

CITY OF STOUGHTON DEPARTMENT OF PLANNING & DEVELOPMENT 207 S. Forrest Street, Stoughton, WI. 53589 RODNEY J. SCHEEL DIRECTOR

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www.ci.stoughton.wi.us

July 27, 2022

Capital Area RPC Attention: Sean Higgins 100 State St, Suite 400 Madison, WI 53703-2573

RE: Stoughton Urban Service Amendment Request

Dear Mr. Higgins:

I have enclosed the City's application materials to expand the Urban Service Area on the south side of Stoughton. This recently annexed land is on the north side of Aaker Road and is west of S. Fourth Street/Taylor Lane. The envisioned development is focused on affordability with roughly 67% single-family lots and 23% duplex lots.

To supplement our application, we are providing information on how this application addresses the region's top priorities found in the 2050 Regional Development Framework.

- 1. *Reduce greenhouse gas emissions and foster community climate resilience* This development is planned to have park and open space along with a full network of sidewalks as well as at trail system that will support a walkable neighborhood. The vision is to preserve the wetland and much of the woodlands on lands to be dedicated to the public in the northwest corner of the amendment area. Street tree requirements will be used to line the terraces of the streets.
- 2. *Increase access to jobs, housing and services for all people* The landowner is focused on creating a more affordable option for single-family and two-family homes than found elsewhere in Stoughton. It is anticipated many of the duplexes will become owner-occupied units.
- 3. *Conserves farmland, water resources, natural areas, and fiscal resources* This urban development will incorporate moderate sized residential parcels. The planned stormwater management areas are planned to be identified as Environmental Corridors. The stormwater management system is intended to control post-development peak runoff rates and runoff volumes to levels not higher than existing conditions for events ranging from the 1-year through the 200-year event. There is an existing pond that will be a natural amenity in the park area.

Thank you for your consideration and let us know if you have any questions.

Sincerely, CITY OF STOUGHTON

Rodney Scheel

Rodney Scheel Director of Planning & Development

cc: Mayor Tim Swadley

Attachment: City of Stoughton Urban Service Area Amendment Application

City of Stoughton 2022URBANSERVICEAREA AMENDMENT

Magnolia Springs

July 21, 2022

Prepared for the Capital Area Regional Plan Commission and the Wisconsin Department of Natural Resources By the City of Stoughton and MSA Professional Services, Inc.

CITY OF STOUGHTON 2022 URBAN SERVICE AREA AMENDMENT

MAGNOLIA MEADOWS ADDITION

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- A City of Stoughton Resolution 2022-XX
- B Adjacent Government Notice Letter
- C Wetland Delineation Report
- D Nonfederal Wetland Exemption Determination

INTRODUCTION

The City of Stoughton is seeking an urban service area amendment to add approximately 32.5 total acres to its urban service area comprised of two privately owned parcels. The amendment area is located north of Aaker Road and west of South 4th Street/Taylor Lane. See Map 3.1.

Of the 38.4 acres of privately-owned undeveloped land (includes 5.9 acres in the urban service area), approximately 18.8 acres are expected to be developable when future rights of way (estimated 9.4 acres) and green space (estimated 5.4 acres) are excluded. The proposed green space includes stormwater facilities and parks. Proposed green space will occur on public outlots 1 and 3 as identified in the neighborhood concept.

The proposed amendment area has no mapped environmental corridors per Wisconsin Department of Natural Resources (WDNR) or Capital Area Regional Planning Commission (CARPC) data, but the northeast wetland and wooded area are listed as a Resource Protection Corridor by Dane County (Map 4.3). Taylor Conservation LLC performed a wetland delineation in October 2020 that identified three, medium- to poor-quality wetland areas. The Army Corps of Engineers determined the delineated wetland located near Aaker Road as nonfederal, and WDNR has approved modification or removal of the wetland.

All of the undeveloped lands proposed for inclusion in the amendment have been annexed into the City of Stoughton, as of April 2022.

The City of Stoughton's most recent urban service area expansion requests were in 2008 (50 developable acres, residential use), 2011 (75 developable acres, mixed residential and commercial use), 2020 (36 developable acres, residential and commercial use), and 2022 (17.2 developable acres for planned industrial use).

1.0 PLAN CONSISTENCY

1.1 Consistency with the Comprehensive Plan

The City of Stoughton Comprehensive Plan, as most recently amended in July 2017, can be found on the City's website at the following link: <u>https://www.ci.stoughton.wi.us/vertical/sites/%7B801AC7AB-1155-4D50-B8C6-60A370EC007F%7D/uploads/Stoughton_Comprehensive_Plan_-</u> <u>Final_Adopted_Plan_(with_maps_and_Apps) - 7.11.17.pdf</u>.

The Comprehensive Plan includes specific recommendations for the proposed amendment area, which it calls out as a Planned Neighborhood (see Map 1.1). Per the plan, this area is:

This future land use category is a carefully planned mixture of predominantly Single-family residential development, combined with one or more of the following land use categories:

Two Family Residential, Multi-Family Residential, Neighborhood Office, Neighborhood Business, Institutional, and Recreation or Public Open Space. This category is intended to accommodate both conventional and Traditional Neighborhood Design (TND) forms of "fullservice" neighborhood development. To implement a key City objective, development within these neighborhoods should contain a minimum of 65 percent single family dwelling units, a maximum of 15 percent two family and/or townhomes, and a maximum of 20 percent multifamily dwellings.

The proposed development is focused on affordability through low-density residential with roughly 67% single-family lots and 23% duplex lots.

City Council action to affirm support for this USAA is anticipated in July 2022.

Zoning and plat review processes are expected to occur in the second quarter of 2022.

1.2 Neighborhood Plan

There is no neighborhood plan for the proposed amendment area.

1.3 Describe the Need for the Addition to the Urban Service Area

The City of Stoughton's most recent urban service area amendments were in 2008, 2011, 2020, and 2022.

The 2008 amendment was for an area at the southwest corner of the City for 50 developable acres of predominantly single-family residential development and one multi-family site. This area is now platted as Nordic Ridge Park; the multi-family site is now fully developed and the single-family sites are roughly 40% developed.

The 2011 amendment was for an area west of USH 51 for 75 developable acres to be a mix of singlefamily, townhome, multifamily and commercial development. This area is now platted as Kettle Park West; a majority of the commercial space is now built out (Walmart, Tru by Hilton hotel, Kwik Trip, McFarland State Bank, etc.) and the one multifamily site is now developed as a senior living complex. The remainder of the development, including a handful of twinhome lots and the rest small and midsize single-family lots, is in early stages of construction and lot development.

The 2020 amendment brought in 82 acres into the urban service area adjacent to USH 51 and south of Rutland-Dun Townline Rd, inclusive of 70 acres of new development in the City of Stoughton and 12 acres of existing residential in the Towns of Rutland and Dunkirk. The new subdivision (51 West Subdivision) is a mixed-use neighborhood that includes 13 acres of commercial and approximately 40 acres of mixed residential lots(i.e., 4 multifamily lots, 5 duplex lots, 3 condo lots, and 9 single-family lots).

The 2022 amendment brought in approximately 18.5 acres of land for planned industrial and commercial use, including approximately 0.5 acres of existing road right of way, and 0.8 acres of proposed environmental corridors for stormwater management.

Census data show a 2010 population of 12,611 in 5,133 households (2.46 people/household). The 2020 Census population estimate of 13,173 indicates an increase of 562 people and demand for about 200 additional housing units since 2010. The 2017 Comprehensive Plan cites Department of Administration population and household projections, estimating a continued decline in average household size, about 5,000 new residents by 2040, and demand for about 2,400 housing units.

The experience of the developments enabled by the 2008, 2011, and 2020 USA amendments, reinforced by broader market trends and developer feedback, is that there is continuing strong demand for new housing.

The proposed new development in this amendment area includes 11.0 acres for single family use, 7.75 acres for duplex use, and 8.6 acres for green space/open space/stormwater management.

2.0 INTERGOVERNMENTAL COOPERATION

2.1 Notification of Adjacent Local Governmental Units

There is one adjacent units of government: Town of Dunkirk.

There have been informal communications with the town. Upon approval of this application by City Council, a copy will be sent to the Town of Dunkirk requesting their formal comments on the proposed amendment. Copies of the transmittal letters are attached as Appendix C.

2.2 Adjacent Local Governmental Unit(s) Objections or Support of the Proposal

As noted in Section 2.1, a copy of the proposed amendment application will have been sent to the adjacent town for their comments following City Council approval of the application. Upon receipt of those comments they will be forwarded to CARPC staff. At present we are aware of no objections to the proposed amendment.

3.0 LAND USE

3.1 Map of the Proposed USAA Boundary and Existing Rights of Way (ROW)

The proposed amendment area includes 32.48 acres of existing private parcels and 1.94 acres of public rightsof-way. See Map 3.1.

3.2 Tables of Land Use Acreage and Number of Housing Units

The concept plans for the proposed amendment areas are shown in Map 4.2. It is possible that some details of the plans (such as precise road alignments, lot configurations, and precise sizes and locations of stormwater management features) will change as the proposals go through the plat approval process. However, the mix of land uses and the general layouts are not anticipated to change substantially.

Proposed Land Use		Acres in USA Amendmer	Acres in USA	# of Housing	
	New Development	Existing Development	Environmental Corridor	New Development	Units
Single Family Residential	10.79	0	-	0.21	60
Duplex Residential	5.77	0	-	1.98	58
Multi-Family Residential	0	0	-	0	-
Residential Total	16.56	0		2.19	118
Commercial	0	0	-	0	-
Industrial	0	0	-	0	-
Institutional	0	0	-	0	-
Street ROW	9.71	1.94	-	1.20	-
Parks	2.01	0	2.01	1.58	-
Stormwater Management	4.16	0	4.16	0.17	-
Other Open Space	0	0	0	0.76	-
TOTAL	32.48	1.94	6.17	5.90	118

Table 3.2: Urban Service Amendment Area Data

3.3 Map of Existing Land Uses

Existing land uses are accurately depicted in the Existing Land Use Map from the 2017 Comprehensive Plan. An Excerpt of this map is provided, see Map 3.3.

3.4 Quantity and Type of Housing Units

A total of 118 new housing units are proposed in the amendment area, including single-family and duplex. See Table 3.2.

4.0 NATURAL RESOURCES

4.1 Natural Resource Areas

The proposed amendment area includes none of the following resources, and no map is provided: water bodies, floodplains, areas of unique vegetation or geology, highly erodible soils, drainageways or groundwater recharge areas.

Wetlands

The amendment area has one wet spot identified in the USDA Surface Water Data Viewer. A wetland delineation in October 2020 identified a total of three wetland areas, totaling 1.2 acres (see Appendix C and Map 4.1A). A quick summary is provided below.

- <u>Wetland #1</u> (0.6 acres) is being preserved as open space within a City Park.
- <u>Wetland #2</u> (0.4 acres) is considered a fresh meadow but functions as a ditch adjacent to Taylor Lane. The City is interested in improving Taylor Lane to make it safer in an urban section to include curb and gutter and a multi-use path. This will require a partial filling of the wetland, requiring Wisconsin DNR approval to be submitted when construction plans are accepted by the City of Stoughton.
- <u>Wetland 3</u> (0.2 acres) is a farmed wetland that has been determined to be non-federal by the Army Corp of Engineers (ACOE). On April 28, 2022, Wisconsin Department of Natural Resources (WDNR) granted the non-federal exemption, allowing for filling the wetland (see Appendix D for WDNR letter).

Woodlands

There are woodlands around the largest wetland in the northeast section of the subdivision. It is the intent of the developer to maintain some of the woodlands adjacent to the wetland, except for those in poor health or in area needing clearing to safely grade stormwater management areas and roadways. A recent aerial photograph is provided, Map 4.1B

Contours and Steep Slopes

See Map 4.1C

Soils Types

See Map 4.1D

4.2 Public Outlots for Parks and Stormwater Management Facilities

There are 6 outlots proposed in the development (inclusive of lands already within the existing urban service area), addressing the need for stormwater management and park space tied to new residential uses. Map 4.2 shows these outlots and the stormwater ponds within them.

