# Wetland Delineation Report
# ~
# Woodland Drive West

## Village of Waunakee, Dane County Wisconsin

**August 9th, 2022**

TAYLOR CONSERVATION LLC

# Village of Waunakee, Dane County, Wisconsin

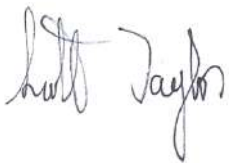
**August 9th, 2022**

---

**Prepared for:**
**Lone Silo North Addition, LLC**
**3564 Egre Road**
**DeForest, WI 53532**
**Jktierney999@gmail.com**

**Prepared by:**

**Taylor Conservation, LLC**
**3856 Schneider Dr.**
**Stoughton, WI 53589**
**(608) 444-7483**



Scott Taylor, PWS
Owner & Principal
WDNR Assured Wetland Delineator

## Table of Contents


*Wetland Delineator Qualifications* ..... 1

*Introduction* ..... 1

*Methods* ..... 2

Desktop Review ..... 2

Data Collection ..... 2

Transect & Sample Plot Location ..... 3

Wetland Boundary Location ..... 3

Waterways ..... 3

*Results and Discussion* ..... 4

Antecedent Precipitation ..... 4

Waterways ..... 4

Wetland ..... 5

Wetland Overview ..... 5

Wetland Boundary Characteristics ..... 5

Wetland Indicators Overview ..... 6

Wetland Indicators Notes ..... 6

Uplands ..... 8

Upland Notes ..... 9

Discussion of Low-lying Field ..... 9

*Conclusion* ..... 10

*References* ..... 11

*Figures* ..... 12

Figure 1: Landscape Overview. ..... 13

Figure 2: Investigation Area, Wetlands & Sample Plots. ..... 14

Figure 3: Topography – 2-foot Contour Map. ..... 15

Figure 4: Topography – United States Geological Survey Map. ..... 16

Figure 5: Soils. ..... 17

Figure 6: Wisconsin Wetland Inventory Map. ..... 18

*Appendix I: Aerial Image Analysis* ..... 19

*Appendix II: Aerial Images* ..... 20

*Appendix III: Survey Map of Wetland Boundary.* ..... 32

*Appendix IV: Antecedent Precipitation Data .....33*
*Appendix V: Map of 2020 Drain Tile Installation.....34*
*Appendix VI: Investigation Area Photos .....35*
*Appendix VII: Data Forms.....41*

# Wetland Delineator Qualifications

Scott Taylor holds a Master of Science degree in Forest Ecology and Management from the University of Wisconsin-Madison (1999). Taylor is an **Assured Wetland Delineator** under Wisconsin Department of Natural Resources guidelines. Taylor has attended the "Critical Methods in Wetland Delineation" training course annually since 2006. Taylor also completed the following courses that prepared him for performing wetland determinations and delineations in Wisconsin using the Army Corps of Engineers 1987 Manual Method:

- Wetland Plant Identification (July 2003, Delafield, WI. – Biotic Consultants, Inc.)
- Basic Wetland Delineation Training (August 2006, Cable, WI. – University of Wisconsin, La Crosse Continuing Education & Extension)
- Advanced Wetland Delineation Training (August 2018, Wisconsin Rapids, WI – University of Wisconsin, La Crosse Continuing Education & Extension).
- Hydric Soils Identification (June 2014, UW-Waukesha Field Station - University of Wisconsin, La Crosse Continuing Education & Extension).

# Introduction

On May 11th of 2022, Scott Taylor of Taylor Conservation, LLC performed wetland determinations and delineations on the Woodland Drive West tract (hereafter "the wetland investigation area") on behalf of Lone Silo North Addition, LLC. Wetland determinations and delineations identify and map wetlands within the wetland investigation area.

The wetland investigation area was approximately 125 acres (Figures 1 & 2). It spanned the Village of Waunakee and the Town of Westport, Dane County, Wisconsin, SENW, SWNE, SENE, NWNE, NENE, Section 18, T08N, R09E. It was situated on the south side of Woodland Drive, 0.2 mile west of the intersection with County Highway Q.

Investigation area terrain was variable. The east and south areas were steep. The west and north areas were flat to gently sloping. Land cover consisted primarily of cropland. However, there were scattered, small meadows interspersed with trees and brush. There was also a grassy drainage swale cutting across the south end of the investigation area.

The low-lying meadow in the southwest corner was found to be a wetland (Figure 2).

A segment of the investigation area (approximately 15 acres) saw installation of a subsurface drainage system (hereafter "drain tiles") in 2020 (Figure 2). Aerial image review (Appendixes I & II) and soil data (see plots 11 & 12) suggested this area possessed wetland conditions. Nonetheless, the investigator will argue this area no longer possesses wetland conditions based on the specifications of the drain tile network provided by the installer (Appendix V) and based on hydrology monitoring conducted

from May to July of 2022. See "*Discussion of Low-lying Field*" below (page 9) for discussion.

The property owner plans to build a residential development on this site. The purpose of this report is to explain the results of the wetland delineation and to describe the features of the wetlands and non-wetlands (uplands) in the investigation area.

# Methods

### *Desktop Review*

The following reference materials were reviewed prior to performing fieldwork:

1) Web Soil Survey (Natural Resource Conservation Service).
2) Wisconsin Wetland Inventory (WDNR Surface Water Data Viewer).
3) Wetland Indicators (WDNR Surface Water Data Viewer).
4) 24K Hydrography, Streams, Rivers & Intermittent Streams (WDNR Surface Water Data Viewer).
5) 7.5-minute quadrangle map (United States Geological Survey).
6) Aerial imagery for multiple past years (Google Earth, USDA Farm Service Agency).
7) Antecedent Precipitation Tool (Army Corps of Engineers).

Wetland determinations and the delineations in Wisconsin follow procedures set forth in the following:

1) The Corps of Engineers Wetlands Delineation Manual (US Army Corps of Engineers 1987).
2) Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral & Northeast Region (US Army Corps of Engineers 2012).
3) Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers & the Wisconsin DNR (WI Department of Natural Resources 2015).

### *Data Collection*

Vegetation, hydrology and soil information were gathered in sample plots and recorded on U.S. Army Corps of Engineers "Wetland Determination Data Forms" for the appropriate region. At each plot, a plot center was established, and the presence or absence of normal circumstances or disturbances was noted. Next, herbaceous vegetation was sampled within a circular 5-foot radius plot. After that, vines, shrubs and trees were sampled within a circular 30-foot radius plot, centered on the herbaceous plot. Next, a 20 inch-deep (at minimum) soil pit was dug at the plot center. The presence or absence of hydrology indictors in the soil pit and within the surrounding 30-foot circular plot was noted. Finally, the soil profile in the pit was examined and described. A determination was then made as to whether the site was wetland or upland.

In agricultural areas, wetland determinations followed the methods in Guidance for Offsite Hydrology/Wetland Determinations (Army Corps of Engineers & Minnesota

Board of Water & Soils Resources 2016). Aerial images (air photos) were inspected for "wetland signatures", or evidence of saturated soil, standing water or crop drown-out or stress. Images for 5 normal precipitation years, 6 wet years and 2 dry years between 2005 and 2021 (Appendixes I & II) were inspected (normal precipitation years were determined using methods from "Hydrology Tools for Wetland Determination", NRCS 1997). If a site possessed wetland signatures for at least 3 of the 5 normal precipitation years, it was judged to have wetland hydrology. However, if field evidence, e.g., presence of wetland obligate plants or stunted crops, strongly suggested an area was wetland, it was determined to be so in spite of lacking wetland signatures 3 of 5 normal precipitation years on crop slides.

***Transect & Sample Plot Location***

Transect beginning points (sample plots) were located inside of areas that appeared to have potential to be wetlands based on maps and field observations. These areas included mapped hydric soil locations, Wisconsin Wetland Inventory-mapped wetlands, and areas that showed pronounced wetland signatures on more than one year of aerial photography. They also included field observed plant communities typical of wetlands or field observed landscape features that collect water, like swales, depressions and drainage-ways.

If the sample plot data suggested that the location was inside of a wetland, a second plot was placed in an upslope location with a different plant community. If data collected at this plot suggested that the location was inside of the upland, no further plots were sampled. Otherwise, the process was repeated. A total of 15 plots were sampled, 4 inside of wetlands and 11 on the uplands (Figure 2).

***Wetland Boundary Location***

The wetland boundaries were located by observing increases in elevation and changes in plant community composition. The presence of healthy, dominant populations of upland plants, such as black raspberry (*Rubus occidentalis*-Upl) and honeysuckle (*Lonicera X bella*-FacU), as one moved upslope, away from the wetland, was generally considered a reliable indicator of the wetland boundary.

***Waterways***

Complete assessment of waterways was outside the scope of this investigation. Nonetheless any waterways observed are noted in the report below.

# Results and Discussion

***Antecedent Precipitation***

The following are the results of analysis of recent and historic precipitation data from the weather stations nearest the wetland investigation area using the Antecedent Precipitation Tool (Army Corps of Engineers). See Appendix IV for precipitation data graph, and for antecedent precipitation data for the dates of hydrology monitoring in the low-lying field.

Investigation Area Information:

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-05-11 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought |
| WebWIMP $H_2O$ Balance | Dry Season |

Weather Stations of Source Data:

| Weather Station Name | Coordinates | Elevation (ft) | Distance (mi) | Elevation Δ | Weighted Δ | Days Normal | Days Antecedent |
|---|---|---|---|---|---|---|---|
| MADISON DANE RGNL AP | 43.1406, -89.3453 | 866.142 | 6.762 | 79.638 | 3.582 | 11353 | 90 |

Antecedent Precipitation Analysis:

| 30 Days Ending | $30^{th}$ %ile (in) | $70^{th}$ %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-05-11 | 3.131102 | 4.641732 | 2.673228 | Dry | 1 | 3 | 3 |
| 2022-04-11 | 1.819291 | 3.395669 | 4.401575 | Wet | 3 | 2 | 6 |
| 2022-03-12 | 1.385039 | 2.306299 | 1.811024 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Normal Conditions - 11 |

The results indicate that on the date of the field investigation, **wetland soil moisture levels should be normal**.

***Waterways***

No waterways were observed in the wetland investigation area.

***Wetland***

*Wetland Overview*

| Sample Plots | Wetland Type | Wisconsin Wetland Inventory Wetland Type | Surface Water Connections | Wetland Floristic Quality* | Approximate Area Delineated in Investigation Area (Acres) |
|---|---|---|---|---|---|
| 1, 3, 5 & 7 | Sedge Meadow (south portion); Fresh (Wet) Meadow (north portion) | E2Kg, T3K, T3/S3Kg | Dorn Creek | **High** (Sedge Meadow), **Medium** (Fresh Wet Meadow) | 10 |

* The wetland floristic quality assessment (high, medium, low) reflects the wetlands within the investigation area. There could be higher quality wetlands adjacent to but outside of the investigation area that were not inspected. Wetland quality is based on Taylor Conservation's best professional judgment. The Wisconsin Department of Natural Resources has authority over wetland and waterway protective areas, per NR 151. Local authorities may enforce wetland structure setbacks as well.

| | |
|---|---|
| **Normal Circumstances Present?** | Yes |
| **Significant Disturbance?** | No |
| **Naturally Problematic?** | Yes, for plots 1 & 7 since no hydric soil indicators were observed. |

The wetland was an open meadow with scattered shrub thickets and trees. The south portion was dominated by sedges and showed higher floristic quality than the north portion.

Surface water was observed in 1 of 4 wetland sample plots (plot 3). Soil saturation within 12 inches of the ground surface was observed in 3 of 4 wetland sample plots (1, 5 & 7). Plot 7 also showed a water table within 12 inches of the surface.

The wetlands' chief water sources are (1) surface runoff from surrounding uplands, which contain large areas of cropland; (2) a drain tile network that drains a low-lying expanse of cropland to the north and empties into the north end of the wetland; and (3) ground water inflow, particularly in the lower-lying south portions of the wetlands.

*Wetland Boundary Characteristics*

Most parts of the wetland boundary were simply the transition from natural meadow to cropland. A relatively sharp slope break occurred where the meadow gave way to cropland.

*Wetland Indicators Overview*

| **Vegetation** | |
|---|---|
| *Dominant Species:* | |
| **Herb-layer** | Tussock sedge (*Carex stricta*-Obl), lake sedge (*Carex lacustris*-Obl), cattails (*Typha angustifolia*-Obl), jewel weed (*Impatiens capensis*-Fac), reed canary grass (*Phalaris arundinacea*-FacW) |
| **Saplings & Shrubs** | Pussy willow (*Salix discolor*-FacW), red osier dogwood (*Cornus alba*-FacW) |
| **Trees** | Cottonwood (*Populus deltoides*-Fac) |
| *Hydrophytic Indicators:* | |
| **Dominance Test** | All Plots showed 100% hydrophytic dominance |
| **Problematic Hydrophytic?** | None |

| **Hydrology** | |
|---|---|
| **Primary Hydrology Indicators** | Surface Water-A1 (plot 3), High Water Table-A2 (plot 7), Saturation-A3 (plots 1, 5 & 7) |
| **Secondary Hydrology Indicators** | Geomorphic Position-D2 (all plots), FAC-neutral Test-D5 (all plots) |
| **Signatures on Aerial Imagery?** | No imagery review for wetlands since they were not cropped. |

| **Soils** | |
|---|---|
| **Hydric indicators** | Redox Dark Surface-F6 (plot 5). Plot 3 possessed standing water, so soil was assumed hydric, see notes below. |
| **Hydric Indicators Missing?** | Plots 1 & 7. Investigator used professional judgment, see notes below. |
| **Surface Horizon Colors & Textures** | 10 YR 2/1, silt loam |
| **Subsoil Horizon Colors & Textures** | Investigator did not observe subsoils at the depths examined (24 inches). |

*Wetland Indicators Notes*

Two wetland plots (plot 1 & 7) did not show a hydric soil indicator, but professional judgment was used to assume the soils were hydric based on the presence of hydrophytic vegetation and wetland hydrology indicators, and the plots' locations in low landscape positions, following guidance in Chapter 5 of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual.

One wetland sample plot (plot 3) possessed standing water and vegetation dominated by FacW & Obl-rated species, therefore no soil pit was dug and the soil was assumed hydric without direct examination.

***Uplands***

(Sample Plots 2, 4, 6, 8, 9, 10, 11, 12, 13, 14 & 15)

The uplands (non-wetlands) were composed primarily of crop fields (Figure 2). They also contained small, scattered meadows amid the crop fields.

Most of the uplands occupied high-lying or sloping ground where water would be unlikely to linger for long periods.

