



July 22, 2021

EDP Renewables SH Project GP Ltd.

219 Dufferin St. Unit 217C
Toronto, Ontario, M6K 3J1

RE: Sharp Hills Wind Farm Updates

Dear Stakeholder,

Thank you for your ongoing interest in the Sharp Hills Wind Farm (the “Project”). In January 2019 EDP Renewables SH Project GP Ltd. (“EDP”) provided Project updates, including further information on the wind farm layout and number of turbines. The Project received an Alberta Utilities Commission (“AUC”) Approval to construct and operate the Project (Approval 24401-D02-2019) on December 20, 2019. The Project was approved using 71 Enercon E-138 EP3 E2 turbines each rated at 4.2 megawatts (MW) and a total generating capacity of 298.2 MW. The AUC approved the Project being built in two phases: Sharp Hills I (59 turbines) and Sharp Hills II (12 turbines).

Project Update

EDP is reducing the number of turbines from 71 to 67 for the Project. The four removed turbines are T4, T9, T50 and T61. The locations of the remaining turbines, meteorological towers, access roads, O&M building, substation, and laydown yard have not changed from the previously AUC-approved infrastructure layout. The total Project size is reduced to 297.1 MW. The Project will no longer have two phases and will now be built in one phase.

In addition to a reduction in turbine locations, EDP is changing the turbine model for the Project. The Project will now consist of Vestas V150 turbines with 22 locations rated at 4.3 MW and 45 locations rated at 4.5 MW. All turbines will have a hub height of 105 metres and be installed with serrated trailing edges on each of the blades. The Vestas V150 turbines selected for the Project utilize internal transformers. EDP has completed an updated noise impact assessment for the proposed turbine layout changes. The updated assessment includes sound emissions from nearby energy facilities. The noise results are demonstrated by noise contours in the Project map. The Project will remain compliant with AUC Rule 012: *Noise Control*.

The following table provides a comparison of the permitted Project with the proposed Project changes.

Table 1: Comparison of the permitted Project and the proposed changes.

	November 2018 Layout (Permitted)	Proposed 2021 Layout (Proposed)	Changes
Project Generating Capacity	298.2 MW	297.1 MW	Small decrease in capacity
Phases	Two phases for the 71 turbines Phase 1: 59 turbines Phase 2: 12 turbines	One phase for all 67 turbines	Single phase
Number of Turbines	71	67 total 22 @ 4.3 MW 45 @ 4.5 MW	Decrease by 4 turbines
Model	Enercon E-138 4.2 MW	Vestas V150-4.3 MW & V150-4.5 MW	Different turbine technology
Generating Capacity (MW)	4.2 MW	4.3 & 4.5 MW	Increase in turbine capacity
Hub Height	128 m	105 m	Decrease in tower height by 23 m
Rotor Diameter	138.6 m	150 m	Increase in rotor diameter by 11.4 m
Maximum Turbine Sound Output (at wind speeds of 12 m/s)	106 dBA Serrated trailing edge on all blades	4.3 MW – 104.9 dBA 4.5 MW – 105 dBA Serrated trailing edge on all blades	Continued compliance with AUC Rule 012: <i>Noise Control</i>
Transformer Location	Up-tower transformer	Up-tower transformer	No change



Environmental refresh studies have been conducted in Fall 2020 and Spring 2021 and EDP has had correspondence with Alberta Environment and Parks ("AEP") regarding the results.

Anticipated Schedule

Please see the updated Project schedule below. EDP will be completing a submission to the AUC regarding the Project modifications in September 2021.

- July 2021 – Project specific information package mailout and consultation period
- September 2021 – Application to the AUC for Project modifications
- September 2021 – Construction start on approved Project infrastructure
- Q4, 2023 – Commercial operations

Accompanying this letter are four documents that provide more detailed information about the proposed Project modifications and EDP's participant involvement program:

- Updated Project infrastructure and noise map showing the turbine locations, associated Project infrastructure, as well as the dropped turbine locations. The noise impact assessment results are shown on the same map.
- Updated shadow flicker map.
- Updated visual simulations from four (4) locations near the Project.
- Alberta Utilities Commission Brochure, *Public involvement in a proposed utility development*.