In Existing Urban Service Area					
Outlot Number	Land Area (Acres)				
Outlot 1 Trail Easement	0.76				
Outlot 3 Stormwater	0.17				
Outlot 3 Park	1.58				
Outlot 3 Total	1.75				
Total Park and Stormwater in Existing USA	2.51				
Proposed Urban Service Amendment Area					
Outlot Number	Land Area (Acres)				
Outlot 2 Stormwater	1.37				
Outlot 3 Stormwater	0.83				
Outlot 3 Wetland	1.00				
Outlot 3 Park	1.97				
Outlot 3 Total	3.8				
Outlot 4 Stormwater	0.73				
Outlot 5 Stormwater	0.23				
Outlot 6 Park	0.04				
Park and Stormwater in Proposed USA Amendment	6.17				
Total Park and Stormwater Facilities for Magnolia Springs 8.68					

Table 4.2: Urban Service Amendment Parks and Stormwater Management Areas

4.3 Existing Environmental Corridors

There is an existing Resource Protection Corridor on the parcel identified by Dane County (Map 4.3). Some woodland sections will be preserved outside of road grading and stormwater management facilities. The largest wetland (#1) will be preserved. These elements, plus park and open spaces and trail corridor outline are included in the Proposed Environmental Corridors map.

4.4 Proposed Environmental Corridors

The proposed Environmental Corridors are shown on Map 4.4. Included are all of the outlots to be used for stormwater management and public park and trail purposes.

4.5 Minimum Environmental Corridors Criteria Requirements

The proposed Environmental Corridors meet the minimum requirements. The minimum environmental corridor criteria requirements refer to major areas unsuitable for the installation of waste treatment systems because of physical or environmental constraints, and should be excluded from the service area. This includes wetlands, floodplains, waterways, and steep slopes.

5.0 UTILITIES & STORMWATER MANAGEMENT

5.1 Proposed Sanitary Sewer Extension for the USAA

The land within the proposed urban service area amendment (USAA) will be served from an existing 8inch sewer main located at the intersection of S. Page Street and Isham Street. An approximate 650foot segment of 6-inch sewer interceptor in S. Page Street (W. Chicago Street to W. Broadway St.) will be upgraded to an 8-inch to accommodate the proposed Magnolia Springs Development. All sanitary sewer service lines within the proposed USAA will be 8-inch gravity lines and will service the lots within the subdivision. The sewer is not anticipated to connect or serve out to 4th Street due to existing grades and not necessary for this development, as indicated in Map 5.1. The developer will be responsible for installation of all sewer facilities based on the final plat approval and development agreement, including the S. Page Street sewer upsizing.

5.2 Estimate of the Average Daily and Peak Wastewater Flow for the USAA

The estimated flow rate is based on the expected flow rates of 100 gallons per person per day for residential use. A peaking factor of 4.0 for residential development results in an estimated peak flow of 0.478 cfs from the USAA.

Land Use		Metrics		Average Flows (GPD)	Average Flows (cfs)	Peaking Factor	Peak Flow (cfs)
New SF	100	60	2.8	17,080	0.026	4	0.104
Residential	GPD/person	units	people/unit				
MF/Duplex	100	58	2.1	11,760	0.018	4	0.072
Residential	GPD/person	units	people/unit				
			Total	28,840	0.044		0.176

Table 5.2 - Average and Peak Wastewater	Flow Rates for the Proposed USAA
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5.3 Current Average Daily Flow for the Interceptor Sewer and the Wastewater Plant

All areas of the proposed USAA flow to an existing sanitary sewer on S. Page Street and ultimately connects to the West interceptor. The existing sewers on Page Street range in size from 6-inches to 10-inches in diameter. Based on existing development, the estimated existing peak flow in the Page Street sanitary sewer is 0.19 cfs. Based on historical information, two segments of existing 6-inch sanitary sewer have a limiting capacity of 0.43 cubic feet per second (cfs) (flowing full). It is anticipated that two blocks of sanitary sewer on S. Page Street (Chicago Street to W. Broadway St.) will be required to be upsized from the existing 6-inch main to an 8-inch main. Once the sewer is upsized, this results in a limiting pipe capacity of 0.95 cfs in the S. Page Street sewer to the West Interceptor.

The Stoughton wastewater treatment plant has a total design average flow capacity of 1.65 mgd. The current average daily flow is approximately 1.29 mgd, per the 2019 CMAR.

5.4 Wastewater Treatment Plant / Interceptor Sewer Capacity to Serve the USAA

Full development of the USAA is expected to generate an additional peak wastewater flow rate of 0.176 cfs in the existing sewers (see Table 5.2).

The estimated total future peak flow rate in the existing sewer on S. Page Street (once the section of 6inch is replaced with an 8-inch sewer) is 0.37 cfs, below the anticipated maximum pipe capacity of 0.95 cfs. Stoughton Utilities requires that sewers operate at no more than 80 percent of the maximum pipe capacity at peak flow. The current capacity of the 6-inch sewer main between Chicago Street and Broadway Street is below the required pipe capacity and therefore the section along S. Page Street is to be upgraded to a 8-inch pipe.

No other existing sewers or interceptors were evaluated.

The difference in design capacity and current flows for the Stoughton wastewater treatment plant is approximately 0.36 mgd. The estimated flows from the proposed USAA would use about 6% of this remaining capacity.

5.5 Proposed Public Water Supply/Distribution System Extension for the Proposed USAA

The amendment area will be served by connecting to an 6-inch watermain at the intersection of S. Page Street and Isham Street, looping through the Development, connecting to the existing 8-inch watermain stub located south of the intersection of S. 4th Street and Isham Street and connecting to an existing 8-inch water main on the west end of Isham Street planned for construction by others in the Summer of 2022, as indicated in Map 5.1. All mains within the Development are intended to be 8-inch watermain. The developer will be responsible for installation of all watermain facilities within the plat based on the final plat approval and development agreement.

5.6 Estimate of the Average Daily and Peak Hourly Water Demand for the USAA

The estimated flow rate is based on a typical expected residential flow rate of 100 gpd. Using these figures, the 117 new residential units will require average daily water of 28.840 gpd and a peak of 4,811 gallons per hour (peaking factor of 4).

Land Use		Metrics	;	Average Flows (GPD)	Peaking Factor	Peak Flow (gallons per hour)
New SF	100	60	2.8 people/unit	17,080	4	2,851
Residential	GPD/person	units				
MF/Duplex	100	58	2.1 people/unit	11,760	4	1,960
Residential	GPD/person	units				
Total				28,840		4,811

Table 5.6 - Average and Peak Water Demand for the Proposed USAA

5.7 Current Average Daily and Peak Hourly Water Demand

As of 2021, the existing average water use was approximately 1.125 million gallons per day (MGD), or approximately 781 gallons per minute (gpm), with a maximum day usage of 2.048 MGD or 1,422 gpm (Stoughton Utilities data). The water model-predicted available fire flow at the 8-inch connection point at the intersection of S. Page Street and Isham Street is approximately 1,938 gpm at a 20 psi residual pressure and at the intersection of S. 4th Street and Isham Street is approximately 2,201 gpm at a 20 psi residual pressure, which can be considered adequate to support this type of development. The water model was operated with no well or booster pumps operating and all elevated storage water levels set to 10 feet below overflow elevation.

5.8 Current Capacity of the Water System

The nearest elevated tank that would serve this proposed development is Tower 3, located on Racetrack Road just south of Main Street/US 51. Tower 3 has a capacity of 600,000 gallons and an overflow elevation of 1,081 feet above mean sea level. Assuming the water level in Tower 3 is 10 feet below overflow, or 1,071 ft, pressures in the proposed development would range from 79 to 90 psi. This is based on ground level elevations in the proposed development that range from 863 to 888 feet.

The City of Stoughton is supplied by four groundwater wells, Nos. 4, 5, 6, and 7. Well Nos. 4, 6, and 7 pump direction into the distribution system while Well No. 5 pumps into a ground-level reservoir, where two 1,000 gpm booster pumps are used to pump into the distribution system. The reported capacities of the four wells are listed below in gpm and MGD.

Table 5.8A – Current Water System Capacity

Well No.	Capacity (gpm)	Capacity (MGD)
4	1,131	1.529
5	1,321	1.902
6	1,084	1.561
7	988	1.423
Total Capacity	4,524	6.515
Firm Capacity*	3,536	5.092

*Assumes Well No. 7 well pump out of service

System storage consists of two steel spheroid elevated tanks and a concrete ground-level reservoir at Well No. 5. A summary of these storage facilities is listed below.

Storage Facility	Year Constructed	Capacity (gallons)	Overflow Elevation (ft)
Tower 2	1977	300,000	1,081.0
Tower 3	2010	600,000	1,081.0
Well No. 5 Reservoir	1989	400,000	N/A
Total Storage		1,300,000	

Table 5.8B – Current Water Storage Capacity

5.9 Proposed Stormwater Management Standards and Best Management Practices

The stormwater management system is intended to control post-development peak runoff rates to levels no higher than existing conditions for events ranging from the 1-yr through the 200-yr event. Post-development runoff volumes will also be controlled to levels no higher than existing for events ranging from the 1-yr through the 200-yr event. In addition to these event-based runoff control measures, the post-development site will also achieve 90% of pre-development stay-on (infiltration) on an annual average basis per current Dane County requirements. These requirements will need to be met regardless of on-site development density and potential changes in drainage patterns within the site.

The preliminary stormwater management plan for the amendment area consists of two (2) principal stormwater management systems, one each serving the west and east sides of the development site. The west side of the site will be served by a two-cell system comprising a large wet pond 'fore-bay' to provide water quality treatment and peak discharge rate control and a downstream infiltration basin to meet the 90% predevelopment stay-on requirement, as well as some additional peak discharge rate control. The east side of the site will be served by a pair of wet detention ponds oriented in series. The function of the two east-side ponds are to provide peak discharge rate control and water quality treatment. Note that the single infiltration facility serving the west side of the site is intended to satisfy infiltration requirements for the entire site.

As illustrated in Map 4.2, the basins are located in Outlot 2 (west end, drains to the east), Outlot 3 (north central and east, drains northeast), and Outlots 4 and 5 (south central, drains to the north).

A system of storm sewer will convey stormwater within the amendment area which includes some small off-site areas to the north, east, and west along proposed roadways to the proposed basins. Additionally, as there is a very large off-site watershed to the south, a centralized drainage swale is

incorporated into the site plans to convey runoff from the south through the site. The drainage swale will be off-line from the proposed on-site stormwater management practices and will not be managed for rate, quality, or volume. It is assumed that when this area develops on-site controls for those lands will be required and that (cumulative) flows will be controlled to no more than that of existing conditions, thereby ensuring the continued adequate capacity of the central drainage swale.

Performance Standards

Applicable stormwater management performance measures for this site will meet or exceed standards required by the State of Wisconsin (NR 151), Dane County (Chapter 14), and City of Stoughton (Chapter 10, Article IV, Section 10) Erosion Control and Stormwater Management, which are summarized below.

The performance standards summarized in the first paragraph of this section meet all current effective state, county, and local standard for stormwater management in terms of water quality treatment, peak discharge rate control, and infiltration (volume control).

Current published standards per applicable regulations are itemized below.

1. Water Quality:

Require Post-Construction sediment control sufficient to reduce total suspended solids leaving the site by at least 80%

2. Peak Discharge Rate Control:

Maintain predevelopment peak runoff rates for the 1- through 200-yr, 24-hour storm events, utilizing an MSE4 rainfall intensity distribution, as itemized below:

- o 1-yr, 24-hr event (2.49 inches).
- o 2-yr, 24-hr event (2.84 inches).
- o 10-yr, 24-hr event (4.09 inches).
- o 100-yr, 24-hr event (6.66 inches).
- o 200-yr, 24-hr event (7.53 inches).

