## 300-3000 ITEM 3

## SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N 1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

TELEPHONE (262) 547-6721 FAX (262) 547-1103

Serving the Counties of:

KENOSHA MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA



June 9, 2020

Mr. Lloyd S. Cole Village Administrator Village of Bloomfield P.O. Box 609 Pell Lake, WI 53157

Re: SEWRPC No. CA-501-43

Dear Mr. Cole:

This will respond to your email message of October 16, 2019, requesting that the Commission staff conduct a field inspection of the McKay Park property. The subject property is located southwest of the intersection of Lake Geneva Highway and Manor Terrace in parts of the Southeast one-quarter of U.S. Public Land Survey Section 16, Township 1 North, Range 18 East, Village of Bloomfield, Walworth County, Wisconsin. The purpose of the field inspection was to determine if the wetland boundaries originally field-staked by Commission staff on May 9, 2002, and subsequently revised on November 7, 2013, are still valid.

Pursuant to your request, Commission staff conducted a field inspection of the subject property on October 28, 2019. Comparing the 2013 wetland boundary survey with current conditions, Commission staff determined that the extent of wetland on the property was mostly unchanged. However, the extent of wetland on the northeast portion of the property was slightly different. Accordingly, Commission staff restaked the wetland boundaries in that area. A copy of the wetland delineation report is attached for your reference.

Should you have any questions regarding this information, please do not hesitate to contact Mr. Christopher J. Jors, Principal Specialist-Biologist (cjors@sewrpc.org or 262-953-3246).

Sincerely,

Kevin J. Muhs, PE, AICP Executive Director

KJM/TMS/CJJ/md #253859 – CA501-43 McKay Park Improvements 2019 Visit Letter

Enclosure (#254047)

Mr. Lloyd S. Cole June 9, 2020 Page 2

cc: Ms. Naomi Rauch, Kapur, Inc. (w/enclosure by email)

Mr. Greg Governatori, PE, Kapur, Inc. (w/enclosure by email)

Atty. Brian Schuk, Schuk Law, LLC (w/enclosure by email)

Mr. Marty Dillenburg, Wisconsin Department of Natural Resources (w/enclosure by email)

Ms. Kara Brooks, Wisconsin Department of Natural Resources (w/enclosure by email)

Ms. Rachel Nuetzel, U.S. Army Corps of Engineers (w/enclosure)

### WETLAND DELINEATION REPORT

# MCKAY PARK PROPOSED PARK IMPROVEMENTS

SE Quarter, Section 16, T1N, R18E
VILLAGE OF BLOOMFIELD
WALWORTH COUNTY,
WISCONSIN

Lead Investigator:
Christopher J. Jors
Principal Specialist-Biologist
Southeastern Wisconsin Regional Planning Commission
W239 N1812 Rockwood Drive
P.O. Box 1607
Waukesha, WI 53187-1607
(262)547-6721
cjors@sewrpc.org

Report Completion: May 21, 2020

#### WETLAND DELINEATION REPORT OVERVIEW

(Based upon WDNR WETLAND Delineation Confirmation Request Check List)

#### INTRODUCTION

- Who requested the delineation Lloyd Cole, Village Administrator, Village of Bloomfield
- Why the delineation was undertaken Proposed Park Improvements
- Date the field work was completed October 28, 2019
- Who conducted field work Christopher Jors, Jennifer Dietl, and Shane Heyel
- Statement of Qualifications
- GIS Support Bradley Subotnik

#### **METHODS**

- Description of Methods
- Sources Reviewed
  - Walworth County Topographic Mapping Exhibit 1
  - Wisconsin Department of Natural Resources (WDNR) Surface Water Data Viewer Wisconsin
     Wetland Inventory (WWI) Mapping Exhibit 2
  - Natural Resources Conservation Service (NRCS) Soil Survey and Federal Emergency
     Management Agency (FEMA) Floodplain Mapping Exhibit 3
  - National Agriculture Imagery Program & SEWRPC Historical Aerial Photographs Exhibits 4A to 4K (2017, 2015, 2010, 2005, 2000, 1990, 1980, 1975, 1963, 1956, and 1940)
  - o SEWRPC Sanitary Sewer Service Area Mapping Exhibit 5
  - o Advance Identification (ADID) Wetland Mapping Not applicable (N/A)
  - o NRCS Draft Wetland Inventory Map Exhibit 6
  - o NAIP & Farm Service Agency (FSA) Images N/A
- Description of any site specific agency guidance (site meetings, etc.) None

#### **RESULTS AND DISCUSSION**

- Antecedent hydrologic condition analysis Wetter than normal
- Previous wetland delineation mapping SEWRPC: 2013 and 2002
- Existing environmental mapping (WWI mapping, Soil survey, etc.)
- Amount and types of wetland in the project area
- Wetland/upland boundary explanation
- Disturbed and problematic areas encountered
- Other Considerations

#### LITERATURE CITED

Wetland Delineation Map - Exhibit 7

Vegetation Survey, Wetland Delineation Data Forms, and Site Photos

- Preliminary Vegetation Survey Exhibit 8
- Wetland Determination Data Forms NC/NE Region Exhibit 9
- Site Photos Exhibit 10

#### INTRODUCTION

This wetland delineation report responds to an October 16, 2019, email request from Lloyd Cole, Village Administrator with the Village of Bloomfield, to determine if any changes have occurred to the wetland boundaries at McKay Park that were field-staked by SEWRPC in 2002 and 2013. McKay Park, bordered by Lake Geneva Highway to the north, Manor Terrace to the east, and Sunset Drive to the south, is located in the Southeast one-quarter of U.S. Public Land Survey Section 16, Township 1 North, Range 18 East, Village of Bloomfield, Walworth County, Wisconsin.

#### **Statement of Qualifications**

Lead Investigator: Christopher Jors, Principal Specialist-Biologist, has worked at SEWRPC since 1993, and has been part of the wetland delineation team since 1994. He received a Bachelor's degree in Biological Aspects of Conservation from the University of Wisconsin – Milwaukee in 1992. Prior to working at SEWRPC, Chris worked at the UWM Field Station at the Cedarburg Bog in Saukville, WI, where he learned methods of sampling wetland plant communities within the Bog. Chris has attended various wetland training workshops including the UW-La Crosse Critical Methods Workshop on February 19, 2019; the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015; a Wisconsin Department of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014; and a U.S. Army Corps of Engineers Workshop on the Midwest Supplement to the 1987 Wetland Delineation Manual on February 3, 2009.

Jennifer Dietl, Senior Specialist-Biologist, earned Bachelor's degrees in Biology and Environmental Science from Carroll University in 1992. Jennifer has worked at SEWRPC from 1992 to 1997 and from 2006 to the present conducting wetland delineations, primary environmental corridor delineations, and vegetation surveys. In between years of service at SEWRPC, she worked for the Wisconsin Department of Transportation – Green Bay as an LTE Environmental Analysis and Review Specialist and the WDNR – Green Bay as an LTE Hydrologist. Jennifer attended the UW-La Crosse Critical Methods Workshop on February 19, 2019; the UW-La Crosse Hydric Soils Workshop on July 19-21, 2017; the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015; and a WDNR Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014.

**Shane Heyel**, Specialist-Biologist, joined the wetland delineation team at SEWRPC in June 2016. He holds a Bachelor's degree in Land Use Planning from the University of Wisconsin-Stevens Point and a Master's degree in Hydrology & Water Quality from Lancaster University (United Kingdom). Shane worked for the Wisconsin Department of Natural Resources for seven years, including four years regulating waterways and wetlands. With Atkins Limited, U.K. from 2005-2009, he delivered pollution and flood risk assessments to the English Highways Agency and modeled sewer networks to report flood solution options for major British water companies. As an independent consultant in Wisconsin, Shane helped develop a site restoration plan for a proposed wetland mitigation bank. His recent wetland training includes UW-La Crosse Workshops in Basic Wetland Delineation (August 2015), Advanced Wetland Delineation (August (2016), Basic Plant ID (July 2017), Hydric Soils (July 2018), and Critical Methods (February 2019).

#### **METHODS**

#### **Description of Methods**

The wetland boundary determinations were based upon the criteria and methodologies set forth in the 1987 *Corps of Engineers Wetlands Delineation Manual*; the January, 2012, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0); the March 4, 2015, *Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources*, and the State of Wisconsin 2016 Wetland Plant List.

#### **Sources Reviewed**

Prior to conducting the field inspection, Commission staff reviewed the following data sources that were available and applicable to the subject property:

- Walworth County's topographic mapping (Exhibit 1)
- WDNR Surface Water Data Viewer WWI mapping (Exhibit 2)
- NRCS soil survey and FEMA floodplain mapping (Exhibit 3)
- NAIP Images and SEWRPC Historical Aerial Photography (Exhibit 4A-4J)
- SEWRPC Sanitary Sewer Service Area mapping (Exhibit 5)
- NRCS Draft Wetland Inventory mapping (Exhibit 6)
- Precipitation data from the NRCS "WETS" tables

#### **RESULTS AND DISCUSSION**

Christopher Jors, as lead field investigator and report author, supervised and approved all aspects of the wetland delineation in the field, data compilation and analysis, and preparation of this report. Wetland boundaries originally staked by SEWRPC on May 9, 2002, and subsequently revised on November 7, 2013, were reviewed for changes on October 28, 2019. This involved walking the surveyed wetland boundary that was overlaid onto aerial photography on a Samsung Tablet with Global Positioning System (GPS) capabilities. Soils, vegetation, and hydrology were recorded at fourteen sample sites within the project area. It was determined that the 2013 wetland boundaries were still valid in the western and southern portions of the project area. However, the extent of wetland in the northeastern part of the project area had changed somewhat. The changes appear to be related to park improvements conducted by the Village. This included areas of filling and grading observed during the late 2013 field inspection. The areal extent of the filled areas was approximated in the wetland delineation report for the 2013 visit, but not field-staked at that time. In addition, Kapur, Inc., an engineering consultant for the Village, indicated that a drain tile was installed at McKay Park in 2016. The drain tile begins at a pair of catch basins located in the northcentral part of the park and then drains in a southwesterly direction. It eventually terminates about three-quarters of a mile southwest of the park in a wetland that drains into the West Branch of Nippersink Creek. Village staff indicated that they conducted these park improvements in the wetland under the Wisconsin Department of Natural Resources Wetland General Permit for Recreational Development (Permit Number WDNR-GP4-2013) issued on July 19, 2013, and in effect until July 19, 2018. An aerial image from the National Agriculture Imagery Program (see Exhibit 4A) dated September 23, 2017, shows the activity at McKay Park at that time. These activities included staging of construction equipment and materials on and adjacent to a gravel pad in the northeastern portion of the park, recent grading in northcentral part, mowing in the north part of the park, and the location of the drain tile, which is especially apparent through the southwest part of the project area where trees were removed.

Sample sites in the area of disturbance indicated that a portion of the gravel parking lot and access driveway no longer met the parameters for wetland. An "island" of upland in the parking lot area and the eastern wetland boundary near the driveway access from Manor Terrace were marked with orange wire flags and ribbon to reflect changes to the wetland. Kapur, Inc., surveyed the new wetland boundary markers and prepared a wetland delineation survey exhibit showing the still-valid wetland boundaries from 2013 as well as the changed wetland boundaries staked in 2019 in the northeastern portion of the property. Commission staff utilized a sub-meter-accuracy GPS device to record the sample site locations. The results of the wetland delineation field inspection for the project area are shown on Exhibit 7, which includes the surveyed 2013 and 2019 wetland boundaries and the GPS-located sample sites.

#### **Antecedent Hydrologic Conditions**

Climatological data presented in the following table were taken from the nearest WETS station(s) with relevant data for the 1981-2010 climate period and the monthly precipitation summaries for the antecedent

90-day period. In this case, the closest station providing the historical data set was the Burlington, WI, Station, while the 90-day observed data were available from the Pell Lake, WI, Station.

October 28, 2019	Month	3 years in 10 Less Than	Normal	3 years in 10 More Than	Observed Precip.	Condition (dry, wet, normal)	Condition Value	Month Weight Value	Product of Previous Two Columns
1st prior month	Oct.	1.39	2.54	3.08	6.39	Wet	3	3	9
2nd prior month	Sept.	2.07	3.23	3.85	9.93	Wet	3	2	6
3rd prior month	August	2.67	3.89	4.58	4.09	Normal	2	1	2
									<b>Sum</b> = 17

If Sum is	
6 - 9	drier than normal
10 - 14	normal
15 - 18	wetter than normal

Conclusion: Wetter-than-Normal

#### **Previous Wetland Delineation Mapping**

At the request of the Kenneth Monroe, former Town Chairman with Town of Bloomfield, SEWRPC originally delineated the wetland boundaries at McKay Park on May 9, 2002. Jeffrey Kimps, RLS, subsequently surveyed the SEWRPC wetland boundary markers. SEWRPC staff returned to McKay Park on November 7, 2013, for the purpose of reviewing the wetland boundary delineated in 2002. It was determined that the wetland boundary had changed in several areas. Those changed areas were re-staked by SEWRPC staff and subsequently surveyed by Mr. Kimps. Mr. Kimps prepared a revised wetland boundary survey to reflect still-valid 2002 wetland boundaries and re-staked 2013 wetland boundary segments. This revised wetland boundary survey from 2013 was used to determine if changes had occurred as of 2019.

#### **Existing Environmental Mapping**

The Walworth County topographic mapping (Exhibit 1) depicts a project area that is relatively level, with slightly higher elevations to the west and south. Fill piles are evident in the northcentral part of the project area. Elevations immediately north of Lake Geneva Highway are similar to elevations within the project area, indicating that these lowlands on both sides of Lake Geneva Highway were part of the same wetland basin prior to construction of the roadway. Natural elevations within the project area range from a high of 879 feet above the National Geodetic Vertical Datum of 1929 (NGVD 29) along the western edge to a low of 875 feet in the northcentral, northeast, and east-central parts. One of the temporary fill piles in the northcentral part of the project area had an elevation of 883 feet when these contour lines were mapped in 2015.

The WDNR Surface Water Data Viewer (WWI) mapping (Exhibit 2) reflects the SEWRPC wetland delineation findings from 2013. Most of the wetland consists of emergent-wet meadow (E2K) wetland, with small pockets of forested/scrub-shrub (T3/S3K) wetland in the northwest corner and forested/emergent-wet meadow (T3/E2K) in the center of the project area. WWI mapping also includes the two areas of filled emergent-wet meadow wetland (\$E2K) in the northeast and north-central parts of the project area that were approximated in the wetland delineation report for the 2013 fieldwork. Wetland indicators, shown as NRCS-mapped Drummer silt loam (Dt) and Matherton silt loam (MmA) soils, cover a substantial portion of the project area.

The NRCS Soil Survey map (Exhibit 3) shows the following soils in the project area:

Map Unit Name and Symbol	Slope (%)	Hydric Category	Hydric Percent of Map Unit	Hydric Minor Component, Percent, and Landform	Project Area (%)
Drummer silt loam, gravelly substratum (Dt)	0-2	Predominantly Hydric	95	Not applicable (N/A)	33.0
Fox silt loam (FsA)	0-2	Non-hydric	0	N/A	0.1
Matherton silt loam (MmA)	1-3	Predominantly Non- hydric	5	Sebewa, 3%, depressions; and Drummer – gravelly substratum, 2%, depressions	47.5
St. Charles silt loam, gravelly substratrum (SeA)	0-2	Non-hydric	0	N/A	19.4

Exhibit 3 also indicates that no FEMA-mapped one-percent-annual-probability floodplain is present within, or in close proximity to, the project area.

Historical aerial photos were reviewed going back to 1956. A National Agriculture Imagery Program image (2017), and SEWRPC Orthophotographs (2015, 2010, 2005, and 2000) and aerial photographs (1990, 1980, 1975, 1963, and 1956), were reviewed. While other images were available, they were of poor quality. The image review is summarized in the following table, and the images are attached (Exhibits 4A to 4J).

Year	Changes in Land Use Observed on Aerial Photography from 1956 to 2017
1940	The dominant land use in the general area is agriculture. The project area is comprised of cropland, part of a larger farm with cropland outside of the project area. Lake Geneva Highway is present but Manor Terrace and Sunset Drive have yet to be constructed.
1956	No significant changes noted.
1963	Residential subdivisions are under construction including new roads Manor Terrace and Sunset Drive to the east and south, respectively. A single residential lot has been built upon immediately west of the project area. The project area appears to be idle when this photo was taken.
1975	The project area continues to be idle. Wetness signatures are apparent in the north and east parts of the project area.
1980	A new residence has been built immediately southeast of the project area. Woody vegetation is occupying the west side of the project area.
1990	No significant changes noted.
2000	Trails have been established across the project area. A berm of fill material has been placed along the eastern edge of the project area.
2005	A boardwalk and two small shelters have been built in the eastern portion of the project area. The berm of fill noted in 2000 appears to have been spread out and trees planted in that area. The property immediately north of the project area is inundated. Three residential lots have been built upon just east of the project area.
2010	The extent of inundation has greatly increased on the property immediately north of the project area. Inundation is also apparent on the north end of the project area, particularly where mowing has occurred.
2015	Disturbances are apparent in the north part of the project area. These include extensive mowing, a driveway access from Manor Terrace and multiple fill piles placed in the northcentral part.
2017	Extensive grading has occurred in the northeastern part of the park where a staging area is apparent for construction equipment and materials. Mowing continues over much of northern part of the park. Installation of a drain tile is apparent in the western part of the park and is especially apparent where a corridor has been cleared of trees to the southwest.

