



2918 Van Hoof Road • Green Bay, WI 54313

Phone: 920.615.0019 • Website: www.evergreenwis.com

Fox Run

Professionally Assured Wetland Delineation Report

Project Number: WKS19-008-01

Property Address:

2300 W St Paul Avenue, City of Waukesha, Waukesha County, Wisconsin

Parcel ID: WAKC1328999001, WAKC1328997, WAKC1328999002, & WAKC1331018

October 28, 2019



Report Request by



100 Camelot Drive
Fond du Lac, WI 54935



2918 Van Hoof Road • Green Bay, WI 54313

Phone: 920.615.0019 • Website: www.evergreenwis.com

Field Work Certification:

Ben J LaCount, PLS, Planner, Wetland Scientist

Wisconsin DNR Professional Assured Wetland Delineator

Lead Wetland Delineator

(920) 265-4105 ben@evergreenwis.com

Chad M Fradette, EP, Chemist, Wetland Scientist

Wisconsin DNR Professional Assured Wetland Delineator

(920) 615-0019 chad@evergreenwis.com

Shyann P Banker, Environmental Specialist

(920) 915-2629 shyann@evergreenwis.com

Table of Contents

Executive Summary

1.0 Introduction 1
 1.1 Purpose 1
 1.2 Personnel 1

2.0 Methodology..... 1
 2.1 Resources..... 2
 2.2 Equipment Used..... 2
 2.3 Vegetation..... 2
 2.4 Soils 2
 2.5 Hydrology..... 2

3.0 Site Characteristics..... 3
 3.1 Land Use..... 3
 3.2 Topography 6
 3.3 Precipitation..... 7
 3.4 Wetland Mapping 9
 3.5 Mapped Soils..... 10

4.0 Field Investigation..... 12
 Wetland 1..... 12
 Upland..... 14
 4.1 Hydrology Assessments with Aerial Photographs 15
 4.2 Rare Species and Natural Communities..... 15
 4.3 Mapping 15

5.0 Conclusion..... 15

6.0 Disclaimer 15

7.0 References 16

Appendices.....
 Appendix A - Site Maps
 Appendix B - Site Pictures
 Appendix C - Original Survey, Notes, and Bordner Survey
 Appendix D - Historic Aerial Photographs
 Appendix E - NRCS County Soil Survey Report
 Appendix F - Precipitation Information
 Appendix G - Wetland Determination Data Sheets

Executive Summary

Evergreen Consultants LLC (Evergreen) was retained by Excel Engineering, to perform a professionally assured wetland delineation. The delineation/project area is all of Waukesha County Tax Parcels WAKC1328999001, WAKC1328997, WAKC1328999002, & WAKC1331018, located in part of the Southeast ¼ of the Southeast ¼ of Section 08 of Township 06 North, Range 19 East and part of the Southwest ¼ of the Southwest ¼ of Section 09 of Township 06 North, Range 19 East, located at 2300 W St Paul Avenue, City of Waukesha, Waukesha County, Wisconsin.

The project area is shown on the Wetland Delineation Map as the Site Boundary, hereafter described as the "Site". The Wetland Delineation Map is in Appendix A. Evergreen was directed to delineate the project area for future planning purposes. The property had once been actively farmed but buildings and roads were constructed within and around the Site prior to 1980.

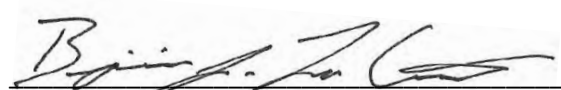
The wetland delineation was certified complete on October 28, 2019 by Benjamin J La Count, PLS, Wisconsin DNR Professionally Assured Wetland Delineator, with assistance from Chad M Fradette, EP, Chemist, WDNR Professionally Assured Wetland Delineator, and Shyann P Banker, Environmental Specialist. Mr. La Count was the Lead Wetland Delineator for the project.

One wetland area was identified during fieldwork:

- Wetland 1 is an area infested with reed canary grass located within an excavated drainage ditch adjacent to the north Site Boundary. The wetland receives artificial hydrology from a culvert discharge which drains into the ditch/wetland.

It is our opinion that Wetland 1 within the Site meets the definition of an artificial wetland as defined in WI Statute 281.36 (4n)(a)1. Wetland 1 is an excavated drainage ditch that receives artificial hydrology from a culvert which drains into the ditch/wetland, the wetland was created during construction of the Site.

Since Benjamin J LaCount and Chad M Fradette are WDNR Professionally Assured Wetland Delineators WDNR concurrence is already granted for five years and some wetlands on-site may have concurrence for 15 years if the conditions of WI Statute 23.321 (5)(b) 1 apply. For wetlands to be confirmed as exempt from state regulatory authority an exemption determination application must be submitted to the DNR Wetland ID Program whose staff makes the final decision.



Benjamin J LaCount, PLS
WI Professionally Assured Wetland Delineator
Lead Wetland Delineator



Chad M Fradette, EP, Chemist
WI Professionally Assured Wetland Delineator



Shyann P Banker
Environmental Specialist

1.0 INTRODUCTION

1.1 Purpose

Evergreen was retained by Excel Engineering to perform a professionally assured wetland delineation.

One wetland area was identified during fieldwork:

- Wetland 1 is an area infested with reed canary grass located within an excavated drainage ditch adjacent to the north Site Boundary. The wetland receives artificial hydrology from a culvert discharge which drains into the ditch/wetland.

1.2 Personnel

The wetland delineation was certified complete on October 28, 2019 by Benjamin J La Count, PLS, Wisconsin DNR Professionally Assured Wetland Delineator, with assistance from Chad M Fradette, EP, Chemist, WDNR Professionally Assured Wetland Delineator, and Shyann P Banker, Environmental Specialist. Mr. La Count was the Lead Wetland Delineator for the project.

Mr. LaCount is a Professional Land Surveyor and WDNR Professionally Assured Wetland Delineator and has over ten years of experience conducting wetland delineations. Mr. LaCount has completed the Basic and Advanced Wetland Delineation Training, Basic Plant Identification for Wetlands and Grasses/Sedges/Rushes courses sponsored by UW-La Crosse Continuing Education/Extension. Mr. LaCount has also completed the Advanced Hydric Soils and Problematic Wetland Delineation courses conducted by the Wetland Training Institute and the Advanced Wetland Plant ID: Grasses/Sedges/Rushes and Aerial Photo Review courses conducted by the USACE and the University of Minnesota Wetland Delineator Certification Program.

Mr. Fradette is an Environmental Professional, Analytical Chemist, WDNR Professionally Assured Wetland Delineator and has over sixteen years of experience conducting wetland delineations. Mr. Fradette biannually attends Advanced Wetland Delineation Training course and has completed Grasses/Sedges/Rushes course sponsored by UW-La Crosse Continuing Education/Extension. Mr. Fradette has also completed the Advanced Hydric Soils and Problematic Wetland Delineation courses conducted by the Wetland Training Institute and the Advanced Wetland Plant ID: Grasses/Sedges/Rushes and Aerial Photo Review courses conducted by the USACE and the University of Minnesota Wetland Delineator Certification Program.

Mrs. Shyann Banker, Environmental Specialist has three years of experience conducting wetland delineations. Mrs. Banker has completed the Basic and Advanced Wetland Delineation Training and Basic Plant Identification for Wetlands courses sponsored by UW-La Crosse Continuing Education/Extension.

2.0 METHODOLOGY

Wetland boundaries were determined based on the comprehensive wetland delineation method as defined in the *Corps of Engineers Wetlands Delineation Manual* (USACE, Waterways Experiment Station, Wetlands Research Program Technical Report Y-87-1) and the *Regional Supplement to the 1987 Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Regions* (NC/NE Regional Supplement) (USACE ERDC, 2012).

Soil data, aerial photographs and topographic information available on Waukesha County's GIS website were reviewed prior to the site visit to determine areas for investigation and included: areas shown as having hydric inclusionary soils as shown on the NRCS National Cooperative Soil Survey and the WDNR

Surface Water Data Viewer. Vegetation, soils and hydrology were investigated during the Site visits to determine the location of wetland boundaries.

2.1 Resources

The following resources were used:

Site topography:	USGS Quadrangle Maps Waukesha County Light Detection and Ranging (LiDAR) Topography
Soils:	Waukesha County Soil Survey Natural Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2019).
Land Use:	Historic and recent aerial photographs
Wetlands:	Wisconsin Wetland Inventory (viewed via the Surface Water Data Viewer) National Wetland Inventory (NWI)

2.2 Equipment Used

The following equipment was used:

- Six-foot stick tape
- Soil auger, trenching shovel
- Munsell soil color charts
- Leica Zeno GG04 GPS

2.3. Vegetation

Vegetation was documented on the NC/NE Regional Supplement data forms. Percent cover of each species for the herbaceous stratum (5-foot radius plot), shrub/sapling stratum (15-foot radius plot) and tree and woody vine stratum (30-foot radius plot) were estimated. Rectangular sample plots were used when plant communities would overlap using circular sample plots or when a community was narrower than the radius. Wetland indicator status was taken from the Lichvar, R.W. 2016, *The National Wetland Plant List, State of Wisconsin 2016 Wetland Plant List*. Dominant species were determined by applying the 50/20 rule. The Dominance Test Worksheet and Prevalence Index Worksheet were completed. Hydrophytic Vegetation Indicators were applied, and a decision was made regarding the dominance of hydrophytic vegetation.

2.4. Soils

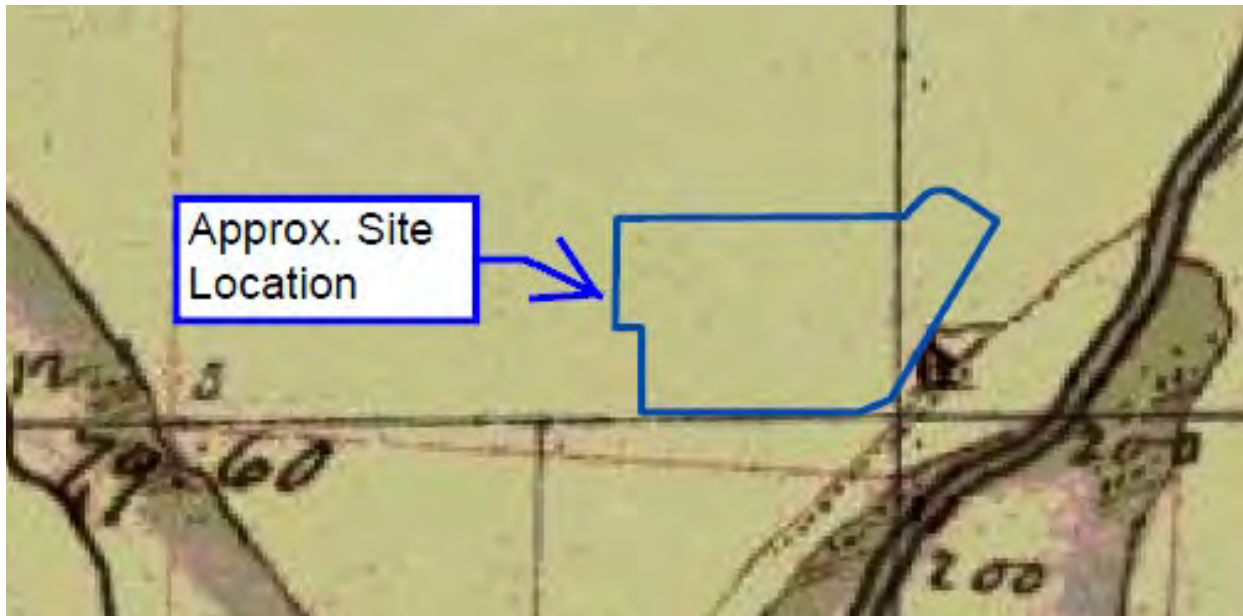
Soil test pits were excavated with a trenching shovel and a soil probe to a depth of at least 24" at each sampling point. The presence and percentage of mottling, matrix color, and texture was documented on the NC/NE Regional Supplement data forms for each layer. The Munsell Soil Color Charts were used to determine the hue, value and chroma of observed moist soils. After the profile was documented it was determined if a hydric soil indicator was met at that sample point.

2.5. Hydrology

Before an on-site investigation, FSA aerial slides and aerial photographs were reviewed for the presence of surface water or saturated soil conditions. Each sample point was investigated for saturated soil conditions, water table and surface water and if present they were measured and recorded on the NC/NE Regional Supplement data form. The area was also investigated for Primary and Secondary Hydrologic Indicators as listed on the NC/NE Regional Supplement data form.

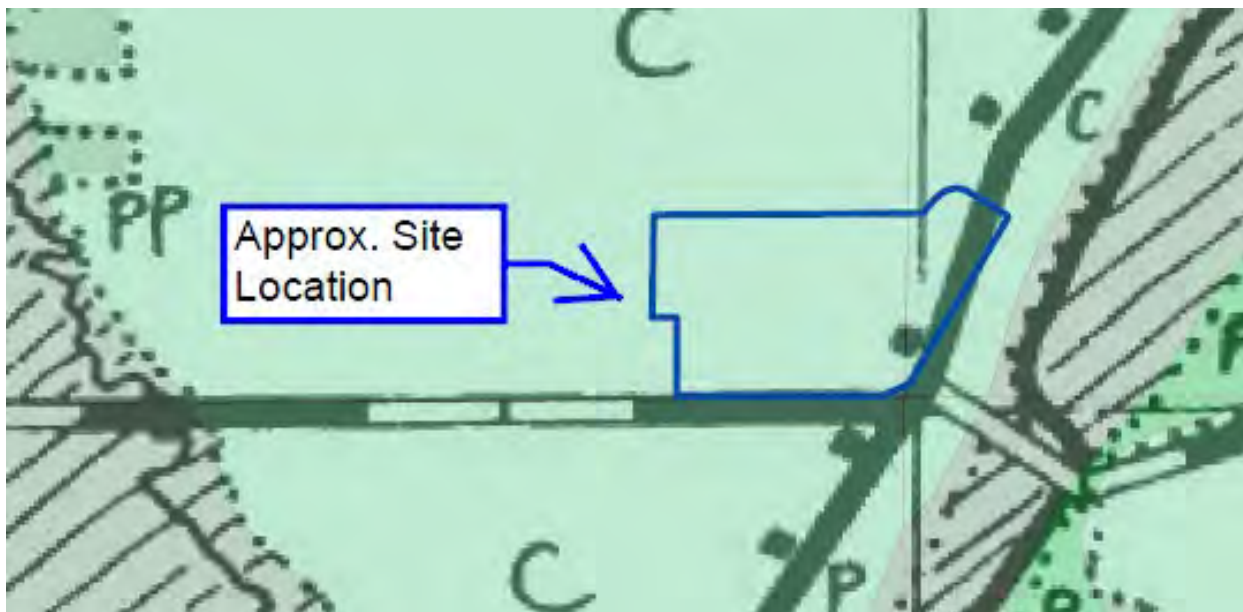
3.0 SITE CHARACTERISTICS

3.1 Land Use



1837 Original Survey

The Original Survey, created in 1837, shows the Site spanning Sections 8 and 9, with a house and trail adjacent to the east Site boundary. The Original Survey Notes describe the vegetation in this area as bur oak, black oak, and white oak.



1945 Bordner Survey

The Bordner Survey, created in 1945, shows the Site as cleared cropland, with a house adjacent to the southeast corner and hard surfaced road adjacent to the east and south Site boundaries. The Original Survey, Survey Notes and Bordner Survey are in Appendix C.

Aerial photographs from 1937, 1980-2008, 2010, 2011, 2014, 2015, 2017, and 2018 were reviewed.



1937- The Site was cropland.



1980- Roads and buildings were constructed within and around the Site.