However, there was a large (approximately 15 acre) expanse of low-lying cropland that was part of the uplands (Figure 2). See discussion of this area below under "*Discussion of Low-lying Field*".

| | |
|---|---|
| **Normal Circumstances Present?** | Not for most of the uplands due to recent tillage. |
| **Significant Disturbance?** | Yes, for most of the uplands due to recent tillage. |
| **Naturally Problematic?** | Not applicable to uplands. |

| ***Vegetation*** | |
|---|---|
| *Dominant Species:* | |
| **Herb-layer** | *In non-cropped areas:* Alfalfa (*Medicago sativaI*-FacU), red clover (*Trifolium pratense*-FacU), orchard grass (*Dactylis glomerata*-FacU), dandelion (*Taraxacum officinale*-FacU) |
| **Saplings & Shrubs** | *In non-cropped areas:* Honeysuckle (*Lonicera X bella*-FacU) |
| **Trees** | *In non-cropped areas:* Black cherry (*Prunus serotina*-FacU), box elder (*Acer negundo*-Fac) |
| *Hydrophytic Indicators:* | |
| **Plots Meeting Dominance Test?** | None |
| **Plots Meeting Prevalence Index?** | None |

| Hydrology | |
|---|---|
| **Primary Hydrology Indicators?** | None |
| **Secondary Hydrology Indicators?** | None |
| **Signatures on Aerial Imagery?** | Wetland signatures were observed in area of plots 11 & 12. See "*Discussion of Low-lying Field*" below & Appendixes I & II. |

| Soils | |
|---|---|
| **Hydric indicators?** | Redox Dark Surface-F6 (plots 11 & 12, see notes below) |
| **Surface Horizon Colors & Textures** | 10 YR 2/1, 2/2 & 3/2; silt loam |
| **Subsoil Horizon Colors & Textures** | 10 YR 3/3, 3/4; silty clay loam |

*Upland Notes*

All upland sample plots except plots 6 and 9 occupied cropland and only supported a recently planted corn crop. There was little to no natural vegetation present in these plots. Judging from the absence of wetland hydrology and hydric soil indicators (except for plots 11 & 12, which showed hydric indicators), and the well elevated landscape position (except for plots 11 & 12, which occupied a low area), the investigator assumed that the cropland plots would support predominantly non-hydrophytic vegetation in the absence of tillage.

*Discussion of Low-lying Field*

Analysis of air photos for 5 normal precipitation years showed evidence of wetland hydrology in the low-lying upland crop field surrounding sample plots 11 and 12 (Figure 2; Appendixes I & II). This area showed hydric soil indicators as well.

However, the investigator learned that drain tile was installed in the low-lying field in 2020, after the year of capture of all but one of the aerial images showing wetland signatures. The drain tile installer stated that 4-inch perforated pipes (laterals) were place at a depth of 3 feet, 30-40 feet apart throughout the field (Josh Miller, "Dried Up Drainage", personal communication; also see map, Appendix V).

In emails dated May 8th, 2020, Army Corps (Mr. Kyle Zibung) and Wisconsin Department of Natural Resources (Mr. Allen Ramminger) stated no permits were needed for the installation because it would replace an existing drainage system.

The investigator monitored hydrology in shallow pits (24 inches) at 3 sample plot locations (plots 10, 11 & 12) on 7 dates in spring and summer or 2022: May 11th; May 20th, June 7th, June 17th, June 24th, July 1st, and July 7th. No water, or even excessively

moist soil, was observed in any of the sample plots on any of the dates. Antecedent precipitation was normal for all monitoring dates (Appendix IV).

Based on guidance published by the Minnesota Board of Water & Soils Resources ("Lateral Effect & Drainage Setback"; https://bwsr.state.mn.us/lateral-effect-drainage-setback), the closest permitted setback distance for a drain tile lateral from a wetland in Tripoli silty clay loam soil (a soil series with texture similar to the soil of the drained field – Wacousta silty clay loam) is 50 feet. This suggests a drain's lateral effect may extend as far as 50 feet. Therefore, laterals spaced 30 to 40 feet are likely to thoroughly drain soils in between the laterals.

Hence the investigator assumed that drain tiles installed on the site in 2020 have eliminated wetland hydrology, and that the low-lying field that showed wetland signatures on aerial imagery and hydric soil indicators is no longer a wetland.

# Conclusion

One wetland area totaling approximately 10 acres was found on the subject wetland investigation area on May 11th of 2022. The wetland was comprised of both "Fresh (Wet) Meadow" and "Sedge Meadow" wetland community types.

The remainder of the investigation area, comprised predominantly of crop fields, for the most part lacked indicators of wetland hydrology, hydrophytic vegetation and hydric soil and was therefore judged a non-wetland area. The low-lying crop field area that was outside of the delineated wetland still showed hydric soil indicators but lacked wetland hydrology indicators and was therefore judged a non-wetland area.

The wetland boundary marked in the field is the best estimate of the location of the boundary based on the available vegetation, hydrology and soil evidence on May 11th of 2022. Wetland boundaries can change over time with changes in vegetation, precipitation, or regional hydrology. The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corp of Engineers, state regulation under the jurisdiction of Wisconsin Department of Natural Resources, and local jurisdiction under your local county, town, city or village. The U.S. Army Corps of Engineers and/or the Wisconsin DNR have authority to make the final decision regarding the wetland boundary. Personnel from these agencies may adjust the boundary upon field inspection.

Activities within or close to the delineated wetland boundaries generally require permits from the Army Corps of Engineers, WDNR or local authorities. If the client proceeds with any work within or close to the delineated wetland boundaries without authorization or permits from the appropriate regulatory authorities, Scott Taylor or Taylor Conservation LLC shall not be responsible or liable for any resulting damages.

Scott Taylor is an **Assured Wetland Delineator** under Wisconsin Department of Natural Resources guidelines (http://dnr.wi.gov/topic/wetlands/assurance.html). Taylor's wetland delineations are considered dependable by the WDNR for purposes of Wisconsin wetland and waterway permits, shoreland-wetland zoning or other state-mandated local wetland programs. Therefore Taylor's clients do not require concurrence letters from WDNR before project planning or permit applications that are based on Taylor's wetland delineations. However, concurrence from the Army Corps of Engineers is still necessary. The

WDNR and Army Corps have final authority over wetlands in Wisconsin. They may adjust Taylor's wetland boundaries. Assurance does not change decisions about wetland fill. Assurance is not a guarantee of accuracy or relief from landowner responsibility in the event an error occurs and wetlands are filled. While it is unlikely for a professional whose work is assured, inadvertent wetland fill that may result from errors must be remedied.

# References

Hurt, G.W., Vasilas, L.M. & Berkowitz, J.F. 2018. Field Indicators of Hydric Soils in the United States: A Guide for Identifying and Delineating Hydric Soils, Version 8.2. Natural Resource Conservation Service, United States Department of Agriculture.

US Army Corps of Engineers 2020. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/

US Army Corps of Engineers, Waterways Experiment Station. 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1.

US Army Corps of Engineers & Minnesota Board of Water & Soil Resources 2016. "Guidance for Offsite Hydrology/Wetland Determinations.".

US Army Corps of Engineers & Wisconsin Department of Natural Resources 2015. "Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers & the Wisconsin DNR."

USDA, Natural Resource Conservation Service. 1997. Hydrology Tools for Wetland Determination. Part 650. Engineering Field Handbook.

# Figures

*Figure 1: Landscape Overview.*

Source: Imagery - National Agricultural Imagery Program, 2015; Roads & Waters – Wisconsin Department of Natural Resources.

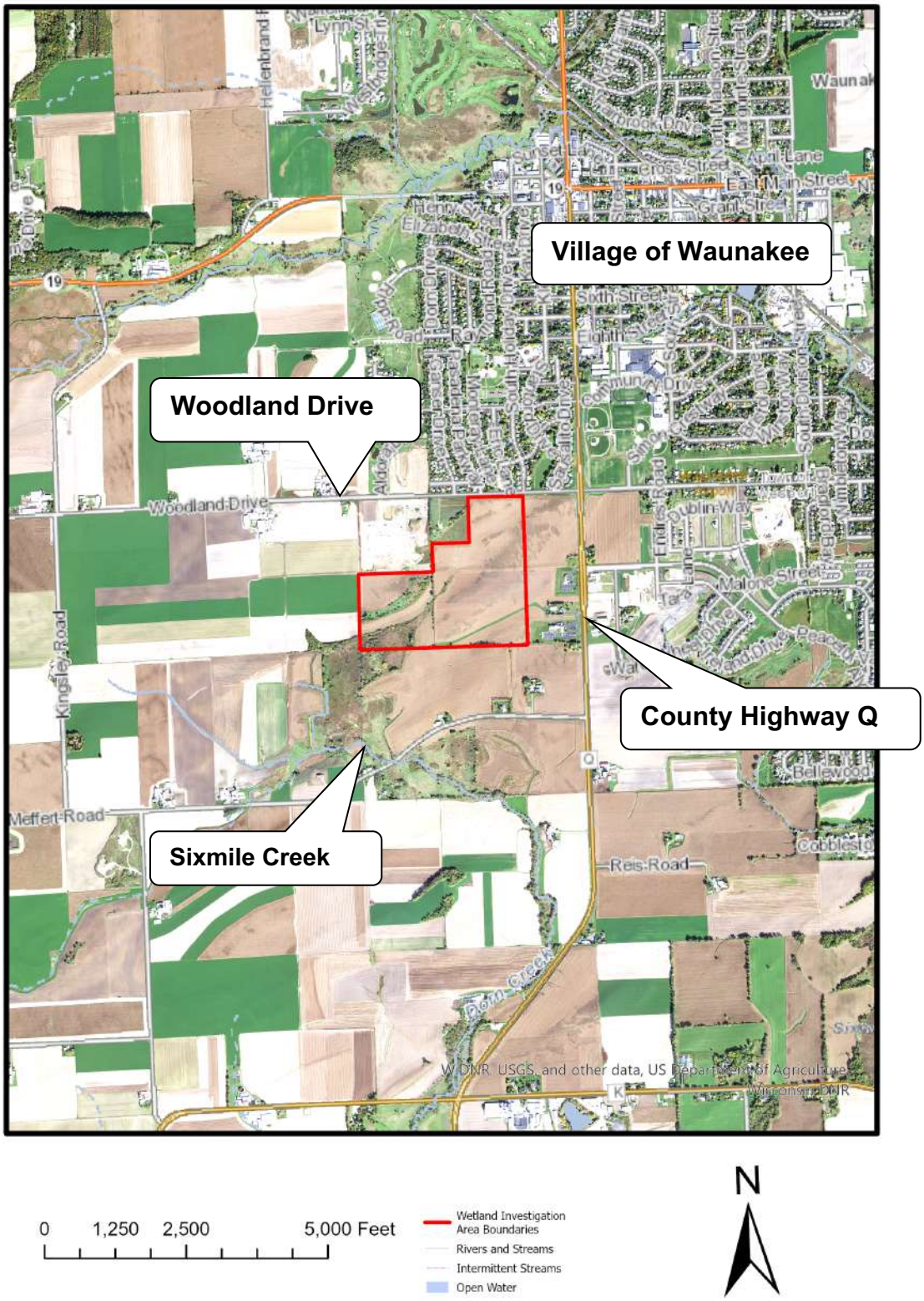


***Figure 2: Investigation Area, Wetlands & Sample Plots.***
Imagery Source: National Agricultural Imagery Program, 2015.

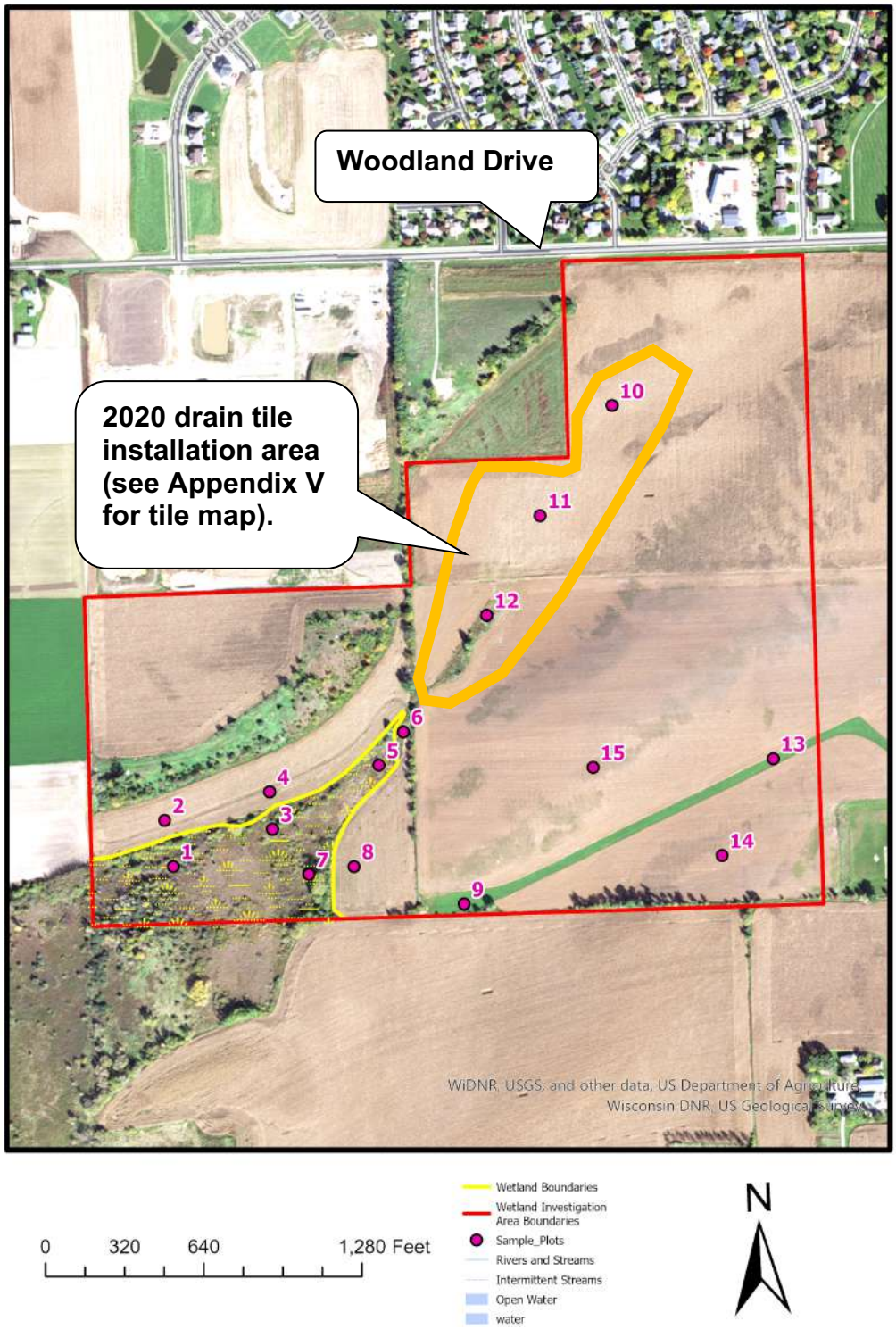


*Figure 3: Topography – 2-foot Contour Map.*

Imagery Source: Dane County.

