

**Legend**

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

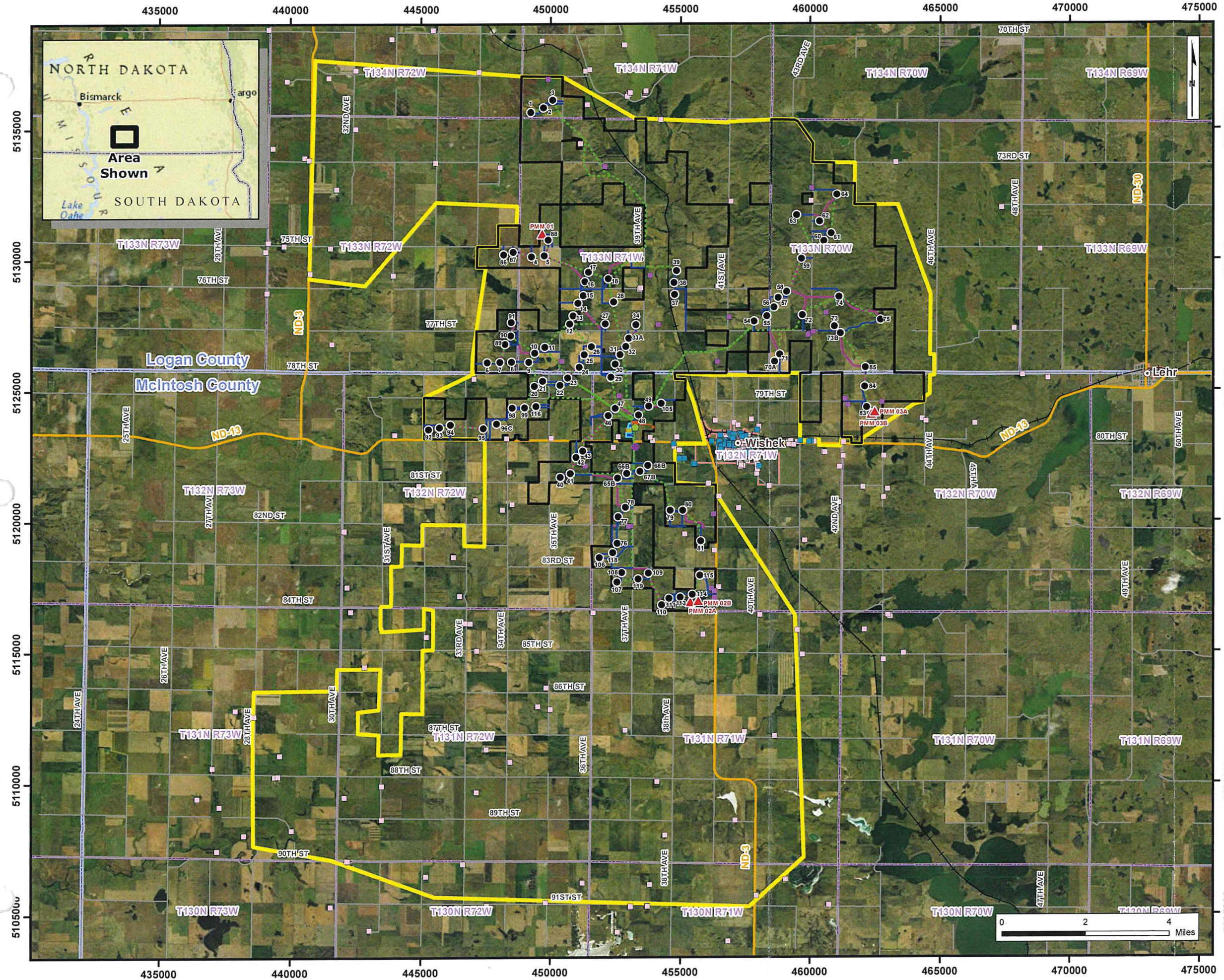
**Orsted**

**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

**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
- Participating Occupied Residence
- Non-Participating Occupied Residence
- Community Building
- State Road
- County/Township Road
- Railroad
- City/Village
- Township (PLSS)
- County