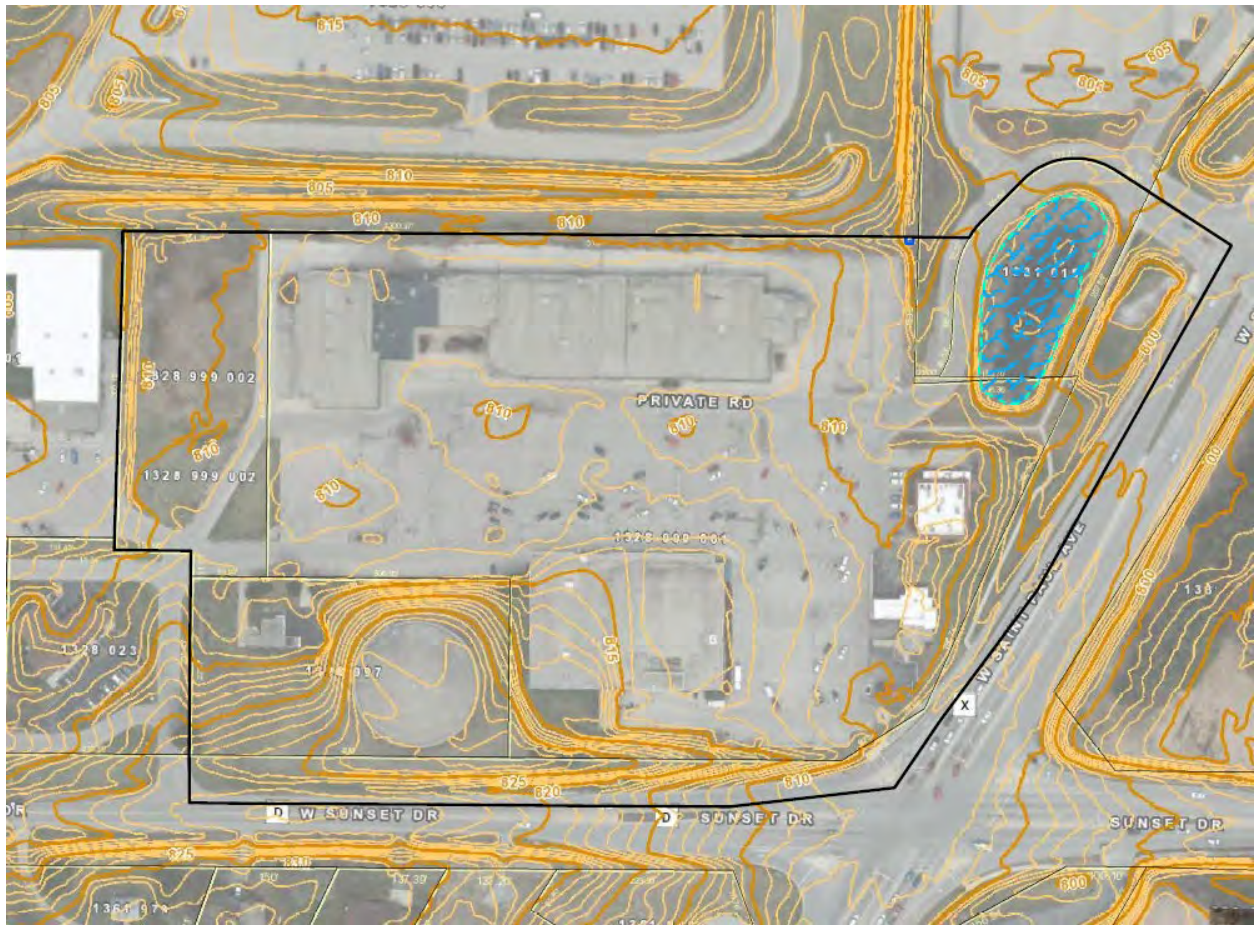
2002- A pond was constructed in the northeast corner of the Site.



2018- Current state of the Site.

3.2 Topography

The topography at the Site ranges from an elevation of 828 feet down to 805 feet. The topography of the Site slopes down towards the north. The Topographic Map is in Appendix A.



Topographic Map

3.3 Precipitation

Precipitation information was reviewed from the Waukesha 1.6 NW, Waukesha County, WI Station. A 90 Day Antecedent Precipitation Rolling Total from August through October 2019 is shown below. Precipitation was in the normal range from the beginning of August until mid-September, with two small spikes above the normal range in mid-August and the end of August. In the mid-September, precipitation spiked above normal and remained high above the normal range until the Site visit in late October. Raw precipitation data is in Appendix F. The antecedent precipitation for approximately 90 days prior to the Site visit in October was wetter than normal.

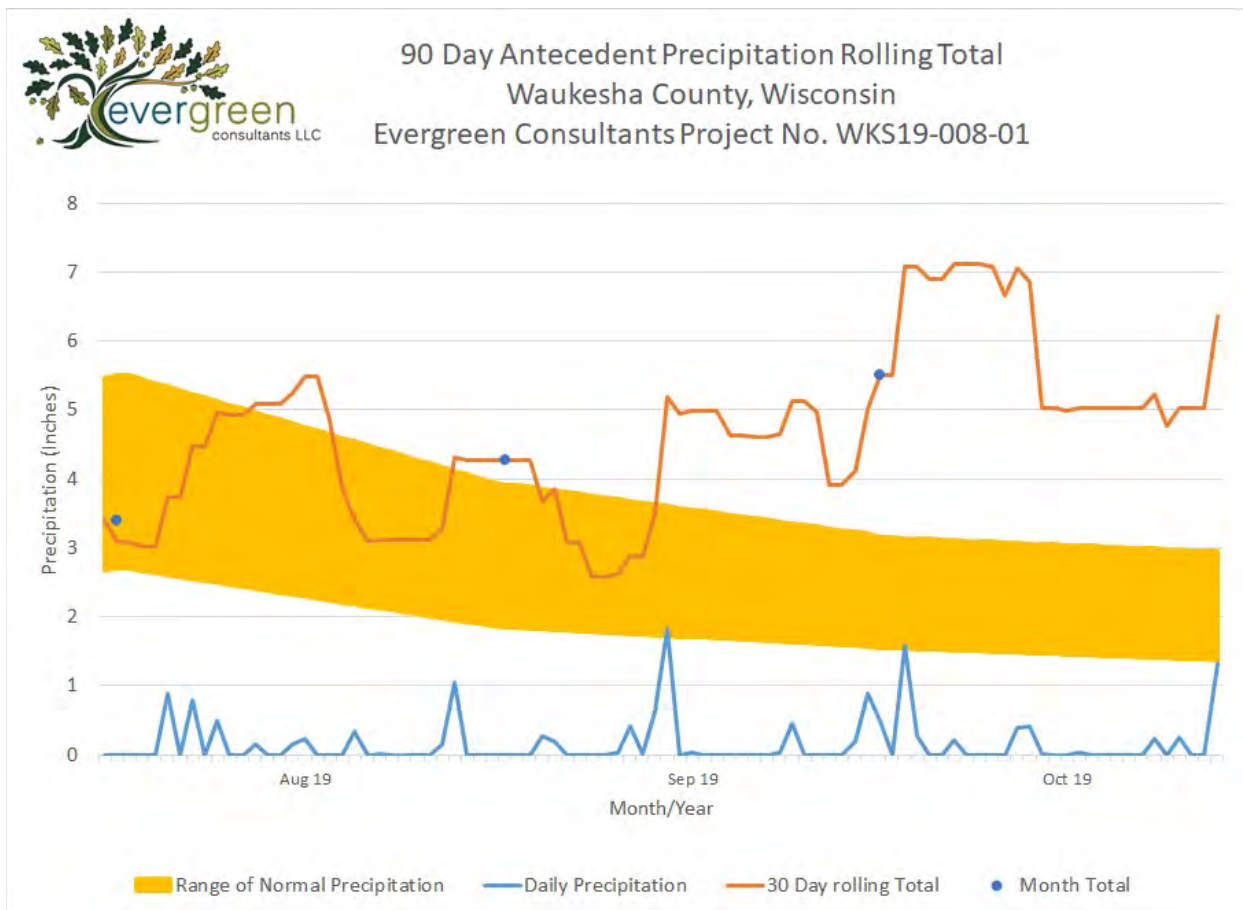


Chart 1. 90 Day Antecedent precipitation Rolling Total Summary between August-October 2019 in Waukesha County, Wisconsin

NRCS method - Rainfall Documentation Worksheet Hydrology Tools for Wetland Determination NRCS Engineering Field Handbook Chapter 19								
Date	10/27/2019			Landowner/Project	WKS19-008-01			
Weather Station	Waukesha 1.6 NW			State	Wisconsin			
County	Waukesha County			Growing Season	yes			
Photo/obs Date	10/28/2019			Soil Name				
shaded cells are locked or calculated	Long-term rainfall statistics (from WETS table or State Climatology Office)							
	Month	30% chance <	30% chance >	Precip	Condition Dry, Wet, Normal	Condition Value	Month Weight Value	Product of Previous 2 Columns
1st Prior Month*	October	1.55	3.16	4.78	W	3	3	9
2nd Prior Month*	September	1.84	3.91	5.50	W	3	2	6
3rd Prior Month*	August	2.69	5.50	4.28	N	2	1	2
	*compared to photo/observation date						Sum	17
	Note: If sum is					Condition value:		
	6 - 9	prior period has been drier than normal				Dry =1		
	10 - 14	prior period has been normal				Normal =2		
	15 - 18	prior period has been wetter than normal				Wet =3		
Conclusions: prior period has been wetter than normal								

Table 1. Precipitation Summary between August and October 2019 in Waukesha County, Wisconsin

Precipitation values are measured in inches.

Sources: National Oceanic & Atmospheric Administration, Midwest Regional Climate Center

3.4 Wetland Mapping

The Wisconsin Wetland Inventory (WWI), viewed via the Surface Water Data Viewer, and the National Wetland Inventory (NWI) were reviewed.



Surface Water Data Viewer

The Surface Water Data Viewer shows wetland indicator soils in the north half of the Site and an excavated pond in the northeast corner.

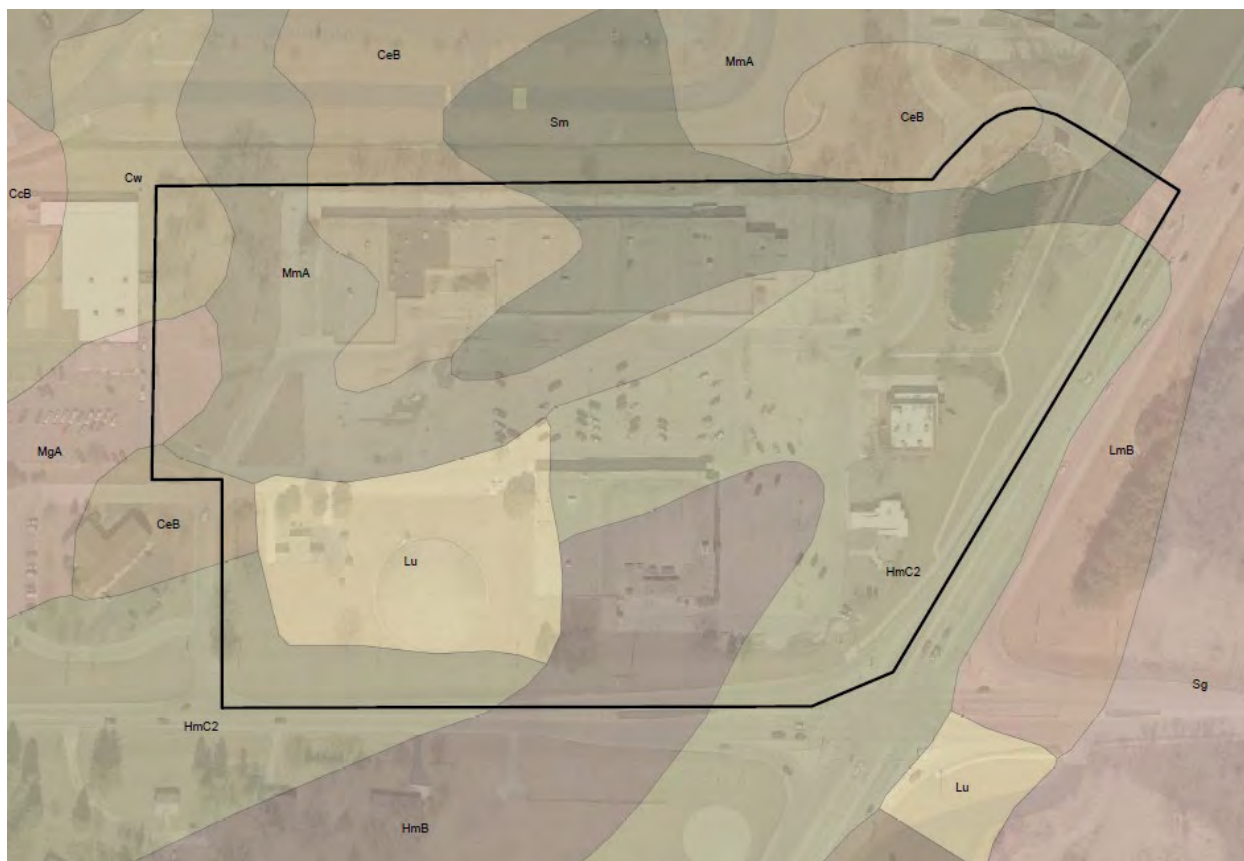


National Wetland Inventory Map

The National Wetland Inventory Map shows an excavated pond in the northeast corner. The surface Water Data Viewer and National Wetland Inventory Maps are in Appendix A.

3.5 Mapped Soils

The NRCS Web Soil Survey and the Soil Survey of Waukesha County, Wisconsin, indicate the presence of the following soil types:



Report—Hydric Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee and Waukesha Counties, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
CeB	Casco loam, 2 to 6 percent slopes	0	WI Nonhydric	—
Cw	Colwood silt loam, 0 to 2 percent slopes	100	WI Hydric	Depressions
HmB	Hochheim loam, 2 to 6 percent slopes	0	WI Nonhydric	—
HmC2	Hochheim loam, 6 to 12 percent slopes, eroded	0	WI Nonhydric	—
LmB	Lamartine silt loam, 0 to 3 percent slopes	15	WI Predominantly Nonhydric	Drainageways
Lu	Loamy land	10	WI Predominantly Nonhydric	Depressions
MgA	Martinton silt loam, 1 to 3 percent slopes	7	WI Predominantly Nonhydric	Depressions
MmA	Matherton silt loam, 1 to 3 percent slopes	7	WI Predominantly Nonhydric	Depressions
Sm	Sebewa silt loam, 0 to 2 percent slopes	96	WI Predominantly Hydric	Lakebeds (relict)

Note: NRCS County Soil Survey Report is in Appendix E.

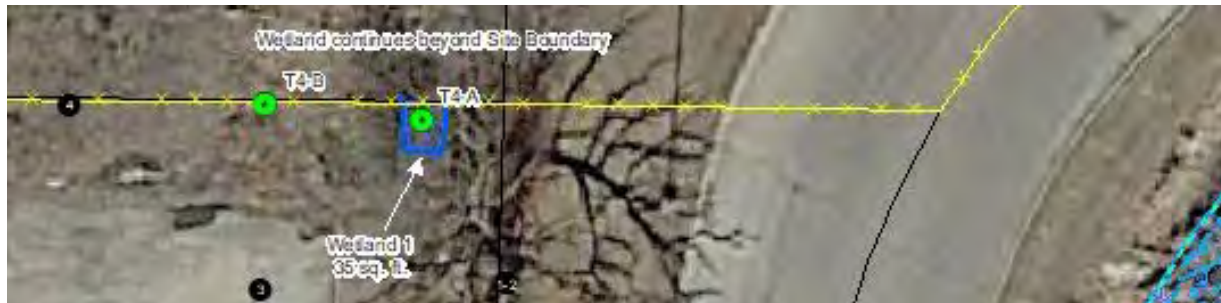
4.0 FIELD INVESTIGATIONS

One wetland area was identified during fieldwork:

- Wetland 1 is an area infested with reed canary grass located within an excavated drainage ditch adjacent to the north Site Boundary. The wetland receives artificial hydrology from a culvert discharge which drains into the ditch/wetland.

Determination Forms are in Appendix G.

Wetland 1: Wetland 1 (35 sq. ft.) is an artificial degraded wet meadow infested with reed canary grass located within a ditch adjacent to the north Site boundary and extends beyond the Site boundary to the north.



Wetland 1 would be considered **E2Kx** (emergent/wet meadow, narrow-leaved persistent with wet soil, palustrine, excavated). The wetland boundary for Wetland 1 is located along a topography break within an excavated ditch. The wet meadow receives stormwater from a culvert which empties into the ditch. The wetland meets wetland criteria for hydrophytic vegetation, hydric soil, and wetland hydrology.

The primary hydrology indicators observed in Wetland 1 include surface water (A1), high water table (A2), and saturation (A3). The secondary hydrology indicators observed in Wetland 1 include geomorphic position (D2) and a positive FAC-neutral test (D5). The wetland receives artificial hydrology from a culvert which empties into the south end of the wetland/ditch.



Photo taken standing above the wetland facing northeast.

The dominant hydrophytic vegetation observed:

- *Phalaris arundinacea* (reed canary grass, FACW)

The soil in Wetland 1 meets hydric soil indicator redox dark surface (F6). The soils observed presented redox dark surface (F6), with a dark surface with prominent or distinct redoximorphic features within a layer at least four inches thick.



This is a picture standing near Wetland 1 facing the culvert which drains into the wetland.

Upland: Upland within the Site are mowed areas, shrubby areas, and some fallow areas adjacent to the parking lot of a retail mall.



Shrubby area adjacent to the parking lot.



Mowed grassy area.

4.1 *Hydrology Assessments with Aerial Photographs*

Aerial photographs from 1937, 1980-2008, 2010, 2011, 2014, 2015, 2017, and 2018 were reviewed. In 1937, the Site was cropland. Prior to 1980, roads and buildings were constructed within and around the Site. A pond was constructed in the northeast corner of the Site in 2002. A hydrology assessment was not completed as the Site has been cultivated since prior to 1980.

4.2 *Rare Species and Natural Communities*

No species or communities of concern were observed during site activities.

