

**Legend**

- Project Area
- Study Area
- Non-Participating Landowner Property
- Participating Landowner Property
- State Road
- Railroad
- City/Village
- Township (PLSS)
- County

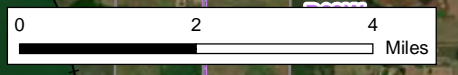


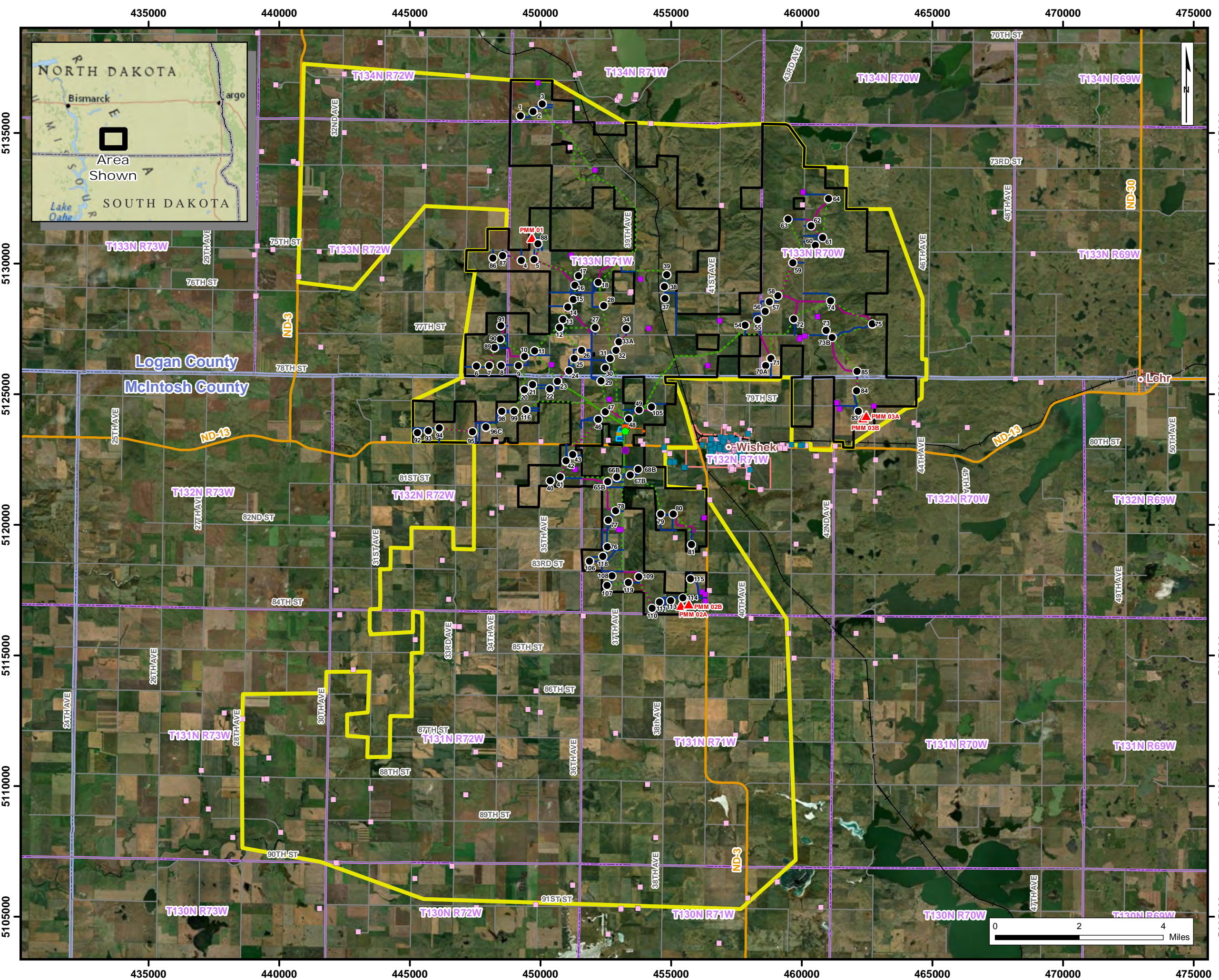
**Badger Wind, LLC**

Figure 1:  
PROJECT LOCATION  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDGF, NDTL, TIGER







- Legend**  
(symbols not to scale)
- Proposed Turbine
  - ▲ Proposed Permanent MET Tower
  - ◆ Proposed O&M Building
  - Proposed Batch Plant
  - Proposed Substation
  - Proposed Gen-Tie Line
  - ⋯ Proposed Underground Collection/Fiber Line
  - ~ Proposed Crane Path
  - ~ Proposed Access Road
  - Proposed Laydown Yard
  - Proposed Marshalling Yard
  - ▭ Project Area
  - ▭ Study Area
  - Participating Occupied Residence
  - Non-Participating Occupied Residence
  - Community Building
  - State Road
  - ~ County/Township Road
  - Railroad
  - ▭ City/Village
  - ▭ Township (PLSS)
  - ▭ County

