

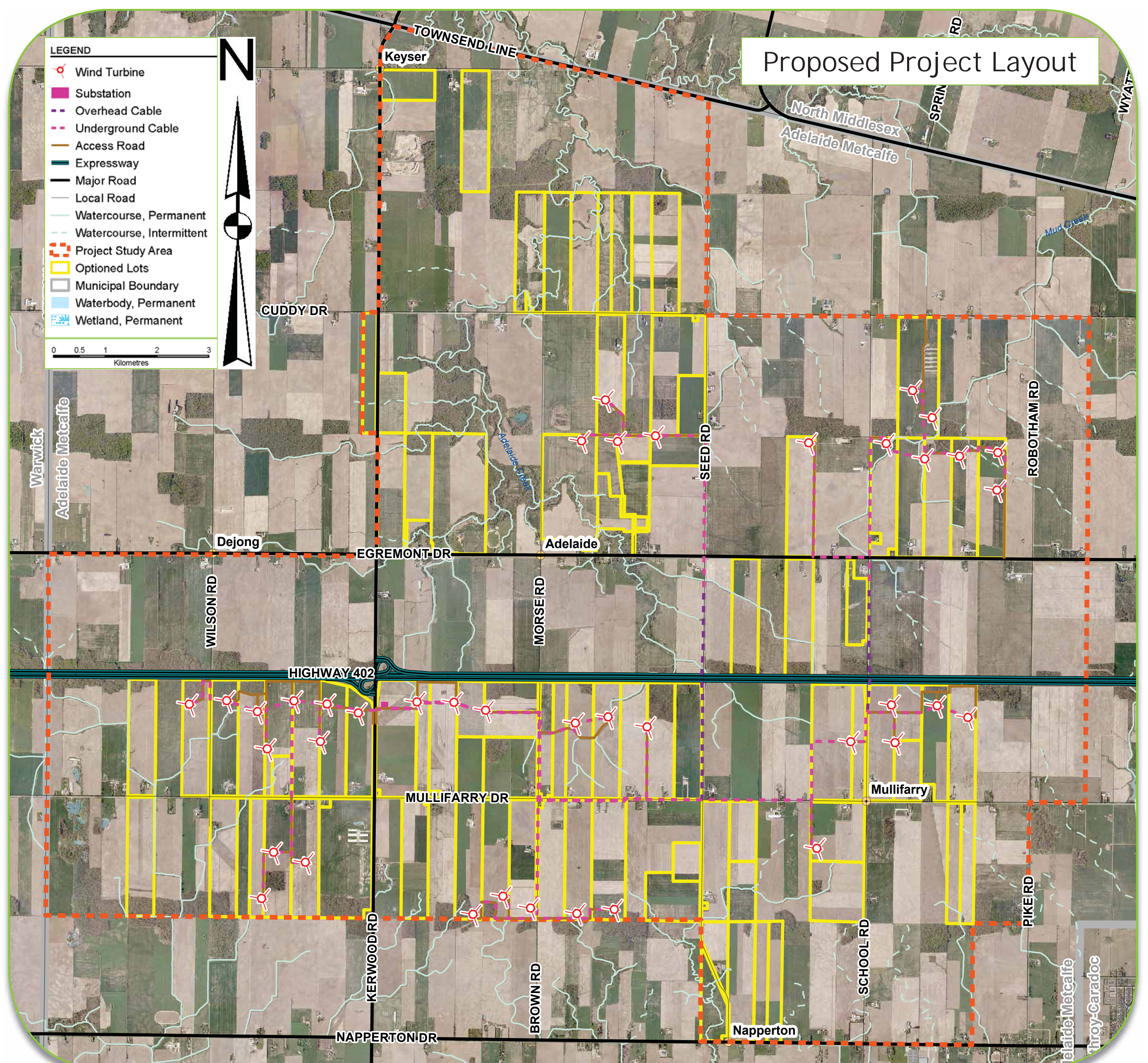
Adelaide Wind Farm the project

The Adelaide Wind Farm Project is located in the Township of Adelaide Metcalfe, Middlesex County, Ontario. The Project Study Area encompasses approximately 8,300 hectares of privately-owned agricultural land, although some lands also contain woodlots.

Under the REA, the Project is a Class 4 wind facility that will generate up to 60 MW of electricity with up to 40 wind turbines. The Project infrastructure will also include transformers, access roads, a transformer substation and electrical cabling.