3. Thermal Control:

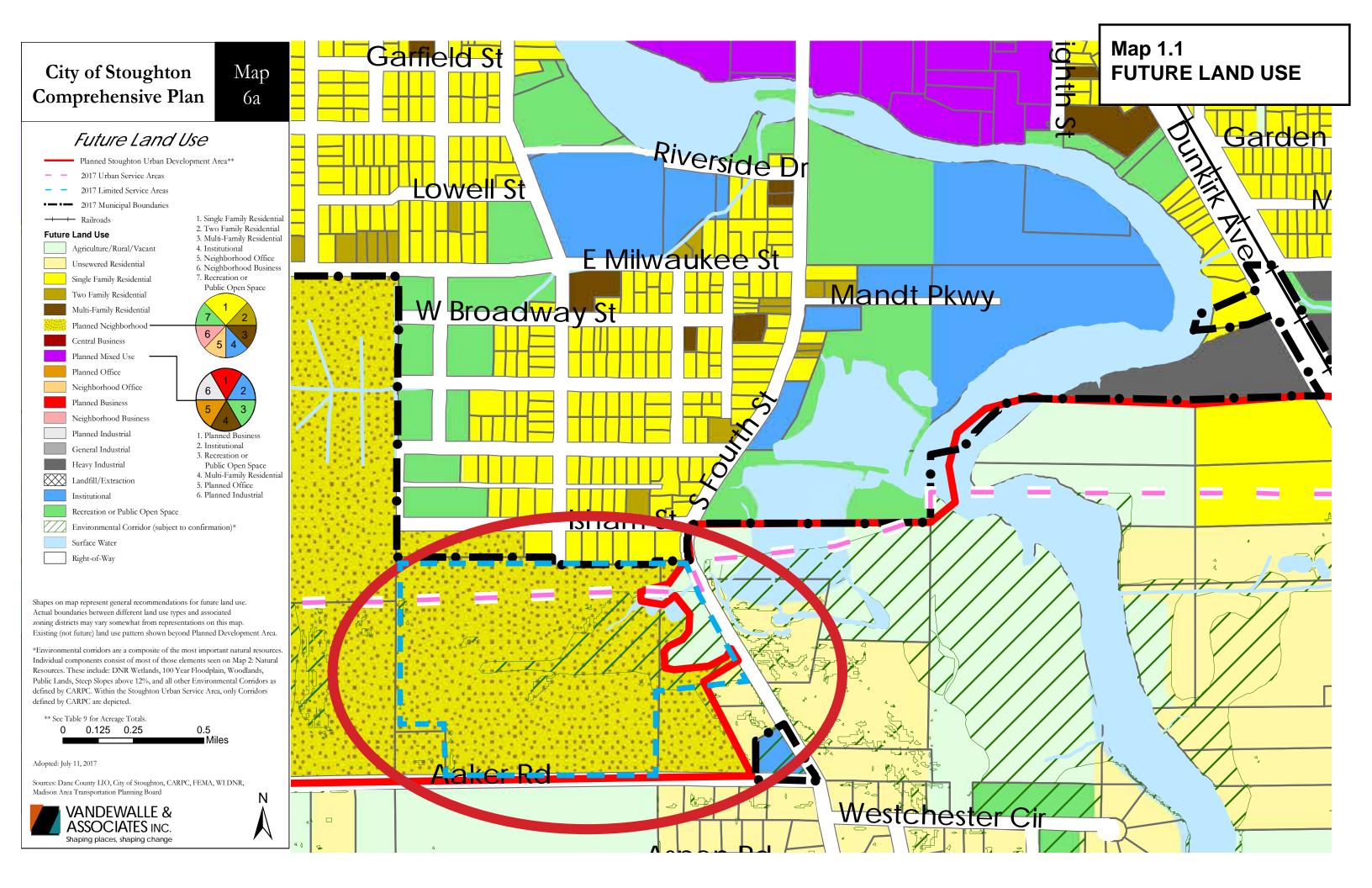
The amendment area is not part of any thermally sensitive areas and thus will not be required.

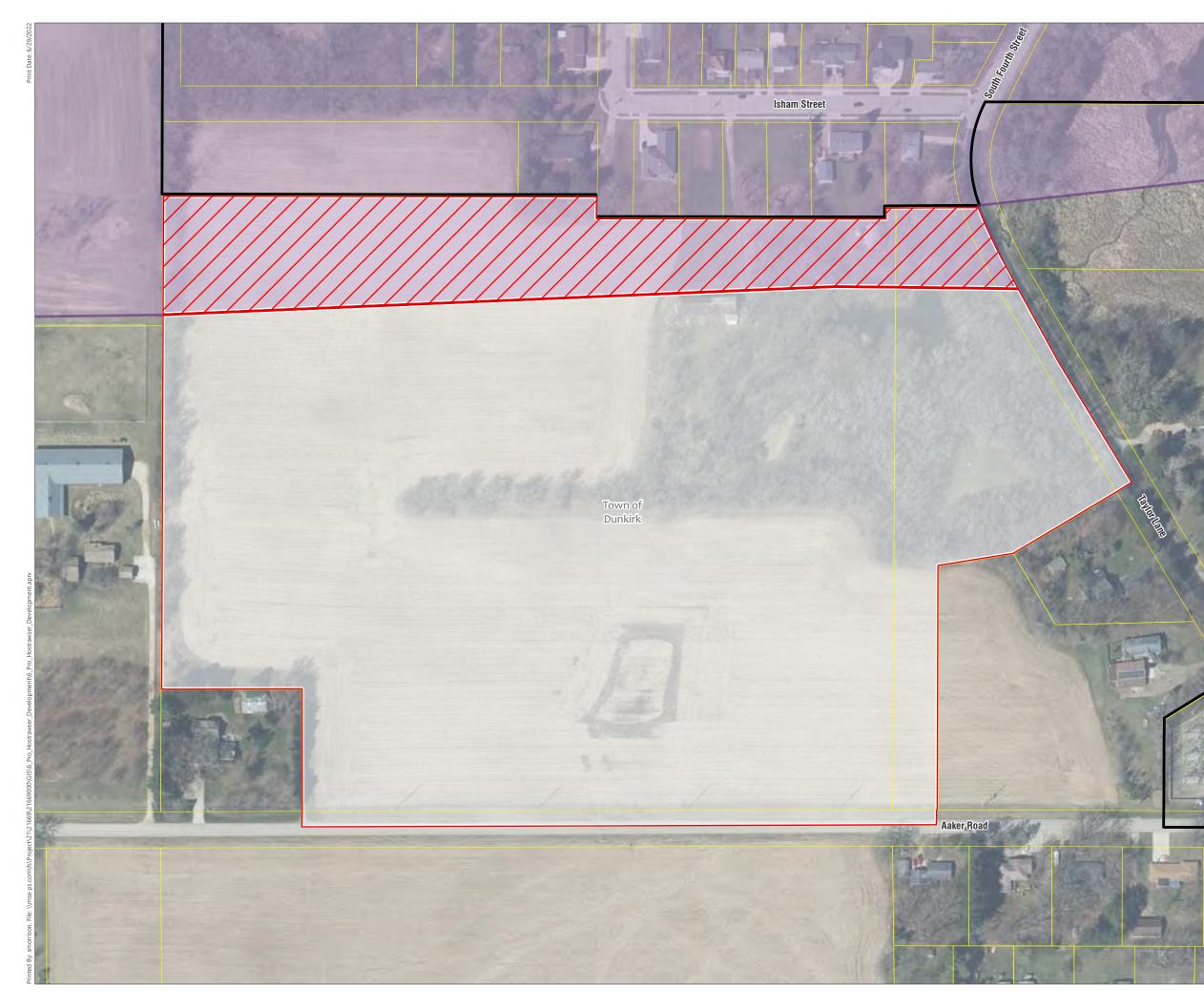
4. Infiltration:

Requirement for any development type is to infiltrate sufficient runoff volume so that postdevelopment infiltration volume shall be at least 90% of the pre-development infiltration volume based on average annual rainfall.

5. Oil and Grease Control:

There are no commercial or industrial lots planned for the development, thus will not be required.







Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI

🖓 Parcel Boundary

d Municipal Boundary

🛑 Urban Service Area

Proposed Development Area

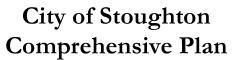
- Proposed Subdivision Within USA (6 Acres)
- Urban Service Area Amendment (32 Acres)

Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020)



