at the time from appropriate government and regulatory bodies. Existing permits and approvals, which may be required at the time of decommissioning, are provided in Table 4.1.

Table 4.1: Potential Decommissioning Permits and Approvals

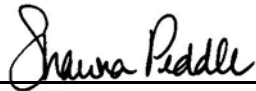
Permit / Approval	Administering Agency	Rationale
Municipal		
Entrance Permits	Municipality	Entrance from Municipal and/or County roads
Road Condition Survey	Municipality	Assessment of pre and post construction conditions of municipal roads to be used for decommissioning activities
Traffic Management Plan	Municipality	Adherence to road safety and suitability, including adherence to load restrictions on municipal roads
Demolition Permit	Municipality	Required prior to the demolition of the Project
Provincial		
Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Permit	Grand River Conservation Authority	Work within floodplains, water crossings, river or stream valleys, hazardous lands and within or adjacent to wetlands. Projects requiring review, <i>Fisheries Act</i> authorization and/or assessment under the <i>Canadian Environmental Assessment Act</i> are forwarded to the Department of Fisheries and Oceans
Record of Site Condition	MOE	For change of property use and/or ownership
Notice of Project	Ministry of Labour	Notify the Ministry of Labour before decommissioning begins
Special vehicle configuration permit	Ministry of Transportation (MTO)	Use of non-standard vehicles to transport large components
Transportation Plan	MTO	Adherence to road safety and suitability
Highway Entrance Permit	MTO	Interference or obstruction of the highway
Change of Access and Heavy/Oversize Load Transportation Permit	MTO	Compliance with provincial highway traffic and road safety regulations. Transportation of large or heavy items on provincial highways
Wide or excess load permit	MTO	Transportation of large or heavy items on provincial highways

5.0 Closure

The Decommissioning Plan Report for the Grand Valley Wind Farms - Phase 3 Wind Project has been prepared by Stantec for GVWF in accordance with Ontario Regulation 359/09 and the *Technical Guide to Renewable Energy Approvals* (MOE, 2012).

This report has been prepared by Stantec for the sole benefit of GVWF, and may not be used by any third party without the express written consent of GVWF. The data presented in this report are in accordance with Stantec's understanding of the Project as it was presented at the time of reporting.

STANTEC CONSULTING LTD.



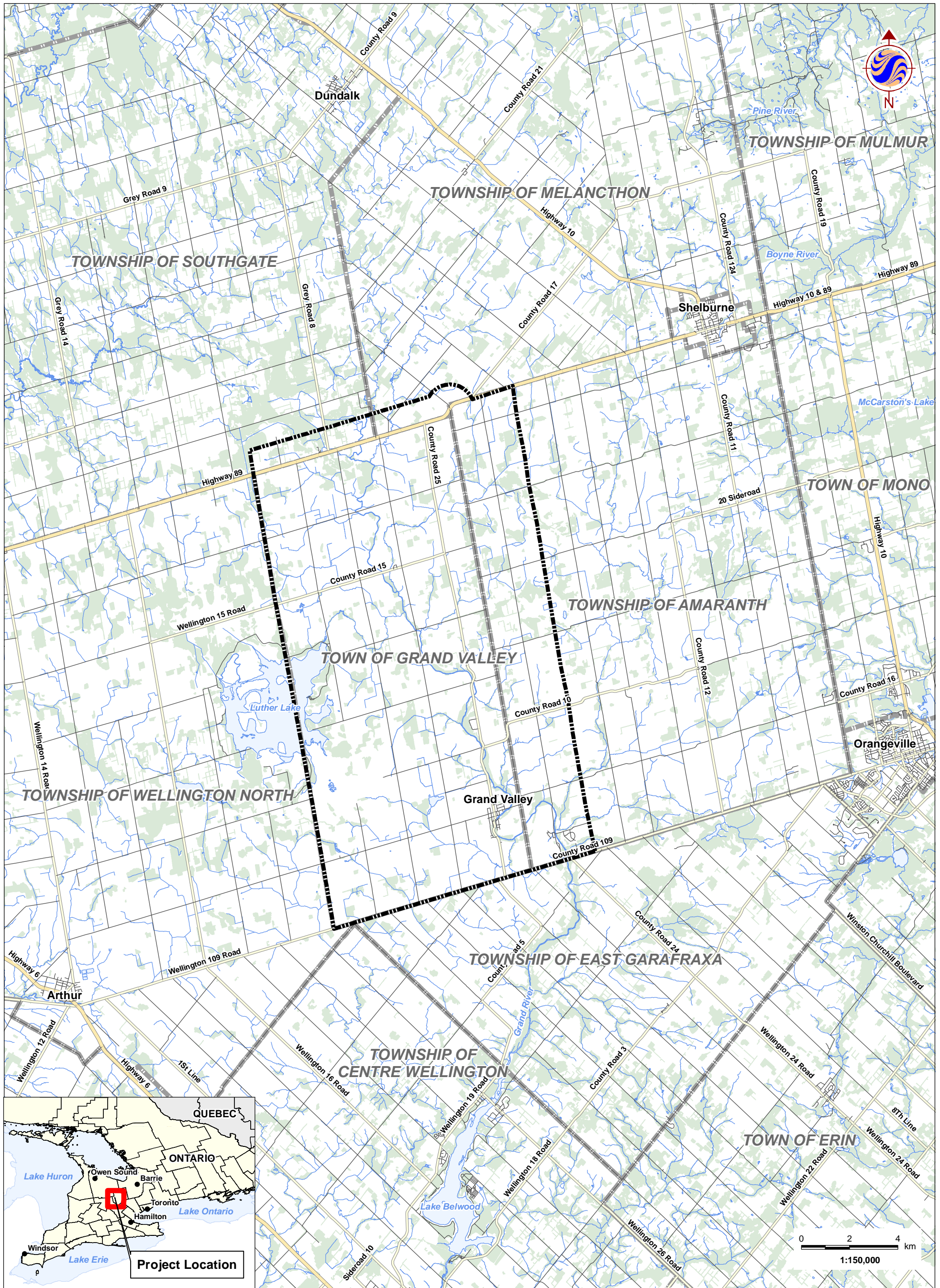
Shawna Peddle, MSc
Senior Project Manager



Mark Knight, MA, MCIP, RPP
Project Manager

Appendix A

Figures



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 Revised: 2012-12-19 By: chharvey

December, 2012
160960698



Legend

- Study Area
- Highway
- Major Road
- Local Road
- Watercourse
- Municipal Boundary
- Waterbody
- Woodland

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.