The Project will include:

- 40 - 1.5 MW turbines
- 25 km of new gravel private access roads
- 38 km of buried distribution lines (34.5 kV)
- 4 km of overhead distribution lines (34.5 kV)
- 1 transformer substation measuring 80 x 80 m (1.6 acres)
- Operations and maintenance facility
- 1 permanent wind measurement mast



Adelaide Wind Farm

benefits of wind

Clean and Efficient

- Limited greenhouse gas emissions from electrical generation
- Efficient and highly reliable
- Easily coexists with agricultural land uses
- Does not need water as a cooling source
- Wind farms are low impact projects

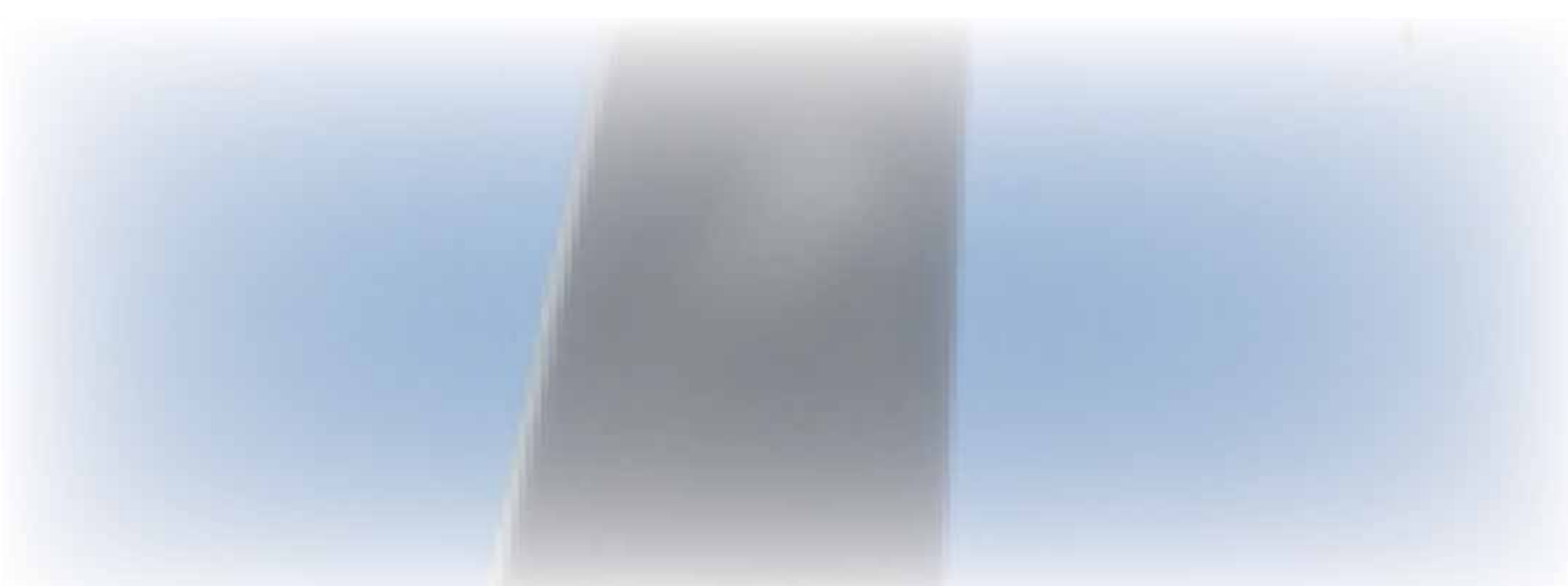
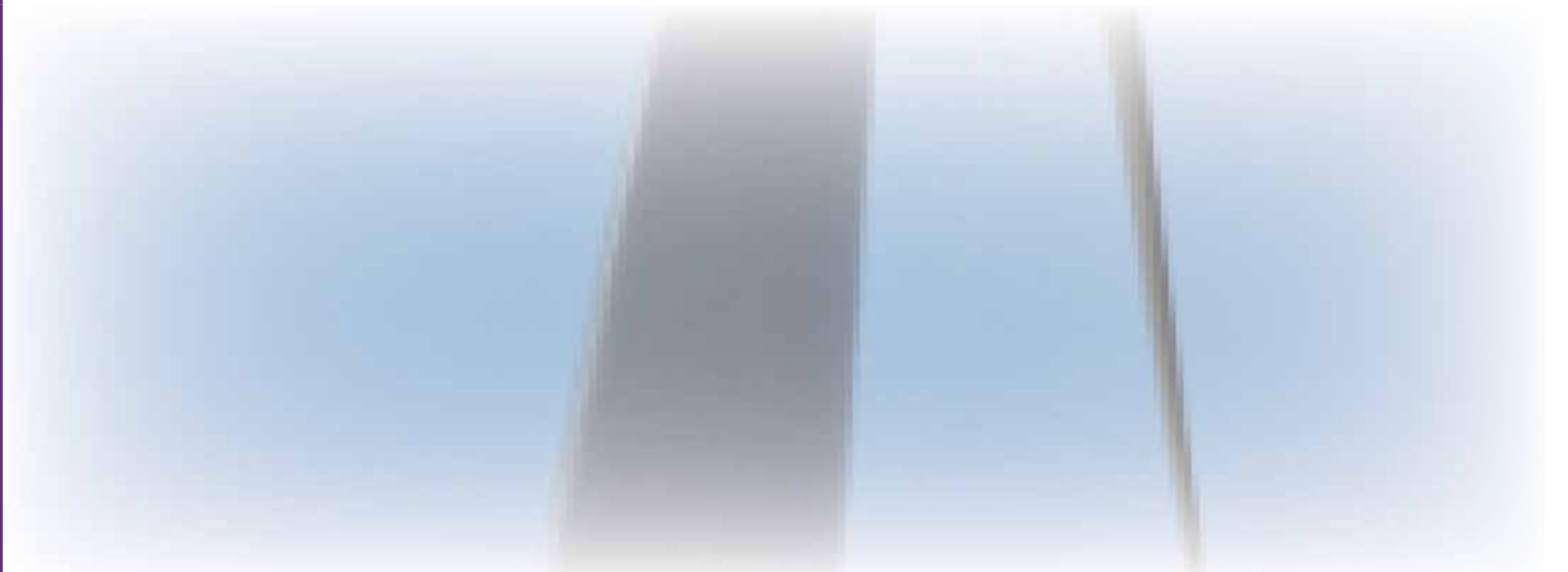