We have included four simulations as part of this information package. All updated visual simulations are available on EDP's website at www.edpr.com/north-america/sharp-hills-wind-farm.

EDP will continue to engage with the community, landowners, local government, and stakeholders over the coming weeks, and we look forward to receiving your feedback about the Project and these proposed changes.

Contact Us

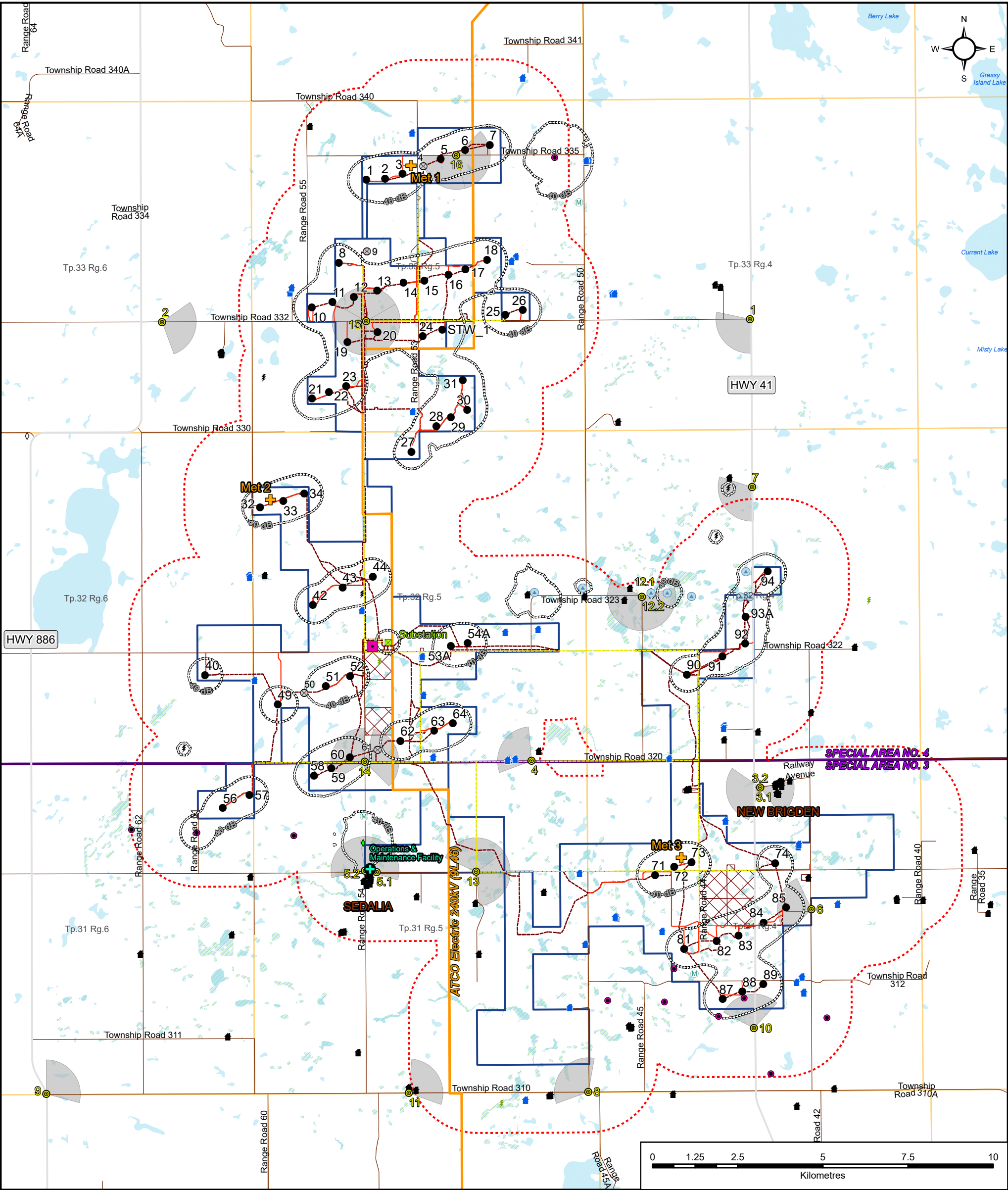
For additional information on the Project, please visit our website at www.edpr.com/north-america/sharp-hills-wind-farm. If you have questions or comments, please contact us directly at **1-416-479-9736** or canada.ab@edpr.com.