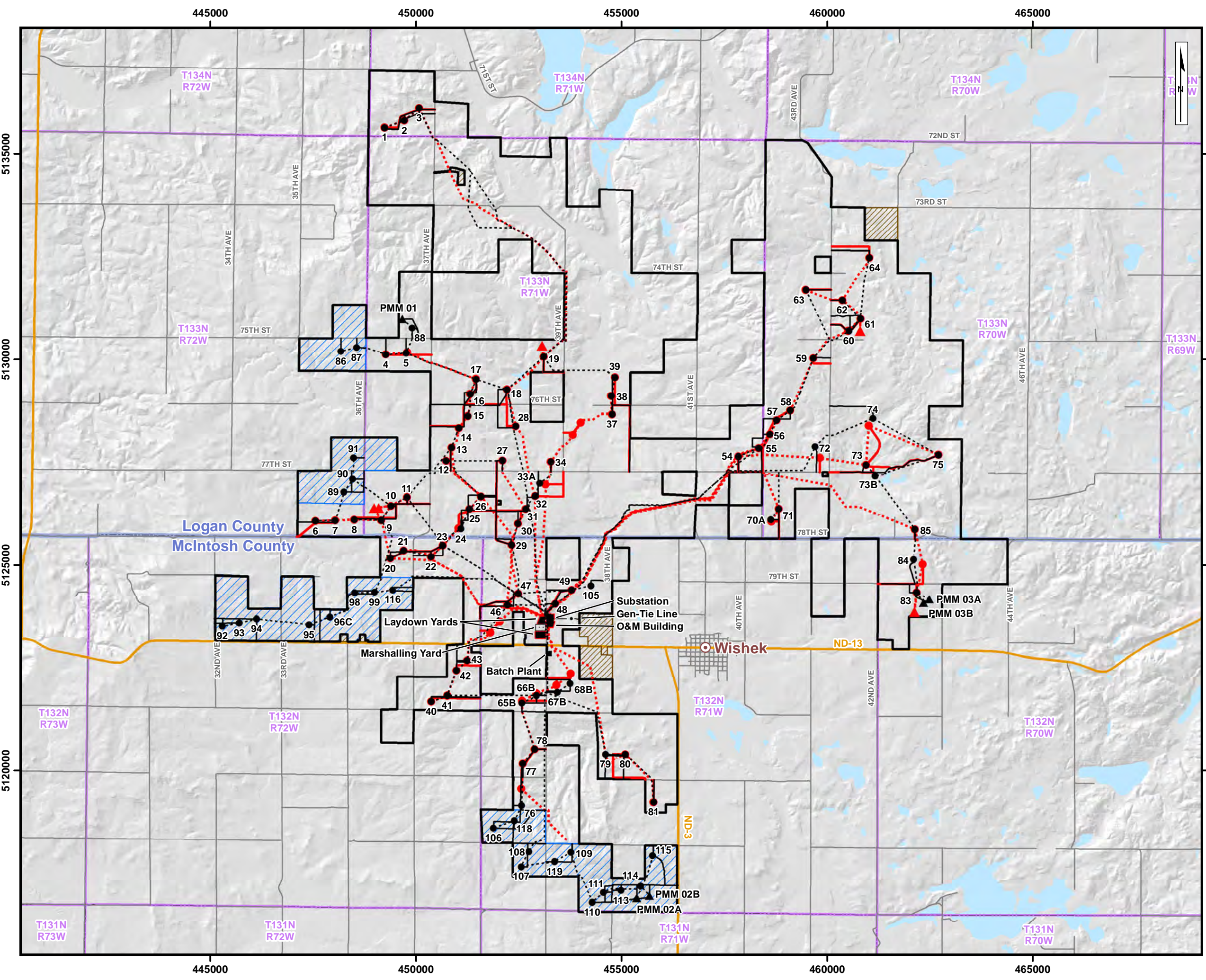
**Orsted**

Badger Wind, LLC

Figure 2:  
PROJECT FACILITIES  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

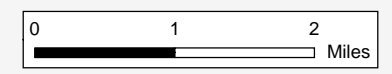
10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDGF, NDTL, TIGER

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### Legend

- Current Layout
- 2022 Layout
- Current Project Area
- Project Area (Added Since 2022 Approval)
- Project Area (Removed Since 2022 Approval)
- County
- Township (PLSS)
- State Road
- County/Township Road



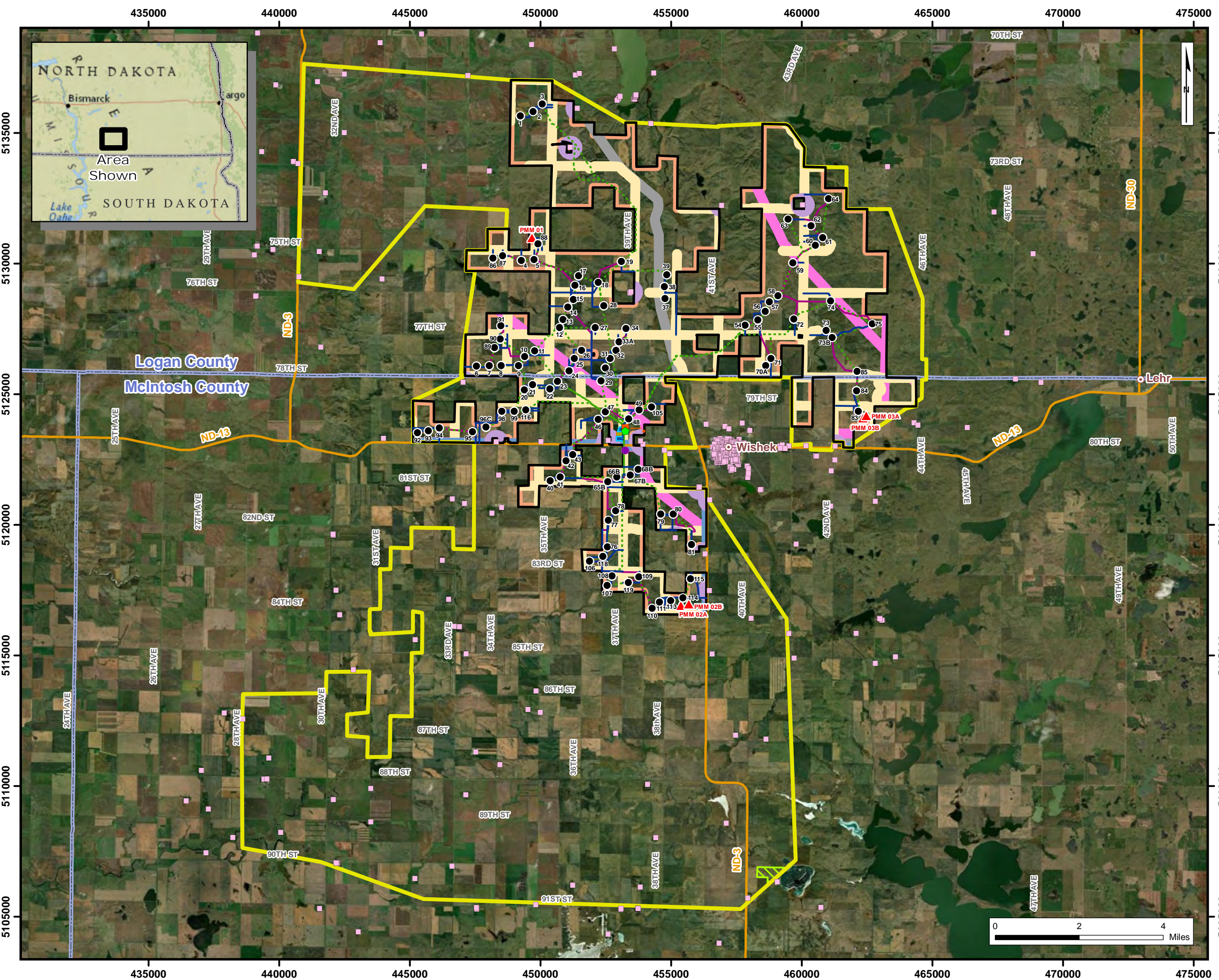


**Badger Wind, LLC**

Figure 3:  
COMPARISON FIGURE  
- Wind Energy Facility -  
Logan County, ND



10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, USGS



**Legend**  
(symbols not to scale)

- Proposed Turbine
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- Proposed Batch Plant
- Proposed Substation
- Proposed Gen-Tie Line
- - - Proposed Underground Collection/Fiber Line
- Proposed Crane Path
- Proposed Access Road
- ▭ Proposed Laydown Yard
- ▭ Proposed Marshalling Yard
- ▭ Project Area
- ▭ Study Area
- ▭ State Road
- ▭ County
- Non-Participating Occupied Residence