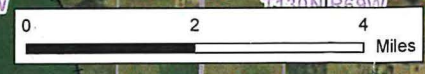
**Orsted**

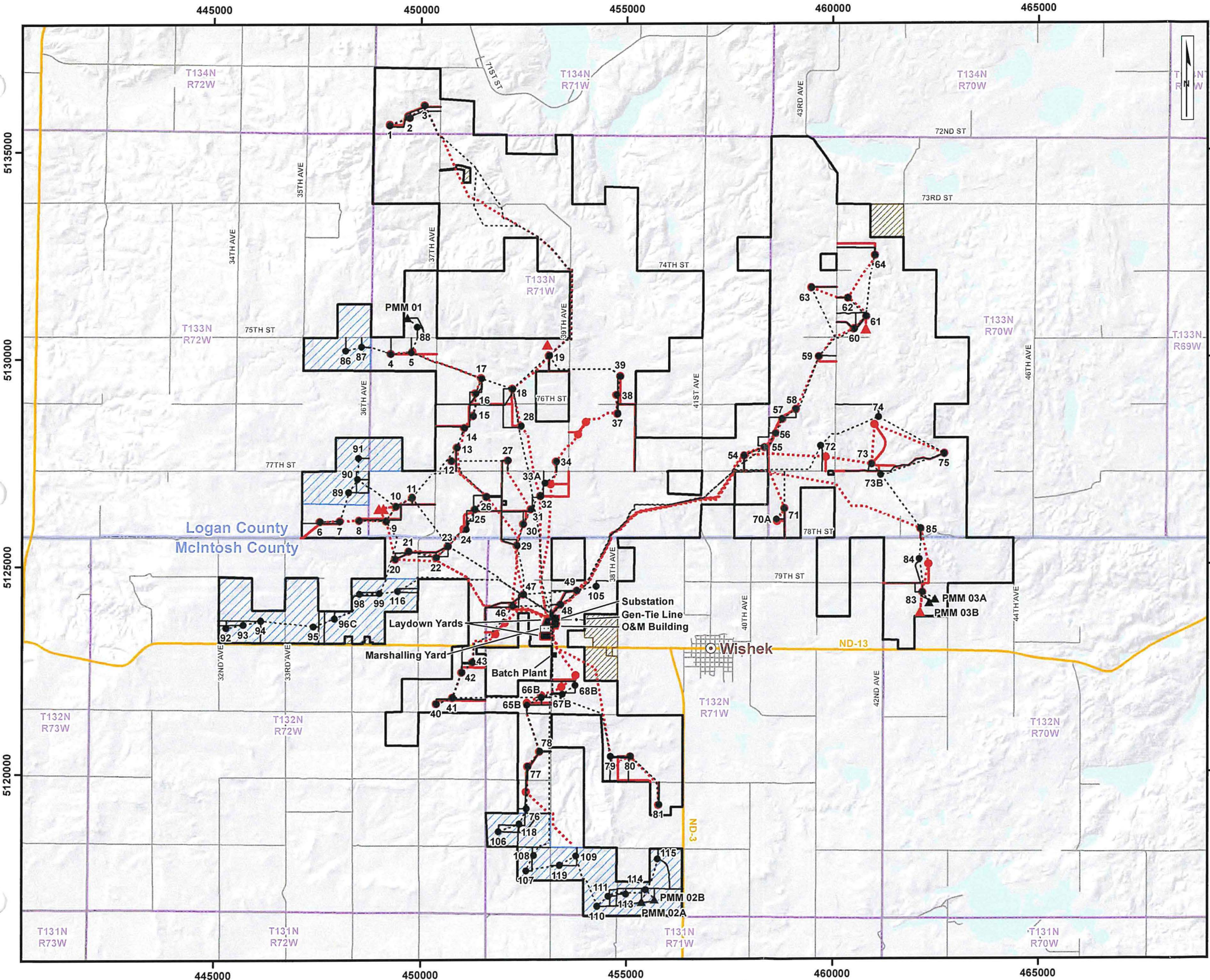
**Badger Wind, LLC**

**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

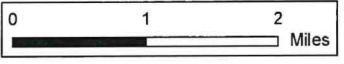
DNV





**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



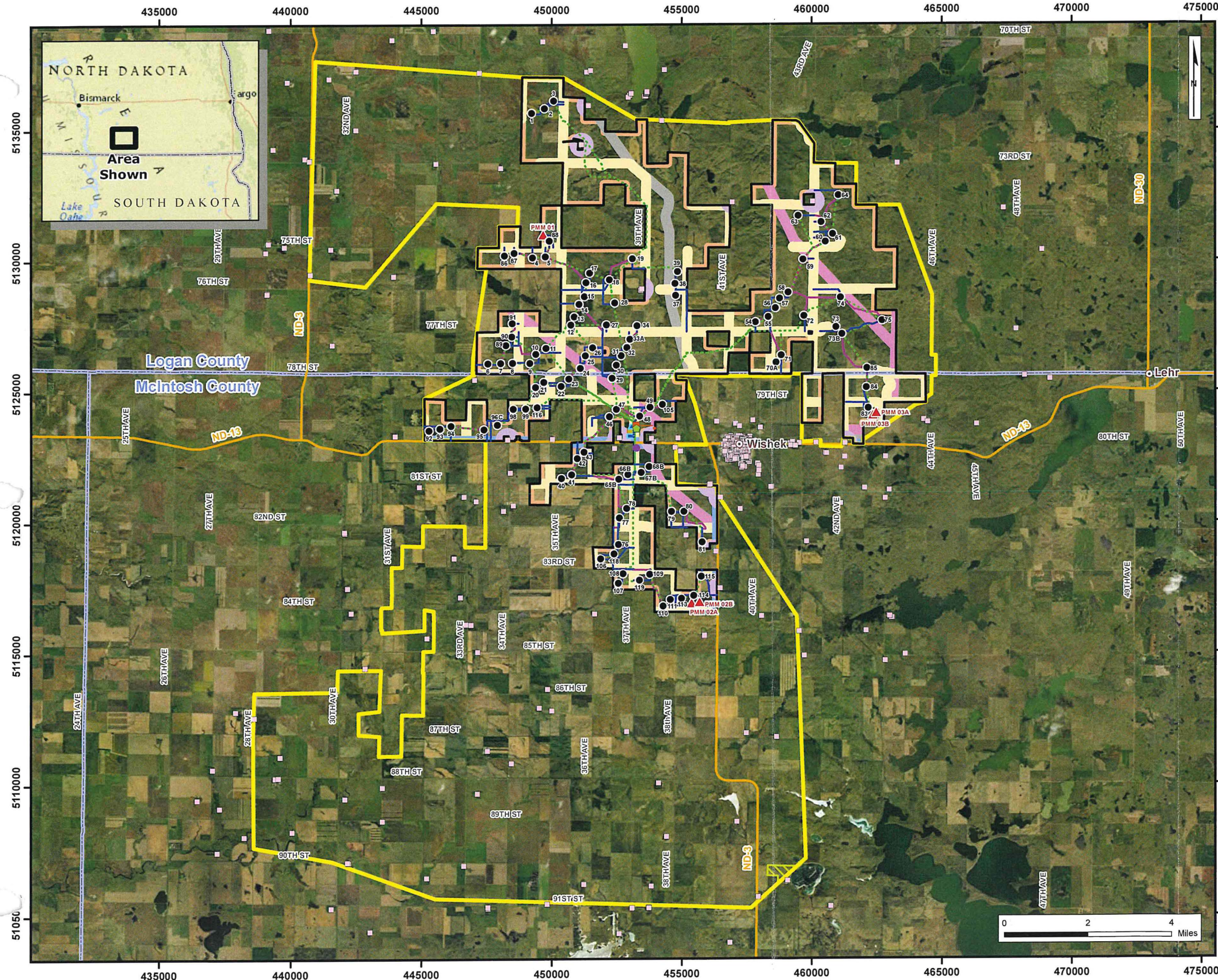
**Orsted**

**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

**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
- Non-Participating Occupied Residence

**Exclusion Area**

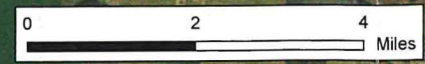
- ▨ Waterfowl Production Area
- Railroad
- State Road
- County and Maintained Township Road
- Existing Transmission Line
- Non-Participating Occupied Residence
- Non-Participating Property Line