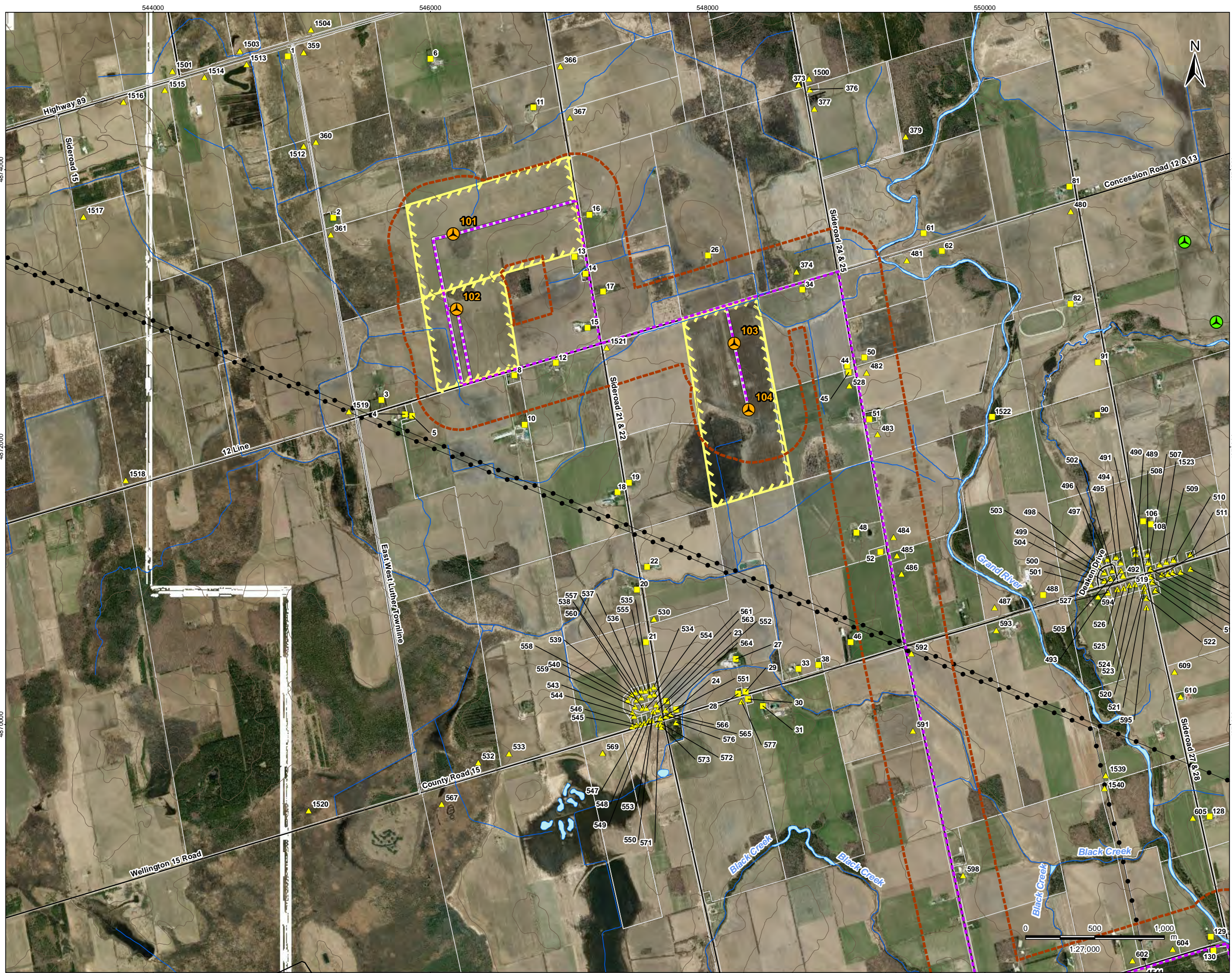
Client/Project
Grand Valley Phase 3
Veresen Inc.

Figure No.

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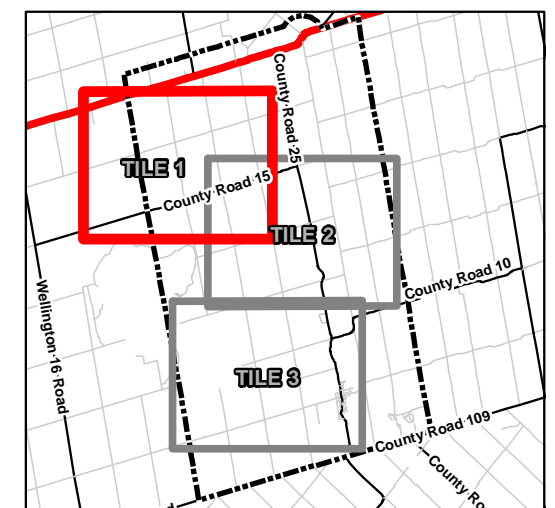
Title

Project Study Area



Legend

- 300m Zone of Investigation
- Proposed Project Components**
- Turbine
- ★ Construction Trailer/ Parking Area (Previously Disturbed)
- Access Roads
- Collector Lines
- Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
- Participating Property
- Other Crystallized/ Existing Turbines**
- Grand Valley Phase 1 & 2
- Melancthon Phase 1 & 2
- Existing Features**
- Hydro Line
- Contours (5 Metre Interval)
- Road
- Watercourse (as per MNR base mapping)
- Property Parcel
- Waterbody (as per MNR base mapping)
- Noise Receptors**
- Participating
- Non- Participating Occupied
- ▲ Non- Participating Vacant
- 483** Receptor ID



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 17N
 2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2011.
 3. Orthographic imagery © First Base Solutions, 2011. Imagery taken in Spring 2010.