Economic Benefits

- 25% capital cost spent within Ontario
- Full-time employment for 3-6 people
- Direct income to farmers
- Construction jobs for approximately 200 people
- Taxes and/or other payments to municipalities

Price Stability

- Helps stabilize the cost of power
- Virtually zero fuel costs
- Can be produced domestically
- Contributes to the economy at many levels

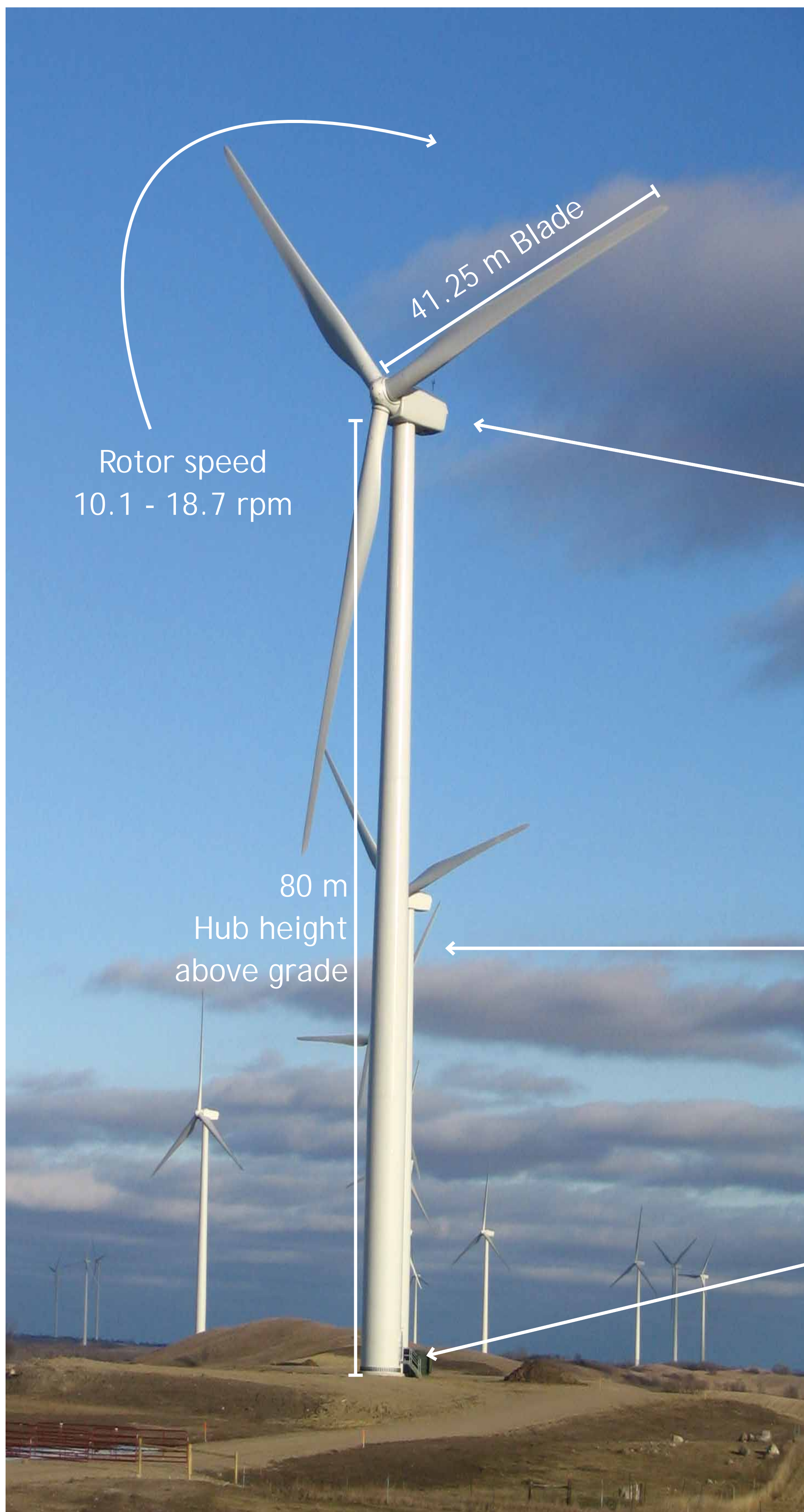


Reliable Supply

- Project cost/benefit considers wind "capacity factor" predicted from wind monitoring and modelling

Adelaide Wind Farm turbine specifications

GE 1.5 xle Turbine (1.5 MW)



Rotor and Blades

- Operates at wind speeds of 3.5 to 20 m/s
- Rotor diameter of 82.5 m
- Total swept area of 5,346 m² per turbine

Nacelle

The nacelle houses the turbine and gearbox.

