

# **Wetlands and Other Waters Delineation Report**

## **Emmons-Logan Wind Energy Center Emmons-Logan Wind, LLC Emmons and Logan Counties, North Dakota**

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## 1.0 INTRODUCTION

Emmons-Logan Wind, LLC (Emmons-Logan Wind), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC (NEER), is proposing to construct the Emmons-Logan Wind Energy Center (Project) in Emmons and Logan Counties, North Dakota (**Figure 1-1**). The Project Area encompasses approximately 64,563 acres of which, the construction easement accounts for approximately 1,202 acres (<2%) with permanent Project disturbance totaling approximately 87 acres (<1%). The Project consists of up to 123 turbines, access roads, underground electrical collection systems, collection substations, an operations and maintenance (O&M) building, meteorological evaluation (Met) towers, a construction laydown area, and a batch plant (**Figure 1-2**). The Project will use up to 111 GE (General Electric) 2.5 megawatt (MW) wind turbines and up to 12 GE 1.715 MW wind turbines and will have a nameplate capacity of 298.1 MW.

AECOM delineated wetland and other waters (collectively, “waters”) in support of the Project. Other waters can include, but are not limited to, streams, ponds, impoundments, prairie potholes, and lakes. Field surveys occurred in September, October, and November 2017 and May, June, July, and October 2018 within the survey corridor. The survey corridor is any location where potential Project infrastructure could be sited within the Project Area. Presented in this report are descriptions of the methodology, results, and conclusions of the delineation. Emmons-Logan Wind has committed to avoid and minimize impacts to all waters to the extent practicable unless there is no reasonable alternative, including those that are potentially regulated under the jurisdiction of the United States Army Corps of Engineers (USACE). For unavoidable impacts, the goal is to keep impacts below thresholds in compliance with USACE Nationwide Permit (NWP) criteria and conditions.

## 2.0 ENVIRONMENTAL SETTING

The Project Area encompasses approximately 64,563 acres (101 square miles) in Emmons and Logan Counties, North Dakota. Land use consists of herbaceous grasslands, pasture, hayland, and cultivated crops (Homer et al. 2015). Small drainages and streams are found within the Project Area. These water complexes may be used for hunting and bird watching. Trees and shrubs are sparse and limited to shelterbelts between fields, windbreaks surrounding farmsteads, along drainages, and near wetlands.

### 2.1 Soils

AECOM acquired soils data from a Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) site-specific soil report (Soil Survey Staff 2018). Within the Project Area, the USDA has mapped 108 soil map units, of which eight soil map units (approximately 1%) have hydric soil components and are classified as somewhat poorly drained, poorly drained, and very poorly drained (**Table 2-1**). The characteristics of these hydric soils are presented in **Table 2-2** below.

**Table 2-1 Drainage Class**

Drainage Class	Drainage Class Description
Somewhat poorly drained	Water is removed slowly so that the soil is wet at a shallow depth for significant periods during the growing season. The occurrence of internal free water commonly is shallow to moderately deep and transitory to permanent. Wetness markedly restricts the growth of mesophytic crops, unless artificial drainage is provided. The soils commonly have one or more of the following characteristics: low or very low saturated hydraulic conductivity, a high water table, additional water from seepage, or nearly continuous rainfall.
Poorly drained	Water is removed so slowly that the soil is wet at shallow depths periodically during the growing season or remains wet for long periods. The occurrence of internal free water is shallow or very shallow and common or persistent. Free water is commonly at or near the surface long enough during the growing season so that most mesophytic crops cannot be grown, unless the soil is artificially drained. The soil, however, is not continuously wet directly below plow-depth. Free water at shallow depth is usually present. This water table is commonly the result of low or very low saturated hydraulic conductivity of nearly continuous rainfall, or of a combination of these.
Very poorly drained	Water is removed from the soil so slowly that free water remains at or very near the ground surface during much of the growing season. The occurrence of internal free water is very shallow and persistent or permanent. Unless the soil is artificially drained, most mesophytic crops cannot be grown. The soils are commonly level or depressed and frequently ponded. If rainfall is high or nearly continuous, slope gradients may be greater

Source: Soil Survey Division Staff (1993)

**Table 2-2 Hydric Soil Characteristics**

Map Unit Name	Area (acres)	Approximate Percent (%) of Project Area	Drainage Class
Karlsruhe coarse sandy loam	16.98	0.03%	Somewhat poorly drained
Zahl-Williams loams	22.79	0.04%	Somewhat poorly drained
Dimmick clay	22.34	0.03%	Poorly drained

Map Unit Name	Area (acres)	Approximate Percent (%) of Project Area	Drainage Class
Harriet loam	20.97	0.03%	Poorly drained
Lihen-Telfer loamy fine sands	316.25	0.49%	Poorly drained
Southam silty clay loam	39.20	0.06%	Poorly drained
Tonka silt loam	103.52	0.16%	Poorly drained
Parnell silty clay loam	156.20	0.24%	Very poorly drained
Water	0.49	0.00%	Not applicable

Source: Soil Survey Staff (2018)

## 2.2 Geography and Topography

The Project Area is in the northeastern portion of Emmons County and southwestern portion of Logan County and lies on the Missouri Coteau Slope. This region declines in elevation from the Missouri Coteau to the Missouri River. Unlike the Missouri Coteau, this region has fewer wetland basins and is comprised of more simple drainage channels and streams. Cropland is generally found within the gentle rolling hills with cattle grazing occurring on the steeper sloped areas.

The Project Area is within the Central Dark Brown Glaciated Plains major land resource area, which is almost entirely covered by glacial till plains (USDA, NRCS 2006). Surficial deposits consist of up to 300 feet of glacial sediments. The interspersed collapsing of these sediments developed the hummocky, rolling hills surrounding the numerous sloughs and lakes.

## 2.3 Hydrology

United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data and United States Geological Survey (USGS) National Hydrography Dataset (NHD) data were used to identify potential surface waters (USFWS 2018, USGS 2018, **Figure 4-1**). This data was used as a precursor for field delineations. Small drainages and streams are found within the Project Area. The Project Area is located within the Missouri Region 10 major watershed. The Project Area is divided into two watersheds; Apple Watershed (USGS Cataloging Unit: 10130103) on the north side and Beaver Watershed (USGS Cataloging Unit: 10130104) on the south side (USGS 2018) which are divided into the sub-watersheds, see **Table 2-3**. All watersheds within the Project Area drain west into the Missouri River.

**Table 2-3 Sub-Watersheds within the Project Area**

Sub-Watershed Name	12-Digit Hydrologic Unit Code
Headwaters Long Lake Creek	101301031003
Round Lake	101301030901
Schell Buttes-Beaver Creek	101301040402
Park Wilkey Dam-Beaver Creek	101301040403
Flickertail National Wildlife Refuge-Beaver Creek	101301040501
Senger Lake-Beaver Creek	101301040502

Sub-Watershed Name	12-Digit Hydrologic Unit Code
Clear Creek	101301040503
Spring Creek	101301040601
West Branch Long Lake Creek	101301031004
Saville Landing Strip	101301031002
101301031001	101301031001

Source: USGS (2018)

## 2.4 Vegetation and Land Use Cover

The Project Area is in a rural location where farming and livestock grazing are the dominant land use. This area is associated with mixed-grass prairie (Dyke et al. 2015). Vegetation of the mixed-grass prairie consists mainly of Western wheatgrass (*Pascopyrum smithii*), little bluestem (*Schizachyrium scoparium*), purple prairie clover (*Dalea purpurea*), and common yarrow (*Achillea millefolium*) with prairie cordgrass (*Spartina pectinata*), and reed canary grass (*Phalaris arundinacea*) occurring in low areas. Much of the native prairie within the Project Area has been replaced by wheat, corn, and other commercial crops. Land use cover is shown in **Figure 2-1**.

## 2.5 Precipitation and Growing Season

The NRCS Climate Analysis for Wetlands (WETS) Tables provide historical data based on a 30 year average (1971-2000) of temperature and precipitation data from the Napoleon, North Dakota monitoring station (USDA 2018). The WETS table, which includes the records of 30 years of precipitation, estimates the growing season (days with an average temperature >32°F with a probability of 70 percent) to occur from May 10 through September 27. The average annual precipitation is 19.17 inches, with an average monthly precipitation exceeding two inches in May, July, and August, and three inches in June. Field surveys were completed in May and June 2018, where monthly precipitation reached 4.15 and 4.30 inches, respectively. The average monthly precipitation was exceeded by 1.56 inches in May 2018 and 1.10 inches in June 2018, so conditions were slightly wetter than average during surveys. Annual average snow fall is 46.1 inches.

## 3.0 REGULATORY SETTING

### 3.1 Federal Regulations

#### 3.1.1 Clean Water Act

All discharges of dredged or fill material into jurisdictional waters of the United States that result in permanent or temporary losses to “waters of the United States” (WOTUS), are regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA). Additionally, the USACE regulates projects in navigable waters under Section 10 of the Rivers and Harbors Act. As defined in 33 Code of Federal Regulations (CFR) Part 328(a), the WOTUS are:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
  - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as WOTUS under the definition;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial seas;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1)-(6) of this section. Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR § 123.11(m) which also meet the criteria of this definition) are not WOTUS.
8. WOTUS do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the United States Environmental Protection Agency (EPA).

Under USACE regulations, wetlands are defined as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas” (33 CFR § 328.3(c)(4)).

In the absence of wetlands in or adjacent to non-tidal waters, the lateral extent of USACE jurisdiction is determined by the ordinary high water mark (OHWM), which is defined as the “line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas” (33 CFR § 328.3(c)(6)).

The USACE Nationwide Permits (NWP) 12: Utility Line Activities and 14: Linear Transportation Projects, authorize the discharge of dredged or fill material into non-tidal WOTUS given that there is not a loss of greater than ½-acre of WOTUS for any “single and complete project” or that permanent access roads are not constructed above grade in WOTUS for a distance of more than 500 feet. “Single and complete project” refers to each discrete intersection between Project infrastructure and jurisdictional wetlands and other WOTUS. A pre-construction notification (PCN) to the USACE is required under both NWP 12 and 14 if permanent impacts exceed the 0.10-acre threshold. However, for permanent impacts less than 0.10-acre, no PCN would be required for NWP 12.

### **3.1.2 United States Fish and Wildlife Service**

The USFWS manages lands including wetland easements within the Project Area. These easements are legal agreements between landowners and the USFWS to protect wetlands that are vital to wildlife habitat. The USFWS owns the perpetual rights to certain wetland basins within wetland easements which cannot be burned, drained, filled, or leveled without authorization under a Special Use Permit from the USFWS. The upland portions of wetland easements may be developed without a permit as long as the wetland basins are avoided. However, landowners are permitted to till and farm these areas when they are not wet. No permanent impacts to these basins are allowed from construction activities for the Project. Emmons-Logan Wind is working with USFWS Refuge staff to avoid impacts to one protected basin within a USFWS wetland easement.

### **3.2 State Regulations**

North Dakota regulates waters through Section 401 water quality certification under the CWA. The North Dakota Department of Health (NDDH) is the regulatory agency that issues the Section 401 certification. The NDDH does not have a permitting program specific to wetlands, and defers to regulations under the CWA. Additionally, the North Dakota State Water Commission (SWC) is the regulatory body that permits water-related projects in the state of North Dakota. The SWC issues two types of permits relating to wetlands: a Drainage Permit and a Construction Permit. The SWC does not have a permit requirement for fill placed in a wetland.

The Drainage Permit is issued for projects that drain ponds, sloughs, lakes, wetlands, or any similar series, which has a watershed greater than 80 acres, or for a subsurface drain having an area of 80 acres or more. The Construction Permit is required if a water control structure is constructed or modified and is capable of retaining, diverting, or obstructing more than 50 acre-feet of water for dikes, other devices, and low-hazard dams, or 25 acre-feet of water for medium-hazard and high-hazard dams.

The Project does not meet the criteria for any of the SWC permits. Therefore, no SWC permit for wetlands is required for this Project.

## 4.0 WETLAND AND OTHER WATERS DELINEATION METHODS

### 4.1 Desktop Analyses

AECOM conducted a desktop analysis to identify locations where Project features (turbines, collection lines, access roads, etc.) intersected potential waters. The desktop analysis used publicly available online mapping tools, as described in this section below.

The USFWS Wetlands Mapper tool depicts wetlands mapped as part of the NWI Program. The NWI dataset identified 1,309 wetlands in the Project Area as depicted in **Figure 4-1** (USFWS 2018). The NWI wetland types included freshwater emergent wetland, freshwater forested/shrub wetland, freshwater pond, and riverine.

The NHD was utilized to identify perennial and intermittent streams, ponds, and lakes. The online database NHD Viewer tool was queried for the Project Area. The query found 80 NHD features within the Project Area as depicted in **Figure 4-1** (USGS 2018). The NHD types included lake/pond intermittent and lake/pond perennial.

The NRCS is the source for hydric soils information, as shown in **Table 2-2** in Section 2.1 of this report. Data were obtained for the Project Area and were used to cross-check against field sites that were initially observed to exhibit wetland or surface water conditions. Hydric soils were identified in the Project Area associated with NWI and NHD mapped features (**Figure 4-2**). Additionally, the WSS was queried for drainage class across the Project Area. A total of 1.08 percent of the Project Area is classified as somewhat poorly drained, poorly drained, and very poorly drained.

Due to the Project Area's rural location, no Federal Emergency Management Agency (FEMA) flood rating maps have been developed for the area (USDHS, FEMA 2018).

### 4.2 Project Micrositing

AECOM completed three separate rounds of micrositing to identify and evaluate facility siting as it relates to wetlands and water resources. Micrositing was completed in August, October, and November 2017 and April 2018. The micrositing process was conducted in the field alongside with representatives from Emmons-Logan Wind and the Project surveying team. The objective of micrositing was to identify waters and avoid siting Project features in these areas. Where possible, Project feature locations were re-located or eliminated during the micrositing process to avoid impacts to waters and reduce the number of delineations.

### 4.3 Waters Delineations

Field delineations were conducted in September, October, and November 2017 and May, June, and July 2018. The delineations were conducted in areas where Project infrastructure and survey corridors intersected wetlands. In order to provide flexibility for potential Project design changes, the survey corridor included a 600-foot diameter area around each turbine location, a 230-foot corridor around access roads, a 150-foot corridor around collection lines, and a five-acre buffer around buildings. **Table 4-1** below provides the estimated temporary and permanent disturbance areas by infrastructure type.

**Table 4-1 Project Area of Impact Assumptions**

<b>Project Component</b>	<b>Total Construction Disturbance</b>	<b>Construction Disturbance to be Reclaimed</b>	<b>Permanent Disturbance during Operations<sup>f</sup></b>
Wind Turbines <sup>a</sup>	4.5 acres per turbine	4.44 acres per turbine	0.06 acres per turbine
Access Roads <sup>b</sup>	50 feet wide per linear foot of road	34 feet wide per linear foot of road	16 feet wide per linear foot of road
Collection Lines <sup>c</sup>	50 feet wide per linear foot	50 feet wider per linear foot minus 12 feet by 8 feet per junction box	12 feet by 8 feet for each junction box
Met Towers <sup>d</sup>	1.25 acres per tower	1.25 acres per tower minus 5 square feet per tower	5 square feet per tower
Crane Paths	50 feet wide per linear foot	50 feet wide per linear foot	0 acres
O&M Building	5 acres	2 acres	3 acres
Collection Substation – 115 kV	5 acres	2 acres	3 acres
Collection Substation – 250 kV	5 acres	2 acres	3 acres
Batch Plant <sup>e</sup>	4 acres	4 acres	0 acres
Construction Laydown Area <sup>e</sup>	20 acres	20 acres	0 acres

<sup>a</sup> Construction impacts assumed a 250-foot construction radius around the turbine, which equates to approximately 4.5 acres per turbine. Impacts during operation account for an 18-foot diameter turbine base with a 20-foot buffer for the gravel pad, or 0.06 acres per turbine.

<sup>b</sup> Easement width necessary for construction based on turbine types. Temporary and permanent impacts represent a conservative estimate of disturbance. Roads required to support crane access to turbines during operation would remain up to 38 feet wide; other access roads may be built at 16 feet or reduced later to 16 feet. Access road impacts also assume all proposed roads are new access roads and do not consider improvements to existing roads separately.

<sup>c</sup> 50 feet is the average width needed for construction with a maximum width of 80 feet.

<sup>d</sup> Area of impact is 1.25 acres for one guyed tower during installation. Once installed, the tower has a 1 square-foot base plate and four 1 square-foot anchor points, or 5 square feet.

<sup>e</sup> Assumes one 4-acre batch plant and one 20-acre construction laydown area.

<sup>f</sup> Permanent disturbance during the life of the Project; following decommissioning all areas will be reclaimed per landowner preference.

Wetland delineations for the Project followed methodology from the USACE Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the USACE Wetland Delineation Manual: Great Plains Region (Version 2.0) (USACE 2010). The delineation process was utilized to document dominant vegetation, soils, and hydrology in areas of interest (i.e., areas with potential intersections between planned Project infrastructure and potential wetland ecosystems). For a site to be considered a wetland, there must be dominance by hydrophytic vegetation, presence of hydric soils, and characteristic wetland hydrology. Under normal conditions, if a sample plot lacks any of these three criteria, it is considered non-wetland. To determine these three variables, the field team designated paired sample plots, placed at discrete (typically less than 20 feet) distances from one another, for each wetland. One sample plot represented wetland conditions; the other sample plot represented upland conditions. Each sample plot featured a hand-dug soil pit averaging 16 inches in depth. The sample plot also included nested concentric sampling rings for vegetation cover and species identification, as follows:

- Herbaceous vegetation was identified within a five-foot radius of the sample plot center;
- Sapling/shrub vegetation was identified within a 15-foot radius of the sample plot center; and,
- Trees and woody vines were documented within a 30-foot radius of the sample plot center.

A Wetland Determination Data Form, specific to the Great Plains Region, was completed for each paired wetland and upland sample plot. In cases where wetlands were assessed outside of the growing season, assessed during drought conditions, or when a wetland boundary was difficult to assess, AECOM conservatively mapped the wetland boundaries to ensure no wetlands were missed.

#### 4.3.1 Hydrophytic Vegetation Indicators

The dominant vegetation at each sample plot was identified to species level and each species was assigned a wetland indicator status using the State of North Dakota 2016 Wetland Plant Lists (Lichvar et al. 2016). The field team used Wetland Plants of the Northern Great Plains (Chadde 2012) and Weeds of the West (Whitson et al. 2009) as field references for identifying unknown plant species.

Hydrophytic vegetation, or plants that are indicators of wetlands, include those species designated as obligate (OBL), facultative wetland (FACW), or facultative (FAC). As a general rule, hydrophytes dominate a sample plot when greater than 50 percent of the evaluated species are OBL, FACW, or FAC. Upland plants include those listed with facultative upland (FACU) or upland (UPL) status or plant species that are not listed (NL). Table 3 provides descriptions of these indicators.

**Table 4-2 Wetland Indicator Status**

Indicator Status	Designation	Qualitative Description
Obligate (OBL)	Hydrophyte	Almost always occur in wetlands under natural conditions (estimated probability >99%).
Facultative Wetland (FACW)	Hydrophyte	Usually occur in wetlands (estimated probability 67%-99%), but occasionally found in non-wetlands (estimated probability 1%-33%).
Facultative (FAC)	Hydrophyte	Equally likely to occur in wetlands or non-wetlands (estimated probability 34%- 66%).
Facultative Upland (FACU)	Nonhydrophyte	Usually occur in non-wetlands (estimated probability 67%-99%), but occasionally found in wetlands (estimated probability 1%-33%).
Upland (UPL)	Nonhydrophyte	Almost always occur in non-wetlands under natural conditions (estimated probability >99%).
Not Listed (NL)	Nonhydrophyte	Not listed plants are assumed to be UPL as defined in the user notes for the 2016 Wetland Plant List.

Source: Lichvar et al. 2016

#### 4.3.2 Hydric Soils Indicators

Soil from each soil pit was evaluated for hue, value, and chroma in each observable horizon using Munsell Soil Color Charts (Gretag/Macbeth 2009). Each soil horizon was also checked for texture and for the presence of redoximorphic features, depleted matrix, saturation, and other specific criteria used to document hydric conditions.

#### 4.3.3 Wetland Hydrology Indicators

One primary indicator is sufficient to conclude that wetland hydrology is present. In the absence of a primary indicator, two or more secondary indicators are required to conclude that wetland hydrology is present. For each wetland, hydrology was analyzed for all primary and secondary wetland indicators. Once established, the soil pits were left open a sufficient amount of time to allow the apparent high water

table, if present, to stabilize. Depth to surface water, water table, and saturation were recorded when present.

#### **4.3.4 Wetland Mapping**

AECOM used Trimble Geo 7X Global Positioning System (GPS) to delineate waters by walking the outer limit of visibly identifiable wetland characteristics between the paired wetland and non-wetland sample plots. The Trimble Geo 7X GPS unit provides sub-meter survey accuracy (post-processing). The field-collected data were plotted as a map layer using geographic information system (GIS) software. Additionally, the Trimble Geo 7X GPS was used to record the locations of the soil pits. Photographs of select wetlands are provided in the photographic log in **Appendix A**.