SEWRPC Sanitary Sewer Service Area mapping (Exhibit 5) indicates the project area is entirely contained within the gross sanitary sewer service area for the Pell Lake Area. However, the northern portion of the project area is not identified as part of the "planned" sanitary sewer service area due to its designation as an isolated natural resource area primarily comprised of wetlands. Although such areas are isolated, they are at least five acres in size, and contain a variety of resource functions that include facilitating surface water drainage, maintaining pockets of natural resource features, and enhancing the movement of wildlife and protection of plant and animal diversity. INRAs are valuable ecological resources and relatively rare in Walworth County (comprise less than three percent of the land area within the County), and such sites are recommended to

be protected to the extent practicable pursuant to the 2019 Multi-Jurisdictional Comprehensive Plan Update for Walworth County.

NRCS draft wetland inventory mapping (Exhibit 6) indicates almost the entire parcel is not inventoried (NI), which is a typical designation for properties where farming ceased long ago. Land immediately north of the parcel, which lies at the approximately the same elevation, is labeled wetland (W).

#### Amount and Types of Wetland in the Project Area

One wetland plant community area (PCA) was identified and inventoried within the project area (Exhibit 7). A list of vascular plant species observed during the all three field inspections (2002, 2013, and 2019) was prepared for the PCA as well as plant community type(s), dominant plant species, disturbances, and any critical plant and animal species (Exhibit 8). The following table summarizes characteristics of the PCA:

PCA Number	Acreage	PCA Type(s)	Dominant Species	Critical Species
		Fresh (wet) meadow (partly degraded),	<u>Cornus racemosa</u> Gray dogwood	
1	6.5	shrub-carr, hardwood swamp, and atypical	Phalaris arundinacea Reed canary grass	None
		(mowed) wetland	Populus tremuloides Quaking aspen	

#### Wetland/Upland Boundary Explanation

Fourteen representative sample sites were identified within the project area. The Wetland Determination Data Forms, describing the findings at each sample site, are attached as Exhibit 9. The locations of the sample sites are shown on Exhibit 7. The wetland boundary was determined using breaks in topography, changes in vegetation composition, visual identification of wetland hydrology, and presence of hydric soils.

#### **Disturbed and Problematic Areas Encountered**

Sample site numbers 7, 8, and 12 were all determined to have "significantly disturbed" vegetation due to ongoing disturbance on that part of the property. Fill piles were evident on historical aerial photography and picked up on topography maps that were generated in 2015 (see Exhibit 1). Filled and graded areas were noted during the 2013 and 2019 field inspections. Finally, ongoing mowing was observed on historical aerial photography and during field inspections. All three sample sites (7, 8, and 12) were found to have both hydric soils and wetland hydrology. Therefore, while the vegetation at all three sample sites did not pass the dominance test or prevalence index indicators, problematic hydrophytic vegetation was determined to be present, leading to a finding that all three sample sites were in wetland.

#### **Other Considerations**

The nonagricultural performance standards set forth in Section NR 151.125 of the *Wisconsin Administrative Code* require establishment of a 75-foot impervious surface protective area to protect "highly susceptible" wetlands (fens, sedge meadows, ephemeral ponds, etc.). "Moderately susceptible" wetland types (USGS-mapped waterways and waterbodies, shrub-carr, floodplain forests, forested wetlands with early successional species, shallow marsh, and fresh (wet) meadow) should have a 50-foot impervious surface protective area. Degraded portions of wetlands with 90 percent or greater cover by non-native species (Reed canary grass, Narrow-leaved cattail, etc.) and farmed wetlands are considered "less susceptible," requiring establishment of a 10- to 30-foot setback depending on average width of the wetland. Stormwater management facilities that are designed, constructed, and maintained for conveyance or treatment purposes are not subject to protective area performance standards as indicated in the WDNR *Guidance for the Establishment of Protective Areas for Wetlands in Runoff Management Rules, Wisconsin Administrative Code NR 151*.

The portions of the wetland that consist of moderately susceptible fresh (wet) meadow, shrub-carr, or early successional hardwood swamp (See Sample Sites 1, 3, 5, 9, and 13) would typically be assigned a 50-foot

protective area setback. The disturbed portions of the wetland consisting of less susceptible degraded fresh (wet) meadow and atypical (mowed) wetland (See Sample Sites 7, 8, 10, and 12) are typically assigned a 10-to 30-foot protective area setback.

The designated protective area boundary is measured horizontally from the delineated wetland boundary to the closest impervious surface. The protective area requirements should be taken into consideration for any planned improvements within the project area. It is suggested that the property owner or their representative contact WDNR regarding approaches to meet the requirements.

Finally, it is noted that no Federal or State regulatory jurisdiction determinations relative to any wetland permits or certifications are made under this report.

#### LITERATURE CITED

Southeastern Wisconsin Regional Planning Commission website at maps.sewrpc.org/regionallandinfo/regionalmapping

SEWRPC CAPR No. 288, *A Multi-Jurisdictional Comprehensive Plan Update for Walworth County,* June 2019. (https://www.co.walworth.wi.us/DocumentCenter/View/1941/Walworth-County-Multi-Jurisdictional-Comprehensive-Plan-Update-PDF)

U.S. Army Corps of Engineers, 2016, State of Wisconsin Wetland Plant List.

U.S. Army Corps of Engineers, 2016, *Guidance for Offsite Hydrology/Wetland Determinations*, U.S. Army Corps of Engineers – St. Paul District, July 1, 2016.

U.S. Army Corps of Engineers, 2015, Special Public Notice: *Guidance for Submittal of Delineation Reports to the St. Paul District Corps of Engineers and the Wisconsin Department of Natural Resources*, U.S. Army Corps of Engineers – St. Paul District, March 2015.

U.S. Army Corps of Engineers, 2012, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0). U.S. Army Engineer Research and Development Center, January, 2012.

U.S. Army Corps of Engineers, 1987, U.S. Army Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1.

USDA, Natural Resources Conservation Service, Soil Survey Staff, Web Soil Survey. Available online at websoilsurvey.sc.egov.usda.gov/

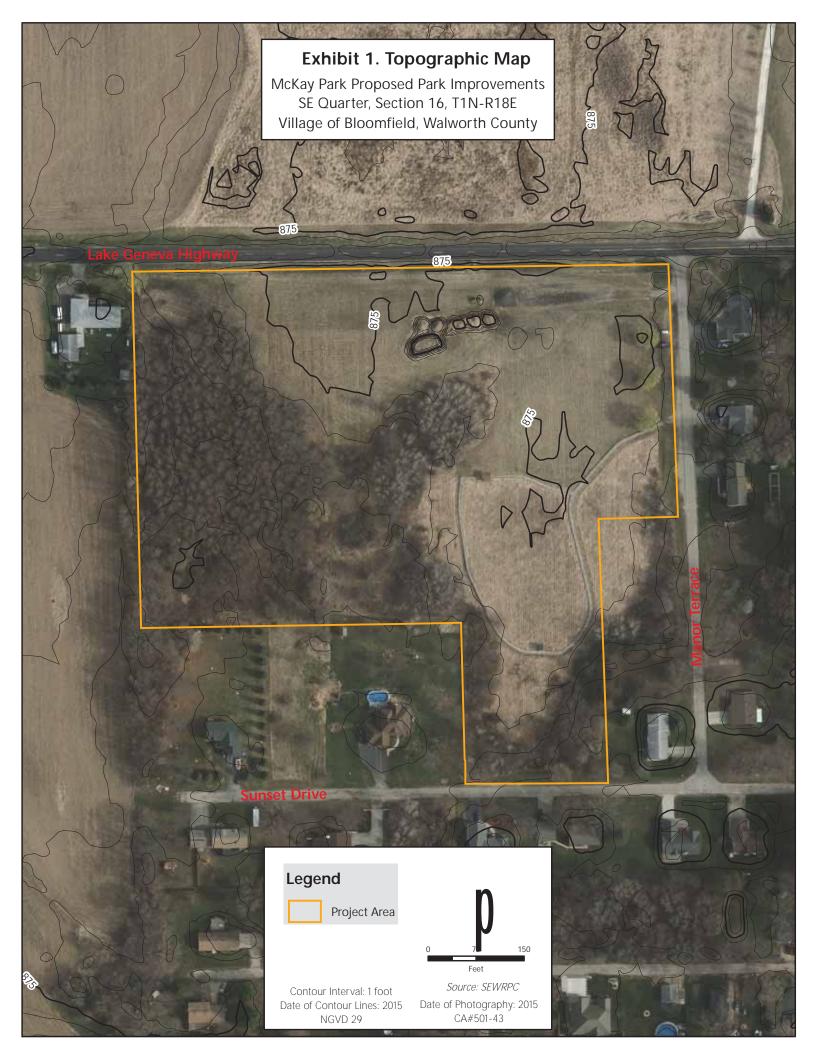
USDA, Natural Resources Conservation Service, 2016. *Field Indicators of Hydric Soils in the United States*, Version 8.0. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Committee for Hydric Soils. 2016.

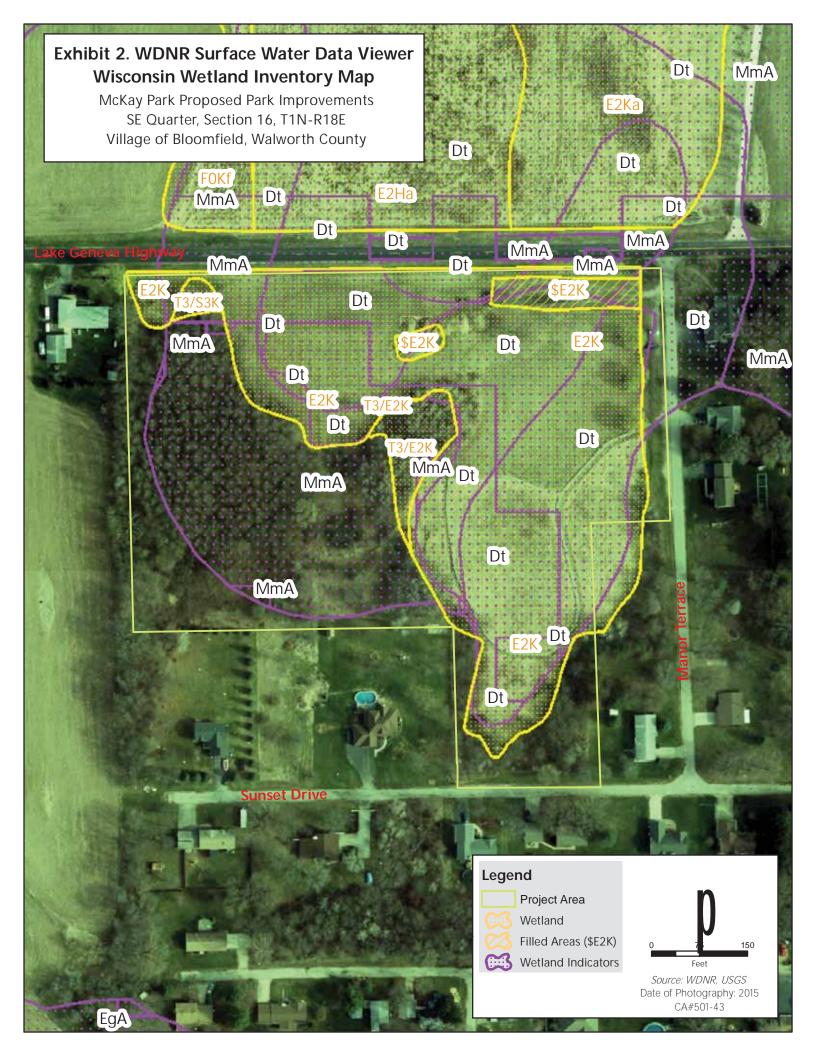
USDA, Natural Resources Conservation Service, 2010. *National Food Security Act Manual, Fifth Edition, Part 514.60*, November 2010.

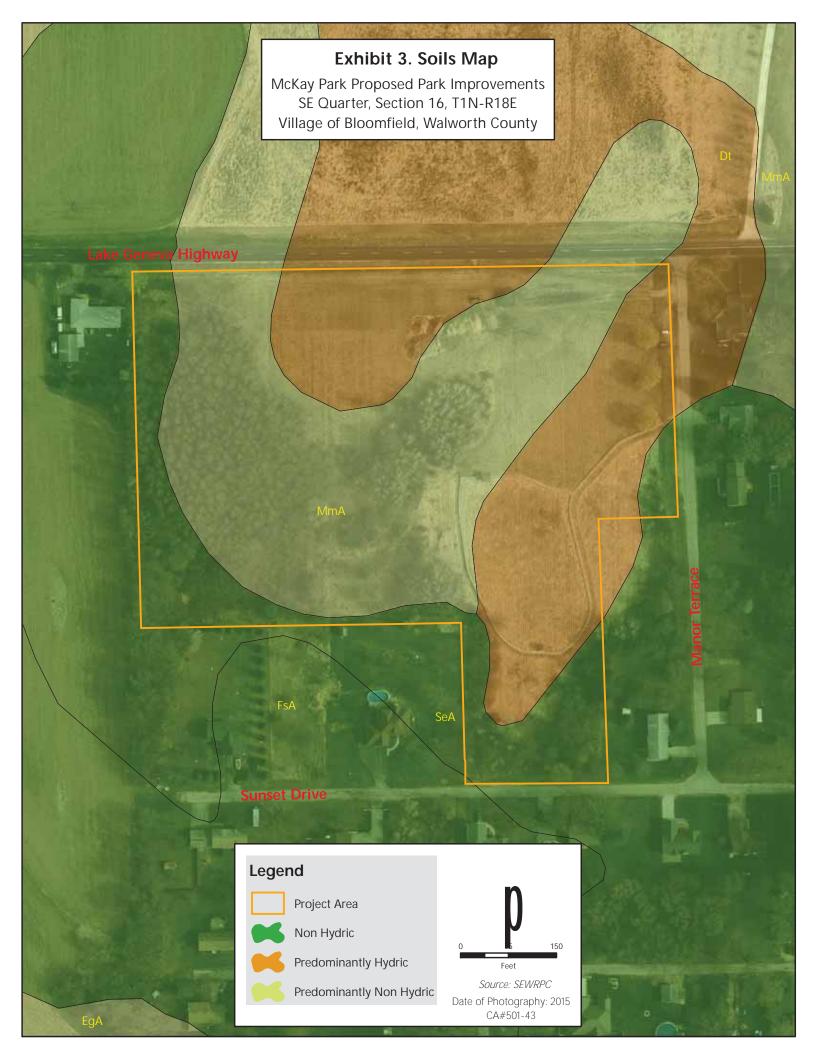
WDNR, Surface Water Data Viewer, website at dnrmaps.wi.gov/sl/?Viewer=SWDV

WDNR, 2015, Guidance for the Establishment of Protective Areas for Wetlands in Runoff Management Rules, Wisconsin Administrative Code NR 151, WDNR Bureau of Watershed Management Program Guidance, Storm Water Management Program, April 2015.