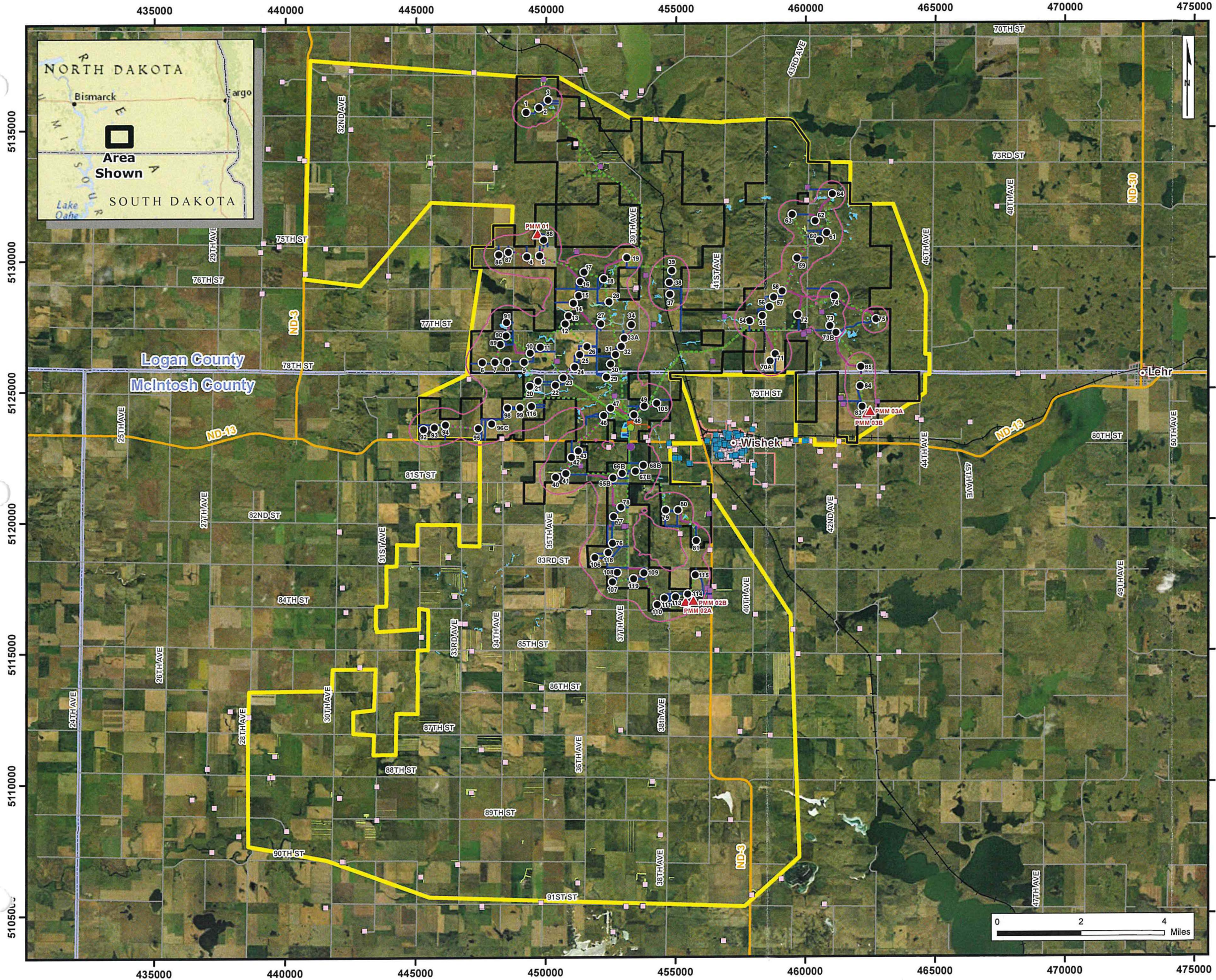
**Orsted**  
Badger Wind, LLC

**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

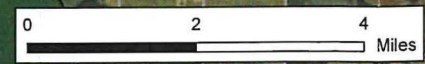
**Orsted**

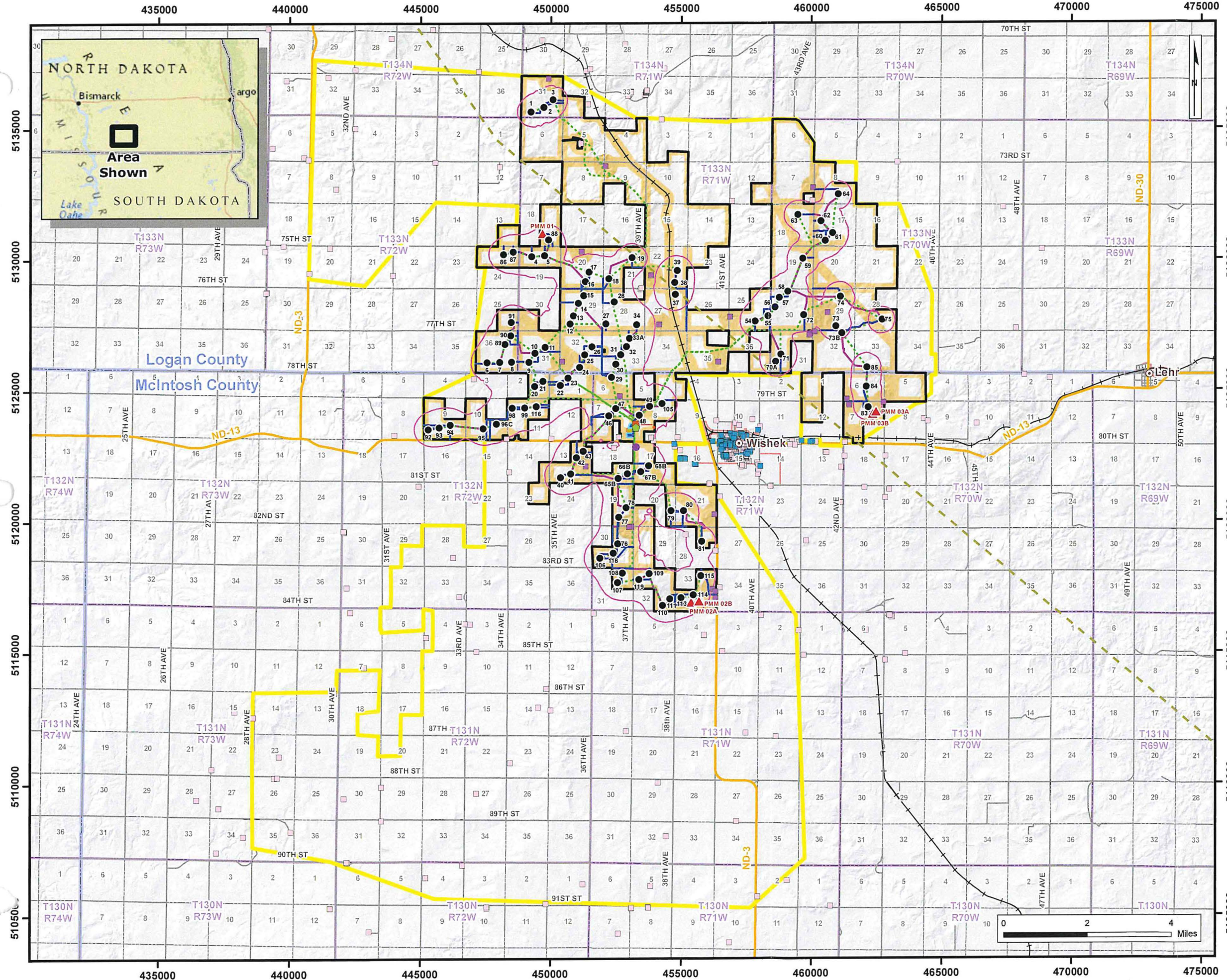
**Badger Wind, LLC**

**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

DNV





**Legend**  
(symbols not to scale)

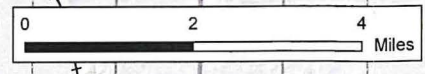
- Proposed Turbine
- ▲ Proposed Permanent MET Tower
- Proposed O&M Building
- Proposed Batch Plant
- Proposed Substation
- Proposed Gen-Tie Line
- Proposed Underground Collection/Fiber Line
- ~ Proposed Crane Path
- ~ Proposed Access Road
- Proposed Laydown Yard
- Proposed Marshalling Yard
- Project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

