



BowArk Energy Ltd.
Suite 3405 Devon Tower
400 – 3 Ave SW
Calgary, Alberta T2P 4H2
www.bowark.com

November 3, 2017

RE: Lanfine North Wind Power Project and Lanfine South Wind Power Project

Dear neighbour:

Thank you for your ongoing interest in the Lanfine North Wind Power Project and in the Lanfine South Wind Power Project. This past September, we hosted our second community open house (Open House #2) to provide new information on the projects, including information for turbine Option A and Option B. We are continuing to move forward with our Phase 2 AUC Application. We've also refined our turbine selection and wind farm layouts. We will continue to engage with the community, landowners, and local government, and I look forward to continuing the dialogue during the projects' development phases.

Based on your feedback, we have

- removed two turbines, turbine 7 and turbine 18, in the Lanfine North Wind Power project;
- moved four turbines, 19, 20 and 39, in the Lanfine North Wind Power project, and turbine 53 in the Lanfine South Wind Power project ;
- adjusted the collector system and access road placement for both projects; and
- revised the projects' boundaries so that the Project has a smaller geographic area.

Accompanying this letter are three documents with further information about the projects and BowArk's public involvement:

- Project Maps showing the reduced project boundaries for Lanfine North and Lanfine South, updated turbine locations and infrastructure, and updated shadow flicker and noise impacts for Turbine Option A and Turbine Option B;
- Visual simulations of the project layouts with 81 turbines reflecting the updated turbine locations for Turbine Option A and Turbine Option B; and
- the Alberta Utilities Commission Brochure — *Public involvement in a proposed utility development*.

As presented in September, we are considering two turbine models:

Option A — Gamesa 3.465 MW which has a hub height of 114 metres and a rotor diameter of 132 metres. This Option will use 42 turbines for Lanfine North Wind Power Project with a total project size of 145.53 MW. Under this Option, there will be 39 turbines for Lanfine South Wind Power Project for a total project size of 135.14 MW. This turbine is slightly taller than those described in Open House #2 (previously hub height of 97 metres).

Option B — Vestas 3.6 MW which has a hub height of 105 metres and a rotor diameter of 136 metres. This Option will also use 42 turbines for Lanfine North Wind Power Project with a total project size of 151.2 MW. Under this Option, there will be 39 turbines for Lanfine South Wind Power Project for a total project size of 140.4 MW. This turbine is the same height as those described in Open House #2.

We will file both turbine options Option A and Option B in the AUC power plant applications. Both projects under either Option A or Option B comply with the AUC Rule 007 requirements for noise.

More details on the updated turbine layouts are available on the attached maps.

We have also updated the following impact assessments in this package:

- noise impact contours, available on the project maps;
- visual simulations; and
- shadow flicker results, available on the project maps.