#### **4.4 Other Waters**

Since the USACE does not have a data form for other waters for the Great Plains Region, data for other waterbodies, such as streams and ponds, were recorded on an AECOM Other Waters Data Form. The data form documented the waterbody features, flow characteristics, substrate, and vegetation features. A Trimble Geo 7X GPS was used to map the OHWM in areas crossed by Project infrastructure and survey corridors.

## 5.0 WETLANDS AND OTHER WATERS RESULTS

### 5.1 Wetland Delineation Results

A total of 57 wetlands were delineated within the survey corridor. Of these delineated wetlands, three will be permanently impacted by Project infrastructure, five will be temporarily impacted by project infrastructure, and 52 will be avoided. The avoided wetlands were either within the survey corridor but outside of the planned Project footprint, or were previously in the Project footprint but the layout was modified to avoid impacts. Maps depicting the survey corridor boundary and delineated wetlands are included in **Figure 5-1**.

#### 5.1.1 Wetlands Permanently Impacted by Project Infrastructure

There are three wetlands that will be permanently impacted by Project infrastructure. These permanently impacted wetlands are the result of requests by landowners and Emmons County. Emmons-Logan Wind routed two access roads to run within existing section line county road rights-of-way (ROW). The county has yet to develop the ROW, but adjacent landowners utilize the ROW for private access, thus there are existing disturbances. The access road routes will minimize the loss and fragmentation of agricultural lands and will be located in areas that have been previously disturbed by vehicle traffic. As a result of the access road routes, the Project will permanently impact three wetlands.

**EL-B09-WETLAND** intersects an access road south of the intersection of 71<sup>st</sup> St SE and 24<sup>th</sup> Ave SE and west of turbine 106 (**Figure 5-1, Map 13**). The wetland is located along an existing section line that follows previously disturbed two-track trails between S36, T134N, and R74W and S31, T134N, and R73W (latitude: 46.384219, longitude: -99.917008). The total permanent impacts to the wetland are approximately 0.06 acres and the total temporary impacts are approximately 0.03 acres. By minimizing the permanent impacts to less than 0.10-acre and with no streams noted to flow to or from the wetland making the wetland appear isolated, this wetland does not likely meet the definition of a WOTUS, and no PCN or permit will be required. The footprint within the wetland during construction will be minimized to the maximum extent possible while still meeting site access and safety requirements. All appropriate erosion control measures will be implemented prior to installation of the crossing.

**EL-E03-WETLAND** intersects an access road north-northwest of turbine 60, along 18<sup>th</sup> Ave SE (**Figure 5-1, Map 9**). The wetland is located along an existing section line that follows previously disturbed two-track trails between S25, T134N, and R75W and S30, T134N, and R74W (latitude: 46.388748, longitude: -100.043155). A gravel section of 18<sup>th</sup> Ave SE runs through a portion of the wetland, and it is surrounded by an agricultural field. The total permanent impacts to the wetland are approximately 0.06 acres and the total temporary impacts are approximately 0.08 acres. By minimizing the permanent impacts to less than 0.10-acre and with no streams noted to flow to or from the wetland making the wetland appear isolated, this wetland does not likely meet the definition of a WOTUS, and no PCN or permit will be required. The footprint within the wetland during construction will be minimized to the maximum extent possible while still meeting site access and safety requirements. All appropriate erosion control measures will be implemented prior to installation of the crossing.

**EL-E04-WETLAND** intersects an access road north-northwest of turbine 60, along 18<sup>th</sup> Ave SE (**Figure 5-1, Map 9**). The wetland is located along an existing section line that follows previously disturbed two-track trails between S25, T134N, and R75W and S30, T134N, and R74W (latitude: 46.393018, longitude: -100.043311). A gravel section of 18<sup>th</sup> Ave SE runs through a portion of the wetland, and it is surrounded by an agricultural field and pasture land. The total permanent impact to the wetland is approximately 0.09 acres and the total temporary impacts are approximately 0.04. By minimizing the permanent impacts to less than 0.10-acre and with no streams noted to flow to or from the wetland making the wetland appear isolated, this wetland does not likely meet the definition of a WOTUS and no PCN or permit will be required. The footprint within the wetland during construction will be minimized to

the maximum extent possible while still meeting site access and safety requirements. All appropriate erosion control measures will be implemented prior to installation of the crossing.

### 5.1.2 Wetlands Temporarily Impacted by Project Infrastructure

There are five wetlands that will be temporarily impacted by Project infrastructure. These temporary impacted wetlands are the result of requested access road routes by landowners and Emmons County staff. Emmons-Logan Wind has routed two access roads to run along existing section lines that follow previously disturbed two-track trails. **Table 5-1** summarizes the delineated wetlands that will be temporarily impacted by Project infrastructure and includes the wetland identification, approximate location, likely jurisdictional status, figure map number, temporary wetland impacts (acreage), and Project infrastructure. All temporary impacts have been minimized to less than 0.10-acres per crossing.

**Table 5-1 Wetlands Temporarily Impacted by Project Infrastructure**

Wetland ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map	Temporary Wetland Impacts (acreage)	Project Infrastructure
	Latitude	Longitude				
EL-B09-WETLAND	46.384219	-99.917008	Non-Jurisdictional	13	0.03	Access road to turbine 106
EL-C09-WETLAND	46.385117	-99.914451	Non-jurisdictional	14	0.01	Access road to turbine 106
EL-E01-WETLAND	46.386686	-100.04358	Non-Jurisdictional	9	0.02	Access road along section line to turbine 60
EL-E03-WETLAND	46.388748	-100.04315	Non-Jurisdictional	9	0.08	Access road along section line to turbine 60
EL-E04-WETLAND	46.393018	-100.04331	Non-jurisdictional	9	0.04	Access road along section line to turbine 60

<sup>a</sup> Note that only the USACE can render an approved Jurisdictional Determination (JD). Jurisdiction status listed in **Table 5-1** reflects AECOM's best professional judgement. Without a USACE rendered JD, impacts to these wetlands should be avoided to the greatest extent possible.

### 5.1.3 Wetlands Not Impacted by Project Infrastructure

Wetlands that were mapped during different design phases of the Project and are either no longer intersected by current infrastructure design or are not anticipated to have temporary or permanent impacts resulting from Project construction are listed in **Table 5-2**. Impacts to these wetlands have been avoided by shifts in Project infrastructure and/or by boring collection lines under jurisdictional features, which is not regulated by the USACE.

**Table 5-2 Wetlands Not Impacted by Project Infrastructure**

Wetland ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map
	Latitude	Longitude		
EL-A01-WETLAND	46.380259	-100.080081	Non-Jurisdictional	6

Wetland ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map
	Latitude	Longitude		
EL-A02-WETLAND	46.353243	-100.047358	Non-Jurisdictional	7
EL-A03-WETLAND	46.354471	-100.047540	Non-Jurisdictional	7
EL-B03-WETLAND	46.370848	-99.952651	Non-Jurisdictional	12
EL-B08-WETLAND	46.379717	-99.917494	Non-Jurisdictional	12
EL-B10-WETLAND	46.386958	-99.917877	Non-Jurisdictional	12 and 14
EL-B11-WETLAND	46.388067	-99.917223	Non-Jurisdictional	14
EL-B12-WETLAND	46.392123	-99.917806	Non-Jurisdictional	14
EL-B13-WETLAND	46.416985	-99.917180	Non-Jurisdictional	16
EL-C01-WETLAND	46.422351	-99.944502	Non-Jurisdictional	17
EL-C06-WETLAND	46.406111	-99.903387	Non-Jurisdictional	15
EL-C07-WETLAND	46.399666	-99.905473	Non-Jurisdictional	15
EL-C08-WETLAND	46.394638	-99.910993	Non-Jurisdictional	15
EL-C10-WETLAND	46.379121	-99.916805	Non-Jurisdictional	12
EL-C17-WETLAND	46.422079	-99.940606	Non-Jurisdictional	17
EL-C18-WETLAND	46.368971	-99.952520	Non-Jurisdictional	12
EL-C19-WETLAND	46.373500	-99.874717	Non-Jurisdictional	14
EL-C21-WETLAND	46.370917	-99.998128	Non-Jurisdictional	11
EL-C24-WETLAND	46.371923	-100.039462	Non-Jurisdictional	8
EL-C25-WETLAND	46.369527	-100.043673	Non-Jurisdictional	8
EL-C27-WETLAND	46.351958	-100.052744	Non-Jurisdictional	7
EL-C28-WETLAND	46.355622	-100.058436	Non-Jurisdictional	7
EL-C29-WETLAND	46.355939	-100.100085	Non-Jurisdictional	5
EL-C30-WETLAND	46.362072	-100.116677	Non-Jurisdictional	5
EL-C31-WETLAND	46.363728	-100.117895	Non-Jurisdictional	5
EL-C32-WETLAND	46.365048	-100.119980	Non-Jurisdictional	5
EL-C34-WETLAND	46.341798	-99.997472	Non-Jurisdictional	10
EL-C35-WETLAND	46.341025	-99.991473	Non-Jurisdictional	10

Wetland ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map
	Latitude	Longitude		
EL-C52-WETLAND	46.377872	-99.961950	Non-Jurisdictional	12
EL-C58-WETLAND	46.383910	-100.030323	Non-Jurisdictional	9
EL-C59-WETLAND	46.384597	-100.027012	Non-Jurisdictional	9
EL-C60-WETLAND	46.385378	-100.024199	Non-Jurisdictional	9
EL-C65-WETLAND	46.390931	-100.092566	Non-Jurisdictional	4
EL-C66-WETLAND	46.389221	-100.093339	Non-Jurisdictional	4
EL-C67-WETLAND	46.387938	-100.093397	Non-Jurisdictional	4
EL-C68-WETLAND	46.386520	-100.091863	Non-Jurisdictional	4 and 6
EL-C75-WETLAND	46.389940	-100.149969	Non-Jurisdictional	1
EL-C78-WETLAND	46.413686	-100.124659	Non-Jurisdictional	2
EL-C81-WETLAND	46.412265	-100.107687	Non-Jurisdictional	2
EL-C82-WETLAND	46.411952	-100.106212	Non-Jurisdictional	2
EL-C83-WETLAND	46.374009	-100.126275	Non-Jurisdictional	3
EL-C84-WETLAND	46.358548	-100.101140	Non-Jurisdictional	5
EL-C85-WETLAND	46.409609	-99.927203	Non-Jurisdictional	16
EL-D01-WETLAND	46.413346	-99.918223	Non-Jurisdictional	16
EL-D02-WETLAND	46.379908	-99.918128	Non-Jurisdictional	12
EL-D03-WETLAND	46.371529	-99.95155	Non-Jurisdictional	12
EL-D04-WETLAND	46.371499	-99.952809	Non-Jurisdictional	12
EL-D05-WETLAND	46.369817	-99.992316	Non-Jurisdictional	11
EL-D06-WETLAND	46.371606	-100.124068	Non-Jurisdictional	3
EL-D07-WETLAND	46.397774	-100.15916	Non-Jurisdictional	1
EL-E02-WETLAND	46.387693	-100.044114	Non-Jurisdictional	9
EL-E05-WETLAND	46.394737	-100.043041	Non-Jurisdictional	9

<sup>a</sup> Note that only the USACE can render an approved Jurisdictional Determination (JD). Jurisdiction status listed in **Table 5-1** reflects AECOM's best professional judgement. Without a USACE rendered JD, impacts to these wetlands should be avoided to the greatest extent possible.

## 5.2 Other Waters

### 5.2.1 Streams

A total of two streams were mapped within the survey corridor. Of these delineated streams, none will be permanently impacted by Project infrastructure, one will be temporarily impacted by Project infrastructure, and one will not be impacted by Project infrastructure. The streams that will not be impacted are either within the survey corridor but outside of the planned Project footprint, or were previously in the Project footprint but the layout was modified to avoid impacts. Maps depicting the survey corridor boundary and delineated streams are included in **Figure 5-1**. Each delineated stream appears to be isolated and that activities in the watershed (farming, land leveling, roads, etc.) have removed upslope draining and downslope connectivity to the Missouri River. The Missouri River is considered a traditional navigable water (TNW) by the USACE.

The flow regime of a stream describes how often it contains flowing water. Perennial streams contain flowing water for the whole year. Intermittent streams flow in response to both precipitation events and from spring sources; this flow is typically not year-long. Ephemeral streams flow only in response to precipitation events and, as such, are more often dry than flowing. The OHWM was measured where the stream was to be crossed by planned elements of the Project infrastructure.

#### 5.2.1.1 Streams Temporarily Impacted by Project Infrastructure

There will be one stream crossing temporarily impacted by Project infrastructure. **Table 5-3** summarizes the delineated stream that will be temporarily impacted by Project infrastructure and includes the stream identification, approximate location, likely jurisdictional status, figure map number, temporary wetland impacts (acreage), and Project infrastructure. All temporary impacts are less than 0.10-acre.

**Table 5-3 Streams Temporarily Impacted by Project Infrastructure**

Stream ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map	Temporary Stream Impacts (acreage)	Project Infrastructure
	Latitude	Longitude				
EL-C02-STREAM	46.410067	-100.12159	Non-Jurisdictional	2	0.05	Crane path between turbine 5 and turbine 6, collection line will be bored.

<sup>a</sup> Note that only the USACE can render an approved Jurisdictional Determination (JD). Jurisdiction status listed in **Table 5-1** reflects AECOM's best professional judgement of Jurisdictional WOTUS. Without a USACE rendered JD, impacts to these wetlands should be avoided to the greatest extent possible.

#### 5.2.1.2 Streams Not Impacted by Project Infrastructure

Streams that were mapped during different design phases of the Project and are either no longer intersected by current infrastructure design or are not anticipated to have temporary or permanent impacts resulting from Project construction are listed in **Table 5-4**. Impacts to these streams have been avoided by shifts in Project infrastructure and/or by boring collection lines under jurisdictional features, which is not regulated by the USACE.

**Table 5-4 Streams Not Impacted by Project Infrastructure**

Stream ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map
	Latitude	Longitude		
EL-C01-STREAM	46.393299	-100.093112	Non-Jurisdictional	4

<sup>a</sup> Note that only the USACE can render an approved Jurisdictional Determination (JD). Jurisdiction status listed in **Table 5-1** reflects AECOM's best professional judgement. Without a USACE rendered JD, impacts to these wetlands should be avoided to the greatest extent possible.

### 5.2.2 Ponds

A total of two ponds were mapped within the survey corridor. Of these delineated ponds, none will be permanently impacted by Project infrastructure. The ponds were previously within the Project footprint; however, the layout was modified to avoid impacts. The ponds are now located outside of the planned Project footprint and impacts are not anticipated. Maps depicting the survey corridor boundary and delineated ponds are included in **Figure 5-1**.

Most ponds were, or are currently, used in support of agricultural operations. The likely jurisdictional status of each pond was determined based on connectivity to a stream feature that drains into a TNW. **Table 5-5** summarizes the delineated ponds and includes the stream identification, approximate location, likely jurisdictional status, and figure map number.

**Table 5-5 Ponds Not Impacted by Project Infrastructure**

Pond ID	Approximate Location		Jurisdiction <sup>a</sup>	Figure 5-1, Map
	Latitude	Longitude		
EL-C01-POND	46.389987	-99.937345	Non-Jurisdictional	4
EL-C02-POND	46.391635	-100.093614	Non-Jurisdictional	2

<sup>a</sup> Note that only the USACE can render an approved Jurisdictional Determination (JD). Jurisdiction status listed in **Table 5-1** reflects AECOM's best professional judgement. Without a USACE rendered JD, impacts to these wetlands should be avoided to the greatest extent possible.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

The Project Area was analyzed for waters, including those potentially under jurisdiction of the USACE (i.e., WOTUS), which include: 1) TNWs, 2) wetlands adjacent to TNWs, 3) non-navigable tributaries of TNWs that are relatively permanent (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally), 4) wetlands that directly abut such tributaries, and 5) water bodies that have a significant biological, chemical, and/or physical nexus with a TNW (USACE 2007). No potential WOTUS were delineated within the survey corridor as none have a significant biological, chemical, or physical nexus to the Missouri River, which the USACE classifies as the nearest TNW.

### 6.1 Waters Impacts

In response to requests by landowners and Emmons County, Emmons-Logan Wind routed two access roads to run within existing section line county road ROW. The county has yet to develop the ROW, but adjacent landowners utilize the ROW for private access, thus there are existing disturbances. The access road routes will minimize the loss and fragmentation of agricultural lands and will be located in areas that have been previously disturbed by vehicle traffic. As a result of the access road routes, the Project will permanently and temporarily impact five wetlands.

One stream will be temporarily impacted by a crane path between turbine five and turbine six. The collection line between the turbines will be bored. No additional streams or ponds will be impacted by Project infrastructure.

### 6.2 Permitting and Recommendations

The USACE NWP 12: Utility Line Activities and 14: Linear Transportation Projects, authorize the discharge of dredged or fill material into non-tidal WOTUS given that there is not a loss of greater than one-half acre of WOTUS for any "single and complete project." Each crossing of a wetland or waterbody at separate and distant locations is considered a "single and complete project" for purposes of NWP 12 or 14 authorization. A PCN is not required under NWP 12 for all permanent impacts less than 0.10 acres. Similarly, a PCN is not required for NWP 14 for all stream and pond impacts less than 0.10 acres. Since each of the five access road crossings are under 0.10 acres, a PCN is not anticipated. However, since impacts cannot be avoided for each of the five service road crossings, Emmons-Logan Wind will request a Jurisdictional Determination (JD) from the USACE to determine if the crossing would impact WOTUS and require a PCN if impacts are expected to exceed 0.10 acres at any crossing.

Coverage under the NDDH National Pollution Discharge Elimination System (NPDES) general construction permit will be obtained prior to the start of construction. The accompanying Stormwater Pollution Prevention Plan (SWPPP) will address construction within and around waters and will outline BMPs to prevent and minimize impacts wherever possible.

The USACE in particular emphasizes the following measures to minimize impacts to WOTUS:

- Use mats or other measures to minimize soil disturbance in jurisdictional areas;
- Ensure no temporary fills remain in jurisdictional areas; and
- Any affected jurisdictional areas be returned to pre-construction contours and the affected areas be revegetated.

AECOM also recommends the following construction BMPs during construction to further avoid and minimize impacts to all waters:

- Avoid and/or minimize impacting drainage features such as ditches, culverts, levees, tiles, and terraces;
- Access road construction should be to the minimum necessary to perform the work;
- All crossings should be designed to maintain low flows for aquatic species movement and designed to function during high flows; and
- Work should occur during periods of low flow or no flow.