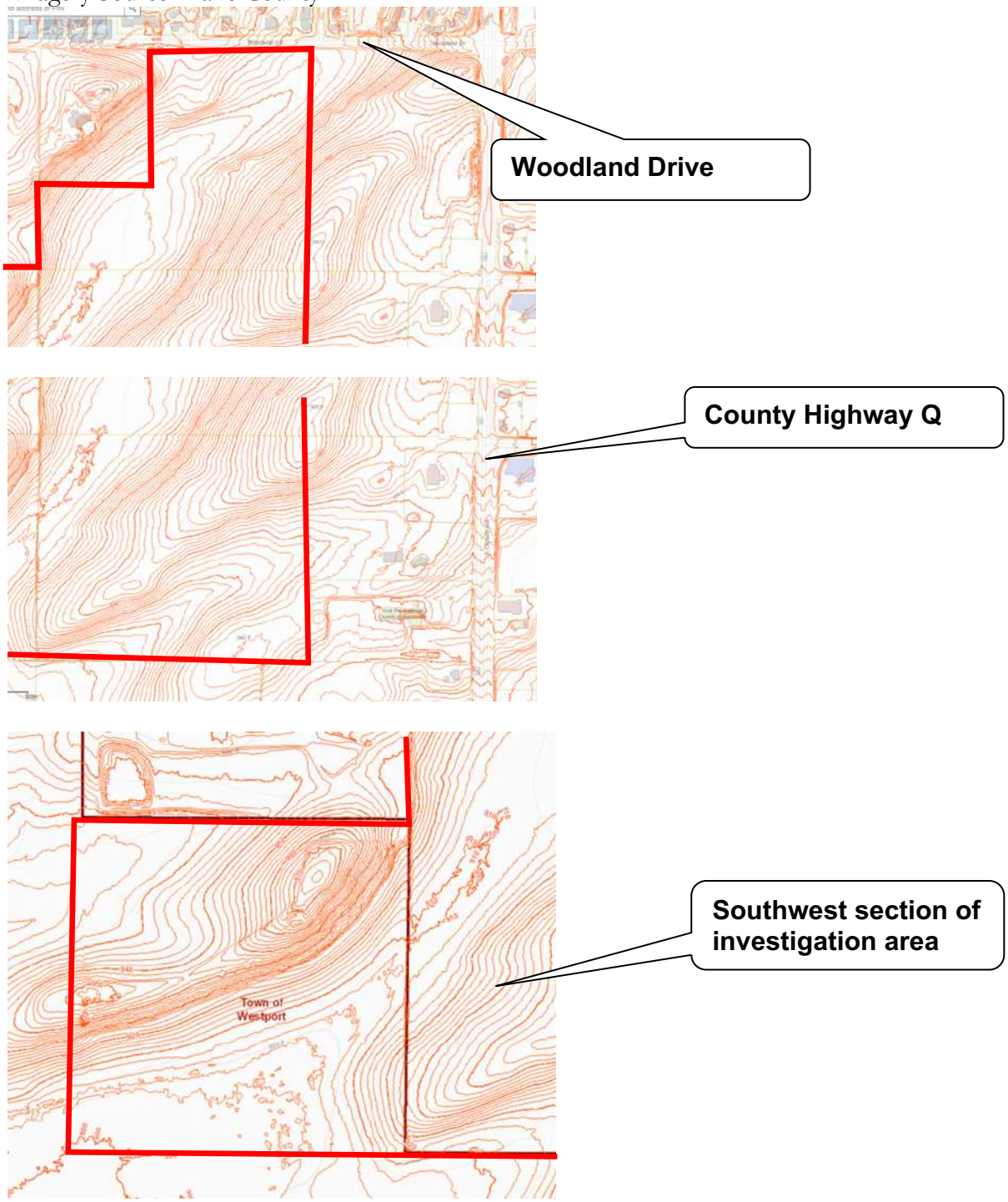


***Figure 4: Topography – United States Geological Survey Map.***
Source: U.S. Geological Survey 7.5-Minute Quadrangle Map.

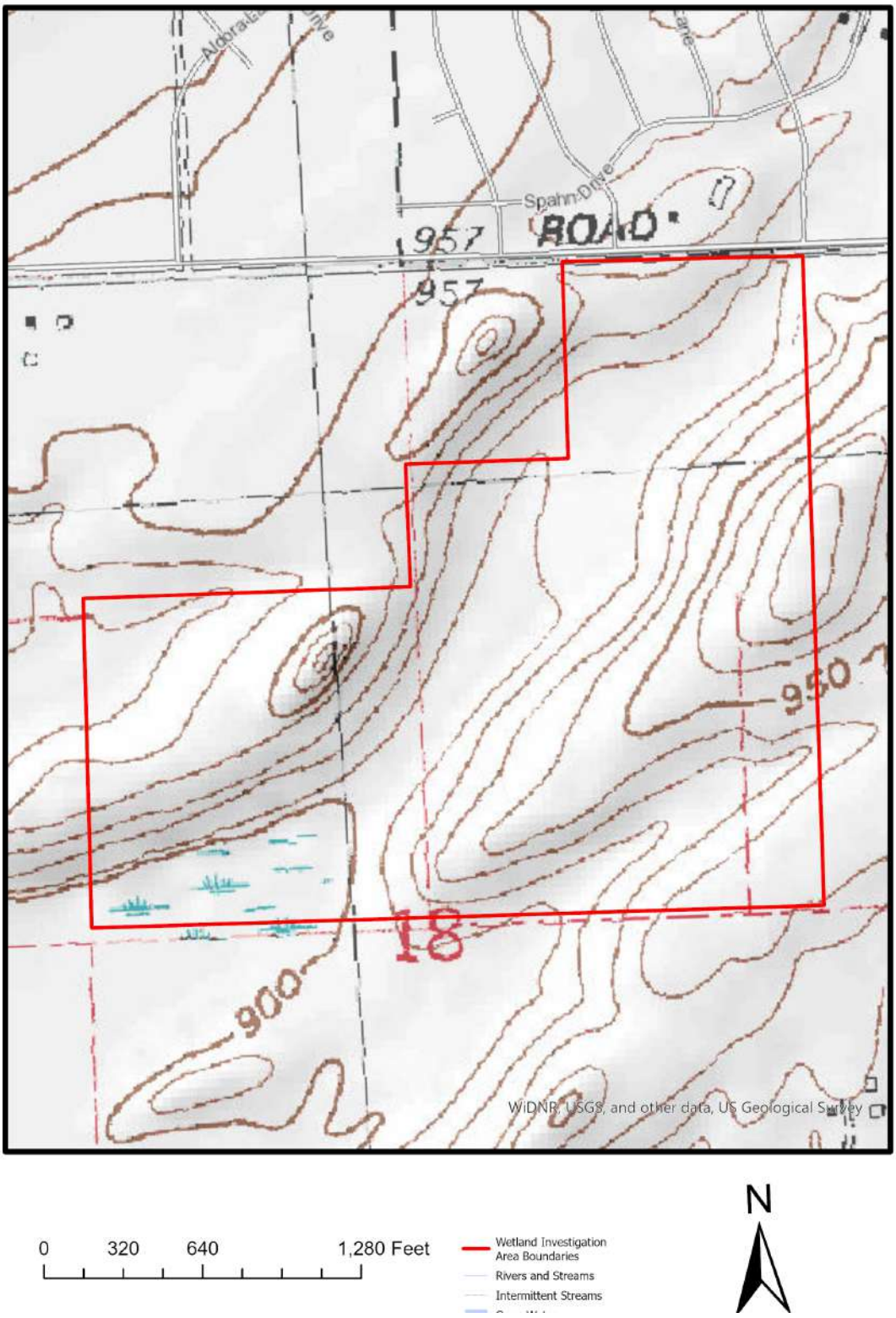


***Figure 5: Soils.***

Source: Natural Resource Conservation Service.

| Investigation Area Soils | Percent Hydric |
|---|---|
| Edmund silt loam (EdC2) | 0% |
| Elburn silt loam (EfB) | 0% |
| Griswold loam (GwD2) | 0% |
| Houghton muck (Ho) | 100% |
| Kidder soils (KrD2) | 0% |
| Orion silt loam, wet (Os) | 100% |
| Plano silt loam (PnB, C2) | 0% |
| Ringwood silt loam (RnC2) | 0% |
| Sogn silt loam (SoD) | 0% |
| Troxel silt loam (TrB) | 0% |
| Wacousta silty clay loam (Wa) | 100% |

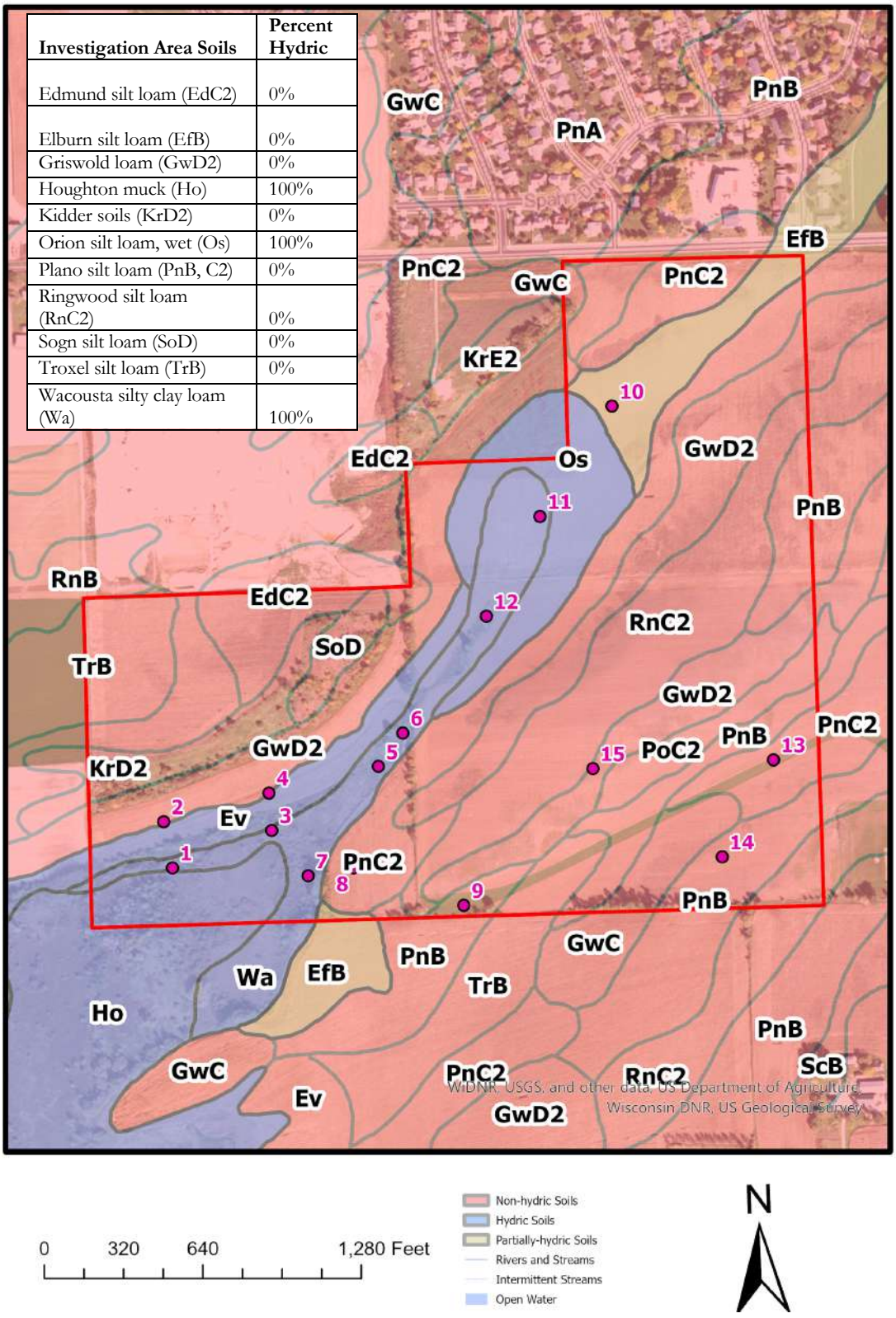
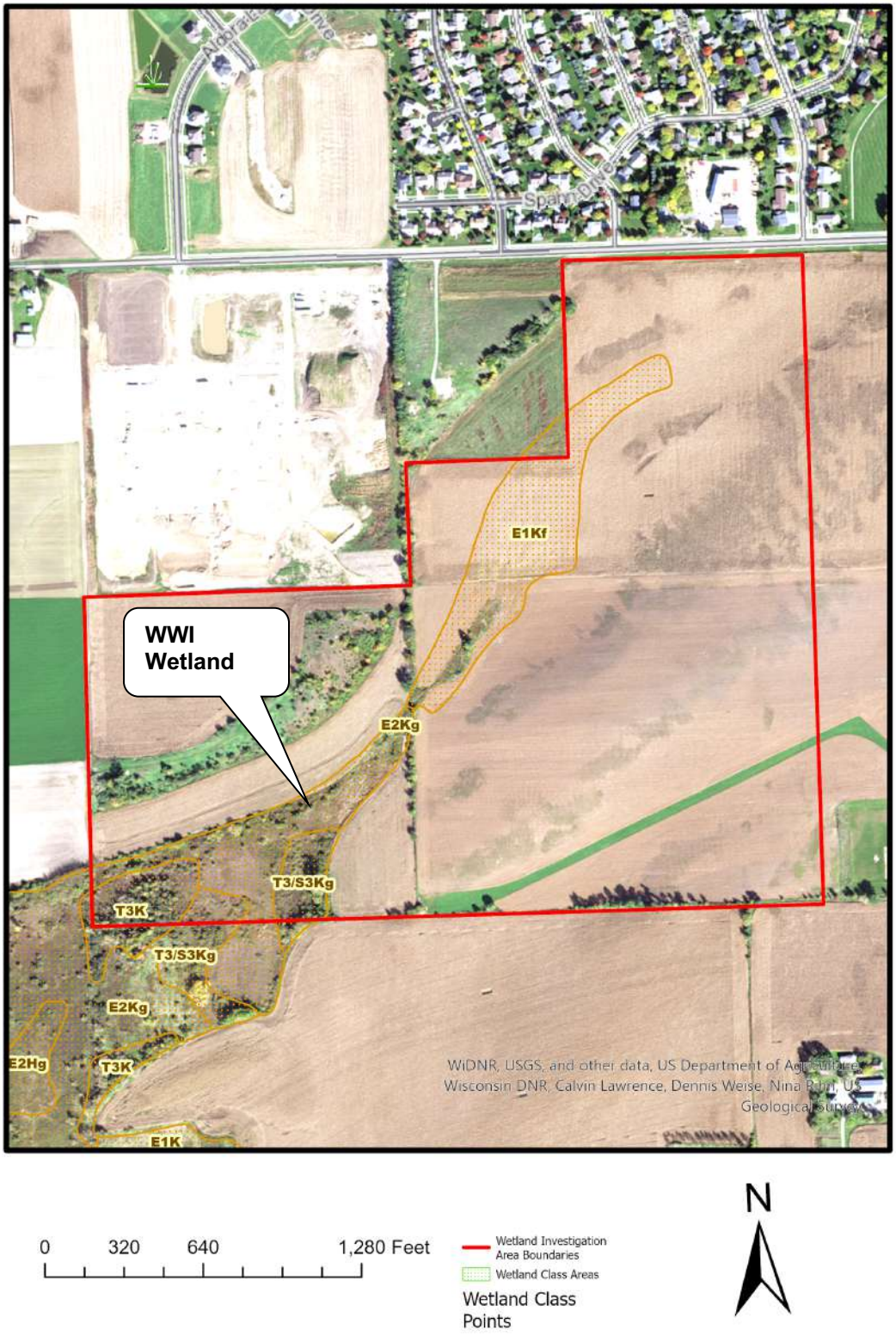


***Figure 6: Wisconsin Wetland Inventory Map.***

Source: Wisconsin Department of Natural Resources.