Kind regards,

Darren Carl
Development Project Manager, EDP Renewables Canada Ltd.
Email: canada.ab@edpr.com

SHARP HILLS WIND FARM

Project Infrastructure and Noise Map for 297.1 MW Wind Farm



Legend

- Approved Turbine Locations (67)
- ⊗ Removed Turbine
- ▭ Current Project Boundary
- ▭ Non-Project Land
- ⊙ Visual Representation Points
- ⊕ Operations & Maintenance Facility
- ⊕ Approved Laydown Yard Location
- ⊕ Approved Substation Location
- ⊕ Approved Meteorological Towers
- ▭ 40 dBA Noise Contours
- ▭ Approved Overhead Collector System
- ▭ Approved Turbine Access Roads
- ▭ Approved Underground Collector System
- ▭ Participating House
- ▭ Non-Participating House
- ▭ 2km Notification Zone
- ▭ Existing 240kV Transmission Line (Single Circuit)

Oil & Gas Facility Type

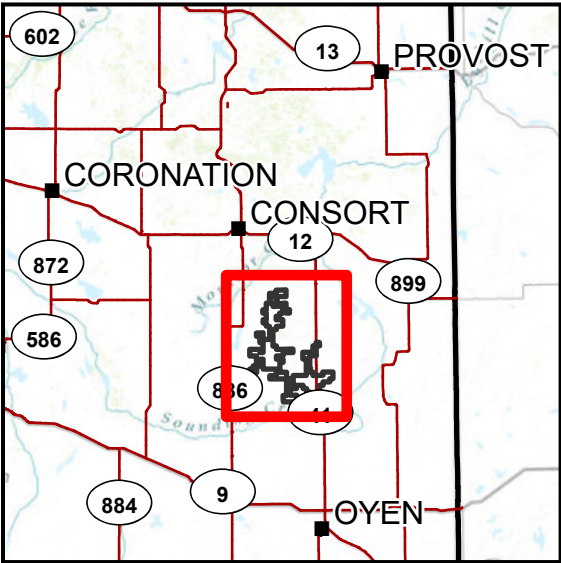
- Compressor Station
- ⚡ Crude Oil Multiwell Proration Battery
- ⚡ Crude Oil Single-Well Battery
- Ⓜ Field Meter Station
- ▭ Gas Gathering System
- ▭ Gas Plant Acid Gas Flaring
- ▭ Gas Plant Sweet
- ⚡ Gas Single-Well Battery
- Ⓜ Pumping Well
- ▭ Special Areas 3 & 4
- ▭ Visual Simulation Photo Orientation & Extent
- ▭ Numbered Highways
- ▭ Municipal Roads
- ▭ Hydrography
- ▭ Class 3 - 5 Waterbodies
- ▭ Township Boundary

Author: Solas Energy Consulting Inc.
Date: 20 July 2021
Datum: North American 1983
Projection: NAD 1983 UTM Zone 12N
Scale: 1:110,000
Sources: EDPR, ESRI, AER, Ventyx, AltaLIS, RWDI.