TMS/CJJ/JLD/STH/mid CA501-43 McKay Park Proposed Park Improvements 2019 - WD Report (00253836).DOCX 300-3000





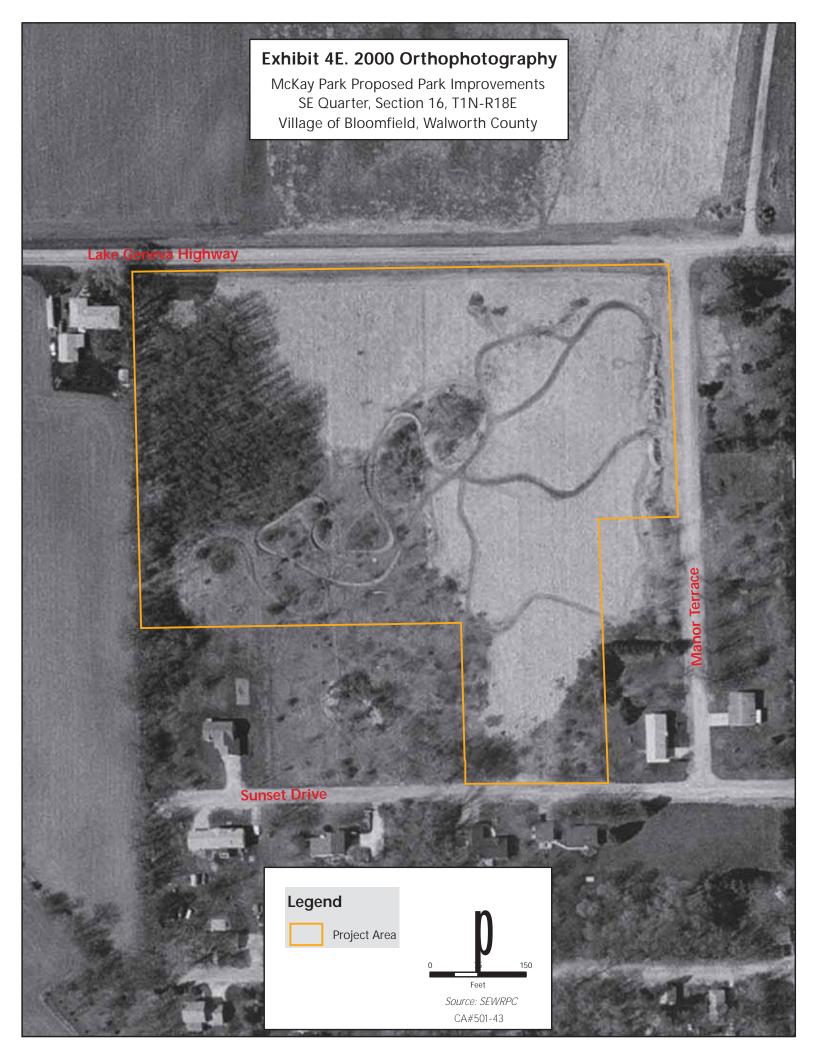












# Exhibit 4F. 1990 Aerial Photograph McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County Lake Geneva Highway Legend Project Area Source: SEWRPC CA#501-43

# Exhibit 4G. 1980 Aerial Photograph McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County Legend Project Area Source: SEWRPC CA#501-43

# Exhibit 4H. 1975 Aerial Photograph McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County Legend Project Area Source: SEWRPC CA#501-43

# Exhibit 41. 1963 Aerial Photograph McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County Lake Geneva Highway Legend Project Area Source: SEWRPC CA#501-43

# Exhibit 4J. 1956 Aerial Photograph McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County Lake Geneva Highway Legend Project Area Source: SEWRPC CA#501-43

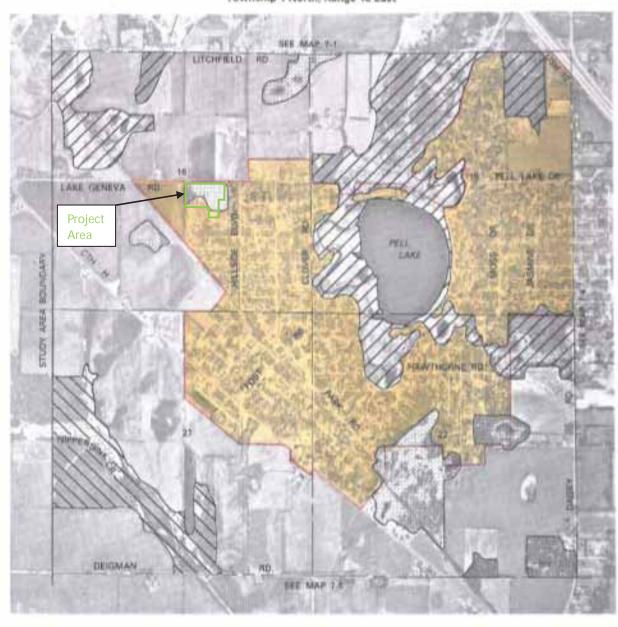


### **Exhibit 5. Sanitary Sewer Service Map**

McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County

# Map 7-3 ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE PELL LAKE AREA

U. S. Public Land Survey Sections 15, 16, 21, and 22 Township 1 North, Range 18 East

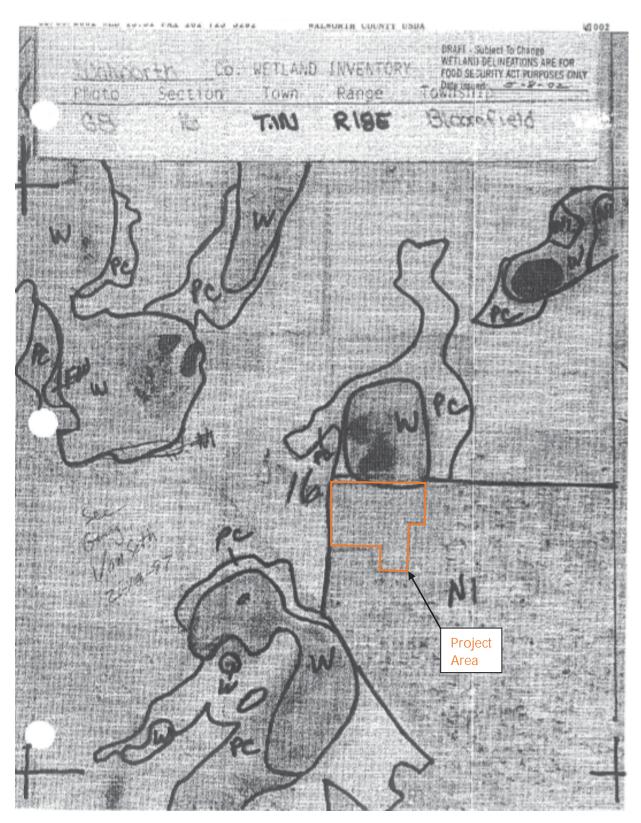


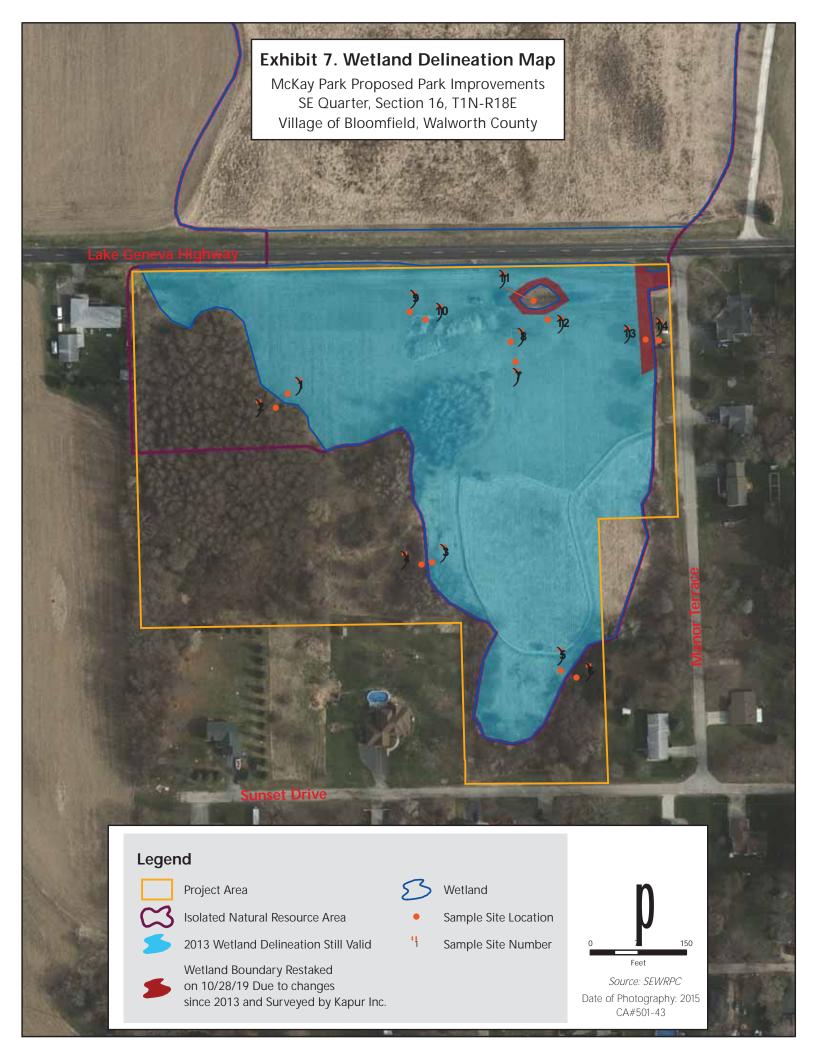




### **Exhibit 6. NRCS Draft Wetland Inventory Map**

McKay Park Proposed Park Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County





### **Exhibit 8. Preliminary Vegetation Survey**

McKay Park Proposed Park Improvements

Dates: October 28, 2019

November 7, 2013

May 9, 2002

Observers: Christopher J. Jors, Principal Biologist (2019, 2013, 2002)

Jennifer L. Dietl, Senior Biologist (2019)

Shane T. Heyel, Biologist (2019)

Donald M. Reed, PhD., Retired Chief Biologist (2002, 2013) Lawrence A. Leitner, Retired Principle Biologist (2002, 2013)

Daniel L. Carter, Former Principal Biologist (2013)

Southeastern Wisconsin Regional Planning Commission

Location: Village of Bloomfield in parts of the Southeast one-quarter of U.S. Public Land Survey

Section 16, Township 1 North, Range 18 East, Walworth County, Wisconsin.

Species List: Native Species

Co-dominant species

Acer negundo--Boxelder

Acer saccharinum -- Silver maple

<u>Calamagrostis</u> <u>canadensis</u>--Canada bluejoint

<u>Carex</u> <u>pellita</u>--Woolly sedge <u>Carex</u> <u>stricta</u>--Tussock sedge

Carex sp.--Sedge

<u>Cornus</u> <u>alba</u>--Red-osier dogwood <u>Cornus</u> <u>obliqua</u>--Silky dogwood <u>Cornus</u> <u>racemosa</u>--Gray dogwood

Epilobium coloratum -- Willow-herb

Euthamia graminifolia--Grass-leaved goldenrod

<u>Fragaria virginiana</u>--Wild strawberry <u>Geum canadense</u>--White avens <u>Juglans nigra</u>--Black walnut <u>Juncus dudleyi</u>--Dudley's rush <u>Juncus tenuis</u>--Path rush

Monarda fistulosa--Wild bergamot
Panicum dichotomiflorum--Knee grass
Persicaria amphibia--Water smartweed
Persicaria lapathifolia--Heart's-ease
Persicaria pensylvanica--Pinkweed
Plantago rugelii--Red-stalked plantain
Populus deltoides--Cottonwood

Populus tremuloides -- Quaking aspen

<u>Quercus</u> <u>macrocarpa</u>--Bur oak <u>Quercus</u> <u>rubra</u>--Northern red oak <u>Quercus</u> x <u>palustris</u>--Hybrid oak

#### Native Species cont.

Rubus allegheniensis -- Common blackberry

Rubus occidentalis -- Black raspberry

Rudbeckia hirta--Black-eyed Susan

Salix amygdaloides -- Peach-leaved willow

Salix discolor -- Pussy willow

Sambucus nigra--Elderberry

Senecio hieracifolius -- Fireweed

Solidago altissima -- Tall goldenrod

Solidago gigantea -- Giant goldenrod

Symphyotrichum pilosum--Frost aster

<u>Urtica</u> <u>dioica</u>--Stinging nettle

<u>Viburnum</u> <u>rafinesquianum</u>--Downy arrowwood

Vitis riparia -- Riverbank grape

#### **NON-Native species**

Alliaria petiolata--Garlic-mustard

Barbarea vulgaris--Yellow rocket

Catalpa speciosa--Catalpa

Cirsium arvense--Canada thistle

Cirsium vulgare -- Bull thistle

Daucus carota--Queen Anne's lace

Echinochloa crusqalli--Barnyard grass

Frangula alnus--Glossy buckthorn

Hypericum perforatum--Common St. John's wort

Lonicera X bella--Hybrid honeysuckle

#### Phalaris arundinacea -- Reed canary grass

Picea sp.--Spruce (planted)

Plantago major--Common plantain

Poa compressa--Canada bluegrass

Poa pratensis--Kentucky bluegrass

Rhamnus cathartica--Common buckthorn

Robinia pseudoacacia -- Black locust

Rosa multiflora--Multiflora rose

Rumex crispus--Curly dock

Salix x pendulina--Willow

Schedonorus arundinaceus--Tall fescue

Setaria pumila -- Yellow foxtail

Solanum dulcamara -- Deadly nightshade

Taraxacum officinale--Common dandelion

<u>Taxus</u> <u>cuspidata</u>--Japanese yew (planted)

<u>Trifolium</u> <u>pratense</u>--Red clover

<u>Ulmus</u> <u>pumila</u>--Siberian elm

<u>Viburnum</u> <u>opulus</u>--European highbush-cranberry

Total number of plant species: 68

Number of alien, or non-native, plant species: 28 (41 percent)

This approximately 6.5-acre wetland plant community area consists of fresh (wet) meadow (partly degraded), shrub-carr, hardwood swamp, and atypical (mowed) wetland. Disturbances to the plant community area include dumping, filling, mowing, siltation and sedimentation due to stormwater runoff from adjacent lands, and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

SVY4589 CA501-43

#### Exhibit 9.

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: McKay Park Proposed Park Imp Applicant/Owner: Investigator(s): Chris Jors, Jen Dietl, and Sh Landform (hillslope, terrace, etc.): depression Subregion (LRR or MLRA): LRR K Soil Map Unit Name: Matherton silt loam (Mr Are climatic/hydrologic conditions on the site Are Vegetation, Soil, or Hydrology Are Vegetation, Soil, or Hydrology SUMMARY OF FINDINGS — Attach Hydrophytic Vegetation Present?	ane Heyel: SEWRPC  n  mA)  typical for this time of year?  ' significantly disturbe  ' naturally problemation  a site map showing sa	d? Are "Normal Circumstants? (If, needed, explain any ampling point locations,  Is the Sampled Area	State: WI  Quarter, Section 16, T1N- none): concave	Slope (%): 1-3%  sification: E2K  No   t features, etc.
Hydric Soils Present?		within a Wetland?	⊠ Yes	□No
Remarks: (Explain alternative procedures h	nere or in a separate report.)	If yes, optional Wetland S 90-day antecedent precipita		al.
HYDROLOGY				
Wetland Hydrology Indicators:			Secondary Indicate	ors (minimum of two required)
Primary Indicators (minimum of one is requi	red; check all that apply)		☐ Surface Soil (	Cracks (B6)
☐ Surface Water (A1)	☐ Water-Sta	ained Leaves (B9)	☐ Drainage Pat	terns (B10)
High Water Table (A2)	Aquatic F	auna (B13)	Moss Trim Lii	nes (B16)
Saturation (A3)		osits (B15)	☐ Dry-Season \	Vater Table (C2)
Water marks (B1)		Sulfide Odor (C1)	☐ Crayfish Bur	·
Sediment Deposits (B2)		Rhizospheres on Living Roots (		sible on Aerial Imagery (C9)
☐ Drift Deposits (B3)		of Reduced Iron (C4)	· · · · —	ressed Plants (D1)
Algal Mat or Crust (B4)		on Reduction in Tilled Soils (C6)		Position (D2)
☐ Iron Deposits (B5)		k Surface (C7)	Shallow Aquit	
Inundation Visible on Aerial Imag		plain in Remarks)		phic Relief (D4)
		piaiii iii Neiliaiks)		` ,
Sparsely Vegetated Concave Su Field Observations:	пасе (вв)			Test (D5)
Surface Water Present? Yes No.	Depth (inches):			
Water Table Present? Yes ⊠ No				
<u></u>	Depth (inches): 0 (a	at surface) Wet	tland Hydrology Present?	Yes ⊠ No □
Describe Recorded Data (stream gauge, modern (Exhibit 3), and Aerial Photos (Exhibit 4).	onitoring well, aerial photos,	previous inspections), if availab	ole: Topo Map (Exhibit 1), V	VWI Map (Exhibit 2), Soils Map
Remarks:				
Nomano.				

Sampling Point: 1

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	70 COVE		<u>Otatus</u>	Number of Dominant Species
2				That are OBL, FACW, or FAC: 1 (A)
3				Total Number of Dominant
4				Species Across All Strata: 1 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100% (A/B)
7				Prevalence Index worksheet:
·- <u></u>	<u>0</u>	= Total Cove		
Ocalica (Obsolo Ocalesa (District Ocalesa Ilus)	⊻	= Total Cove	31	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)	2		FAC	OBL species x 1 =
1. Rhamnus cathartica	<u>2</u>			FACW species x 2 =
2. Cornus racemosa	<u>1</u>		FAC	FAC species x 3 =
3. Rosa multiflora	<u>1</u>		<u>FACU</u>	FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators: ☐ Rapid Test for Hydrophytic Vegetation
	<u>4</u>	= Total Cove	er	<ul> <li>☑ Dominance Test is &gt;50%</li> </ul>
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	<u>60</u>	$\boxtimes$	<u>FACW</u>	☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Solanum dulcamara	<u>20</u>		<u>FAC</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Alliaria petiolata	<u>15</u>		<u>FACU</u>	1 Indicators of budgin call and wattened budgetons must
4. Geum canadense	<u>8</u>		FAC	Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
5. <u>Sambucus nigra</u>	<u>6</u>		FAC	
6. <u>Urtica dioica</u>	<u>5</u>		<u>FAC</u>	Definitions of Vegetation Strata:
7. <u>Cirsium arvense</u>	<u>3</u>		<u>FACU</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Hards All barbassass (and one of a decision
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>117</u>	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				neight
2.				
3				
4				Hydrophytic Vegetation
4	<u> </u>	= Total Cove		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet			<b>31</b>	
(	.,	,		

Profile De	scription: (Describe t	o the dep	th needed to docu	ument the indi	cator or cor	nfirm the a	bsence of indicators.)
Depth	Matrix			Redox Feat	ures		_
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture Remarks
0-3	10YR 3/1	100					Silty clay loam
3-14	10YR 3/1	93	7.5YR 3/4	7	C	PL M	Silty clay loam
14-16	10YR 5/1	85	7.5YR 3/4	15	C	PL M	Silty clay loam
16-25	2.5Y 6/2	60	10YR 3/6	10	C	PL M	Clay loam
	10YR 5/2	20	7.5YR 3/4	10	C	PL M	· <del></del>
							·
							·
	- <del></del>						
	- <del></del>						
	- <del></del>						
	. <u></u>						
	· <del></del>						
¹Type: C=	Concentration, D=Dep	letion RM	I-Reduced Matrix	MS- Masked S	and Grains		<sup>2</sup> Location: PL=Pore Lining, M=Matrix
	il Indicators:	iotion, rtiv	- reduced Matrix, 1	Waskea C	ana Oramo		Indicators for Problematic Hydric Soils <sup>3</sup> :
	Histosol (A1)		☐ F	Polyvalue Belov		8) <b>(LRR R,</b>	
	Histic Epipedon (A2)			MLRA 149I	,		Coast Prairie Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)			Γhin Dark Surfa ₋oamy Mucky M			
	Stratified Layers (A5)			_oamy Gleyed I			Polyvalue Below Surface (S8) (LRR K, L)
	Depleted Below Dark		A11) 🔲 🛭	Depleted Matrix	(F3)		☐ Thin Dark Surface (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark Su			☐ Iron-Manganese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (			Depleted Dark S Redox Depressi			<ul><li>□ Piedmont Floodplain Soils (F19) (MLRA 149E</li><li>□ Mesic Spodic (TA6) (MLRA 144A, 145, 149B</li></ul>
	Sandy Redox (S5)	54)	L '	redux Depressi	10113 (1 0)		Red Parent Material (F21)
	Stripped Matrix (S6)						☐ Very Shallow Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)				Other (Explain in Remarks)
3Indicators	of Hydrophytic vegeta	tion and w	vetland hydrology m	nust he nresent	unless dist	urhed or pro	rohlematic
	E Layer (if observed)		retiand nydrology n	idot be present	, 4111000 4100	arbed or pro	
	:						Hydric Soil Present? Yes ⊠ No □
Dept	h (inches):						
Remarks:							
ı							
l							

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County State: WI Sampling Point: 2 Applicant/Owner: \_\_\_ Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): slight hillslope Local relief (concave, convex, none): linear Slope (%): 1-3% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Matherton silt loam (MmA) 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. Is the Sampled Area Hydrophytic Vegetation Present? □Yes ⊠No ☐ Yes ⊠No within a Wetland? Hydric Soils Present? ⊠Yes □No ⊠No Wetland Hydrology Present? □Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛚 Depth (inches): \_\_ Depth (inches): \_\_ Water Table Present? Yes No 🛛 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 (surface) to 3, and at 14 Wetland Hydrology Present? Yes No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Saturation at the surface is due to wetter than normal antecedent precipitation. No wetland hydrology indicators observed.