# Appendix I: Aerial Image Analysis

**Hydrology Assessment with Aerial Imagery - Recording Form**

Project Name: Woodland Dr West Date: 5/10/22 Legal Description: Sec. 18, T8N, R9E

Investigator: Scott Taylor County: Dane

# Normal Years: 5 # Wet Years: 6 # Dry Years: 2

| | | | Interpretation (list hydrology indicators observed, e.g. crop stress, drowned out, standing water, etc.)** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area 1 | Area 2 | | | | | | | |
| | | WWI Wetland Type (if applicable): | | | | | | | | | |
| | Climate Condition (Wet, Dry, Normal)* | Soil Series (% Hydric): | | | | | | | | | |
| 2021 | Dry | [redacted] | NSS | NSS | | | | | | | |
| 2020 | Normal | | SS | SS | | | | | | | |
| 2018 | Normal | | NSS | SS | | | | | | | |
| 2017 | Wet | | SS | SS | | | | | | | |
| 2015 | Normal | | NSS | WS | | | | | | | |
| 2014 | Wet | | NSS | WS | | | | | | | |
| 2013 | Wet | | NV | SS | | | | | | | |
| 2012 | Dry | | NSS | NSS | | | | | | | |
| 2010 | Wet | | NV | WS | | | | | | | |
| 2008 | Wet | | SS | WS | | | | | | | |
| 2006 | Normal | | NV | CS | | | | | | | |
| 2005 | Normal | | NV | WS | | | | | | | |
| **# Normal Years:** | | | 5 | 5 | | | | | | | |
| **# Normal Year. with Wetness Signatures:** | | | 1 | 5 | **Notes:** | | | | | | |
| **% Normal Years with Wetness Signatures:** | | | 20% | 100% | | | | | | | |

*Taken from NRCS WETS Table for **Dane County Regional Airport** climate station.

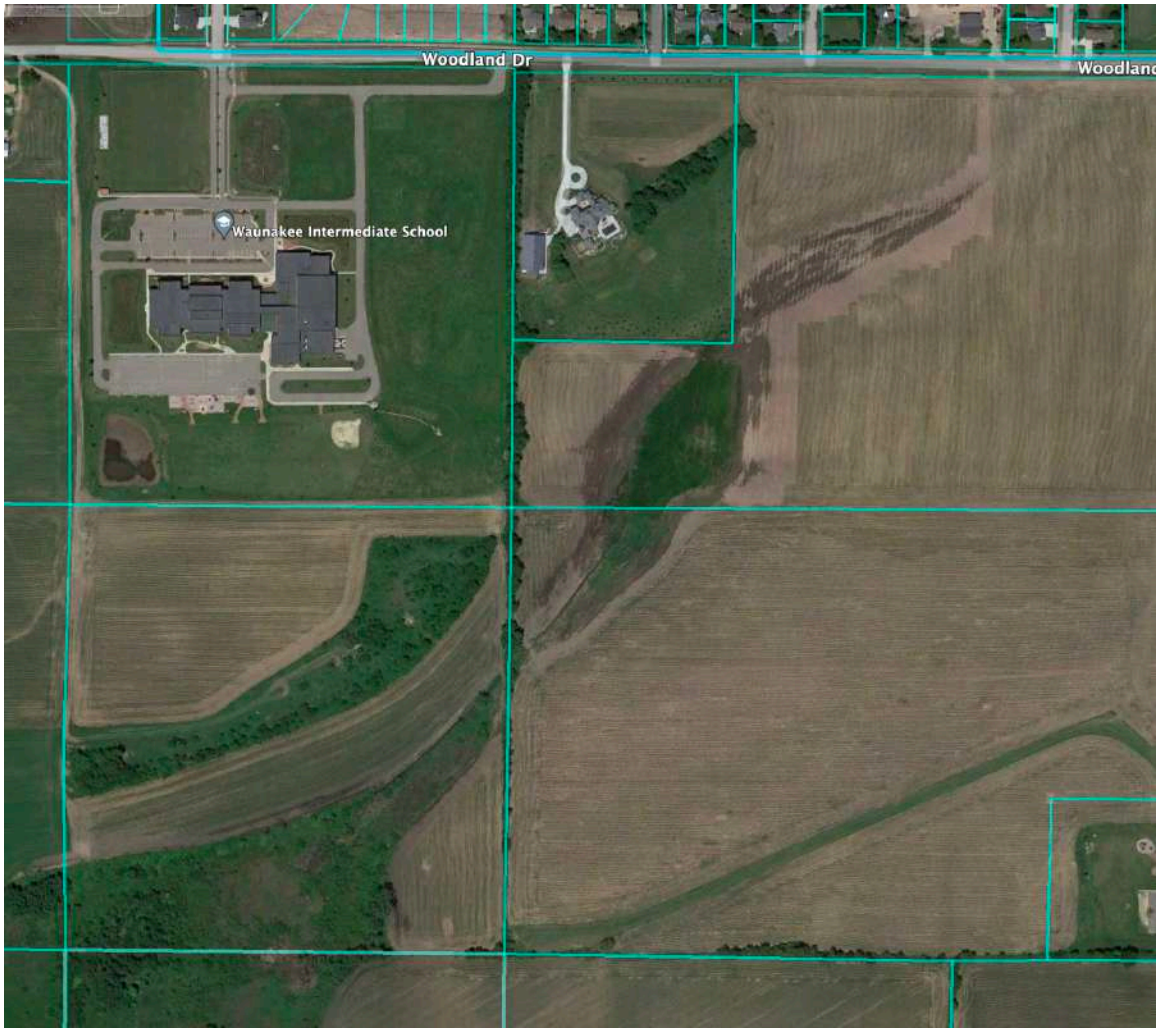
**Use key below to label photo interpretations.

**CS – Crop Stress**
**DO – Drowned Out**
**NC – Not Cropped**
**SW – Standing Water**
**SS – Soil Wetness Signature**
**WS – Wetland Signature (i.e. actual wetland vegetation apparent)**
**AP – Altered Pattern (e.g. delayed planting in a low, wet area)**
**NO Wetness Signatures:**
**NV – Normal Vegetative Cover (for when crop present) o**
**NSS – No Soil Wetness (for bare soil)**