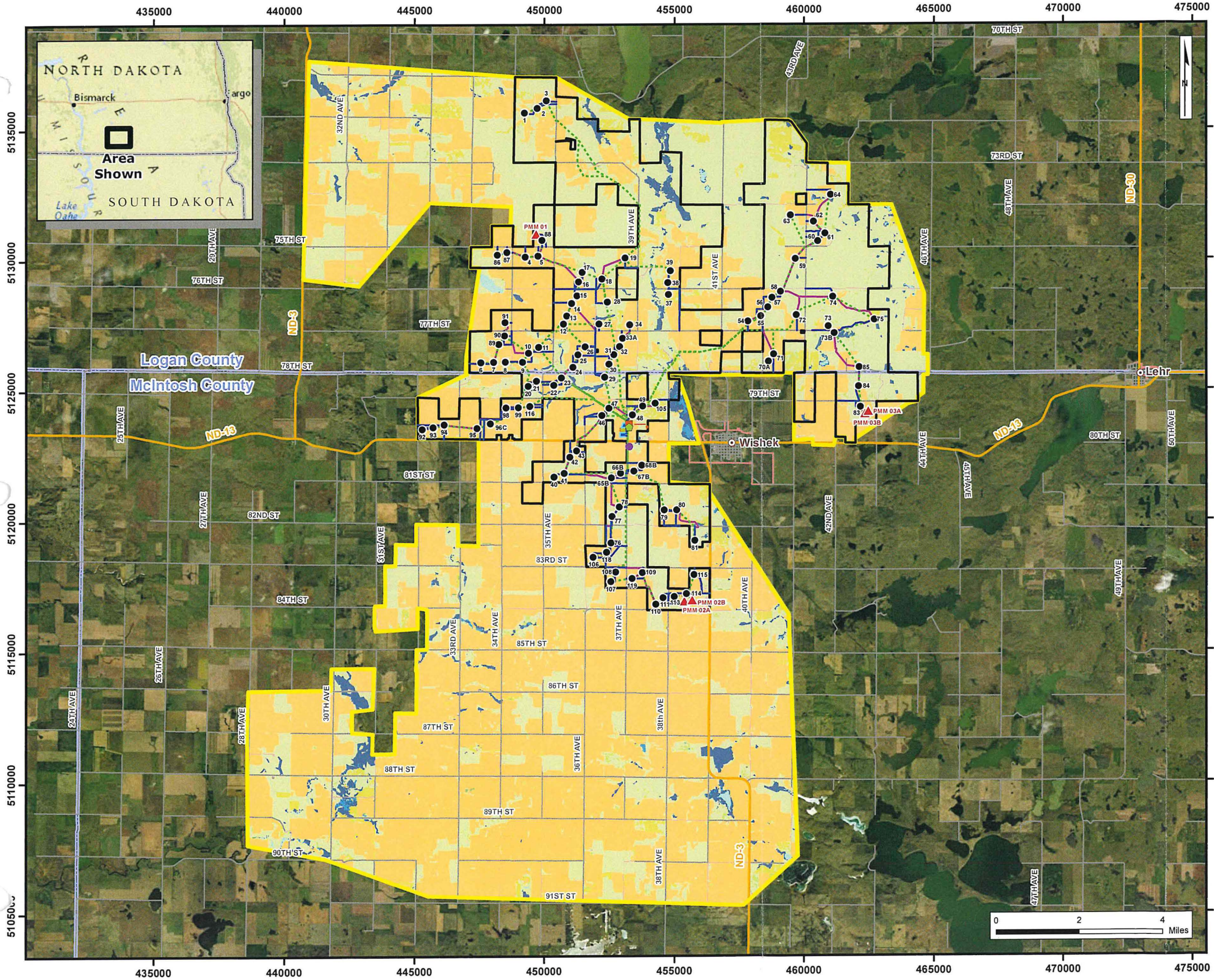
**Orsted**  
Badger Wind, LLC

**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





**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
- 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

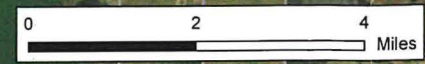
**Orsted**

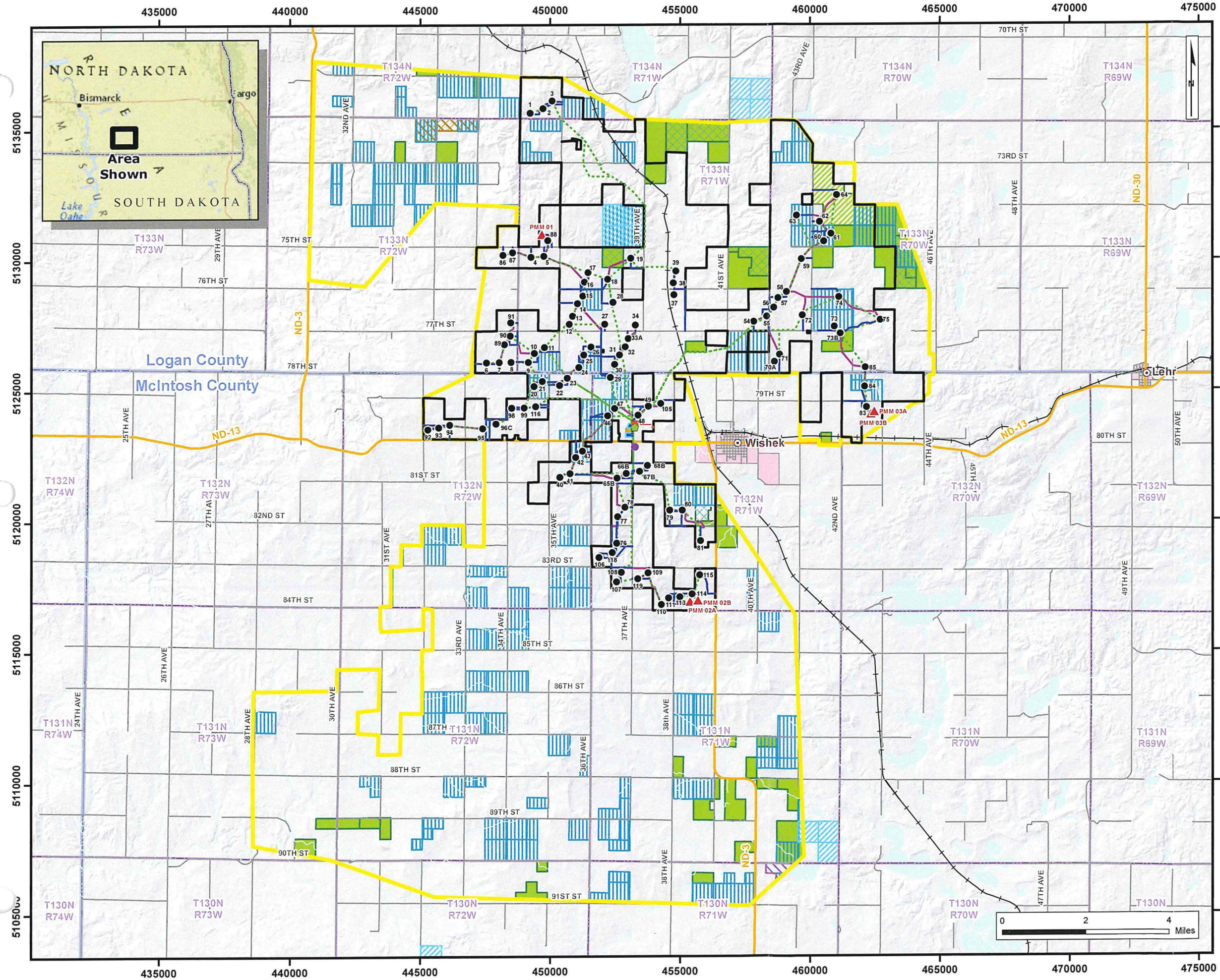
**Badger Wind, LLC**

**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

**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/Township Road
- Railroad
- City/Village
- Township (PLSS)
- County