T 0 (D) (1 (D) (1 )	Absolute	Dominant	Indicator	Daminanas Tast waylahast
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status 54011	Dominance Test worksheet:
1. Robinia pseudoacacia	<u>60</u>		FACU	Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
2. Acer negundo	<u>15</u>		<u>FAC</u>	That are OBL, FACW, or FAC: 3 (A)
3. Rhamnus cathartica	<u>10</u>		<u>FAC</u>	Total Number of Dominant
4				Species Across All Strata: <u>6</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 50% (A/B)
7				Prevalence Index worksheet:
	<u>85</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Rhamnus cathartica	<u>20</u>	$\boxtimes$	<u>FAC</u>	FACW species x 2 =
2. Rosa multiflora	<u>15</u>	$\boxtimes$	<u>FACU</u>	FAC species x 3 =
3. Viburnum opulus	<u>15</u>	$\boxtimes$	<b>FACW</b>	FACU species x 4 =
4. Lonicera x bella	<u>8</u>		<u>FACU</u>	UPL species x 5 =
5. <u>Cornus racemosa</u>	<u>5</u>		FAC	Column Totals: (A) (B)
6. Rubus occidentalis	<u>5</u>		NI (UPL)	Prevalence Index = B/A =
7	_			Hydrophytic Vegetation Indicators:
··· <del></del>	<u>68</u>	= Total Cov		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)		= 10tal 00V	OI .	☐ Dominance Test is >50% ☐ Prevalence Index is ≤3.0¹
1. Alliaria petiolata	<u>25</u>	$\boxtimes$	FACU	☐ Morphological Adaptations¹ (Provide supporting
2. Geum canadense	20		FAC	data in Remarks or on a separate sheet)
	<u>8</u>		FAC	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Symphyotrichum lateriflorum</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Rosa multiflora	<u>5</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. Phalaris arundinacea	<u>5</u>		<u>FACW</u>	Definitions of Variation Strate.
6			-	Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>63</u>	= Total Cov	er	Was designed All searches in a secretar than 0.00 ft is
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3.		П		Hydraphysia
4.				Hydrophytic Vegetation
	0	= Total Cov	er	Present? Yes ☐ No ⊠
Remarks: (include photo number here or on a separate sheet			<u> </u>	
	,			

Profile Des	scription: (Describe to	o the de	oth needed to docu	ment the ind	icator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Feat	tures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-3	10YR 3/2	100					Silt loam	
3-14	10YR 3/1	85	5YR 3/4	15	С	PL M	Silt loam	
14-27	10YR 6/2	60	7.5YR 3/4	30	С	PL M	Clay loam	
	10YR 3/1	10						
	<u> </u>						· <u></u>	
	· <del></del>							
	· <del></del>						·	
		-						
							· <del></del>	
							-	
	·							
Type: C=	Concentration, D=Depl	etion, RN	/=Reduced Matrix, N	/IS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore Li	
-	il Indicators:					-> 42 :	Indicators for Probler	-
	Histosol (A1) Histic Epipedon (A2)		∐ Po	olyvalue Belo		8) <b>(LRR R</b> ,		0) <b>(LRR K, L, MLRA 149B</b> ) Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)		Пт	MLRA 149 hin Dark Surfa		RR MIRA		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			oamy Mucky I			Dark Surface (\$	
	Stratified Layers (A5)			oamy Gleyed			☐ Polyvalue Belo	w Surface (S8) (LRR K, L)
	Depleted Below Dark S			epleted Matrix				ace (S9) (LRR K, L)
	Thick Dark Surface (A' Sandy Mucky Mineral (			edox Dark Some epleted Dark				se Masses (F12) ( <b>LRR K, L, R</b> ) dplain Soils (F19) ( <b>MLRA 149B</b> )
	Sandy Gleyed Matrix (			edox Depress				TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5)	- /	_		( - )		☐ Red Parent Ma	
	Stripped Matrix (S6)							Oark Surface (TF12)
Ш	Dark Surface (S7) (LR	R R, MLI	RA 149B)				☐ Other (Explain	in Remarks)
3Indicators	of Hydrophytic vegetat	ion and v	wetland hydrology m	ust be presen	t. unless dist	urbed or pr	oblematic.	
	e Layer (if observed):				.,			
Type	:						Hydric Soil Present?	Yes ⊠ No □
Deptl	h (inches):							
Remarks:								

WETLAND DETERMINATION DATA	FORM – Northcentral and Northeast Region
Project/Site: McKay Park Proposed Park Improvements City/County: Vil	<u>llage of Bloomfield/Walworth County</u> Sampling Date: 10-28-2019
Applicant/Owner:	State: WI Sampling Point: 3
	ction, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u>
	cal relief (concave, convex, none): concave Slope (%): 1-3% t: Long: Datum:
Soil Map Unit Name: Matherton silt loam (MmA)	NWI classification: <u>E2K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes ☐ <b>No</b> ☒ (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 samp	pling point locations, transects, important features, etc.
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area within a Wetland? ⊠ Yes □No
Hydric Soils Present?	within a wetland:
wettand rhydrology Fresent:	If yes, optional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a separate report.) 90	
(	,
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	☐ Surface Soil Cracks (B6)
Surface Water (A1) Water-Staine	ed Leaves (B9) Drainage Patterns (B10)
<u> </u>	
High Water Table (A2)  Aquatic Faun  Augustic Faun	
Saturation (A3)	<u> </u>
	ulfide Odor (C1) Crayfish Burrows (C8)
	zospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presence of F	Reduced Iron (C4) Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4) Recent Iron F	Reduction in Tilled Soils (C6) Geomorphic Position (D2)
☐ Iron Deposits (B5) ☐ Thin Muck Su	urface (C7) Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Other (Explai	in in Remarks) Microtopographic Relief (D4)
☐ Sparsely Vegetated Concave Surface (B8)	
Field Observations:	
Surface Water Present? Yes No Depth (inches):	
Water Table Present? Yes ⊠ No ☐ Depth (inches): 25.5	
Saturation Present? Yes ⊠ No □ Depth (inches): 0 (at su	urface) Wetland Hydrology Present? Yes ⊠ No □
(includes capillary fringe)	, , , = =
, , , , , , , , , , , , , , , , , , , ,	vious inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map
(Exhibit 3), and Aerial Photos (Exhibit 4).	
Remarks:	

Troe Stratum (Diot gize: 20) radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
Tree Stratum (Plot size: 30' radius)	% Cover <u>60</u>	Species? ⊠	Status FAC	
1. Populus tremuloides	<u> </u>		IAU	Number of Dominant Species That are OBL, FACW, or FAC: 7 (A)
2				
3				Total Number of Dominant Species Across All Strata: 7 (B)
4			-	
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7			-	Prevalence Index worksheet:
	<u>60</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. <u>Frangula alnus</u>	<u>25</u>	$\boxtimes$	<u>FAC</u>	FACW species x 2 =
2. Populus tremuloides	<u>20</u>	$\boxtimes$	<u>FAC</u>	FAC species x 3 =
3. Cornus racemosa	<u>15</u>	$\boxtimes$	FAC	FACU species x 4 =
4. Lonicera x bella	<u>5</u>		<u>FACU</u>	UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>65</u>	= Total Cov	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Epilobium coloratum	<u>20</u>	$\boxtimes$	OBL	☐ Morphological Adaptations¹ (Provide supporting
2. Geum canadense	20	$\boxtimes$	FAC	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. Phalaris arundinacea	<u>18</u>	$\boxtimes$	FACW	Froblematic Hydrophytic vegetation (Explain)
			FACW	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Solidago gigantea	<u>15</u>			Be present, unless disturbed or problematic.
5. <u>Frangula alnus</u>	<u>10</u>		<u>FAC</u>	Definitions of Vagatation Strata
6. Cornus racemosa	<u>5</u>		<u>FAC</u>	Definitions of Vegetation Strata:
7. <u>Juncus dudleyi</u>	<u>3</u>		<u>FACW</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>91</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1. Vitis riparia	<u>3</u>		FAC	g.n.
2				
3				
4	<u></u>		· <u></u>	Hydrophytic Vegetation
*· <u> </u>	<u>3</u>	= Total Cov		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet			<b>Ο</b> Ι	
Tromaine. (morage priote mamber note of on a coparate office	.,	· orramp.		

										Sampling Po	JINI. <u>3</u>	
Profile De	scription: (Describe to	the dep	th needed t	to doc	ument the indi	cator or cor	nfirm the a	bsence	of indicators.)			
Donth	Matrix				Redox Featu	ıres						
Depth (inches)	Color (moist)	%	Color (ı	moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	_	Texture	D	emarks	
				Holstj				Ciltilaa			illaiks	
0-9	10YR 4/1	97	10YR 4/4		3	C	PL M	Silt loa				
9-26	10YR 5/1	75	10YR 4/6		25	С	PL M	Clay lo	am	with gravel		
					<del></del>							
										-		
	,											
										-		
<sup>1</sup> Type: C=	Concentration, D=Depl	etion, RM	I=Reduced I	Matrix,	MS= Masked S	and Grains		2	Location: PL=Pore	Lining, M=Matrix	Κ	
	il Indicators:								dicators for Proble			
	Histosol (A1)				Polyvalue Belov	Surface (S	8) <b>(LRR R,</b>		2 cm Muck (A	10) <b>(LRR K, L,</b> l	MLRA 149	B)
	Histic Epipedon (A2)				MLRA 149	,				Redox (A16) (LI		
	Black Histic (A3)				Thin Dark Surfa			149B)		Peat or Peat (S3)		., R)
	Hydrogen Sulfide (A4)				Loamy Mucky M		LRR K, L)			(S7) (LRR K, L)		
	Stratified Layers (A5)				Loamy Gleyed N					ow Surface (S8)		.)
	Depleted Below Dark S		<b>\11</b> )		Depleted Matri					face (S9) (LRR		>\
	Thick Dark Surface (A				Redox Dark Sur					ese Masses (F12		
	Sandy Mucky Mineral				Depleted Dark S					odplain Soils (F1		
	Sandy Gleyed Matrix (	54)			Redox Depressi	ons (F8)				(TA6) (MLRA 1	44A, 145, 1	(49B)
	Sandy Redox (S5) Stripped Matrix (S6)								Red Parent M	Dark Surface (T	E12)	
	Dark Surface (S7) (LR	D D MIE	0 A 1/10R)						Other (Explain		F12)	
	Dark Surface (S7) (LK	K K, WIL	.A 143D)						☐ Other (Explain	i iii Neiliaiks)		
3Indicators	of Hydrophytic vegetat	ion and v	vetland hvdr	oloav r	nust be present.	unless dist	urbed or pro	oblematio	C.			
	e Layer (if observed):			5.097		u	a. 50 a o. p		·			
	):							н	vdric Soil Present?	? Yes ⊠	No 🗆	
, ,	h (inches):								yano com i resent	. 165 🖂	110	
Remarks:	(											
ixemaiks.												

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County State: WI Sampling Point: 4 Applicant/Owner: \_\_\_ Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope (%): 1-3% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Matherton silt loam (MmA) 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. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No ☐ Yes ⊠No within a Wetland? ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛚 Depth (inches): \_\_ Depth (inches): \_\_ Water Table Present? Yes No 🛛 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 (surface) to 4, and at 13 Wetland Hydrology Present? Yes No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Saturation at the surface is due to wetter than normal antecedent precipitation. No wetland hydrology indicators observed.

Trace Observer (Plateine OOl realize)	Absolute	Dominant	Indicator	Deminence Test werksheet
Tree Stratum (Plot size: 30' radius)	% Cover	Species?	Status 540	Dominance Test worksheet:
1. Populus tremuloides	<u>45</u>		FAC	Number of Dominant Species That are OBL, FACW, or FAC: 6 (A)
2. Prunus serotina	<u>30</u>		<u>FACU</u>	That are OBL, FACW, or FAC: <u>6</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: 7 (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 86% (A/B)
7				Prevalence Index worksheet:
	<u>75</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Cornus raceosa	<u>35</u>	$\boxtimes$	<u>FAC</u>	FACW species x 2 =
2. Populus tremuloides	<u>25</u>		<u>FAC</u>	FAC species x 3 =
3. Rhamnus cathartica	<u>25</u>	$\boxtimes$	FAC	FACU species x 4 =
4. Lonicera x bella	<u>20</u>	П	<u>FACU</u>	UPL species x 5 =
5. <u>Viburnum opulus</u>	<u>15</u>		FACW	Column Totals: (A) (B)
6. Viburnum rafinesqueanum	<u>5</u>		NI (UPL)	Prevalence Index = B/A =
7	_			Hydrophytic Vegetation Indicators:
··· <del>·</del>	125	= Total Cov		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)		= 10tal 00V	OI .	<ul> <li>Dominance Test is &gt;50%</li> <li>□ Prevalence Index is ≤3.0¹</li> </ul>
1. Geum canadense	<u>25</u>		FAC	☐ Morphological Adaptations¹ (Provide supporting
2. Rhamnus cathartica	<u>15</u>		FAC	data in Remarks or on a separate sheet)
	<u>10</u>		<u>FACU</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Alliaria petiolata				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Rudbeckia hirta	<u>5</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. <u>Solanum dulcamara</u>	<u>5</u>		<u>FAC</u>	Definitions of Vocatation Strate.
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>60</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				<b>Woody vines</b> – All woody vines greater than 3.28 ft in height
1				
2				
3.				Hydrophytic
4.		П		Vegetation
· · · · · · · · · · · · · · · · · · ·	<u>0</u>	= Total Cov	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet				
` '	,			

Profile De	scription: (Describe to	o the dep	oth needed to do	ocument the in	dicator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Fea	atures			
(inches)	Color (moist)	%	Color (mois	t) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-13	10YR 3/2	100	· -				Silt loam	
13-18	10YR 5/2	50	10YR 4/6	15	C	PL M	Clay loam	with gravel
	10YR 4/2	35						
18+								Refusal: Rocks
	-							
	- <u> </u>						-	
							-	
		-					-	
	-				<del>-</del>		-	-
	· -	-						
							-	_
		-					-	_
Type: C=	Concentration, D=Depl	etion, RM	1=Reduced Matri	x, MS= Masked	Sand Grains		<sup>2</sup> Location: PL=Pore	Lining, M=Matrix
	il Indicators:							lematic Hydric Soils <sup>3</sup> :
	Histosol (A1)			Polyvalue Bel		8) <b>(LRR R</b> ,		A10) <b>(LRR K, L, MLRA 149B</b> )
	Histic Epipedon (A2)			MLRA 14	,			e Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)		H	Thin Dark Sur Loamy Mucky				Peat or Peat (S3) (LLR K, L, R) e (S7) (LRR K, L)
	Stratified Layers (A5)		H	Loamy Gleyer		(LKK K, L)		elow Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A	_	Depleted Mati				urface (S9) (LRR K, L)
	Thick Dark Surface (A	12)	,	Redox Dark S	Surface (F6)			nese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			Depleted Dark				oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (	S4)		Redox Depres	ssions (F8)			c (TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5) Stripped Matrix (S6)							Material (F21) v Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					nin in Remarks)
	· / ·	,	,				_	,
	of Hydrophytic vegetat		vetland hydrology	/ must be prese	nt, unless dist	urbed or pr	oblematic.	
	e Layer (if observed):	:						
	e: <u>Rocks</u> :h (inches): <u>18</u>						Hydric Soil Present	t? Yes ☐ No ☒
	Several attempts we	ro mado	to dia further	No bydric soil	indicators of	served		
Nemains.	oeveral attempts we	ie made	to dig futilier.	NO HYUHO 30H	indicators of	oscivea.		