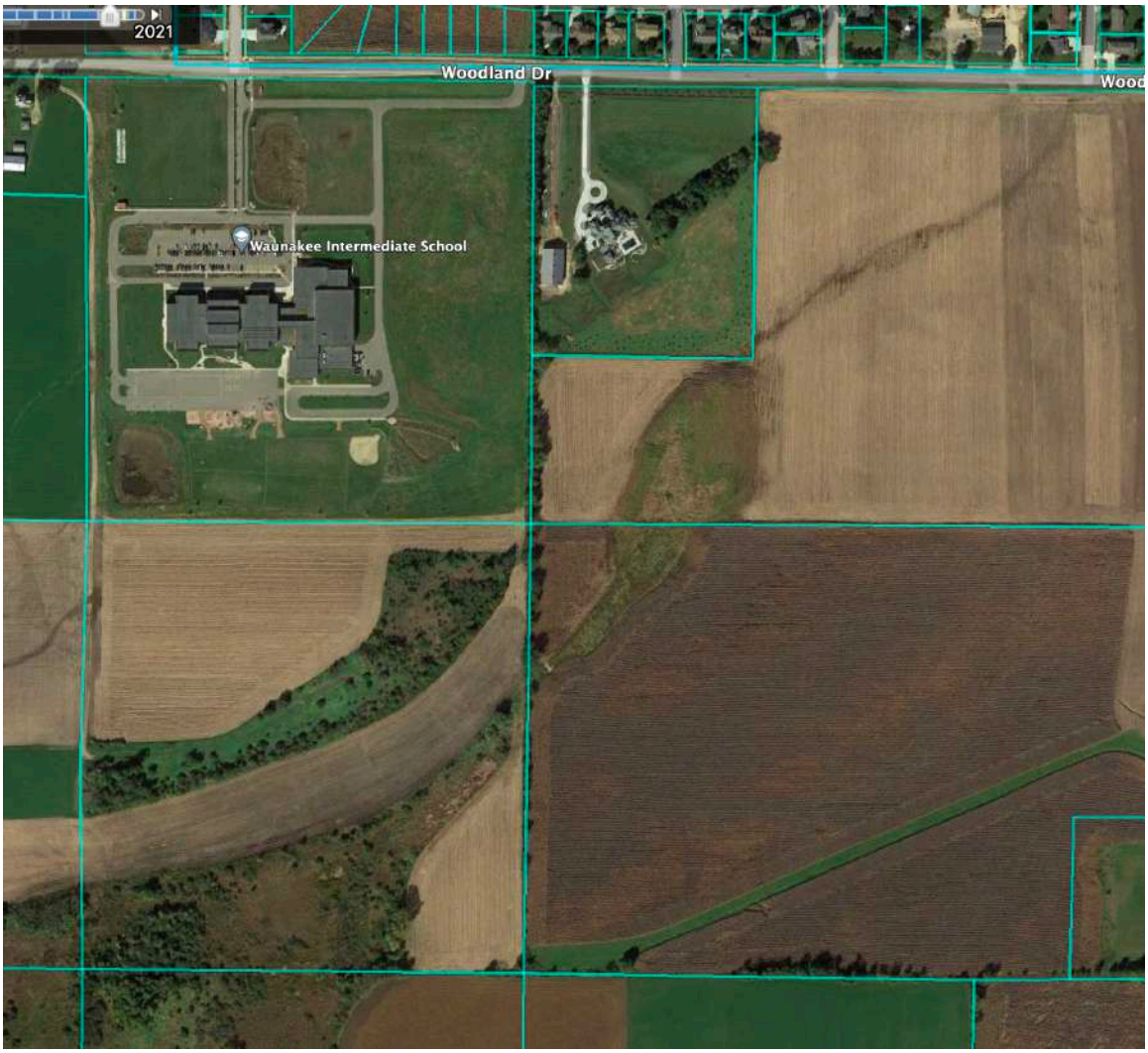
# Appendix II: Aerial Images

2021-Dry

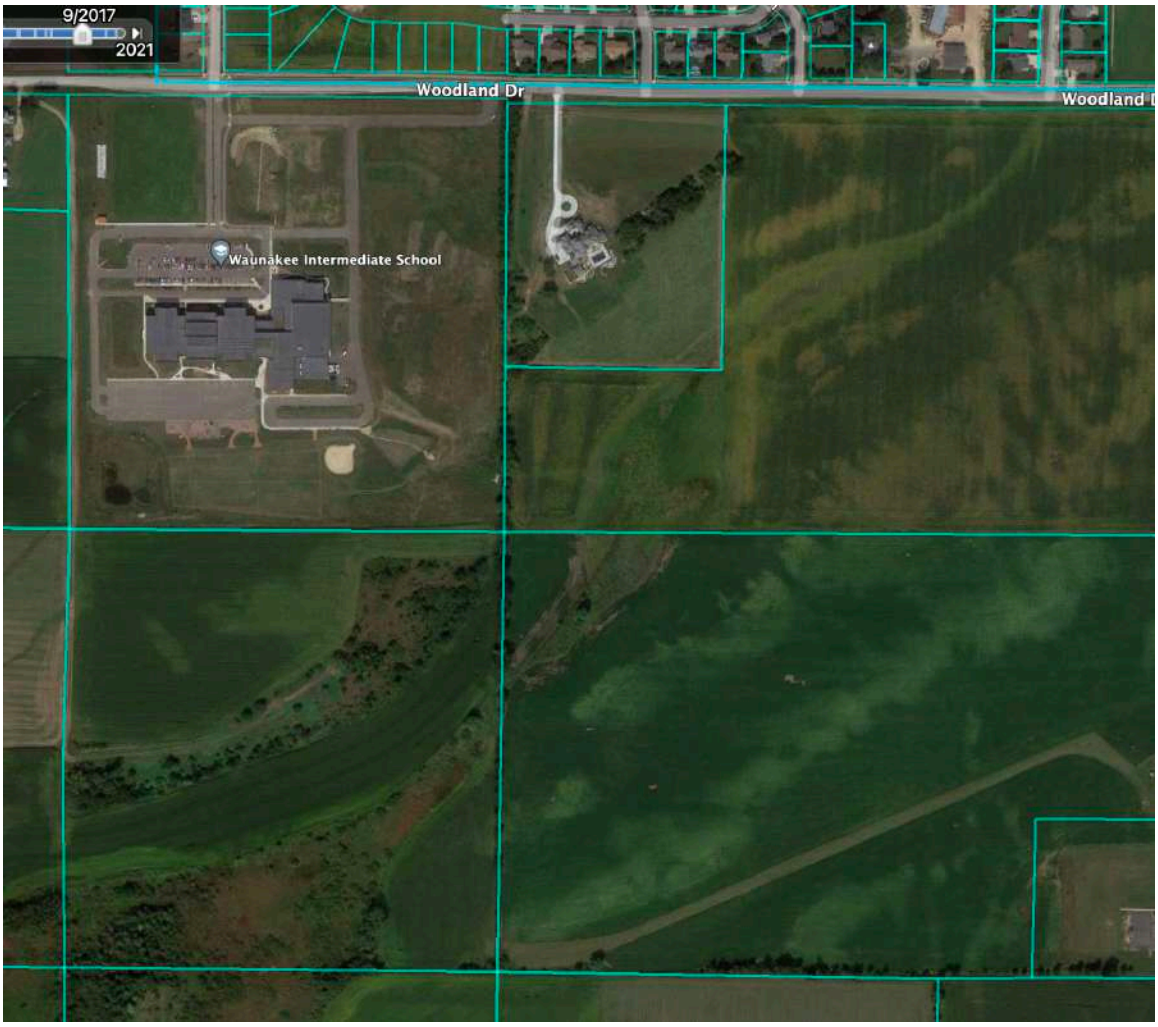
2020 - Normal



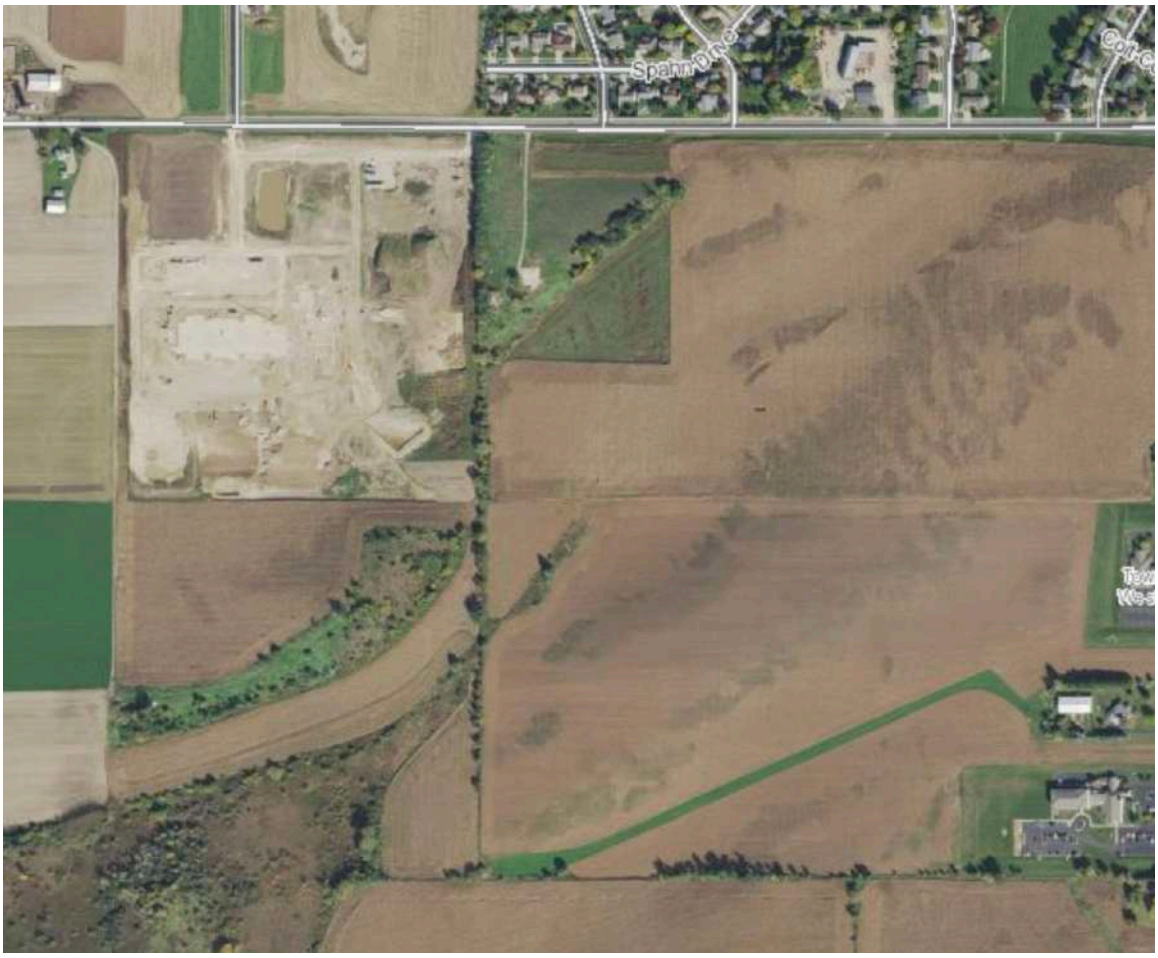
## 2018 -Normal



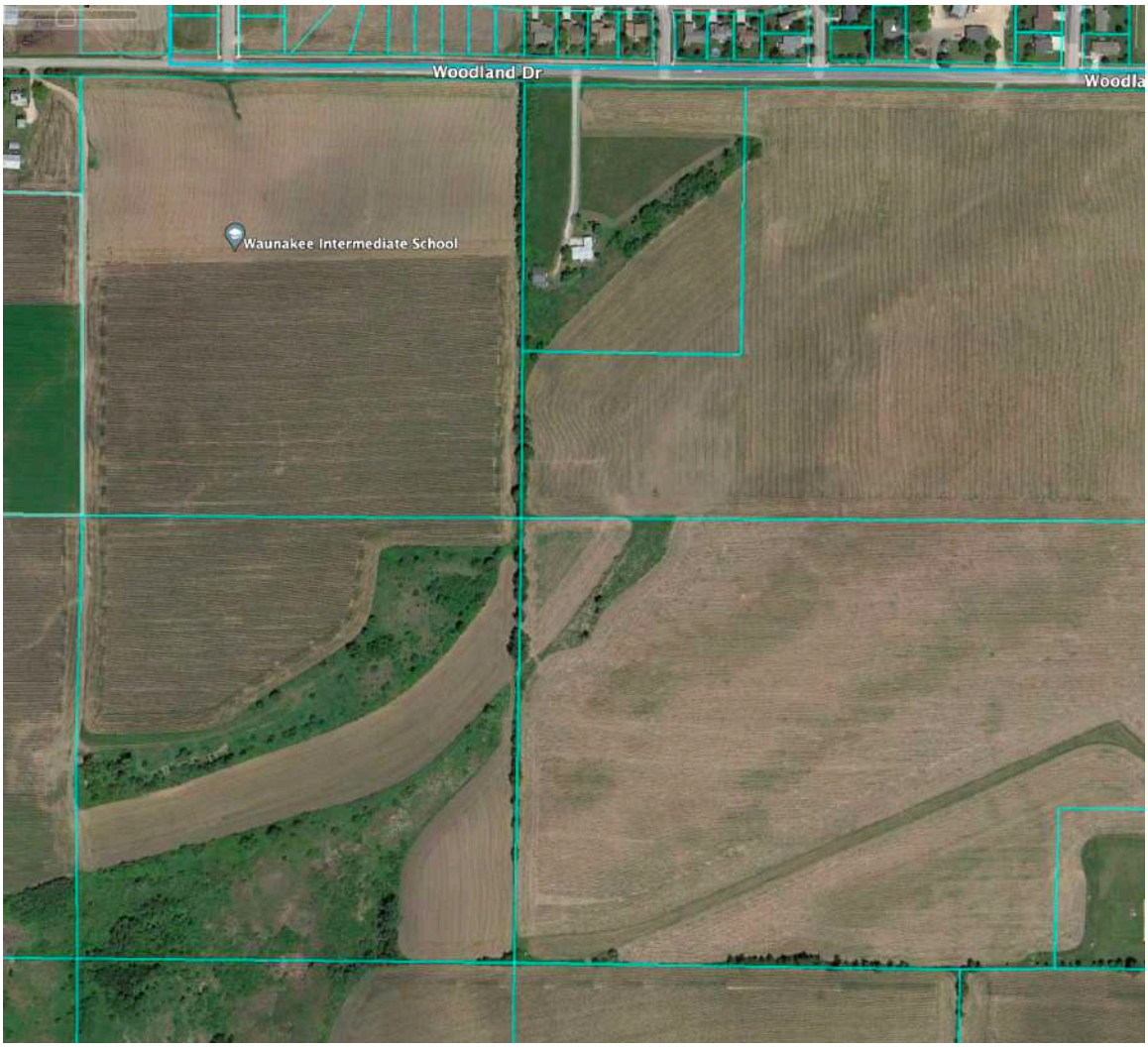
## 2017-Wet



## 2015-Normal

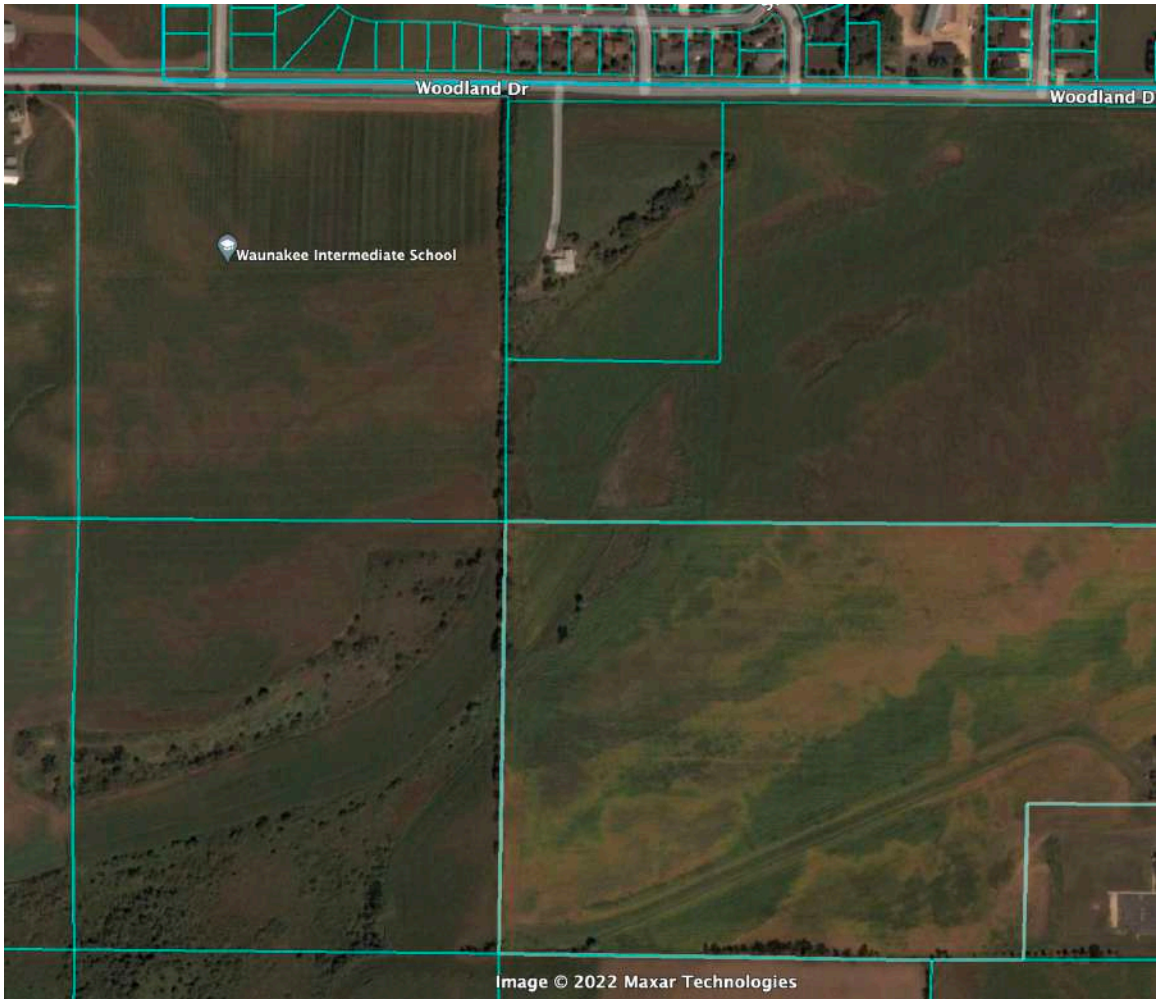


## 2014-Wet

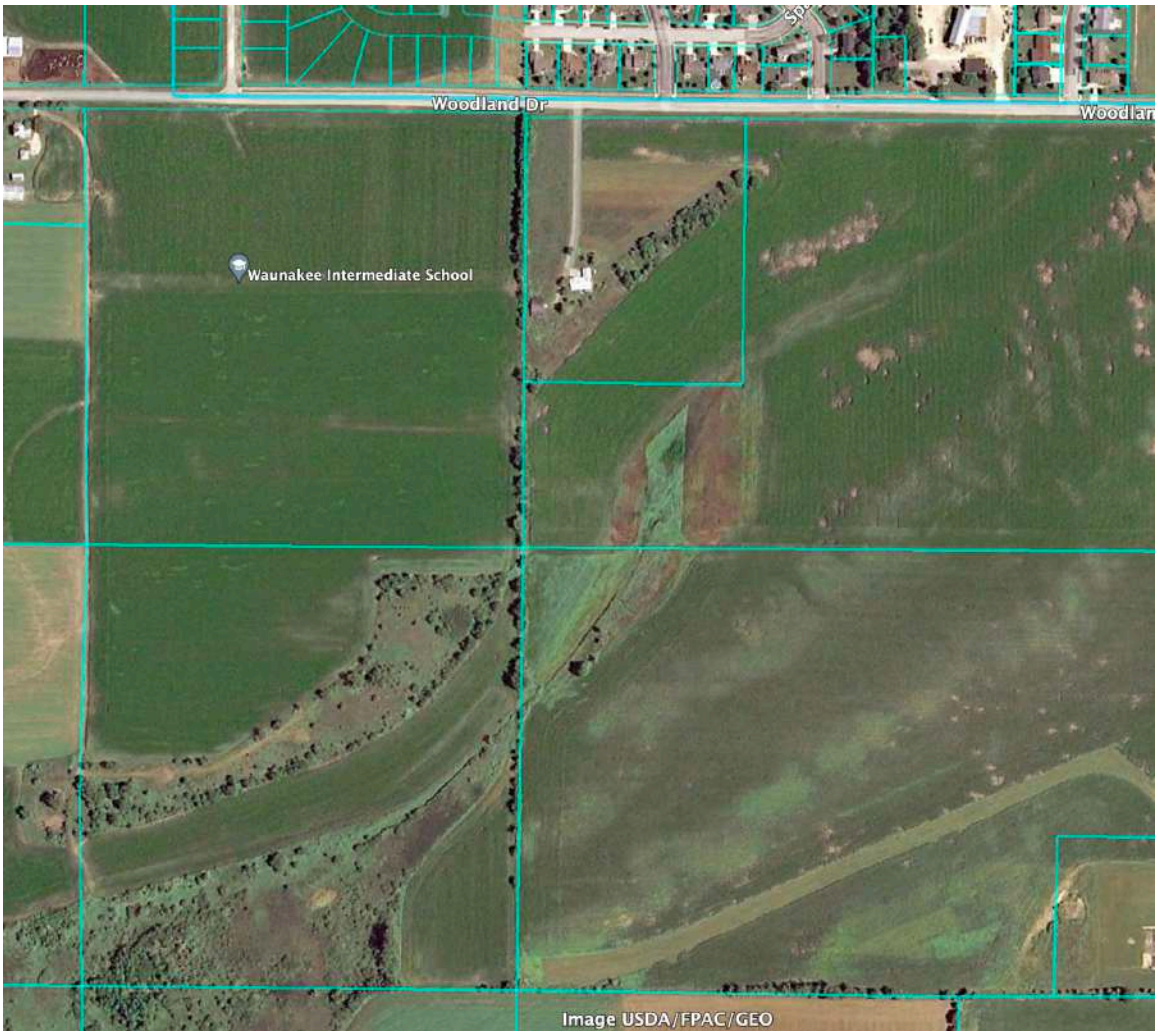


**2013-Wet**

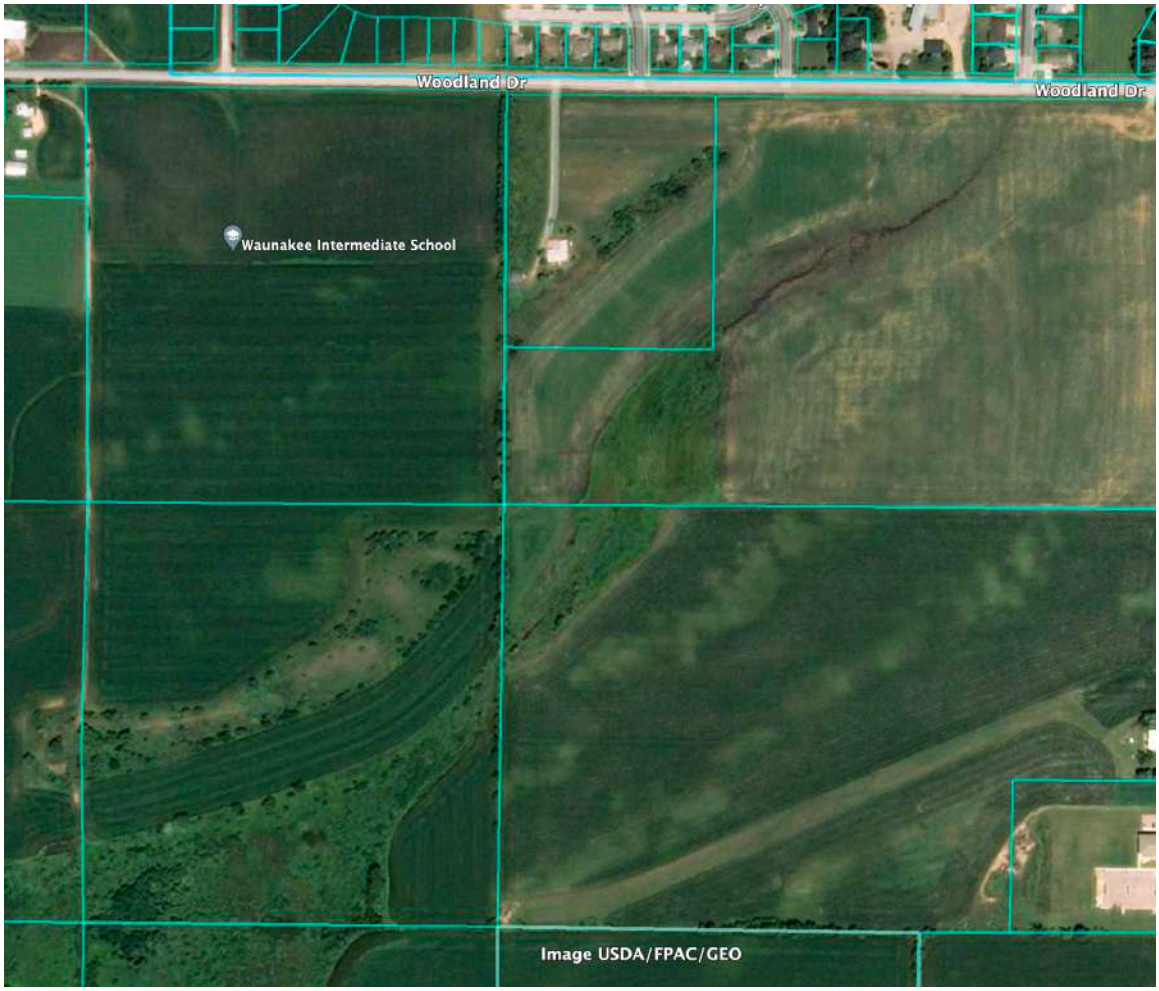
## 2012-Dry


Woodland Dr
Woodland D
Waunakee Intermediate School
Image © 2022 Maxar Technologies