**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

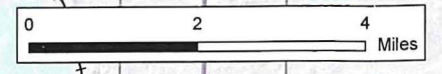
**Orsted**

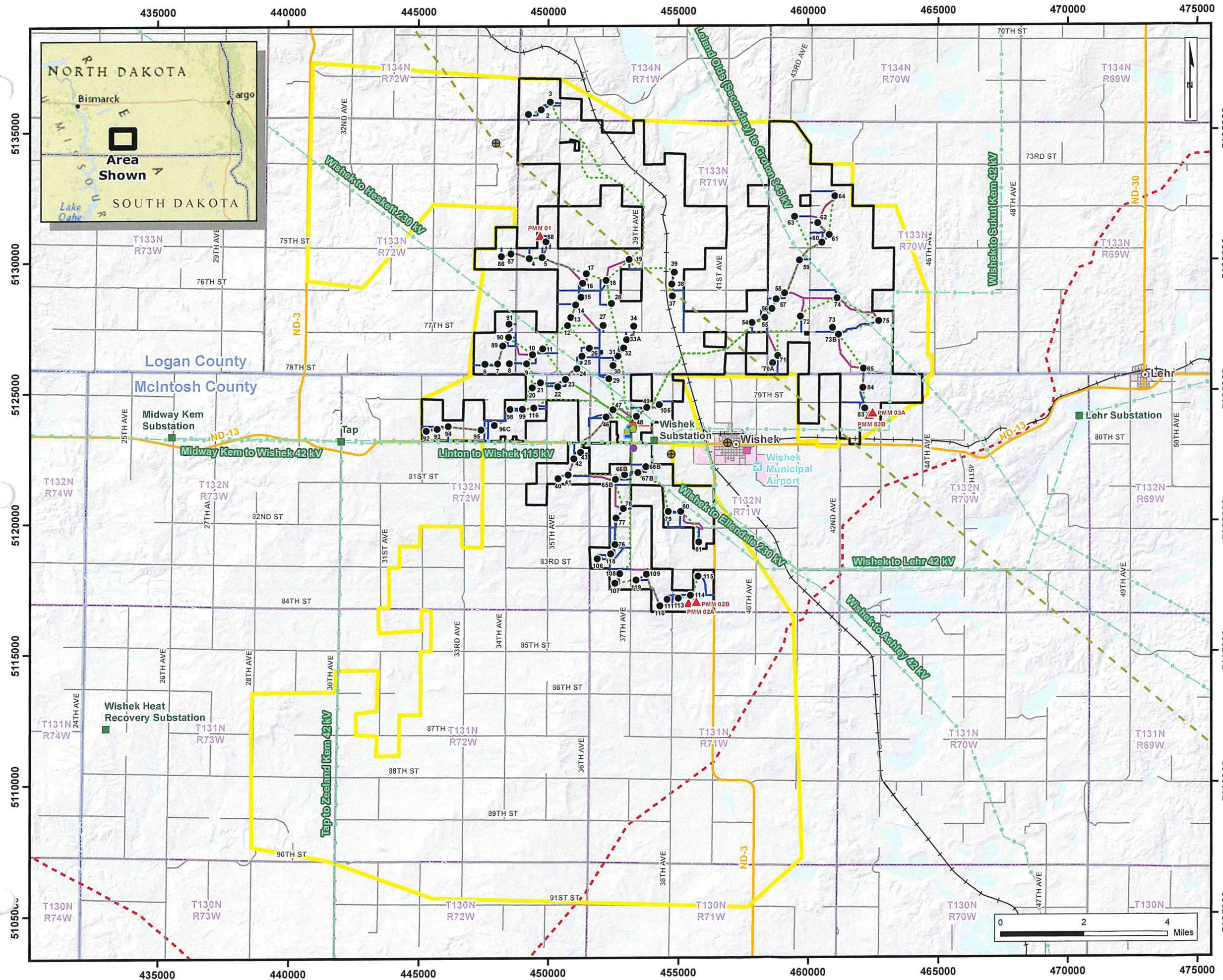
**Badger Wind, LLC**

**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**  
(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
- 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

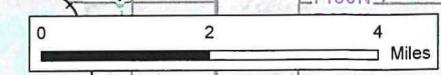
**Orsted**

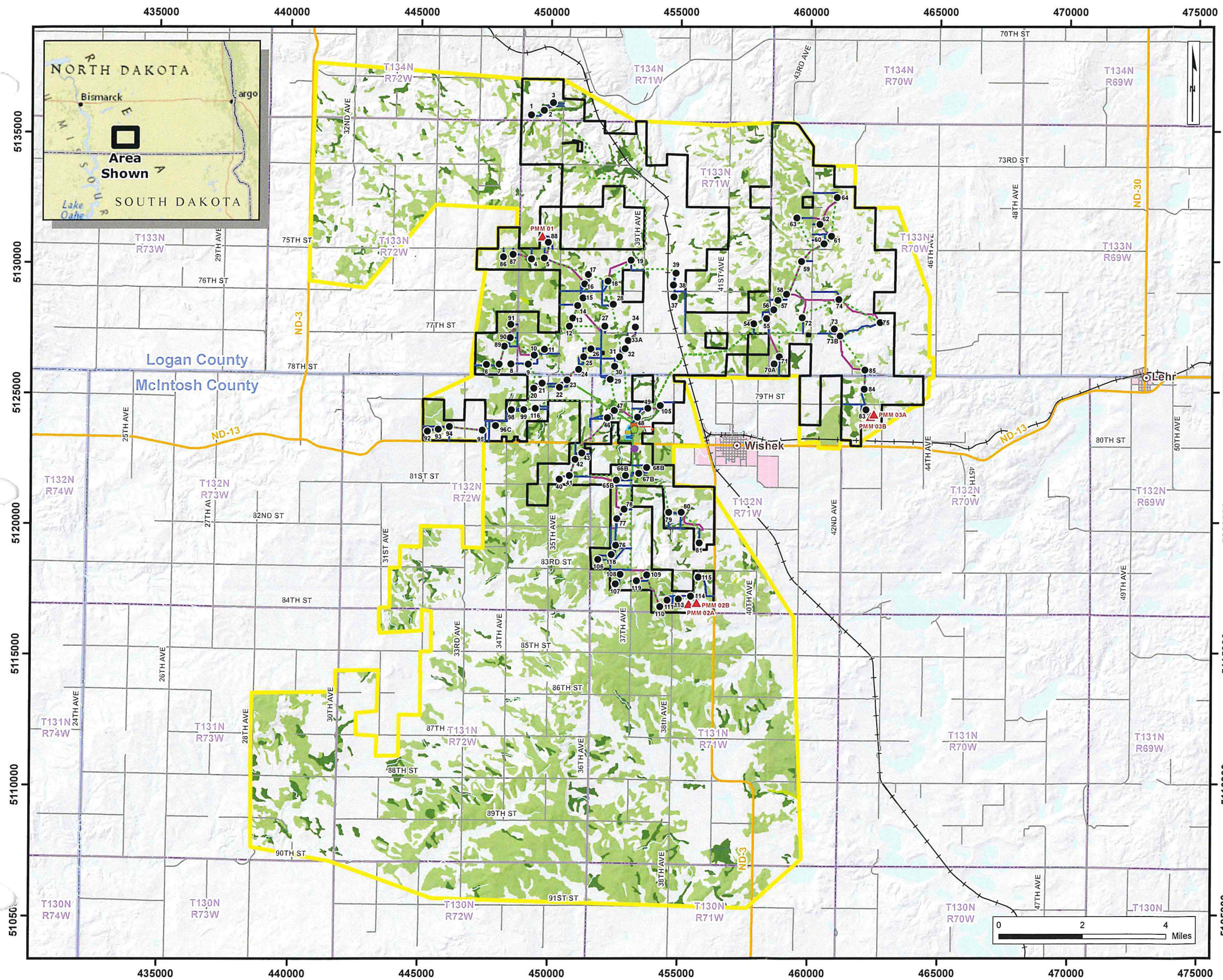
**Badger Wind, LLC**

**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**  
(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/Township Road
- Railroad
- City/Village
- Township (PLSS)
- County

