Appendix N
Wetland and Waterbodies Assessment

Badger Wind, LLC
February 2024

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Wetlands and Waterbodies Assessment
Badger Wind Project
Logan and McIntosh Counties, North Dakota

Report

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WEST

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REPORT REFERENCE

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ACRONYMS AND ABBREVIATIONS

Atwell	Atwell, LLC
Badger Wind	Badger Wind, LLC
CWA	Clean Water Act
GPS	Global Positioning System
m	meter
MW	megawatt
NHD	National Hydrography Dataset
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
PEM	Palustrine Emergent
PFO	Palustrine Forested
PSS	Palustrine Scrub Shrub
Project	Badger Wind Project
USACE	US Army Corps of Engineers
USDA	US Department of Agriculture
USEPA	US Environmental Protection Agency
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
WEST.	Western EcoSystems Technology, Inc.
WOTUS	waters of the US

INTRODUCTION

Badger Wind, LLC (Badger Wind) is proposing the Badger Wind Project (Project) in Logan and McIntosh counties, North Dakota. The Project is located approximately two miles (mi) west of Wishek, North Dakota (Figure 1). Previously delineated wetlands and waterbodies within the permitted Project area are included in the Aquatic Resources Delineation Report (Atwell 2022).The objective of the assessment was to identify (desktop review) and delineate (field review) precise boundaries of wetlands (land with presence of hydric soils, hydrology, and hydrophytic vegetation) and waterbodies (any type of perennial, intermittent, or ephemeral waterway or catch basin where water flows, or could flow, or is held), and to assign an informal jurisdictional determination (determination) to delineated features within the 2023 Wetland Survey Area. Due to poor weather and late season conditions, which prevented the full wetland delineation protocol from being adequately performed, wetlands and waterbodies were mapped. This report presents the combined results of the aquatic resources delineation surveys conducted for the Project in 2020, 2021, and 2022 (Atwell 2022) and during 2023 to address changes/updates to the Project since 2022.

SURVEY AREA

The 2023 Wetland Survey Area consisted of newly proposed Project infrastructure or previously surveyed infrastructure that changed locations and their associated survey buffers. The 2023 Wetland Survey Area encompassed approximately 1,819 acres (ac) and lies within the larger Project, which is situated in the Northwestern Glaciated Plains Level III Ecoregion, an ecoregion dominated by mixed-grass prairie (US Environmental Protection Agency 2013). The Project will be sited entirely on private lands. Topography within the Project ranges from relatively flat to rolling hills and elevations range from 2,020 to 2,200 feet (ft). Overall, the Project drains to the southwest and to the north, into South Branch Beaver Creek and Beaver Creek, tributaries to the Missouri River. The Project contains numerous unnamed drainages, a few of which may be intermittent or perennial waterbodies or wetlands (Figures 2 and 3). Primary land uses in the Project include agriculture and livestock grazing.

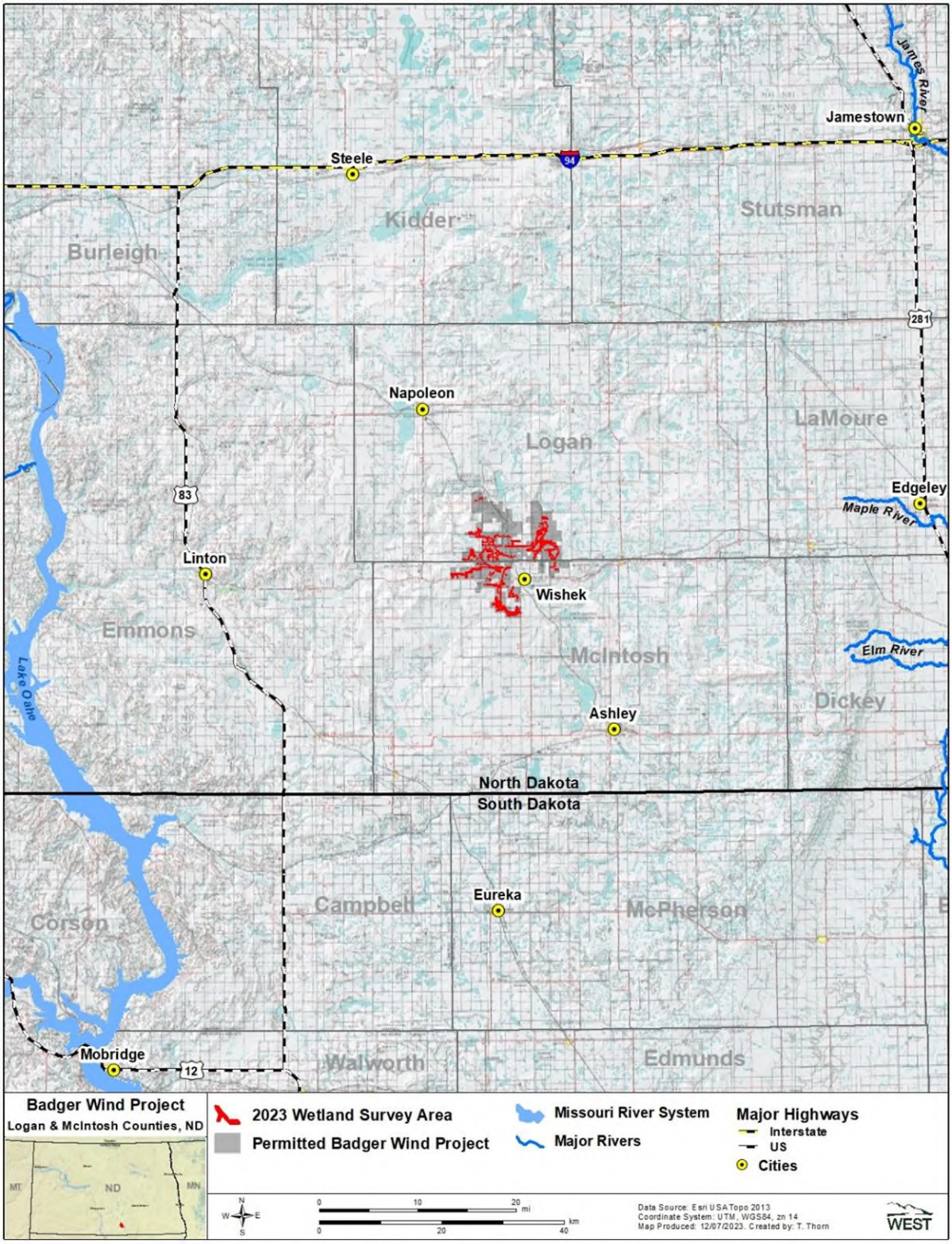

Figure 1. Location of the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

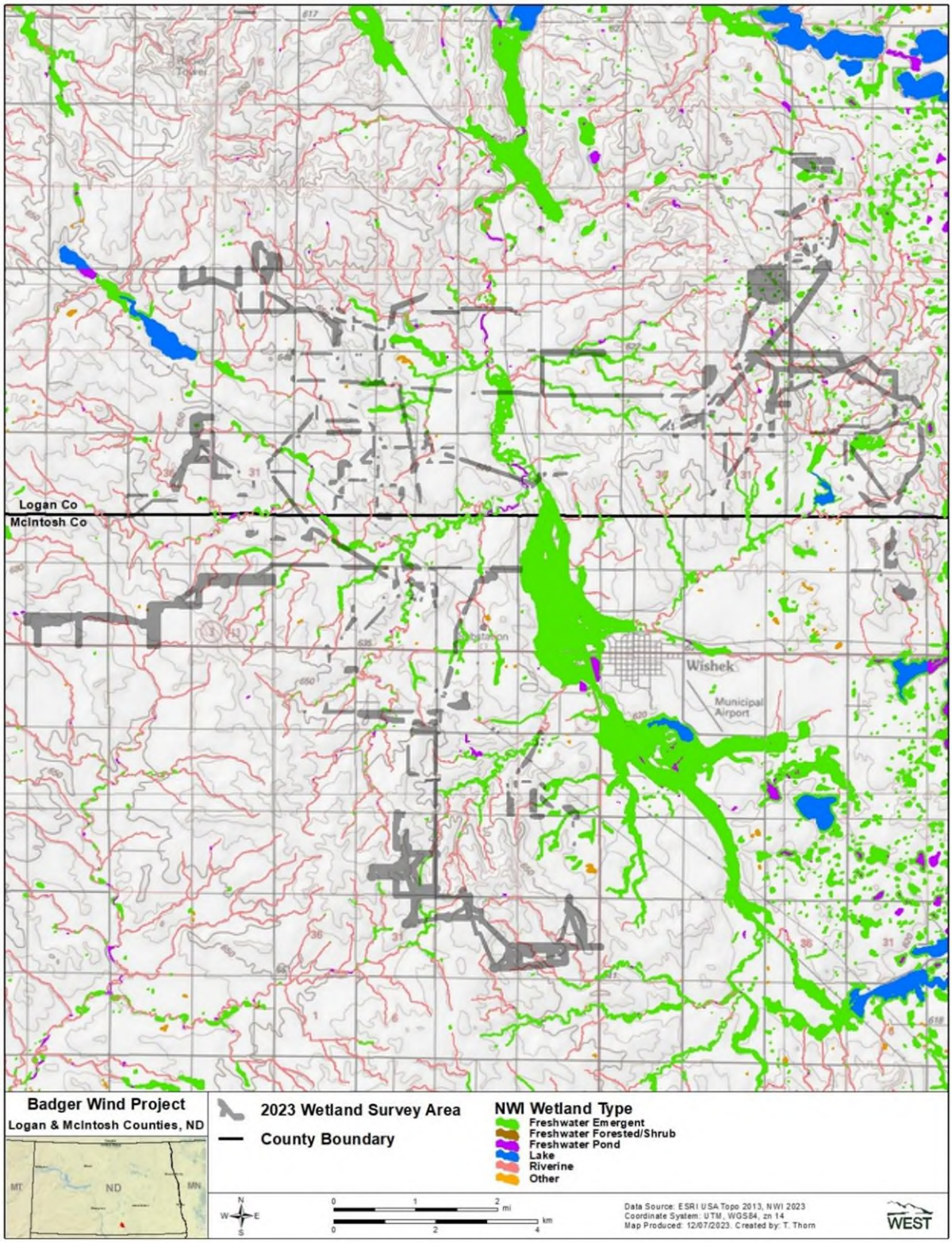

Figure 2. National Wetland Inventory features within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

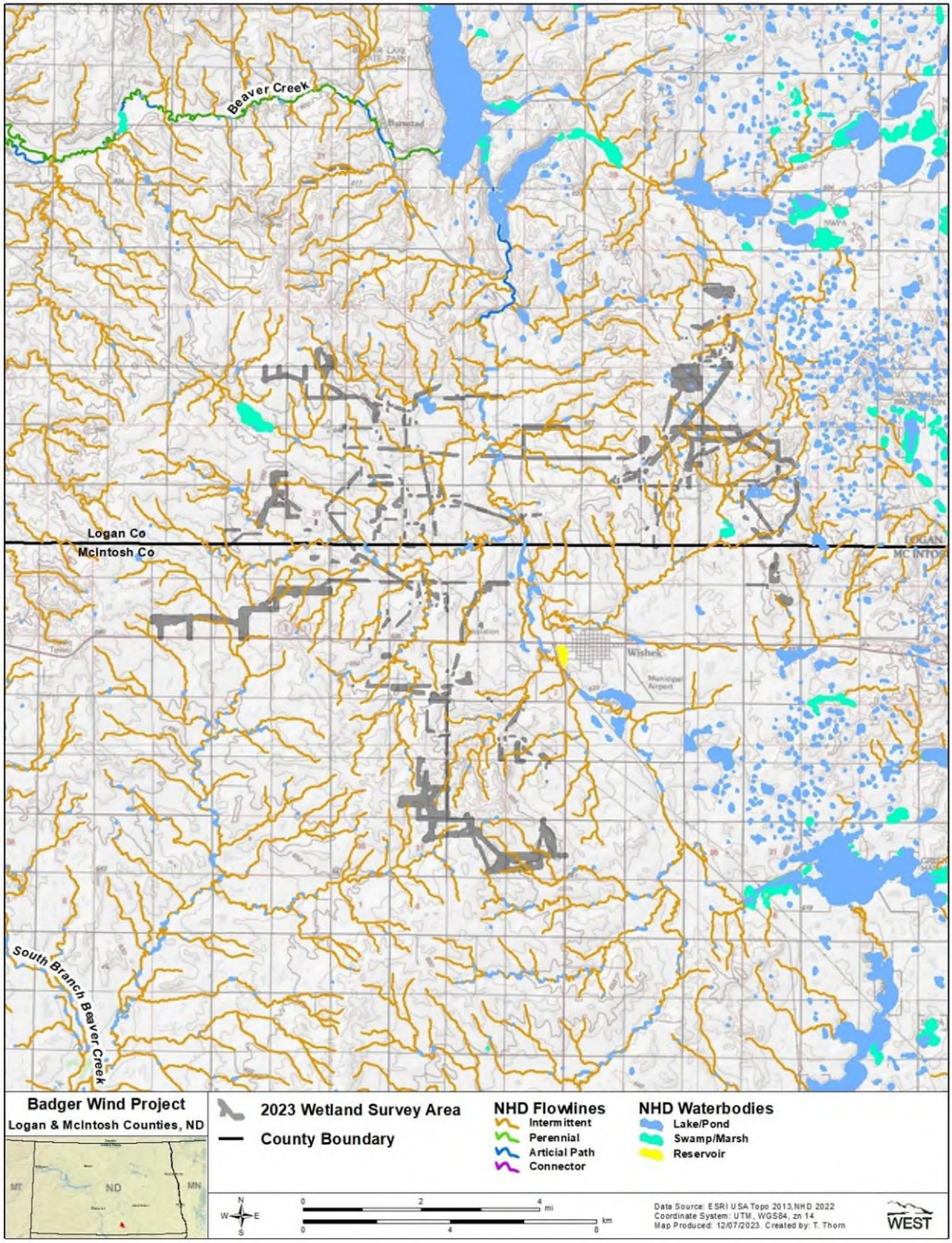

Figure 3. National Hydrologic Dataset features within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota.

REGULATORY BACKGROUND

Waters of the United States

Section 404 of the Clean Water Act (CWA) is the primary federal statute regulating impacts (dredge and fill) to wetlands and waterbodies. Wetlands and waterbodies that are subject to federal jurisdiction under the CWA are referred to as waters of the United States (WOTUS; US Environmental Protection Agency [USEPA] 2023). Under the CWA, it is unlawful to discharge any pollutant from a point source into a WOTUS without a permit.

Waters that have consistently been considered jurisdictional WOTUS by the US Army Corps of Engineers (USACE) include traditional navigable waters (Section 10 waters), interstate waters, territorial seas, and impoundments of these WOTUS. Jurisdictional status of tributaries to these categories of WOTUS and adjacent wetlands continue to be both challenged in courts and clarified by agencies. On August 29, 2023, the US Environmental Protection Agency and USACE jointly released information announcing an Amendment to the definition of Waters of the United States (USEPA 2023). Coordination with the USACE regarding jurisdictional status of wetlands and waterbodies documented in this report will be necessary to evaluate Section 404 permit requirements for the Project.

METHODS

2023 Desktop Assessment

A comprehensive desktop assessment of publicly available wetlands and waterbodies data in the 2023 Wetland Survey Area was completed using United States Department of Agriculture (USDA) National Agriculture Imagery Program (NAIP, NAIP 2021 and 2022), US Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (USFWS; 2023), and the US Geological Survey (USGS) National Hydrography Dataset (NHD; USGS NHD 2022). Based on this review, areas identified as potentially being wetlands or WOTUS were targeted for field verification along with the rest of the 2023 Wetland Survey Area.

Using these public data sources, potential wetlands and waterbodies located within the 2023 Wetland Survey Area were identified and mapped in the desktop assessment using Geographic Information Systems (GIS) mapping software. Wetland and waterbody types (i.e. freshwater emergent wetland, freshwater pond, riverine, lake, freshwater forested/shrub wetlands, and rivers and streams) are based on wetland nomenclature used by the USFWS NWI (2023; based on Cowardin et al. 1979) and USGS NHD (2022).

2023 Field Reconnaissance Assessment

The field reconnaissance assessment occurred in two phases. Phase one consisted of wetland delineations and phase two consisted of wetland mapping. Wetland delineations indicated wetland and waterbody type and boundaries based on field observations of hydrophytic

vegetation, hydrology, and presence of hydric soils. Wetland mapping indicated type and boundaries based on field observations of hydrophytic vegetation and hydrology; this phase does not evaluate the presence of hydric soils. The goal of both phases was to identify and confirm the presence or absence and extent of wetlands and waterbodies initially identified during the desktop assessment within the 2023 Wetland Survey Area. Wetlands and waterbodies were mapped in both phases using a tablet with Collector for ArcGIS software (ESRI 2023) coupled with an Arrow Lite global positioning system (GPS) receiver with submeter accuracy. Wetlands and waterbodies observed in the field (i.e., wet or saturated features, hydrophytic vegetation, surface hydrology), but not recorded during the initial desktop assessment, were also mapped.

Proposed infrastructure survey corridors were provided by Badger Wind as a spatial file in October 2023. Project infrastructure and associated buffers located within the 2023 Wetland Survey Area included:

- 250-ft radius centered around turbines
- 300-ft wide corridor for turbine access roads
- 100-ft wide corridor for underground collection lines
- 200-ft wide corridor for aircraft detection and lighting system tower, batch plant, crane walk paths, laydown yard, meteorological tower, operations and maintenance facility, marshaling yard, substation, transmission line, and turning radii locations

Shapefiles depicting the infrastructure and associated buffers were loaded onto the tablet and used in the field to ensure boundaries were accurately identified and included during field surveys. NWI and NHD features were also loaded onto the tablet for accurate field-verification.

Photographs were recorded for wetlands identified within the 2023 Wetland Survey Area. Each delineated/mapped wetland was assigned a unique identification (ID) name consisting of an alphanumeric name in a series, differentiated according to the two observers (e.g. WET001, WET201).

NWI or NHD features that intersected the 2023 Wetland Survey Area but clearly did not meet the definition of a WOTUS were photo documented and a non-WOTUS point was collected on the tablet. Such points were identified with a sequential alphanumeric name differentiated according to the two observers (e.g. 212U, 501U; 701U).

Wetland delineations were conducted on October 24 – 25, 2023 and wetland mapping on October 31, November 1-2, and November 17 and 20, 2023.

Wetland Delineation

Wetlands were delineated in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual* (US Army Corps of Engineers [USACE] 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains* (Version 2.0; USACE 2010). The 1987 manual outlines a three-parameter approach, which requires presence of hydrophytic plants (dominant vegetative cover), hydric soils, and wetland hydrology. All three parameters must be

present and meet the wetland criteria of each parameter in order for an area to be considered a wetland.

The delineated wetlands were classified according to the classification system outlined in Wetlands and Deepwater Habitats of the United States (Cowardin et al. 1979). Wetland plant indicator status was determined using the most recent version of the National Wetland Plant List (USACE 2020). Paired sample plots (wetland and upland) were established, and USACE regional datasheets were completed for each potential wetland within the 2023 Wetland Survey Area. Wetland sample plots were located in areas that represented the wetland community that was present, utilizing an upland sample plot to characterize the adjoining upland community. A wetland boundary was then established between these points and the boundary was recorded based on the observations made at the paired sample points. Additional sample plots were established in locations where NWI or aerial signatures suggested wetland conditions may be present. Wetlands are typically categorized as one of three common types of wetlands including:

- Palustrine emergent (PEM) wetlands are defined as inland freshwater areas dominated by hydrophytic vascular plants such as rushes, sedges, forbs, and other herbaceous or grass-like plants.

- Palustrine scrub-shrub (PSS) wetlands are defined as inland freshwater areas dominated by woody vegetation less than 20 feet tall, such as buttonbush, alders, and many kinds of saplings.

- Palustrine forested (PFO) wetlands are defined as inland freshwater areas dominated by woody vegetation equal to or over 20 feet tall.

Drainage features (e.g. streams) and other waterbodies (e.g., stock ponds) within the 2023 Wetland Survey Area, including those identified in the NWI and NHD datasets, were examined for inclusion as potential WOTUS. The field assessment was focused on the presence of a definable bed and bank, ordinary high water mark (OHWM), downstream surface connection to a potential WOTUS, evidence of flow, and/or presence of areas that meet the USACE criteria for wetlands. If present, the OHWM of each of these features was recorded with GPS. These features were mapped and documented in a similar manner as wetlands. If detected, each waterbody feature possessing an OHWM would have been assigned its own unique ID, however none were identified during field surveys.

In addition to evaluating the 2023 Wetland Survey Area for features that met wetland and waterbody definitions, the professional judgment of the WEST delineator was used to make an informal determination of jurisdiction. Certain features are jurisdictional based on regulation and do not require further assessments (e.g., territorial seas, traditional navigable waters, interstate waters, and impoundments of these features). As previously noted in the Regulatory Background section, there have recently been both regulatory guidance changes as well as court decisions that are influencing how the USACE determines jurisdiction of wetlands and waterbodies. WEST utilized the best available information from the agencies to make the determinations; however,

the informal jurisdictional determinations in this report are subject to USACE review and final determination.

The WOTUS definition further identifies features that are exempt from jurisdiction, including prior converted croplands, waste treatment systems, ditches (including roadside ditches), artificially irrigated areas, artificial lakes/ponds, artificial reflecting pools, waterfilled depressions, and swales and erosional features.

The delineator assigned a likely, unlikely, or unknown jurisdictional status to the delineated and mapped wetlands and waterbodies based on best professional judgement and experience in the region. Wetland and waterbody determinations included in this report are informal as only the USACE can make a formal jurisdictional determination.

Wetland Mapping

Wetlands were identified based on two parameters: hydrology and wetland vegetation (see above description). The wetland boundary was mapped following wetland/upland vegetation breaks, slope, and other hydrology indicators. A list of plant species observed was recorded in field notes. All other areas not mapped as wetland were considered uplands (i.e., areas containing upland vegetation and lacking hydrological indicators) and recorded as non-wetland ("no") points. An informal jurisdictional determination was not made for mapped resources.

2024 Desktop Assessment

A comprehensive desktop assessment of publicly available wetlands and waterbodies data for areas adjusted for reroutes that were not included in the previous aquatic resources inventory or wetland mapping efforts. The desktop assessment followed methodology as outlined above in the 2023 desktop assessment section. Based on this review, areas identified as potentially being wetlands or WOTUS will be targeted for wetland delineations in spring 2024.

RESULTS

2023 Wetland Delineations

Thirteen wetlands, totaling 11.76 ac, were identified, and delineated during the field reconnaissance (Table 1, Figure 4). Detailed maps of wetland locations are provided in Appendix A. Table 1 provides a summary of wetland classifications and acreages. All the 13 delineated wetlands were classified as Palustrine Emergent (PEM) wetlands. Nine of the wetlands occurred in depressions, two in flat areas, and two along hillslopes. Five of the delineated wetlands appeared to have a downstream connection to WOTUS and were therefore considered potentially or likely jurisdictional. Eight delineated wetlands were apparently isolated and lacked a downstream surface connection to WOTUS and were therefore considered unlikely to be jurisdictional (Table 1). Wetland determination data forms and representative photographs of wetlands are provided in Appendices B and C, respectively.

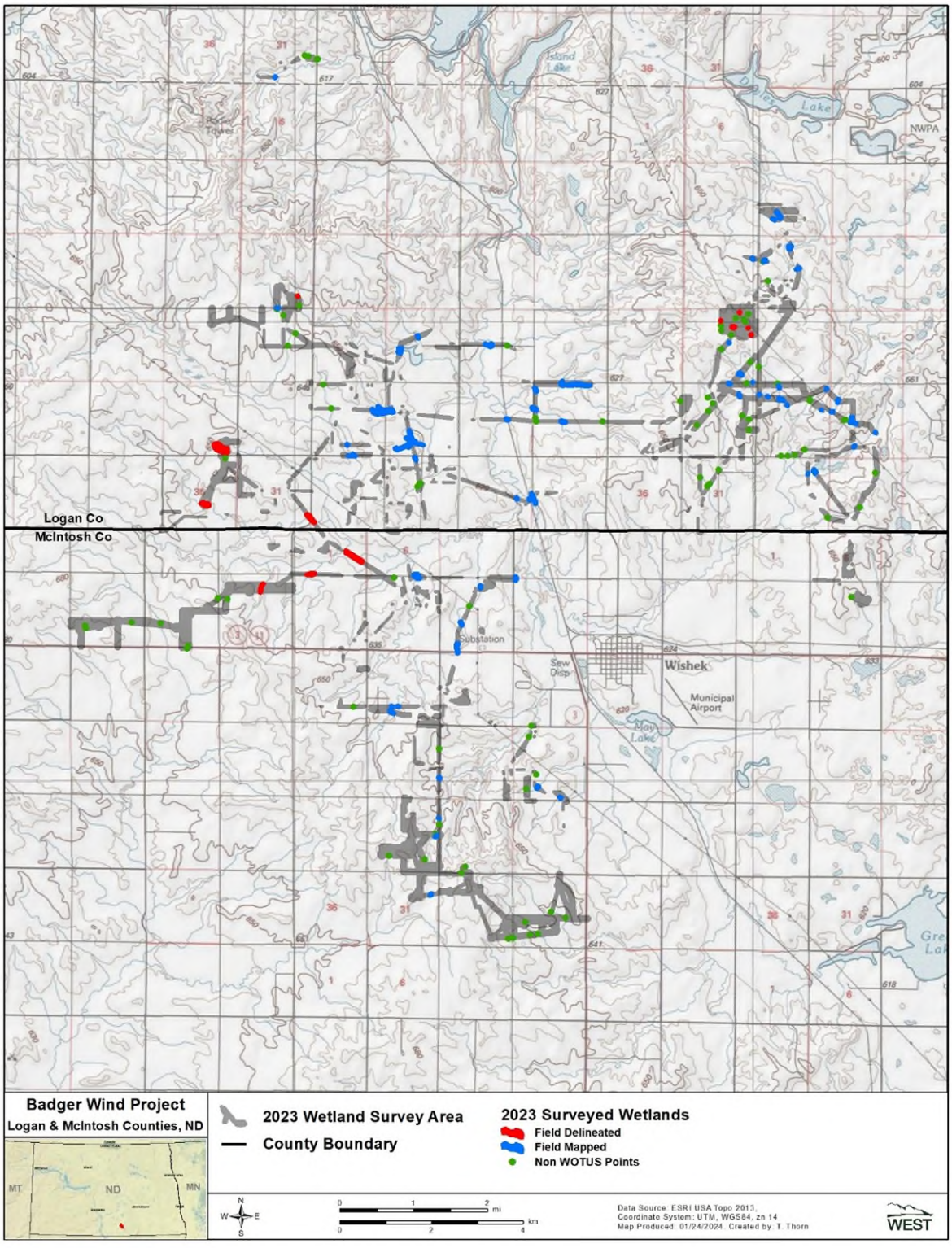

Figure 4. Results of the National Wetland Inventory and National Hydrography Dataset review within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota, October 24 – 25 and 31, November 1 – 2, 17, and 20, 2023.

Vegetation

The most common wetland species encountered in the13 delineated wetlands within the 2023 Wetland Survey Area were prairie cordgrass (*Spartina pectinata*), foxtail barley (*Hordeum jubatum*), and cattail (*Typha sp.*).

Hydrology

Hydrology indicators included surface water, high water table, saturation, and inundation visible on aerial imagery. Documented saturation, high water table, and surface water were the primary hydrologic indicators present for wetlands. Other hydrology indicators noted during the field investigation were redox dark surface, algal mat or crust, thin muck surface, salt crust, water-stained leaves, hydrogen sulfide odor, geomorphic position, and FAC-neutral test.

Table 1. Summary of all field delineated wetlands within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh counties, North Dakota, October 24 – 25, 2023.[1]

Feature ID	Acres	Cowardin Classification[2]	Latitude/Longitude[3]	Landform	Informal Jurisdictional Determination[4]
WET001	0.12	PEM	46.321769/-99.520417	Depression	Unlikely
WET003	0.02	PEM	46.323157/-99.521396	Depression	Unlikely
WET004	0.05	PEM	46.326259/-99.523731	Depression	Unlikely
WET005	0.42	PEM	46.323369/-99.525442	Depression	Unlikely
WET006	0.03	PEM	46.324534/-99.529152	Flat fence line	Unlikely
WET007	0.05	PEM	46.328772/-99.648972	Depression	Unlikely
WET008	4.36	PEM	46.297969/-99.668968	Flat	Unlikely
WET009	0.72	PEM	46.287986/-99.675265	Depression	Likely
WET010a	0.65	PEM	46.285454/-99.645177	Depression	Likely
WET010b	0.54	PEM	46.285454/-99.645177	Depression	Likely
WET011	3.65	PEM	46.276730/-99.630194	Hillslope	Likely
WET012	0.78	PEM	46.274184/-99.644255	Hillslope	Likely
WET013	0.37	PEM	46.272032/-99.658492	Depression	Unlikely

[1] Wetlands delineated in 2021 and 2022 are present in Flaig (2021) and Atwell (2022) reports.
[2] PEM = Palustrine emergent wetland
[3] Location from wetland sample plot
[4] Determination based on WEST's professional judgement and subject to change based on USACE review

Soils

Soil colors were predominantly dark (e.g., 10 YR 2/1 and 3/1) and included iron concentrations. The primary field hydric soil indicator used was, redox dark surface. The majority of the soil was clay loams and clay.

Wetland Mapping

Wetlands

Sixty-seven wetlands, totaling 21.93 ac, were identified and mapped during the field assessment (Table 2, Figure 4). Detailed maps of wetland locations are provided in Appendix A. All 67 wetlands were classified as PEM wetlands based on observed vegetation. Landform type was not assessed for mapped wetlands, but generally appeared similar to that of the delineated wetlands. Common wetland species recorded for each mapped wetland were similar to those for delineated wetlands. Hydric soils were not assessed. Photographs of representative wetlands are provided in Appendix C.

Non-wetland Points

Eighty-six NWI/NHD features identified during the desktop assessment as wetlands were evaluated within the 2023 Wetland Survey Area and determined to lack characteristics of WOTUS (Appendix D). These locations were recorded with the tablet with Collector for ArcGIS software coupled with an Arrow Lite GPS as “non-WOTUS” (“no”) points and were photo documented. Fourteen no points were recorded during the wetland delineation field effort (503U – 516U). Specifically, these drainages lacked an OHWM and were composed of upland vegetation. Seventy-two no points were recorded during the wetland mapping field effort, indicating these locations lacked wetland vegetation and hydrology (212U, 517U – 539U, 541U – 554U, 640U, 700U – 711U, 2000U – 2019U, and 5201U). Detailed maps of non-WOTUS points are provided in Appendix A and representative photographs are provided in Appendix C.

Table 2. Summary of all mapped wetlands within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota, November 1 – 2, November 17, and November 20, 2023.

Feature ID	Acres	Cowardin Classification[1]
WET014	0.06	PEM
WET015	0.11	PEM
WET016	0.44	PEM
WET017	0.15	PEM
WET018	0.29	PEM
WET019	0.42	PEM
WET020	0.17	PEM
WET021	0.12	PEM
WET023	0.12	PEM
WET024	0.18	PEM
WET025	0.30	PEM
WET027a	0.03	PEM
WET027b	0.35	PEM
WET028	0.17	PEM
WET029	1.43	PEM

Table 2. Summary of all mapped wetlands within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota, November 1 – 2, November 17, and November 20, 2023.

Feature ID	Acres	Cowardin Classification[1]
WET030	0.01	PEM
WET031	0.13	PEM
WET032	0.15	PEM
WET098	2.39	PEM
WET099	0.13	PEM
WET200	0.64	PEM
WET201	0.23	PEM
WET202	0.02	PEM
WET203	0.08	PEM
WET204	0.06	PEM
WET205	0.42	PEM
WET206	0.06	PEM
WET207	0.04	PEM
WET208	0.15	PEM
WET209	0.15	PEM
WET210	0.42	PEM
WET211	0.08	PEM
WET212	2.91	PEM
WET213	0.13	PEM
WET214	0.21	PEM
WET215	0.26	PEM
WET216	0.26	PEM
WET217	0.69	PEM
WET219	0.25	PEM
WET220	0.11	PEM
WET221	0.26	PEM
WET224	0.09	PEM
WET225	0.59	PEM
WET226	0.13	PEM
WET228	0.47	PEM
WET229	0.14	PEM
WET234	1.42	PEM
WET236	0.81	PEM
WET237	0.13	PEM
WET238	0.09	PEM
WET239	0.07	PEM
WET241	0.06	PEM
WET340	0.39	PEM
WET1002	0.22	PEM
WET1003	0.05	PEM
WET1004	0.01	PEM
WET1005	0.01	PEM
WET1006	0.08	PEM
WET1007	0.00	PEM
WET1008	0.01	PEM
WET1009	1.08	PEM
WET1013	0.70	PEM
WET1014	0.27	PEM
WET1015	0.07	PEM
WET1016	0.12	PEM
WET1017	0.31	PEM

Table 2. Summary of all mapped wetlands within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota, November 1 – 2, November 17, and November 20, 2023.

Feature ID	Acres	Cowardin Classification[1]
WET1018	0.03	PEM

[1] PEM = Palustrine emergent wetland

2024 Desktop Assessment

A total of three potential wetlands totaling 0.24 ac were identified for the re-routed survey area (Figure 5).

CONCLUSION

Aquatic resources delineations and wetland mapping were completed in the months of September 2020, October 2020, September 2021, May 2022, October 2023, and November 2023 and a desktop assessment was completed January 2024 for re-routed infrastructure. Further details regarding surveys conducted pre-2023 can be found in the Aquatic Resources Delineation Report (Atwell 2022). A combined total of 193 wetlands were identified through field delineation, comprising 185.11 ac and 64 additional wetlands were mapped, totaling 30.5 ac during surveys (Figure 5). Four waterbody features were delineated, comprising 0.78 ac and seven watercourses were identified, comprising a cumulative total of 5.18 ac. A total of three potential wetlands as identified by the desktop review totaling 0.24 ac were identified for the re-routed survey area (Figure 5).

Areas identified as potentially being wetlands or WOTUS in the 2024 desktop assessment and mapped wetlands from the 2023 field reconnaissance will be targeted for wetland delineations in spring 2024. Informal jurisdictional determinations provided in this report must be verified and/or finalized with USACE. Project activities that impact WOTUS must be authorized by USACE prior to activities occurring.