WETLAND DETERMINATION	N DATA FORM – Northc	entral and Northeast	Region
	//County: Village of Bloomfield/Wa		Sampling Date: 10-28-2019 Sampling Point: 5
Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRP	C Section, Township, Range	e: SE Quarter, Section 16, T1N	· -
Landform (hillslope, terrace, etc.): depression	Local relief (concave, con	vex, none): concave	Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u> Soil Map Unit Name: <u>Drummer silt loam, gravelly substratum (Dt</u>	Lat: Long: _ <u>:)</u>	Datum:	NWI classification: E2K
Are climatic/hydrologic conditions on the site typical for this time of		(If no, explain in Remarks) imstances" present? <b>Yes</b> ⊠	No □
Are Vegetation, Soil, or Hydrology significantly Are Vegetation, Soil, or Hydrology naturally pro		in any answers in Remarks.)	140
SUMMARY OF FINDINGS – Attach site map show	ving sampling point locati	ons, transects, importai	nt features, etc.
	<u> </u>		
Hydrophytic Vegetation Present?       ☑Yes       ☐No         Hydric Soils Present?       ☑Yes       ☐No	Is the Sampled Are within a Wetland?	ea ⊠ Yes	□No
Wetland Hydrology Present?			_
	If yes, optional Wetla		
Remarks: (Explain alternative procedures here or in a separate	report.) 90-day antecedent pre	ecipitation is wetter than norr	nal.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indica	tors (minimum of two required)
Primary Indicators (minimum of one is required; check all that a	pply)	☐ Surface Soil	Cracks (B6)
Surface Water (A1)	Vater-Stained Leaves (B9)	Drainage Pa	atterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim L	ines (B16)
☐ Saturation (A3)	Marl Deposits (B15)	☐ Dry-Season	Water Table (C2)
☐ Water marks (B1) ☐ H	Hydrogen Sulfide Odor (C1)	Crayfish Bur	rows (C8)
	Oxidized Rhizospheres on Living R		isible on Aerial Imagery (C9)
	Presence of Reduced Iron (C4)		Stressed Plants (D1)
<u> </u>	Recent Iron Reduction in Tilled Soil	<u> </u>	c Position (D2)
	Thin Muck Surface (C7)	Shallow Aqu	, ,
	Other (Explain in Remarks)		aphic Relief (D4)
Sparsely Vegetated Concave Surface (B8)  Field Observations:			Il Test (D5)
Surface Water Present? Yes No Depth (inch	nes).		
Water Table Present? Yes ⊠ No ☐ Depth (inch			
	nes): 0 (at surface)	Wetland Hydrology Present	? Yes⊠ No □
(includes capillary fringe)	, —	Wettand Trydrology Tresent	i ies 🖂 No 🗀
Describe Recorded Data (stream gauge, monitoring well, aerial	photos, previous inspections), if a	vailable: Topo Map (Exhibit 1),	WWI Map (Exhibit 2), Soils Map
(Exhibit 3), and Aerial Photos (Exhibit 4).			
Remarks:			

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	76 COVEL		Status	Number of Dominant Species
2				That are OBL, FACW, or FAC: 3 (A)
	-			
3			-	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
4	-			
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Cornus racemosa	<u>50</u>	$\boxtimes$	FAC	FACW species x 2 =
2. <u>Cornus alba</u>	<u>15</u>	$\boxtimes$	<b>FACW</b>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
· · · —	65	= Total Cove		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	_	- 10tai 00V	51	Dominance Test is >50%     Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	<u>80</u>	$\boxtimes$	FACW	☐ Morphological Adaptations¹ (Provide supporting
Epilobium coloratum	<u>12</u>		OBL	data in Remarks or on a separate sheet)
	<u>10</u>		FACU	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Poa pratensis</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Geum canadense</u>	<u>5</u>		<u>FAC</u>	Be present, unless disturbed or problematic.
5. <u>Taraxacum officinale</u>	<u>3</u>		<u>FACU</u>	Definitions of Vanadation Strate.
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8	-			at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>110</u>	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				neight
2				
3.	· <u></u>		<u> </u>	
4				Hydrophytic Vegetation
<del></del>	<u> </u>	= Total Cove		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.				rr along the edge
Tromanie. (instage priote names) here of our a coparate office.	, , , , , , , , , , , , , , , , , , ,	n, moadon m	ar ornab oa	in along the edge.

Profile Des	scription: (Describe t	o the dep	oth needed to docum	nent the ind	licator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Feat	tures		_	
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
)-6	10YR 3/1	100					Silt loam	
6-13	10YR 3/1	95	10YR 3/3	5	С	PL M	Silt loam	
13-18	10YR 2/1	95	10YR 3/3	5	С	PL M	Silt loam	
18-25	10YR 4/1	80	10YR 5/6	10	С	PL M	Sandy clay loam	
	10YR 3/1	10						
		-						
		-						
		-						
		-						
	Concentration, D=Depl	etion, RN	/I=Reduced Matrix, MS	S= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore L	
-	il Indicators: Histosol (A1)		П Ро	lvvalue Belo	ow Surface (S	8) <b>(LRR R</b>	Indicators for Probler  2 cm Muck (A1	matic Hydric Solls": (0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		o, <b>(=</b> ,		Redox (A16) ( <b>LLR K, L, R</b> )
	Black Histic (A3)		☐ Th	in Dark Surfa	ace (S9) (LRI	R R, MLRA		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (	LRR K, L)	☐ Dark Surface (\$	
	Stratified Layers (A5) Depleted Below Dark S	Surface (		amy Gleyed pleted Matri				ow Surface (S8) (LRR K, L) ace (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark S				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral	(S1)	☐ De	pleted Dark	Surface (F7)		☐ Piedmont Floor	dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (	S4)	☐ Re	dox Depress	sions (F8)			(TA6) ( <b>MLRA 144A, 145, 149B</b> )
	Sandy Redox (S5) Stripped Matrix (S6)						☐ Red Parent Ma☐ Very Shallow D	Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, ML	RA 149B)				☐ Other (Explain	
	of Hydrophytic vegeta		vetland hydrology mu	st be presen	nt, unless dist	urbed or pr	oblematic.	
	Layer (if observed)	i					Hydric Soil Present?	Yes ⊠ No □
	 h (inches):						nyunc son Fresent?	res 🖂 🛮 🖂
Remarks:	(							

# WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County Sampling Point: 6 Applicant/Owner: \_\_\_ State: WI Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: St. Charles silt loam, gravelly substratum (SeA) 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. Is the Sampled Area Hydrophytic Vegetation Present? Yes ⊠No ☐ Yes ⊠No within a Wetland? ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): \_\_ Depth (inches): \_\_ Water Table Present? Yes $\boxtimes$ No Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 (surface) to 7 Wetland Hydrology Present? Yes No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Saturation near the surface is due to wetter than normal antecedent precipitation. No wetland hydrology indicators observed.

Trace Otractions (Photosine Otherships)	Absolute	Dominant	Indicator	Deminence Test werkeheet.
Tree Stratum (Plot size: 30' radius)	% Cover <u>35</u>	Species? ⊠	Status FACU	Dominance Test worksheet:
1. <u>Prunus serotina</u>				Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
2. Rhamnus cathartica	<u>10</u>		FAC	
3				Total Number of Dominant Species Across All Strata: 7 (B)
4				Species Across All Strata.
5	-			Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 43% (A/B)
7				Prevalence Index worksheet:
	<u>45</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Lonicera x bella	<u>40</u>	$\boxtimes$	<u>FACU</u>	FACW species x 2 =
2. Rosa multiflora	<u>35</u>	$\boxtimes$	<u>FACU</u>	FAC species x 3 =
3. Cornus racemosa	<u>30</u>	$\boxtimes$	FAC	FACU species x 4 =
4. Rhamnus cathartica	<u>15</u>		FAC	UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
··· <del></del>	120	= Total Cove		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)		- 10tai 00V	<b>J</b> 1	☐ Dominance Test is >50% ☐ Prevalence Index is ≤3.0¹
1. Rosa multiflora	<u>12</u>	$\boxtimes$	FACU	☐ Morphological Adaptations¹ (Provide supporting
	<u>10</u>		FAC	data in Remarks or on a separate sheet)
2. Geum canadense	<u>3</u>		<u>FACU</u>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Erigeron annuus</u>	<u> </u>		<u>1 A00</u>	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				Be present, unless disturbed or problematic.
5	-			Definitions of Variation Office
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>25</u>	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				noight
2				
3				
4				Hydrophytic Vegetation
4	<u> </u>	= Total Cove		Present? Yes ☐ No ⊠
Remarks: (include photo number here or on a separate sheet			<del></del>	
Tromano. (morado prioto frambol ficio di diria sopurato snoot	.) Official time	MOL.		

<b>OIL</b>										Sampling Po	oint: <u>6</u>	
Profile Des	scription: (Describe to	o the dep	th needed f	to doc	ument the indi	cator or cor	nfirm the a	bsence	of indicators.)			
	Matrix				Redox Feat							
Depth (inches)	Color (moist)	%	Color (ı	moist)		Type <sup>1</sup>	Loc <sup>2</sup>	_	Texture	R	emarks	2
0-9	10YR 3/2	100	1) 10100	moioty		Турс		Silt loa			marke	<u>,                                      </u>
9-17	10YR 4/2	45	10YR 4/6		25		PL M	. —				
9-17			101K 4/6				FL IVI	Silty Ci	ay loam			
	10YR 3/1	30										
17-25	10YR 4/2	65	10YR 4/6		10	C	PL M	Clay lo	oam			
	10YR 3/1	25										
	· ·											
¹Type: C=0	Concentration, D=Depl	etion, RM	=Reduced I	Matrix,	MS= Masked S	Sand Grains		2	Location: PL=Pore L	ining, M=Matri	x	
Hydric Soi	il Indicators:							In	ndicators for Proble	-		
	Histosol (A1)				Polyvalue Belov		8) <b>(LRR R,</b>		2 cm Muck (A1	, .		,
	Histic Epipedon (A2)				MLRA 149	,			Coast Prairie R			
	Black Histic (A3) Hydrogen Sulfide (A4)				Thin Dark Surfa Loamy Mucky N			(149B)	☐ 5 cm Mucky Pe☐ Dark Surface (			K, L, R)
	Stratified Layers (A5)				Loamy Gleyed		LKK K, L)		☐ Polyvalue Belo			(K.I.)
	Depleted Below Dark S	Surface (A	<b>\11</b> )		Depleted Matrix				☐ Thin Dark Surfa			, =/
	Thick Dark Surface (A	12)	,		Redox Dark Su	rface (F6)			☐ Iron-Manganes			R K, L, R)
	Sandy Mucky Mineral				Depleted Dark				Piedmont Floor			
	Sandy Gleyed Matrix (	S4)			Redox Depress	ions (F8)			☐ Mesic Spodic (		44A, 1	45, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)								<ul><li>☐ Red Parent Ma</li><li>☐ Very Shallow D</li></ul>		F12)	
	Dark Surface (S7) (LR	R R. MLF	RA 149B)						Other (Explain		F12)	
		,										
	of Hydrophytic vegetat		etland hydr	ology r	must be present	i, unless dist	urbed or pro	oblemati	c.			
Restrictive	E Layer (if observed):											
	:							Н	lydric Soil Present?	Yes 🗌	No	$\boxtimes$
	h (inches):							L				
Remarks: N	No hydric soil indicat	ors obse	rved.									

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County State: WI Sampling Point: 7 Applicant/Owner: \_\_\_ Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): terrace (level ground) Local relief (concave, convex, none): none Slope (%): 1-3% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Matherton silt loam (MmA) NWI classification: E2K Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ **No** ☒ (If no, explain in Remarks) Are Vegetation\_X\_, 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. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No □No within a Wetland? □No Hydric Soils Present? ⊠Yes Wetland Hydrology Present? ⊠Yes □No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. The sample site has significantly disturbed vegetation due to a history of mowing (managed plant community). In addition, the 2015 aerial photo shows several soil fill piles in the area. Subsequent aerial imagery, and 2019 on-site observations, indicate apparent spreading of this fill material in the sample site area. (This fill material is different than the sand/gravel material placed for the purpose of creating a driveway/parking area that encompasses sample site 11.) **HYDROLOGY Wetland Hydrology Indicators:** Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): Water Table Present? Yes 🛚 No 🗌 Depth (inches): 14 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 at surface) Wetland Hydrology Present? Yes 🛛 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Geomorphic position (D2) is not checked due to an apparently graded, level landscape in the sample site area.

Troe Stratum (Plot aize: 20' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	% Cover	Species? ☐	<u>Status</u>	
1 2				Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant Species Across All Strata: 2 (B)
4 5				
				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
6				· · ·
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species <u>0</u> x 1 = <u>0</u>
1				FACW species $8 \times 2 = 16$
2				FAC species $\underline{3}$ x 3 = $\underline{9}$
3				FACU species <u>70</u> x 4 = <u>280</u>
4				UPL species $\underline{53}$ x 5 = $\underline{265}$
5				Column Totals: <u>134</u> (A) <u>570</u> (B)
6				Prevalence Index = $B/A = 4.3$
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				Prevalence Index is ≤3.0¹
1. Poa pratensis	<u>55</u>	$\boxtimes$	<u>FACU</u>	☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Daucus carota</u>	<u>50</u>	$\boxtimes$	<u>UPL</u>	□ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Solidago altissima</u>	<u>10</u>		<u>FACU</u>	
4. Phalaris arundinacea	<u>8</u>		<u>FACW</u>	Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
5. Rudbeckia hirta	<u>5</u>		<u>FACU</u>	
6. Hypericum perforatum	<u>3</u>		<u>UPL</u>	Definitions of Vegetation Strata:
7. Plantago rugelii	<u>3</u>		<u>FAC</u>	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8.				at breast height (DBH), regardless of height
9				Canting to brush Weeks plants less than 2 in DDII
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				
12		$\overline{\Box}$		Herb – All herbaceous (non-woody) plants, regardless
12.	134	= Total Cov		of size, and woody plants less than 3.28 ft tall.
Mandy Vina Chrotum (Plat circ. 201 radius)	101	= 10tal C0V	GI	Woody vines - All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		П		height
1		_		
2		Ц		
3		Ц		Hydrophytic
4				Vegetation Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet	<u>0</u>	= Total Cov		
exhibits wetland hydrology indicators and has a hydric sidetermined to be wetland with significantly disturbed hy	soil despite	apparent grad	ding/spreadi	ng of fill material in recent years. Thus, the site is

Profile Des	scription: (Describe	to the dep	th needed to d	locume	ent the ind	licator or cor	nfirm the a	bsenc	e of indicators.)			
Depth	Matrix			F	Redox Feat	tures						
(inches)	Color (moist)	%	Color (moi	st)	%	Type <sup>1</sup>	Loc <sup>2</sup>	<u> </u>	Texture	Re	emarks	
)-4	10YR 4/2	100						Silt lo	oam			
8	10YR 4/2	94	10YR 4/6		6	C	PL M	Silt lo	oam			
3-12	10YR 4/1	80	10YR 4/6		13	С	PL M	Silt lo	oam			
	· -		7.5YR 3/4		7	С	PL M					
12-27	5Y 6/2	55	10YR 5/6		20	С	PL M	Clay	loam			
	5Y 6/1	25										
	·											
Type: C=	Concentration, D=Dep	oletion RM	I=Reduced Mat	rix MS=	= Masked S	Sand Grains			<sup>2</sup> Location: PL=Pore Lin	ning M=Matrix		
	il Indicators:	notion, rev	- readoca iviati	11, 1010-	- Maskoa (	Sana Grams			Indicators for Problem			
	Histosol (A1)					w Surface (S	8) <b>(LRR R</b> ,	,	2 cm Muck (A10			,
	Histic Epipedon (A2)		_		MLRA 149	,			☐ Coast Prairie Re			
	Black Histic (A3) Hydrogen Sulfide (A4	١	Ļ			ace (S9) <b>(LR</b> I Mineral (F1) (						K, L, R)
	Stratified Layers (A5)	)				Matrix (F1) (	LKK K, L)		☐ Dark Surface (Since Polyvalue Below			K I)
	Depleted Below Dark	Surface (A			leted Matr				☐ Thin Dark Surface			κ, L)
	Thick Dark Surface (A				ox Dark Su				☐ Iron-Manganese			K, L, R)
	Sandy Mucky Mineral					Surface (F7)			☐ Piedmont Flood			
	Sandy Gleyed Matrix	(S4)		] Red	ox Depress	sions (F8)			☐ Mesic Spodic (T.		44A, 14	45, 149B)
	Sandy Redox (S5)								Red Parent Mate			
	Stripped Matrix (S6)	D D MI F	2 A 440B)						☐ Very Shallow Da		F12)	
Ш	Dark Surface (S7) (LF	KK K, WILF	(A 149b)						Other (Explain in	i Kemarks)		
Indicators	of Hydrophytic vegeta	ation and w	vetland hydrolog	y must	be presen	t, unless dist	urbed or pr	oblema	atic.			
	E Layer (if observed)	):										
, ,	:								Hydric Soil Present?	Yes ⊠	No	
	h (inches):											
Remarks:												

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County State: WI Sampling Point: 8 Applicant/Owner: \_\_\_ Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): terrace (level ground) Local relief (concave, convex, none): none Slope (%): 1-3% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Matherton silt loam (MmA) NWI classification: E2K Are climatic/hydrologic conditions on the site typical for this time of year? Yes ☐ **No** ☒ (If no, explain in Remarks) Are Vegetation\_X\_, 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. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No □No within a Wetland? □No Hydric Soils Present? ⊠Yes Wetland Hydrology Present? ⊠Yes □No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. The sample site has significantly disturbed vegetation due to a history of mowing (managed plant community). In addition, the 2015 aerial photo shows several soil fill piles in the area. Subsequent aerial imagery, and 2019 on-site observations, indicate apparent spreading of this fill material in the sample site area. (This fill material is different than the sand/gravel material placed for the purpose of creating a driveway/parking area that encompasses sample site 11.) **HYDROLOGY Wetland Hydrology Indicators:** Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): \_ Water Table Present? Yes 🛚 No 🗌 Depth (inches): 17.5 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 (surface) to 3, and at 9 Wetland Hydrology Present? Yes 🛛 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Geomorphic position (D2) is not checked due to an apparently graded, level landscape in the sample site area.