Notes

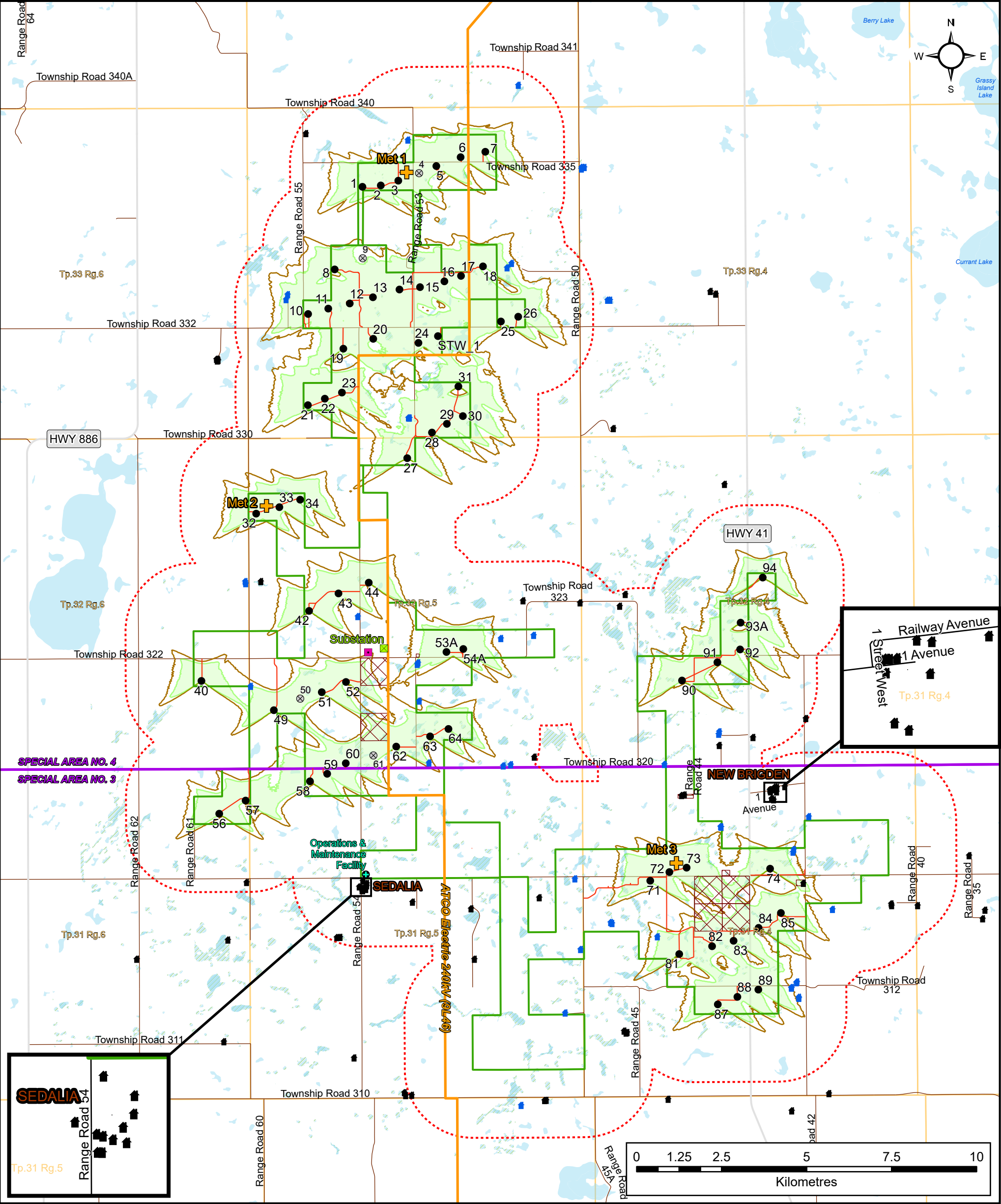
Turbine labels with "STW" refer to those turbines that were previously "Subject to Waiver" from adjoining non-project landowners. All STW turbines have received and executed these waivers.