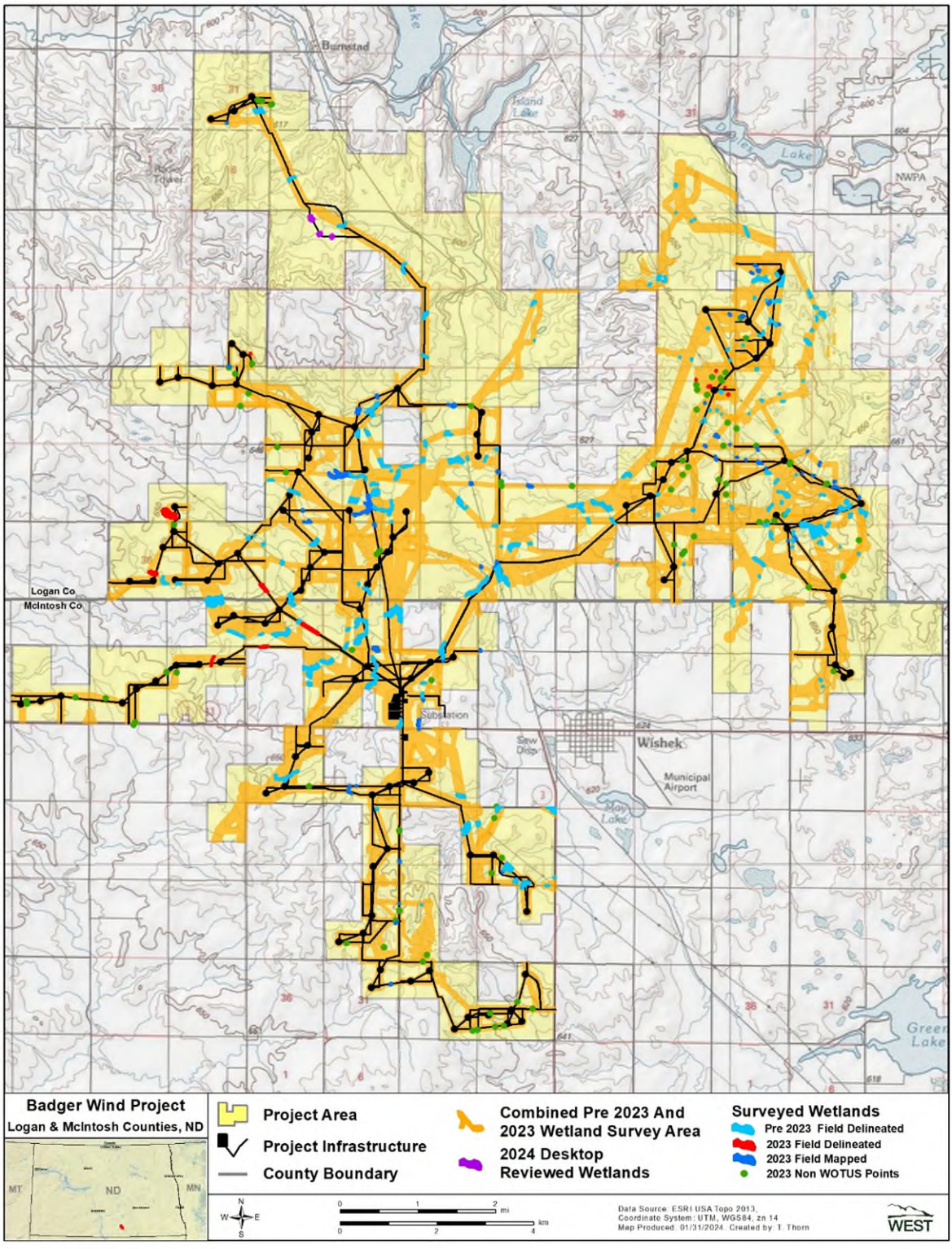

Figure 5. Wetland survey results for field surveys conducted in 2020, 2021, 2022, and 2023, and 2024 desktop review at the Badger Wind Project in Logan and McIntosh counties, North Dakota.

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Appendix A. Field Delineated and Mapped Wetland Locations within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota

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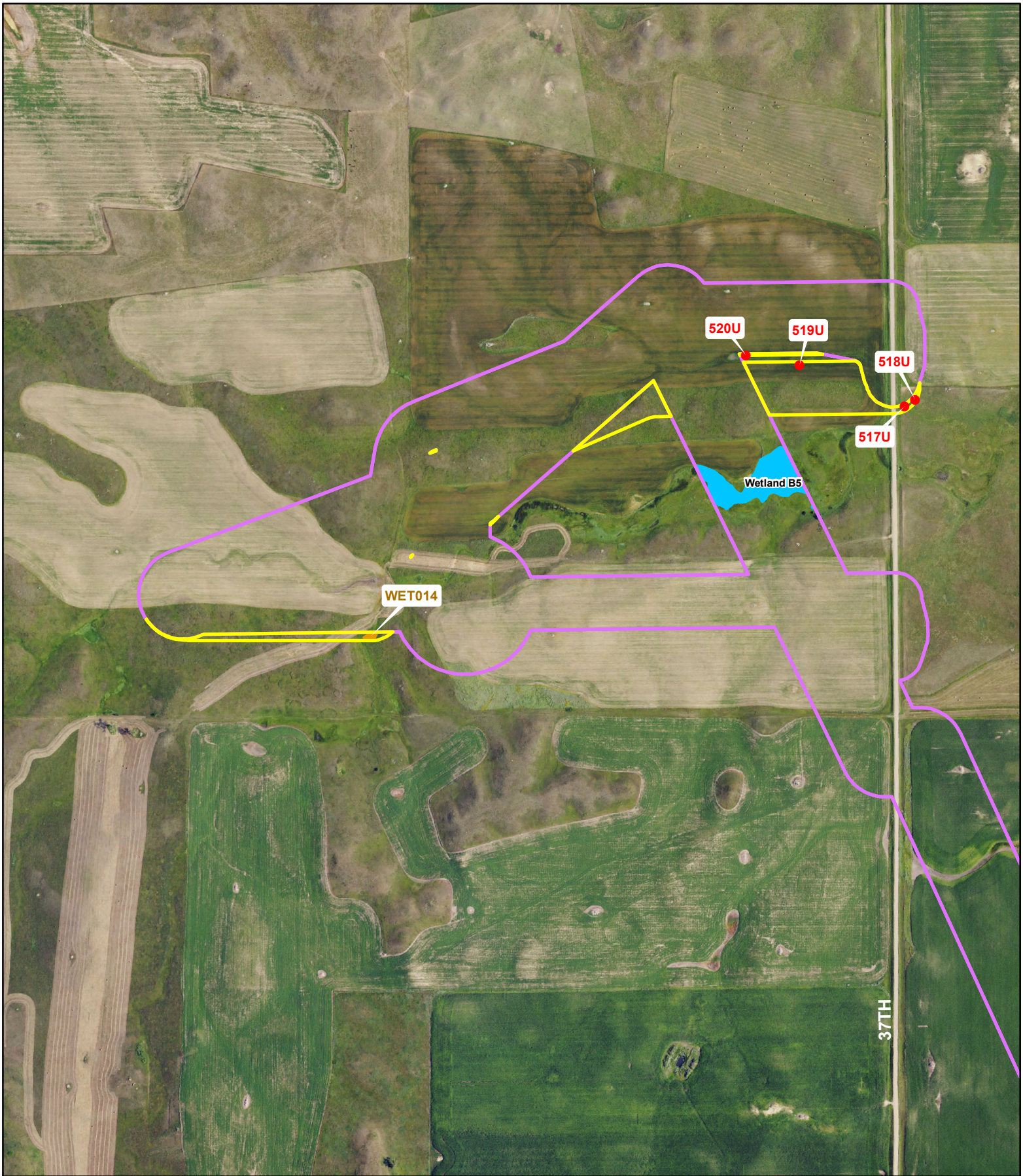
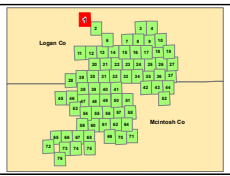


Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

Pre 2023 Wetland Survey Area

County Boundary

State Highway

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Surveyed Wetlands

Field Delineated

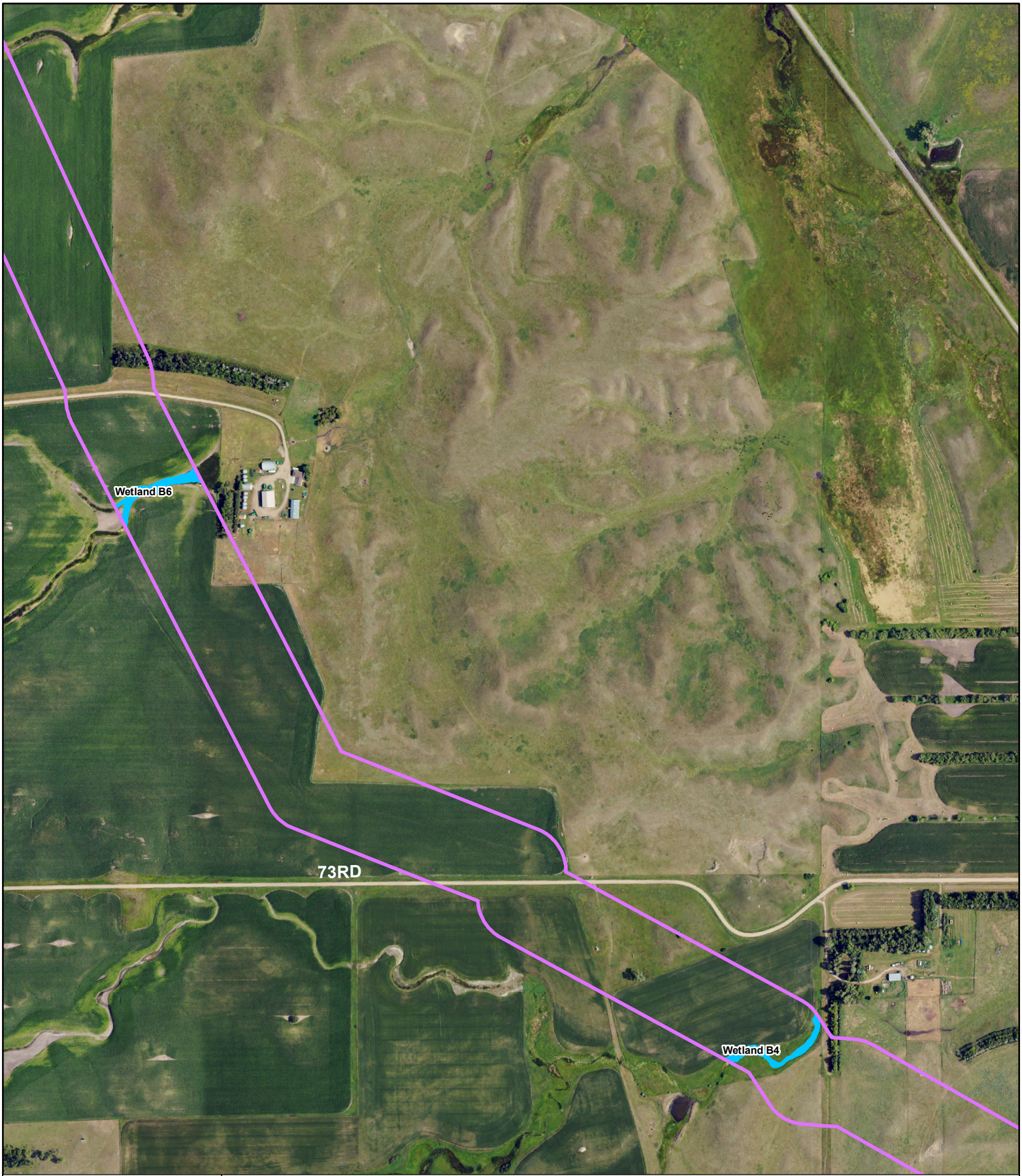
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

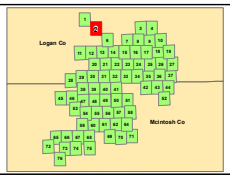
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

Pre 2023 Wetland Survey Area

County Boundary

State Highway

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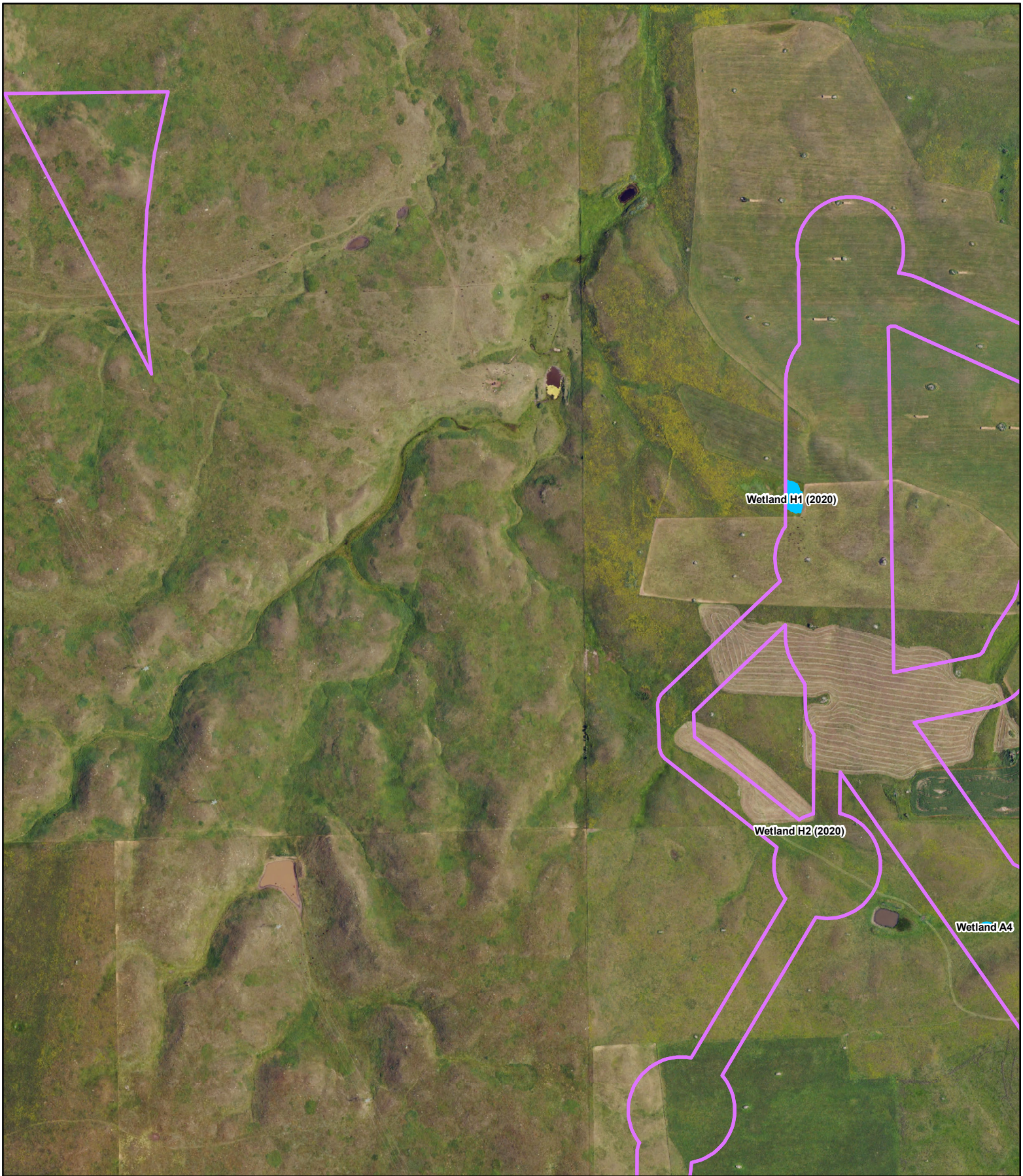

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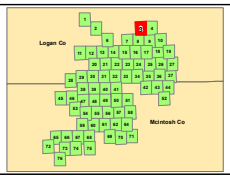

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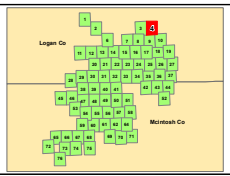
Logan & McIntosh Counties, ND



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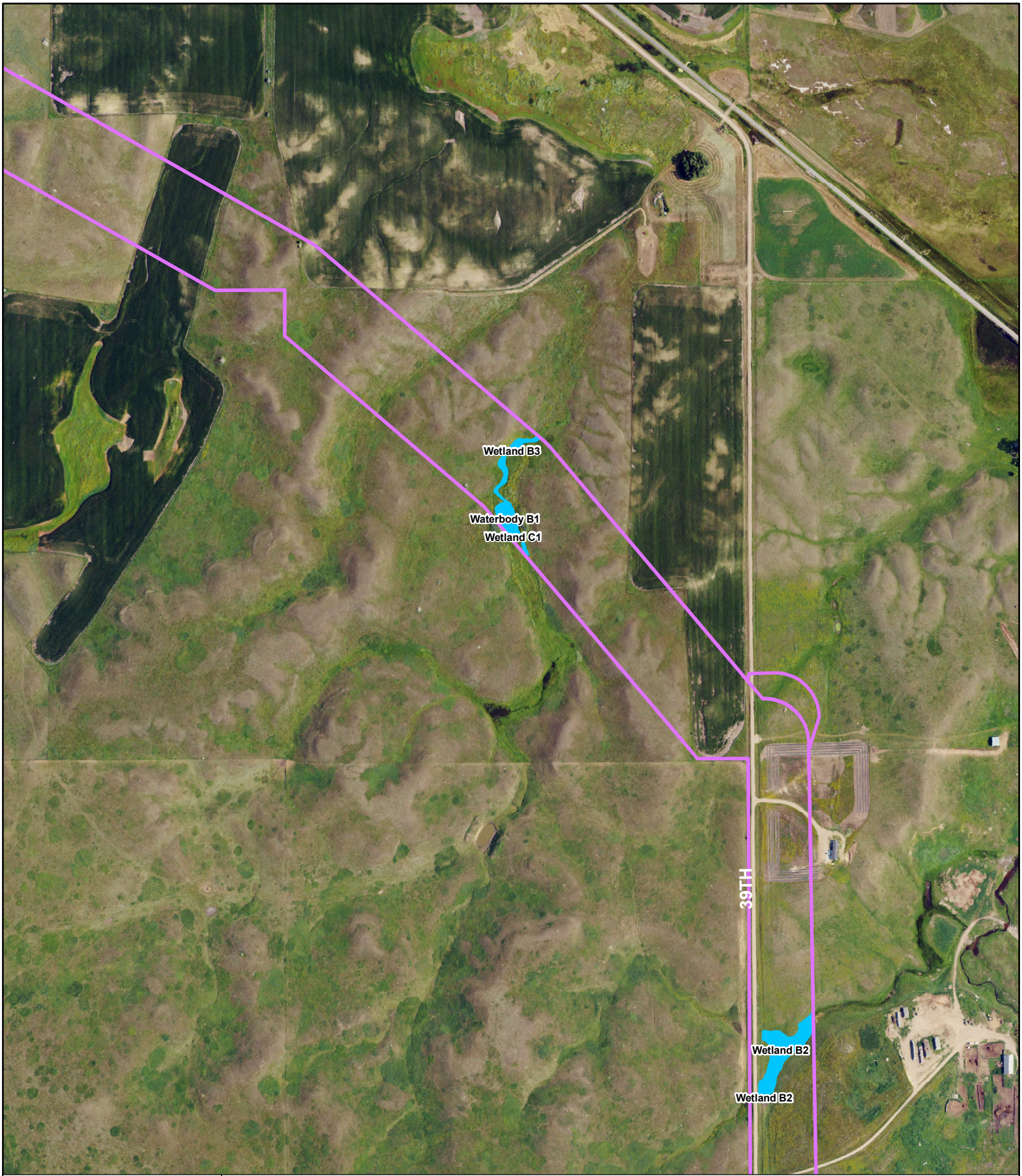

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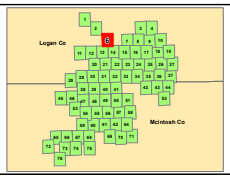
Logan & McIntosh Counties, ND



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2023 Surveyed Wetlands

Field Delineated Field Mapped

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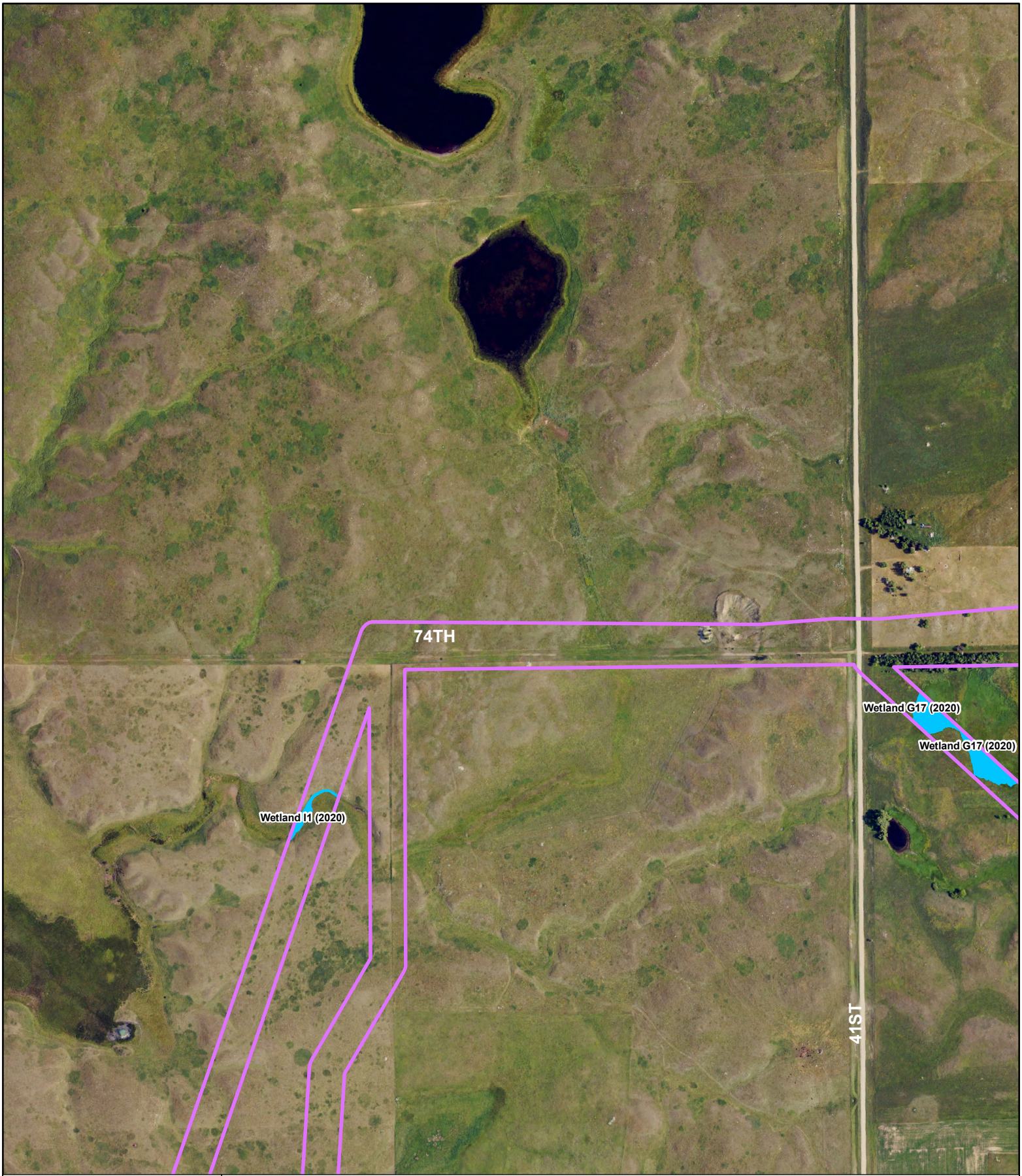

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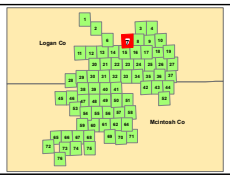
Logan & McIntosh Counties, ND



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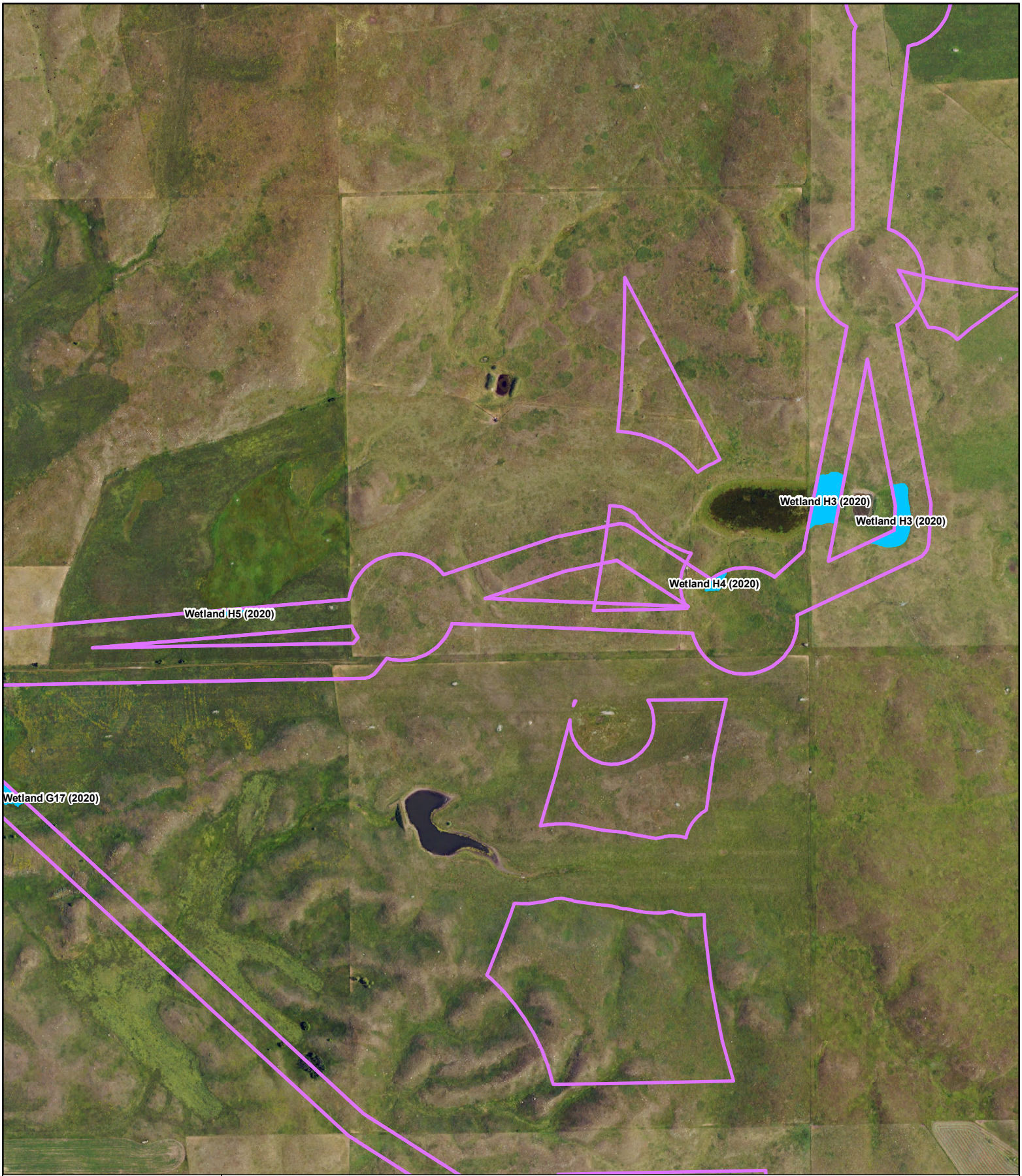

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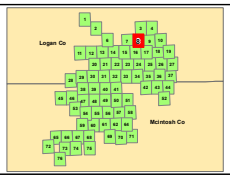

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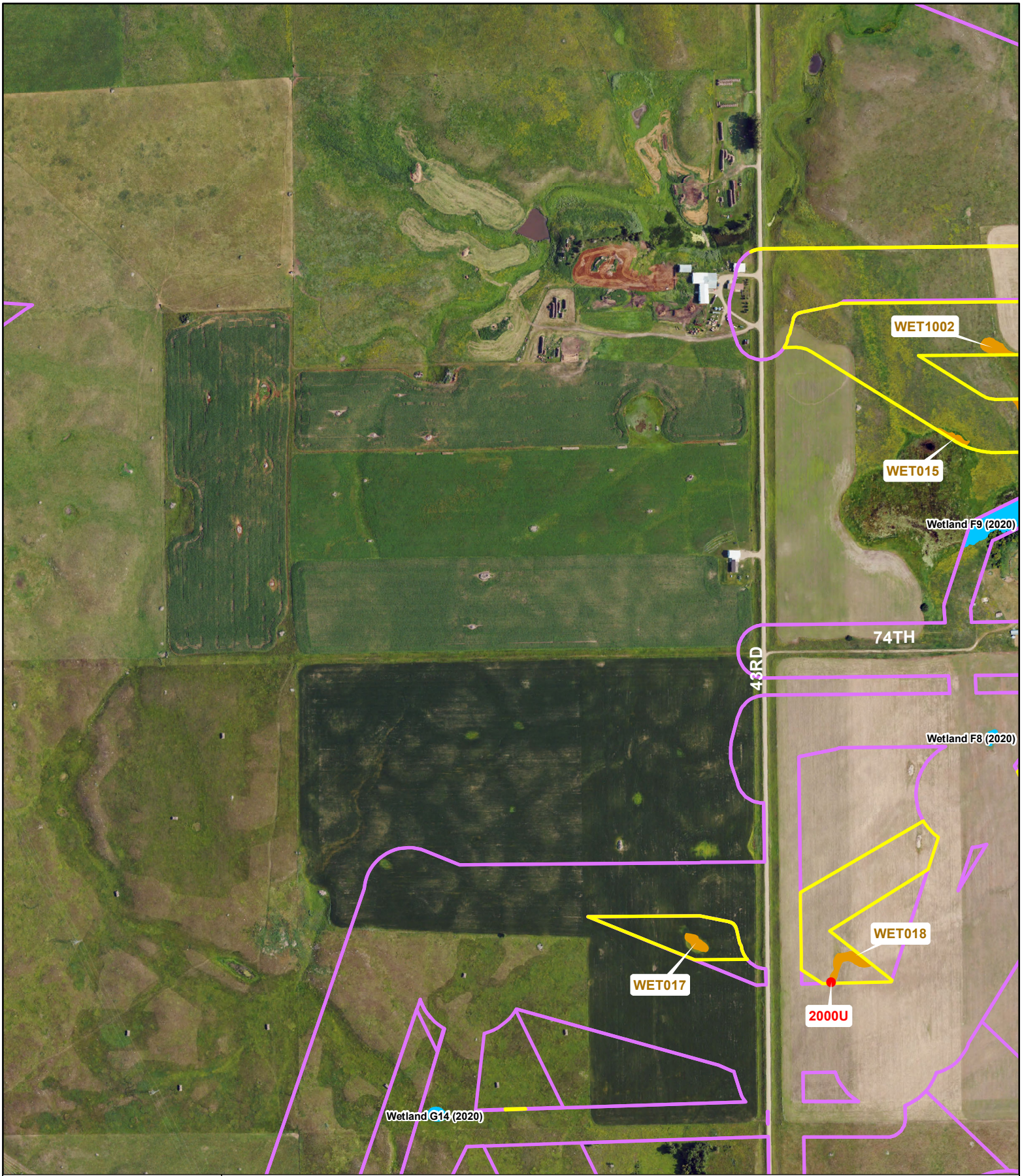

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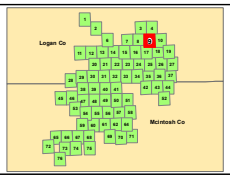

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2023 Surveyed Wetlands

Field Delineated Field Mapped

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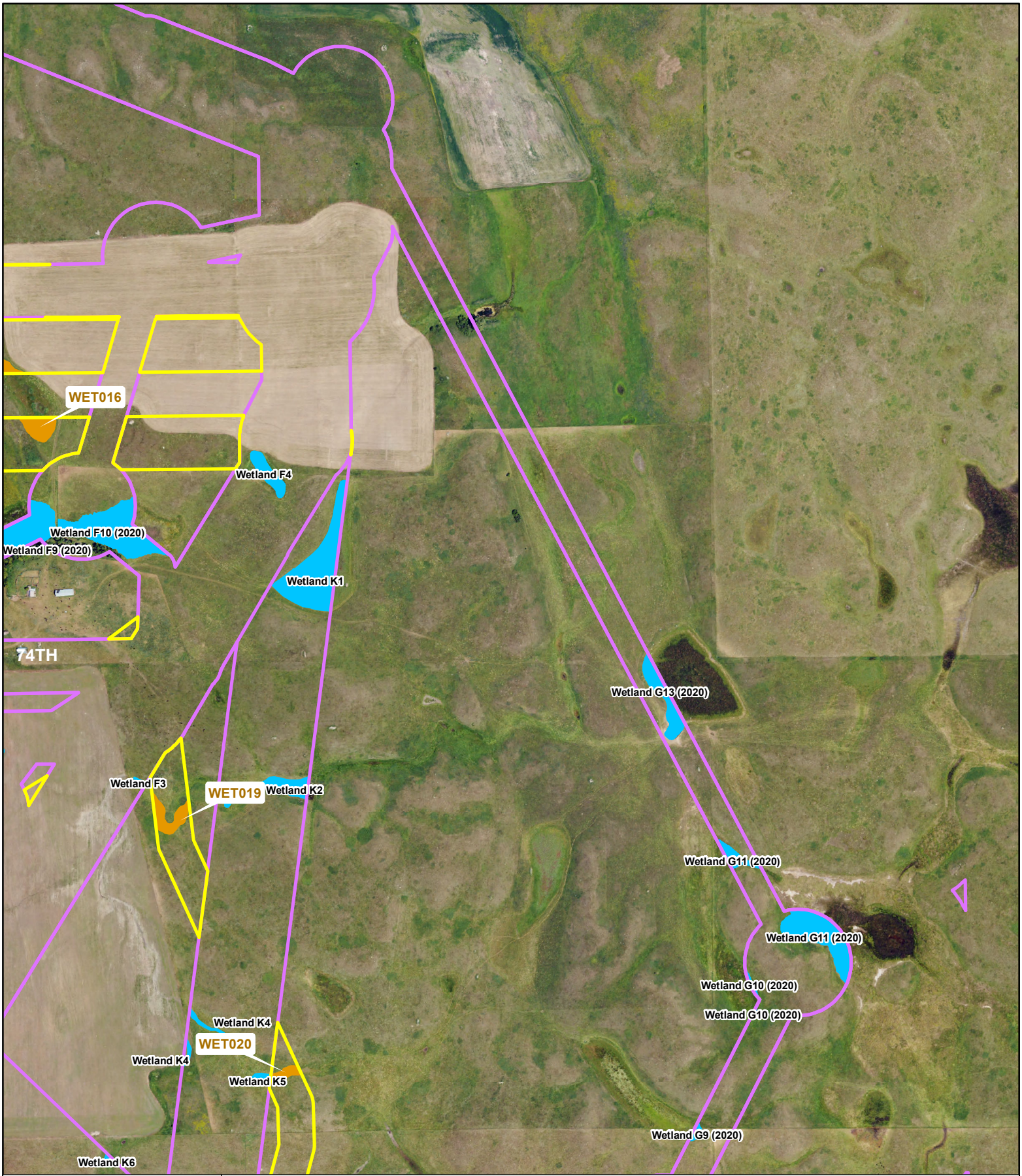

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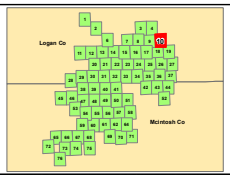