·				
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	<u>70 00VCI</u>		<u>Otatus</u>	Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				
6				Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
				Prevalence Index worksheet:
7	<u> </u>			
	<u>U</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species <u>0</u> x 1 = <u>0</u>
1				FACW species $\underline{0}$ x 2 = $\underline{0}$
2				FAC species $\underline{0}$ x 3 = $\underline{0}$
3				FACU species <u>93</u> x 4 = <u>372</u>
4				UPL species <u>30</u> x 5 = <u>150</u>
5				Column Totals: <u>123</u> (A) <u>522</u> (B)
6				Prevalence Index = $B/A = 4.2$
7				Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Poa pratensis	<u>40</u>	$\boxtimes$	<u>FACU</u>	☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Daucus carota</u>	<u>30</u>	$\boxtimes$	<u>UPL</u>	<ul> <li>☑ Problematic Hydrophytic Vegetation¹ (Explain)</li> </ul>
3. Plantago lanceolata	<u>25</u>	$\boxtimes$	<u>FACU</u>	
4. Alliaria petiolata	<u>8</u>		<u>FACU</u>	Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
5. Erigeron annuus	<u>7</u>	П	FACU	Do prodont, unicoo distarbed of problematic.
	<u>-</u> <u>5</u>		FACU	Definitions of Vegetation Strata:
6. Rudbeckia hirta	<u>5</u>		FACU	_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
7. <u>Taraxacum officinale</u>			FACU	<b>Tree</b> – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8. <u>Symphyotrichum pilosum</u>	<u>3</u>		FACO	at broadt noight (BBH), rogaraisos of noight
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11		<u> </u>		Herb - All herbaceous (non-woody) plants, regardless
12		Ш		of size, and woody plants less than 3.28 ft tall.
	<u>123</u>	= Total Cove	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet exhibits wetland hydrology indicators and has a hydric determined to be wetland with significantly disturbed hy	soil despite	apparent grad	ding/spreadi	ng of fill material in recent years. Thus, the site is

Profile Des	scription: (Describe t	o tne dep				itirm the a	bsence of indicators.)		
Depth	Matrix			Redox Feat			_		
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks	
0-4	10YR 3/1	100					Silt loam		
4-13	10YR 3/1	87	10YR 4/6	10	C	PL M	Silt loam		
	· <del></del>		7.5YR 3/4	3	C	PL M	·		
13-21	10YR 4/2	70	10YR 5/6	30	C	PL M	Clay loam		
21-25	5Y 6/2	80	10YR 5/6	20	C	PL M	Clay loam		
		-				-			
		-		·			·		
		-			-				
Type: C=	Concentration, D=Dep	letion, RN	/I=Reduced Matrix, MS	S= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore L	 Lining, M=Matrix	
Hydric Soi	I Indicators:						Indicators for Probler	matic Hydric Soils <sup>3</sup> :	
	Histosol (A1)		☐ Pol		w Surface (S	8) <b>(LRR R</b> ,		(10) (LRR K, L, MLRA 149B)	
	Histic Epipedon (A2) Black Histic (A3)		☐ Thi	MLRA 149	в) ace (S9) <b>(LRI</b>	D MIDA		Redox (A16) ( <b>LLR K, L, R</b> ) eat or Peat (S3) ( <b>LLR K, L, R</b> )	
	Hydrogen Sulfide (A4)	1			Mineral (F1) (		Dark Surface (\$		
	Stratified Layers (A5)		☐ Loa	amy Gleyed	Matrix (F2)	, ,	☐ Polyvalue Belo	ow Surface (S8) (LRR K, L)	
☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3) ☐ Thin Dark Surface (S9) (LRR K, L)									
	Thick Dark Surface (A Sandy Mucky Mineral			dox Dark Sundered Dark	urtace (F6) Surface (F7)			se Masses (F12) ( <b>LRR K, L, R</b> ) dplain Soils (F19) ( <b>MLRA 149B</b> )	
	Sandy Gleyed Matrix			dox Depress				(TA6) (MLRA 144A, 145, 149B)	
	Sandy Redox (S5)	` ,	_	•	` ,		Red Parent Ma		
	Stripped Matrix (S6)		\					Dark Surface (TF12)	
Ш	Dark Surface (S7) (LF	RR, ML	RA 149B)				Other (Explain	in Remarks)	
3Indicators	of Hydrophytic vegeta	tion and v	vetland hydrology mus	st be present	t, unless dist	urbed or pr	oblematic.		
Restrictive	Layer (if observed)	:							
	:						Hydric Soil Present?	Yes ⊠ No □	
	h (inches):								
Remarks:									

WETLAND DETERMINATION DATA F	ORM - Northcentr	ral and Northeast F	Region					
	age of Bloomfield/Walworth		Sampling Date: <u>10-28-2019</u>					
Applicant/Owner:			Sampling Point: 9					
		Quarter, Section 16, T1N-						
· · · · · · · · · · · · · · · · · · ·	al relief (concave, convex, r Long:		Slope (%): <u>0-2%</u>					
Soil Map Unit Name: <u>Drummer silt loam, gravelly substratum (Dt)</u>			NWI classification: E2K					
Are climatic/hydrologic conditions on the site typical for this time of year?		no, explain in Remarks)						
Are Vegetation, Soil, or Hydrology significantly disturbed?		nces" present? Yes ⊠	No 🗌					
Are Vegetation, Soil, or Hydrology naturally problematic?	(If, needed, explain any	,						
SUMMARY OF FINDINGS – Attach site map showing samp	ling point locations,	, transects, importan	t features, etc.					
	In the Commissi Area							
Hydrophytic Vegetation Present?	Is the Sampled Area within a Wetland?	⊠ Yes	□No					
Wetland Hydrology Present?								
	If yes, optional Wetland S	Site ID:						
Remarks: (Explain alternative procedures here or in a separate report.) 90-	day antecedent precipita	ation is wetter than norm	al.					
HYDROLOGY								
Wetland Hydrology Indicators:		Secondary Indicate	ors (minimum of two required)					
Primary Indicators (minimum of one is required; check all that apply)		☐ Surface Soil (	Cracks (B6)					
Surface Soil Cracks (B6)  Surface Water (A1)  Water-Stained Leaves (B9)  Drainage Patterns (B10)								
☐ High Water Table (A2) ☐ Aquatic Fauna		☐ Moss Trim Lii						
Saturation (A3)	, ,		Water Table (C2)					
Water marks (B1) Hydrogen Sulf	,	☐ Crayfish Bur						
	ospheres on Living Roots (	<del></del>	sible on Aerial Imagery (C9)					
	educed Iron (C4)		ressed Plants (D1)					
	eduction in Tilled Soils (C6)		Position (D2)					
	` '							
_ <del></del>		Shallow Aquit	, ,					
Inundation Visible on Aerial Imagery (B7) Other (Explain	i in Remarks)	<del></del>	phic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)  Field Observations:			Test (D5)					
Surface Water Present? Yes No Depth (inches):								
Water Table Present? Yes ⊠ No ☐ Depth (inches): 7								
Saturation Present? Yes \( \text{No } \square \text{Depth (inches): } \( \frac{1}{2} \)	rface)		v M v D					
(includes capillary fringe)	wet Wet	tland Hydrology Present?	Yes ⊠ No □					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous	ious inspections), if available	ole: Topo Map (Exhibit 1), V	VWI Map (Exhibit 2), Soils Map					
(Exhibit 3), and Aerial Photos (Exhibit 4).								
Remarks:								

Sampling Point: 9

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	70 OOVEI		Otatus	Number of Dominant Species
2	· <del></del>			That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
				Species Across All Strata: <u>1</u> (B)
4 5	-			
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	_	_ 10tai 00V	0.	Dominance Test is >50%     Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	<u>90</u>	$\boxtimes$	FACW	☐ Morphological Adaptations¹ (Provide supporting
2. Poa pratensis	<u>20</u>		FACU	data in Remarks or on a separate sheet)
	<u>15</u>		OBL	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Carex pellita</u>				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Juncus dudleyi</u>	<u>10</u>		<u>FACW</u>	Be present, unless disturbed or problematic.
5				Definitions of Vanatation Country
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8	-			at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>135</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in
1				height
2	· <u> </u>		<u></u>	
2				
3	-			Hydrophytic Vegetation
4				Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.	) Froch (wo	= Total Cov	er	
Remarks. (include prioto number nere of on a separate sneet	) Fiesii (we	i) meadow.		

OIL										Sampling Po	oint: <u>9</u>	
rofile De	scription: (Describe	to the dep	th needed	to do	cument the indi	cator or co	nfirm the a	bsence	e of indicators.)			
Depth	Matrix				Redox Feat	ures		_				
inches)	Color (moist)	%	Color (	(moist)	) %	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	Re	emarks	
5	10YR 3/1	95	7.5YR 3/4	1	5	С	PL M	Silt lo	pam			
10	10YR 3/1	85	7.5YR 3/4	1	15	С	PL M	Silt lo	oam			
-20	10YR 4/2	70	10YR 4/6		10	С	PL M	Clay	loam			
	5GY 5/1	15	10YR 6/8		5	С	PL M					
)-25	10YR 4/2	40	10YR 5/6		20	C	PL M	Clay	loam			
	10YR 6/1	30										
	5GY 5/1	10										
		. <u> </u>										
	· -											
	·											
	<u> </u>	· ——										
vpe: C=	Concentration, D=Dep	oletion, RM	I=Reduced	Matrix	. MS= Masked S	Sand Grains			<sup>2</sup> Location: PL=Pore L	ining M=Matri	x	
	il Indicators:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-1100000	Matrix	, me- madred e	and Oramo			Indicators for Probler			
	Histosol (A1)				Polyvalue Belov	,	8) <b>(LRR R</b> ,		☐ 2 cm Muck (A1			
	Histic Epipedon (A2)				MLRA 149	,			☐ Coast Prairie R			
	Black Histic (A3)				Thin Dark Surfa			(149B)				<b>K</b> , <b>L</b> , <b>R</b> )
	Hydrogen Sulfide (A4	)			Loamy Mucky N	, ,	(LRR K, L)		☐ Dark Surface (			
	Stratified Layers (A5)		(444)		Loamy Gleyed				Polyvalue Belo			K, L)
	Depleted Below Dark Thick Dark Surface (A		(A11)	$\boxtimes$	Depleted Matri Redox Dark Su				☐ Thin Dark Surfa☐ Iron-Manganes			OK I D
	Sandy Mucky Mineral				Depleted Dark St				☐ Piedmont Floor			
	Sandy Gleyed Matrix			H	Redox Depress				☐ Mesic Spodic (			
	Sandy Redox (S5)	(0.)		_		(. 0)			Red Parent Ma		, .	,
	Stripped Matrix (S6)								☐ Very Shallow D		F12)	
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)						☐ Other (Explain	in Remarks)		
ndicators	of Hydrophytic vegeta	ation and w	votland bydy	rology	must be present	unloce diet	urbad ar ar	oblomo	tio			
	e Layer (if observed)		eliana nyai	ology	must be present	, uriless dist	arbea or pr	ODICITIA	uo.			
	:	•							Hydric Soil Present?	Yes ⊠	No	
Dept	h (inches):								•	_		_
emarks:												

### WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County Sampling Point: 10 Applicant/Owner: State: WI Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): slight hillslope (\*fill pile) Local relief (concave, convex, none): convex Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt) NWI classification: E2K 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. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No □No within a Wetland? □No Hydric Soils Present? ⊠Yes Wetland Hydrology Present? ⊠Yes □No If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. \*The sample site is on the remainder of one of several soil fill piles that first appeared on the 2015 aerial photo. Most of this fill material appears to have been spread on-site, between this point and the area including sample sites 7 and 8. See Exhibit 10, Photo 11. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) ☐ Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) ☐ Saturation (A3) ☐ Marl Deposits (B15) Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) $\bowtie$ Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) $\bowtie$ **FAC-Neutral Test (D5) Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): \_ Water Table Present? Yes 🛛 No 🗌 Depth (inches): 21 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 0 (surface) to 3, and at 17 Wetland Hydrology Present? Yes 🛛 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: While the sample site lies within a large depression, geomorphic position (D2) is not checked due to the presence of fill material that forms a raised, slightly convex surface. As observed at nearby sample site 9, the high-water table (A2) and saturation (A3) indicators might also be met at this location in the absence of fill material.

Sampling Point: 10

<u>Tree Stratum</u> (Plot size: <u>30' radius</u> )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	70 00 001		<u>Otatao</u>	Number of Dominant Species
2				That are OBL, FACW, or FAC: 2 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5	· <u> </u>			Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 100% (A/B)
	-			Prevalence Index worksheet:
7				
	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Panicum dichotomiflorum	<u>50</u>	$\boxtimes$	<b>FACW</b>	☐ Morphological Adaptations¹ (Provide supporting
2. Echinochloa crus-galli	<u>20</u>	$\boxtimes$	FAC	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. Setaria pumila	<u>15</u>		FAC	Troblematic Hydrophytic Vegetation (Explain)
	<u>3</u>		UPL	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. <u>Daucus carota</u>	2	_	OI L	Be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Definitions of Vegetation offata.
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8	·			at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>88</u>	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				noight —
2				
3	· <del></del>			
4				Hydrophytic Vegetation
4	<u> </u>	= Total Cove		Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.				he remainder of an old fill pile
Tremaine. (illolade priote framber field of off a separate shoet	, Biotarboa	moon (wot) m	oudow on a	To formalitation of all old lin pile.

OIL Profile Dec	scription: (Doscribo	to the den	th pooded to decur	nont the indi	cator or co	afirm the a	bsence of indicators.)	Sampling Po	oint: <u>10</u>
	Matrix	to the dep	in needed to docur	Redox Feat		iiiiiii tiie ai	bsence of indicators.)		
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	– Texture	D	emarks
·3	10YR 3/1 - 3/2	90	10YR 5/4	10	С	M	Sandy clay loam	fill material	<u> </u>
5	10YR 4/4	100	1011(0/4				Clay loam	fill material	
12	5Y 4/1	75	5YR 4/4	25		PL M	Clay loam	fill material wit	th gravel
2-17	10YR 4/1	85	10YR 5/6	15		PL M	Clay loam	fill material wit	
7-20	10YR 4/1	90	7.5YR 3/4	10		PL M	Clay loam		g.a.ro.
)-27	2.5Y 4/1	90	7.5YR 3/4	10		PL M	Silt loam		
	-						-		
								<del></del>	
	Concentration, D=Dep	pletion, RM	I=Reduced Matrix, M	S= Masked S	and Grains			re Lining, M=Matri	
	il Indicators: Histosol (A1)		ПР	olyvalue Belov	v Surface (S	8) <b>(I RR R</b>	Indicators for Pro	(A10) (LRR K, L,	
	Histic Epipedon (A2)			MLRA 149I		o, (Litter,		rie Redox (A16) ( <b>L</b>	
	Black Histic (A3)			in Dark Surfa			149B)	y Peat or Peat (S3	3) (LLR K, L, R)
	Hydrogen Sulfide (A4	,		amy Mucky M	, ,	(LRR K, L)		ce (S7) ( <b>LRR K, L</b> )	
	Stratified Layers (A5)			amy Gleyed I				Below Surface (S8)	
	Depleted Below Dark Thick Dark Surface (A		,	epleted Matri: edox Dark Sur				Surface (S9) <b>(LRR</b> anese Masses (F12	
	Sandy Mucky Mineral			epleted Dark S			_	Floodplain Soils (F	
	Sandy Gleyed Matrix			edox Depressi				dic (TA6) (MLRA 1	
	Sandy Redox (S5)							t Material (F21)	
	Stripped Matrix (S6) Dark Surface (S7) (LI	DD D MIE	0 A 140P)					ow Dark Surface (T lain in Remarks)	r̃F12)
	Dark Surface (St) (Li	IXIX IX, IVILIY	(A 149D)				□ Other (Exp	iaiii iii Keiliaiks)	
	of Hydrophytic vegeta		vetland hydrology mu	st be present	, unless dist	urbed or pro	oblematic.		
	e Layer (if observed	):							_
	: h (inches):						Hydric Soil Prese	nt? Yes ⊠	No 🗌
emarks:	ii (iiiches).								
HIIIAIKS.									