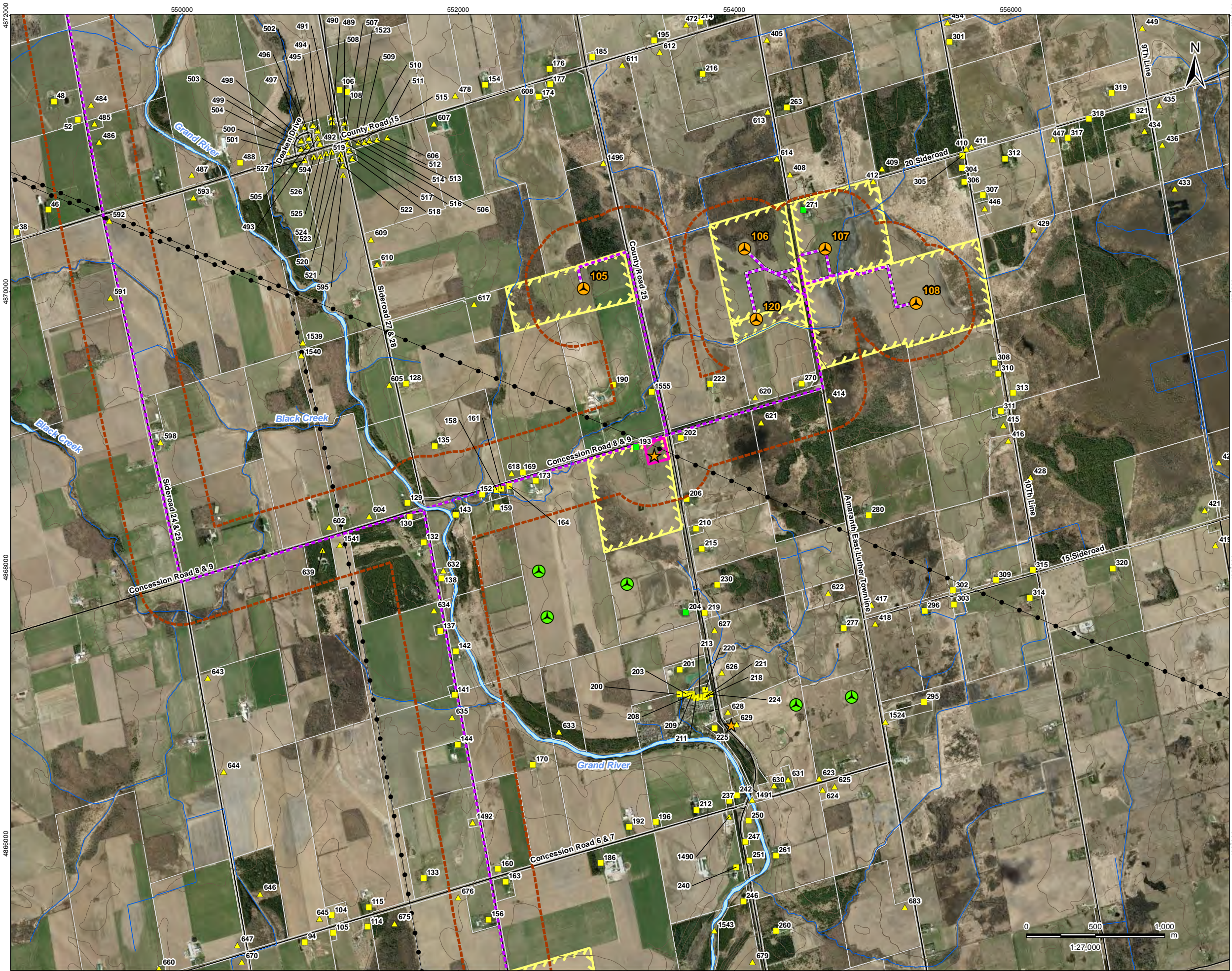
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Veresen Inc.

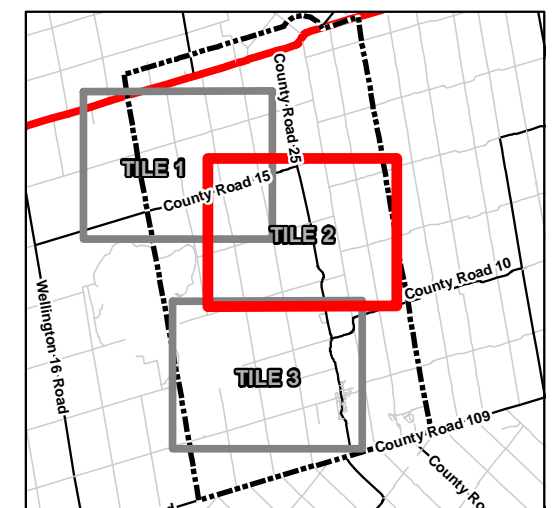
Figure No.
2

Title
**Project Location Mapbook
TILE 1**



Legend

- 300m Zone of Investigation
- Proposed Project Components**
- Turbine
- ★ Construction Trailer/ Parking Area (Previously Disturbed)
- Access Roads
- Collector Lines
- Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
- Participating Property
- Other Crystallized/ Existing Turbines**
- Grand Valley Phase 1 & 2
- Melancthon Phase 1 & 2
- Existing Features**
- Hydro Line
- Contours (5 Metre Interval)
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- Watercourse (as per MNR base mapping)
- Property Parcel
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- Non- Participating Occupied
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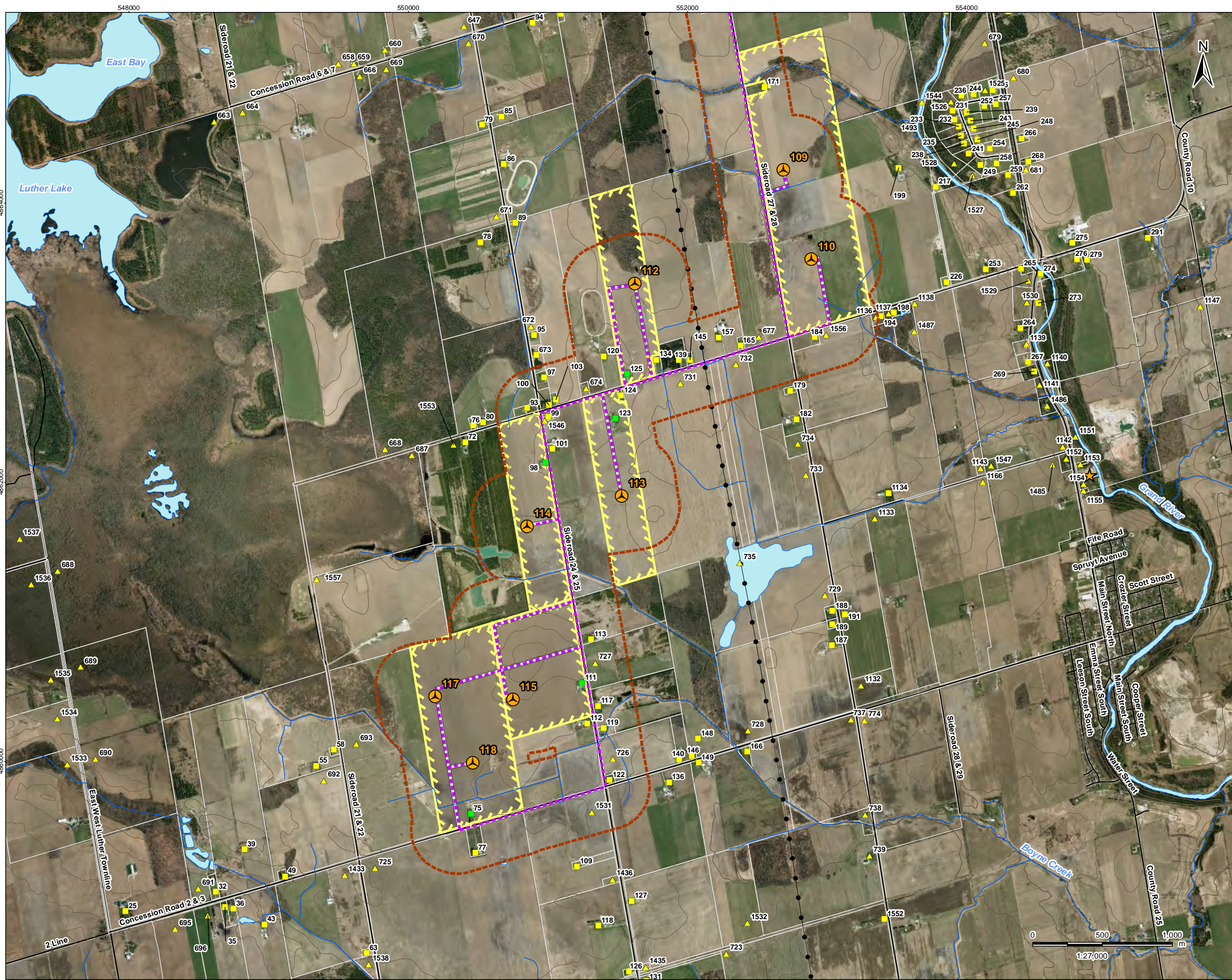
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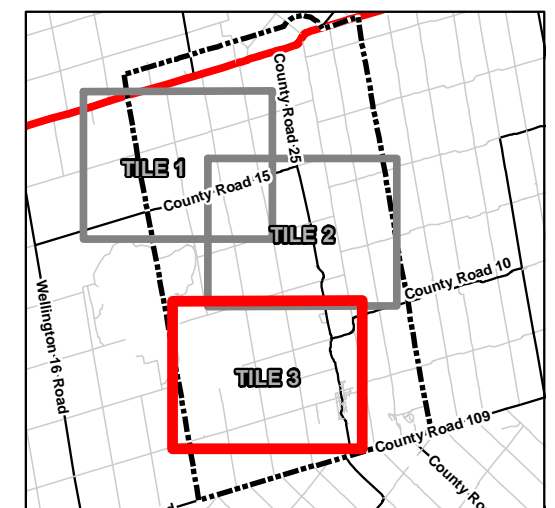
Client/Project
Grand Valley Phase 3
Veresen Inc.