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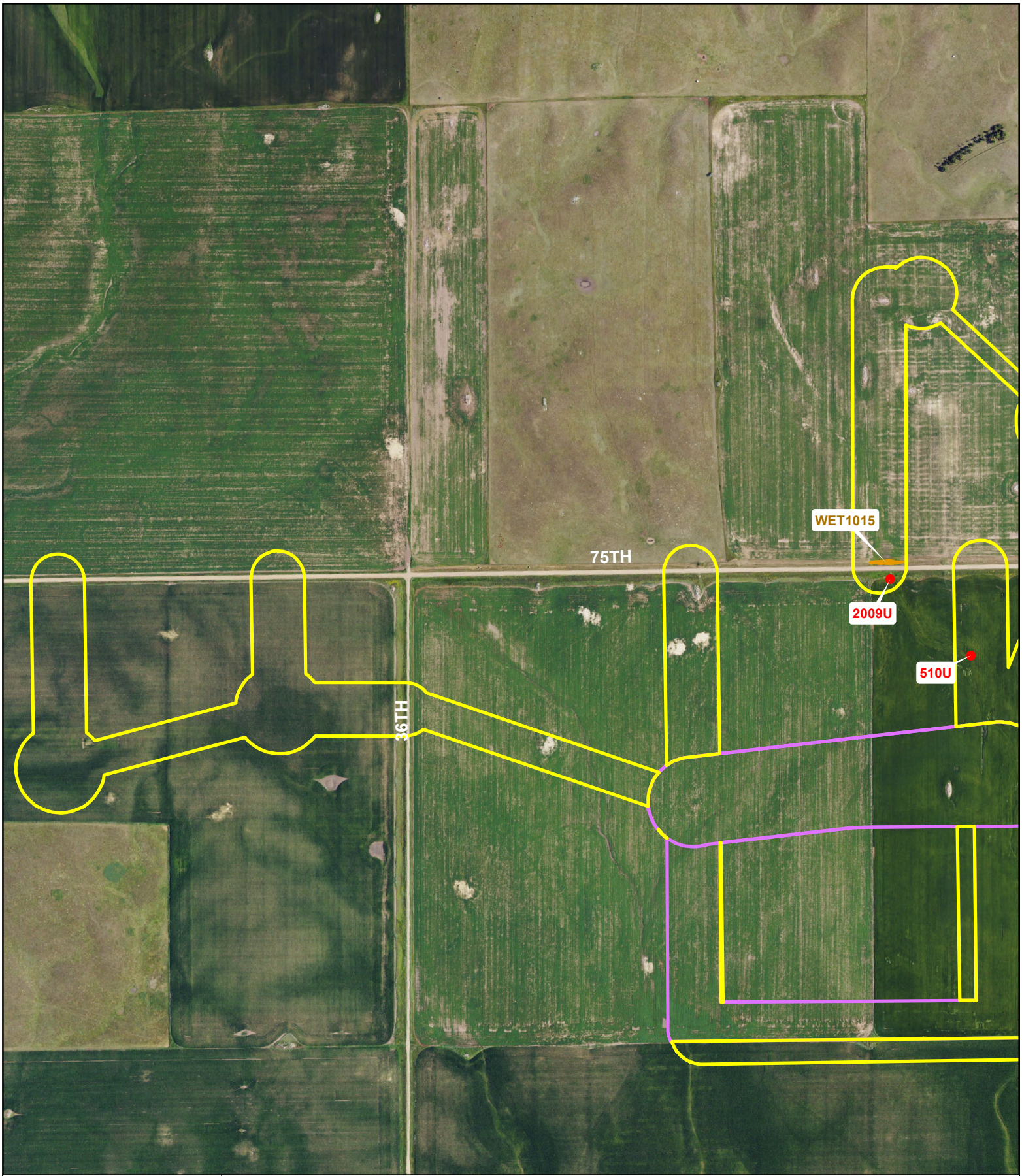
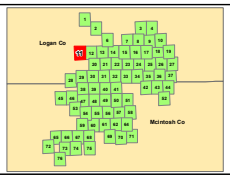


Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

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Wetland/Upland Sample Points

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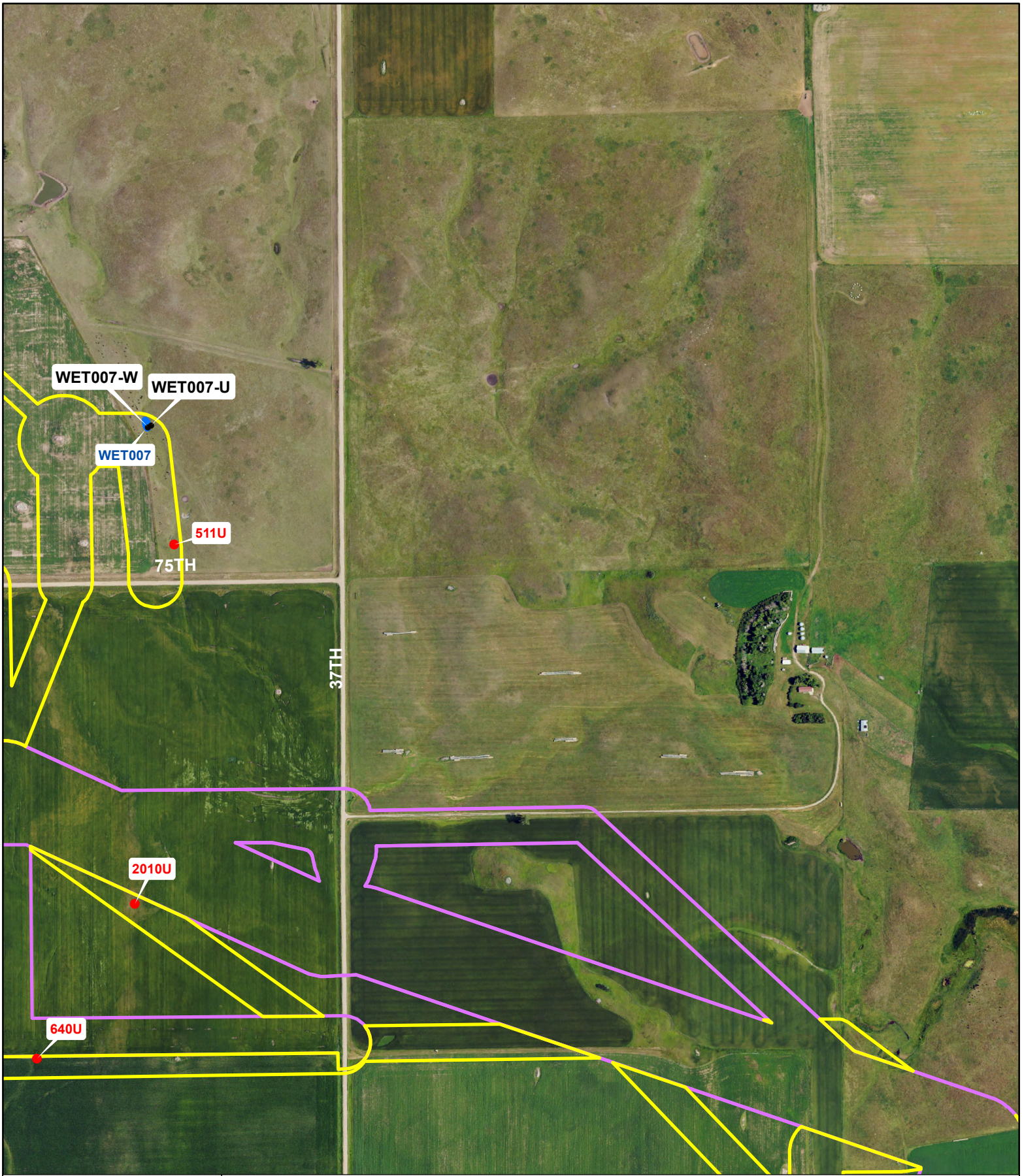

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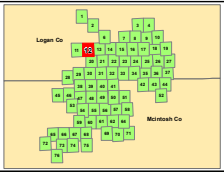
Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated | Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

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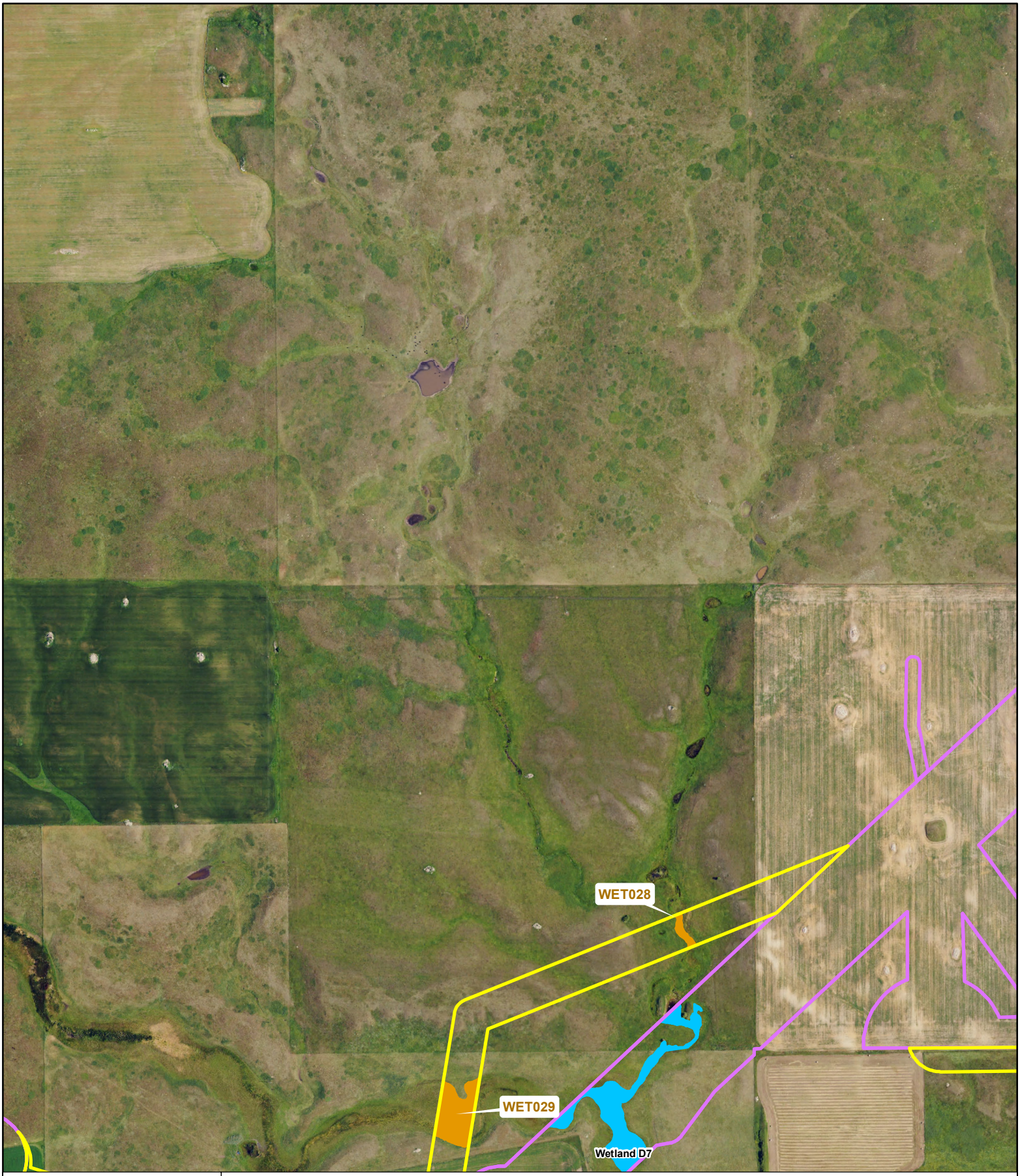

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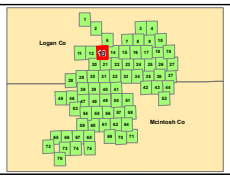
Logan & McIntosh Counties, ND



2023 Wetland Survey Area

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County Boundary

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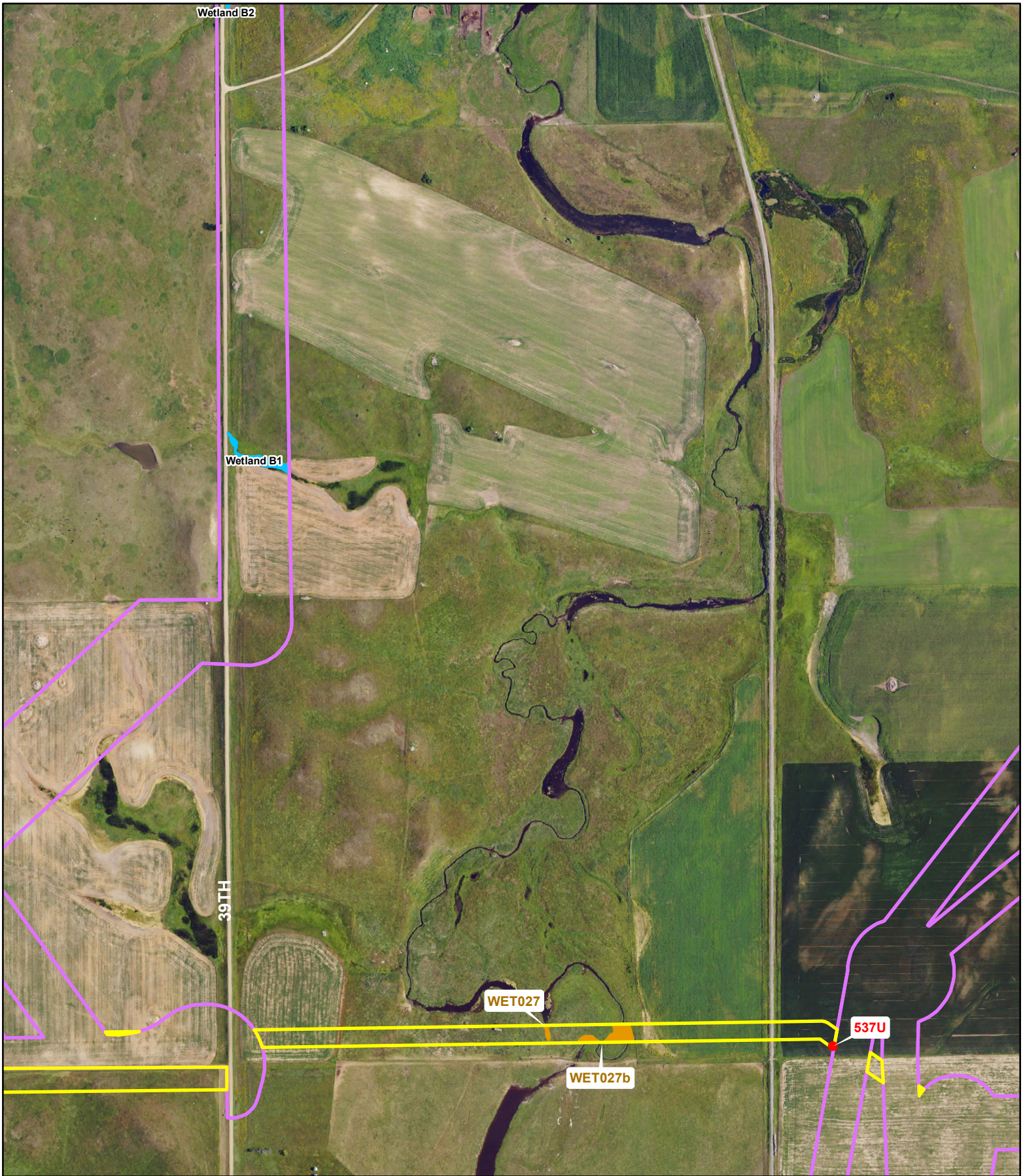

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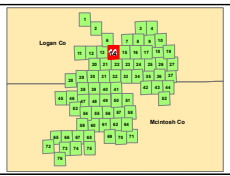

2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated Field Mapped

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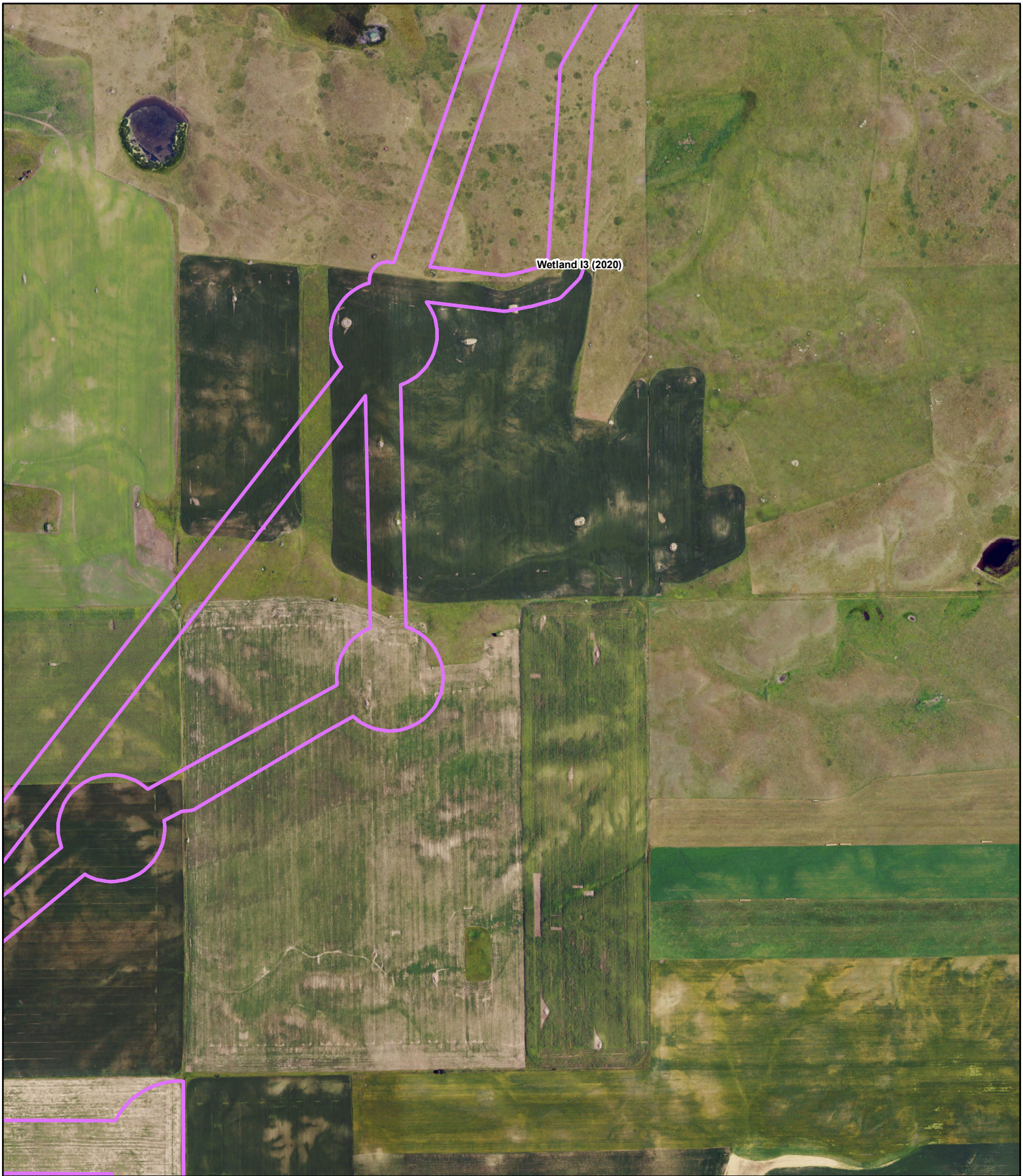

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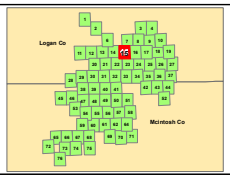

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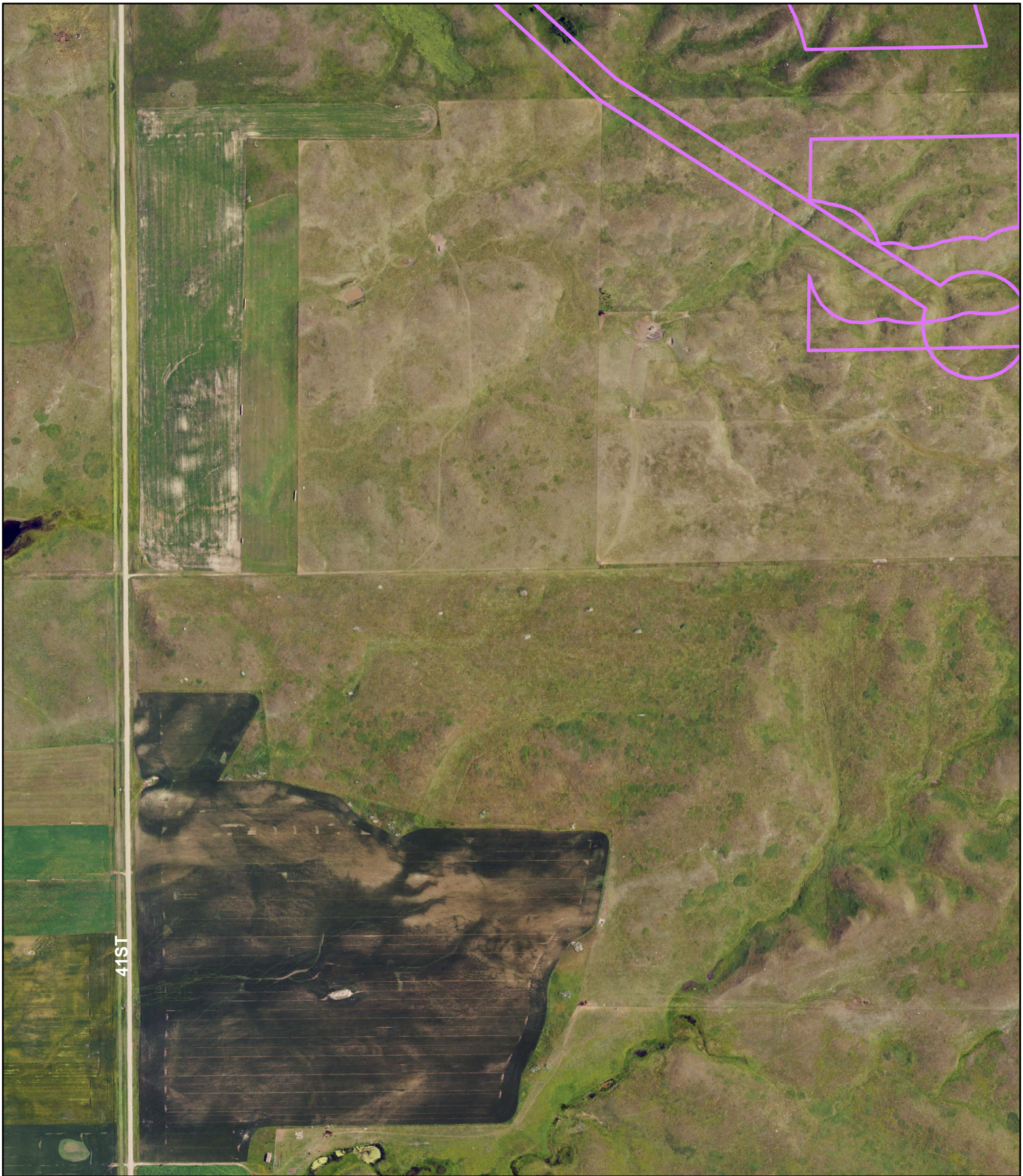

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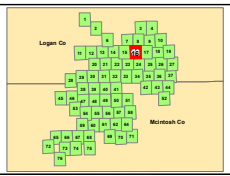

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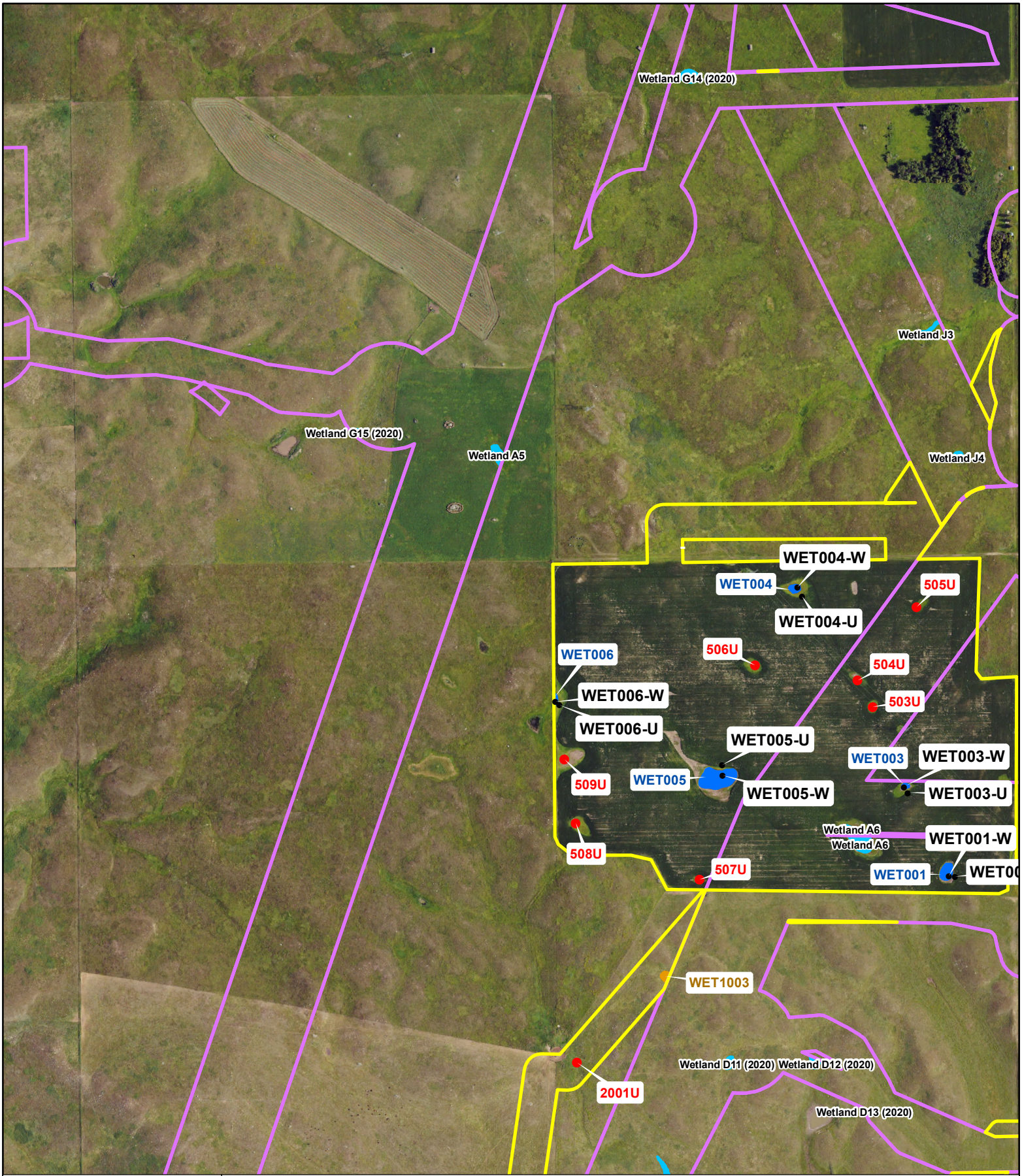

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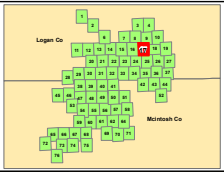

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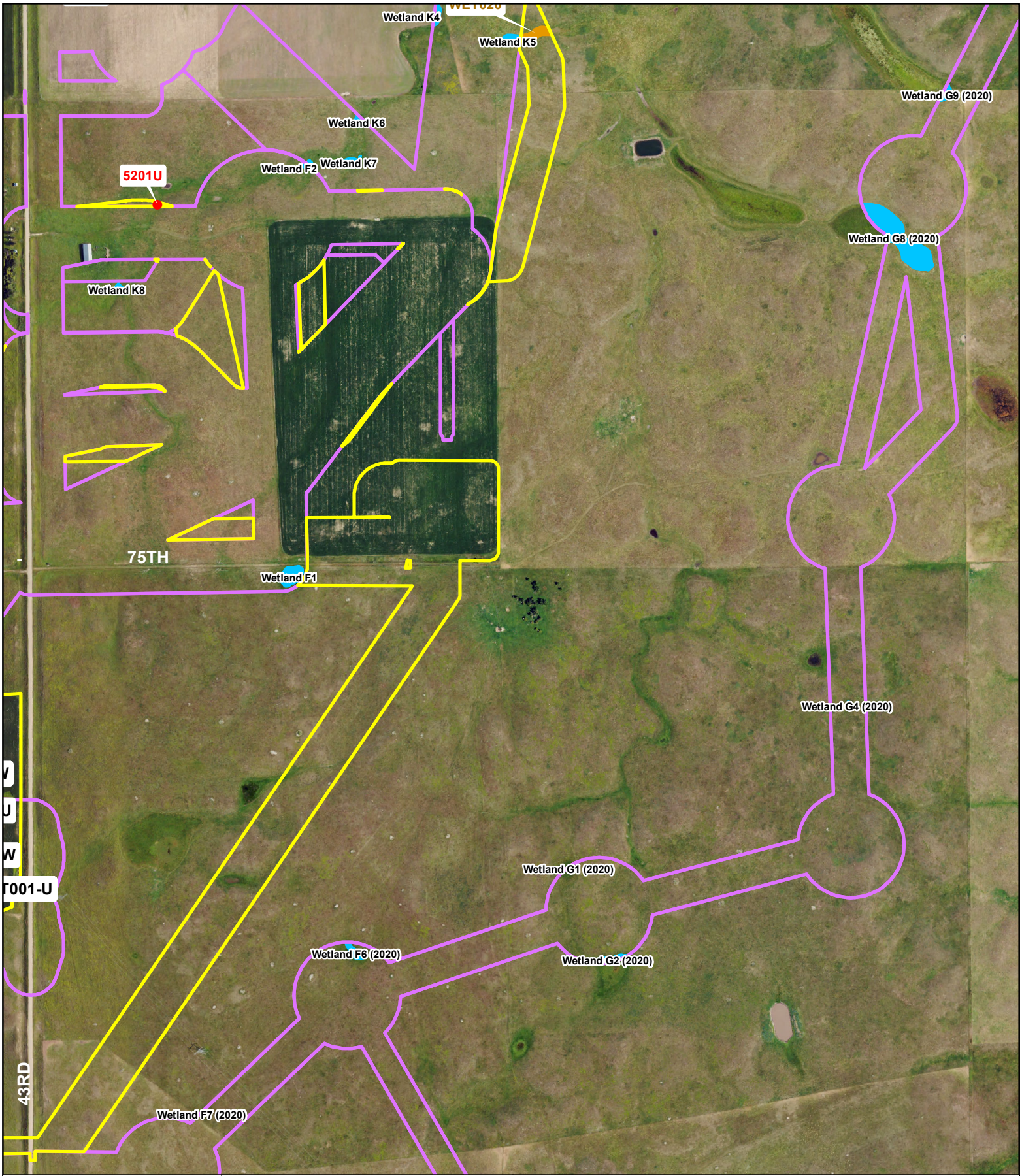

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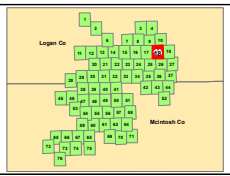

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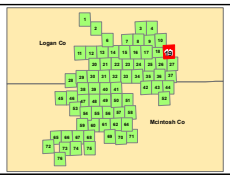

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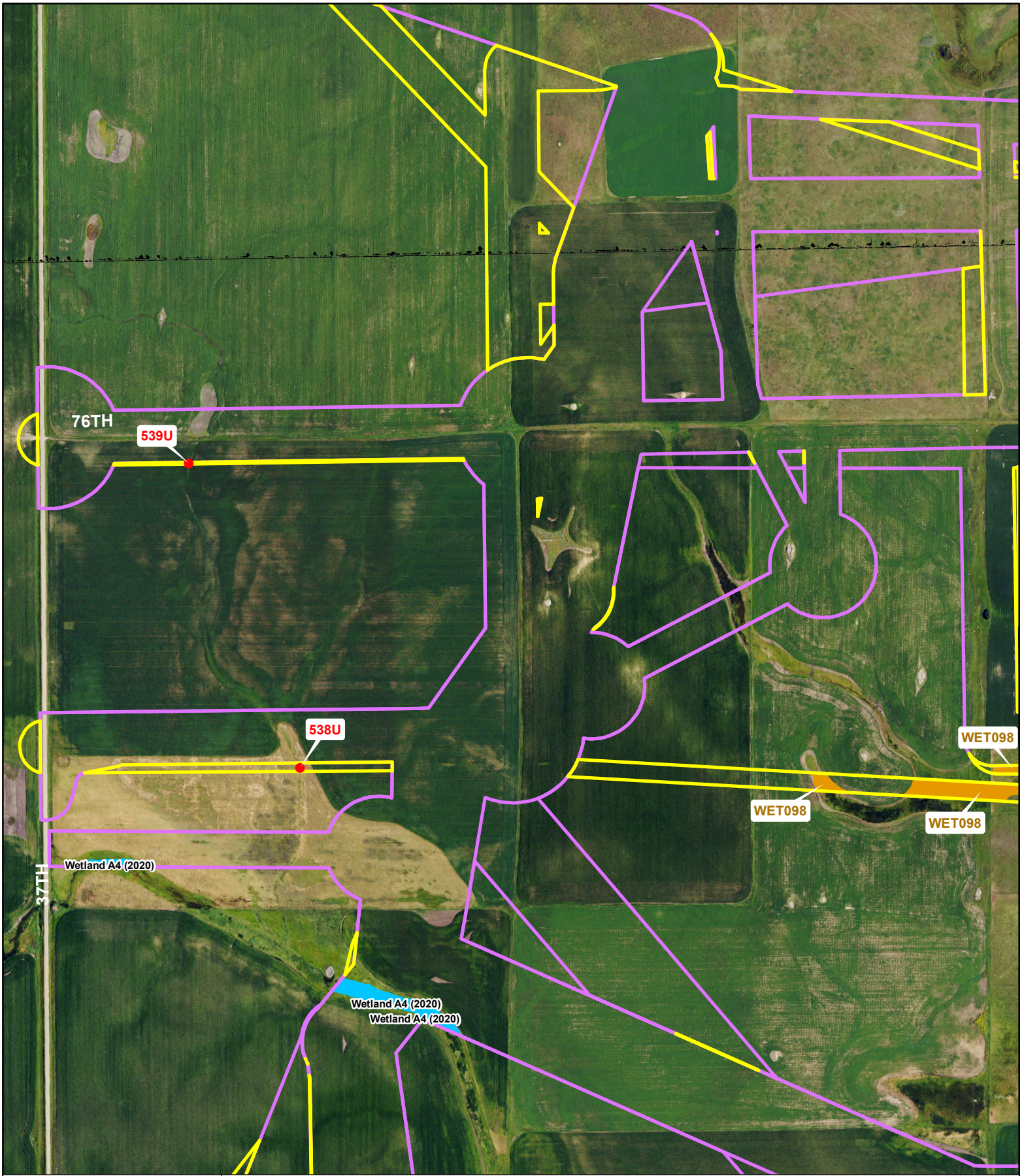

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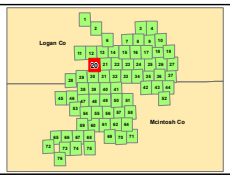

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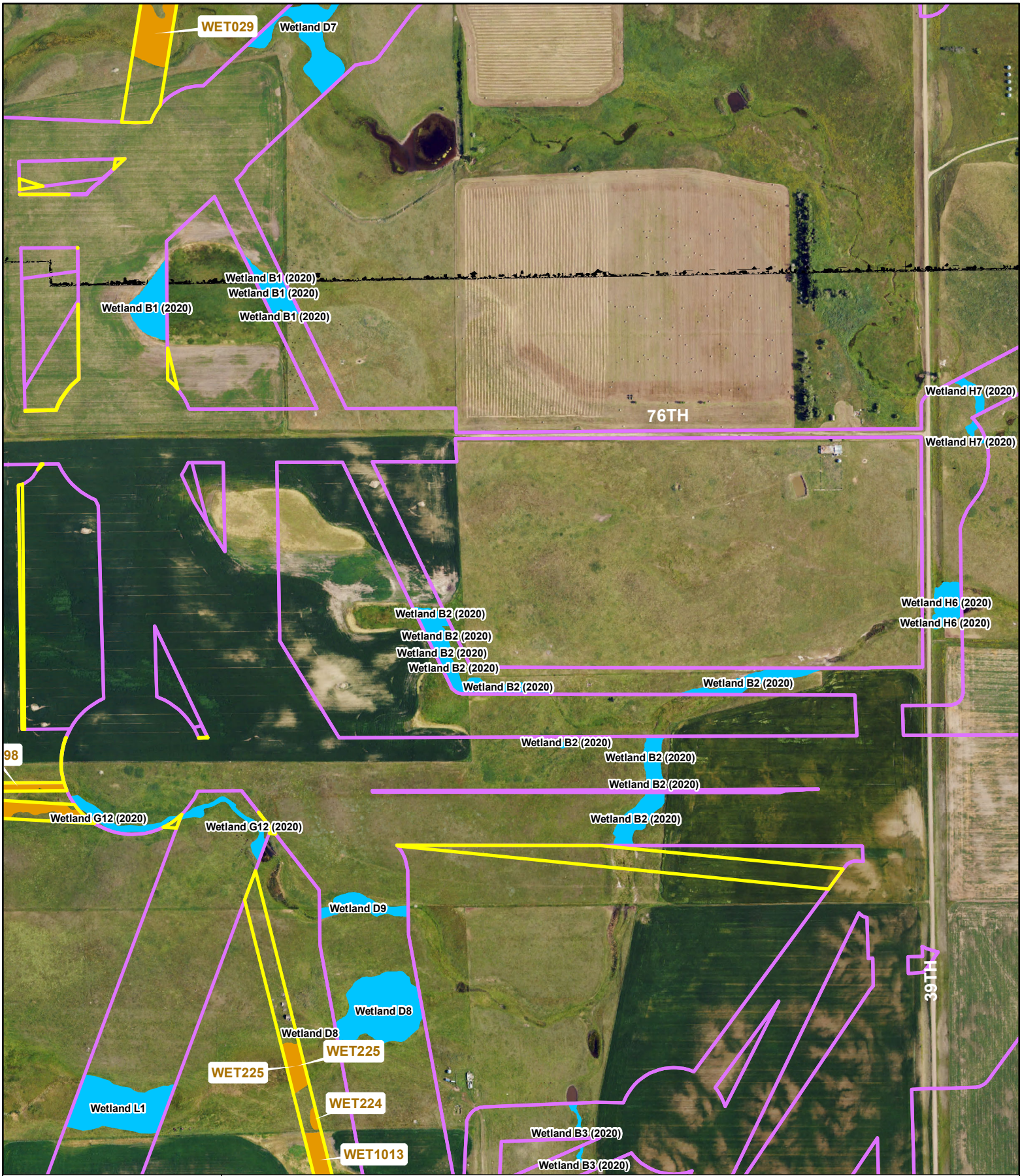