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County State: WI Sampling Point: 11 Applicant/Owner: \_\_\_ Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: <u>SE Quarter, Section 16, T1N-R18E</u> Landform (hillslope, terrace, etc.): gravel driveway (\*level ground) Local relief (concave, convex, none): none Slope (%): 1-3% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Matherton silt loam (MmA) NWI classification: \$E2K 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. Is the Sampled Area Hydrophytic Vegetation Present? ⊠Yes □No ☐ Yes ⊠No within a Wetland? ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. \*Leveled ground at the sample site includes significant sand and gravel fill that is part of a driveway access to the site. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Geomorphic Position (D2) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) FAC-Neutral Test (D5) $\bowtie$ **Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): Water Table Present? Yes 🛛 No 🗌 Depth (inches): 30 Saturation Present? Yes 🛛 No $\square$ Depth (inches): 18 Wetland Hydrology Present? Yes 🗌 No 🖂 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Sand and gravel fill (driveway material) to 18 inches below the surface. Gleyed clay loam at that point is saturated. Only one secondary wetland hydrology indicator observed.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	70 OOVEI		Otatus	Number of Dominant Species
2				That are OBL, FACW, or FAC: $\underline{2}$ (A)
3				Total Number of Dominant
				Species Across All Strata: <u>2</u> (B)
4 5				
				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Panicum dichotomiflorum	<u>15</u>	$\boxtimes$	<b>FACW</b>	☐ Morphological Adaptations¹ (Provide supporting
2. <u>Setaria pumila</u>	<u>12</u>	$\boxtimes$	FAC	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. <u>Poa pratensis</u>	<u>2</u>		FACU	Troblematic Hydrophytic vegetation (Explain)
	_			<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4		_		Be present, unless disturbed or problematic.
5				Definitions of Vegetation Strata:
6				Definitions of Vegetation offata.
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>29</u>	= Total Cove	er	W 1 2 4 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2.				
3.				Undershide
4				Hydrophytic Vegetation
	<u>0</u>	= Total Cove	<u></u>	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet.				<u> </u> V.
(	,			,

SAMPLING Point: 11

	scription: (Describe to	the dep	th needed to	docume	ent the indi	icator or cor	firm the a	bsence	of indicators.)			
Depth	Matrix			F	Redox Feat	ures		_				
(inches)	Color (moist)	%	Color (mo	oist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		Texture	R	emarks	
18	10YR 4/3	100	-					Sand	and gravel	Fill material		
3-24	5G 5/1	80	10YR 3/6		10	C	M	Clay	oam			
			10YR 5/6		10	C	M					
	-											
	Concentration, D=Depl	etion, RM	I=Reduced Ma	trix, MS	= Masked S	Sand Grains			<sup>2</sup> Location: PL=Pore			
	il Indicators: Histosol (A1)		г	☐ Polv	value Rele	w Surface (S	8) <b>(I RP P</b>		ndicators for Proble	ematic Hydric \$ .10) (LRR K, L,		49R\
	Histic Epipedon (A2)		L		MLRA 149		o) (Litti it,			Redox (A16) ( <b>L</b>		
	Black Histic (A3)					ace (S9) <b>(LRI</b>	R R, MLRA	149B)		Peat or Peat (S3		
	Hydrogen Sulfide (A4)					Mineral (F1) (	LRR K, L)			(S7) (LRR K, L		
	Stratified Layers (A5)	·	_			Matrix (F2)				ow Surface (S8		<b>(</b> , <b>L</b> )
	Depleted Below Dark S Thick Dark Surface (A1		_		eted Matrix ox Dark Su					rface (S9) <b>(LRR</b> ese Masses (F1:		K.I.R
	Sandy Mucky Mineral (		_			Surface (F7)				odplain Soils (F		
	Sandy Gleyed Matrix (				ox Depress				☐ Mesic Spodic	(TA6) (MLRA 1		
	Sandy Redox (S5)								Red Parent M			
	Stripped Matrix (S6) Dark Surface (S7) (LR	RR MIF	2Δ 149R)						☐ Very Shallow ☐ Other (Explain	Dark Surface (7	F12)	
	Dank Gariage (G7) (ER	11, WL	(A 140B)						_ Other (Explain	i iii rtomantoj		
	of Hydrophytic vegetat		vetland hydrolo	gy must	be present	t, unless distu	urbed or pro	blema	tic.			
	e Layer (if observed):											_
	e: :h (inches):								Hydric Soil Present	? Yes □	No	$\boxtimes$
	Due to the presence	of fill ma	sterial no byo	tric soil	indicators	observed						
marko. i	Duo to the procence	01 1111 1110	atoriai, no nye	1110 0011	maioatore	oboolvou.						

WETLAND DETERMINATION DATA FO	RM – Northcentral and Northeast Region
Project/Site: McKay Park Proposed Park Improvements City/County: Village Applicant/Owner: Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section Landform (hillslope, terrace, etc.): level ground Local re Subregion (LRR or MLRA): LRR K Lat: Soil Map Unit Name: Matherton, silt loam (MmA) Are climatic/hydrologic conditions on the site typical for this time of year? Are Vegetation_X_, Soil, or Hydrology significantly disturbed?	Sampling Date: 10-28-2019 State: WI Sampling Point: 12  In, Township, Range: SE Quarter, Section 16, T1N-R18E  elief (concave, convex, none): none
Hydric Soils Present?	the Sampled Area ithin a Wetland?
Remarks: (Explain alternative procedures here or in a separate report.) 90-day disturbed vegetation due to mowing.	y antecedent precipitation is wetter than normal. Sample site has
HYDROLOGY	
Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
□ Drift Deposits (B3) □ Presence of Reduce Algal Mat or Crust (B4) □ Recent Iron Reduce □ Iron Deposits (B5) □ Thin Muck Surface □ Inundation Visible on Aerial Imagery (B7) □ Other (Explain in Sparsely Vegetated Concave Surface (B8)  Field Observations:  Surface Water Present? Yes □ No ☑ Depth (inches): □	Moss Trim Lines (B16)   Dry-Season Water Table (C2)   Odor (C1)
Water Table Present?  Yes ☑ No ☐ Depth (inches): 16  Saturation Present?  Yes ☑ No ☐ Depth (inches): 0 (at surface)	©E) Wetland Hydrology Present? Yes ⊠ No □
(includes capillary fringe)  Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous (Exhibit 3), and Aerial Photos (Exhibit 4).	s inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map
Remarks:	

<u> </u>	A I I t -	Daminant	la dia atau	, , <u> </u>
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Populus deltoides	<u>15</u>	$\boxtimes$	FAC	Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 33% (A/B)
7		П		Prevalence Index worksheet:
	<u>15</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1. Cornus alba	<u>2</u>		<u>FACW</u>	FACW species x 2 =
2. Rhamnus cathartica	<u>2</u>	П	<u>FACU</u>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7		П		Hydrophytic Vegetation Indicators:
	<u>4</u>	= Total Cov	er	☐ Rapid Test for Hydrophytic Vegetation ☐ Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Poa pratensis	<u>50</u>	$\boxtimes$	<u>FACU</u>	☐ Morphological Adaptations¹ (Provide supporting
2. Daucus carota	<u>30</u>	$\boxtimes$	<u>UPL</u>	data in Remarks or on a separate sheet)  Problematic Hydrophytic Vegetation¹ (Explain)
3. Agrostis stolonifera	<u>15</u>	П	FACW	Z Problematio Tryarophytio Vegetation (Explain)
	<u>10</u>		FACU	<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4. Schedonorus arundinaceus			FAC	Be present, unless disturbed or problematic.
5. <u>Setaria pumila</u>	<u>8</u>			Definitions of Vegetation Strata:
6. Ambrosia artemisiifolia	<u>5</u>		<u>FACU</u>	_
7. <u>Populus deltoides</u>	<u>5</u>		FAC	<b>Tree</b> – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8. <u>Trifolium pratense</u>	<u>3</u>		<u>FACU</u>	at breast neight (DBH), regardless of height
9		П		Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11		<u> </u>		Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>126</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3	-			Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	er	Present? Yes ⊠ No □
Remarks: (include photo number here or on a separate sheet heavy equipment. It exhibits indicators of wetland hydrodisturbed hydrophytic vegetation. Atypical (mowed) wet	logy and ha		-	

Depth	scription: (Describe to	the dep	th needed to do	ocument the indi	icator or cor	nfirm the a	bsence of indicators.)		
	Matrix			Redox Feat	ures		_		
(inches)	Color (moist)	%	Color (mois	st) %	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Re	emarks
)-5	10YR 4/1	95	10YR 3/6	5	C	PL M	Silt loam		
5-11	2.5Y 4/1	85	7.5YR 3/4	15	C	PL M	Silt loam		
11-25	10Y 5/1	65	10YR 4/6	25	C	PL M	Silty clay loam		
	2.5Y 4/1	10							
	-								
	-								
	-								
	Concentration, D=Deple	etion, RM	=Reduced Matri	x, MS= Masked S	Sand Grains		<sup>2</sup> Location: PL=Pore		
-	il Indicators: Histosol (A1)		П	Polyvalue Belov	v Surface (S	9) <b>/I DD D</b>	Indicators for Proble  2 cm Muck (A	ematic Hydric S 10) (LRR K, L, I	
	Histic Epipedon (A2)			MLRA 149		o) (LKK K,		Redox (A16) ( <b>LI</b>	
	Black Histic (A3)			Thin Dark Surfa	,	R R, MLRA		eat or Peat (S3)	
	Hydrogen Sulfide (A4)			Loamy Mucky N	Mineral (F1) (		□ Dark Surface	(S7) ( <b>LRR K, L</b> )	
	Stratified Layers (A5)	S		Loamy Gleyed				ow Surface (S8)	
	Depleted Below Dark S Thick Dark Surface (A1		A11) ⊠ □	Depleted Matri Redox Dark Su				face (S9) <b>(LRR</b> se Masses (F12	K, L) 2) (LRR K, L, R)
	Sandy Mucky Mineral (			Depleted Dark					9) (MLRA 149B)
	Sandy Gleyed Matrix (S			Redox Depress			☐ Mesic Spodic	(TA6) ( <b>MLRA 1</b>	44A, 145, 149B)
	Sandy Redox (S5)						Red Parent M		(F40)
	Stripped Matrix (S6) Dark Surface (S7) (LRI	RR MIF	2 A 149R)				☐ Very Shallow ☐ Other (Explain	Dark Surface (T	F12)
	Dank Garlage (G7) (ER	( IX, IVILI	(A 140D)				Other (Explain	r iir rteinanto)	
	of Hydrophytic vegetati		etland hydrology	y must be present	t, unless dist	urbed or pr	oblematic.		
	e Layer (if observed):								
, ,	9:						Hydric Soil Present?	P Yes ⊠	No 🗌
	th (inches):								
Remarks:									

WETLAND DETERMINATION DA	ATA FORM – Northcer	ntral and Northeast F	Region
Project/Site: McKay Park Proposed Park Improvements City/Coun	ty: Village of Bloomfield/Walwo		Sampling Date: <u>10-28-2019</u>
Applicant/Owner: Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC	Section Township Pange:	SE Quarter, Section 16, T1N-	Sampling Point: <u>13</u>
Landform (hillslope, terrace, etc.): depression	Local relief (concave, convex		Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): LRR K	Lat: Long:	· <del>_</del>	0.0po (70). <u>0.270</u>
Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt)			NWI classification: None
Are climatic/hydrologic conditions on the site typical for this time of yea	r? Yes 🗌 No 🛛 (	(If no, explain in Remarks)	
Are Vegetation, Soil, or Hydrology significantly distur		stances" present? Yes 🛛	No 🗆
Are Vegetation, Soil, or Hydrology naturally problems	atic? (If, needed, explain a	any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing	sampling point location	s, transects, importan	t features, etc.
Hydrophytic Vegetation Present?   ☐ Yes ☐ No	Is the Sampled Area	M vaa	
Hydric Soils Present?   Yes   No	within a Wetland?	⊠ Yes	□No
Wetland Hydrology Present?			
	If yes, optional Wetland		1
Remarks: (Explain alternative procedures here or in a separate report	t.) 90-day antecedent precip	oitation is wetter than norm	ial.
HYDROLOGY			
Wetland Hydrology Indicators:		Secondary Indicat	ors (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		☐ Surface Soil	Cracks (B6)
	Stained Leaves (B9)	☐ Drainage Pat	, ,
	, ,		
	c Fauna (B13)	Moss Trim Li	` '
Saturation (A3) Marl D	eposits (B15)		Nater Table (C2)
☐ Water marks (B1) ☐ Hydrog	gen Sulfide Odor (C1)	Crayfish Burr	ows (C8)
Sediment Deposits (B2) Oxidize	ed Rhizospheres on Living Root	s (C3) Saturation Vi	sible on Aerial Imagery (C9)
☐ Drift Deposits (B3) ☐ Presen	ice of Reduced Iron (C4)	Stunted or St	ressed Plants (D1)
	t Iron Reduction in Tilled Soils (6		Position (D2)
	uck Surface (C7)	Shallow Aqui	
		· · · · · · · · · · · · · · · · · · ·	, ,
<del></del>	Explain in Remarks)		phic Relief (D4)
Sparsely Vegetated Concave Surface (B8)  Field Observations:			Test (D5)
Surface Water Present? Yes No Depth (inches):	1		
· ` ` · · · ·			
Saturation Present? Yes No Depth (inches): _ (includes capillary fringe)	w	Vetland Hydrology Present?	Yes ⊠ No □
Describe Recorded Data (stream gauge, monitoring well, aerial photo	s previous inspections) if avail	lable: Topo Man (Exhibit 1) V	VWI Man (Exhibit 2) Soils Man
(Exhibit 3), and Aerial Photos (Exhibit 4).	o, providuo inopoduono), ii avaii	abio. Topo map (Extiloit 1), v	VVV Map (Extract 2), Solid Map
Remarks:			

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. Salix x pendulina	<u>20</u>	Species :	FACW	Number of Dominant Species
			<u> </u>	That are OBL, FACW, or FAC: 3 (A)
2				_ , ,
3				Total Number of Dominant Species Across All Strata: <u>3</u> (B)
4				
5				Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)
6				
7				Prevalence Index worksheet:
	<u>20</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4	-			UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
·· <u>—</u>	<u>0</u>	= Total Cove		Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	⊻	- Total Cove	ΣI	Dominance Test is >50%     Prevalence Index is ≤3.0¹
1. Phalaris arundinacea	<u>35</u>	$\boxtimes$	FACW	☐ Morphological Adaptations¹ (Provide supporting
	<u>20</u>	$\boxtimes$	OBL	data in Remarks or on a separate sheet)
2. Persicaria amphibia	20		OBL	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3				<sup>1</sup> Indicators of hydric soil and wetland hydrology must
4				Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11	-			
12		П		Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>55</u>	= Total Cove	er	of olze, and weedy plante less than olze it tall.
Woody Vine Stratum (Plot size: 30' radius)	_			Woody vines – All woody vines greater than 3.28 ft in
1				height
2				
2		_		
3		Ц		Hydrophytic
4				Vegetation       Present?     Yes ⊠ No □
Demonstrative (include abote number has a parameter about	<u>0</u>	= Total Cov	er	
Remarks: (include photo number here or on a separate sheet.	.) Fresh (we	neadow.		