0 50 100 Feet





Existing Land Use



0.5

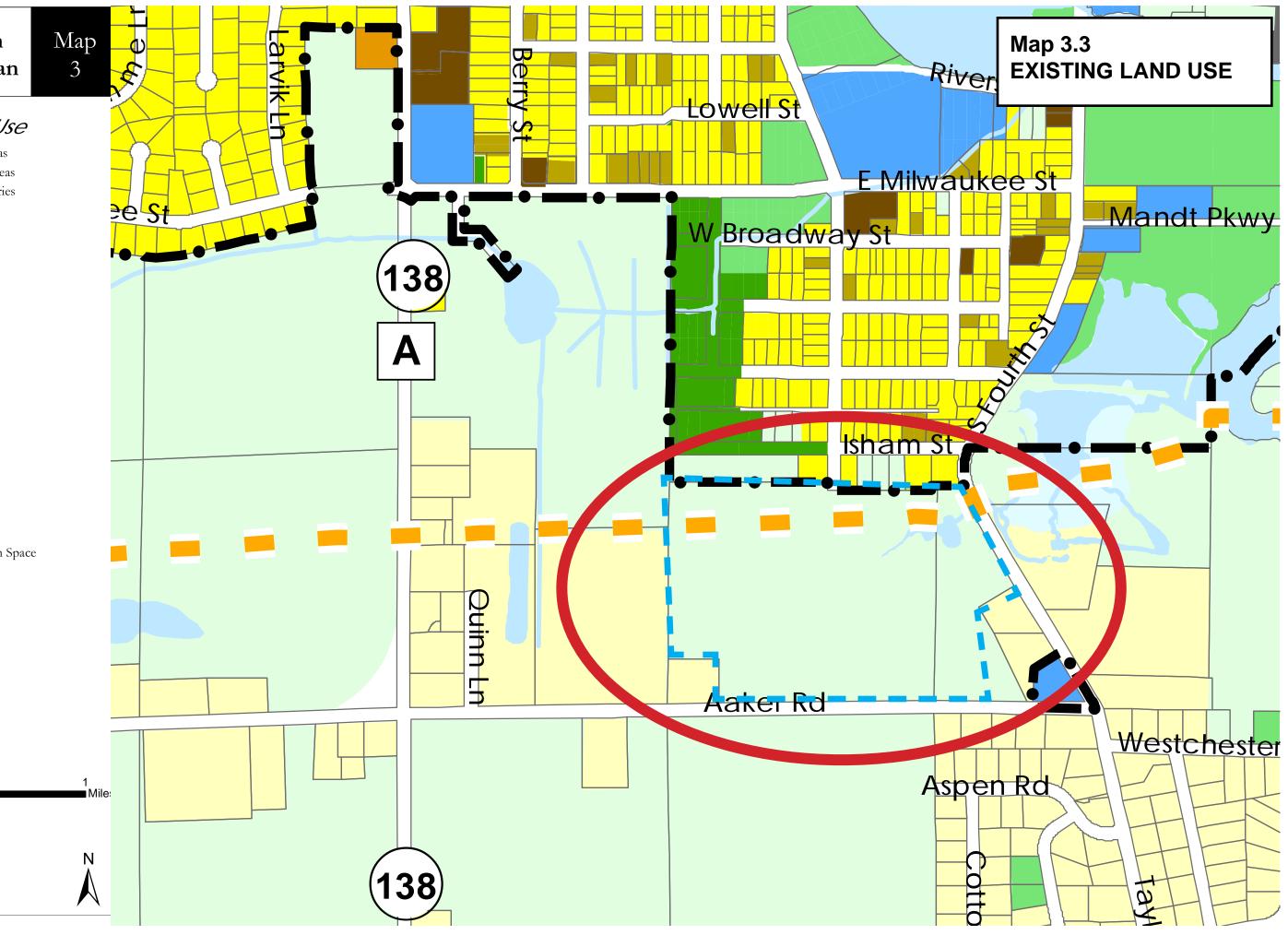
0.25

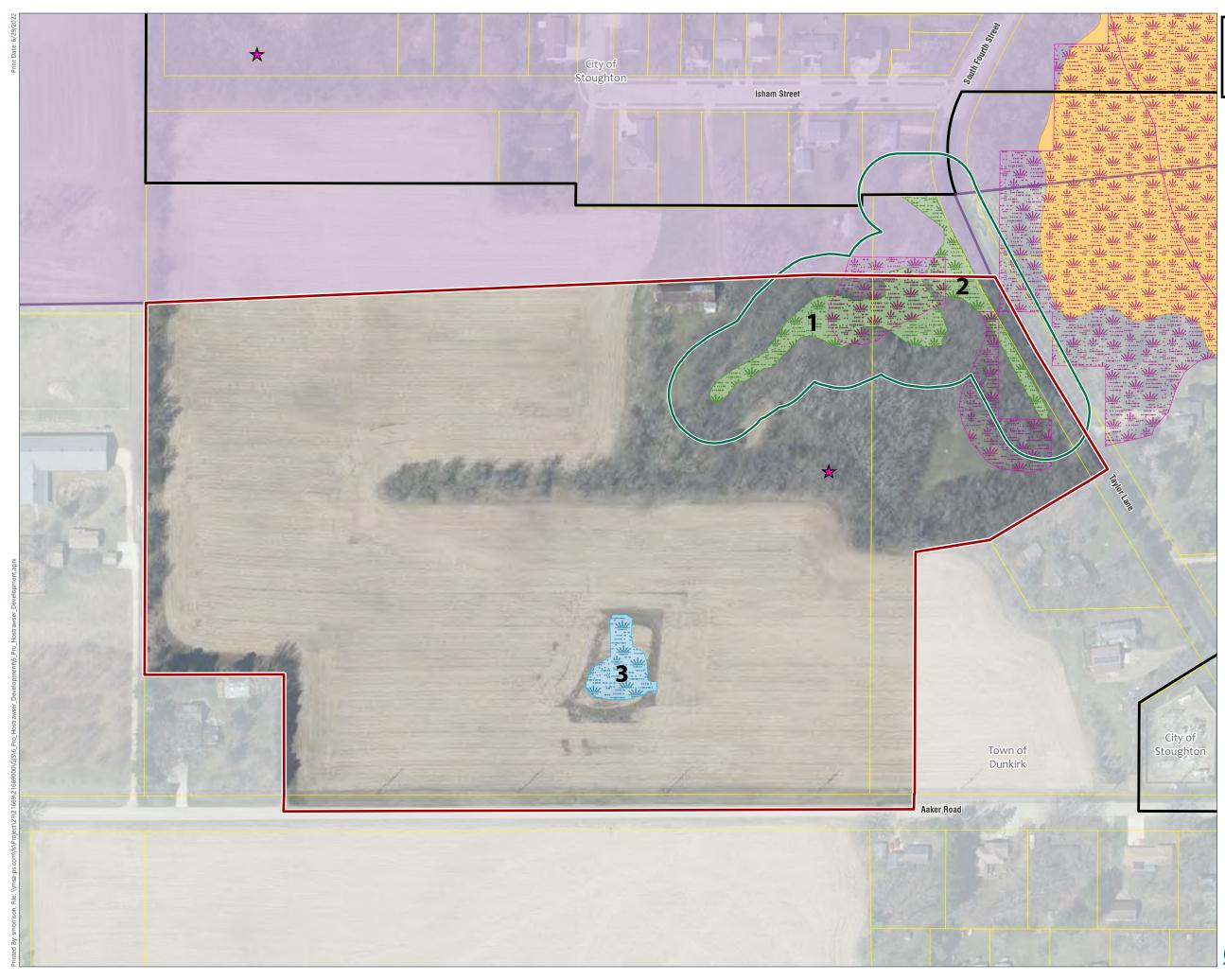
Sources: Dane County LIO, City of Stoughton.

VANDEWALLE & ASSOCIATES INC.

Shaping places, shaping change

Adopted: July 11, 2017





Map 4.1A WETLAND DATA

Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI

🛧 USDA Wet Spot
😂 Max Extent Wetland Indicators
🗚 75-ft Wetland Buffer
🙈 Existing Delineated Wetland
🙈 Exempt Delineated Wetland*
🟓 WDNR Wetland Area
Urban Service Area Amendment
Parcel Boundary
Municipal Boundary

🔲 Urban Service Area

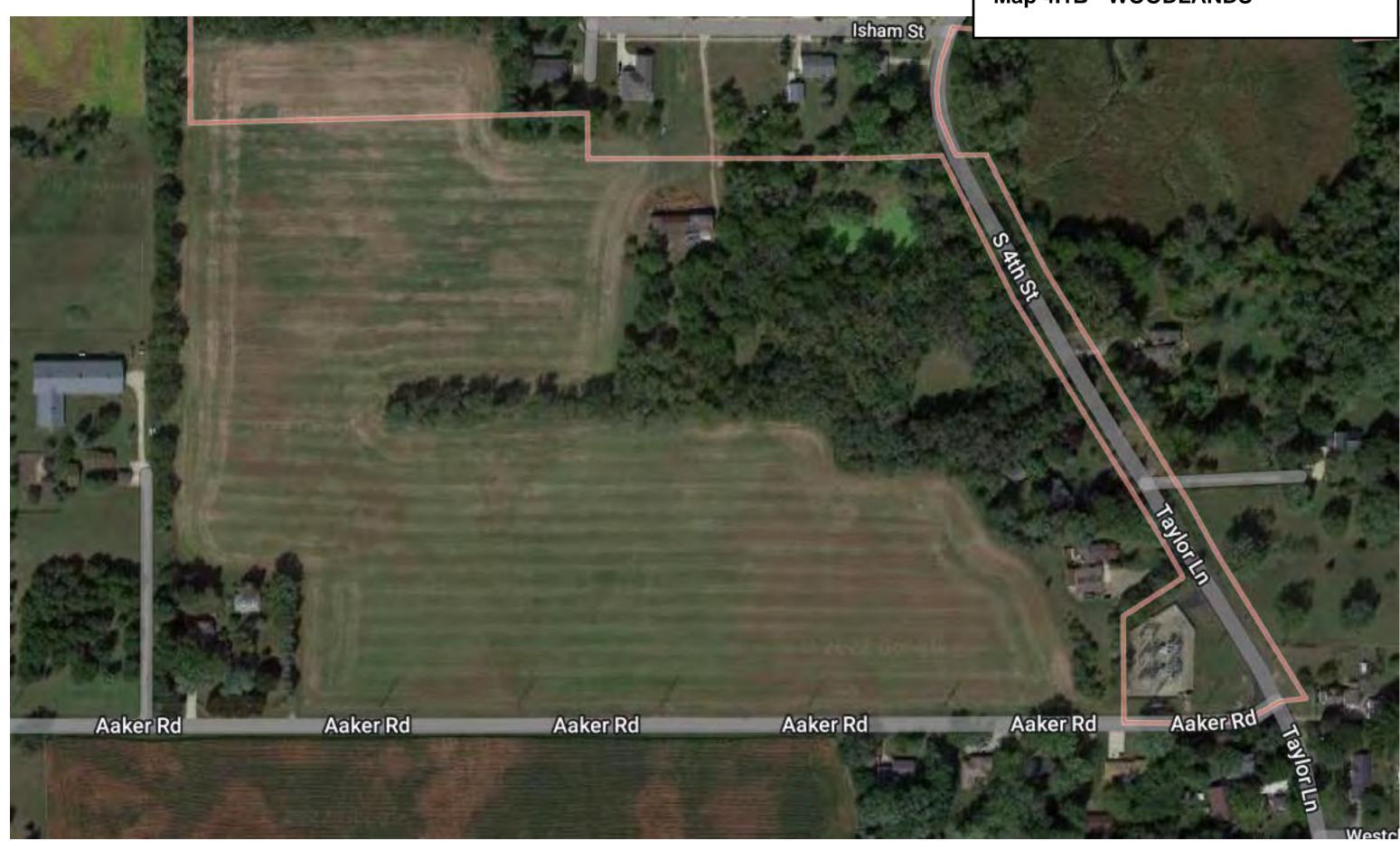
*The exempt delineated wetland has been determined by ACOE as nonfederal and by WDNR as low quality. It may be modified or filled.

Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020) USDA Wetspots, Wetland Indicators, Mapped Wetlands: WDNR SWDV (2020) Existing Wetlands: Wetland Delineation by Taylor Conservation (2021)