**Exclusion Area**

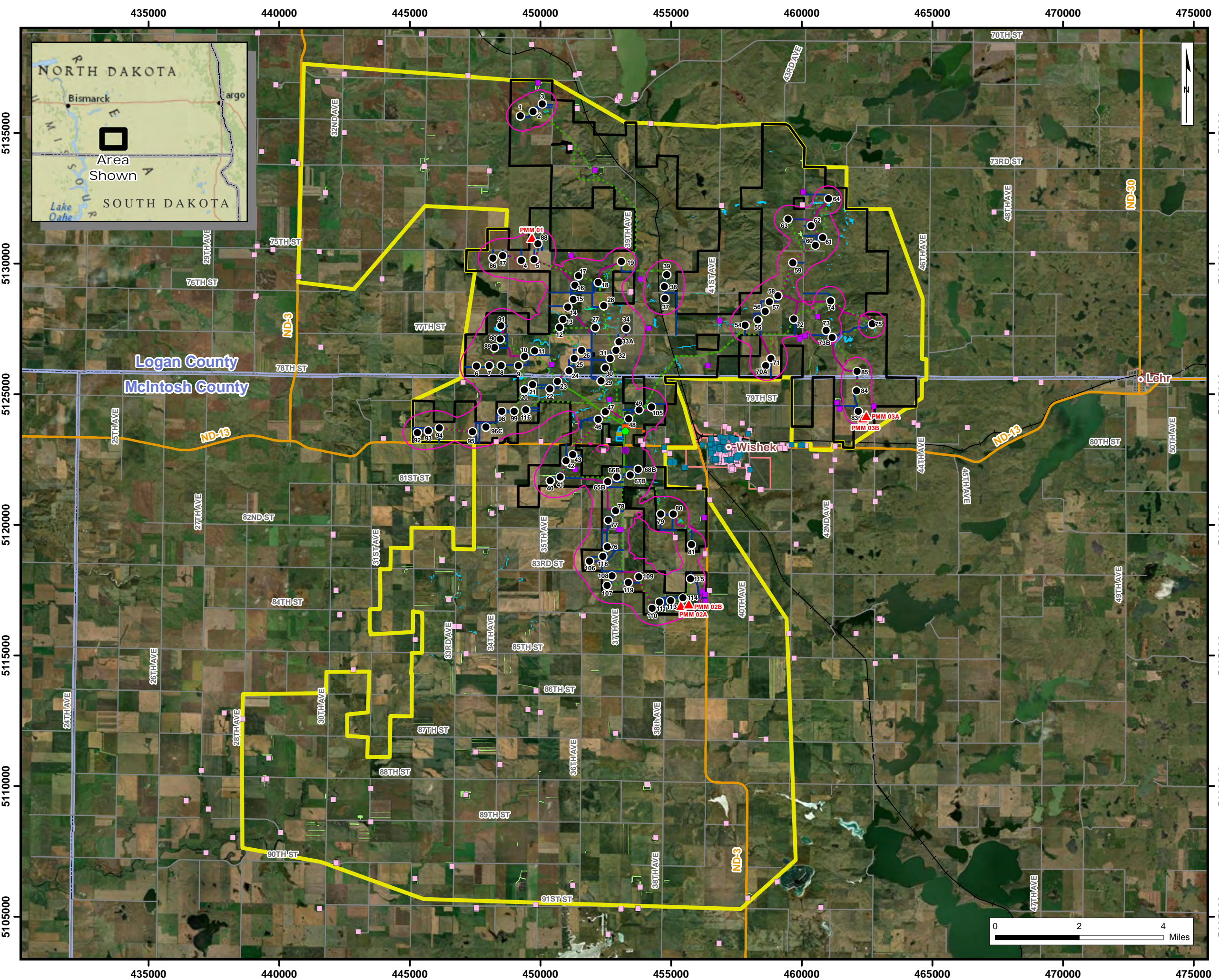
- ▭ Waterfowl Production Area
- ▭ Railroad
- ▭ State Road
- ▭ County and Maintained Township Road
- ▭ Existing Transmission Line
- Non-Participating Occupied Residence
- ▭ Non-Participating Property Line

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Badger Wind, LLC

Figure 4:  
EXCLUSION AREAS  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NLCD-USGS, TIGER

**DNV**



**Legend**  
(symbols not to scale)

- Proposed Turbine
- ▲ Proposed Permanent MET Tower
- Proposed O&M Building
- Proposed Batch Plant
- Proposed Substation
- Proposed Gen-Tie Line
- Proposed Underground Collection/Fiber Line
- ~ Proposed Crane Path
- ~ Proposed Access Road
- Proposed Laydown Yard
- Proposed Marshalling Yard
- ▭ Project Area
- ▭ Study Area
- ▭ State Road
- ▭ County

**Avoidance Areas**

- Participating Occupied Residence
- Non-Participating Occupied Residence
- Community Building
- 45 dBA Sound Level Isoline
- Field Mapped Wetland
- Delineated Wetland
- Woodlands (Desktop Delineation)
- ▭ City/Village