Safety Lighting

Selected turbines will be lit as agreed by Transport Canada

Tower

The tower raises the blades into the optimum wind conditions.

Foundation

Electronic equipment, controls, cables, ground support and transformer. The transformer will be housed inside the tower.

Adelaide Wind Farm construction plan

Typical wind turbine foundations will be made of reinforced concrete. Each foundation will require an excavation of approximately 25 m by 25 m and 3.5 m deep. Formwork and rebar will be installed to construct the foundation. Only the tower base portion of the foundation will be left above ground. The turbine tower is then anchored to the foundation by large bolts set in concrete. Final foundation design will be determined by site-specific geotechnical studies.

The electrical collector system will consist of primarily underground cable with small portions of overhead lines, junction boxes and a substation. Ploughing, trenching and directional drilling will be used to install the underground cables. The cabling will be buried at a depth that will not interfere with normal agricultural practices and maps of cable locations will be provided to landowners.

The substation site will measure no more than 80 m by 80 m and will include a temporary workspace. Once the substation building is finished, the remaining space will not be reinstated for agricultural use and will be gravelled as a hard standing area.

ACTIVITY	PLANNED DURATION*
Construction Phase	9 to 12 months
Turbine Siting and Surveys	1 to 3 weeks
Access Roads	2 to 3 months
Equipment delivery	4 to 5 months
Land clearing	1 month
Topsoil stripping and salvage	1 month
Overhead and Underground distribution line	4 to 6 months
Turbine foundations	9 months
Equipment laydown	9 months
Turbine assembly and erection	4 to 6 months
Substation and interconnection	6 months

*Pending OPA Approval



Adelaide Wind Farm construction plan

Site preparation will include final turbine siting and surveys. During these surveys, boundaries of turbines sites will be staked and existing buried infrastructure will be located and marked.

Access roads to each turbine site will be constructed before construction equipment and turbine components can be delivered. The access roads will be built 10 m wide, but will be reduced to widths of 5-6 m within 24 months.

The total number of equipment deliveries is expected to be between 9 to 13 deliveries per turbine.

Temporary laydown areas of 60 m x 60 m will be created beside each turbine. Typically, when equipment is delivered to the site, it will be installed immediately to avoid double-handling. However, if necessary equipment will be stored on the laydown area until the construction and assembly crews are ready to use it. The laydown areas will also include temporary crane pads for safety during turbine assembly.

Construction equipment will include:

- Bulldozers
- Excavators
- Compactors
- Graders
- Concrete Pump/Elevator
- Dump Trucks
- Cranes