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

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

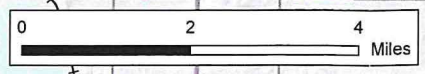
**Orsted**

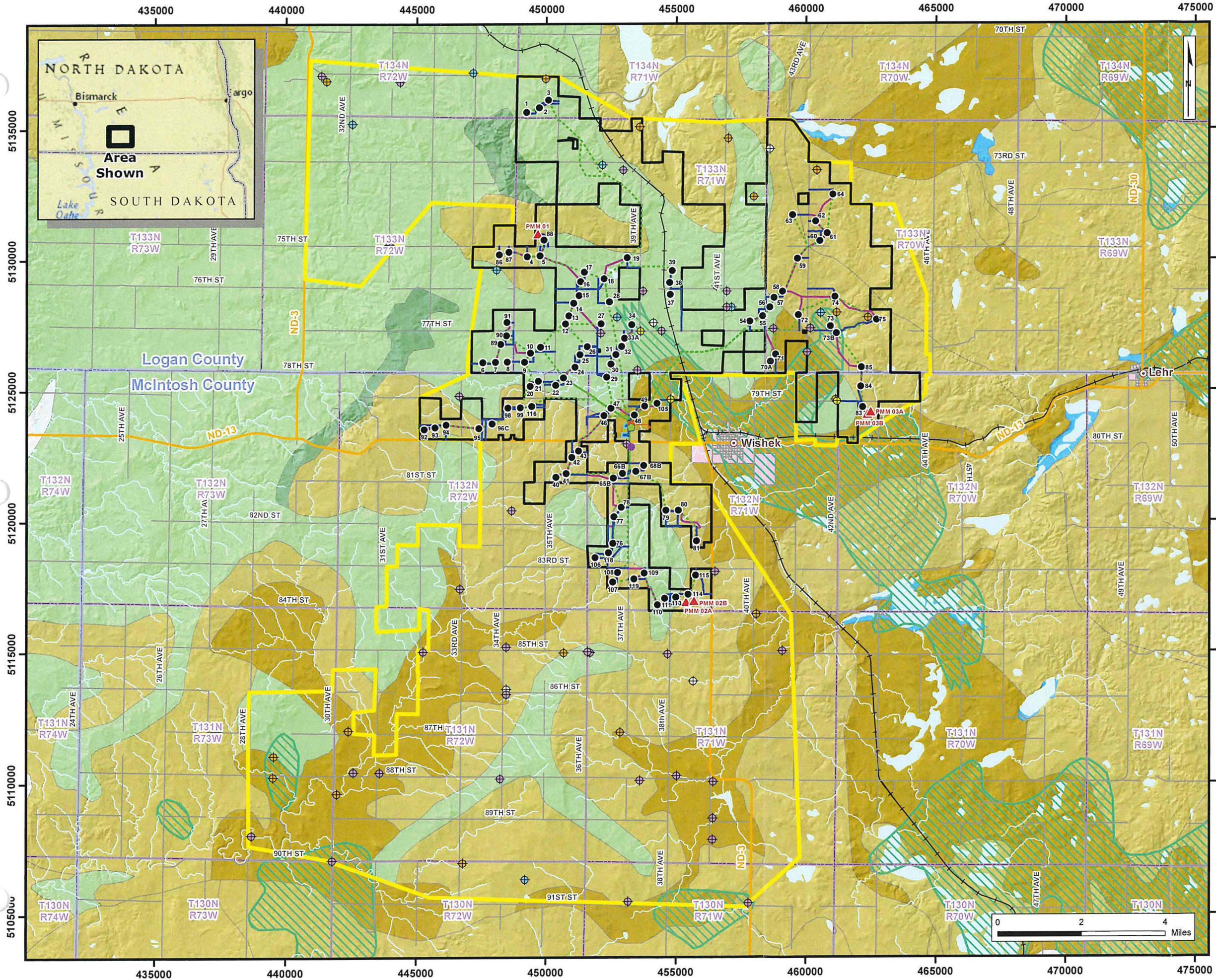
**Badger Wind, LLC**

**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)

- 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/Township Road
- Railroad
- ▭ City/Village
- ▭ Township (PLSS)
- ▭ County