Figure No.
2

Title
**Project Location Mapbook
TILE 2**



- ### Legend
- 300m Zone of Investigation
 - Proposed Project Components**
 - Turbine
 - ★ Construction Trailer/ Parking Area (Previously Disturbed)
 - Access Roads
 - Collector Lines
 - Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
 - Participating Property
 - Other Crystallized/ Existing Turbines**
 - Grand Valley Phase 1 & 2
 - Melancthon Phase 1 & 2
 - Existing Features**
 - Hydro Line
 - Contours (5 Metre Interval)
 - Road
 - Watercourse (as per MNR base mapping)
 - Property Parcel
 - Waterbody (as per MNR base mapping)
 - Noise Receptors**
 - Participating
 - ▲ Non- Participating Occupied
 - ▲ Non- Participating Vacant
 - 483 Receptor ID



- ### Notes
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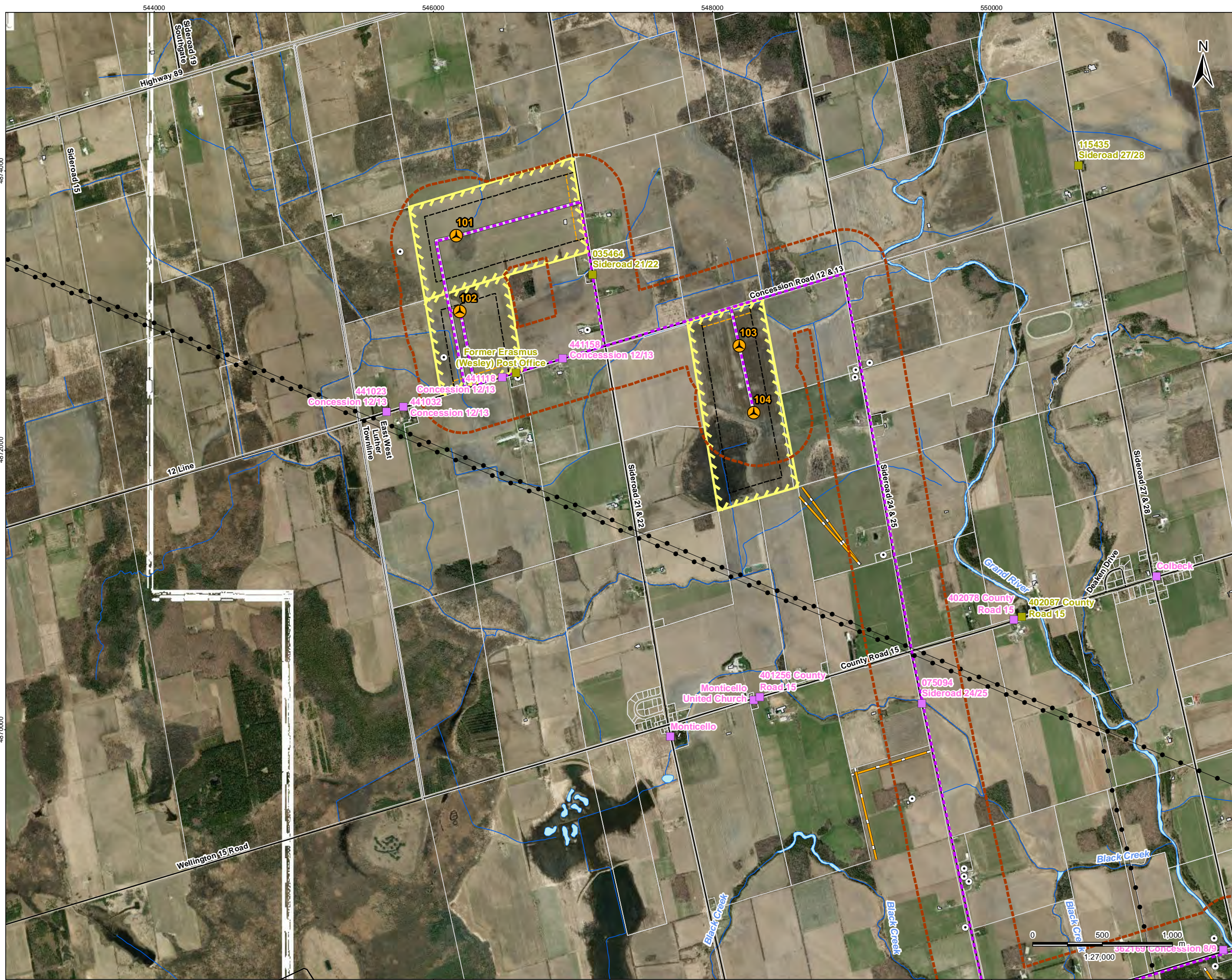
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Client/Project
Grand Valley Phase 3
Veresen Inc.