4.3 *Mapping*

The wetland boundaries were flagged with pink flags. Benjamin La Count, a Professional Land Surveyor, surveyed the wetland boundary. The surveyed wetland boundaries are shown on the Wetland Delineation Map located in Appendix A, Site Maps.

5.0 CONCLUSIONS

Investigation of the area determined that wetlands exist as shown on the attached figures and Wetland Delineation Map. The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corps of Engineers, state regulation under the jurisdiction of Wisconsin DNR, and local jurisdiction under Waukesha County, and the City of Waukesha.

- Wetland 1 is an area infested with reed canary grass located within an excavated drainage ditch adjacent to the north Site Boundary. The wetland receives artificial hydrology from a culvert discharge which drains into the ditch/wetland.

It is our opinion that Wetland 1 within the Site meets the definition of an artificial wetland as defined in WI Statute 281.36 (4n)(a)1. Wetland 1 is an excavated drainage ditch that receives artificial hydrology from a culvert which drains into the ditch/wetland, the wetland was created during construction of the Site.

6.0 DISCLAIMER

If wetlands are proposed to be impacted a Section 404 Letter of Permission Authorization will need to be obtained from USACE and according to Section 281.36, Wisconsin Statutes and NR 299 and NR 103, Wisconsin Administrative Code a permit from the WDNR would be necessary.

Since Benjamin J LaCount and Chad M Fradette are WDNR Professionally Assured Wetland Delineators WDNR concurrence is already granted for five years and some wetlands on-site may have concurrence for 15 years if the conditions of WI Statute 23.321 (5)(b) 1 apply. For wetlands to be confirmed as exempt from state regulatory authority an exemption determination application must be submitted to the DNR Wetland ID Program whose staff makes the final decision.

7.0 REFERENCES

- Black, Merel R., and Judziewicz, Emmet J., *Wildflowers of Wisconsin and the Great Lakes Region, A Comprehensive Field Guide*, University of Wisconsin Press, Madison, WI, 2009
- Board of Commissioners of Public Lands, *Wisconsin Public Land Survey Records: Original Field Notes and Plat Maps*, Madison, Wisconsin, 2019
- Chadde, Steve W., *Wetland Plants of Wisconsin, Second Edition*, Steve Chadde, United States, 2013
- Cochrane, Theodore S., Elliot, Kandis, and Lipke, Claudia S., *Prairie Plants of the University of Wisconsin-Madison Arboretum*, University of Wisconsin Press, Madison, WI, 2006
- Curtis, Linda, *Woodland Carex of the Upper Midwest*, Curtis to the Third Productions, Lake Villa, IL, 2014
- Czarapata, Elizabeth J., *Invasive Plants of the Upper Midwest, an Illustrated Guide to Their Identification and Control*, University of Wisconsin Press, Madison, WI, 2005
- Eggers, Steve D., and Reed, Donald M., U.S. Army Corps of Engineers, St. Paul District, *Wetland Plants and Plant Communities of Minnesota & Wisconsin*, 1997
- Fassett, Norman C., *A Manual of Aquatic Plants*, University of Wisconsin Press, Madison, WI, 1940
- Gleason, Henry A., Ph.D., and Cronquist, Arthur, Ph.D., *Manual of Vascular Plants of Northeastern Google Earth Aerial Photographs and FSA Slides*
- Hipp, Andrew, *Field Guide to Wisconsin Sedges*, University of Wisconsin Press, Madison, WI, 2008
- Holmgren, Noel H., *Illustrated Companion to Gleason and Cronquist's Manual, Illustrations of the Vascular Plants of Northeastern United States and Adjacent Canada*, The New York Botanical Garden, 1998
- Judziewicz, Emmet J., Freckmann, Robert W., Clark, Lynn G., and Black, Merel R., *Field Guide to Wisconsin Grasses*, University of Wisconsin Press, Madison, WI, 2014
- Knobel, Edward, *Field Guide to the Grasses, Sedges, and Rushes of the United States*, Dover Publications, Inc., Mineola, NY, 1977
- Kopitzke, David A., and Sweeney, Dr. James M., *Threatened and Endangered Species in Forests of Wisconsin, A Guide to Assist with Forestry Activities*, International Paper Co, 2000
- Lichvar, R.W. 2016. *The National Wetland Plant List*. ERDC/CRREL TR-12-11. Hanover, NH: U.S. Army Corps of Engineers, Cold Regions Research and Engineering Laboratory
- Tekiela, Stan, *Wildflowers of Wisconsin, Field Guide*, Adventure Publications, Inc., Cambridge, MN, 2000
- Tekiela, Stan, *Trees of Wisconsin, Field Guide*, Adventure Publications, Inc., Cambridge, MN, 2002
- U.S. Army Corps of Engineers (USACOE), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, 2012
- U.S. Fish and Wildlife Service, National Wetlands Inventory, 2019
- United States and Adjacent Canada, Second Edition* New York Botanical Garden, NY, 1991

United States Department of Agriculture Soil Conservation Service, *Soil Survey of Waukesha County, Wisconsin*, 1974

University of Wisconsin Digital Collections Center, *Wisconsin Land Economic Inventory Maps (Bordner Survey)*, Madison, WI, 2019

University of Wisconsin, *Wisconsin Historic Aerial Image Finder*, 2019

USACE, Environmental Laboratory, *Wetlands Delineation Manual, Technical Report Y-87-1*, U.S. Army Engineer Waterways Experiment Station, 1987

USACE, Minnesota Board of Water & Soil Resources, *Guidance for Offsite Hydrology/Wetland Determinations*, 2016.

USDA, FSA, Service Center, *FSA Slides for years 1981 through 2002*. Waukesha County, WI

USDA, Natural Resources Conservation Service (NRCS), *Field Indicators of Hydric Soils in the United States, Guide for delineating Hydric Soils*, Version 5.01, 2003

USDA, NRCS, *Web Soil Survey*, 2019

Uva, Richard H., Neal, Joseph C., and DiTomaso, Joseph M., *Weeds of the Northeast*, Cornell University Press, Ithaca, NY, 1997

Vascular Plants of Northeastern United States and Adjacent Canada, The New York Botanical Garden, 1998

Voss, Edward G., *Michigan Flora*, Cranbrook Institute of Science, Bloomfield Hills, MI, 1972

Waukesha County, GIS, *aerial photographs, topography*, Waukesha County, WI

WDNR, Wisconsin Wetland Inventory Classification Guide, PUBL-W2-W2023, 1992

Wetland Training Institute, Inc., *2013 Pocket Guide to Hydric Soil Field Indicators*, Wetland Training Institute, Inc., Glenwood, NM, 2013

Wisconsin Department of Administration, *Basic Guide to Wisconsin's Wetlands and Their Boundaries*, 1995

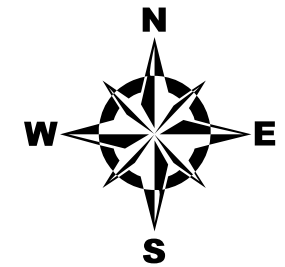
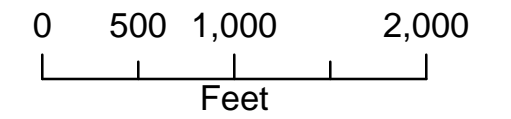
Wisconsin Department of Natural Resources (WDNR), *Surface Water Data Viewer*, 2019

Appendix A:

Site Maps

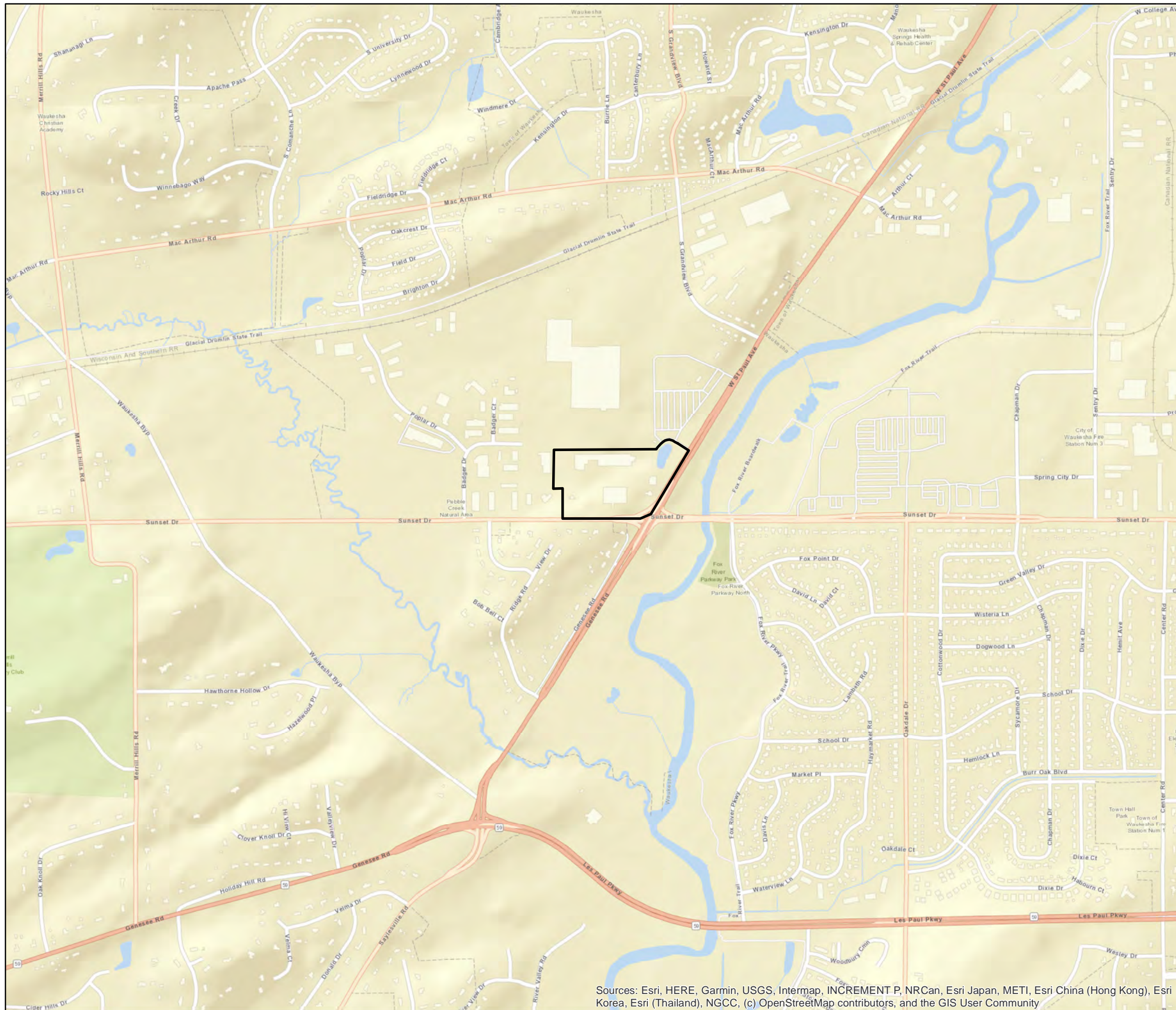
**Fox Run
Site Location Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin**

All of Parcel No's: WAKC1328999001, WAKC1328997
WAKC1328999002, & WAKC1331018
Project #: WKS19-008-01



Legend

Site Boundary



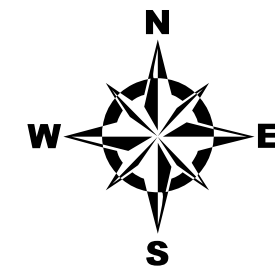
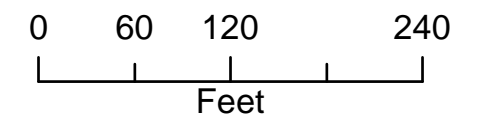
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



2918 Van Hoof Road • Green Bay, WI 54313
Phone: 920.615.0019 • Website: www.evergreenwis.com

Fox Run
 Wetland Delineation Map
 2300 W St Paul Avenue
 City of Waukesha
 Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Part of Parcel No: WAKC1331016
 Project #: WKS19-008-01



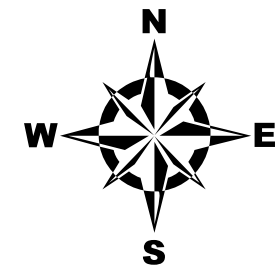
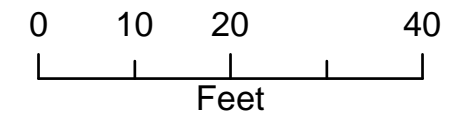
Legend

- Sample Point
- Picture Location
- Site Boundary
- Wetland Line
- Wetland
- Wisconsin Parcels Lines 2017
- Stormwater Pond
- Ordinary High Water Mark



Fox Run
Wetland Delineation Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin
- Wetland 1 -

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Part of Parcel No: WAKC1331016
 Project #: WKS19-008-01



Legend

- Sample Point
- Picture Location
- Site Boundary
- Wetland Line
- Wetland
- Wisconsin Parcels Lines 2017



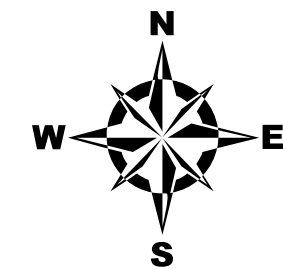
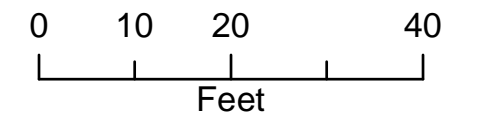
2907 Baylite Drive • Green Bay, WI 54313

Phone: 920.615.0019 • Website: www.evergreenwis.com



Fox Run
Wetland Delineation Map with
Potentially Exempt Wetlands
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin
- Wetland 1 -

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Part of Parcel No: WAKC1331016
 Project #: WKS19-008-01



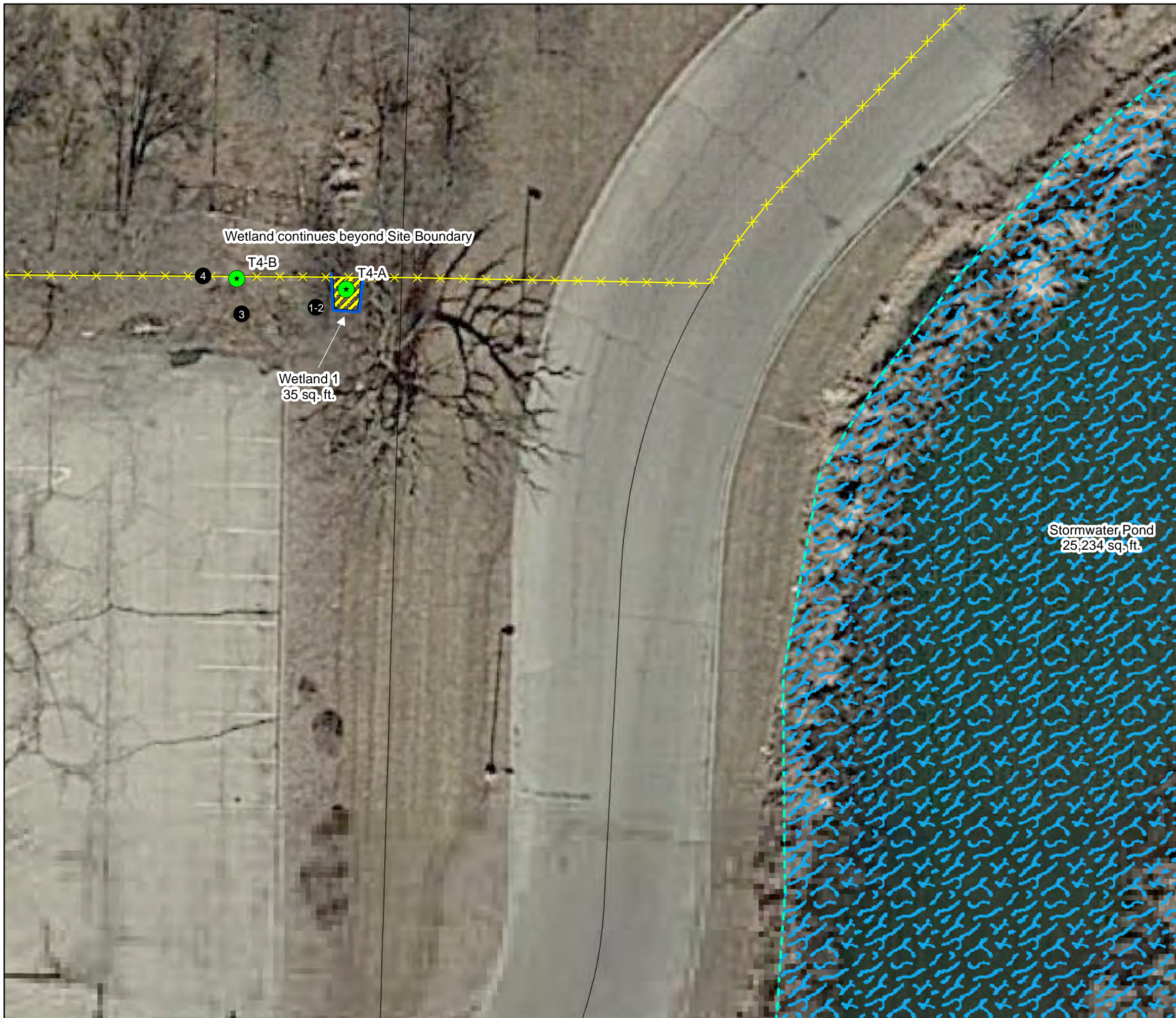
Legend

- + Sample Point
- Picture Location
- ⌘ Site Boundary
- Wetland Line
- ▨ Wetland
- ▭ Wisconsin Parcels Lines 2017
- ▨ Potentially Exempt Wetland



