



NextEra Energy Canada, ULC

## ADELAIDE WIND ENERGY CENTRE - PARCEL BOUNDARY SETBACK REDUCTION ANALYSIS

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JUSTIFICATION REPORT

JULY 2012



**ADELAIDE WIND ENERGY CENTRE - PARCEL BOUNDARY SETBACK REDUCTION ANALYSIS**

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# 1. INTRODUCTION

## 1.1 Purpose

The purpose of this report is to provide an assessment of proposed wind turbine locations within the Adelaide Wind Energy Centre that do not meet the required setback of “turbine height minus blades” from the base of the wind turbine to the boundary of parcels of land on which the turbine is located.

IBI Group was retained by NextEra Energy Canada, ULC (in partnership with Air Energy TCI Inc.) to undertake an analysis of twenty (20) turbines within the Adelaide Wind Energy Centre. The analysis will look at what impacts the reduced setback may have on nearby business, infrastructure, properties or land use activities, and will describe any required preventative measures to be used to address any adverse impacts.

From an agricultural planning perspective, it is generally considered advantageous to farmers to have turbines located as close as possible to lot lines (or fence lines located between fields), in order to cause the least amount of disruption to farming practices, in particular field crop planting and harvesting. This coincides with traditional locations for farm access roads along fence lines, which in turn are preferred locations for new or improved turbine access roads. To this point, the County of Middlesex Official Plan states in Section 2.4.6.1 d) that Wind Energy Generation Systems, or WEGS, should be positioned to minimize impacts on normal farm practices

## 1.2 Legislation

Ontario Regulation 359/09 outlines the regulations for the development and approval of renewable energy projects within the Province of Ontario. Section 53 of the regulation outlines setback requirements for Class 3, 4, and 5 wind facilities, with the Adelaide Wind Energy Centre being a Class 4 wind facility. It states in subsection 53 (1) (b) that no person shall erect a Class 4 wind facility unless:

***the distance between the base of the wind turbine and all boundaries of the parcel of land on which the wind turbine is constructed, installed or expanded is equivalent to, at a minimum, the height of the wind turbine, excluding the length of any blades.***

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And furthermore under subsection 53 (3), states that clause 53 (1) (b) does not apply if the distance from the base of the turbine to the property boundary is at least blade length plus 10 metres and:

*as part of an application for the issue of a renewable energy approval or a certificate of approval in respect of the construction, installation or expansion of the wind turbine, the person who is constructing, installing or expanding the wind turbine submits a written assessment,*

*(i) demonstrating that the proposed location of the wind turbine will not result in adverse impacts on nearby business, infrastructure, properties or land use activities, and*

*(ii) describing any preventative measures that are required to be implemented to address the possibility of any adverse impacts mentioned in subclause (i).*

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This report is intended to fulfill the above requirements of subsection 53 (3) of Ontario Regulation 359/09.

### 1.3 Project Description

The proposed Adelaide Wind Energy centre is located in south-western Ontario, in the Township of Adelaide-Metcalf, Middlesex County, Ontario. More specifically, the area being studied for the wind farm components is located south of Townsend Line, west of Centre Road, north of Napperton Drive and east of Sexton Road. The total Project Area is approximately 6,515 ha. Project components will be installed on privately-owned agricultural lots within this area. It is anticipated that the Projects collection system may be partially located on public Rights of Way.

The proposed transmission route is located to the north of the project area and crosses into the Municipality of North Middlesex. The proposed transmission route is to travel north from the project substation using existing rights of way, to a switchyard located just south of Elginfield Road. From there the transmission route is proposed to travel east along Elginfield and Nairn Roads using existing rights of way to an existing Hydro One 500 kV transmission line.

The Adelaide Wind Energy Centre is a Class 4 Wind Facility and will consist of thirty-seven 1.6-100 GE model wind turbines (although the REA is seeking approval for 38 turbine locations). These turbines have a hub height of 80 metres, with a blade length of 50 metres. Based on this turbine model the absolute minimum setback from a property boundary would be 60 metres (blade length + 10 metres). However, in the event that the turbines are sited closer than 60 metres, an agreement is required which would allow for a setback less than 60 metres (blade length + 10 metres).

For this project there are twenty (20) turbines which require justification for the reduced property boundary setback.

TURBINE NO.	Host Land Parcel		Turbine Distance from Lot Line (metres)	Direction of Neighbouring Land Parcel from Turbine	Neighbouring Land Parcel		Notes
	Lot	Concession			Lot	Concession	
2	Park Lot 492	Plan 86	70.2	north	Pt 10	2 NER	Assessment Conducted
3	Park Lots 4, 5 & 6	Plan 310	54	north	Pk 7 Pt 11	Plan 310 2	Agreement will be in place as per Section 53(2) (b) / Assessment Conducted
			70	northeast			
			53	west			
			73	west			
4	Park Lot 12	1 NER	31.6	north	Pt 12 W ½ Pt 11	2 NER	Agreement will be in place as per Section 53(2) (b) / Assessment Conducted
			74.2	northwest			
5	E ½ Pt 14	1 NER	73.5	north	Pt 14	2 NER	Assessment Conducted
			68.4	east	Pt 15	1 & 2 NER	
			68.3	east	Pt 15	1 NER	
8	Pt 16	1 NER	71.2	north	Pt 16	2 NER	Assessment Conducted
13	E ½ Pt 3	2 SER	77.1	west	Pt 3	2 SER	Assessment Conducted
16	E ½ Pt 5	2 SER	32.4	west	Pt 5	2 SER	Agreement will be in place as per Section 53(2) (b)
19	Pt 5	2 SER	32.0	west	Pt 4	2 SER	Agreement will be in place as per Section 53(2) (b)
20	6	2 SER	32.2	west	Pt 5	2 SER	Agreement will be in place as per Section 53(2) (b)
21	Pt 7	2 SER	31.6	west	Pt 7	2 SER	Agreement will be in place as per Section 53(2) (b)
22	Pt 8	2 SER	30.7	east	Pt 8	2 SER	Agreement will be in place as per Section 53(2) (b)
23	Pt 9	2 SER	29	west	Pt 8 Pt 9	2 SER	Agreement will be in place as per Section 53(2) (b)
			31	south			
25	E ½ Pt 11	2 SER	31.0	east	Pt 12	2 SER	Agreement will be in place as per Section 53(2) (b)
26	Pt 15	2 SER	36.0	east	Pt 15	2 SER	Agreement will be in place as per Section 53(2) (b)
27	Pt 16	2 SER	33.3	east	E ½ 16	2 SER	Agreement will be in place as per Section 53(2) (b)
30	E ½ Pt 4	3 SER	29.9	east	5	3 SER	Agreement will be in place as per Section 53(2) (b)
33	E ½ Pt 8	3 SER	64.9	east	Pt 9 Pt 8 & 9	3 SER	Assessment Conducted
			63	south		4 SER	
34	E ½ Pt 9	3 SER	66.9	east	Pt 9	3 SER	Assessment Conducted
36	10	3 SER	67.6	south	Pt 10 Pt 10 & 11	4 SER	Assessment Conducted
			68.7	southeast		4 SER	
38	N ½ Pt 15	3 SER	69.5	west	Pt 14 Pt 15	3 SER	Assessment Conducted / Agreement will be in place as per Section 53(2) (b)
			43.6	south		3 SER	

## 2. ANALYSIS

The methodology for this report was to identify turbines that were less than 80 metres from a lot line; undertake an analysis of the local surrounding land use characteristics; determine the potential impacts of the wind turbine on the surrounding land uses; and discuss what if any preventative measures should be employed to mitigate such impacts.

### 2.1 Turbine 2 – Park Lot 493, Plan 86

#### 2.1.1 DESCRIPTION

Turbine 2 is located 70.2 metres from the closest lot line (north rear lot line) which is 9.8 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands are entirely used for field crop purposes with no buildings, structures, or infrastructure located on the lands. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 2 Map in Appendix 1).

#### 2.1.2 POTENTIAL IMPACTS

Impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 9.8 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.1.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include design certification of the wind turbine by professional engineers; regular maintenance and ongoing monitoring of the wind turbine by operations staff; and turbine shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

### 2.2 Turbine 3– Park Lots 4, 5 & 6, Plan 310

#### 2.2.1 DESCRIPTION

Turbine 3 is located 53 metres to the west, 73 metres to the west, 54 metres to the north, and additionally 70 metres to the northwest from the closest lot lines (west and north site lot lines respectively) which are 27 metres, 7 metres, 16 metres, and 10 metres less than required as the standard setback without undertaking any further analysis. The subject lot is bounded on the north by an unopened road allowance and by a closed road allowance on the west (County of Middlesex By-law No. 2386). The adjacent lands to the north and west of the closed road allowances are

used for crop production, with the exception of a woodland on the abutting property to the northwest, and with no buildings, structures, located on the lands. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 3 Map in Appendix 1). The municipality has closed the road allowances and passed a by-law to declare them as surplus. The former rights of way to the west and northwest are being conveyed to the adjacent land owner, being the owner of the lands on both the east and west side of the former right of way, as such, an agreement is not anticipated to be required.

#### 2.2.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 27 metres, 7 metres, 16 metres and 10 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.2.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.3 Turbine 4 –Part Lot 12, Conc. 1 NER

#### 2.3.1 DESCRIPTION

This turbine is located 31.6 metres from the lands directly to the north, and 74.2 metres from the nearest corner of the parcel abutting the northwest corner of the subject lot. The 74.2 metre setback from the northwest corner exceeds the absolute minimum requirement of blade length plus 10 metres (60 metres) and is only 5.8 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands are used for cash crop purposes and have wind row vegetation along each side lot line running north to south. The closest building is a participating receptor located approximately 550 metres to the northeast of the proposed turbine. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities (See Turbine 4 Map in Appendix 1). The lands 31.6 metres from the turbine are 48.4 metres less than required as the standard setback. In addition to an assessment, an agreement is required for lands to the northwest given that they are less than 60 metres from the property boundary.



### 2.3.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel to the northwest from the reduced setback may include damage to wind row trees and/or crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 5.8 metres and 48.4 metres. There is no adverse impact on nearby properties or land use activities.

### 2.3.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring trees and crops, and reduce risk to human safety include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.4 Turbine 5 – E ½ Part Lot 14, Conc. 1 NER

### 2.4.1 DESCRIPTION

This turbine is located 73.5 metres from lands to the north, and 68.4 and 68.3 metres from two separate parcels to the east. This exceeds the absolute minimum requirement of blade length plus 10 metres (60 metres) and is only 6.5 – 11.7 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands are wooded to the north, while the abutting property to the east is a landfill site, and a field used for cash crop purposes. The closest building in any direction is a barn located over 600 metres to the southeast. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities and intermittent use of the landfill site (See Turbine 5 Map in Appendix 1).

### 2.4.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel to the north and southeast from the reduced setback may include damage to trees and/or crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 6.5 – 11.7 metres. Adverse impacts to the landfill would not include property damage, but include risks to human safety as a result of turbine failure. However actively used lands on the landfill site are currently over 300 metres away, and apparent buffering requirements (approximately 15 metres based on existing buffers on easterly and southerly yards of landfill property) on the landfill site, would likely limit human activity within 80 metres of the proposed turbine location. In addition, the Municipality has stated in writing to the proponents that they have no issues with a turbine being located in proximity to the landfill site. There is no adverse impact on nearby properties or land use activities.

### 2.4.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring trees and crops, and reduce risk to human safety include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.5 Turbine 8 – Part Lot 16, Conc. 1 NER

### 2.5.1 DESCRIPTION

This turbine is located 71.2 metres from the closest lot line (northerly rear lot line) which exceeds the absolute minimum requirement of blade length plus 10 metres (60 metres) and is only 8.8 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands are characterized as a small woodlot at the rear of a farm parcel. There are no buildings, structures, or infrastructure located on the adjacent lands within approximately 1.2 kilometres of the proposed turbine. Land use within the vicinity of the proposed turbine would be restricted to tree harvesting on an intermittent basis with otherwise minimal human activities (See Turbine 8 Map in Appendix 1).

### 2.5.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to trees as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 8.8 metres. There is no adverse impact on nearby properties or land use activities.

### 2.5.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring trees include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.6 Turbine 13 – East ½ Part Lot 3, Conc. 2 SER

### 2.6.1 DESCRIPTION

This turbine is located 77.1 metres from the closest lot line (westerly side lot line) which exceeds the absolute minimum requirement of blade length plus 10 metres (51 metres) and is 2.9 metres less

than required as the standard setback without undertaking any further analysis. The adjacent lands are characterized as cropped fields to the east and west, while Provincial Highway 402 lies along the northerly property line. In addition, the closest building is located over 800 metres to the southwest. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 13 Map in Appendix 1).

#### 2.6.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 2.9 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.6.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.7 Turbine 16 – East ½ Part Lot 5, Conc. 2 SER

#### 2.7.1 DESCRIPTION

This turbine is located 32.4 metres from the closest lot line (westerly side lot line) which is 47.6 metres less than required as the standard setback without undertaking any further analysis. The land is used entirely for field crop purposes, and no buildings, structures, or infrastructure, are located within 800 metres of the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 16 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.7.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 47.6 metres. There is no adverse impact on nearby properties or land use activities.

### 2.7.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.8 Turbine 19 – Part Lot 5, Conc. 2 SER

### 2.8.1 DESCRIPTION

This turbine is located 32 metres from the closest lot line (westerly side lot line) which is 48 metres less than required as the standard setback without undertaking any further analysis. The land is used entirely for field crop purposes, and no buildings, structures, or infrastructure, are located within 800 metres of the proposed turbine. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 19 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

### 2.8.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 48 metres. There is no adverse impact on nearby properties or land use activities.