Figure No.
2

Title
**Project Location Mapbook
TILE 3**





Legend

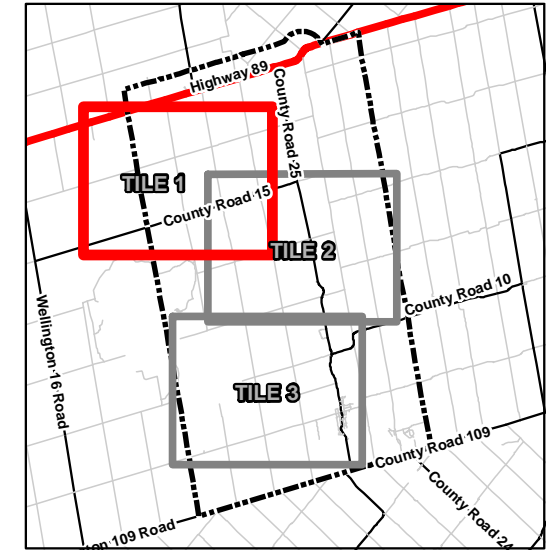
300m Zone of Investigation

Proposed Project Components

- Turbine
- Construction Trailer/ Parking Area (Previously Disturbed)
- Access Roads
- Collector Lines
- Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
- Participating Property

Existing Features

- Hydro Line
- Air Strip
- Road
- Watercourse (as per MNR base mapping)
- Buildings (as per MNR base mapping)
- Property Parcel
- Property Line - 100m Setback
- Public Road - 65.5m Setback
- Waterbody (as per MNR base mapping)
- Built Heritage Resource
- Cultural Heritage Landscape
- Landfill (MOE)
- Water Well Record (MOE)



Notes

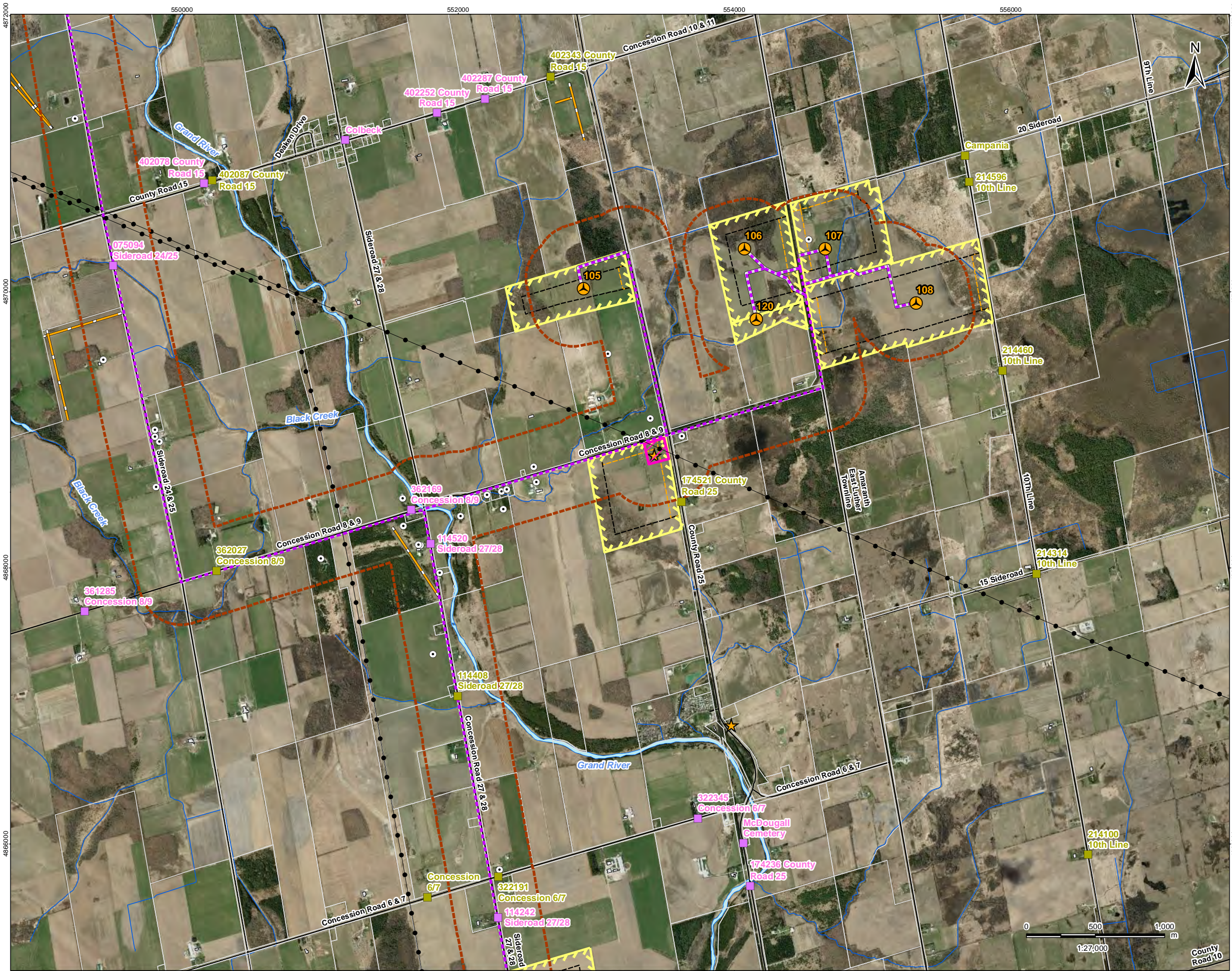
- Coordinate System: NAD 1983 UTM Zone 17N
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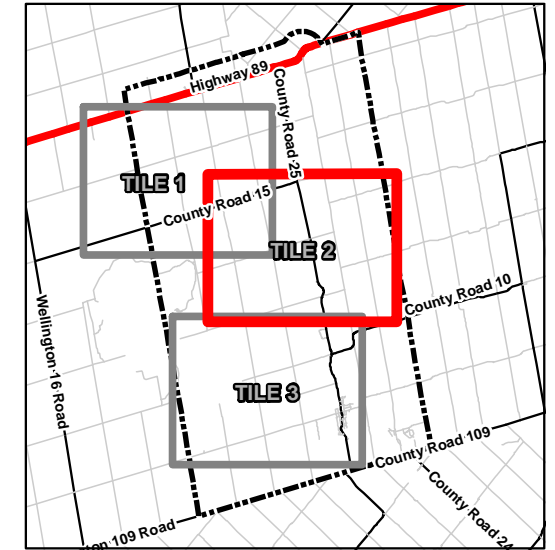
Figure No.
 3

Title
**Socio-Economic Features
 Mapbook
 TILE 1**



Legend

- 300m Zone of Investigation
- Proposed Project Components**
- Turbine
- ★ Construction Trailer/ Parking Area (Previously Disturbed)
- Access Roads
- Collector Lines
- Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
- Participating Property
- Existing Features**
- Hydro Line
- Air Strip
- Road
- Watercourse (as per MNR base mapping)
- Buildings (as per MNR base mapping)
- Property Parcel
- Property Line - 100m Setback
- Public Road - 65.5m Setback
- Waterbody (as per MNR base mapping)
- Built Heritage Resource
- Cultural Heritage Landscape
- ▲ Landfill (MOE)
- Water Well Record (MOE)