## 7.0 LITERATURE CITED

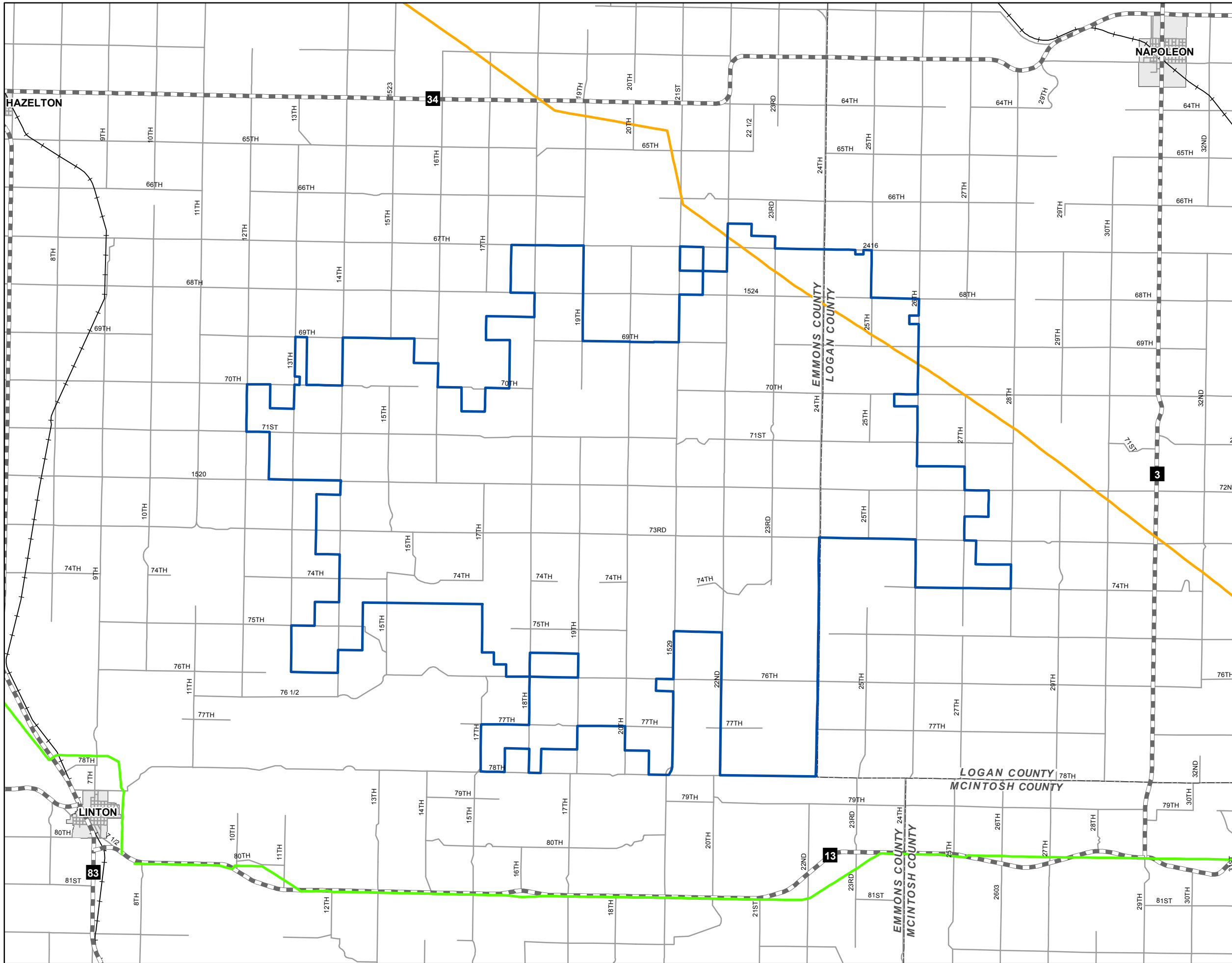
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## 8.0 ACRONYMS AND ABBREVIATIONS

BMPs	best management practices
CFR	Code of Federal Regulations
CWA	Clean Water Act
Emmons-Logan Wind	Emmons-Logan Wind, LLC
FAC	facultative
FACU	facultative upland
FACW	facultative wetland
FEMA	Federal Emergency Management Agency
GPS	Global Positioning System
JD	Jurisdictional Determination
kV	kilovolt
NDDH	North Dakota Department of Health
NEER	NextEra Energy Resources, LLC
NHD	National Hydrography Dataset
NL	not listed
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWP	Nationwide Permit
OBL	obligate
OHWM	ordinary high water mark
PCN	Pre-Construction Notification
PEMA	palustrine, emergent, temporarily flooded
PEMC	palustrine, emergent, seasonally flooded
Project	Emmons-Logan Wind Energy Center
ROW	rights-of-way
SWC	North Dakota State Water Commission
SWPPP	Stormwater Pollution Prevention Plan
TNWs	Traditional Navigable Waters
UPL	upland
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDHS	United States Department of Homeland Security
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WETS	Climate Analysis for Wetlands
WOTUS	waters of the United States
WSS	Web Soil Survey

## Figures

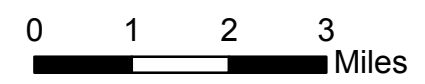


**Legend**

- Existing 115 kV Transmission Line
- Existing 230 kV Heskett-Wishek Transmission Line
- Municipal Boundary
- County Boundary
- State Highway
- County Road
- Railroad

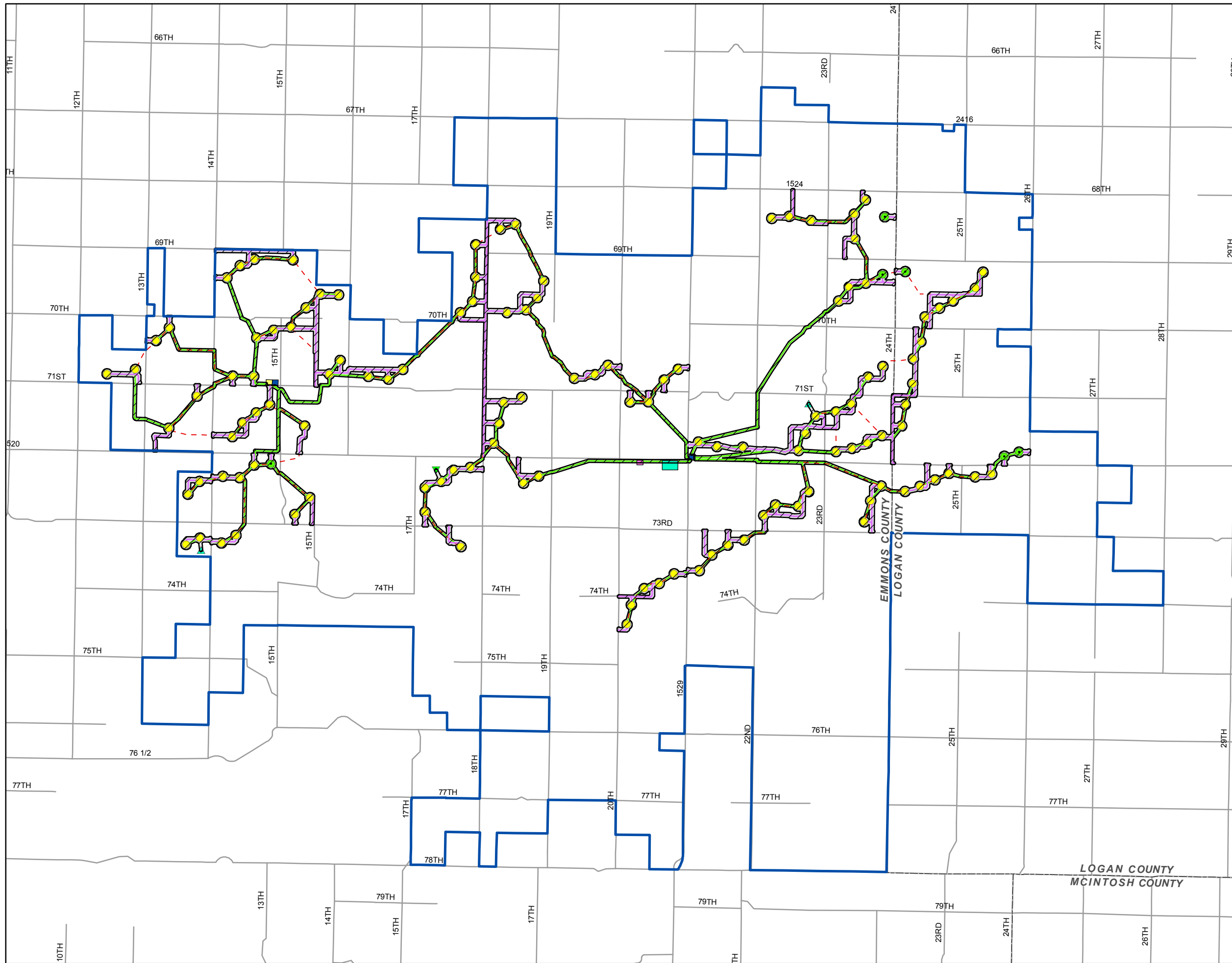
**Project Features**

- Emmons-Logan Wind Energy Center Project Area

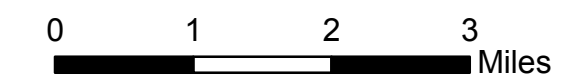


**Figure 1-1**  
**Project Area**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**



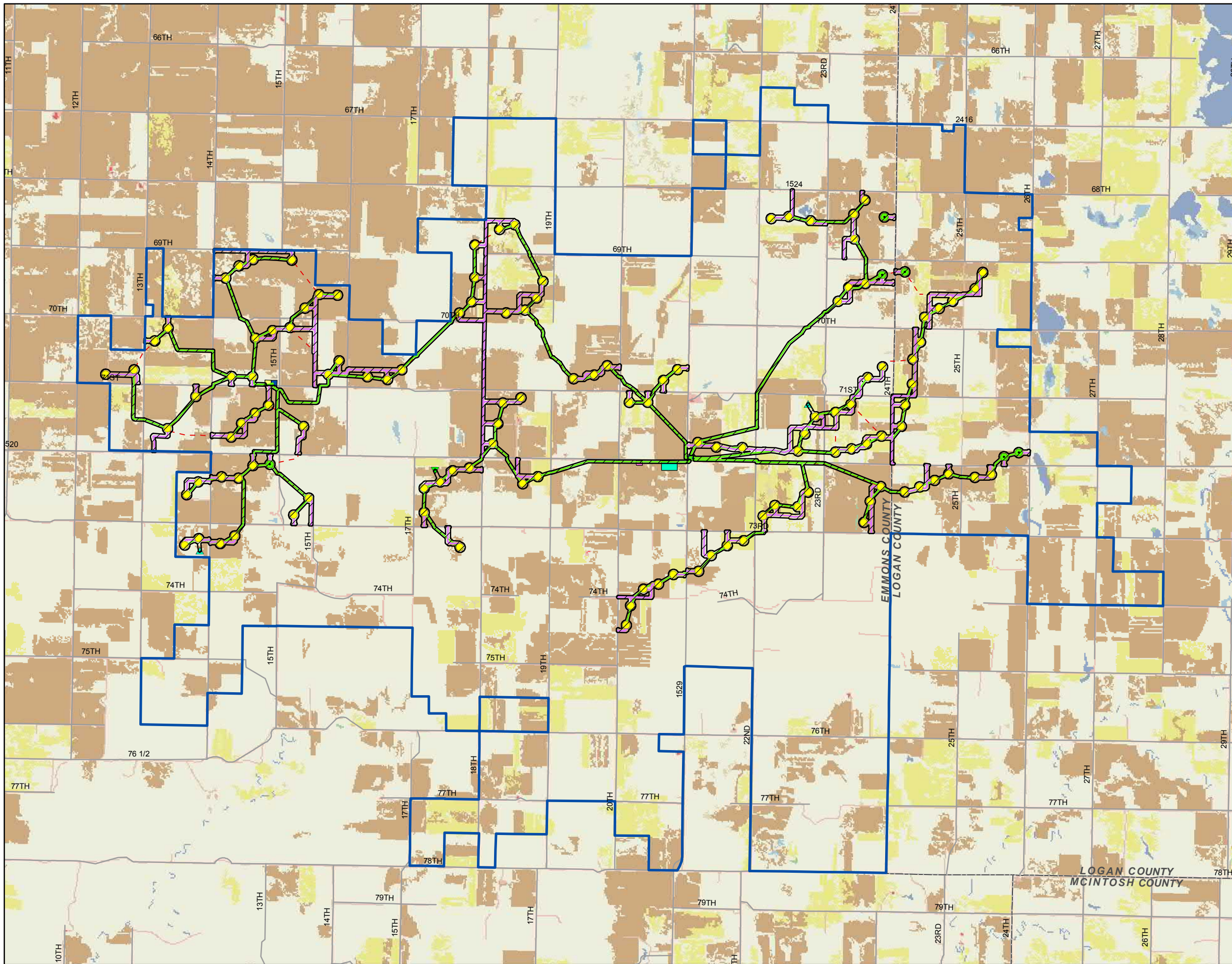


- Legend**
- County Boundary
  - County Road
- Project Features**
- Emmons-Logan Wind Energy Center Project Area
  - Turbine
  - Alternative Turbine
  - Met Tower
  - Alternative Met Tower
  - Service Road
  - Crane Path
  - Collection Line
  - Construction Easement
  - Proposed Substation
  - Proposed O&M Building
  - Proposed Batch Plant
  - Proposed Laydown Yard



**Figure 1-2**  
**Project Layout**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**





**Legend**

- County Road
- County Boundary

**Project Features**

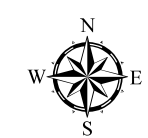
- Emmons-Logan Wind Energy Center Project Area
- Turbine
- Alternative Turbine
- Met Tower
- Alternative Met Tower
- Service Road
- Crane Path
- Collection Line
- Construction Easement
- Proposed Substation
- Proposed O&M Building
- Proposed Batch Plant
- Proposed Laydown Yard

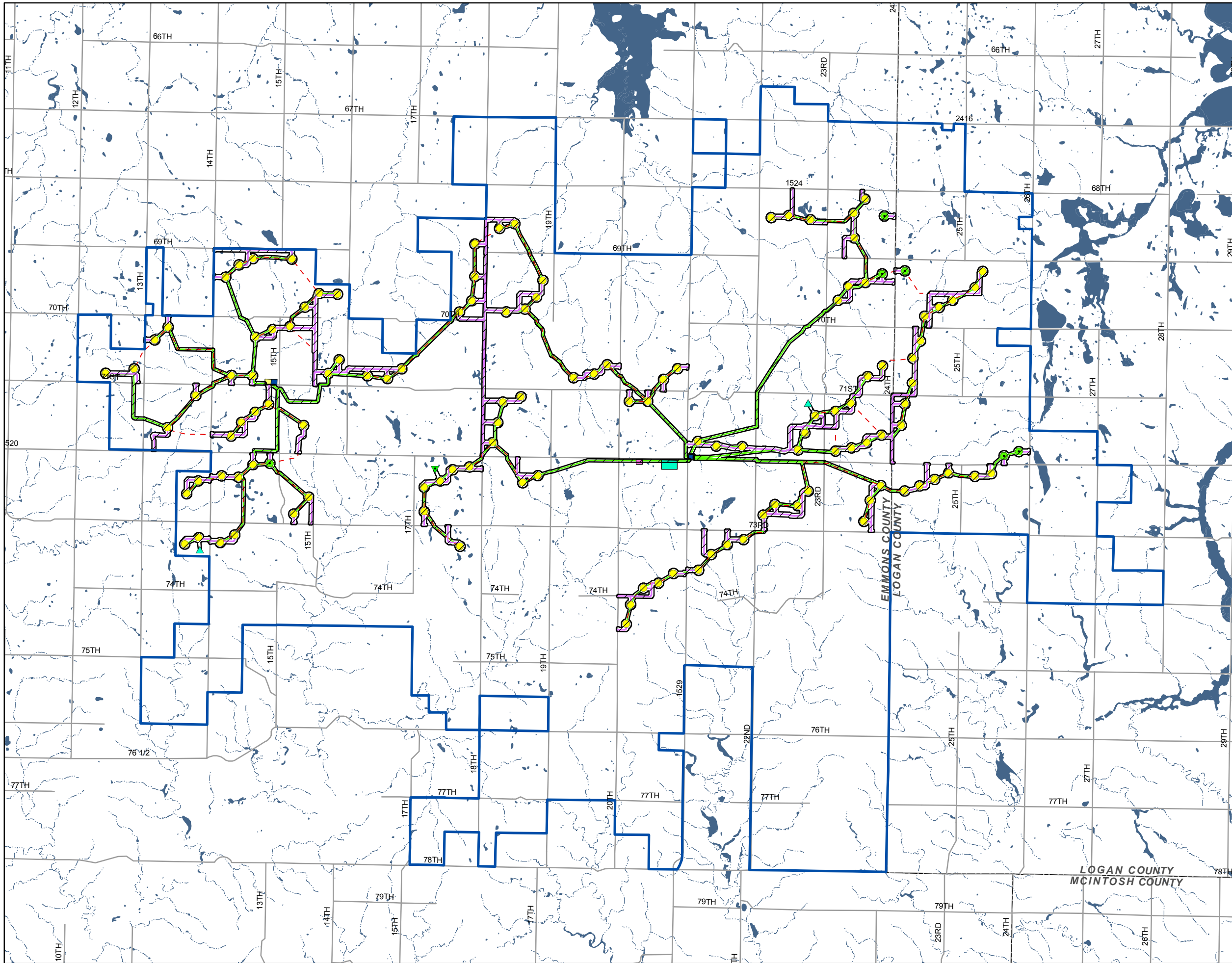
**NLCD Land Cover (Homer et al. 2015)**

Barren Land (Rock/Sand/Clay)	Developed, Open Space
Cultivated Crops	Emergent Herbaceous Wetlands
Deciduous Forest	Grassland/ Herbaceous
Developed, High Intensity	Open Water
Developed, Low Intensity	Pasture/Hay
Developed, Medium Intensity	Shrub/Scrub
	Woody Wetlands

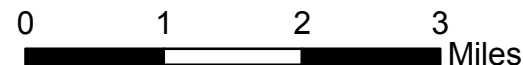
0 1 2 3 Miles

**Figure 2-1**  
**Land Cover**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**



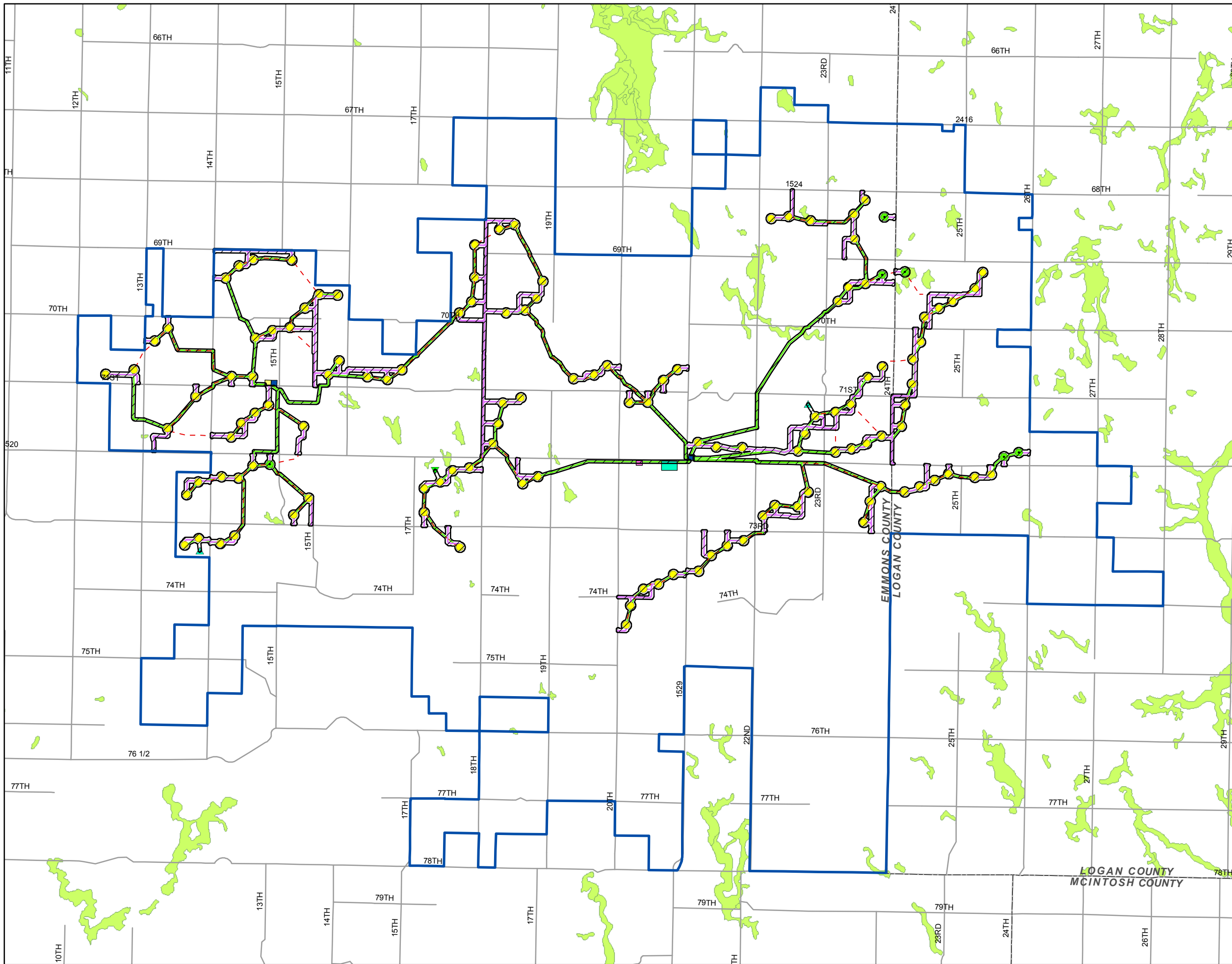


- Legend**
- County Boundary
  - County Road
  - National Wetlands Inventory (USFWS 2018)
  - National Hydrography Dataset (USGS 2018)
- Project Features**
- Emmons-Logan Wind Energy Center Project Area
  - Turbine
  - Alternative Turbine
  - Met Tower
  - Alternative Met Tower
  - Service Road
  - Crane Path
  - Collection Line
  - Construction Easement
  - Proposed Substation
  - Proposed O&M Building
  - Proposed Batch Plant
  - Proposed Laydown Yard

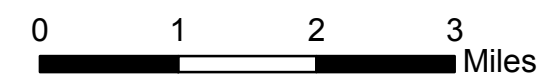


**Figure 4-1**  
**National Wetlands Inventory and Surface Waters**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**