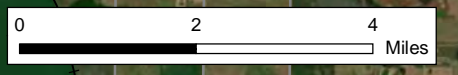
**Orsted**

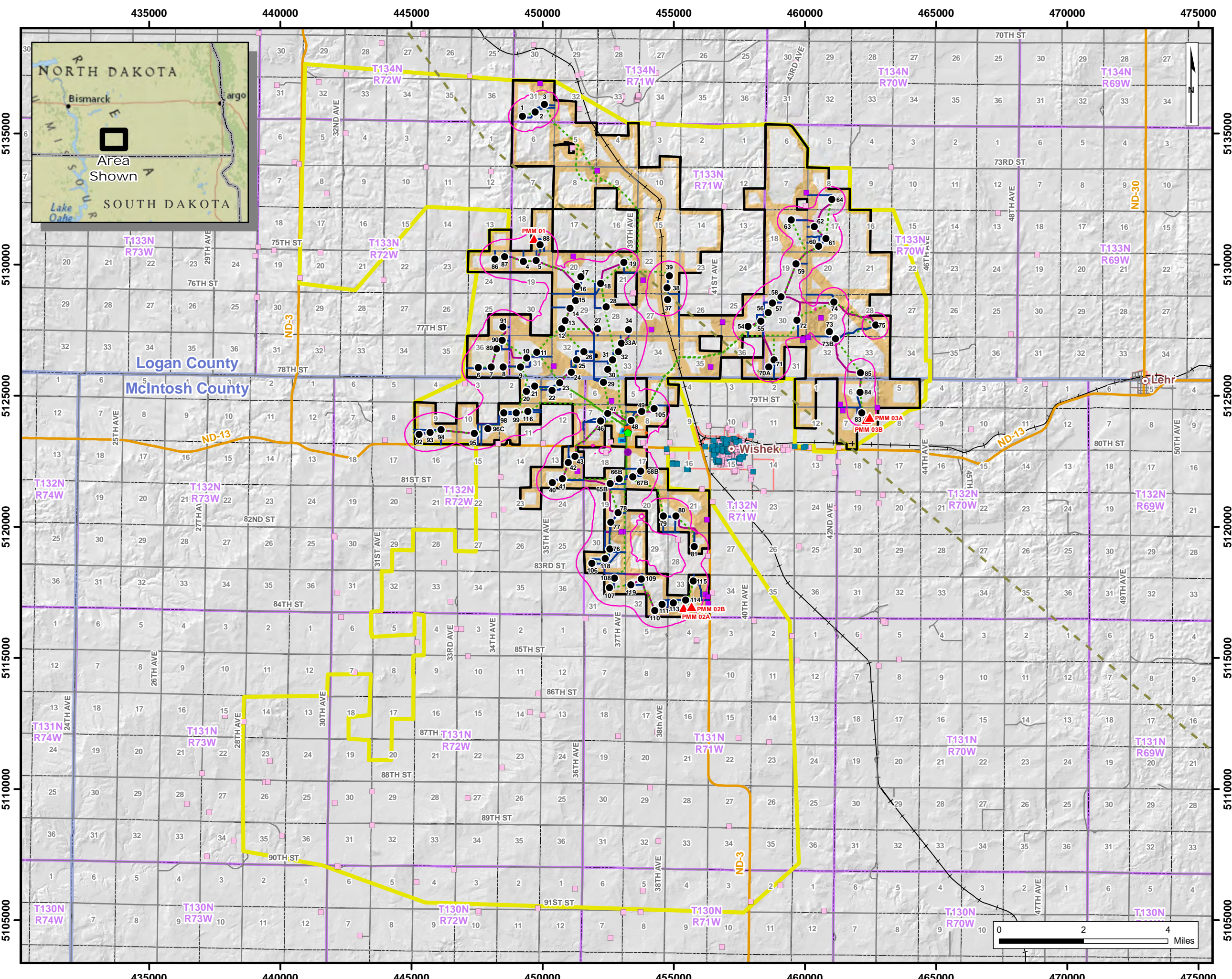
Badger Wind, LLC

Figure 5:  
AVOIDANCE AREAS  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDGF, NDTL, TIGER

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**Legend**  
(symbols not to scale)

- Proposed Turbine
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- Proposed Batch Plant
- Proposed Substation
- Proposed Gen-Tie Line
- ⋯ Proposed Underground Collection/Fiber Line
- ~ Proposed Crane Path
- ~ Proposed Access Road
- Proposed Laydown Yard
- Proposed Marshalling Yard
- Project Area
- Study Area
- State Road
- Township (PLSS)
- Section Boundary
- County
- Participating Occupied Residence
- Non-Participating Occupied Residence
- Community Building
- 45 dBA Sound Level Isoline
- Microwave Beam Path
- Setback

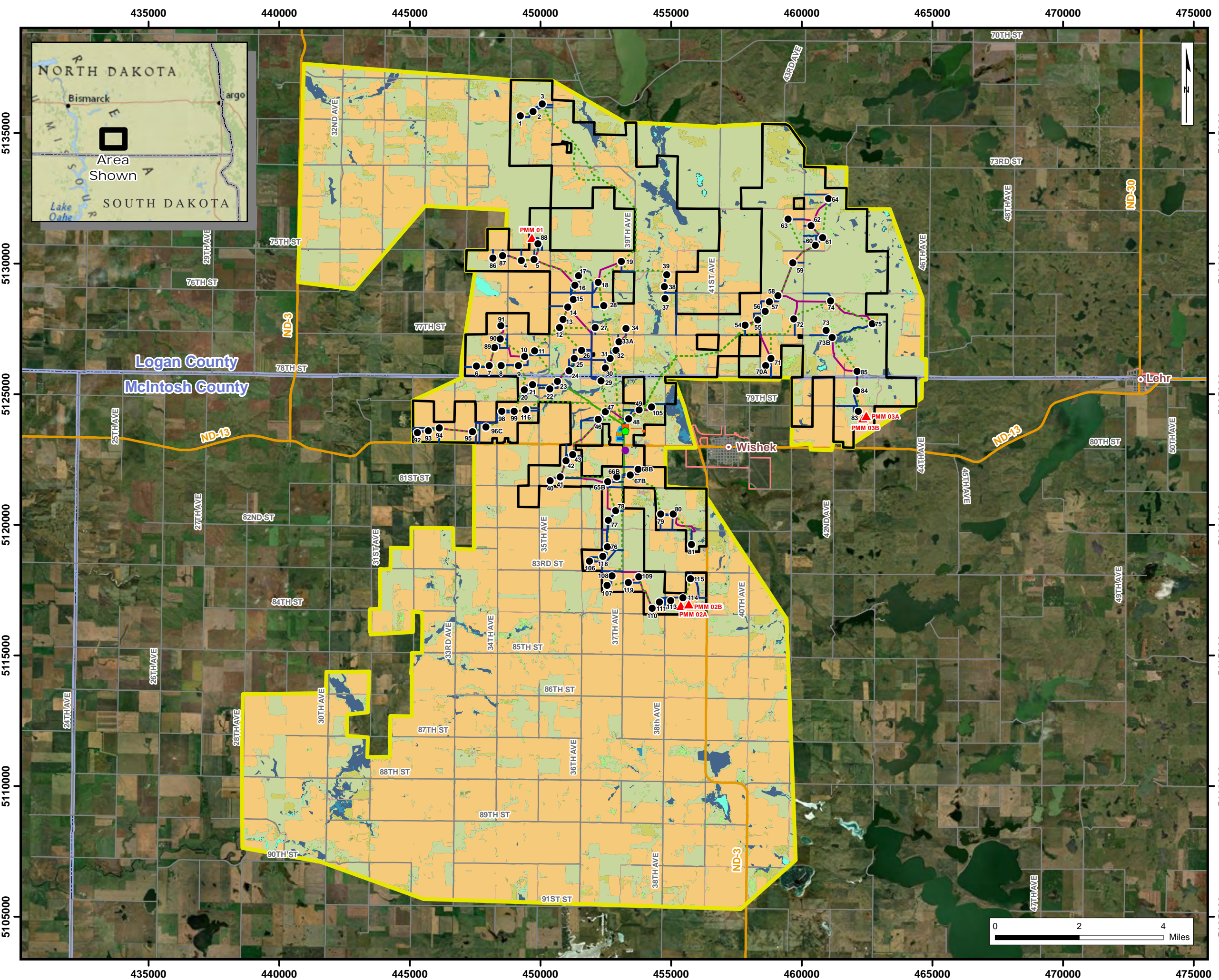
**Orsted**  
Badger Wind, LLC

Figure 6:  
PROJECT SETBACKS  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDGF, NDTL, TIGER