- Notes**
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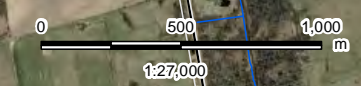
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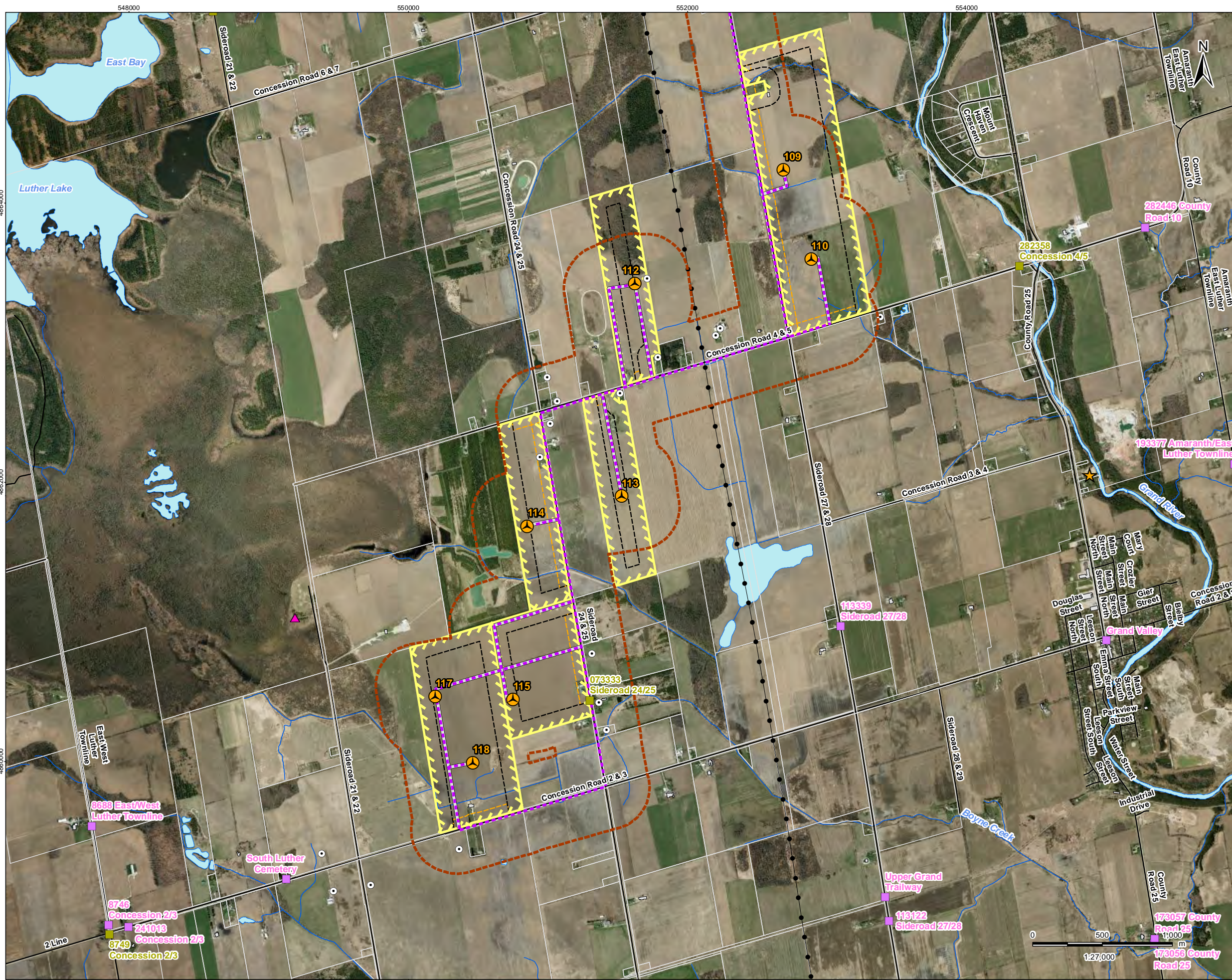
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Figure No.
3

Title
**Socio-Economic Features
Mapbook
TILE 2**





Legend

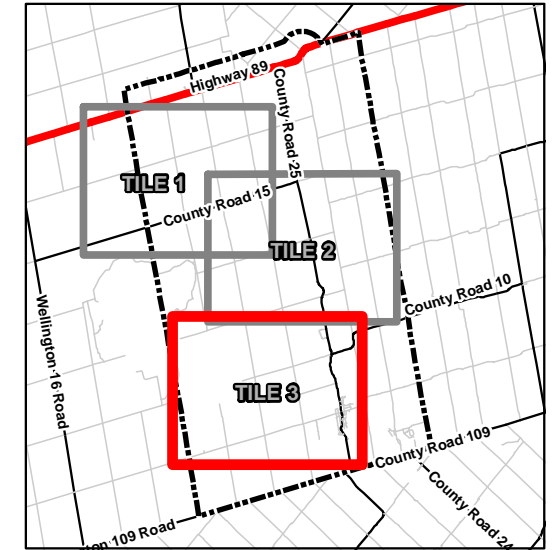
300m Zone of Investigation

Proposed Project Components

- Turbine
- Construction Trailer/ Parking Area (Previously Disturbed)
- Access Roads
- Collector Lines
- Transformer Location/ HONI Connection Point/ Met Tower/ Construction Laydown
- Participating Property

Existing Features

- Hydro Line
- Air Strip
- Road
- Watercourse (as per MNR base mapping)
- Buildings (as per MNR base mapping)
- Property Parcel
- Property Line - 100m Setback
- Public Road - 65.5m Setback
- Waterbody (as per MNR base mapping)
- Built Heritage Resource
- Cultural Heritage Landscape
- Landfill (MOE)
- Water Well Record (MOE)



Notes

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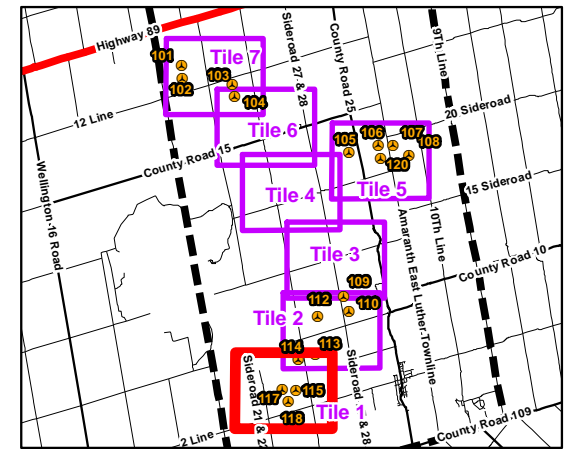
Figure No.
3

Title
**Socio-Economic Features
Mapbook
TILE 3**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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Figure No.