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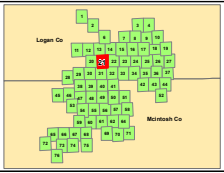

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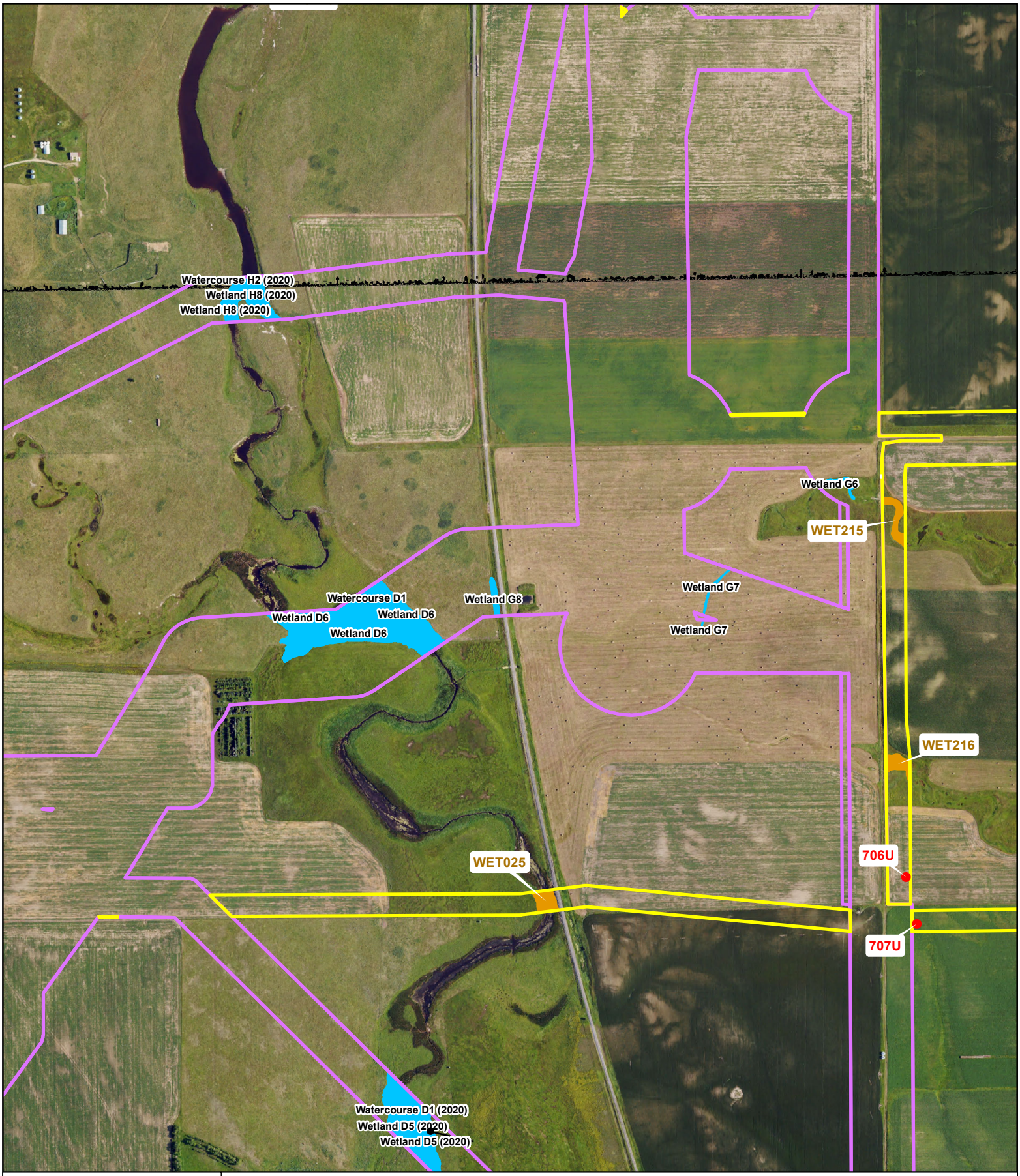
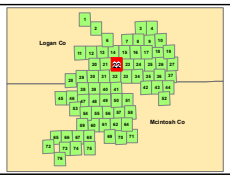


Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

Pre 2023 Wetland Survey Area

County Boundary

State Highway

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Surveyed Wetlands

Field Delineated

N W E S

0 0.1 0.2 mi

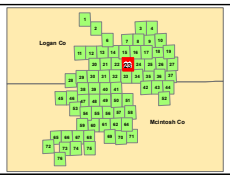
0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Badger Wind Project

Logan & McIntosh Counties, ND



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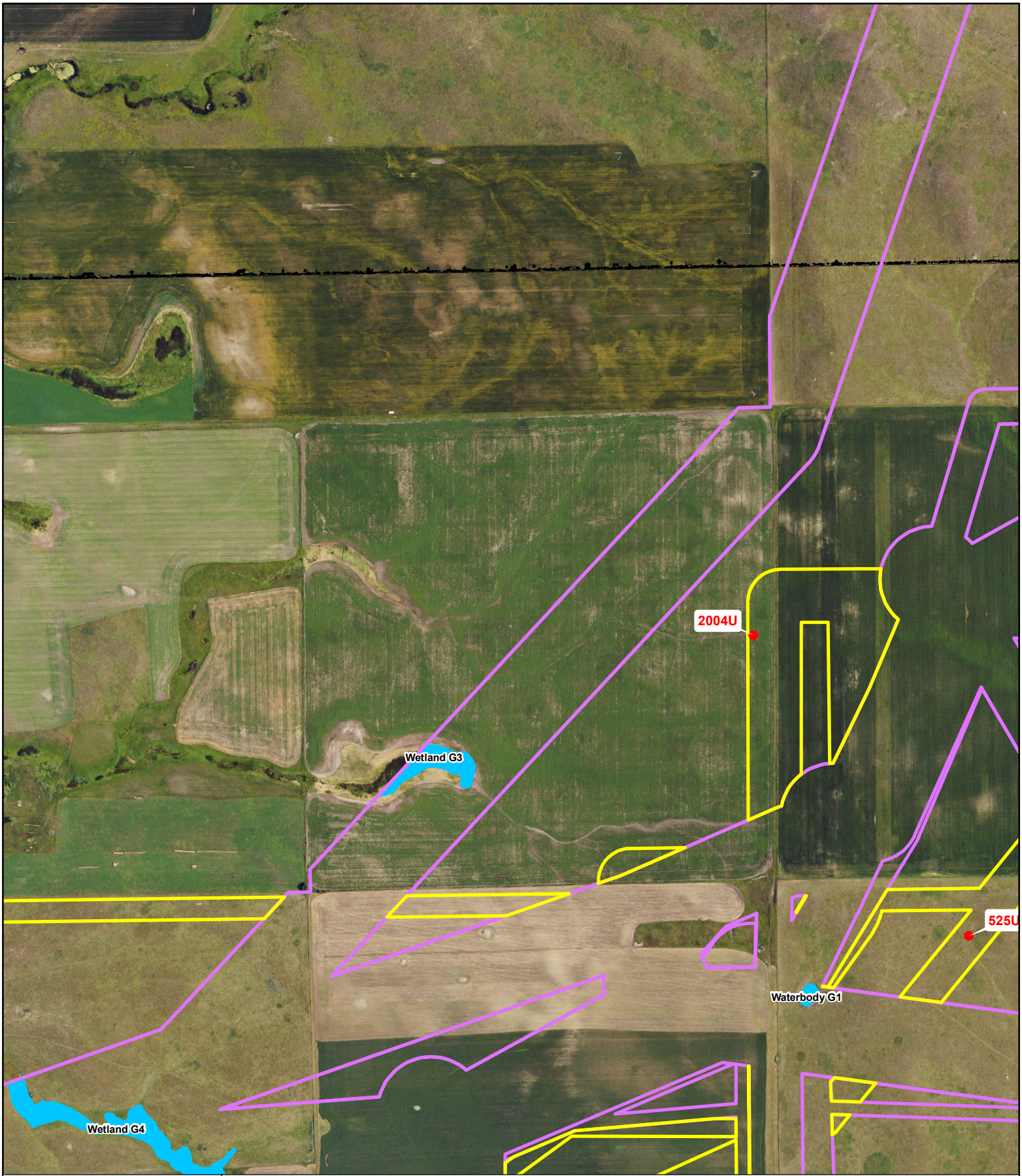

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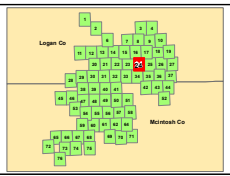
Logan & McIntosh Counties, ND



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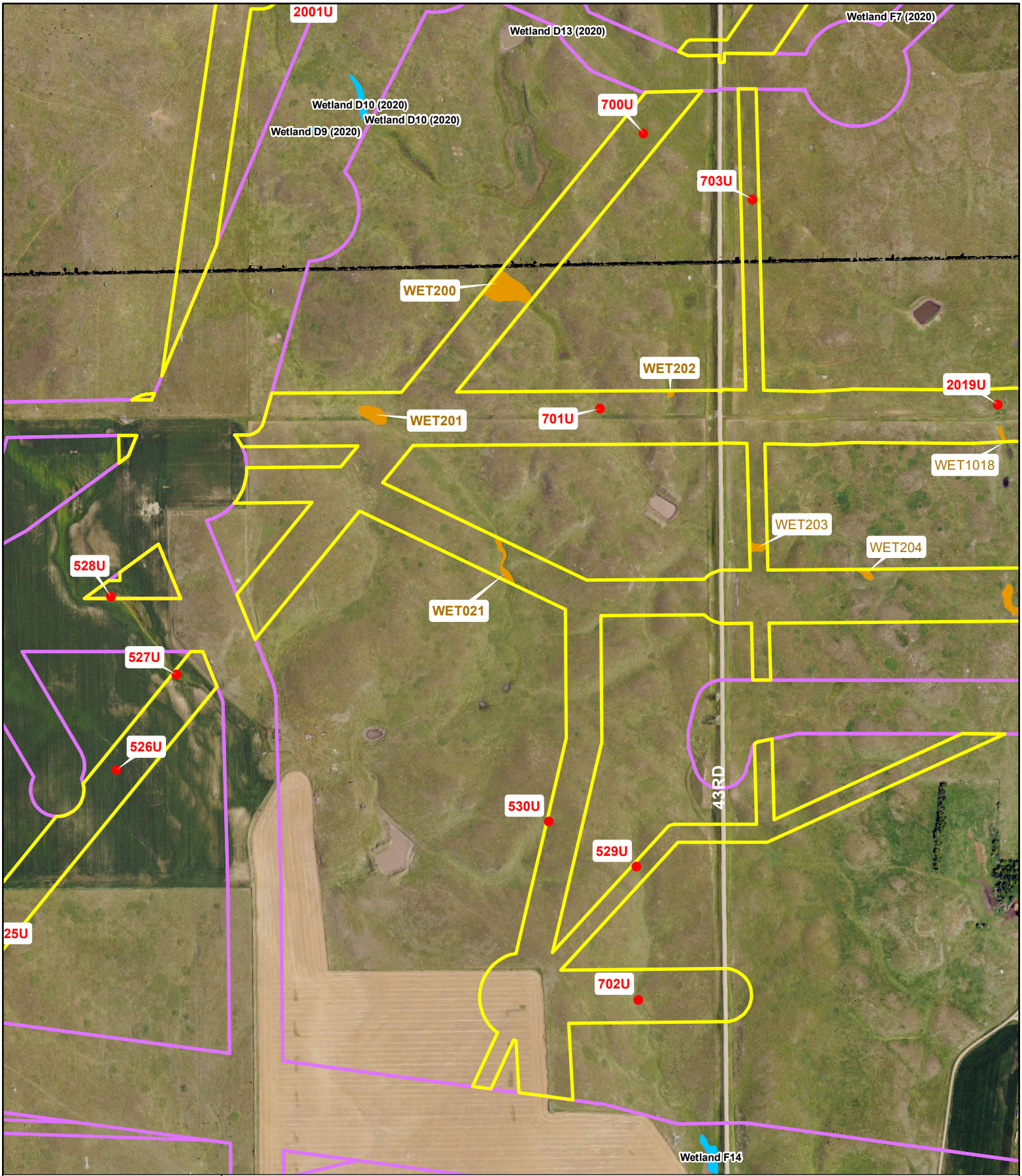

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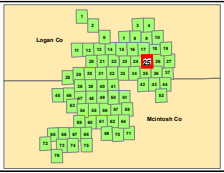
Logan & McIntosh Counties, ND



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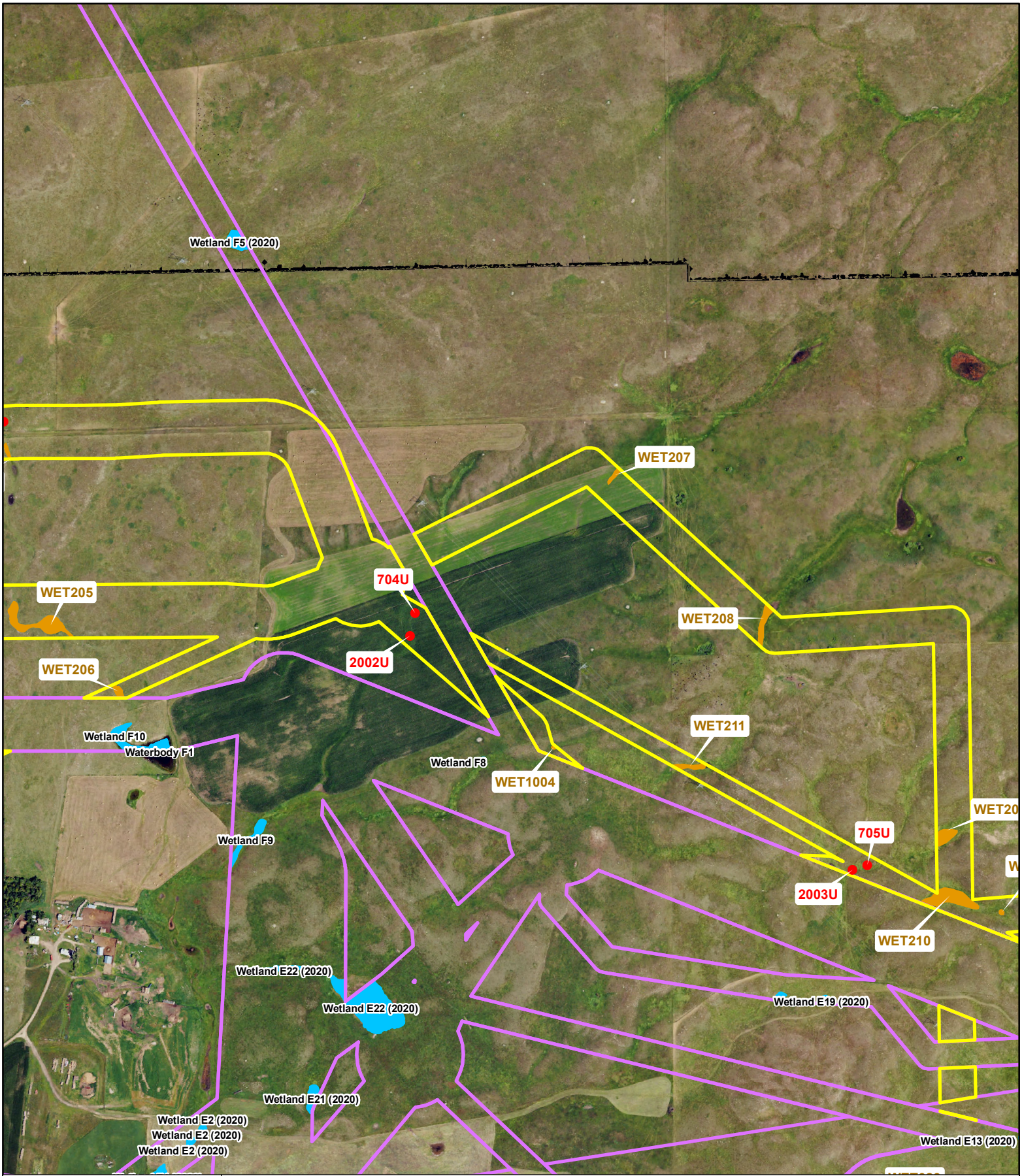

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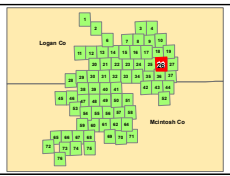

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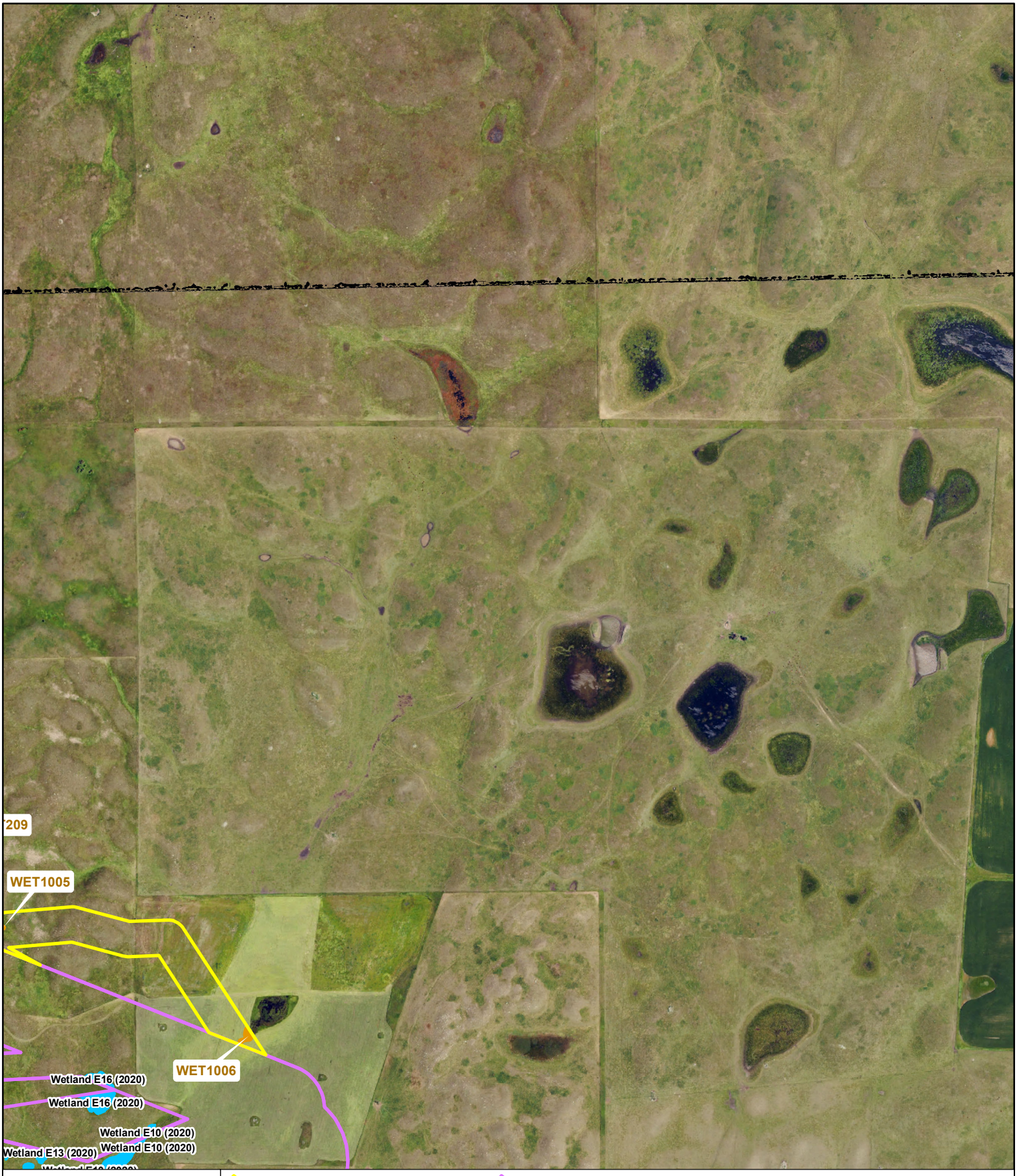

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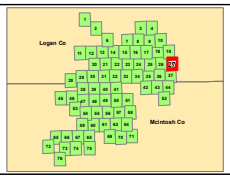

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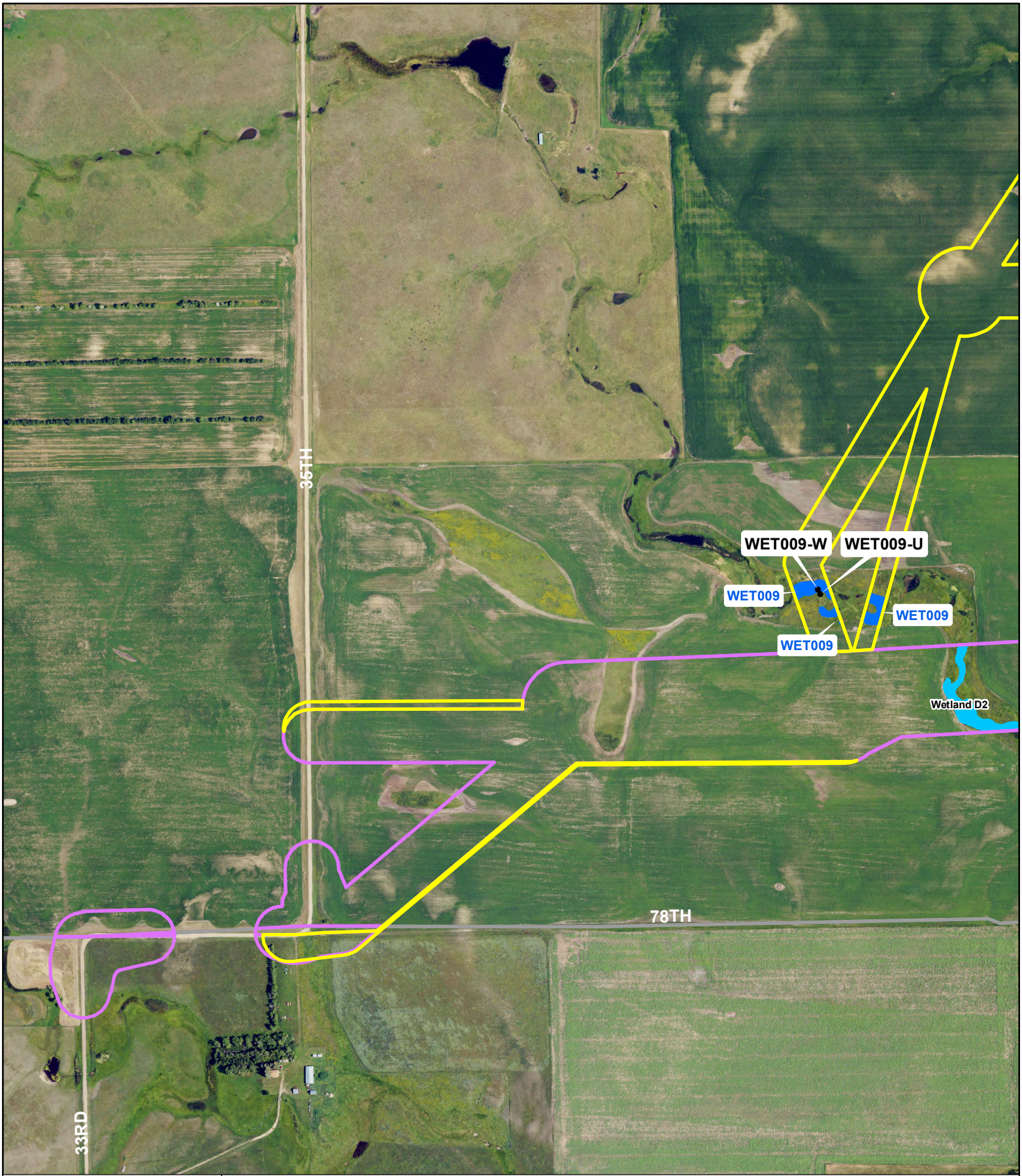

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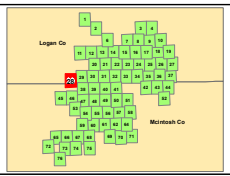
Logan & McIntosh Counties, ND



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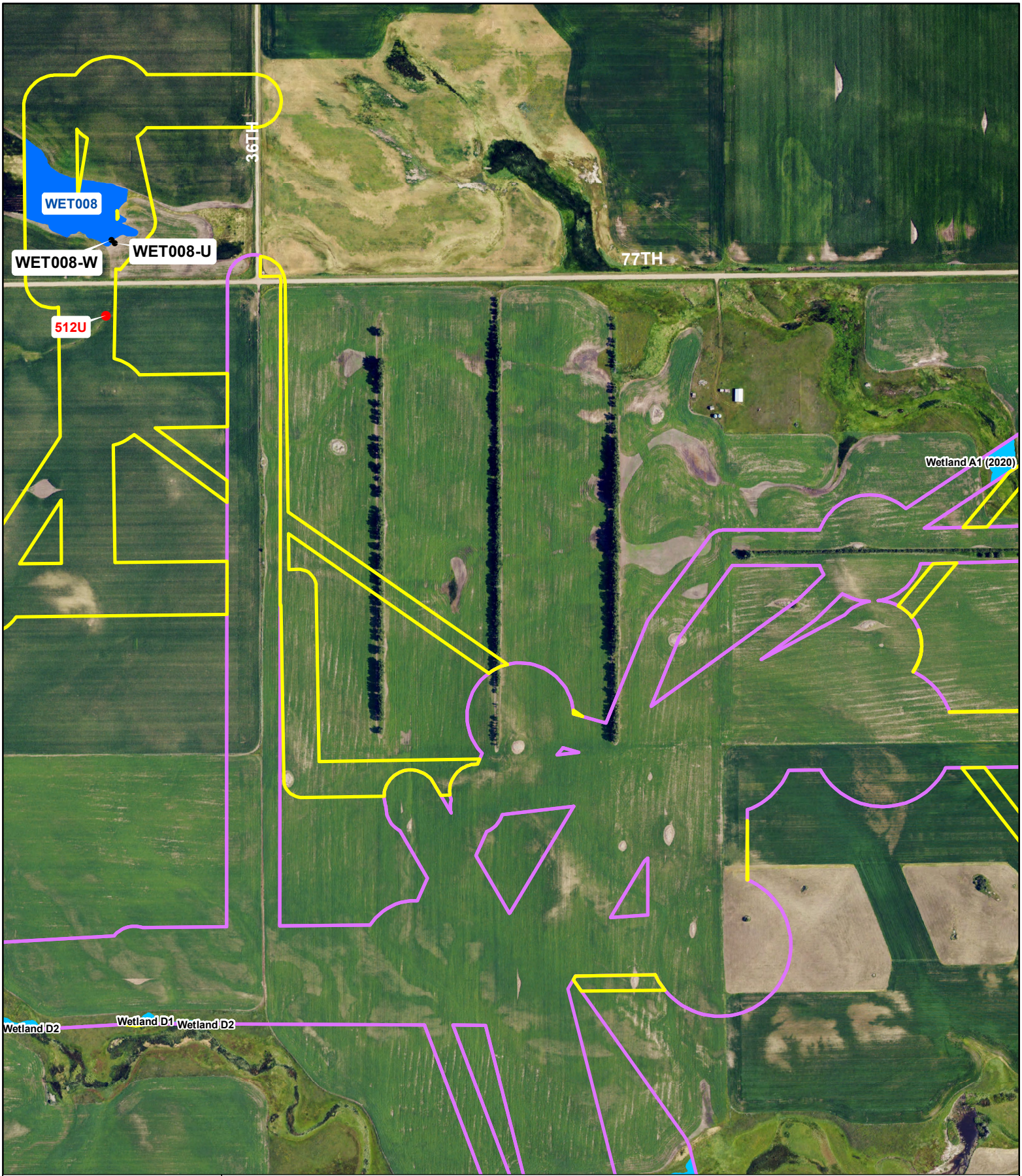

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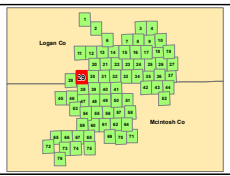

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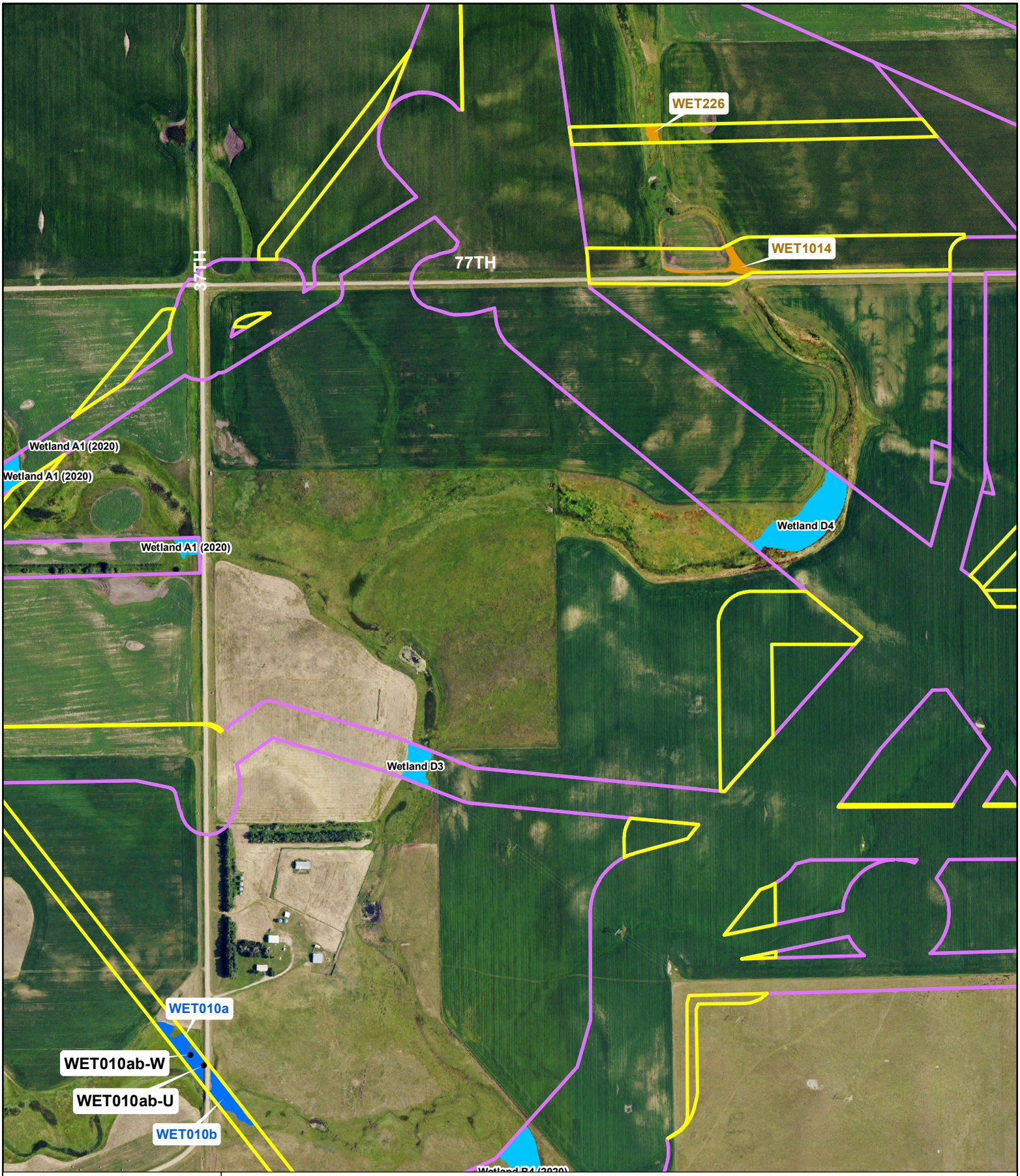

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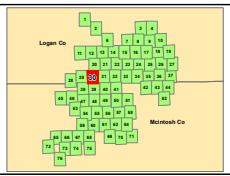

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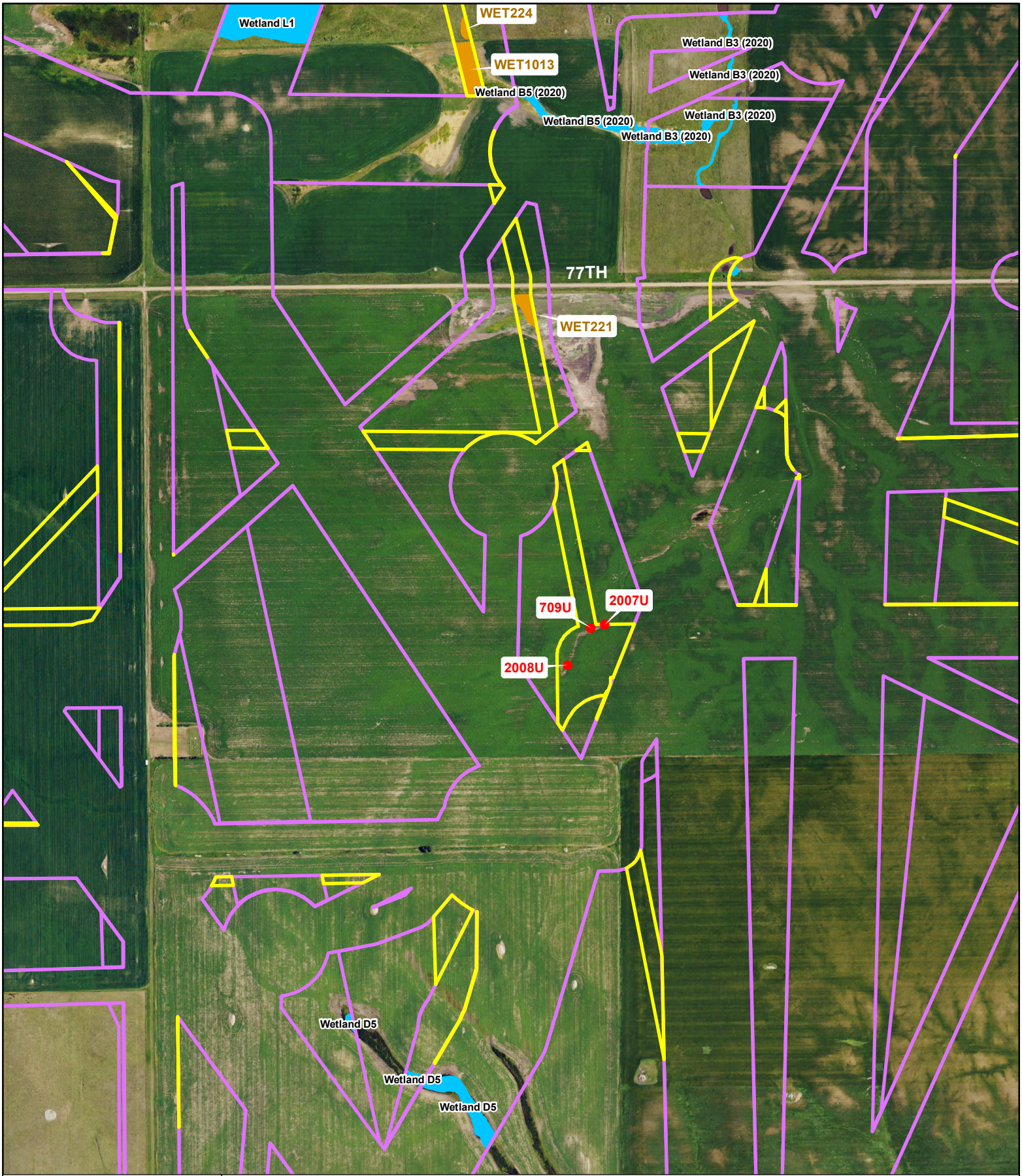