DNV

0 2 4 Miles



**Legend**  
(symbols not to scale)

- Proposed Turbine
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- ~ Proposed Access Road
- Proposed Laydown Yard
- Proposed Marshalling Yard
- Project Area
- ▭ Study Area
- ▬ State Road
- ⊕ City/Village
- ⊞ County

**Land Cover (NLCD-USGS, 2021)**

- Open Water
- Developed
- Barren Land (Rock/Sand/Clay)
- Deciduous Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture/Hay
- Cultivated Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands



Badger Wind, LLC

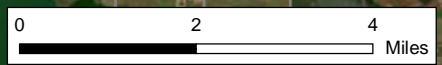
Figure 7:  
LAND COVER & USE  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

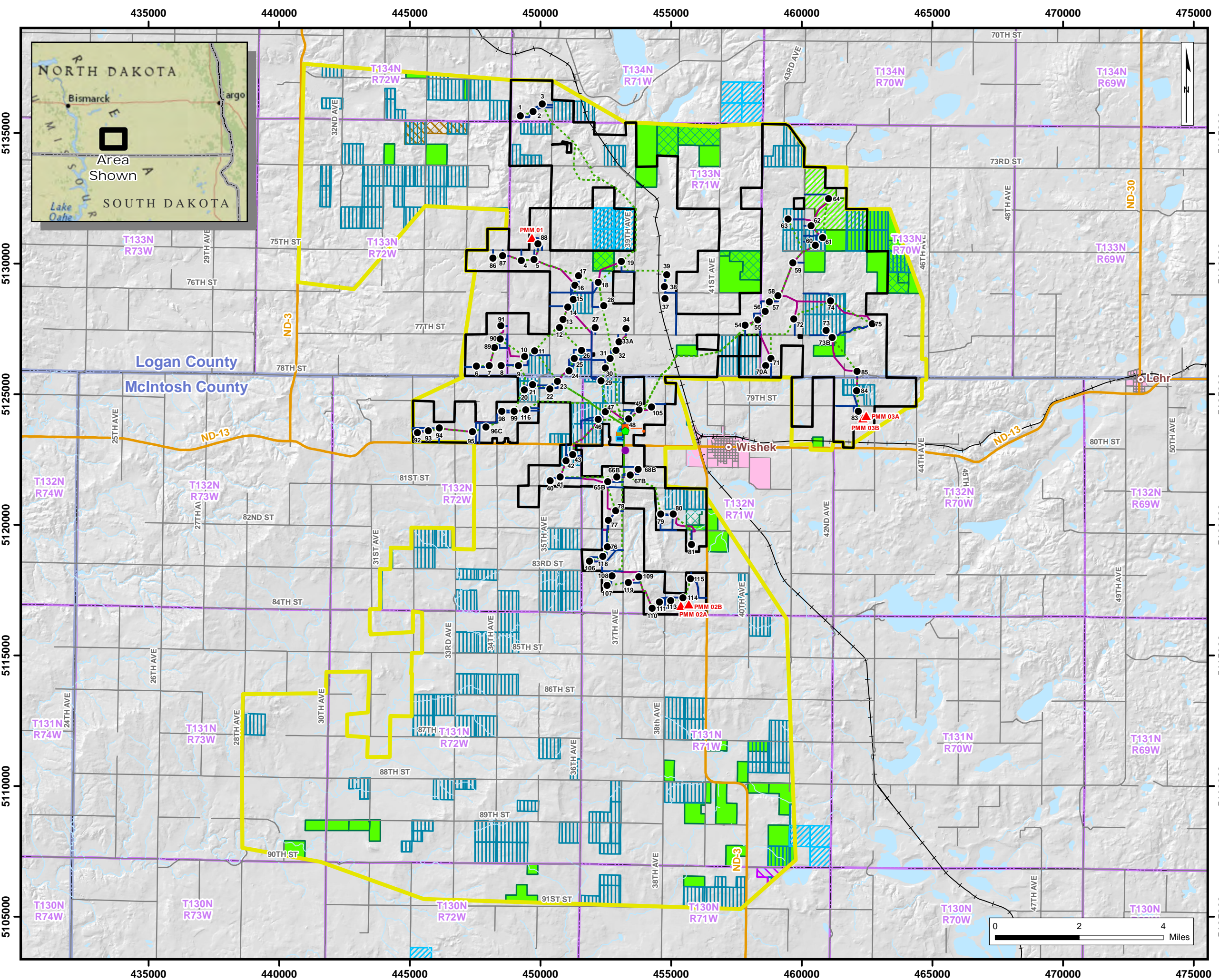
10455420-240509-PV

May 9, 2024

Projection: NAD83 UTM14

Sources: ESRI, NLCD-USGS, TIGER





**Legend**  
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**Existing Public Lands and Easements**

- ▨ NDGF PLOTS Land
- ▨ North Dakota Trust Land - Surface
- ▨ North Dakota Trust Land - Mineral
- ▨ USFWS Waterfowl Production Area
- ▨ USFWS Grassland Easement
- ▨ USFWS Wetland Easement
- ▨ USFWS Wetland Easement obtained subsequent to Project lease agreement