Depth Matrix Redox Features (inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks    Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains   Location: PL=Pore Lining, M=Matrix	Depth   Matrix   Redox Features
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains  ydric Soil Indicators:    Histosol (A1)	ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains  ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains  ydric Soil Indicators:
ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains	ype: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains    All   All
Histosol (A1)	Histosol (A1)
ric Soil Indicators:	Histosol (A1)
Histosol (A1)	Histosol (A1)
Histosol (A1)	Indicators for Problematic Hydric Soils:   Histosol (A1)
Histosol (A1)	Histosol (A1)
Histosol (A1)	Histosol (A1)
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, Logical Content of Lark K, Logical Content of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. 2 cm Muck (A10) (LRR K, L, MLRA 1498)   Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LLR K, L, R)   Coast Prairie Redox (A16) (LLR K, L, R) Coast Prairie Redox (A16) (LLR K, L, R)   Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L)   Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)   Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)   Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L)   Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 144A, 145, Fed Parent Material (F21)   Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, Fed Parent Material (F21)   Stripped Matrix (S6) Very Shallow Dark Surface (TF12)   Dark Surface (S7) (LRR R, MLRA 149B) Other (Explain in Remarks)    Type:  Hydric Soil Present? Yes No	☐ Histosol (A1) ☐ Polyvalue Below Surface (S8) (LRR R, ☐ 2 cm Muck (A10) (LRR K, L, MLRA I49B)   ☐ Histic Epipedon (A2) MLRA 149B) ☐ Coast Prairie Redox (A16) (LLR K, I)   ☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B) ☐ 5 cm Mucky Peat or Peat (S3) (LLR K, L)   ☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (LRR K, L) ☐ Dark Surface (S7) (LRR K, L)   ☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Polyvalue Below Surface (S8) (LRR K, L)   ☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3) ☐ Thin Dark Surface (S9) (LRR K, L)   ☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRI N)   ☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) ☐ Piedmont Floodplain Soils (F19) (MI Nesic Spodic (TA6) (MLRA 144A, 1)   ☐ Sandy Redox (S5) ☐ Redox Depressions (F8) ☐ Mesic Spodic (TA6) (MLRA 144A, 1)   ☐ Sandy Redox (S5) ☐ Very Shallow Dark Surface (TF12)   ☐ Dark Surface (S7) (LRR R, MLRA 149B) ☐ Other (Explain in Remarks)    Identificative Layer (if observed):  Type:
☐ Histic Epipedon (A2)       MLRA 149B)       ☐ Coast Prairie Redox (A16) (LLR K, L, R)         ☐ Black Histic (A3)       ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B)       ☐ 5 cm Mucky Peat or Peat (S3) (LLR K, L)         ☐ Hydrogen Sulfide (A4)       ☐ Loamy Mucky Mineral (F1) (LRR K, L)       ☐ Dark Surface (S7) (LRR K, L)         ☐ Stratified Layers (A5)       ☐ Loamy Gleyed Matrix (F2)       ☐ Polyvalue Below Surface (S8) (LRR K, L)         ☐ Depleted Below Dark Surface (A11)       ☐ Depleted Matrix (F3)       ☐ Thin Dark Surface (S9) (LRR K, L)         ☐ Thick Dark Surface (A12)       ☐ Redox Dark Surface (F6)       ☐ Iron-Manganese Masses (F12) (LRR K, L)         ☐ Sandy Mucky Mineral (S1)       ☐ Depleted Dark Surface (F7)       ☐ Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 145, 145)         ☐ Sandy Redox (S5)       ☐ Redox Depressions (F8)       ☐ Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145)         ☐ Stripped Matrix (S6)       ☐ Very Shallow Dark Surface (TF12)         ☐ Dark Surface (S7) (LRR R, MLRA 149B)       ☐ Other (Explain in Remarks)     Type:	☐ Histic Epipedon (A2) MLRA 149B) ☐ Coast Prairie Redox (A16) (LLR K, I)   ☐ Black Histic (A3) ☐ Thin Dark Surface (S9) (LRR R, MLRA 149B) ☐ 5 cm Mucky Peat or Peat (S3) (LLR K, I)   ☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1) (LRR K, L) ☐ Dark Surface (S7) (LRR K, L)   ☐ Stratified Layers (A5) ☐ Loamy Gleyed Matrix (F2) ☐ Polyvalue Below Surface (S8) (LRR K, L)   ☐ Depleted Below Dark Surface (A11) ☐ Depleted Matrix (F3) ☐ Thin Dark Surface (S9) (LRR K, L)   ☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRI   ☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) ☐ Piedmont Floodplain Soils (F19) (MI   ☐ Sandy Redox (S5) ☐ Redox Depressions (F8) ☐ Mesic Spodic (TA6) (MLRA 144A, 1   ☐ Sandy Redox (S5) ☐ Red Parent Material (F21)   ☐ Dark Surface (S7) (LRR R, MLRA 149B) ☐ Very Shallow Dark Surface (TF12)   ☐ Other (Explain in Remarks)    Type: Hydric Soil Present? Yes ☑ No
□ Black Histic (A3)       □ Thin Dark Surface (S9) (LRR R, MLRA 149B)       □ 5 cm Mucky Peat or Peat (S3) (LLR K, L)         □ Hydrogen Sulfide (A4)       □ Loamy Mucky Mineral (F1) (LRR K, L)       □ Dark Surface (S7) (LRR K, L)         □ Stratified Layers (A5)       □ Loamy Gleyed Matrix (F2)       □ Polyvalue Below Surface (S8) (LRR K, L)         □ Depleted Below Dark Surface (A11)       □ Depleted Matrix (F3)       □ Thin Dark Surface (S9) (LRR K, L)         □ Thick Dark Surface (A12)       □ Redox Dark Surface (F6)       □ Iron-Manganese Masses (F12) (LRR K, L)         □ Sandy Mucky Mineral (S1)       □ Depleted Dark Surface (F7)       □ Piedmont Floodplain Soils (F19) (MLRA 144A, 145, 144A, 14	□ Black Histic (A3)       □ Thin Dark Surface (S9) (LRR R, MLRA 149B)       □ 5 cm Mucky Peat or Peat (S3) (LLR Phydrogen Sulfide (A4)         □ Hydrogen Sulfide (A4)       □ Loamy Mucky Mineral (F1) (LRR K, L)       □ Dark Surface (S7) (LRR K, L)         □ Stratified Layers (A5)       □ Loamy Gleyed Matrix (F2)       □ Polyvalue Below Surface (S8) (LRR Phydrogen Sulface (S8) (LRR Phydrogen Sulface (A11))         □ Depleted Below Dark Surface (A11)       □ Depleted Matrix (F3)       □ Thin Dark Surface (S9) (LRR K, L)         □ Thick Dark Surface (A12)       □ Redox Dark Surface (F6)       □ Iron-Manganese Masses (F12) (LRIF Phydrogen Sulface (B7))         □ Sandy Mucky Mineral (S1)       □ Depleted Dark Surface (F7)       □ Piedmont Floodplain Soils (F19) (MIRA 144A, 1)         □ Sandy Redox (S5)       □ Redox Depressions (F8)       □ Mesic Spodic (TA6) (MLRA 144A, 1)         □ Sandy Redox (S5)       □ Redox Depressions (F8)       □ Very Shallow Dark Surface (TF12)         □ Dark Surface (S7) (LRR R, MLRA 149B)       □ Very Shallow Dark Surface (TF12)         □ Dark Surface (S7) (LRR R, MLRA 149B)       □ Other (Explain in Remarks)     Hydric Soil Present? Yes □ No
Hydrogen Sulfide (A4) □ Loamy Mucky Mineral (F1) (LRR K, L) □ Dark Surface (S7) (LRR K, L)   □ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Polyvalue Below Surface (S8) (LRR K, L)   □ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L)   □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRR K, L)   □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MLRA   □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, □   □ Sandy Redox (S5) □ Red Parent Material (F21)   □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12)   □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)    Idicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if observed):  Type: Hydric Soil Present? Yes ☑ No □	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L)   Stratified Layers (A5) Loamy Gleyed Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L)   Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (S9) (LRR K, L)   Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (MI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (MI Iron-Manganese Masses (F12) (LRI Iron-Ma
□ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Polyvalue Below Surface (S8) (LRR K, L)   □ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L)   □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRR K, L)   □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MLRA LA4A, L45, L44A, L45A, L44A, L45A, L44A, L45A, L44A, L45A, L44A, L45A,	□ Stratified Layers (A5) □ Loamy Gleyed Matrix (F2) □ Polyvalue Below Surface (S8) (LRR K, L)   □ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L)   □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (LRI Iron-Manganese Masses (F12) (MI Iron-Manganese Masses (F12) (LRI Iron-Manganese
□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRR K, L) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MLRA □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, □ Sandy Redox (S5) □ Red Parent Material (F21) □ Very Shallow Dark Surface (TF12) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)  icators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Itrictive Layer (if observed): □ Hydric Soil Present? Yes □ No □	□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L) □ Thick Dark Surface (A12) □ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRI □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MI □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 1 □ Sandy Redox (S5) □ Red Parent Material (F21) □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)  icators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  itrictive Layer (if observed): □ Type: □ Hydric Soil Present? Yes □ No
☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRR K,   ☐ Sandy Mucky Mineral (S1) ☐ Depleted Dark Surface (F7) ☐ Piedmont Floodplain Soils (F19) (MLRA   ☐ Sandy Gleyed Matrix (S4) ☐ Redox Depressions (F8) ☐ Mesic Spodic (TA6) (MLRA 144A, 145, ☐   ☐ Sandy Redox (S5) ☐ Red Parent Material (F21)   ☐ Stripped Matrix (S6) ☐ Very Shallow Dark Surface (TF12)   ☐ Dark Surface (S7) (LRR R, MLRA 149B) ☐ Other (Explain in Remarks)    Iron-Manganese Masses (F12) (LRR K, Mera 144A, 145, ☐   ☐ Wesic Spodic (TA6) (MLRA 144A, 145, ☐   ☐ Very Shallow Dark Surface (TF12)   ☐ Other (Explain in Remarks)    Iron-Manganese Masses (F12) (LRR K, Mera 144A, 145, ☐   ☐ Very Shallow Dark Surface (TF12)   ☐ Other (Explain in Remarks)    Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless disturbed or problematic.  Indicators of Hydrophytic Vegetation and Wetland hydrology must be present, unless	☐ Thick Dark Surface (A12) ☐ Redox Dark Surface (F6) ☐ Iron-Manganese Masses (F12) (LRI Piedmont Floodplain Soils (F19) (MI Piedmont Floodplain
□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, 145, 145, 145, 145, 145, 145, 145	□ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 1   □ Sandy Redox (S5) □ Red Parent Material (F21)   □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12)   □ Dark Surface (S7) (LRR R, MLRA 149B) ○ Other (Explain in Remarks)    Idicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if observed):  Type: Hydric Soil Present? Yes ☑ No
□ Sandy Redox (S5) □ Red Parent Material (F21)   □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12)   □ Dark Surface (S7) (LRR R, MLRA 149B) ☑ Other (Explain in Remarks)    Idicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  Strictive Layer (if observed):  Type: Hydric Soil Present? Yes ☑ No □	Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)  □ Very Shallow Dark Surface (TF12) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)  □ Other (Explain in Remarks) □ Wery Shallow Dark Surface (TF12) □ Other (Explain in Remarks) □ O
□ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12)   □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)    Strictive Layer (if observed):  Type: Hydric Soil Present? Yes ☑ No □	Stripped Matrix (S6) □ Dark Surface (S7) (LRR R, MLRA 149B)  Strictive Layer (if observed): □ Type: □ Hydric Soil Present? Yes ☑ No
□ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks)  dicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  strictive Layer (if observed):  Type:	□ Dark Surface (S7) (LRR R, MLRA 149B) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Dark Surface (S7) (LRR R, MLRA 149B
dicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  strictive Layer (if observed):  Type: Hydric Soil Present? Yes \( \times \) No \( \times \)	dicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.  strictive Layer (if observed):  Type: Hydric Soil Present? Yes \( \Sigma \) No
strictive Layer (if observed):  Type: Hydric Soil Present? Yes 🗵 No 🗌	strictive Layer (if observed):  Type: Hydric Soil Present? Yes ⊠ No
strictive Layer (if observed):  Type: Hydric Soil Present? Yes ⊠ No □	strictive Layer (if observed):  Type: Hydric Soil Present? Yes ⊠ No
Type: Hydric Soil Present? Yes ⊠ No □	Type: Hydric Soil Present? Yes ⊠ No
<b>,</b>	**
Depth (inches):	
narks: Soils inundated with 4 inches of water, hydric by definition - Criteria 3.	parks: Soils inundated with 4 inches of water, hydric by definition - Criteria 3

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region Sampling Date: 10-28-2019 Project/Site: McKay Park Proposed Park Improvements City/County: Village of Bloomfield/Walworth County Sampling Point: 14 Applicant/Owner: \_\_\_ State: WI Investigator(s): Chris Jors, Jen Dietl, and Shane Heyel: SEWRPC Section, Township, Range: SE Quarter, Section 16, T1N-R18E Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): linear Slope (%): 0-2% Subregion (LRR or MLRA): LRR K Long: \_\_\_\_\_ Soil Map Unit Name: Drummer silt loam, gravelly substratum (Dt) 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. Is the Sampled Area Hydrophytic Vegetation Present? □Yes ⊠No ☐ Yes ⊠No within a Wetland? ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes If yes, optional Wetland Site ID: Remarks: (Explain alternative procedures here or in a separate report.) 90-day antecedent precipitation is wetter than normal. Sample site contains gravel fill and is serving as a parking area. **HYDROLOGY** Wetland Hydrology Indicators: Secondary Indicators (minimum of two required) Primary Indicators (minimum of one is required; check all that apply) Surface Soil Cracks (B6) Surface Water (A1) Water-Stained Leaves (B9) Drainage Patterns (B10) High Water Table (A2) Aquatic Fauna (B13) Moss Trim Lines (B16) Saturation (A3) ☐ Marl Deposits (B15) ☐ Dry-Season Water Table (C2) Water marks (B1) ☐ Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8) П ☐ Sediment Deposits (B2) Oxidized Rhizospheres on Living Roots (C3) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) ☐ Presence of Reduced Iron (C4) Drift Deposits (B3) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6) Geomorphic Position (D2) Iron Deposits (B5) Thin Muck Surface (C7) Shallow Aquitard (D3) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Microtopographic Relief (D4) Sparsely Vegetated Concave Surface (B8) П FAC-Neutral Test (D5) **Field Observations:** Surface Water Present? Yes No 🛛 Depth (inches): \_ Water Table Present? Yes $\boxtimes$ Depth (inches): No Saturation Present? Yes 🛛 No $\square$ Depth (inches): 4 Wetland Hydrology Present? Yes 🛚 No $\square$ (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), WWI Map (Exhibit 2), Soils Map (Exhibit 3), and Aerial Photos (Exhibit 4). Remarks: Saturation this close to the surface at this location is due to wetter than normal antecedent precipitation. A water table could not be reached due to refusal at 14 inches. Therefore, the Saturation (A3) indicator does not apply.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1	70 COVE		<u>Otatus</u>	Number of Dominant Species
2			<u> </u>	That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
				Prevalence Index worksheet:
7	<u> </u>			
	<u>U</u>	= Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:  Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	r	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				☐ Prevalence Index is ≤3.0¹
1. Poa pratensis	<u>40</u>	$\boxtimes$	<u>FACU</u>	☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
2. Trifolium repens	<u>35</u>	$\boxtimes$	<b>FACU</b>	☐ Problematic Hydrophytic Vegetation¹ (Explain)
3. Agrostis stolonifera	<u>10</u>		<u>FACW</u>	
4. Plantago major	<u>10</u>	П	FACU	Indicators of hydric soil and wetland hydrology must     Be present, unless disturbed or problematic.
5. Erigeron annuus	<u>3</u>	П	<u>FACU</u>	Do process, among dictarged of programate.
6	_			Definitions of Vegetation Strata:
				To a Manda de de Cia (7.0 an) as sons in discussos
7 8				<b>Tree</b> – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb - All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>98</u>	= Total Cove	r	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
4				Vegetation No. 7
	<u>0</u>	= Total Cove		Present? Yes ☐ No ☒
Remarks: (include photo number here or on a separate sheet	.) Mowed la	wn (parking ar	ea stabilize	ed with gravel fill).

OIL									Sampling Po	int: <u>14</u>
Profile Des	scription: (Describe to	o the depth	needed to doc	ument the indi	icator or con	firm the a	bsence	of indicators.)		
Depth	Matrix			Redox Feat	ures					
(inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	_	Texture	Re	emarks
0-4	10YR 2/2		, ,				Sandv	loam	with gravel fill	
4-14	10YR 4/1								· <del></del>	el fill
14+							<u> </u>			
141									Neiusai. Grave	71 1111
	· -									
	·									
	·									
	· ·									
		Texture Remarks    2/2   100								
-	il Indicators:			Dobarolus Bolov	u Curtoso (Ci	o) // DD D			-	
	Histosol (A1) Histic Epipedon (A2)		Ш '			5) (LKK K,				
	Black Histic (A3)		П.		,	R. MLRA	149B)			
	Hydrogen Sulfide (A4)						,			
	Stratified Layers (A5)									
	Sandy Redox (S5)	<b>O</b> 1)	ш.	todox Bopiood	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					,
	Stripped Matrix (S6)									F12)
	Dark Surface (S7) (LR	R R, MLRA	149B)					Other (Explain	n in Remarks)	
31 n di notoro	of Undrankutia vanatat	ion and wat	and budgalage	auat ha nraaan	t unlana diatu	יים מי מיי	ahlamati	•		
			and nydrology n	iust be present	i, uriless disti	inbed of pro	DDIEMAN	<b>с.</b>		
	:	•					н	vdric Soil Present	? Yes □	No. ⊠
	h (inches):							yane con i resent	. 103 🗆	NO 🖂
		ors observ	ed.							
	,									

## **Exhibit 10. Site Photos**

McKay Park Proposed Improvements SE Quarter, Section 16, T1N-R18E Village of Bloomfield, Walworth County

Photo 1. Wetland sample site 1. Fresh (wet) meadow. (NE view)



Photo 2. Upland sample site 2. Hardwoods.



Photo 3. Wetland sample site 3. Hardwood swamp.



Photo 4. Upland sample site 4. Hardwoods.



Photo 5. Wetland sample site 5. Fresh (wet) meadow with shrub-carr along the edge.



Photo 6. Upland sample site 6. Shrub thicket.



Photo 7. Wetland sample site 7. Atypical (mowed) wetland. In addition to mowing disturbance, the plant community is indicative of recent ground disturbance, i.e. spreading of soil fill material. (South view)



Photo 8. Wetland sample site 8. Atypical (mowed) wetland. Disturbances at this sample site are as observed at sample site 7, and described above. (South view)



Photo 9. Wetland sample site 9. Fresh (wet) meadow, with an old fill pile in the background. (South view)



Photo 10. Wetland hydrology indicator C8, crayfish burrow, at sample site 9.



Photo 11. Wetland sample site 10. Disturbed fresh (wet) meadow on the remainder of an old fill pile. Aerial imagery and on-site observations indicate fill from this area was spread toward samples sites 7 and 8, as indicated by the orange arrows, below. (South view)



Photo 12. Upland sample site 11. Sparsely vegetated gravel driveway. (Gravel fill to 18 inches)



Photo 13. Wetland sample site 12. Atypical (mowed) wetland. NW view is toward sample site 11, which is on the gravel driveway near the top of the shovel.



Photo 14. Wetland sample site 13. Fresh (wet) meadow.



Photo 15. Upland sample site 14. Mowed lawn.



Photo 16. North view across large wetland from sample site 5.



Photo 17. North view along staked wetland boundary from between sample sites 13 and 14.



Photo 18. South view along staked wetland boundary from between sample sites 13 and 14.



00253661