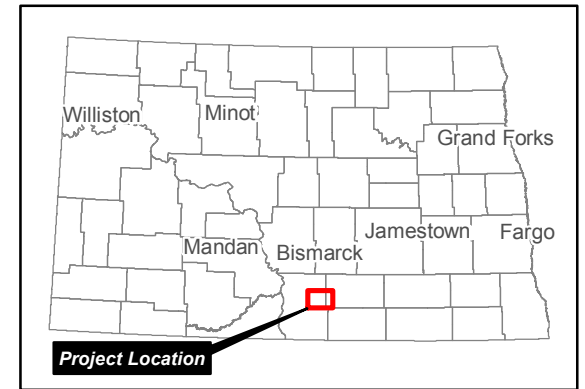
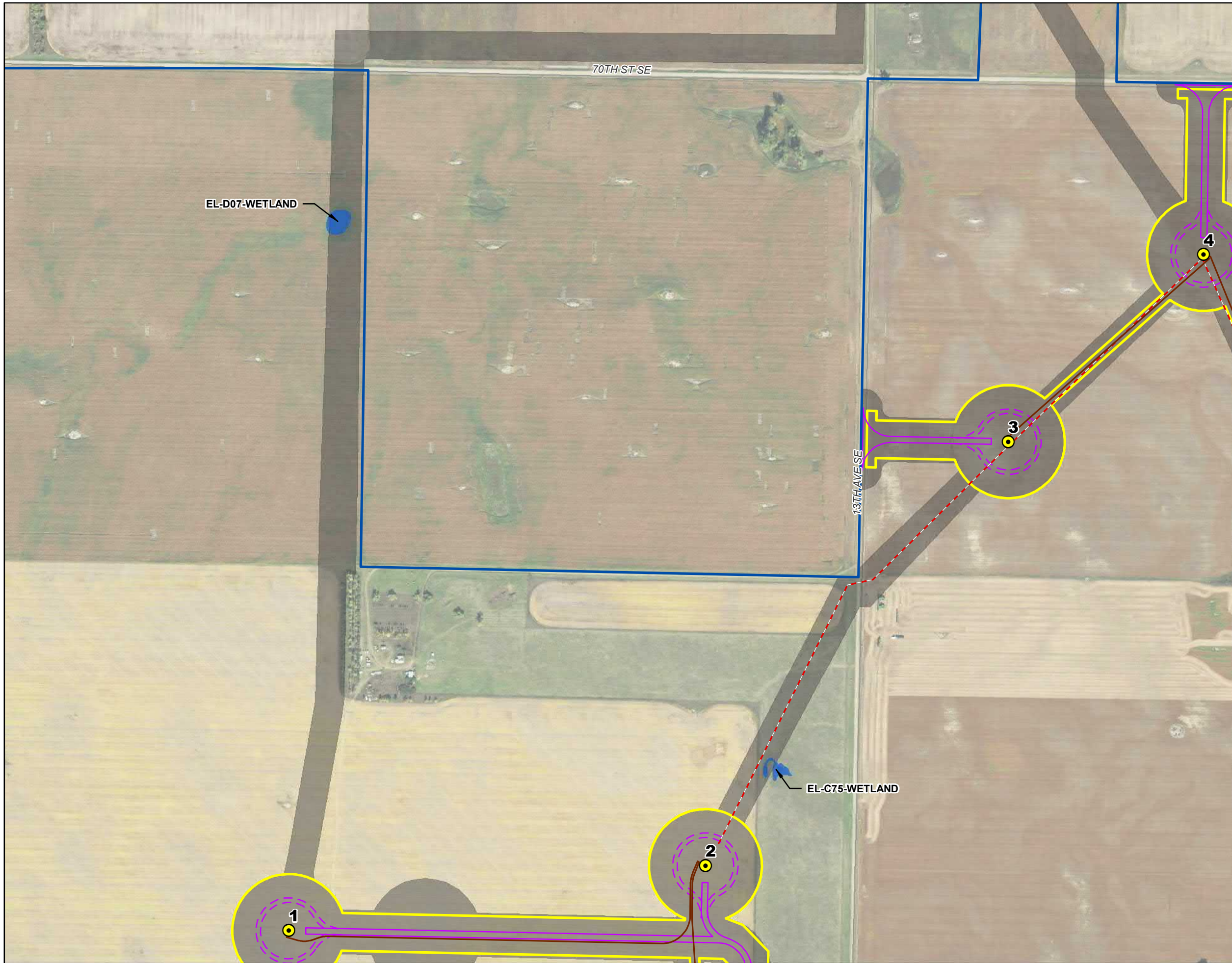


- Legend**
- County Boundary
  - County Road
  - Hydric Soils
- Project Features**
- Turbine
  - Alternative Turbine
  - Met Tower
  - Alternative Met Tower
  - Service Road
  - Crane Path
  - Collection Line
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Proposed Substation
  - Proposed O&M Building
  - Proposed Batch Plant
  - Proposed Laydown Yard

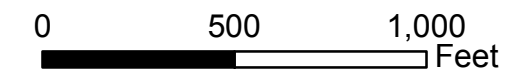
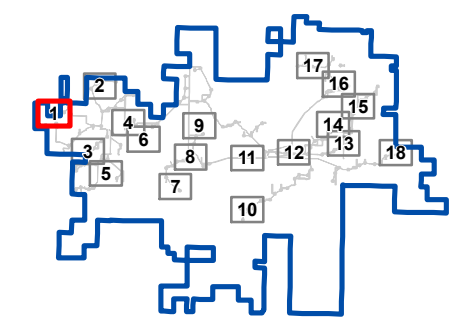


**Figure 4-2**  
**Hydric Soils**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**

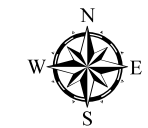


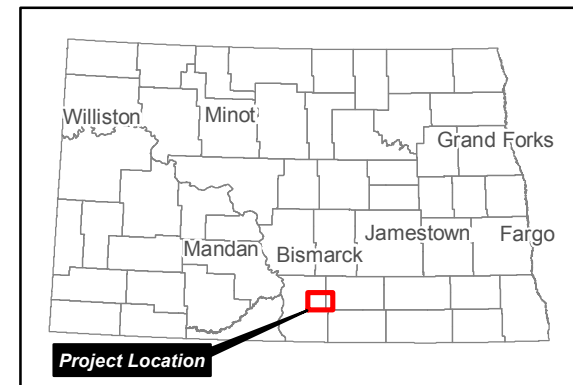
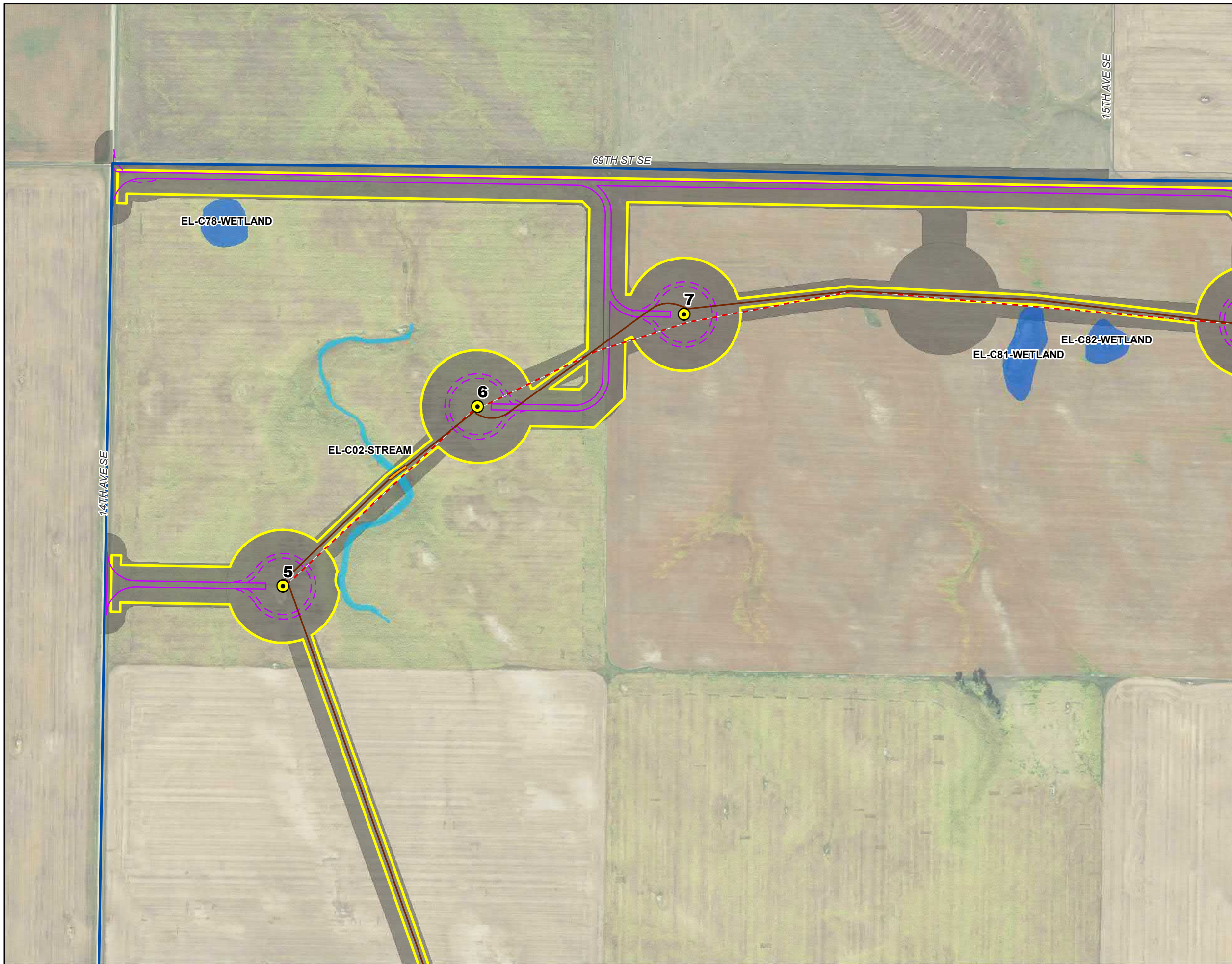


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

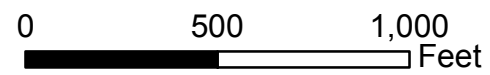
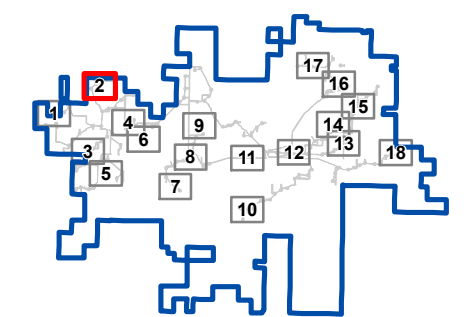


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 1 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

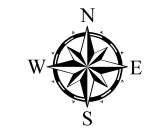


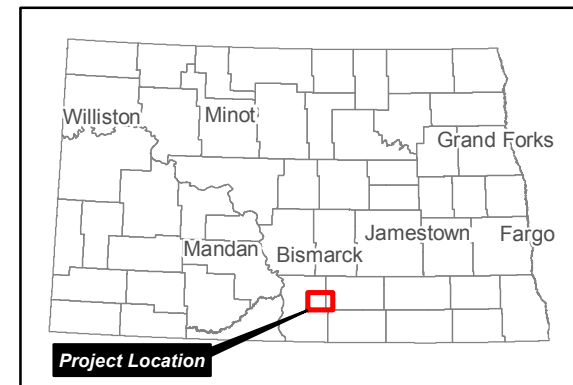
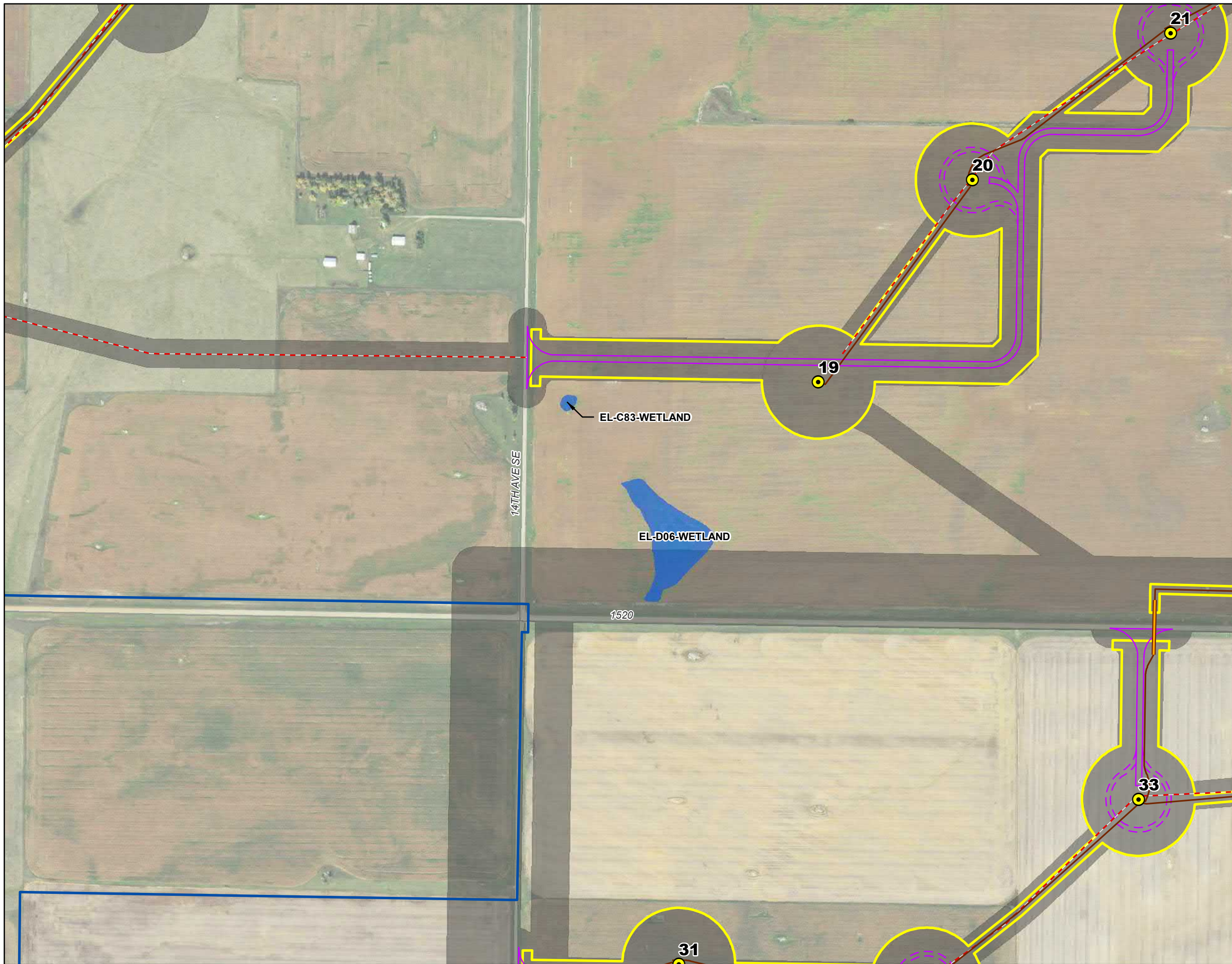


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

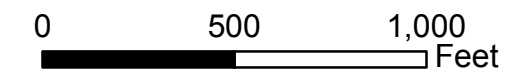
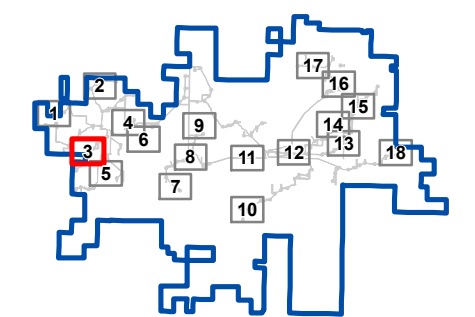


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 2 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

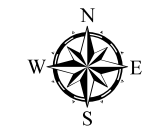


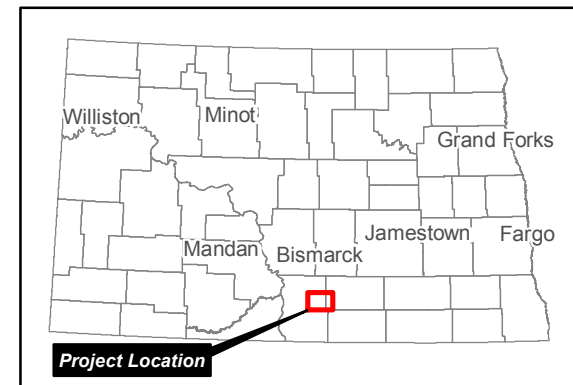
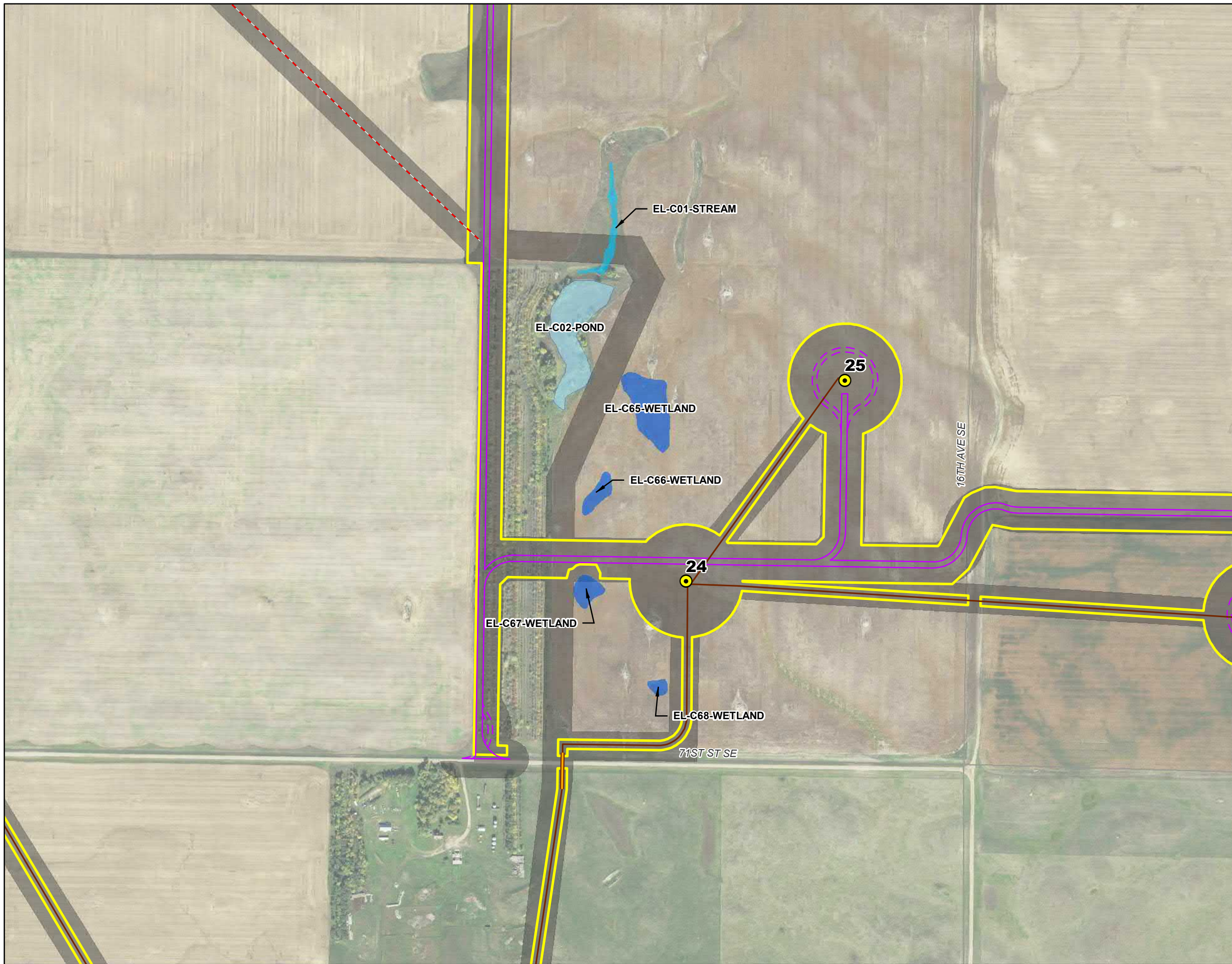


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor



**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 3 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND





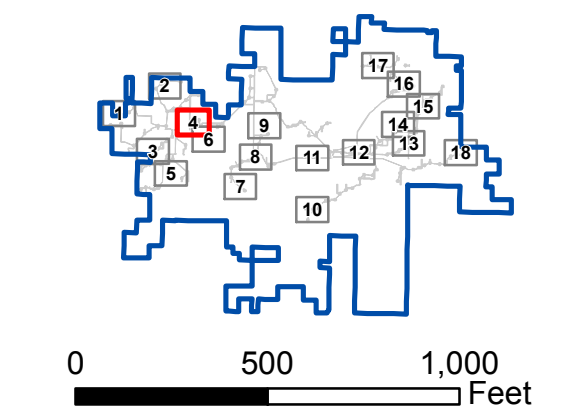
**Legend**

**Delineated Wetlands and Other Waters**

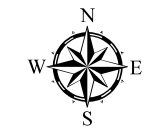
- Pond
- Stream
- Wetland
- USFWS Wetland Easement