The Project boundary is not representative of the entire leased land base.



SHARP HILLS WIND FARM

Shadow Flicker Map for 297.1 MW Wind Farm



- Legend**
- Approved Turbine Locations (67)
 - ⊗ Removed Turbine
 - ▭ Current Project Boundary
 - ▭ Non-Project Land
 - ⊕ Operations & Maintenance Facility
 - ▭ Approved Laydown Yard Location
 - ▭ Approved Substation Location
 - ⊕ Approved Meteorological Towers
 - 🏠 Participating House
 - 🏠 Non-Participating House

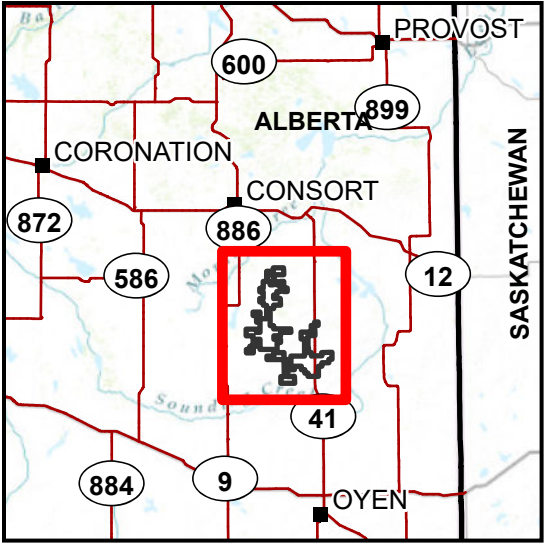
- Shadow Flicker - Adjusted Case**
- ▭ Shadow Flicker (15 hours per year)
 - ▭ Shadow Flicker (8 hours per year)
 - Approved Turbine Access Roads
 - Existing 240kV Transmission Line (Single Circuit)
 - ▭ 2km Notification Zone
 - ▭ Special Areas 3 & 4
 - Numbered Highways
 - Municipal Roads
 - Hydrography
 - ▭ Class 3 - 5 Waterbodies
 - ▭ Township

Author: Solas Energy Consulting Inc.
Date / Time: 15 July 2021
Datum: North American 1983
Projection: NAD 1983 UTM Zone 12N
Scale: 1:110,000
Sources: EDPR, ESRI, AER, Ventyx, AltaLIS, RWDI.



Notes

Turbine labels with "STW" refer to those turbines that were previously "Subject to Waiver" from adjoining non-project landowners. All STW turbines have received and executed these waivers.

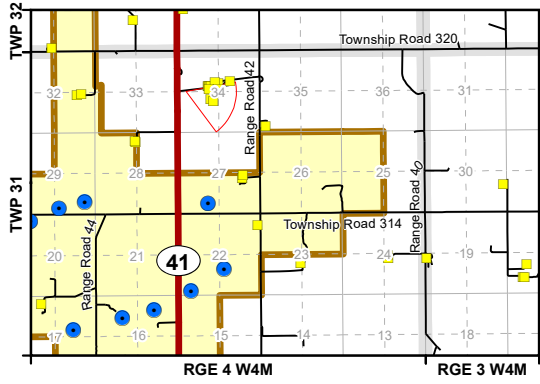
The Project boundary is not representative of the entire leased land base.