2918 Van Hoof Road • Green Bay, WI 54313

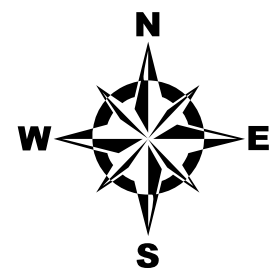
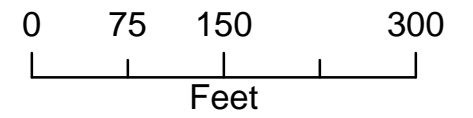
Phone: 920.615.0019 • Website: www.evergreenwis.com




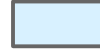
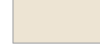


Fox Run
Surface Water Data Viewer Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
WAKC1328999002, & WAKC1331018
Project #: WKS19-008-01



Legend

-  Site Boundary
-  WWI Wetlands
-  Wetland Indicator Soils

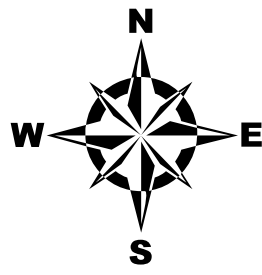
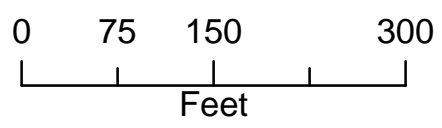


2918 Van Hoof Road • Green Bay, WI 54313
Phone: 920.615.0019 • Website: www.evergreenwis.com








Fox Run
 National Wetland Inventory Map
 2300 W St Paul Avenue
 City of Waukesha
 Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Project #: WKS19-008-01



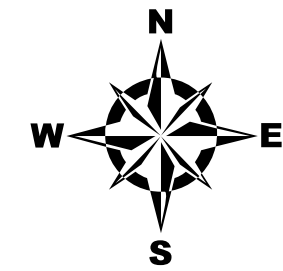
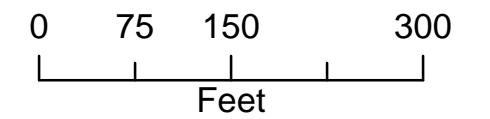
Legend

-  Site Boundary
- WI_Wetlands**
-  PEM1C
-  PFO1/EM1C
-  PUBHx
-  R2UBH



Fox Run
NRCS Soil Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997
 WAKC1328999002, & WAKC1331018
 Project #: WKS19-008-01



Legend

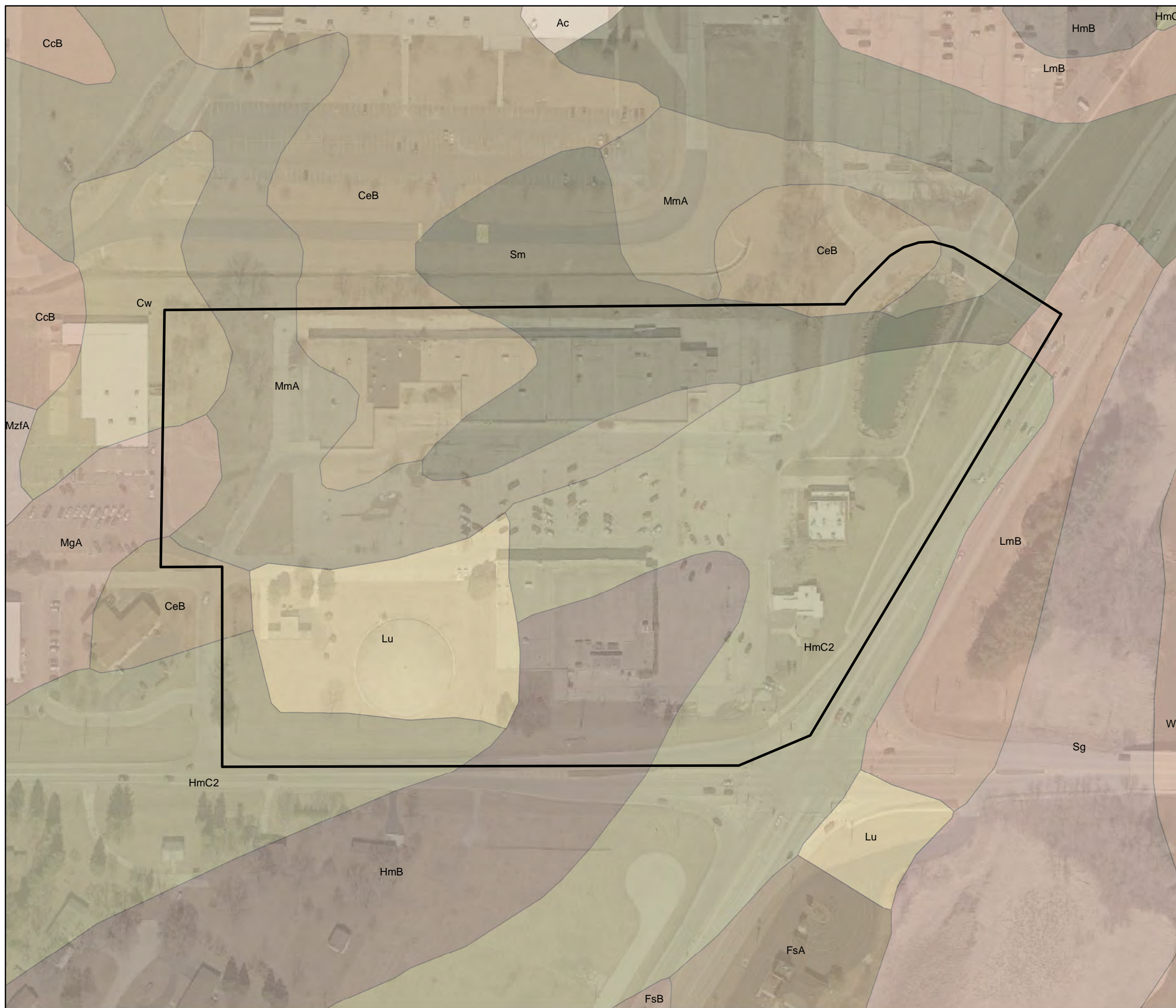
Site Boundary

Soil Type

- CeB - Casco loam
- Cw - Colwood silt loam
- HmB - Hochheim loam
- HmC2 - Hochheim loam
- LmB - Lamartine silt loam
- Lu - Loamy land
- MgA - Martinton silt loam
- MmA - Matherton silt loam
- Sm - Sebewa silt loam

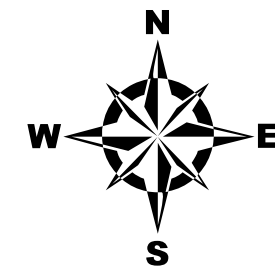
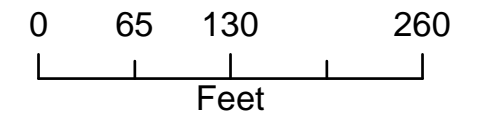


2918 Van Hoof Road • Green Bay, WI 54313
 Phone: 920.615.0019 • Website: www.evergreenwis.com









Fox Run
 Topographic Map
 2300 W St Paul Avenue
 City of Waukesha
 Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Part of Parcel No: WAKC1331016
 Project #: WKS19-008-01

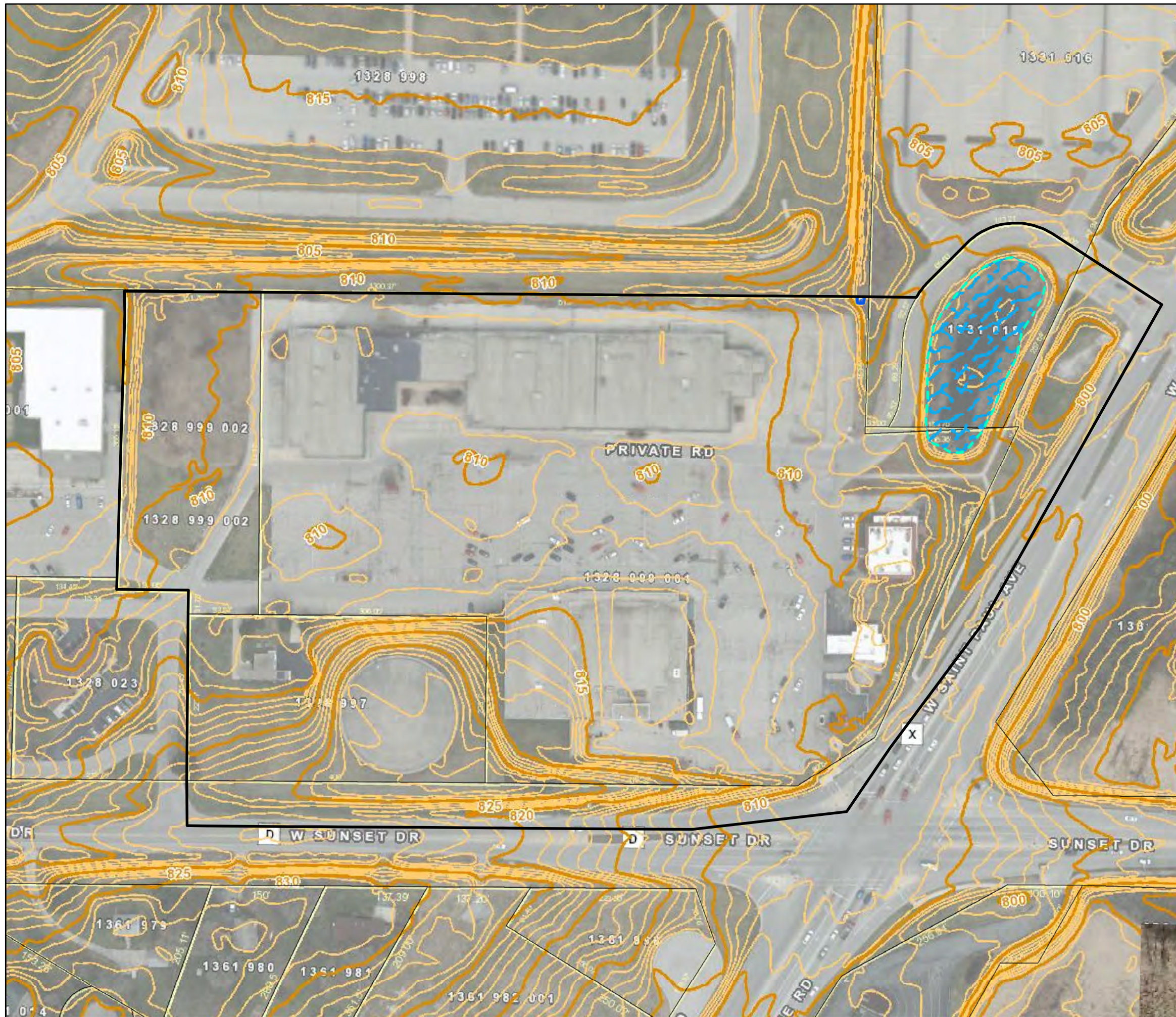


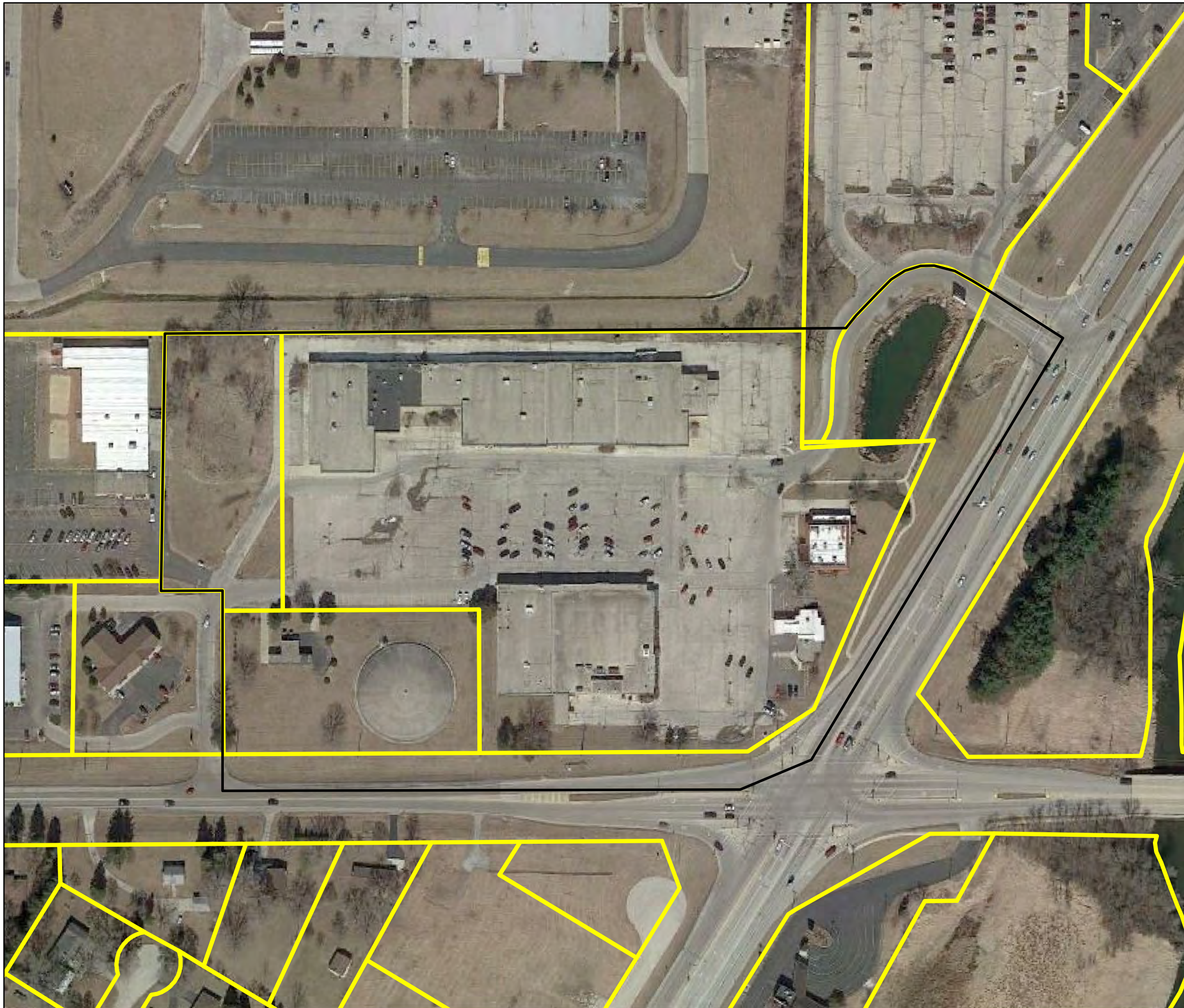
Legend

-  Site Boundary
-  Wetland Line
-  Wetland
-  Wisconsin Parcels Lines 2017
-  Stormwater Pond
-  Ordinary High Water Mark



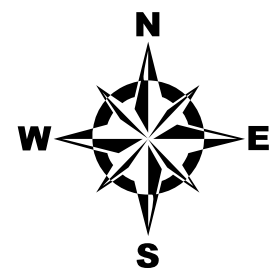
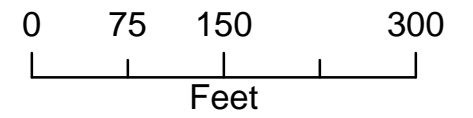
evergreen
 consultants LLC
 2907 Baylite Drive • Green Bay, WI 54313
 Phone: 920.615.0019 • Website: www.evergreenwis.com





Fox Run
Parcel Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
WAKC1328999002, & WAKC1331018
Project #: WKS19-008-01