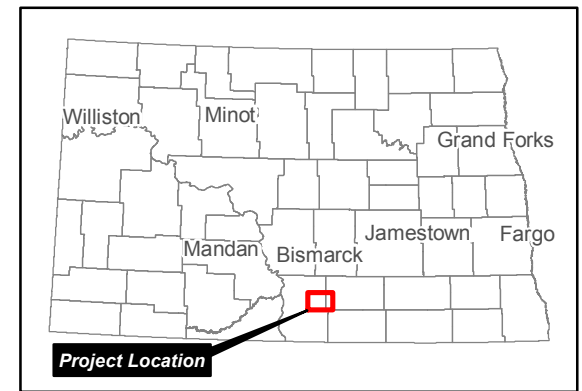
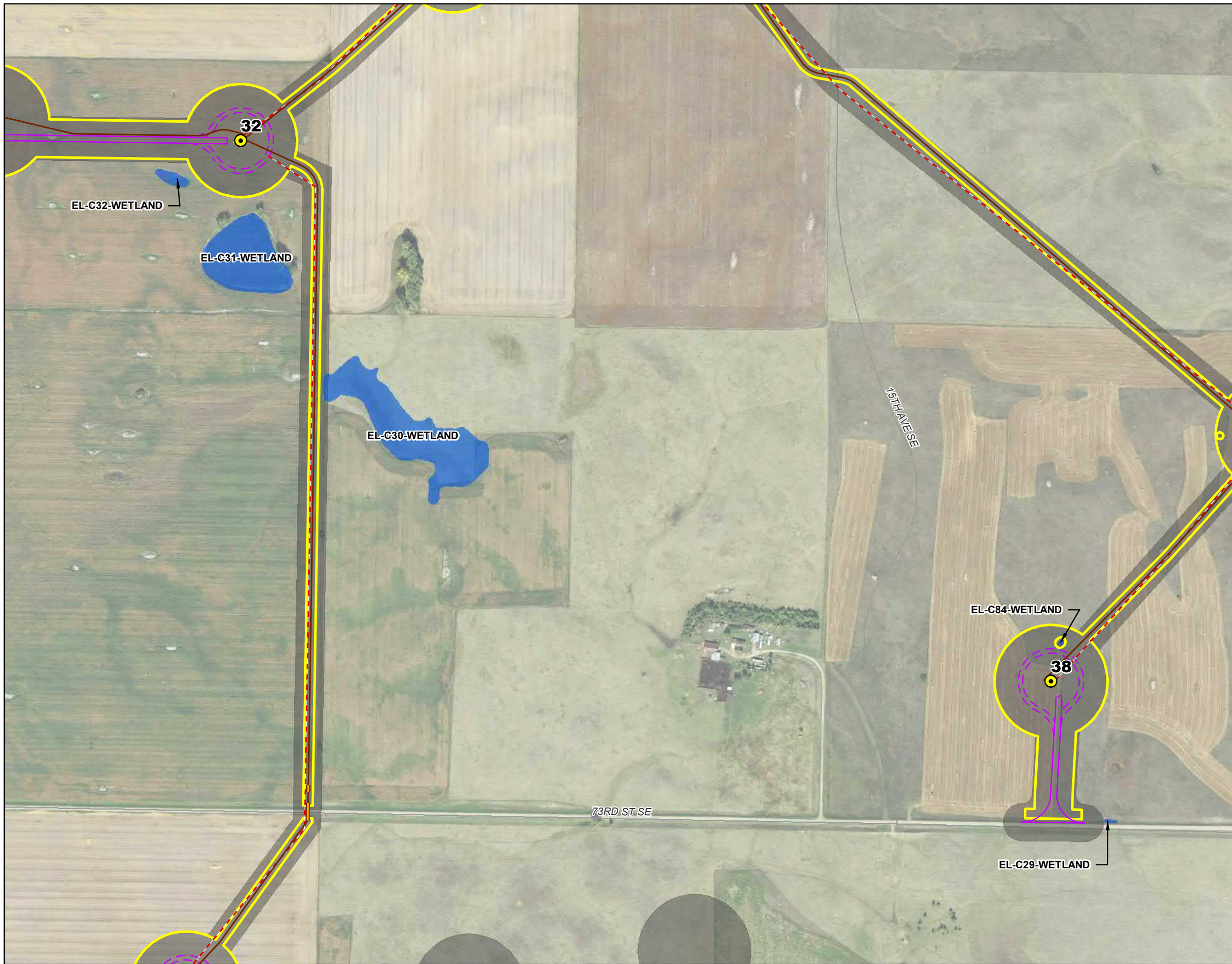
**Project Features**

- Proposed Turbine
- Service Road
- Temporary Service Road
- Turnaround
- Crane Path
- Collection Line
- Collection Line Bore Location
- Emmons-Logan Wind Energy Center Project Area
- Construction Easement
- Survey Corridor

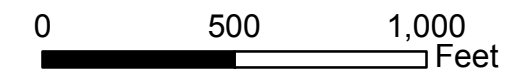
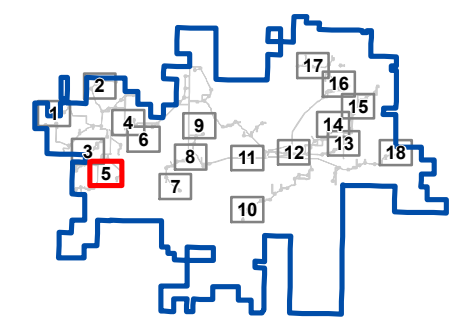


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 4 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

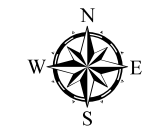


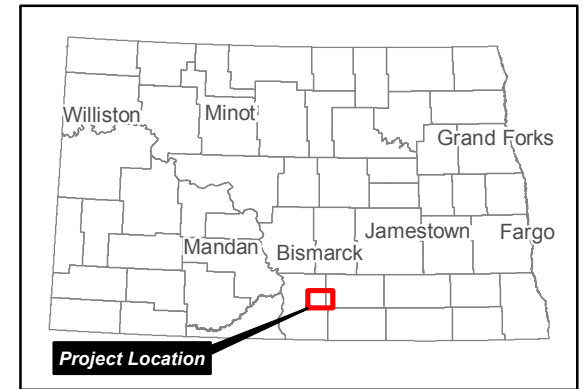
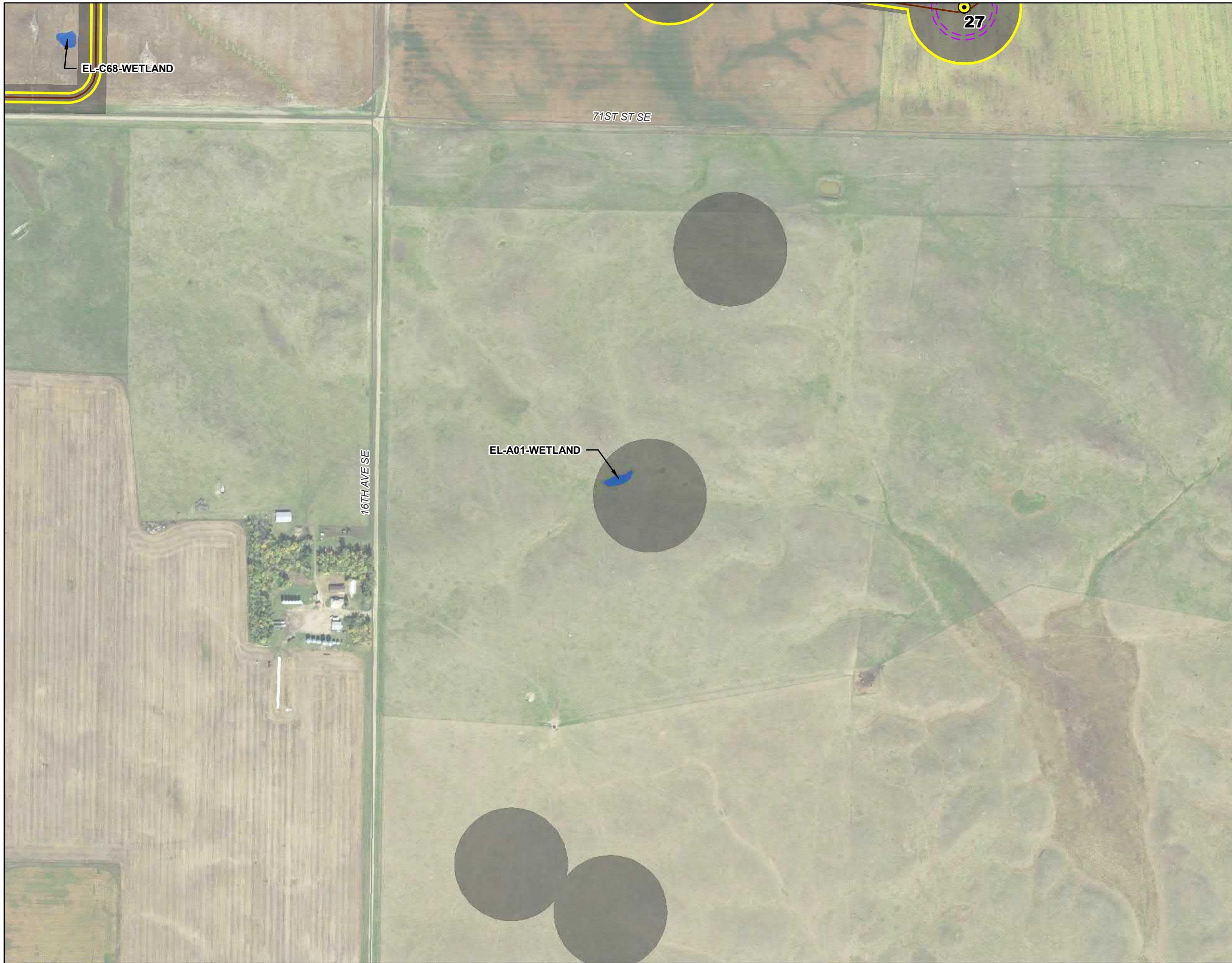


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

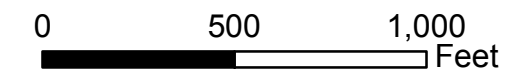
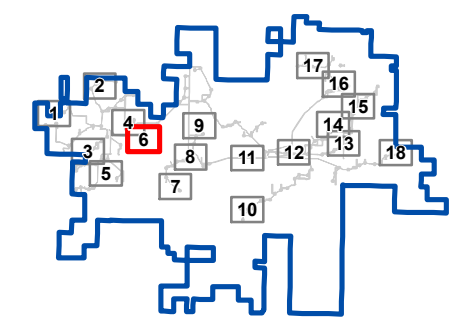


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 5 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

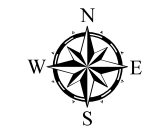


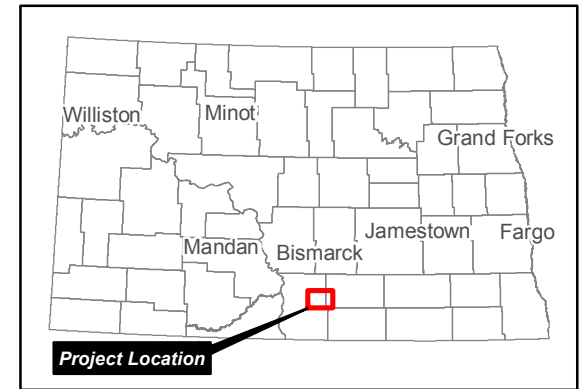
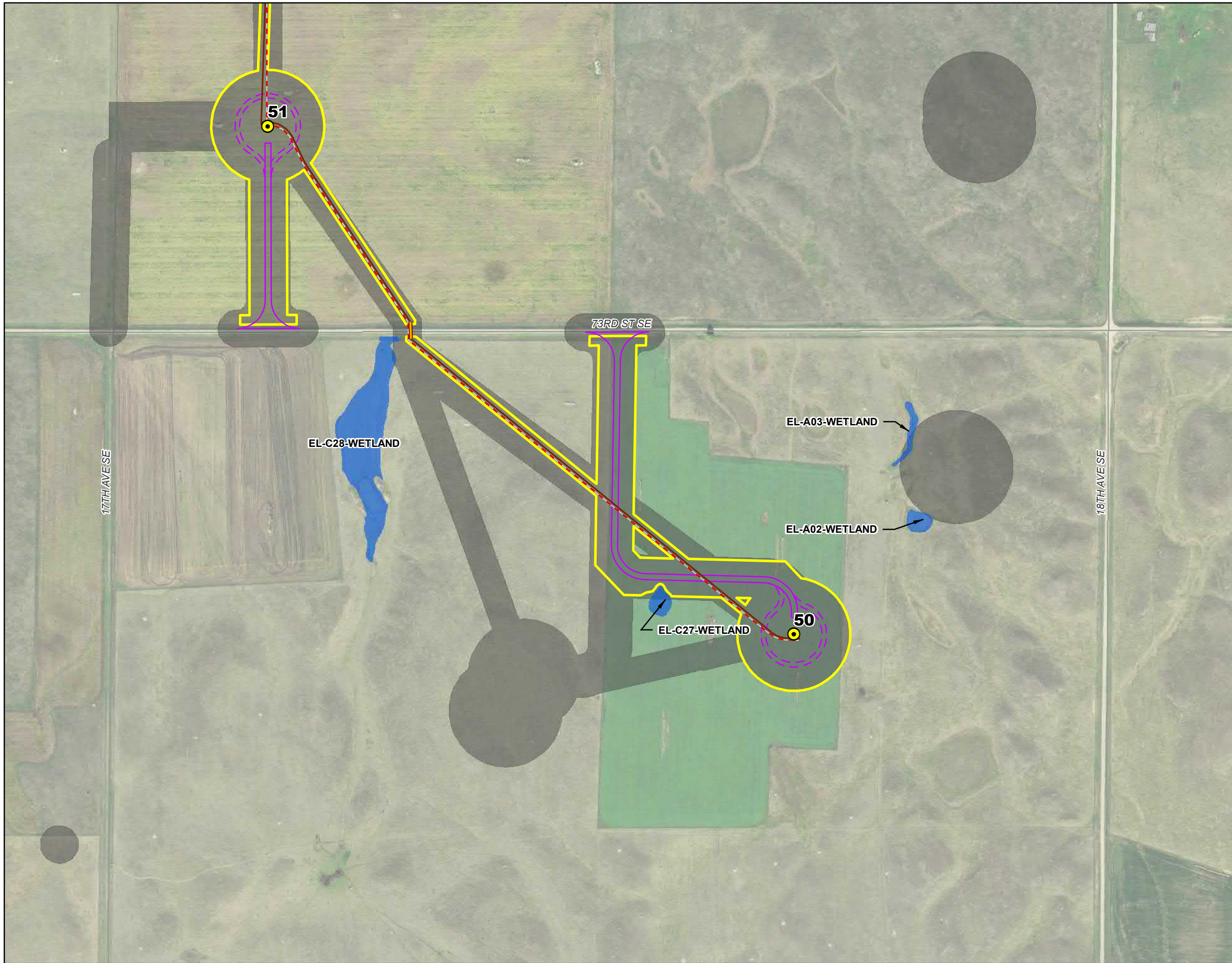


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Temporary Service Road Turnaround
  - Crane Path
  - Collection Line
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

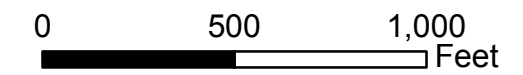
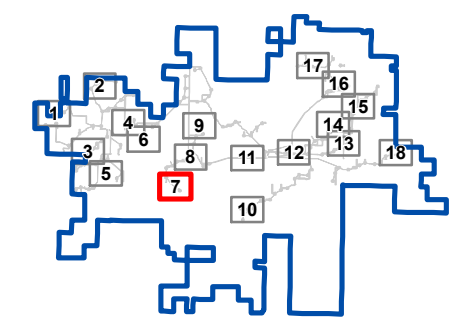


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 6 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

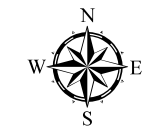


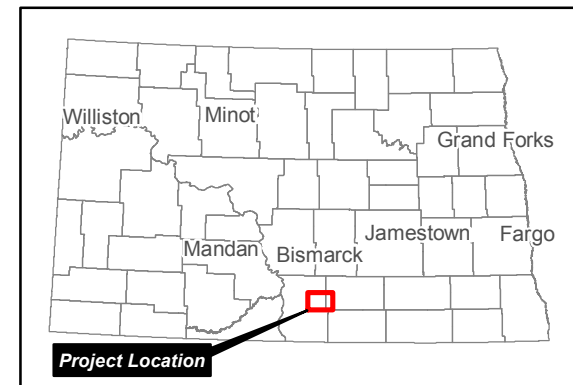
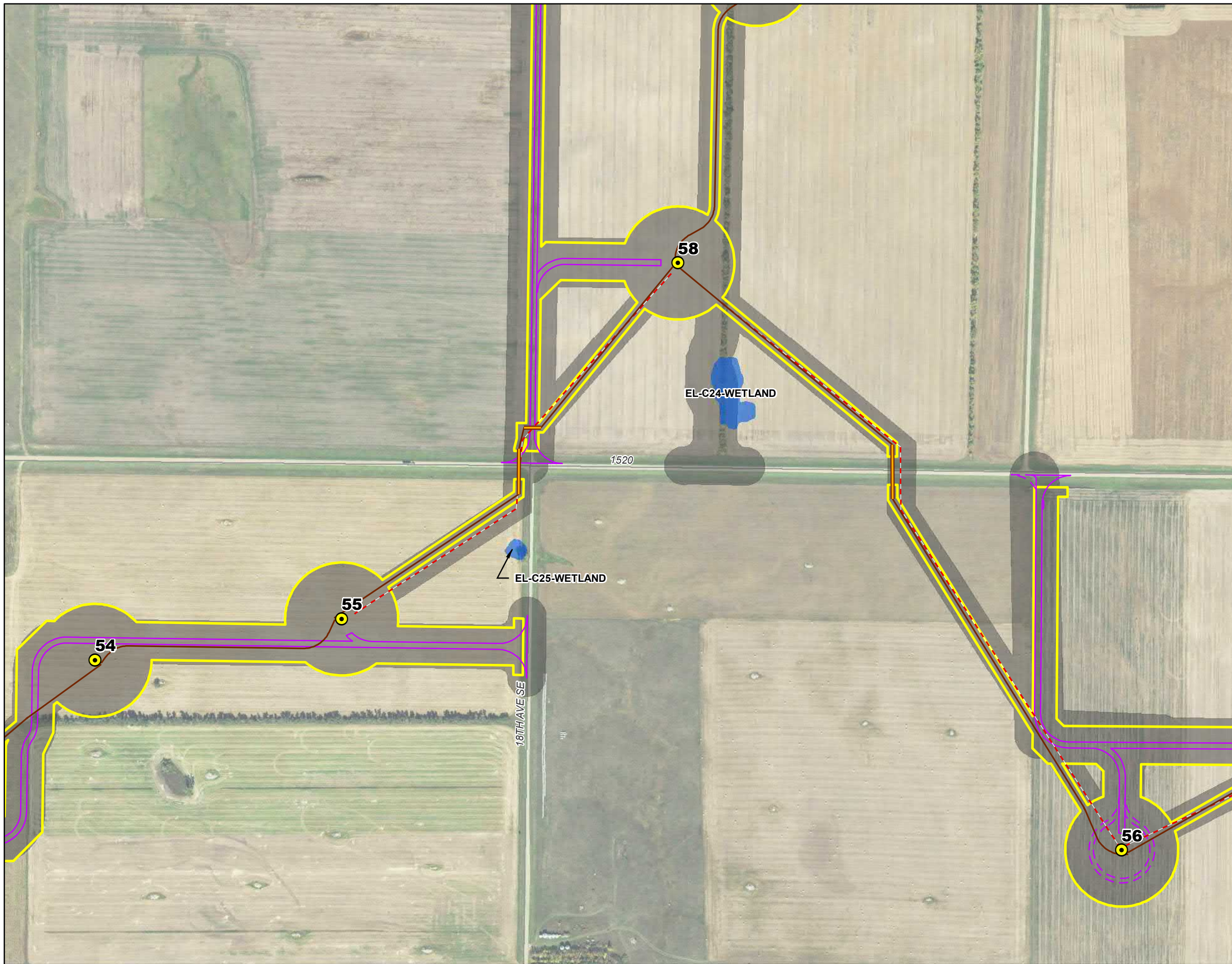