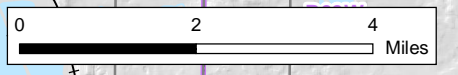
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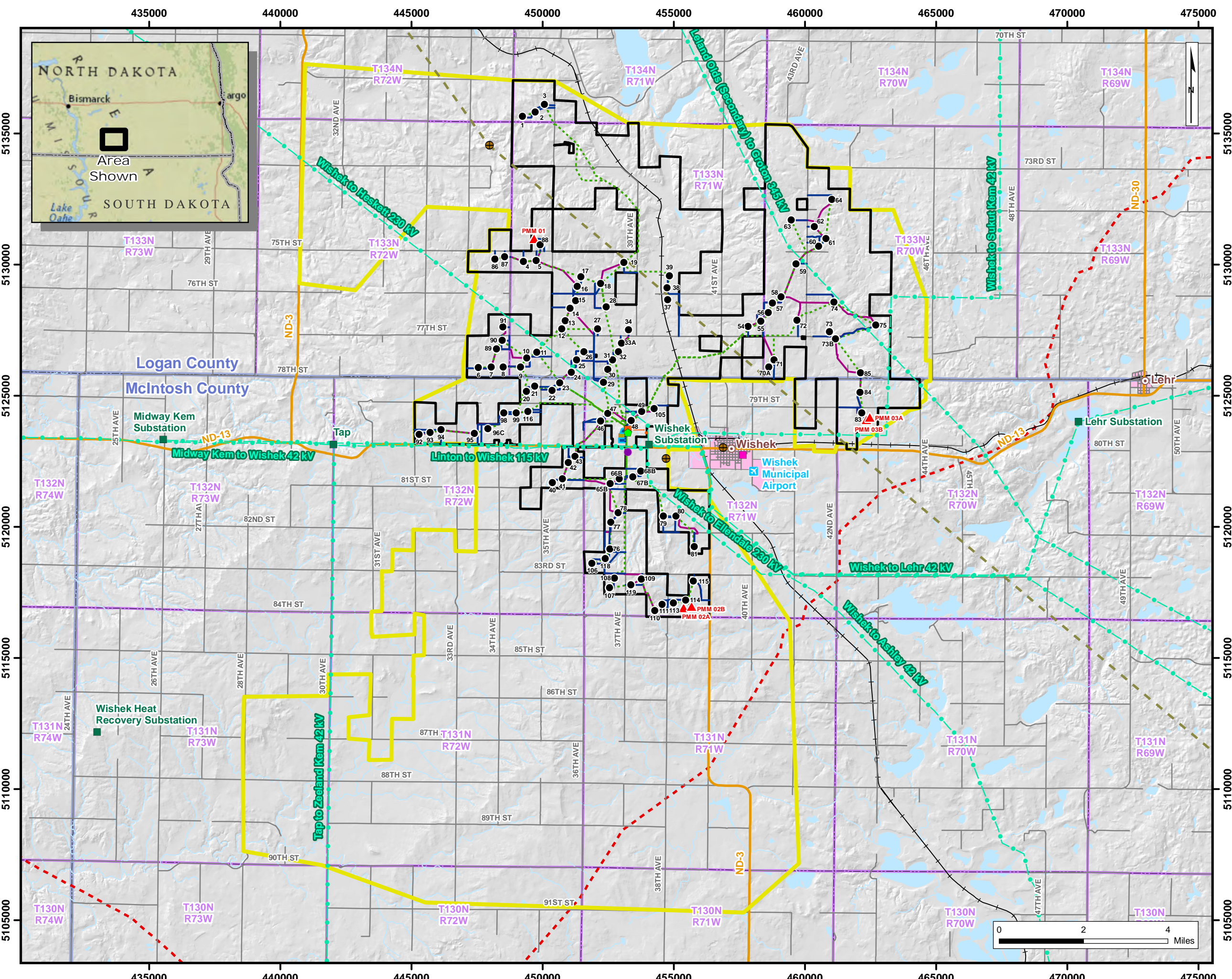
**Badger Wind, LLC**

Figure 8:  
EXISTING PUBLIC LANDS & EASEMENTS  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDGF, NDTL, TIGER

**DNV**





**Legend**  
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- Proposed Marshalling Yard
- Project Area
- Study Area
- City/Village
- Township (PLSS)
- County

**Existing Infrastructure**

- ✈ Airport
- School
- Communication Towers
- Existing Substation
- Existing Transmission Line
- Microwave Beam Path
- - - Natural Gas Pipeline
- State Road
- ~ County/Township Road
- Railroad

**Orsted**

Badger Wind, LLC

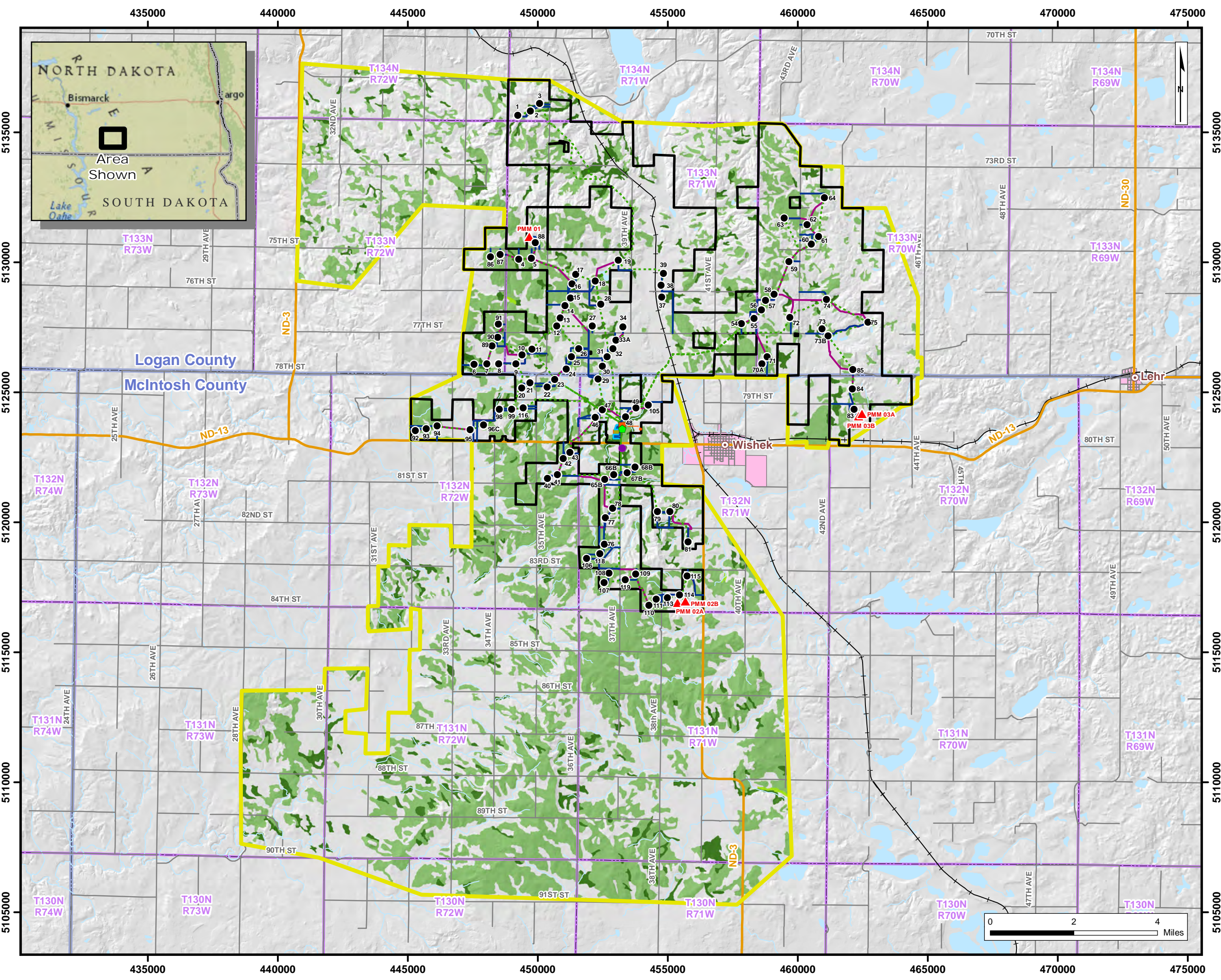
Figure 9:  
EXISTING INFRASTRUCTURE  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV