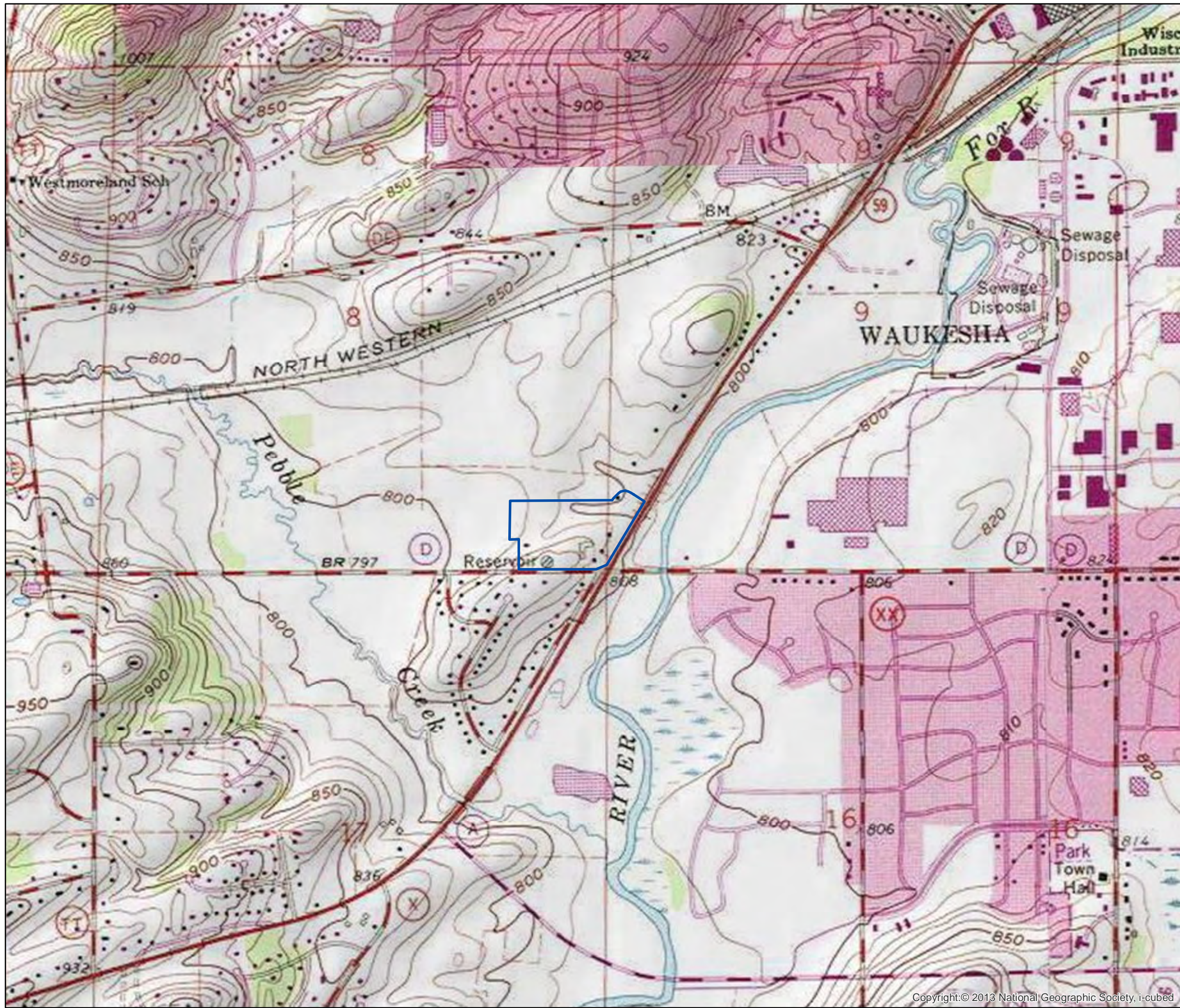


Legend

 Site Boundary

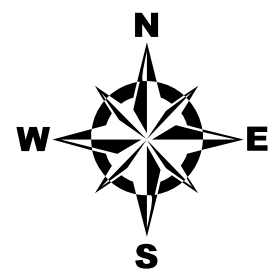
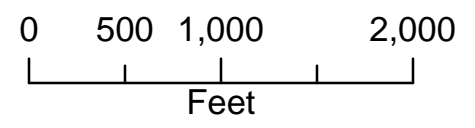


2918 Van Hoof Road • Green Bay, WI 54313
Phone: 920.615.0019 • Website: www.evergreenwis.com



Fox Run
 Quadrangle Map
 2300 W St Paul Avenue
 City of Waukesha
 Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Project #: WKS19-008-01



Legend

 Site Boundary



2918 Van Hoof Road • Green Bay, WI 54313
 Phone: 920.615.0019 • Website: www.evergreenwis.com

Appendix B:

Site Pictures



1- Standing near T1-A facing the small wetland where a culvert drains into Wetland 1.



2- Standing near Wetland 1 and T4-A facing the culvert which drains into the wetland.



3- Standing near T4-B facing south.



4- Standing near T4-B facing west.



5- Standing near T1-A facing east.



6- Standing near T2-A facing east.



7- Standing near T2-A facing south.



8- Standing near T3-A facing southwest.



9- Standing near T3-A facing east.

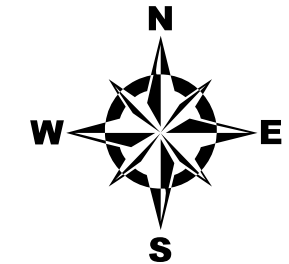
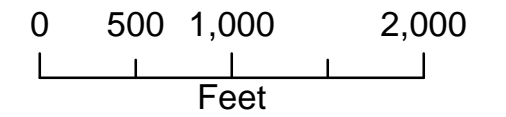


10- Standing south of the stormwater pond facing northeast.

Appendix C:

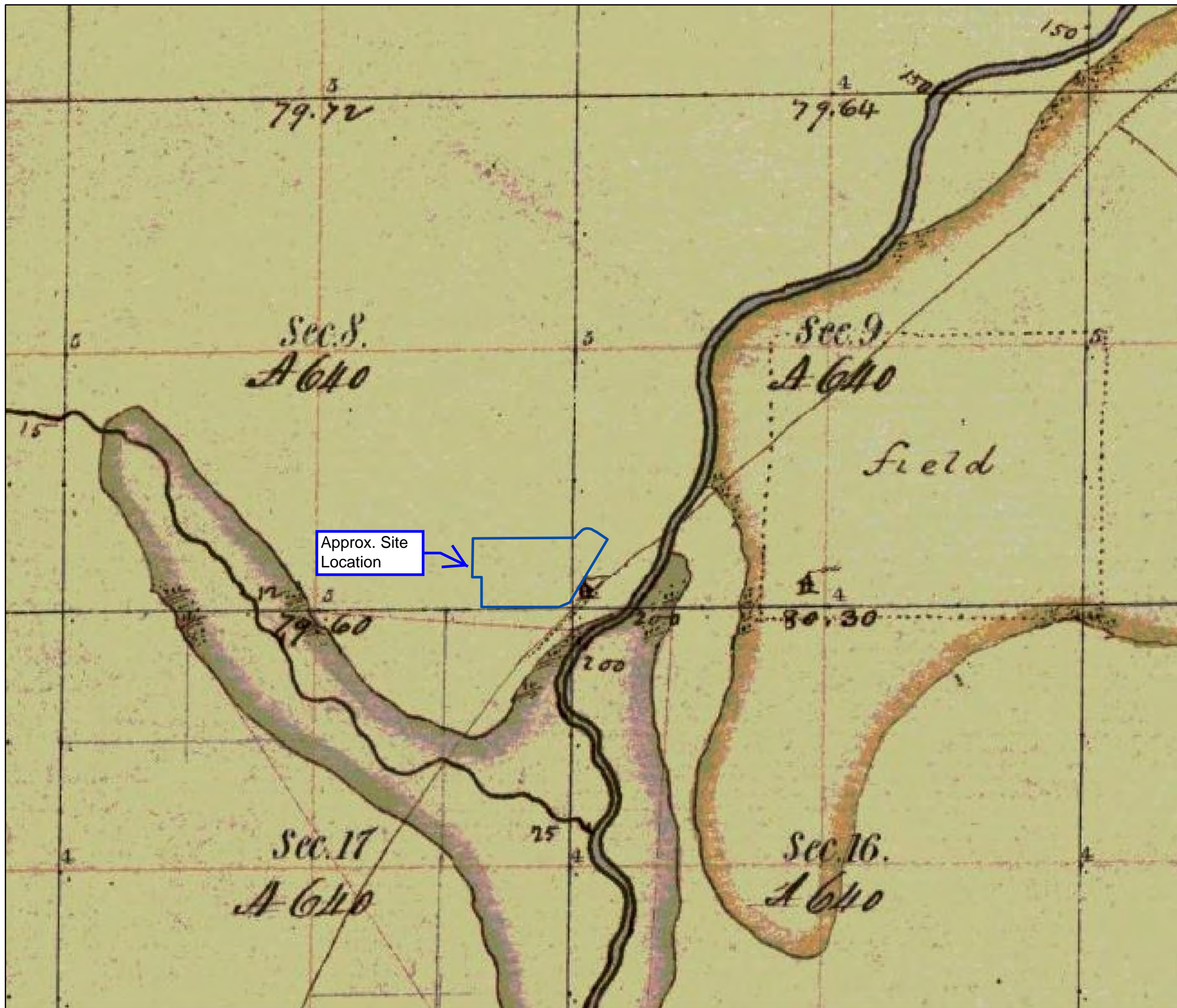
Original Survey, Notes, and Bordner Map

Fox Run
1837 Original Survey Map
2300 W St Paul Avenue
City of Waukesha
Waukesha County, Wisconsin
All of Parcel No's: WAKC1328999001, WAKC1328997,
WAKC1328999002, & WAKC1331018
Project #: WKS19-008-01



Legend

 Site Boundary



2918 Van Hoof Road • Green Bay, WI 54313
Phone: 920.615.0019 • Website: www.evergreenwis.com

T. 6, R. 19 E. 4th Mer.

✓ North between sections 8 & 9

4.50 A House 250 East of line

1.000 set quarter section Pat

Bar Oak 180 5 1/2 N 424

to 8 1/2 E 272

80.00 set Pat cor sections 4, 5, 8 & 9

Black Oak 16 2 6 1/2 E 75

to 16 N 3 E .50

Land Rolling down Kote

- Black Bar & White Oak

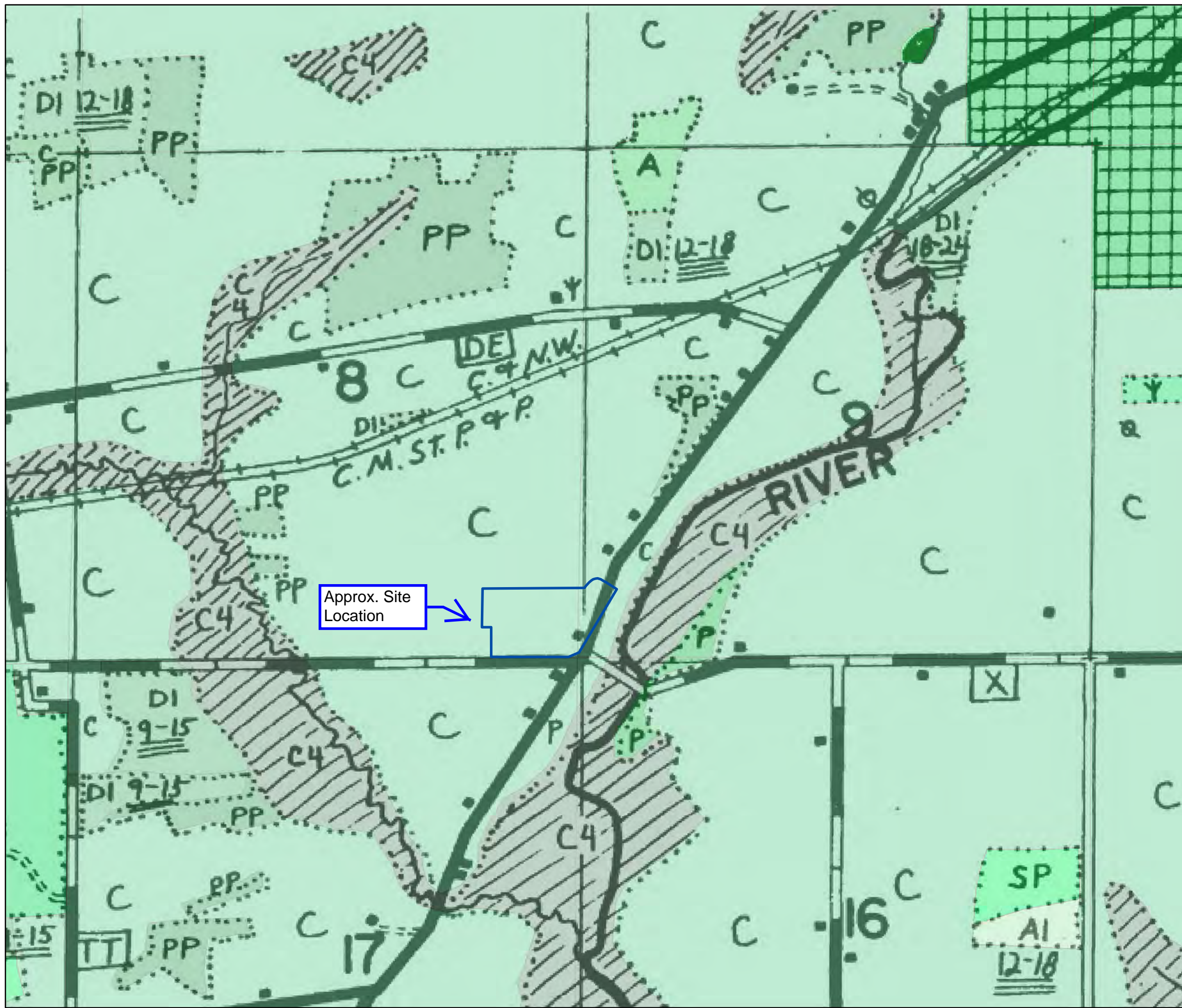
- Red Root Prairie Grass &c

T. 6, R. 19 E. 4th Mer.

East on random bet. Sec. 8 & 17
18.00 Enter marsh & North
34.50 Stream 12 E. S. E
40.50 Leave marsh & S. S. E
79.60 Put a stake 35 North of Post

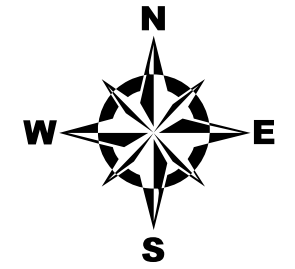
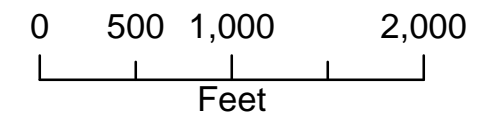
April 19th 1886

West corrected bet. sections 5 & 17
39.60 set quarter section Post
Black Oak 10 N 35 E 1.81
do N 32 E 2.72
79.60 Section corner



Fox Run
 1945 Bordner Survey Map
 2300 W St Paul Avenue
 City of Waukesha
 Waukesha County, Wisconsin

All of Parcel No's: WAKC1328999001, WAKC1328997,
 WAKC1328999002, & WAKC1331018
 Project #: WKS19-008-01



Legend
 [Blue Box] Site Boundary



LEGEND

UPLAND FOREST NUMERALS 1-2	LOWLAND FOREST ALL NUMERALS 3	NON-TILLABLE A-PP-CP-SP-EI-A4-C4-E4-A	INFERIOR FOREST POORLY STOCKED WOODLAND B1-C1-D3-D5	OPEN SWAMP ALL NUMERALS 4	TILLABLE LAND C-C3-P	ALL SWAMP LAND NUMERALS 3-4
-------------------------------	----------------------------------	--	---	------------------------------	-------------------------	--------------------------------

FOREST PLANTING RECOMMENDED

LAND COVER

..... COVER BOUNDARY	C CLEARED CROP LAND	D3 BALSAM
A ABANDONED	C1 POPLAR WITH WHITE BIRCH	D4 LEATHER LEAF
A1 UPLAND HARDWOODS	C2 INFERIOR C	D5 RECENT BURN
A2 HEMLOCK WITH HARDWOOD	C3 NORWAY PINE	D5 DEAD TIMBER
A3 SWAMP HARDWOODS	C4 TAMARACK	E1 PIN CHERRY
A4 TAGALDER, WILLOW, DOGWOOD ETC.	C4 GRASS MARSH	E4 WEEDY PEAT
B BIRCH	C4 SEDGE MARSH	F4 CRANBERRY MARSH
B1 HARDWOOD WITH CONIFERS	C3 CULTIVATED STUMP LAND	FP FOREST PLANTATION
B1 INFERIOR B1	CP POOR LAND PREVIOUSLY CROPPED	O OPEN PASTURE
B2 WHITE PINE	D SCRUB OAK	PP PERMANENT PASTURE
B3 WHITE CEDAR	D1 OAK-HICKORY	PC RED CEDAR
B4 CAT TAIL MARSH	D2 JACK PINE	SP STUMP PASTURE
	D3 BLACK SPRUCE	TG TRUCK GARDEN

MISCELLANEOUS SYMBOLS

Q QUARRY	☪ CEMETERY	GC GOLF COURSE
Q GRAVEL PIT	☪ NURSERY	BD BEAVER DAM
☪ SPRING	☪ EROSION	PD PUBLIC DAMP
☪ FUR FARM	☪ FIRE TOWER	Y ORCHARD
→ DRAINAGE DITCH	~ INTERMITTENT STREAM	↔ CIVIL TOWN BOUNDARY