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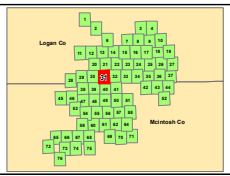

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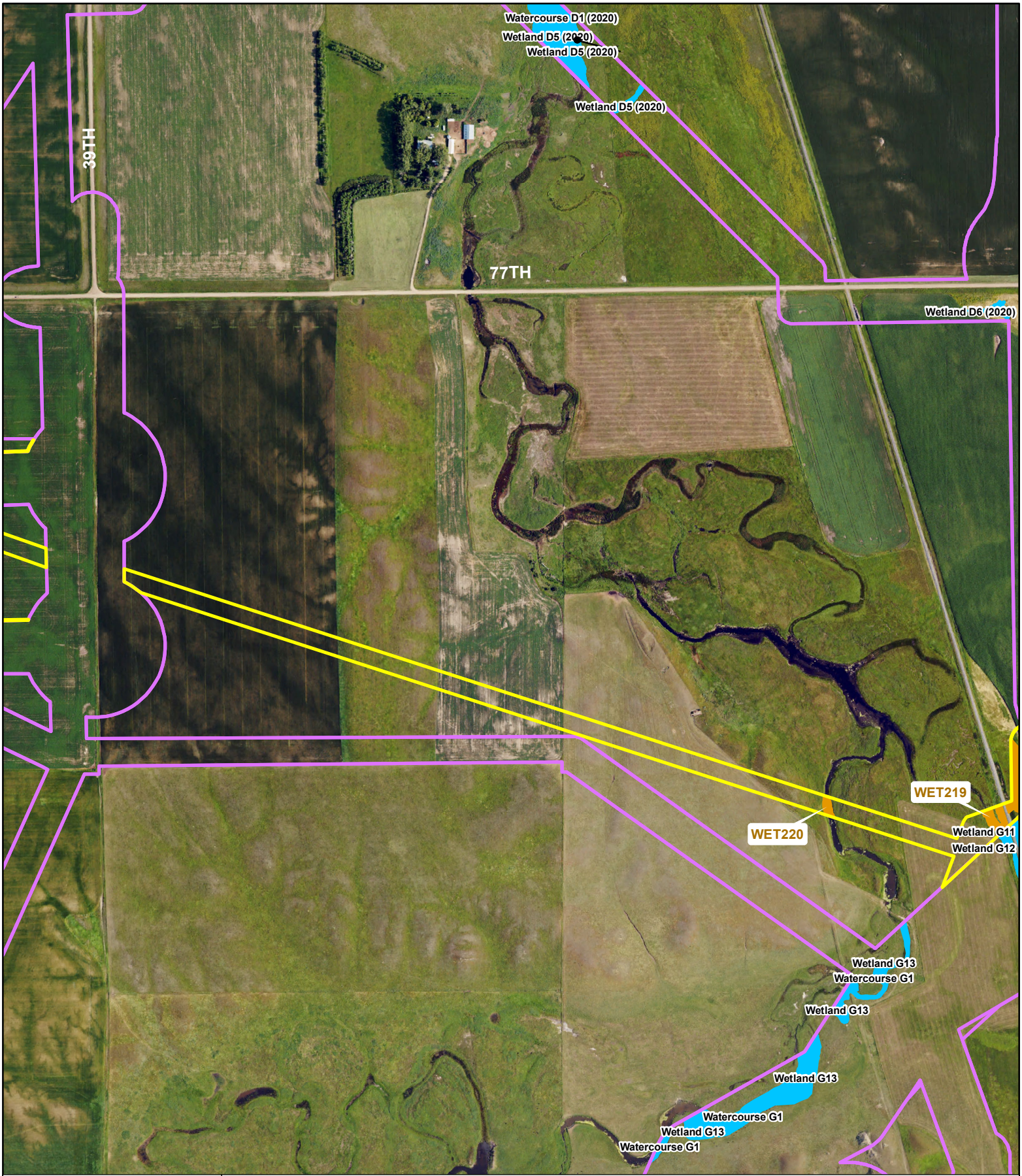

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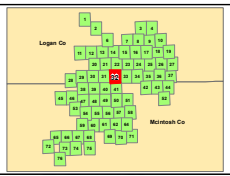

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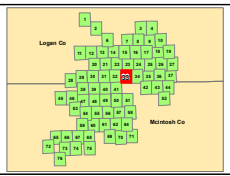
Logan & McIntosh Counties, ND



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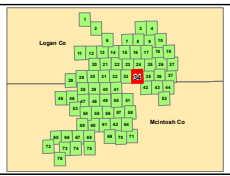

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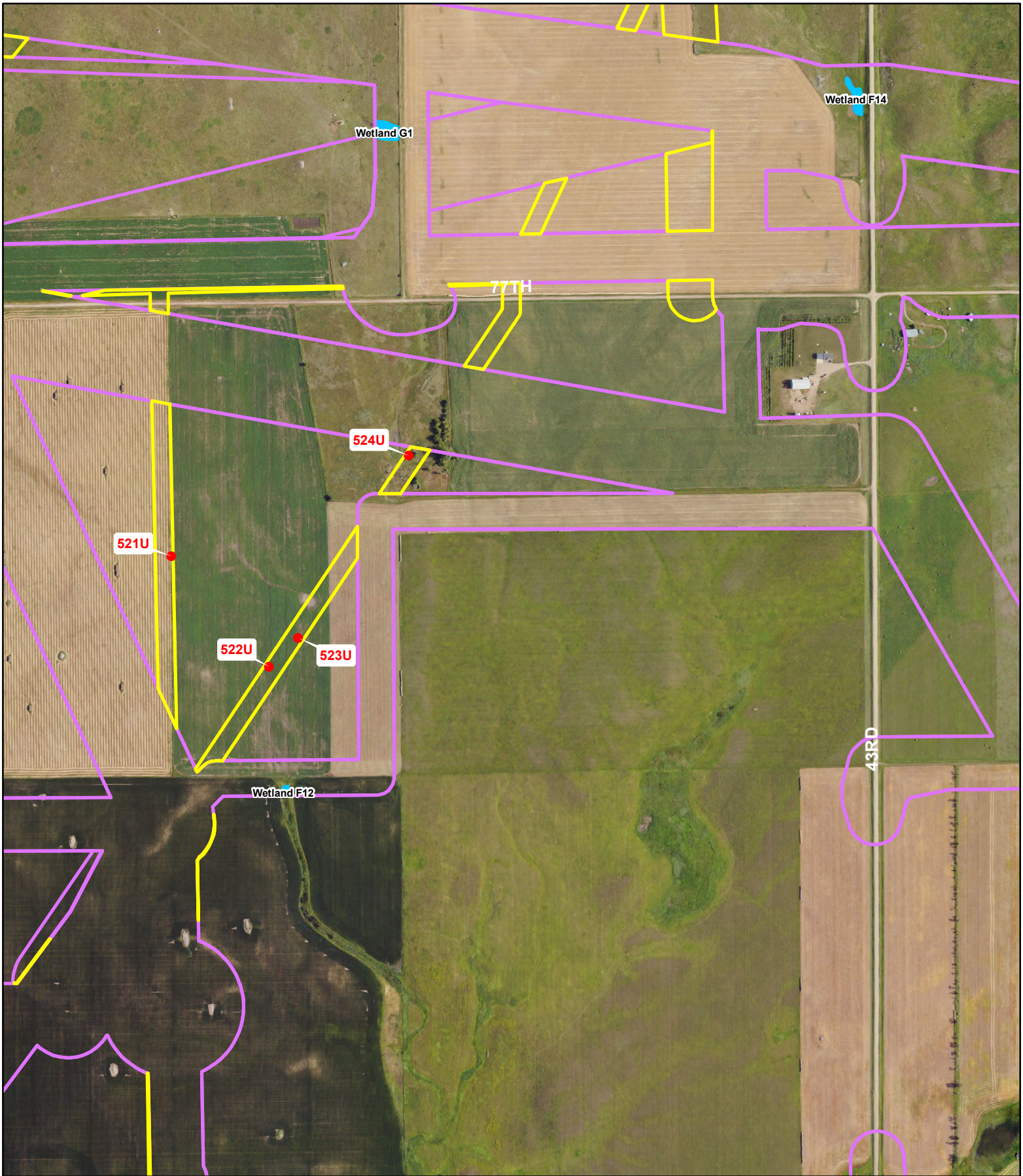

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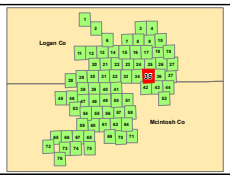
Logan & McIntosh Counties, ND



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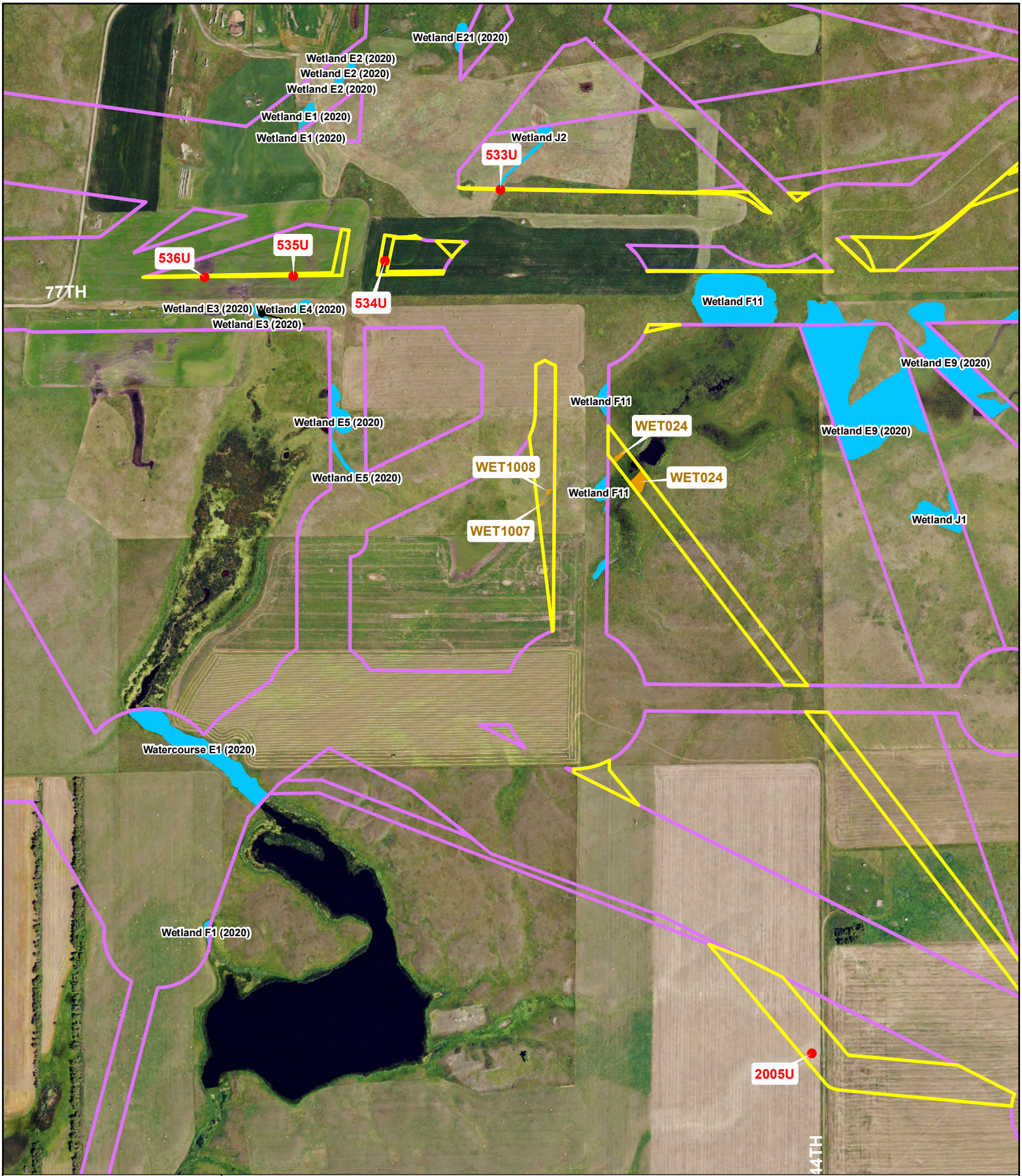

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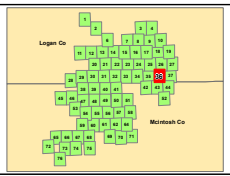

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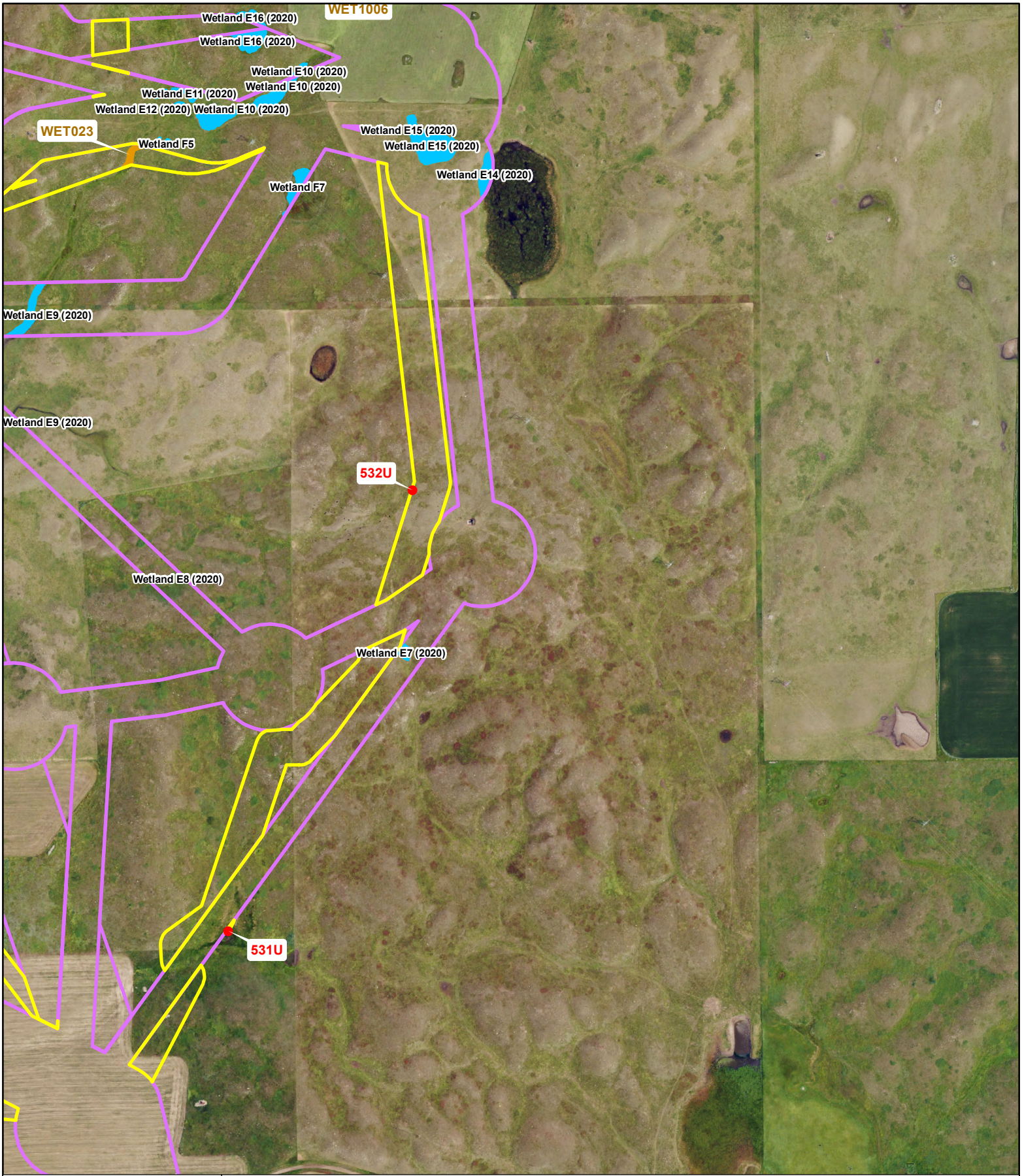

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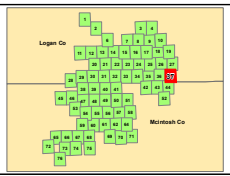

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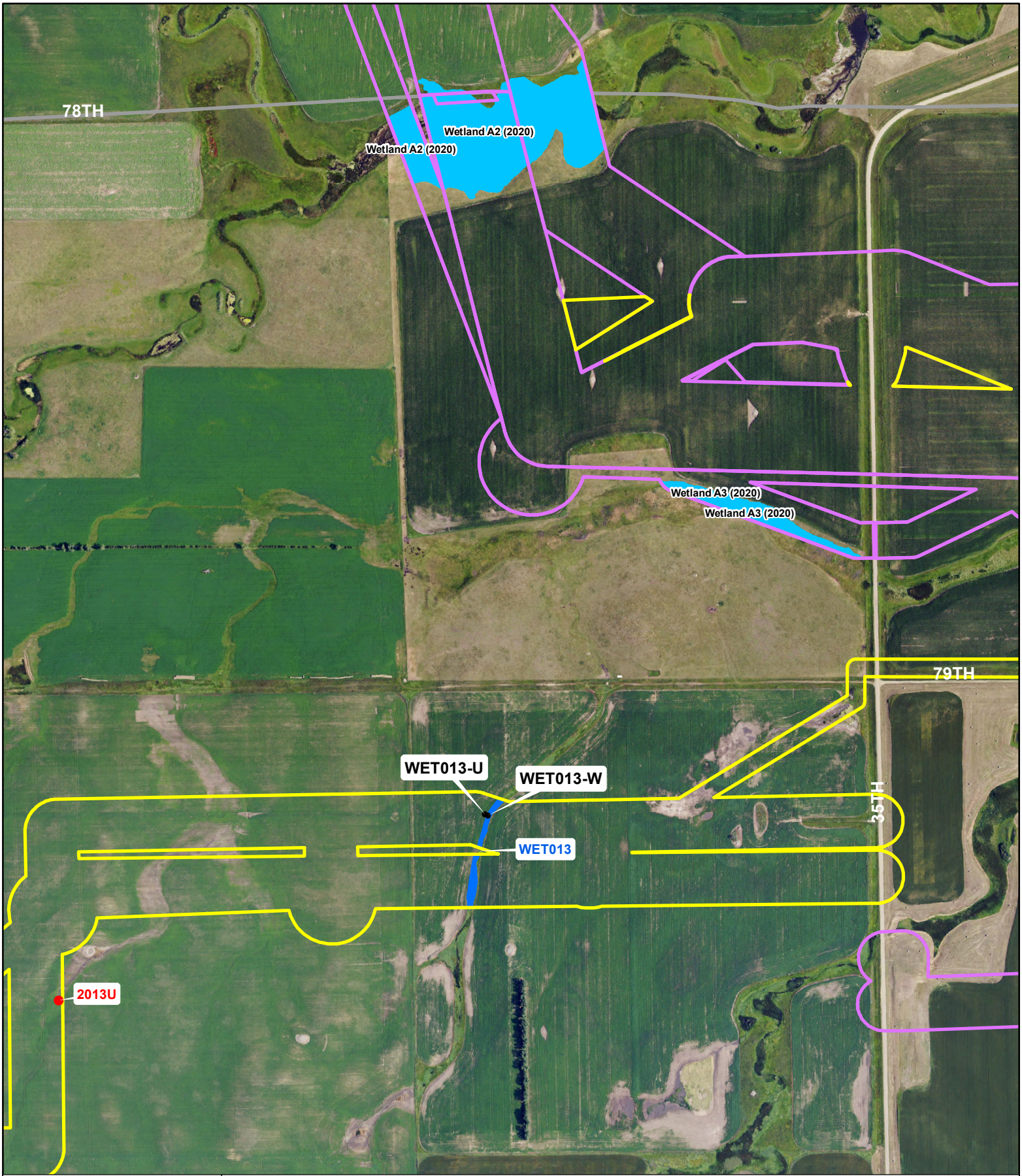

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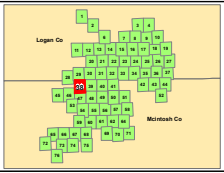

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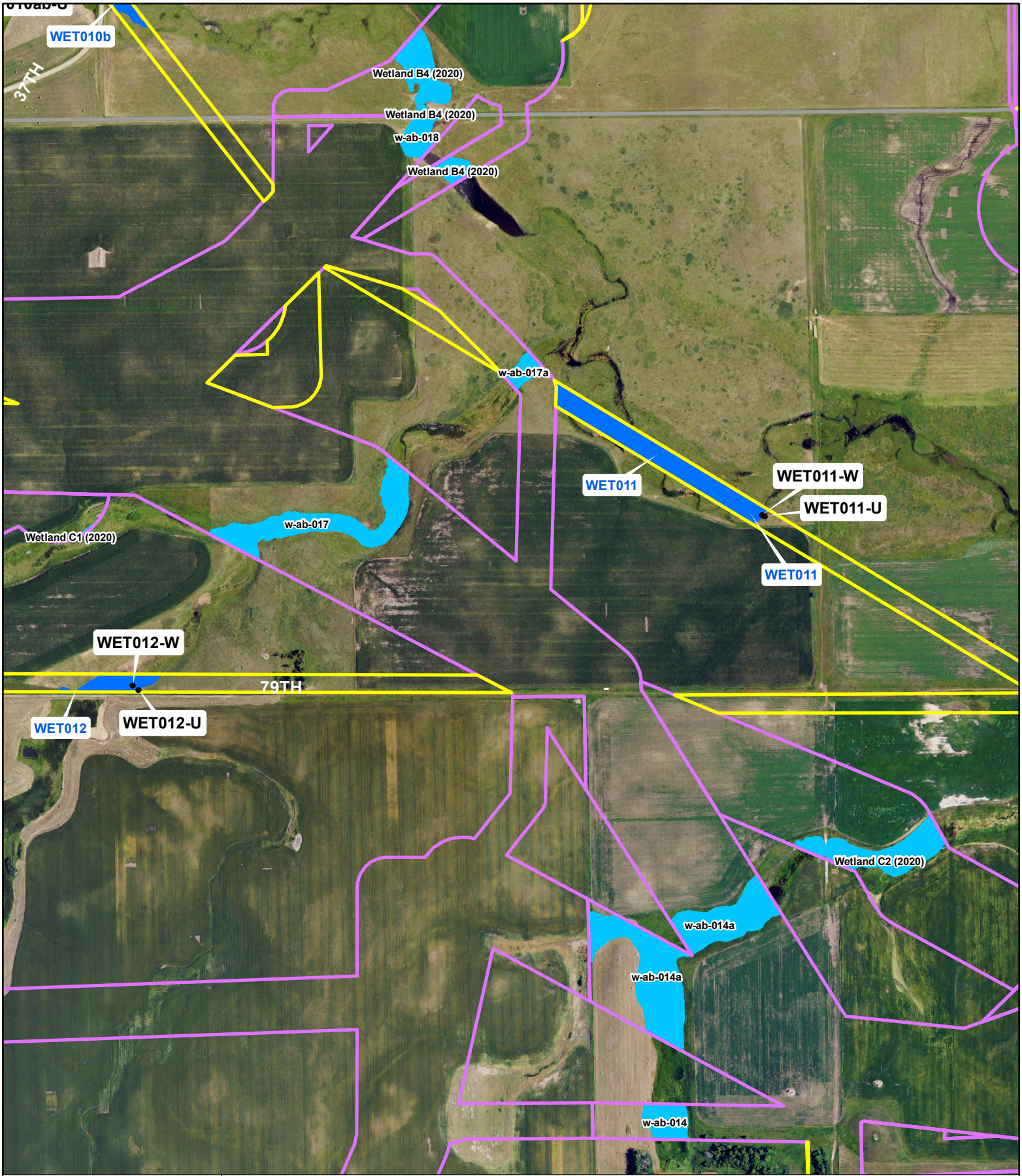

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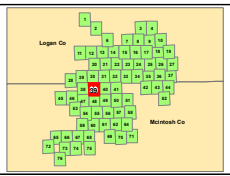

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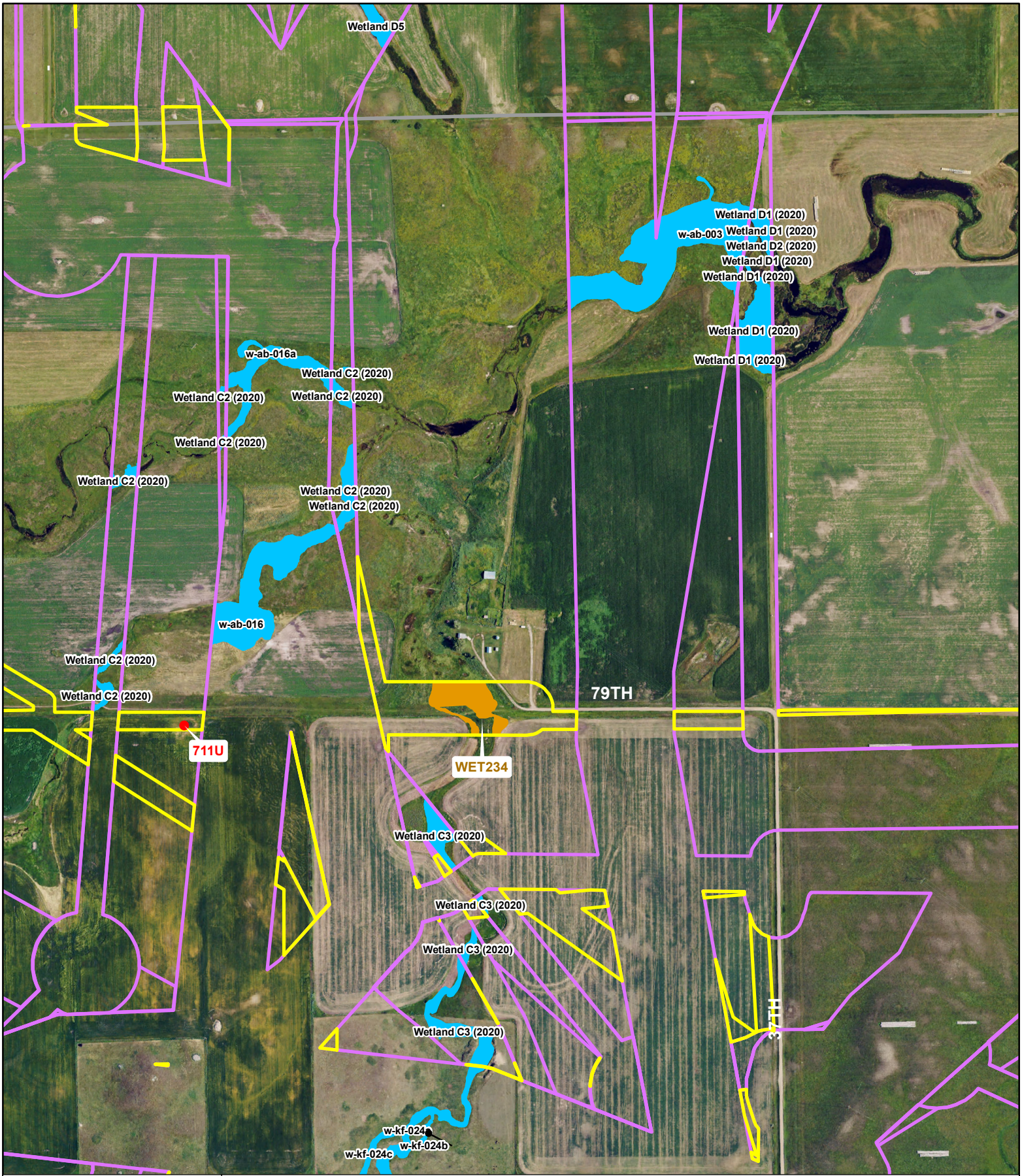

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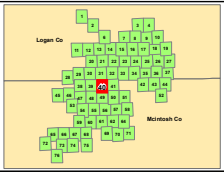

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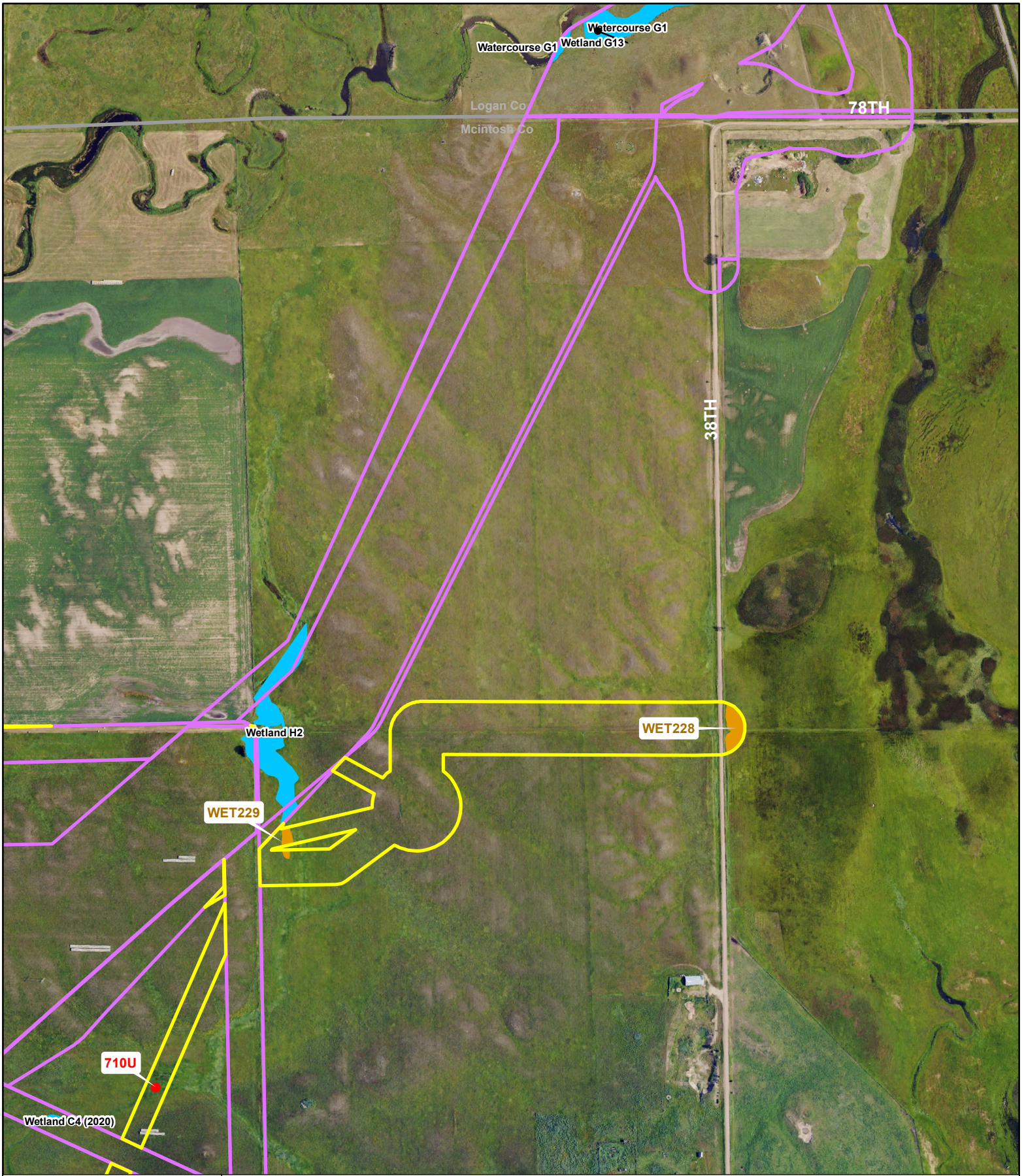

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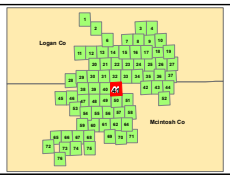

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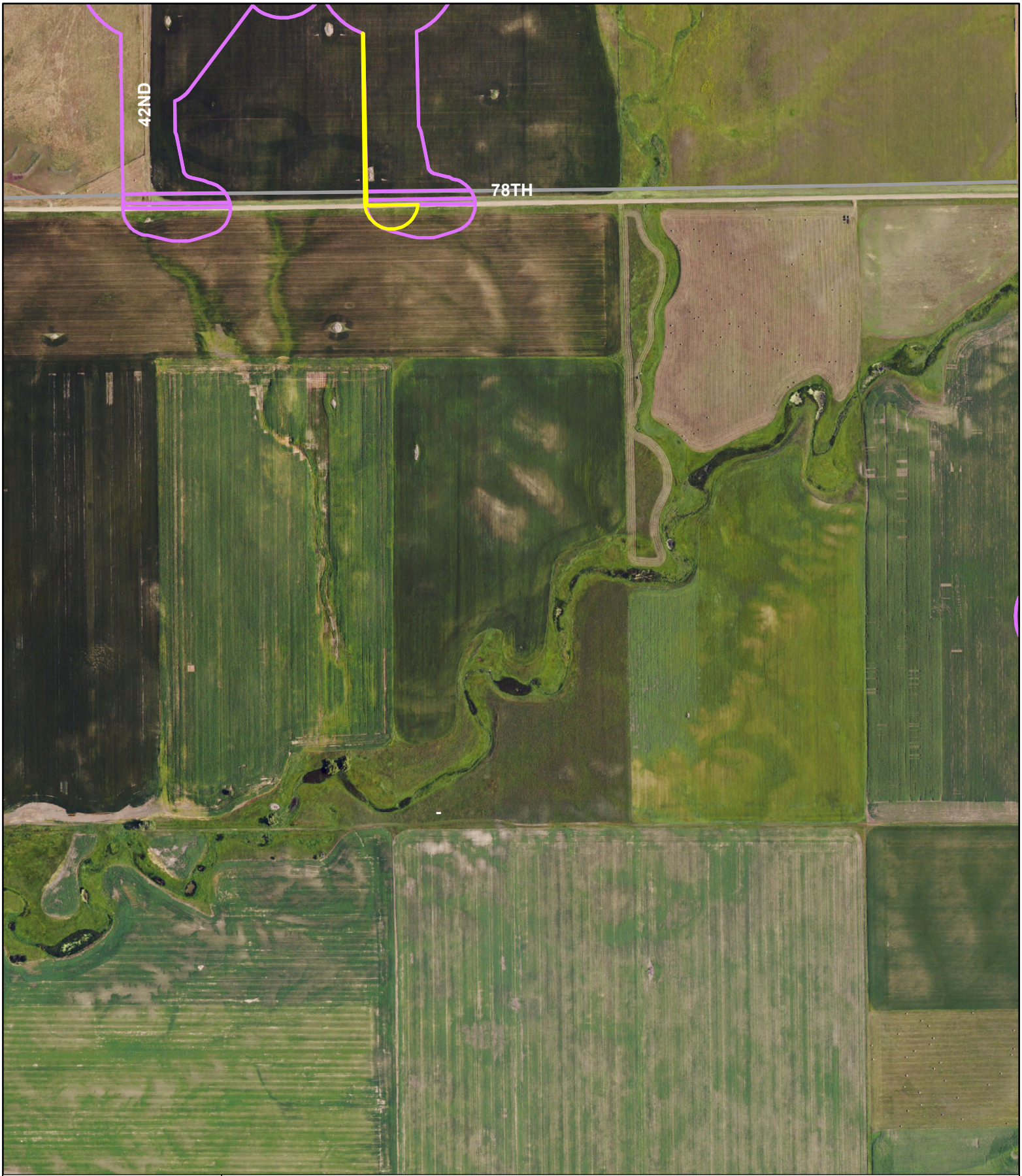
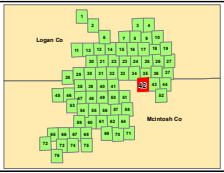


Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

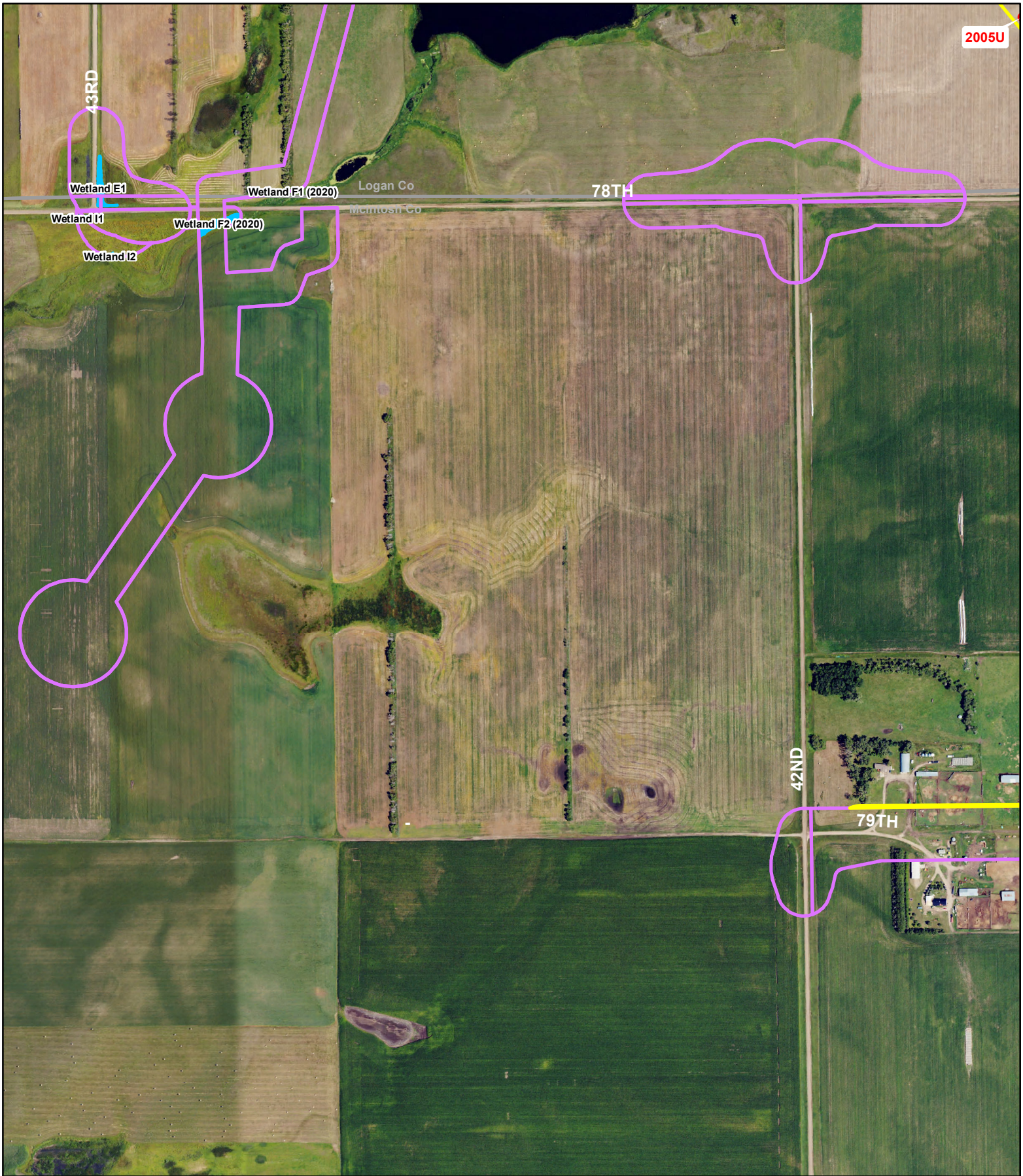
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



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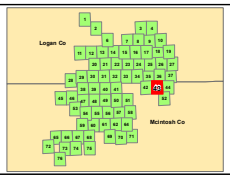
Logan & McIntosh Counties, ND



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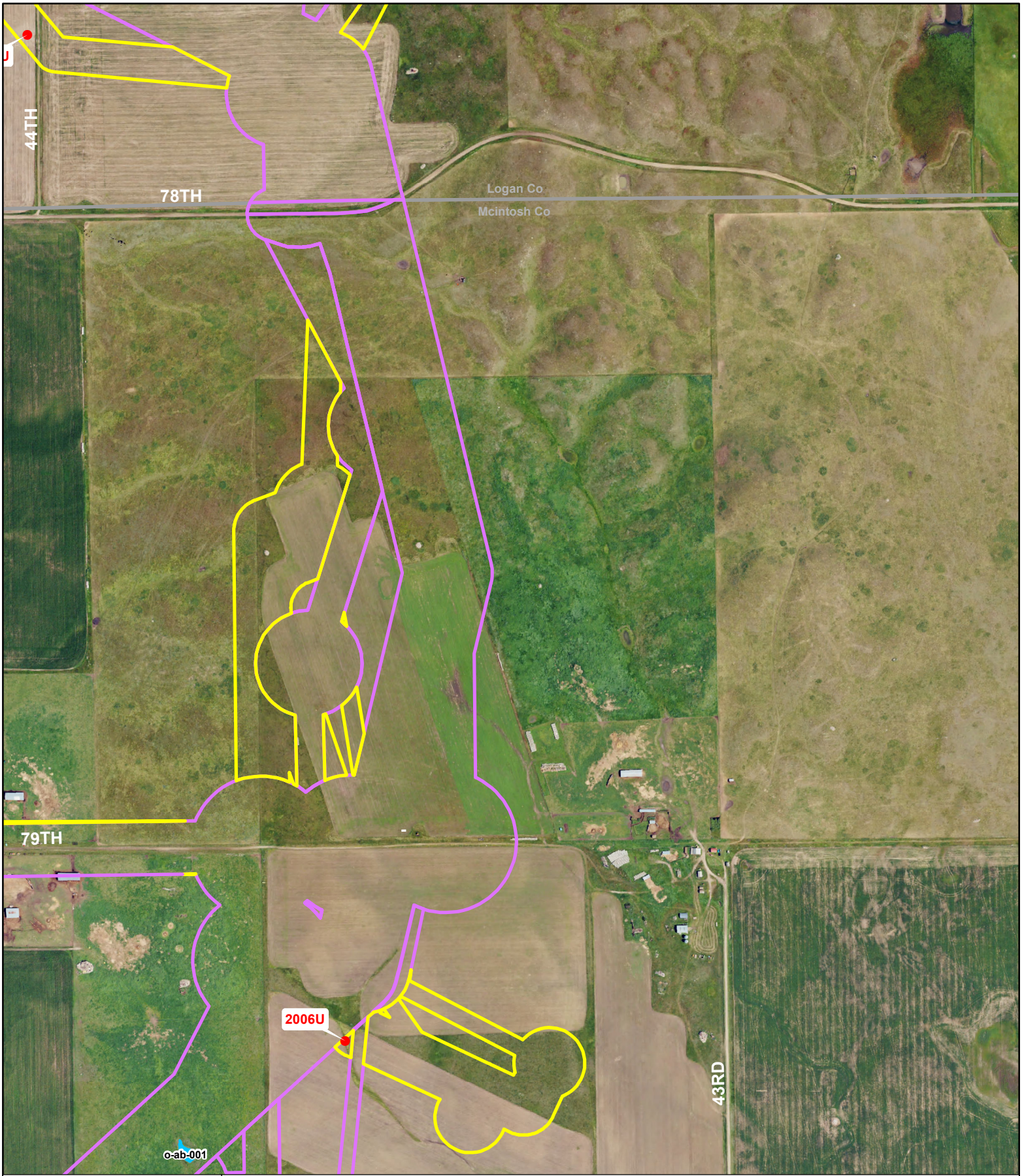

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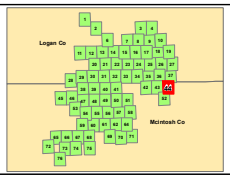
Logan & McIntosh Counties, ND



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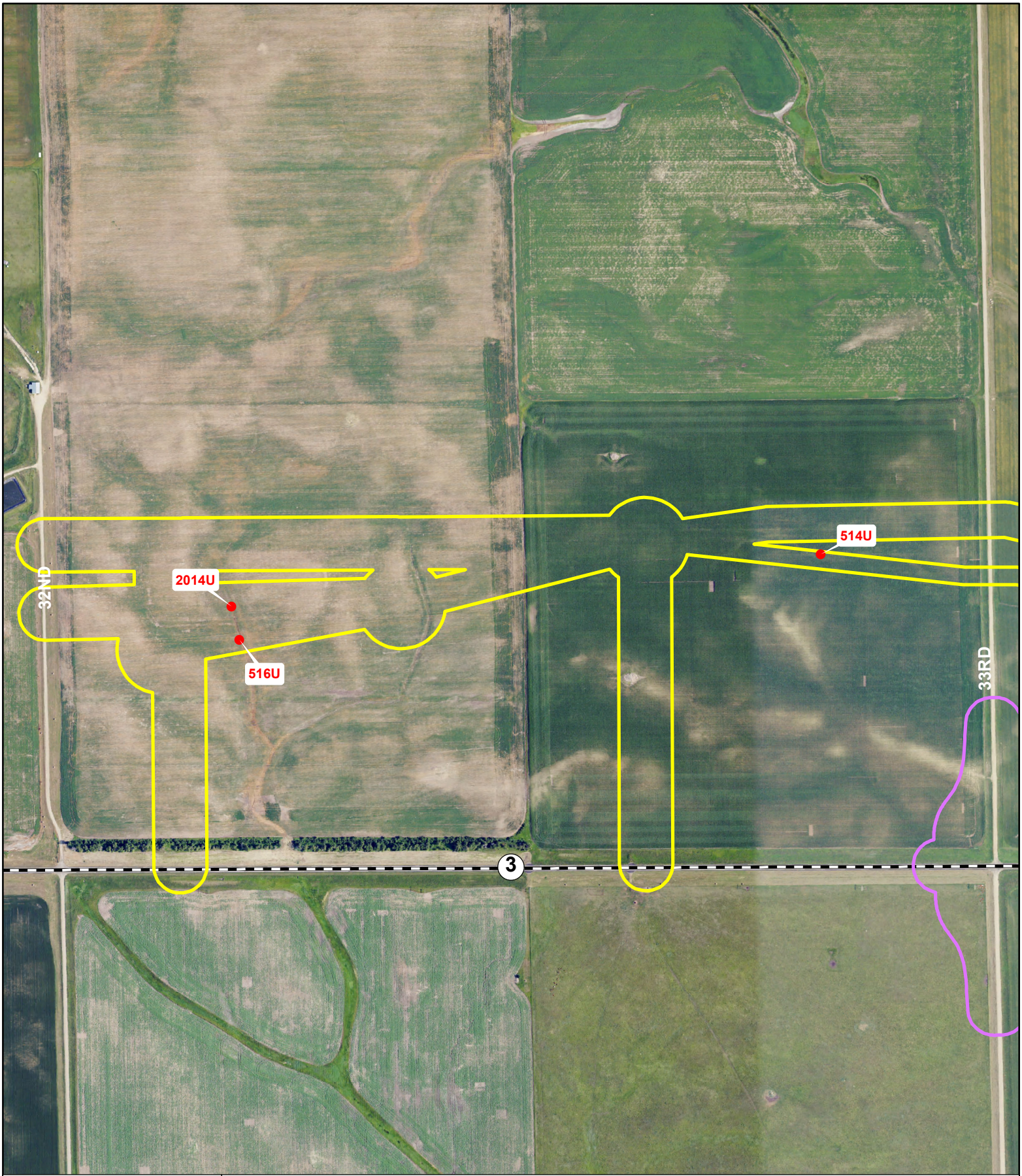

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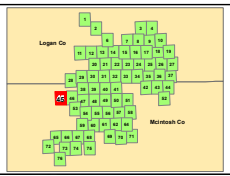

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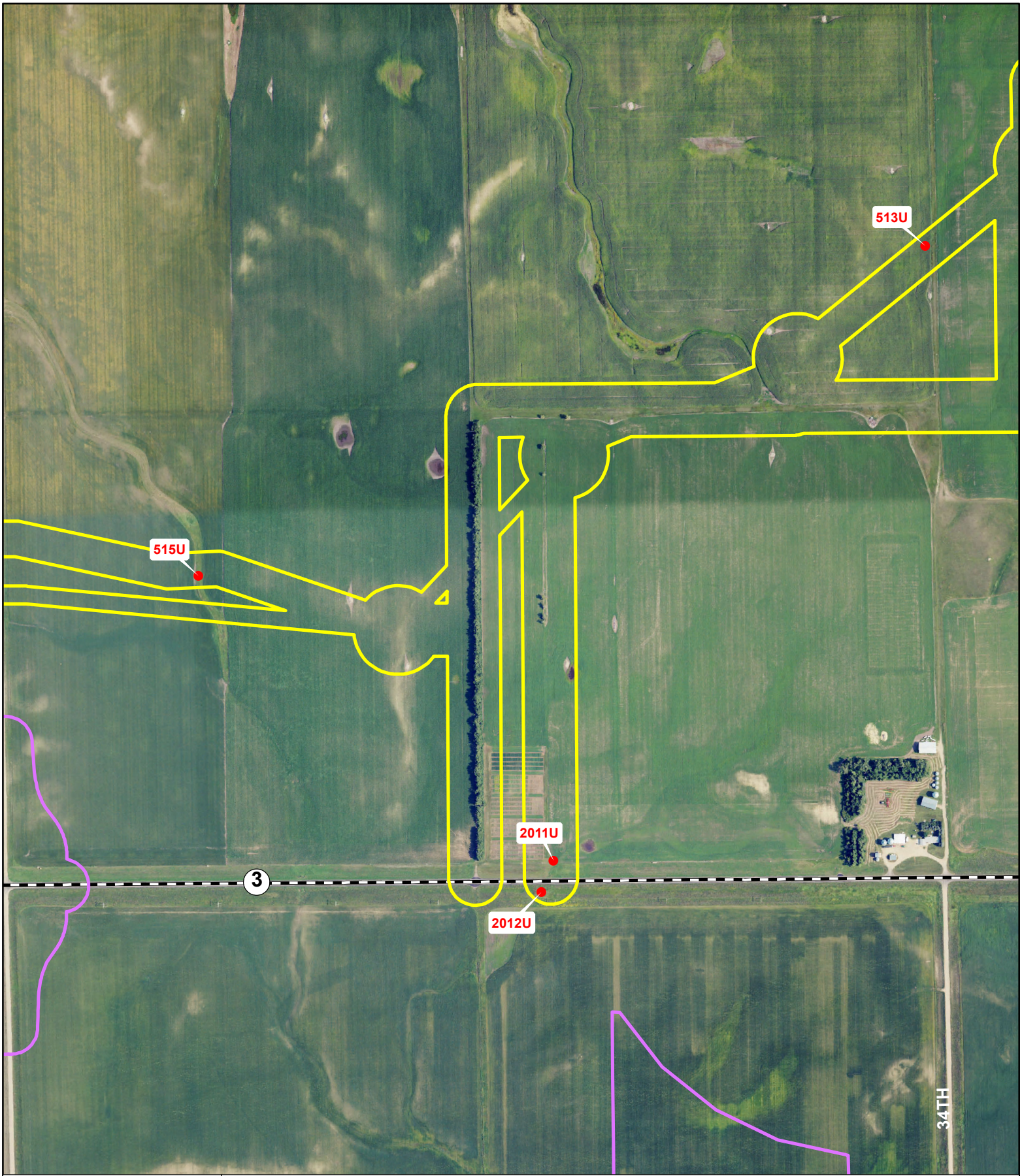

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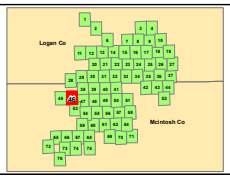

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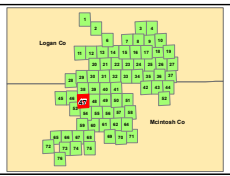

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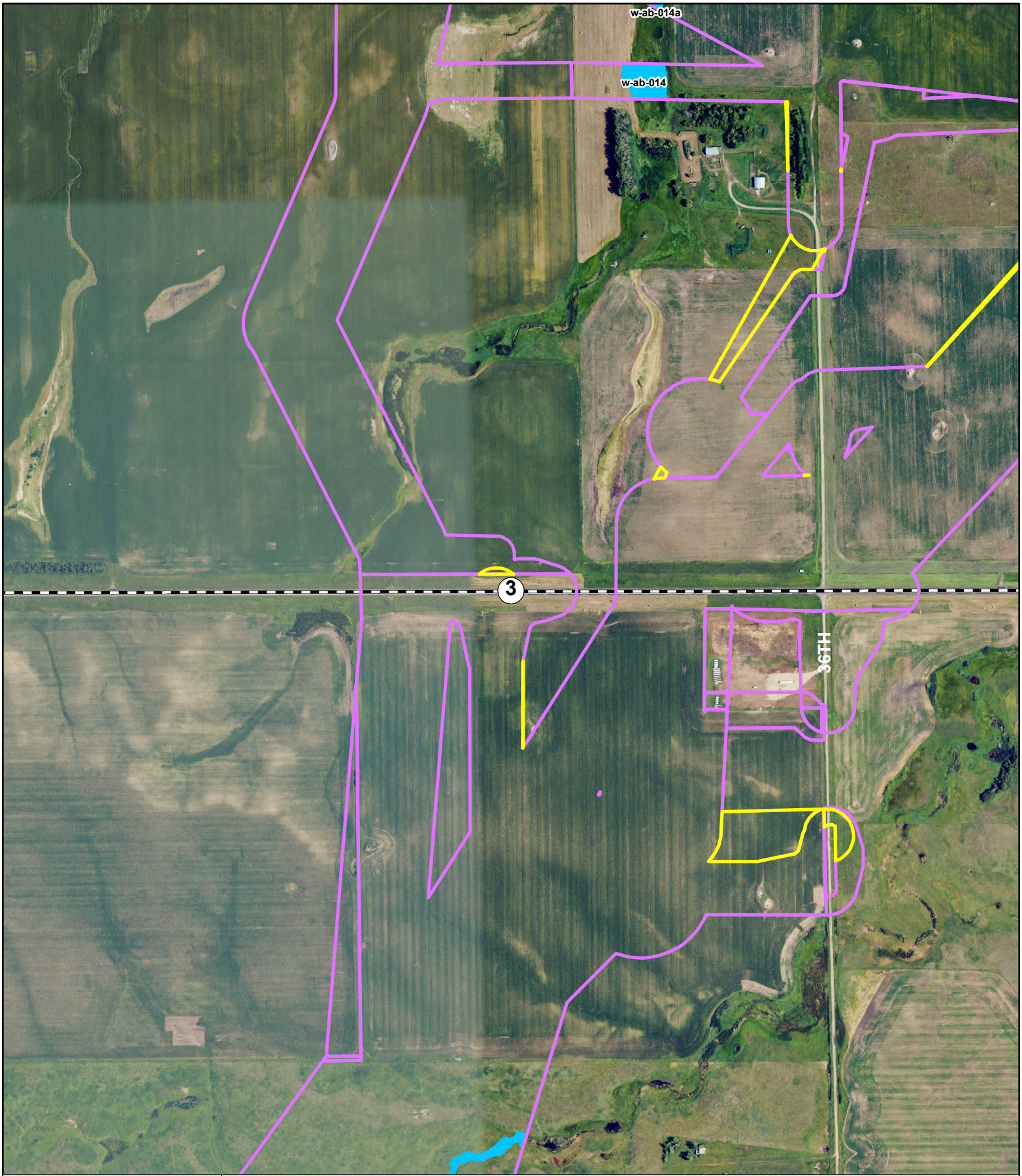

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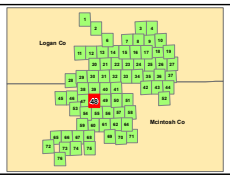
Logan & McIntosh Counties, ND



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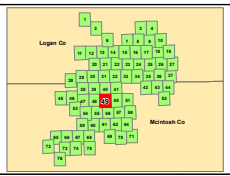

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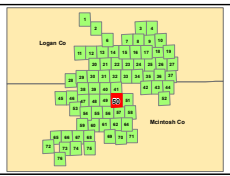

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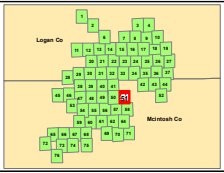

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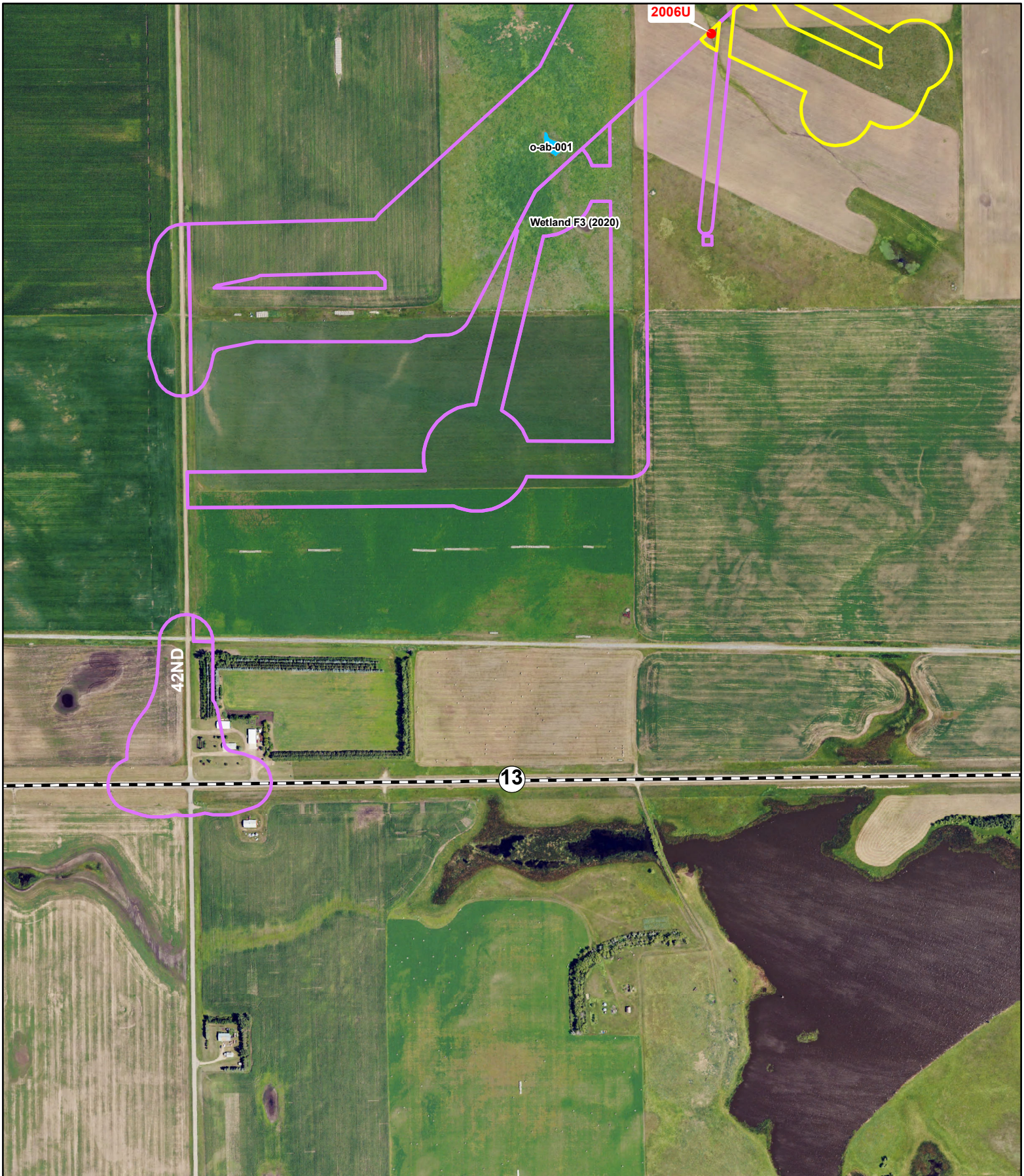

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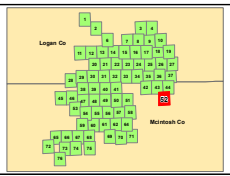
Logan & McIntosh Counties, ND



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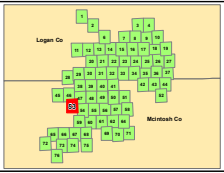
Logan & McIntosh Counties, ND



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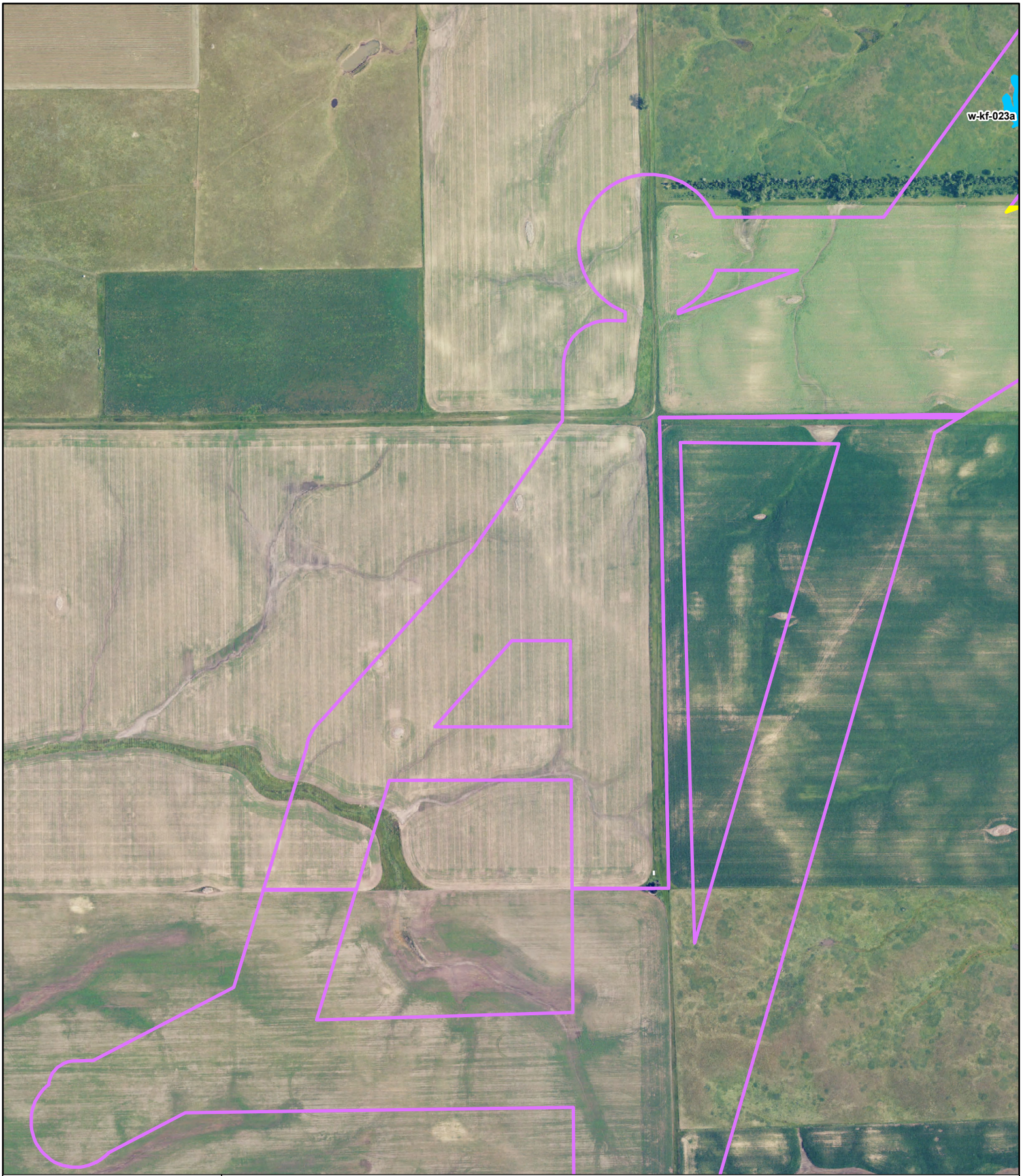

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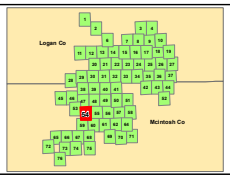
Logan & McIntosh Counties, ND



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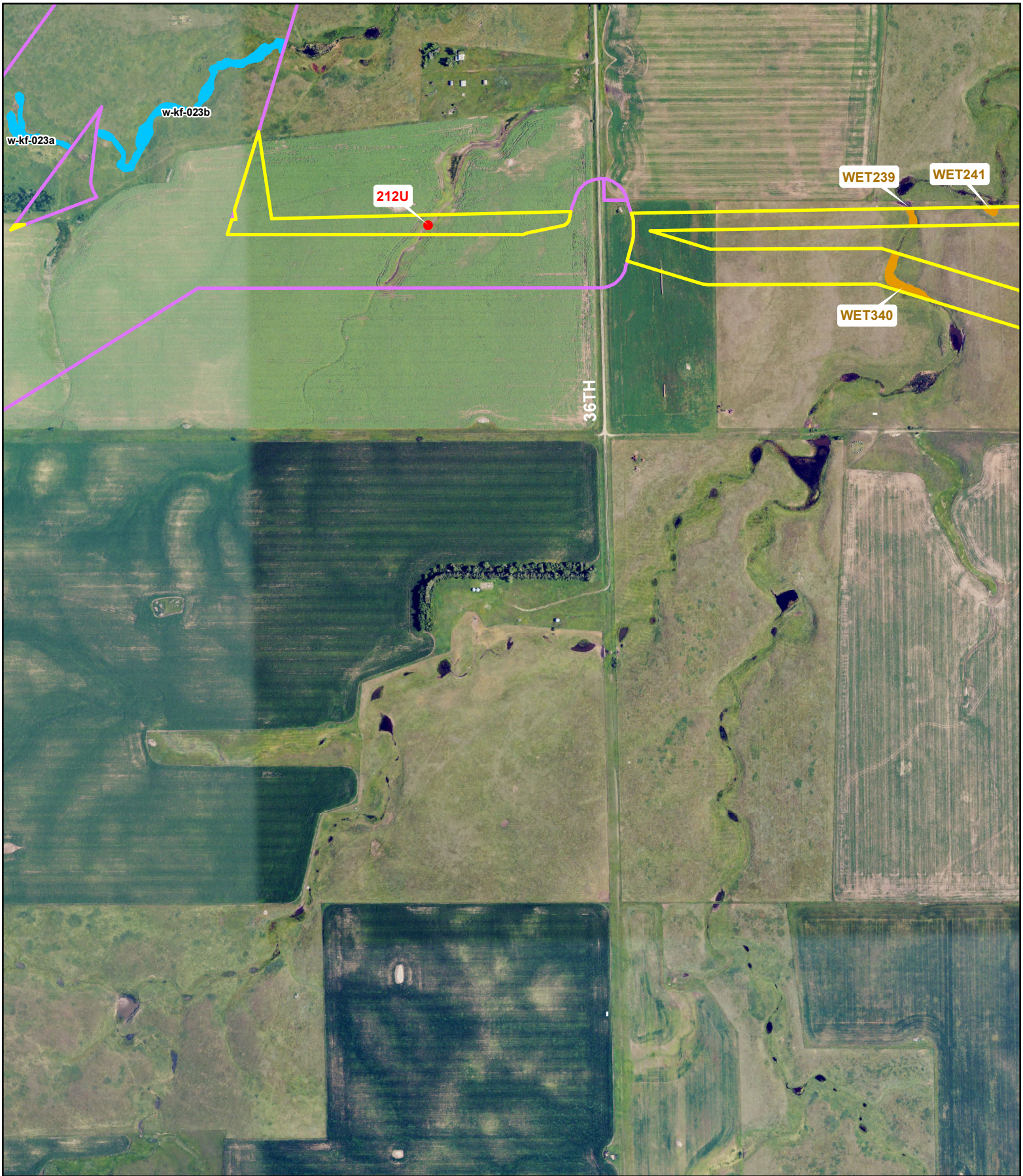

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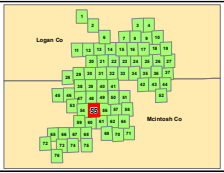

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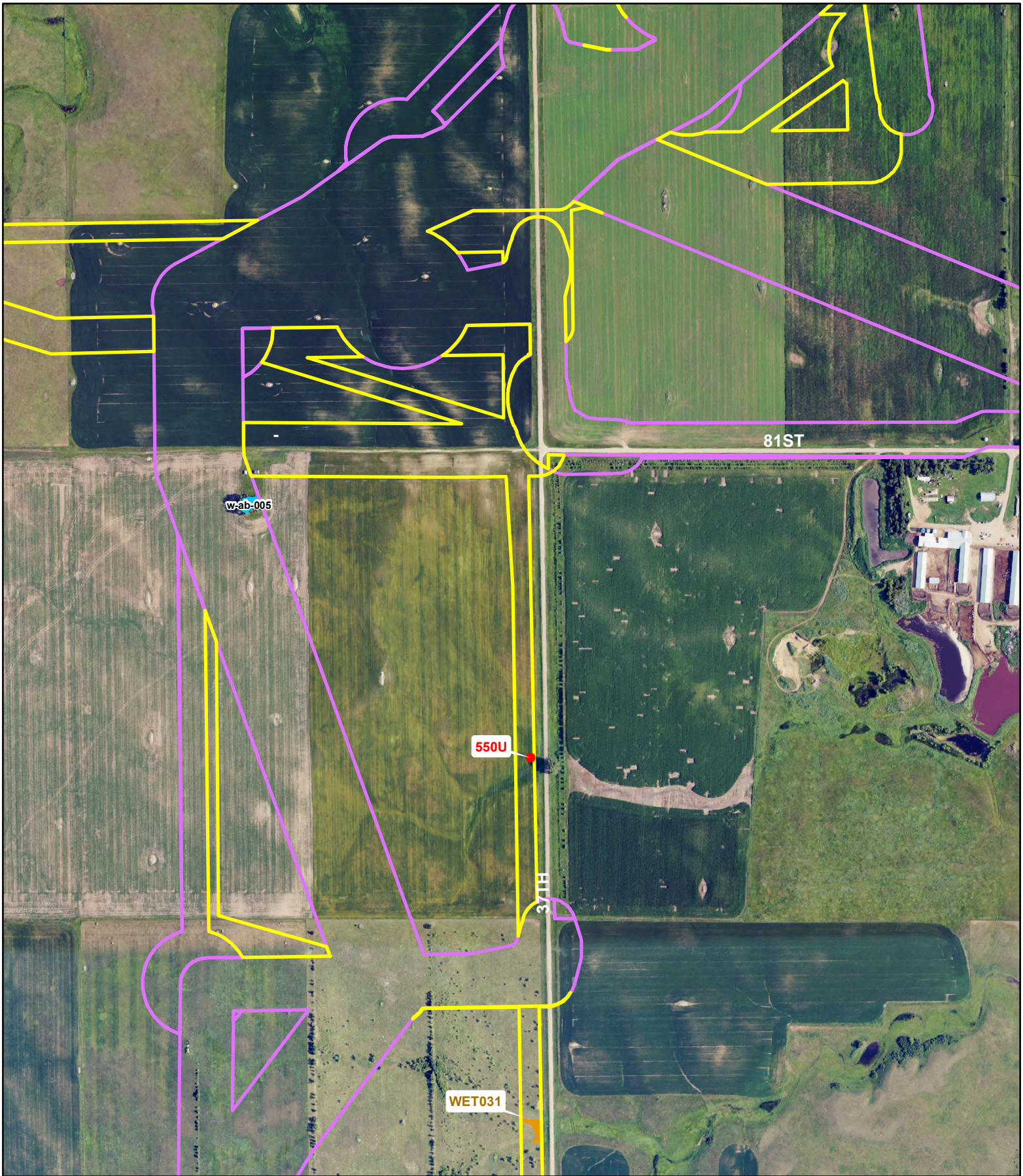