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

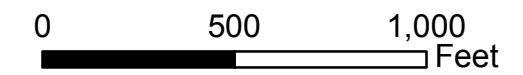
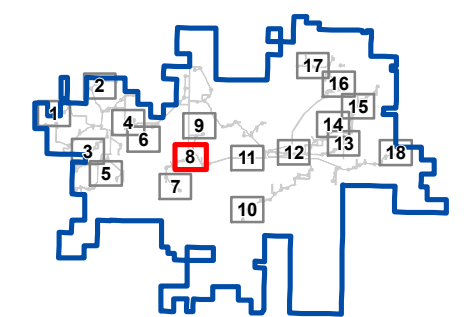


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 7 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

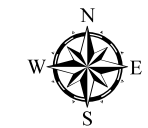


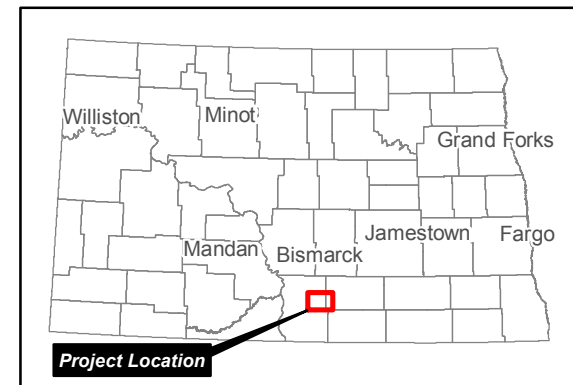
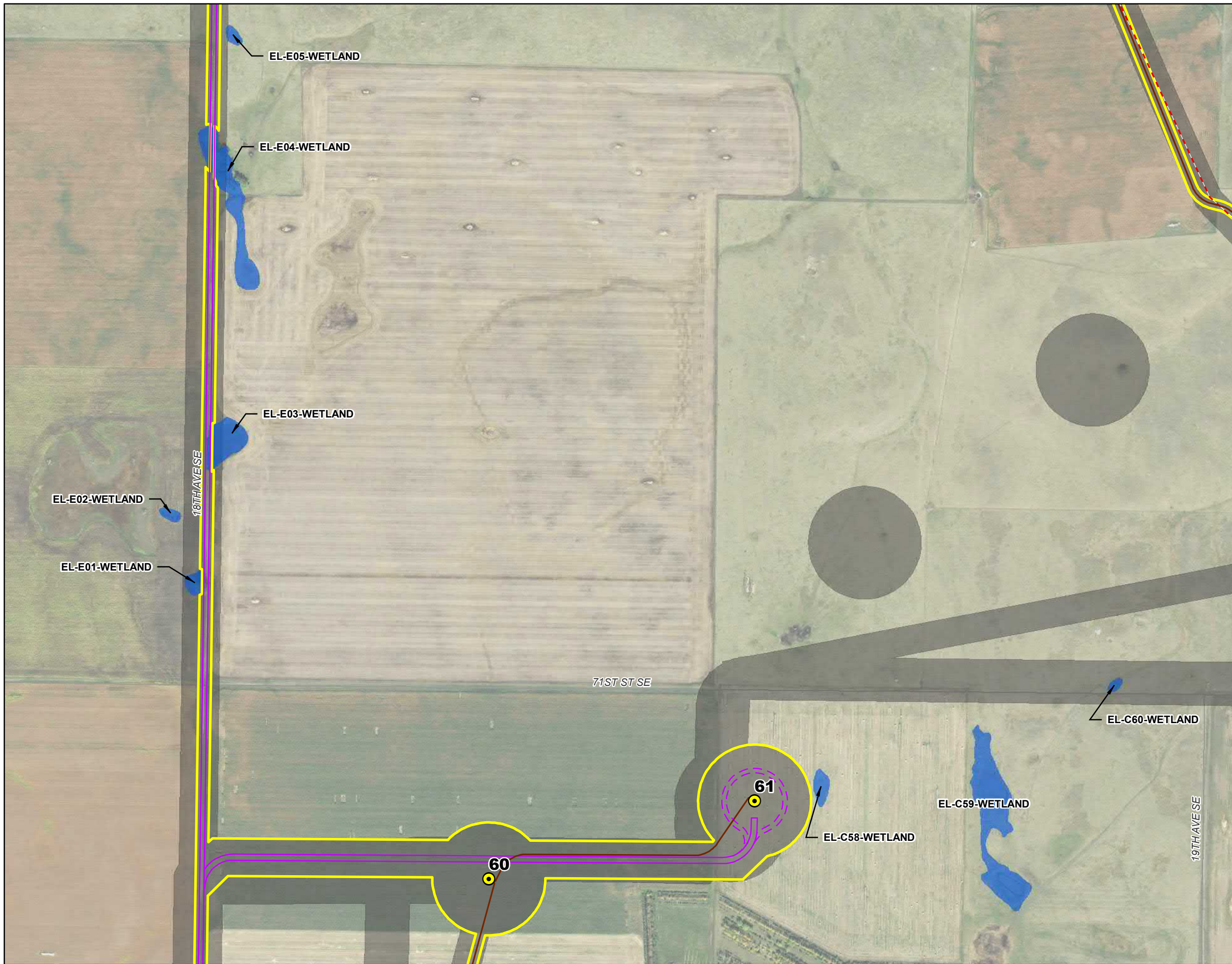


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor



**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 8 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND





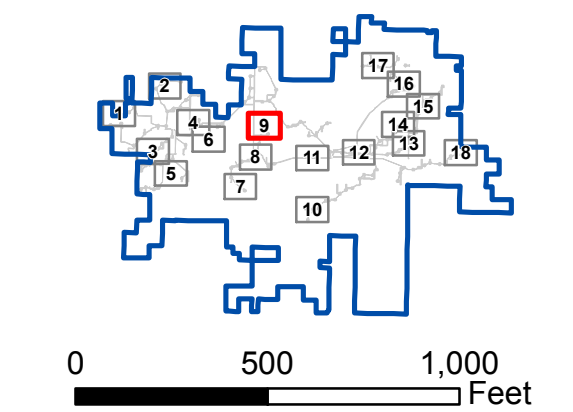
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**Delineated Wetlands and Other Waters**

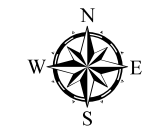
- Pond
- Stream
- Wetland
- USFWS Wetland Easement

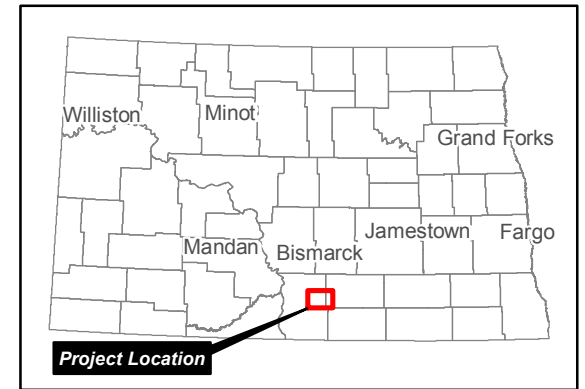
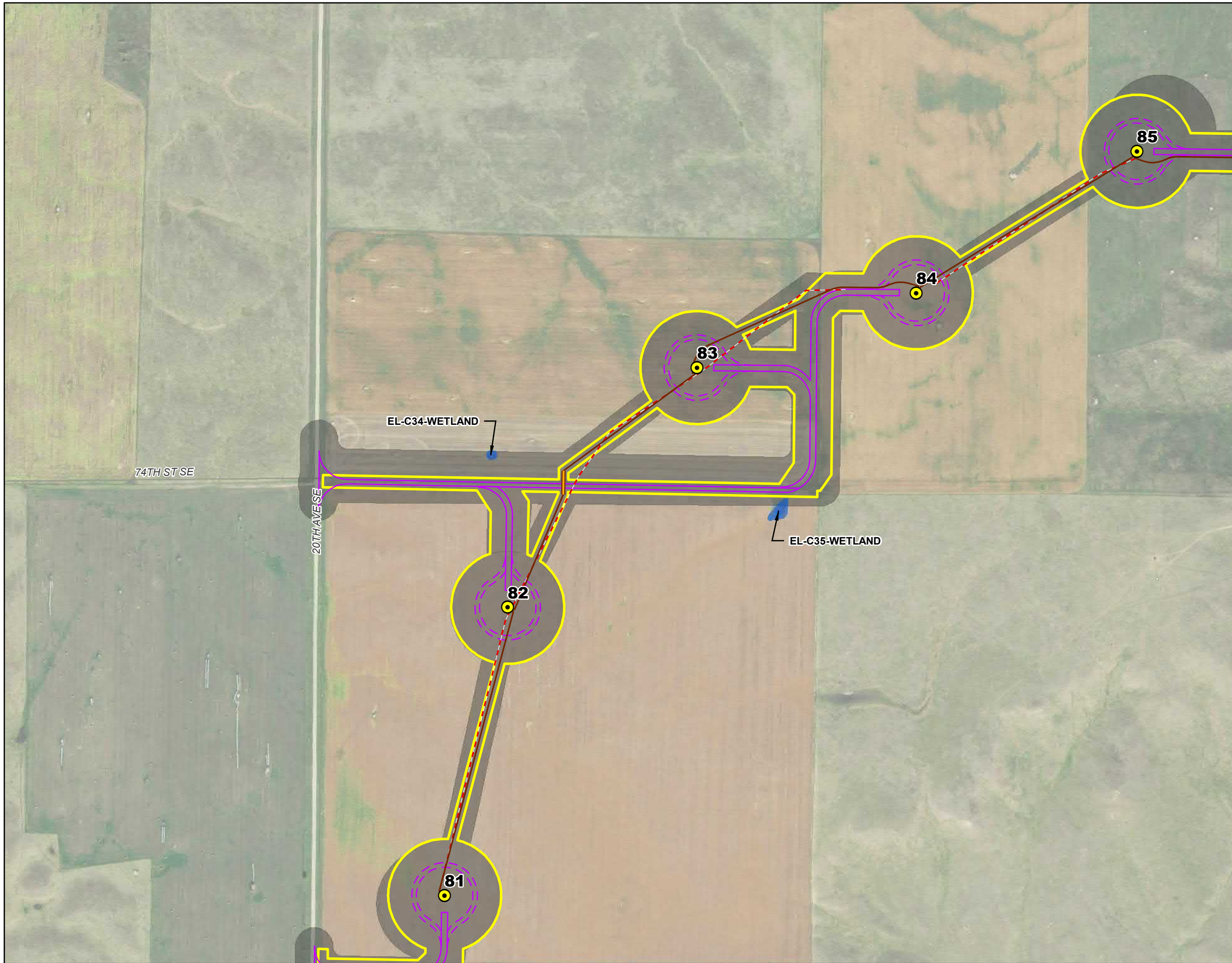
**Project Features**

- Proposed Turbine
- Service Road
- Temporary Service Road
- Turnaround
- Crane Path
- Collection Line
- Emmons-Logan Wind Energy Center Project Area
- Construction Easement
- Survey Corridor

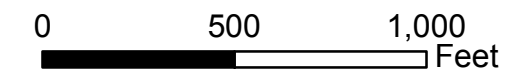
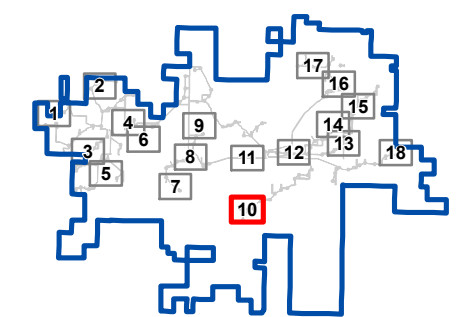


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 9 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND



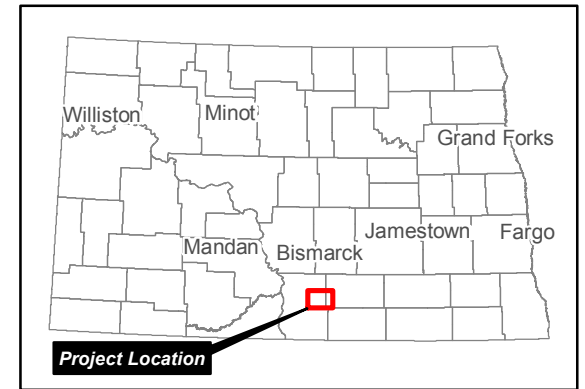
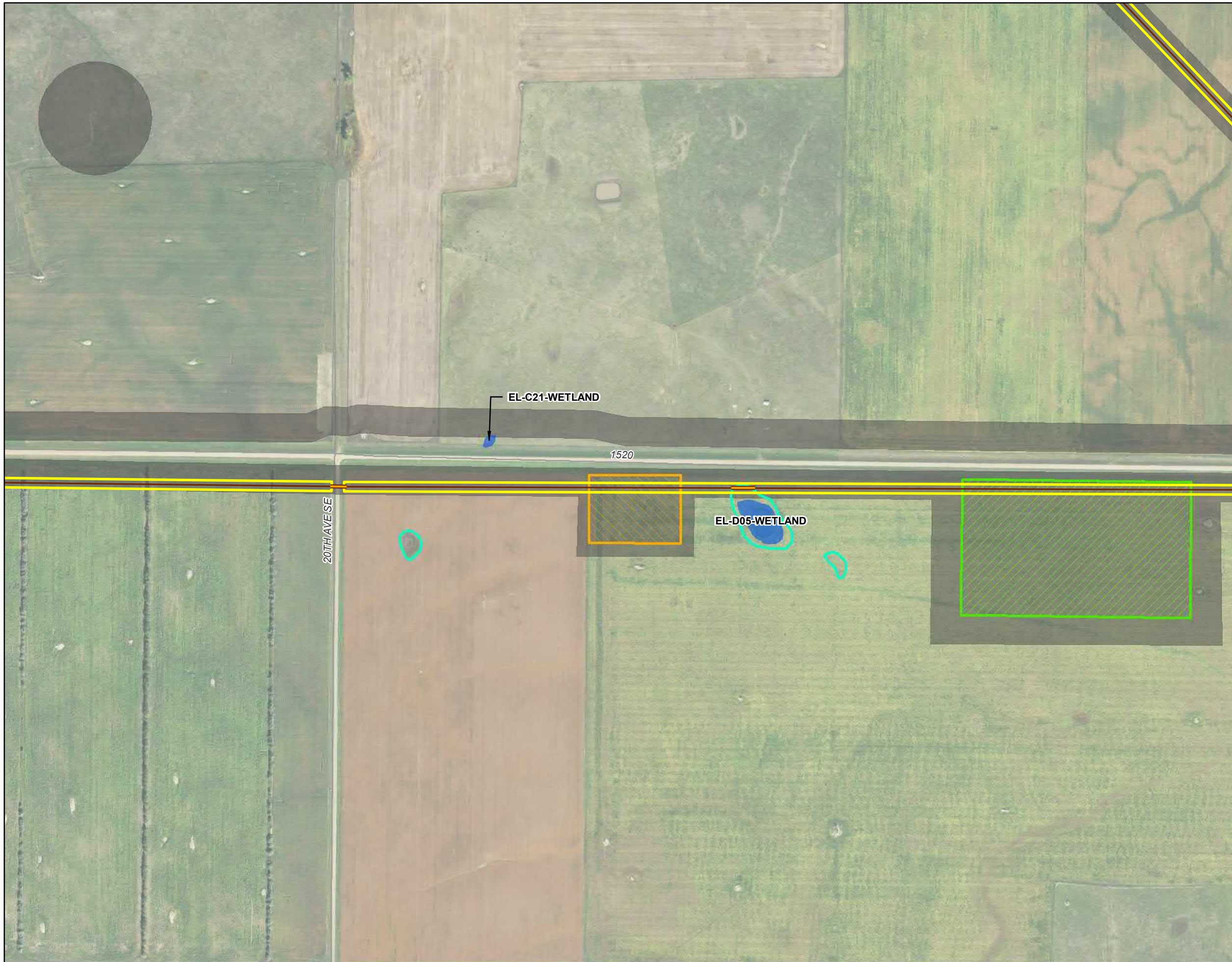


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

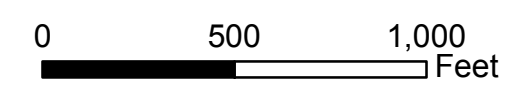
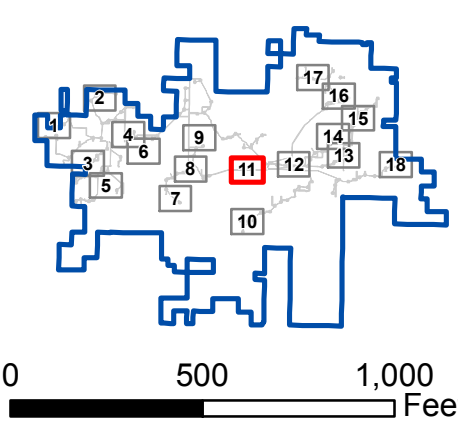


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 10 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND



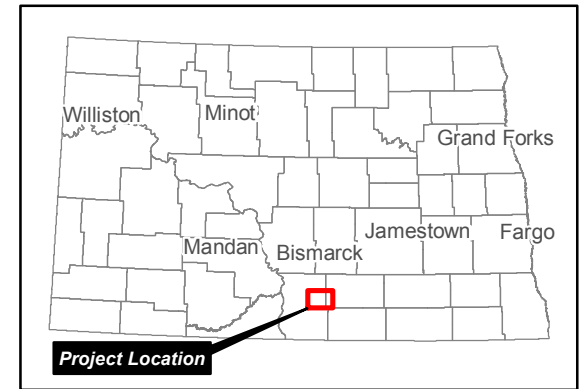
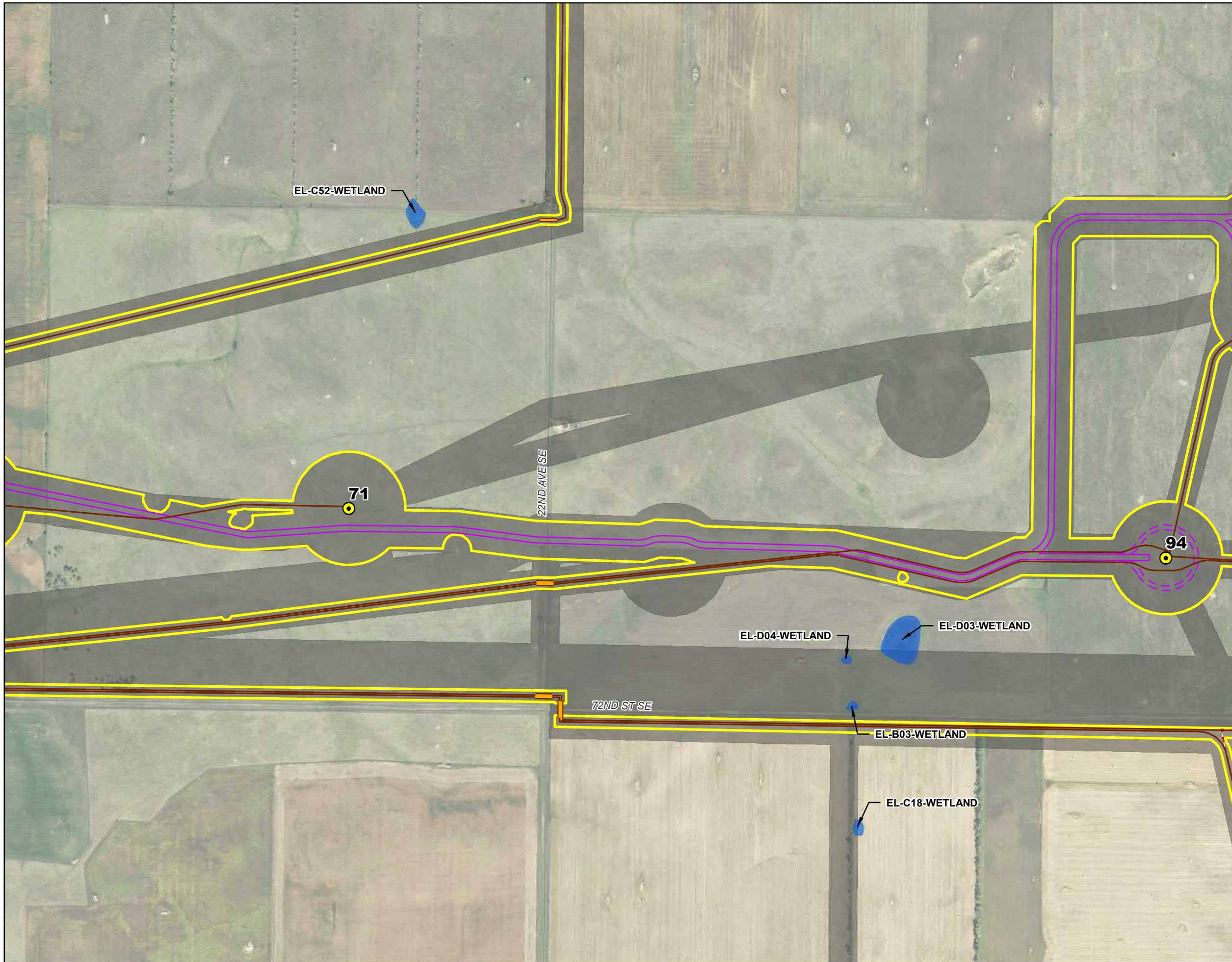