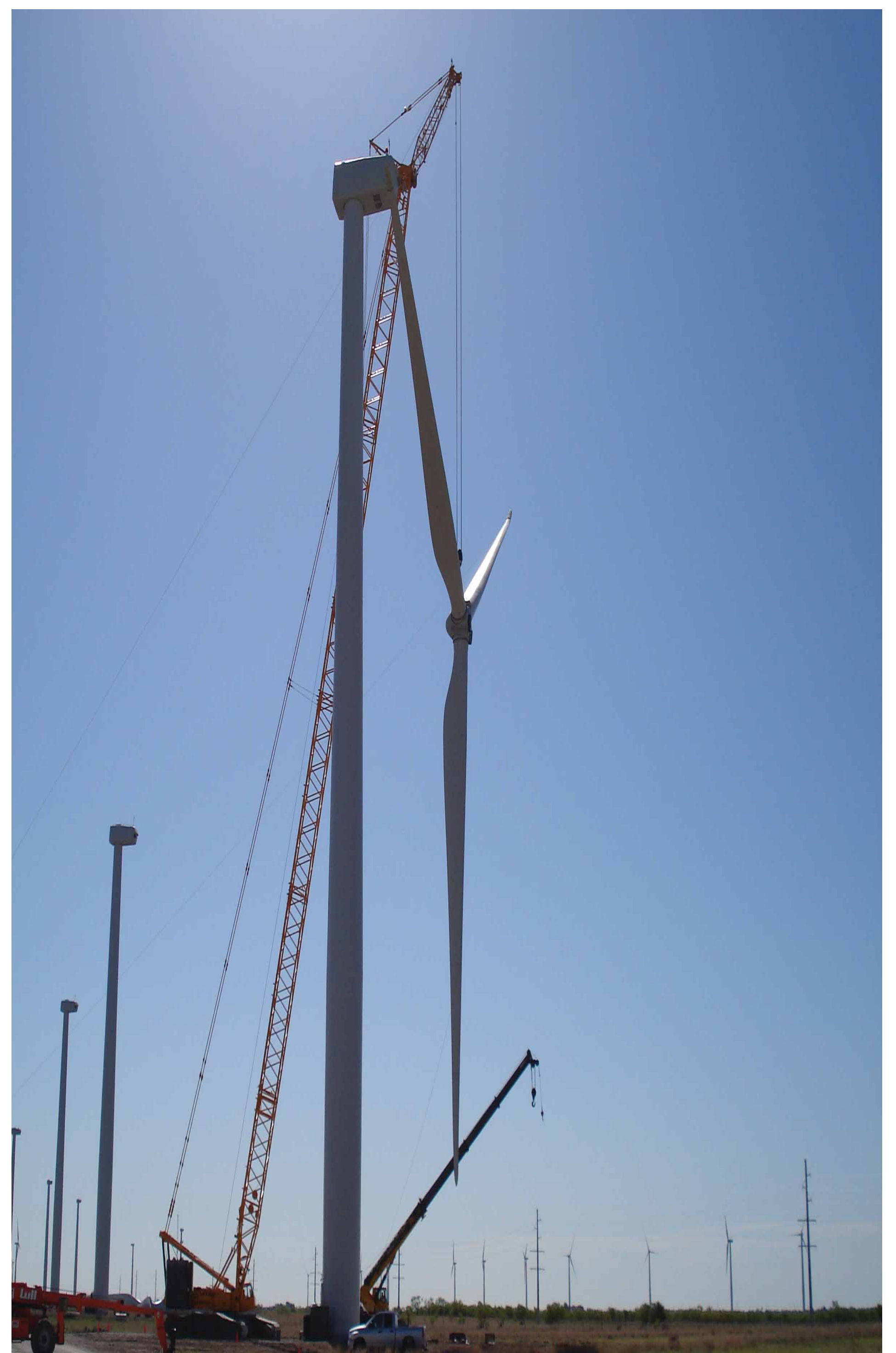


Adelaide Wind Farm design and operations

The Project is designed to meet all applicable regulatory requirements (municipal, provincial and federal). The design process identified limiting factors, including important considerations listed below, and placed Project components in areas of least constraint. Where Project infrastructure was sited within Reg 359/09 setback distances, effects assessments were conducted following accepted protocols to determine the significance of residual impacts.

Our main considerations when siting the turbines and other components included:

- Proximity to environmental features and their significance
- Site access
- Existing land use
- Wind yield
- Landowner input
- Weather conditions
- Existing transmission lines
- Minimizing watercourse crossings
- Results of environmental field studies
- Minimizing the length of collector lines and access roads



Adelaide Wind Farm decommissioning plan

The Project is expected to be operational for 25 to 30 years. At that time, the turbines will need to be replaced, refurbished or dismantled and removed. Project components that would be dismantled and removed include:

- Turbines
- Overhead lines and poles
- Substation
- Contaminated soil, if any.

The foundations will be back covered with earth to a depth that can be used for agriculture. Access road removal will depend on the requirements of the landowner. Areas of land will be reseeded where appropriate.

All materials will be recycled and reused where possible. For example, copper wiring and aluminium conductors will likely have some value in the scrap metals market.



Adelaide Wind Farm natural heritage

The Project Study Area is mostly agricultural with small woodlots of deciduous forests. The most common trees growing in the area include:

- White elm
- Shagbark hickory
- White birch
- Trembling aspen

The area does not include any known federally or provincially rare or endangered plant species.

Tracks and signs of five mammal species were observed on several occasions during field surveys including:

- White-tailed deer
- Northern raccoon
- European hare
- Red fox
- Grey squirrels

Historical records include single observations of two provincially and federally endangered species: a loggerhead shrike in 1995 and an American badger in 1979. These sightings are assumed to be of migrant animals, since no other sightings have occurred before or since.

Several significant features were identified within the Project Study Area. The minimum distances between significant natural feature and Project components will be met as outlined in the table below.

The ESR/EIS concluded that there will be no significant residual impacts to natural heritage.



Red Fox



Grey Squirrel



White-tailed Deer

Significant Features in the Project Study Area

NATURAL FEATURE	DESIGNATION	PROXIMITY TO PROJECT COMPONENT
Kerwood Bluff	Life Science Site	320 m
Adelaide 5 Wetland	Non-Provincially Significant Wetland	1,050 m
Rookery Woodlot	Life Science Site	1,050 m
Kerwood Swamp	Provincially Significant Wetland	2,350 m
Kerwood Woods	ANSI (Life Science)	2,350 m
Un-named (on Adelaide Creek)	Environmentally Significant Area	650 m
Significant Woodlands (numerous)	Significant Woodland	No Project components located within Significant Woodlands. No significant residual effects.

* All features also include significant woodlands

Adelaide Wind Farm natural heritage - birds

The Project Study Area is mainly agricultural land, with small patches of woodland providing habitat suitable for Ontario's more common and abundant bird species. Avian use surveys and risk assessment studies identified 4,201 individuals of 77 species during the study period.