### 2.8.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.9 Turbine 20 – Lot 6, Conc. 2 SER

### 2.9.1 DESCRIPTION

This turbine is located 32.2 metres from the closest lot line (westerly side lot line) which is 47.8 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 800 metres of the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the

proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 20 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.9.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 47.8 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.9.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.10 Turbine 21 – Part Lot 7, Conc. 2 SER

#### 2.10.1 DESCRIPTION

This turbine is located 31.6 metres from the closest lot line (westerly side lot line) which is 48.4 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 800 metres of the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 21 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.10.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 48.4 metres. There is no adverse impact on nearby properties or land use activities.

### 2.10.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.11 Turbine 22 – Part Lot 8, Conc. 2 SER

### 2.11.1 DESCRIPTION

This turbine is also located 30.7 metres from the closest lot line (easterly side lot line) which is 49.3 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 800 metres of the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 22 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

### 2.11.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 49.3 metres. There is no adverse impact on nearby properties or land use activities.

### 2.11.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.12 Turbine 23 – Part Lot 8 & 9, Conc. 2 SER

### 2.12.1 DESCRIPTION

This turbine is located 29 metres and 31 metres from the closest lot lines (west and south site lot lines respectively) which is 51 metres and 49 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 600 metres of the proposed turbine. Highway 402 abuts the subject lands to

the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 23 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.12.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 51 and 49 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.12.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

### 2.13 Turbine 25 – E ½ Part Lot 11, Conc. 2 SER

#### 2.13.1 DESCRIPTION

This turbine is located 31 metres from the closest lot line (easterly side lot line) which is 49 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes and has a wood land in the northern portion of the lot. Buildings are located greater than 600 metres of the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 25 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.13.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 49 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.13.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops and wood land include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in

extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.14 Turbine 26 – Part Lot 15, Conc. 2 SER

### 2.14.1 DESCRIPTION

This turbine is also located 36 metres from the closest lot line (easterly side lot line) which is 44 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with a participating receptor and two barns located less than 550 metres from the proposed turbine. Highway 402 abuts the subject lands to the north. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 26 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

### 2.14.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 44 metres. There is no adverse impact on nearby properties or land use activities.

### 2.14.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.15 Turbine 27 – Part Lot 16, Conc. 2 SER

### 2.15.1 DESCRIPTION

This turbine is located 33.3 metres from the closest lot line (easterly side lot line) which is less than the minimum requirement of blade length plus 10 metres (60 metres) and is 46.7 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands are used for field crop purposes with buildings and structures located to the southeast at an approximate distance of 900 metres. Highway 402 right of way is located along the north property line. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming



activities with otherwise minimal human activities (See Turbine 27 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.15.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 46.7 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.15.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

### 2.16 Turbine 30 – E ½ Part Lot 4, Conc. 3 SER

#### 2.16.1 DESCRIPTION

This turbine is also located 29.9 metres from the closest lot line (easterly side lot line) which is 50.1 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 900 metres of the proposed turbine. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 30 Map in Appendix 1). Despite requiring an agreement for a reduced setback, further analysis is required.

#### 2.16.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 50.1 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.16.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.17 Turbine 33 – E ½ Part Lot 8, Conc. 3 SER

### 2.17.1 DESCRIPTION

This turbine is located 64.9 metres from the lands directly to the east, and 63 metres from the lands directly to the south, which is 15.1 – 17 metres less than required as the standard setback without undertaking any further analysis. The adjacent lands to the east are used for cash crop purposes and contain woodlands directly east of the turbine. The adjacent lands to the south are used for cash crop purposes. There are no buildings, structures or infrastructure on the lands. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities (See Turbine 33 Map in Appendix 1).

### 2.17.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to trees and/or crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly by a reduction of 15.1 – 17 metres. There is no adverse impact on nearby properties or land use activities.

### 2.17.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring trees or crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.18 Turbine 34 – W ½ Part Lot 9, Conc. 3 SER

### 2.18.1 DESCRIPTION

This turbine is also located 66.9 metres from the closest lot line (easterly side lot line) which is 13.1 metres less than required as the standard setback without undertaking any further analysis. The land is used for field crop purposes with buildings located greater than 550 metres of the proposed turbine. Land use within the vicinity of the proposed turbine would be restricted to seasonal farming activities with otherwise minimal human activities (See Turbine 34 Map in Appendix 1).

### 2.18.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is

not enhanced significantly as the turbine exceeds the minimum setback by 13.1 metres. There is no adverse impact on nearby properties or land use activities.

#### 2.18.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crops include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

### 2.19 Turbine 36 – Lot 10, Conc. 3 SER

#### 2.19.1 DESCRIPTION

This turbine is located 67.6 metres and 68.7 metres from the closest lot lines (southerly rear lot line) which exceed the absolute minimum requirement of blade length plus 10 metres (60 metres) and are only 12.4 metres and 11.3 metres less, respectively, than required as the standard setback without undertaking any further analysis. The adjacent lands to the south are characterized as woodlands immediately abutting the rear lot lines with crop production occurring on further to the south. There are no buildings, structures or infrastructure within 1 kilometre of Turbine 36. Land use within the vicinity of the proposed turbine would likely be restricted to possible tree harvesting to the south on an intermittent basis with otherwise minimal human activities (See Turbine 36 Map in Appendix 1).

#### 2.19.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring parcel from the reduced setback may include damage to woodland vegetation as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly as the turbine exceeds the minimum setback by 12.4 metres and 11.3 metres respectively. There is no adverse impact on nearby properties or land use activities.

#### 2.19.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring vegetation include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

## 2.20 Turbine 38 – N ½ Part Lot 15, Conc. 3 SER

### 2.20.1 DESCRIPTION

This turbine is located 69.5 metres from the westerly side lot line which exceeds the absolute minimum requirement of blade length plus 10 metres (60 metres) which exceeds the minimum requirement of blade length plus 10 metres (60 metres) and is 10.5 metres less than required as the standard setback without undertaking any further analysis. The turbine is 43.6 metres from the southerly side lot line which is less than the minimum requirement of blade length plus 10 metres (60 metres) and is 36.4 metres less, respectively, than required as the standard setback without undertaking any further analysis. Land to the south is owned by a landowner who has signed an agreement for a reduced turbine setback and who is a project participant. Based on this noted agreement being in place, no further analysis for the southerly lot is required as per subsection 53(2) of Ontario Regulation 359/09.

The adjacent lands to the west are characterized as crop lands with a barn situated greater than 550 metres northwest of the turbine. Land use within the vicinity of the proposed turbine would likely be restricted to farming activities both to the west and south on a seasonal basis with otherwise minimal human activities (See Turbine 38 Map in Appendix 1).

### 2.20.2 POTENTIAL IMPACTS

Adverse impacts to the neighbouring westerly parcel from the reduced setback may include damage to crops as a result of turbine failure. However, this impact is already present at an 80 metre setback and is not enhanced significantly as the turbine exceeds the minimum setback by 10.5 metres and 43.6 metres. There is no adverse impact on nearby properties or land use activities.

### 2.20.3 PREVENTATIVE MEASURES

Preventative measures to address potential damage to neighbouring crop production include certification of the wind turbine by professional engineers; ongoing regular maintenance and monitoring of the wind turbine by operations staff; and shutdown mechanisms and protocols in extreme weather instances to prevent damage to wind turbines. All of these measures are standard best practices and no additional preventative measures are required for the change in setback.

### 3. CONCLUSION

Based on the preceding analysis of the proposed twenty (20) turbine locations considered for reduced setbacks from property boundaries, it is our opinion that there would be no adverse impacts as a result of the setback reductions, and that standard preventative measures implemented through best practices address any change in impacts that may be encountered.




## **Appendix 1 – Individual Map Schedules**





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**Parcel Boundary Setback  
Reduction Analysis**

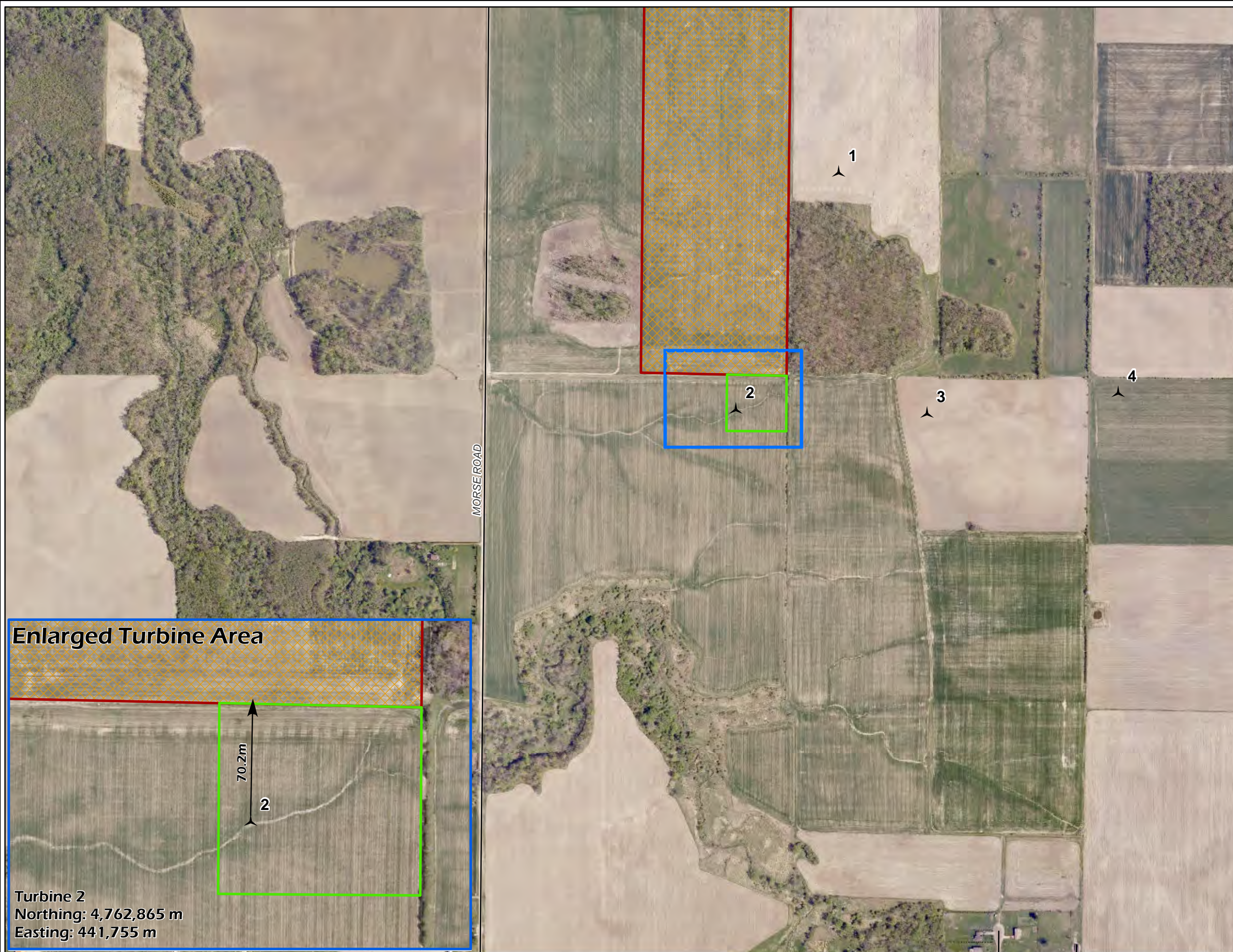
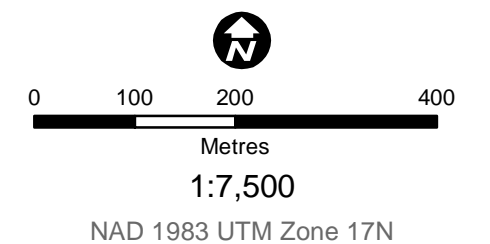
**Legend**

-  Turbine Location
-  Host Land Parcel  
Park Lot 492 Plan 86
-  Neighbouring Land Parcel  
Pt Lt 10, Con 2, Ner , Being The  
E 1/2, S/t Interest In 399663

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 2**










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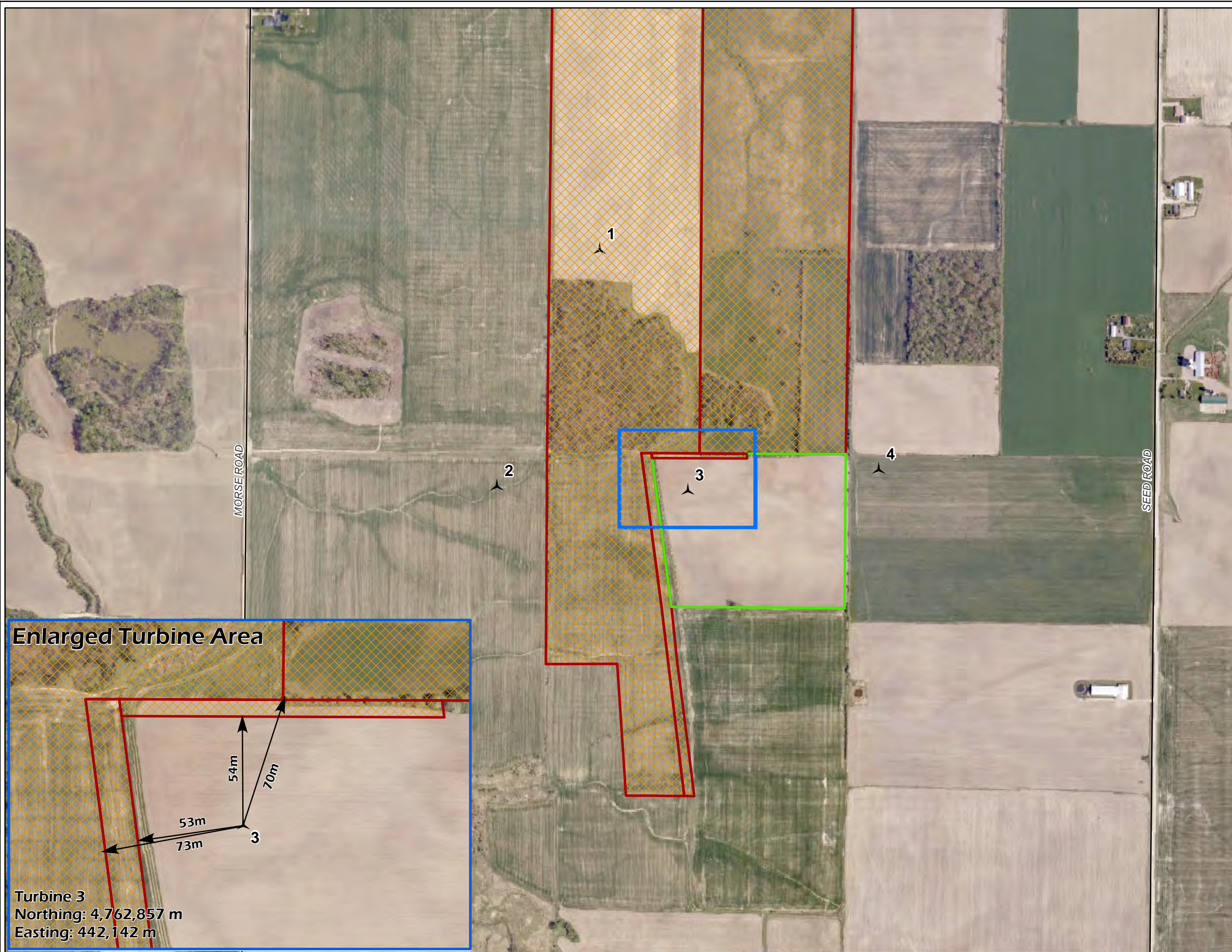
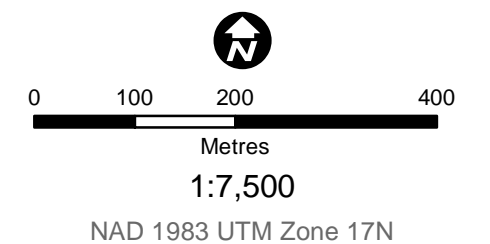
**Parcel Boundary Setback  
Reduction Analysis**