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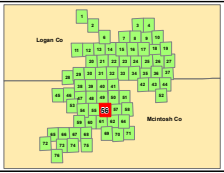

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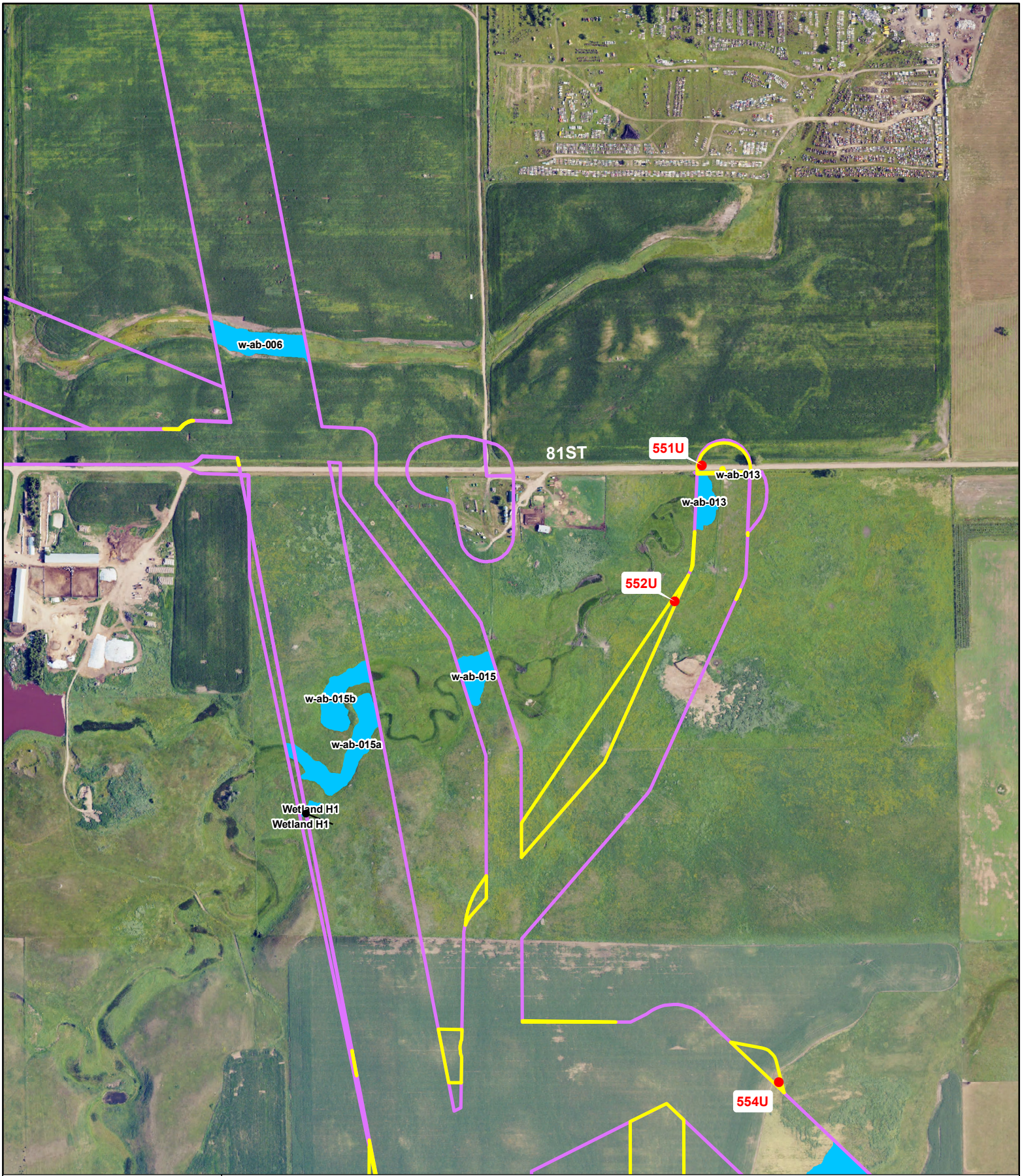

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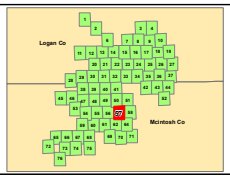

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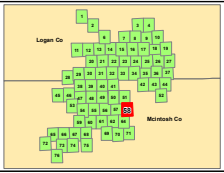

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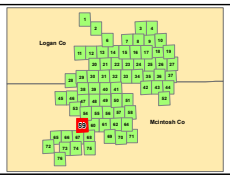

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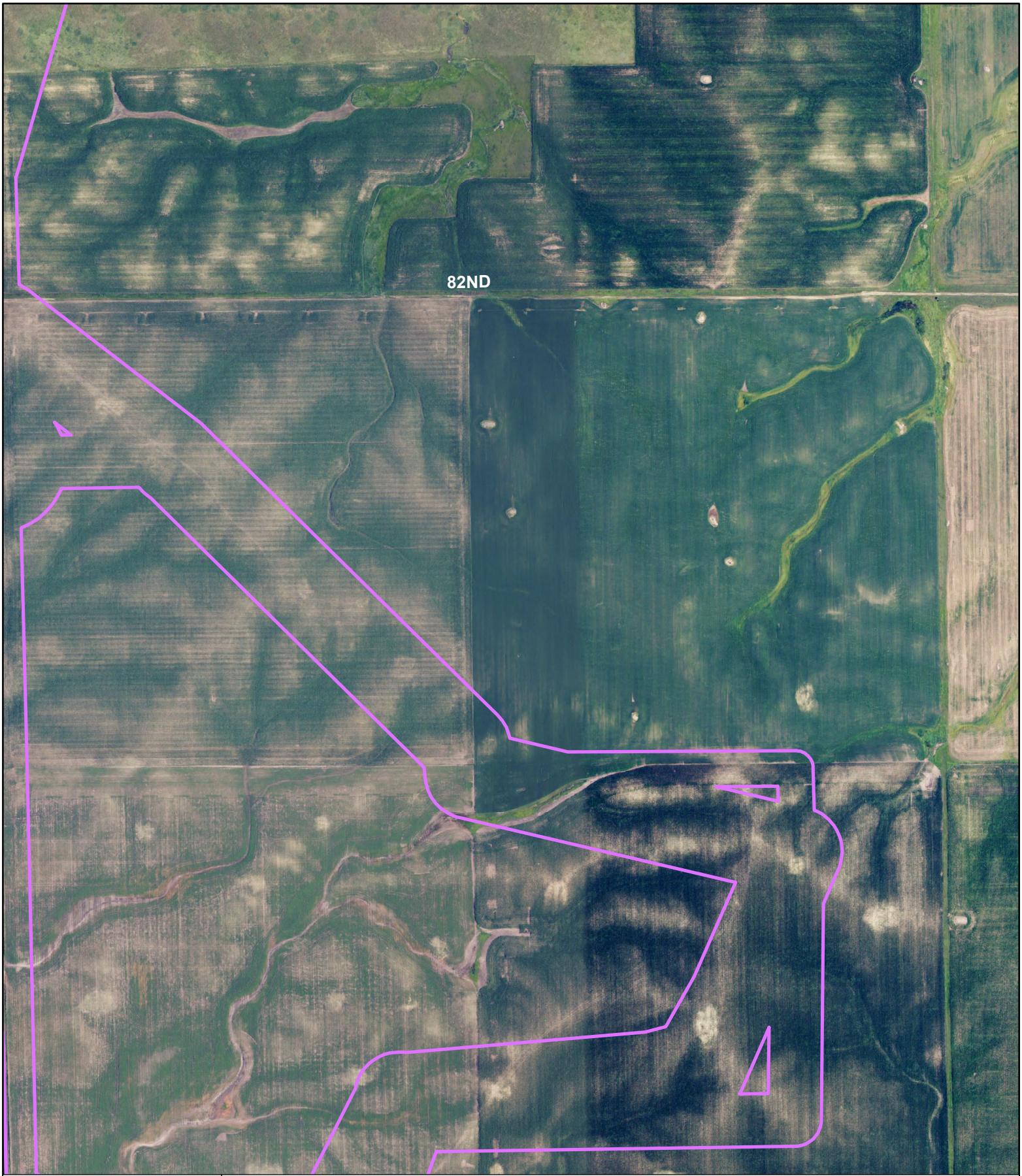

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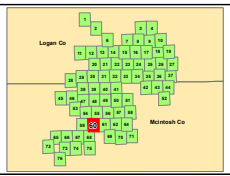

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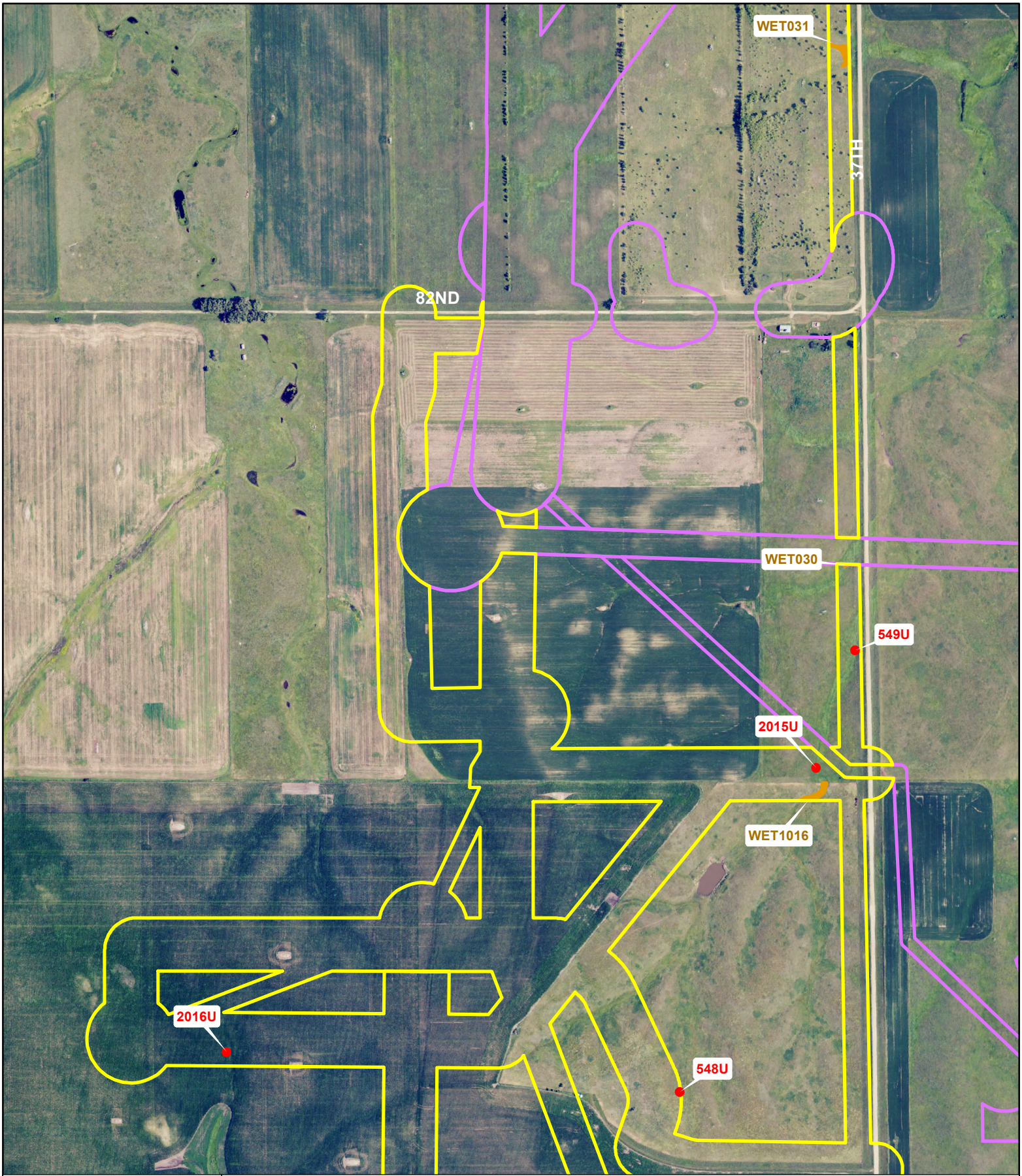

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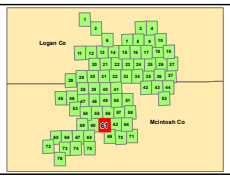

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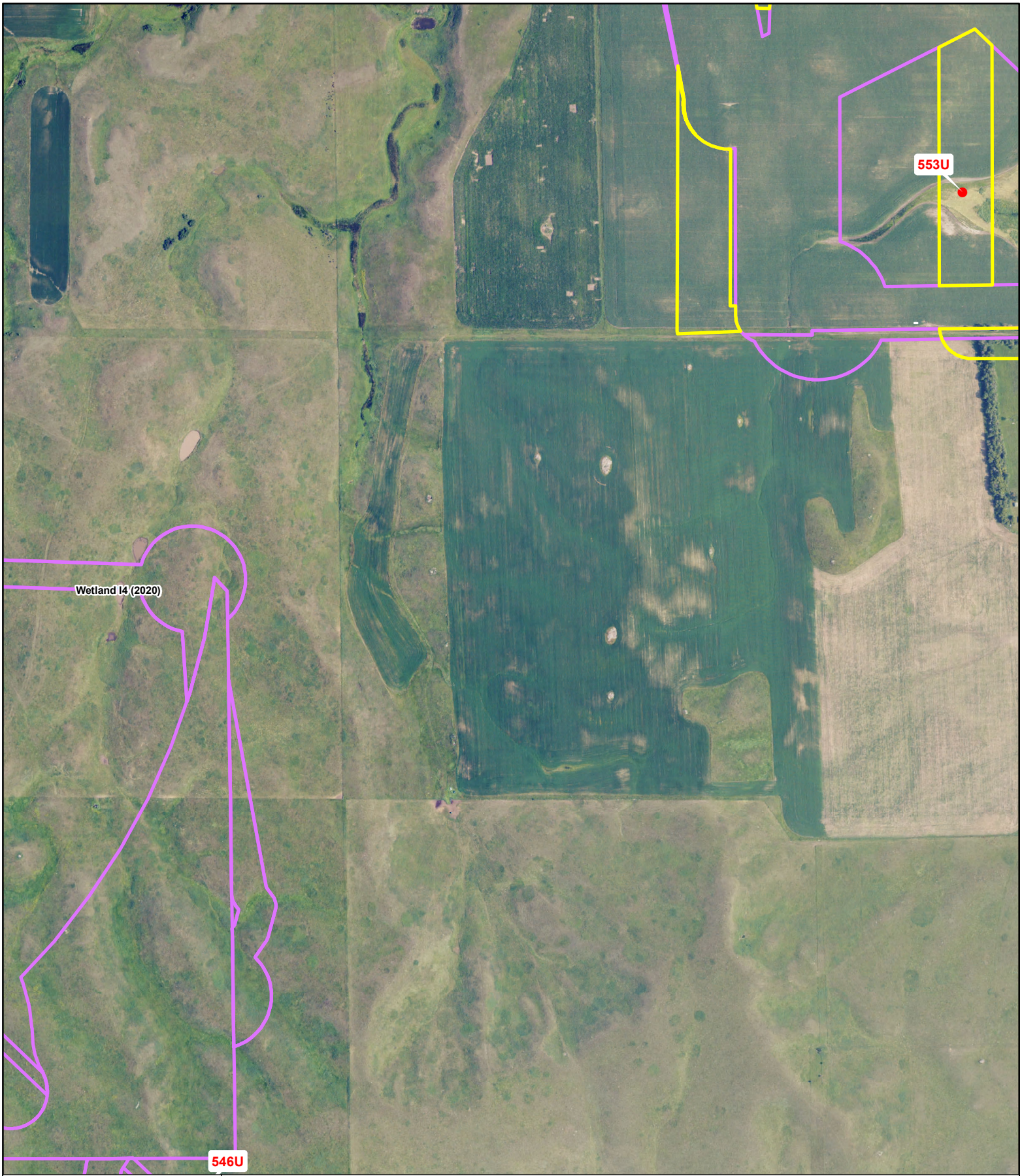

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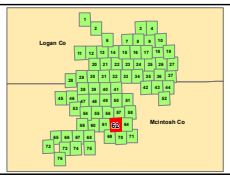

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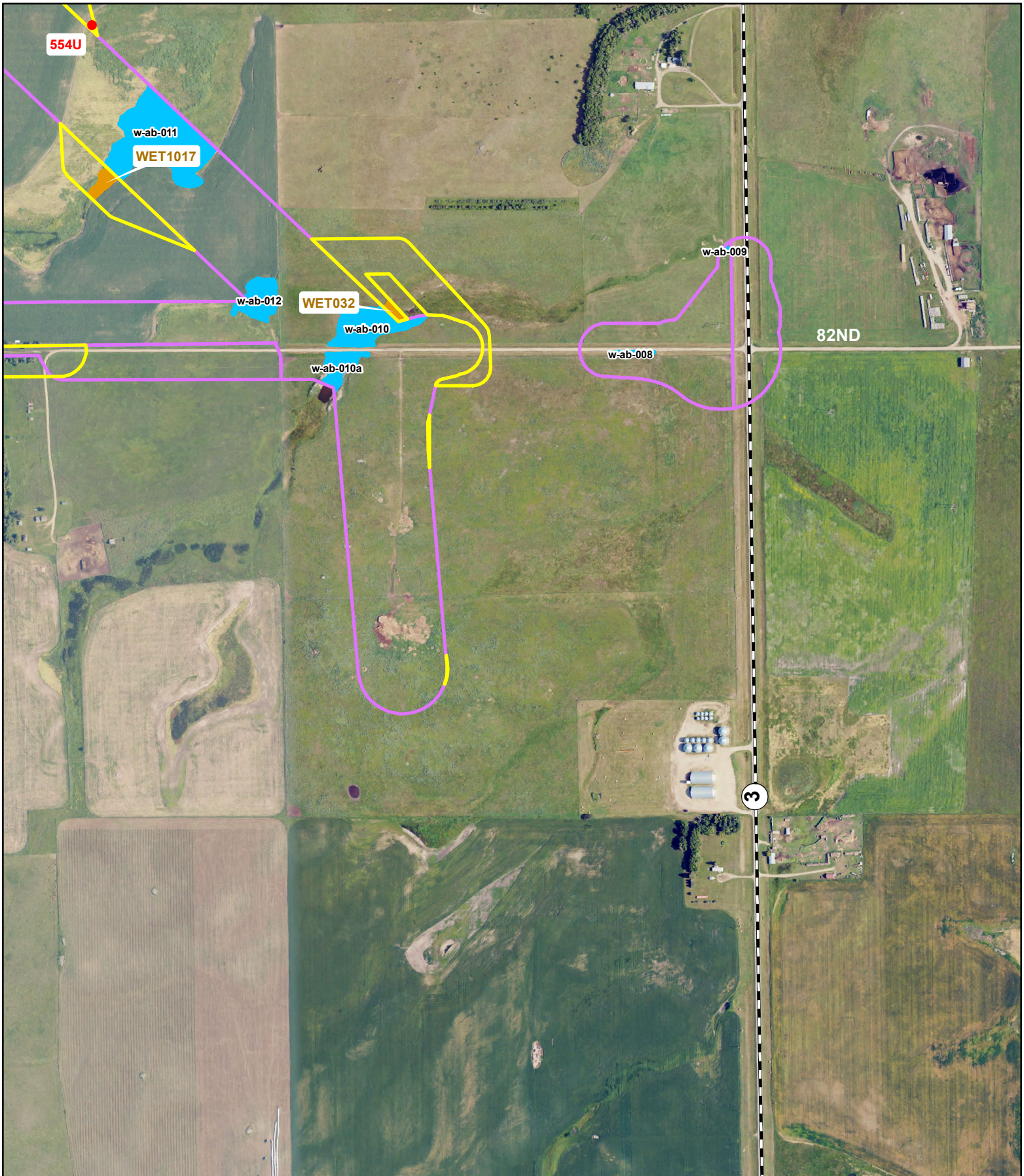

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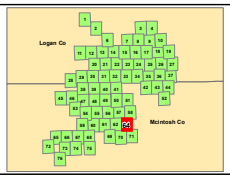
Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

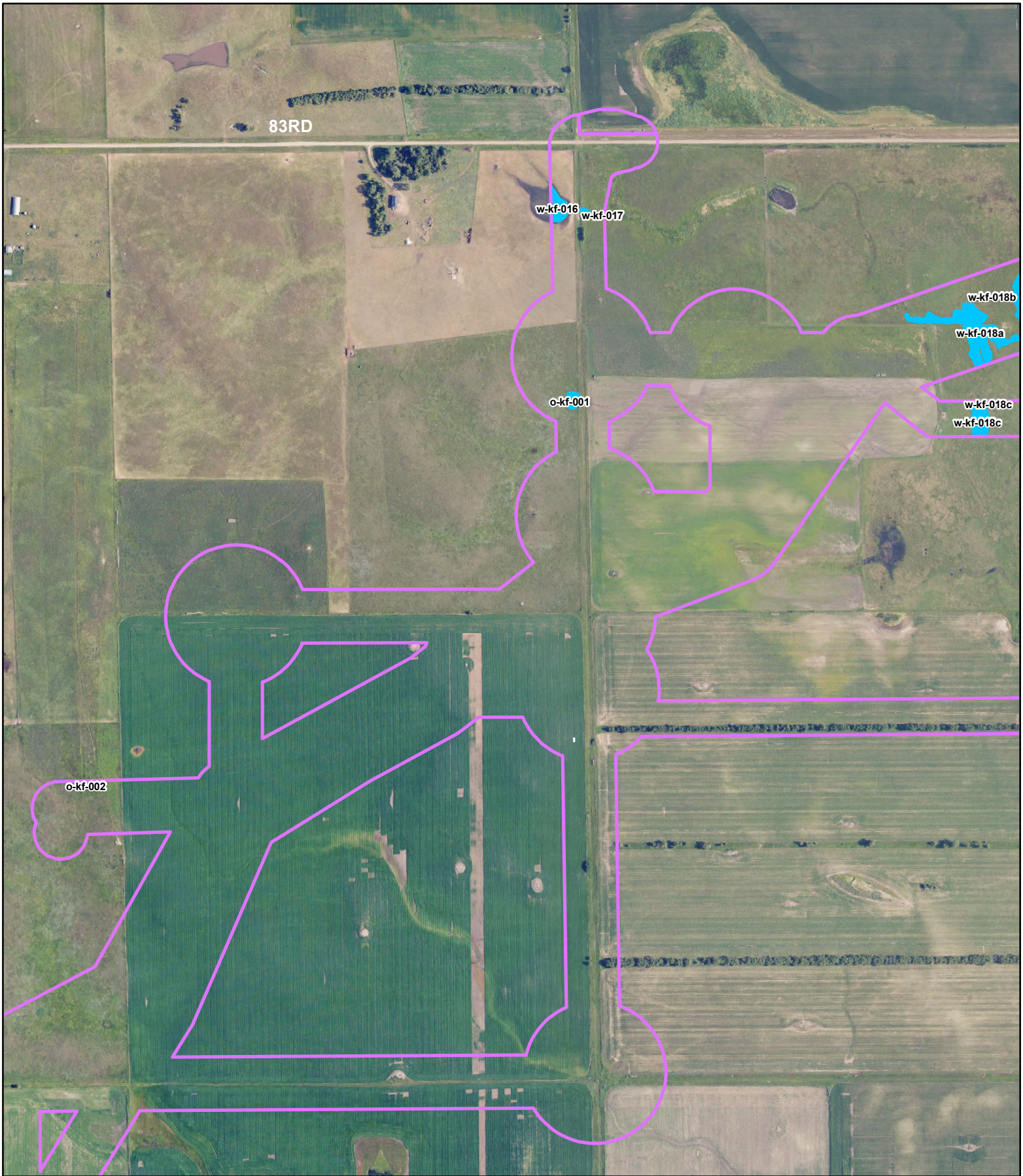
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

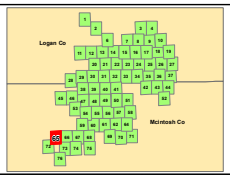
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated **Field Mapped**

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

N W E S

0 0.1 0.2 mi

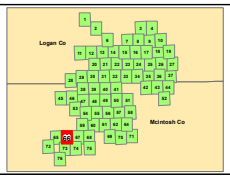
0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

N W E S

0 0.1 0.2 mi

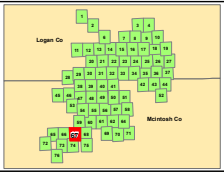
0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated **Field Mapped**

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

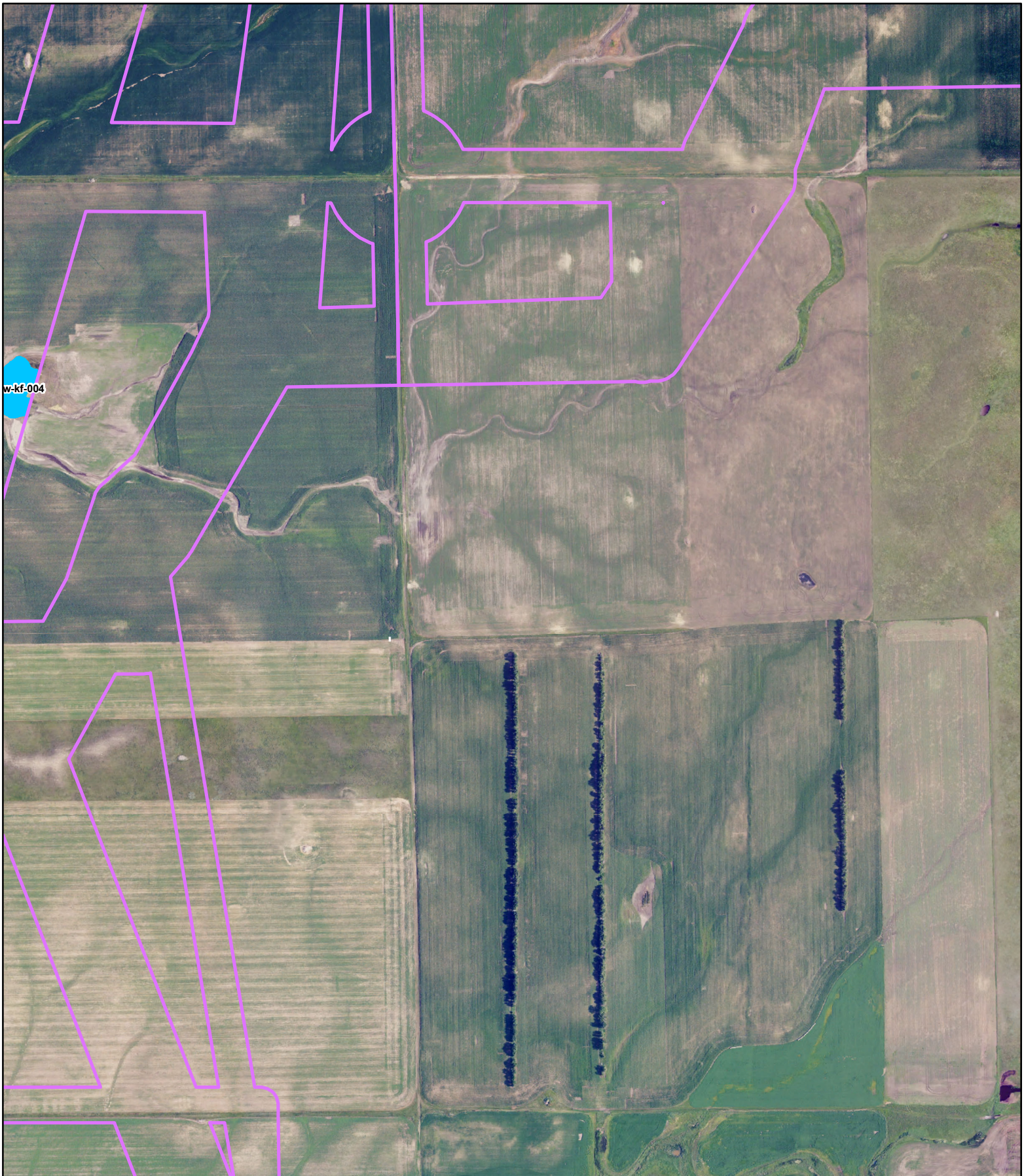
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

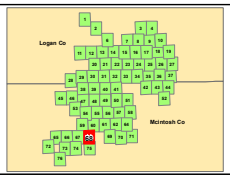
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

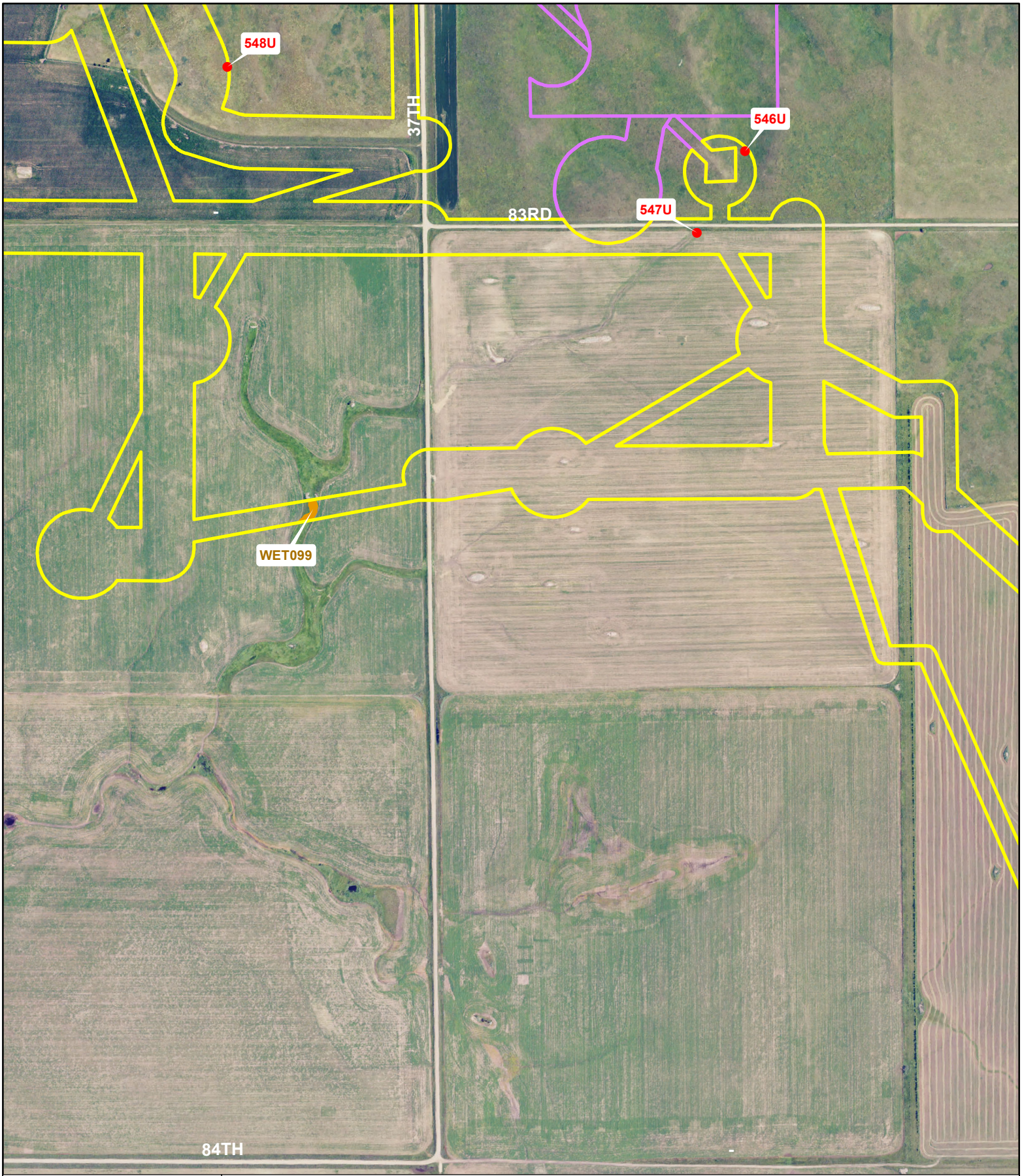
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

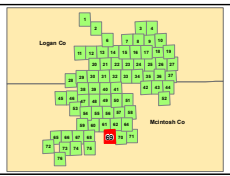
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

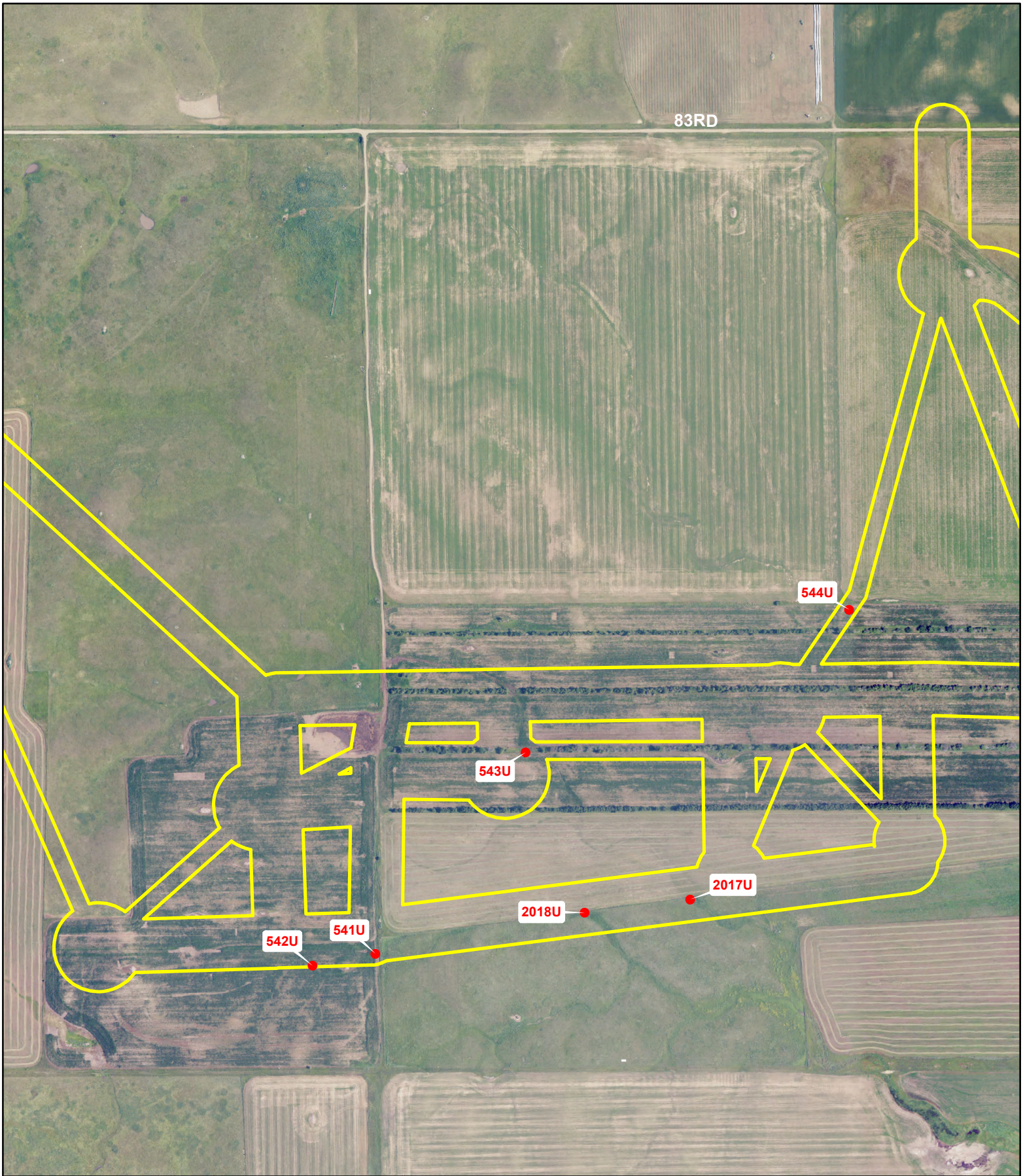
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