ROADS

14 FEDERAL HIGHWAY	3 STATE HIGHWAY	A COUNTY HIGHWAY
===== HARD SURFACED ROAD	===== IMPROVED GRAVEL ROAD	===== UNIMPROVED GRAVEL ROAD
===== IMPROVED DIRT ROAD	===== UNIMPROVED DIRT ROAD	----- TRAIL
XXXXXXX DRIVABLE FIRE LANE	XXXXXXX NON-DRIVABLE FIRE LANE	----- TELEPHONE LINE
----- POWER LINE	----- RAILROAD	----- ABANDONED RAILROAD

WOODED AREAS

DENSITY OF STAND	DIAMETER CLASSES
IS INDICATED BY THE LINE OR LINES BELOW THE DIAMETER	NUMERALS 0-3, 3-8 ETC. PLACED AFTER A TIMBER SYMBOL (D1 @ 2)
D1 @ 1 ONE LINE=GOOD STAND	INDICATES IN INCHES THE AVERAGE DIAMETER OF THE TREES BREST HIGH (4 1/2 FT) WITHIN A GIVEN COVER AREA.
D1 @ 2 TWO LINES=MEDIUM STAND	
D1 @ 3 THREE LINES=POOR STAND	
D1 @ 4 FOUR LINES=SCATTERED	

IMPROVEMENTS

☪ OCCUPIED HOUSE	☪ VACANT HOUSE
☪ SUMMER HOME	☪ OCCUPIED SCHOOL
☪ VACANT SCHOOL	☪ CHURCH
☪ TOWN HALL	☪ CHEESE FACTORY
☪ CREAMERY	☪ FILLING STATION OR GARAGE
☪ STORE	☪ TAVERN
☪ HOTEL	☪ SAW MILL
☪ GRIST MILL	☪ FARM BLDG LESS THAN 100 FT. FROM CENTER OF ROAD
☪ LOGGING CAMP	☪ INDICATES NO OF HOUSES IN A GROUP
30 INDICATES THE NUMBER OF FEET BUILDING IS LOCATED FROM CENTER OF ROAD	

WISCONSIN STATE PLANNING BOARD - WPA. COOPERATING

WISCONSIN LAND ECONOMIC INVENTORY DIVISION

ONE MILE
- STATE CAPITOL - MADISON WISCONSIN

1945 Bordner Survey Legend

Appendix D:

Historic Aerial Photographs



Site Boundary



1937 Aerial



1980 Aerial - August



1981 Aerial - June



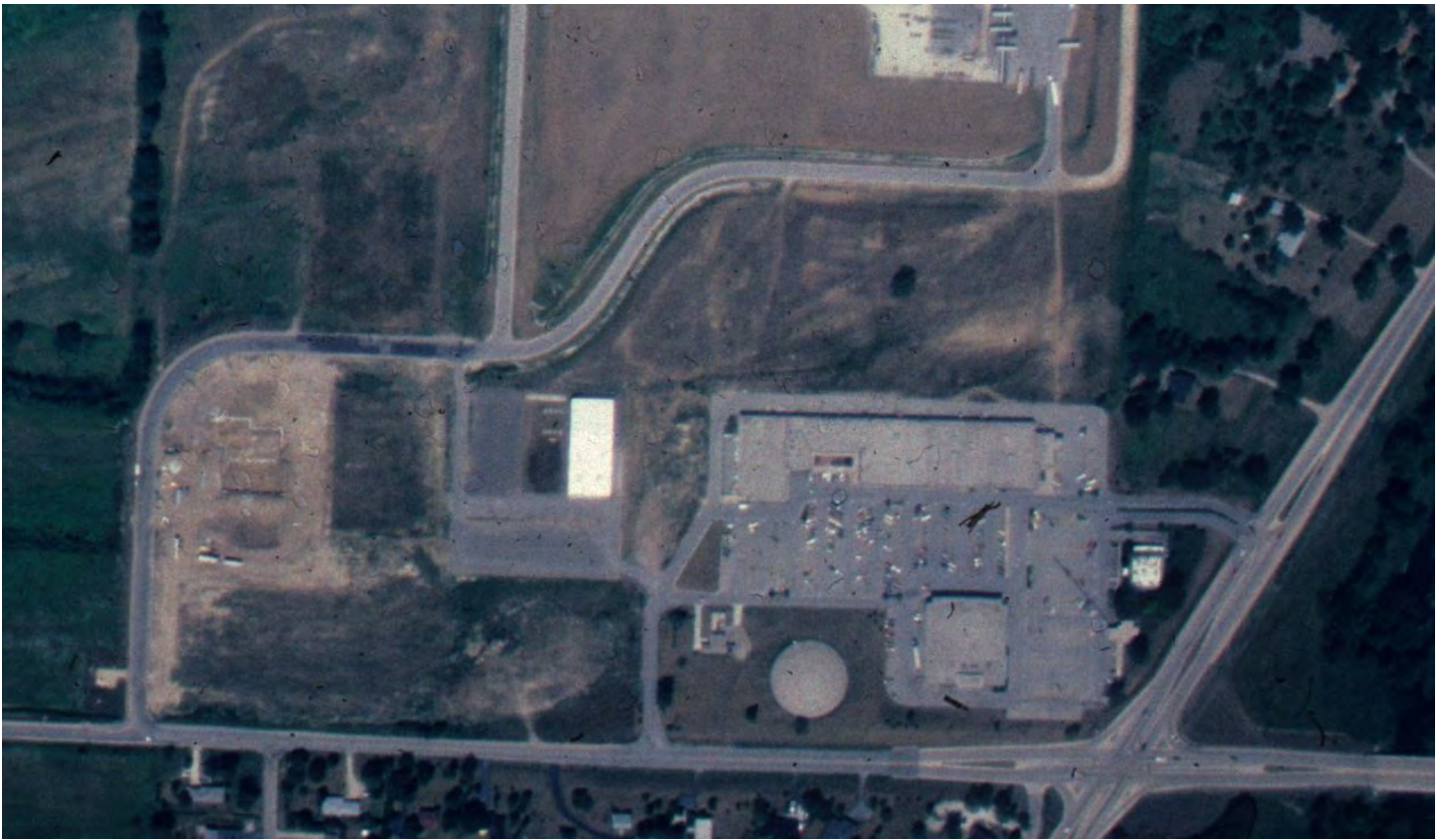
1982 Aerial - July



1983 Aerial - July



1984 Aerial - July



1985 Aerial - July



1986 Aerial - August



1987 Aerial - September



1988 Aerial - July



1989 Aerial - July



1990 Aerial - July



1991 Aerial - August



1992 Aerial - August



1993 Aerial



1994 Aerial



1995 Aerial - June



1996 Aerial - August



1997 Aerial - June



1998 Aerial - June



1999 Aerial - June



2000 Aerial - June



2001 Aerial - June



2002 Aerial



2003 Aerial - June



2004 Aerial - August



2005 Aerial



2006 Aerial



2007 Aerial



2008 Aerial



2010 Aerial



2011 Aerial



2014 Aerial



2015 Aerial



2017 Aerial



2018 Aerial

Appendix E:

NRCS County Soil Survey Report



United States
Department of
Agriculture

NRCS

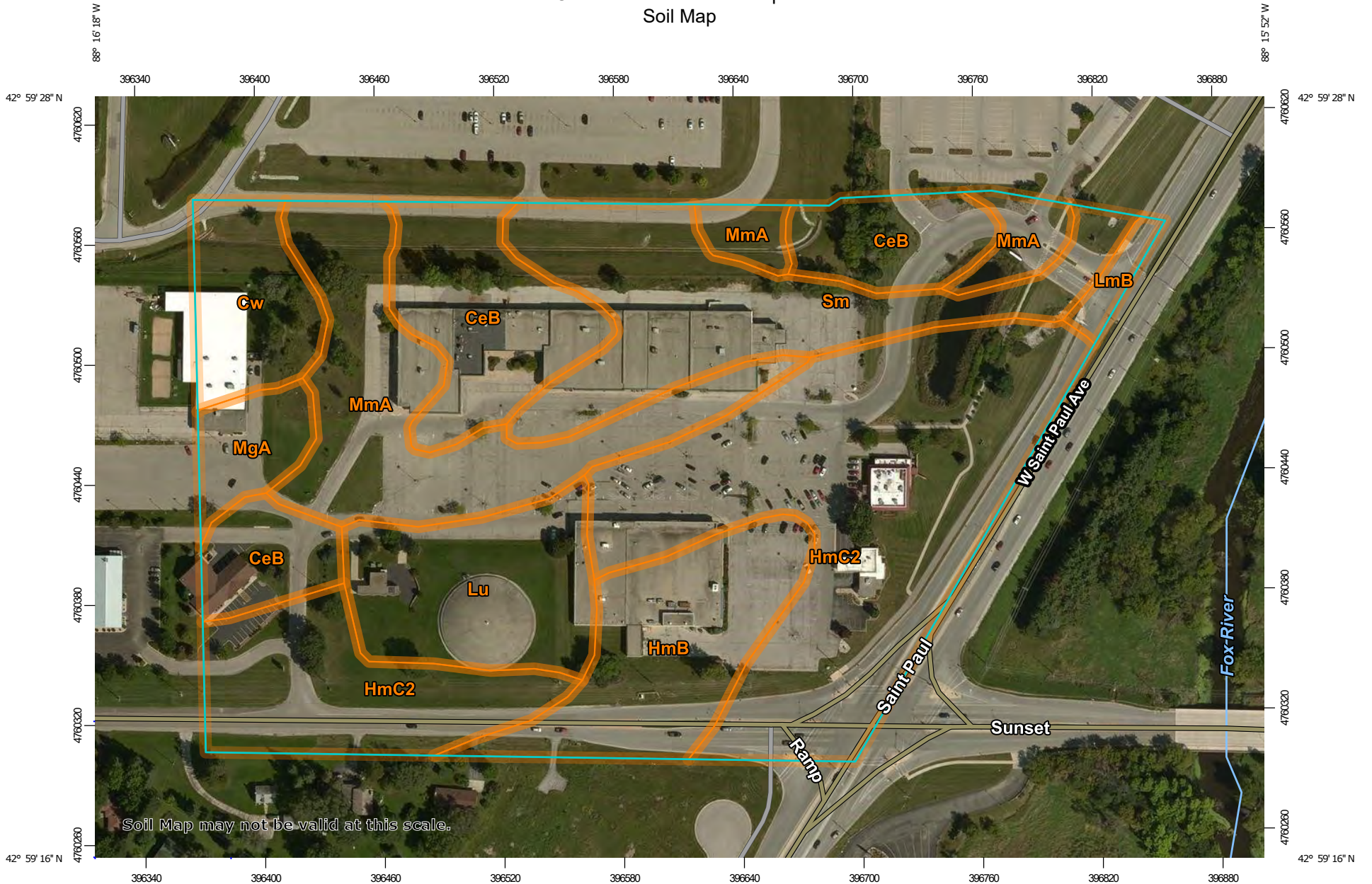
Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

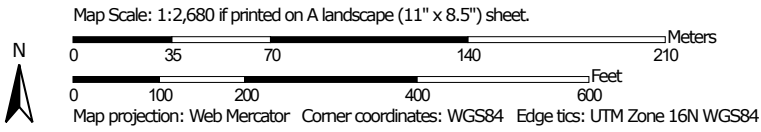
Custom Soil Resource Report for Milwaukee and Waukesha Counties, Wisconsin



Custom Soil Resource Report Soil Map



Soil Map may not be valid at this scale.



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin
 Survey Area Data: Version 15, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 7, 2014—Sep 22, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CeB	Casco loam, 2 to 6 percent slopes	4.0	14.0%
Cw	Colwood silt loam, 0 to 2 percent slopes	1.3	4.8%
HmB	Hochheim loam, 2 to 6 percent slopes	2.5	9.0%
HmC2	Hochheim loam, 6 to 12 percent slopes, eroded	9.2	32.7%
LmB	Lamartine silt loam, 0 to 3 percent slopes	0.2	0.9%
Lu	Loamy land	2.3	8.3%
MgA	Martinton silt loam, 1 to 3 percent slopes	0.7	2.6%
MmA	Matherton silt loam, 1 to 3 percent slopes	4.2	14.9%
Sm	Sebewa silt loam, 0 to 2 percent slopes	3.6	12.8%
Totals for Area of Interest		28.2	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the

Milwaukee and Waukesha Counties, Wisconsin

CeB—Casco loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2tjw7

Elevation: 800 to 1,140 feet

Mean annual precipitation: 29 to 35 inches

Mean annual air temperature: 43 to 48 degrees F

Frost-free period: 134 to 192 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Casco and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Casco

Setting

Landform: Outwash plains

Landform position (three-dimensional): Riser

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy alluvium over calcareous, stratified sandy and gravelly outwash

Typical profile

Ap - 0 to 8 inches: loam

Bt - 8 to 17 inches: clay loam

2C - 17 to 79 inches: stratified sand to gravel

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: 11 to 20 inches to strongly contrasting textural stratification

Natural drainage class: Somewhat excessively drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 25 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: B

Forage suitability group: Low AWC, adequately drained (G095BY002WI)

Hydric soil rating: No

Minor Components

Fox

Percent of map unit: 8 percent
Landform: Outwash plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Boyer

Percent of map unit: 7 percent
Landform: Outwash plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Cw—Colwood silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2tjx2
Elevation: 570 to 1,020 feet
Mean annual precipitation: 31 to 37 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 110 to 194 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Colwood and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colwood

Setting

Landform: Lakebeds (relict)
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy glaciolacustrine deposits over stratified silt and fine sand
glaciolacustrine deposits

Typical profile

Ap - 0 to 10 inches: silt loam
Bg - 10 to 24 inches: sandy clay loam
2Cg - 24 to 79 inches: stratified very fine sand to silt

Custom Soil Resource Report

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 20 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C/D
Forage suitability group: High AWC, high water table (G095BY007WI)
Hydric soil rating: Yes

Minor Components

Pella

Percent of map unit: 8 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Palms

Percent of map unit: 7 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

HmB—Hochheim loam, 2 to 6 percent slopes

Map Unit Setting

National map unit symbol: 2t03x
Elevation: 820 to 1,330 feet
Mean annual precipitation: 29 to 31 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 135 to 155 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hochheim and similar soils: 90 percent

Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hochheim

Setting

Landform: Drumlins

Landform position (two-dimensional): Summit, shoulder

Landform position (three-dimensional): Crest, side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Loamy till and/or calcareous, dense loamy till

Typical profile

Ap - 0 to 9 inches: loam

Bt - 9 to 17 inches: clay loam

C - 17 to 33 inches: gravelly loam

Cd - 33 to 79 inches: gravelly loam

Properties and qualities

Slope: 2 to 6 percent

Depth to restrictive feature: 20 to 40 inches to densic material

Natural drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 60 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D

Forage suitability group: Mod AWC, adequately drained (G095BY005WI)

Hydric soil rating: No

Minor Components

Theresa

Percent of map unit: 7 percent

Landform: Drumlins

Landform position (two-dimensional): Summit, backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Concave

Across-slope shape: Linear

Hydric soil rating: No

Lamartine

Percent of map unit: 3 percent

Landform: Drumlins

Custom Soil Resource Report

Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

HmC2—Hochheim loam, 6 to 12 percent slopes, eroded

Map Unit Setting

National map unit symbol: 2t03r
Elevation: 900 to 1,340 feet
Mean annual precipitation: 31 to 33 inches
Mean annual air temperature: 43 to 46 degrees F
Frost-free period: 135 to 175 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Hochheim, eroded, and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hochheim, Eroded

Setting

Landform: Drumlins
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy till and/or calcareous, dense loamy till

Typical profile

Ap - 0 to 7 inches: loam
Bt - 7 to 16 inches: clay loam
C - 16 to 33 inches: gravelly sandy loam
Cd - 33 to 79 inches: gravelly sandy loam

Properties and qualities

Slope: 6 to 12 percent
Depth to restrictive feature: 20 to 40 inches to densic material
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 60 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 4.4 inches)

Custom Soil Resource Report

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: D

Forage suitability group: Mod AWC, adequately drained (G095BY005WI)

Hydric soil rating: No

Minor Components

Theresa

Percent of map unit: 5 percent

Landform: Drumlins

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Hochheim

Percent of map unit: 5 percent

Landform: Drumlins

Landform position (two-dimensional): Backslope, shoulder

Landform position (three-dimensional): Side slope, head slope

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

LmB—Lamartine silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2t043

Elevation: 590 to 1,140 feet

Mean annual precipitation: 29 to 35 inches

Mean annual air temperature: 37 to 46 degrees F

Frost-free period: 135 to 170 days

Farmland classification: Prime farmland if drained

Map Unit Composition

Lamartine and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lamartine

Setting

Landform: Interdrumlins

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Linear

Custom Soil Resource Report

Parent material: Loess over loamy till

Typical profile

Ap - 0 to 8 inches: silt loam

Bt1 - 8 to 20 inches: silty clay loam

2Bt2 - 20 to 28 inches: clay loam

2C - 28 to 79 inches: gravelly sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Natural drainage class: Somewhat poorly drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: About 12 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum in profile: 30 percent

Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water storage in profile: Moderate (about 8.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Forage suitability group: High AWC, high water table (G095BY007WI)

Hydric soil rating: No

Minor Components

Pella

Percent of map unit: 8 percent

Landform: Drainageways

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Ossian

Percent of map unit: 7 percent

Landform: Depressions

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Lu—Loamy land

Map Unit Setting

National map unit symbol: g94q
Elevation: 670 to 1,100 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 37 to 55 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Not prime farmland

Map Unit Composition

Loamy land and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Loamy Land

Setting

Parent material: Loamy mine spoil or earthy fill

Typical profile

H1 - 0 to 10 inches: loam

Properties and qualities

Slope: 1 to 12 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 12 to 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Hydric soil rating: No

Minor Components

Pella

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: Yes

MgA—Martinton silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: g94y
Elevation: 670 to 1,100 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 37 to 55 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Martinton and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Martinton

Setting

Landform: Lakebeds (relict), beach terraces
Landform position (three-dimensional): Riser
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Calcareous silty and clayey lacustrine deposits

Typical profile

Ap,A - 0 to 11 inches: silt loam
AB,Btg,Bt1-2 - 11 to 35 inches: silty clay loam
CB,C - 35 to 60 inches: stratified sandy loam to silty clay

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 0.57 in/hr)
Depth to water table: About 12 to 36 inches
Frequency of flooding: None
Frequency of ponding: Occasional
Calcium carbonate, maximum in profile: 30 percent
Available water storage in profile: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Forage suitability group: High AWC, high water table (G095BY007WI)
Hydric soil rating: No

Minor Components

Montgomery

Percent of map unit: 7 percent
Landform: Depressions
Hydric soil rating: Yes

Saylesville

Percent of map unit: 3 percent
Landform: Lakebeds (relict)
Hydric soil rating: No

MmA—Matherton silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: g950
Elevation: 670 to 1,100 feet
Mean annual precipitation: 28 to 36 inches
Mean annual air temperature: 37 to 55 degrees F
Frost-free period: 135 to 170 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Matherton and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Matherton

Setting

Landform: Outwash plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy glaciofluvial deposits over stratified sandy and gravelly outwash

Typical profile

A,E - 0 to 11 inches: silt loam
EBg,Btg,Bt - 11 to 35 inches: sandy clay loam
2Cg - 35 to 60 inches: Error

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None

Custom Soil Resource Report

Frequency of ponding: Occasional
Calcium carbonate, maximum in profile: 25 percent
Available water storage in profile: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Forage suitability group: Mod AWC, high water table (G095BY004WI)
Hydric soil rating: No

Minor Components

Sebewa

Percent of map unit: 7 percent
Landform: Depressions
Hydric soil rating: Yes

Fox

Percent of map unit: 3 percent
Landform: Outwash plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Sm—Sebewa silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2szfk
Elevation: 780 to 1,140 feet
Mean annual precipitation: 29 to 35 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 124 to 180 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Sebewa and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sebewa

Setting

Landform: Depressions
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Loamy outwash over sandy and gravelly outwash

Custom Soil Resource Report

Typical profile

Ap - 0 to 11 inches: silt loam
Btg - 11 to 27 inches: clay loam
2Cg - 27 to 79 inches: coarse sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 24 to 30 inches to strongly contrasting textural stratification
Natural drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 25 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Hydric soil rating: Yes

Minor Components

Adrian

Percent of map unit: 6 percent
Landform: Lakebeds (relict)
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Ionia

Percent of map unit: 3 percent
Landform: Rises
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf
Down-slope shape: Concave
Across-slope shape: Linear
Hydric soil rating: No

Fox

Percent of map unit: 1 percent
Landform: Rises
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Custom Soil Resource Report

Federal Register. February, 28, 2012. Hydric soils of the United States.
 Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.
 Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.
 Soil Survey Staff. 2010. Keys to soil taxonomy. 11th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.
 Vasilas, L.M., G.W. Hurt, and C.V. Noble, editors. Version 7.0, 2010. Field indicators of hydric soils in the United States.

Report—Hydric Rating by Map Unit (WI)

Hydric Rating by Map Unit (WI)—Milwaukee and Waukesha Counties, Wisconsin				
Map Unit Symbol	Map Unit Name	Hydric Percent of Map Unit	Hydric Category	Landform Hydric Minor Components
CeB	Casco loam, 2 to 6 percent slopes	0	WI Nonhydric	—
Cw	Colwood silt loam, 0 to 2 percent slopes	100	WI Hydric	Depressions
HmB	Hochheim loam, 2 to 6 percent slopes	0	WI Nonhydric	—
HmC2	Hochheim loam, 6 to 12 percent slopes, eroded	0	WI Nonhydric	—
LmB	Lamartine silt loam, 0 to 3 percent slopes	15	WI Predominantly Nonhydric	Drainageways
Lu	Loamy land	10	WI Predominantly Nonhydric	Depressions
MgA	Martinton silt loam, 1 to 3 percent slopes	7	WI Predominantly Nonhydric	Depressions
MmA	Matherton silt loam, 1 to 3 percent slopes	7	WI Predominantly Nonhydric	Depressions
Sm	Sebewa silt loam, 0 to 2 percent slopes	96	WI Predominantly Hydric	Lakebeds (relict)

Hydric Soil List - All Components

This table lists the map unit components and their hydric status in the survey area. This list can help in planning land uses; however, onsite investigation is recommended to determine the hydric soils on a specific site (National Research Council, 1995; Hurt and others, 2002).

The three essential characteristics of wetlands are hydrophytic vegetation, hydric soils, and wetland hydrology (Cowardin and others, 1979; U.S. Army Corps of Engineers, 1987; National Research Council, 1995; Tiner, 1985). Criteria for all of the characteristics must be met for areas to be identified as wetlands. Undrained hydric soils that have natural vegetation should support a dominant population of

Custom Soil Resource Report

Report—Hydric Soil List - All Components

Hydric Soil List - All Components—WI602-Milwaukee and Waukesha Counties, Wisconsin					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
CeB: Casco loam, 2 to 6 percent slopes	Casco	80-90	Outwash plains	No	—
	Fox	5-11	Outwash plains	No	—
	Boyer	5-9	Outwash plains	No	—
Cw: Colwood silt loam, 0 to 2 percent slopes	Colwood	80-90	Lakebeds (relict)	Yes	2,3
	Pella	5-10	Drainageways	Yes	2,3
	Palms	5-10	Depressions	Yes	1,3
HmB: Hochheim loam, 2 to 6 percent slopes	Hochheim	85-92	Drumlins	No	—
	Theresa	5-8	Drumlins	No	—
	Lamartine	3-7	Drumlins	No	—
HmC2: Hochheim loam, 6 to 12 percent slopes, eroded	Hochheim-Eroded	85-92	Drumlins	No	—
	Theresa	4-8	Drumlins	No	—
	Hochheim	4-7	Drumlins	No	—
LmB: Lamartine silt loam, 0 to 3 percent slopes	Lamartine	80-91	Interdrumlins	No	—
	Pella	6-11	Drainageways	Yes	2,3
	Ossian	3-9	Depressions	Yes	2,3
Lu: Loamy land	Loamy land	90	—	No	—
	Pella	10	Depressions	Yes	2
MgA: Martinton silt loam, 1 to 3 percent slopes	Martinton	90	Lakebeds (relict), beach terraces	No	—
	Montgomery	7	Depressions	Yes	2,3
	Saylesville	3	Lakebeds (relict)	No	—
MmA: Matherton silt loam, 1 to 3 percent slopes	Matherton	90	Outwash plains	No	—
	Sebewa	7	Depressions	Yes	2,3
	Fox	3	Outwash plains	No	—
Sm: Sebewa silt loam, 0 to 2 percent slopes	Sebewa	80-95	Depressions	Yes	2,3
	Adrian	3-12	Lakebeds (relict)	Yes	1,3
	Ionia	1-5	Rises	No	—
	Fox	0-3	Rises	No	—

Custom Soil Resource Report

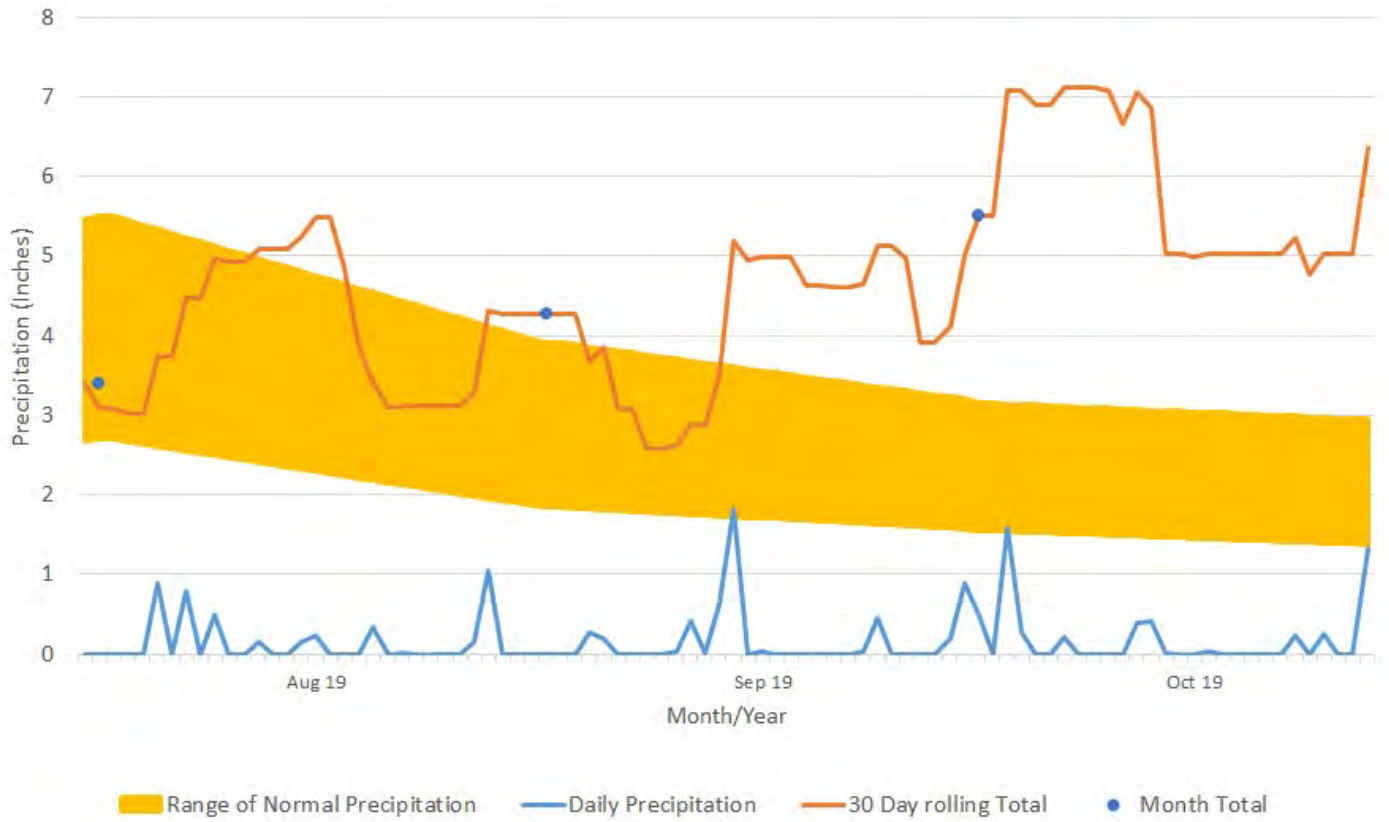
Hydric Soils—Milwaukee and Waukesha Counties, Wisconsin				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
Cw—Colwood silt loam, 0 to 2 percent slopes				
	Colwood	85	Lakebeds (relict)	2, 3
	Pella	8	Drainageways	2, 3
LmB—Lamartine silt loam, 0 to 3 percent slopes	Palms	7	Depressions	1, 3
	Pella	8	Drainageways	2, 3
Lu—Loamy land	Ossian	7	Depressions	2, 3
	Pella	10	Depressions	2
MgA—Martinton silt loam, 1 to 3 percent slopes				
	Montgomery	7	Depressions	2, 3
MmA—Matherton silt loam, 1 to 3 percent slopes				
	Sebewa	7	Depressions	2, 3
Sm—Sebewa silt loam, 0 to 2 percent slopes				
	Sebewa	90	Depressions	2, 3
	Adrian	6	Lakebeds (relict)	1, 3

Appendix F:

Precipitation Information



90 Day Antecedent Precipitation Rolling Total
Waukesha County, Wisconsin
Evergreen Consultants Project No. WKS19-008-01



**NRCS method - Rainfall Documentation Worksheet Hydrology Tools for Wetland Determination
NRCS Engineering Field Handbook Chapter 19**

Date	10/27/2019	Landowner/Project	WKS19-008-01
Weather Station	Waukesha 1.6 NW	State	Wisconsin
County	Waukesha County	Growing Season	yes
Photo/obs Date	10/28/2019	Soil Name	

shaded cells are locked or calculated	Long-term rainfall statistics (from WETS table or State Climatology Office)								
	Month	30% chance <	30% chance >	Precip	Condition Dry, Wet, Normal	Condition Value	Month Weight Value	Product of Previous 2 Columns	
	1st Prior Month*	October	1.55	3.16	4.78	W	3	3	9
	2nd Prior Month*	September	1.84	3.91	5.50	W	3	2	6
3rd Prior Month*	August	2.69	5.50	4.28	N	2	1	2	
							Sum	17	

*compared to photo/observation date

Note: If sum is	
6 - 9	prior period has been drier than normal
10 - 14	prior period has been normal
15 - 18	prior period has been wetter than normal

Condition value:
Dry =1
Normal =2
Wet =3

Conclusions: prior period has been wetter than normal

WETS Station: WAUKESHA, WI			
Requested years: 1981 - 2010			
Month	30% chance precip less than	30% chance precip more than	A
Jan	0.83	1.71	
Feb	0.84	1.72	
Mar	1.04	2.12	
Apr	2.51	4	
May	2.55	4.34	
Jun	3.02	5.7	
Jul	2.57	4.59	
Aug	2.69	5.5	
Sep	1.84	3.91	
Oct	1.55	3.16	
Nov	1.35	2.93	
Dec	1.12	2.16	

STATION	NAME	DATE	PRCP	S
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/1/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/2/2019	0.11	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/3/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/4/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/5/2019	0.2	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/6/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/7/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/8/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/9/2019	0.06	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/10/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/11/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/12/2019	0.06	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/13/2019	0.77	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/14/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/15/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/16/2019	0.03	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/17/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/18/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/19/2019	0.22	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/20/2019	0.26	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/21/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/22/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/23/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/24/2019	0.03	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/25/2019	0.49	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/26/2019	0.08	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/27/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/28/2019	0.93	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/29/2019	1.05	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	6/30/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/1/2019	0.31	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/2/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/3/2019	0.06	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/4/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/5/2019	0.18	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/6/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/7/2019	0.05	

STATION	NAME	DATE	PRCP
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/8/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/9/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/10/2019	0.03
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/11/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/12/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/13/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/14/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/15/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/16/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/17/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/18/2019	0.63
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/19/2019	0.98
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/20/2019	0.79
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/21/2019	0.33
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/22/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/23/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/24/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/25/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/26/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/27/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/28/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/29/2019	0.03
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/30/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	7/31/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/1/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/2/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/3/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/4/2019	0.89
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/5/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/6/2019	0.79
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/7/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/8/2019	0.49
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/9/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/10/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/11/2019	0.16
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/12/2019	0
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/13/2019	0

STATION	NAME	DATE	PRCP	S
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/14/2019	0.15	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/15/2019	0.24	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/16/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/17/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/18/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/19/2019	0.34	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/20/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/21/2019	0.02	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/22/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/23/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/24/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/25/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/26/2019	0.16	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/27/2019	1.04	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/28/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/29/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/30/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	8/31/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/1/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/2/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/3/2019	0.28	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/4/2019	0.19	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/5/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/6/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/7/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/8/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/9/2019	0.04	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/10/2019	0.41	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/11/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/12/2019	0.62	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/13/2019	1.83	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/14/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/15/2019	0.04	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/16/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/17/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/18/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/19/2019	0	

STATION	NAME	DATE	PRCP	\$
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/20/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/21/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/22/2019	0.04	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/23/2019	0.46	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/24/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/25/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/26/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/27/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/28/2019	0.2	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/29/2019	0.89	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	9/30/2019	0.49	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/1/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/2/2019	1.58	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/3/2019	0.28	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/4/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/5/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/6/2019	0.22	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/7/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/8/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/9/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/10/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/11/2019	0.4	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/12/2019	0.42	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/13/2019	0.01	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/14/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/15/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/16/2019	0.04	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/17/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/18/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/19/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/20/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/21/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/22/2019	0.24	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/23/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/24/2019	0.26	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/25/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/26/2019	0	
US1WIWK0054	WAUKESHA 1.6 NW, WI US	10/27/2019	1.33	

Appendix G:

Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: WKS19-008-01 City/County: City of Waukesha/ Waukesha County Sampling Date: 28-Oct-19
 Applicant/Owner: Excel Engineering State: WI Sampling Point: T1-A
 Investigator(s): Benjamin L LaCount, Chad M Fradette Section, Township, Range: S. 08 T. 06N R. 19E
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope: 1.5 % / 0.9 °
 Subregion (LRR or MLRA): LRR K Lat.: 42.99045 Long.: -88.26851 Datum: NAD83
 Soil Map Unit Name: Sm- Sebewa silt loam, 0 to 2 percent slopes 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 <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Grassy strip between pavement and fence behind retail mall. Area graded and filled in the past, storm sewer buried through this area.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: Antecedent precipitation has been above normal prior to the Site visit.	