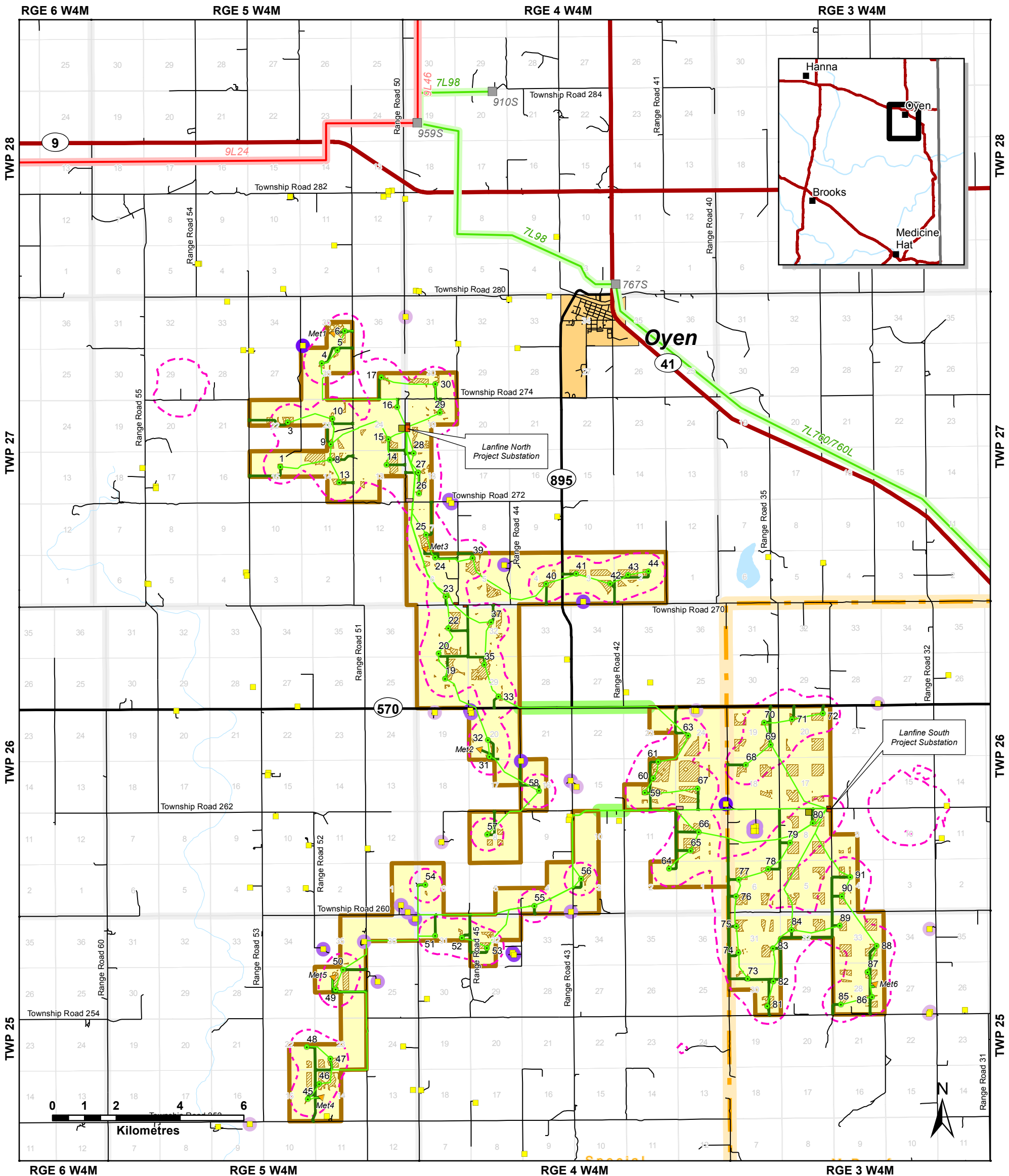
Open House #2 provided shadow flicker results based on never having a partially cloudy day and assuming the turbines are always turning so that they create shadow flicker. We considered this the theoretical maximum for what could happen from a shadow flicker basis. Our stakeholders indicated that they wanted a more realistic approach. We've listened to you and have updated our shadow flicker analysis to include wind speed and wind orientation, ground elevation, as well as partially cloudy days. This provides you with a more probable approach to shadow flicker, compared to the theoretical maximum. We have not taken the following into consideration in this analysis: orientation and location of windows, trees and structures near your residence. We've also identified houses that are expected to have zero shadow flicker from the project.

If you have any questions about the information presented or are looking for more information, please contact us toll-free at 1-844-421-2028 and at lanfinewind@bowark.com. Or please visit our website at www.bowark.com.

Kind regards,

A handwritten signature in blue ink, appearing to read "Keith Knudsen".

Keith Knudsen
Project Manager
BowArk Energy Ltd.
403-585-6761
kknudsen@bowark.com



Lanfine North and Lanfine South Wind Power Projects

Proposed Project Map Option A: Gamesa

Date: 31 Oct 2017
Version: 3

Prepared By: WSP Canada Inc.
Author: S. Schnick
Reviewed: A. Louro
Approved: R. Istchenko

Notes and Data Sources:
Project Land provided by BowArk (updated 28 Oct 2017). Buildable Area derived by WSP (updated 15 May 2017). Turbine layout and proposed infrastructure provided by BowArk (updated 28 Oct 2017). Populated places, roads, Alberta Township System, and municipal boundaries from AltaLIS, licensed under the Open Government Licence – Alberta. Existing transmission lines and substations derived by WSP based on AESO AIES map provided by BowArk. Shadow flicker estimates and sound level contours based on Gamesa 3.465 MW turbine with rotor diameter of 132 m and hub height of 97 m using 81 turbine locations. Sound level contours provided by RWDI (third-party sound sources not shown).