**Legend**

-  Turbine Location
-  Host Land Parcel  
Park Lots 4, 5 & 6 Plan 310
-  Neighbouring Land Parcel  
Pt Lt 11, Con 2, Ner , Being The  
W 1/2; Unamed St Lying E ofPt  
Lt 7 Plan 310

- Required Lotline Setback**
-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
  -  No Agreement - 60m Setback  
With Assessment

**Turbine 3**










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**Parcel Boundary Setback  
Reduction Analysis**

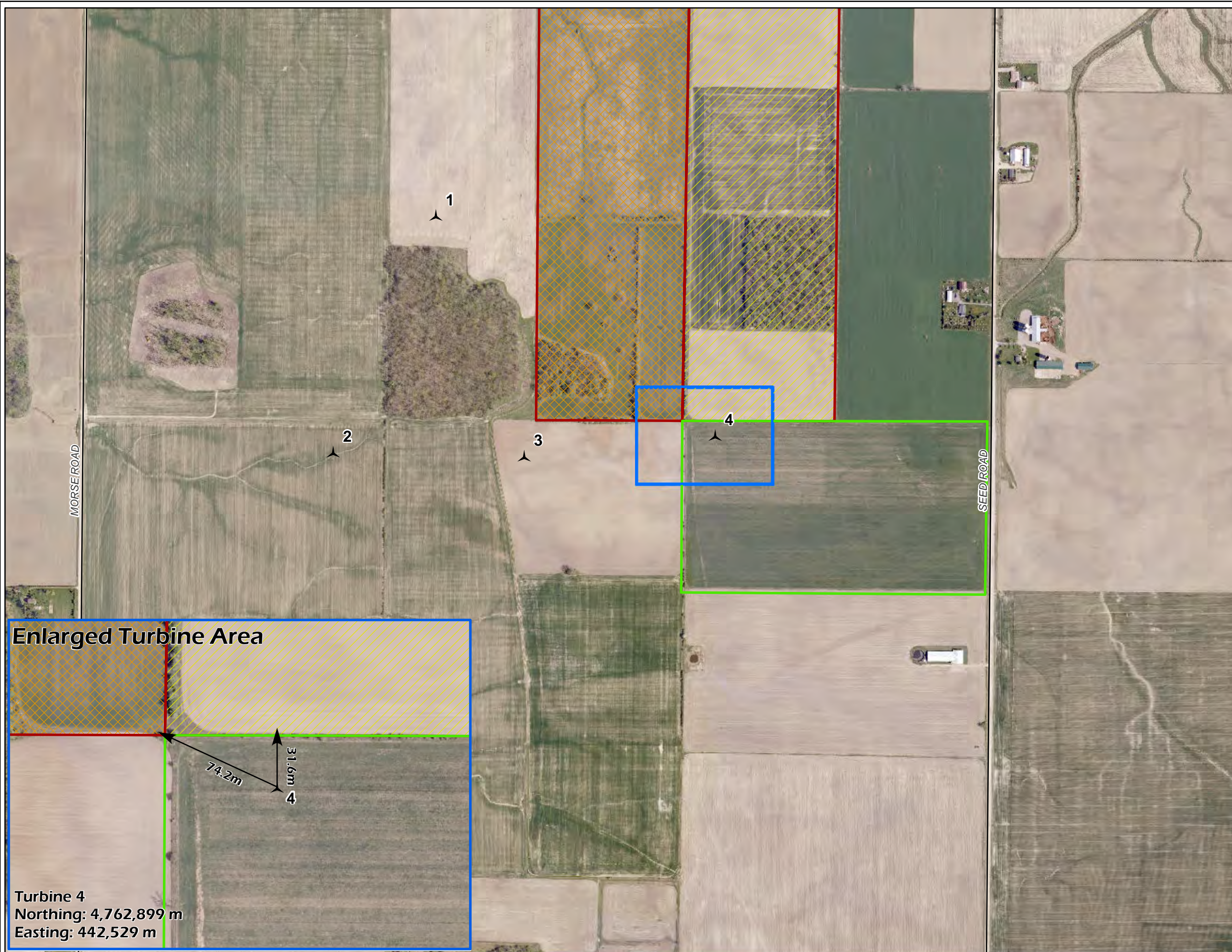
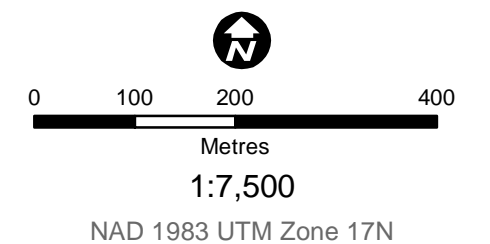
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 12, Con 1, Ner , Being  
The N 1/2 Of The N 1/2
-  Neighbouring Land Parcel  
Pt Lt 12, Con 2, Ner , Being The  
W 1/2; Pt Lt 11 Con 2 Ner Being  
The E 1/2

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 4**










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**Parcel Boundary Setback  
Reduction Analysis**

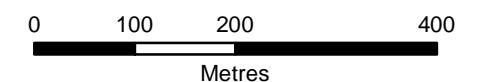
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 14, Con 1, Ner, Being The  
E 1/2, Except 137233
-  Neighbouring Land Parcel  
Pt Lt 15, Con 1, Ner, As In  
372008, Except 137233,  
Part 1, 33r11743 & Part 1,  
33r5444; Pt Lt 15, Cons 1  
& 2, Ner, As In Mw105277,  
633029, 944481 & 223062;  
Pt Lt 14, Con 2, Ner, As In  
Mw113161

**Required Lotline Setback**

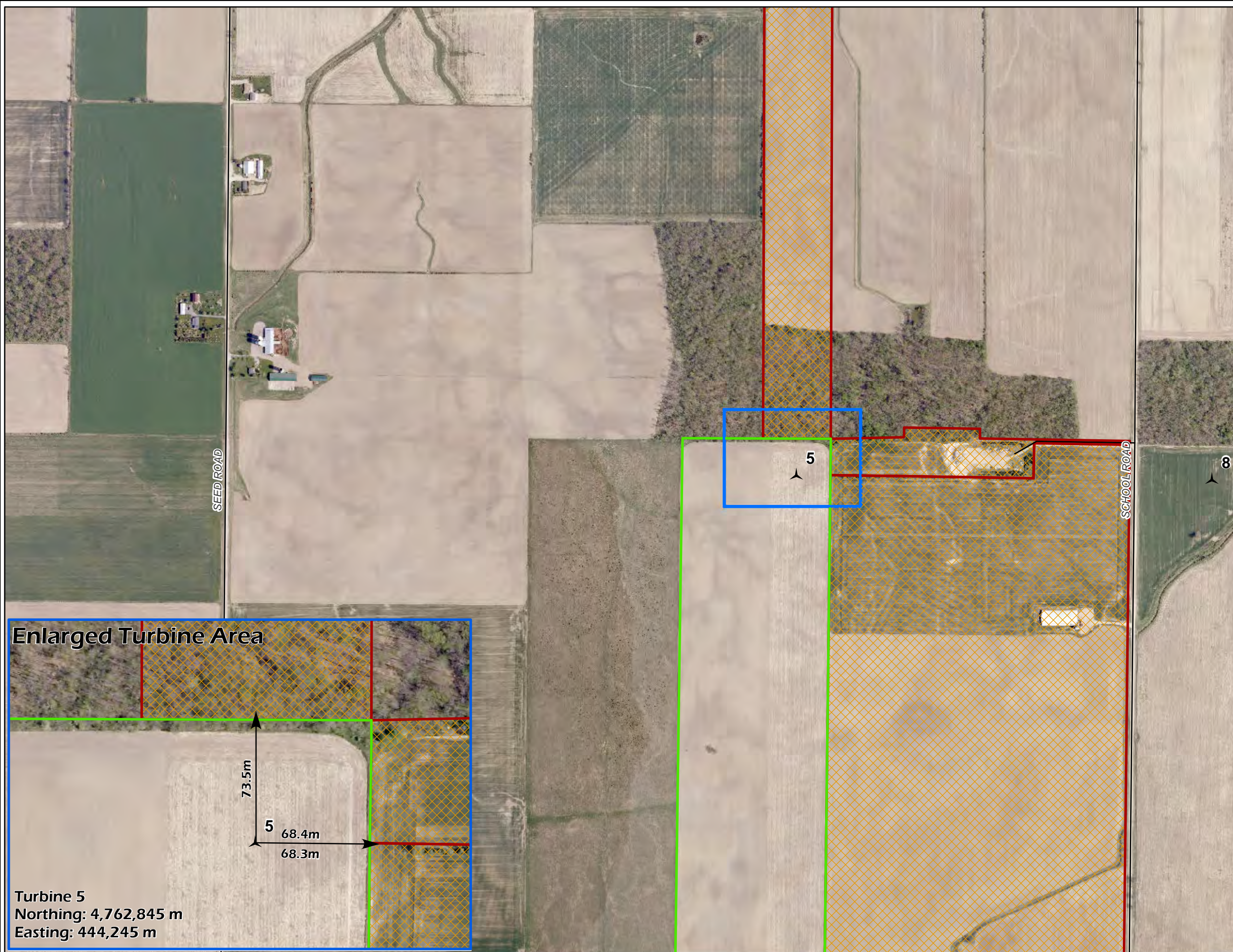
-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 5**



1:7,500

NAD 1983 UTM Zone 17N



**Enlarged Turbine Area**




**Turbine 5**  
Northing: 4,762,845 m  
Easting: 444,245 m





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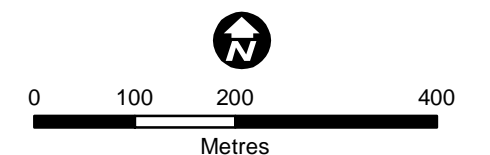
**Parcel Boundary Setback  
Reduction Analysis**

**Legend**

-  Turbine Location
-  Host Land Parcel  
Part Lot 16, Con 1, Ner, Being  
Part 1, Plan 33r-16463
-  Neighbouring Land Parcel  
Pt Lt 16, Con 2, Ner, Being  
The W 1/2

- Required Lotline Setback**
-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
  -  No Agreement - 60m Setback  
With Assessment

**Turbine 8**



1:7,500  
NAD 1983 UTM Zone 17N



**Enlarged Turbine Area**

71.2m  
8




Turbine 8  
Northing: 4,762,836 m  
Easting: 445,087 m





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**Parcel Boundary Setback**  
**Reduction Analysis**