The most common species observed were:

- Red-winged blackbird
- Horned lark
- Common grackle
- European starling
- House sparrow
- Canada goose
- Mourning dove

The Ontario Breeding Bird Atlas identified breeding evidence of a red-headed woodpecker (listed as a species of special concern provincially and federally) within the Project Study Area between 2000 and 2005; however, no woodpeckers were observed during field surveys.

Birds were observed at different heights to determine the potential impact that wind turbines could have on the bird population. The rotor blade sweep is assumed to be between 40 to 120 m above ground.

As seen in the pie chart below, the large majority of birds observed in the Project Study Area were flying below the sweep of the rotor blades.

Construction and decommissioning activities that remove or alter vegetation are planned to occur outside of the breeding season for most bird species (April to August). Should any construction activities be required within the Project Study Area during the breeding season, avian nest surveys will be undertaken to identify the presence of nesting birds and appropriate species-specific setbacks will be created.

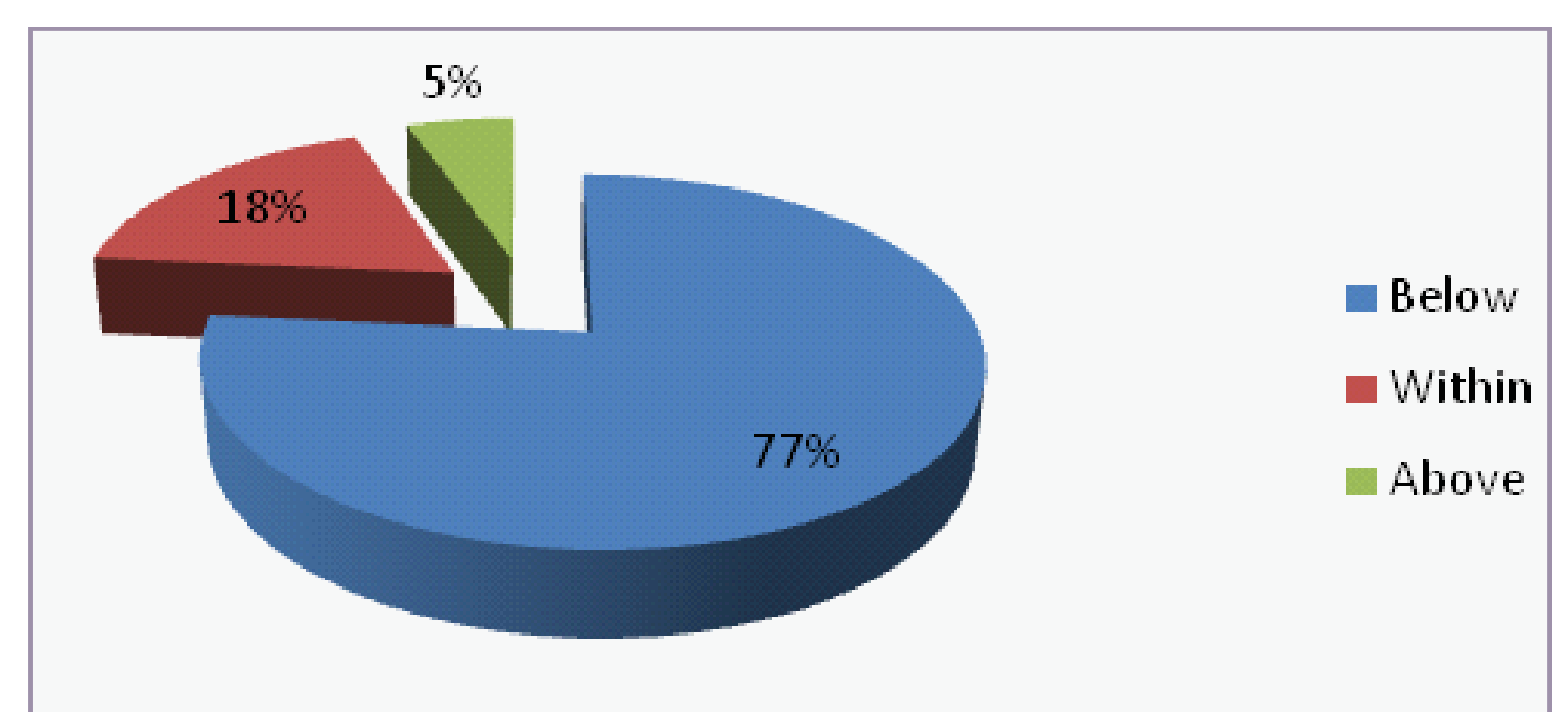
European Starling



Red-Winged Blackbird

Based on observations of current bird use in the Project Study Area and mortality data from other wind power projects, avian mortality is expected to be low. No residual effects to regional bird populations are anticipated.

Percentage of Birds Observed Flying Below, Within and Above the Sweep of the Rotor blades



Adelaide Wind Farm natural heritage - bats

The Project Study Area is primarily flat agricultural land. Bat habitat is limited to small blocks of woodland, old buildings and wetlands located within the Project Study Area.