VEGETATION - Use scientific names of plants

Sampling Point: T1-A

Tree Stratum (Plot size: Linear 20'x100')	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
1. <u><i>Ulmus pumila</i></u>	10	<input checked="" type="checkbox"/>	FACU	Number of Dominant Species That are OBL, FACW, or FAC:	<u>1</u> (A)
2. _____	0	<input type="checkbox"/>	_____	Total Number of Dominant Species Across All Strata:	<u>6</u> (B)
3. _____	0	<input type="checkbox"/>	_____	Percent of dominant Species That Are OBL, FACW, or FAC:	<u>16.7%</u> (A/B)
4. _____	0	<input type="checkbox"/>	_____		
5. _____	0	<input type="checkbox"/>	_____		
6. _____	0	<input type="checkbox"/>	_____		
7. _____	0	<input type="checkbox"/>	_____		
Sapling/Shrub Stratum (Plot size: Linear 20'x50')				Prevalence Index worksheet:	
				Total % Cover of:	Multiply by:
1. <u><i>Rhamnus cathartica</i></u>	5	<input checked="" type="checkbox"/>	FAC	OBL species	<u>0</u> x 1 = <u>0</u>
2. _____	0	<input type="checkbox"/>	_____	FACW species	<u>0</u> x 2 = <u>0</u>
3. _____	0	<input type="checkbox"/>	_____	FAC species	<u>5</u> x 3 = <u>15</u>
4. _____	0	<input type="checkbox"/>	_____	FACU species	<u>115</u> x 4 = <u>460</u>
5. _____	0	<input type="checkbox"/>	_____	UPL species	<u>30</u> x 5 = <u>150</u>
6. _____	0	<input type="checkbox"/>	_____	Column Totals:	<u>150</u> (A) <u>625</u> (B)
7. _____	0	<input type="checkbox"/>	_____	Prevalence Index = B/A = <u>4.167</u>	
Herb Stratum (Plot size: 5 ft radius)				Hydrophytic Vegetation Indicators:	
				<input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is > 50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)	
1. <u><i>Schedonorus arundinaceus</i></u>	60	<input checked="" type="checkbox"/>	FACU	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
2. <u><i>Sonchus arvensis</i></u>	20	<input checked="" type="checkbox"/>	FACU	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.	
3. <u><i>Medicago sativa</i></u>	20	<input checked="" type="checkbox"/>	UPL		
4. <u><i>Elymus repens</i></u>	20	<input checked="" type="checkbox"/>	FACU		
5. <u><i>Daucus carota</i></u>	10	<input type="checkbox"/>	UPL		
6. <u><i>Ambrosia artemisiifolia</i></u>	5	<input type="checkbox"/>	FACU		
7. _____	0	<input type="checkbox"/>	_____		
8. _____	0	<input type="checkbox"/>	_____		
9. _____	0	<input type="checkbox"/>	_____		
10. _____	0	<input type="checkbox"/>	_____		
11. _____	0	<input type="checkbox"/>	_____		
12. _____	0	<input type="checkbox"/>	_____		
Woody Vine Stratum (Plot size: Linear 20'x100')					
1. _____	0	<input type="checkbox"/>	_____		
2. _____	0	<input type="checkbox"/>	_____		
3. _____	0	<input type="checkbox"/>	_____		
4. _____	0	<input type="checkbox"/>	_____		
0 = Total Cover					

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

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: WKS19-008-01 City/County: City of Waukesha/ Waukesha County Sampling Date: 28-Oct-19
 Applicant/Owner: Excel Engineering State: WI Sampling Point: T2-A
 Investigator(s): Benjamin L LaCount, Chad M Fradette Section, Township, Range: S. 08 T. 06N R. 19E
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope: 1.5 % / 0.9 °
 Subregion (LRR or MLRA): LRR K Lat.: 42.99040 Long.: -88.27063 Datum: NAD83
 Soil Map Unit Name: Cw- Colwood silt loam, 0 to 2 percent slopes 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 <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Shrubby area that has been partially cleared this year. Area has been filled and graded in the past.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Antecedent precipitation has been above normal prior to the Site visit.	

VEGETATION - Use scientific names of plants

Sampling Point: T2-A

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>57.1%</u> (A/B)
1. <u><i>Ulmus pumila</i></u>	30	<input checked="" type="checkbox"/>	FACU	
2. <u><i>Ulmus americana</i></u>	20	<input checked="" type="checkbox"/>	FACW	
3. <u><i>Populus deltoides</i></u>	20	<input checked="" type="checkbox"/>	FAC	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
70 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>20</u> x 2 = <u>40</u> FAC species <u>135</u> x 3 = <u>405</u> FACU species <u>65</u> x 4 = <u>260</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>220</u> (A) <u>705</u> (B) Prevalence Index = B/A = <u>3.205</u>
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				
1. <u><i>Rhamnus cathartica</i></u>	80	<input checked="" type="checkbox"/>	FAC	
2. <u><i>Cornus racemosa</i></u>	5	<input type="checkbox"/>	FAC	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
85 = Total Cover				
Herb Stratum (Plot size: <u>5 ft radius</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is > 50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u><i>Allaria petiolata</i></u>	20	<input checked="" type="checkbox"/>	FACU	
2. <u><i>Solidago altissima</i></u>	15	<input checked="" type="checkbox"/>	FACU	
3. <u><i>Rhamnus cathartica</i></u>	30	<input checked="" type="checkbox"/>	FAC	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
11. _____	0	<input type="checkbox"/>	_____	
12. _____	0	<input type="checkbox"/>	_____	
65 = Total Cover				
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				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.
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				
				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>

Remarks: (Include photo numbers here or on a separate sheet.)
 Reviewing remnant vegetation.

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: WKS19-008-01 City/County: City of Waukesha/ Waukesha County Sampling Date: 28-Oct-19
 Applicant/Owner: Excel Engineering State: WI Sampling Point: T3-A
 Investigator(s): Benjamin L LaCount, Chad M Fradette Section, Township, Range: S. 08 T. 06N R. 19E
 Landform (hillslope, terrace, etc.): depression Local relief (concave, convex, none): concave Slope: 0.5 % / 0.3 °
 Subregion (LRR or MLRA): LRR K Lat.: 42.98977 Long.: -88.27040 Datum: NAD83
 Soil Map Unit Name: MmA- Matherton silt loam, 1 to 3 percent slopes 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 <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Area with small depressions within fill soil holding water from recent rains.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>3</u> Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Antecedent precipitation has been above normal prior to the Site visit. *3 inches of surface water from recent rain impounded in small depressions. Parking lot drains to this area. Area in fill soil, lacks hydric indicators and has no vegetation. Ignoring surfae water as a normal indicator.	

VEGETATION - Use scientific names of plants

Sampling Point: T3-A

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30 ft radius</u>)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>90</u> x 4 = <u>360</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>90</u> (A) <u>360</u> (B) Prevalence Index = B/A = <u>4.000</u>
Sapling/Shrub Stratum (Plot size: <u>15 ft radius</u>)				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
Herb Stratum (Plot size: <u>5 ft radius</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is > 50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <i>Poa pratensis</i>	80	<input checked="" type="checkbox"/>	FACU	
2. <i>Elymus repens</i>	5	<input type="checkbox"/>	FACU	
3. <i>Plantago major</i>	5	<input type="checkbox"/>	FACU	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
11. _____	0	<input type="checkbox"/>	_____	
12. _____	0	<input type="checkbox"/>	_____	
Woody Vine Stratum (Plot size: <u>30 ft radius</u>)				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.
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				Hydrophytic Vegetation Present? Yes <input type="radio"/> No <input checked="" type="radio"/>

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

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: WKS19-008-01 City/County: City of Waukesha/ Waukesha County Sampling Date: 28-Oct-19
 Applicant/Owner: Excel Engineering State: WI Sampling Point: T4-A
 Investigator(s): Benjamin L LaCount, Chad M Fradette Section, Township, Range: S. 08 T. 06N R. 19E
 Landform (hillslope, terrace, etc.): ditch Local relief (concave, convex, none): concave Slope: 0.0 % / 0.0 °
 Subregion (LRR or MLRA): LRR K Lat.: 42.99045 Long.: -88.26710 Datum: NAD83
 Soil Map Unit Name: Sm- Sebewa silt loam, 0 to 2 percent slopes 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 <input checked="" type="radio"/> No <input type="radio"/> Hydric Soil Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="radio"/> No <input type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Ditch. Culvert empties into ditch.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (minimum of 2 required)
<input checked="" type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input checked="" type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input checked="" type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>4</u> Water Table Present? Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>0</u> Saturation Present? (includes capillary fringe) Yes <input checked="" type="radio"/> No <input type="radio"/> Depth (inches): <u>0</u>	
Wetland Hydrology Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: Antecedent precipitation has been above normal prior to the Site visit.	

VEGETATION - Use scientific names of plants

Sampling Point: T4-A

	Absolute % Cover	Dominant Species?	Indicator Status		
Tree Stratum (Plot size: <u>Linear 5'x50'</u>)					
1. _____	0	<input type="checkbox"/>	_____	Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)	
2. _____	0	<input type="checkbox"/>	_____		
3. _____	0	<input type="checkbox"/>	_____		
4. _____	0	<input type="checkbox"/>	_____		
5. _____	0	<input type="checkbox"/>	_____		
6. _____	0	<input type="checkbox"/>	_____		
7. _____	0	<input type="checkbox"/>	_____		
0 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>10</u> x 1 = <u>10</u> FACW species <u>100</u> x 2 = <u>200</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>110</u> (A) <u>210</u> (B) Prevalence Index = B/A = <u>1.909</u>	
Sapling/Shrub Stratum (Plot size: <u>Linear 5'x50'</u>)					
1. _____	0	<input type="checkbox"/>	_____		
2. _____	0	<input type="checkbox"/>	_____		
3. _____	0	<input type="checkbox"/>	_____		
4. _____	0	<input type="checkbox"/>	_____		
5. _____	0	<input type="checkbox"/>	_____		
6. _____	0	<input type="checkbox"/>	_____		
7. _____	0	<input type="checkbox"/>	_____		
0 = Total Cover				Hydrophytic Vegetation Indicators: <input checked="" type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> Dominance Test is > 50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0¹ <input type="checkbox"/> Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Herb Stratum (Plot size: <u>Linear 5'x20'</u>)					
1. <i>Phalaris arundinacea</i>	100	<input checked="" type="checkbox"/>	FACW		
2. <i>Typha x glauca</i>	10	<input type="checkbox"/>	OBL		
3. _____	0	<input type="checkbox"/>	_____		
4. _____	0	<input type="checkbox"/>	_____		
5. _____	0	<input type="checkbox"/>	_____		
6. _____	0	<input type="checkbox"/>	_____		
7. _____	0	<input type="checkbox"/>	_____		
8. _____	0	<input type="checkbox"/>	_____		
9. _____	0	<input type="checkbox"/>	_____		
10. _____	0	<input type="checkbox"/>	_____		
11. _____	0	<input type="checkbox"/>	_____		
12. _____	0	<input type="checkbox"/>	_____		
110 = Total Cover				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.	
Woody Vine Stratum (Plot size: <u>Linear 5'x50'</u>)					
1. _____	0	<input type="checkbox"/>	_____		
2. _____	0	<input type="checkbox"/>	_____		
3. _____	0	<input type="checkbox"/>	_____		
4. _____	0	<input type="checkbox"/>	_____		
0 = Total Cover				Hydrophytic Vegetation Present? Yes <input checked="" type="radio"/> No <input type="radio"/>	

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

Adjacent vegetation across fence.

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

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: WKS19-008-01 City/County: City of Waukesha/ Waukesha County Sampling Date: 28-Oct-19
 Applicant/Owner: Excel Engineering State: WI Sampling Point: T4-B
 Investigator(s): Benjamin L LaCount, Chad M Fradette Section, Township, Range: S. 08 T. 06N R. 19E
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex Slope: 5.0 % / 2.9 °
 Subregion (LRR or MLRA): LRR K Lat.: 42.99046 Long.: -88.26718 Datum: NAD83
 Soil Map Unit Name: Sm- Sebewa silt loam, 0 to 2 percent slopes 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 <input type="radio"/> No <input checked="" type="radio"/> Hydric Soil Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	Is the Sampled Area within a Wetland? Yes <input type="radio"/> No <input checked="" type="radio"/>
Remarks: (Explain alternative procedures here or in a separate report.) Hillslope with some mowed areas and some fallow area. Reviewed vegetation in fallow areas.	

Hydrology

Wetland Hydrology Indicators: Primary Indicators (minimum of one required; check all that apply) <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3) <input type="checkbox"/> Drift deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of 2 required) <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-neutral Test (D5)
Field Observations: Surface Water Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Water Table Present? Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes <input type="radio"/> No <input checked="" type="radio"/> Depth (inches): _____ Wetland Hydrology Present? Yes <input type="radio"/> No <input checked="" type="radio"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks: Antecedent precipitation has been above normal prior to the Site visit.	

VEGETATION - Use scientific names of plants

Sampling Point: T4-B

Tree Stratum (Plot size: 30 ft radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u><i>Ulmus pumila</i></u>	30	<input checked="" type="checkbox"/>	FACU	Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>7</u> (B) Percent of dominant Species That Are OBL, FACW, or FAC: <u>28.6%</u> (A/B)
2. <u><i>Quercus macrocarpa</i></u>	30	<input checked="" type="checkbox"/>	FACU	
3. <u><i>Fraxinus americana</i></u>	5	<input type="checkbox"/>	FACU	
4. _____	0	<input type="checkbox"/>	_____	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
65 = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>30</u> x 2 = <u>60</u> FAC species <u>10</u> x 3 = <u>30</u> FACU species <u>137</u> x 4 = <u>548</u> UPL species <u>50</u> x 5 = <u>250</u> Column Totals: <u>227</u> (A) <u>888</u> (B) Prevalence Index = B/A = <u>3.912</u>
22 = Total Cover				
Sapling/Shrub Stratum (Plot size: 15 ft radius)				
1. <u><i>Fraxinus americana</i></u>	2	<input type="checkbox"/>	FACU	
2. <u><i>Rhamnus cathartica</i></u>	10	<input checked="" type="checkbox"/>	FAC	
3. <u><i>Cornus alba</i></u>	5	<input checked="" type="checkbox"/>	FACW	
4. <u><i>Ulmus pumila</i></u>	5	<input checked="" type="checkbox"/>	FACU	
5. _____	0	<input type="checkbox"/>	_____	
6. _____	0	<input type="checkbox"/>	_____	
7. _____	0	<input type="checkbox"/>	_____	
22 = Total Cover				
Herb Stratum (Plot size: 5 ft radius)				
1. <u><i>Solidago gigantea</i></u>	5	<input type="checkbox"/>	FACW	
2. <u><i>Solidago altissima</i></u>	5	<input type="checkbox"/>	FACU	
3. <u><i>Bromus inermis</i></u>	30	<input checked="" type="checkbox"/>	UPL	
4. <u><i>Phalaris arundinacea</i></u>	20	<input type="checkbox"/>	FACW	
5. <u><i>Daucus carota</i></u>	20	<input type="checkbox"/>	UPL	
6. <u><i>Poa pratensis</i></u>	60	<input checked="" type="checkbox"/>	FACU	
7. _____	0	<input type="checkbox"/>	_____	
8. _____	0	<input type="checkbox"/>	_____	
9. _____	0	<input type="checkbox"/>	_____	
10. _____	0	<input type="checkbox"/>	_____	
11. _____	0	<input type="checkbox"/>	_____	
12. _____	0	<input type="checkbox"/>	_____	
140 = Total Cover				
Woody Vine Stratum (Plot size: 30 ft radius)				
1. _____	0	<input type="checkbox"/>	_____	
2. _____	0	<input type="checkbox"/>	_____	
3. _____	0	<input type="checkbox"/>	_____	
4. _____	0	<input type="checkbox"/>	_____	
0 = Total Cover				
Hydrophytic Vegetation Indicators: <input type="checkbox"/> Rapid Test for Hydrophytic Vegetation <input type="checkbox"/> Dominance Test is > 50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> 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 <input type="radio"/> No <input checked="" type="radio"/>				

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

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