4.1

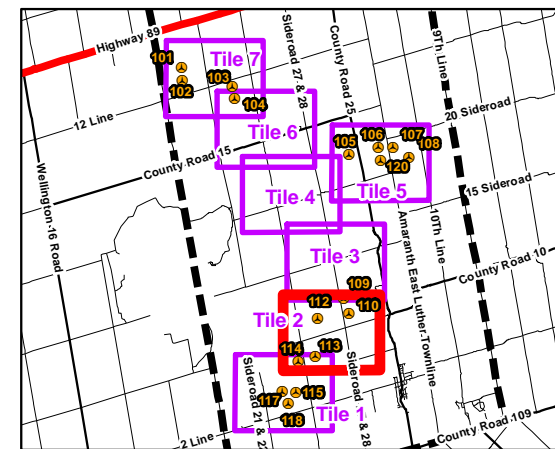
Title

**Aquatic & Natural Heritage Features
- Field Review
Tile 1 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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Figure No.

4.1

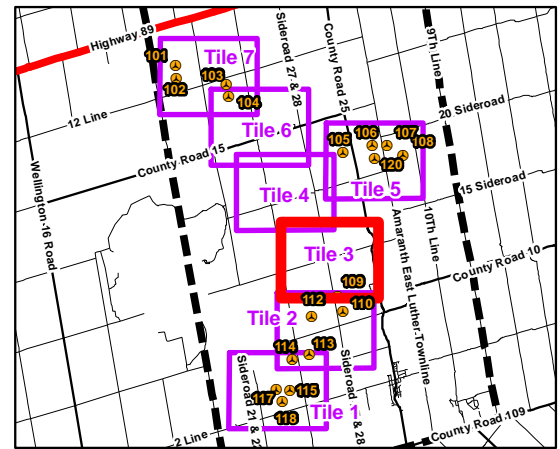
Title

**Aquatic & Natural Heritage Features
- Field Review
Tile 2 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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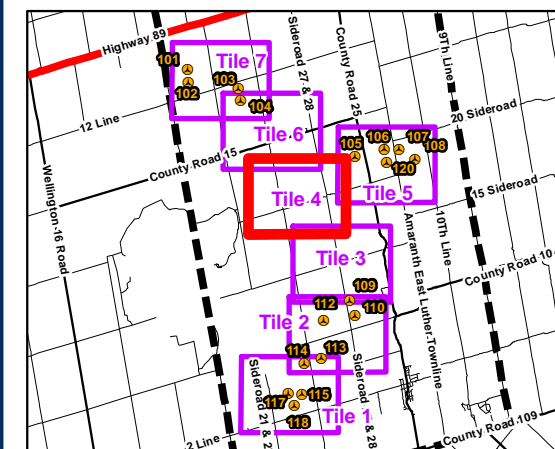
Figure No.
4.1

Title
**Aquatic & Natural Heritage Features
- Field Review
Tile 3 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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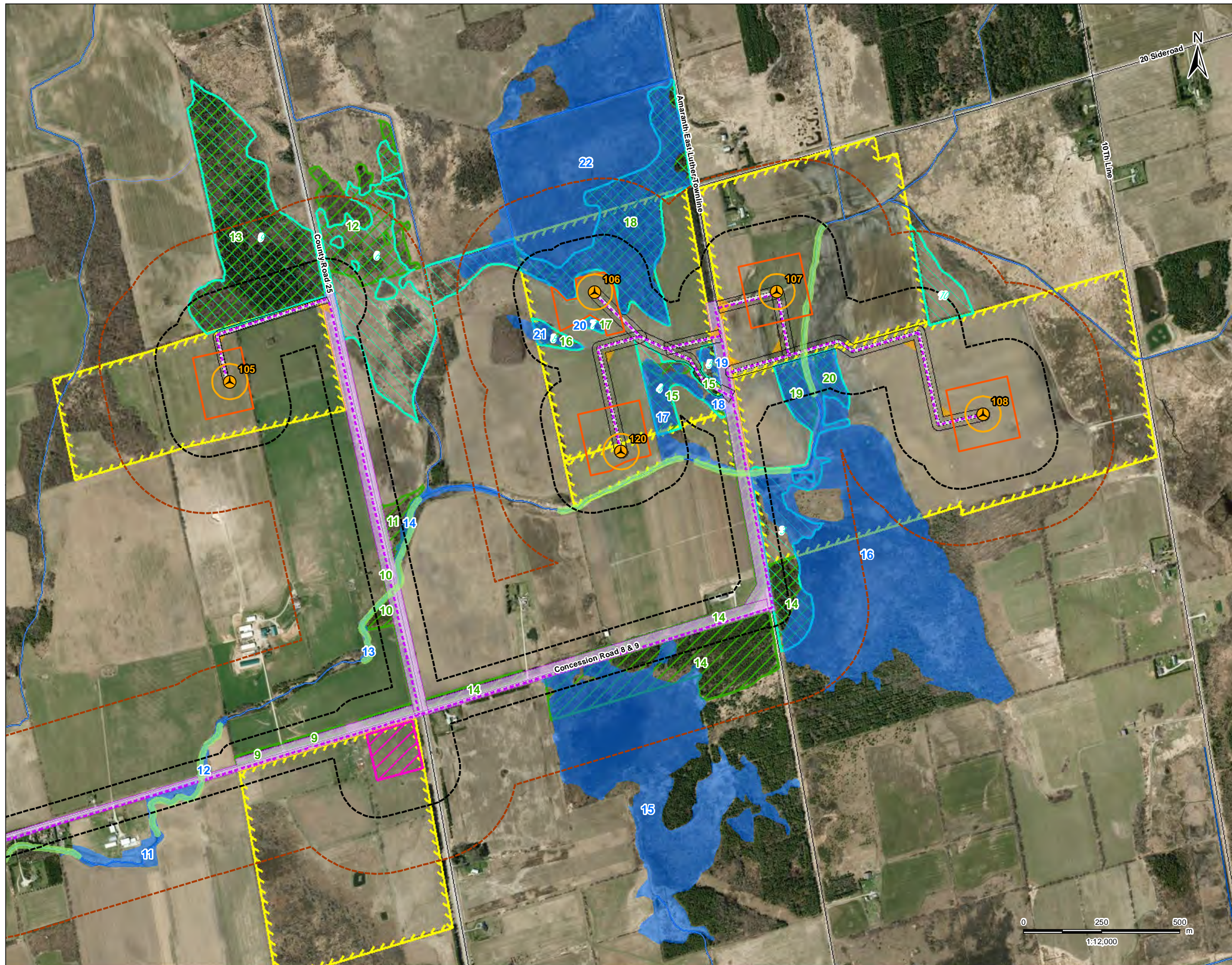
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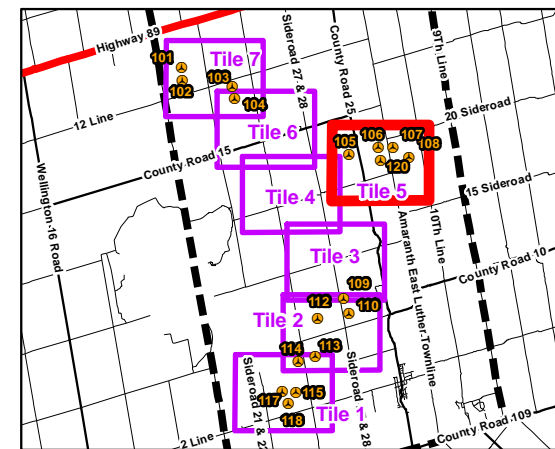
Figure No.
4.1

Title
**Aquatic & Natural Heritage Features
- Field Review
Tile 4 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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Figure No.