## 2010 - Wet


Woodland Dr
Waunakee Intermediate School
Image USDA/FPAC/GEO

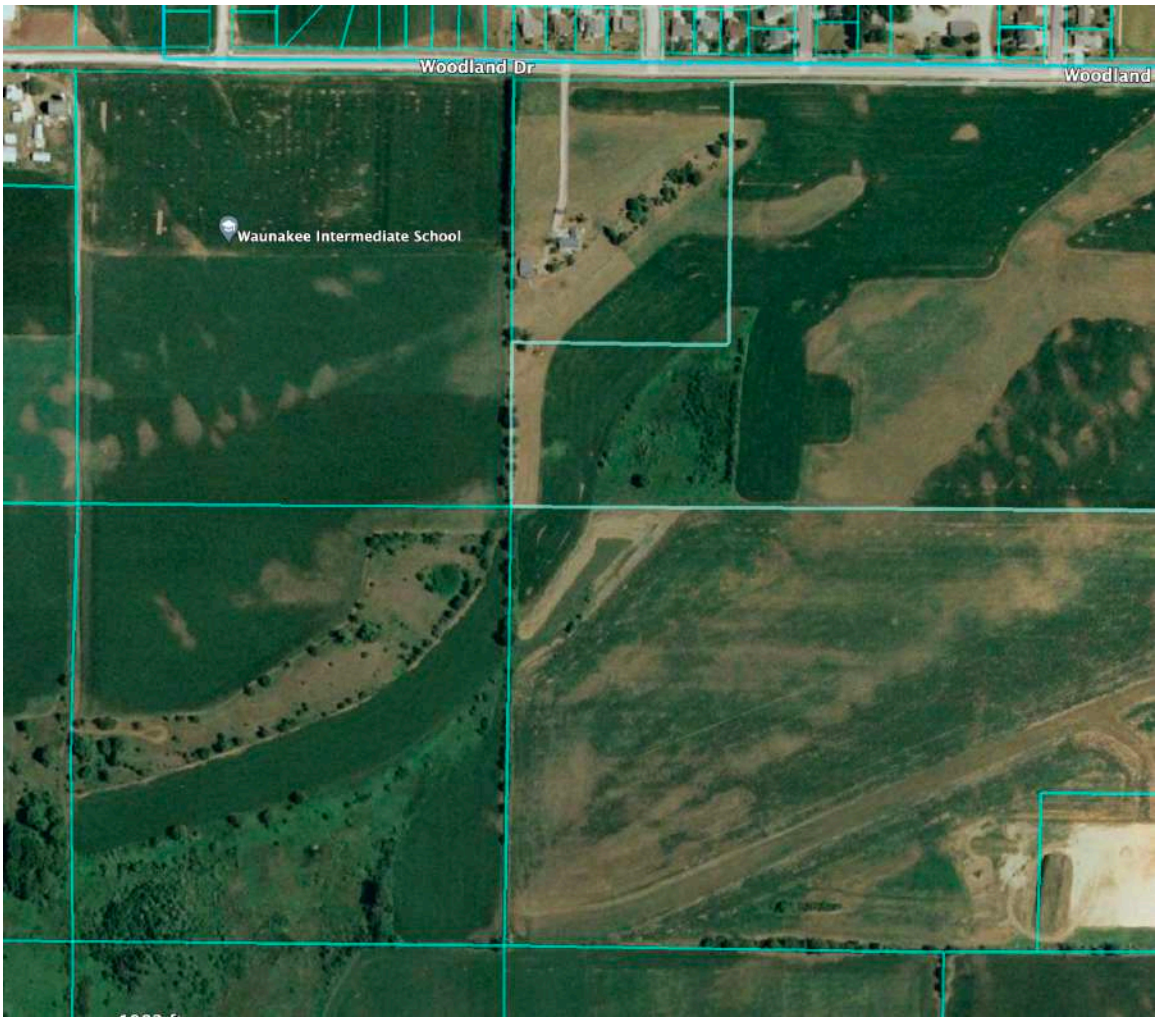
## 2008-Wet


Woodland Dr
Woodland Dr
Waunakee Intermediate School
Image USDA/FPAC/GEO

## 2006-Normal

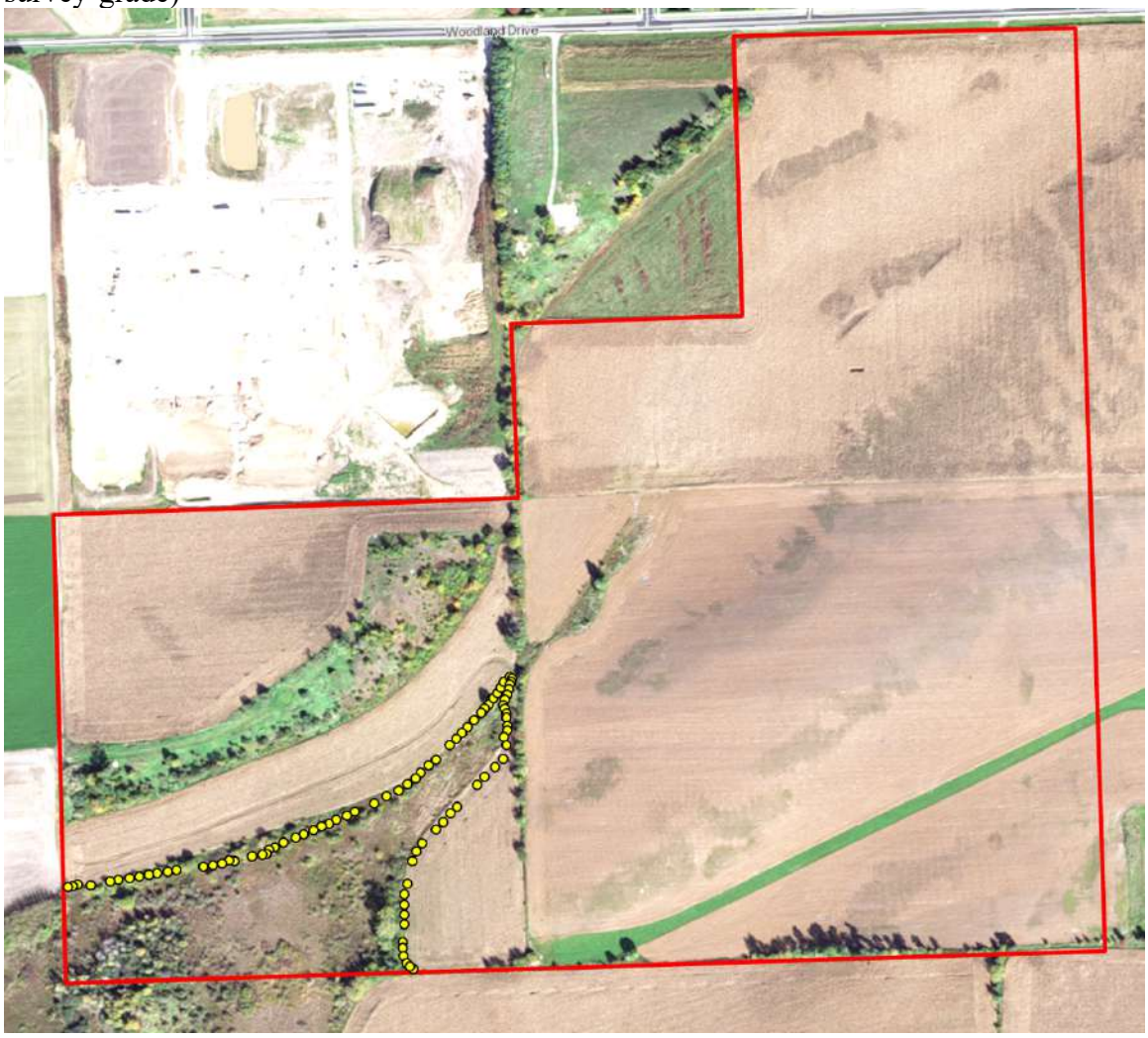

Woodland Dr
Woodland
Waunakee Intermediate School
Image USDA/FPAC/GEO

## 2005-Normal

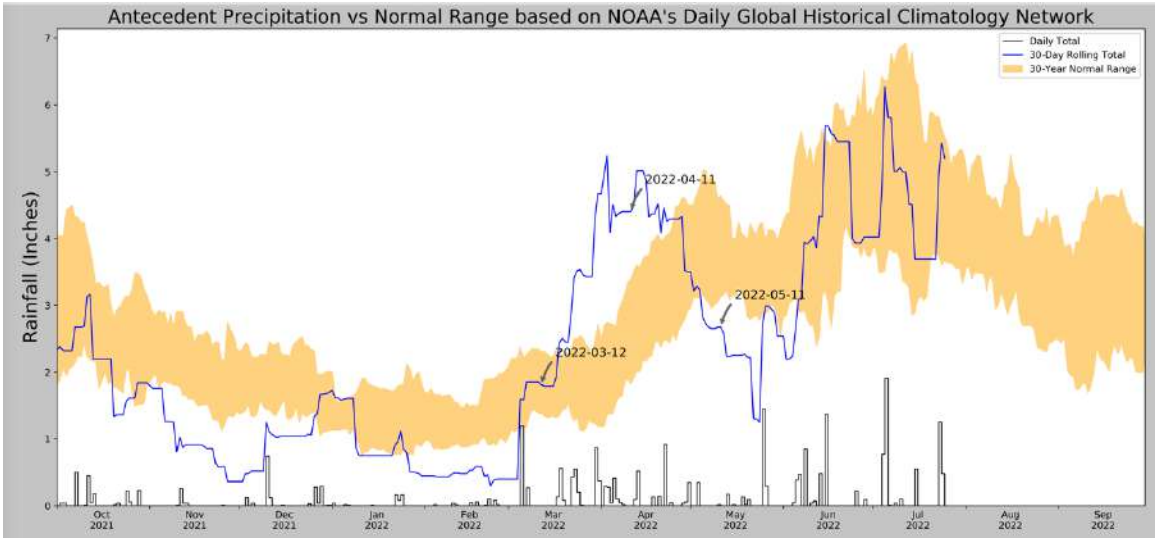


# Appendix III: Survey Map of Wetland Boundary.

(The wetland boundary flags were located with a hand-held GPS unit. The unit was not survey-grade)