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Proposed Batch Plant
  - Proposed Laydown Yard
  - Survey Corridor

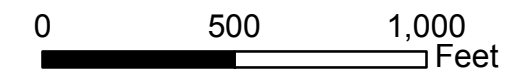
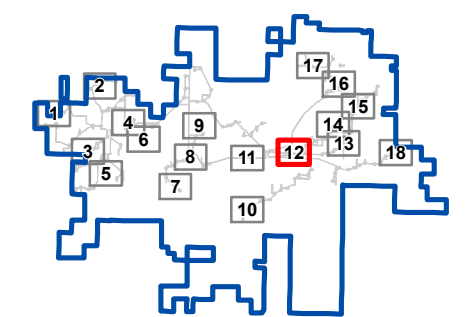


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 11 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

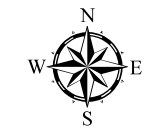


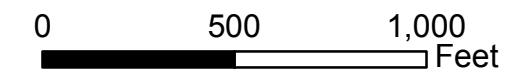
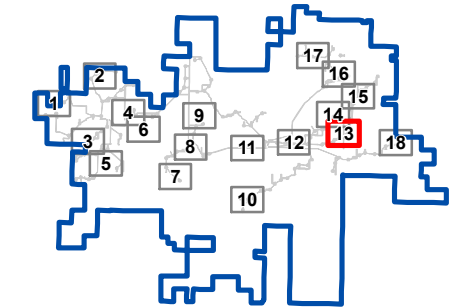
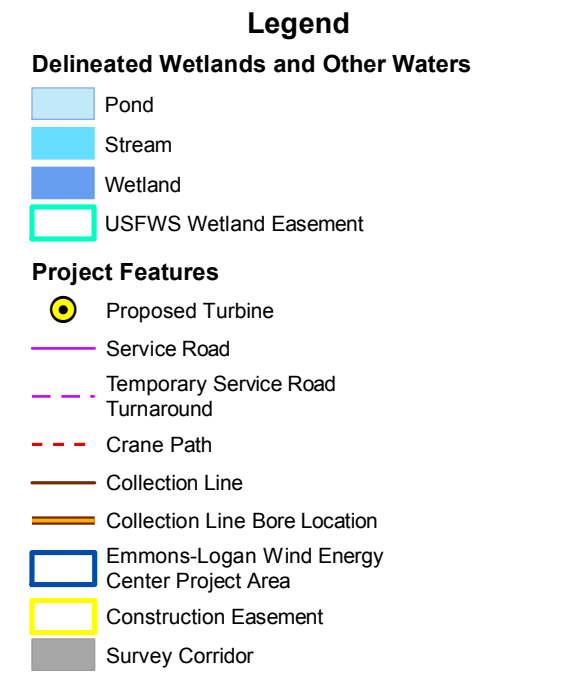
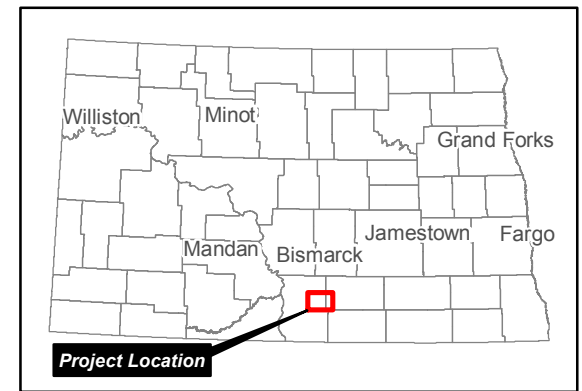
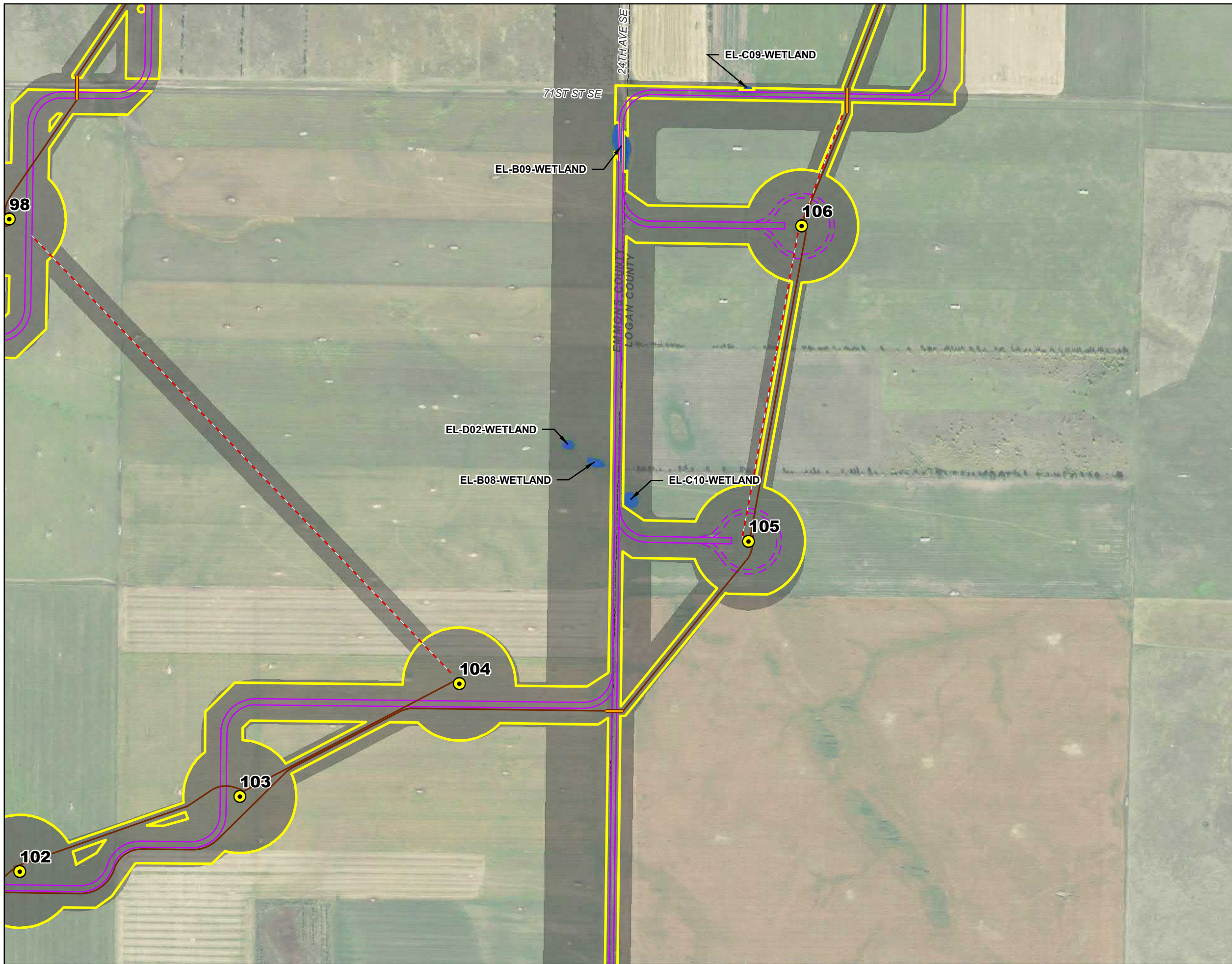


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor

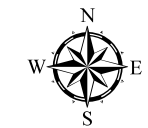


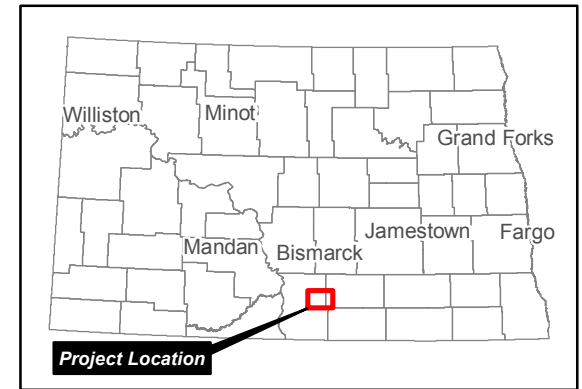
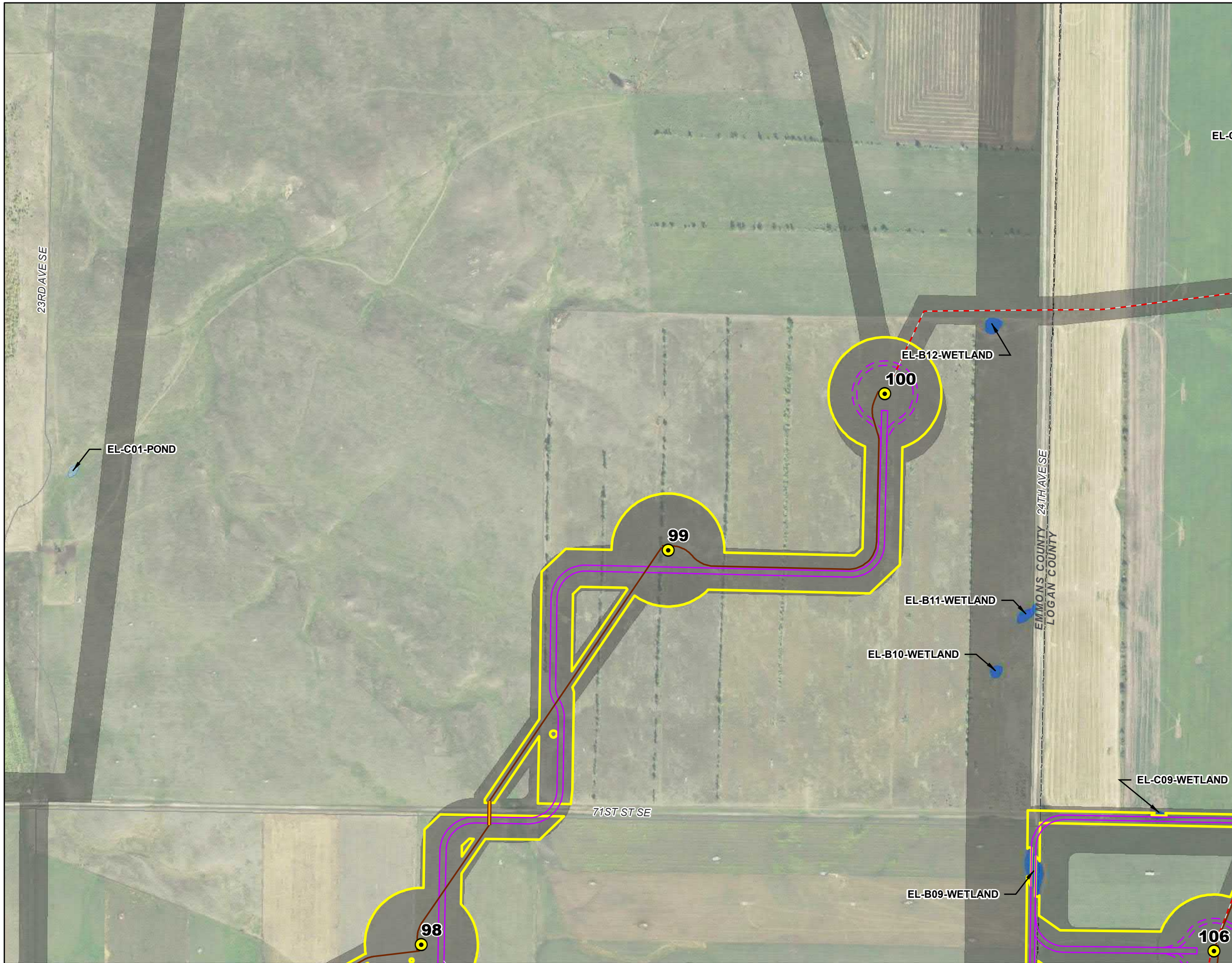
**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 12 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND



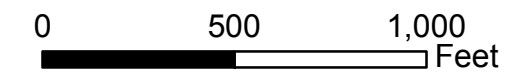
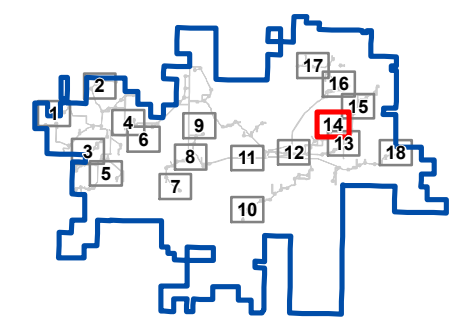


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 13 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND

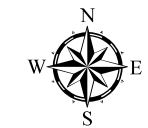


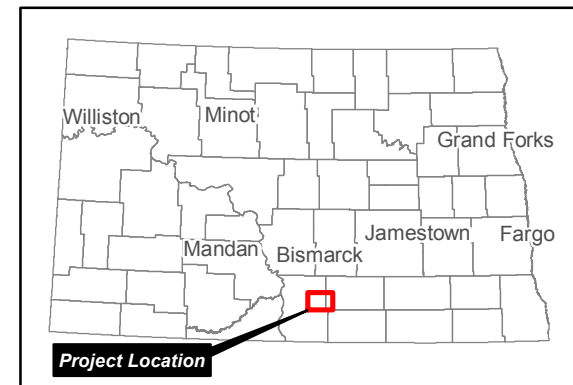


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Service Road
  - Temporary Service Road
  - Turnaround
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor



**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
**Map 14 of 18**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**





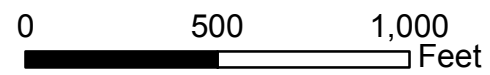
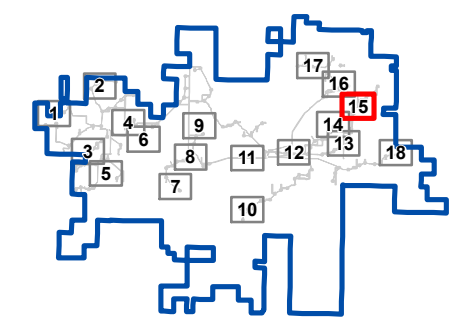
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**Delineated Wetlands and Other Waters**

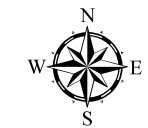
- Pond
- Stream
- Wetland
- USFWS Wetland Easement

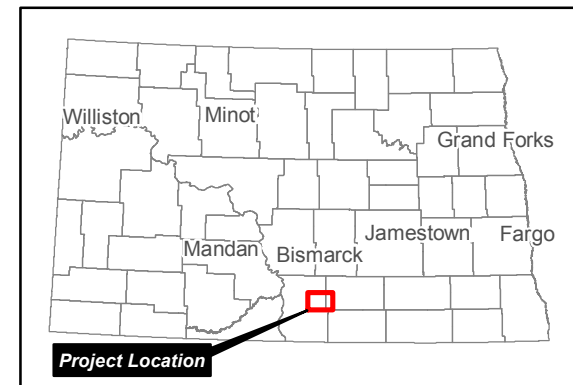
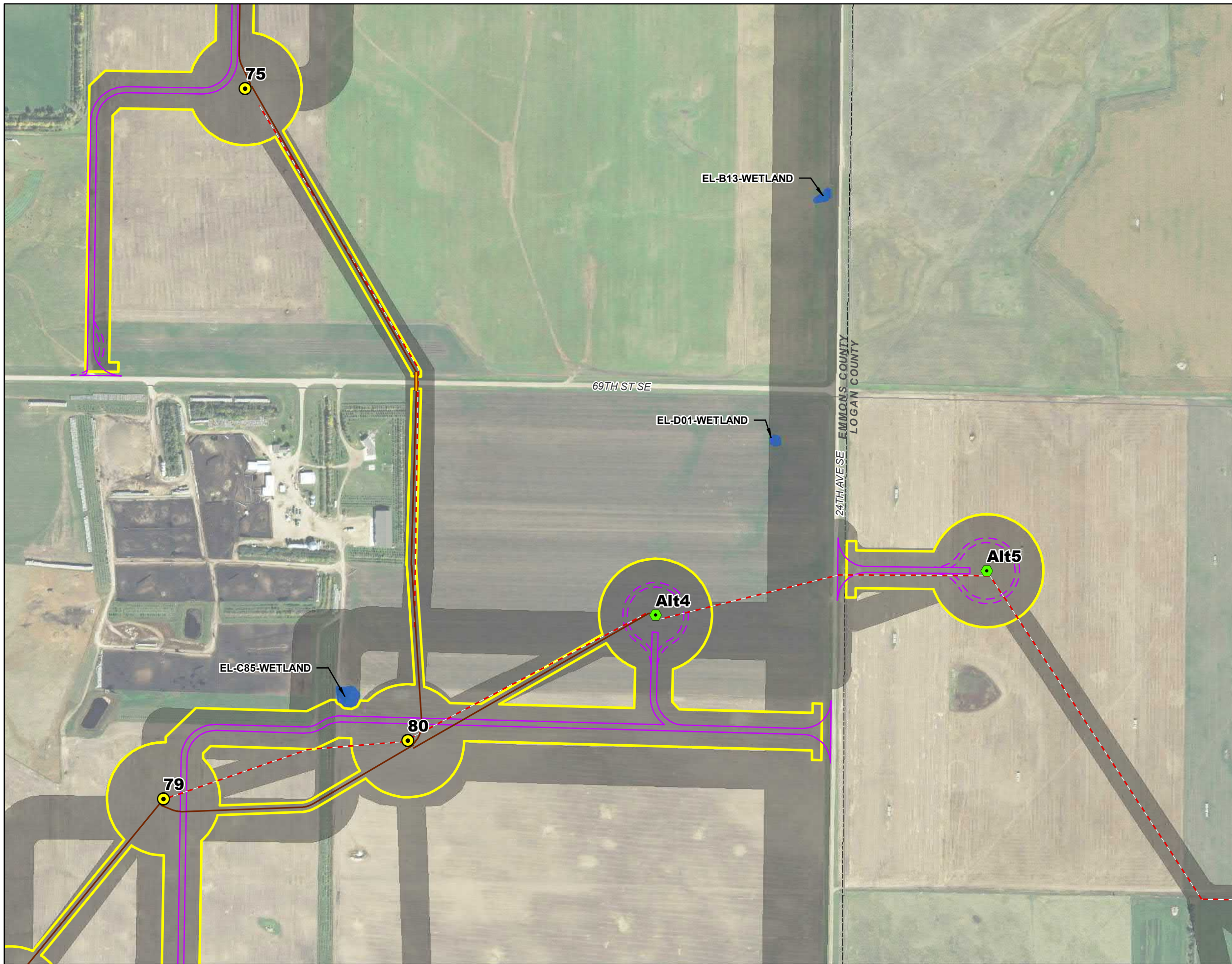
**Project Features**

- Proposed Turbine
- Service Road
- Temporary Service Road
- Turnaround
- Crane Path
- Collection Line
- Collection Line Bore Location
- Emmons-Logan Wind Energy Center Project Area
- Construction Easement
- Survey Corridor

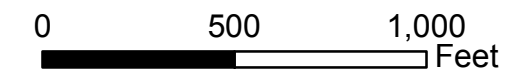
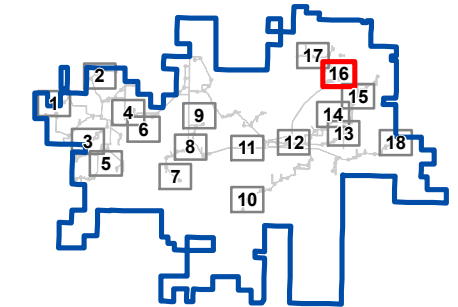


**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
**Map 15 of 18**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**