May 9, 2024

Projection: NAD83 UTM14  
Sources: ESRI, TIGER

**DNV**



**Legend**  
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**Farmland Class (gSSURGO-USDA, 2022)**

- Prime Farmland
- Farmland of Statewide Importance
- Prime Farmland if drained

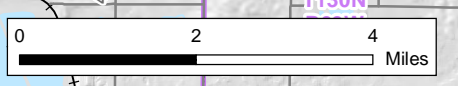
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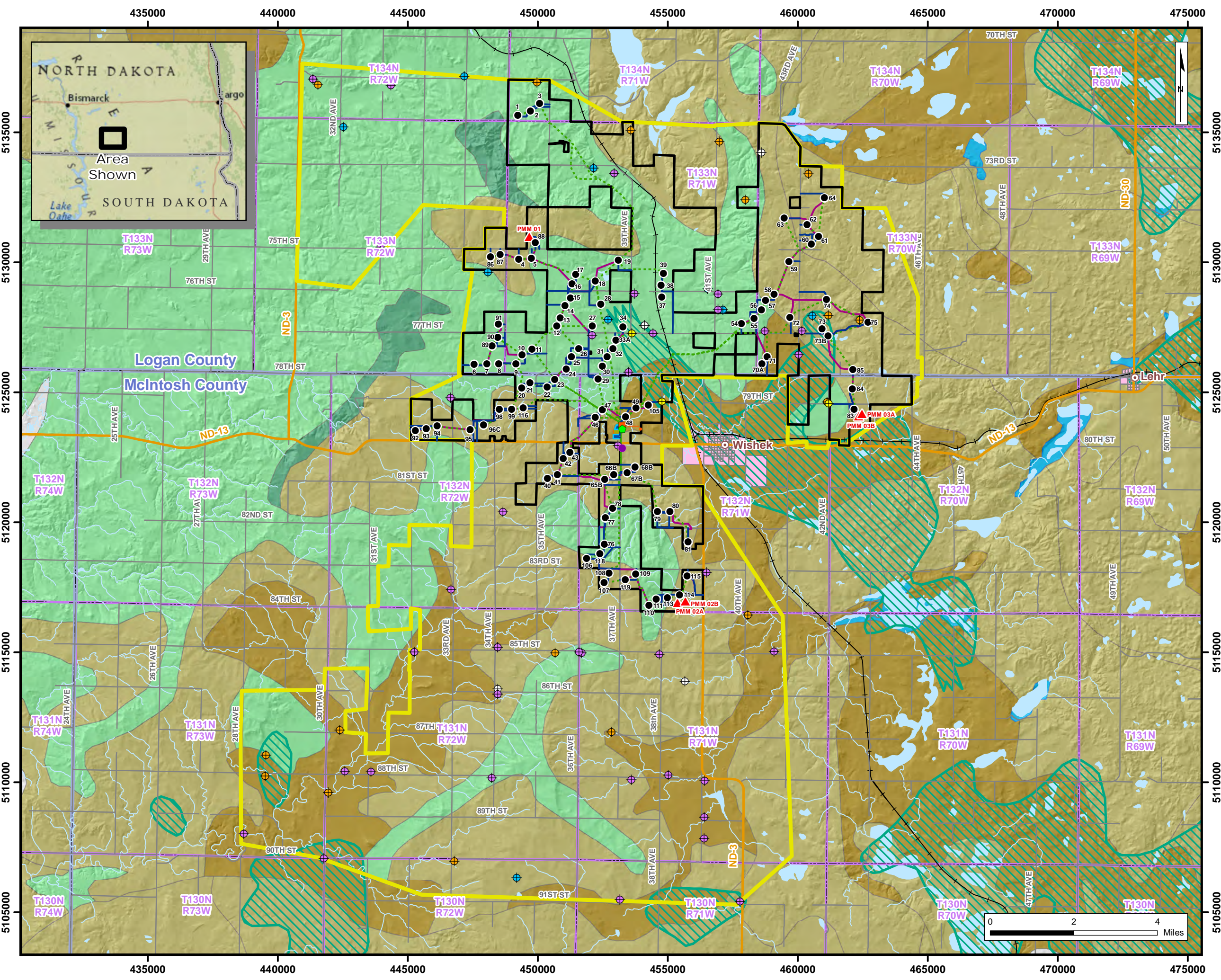
**Badger Wind, LLC**

Figure 10:  
PRIME AND UNIQUE FARMLAND  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, gSSURGO (USDA), TIGER

**DNV**





### Legend

(symbols not to scale)

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- County

#### Ground Water Sites (NDDWR, n.d.)

- ◆ Domestic Well
- ◆ Observation Well
- ◆ Stock Well
- ◆ Plugged/Test Well
- ◆ Unknown Well

#### Surficial Aquifer (NDDWR, 2019)

- Surficial Aquifer (NDDWR, 2019)

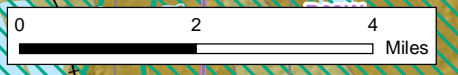
#### Surface Geology (NDGS, 2023)

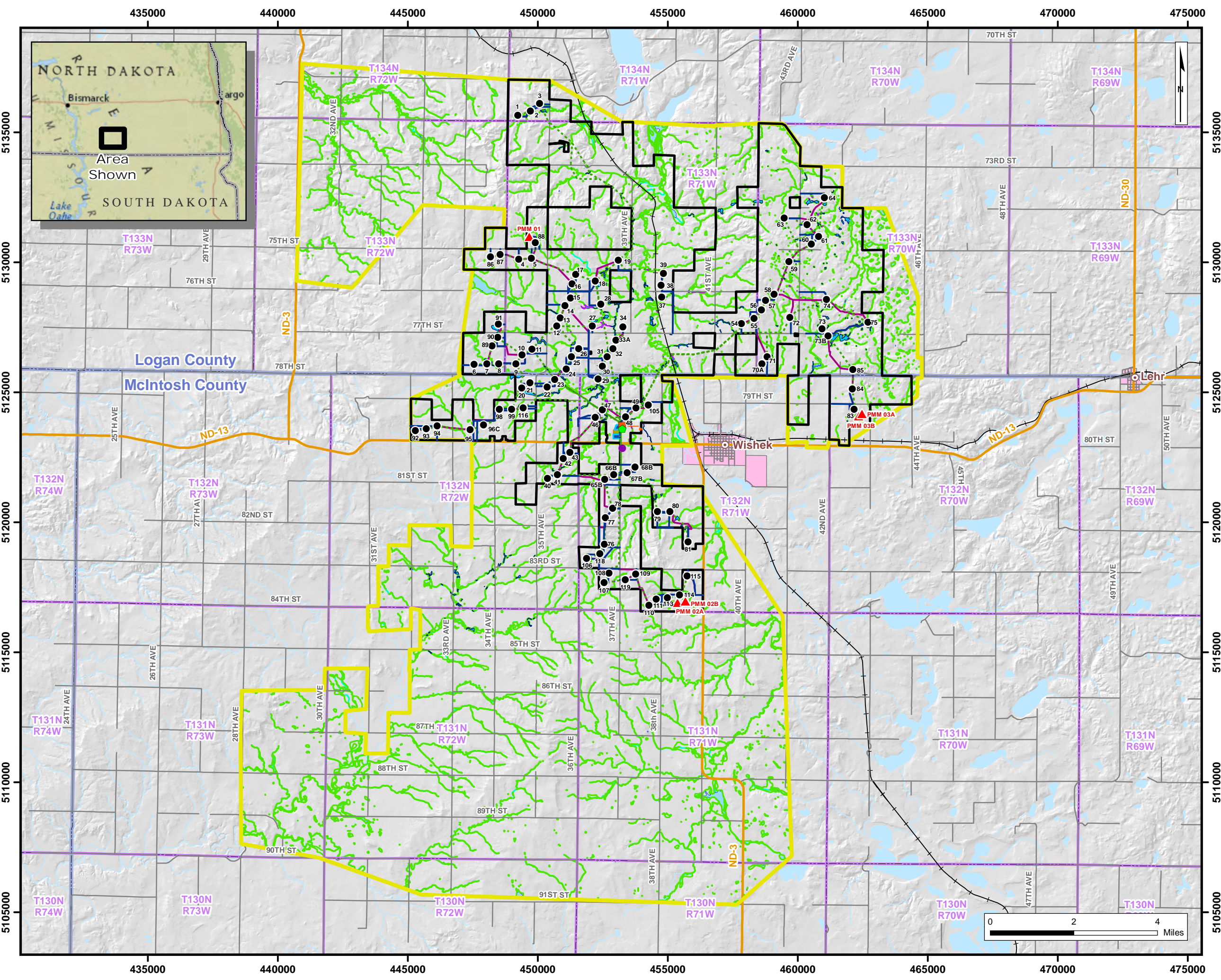
- Qop, Qct, Qcoh, Qcdn, Qcdc, Qccu, Qccr, Qcch; Quaternary (clay or mud, silt)
- Qcrh, Qcfr; Quaternary (sand, gravel)
- Kh; Cretaceous Hell Creek Formation (sand and silt)
- Kf; Cretaceous Fox Hills Formation (sand and shale)
- Water