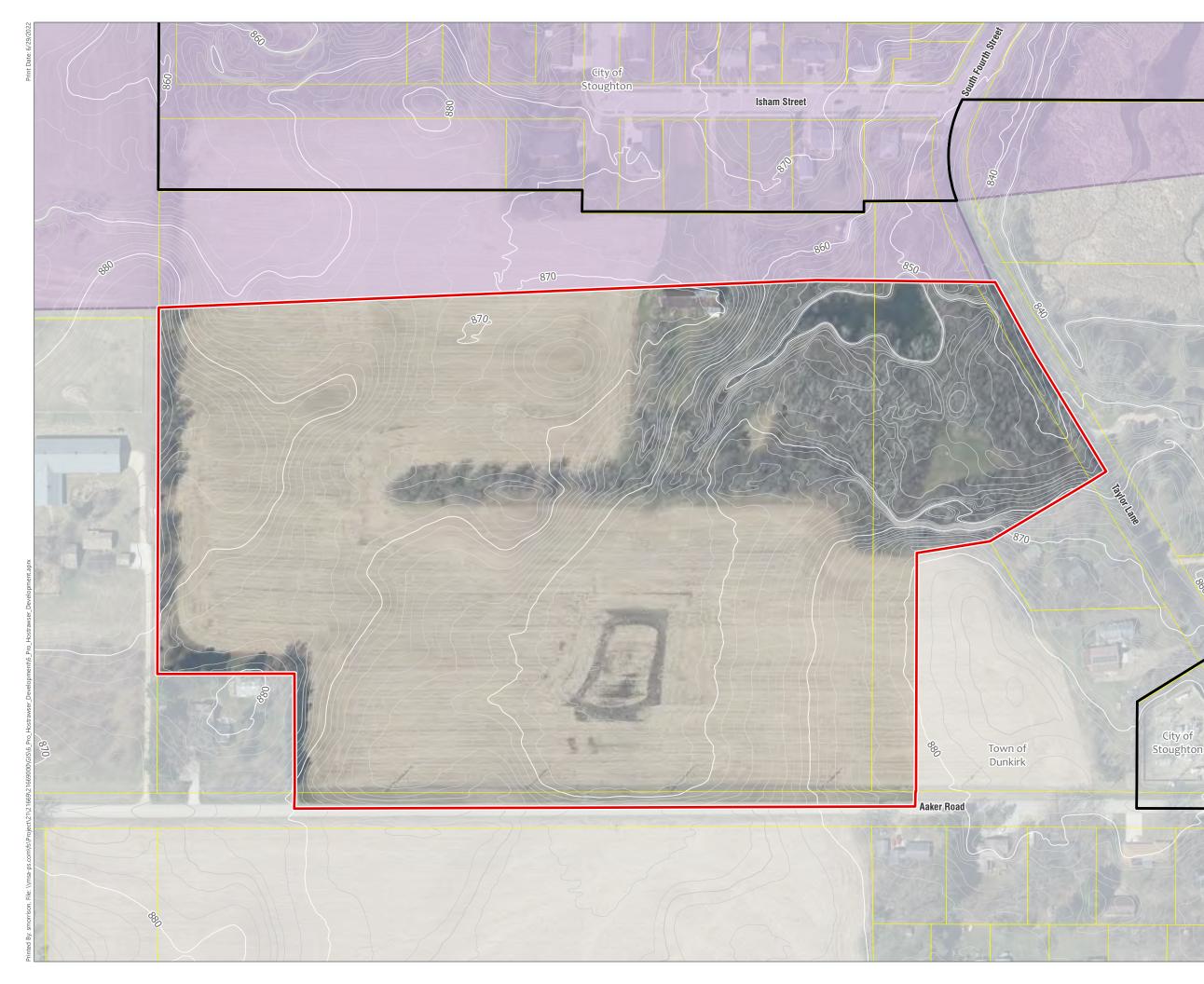








Map 4.1B - WOODLANDS



Map 4.1C **CONTOURS AND STEEP SLOPES**

Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI

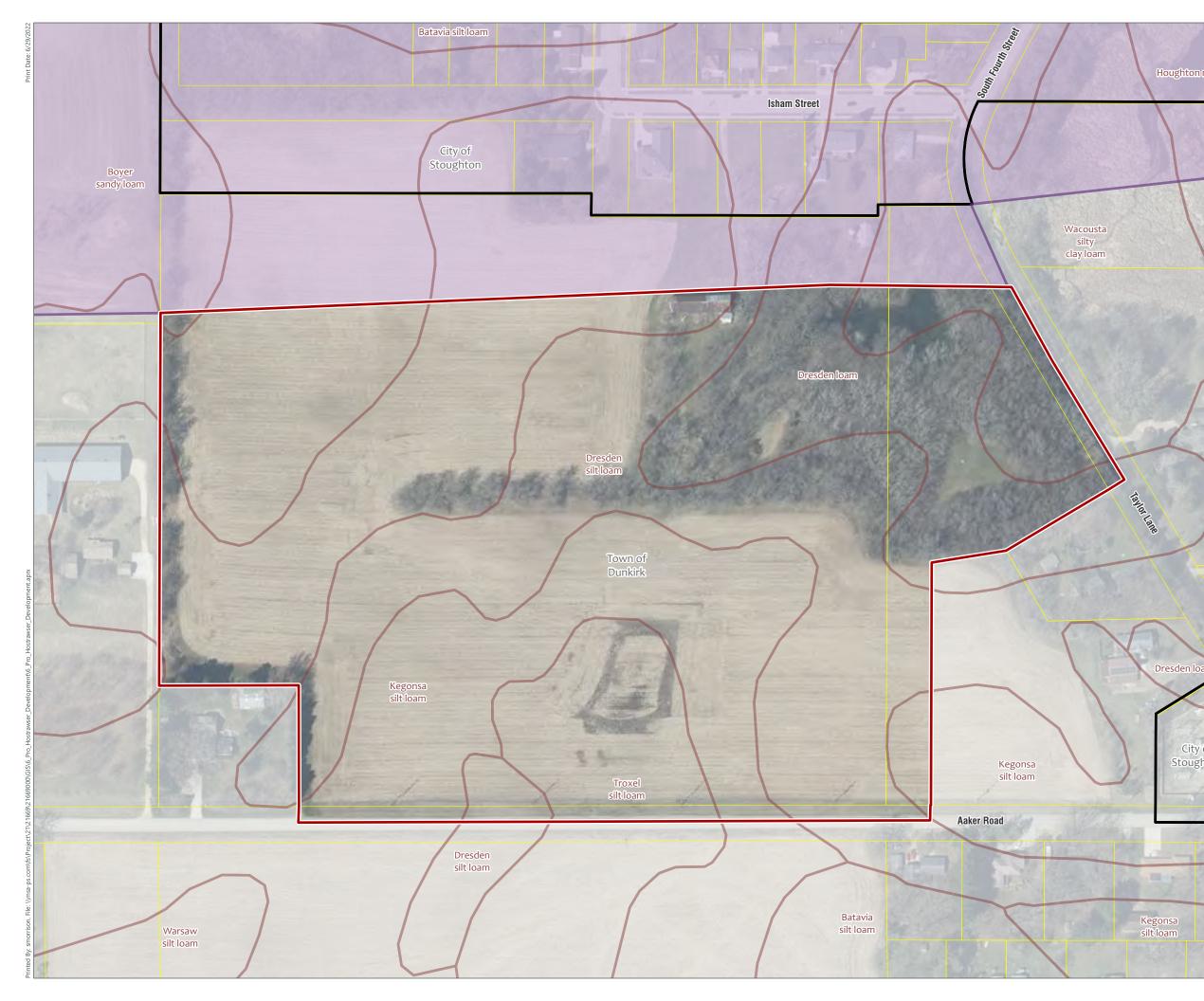
- 🔨 1-ft Contour
- \sim 2-ft Contour
- \sim 5-ft Contour
- No. 10-ft Contour
- Slopes Greater than 1 12%
- Parcel Boundary
- **Municipal Boundary**
- Urban Service Area Amendment
- 루 Urban Service Area

Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020) Contours & Slopes: Dane County (2017)











Map 4.1D SOIL TYPES

Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI



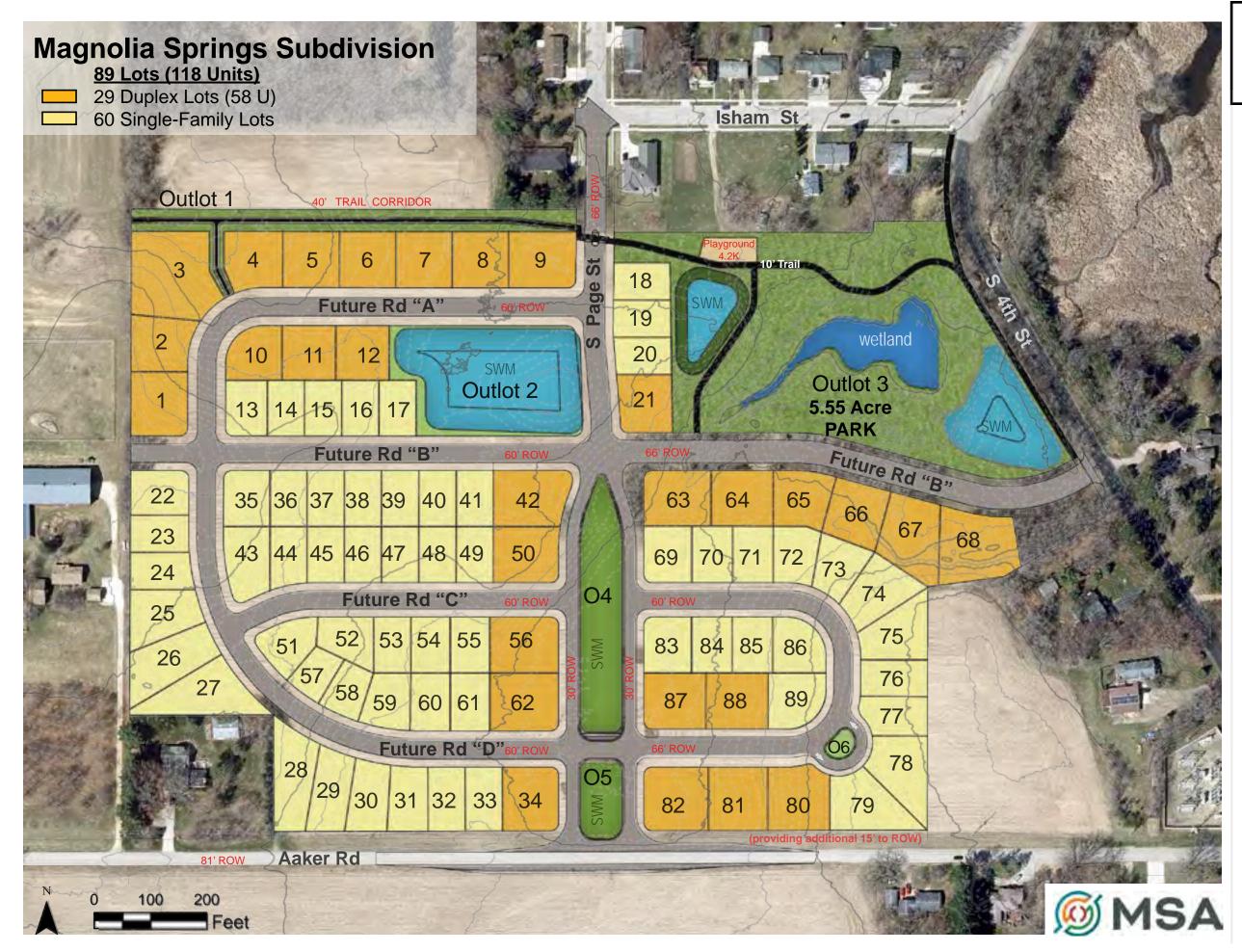
Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020) Soils: NRCS Web Soil Survey



City of Stoughton



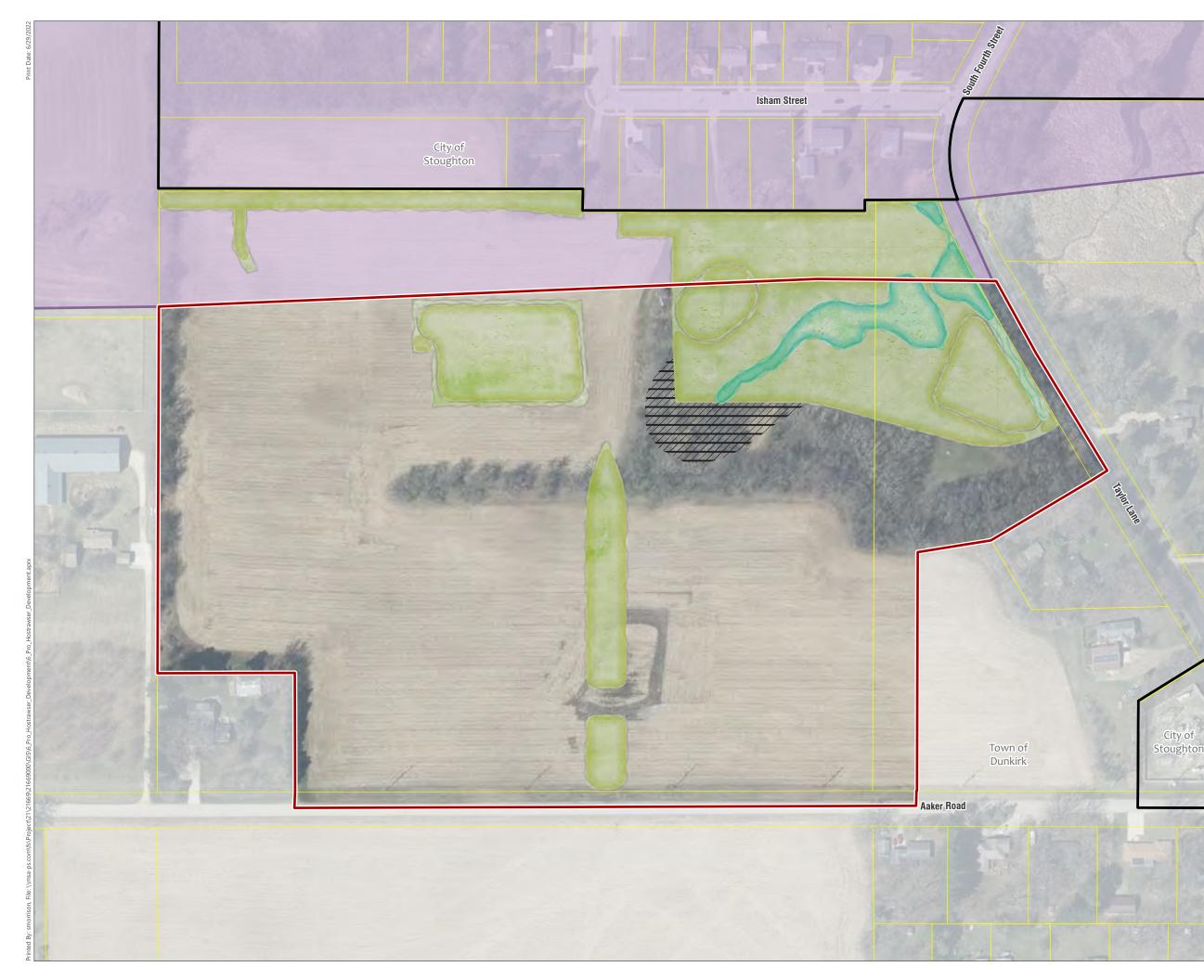




Map 4.2 DEVELOPMENT PLAN



Map 4.3 **RESOURCE PROTECTION CORRIDORS DANE COUNTY**



Map 4.4 PROPOSED ENVIRONMENTAL CORRIDORS

Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI

- Existing Urban Service Area
- Parcel Boundary
- **D** Municipal Boundary
- **d** Urban Service Area Amendment
- 🛋 Development Outlot
- Delineated Wetlands

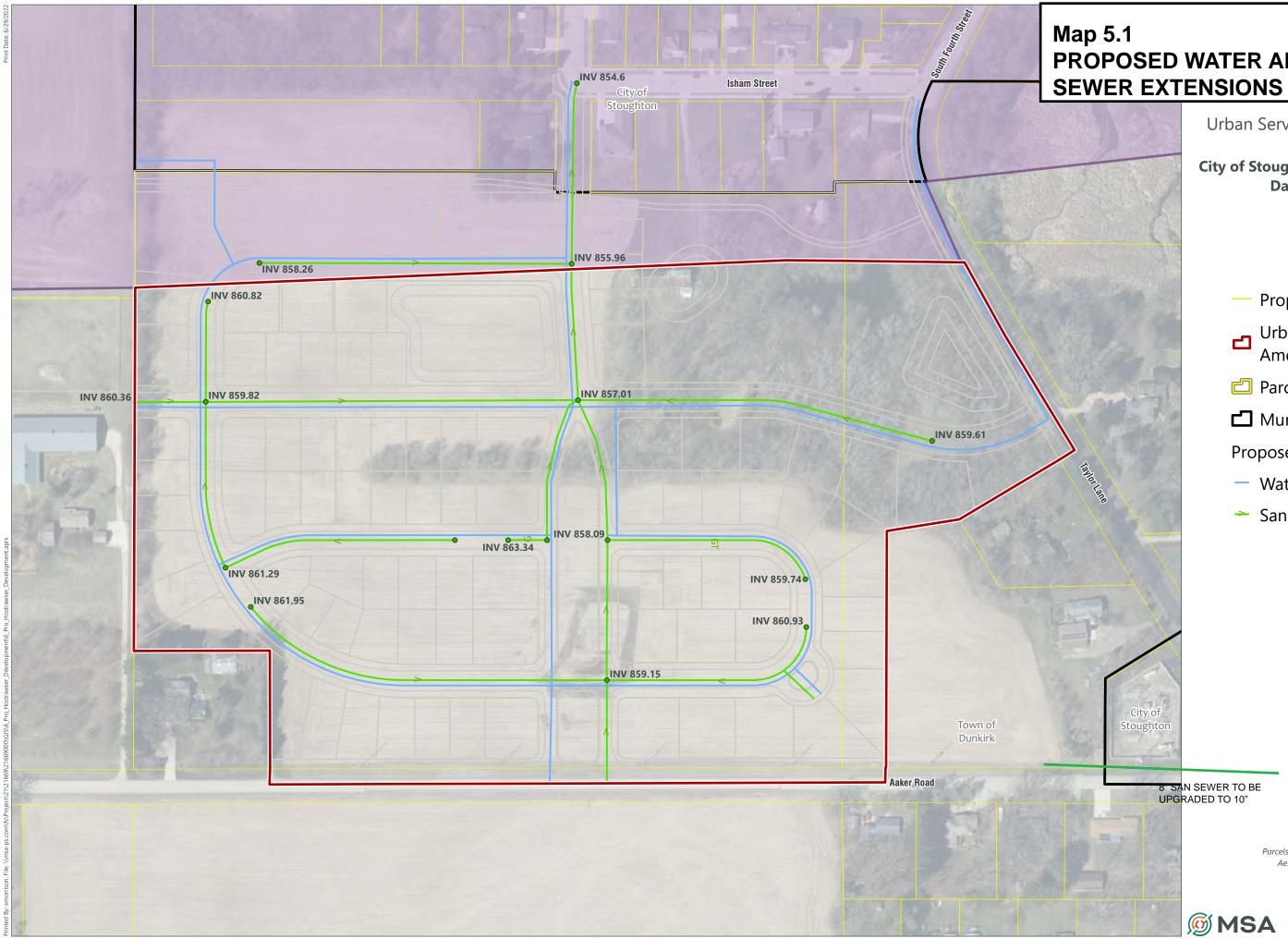


Wetland Buffer

Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020)