4.1

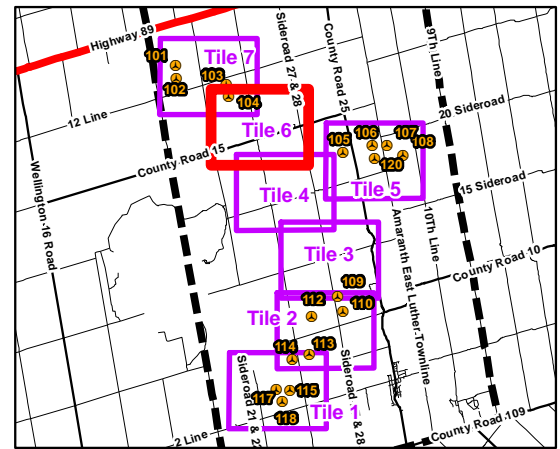
Title

**Aquatic & Natural Heritage Features
- Field Review
Tile 5 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



Notes

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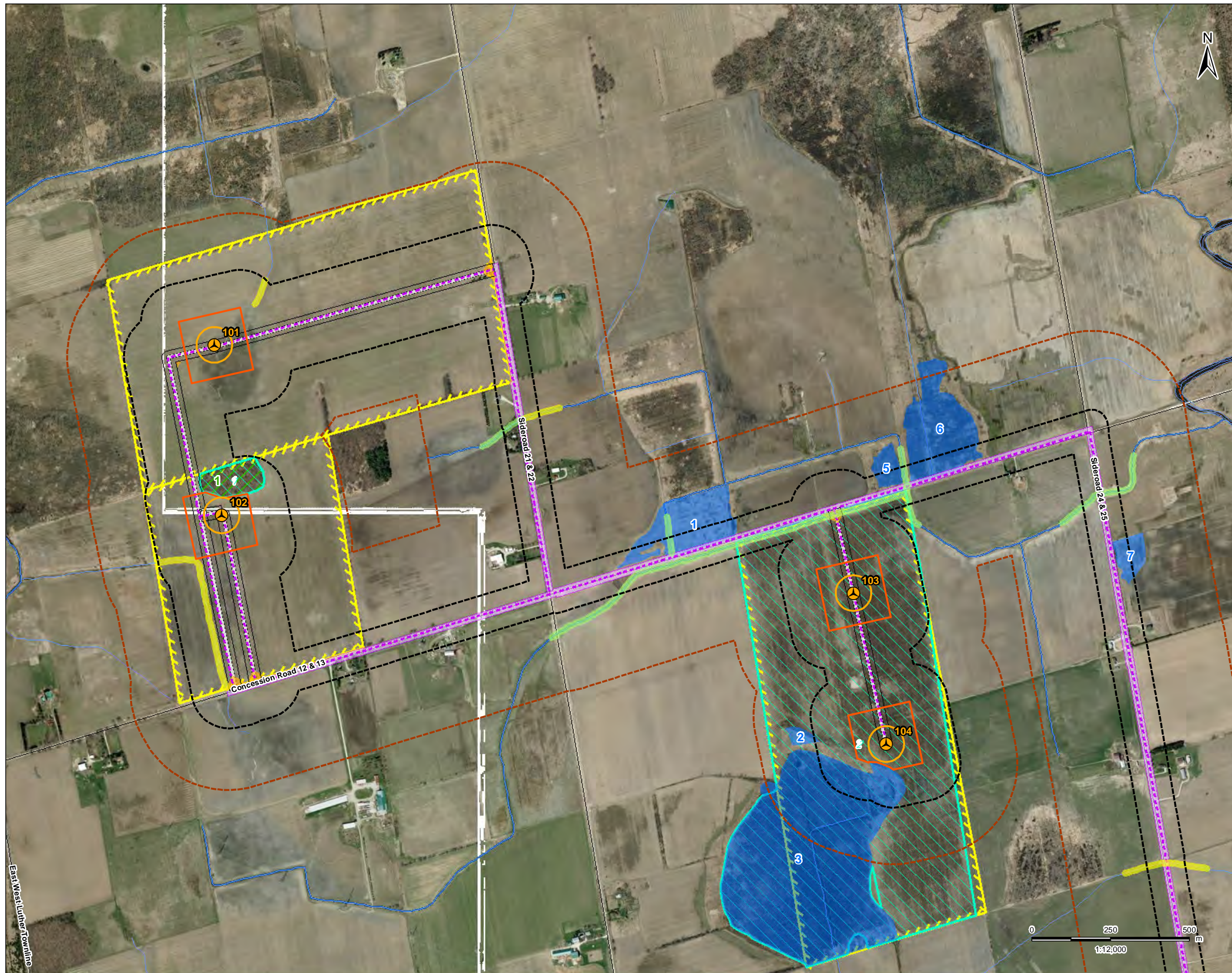
Grand Valley Phase 3
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Figure No.

4.1

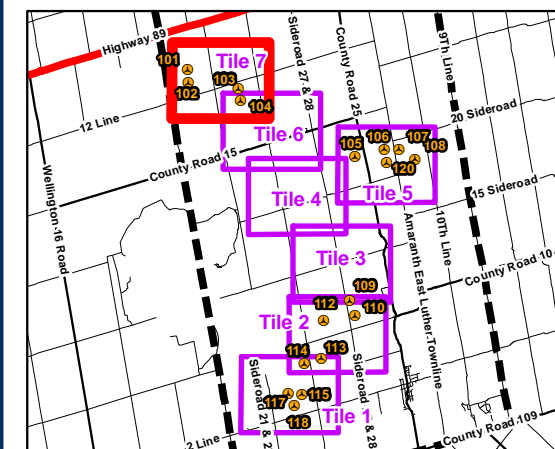
Title

**Aquatic & Natural Heritage Features
- Field Review
Tile 6 of 7**



Legend

- 120m Zone of Investigation
- 300m Zone of Investigation
- Proposed Project Components**
- Turbines
- Access Roads
- Collector Lines
- Collector Line ROW
- Transformer Location/
HONI Connection Point/
Met Tower/ Construction
Laydown
- Turbine Blade Reach (56.5m)
- Turbine Construction Area
- Turning Area
- Optioned Property
- Existing Features**
- Road
- Constructed Drain
- Watercourse
- Waterbody
- Natural Features**
- Candidate Significant Woodland
- Wildlife Habitat
- Wetland Feature
- Water Body Status**
- REA Water Body/ Fish Habitat
- Not REA Water Body



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Figure No.

4.1

Title

**Aquatic & Natural Heritage Features
- Field Review
Tile 7 of 7**