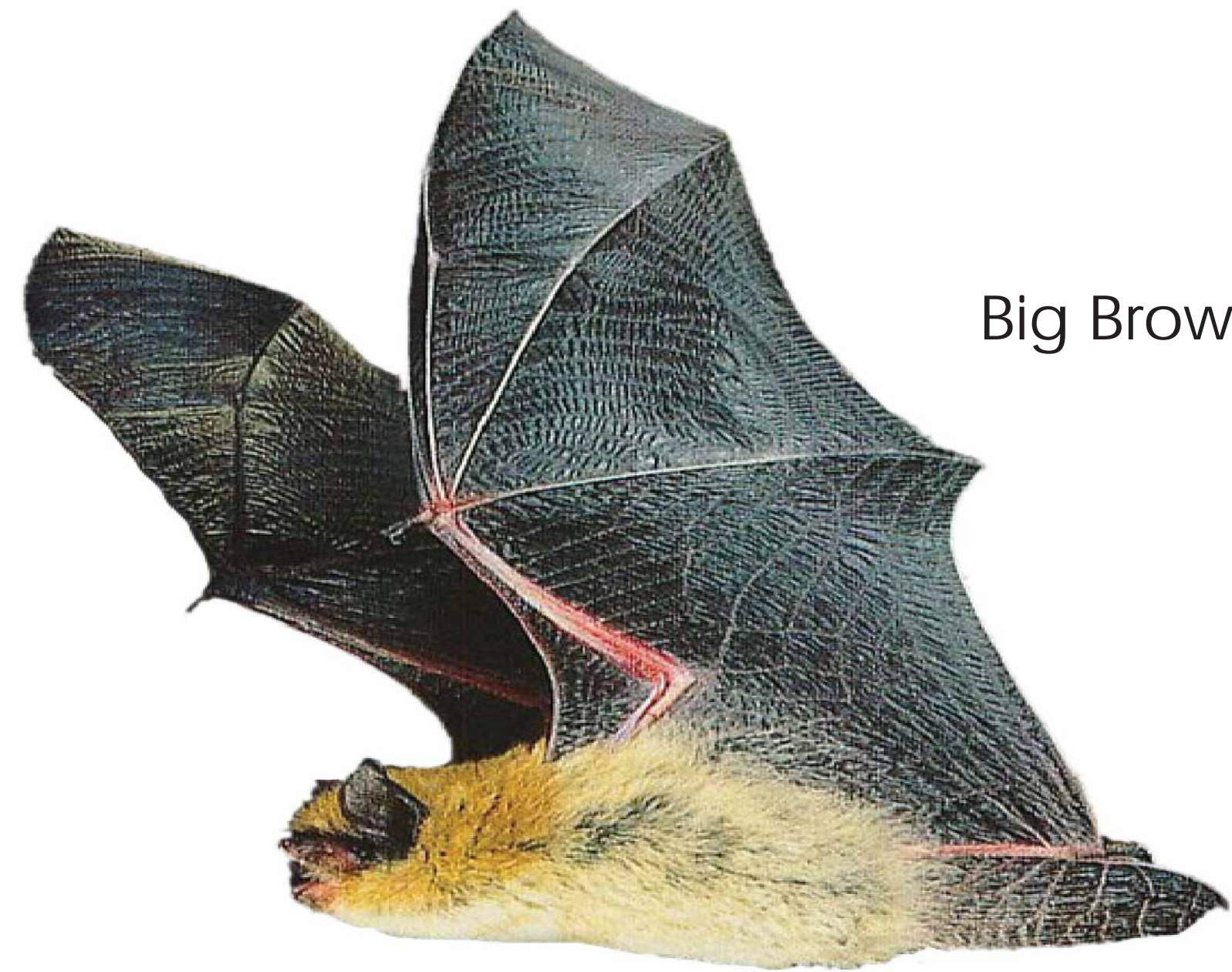
Bat field surveys took place during the late swarming season and fall migration using ultrasonic bat detectors at stations distributed throughout the Project Study Area.

The bat detectors collected nightly bat echolocation information by measuring the number of bats that passed by each night. Detector locations were chosen by identifying optimum bat habitat within the Project Study Area.

A total of 4,989 bat passes were recorded over 117 nights. The most common species recorded was the big brown bat, and the site with the most passes was located adjacent to Adelaide Creek, avoided by including as a constraint in the Project design.

Construction and decommissioning activities are planned to occur during daylight hours, when bats are inactive, therefore limiting sensory disturbance. Land clearing will be minimal and large trees that may provide roosting habitat for bats will not be removed. Siting turbines 30 m from watercourses, where bat foraging activity is highest, will limit bat-turbine collisions.

Based on observations of current bat use in the Project Study Area and mortality data from other wind power projects, bat mortality is expected to be low. No residual effects to regional bat populations are anticipated.



Big Brown Bat



Ultrasonic bat detectors were distributed throughout the Project Study Area.