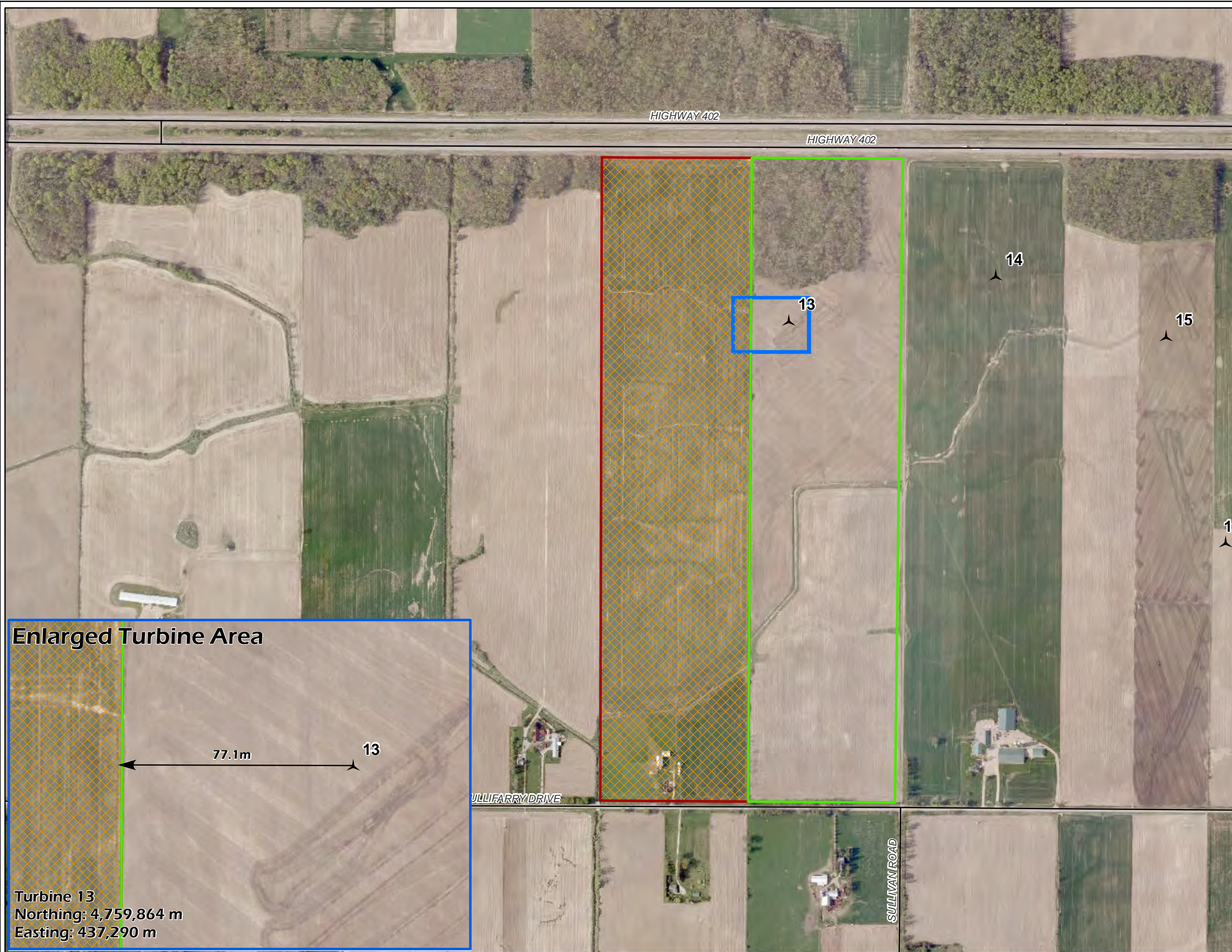
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 3, Con 2, Ser , Being  
The E 1/2, Except Part 15,  
33r1415
-  Neighbouring Land Parcel  
Pt Lt 3, Con 2, Ser , Being The  
W 1/2, Except Part 14, 33r1415

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

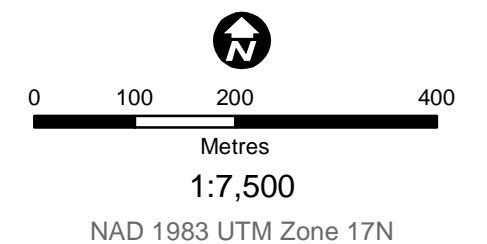
**Turbine 13**



**Enlarged Turbine Area**

← 77.1m → 13

Turbine 13  
Northing: 4,759,864 m  
Easting: 437,290 m










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**Parcel Boundary Setback**  
**Reduction Analysis**

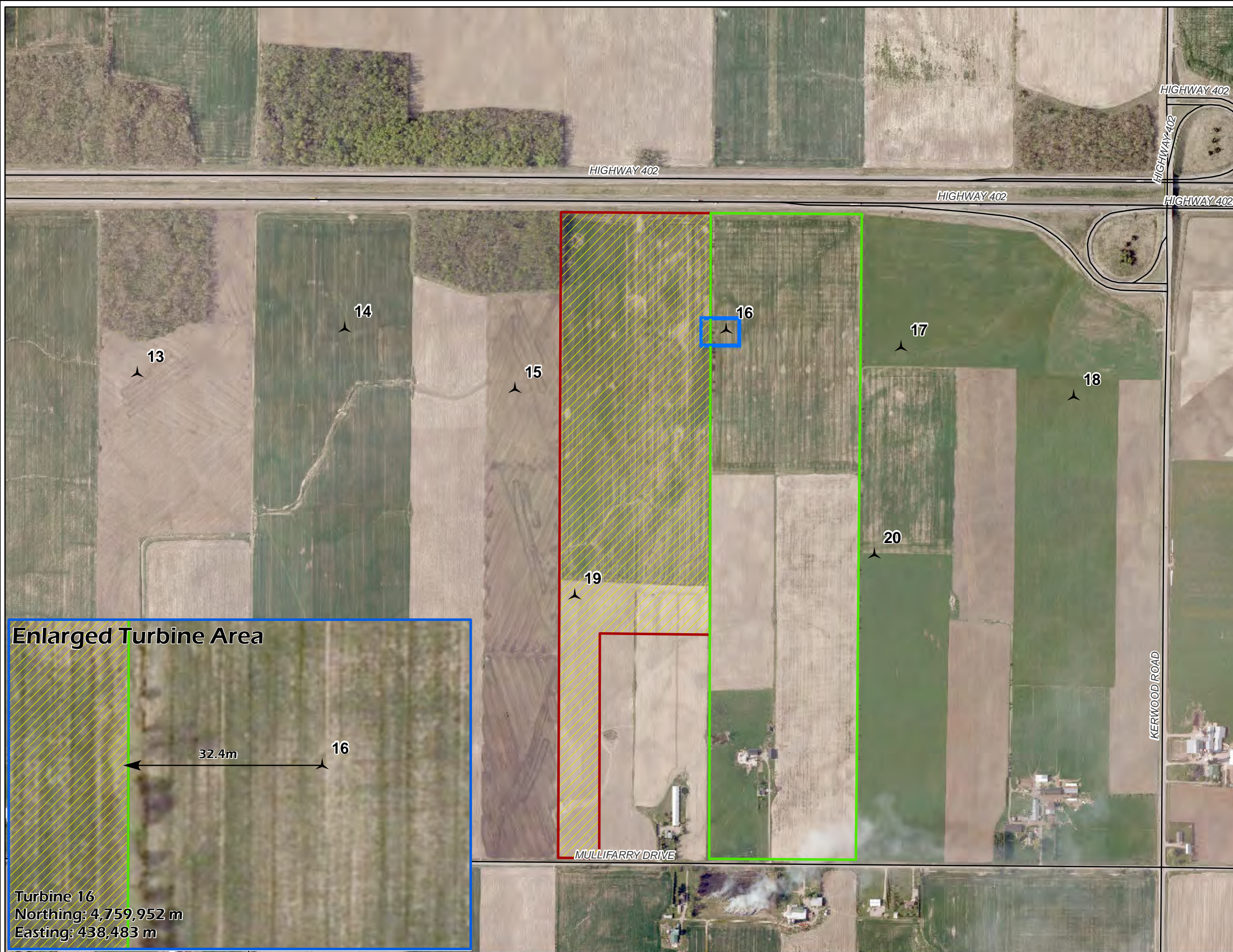
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 5, Con 2, Ser , Being  
The E 1/2, Except Part 10,  
33r1446
-  Neighbouring Land Parcel  
Pt Lt 5, Con 2, Ser , As In 445958,  
Except Part 9, 33r1446

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 16**

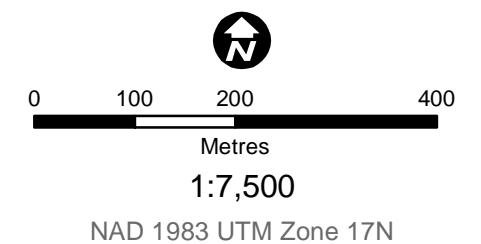


**Enlarged Turbine Area**

← 32.4m →

Turbine 16

Northing: 4,759,952 m  
Easting: 438,483 m










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**Parcel Boundary Setback  
Reduction Analysis**

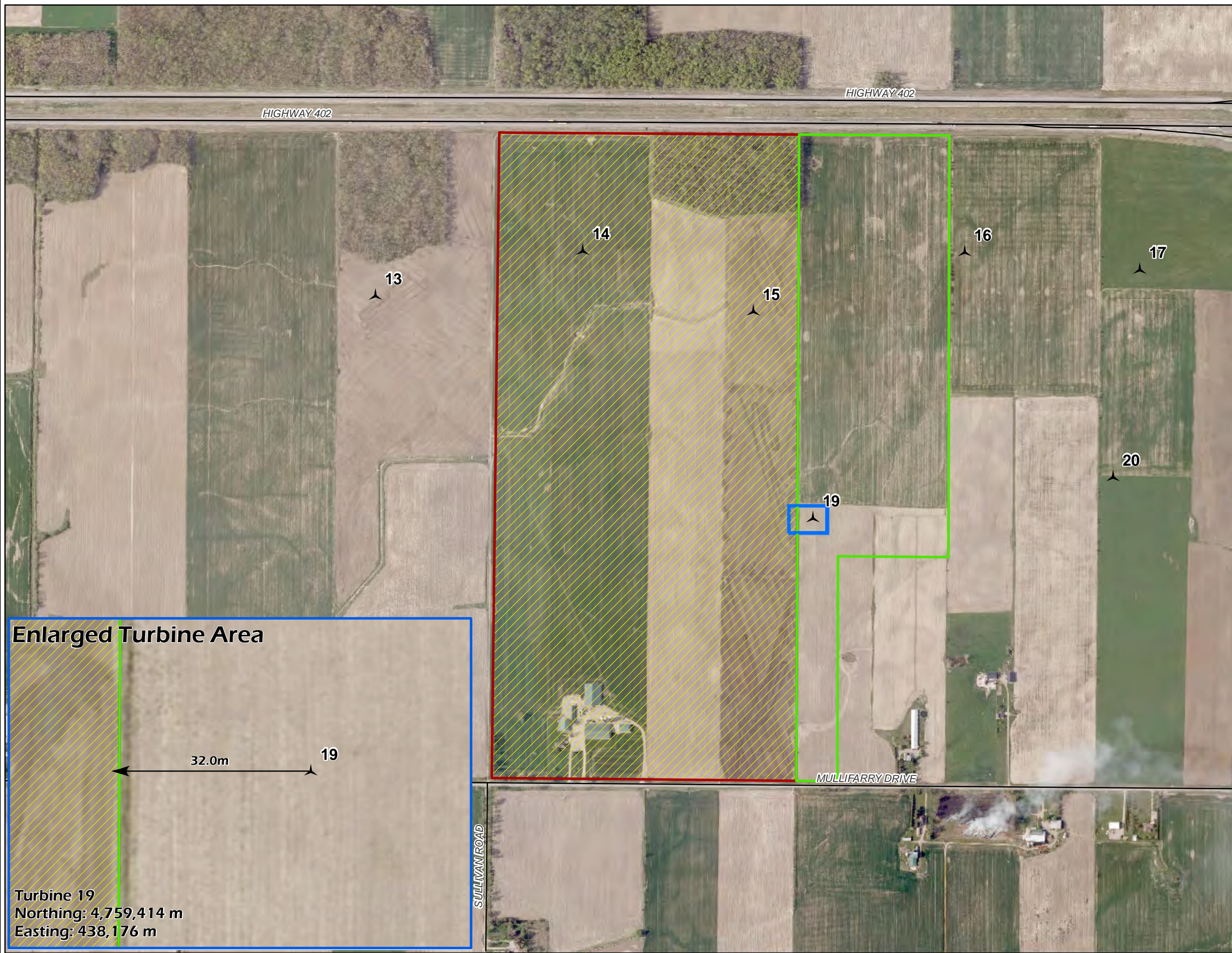
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 5, Con 2, Ser , As In  
445958, Except Part 9,  
33r1446
-  Neighbouring Land Parcel  
Lt 4, Con 2, Ser , Except Part 8,  
33r1446

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

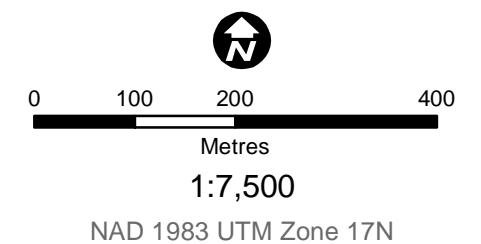
**Turbine 19**



**Enlarged Turbine Area**

← 32.0m →

Turbine 19  
Northing: 4,759,414 m  
Easting: 438,176 m










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**Parcel Boundary Setback  
Reduction Analysis**