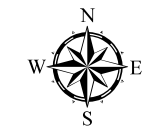


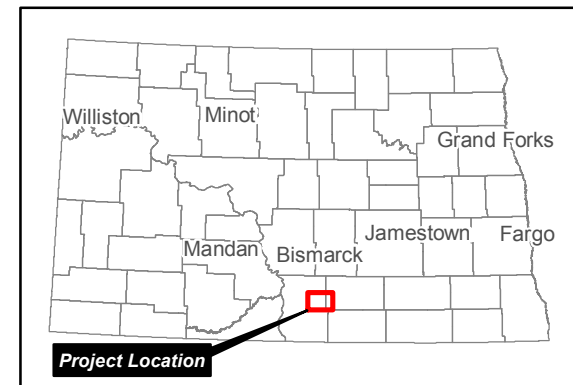
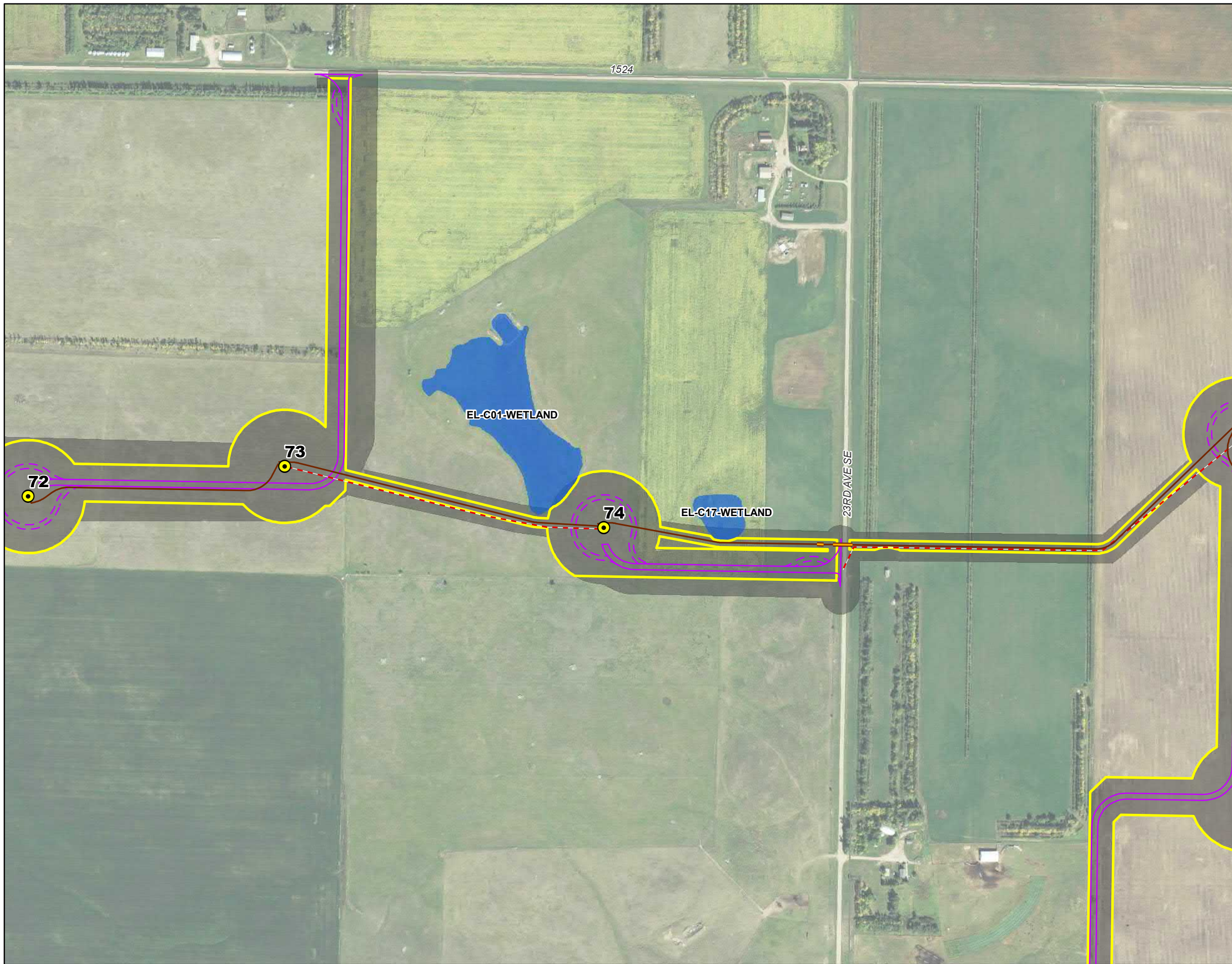


- Legend**
- Delineated Wetlands and Other Waters**
- Pond
  - Stream
  - Wetland
  - USFWS Wetland Easement
- Project Features**
- Proposed Turbine
  - Alternative Turbine
  - Service Road
  - Temporary Service Road
  - Crane Path
  - Collection Line
  - Collection Line Bore Location
  - Emmons-Logan Wind Energy Center Project Area
  - Construction Easement
  - Survey Corridor



**Figure 5-1**  
**Delineated Wetlands**  
**and Other Waters**  
**Map 16 of 18**  
**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**





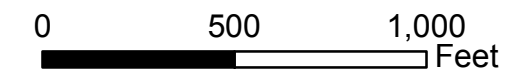
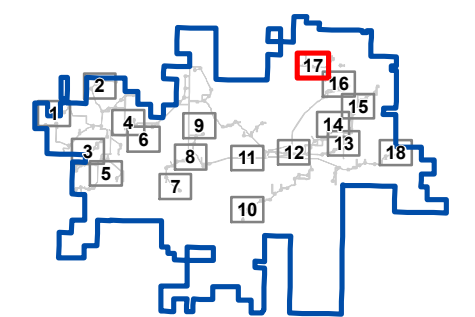
**Legend**

**Delineated Wetlands and Other Waters**

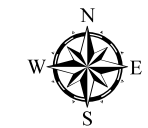
- Pond
- Stream
- Wetland
- USFWS Wetland Easement

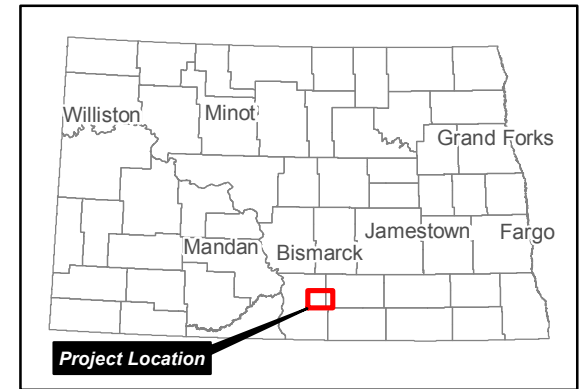
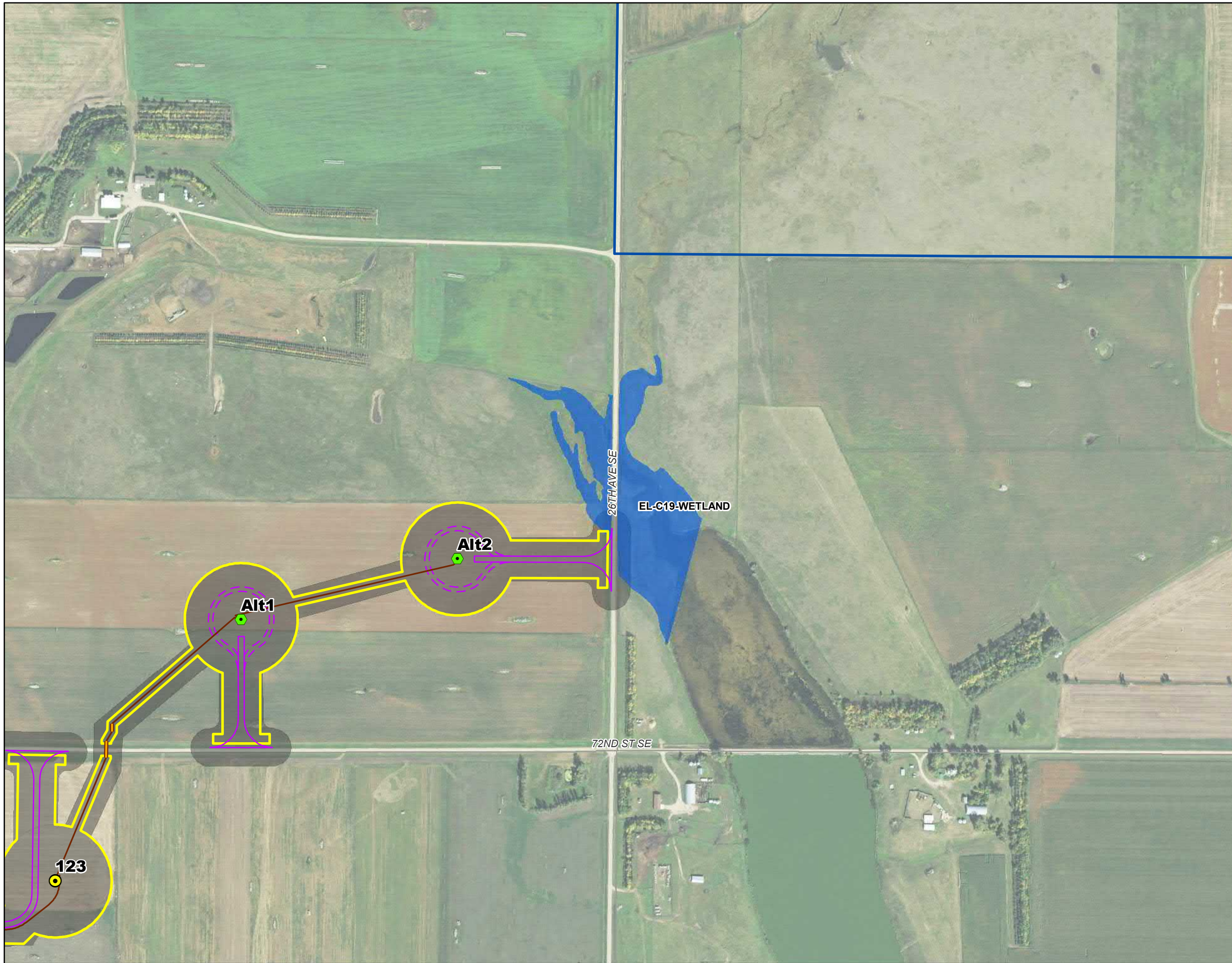
**Project Features**

- Proposed Turbine
- Service Road
- Temporary Service Road
- Turnaround
- Crane Path
- Collection Line
- Collection Line Bore Location
- Emmons-Logan Wind Energy Center Project Area
- Construction Easement
- Survey Corridor



**Figure 5-1**  
**Delineated Wetlands and Other Waters**  
 Map 17 of 18  
 Emmons-Logan Wind Energy Center  
 Emmons and Logan Counties, ND



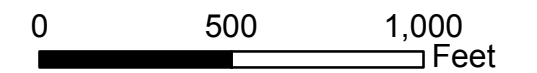
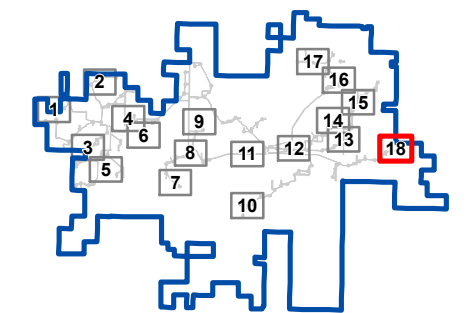


**Legend**  
**Delineated Wetlands and Other Waters**

- Pond
- Stream
- Wetland
- USFWS Wetland Easement

**Project Features**

- Proposed Turbine
- Alternative Turbine
- Service Road
- Temporary Service Road Turnaround
- Collection Line
- Collection Line Bore Location
- Emmons-Logan Wind Energy Center Project Area
- Construction Easement
- Survey Corridor



**Figure 5-1**  
**Delineated Wetlands**  
**and Other Waters**  
**Map 18 of 18**

**Emmons-Logan Wind Energy Center**  
**Emmons and Logan Counties, ND**



## **Appendix A**

### **Photographic Log**

## Emmons-Logan Wind Energy Center

Photo No.:

Date:

1

5/16/2018

Description:

### EL-C01-WETLAND

Overview photo facing northwest. Wetland was dominated by prairie cordgrass (*Spartina pectinata*). Northern leopard frogs (*Lithobates pipiens*) were present. Photo was taken directly to the right of a field-clearing pile.



Photo No.:

Date:

2

5/16/2018

Description:

### EL-C01-WT

Wetland soil that contains prominent redox concentrations.

Hydric soil indicators include: F3 (Depleted Matrix)



## Emmons-Logan Wind Energy Center

Photo No.:

3

Date:

5/19/2018

Description:

### **EL-C17-WETLAND**

Overview photo facing northwest. Wetland located in agricultural field and appeared to be planted through with corn in 2017. Wetland vegetation was predominately absent due to agriculture.



Photo No.:

4

Date:

5/21/2018

Description:

### **EL-C25-WETLAND**

Overview photo facing south. Wetland appears to be a ponded drainage caused by 18th Ave SE. A cattle pond was created on the south end with an earth mound. Dominated by prairie cordgrass (*Spartina pectinata*).



## Emmons-Logan Wind Energy Center

Photo No.:

5

Date:

5/21/2018

Description:

### EL-C31-WETLAND

Overview photo facing north. Wetland is surrounded by a corn field. Red-wing blackbirds (*Aeglais phoeniceus*) and Northern leopard frogs (*Lithobates pipiens*) are present. Some cottonwood trees (*Populus deltoides*) line the wetland.



Photo No.:

6

Date:

5/21/2018

Description:

### EL-C31-WT

Wetland soil that contains prominent redox concentrations.

Hydric soil indicators include: F3 (Depleted Matrix)



## Emmons-Logan Wind Energy Center

Photo No.:

7

Date:

5/21/2018

Description:

### **EL-C35-WETLAND**

Overview photo facing west. Wetland is surrounded by a soybean field. Northern leopard frogs (*Lithobates pipiens*) were present.



Photo No.:

8

Date:

5/23/2018

Description:

### **EL-C02-POND**

Overview photo facing south. Large, deep pond surrounded by agricultural fields. A man made dam is located along the NHD flow line. Pond overflows into EL-C01-STREAM. Willows (*Salix*) and cottonwoods (*Populus deltoides*) surround the pond.



## Emmons-Logan Wind Energy Center

Photo No.:

Date:

9

5/24/2018

Description:

### **EL-C81-WETLAND**

Overview photo facing south. Corn was planted through the wetland last year and up to the edge this year. A rock pile is located near the center of the wetland. Nothing appears to be growing. Dead absinthe wormwood (*Artemisia absinthium*) is located within the wetland.



Photo No.:

Date:

10

6/26/2018

Description:

### **EL-D05-WETLAND**

Overview photo facing south. Wetland is surrounded by a wheat field with a road directly to the north. Wetland is dominated by water smartweed (*Polygonum amphibium*).



## **Appendix B**

### **USACE Nationwide Permits General and Regional Conditions**

## **Nationwide Permit General Conditions**

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization.

Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or

is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre- construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or Study River (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the

proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps. As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(d) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(e) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

**19. Migratory Birds and Bald and Golden Eagles.** The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the

Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106

consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects,

both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

**24. Safety of Impoundment Structures.** To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and

implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer’s receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the

potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is “no effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed activity;
- (3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
- (4) A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from

the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### **District Engineer's Decision**

In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and

cumulative adverse environmental effects. For those NWP's that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWP's 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

1. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### **Further Information**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31)

**2017 Nationwide Permits  
Regional Conditions  
Omaha District  
State of North Dakota**

**1. Wetlands Classified as Peatlands – Revoked for use**

All NWPs, with the exception of 3, 5, 20, 32, 38 and 45, are revoked for use in peatlands. Peatlands are permanently or seasonally saturated and inundated wetlands where conditions inhibit organic matter decomposition and allow for the accumulation of peat. Under cool, anaerobic, and acidic conditions, the rate of organic matter accumulation exceeds organic decay.

**2. Wetlands Classified as Peatlands – Preconstruction Notification Requirement**

For NWPs 3, 5, 20, 32, 38 and 45 permittees must notify the Corps in accordance with General Condition 32 (PCN) prior to initiating any regulated activity impacting peatlands.

**3. Waters Adjacent to Natural Springs – Preconstruction Notification Requirement**

For all NWPs permittees must notify the Corps in accordance with General Condition No. 32 (PCN) for regulated activities located within 100 feet of the water source in natural spring areas. For purposes of this condition, a spring source is defined as any location where there is flow emanating from a distinct point at any time during the growing season. Springs do not include seeps and other groundwater discharge areas where there is no distinct point source.

**4. Missouri River, including Lake Sakakawea and Lake Oahe – PCN Requirement**

For all NWPs permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity occurring in or under the Missouri River, including Lake Sakakawea and Lake Oahe. In addition, any activity occurring in an off channel area (marinas, bays, etc.) of any of these waterbodies, a preconstruction notification is required.

**5. Spawning Areas**

Spawning restrictions and important fish habitat areas, if applicable, can be accessed on the North Dakota Game & Fish Department's website at:

<http://gf.nd.gov/gnf/conservation/docs/spawning-restriction-exclusions.pdf>

No regulated activity within the Red River of the North shall occur between 15 April and 1 July.

Spawning season restrictions do not apply to projects involving dredging or other discharges of less than 25 cubic yards of material in any jurisdictional water.

**6. Counter-Sinking Culverts and Associated Riprap – All NWPs**

In streams with intermittent or perennial flow and a stable stream bed, culvert stream crossings shall be installed with the culvert invert set below the natural streambed according to the table below. This regional condition does not apply in instances where the lowering of the culvert invert would allow a headcut to migrate upstream of the project into an unaffected stream reach or result in lowering the elevation of the stream reach.

Riprap inlet and outlet protection shall be placed to match the height of the culvert invert.

Culvert Type	Drainage Area	Minimum Distance Culvert Invert Shall Be Lowered Below Stream Flow Line
All culvert types	< 100 acres	Not required
Pipe diameter <8.0 ft	100 to 640 acres	0.5 ft
Pipe diameter <8.0 ft	>640 acres	1.0 ft
Pipe diameter ≥ 8.0 ft	All drainage sizes	1.0 ft
Box culvert	All drainage sizes	1.0 ft

## REGIONAL CONDITIONS APPLICABLE TO SPECIFIC NATIONWIDE PERMITS

### NWP 7 – Outfall Structures and Associated Intake Structures and NWP 12 – Utility Line Activities.

**Intake Structures** – Intake screens with a maximum mesh opening of ¼-inch must be provided, inspected annually, and maintained. Wire, Johnson-like, screens must have a maximum distance between wires of 1/8-inch. Water velocity at the intake screen shall not exceed ½-foot per second.

Pumping plant sound levels will not exceed 75 dB at 50 feet.

Intakes located in Lake Sakakawea, above river mile 1519, and on the Yellowstone River, are subject to the following conditions:

- The intakes shall be floating.
- At the beginning of the pumping season, the intake shall be placed over water with a minimum depth of 20 feet.
- If the 20-foot depth is not attainable, then the intake shall be located over the deepest water available.
- If the water depth falls below six feet, the intake shall be moved to deeper water or the maximum intake velocity shall be limited to ¼ foot per second.

Intakes located in Lake Sakakawea, below river mile 1519, and the Missouri River below Garrison Dam are subject to the following conditions:

- The intakes shall be submerged.
- At the beginning of the pumping season, the intake will be placed at least 20 vertical feet below the existing water level.
- The intake shall be elevated 2 to 4 feet off the bottom of the river or reservoir bed.
- If the 20-foot depth is not attainable, then the intake velocity shall be limited to ¼-foot per second with intake placed at the maximum practicable attainable depth.

Intakes and associated utility lines that are proposed to cross sandbars in areas designated as piping plover critical habitat are prohibited.

### **Utility Lines**

- Any temporary open trench associated with utility lines are to be closed within 30 days of excavation. This time limit may be extended by notifying the North Dakota Regulatory Office and receiving a written response that the extension is acceptable.

## **NWP 11 – Temporary Recreational Structures – Boat Docks**

To ensure that the work or structure shall not cause unreasonable obstruction to the free navigation of the navigable waters, the following conditions are required:

- No boat dock shall be located on a sandbar or barren sand feature. The farthest point riverward of a dock shall not exceed a total length of 30 feet from the ordinary high watermark. Information Note: Issuance of this permit does not supersede authorization required by the North Dakota State Engineer's Office.
- Any boat dock shall be anchored to the top of the high bank.
- Any boat dock located within an excavated bay or marina that is off the main river channel may be anchored to the bay or marina bottom with spuds.

Section 10 Waters located in the State of North Dakota are:

Bois de Sioux River  
James River  
Missouri River  
Red River of the North  
Upper Des Lacs Lake  
Yellowstone River

## **NWP 13 – Bank Stabilization**

Permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity. The notification must also include photo evidence of erosion in the area. Prohibited materials found at

<http://www.nwo.usace.army.mil/Media/FactSheets/FactSheetArticleView/tabid/2034/Article/487696/prohibited-restricted-materials.aspx> cannot be used in waters of the U.S.

## **NWP 23 – Approved Categorical Exclusions**

Permittees must notify the Corps in accordance with General Condition No. 32 (PCN) prior to initiating any regulated activity. In addition to information required by General Condition 32 (PCN), permittees must identify the approved categorical exclusion that applies and provide documentation that the project fits the categorical exclusion.

### **GENERAL CONDITIONS (REGIONAL ADDITIONS)**

#### **General Condition 32 Notification– PCN**

Prospective permittees should be aware that a field aquatic resources delineation may be required for applications where notification is required in accordance with General Condition 32 (PCN) and/or mitigation may be required. Specific guidelines outlining the aquatic resources delineation process in the State of North Dakota and the Corps 1987 Wetland Delineation Manual and applicable Regional supplements to the Manual can be accessed on the North Dakota Regulatory Office's website at:

<http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/NorthDakota.aspx>