Coordinate System: NAD 1983 UTM Zone 12N
Scale: 1:120,000 when printed at 11" x 17"



Buildable Area

Proposed Turbine Location

Proposed Underground Collector

Proposed Collector Right-of-Way
(Underground or Above ground)

Proposed Road

Proposed Substation

Proposed O&M Area

Proposed Laydown Area

Proposed Batch Plant

Proposed Permanent
Meteorological Tower

Residence

Existing ATCO Substation

Existing Transmission Line (240 kV)

Existing Transmission Line (138 kV)

Major Highway

Minor Highway

Road

City, Town or Village

Municipal District and
County Boundary

Waterbody

Township Line

Section Line

Shadow Flicker (Corrected Case) Hours Per Year

Between 0 and 4 hours

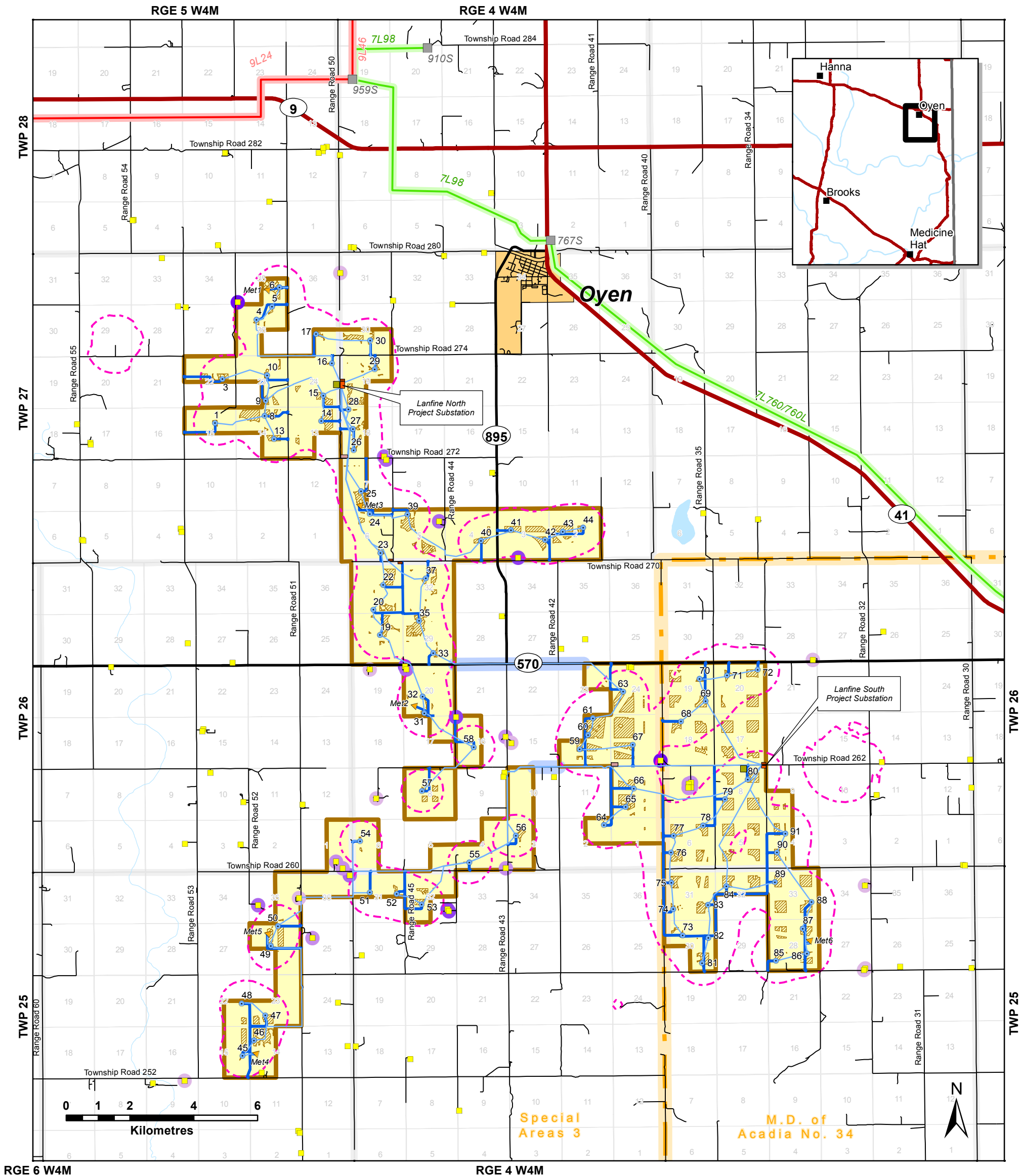
Between 4 and 8 hours

Between 8 and 12 hours

Between 12 and 16 hours

Between 16 and 20 hrs

Sound Level (38.3 dBA)