PROPOSED WATER AND SANITARY

Urban Service Area Amendment

City of Stoughton & Town of Dunkirk Dane County, WI

- Proposed Lot Line
- Urban Service Area Amendment
- **Parcel Boundary**
- **Municipal Boundary**

Proposed Utility

- Water Main
- ← Sanitary Main

Data Sources: Parcels, Roads: Dane County (2022) Aerial: Dane County (2020)

50 100 Feet



APPENDIX A

City of Stoughton Resolution R-148-2022

CITY OF STOUGHTON, 207 S. FORREST STREET, STOUGHTON, WISCONSIN

RESOLUTION OF THE COMMON COUNCIL

A Resolution finding that the expansion of the Stoughton Urban Service Area to include approximately 32.5 acres located north of Aaker Road and west of S. Fourth Street is consistent with the City of Stoughton Comprehensive Plan and directs staff to submit a request for expanding the Stoughton Urban Service Area to include said lands.

Committee Action: Plan Commission recommends Common Council approval 7-0

Fiscal Impact: None.

File Number:	R-148-2022	Date Introduced:	July 26, 2022	
--------------	------------	------------------	---------------	--

The City of Stoughton, Wisconsin, Common Council does proclaim as follows:

WHEREAS, the City's Urban Service Area is the area in which denser, urban development is permitted and utilities such as City sewer and water are allowed; and

WHEREAS, the City expects urban development to occur within an area located north of Aaker Road and west of S. Fourth Street as outlined in Exhibit A: City of Stoughton 2022 Urban Service Area Amendment – Magnolia Springs; and

WHEREAS, the amendment area adds approximately 32.5 acres of privately owned, undeveloped land; and

WHEREAS, the City has planned for expected urban growth within the proposed urban service expansion area; and

WHEREAS, the City's Comprehensive Plan designates this area as Planned Neighborhood and the development planned for this area is consistent with this Plan; and

WHEREAS, the "Magnolia Springs Urban Service Area Amendment" will be consistent with all applicable land-use and environmental protection regulations and requirements; and

WHEREAS, the Plan Commission recommends approval of expanding the Stoughton Urban Service Area to include the "Magnolia Springs Urban Service Area Amendment" at its July 11, 2022 meeting;

NOW, THEREFORE, BE IT RESOLVED that the City of Stoughton Common Council finds that the expansion of the Urban Service Area to include the approximately 32.5 acres located north of Aaker Road and west of S. Fourth Street is consistent with the adopted Comprehensive Plan and furthermore directs staff to submit a request to expand the Stoughton Urban Service Area to include said property as outlined in Exhibit A: City of Stoughton Urban Service Area Amendment Application – July 21, 2022.

BE IT FURTHER RESOLVED that the City of Stoughton hereby requests that the Capital Area Regional Planning Commission consider and approve the requested amendment to the Urban Service Area.

BE IT RESOLVED, by the City of Stoughton Common Council that the Conditional Use Permit request for Indoor Commercial Entertainment use (Fitness Center) at 209 S. Sixth Street is hereby approved as presented.

Council Action: 🗹 Adopted	Failed Vote	11-0
Mayoral Action: Accept	Veto	
Tim Swadley, Mayor	7/26 (2022 Date	
Council Action:	Override Vote	

APPENDIX B

Adjacent Government Notice Letter



CITY OF STOUGHTON DEPARTMENT OF PLANNING & DEVELOPMENT 207 S. Forrest, Stoughton, WI. 53589

(608) 873-6619 www.ci.stoughton.wi.us

RODNEY J. SCHEEL DIRECTOR

July 27, 2022

Town of Dunkirk Norman Monsen, Town Chairperson 654 County Road N Stoughton, WI 53589

Dear Mr. Monsen:

The City of Stoughton has applied to the Capital Area Regional Planning Commission (CARPC) for an amendment to the Stoughton Urban Service Area (USA). The attached document is a copy of the July 2022 USA amendment application.

The proposed amendment regards the planned Magnolia Springs Subdivision which includes approximately 38.37 acres of privately owned land including approximately 5.89 acres of land currently within Stoughton's USA. Approximately 18.75 acres will be devoted to residential lots, 12.85 acres devoted to public right-of-way, 4.35 acres of parks and trails, and 4.33 acres of stormwater management facilities. The Subdivision will include 118 residential units on its 89 lots: 60 single-family lots and 29 duplex lots. No land in the Town of Dunkirk is included; we are notifying you as an adjacent jurisdiction.

Please review the attached application materials. We would be happy to receive any comments you have. You may also copy your comments to Mike Rupiper at CARPC (miker@capitalarearpc.org).

Thank you for your consideration.

Sincerely, CITY OF STOUGHTON

Rodney Scheel Director of Planning & Development

CC: Mayor Tim Swadley

Enclosure

APPENDIX C

Wetland Delineation Report

Wetland Delineation Report

Hostrawser Property

Town of Dunkirk, Dane County Wisconsin

May 21st, 2021



Town of Dunkirk, Dane County, Wisconsin

May 21st, 2020

Prepared for:

Mr. Robert Hostrawser 3092 Linnerud Drive Stoughton, WI 53589 (608) 213-1807

Prepared by:

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

Jaylo

Scott Taylor Owner & Principal WDNR Assured Wetland Delineator

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Wetland Delineator Qualifications

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

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

Introduction

On October 21st of 2020, Scott Taylor of Taylor Conservation, LLC performed wetland determinations and delineations on the 40-acre Hostrawser property in the Town of Dunkirk, Dane County, Wisconsin (Figures 1 & 2). The property was located on the north side of Aaker Road, 0.4 mile east of Highway 138. It sat immediately south of the City of Stoughton corporate limit.

The landscape surrounding the investigation area consisted of residential neighborhoods to the north and east and crop fields to the west and south. Investigation area terrain was flat to gently sloping in some areas and rugged and steeply sloping in other areas. Land cover consisted primarily of cropland but tree groves covered the northeast corner of the investigation area. There was also an old barn in the northeast corner of the investigation area.

There was a dammed pond in the northeast corner of the property (Figure 2). It was drained by a culvert that emptied into the head of a stream flowing east toward the Yahara River.

Three wetland areas were identified and delineated (Figure 2). The site is in Section 8 (SESW), T5N, R11E.

Mr. Rob Hostrawser would like to evaluate options to develop his property. He ordered a wetland study for planning purposes.

The purpose of this report is to explain the results of the wetland delineation and to describe the features of the wetlands and non-wetlands (uplands) in the investigation area.

Methods

The following reference materials were reviewed prior to performing fieldwork:

- 1) Web Soil Survey (Natural Resource Conservation Service).
- 2) Wisconsin Wetland Inventory (WDNR Surface Water Data Viewer).
- 3) Wetland Indicators (WDNR Surface Water Data Viewer).
- 4) 24K Hydrography, Streams, Rivers & Intermittent Streams (WDNR Surface Water Data Viewer).
- 5) 7.5-minute quadrangle map, Stoughton Quadrangle (United States Geological Survey).
- 6) Aerial Imagery (USDA Farm Service Agency).

The wetland determinations and the delineations followed the procedures for the Routine Method set forth in <u>The Corps of Engineers Wetlands Delineation Manual</u> (US Army Corps of Engineers 1987) and <u>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral & Northeast Region</u>. They also followed the methods set forth in the <u>Guidance for Submittal of Delineation Reports to the St. Paul District</u> Army Corps of Engineers & the Wisconsin DNR (WI Department of Natural Resources 2014). In agricultural areas, wetland determinations followed the methods in <u>Guidance for Offsite Hydrology/Wetland Determinations</u> (Army Corps of Engineers & Minnesota Board of Water & Soils Resources 2016).

Method of Data Collection

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

For investigation areas located in agricultural fields, aerial images (air photos) were inspected for "wetland signatures", or evidence of saturated soil, standing water or crop drown-out or stress. Images for 4 normal rainfall years, 6 wet years and 0 dry years between 2000 and 2018 (Appendixes I & II) were inspected (normal rainfall years were determined using methods from "Hydrology Tools for Wetland Determination", NRCS 1997). If a site possessed wetland signatures for at least 3 of the 4 normal rainfall years, it was judged to have wetland hydrology. However, if field evidence, e.g. presence of wetland obligate plants or stunted crops, strongly suggested an area was wetland, it was determined to be so in spite of lacking wetland signatures 3 of 4 normal rainfall years on crop slides.

Location of Transects

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

If the sample plot data suggested that the location was inside of a wetland, a second plot was placed in an upslope location with a different plant community. If data collected at this plot suggested that the location was inside of the upland, no further plots were sampled. Otherwise, the process was repeated. A total of 14 plots were sampled, 3 inside of wetlands and 11 on the uplands (Figure 2).

Procedure for Locating Wetland Boundaries

The wetland boundaries were located by observing elevation increases around the margins of the basins. In the crop field, the wetland boundary was located by observing changes in elevation and by following the outer limits of wetland signatures observed on aerial images. The wetland boundaries were marked with pink "wetland delineation" wire-stake flags.

Results and Discussion

Soils

The Natural Resource Conservation Service-mapped soils of the wetland investigation area are (Figure 5):

Investigation	Percent
Area Soils	Hydric
Boyer sandy	
loam (BoD2)	0%
Dresden loam	
(DrD2)	0%
Dresden silt loam	0%
(DsC2)	
Kegonsa silt loam	0%
(KeB)	
Troxel silt loam	0%
(TrB)	
Wacousta silty	100%
clay loam (Wa)	

Wisconsin Wetland Inventory Map

The Wisconsin Wetlands Inventory (WWI) identifies a "wetland too small to delineate" in the location of the dammed pond (Figure 6). The WWI does not identify the other wetlands. Discrepancies between the W.W.I. and field-identified wetland boundaries reflect the greater accuracy of field methods over interpretation of wetland boundaries from aerial photographs, which is the method used in the W.W.I.

Topography

The 2-foot contour map shows relatively high elevation, rugged terrain on the west and east sides of the investigation area. It shows a stretch of low-lying lands, which include the pond, running southwest to northeast through the middle of the investigation area (Figure 3).

The United States Geological Survey map identifies a "Pit" in the northeast corner of the property (Figure 4). Rugged contours in this area confirmed the presence of an abandoned pit of some kind.

Wetlands

Overview of Wetlands

Wetland 1 was the bottom of a swale and the side slopes of the pond. Wetland 2 was a stream terrace and adjoining road ditches. Wetland 3 was a farmed wetland. All of the wetlands consisted of open, herbaceous plant communities.