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

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

**Surficial Aquifer (NDDWR, 2019)**

- ▭ Surficial Aquifer

**Surface Geology (NDGS, 2023)**

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

**Orsted**

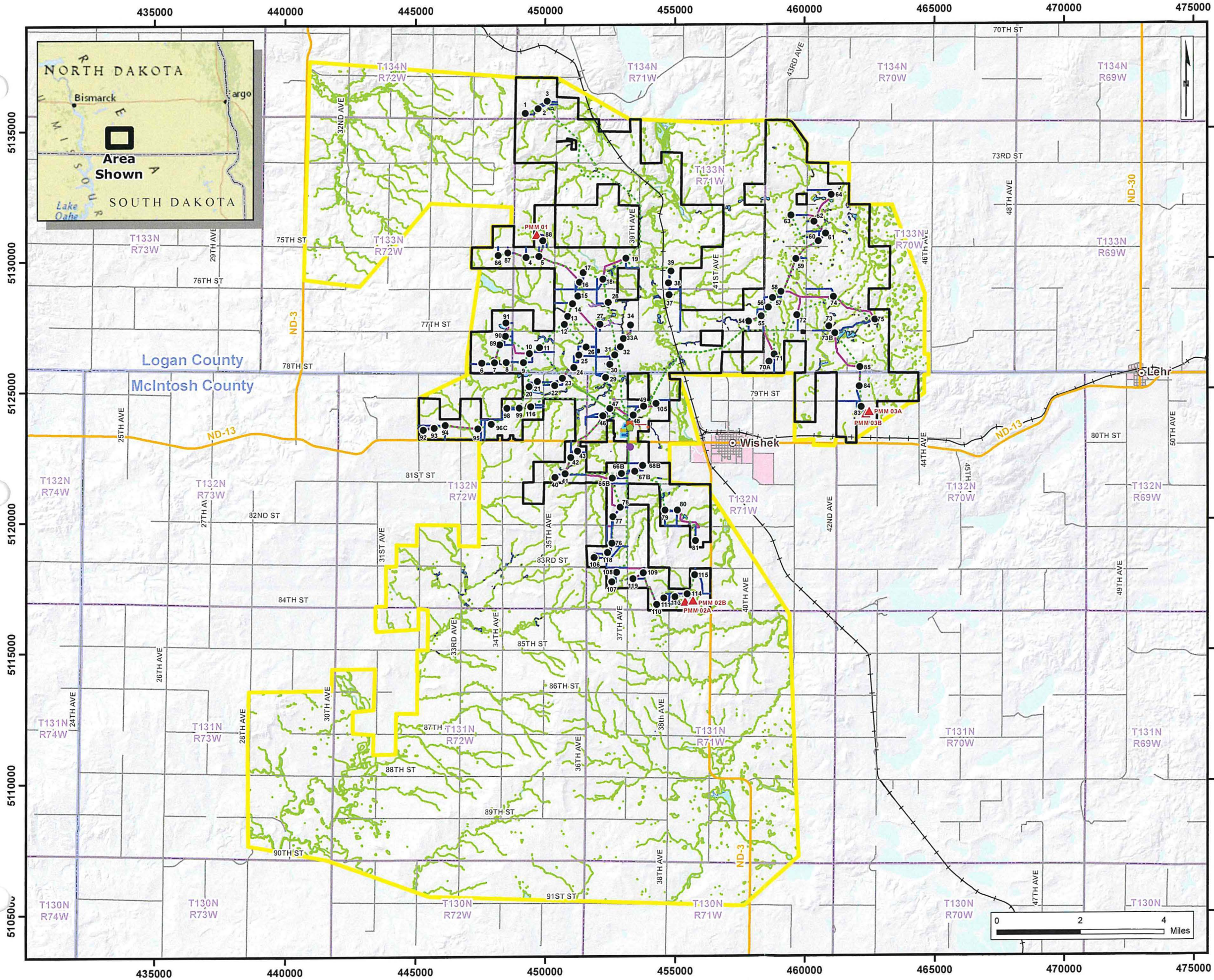
**Badger Wind, LLC**

**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

**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/Township Road
- Railroad
- City/Village
- ▭ Township (PLSS)
- ▭ County

**Hydrography**

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

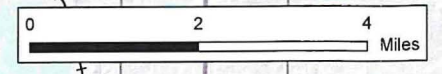
**Orsted**

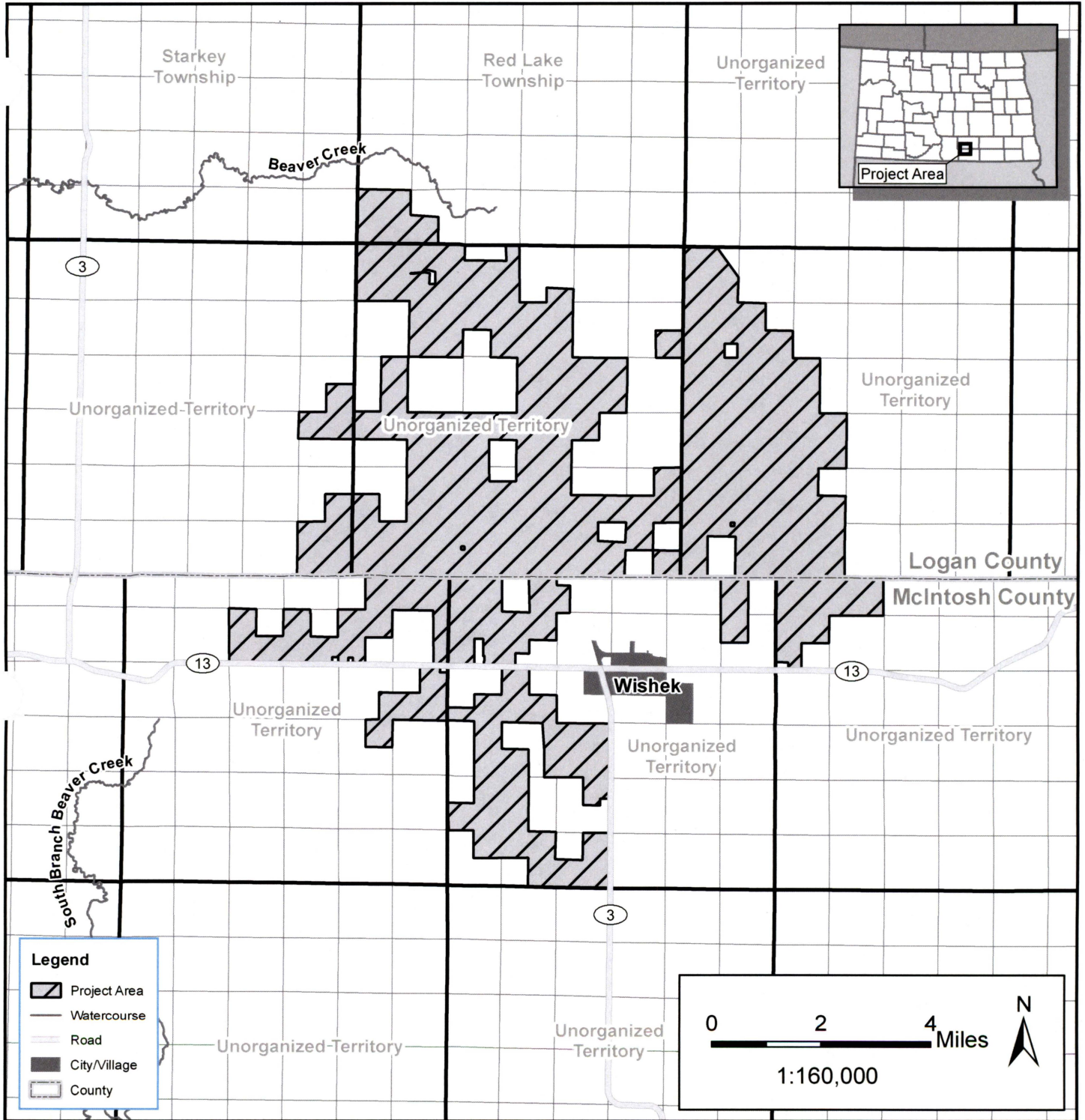
**Badger Wind, LLC**

**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),  
NW (USFWS), TIGER

**DNV**





**Badger Wind Project**  
Logan and McIntosh Counties, North Dakota