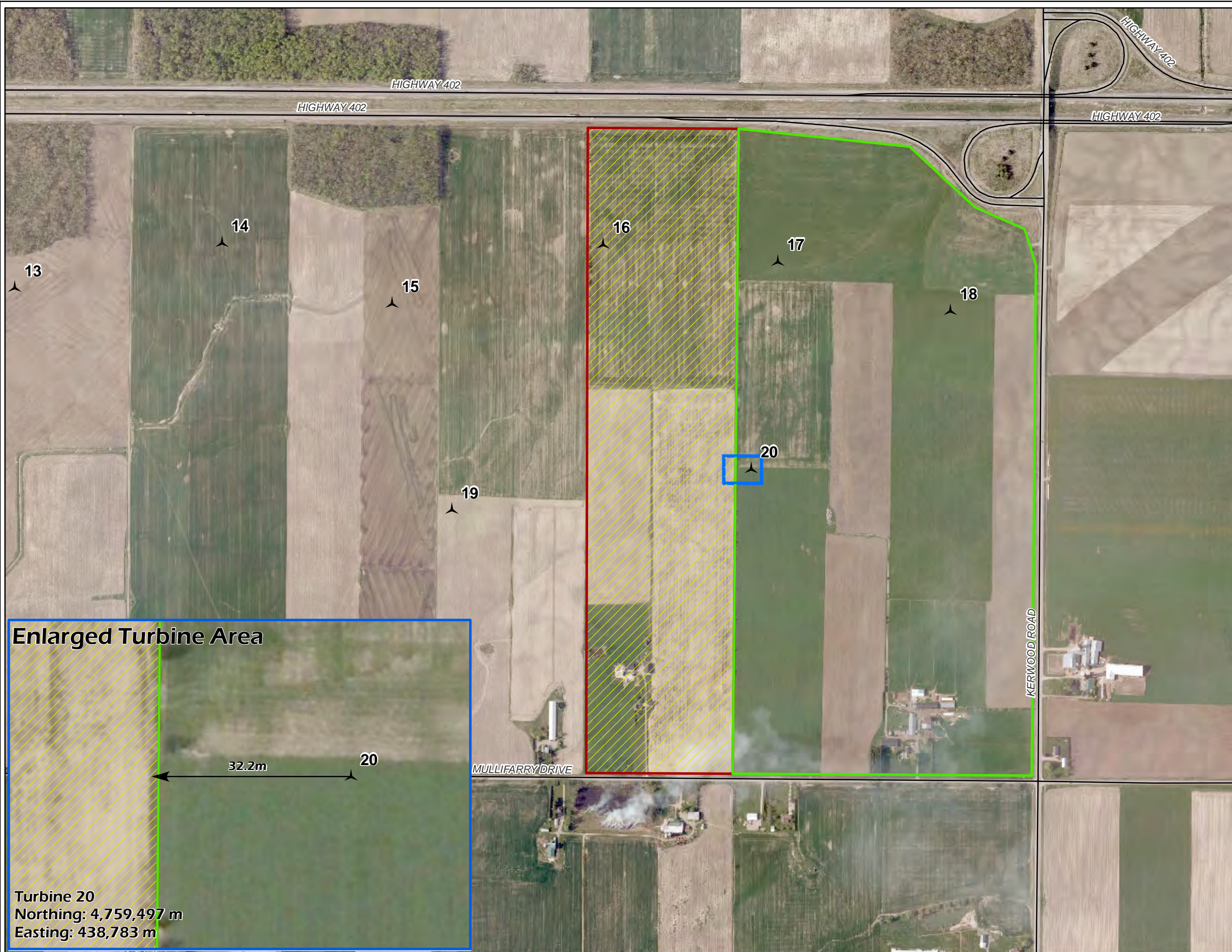
**Legend**

-  Turbine Location
-  Host Land Parcel  
Lt 6, Con 2, Ser , As In 265477,  
Except Part 14, 33r1781
-  Neighbouring Land Parcel  
Pt Lt 5, Con 2, Ser , Being The  
E 1/2, Except Part 10, 33r1446

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 20**

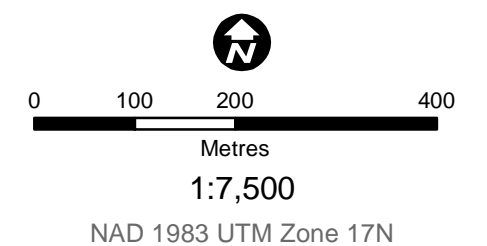


**Enlarged Turbine Area**

32.2m

Turbine 20

Turbine 20  
Northing: 4,759,497 m  
Easting: 438,783 m





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**Parcel Boundary Setback  
Reduction Analysis**

**Legend**

▲ Turbine Location

Host Land Parcel  
Pt Lt 7, Con 2, Ser , As In  
943976

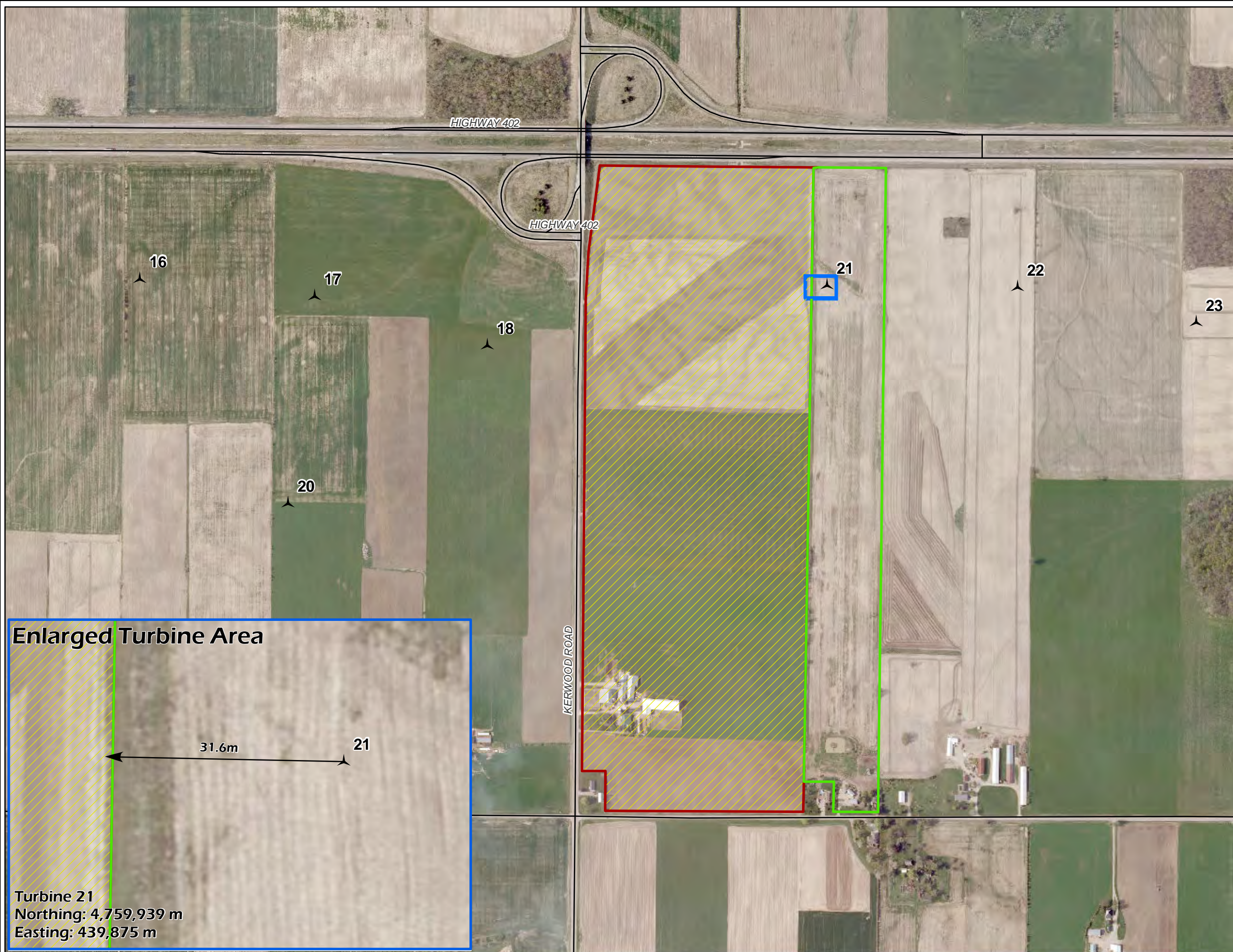
Neighbouring Land Parcel  
Pt Lt 7, Con 2, Ser , As In  
Mw103070

**Required Lotline Setback**

Agreement Will Be in Place  
With Assessment - No Setback  
Required

No Agreement - 60m Setback  
With Assessment

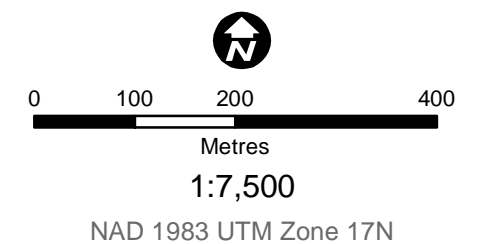
**Turbine 21**



**Enlarged Turbine Area**

← 31.6m →

Turbine 21  
Northing: 4,759,939 m  
Easting: 439,875 m










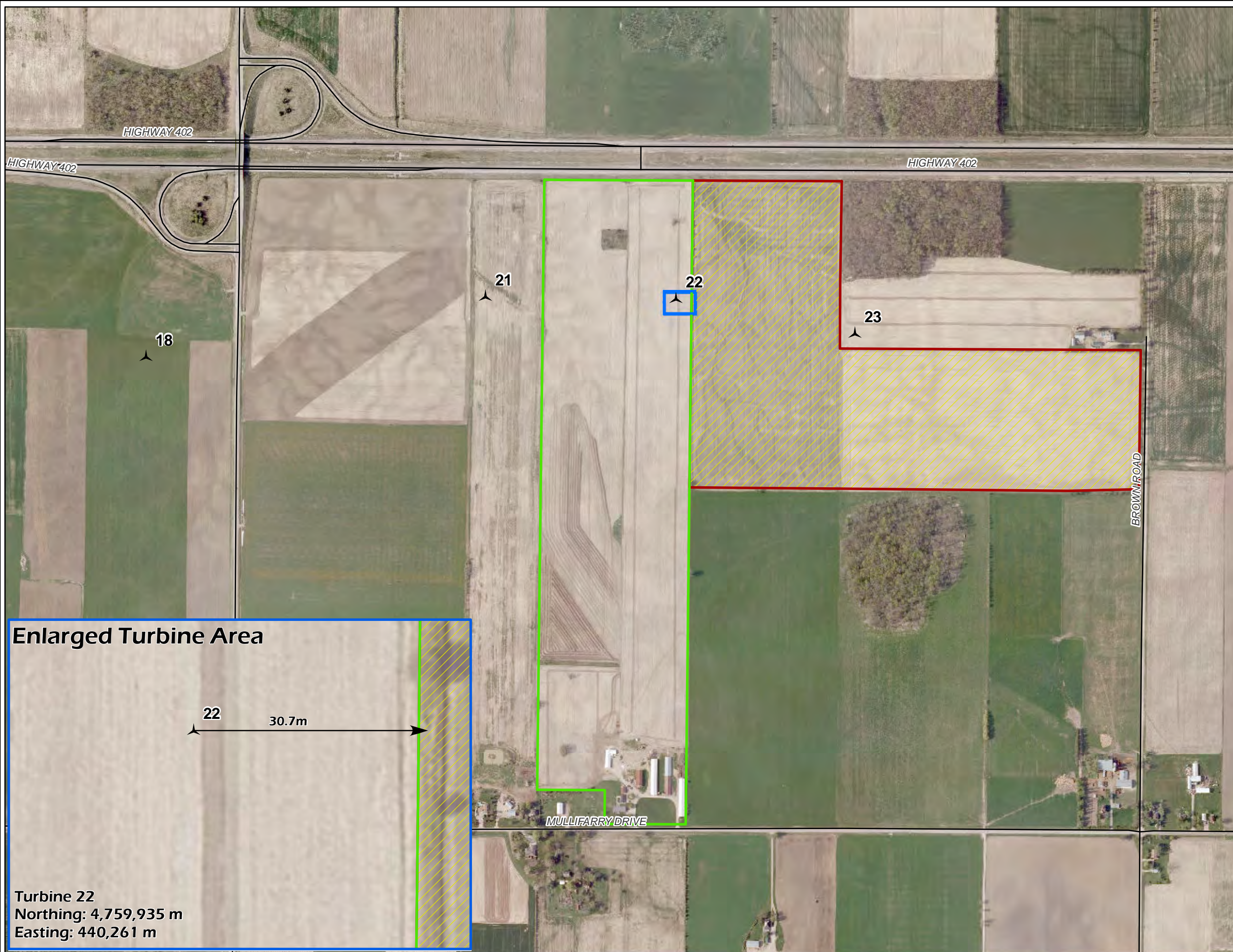
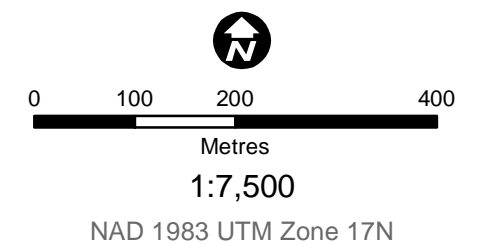
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**Parcel Boundary Setback  
Reduction Analysis**

**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 8, Con 2, Ser , As In  
Mw99872
-  Neighbouring Land Parcel  
Pt Lt 8, Con 2, Ser , Being The  
N 1/2 Of The E 1/2 & Pt Lt 9,  
Con 2, Ser, Being The N 1/2,  
Except 638535 & Part 1,  
33r12092
- Required Lotline Setback**
-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 22**










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**Parcel Boundary Setback  
Reduction Analysis**