Lanfine North and Lanfine South Wind Power Projects

Proposed Project Map

Option B: Vestas

Date: 31 Oct 2017
Version: 3
Prepared By: WSP Canada Inc.
Author: S. Schnick
Reviewed: A. Louro
Approved: R. Istchenko

Notes and Data Sources:
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Scale: 1:120,000 when printed at 11" x 17"

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- Project Land
- Buildable Area
- Proposed Turbine Location
- Proposed Underground Collector
- Proposed Collector Right-of-Way (Underground or Above ground)
- Proposed Road
- Proposed Substation
- Proposed O&M Area
- Proposed Laydown Area
- Proposed Batch Plant
- Proposed Permanent Meteorological Tower
- Residence
- Existing ATCO Substation
- Existing Transmission Line (240 kV)
- Existing Transmission Line (138 kV)
- Major Highway
- Minor Highway
- Road
- City, Town or Village
- Municipal District and County Boundary
- Waterbody
- Township Line
- Section Line
- Shadow Flicker (Corrected Case) Hours per Year**
 - Between 0 and 4 hours
 - Between 4 and 8 hours
 - Between 8 and 12 hours
 - Between 12 and 16 hours
 - Between 16 and 20 hours
 - Sound Level (38.3 dBA)





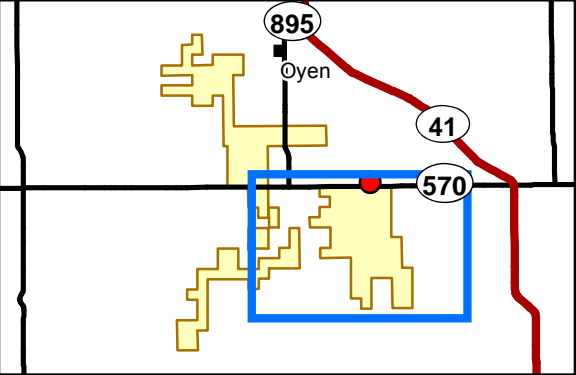
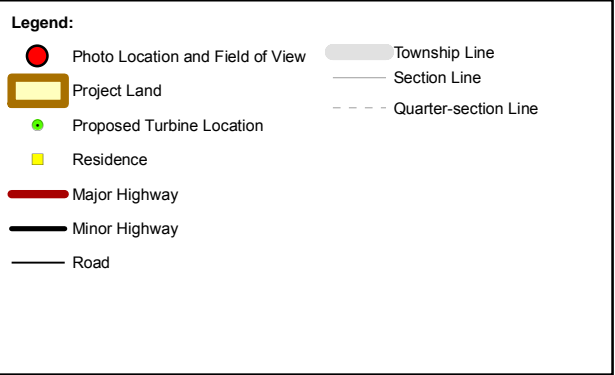
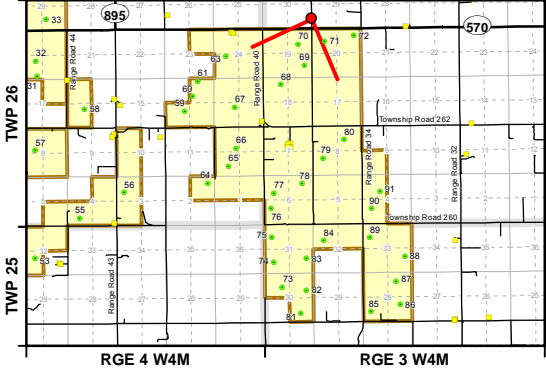
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Project: Lanfine North and Lanfine South Wind Power Projects	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
	Date: 2017-11-02
	Version: 2

Notes:
Photographs taken with Nikon D60 DSLR camera and 35 mm lens. Panoramic view compiled from five individual photographs. Photomontage simulated using Gamesa 3.465 MW turbine with rotor diameter of 132 m and hub height of 114 m using 81 turbine locations (Layout L06 provided by BowArk 23 Oct 2017).