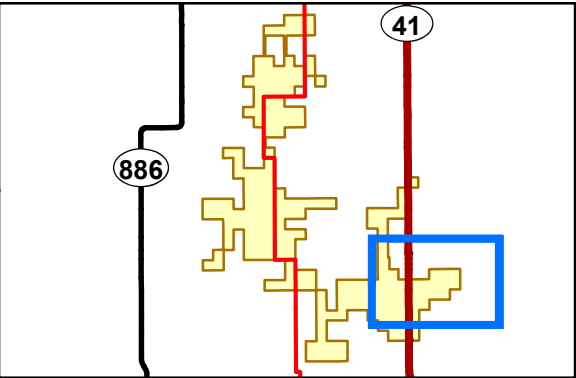


Title: Photomontage: 67 x V150 at 105 m hub height Location 3 New Brigden Looking South East	
Project: Sharp Hills Wind Power Project	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
	Date: 2021-06-29
	Version: 5



Notes: Photographs taken July 25, 2017 with Canon 5D DSLR camera and 50 mm lens. Photomontage simulated using Vestas V150 and with a hub height of 105 m using 67 turbine locations (Layout provided by EDPR on June 21, 2021).
Data Sources: Project lands provided by EDPR Nov 6, 2018. Populated places, roads, Alberta Township System, and municipal boundaries from AltaLIS, licensed under the Open Government Licence – Alberta.
Prepared By: WSP Canada Inc. Author: A. Medd Reviewed: S. Schnick Approved: R. Istchenko
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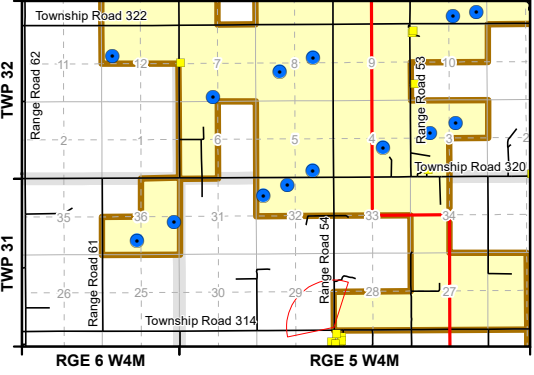
Legend:	
 Residence	 Quarter-section Line
 Wind Turbine	 Project Land
 Photo Location and Field of View	
 Transmission Line	
 Major Highway	
 Minor Highway	
 Road	
 Township Line	
 Section Line	


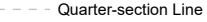

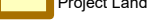

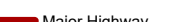
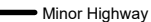
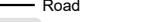





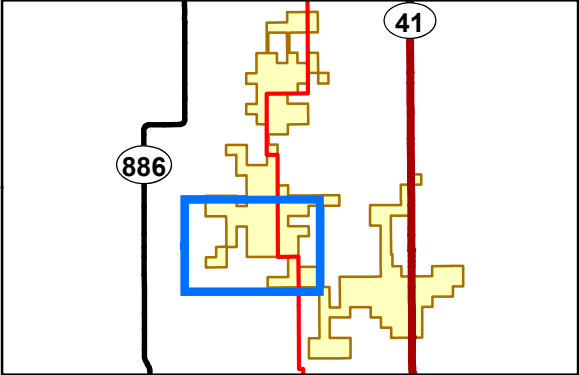


Title: Photomontage: 67 x V150 at 105 m hub height Location 5 Sedalia Looking North West	
Project: Sharp Hills Wind Power Project	
 	Datum: NAD 83 Projection: UTM Zone 12N
	Scale: N.T.S.
	Date: 2021-07-06
	Version: 5

Notes: Photographs taken July 28, 2017 with Cannon EOS 5D DSLR camera and 50 mm lens. Photomontage simulated using Vestas V150 and with a hub height of 105 m using 67 turbine locations (Layout provided by EDPR on June 21, 2021).
Data Sources: Project lands provided by EDPR Nov 6, 2018. Populated places, roads, Alberta Township System, and municipal boundaries from AltaLIS, licensed under the Open Government Licence – Alberta.
Prepared By: WSP Canada Inc. Author: A. Medd Reviewed: M. Breakey Approved: R. Istchenko
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Legend:	
 Residence	 Quarter-section Line
 Wind Turbine	 Project Land
 Photo Location and Field of View	
 Transmission Line	
 Major Highway	
 Minor Highway	
 Road	
 Township Line	
 Section Line	







Before



After

Title:Photomontage: 67 x V150 at 105 m hub heightLocation 13Range Road 52 and TWP Road 314 Looking North

Project:Sharp Hills Wind Power Project



Datum: NAD 83
Projection: UTM Zone 12N

Scale: N.T.S.