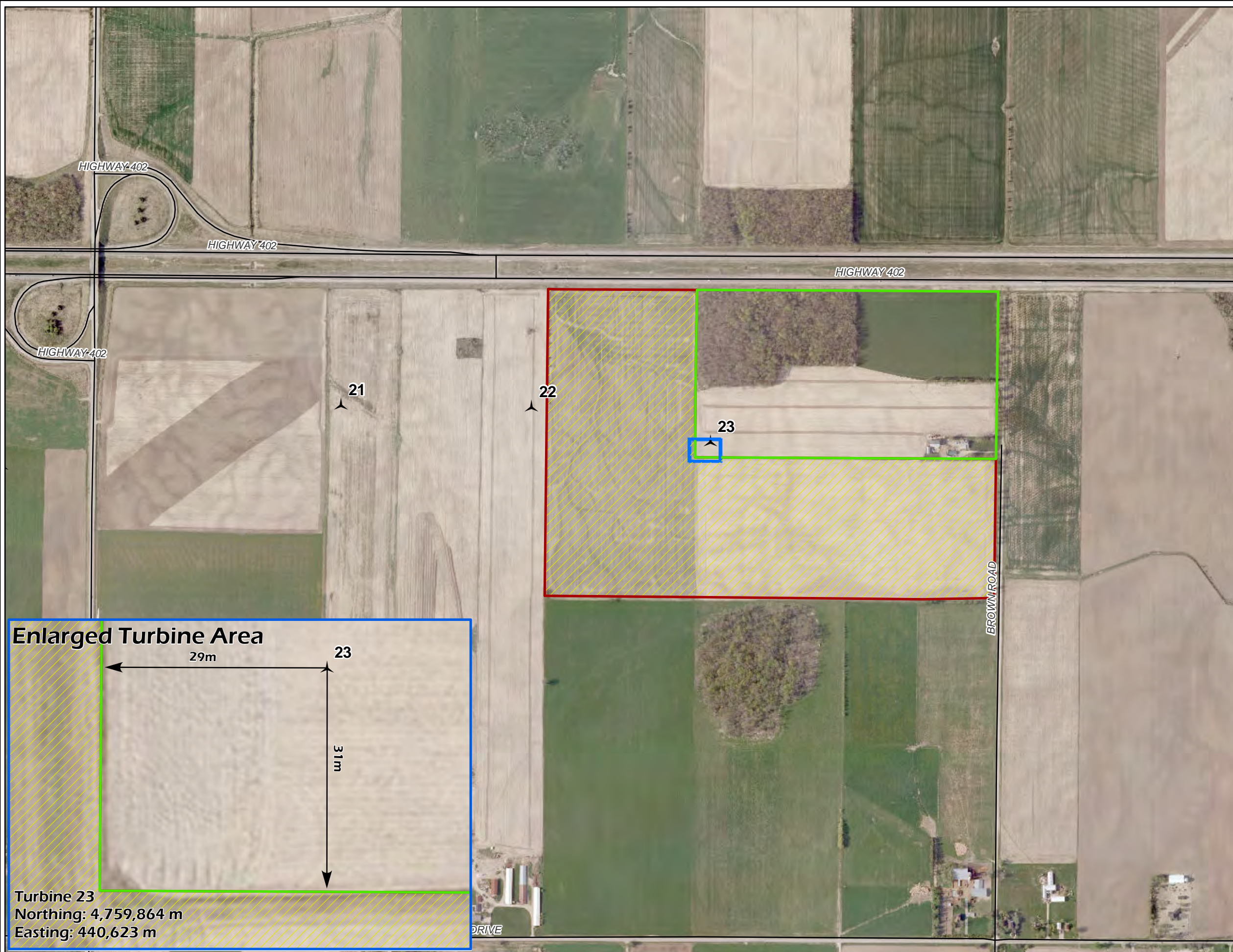
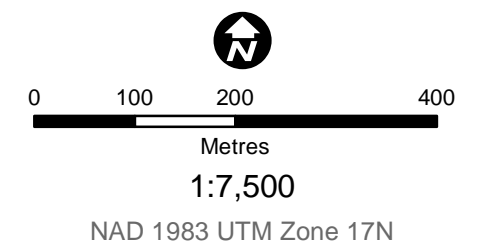
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 9, Con 2, Ser , Part 1,  
33r12092
-  Neighbouring Land Parcel  
Pt Lt 8, Con 2, Ser , Being The  
N 1/2 Of The E 1/2 & Pt Lt 9,  
Con 2, Ser, Being The N 1/2,  
Except 638535 & Part 1,  
33r12092

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 23**










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**Parcel Boundary Setback**  
**Reduction Analysis**

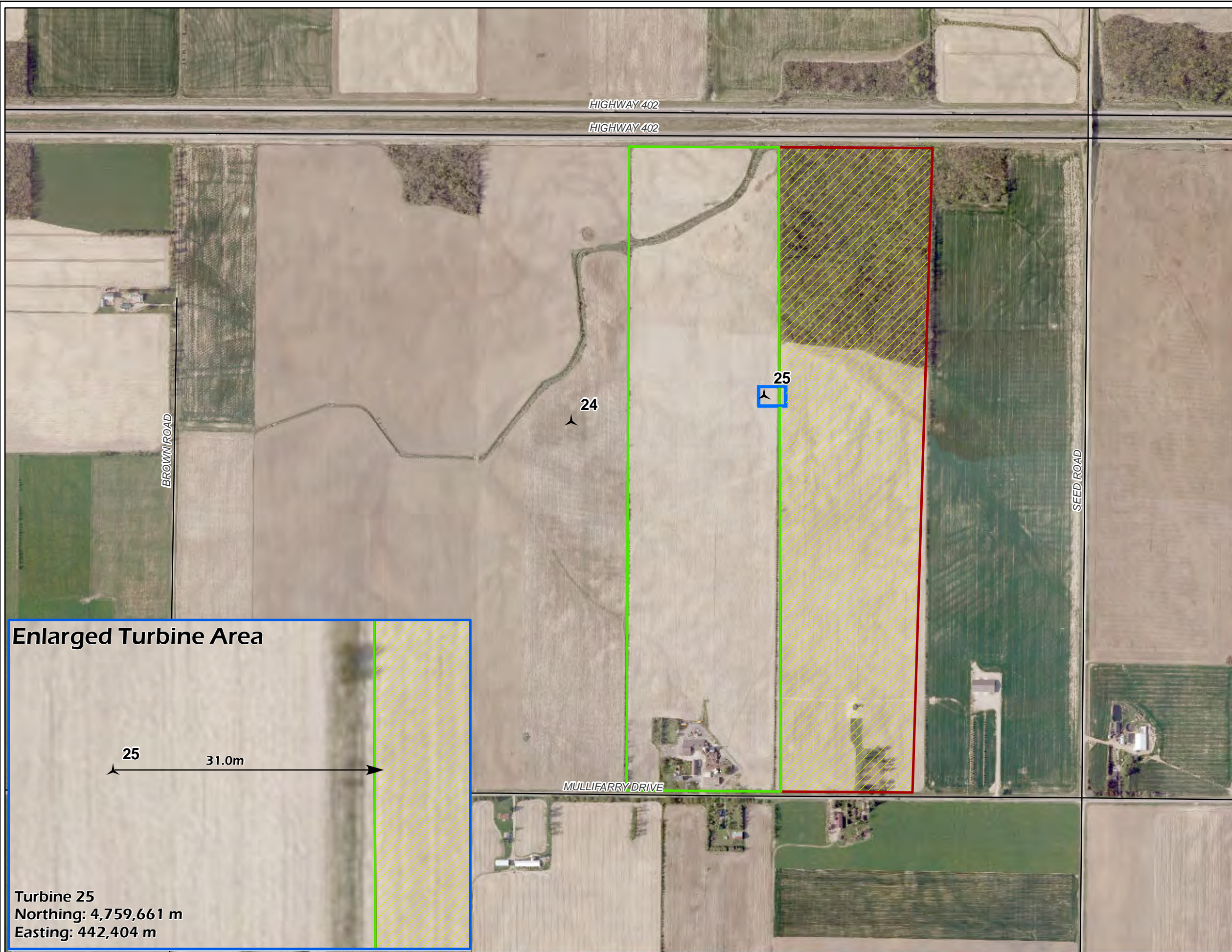
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 11, Con 2, Ser , Being The E 1/2, Except 638535
-  Neighbouring Land Parcel  
Pt Lt 12, Con 2, Ser , Being The W 1/2, Except 638535

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

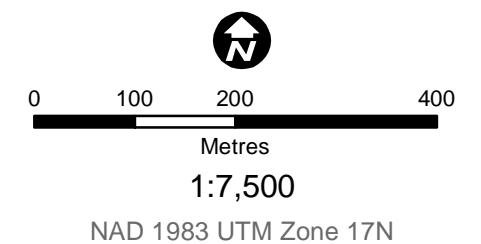
**Turbine 25**



**Enlarged Turbine Area**

31.0m

Turbine 25  
Northing: 4,759,661 m  
Easting: 442,404 m










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**Parcel Boundary Setback  
Reduction Analysis**

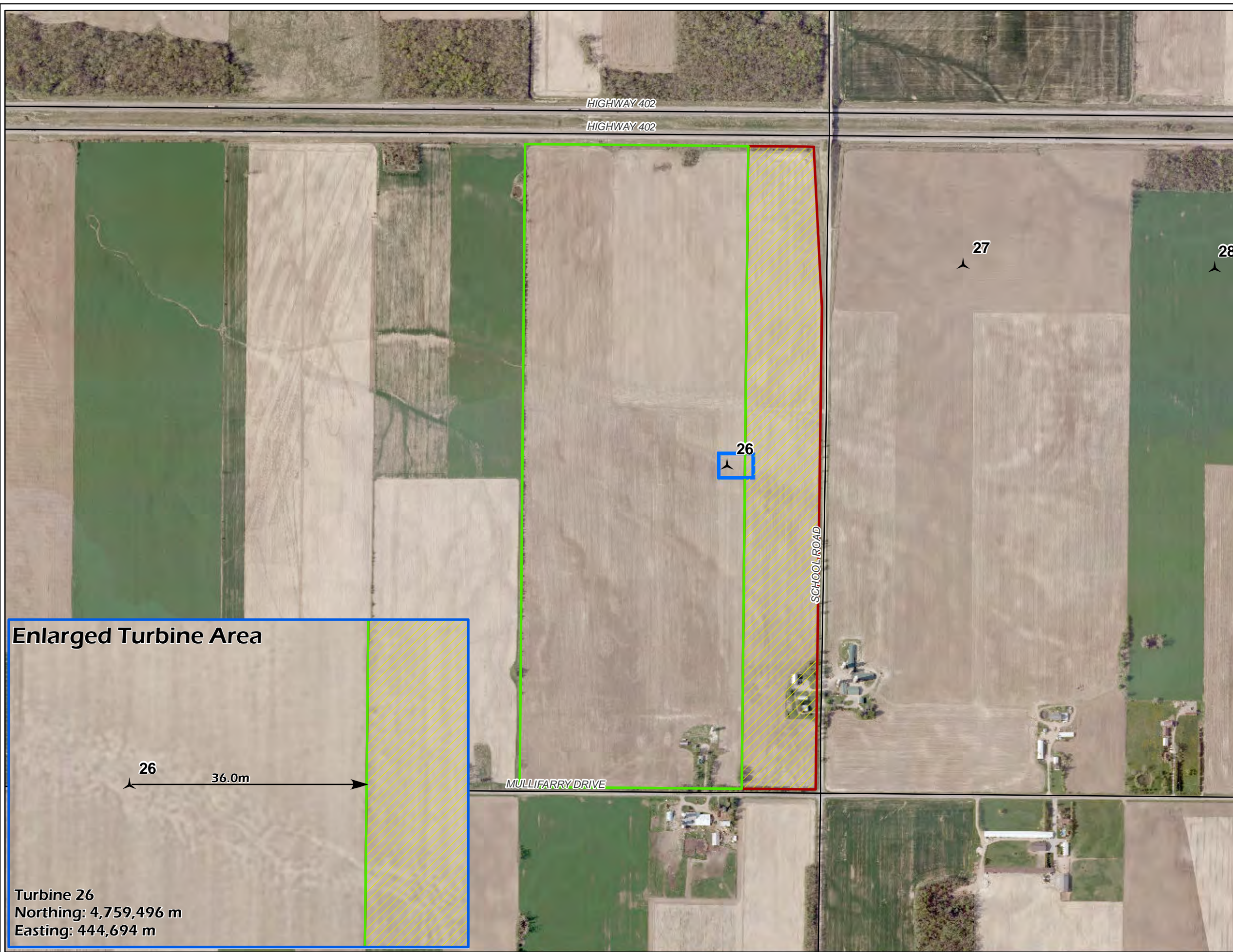
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 15, Con 2, Ser , As In  
Ad16234, Except Part 18,  
33r1448
-  Neighbouring Land Parcel  
Pt Lt 15, Con 2, Ser , Being The  
E 1/2 Of The E 1/2, Except Part  
19 & 20, 33r1448

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

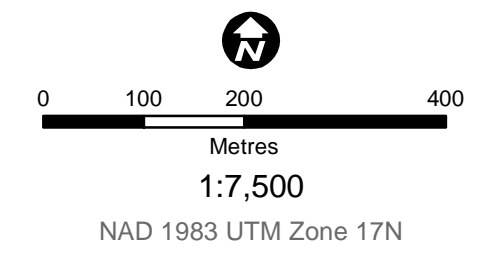
**Turbine 26**



**Enlarged Turbine Area**

26      36.0m

Turbine 26  
Northing: 4,759,496 m  
Easting: 444,694 m










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**Parcel Boundary Setback  
Reduction Analysis**

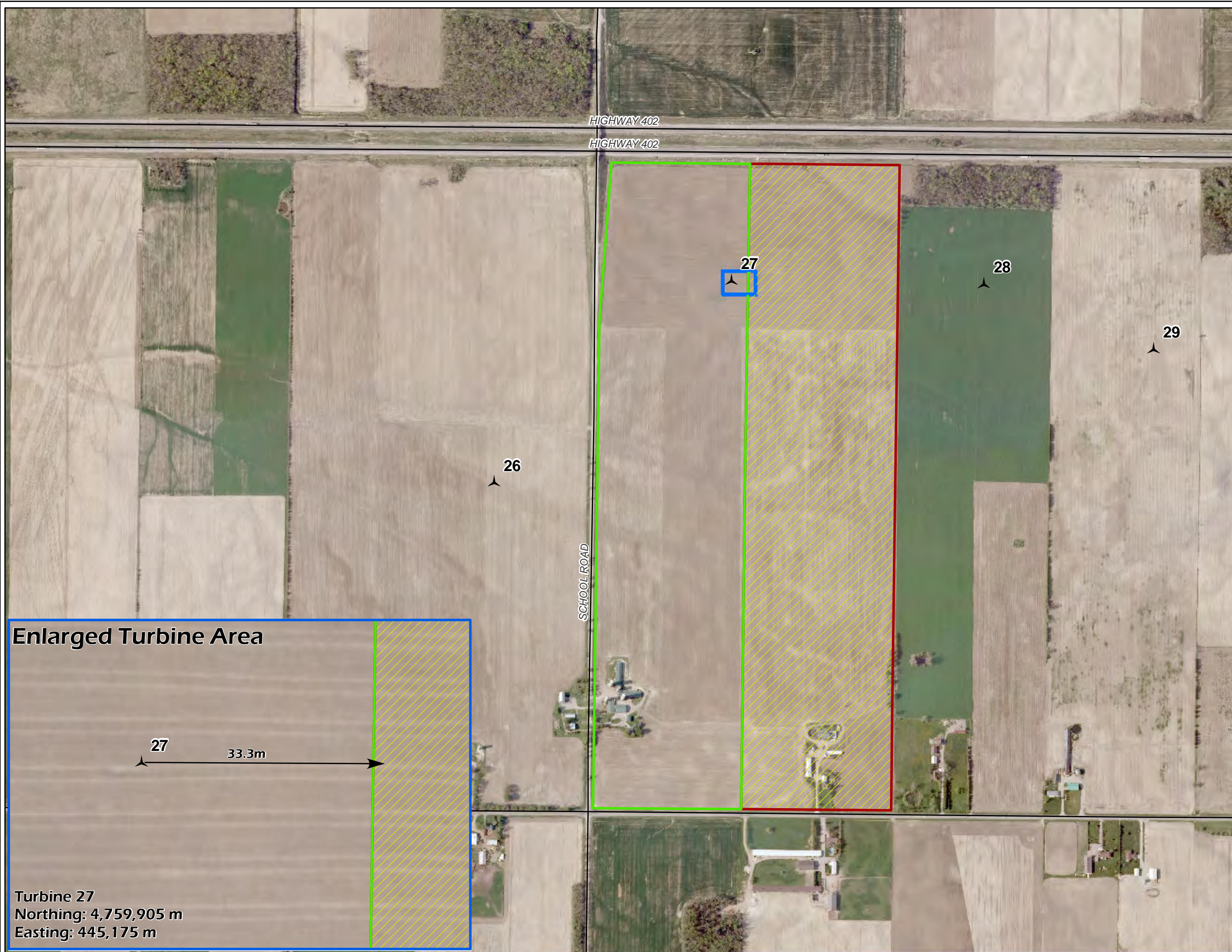
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 16 Con 2, Ser As In  
Mw104982, Except Pt 9,  
33r-1428 And Lt525188
-  Neighbouring Land Parcel  
East Half Lot 16, Con 2, Ser;  
Except Part 11 Plan 33r-1428