**Badger Wind, LLC**

Figure 11:  
GEOLOGIC AND GROUNDWATER RESOURCES  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

10455420-240509-PV  
May 9, 2024  
Projection: NAD83 UTM14  
Sources: ESRI, NDDWR, NDGS, TIGER





**Legend**  
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- Township (PLSS)
- County

**Hydrography**

- ~ Perennial Stream (NHD)
- ~ Intermittent Stream (NHD)
- ~ Waterbody (NHD)
- ~ Field Mapped Wetland (2023)
- ~ Delineated Wetland
- ~ Wetland (NWI)

**Orsted**

Badger Wind, LLC

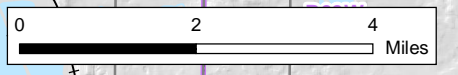
Figure 12:  
SURFACE WATER & WETLANDS  
- Wind Energy Facility -  
Logan and McIntosh Counties, ND

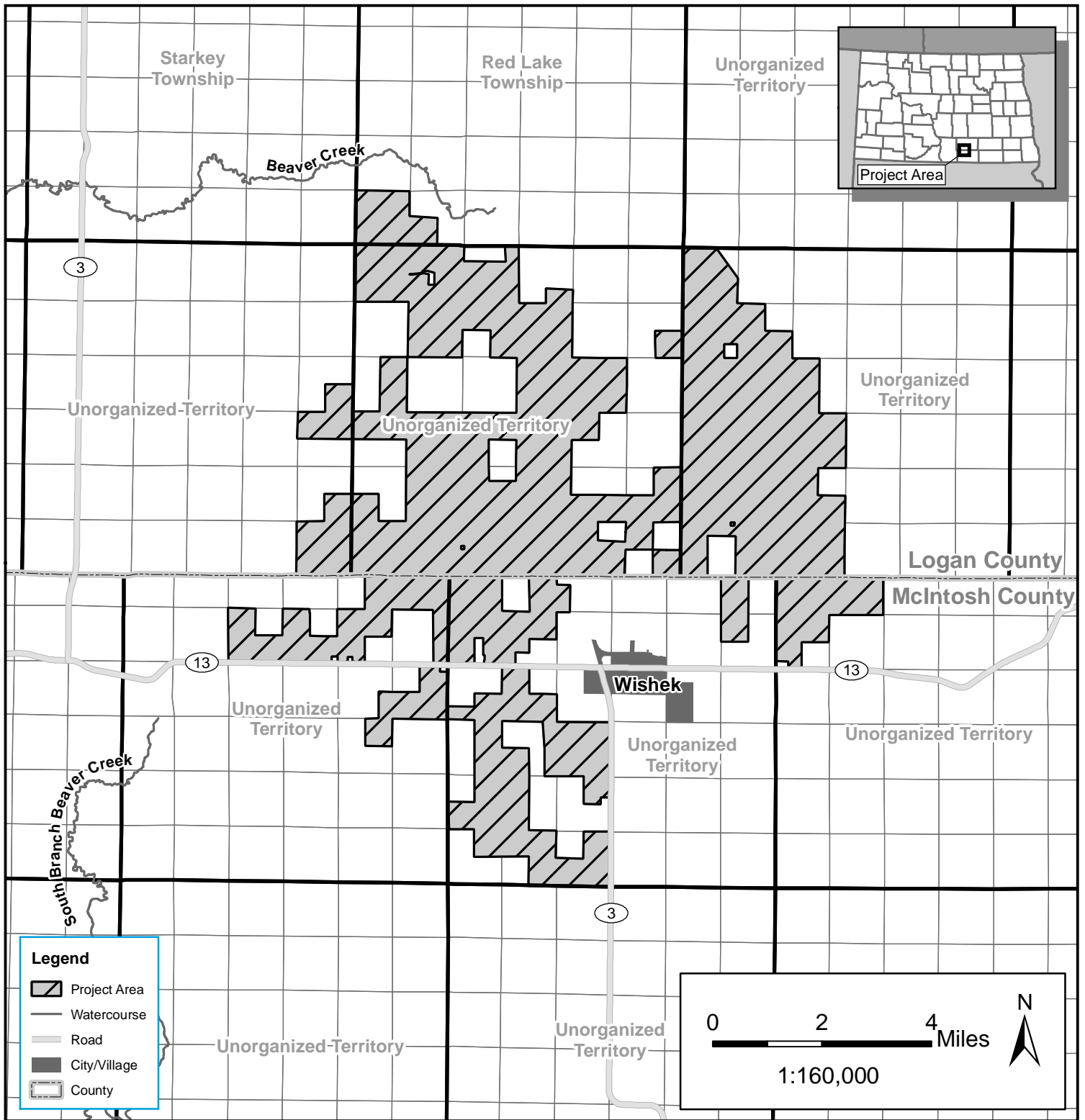
10455420-240509-PV

May 9, 2024

Projection: NAD83 UTM14  
Sources: ESRI, NHD (USGS),  
NWI (USFWS), TIGER

**DNV**





# Badger Wind Project

## Logan and McIntosh Counties, North Dakota