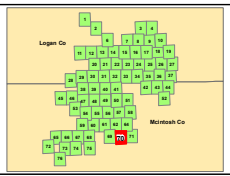
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated | Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

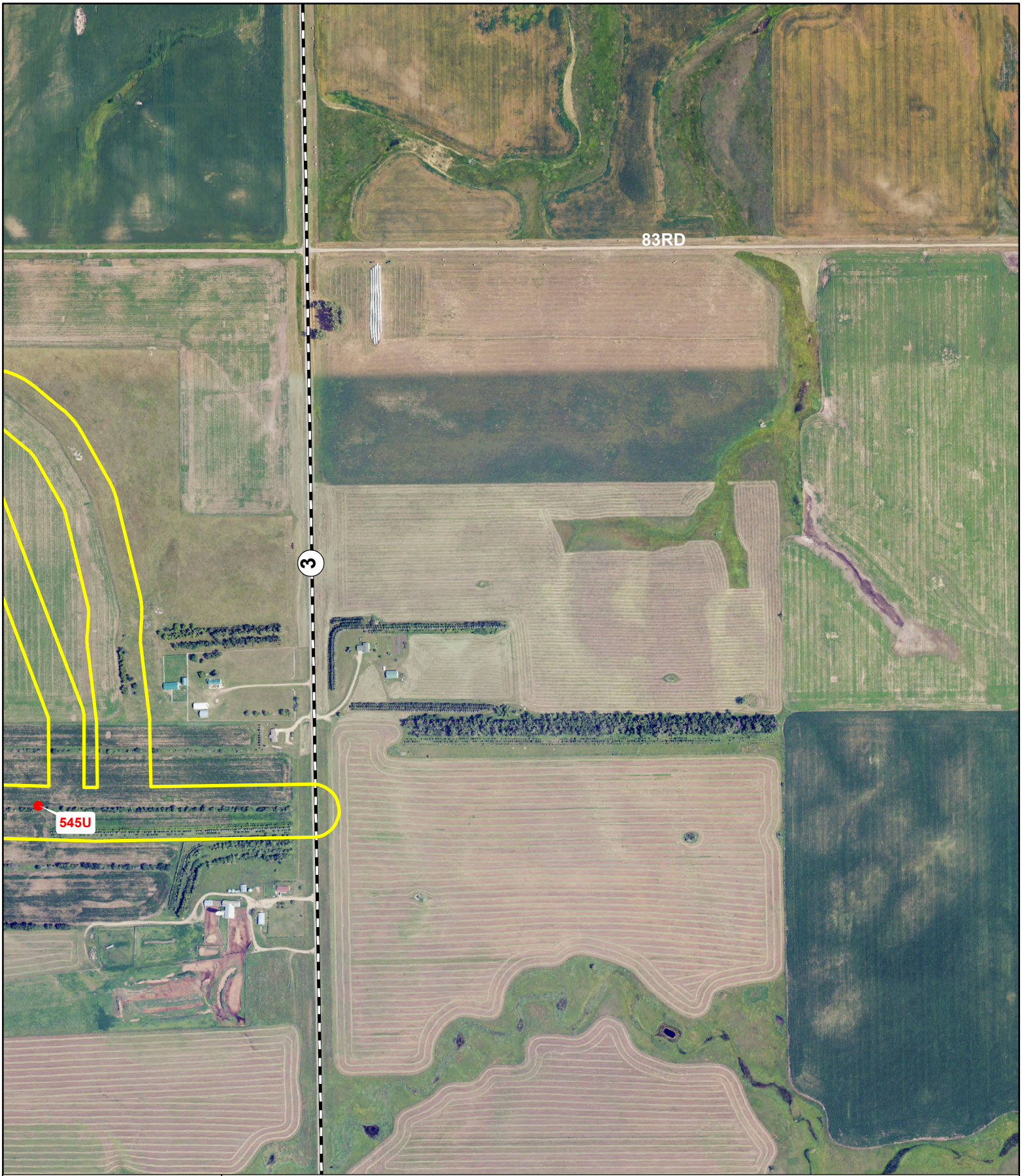
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

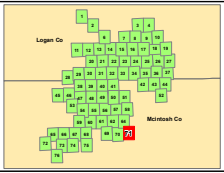
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

N W E S

0 0.1 0.2 mi

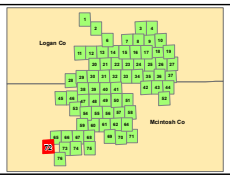
0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

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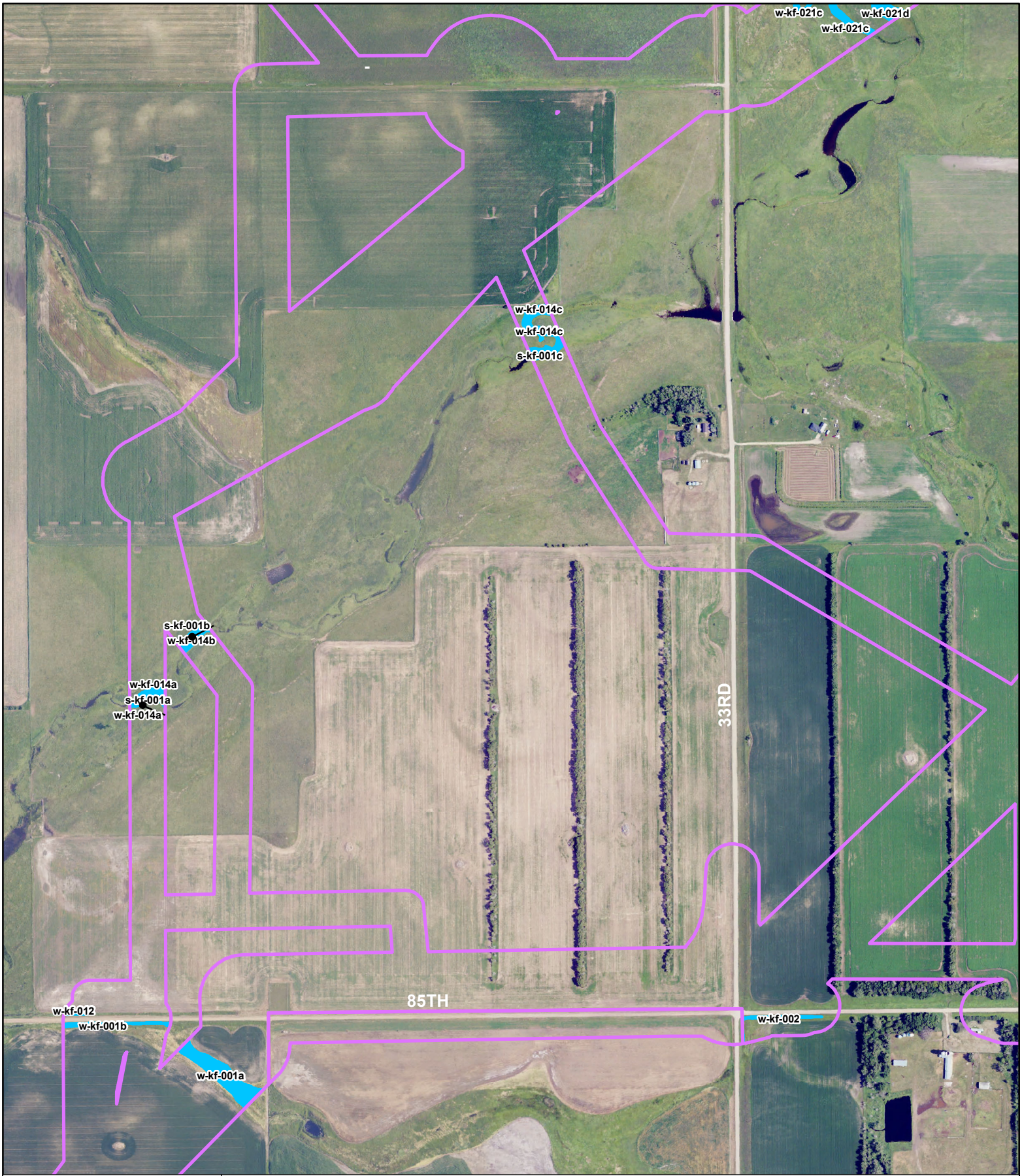
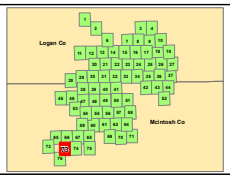


Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

Pre 2023 Wetland Survey Area

County Boundary

State Highway

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Surveyed Wetlands

Field Delineated

N W E S

0 0.1 0.2 mi

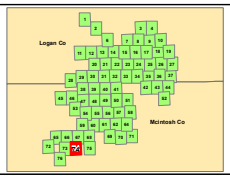
0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

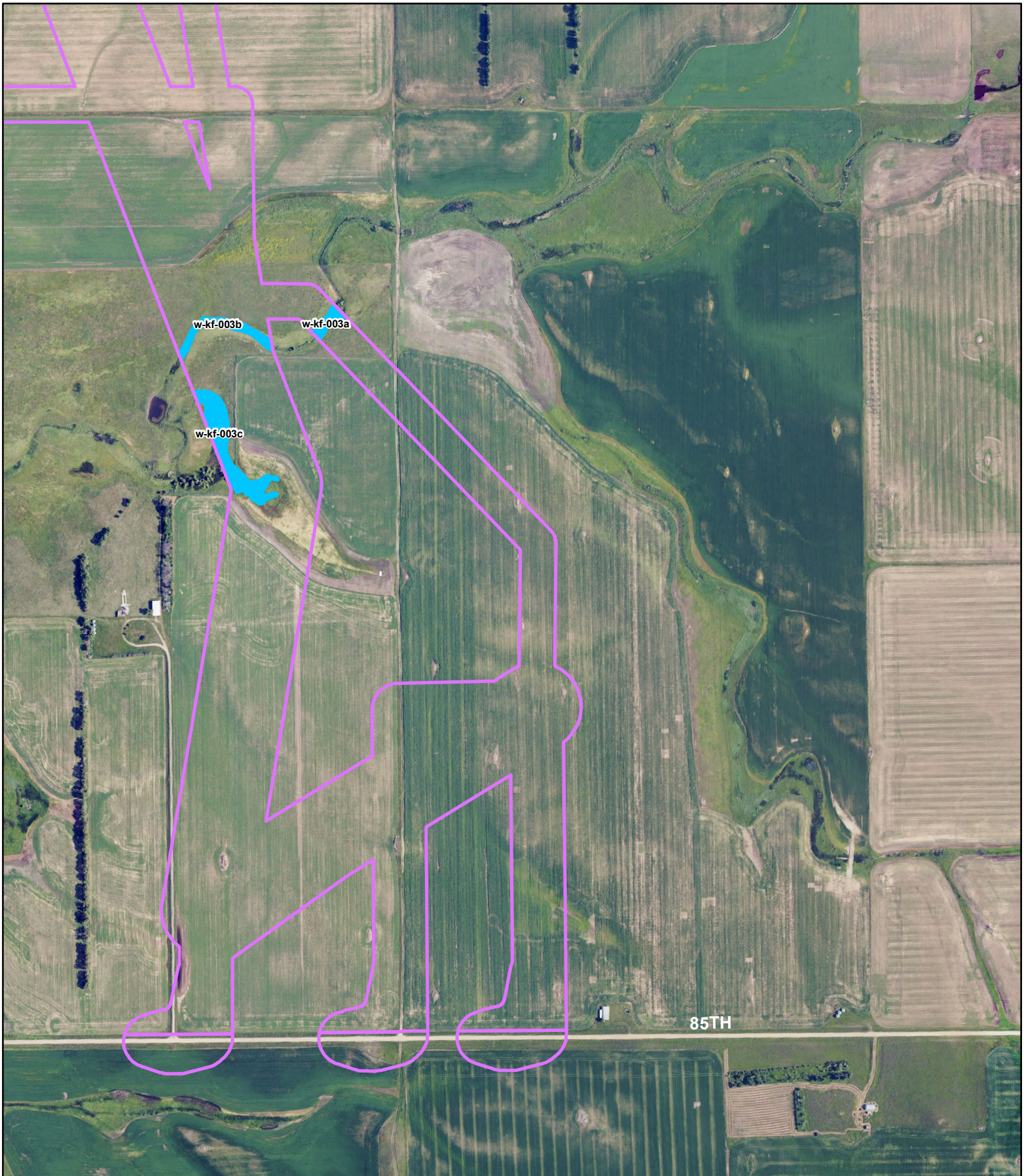
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

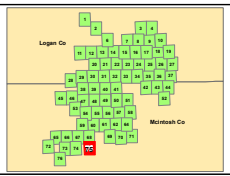
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated **Field Mapped**

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

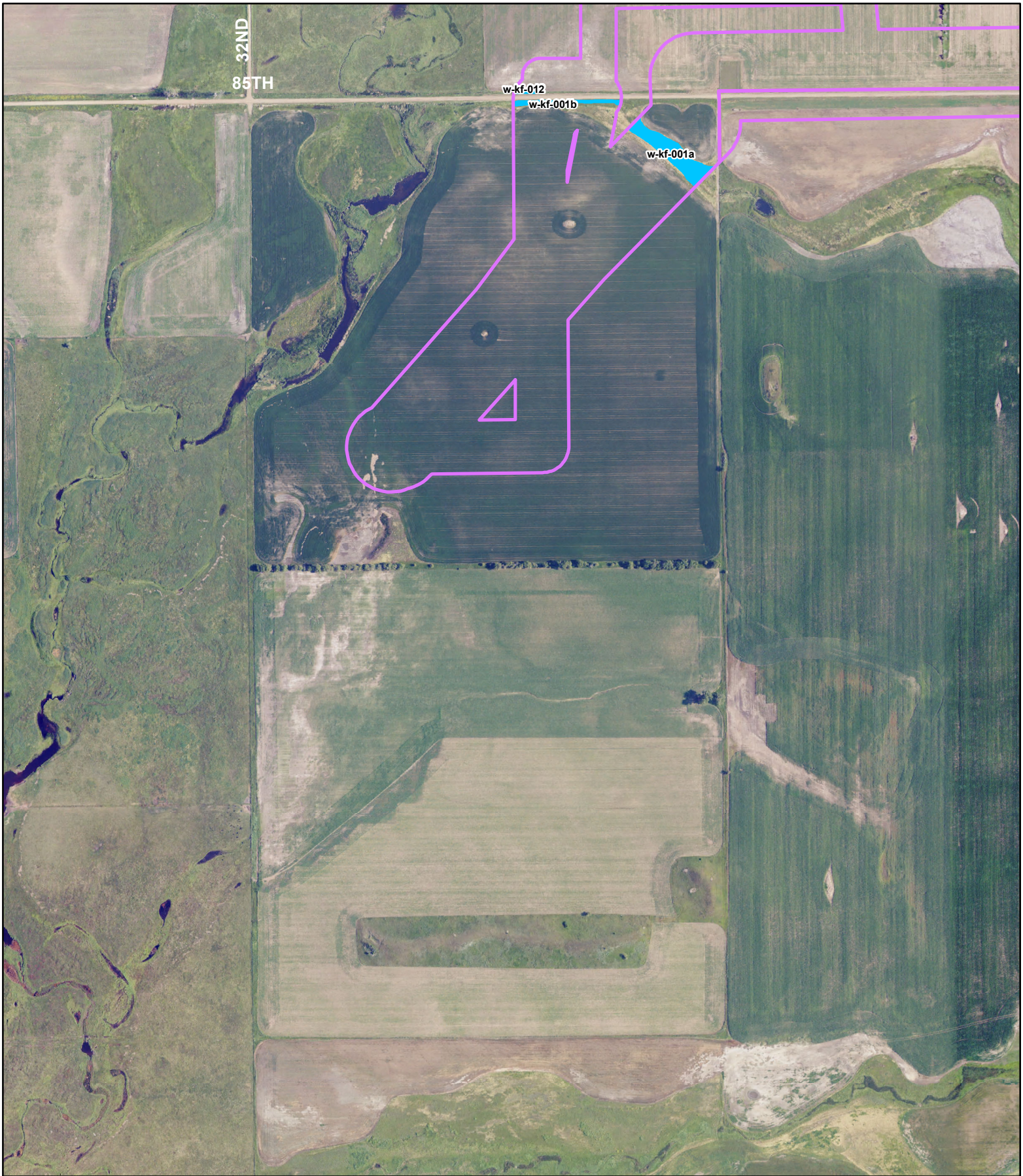
N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

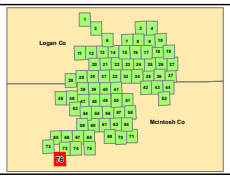
Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST



Badger Wind Project

Logan & McIntosh Counties, ND



2023 Wetland Survey Area

2023 Surveyed Wetlands

Field Delineated

Field Mapped

Non WOTUS Points

Wetland/Upland Sample Points

Pre 2023 Wetland Survey Area

Pre 2023 Surveyed Wetlands

Field Delineated

County Boundary

State Highway

N W E S

0 0.1 0.2 mi

0 0.2 0.4 km

Data Source: NAIP 2023
Coordinate System: UTM, WGS84, zn 14
Map Produced: 01/25/2024. Created by: T. Thorn

WEST

Appendix B. US Army Corps of Engineers Great Plains Region Datasheets for Wetland Delineation within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota

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WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: OOT W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Section 19
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.3217693S Long: -99.62041749 Datum: NAD83
Soil Map Unit Name: Zahl-Williams-Zahill complex, 6-9% slopes NWI Classification: PEMA
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Juncus spp.	2	NO	OBL
2. Echinochloa crusgalli	50	YES	FAC
3. Amaranthus spp.	10	NO	FAC
4. Setaria pumila	18	NO	FAC
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	2	x 1 =	2
FACW species	0	x 2 =	0
FAC species	78	x 3 =	234
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		236 (B)

Prevalence Index = B/A = 2.95

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 001 U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T113N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat field Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32176470 Long: -99.52027913 Datum: NAD83
Soil Map Unit Name: Zahill-Williams-Zahill complex, 6-9% slopes NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).
Cultivated crop

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 002 W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.32232562 Long: -99.52211948 Datum: NAD83
Soil Map Unit Name: Zahl-Williams-Zahill complex, 6-9% slopes NWI Classification: PEMF
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	30	yes	FACW
2. Cicuta spp.	25	NO	OBL
3. Juncus spp.	1	No	OBL
4. Echinochloa crusgalli	30	Yes	FAC
5. Setaria pumila	14	NO	FAC
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 15

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	26	x 1 =	26
FACW species	30	x 2 =	60
FAC species	44	x 3 =	132
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		218 (B)

Prevalence Index = B/A = 2.18

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 002 U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat Field Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32236180 Long: -99.52198079 Datum: NAD83
Soil Map Unit Name: Zahl-Williams-Zahill complex, 6-9% slopes NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation N, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes N No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No N
Hydric Soil Present? Yes ____ No N
Wetland Hydrology Present? Yes ____ No N

Is the Sampled Area within a Wetland? Yes ____ No N

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No N

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 003W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec 19
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR): LRRF Lat: 46.323157440 Long: -99.521395940 Datum: NAD83
Soil Map Unit Name: Williams-Zahl loams, 3-6% NWI Classification: PEMA
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Echinochloa crusgalli	55	Yes	FAC
2. Setaria pumila	14	NO	FAC
3. Juncus spp.	1	NO	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	1	x 1 =	1
FACW species	0	x 2 =	0
FAC species	69	x 3 =	207
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70 (A)		208 (B)

Prevalence Index = B/A = 2.97

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 0034
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat Field Local relief (concave, convex, none): None Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32306620 Long: -99.52131209 Datum: NAD83
Soil Map Unit Name: Williams-Zahl loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 004W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec 19
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR): LRRF Lat: 46.32625942 Long: -99.52373076 Datum: NAD83
Soil Map Unit Name: Williams-Zahl loams, 3-6% NWI Classification: PEMA
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Artemisia biennis	3	No	FAC
2. Echinochloa crusgalli	50	Yes	FAC
3. Setaria pumila	22	No	FAC
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	75	x 3 =	225
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	75 (A)		225 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).
Grazed by cattle

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 0040
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat Field Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32611807 Long: -99.52362385 Datum: NAD83
Soil Map Unit Name: Williams-Zahl loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation N, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).
Harvested crop

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 005W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRRF Lat: 46.3233693 8 Long: -99.52544168 Datum: NAD83
Soil Map Unit Name: Williams-Bowbells loams, 3-6% NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Typha spp.	2	NO	OBL
2. Persicaria spp.	30	Yes	OBL
3. Cirsium spp.	30	Yes	OBL
4. Carex spp.	3	No	OBL
5. Setaria pumila	25	NO	FAC
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 % (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	0	x 2 =	0
FAC species	25	x 3 =	75
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	90 (A)		140 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).
Grazed and mowed over

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 005U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat Field Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32362727 Long: -99.52624849 Datum: NAD83
Soil Map Unit Name: Williams-Bowbells loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

Harvested crop

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: C006W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat Fence line Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.32453405 Long: -99.52915189 Datum: NAD83
Soil Map Unit Name: Williams-Bowbells loams, 3-6% NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	95	Yes	FACW
2. Hordeum jubatum	5	No	FACW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	100	x 2 =	200
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		200 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).
Fenceline

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-24-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 0064
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R70W, Sec. 19
Landform (hillslope, terrace, etc.): Flat field Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.324148236 Long: -99.529062218 Datum: NAD83
Soil Map Unit Name: Williams-Bowbells loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Triticum spp.	100	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 007W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R71W, Sec. 18
Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope (%): 3
Subregion (LRR): LRRF Lat: 46.32877191 Long: -99.64897192 Datum: NAD83
Soil Map Unit Name: Reeder-Farnuf loams, 3-6% NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Echinochloa crusgalli	35	Yes	FAC
2. Hordeum jubatum	10	No	FACW
3. Carex spp.	25	Yes	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 30

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	25	x 1 =	25
FACW species	10	x 2 =	20
FAC species	35	x 3 =	105
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	70	(A)	150 (B)

Prevalence Index = B/A = 2.14

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 007U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R71W, Sec. 18
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.32880252 Long: -99.64890498 Datum: NAD83
Soil Map Unit Name: Beader-Farnuf loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Poa palustris	70	Yes	FACU
2. Trifolium spp.	10	NO	NI
3. Artemisia campestris	5	NO	UPL
4. Nassella viridula	15	NO	NI
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	70	x 4 =	280
UPL species	0	x 5 =	0
Column Totals:	70	(A)	280 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 008W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R72W, Sec. 25
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.29796946 Long: -99.66896850 Datum: NAD83
Soil Map Unit Name: Reeder-Arnegard loams, 3-6% NWI Classification: PEMF
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Typha spp.	50	Yes	OBL
2. Hordeum jubatum	40	Yes	FACW
3. Artemisia biennis	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	50	x 1 =	50
FACW species	45	x 2 =	90
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		140 (B)

Prevalence Index = B/A = 1.47

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
___ 4 - Morphological Adaptations[1] (Explain)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 0080
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R72W, Sec. 25
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 0
Subregion (LRR): LRRF Lat: 46.29791306 Long: -99.16889156 Datum: NAD83
Soil Map Unit Name: Reeder-Arnegard loams, 3-6% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Glycine max	90	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 80

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

Harvested crop

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 009W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R72W, Sec. 36
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.28798563 Long: -99.67526475 Datum: NAD83
Soil Map Unit Name: Bowdle-Lehr loams, 0-2% NWI Classification: PEMF
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	60	Yes	FACW
2. Rumex crispus	10	NO	FAC
3. Typha spp.	27	Yes	OBL
4. Hordeum jubatum	3	NO	FACW
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	27	x 1 =	27
FACW species	63	x 2 =	126
FAC species	10	x 3 =	30
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100	(A)	183 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
___ 4 - Morphological Adaptations[1] (Explain)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

Farmer mowed over wetland

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind, LLC State: ND Sampling Point: 009U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R72W, Sec. 36
Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): none Slope (%): 2
Subregion (LRR): LRRF Lat: 46.28791195 Long: -99.67521006 Datum: NAD83
Soil Map Unit Name: Bowbells-Lehr loams, 0-2% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Bromus inermis	100	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

Mowed over

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 010W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R71W, Sec 33
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): LRRF Lat: 46.285415409 Long: -99.64517727 Datum: NAD83
Soil Map Unit Name: Lowe loam, 0-2%, occasionally flooded NWI Classification: PEMF
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	90	Yes	FACW
2. Polygonaceae	5	No	UI
3. Hordeum jubatum	5	No	FACW
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	____ = Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		190 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
___ 4 - Morphological Adaptations[1] (Explain)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

Mowed over

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: Logan Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: d10 U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T133N, R71W, Sec 33
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 8
Subregion (LRR): LRRF Lat: 46.28528442 Long: -99.64487937 Datum: NAD83
Soil Map Unit Name: Lowe loam, 0-2%, occasionally flooded NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 30 ft.)	Absolute % cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Bromus inermis	95	Yes	UPL
2. Solidago spp.	5	No	UPL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
___ 2 - Dominance Test is >50%
___ 3 - Prevalence Index is ≤ 3.0[1]
___ 4 - Morphological Adaptations[1] (Explain)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

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WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 011W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec. 1
Landform (hillslope, terrace, etc.): Hill slope Local relief (concave, convex, none): Convex Slope (%): 8
Subregion (LRR): LRRF Lat: 46.27673024 Long: -99.63019379 Datum: NAD83
Soil Map Unit Name: Harriet loam, 0-2% NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	80	Yes	FACW
2. Hordeum jubatum	3	No	FACW
3. Typha spp.	17	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	17	x 1 =	17
FACW species	83	x 2 =	166
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		183 (B)

Prevalence Index = B/A = 1.83

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
___ 4 - Morphological Adaptations[1] (Explain)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 011U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec. 1
Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): Convex Slope (%): 4
Subregion (LRR): LRRF Lat: 46.27671052 Long: -99.63013720 Datum: NAD83
Soil Map Unit Name: Harriet loams, 0-2% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1. Symphoricarpos occidentalis	5	NO	UPL
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Bromus inermis	80	Yes	UPL
2. Grindelia squarrosa	5	NO	UPL
3. Melilotus spp.	10	NO	FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	10	x 4 =	40
UPL species	90	x 5 =	450
Column Totals:	100 (A)		490 (B)

Prevalence Index = B/A = 4.9

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 01xW
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec. 1
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.27418414 Long: -99.64426503 Datum: NAD83
Soil Map Unit Name: Lowe loam, 0-2%, occasionally flooded NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Spartina pectinata	90	Yes	FACW
2. Hordeum jubatum	5	No	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 5

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	95	x 2 =	190
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	95 (A)		190 (B)

Prevalence Index = B/A = 2

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 012U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec 1
Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 5
Subregion (LRR): LRRF Lat: 46.27411408 Long: -99.64412278 Datum: NAD83
Soil Map Unit Name: Lowe loam, 0-2%, occasionally flooded NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
= Total Cover			
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1. Symphoricarpos occidentalis	5	No	UPL
2.			
3.			
4.			
5.			
= Total Cover			
Herb Stratum (Plot size: 5 ft.)			
1. Bromus inermis	95	Yes	UPL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
= Total Cover			
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
= Total Cover			

% Bare Ground in Herb Stratum 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	100	x 5 =	500
Column Totals:	100 (A)		500 (B)

Prevalence Index = B/A = 5

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 013W
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec 11
Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRRF Lat: 46.27203170 Long: -99.65849247 Datum: NAD83
Soil Map Unit Name: Daglum-Belfield complex, 0-2% NWI Classification: PEMC
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes X No ____
Hydric Soil Present? Yes X No ____
Wetland Hydrology Present? Yes X No ____

Is the Sampled Area within a Wetland? Yes X No ____

Remarks:
Photos:
Harvested crop boarders wetland

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Typha spp.	40	Yes	OBL
2. Rumex crispus	3	No	FAC
3. Artemisia ludoviciana	2	No	FAC
4. Hordeum jubatum	10	No	FACW
5. Spartina pectinata	25	Yes	FACW
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	40	x 1 =	40
FACW species	35	x 2 =	70
FAC species	5	x 3 =	15
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	80 (A)		125 (B)

Prevalence Index = B/A = 1.56

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
X 2 - Dominance Test is >50%
X 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes X No ____

Remarks: (if observed, list morphological adaptations below).

WETLAND DETERMINATION DATA FORM - Great Plains Region

Project/Site: Badger Wind Farm County: McIntosh Sampling Date: 10-25-2023
Applicant/Owner: Badger Wind LLC State: ND Sampling Point: 013 U
Investigator(s): H. Beckert and A. Blunt Section, Township, Range: T132N, R72W, Sec 11
Landform (hillslope, terrace, etc.): hillside Local relief (concave, convex, none): Concave Slope (%): 1
Subregion (LRR): LRRF Lat: 46.27205480 Long: -99.65855912 Datum: NAD83
Soil Map Unit Name: Daglum - Belfield complex, 0-2% NWI Classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? (Yes / No) Yes (if no, explain in Remarks.)
Are Vegetation X, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ____ No X
Hydric Soil Present? Yes ____ No X
Wetland Hydrology Present? Yes ____ No X

Is the Sampled Area within a Wetland? Yes ____ No X

Remarks:
Photos:
Harvested crop

VEGETATION - Use scientific names of plants.

	Absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30 ft.)			
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft.)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft.)			
1. Glycine max	90	Yes	NI
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
	= Total Cover		
Woody Vine Stratum (Plot size: 30 ft.)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index Worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:

____ 1 - Rapid Test for Hydrophytic Vegetation
____ 2 - Dominance Test is >50%
____ 3 - Prevalence Index is ≤ 3.0[1]
____ 4 - Morphological Adaptations[1] (Explain)
____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Provide supporting data in Remarks.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks: (if observed, list morphological adaptations below).

Appendix C. Wetland, Waterbody, and Non-WOTUS Wetlands Photographs within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota

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Appendix C1. WET005

Appendix C2. WET012

Appendix C3. WET219

Appendix C4. WET220

Appendix C5. WET225

Appendix C6. WET234

Appendix C7. WET241

Appendix C8. WET1015

Appendix C9. WET1016

Appendix C10. WET1017

Appendix C11. 505U

Appendix C12. 511U

Appendix C13. 2014U

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Appendix D. Summary of Non-Wetland and Non-Waterbody Points Recorded within the 2023 Wetland Survey Area of the Badger Wind Project in Logan and McIntosh Counties, North Dakota

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Appendix D. Summary of all non-wetland and non-waterbody points recorded within the Survey Area of the Badger Wind Expansion Project in Logan and McIntosh counties, North Dakota.[1]

Non-wetland ID	Type[1]	Latitude	Longitude
212U	Non-wetland	46.248238	-99.632207
503U[2]	Non-wetland	46.324398	-99.522076
504U[2]	Non-wetland	46.324810	-99.522404
505U[2]	Non-wetland	46.325938	-99.521074
506U[2]	Non-wetland	46.325062	-99.524693
507U[2]	Non-wetland	46.321761	-99.525981
508U[2]	Non-wetland	46.322657	-99.528729
509U[2]	Non-wetland	46.323641	-99.528960
510U[2]	Non-wetland	46.324982	-99.652904
511U[2]	Non-wetland	46.326950	-99.648413
512U[2]	Non-wetland	46.296798	-99.669109
513U[2]	Non-wetland	46.269339	-99.670745
514U[2]	Non-wetland	46.264433	-99.695189
515U[2]	Non-wetland	46.264345	-99.687006
516U[2]	Non-wetland	46.263189	-99.708153
517U	Non-wetland	46.375233	-99.643976
518U	Non-wetland	46.375338	-99.643734
519U	Non-wetland	46.375883	-99.646309
520U	Non-wetland	46.376048	-99.647504
521U	Non-wetland	46.293770	-99.534573
522U	Non-wetland	46.292048	-99.532430
523U	Non-wetland	46.292488	-99.531764
524U	Non-wetland	46.295282	-99.529267
525U	Non-wetland	46.304049	-99.535540
526U	Non-wetland	46.306795	-99.532380
527U	Non-wetland	46.308261	-99.531019
528U	Non-wetland	46.309474	-99.532457
529U	Non-wetland	46.305217	-99.520812
530U	Non-wetland	46.305929	-99.522755
531U	Non-wetland	46.288057	-99.489138
532U	Non-wetland	46.294834	-99.484909
533U	Non-wetland	46.299418	-99.505084
534U	Non-wetland	46.298329	-99.507672
535U	Non-wetland	46.298123	-99.509717
536U	Non-wetland	46.298117	-99.511690
537U	Non-wetland	46.319381	-99.589391
538U	Non-wetland	46.306730	-99.639082
539U	Non-wetland	46.311446	-99.641497
541U	Non-wetland	46.203083	-99.586475
542U	Non-wetland	46.202901	-99.587869
543U	Non-wetland	46.206166	-99.583090
544U	Non-wetland	46.208319	-99.575860
545U	Non-wetland	46.207135	-99.571718
546U	Non-wetland	46.216998	-99.600213
547U	Non-wetland	46.215742	-99.601298
548U	Non-wetland	46.218380	-99.611711

Appendix D. Summary of all non-wetland and non-waterbody points recorded within the Survey Area of the Badger Wind Expansion Project in Logan and McIntosh counties, North Dakota.[1]

Non-wetland ID	Type[1]	Latitude	Longitude
549U	Non-wetland	46.225177	-99.607710
550U	Non-wetland	46.240128	-99.607870
551U	Non-wetland	46.244729	-99.581818
552U	Non-wetland	46.242626	-99.582459
553U	Non-wetland	46.232353	-99.583064
554U	Non-wetland	46.235181	-99.580250
640U	Non-wetland	46.319031	-99.651576
700U	Non-wetland	46.316545	-99.520476
701U	Non-wetland	46.312300	-99.521517
702U	Non-wetland	46.303161	-99.520795
703U	Non-wetland	46.315506	-99.518062
704U	Non-wetland	46.309264	-99.503520
705U	Non-wetland	46.305298	-99.493500
706U	Non-wetland	46.305231	-99.581317
707U	Non-wetland	46.304505	-99.581081
708U	Non-wetland	46.304590	-99.562212
709U	Non-wetland	46.292144	-99.613974
710U	Non-wetland	46.268199	-99.599594
711U	Non-wetland	46.273671	-99.620989
2000U	Non-wetland	46.336155	-99.517174
2001U	Non-wetland	46.318950	-99.528759
2002U	Non-wetland	46.308915	-99.503638
2003U	Non-wetland	46.305223	-99.493825
2004U	Non-wetland	46.308736	-99.540264
2005U	Non-wetland	46.286017	-99.498350
2006U	Non-wetland	46.270418	-99.491510
2007U	Non-wetland	46.292183	-99.613666
2008U	Non-wetland	46.291569	-99.614496
2009U	Non-wetland	46.326168	-99.654687
2010U	Non-wetland	46.321404	-99.649365
2011U	Non-wetland	46.259893	-99.679147
2012U	Non-wetland	46.259415	-99.679424
2013U	Non-wetland	46.269236	-99.668095
2014U	Non-wetland	46.263709	-99.708323
2015U	Non-wetland	46.223366	-99.608607
2016U	Non-wetland	46.219068	-99.621789
2017U	Non-wetland	46.203872	-99.579459
2018U	Non-wetland	46.203683	-99.581808
2019U	Non-wetland	46.312297	-99.512643
5201U	Non-wetland	46.332374	-99.515691

[1] Wetlands delineated in 2020, 2021, and 2022 are presented in Atwell (2022) and Flaig (2021) reports.

"Non-WOTUS" ("no") points that lacked wetland or waterbody characteristics and were composed of upland vegetation.

[2] Documented during wetland delineation field effort; other "no" points in table were documented during wetland mapping effort.