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

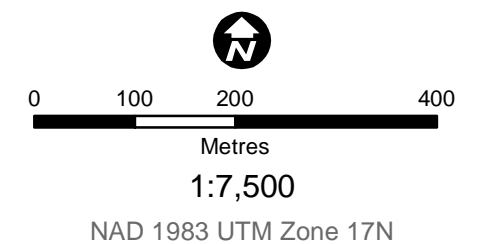
**Turbine 27**



**Enlarged Turbine Area**

27 33.3m

Turbine 27  
Northing: 4,759,905 m  
Easting: 445,175 m










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**Parcel Boundary Setback**  
**Reduction Analysis**

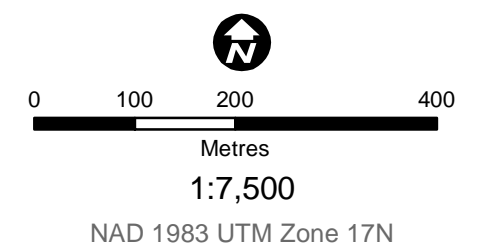
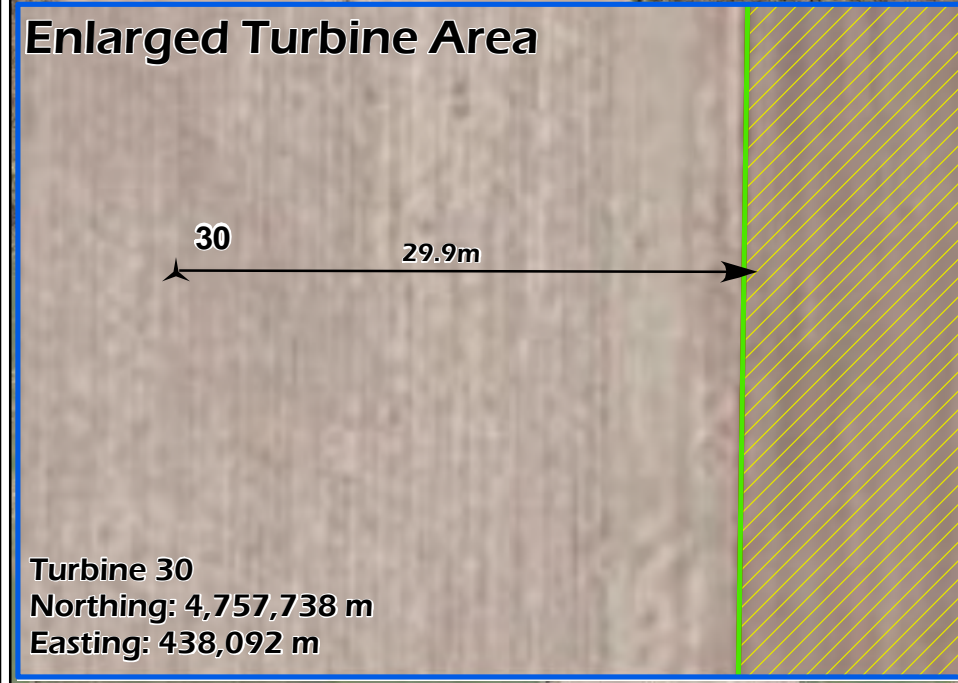
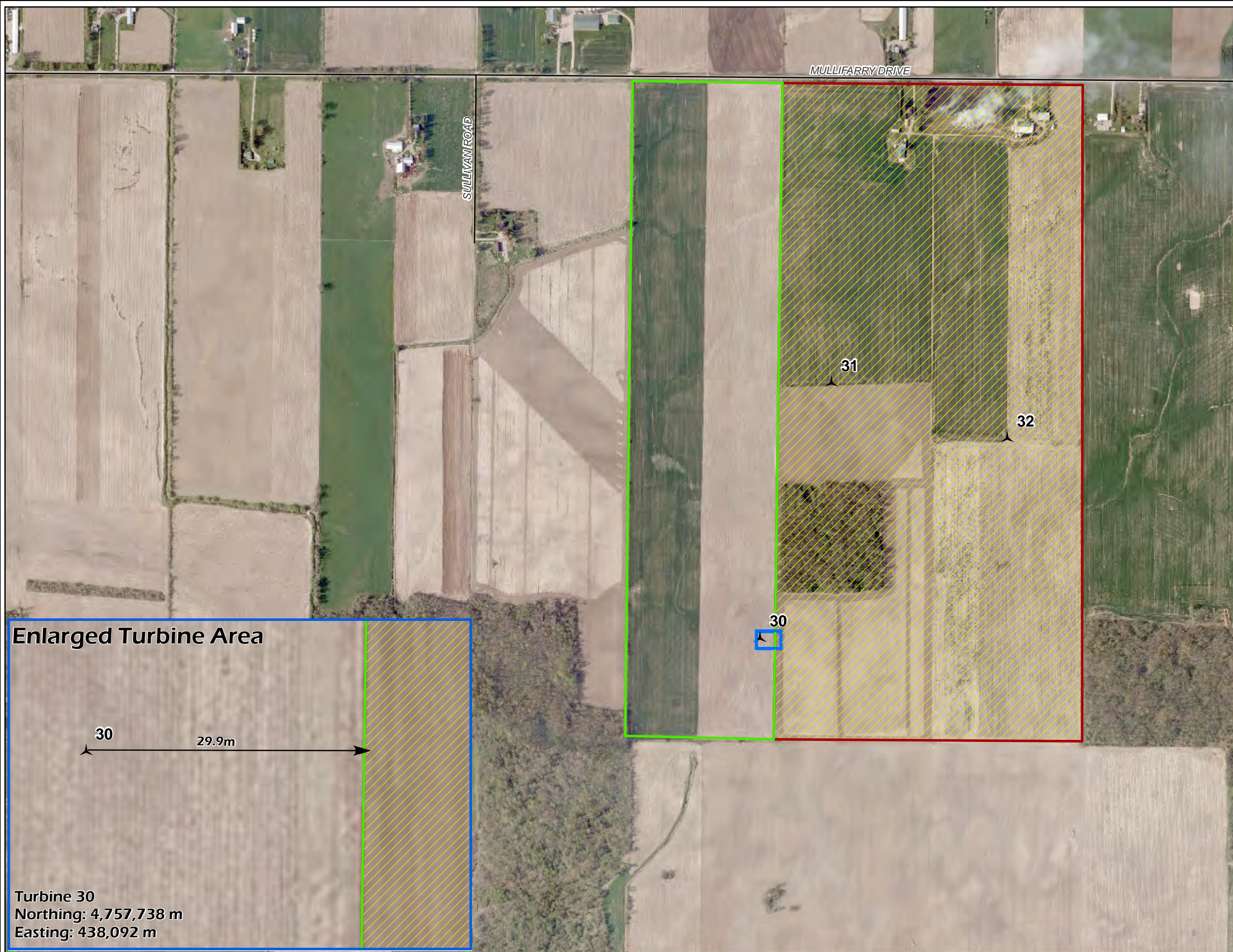
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 4, Con 3, Ser , Being  
The E 1/2
-  Neighbouring Land Parcel  
Lt 5, Con 3, Ser

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 30**










**Adelaide**  
**Wind Energy Centre**  
Huron County, Ontario

**Parcel Boundary Setback**  
**Reduction Analysis**

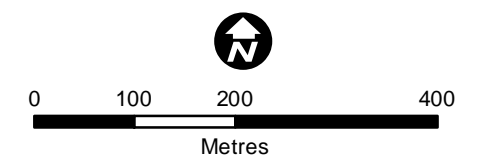
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 8, Con 3, Ser , Being The E 1/2
-  Neighbouring Land Parcel  
Pt Lt 9, Con 3, Ser , Being The W 1/2; Pt Lt 8, Con 4, Ser ,  
Being The E 1/4; Pt Lt 9, Con 4, Ser, Being The W 1/4

**Required Lotline Setback**

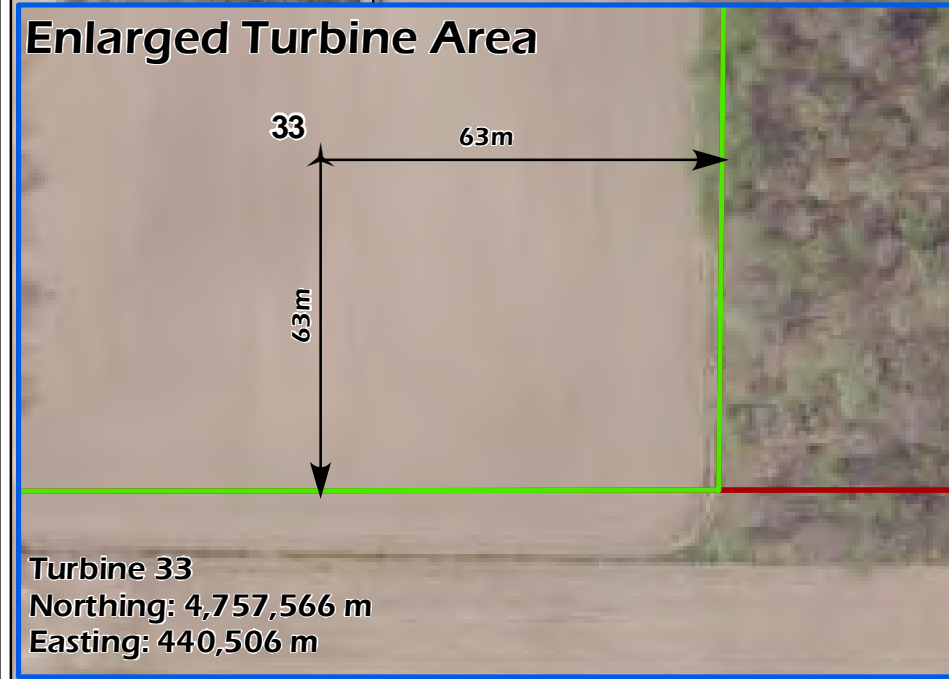
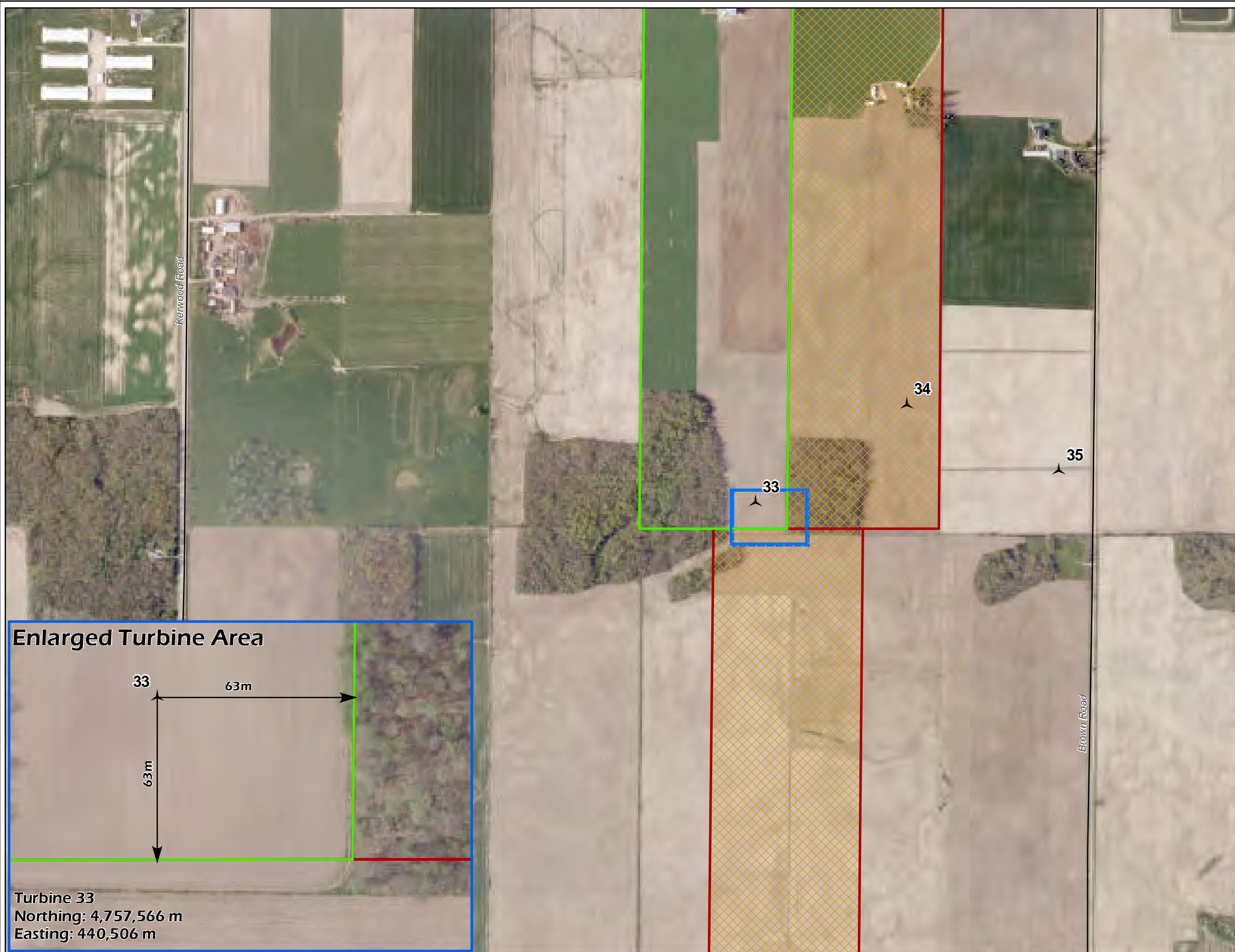
-  Existing Agreement - No Setback Required
-  No Agreement - 60m Setback With Assessment