Wetland ID Number (Figure 2)	Wetland Type	Wisconsin Wetland Inventory Wetland Type	Surface Water Connections	Wetland Quality (Susceptibility to Storm water Runoff Impacts)*	Approximate Area Delineated (Acres)
	Fresh (Wet)	Wetland too small			
1	Meadow	to delineate	Yahara River	Medium	0.6
	Fresh (Wet)				
2	Meadow	None	Yahara River	Medium	0.4
			Potentially		
3	Farmed Wetland	None	Isolated	Poor	0.2
					Total: 1.2

*Wetland quality is based on Taylor Conservation's best professional judgment. The Wisconsin Department of Natural Resources will determine the width of wetland and waterway protective areas, per NR 151, based on its own judgment of wetland quality, which may differ from Taylor Conservation's judgment.

	Wetlands (Plots 1A, 2A & 7A)
Normal Circumstances	Not for Plot 7A since it had
Present?	been tilled recently.
Significant Disturbance?	Yes, for Plot 7A. See above.
	Yes, for Plot 7A since the soil
	was judged hydric but no hydric
Naturally Problematic?	indicators were observed.

Wetland Boundary Characteristics

Wetlands 1 and 2 were delineated by sharp in increases in elevation. Wetland 3 – the farmed wetland – was delineated by gentle slope breaks and the boundaries of wetland signatures observed on aerial images.

Wetland Vegetation

- Wetland 1 was mostly open water and bare soil but reed canary grass (*Phalaris arundinacea*-FacW) and clearweed (*Pilea pumila*-FacW) were sparsely distributed in the wetland.
- Wetland 2 was dominated by clearweed and Japanese knotweed (*Fallopia japonica*-FacU) in the ground layer, and by red osier dogwood (*Cornus alba*-FacW) in the sapling/shrub layer.
- Wetland 3, which occupied a weedy spot where the crop had drowned out, consisted of fall panicum (*Panicum dichotomiflorum*-FacW) and nut sedge (*Cyperus esculentus*-FacW).
- Dominance values for hydrophytes in wetland sample plots ranged from 75%-100%.

Wetland Hydrology

- The wetlands' chief water source is surface runoff from surrounding uplands, which contain large areas of agricultural land.
- Wetlands 1 and 2 are probably permanently saturated or inundated. Wetland 3 probably only saturates in the spring of most years, and following high rainfall periods.
- Rainfall for the preceding 3 months should result in normal moisture conditions in the wetland (see prior rainfall analysis below). A total of 0.7 inch of rain was recorded at the nearby Dane County Regional Airport weather station in the 2week period prior to the date fieldwork. A total of 0.4 inch was recorded in the 3day period prior to the date of fieldwork.
- ✤ As a result of normal antecedent rainfall, and the late season date of the field investigation, the investigator did not necessarily expect to directly observe a primary wetland hydrology indicator. Nonetheless, "Saturation" & "Surface

Water" were noted in Plots 1A & 2A. No primary hydrology indicators were noted in wetland Plot 7A.

- Wetland sample plots 2A & 7A showed the two secondary hydrology indicators, "Geomorphic Position" (because the plots were located in the bottoms of depressions) and "FAC Neutral Test". Wetland 7A also showed "Saturation Visible on Aerial Imagery". Wetland Plot 1A only showed one secondary indicator, "Geomorphic Position".
- "Saturation Visible on Aerial Imagery" was met in wetland plot 7A due to wetland signatures observed on aerial imagery from 2017 and 2018 (Appendixes I & II).

Prior Rainfall Analysis:

(USDA Field Office Climate Data – WETS Station: Dane County Regional Airport, Wisconsin.)

	30% chance precipitation	e will have on (inches)					
	less than:	more than:	2020 precipitation:	Condition	Conditi on value (Dry=1, Normal =2, Wet=3)	Month weight value	Product of previous two columns
July	3.18	5.05	7.59	Wet	3	1	3
August	2.66	5.19	2.88	Normal	2	2	4
September	2.04	3.98	3.41	Normal	2	3	6
					O a sa all'(1	Sum	
		A	ntecedent	woisture	Conditi	ons: N	URIMAL

(If sum is 6-9, prior period dry; 10-14, prior period normal; 15-18, prior period wet. From USDA, Natural Resource Conservation Service. 1997. Hydrology Tools for Wetland Determination. Part 650. <u>Engineering Field Handbook</u>.)

Wetland Soils

- The soil surface layers in the wetland sample plots were comprised of 10 YR 2/1colored silt loam.
- ◆ B-horizons were not observed at the soil depths examined (22-31 inches).
- Two wetland plots (2A & 7A) did not show hydric soil indicators but professional judgment was used to assume the soils were hydric based on the presence of hydrophytic vegetation and wetland hydrology indicators. One wetland sample plot (1A) possessed standing water and appeared to be permanently inundated, therefore no soil pit was dug and the soil was assumed hydric without direct examination.

Waterways

A pond was present in the northeast corner of the investigation area (Figure 2). It was fringed by Wetland 1. The pond was drained by a culvert that emptied into a stream flowing east to a nearby wetland complex that abutted the Yahara River.

Uplands

Overview of Uplands

The uplands (non-wetlands) were the crop fields and wooded areas that comprised the majority of the investigation area (Figure 2). There was an old barn on the uplands north of the pond.

	Uplands (Plots 1B, 1C, 1D, 2B,
	2C, 3, 4, 5, 6, 7B & 7C)
	Not in the crop fields due to
	recent tillage. Some parts of the
Normal Circumstances	woods had been mowed
Present?	recently.
Significant Disturbance?	Yes, see above.
Naturally Problematic?	Not applicable to uplands.

Upland Vegetation

- The uplands were dominated by creeping charlie (*Glechoma hederacea*-FacU), garlic mustard (*Alliaria petiolata*-FacU) and dame's rocket (*Hesperis matronalis*-FacU) in the ground layer; by honeysuckle (*Lonicera X bella*-FacU) and buckthorn (*Rhamnus cathartica*-Fac) in the sapling/shrub layer; and by black walnut (*Juglans nigra*-FacU), black cherry (*Prunus serotina*-FacU), bur oak (*Quercus macrocarpa*-FacU) and box elder (*Acer negundo*-Fac) in the tree layer.
- Dominance values for non-hydrophytes in upland sample plots ranged from 50%-100%.
- Upland Plots 7B & 7C were located in the crop field. They consisted of stubble from a recently harvested soybean crop and recently germinated wheat plants.

Upland Hydrology

- No hydrology indicators were noted in any of the upland sample plots.
- All parts of the uplands occupied high-lying or sloping ground where water would be unlikely to linger for long periods.
- Aerial imagery review did not show wetland signatures in the upland portions of the crop fields during normal or wet years since the year 2000 (Appendixes I & II).

Upland Soils

- The soil surface layers in the upland sample plots were comprised predominantly of 10 YR 3/2 & 2/2-colored silt loam.
- The subsoils (B-horizons) in the upland sample plots were comprised predominantly of 10 YR 3/4 & 3/3-colored silty clay loam.

♦ None of the upland sample plots showed a hydric soil indicator.

Conclusion

Three wetland areas totaling 1.2 acres were found on the Hostrawser property on October 21st of 2020. The wetland boundary marked in the field is the best estimate of the location of the boundary based on the available vegetation, hydrology and soil evidence on October 21st of 2020. Wetland boundaries can change over time with changes in vegetation, precipitation, or regional hydrology. The wetlands identified for this report may be subject to federal regulation under the jurisdiction of the U.S. Army Corp of Engineers, state regulation under the jurisdiction of Wisconsin Department of Natural Resources, and local jurisdiction under your local county, town, city or village. The U.S. Army Corps of Engineers and/or the Wisconsin DNR have authority to make the final decision regarding the wetland boundary. Personnel from these agencies may adjust the boundary upon field inspection.

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

Scott Taylor is an **Assured Wetland Delineator** under Wisconsin Department of Natural Resources guidelines (http://dnr.wi.gov/topic/wetlands/assurance.html). Taylor's wetland delineations are considered dependable by the WDNR for purposes of Wisconsin wetland and waterway permits, shoreland-wetland zoning or other state-mandated local wetland programs. Therefore Taylor's clients do not require concurrence letters from WDNR before project planning or permit applications that are based on Taylor's wetland delineations. However, concurrence from the Army Corps of Engineers is still necessary. The WDNR and Army Corps have final authority over wetlands in Wisconsin. They may adjust Taylor's wetland boundaries. Assurance does not change decisions about wetland fill. Assurance is not a guarantee of accuracy or relief from landowner responsibility in the event an error occurs and wetlands are filled. While it is unlikely for a professional whose work is assured, inadvertent wetland fill that may result from errors must be remedied.

References

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

Lichvar, R.W., D.L Banks, N.C. Melvin, and W.N. Kirchner, US Army Corp of Engineers, 2016. State of Wisconsin 2016 Wetland Plant List.

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

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

Wisconsin Department of Administration, Coastal Management Program. 1995. <u>Basic</u> <u>Guide to Wisconsin's Wetlands and their Boundaries.</u> Figures

Figure 1: Landscape Overview.

Source: Imagery - National Agricultural Imagery Program, 2013; Roads & Waters – Wisconsin Department of Natural Resources.

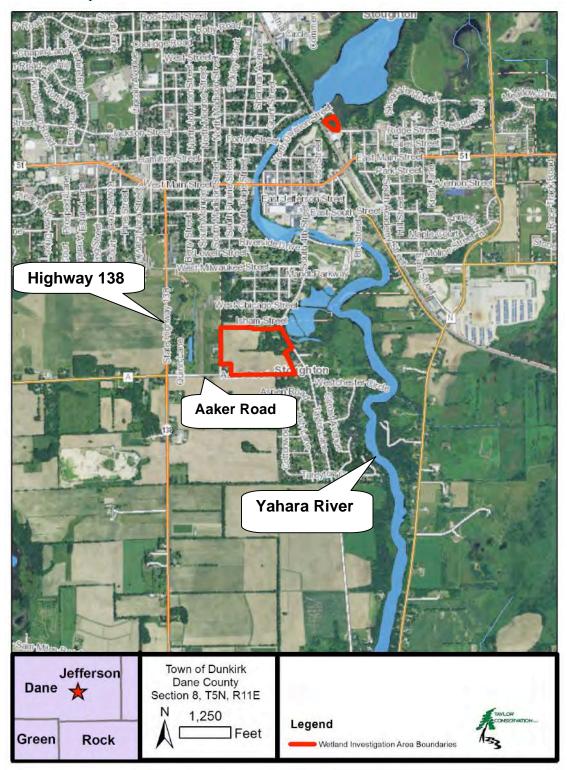


Figure 2: Investigation Area, Wetlands & Sample Plots.

Imagery Source: Wisconsin Regional Orthophotography Consortium, 2010.