Adelaide Wind Farm noise assessment

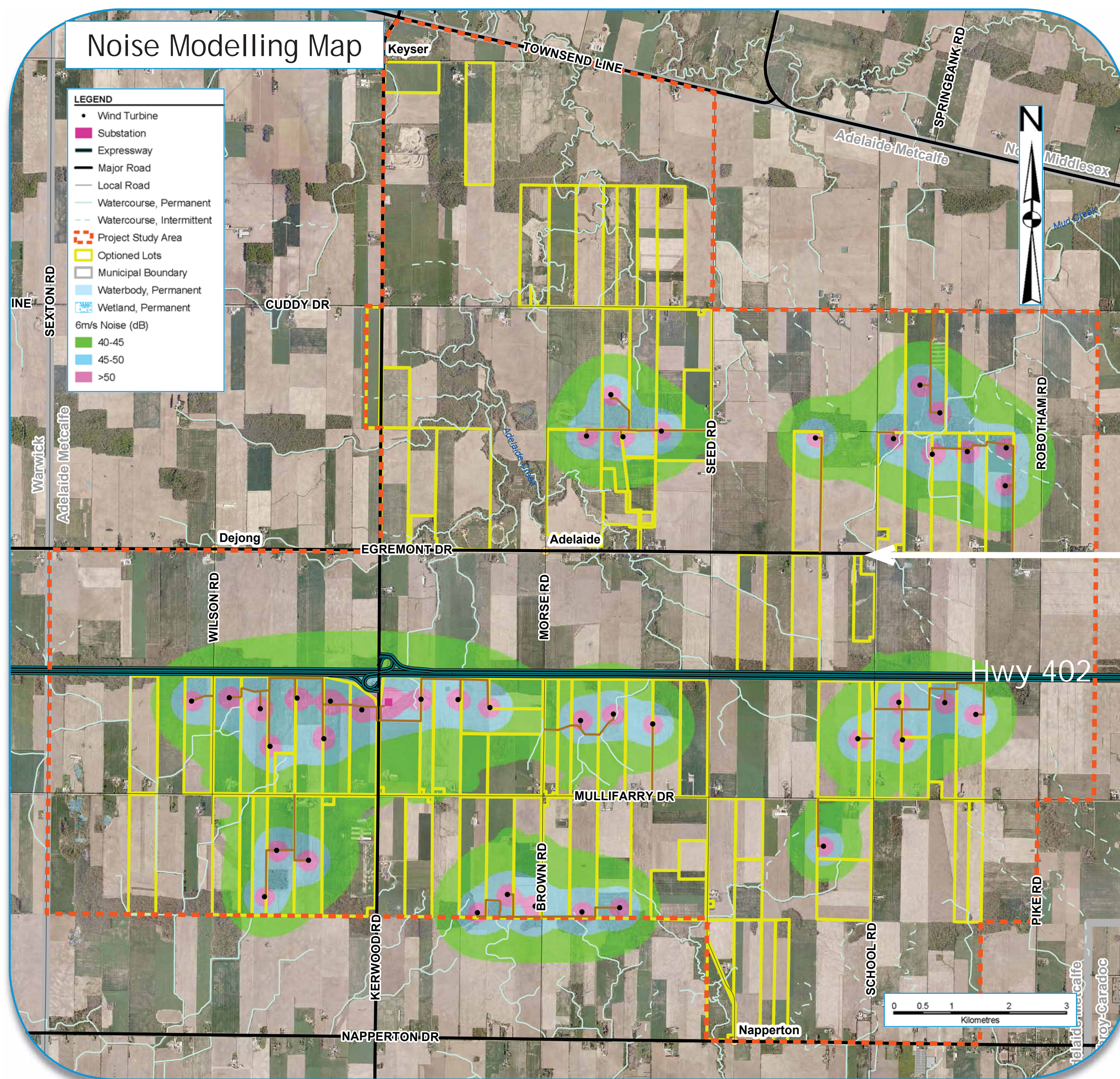
As per Renewable Energy Approval (REA) requirements, all wind turbines have been located a minimum of 550 m from any Point of Reception (POR).

688 receptors, including all local, non-participating residents, schools and churches, were identified as PORs and included in a predictive noise model. The noise model was used to ensure that noise levels are lower than the maximum sound pressure level of 40.0 dBA outlined in Ministry of the Environment (MOE) guidelines.

The noise modelling map below shows predicted sound pressure levels surrounding the turbines. 52 additional receptors were identified as being Participating Receptors

(PRs), meaning they are directly associated with the Project.

In order to assess potential cumulative effects associated with the Project, planned projects within a 10 km buffer around the Project Study Area were considered. One planned wind facility within a 10 km radius of the Adelaide Wind Facility was identified. The proposed Bornish wind facility consists of 50 GE 1.5 xle wind turbines for a nameplate capacity of 75 MW. The highest predicted noise level at a POR, due to the combined effect of both wind facilities is less than 40.0 dBA, which is in compliance with MOE guidelines.



Note: Predicted noise levels based on MOE Noise Guidelines for Wind Farms, October 2008