Date: 2021-06-30

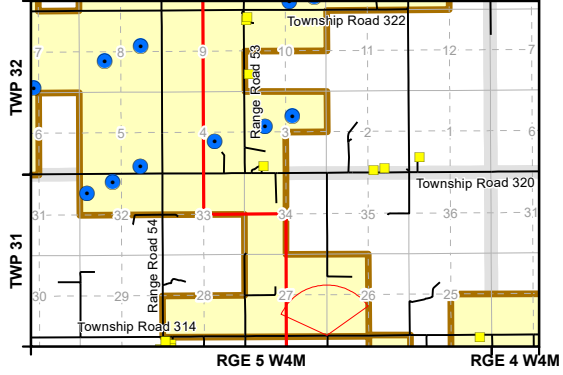
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Notes:
Photographs taken on Oct 26, 2018 with Canon EOS Rebel SL1 DSLR camera and 35 mm lens. Photomontage simulated using Vestas V150 and with a hub height of 105 m using 67 turbine locations (Layout provided by EDPR on June 21, 2021).

Data Sources:
Project lands provided by EDPR Nov 6, 2018.
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Legend:

Residence

Wind Turbine

Photo Location and Field of View

Transmission Line

Major Highway

Minor Highway

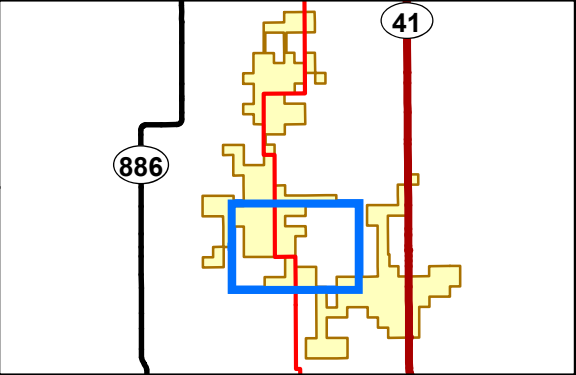
Road

Township Line

Section Line

Quarter-section Line


Project Land






Title:Photomontage: 67 x V150 at 105 m hub height
Location 15
Range Road 54 and TWP Road 332 Looking North

Project:Sharp Hills Wind Power Project





Datum: NAD 83
Projection: UTM Zone 12N

Scale: N.T.S.

Date: 2021-07-06

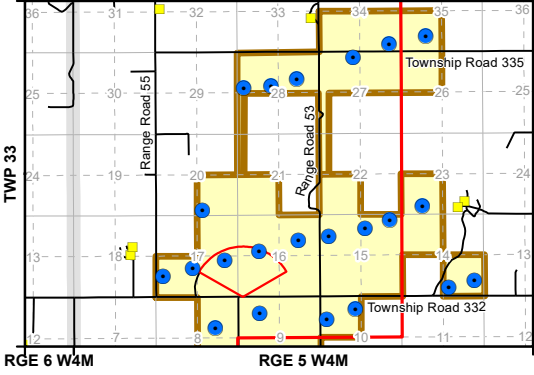
Version: 3

Notes:
Photographs taken on Oct 26, 2018 with Canon EOS Rebel SL1 DSLR camera and 35 mm lens. Photomontage simulated using Vestas V150 and with a hub height of 105 m using 67 turbine locations (Layout provided by EDPR on June 21, 2021).


Data Sources:
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Legend:


 Residence


 Wind Turbine


 Photo Location and Field of View


 Transmission Line


 Major Highway

 Minor Highway

 Township Line

 Section Line

 Quarter-section Line

 Project Land