# Appendix IV: Antecedent Precipitation Data




**May 20, 2022:**

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-05-20 | 2.832284 | 3.988583 | 2.220473 | Dry | 1 | 3 | 3 |
| 2022-04-20 | 2.465748 | 4.06063 | 4.515748 | Wet | 3 | 2 | 6 |
| 2022-03-21 | 1.53937 | 2.280315 | 2.448819 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Normal Conditions - 12 |

**June 7th, 2022:**

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-06-07 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-06-07 | 2.893701 | 5.604725 | 3.090551 | Normal | 2 | 3 | 6 |
| 2022-05-08 | 2.950394 | 4.96378 | 2.653543 | Dry | 1 | 2 | 2 |
| 2022-04-08 | 1.644882 | 3.058268 | 4.401575 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Normal Conditions - 11 |

June 17th, 2022:

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-06-17 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-06-17 | 2.660236 | 5.352756 | 5.562992 | Wet | 3 | 3 | 9 |
| 2022-05-18 | 3.185827 | 4.090945 | 2.251969 | Dry | 1 | 2 | 2 |
| 2022-04-18 | 2.25 | 3.956693 | 4.374016 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Normal Conditions - 14 |

June 24th, 2022:

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-07-01 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought (2022-06) |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-07-01 | 3.866142 | 5.782284 | 4.023622 | Normal | 2 | 3 | 6 |
| 2022-06-01 | 2.823622 | 4.248819 | 2.53937 | Dry | 1 | 2 | 2 |
| 2022-05-02 | 3.119291 | 4.516142 | 3.212599 | Normal | 2 | 1 | 2 |
| Result | | | | | | | Normal Conditions - 10 |

July 1st, 2022:

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-06-24 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought |
| WebWIMP $H_2O$ Balance | Dry Season |

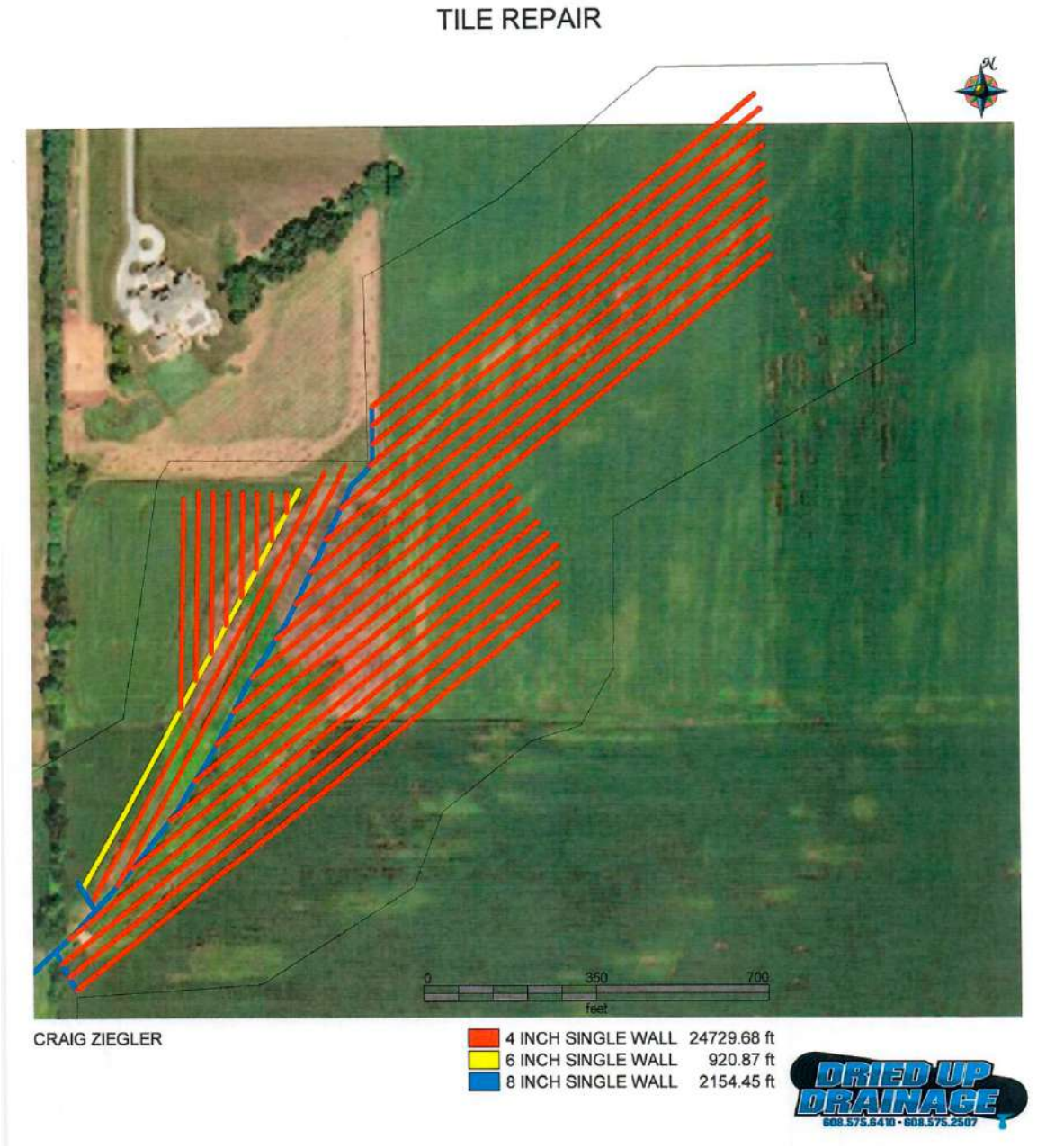
| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-06-24 | 3.897638 | 5.841339 | 4.003937 | Normal | 2 | 3 | 6 |
| 2022-05-25 | 2.881102 | 4.231102 | 2.69685 | Dry | 1 | 2 | 2 |
| 2022-04-25 | 2.575984 | 4.206693 | 4.295276 | Wet | 3 | 1 | 3 |
| Result | | | | | | | Normal Conditions - 11 |

July 7th, 2022:

| | |
|---|---|
| Coordinates | 43.17629, -89.470233 |
| Observation Date | 2022-07-07 |
| Elevation (ft) | 945.78 |
| Drought Index (PDSI) | Moderate drought (2022-06) |
| WebWIMP $H_2O$ Balance | Dry Season |

| 30 Days Ending | 30th %ile (in) | 70th %ile (in) | Observed (in) | Wetness Condition | Condition Value | Month Weight | Product |
|---|---|---|---|---|---|---|---|
| 2022-07-07 | 3.828347 | 6.777953 | 5.814961 | Normal | 2 | 3 | 6 |
| 2022-06-07 | 2.893701 | 5.604725 | 3.090551 | Normal | 2 | 2 | 4 |
| 2022-05-08 | 2.950394 | 4.96378 | 2.653543 | Dry | 1 | 1 | 1 |
| Result | | | | | | | Normal Conditions - 11 |

# Appendix V: Map of 2020 Drain Tile Installation



# Appendix VI: Investigation Area Photos

**Wetland - Plot 1**

**Upland - Plot 2**

Wetland - Plot 3

Upland - Plot 4

Wetland - Plot 5

Upland - Plot 6

Wetland - Plot 7

Upland - Plot 8

Upland - Plot 9

Upland - Plot 10

Upland - Plot 11

Upland - Plot 12

# Appendix VII: Data Forms

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 01

**Investigator(s):** Scott Taylor **Section, Township, Range:** S. 18 T. 8N R. 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** T3K

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ○ | **Is the Sampled Area within a Wetland?** | Yes ◉ No ○ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ◉ No ○ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The soil was naturally problematic since it was judged hydric even though no hydric indicators were observed.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Water Table Present? | Yes ◉ No ○ | Depth (inches): | 20 | **Wetland Hydrology Present?** Yes ◉ No ○ |
| Saturation Present? (includes capillary fringe) | Yes ◉ No ○ | Depth (inches): | 0 | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The plot occupied the bottom of a depression. The soil was saturated to the surface.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 01

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. *Salix discolor* | 50 | ☑ | FACW |
| 2. *Cornus alba* | 20 | ☑ | FACW |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 70 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Carex stricta* | 70 | ☑ | OBL |
| 2. *Impatiens capensis* | 30 | ☑ | FACW |
| 3. *Symphyotrichum puniceum var. puniceum* | 20 | ☐ | OBL |
| 4. *Solidago gigantea* | 15 | ☐ | FACW |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 135 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**Dominance Test worksheet:**

Number of Dominant Species That are OBL, FACW, or FAC: 4 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | | |
|---|---|---|---|---|
| OBL species | 90 | x 1 = | 90 | |
| FACW species | 115 | x 2 = | 230 | |
| FAC species | 0 | x 3 = | 0 | |
| FACU species | 0 | x 4 = | 0 | |
| UPL species | 0 | x 5 = | 0 | |
| Column Totals: | 205 | (A) | 320 | (B) |

Prevalence Index = B/A = 1.561

**Hydrophytic Vegetation Indicators:**

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ◉ No ○

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a sedge meadow with scattered shrub thickets.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 01

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-15 | 10YR | 2/1 | 100 | | | | | Silt Loam | |
| 15-24 | 10YR | 2/1 | 100 | | | | | Silty Clay Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☑ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

No hydric indicators observed however professional judgment was used to assume the soil was hydric based on landscape position, and the vegetation and hydrology indicators, following guidance in Chapter 5 of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 02

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** convex **Slope:** 3.0 % / 1.7 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Griswold loam (GwD2) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a well elevated area.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 02

| | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| **Tree Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field that was just tilled and did not yet support a crop. No vegetation was present. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 02

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-15 | 10YR | 2/1 | 100 | | | | | Silt Loam | |
| 15-24 | 10YR | 3/3 | 100 | | | | | Silty Clay Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 03

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** E2Kg

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ○ | **Is the Sampled Area within a Wetland?** | Yes ◉ No ○ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ◉ No ○ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☑ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ◉ | No ○ | Depth (inches): 6 | |
| Water Table Present? | Yes ○ | No ◉ | Depth (inches): 0 | **Wetland Hydrology Present?** Yes ◉ No ○ |
| Saturation Present? (includes capillary fringe) | Yes ○ | No ◉ | Depth (inches): 0 | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The plot occupied the bottom of a depression with standing water.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 03

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. *Salix discolor* | 15 | ☑ | FACW |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 15 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Typha angustifolia* | 80 | ☑ | OBL |
| 2. *Carex stricta* | 30 | ☑ | OBL |
| 3. *Carex lacustris* | 10 | ☐ | OBL |
| 4. *Impatiens capensis* | 15 | ☐ | FACW |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 135 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | | |
|---|---|---|---|---|
| OBL species | 120 | x 1 = | 120 | |
| FACW species | 30 | x 2 = | 60 | |
| FAC species | 0 | x 3 = | 0 | |
| FACU species | 0 | x 4 = | 0 | |
| UPL species | 0 | x 5 = | 0 | |
| Column Totals: | 150 | (A) | 180 | (B) |

Prevalence Index = B/A = 1.200

**Hydrophytic Vegetation Indicators:**

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ◉ No ○

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a wet meadow with scattered willow shrubs.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 03

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☑ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

No soil data were collected; the soil was assumed hydric since standing water was present and all of the dominant plants were FacW and/or Obl-rated.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 04

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** convex **Slope:** 3.0 % / 1.7 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Griswold loam (GwD2) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a well elevated area.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 04

| | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| **Tree Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field that was just tilled and did not yet support a crop. No vegetation was present. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 04

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-17 | 10YR | 2/1 | 100 | | | | | Silt Loam | |
| 17-24 | 10YR | 3/3 | 100 | | | | | Silty Clay Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 05

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** E2Kg

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ○ | **Is the Sampled Area within a Wetland?** | Yes ◉ No ○ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ◉ No ○ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Water Table Present? | Yes ◉ No ○ | Depth (inches): | 18 | **Wetland Hydrology Present?** Yes ◉ No ○ |
| Saturation Present? (includes capillary fringe) | Yes ◉ No ○ | Depth (inches): | 0 | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The plot occupied the bottom of a depression. The soil was saturated to the surface.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 05

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. *Salix discolor* | 5 | ☑ | FACW |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 5 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Typha angustifolia* | 90 | ☑ | OBL |
| 2. *Phalaris arundinacea* | 20 | ☐ | FACW |
| 3. *Impatiens capensis* | 15 | ☐ | FACW |
| 4. *Urtica dioica* | 10 | ☐ | FAC |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 135 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | | |
|---|---|---|---|---|
| OBL species | 90 | x 1 = | 90 | |
| FACW species | 40 | x 2 = | 80 | |
| FAC species | 10 | x 3 = | 30 | |
| FACU species | 0 | x 4 = | 0 | |
| UPL species | 0 | x 5 = | 0 | |
| Column Totals: | 140 | (A) | 200 | (B) |

Prevalence Index = B/A = 1.429

**Hydrophytic Vegetation Indicators:**

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ◉ No ○

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a cattail-dominated meadow.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 05

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | | % | Type [1] | Loc² | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-7 | 10YR | 2/1 | 100 | | | | | | Silt Loam | |
| 7-24 | 10YR | 2/1 | 95 | 10YR | 4/6 | 5 | C | PL | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 06

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Footslope **Local relief (concave, convex, none):** convex **Slope:** 1.0 % / 0.6 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 | **Wetland Hydrology Present?** Yes ○ No ◉ |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators. The plot occupied a well elevated area.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 06