**Turbine 33**



1:7,500




NAD 1983 UTM Zone 17N





**Adelaide**  
**Wind Energy Centre**  
Huron County, Ontario

**Parcel Boundary Setback  
Reduction Analysis**

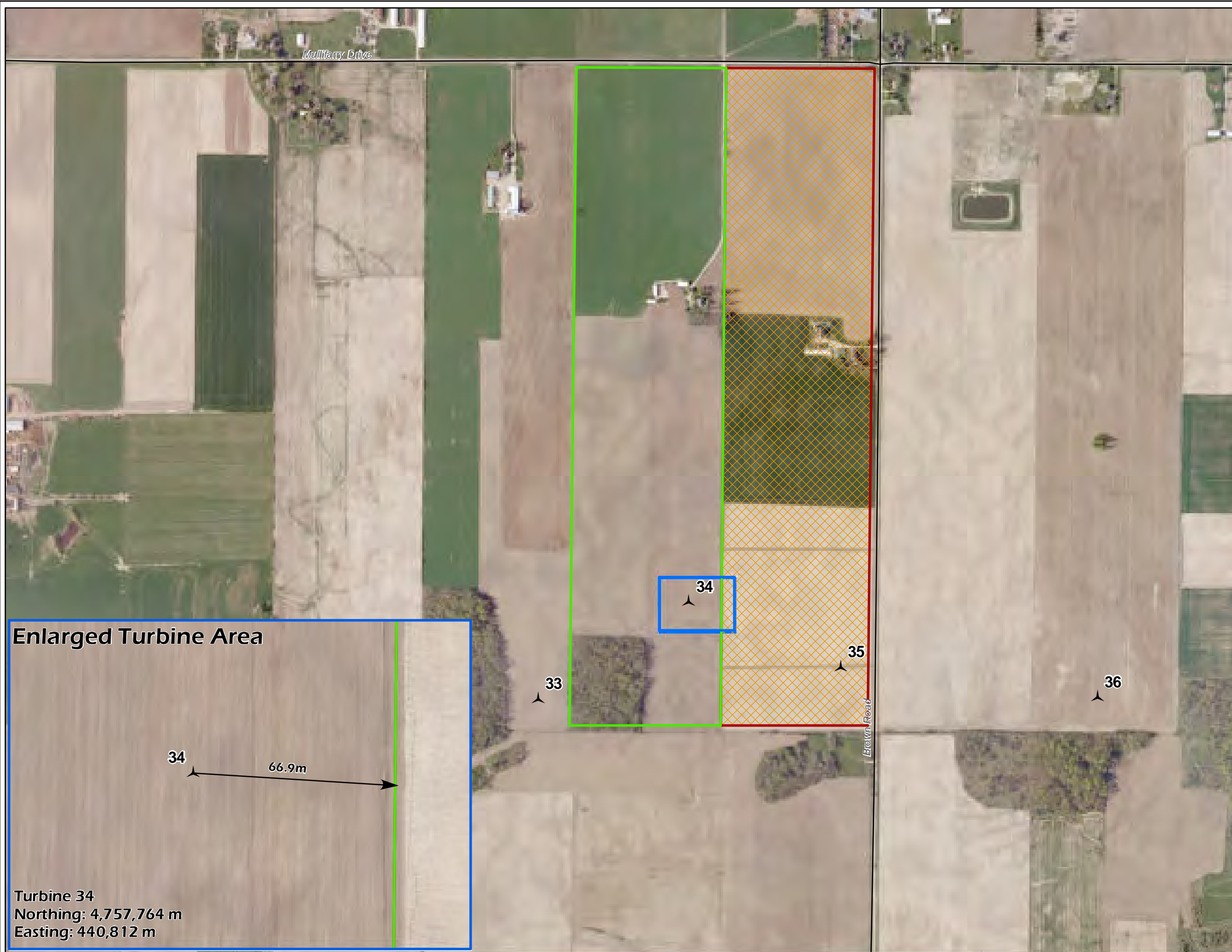
**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 9, Con 3, Ser , Being The  
W 1/2
-  Neighbouring Land Parcel  
Pt Lt 9, Con 3, Ser , Being The  
E 1/2

**Required Lotline Setback**

-  Existing Agreement - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

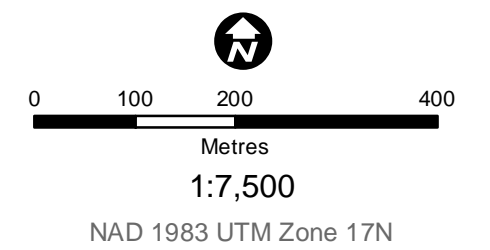
**Turbine 34**



**Enlarged Turbine Area**

34  $\longleftrightarrow$  66.9m

Turbine 34  
Northing: 4,757,764 m  
Easting: 440,812 m










**Adelaide**  
**Wind Energy Centre**  
Huron County, Ontario

**Parcel Boundary Setback**  
**Reduction Analysis**

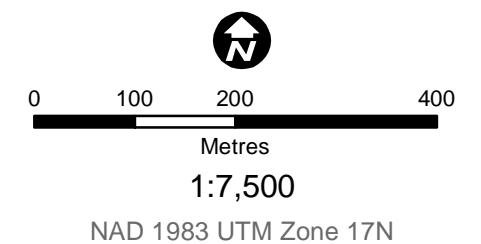
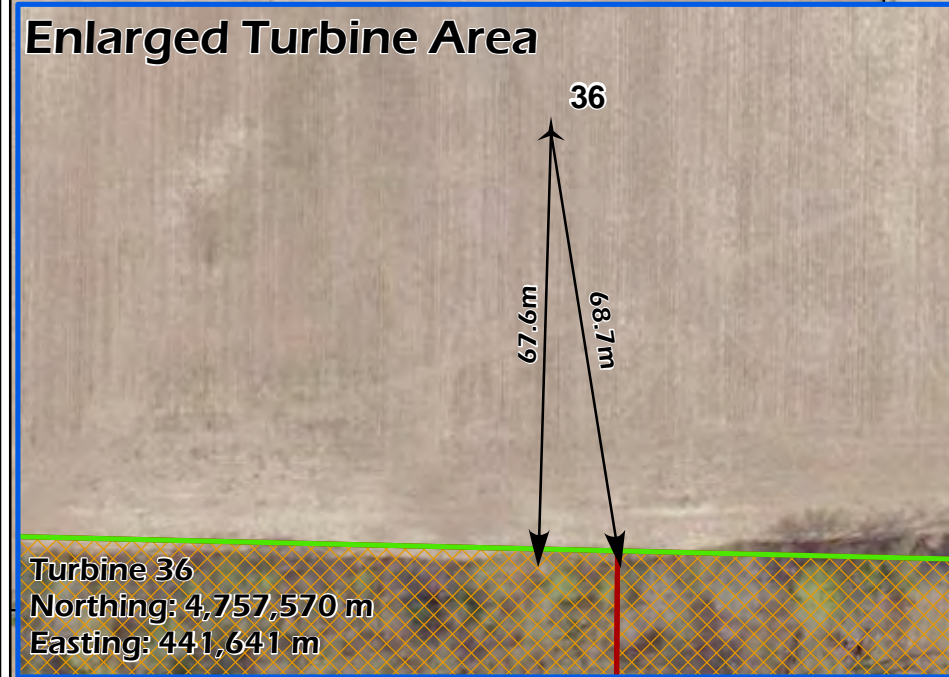
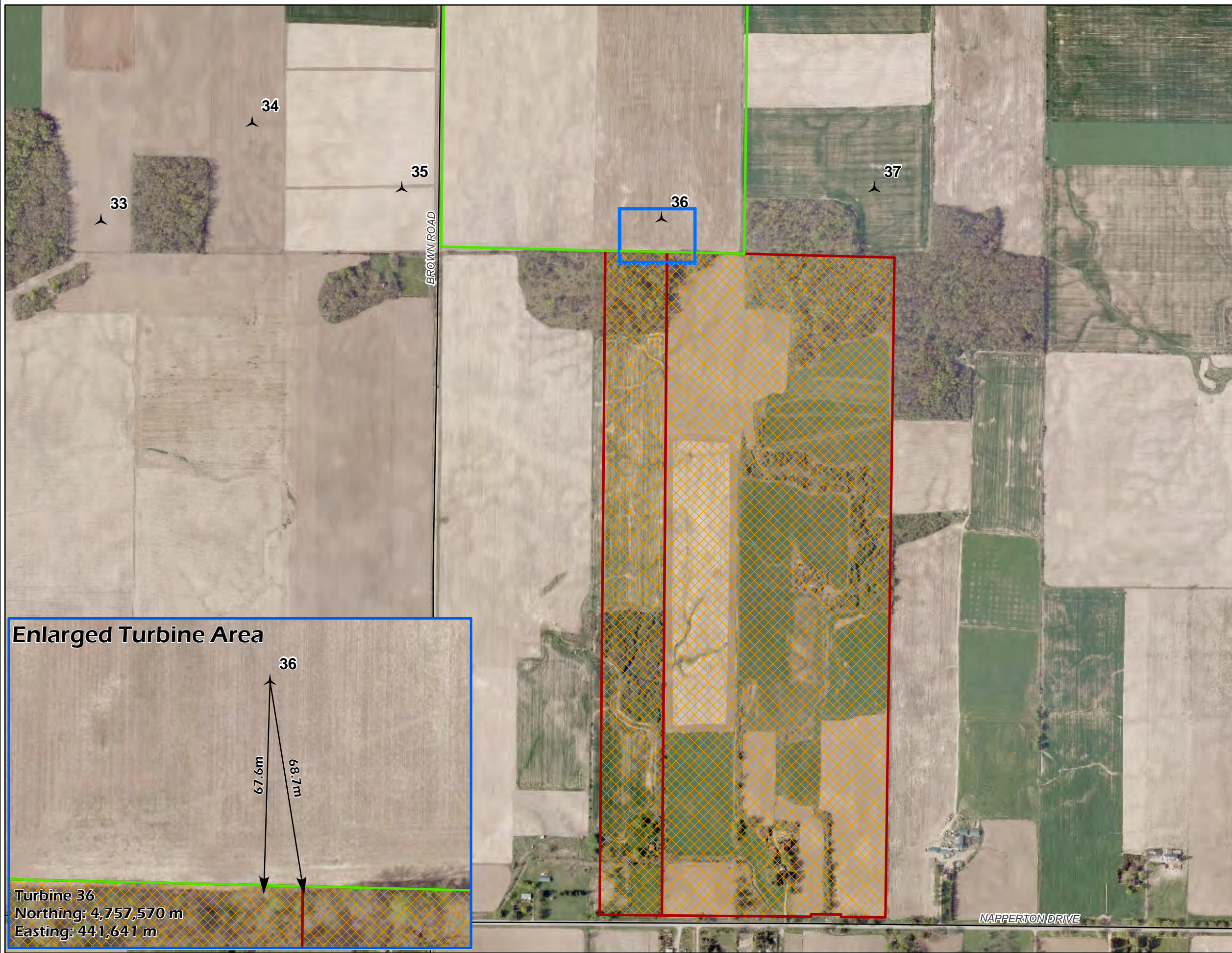
**Legend**

-  Turbine Location
-  Host Land Parcel  
Lt 10, Con 3, Ser , Except Part 1 & 2, 33r3874
-  Neighbouring Land Parcel  
Pt Lt 10, Con 4, Ser , Being The W 1/2 Of The E 1/2; Pt Lt 10, Con 4, Ser , Being The E 1/2 Of The E 1/2; Pt Lt 11, Con 4, Ser, Being The W 1/2, Except Part 1, 33r11911

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 36**










**Adelaide**  
**Wind Energy Centre**  
Huron County, Ontario

**Parcel Boundary Setback**  
**Reduction Analysis**

**Legend**

-  Turbine Location
-  Host Land Parcel  
Pt Lt 15, Con 3, Ser , Being  
The N 1/2
-  Neighbouring Land Parcel  
Pt Lt 14, Con 3, Ser , Being The  
E 1/2; Pt Lt 15, Con 3, Ser ,  
Being The S 1/2

**Required Lotline Setback**

-  Agreement Will Be in Place  
With Assessment - No Setback  
Required
-  No Agreement - 60m Setback  
With Assessment

**Turbine 38**