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Before



After

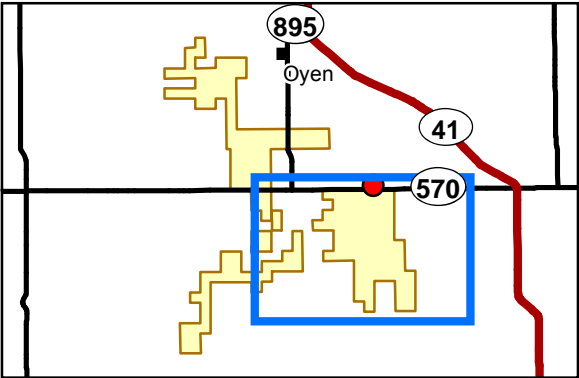
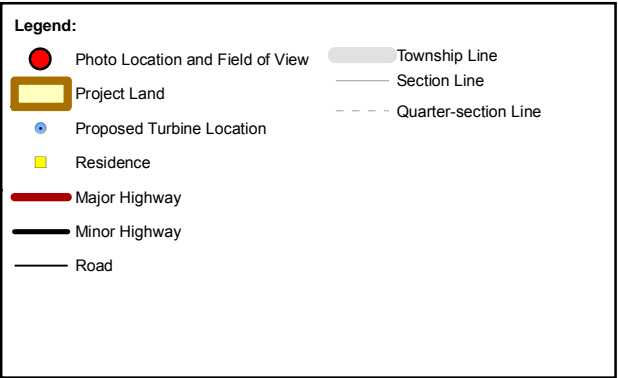
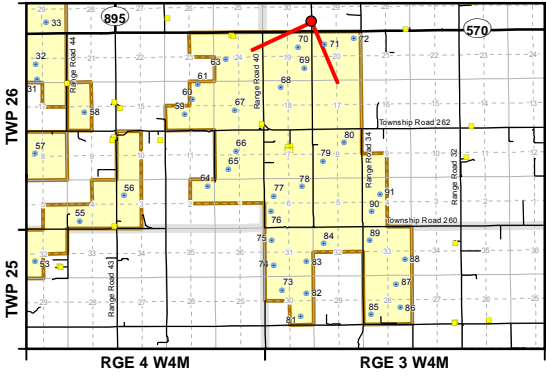
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Project: Lanfine North and Lanfine South Wind Power Projects	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
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Before



After

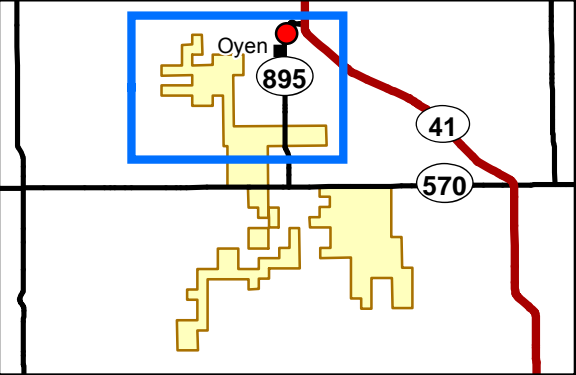
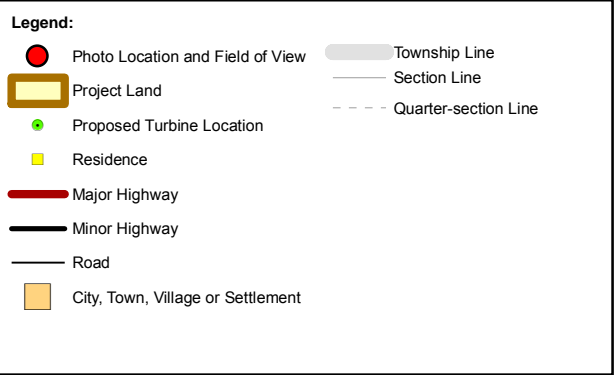
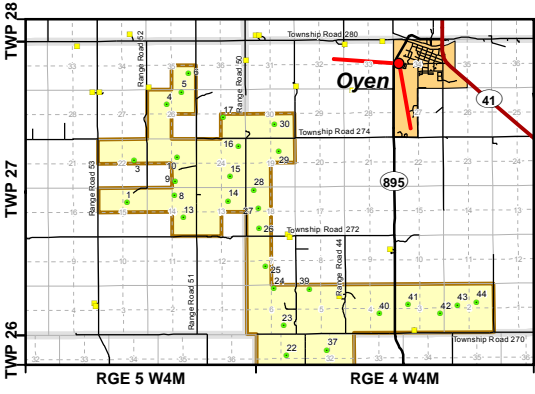
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Project: Lanfine North and Lanfine South Wind Power Projects	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
	Date: 2017-11-02
	Version: 2

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Before



After

Title: Photomontage: Oyen (Vestas)	
Project: Lanfine North and Lanfine South Wind Power Projects	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
	Date: 2017-11-02
	Version: 1

Notes:
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