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Medicago sativa* | 40 | ☑ | UPL |
| 2. *Trifolium pratense* | 20 | ☑ | FACU |
| 3. *Dactylis glomerata* | 40 | ☑ | FACU |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 100 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**Dominance Test worksheet:**

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 0.0% (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 | 60 | x 4 = | 240 | |
| UPL species | 40 | x 5 = | 200 | |
| Column Totals: | 100 | (A) | 440 | (B) |

Prevalence Index = B/A = 4.400

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

Open grassy, herbaceous meadow.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 06

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-7 | 10YR | 2/2 | 100 | | | | | | Silt Loam | |
| 7-24 | 10YR | 2/2 | 95 | 10YR | 4/8 | 5 | C | PL | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 07

**Investigator(s):** Scott Taylor **Section, Township, Range:** S. 18 T. 8N R. 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** T3/S3Kg

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ○ | **Is the Sampled Area within a Wetland?** | Yes ◉ No ○ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ◉ No ○ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The soil was naturally problematic since it was judged hydric even though no hydric indicators were observed.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☑ High Water Table (A2)
- ☑ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☑ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Water Table Present? | Yes ◉ No ○ | Depth (inches): | 10 | **Wetland Hydrology Present?** Yes ◉ No ○ |
| Saturation Present? (includes capillary fringe) | Yes ◉ No ○ | Depth (inches): | 0 | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

The plot occupied the bottom of a depression. The soil was saturated to the surface.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 07

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. *Salix discolor* | 20 | ☑ | FACW |
| 2. *Salix interior* | 10 | ☑ | FACW |
| 3. *Cornus alba* | 5 | ☐ | FACW |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 35 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Carex lacustris* | 90 | ☑ | OBL |
| 2. *Typha angustifolia* | 15 | ☐ | OBL |
| 3. *Impatiens capensis* | 10 | ☐ | FACW |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 115 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

| Total % Cover of: | | Multiply by: | | |
|---|---|---|---|---|
| OBL species | 105 | x 1 = | 105 | |
| 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: | 150 (A) | | 195 | (B) |

Prevalence Index = B/A = 1.300

**Hydrophytic Vegetation Indicators:**

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☑ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ◉ No ○

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a sedge meadow with scattered shrub thickets.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 07

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/1 | 100 | | | | | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☑ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

No hydric indicators observed however professional judgment was used to assume the soil was hydric based on landscape position, and the vegetation and hydrology indicators, following guidance in Chapter 5 of the Regional Supplement to the Corps of Engineers Wetland Delineation Manual.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 08

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** convex **Slope:** 3.0 % / 1.7 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Plano silt loam (PnC2) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a well elevated area.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 08

| **Tree Stratum** (Plot size: 2,826 sf) | **Absolute % Cover** | **Dominant Species?** | **Indicator Status** |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field that was just tilled and did not yet support a crop. No vegetation was present. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 08

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-18 | 10YR | 2/1 | 100 | | | | | Silt Loam | |
| 18-24 | 10YR | 3/3 | 100 | | | | | Silty Clay Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 09

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** concave **Slope:** 2.0 % / 1.1 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Plano silt loam (PnB) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☐ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ◉ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | | |
|---|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 | |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 | **Wetland Hydrology Present?** Yes ○ No ◉ |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 | |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No hydrology indicators. The plot occupied the bottom of a wide, shallow swale however this location was still a relatively well elevated landscape area so water would not be expected to collect and linger here.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 09

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. *Salix amygdaloides* | 40 | ☑ | FACW |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 40 | = Total Cover | |

| Sapling/Shrub Stratum (Plot size: 2,826 sf) | | | |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |

| Herb Stratum (Plot size: 78.5 sf7) | | | |
|---|---|---|---|
| 1. *Dactylis glomerata* | 30 | ☑ | FACU |
| 2. *Bromus inermis* | 20 | ☐ | UPL |
| 3. *Trifolium repens* | 20 | ☐ | FACU |
| 4. *Viola sororia* | 25 | ☑ | FAC |
| 5. *Taraxacum officinale* | 30 | ☑ | FACU |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 125 | = Total Cover | |

| Woody Vine Stratum (Plot size: 2,826 sf) | | | |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**Dominance Test worksheet:**

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

| | Total % Cover of: | Multiply by: | |
|---|---|---|---|
| OBL species | 0 | x 1 = | 0 |
| FACW species | 40 | x 2 = | 80 |
| FAC species | 25 | x 3 = | 75 |
| FACU species | 80 | x 4 = | 320 |
| UPL species | 20 | x 5 = | 100 |
| Column Totals: | 165 (A) | | 575 (B) |

Prevalence Index = B/A = 3.485

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot was in an open, grassy meadow with a mature willow tree on an old fenceline.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 09

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/2 | 100 | | | | | Silt Loam | |

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 10

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Elburn silt loam (EfB) **NWI classification:** E1Kf

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ○ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures in most years.

Remarks:

No hydrology indicators. The plot occupied a low-lying area where water would be expected to collect and linger, however it did not meet D2 since a subsurface drainage system (4 inch perforated pipes, installed at 3 foot depth and 30-40 foot spacing) was installed in 2020

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 10

| **Tree Stratum** (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Cyperus esculentus* | 10 | ☑ | FACW |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 10 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 100.0% (A/B)

**Prevalence Index worksheet:**

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

Prevalence Index = B/A = 2.000

**Hydrophytic Vegetation Indicators:**

- ☑ **Rapid Test for Hydrophytic Vegetation**
- ☑ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ◉ No ○

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. The site was a low-lying area that received runoff water from a large area of crop field. However, considering the recent installation of drain tiles throughout this field, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 10

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/2 | 99 | 10YR | 4/6 | 1 | C | PL | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 11

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** E1Kf

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall showed wetland signatures in most years.

Remarks:

No hydrology indicators (except signatures on aerial imagery). The plot occupied a low-lying area where water would be expected to collect, however it did not meet D2 since a subsurface drainage system (4 inch perforated pipes, installed at 3 foot depth and 30-40 foot spacing) was installed in 2020

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 11

| Tree Stratum (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | = Total Cover | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. *Cyperus esculentus* | 2 | ☑ | FACW |
| 2. *Abutilon theophrasti* | 5 | ☑ | FACU |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 7 | = Total Cover | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | = Total Cover | |

**Dominance Test worksheet:**

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

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

Percent of dominant Species That Are OBL, FACW, or FAC: 50.0% (A/B)

**Prevalence Index worksheet:**

| | Total % Cover of: | | Multiply by: | |
|---|---|---|---|---|
| OBL species | 0 | x 1 = | 0 | |
| FACW species | 2 | x 2 = | 4 | |
| FAC species | 0 | x 3 = | 0 | |
| FACU species | 5 | x 4 = | 20 | |
| UPL species | 0 | x 5 = | 0 | |
| Column Totals: | 7 | (A) | 24 | (B) |

Prevalence Index = B/A = 3.429

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. The site was a low-lying area that received runoff water from a large area of crop field. However, considering the recent installation of drain tiles throughout this field, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 11

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/2 | 95 | 10YR | 4/6 | 5 | C | PL | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 12

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Toeslope **Local relief (concave, convex, none):** concave **Slope:** 0.0 % / 0.0 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Wacousta silly clay loam (Wa) **NWI classification:** E1Kf

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ◉ No ○ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

crop Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | 0 |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | 0 |

**Wetland Hydrology Present?** Yes ○ No ◉

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall showed wetland signatures in most years.

Remarks:

No hydrology indicators (except signatures on aerial imagery). The plot occupied a low-lying area where water would be expected to collect, however it did not meet D2 since a subsurface drainage system (4 inch perforated pipes, installed at 3 foot depth and 30-40 foot spacing) was installed in 2020

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 12

| **Tree Stratum** (Plot size: 2,826 sf) | **Absolute % Cover** | **Dominant Species?** | **Indicator Status** |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. The site was a low-lying area that received runoff water from a large area of crop field. However, considering the recent installation of drain tiles throughout this field, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 12

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/2 | 95 | 10YR | 4/6 | 5 | C | PL | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☑ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ◉ No ○

Remarks:

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 13

**Investigator(s):** Scott Taylor **Section, Township, Range: S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** concave **Slope:** 1.0 % / 0.6 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Plano silt loam (PnC2) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | **Wetland Hydrology Present?** Yes ○ No ◉ |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a broad shallow drainage swale but the bottom of the swale was sloping enough to drain water away from the site.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 13

| **Tree Stratum** (Plot size: 2,826 sf) | **Absolute % Cover** | **Dominant Species?** | **Indicator Status** |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 13

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-24 | 10YR | 2/2 | 100 | | | | | Silt Loam | |

[1]Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2]Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 14

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** convex **Slope:** 2.0 % / 1.1 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Plano silt loam (PnB) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | **Wetland Hydrology Present?** Yes ○ No ◉ |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a well elevated area on sloping ground.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 14

| **Tree Stratum** (Plot size: 2,826 sf) | **Absolute % Cover** | **Dominant Species?** | **Indicator Status** |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 14

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-11 | 10YR | 2/2 | 100 | | | | | Silt Loam | |
| 11-20 | 10YR | 3/4 | 100 | | | | | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.

## WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

**Project/Site:** Woodland Drive West **City/County:** Waunakee, Dane Co. **Sampling Date:** 11-May-22

**Applicant/Owner:** Lone Silo North Addition, LLC **State:** Wisconsin **Sampling Point:** 15

**Investigator(s):** Scott Taylor **Section, Township, Range:** **S.** 18 **T.** 8N **R.** 9E

**Landform (hillslope, terrace, etc.):** Backslope **Local relief (concave, convex, none):** convex **Slope:** 2.0 % / 1.1 °

**Subregion (LRR or MLRA):** LRR K **Lat.:** 43.17629 **Long.:** -89.470233 **Datum:** NAD83

**Soil Map Unit Name:** Griswold loam (GwD2) **NWI classification:** None

**Are climatic/hydrologic conditions on the site typical for this time of year?** Yes ◉ No ○ **(If no, explain in Remarks.)**

**Are Vegetation** ☑ **, Soil** ☐ **, or Hydrology** ☐ **significantly disturbed?** **Are "Normal Circumstances" present?** Yes ○ 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 ◉ | **Is the Sampled Area within a Wetland?** | Yes ○ No ◉ |
| **Hydric Soil Present?** | Yes ○ No ◉ | | |
| **Wetland Hydrology Present?** | Yes ○ No ◉ | | |

**Remarks: (Explain alternative procedures here or in a separate report.)**

Using the Natural Resource Conservation Service weighted-month method, based on total precipitation for the previous 90 days, the wetland soil moisture level should NORMAL (the moisture level was 11 on a scale of 6-18). Total precipitation recorded at the nearby Dane County Regional Airport weather station within two weeks prior to the date of fieldwork was 0.8 inch. Total precipitation recorded within 3 days prior to the date of fieldwork was 0.02 inch. The vegetation was significantly disturbed, and normal circumstances were not present since the plot was in a crop field and had been tilled recently.

## Hydrology

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of 2 required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☐ FAC-neutral Test (D5)

**Field Observations:**

| | | | |
|---|---|---|---|
| Surface Water Present? | Yes ○ No ◉ | Depth (inches): | |
| Water Table Present? | Yes ○ No ◉ | Depth (inches): | |
| Saturation Present? (includes capillary fringe) | Yes ○ No ◉ | Depth (inches): | **Wetland Hydrology Present?** Yes ○ No ◉ |

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Air photos for 5 years between 2005 and 2021 with normal rainfall did not show wetland signatures.

Remarks:

No hydrology indicators. The plot occupied a well elevated area on sloping ground.

## VEGETATION - Use scientific names of plants.

**Sampling Point:** 15

| **Tree Stratum** (Plot size: 2,826 sf) | Absolute % Cover | Dominant Species? | Indicator Status |
|---|---|---|---|
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Sapling/Shrub Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Herb Stratum** (Plot size: 78.5 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| 5. | 0 | ☐ | |
| 6. | 0 | ☐ | |
| 7. | 0 | ☐ | |
| 8. | 0 | ☐ | |
| 9. | 0 | ☐ | |
| 10. | 0 | ☐ | |
| 11. | 0 | ☐ | |
| 12. | 0 | ☐ | |
| | 0 | **= Total Cover** | |
| **Woody Vine Stratum** (Plot size: 2,826 sf) | | | |
| 1. | 0 | ☐ | |
| 2. | 0 | ☐ | |
| 3. | 0 | ☐ | |
| 4. | 0 | ☐ | |
| | 0 | **= Total Cover** | |

**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: 0.0% (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 = 0.000

**Hydrophytic Vegetation Indicators:**

- ☐ **Rapid Test for Hydrophytic Vegetation**
- ☐ **Dominance Test is > 50%**
- ☐ **Prevalence Index is ≤3.0** [1]
- ☐ **Morphological Adaptations** [1] **(Provide supporting data in Remarks or on a separate sheet)**
- ☐ **Problematic Hydrophytic Vegetation** [1] **(Explain)**

[1] **Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.**

### Definitions of Vegetation Strata:

Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall..

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vine - All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes ○ No ◉

**Remarks: (Include photo numbers here or on a separate sheet.)**

The plot occupied a crop field supporting corn seedlings & open soil. Judging from the absence of wetland hydrology and hydric soil indicators, and the well elevated landscape position, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e., in the absence of tillage.

*Indicator suffix = National status or professional decision assigned because Regional status not defined by FWS.

## Soil

**Sampling Point:** 15

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

| Depth (inches) | Matrix Color (moist) | | % | Redox Features Color (moist) | % | Type [1] | Loc[2] | Texture | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 0-14 | 10YR | 3/2 | 100 | | | | | Silt Loam | |
| 14-24 | 10YR | 3/4 | 100 | | | | | Silt Loam | |

[1] Type: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains [2] Location: PL=Pore Lining. M=Matrix

**Hydric Soil Indicators:**

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Muck Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Dark Surface (S7) (LRR R, MLRA 149B)
- ☐ Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)
- ☐ Loamy Mucky Mineral (F1) LRR K, L)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)

**Indicators for Problematic Hydric Soils :** [3]

- ☐ 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- ☐ Coast Prairie Redox (A16) (LRR K, L, R)
- ☐ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ☐ Dark Surface (S7) (LRR K, L, M)
- ☐ Polyvalue Below Surface (S8) (LRR K, L)
- ☐ Thin Dark Surface (S9) (LRR K, L)
- ☐ Iron-Manganese Masses (F12) (LRR K, L, R)
- ☐ Piedmont Floodplain Soils (F19) (MLRA 149B)
- ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- ☐ Red Parent Material (F21)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3] Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: _____

Depth (inches): _____

**Hydric Soil Present?** Yes ○ No ◉

Remarks:

No hydric indicators.