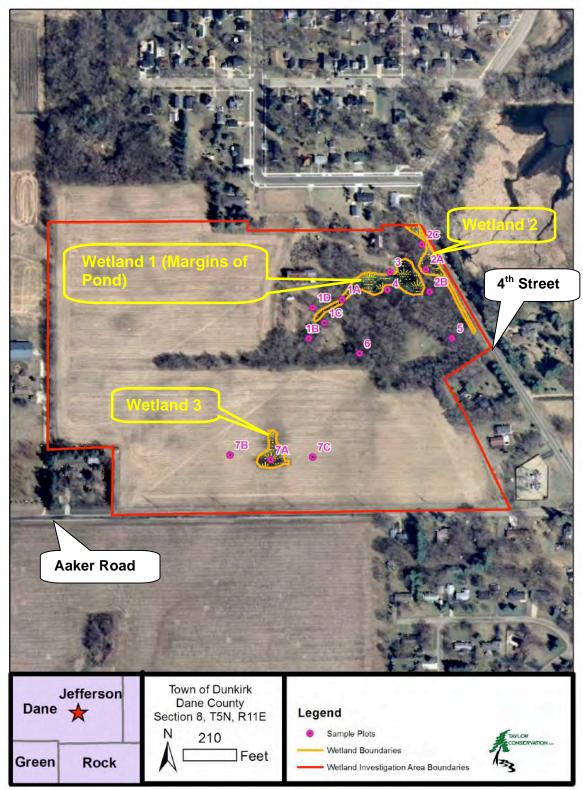
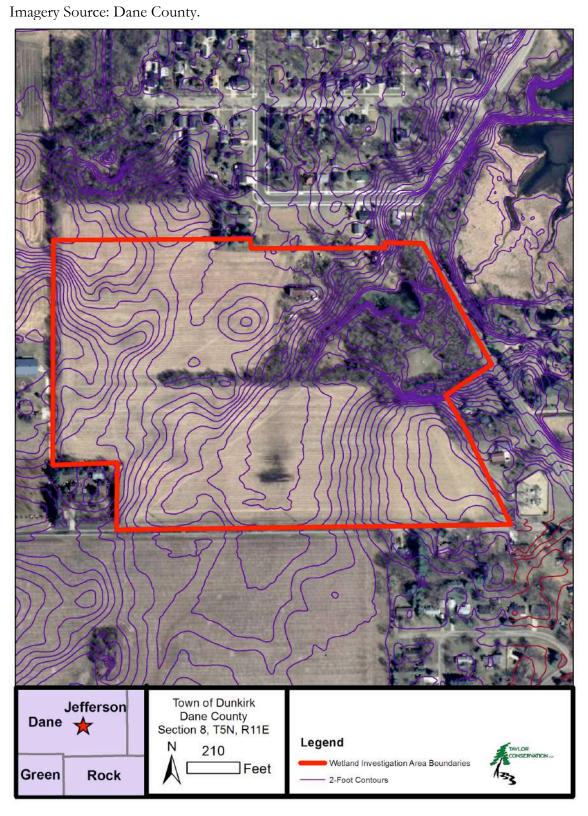
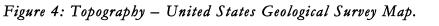
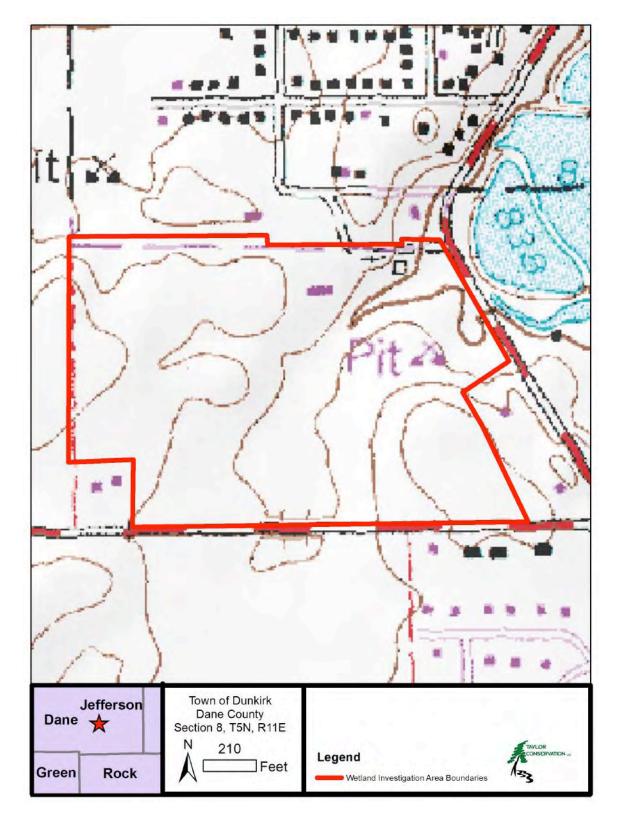


Figure 3: Topography – 2-foot Contour Map.





Source: U.S. Geological Survey 7.5-Minute Quadrangle Map, Stoughton Quadrangle.



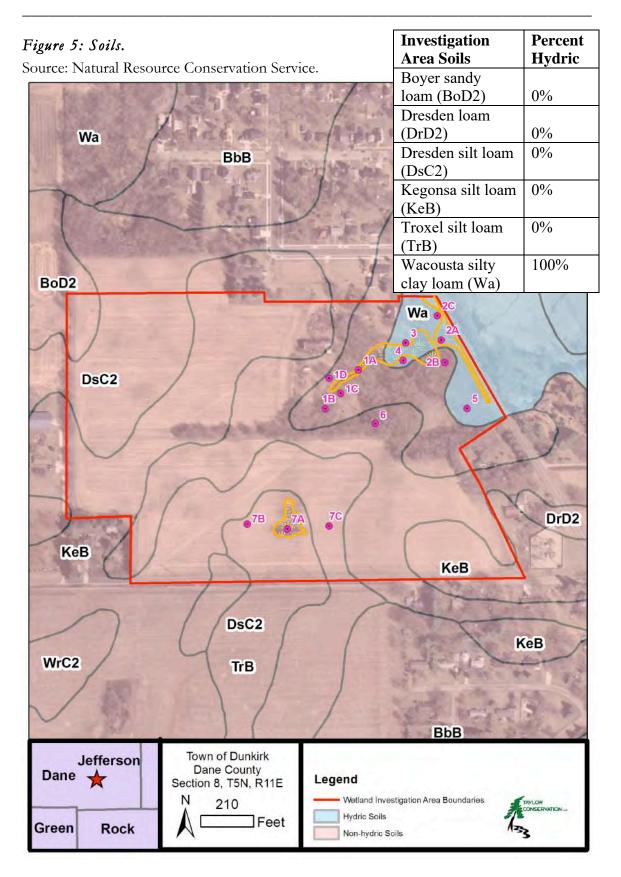
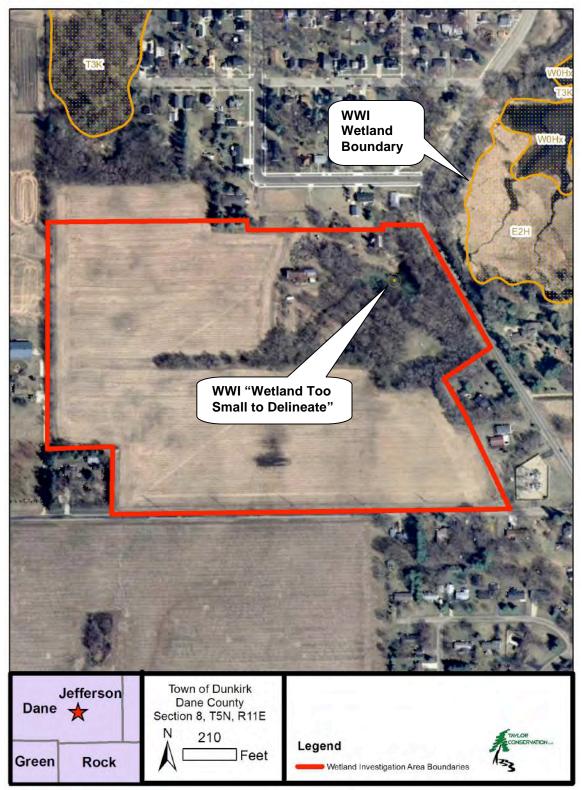


Figure 6: Wisconsin Wetland Inventory Map.

Source: Wisconsin Department of Natural Resources.



Appendix I: Aerial Image Analysis

	Investigator: S # Normal Year			County: 1 # Wet Yea		# Dry Ye	ars: 0	2			_
						125					
			Interpreta	tion (list hyd	ology ind	icators observ	ed. e.g. cro	o stress, dr	owned out.	standing wa	ter, etc
			incer prece		010/01/11/0					0	
				1.4.4			1.1.1	1.00	12.11		
		1	Area 1		11			1.2.1	1.000		
		WWI Wetland							1.1		
		Type (if applicable):	None								
		(in application).	Tione								1
	Climate		Troxel					100			
	Condition (Wet,	Soil Series	silt loam	1. 1				1.41	1.11.1		
	Dry, Normal)*	(% Hydric):	(TrB)	-		-		-	-		-
	Normal		DO		_		-	-	-	-	-
2017			CS	-		-	-	-	-	-	-
	Normal		CS			-	-		-		-
2014			NSS		_	-	-	-	-	-	
2013		576 34	NSS		_	-	-	-	-	-	-
2010 2008	12.20	1000	CS			-	-	-	-	-	
	Normal		DO	-		-	-		-	-	-
	Normal		NV NSS			-	-	-	-	-	-
2000		1.5	SS			-		-	-	-	
# Normal Years:	wet		4			-		-	-	-	
a reality in the second s											-
# Normal Year, with											
Wetness Signatures:			2			Notes:					
% Normal Years with Wetness Signatures:	2		50%								
*Taken from NRCS WI	ETS Table for			climat	e station						
**Use key below to lab	el photo interpre	etations.									
CS - Crop Stress											
DO – Drowned Out NC – Not Cropped											
SW - Standing Wate											
55 - Soil Wetness Si	gnature	I wetland veget									

NV – Normal Vegetative Cover (for when crop present) o NSS – No Soil Wetness (for bare soil)



Appendix II: Aerial Images

2018 - Normal



Areas were selected for inspection because they occupied low areas or because they showed possible wetland signatures, especially in the wettest years.

2017 - Wet



2015-Normal



2014-Wet



2013-Wet



Taylor Conservation LLC

2010 - Wet



2008-Wet



2006 – Normal

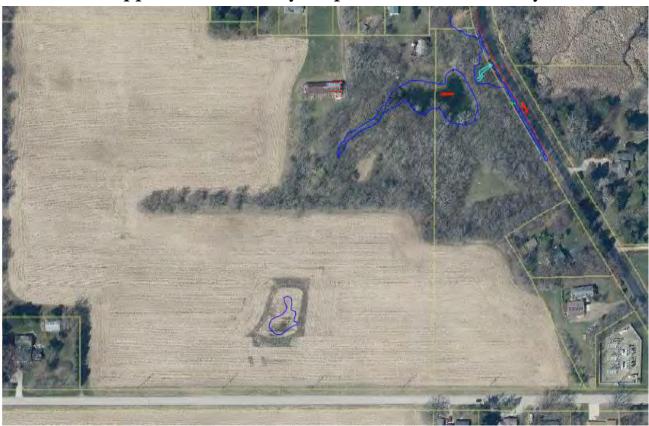


2005-Normal



2000-Wet





Appendix III: Survey Map of Wetland Boundary.

Appendix IV: Investigation Area Photos Wetland - Plot 1A



Upland - Plot 1B



Upland - Plot 1C



Upland - Plot 1D



Taylor Conservation LLC

Wetland - Plot 2A



Upland - Plot 2B



Upland - Plot 2C



Upland - Plot 3



Taylor Conservation LLC





Upland - Plot 5







Appendix V: Data Forms

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Hostrawser Property		City/County:	Twn. Dunkirk, Da	ane Co.	Samplin	g Date: 21-Oct-20		
Applicant/Owner: Rob Hostrawser			State: V	Visconsi	Sampling Point:	01a		
Investigator(s): Scott Taylor		Section, To	wnship, Range	s. 8	T. 5N	R. 11E		
Landform (hillslope, terrace, etc.):	Toeslope	Local relief (co	ncave, convex,	none):	concave	Slope: <u>0.0</u> % / <u>0.0</u> °		
Subregion (LRR or MLRA): LRR K	Lat.:	42.905775	Lor	ng.: -89	9.2250057	Datum: NAD83		
Soil Map Unit Name: Dresden loam	(DrD2)			1	WI classification:	None		
Are climatic/hydrologic conditions of Are Vegetation , Soil Are Vegetation , Soil Summary of Findings - At	Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes • No							
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ● No ○ Yes ● No ○ Yes ● No ○		Sampled Area a Wetland?	Yes	● No ○			
Remarks: (Explain alternative pro	cedures here or in a separate repo	ort.)						
(July-Wet; August-Normal; Septer County Regional Airport weather s	ervation Service weighted-month n nber-Normal), was found to be AV station within two weeks prior to t as in Vegetation section for discuss	VERAGE. In add	ition, a total of work. A total of	0.7 inch 0.4 inch	of rainfall was recomended in of rainfall was recomended in the second sec	rded at the nearby Dane		

Hydrology

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)				
Primary Indicators (minimum of one required; c	heck all that apply)	Surface Soil Cracks (B6)				
✓ Surface Water (A1)		Drainage Patterns (B10)				
High Water Table (A2)	Water-Stained Leaves (B9)					
	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)				
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)				
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils (C6)					
Iron Deposits (B5)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Microtopographic Relief (D4)					
Sparsely Vegetated Concave Surface (B8)		FAC-neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes No	Depth (inches): 7					
Water Table Present? Yes No	Depth (inches): 0	tvdrology Present? Yes 🖲 No 🔾				
Saturation Present? (includes capillary fringe) Yes No	Depth (inches): 0	Hydrology Present? Yes $ullet$ No $igodoldsymbol{ imes}$				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:						
Remarks:						
The plot occupied the botton of a swale. This are	ea appeared permanently inundated. No soil pit v	was dug but soil saturation and the water table was				
assumed to be at the surface.						

VEGETATION - Use scientific names of plants

VEGETATION - Use scientific names of plat	115			Sampling Point: 01a
Tree Stratum (Plot size: _78.5 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1	0			Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)
2	0			Total Number of Dominant
3	0			Species Across All Strata: 0 (B)
4	0			
5	0			Percent of dominant Species That Are OBL_EACW_or EAC: 0.0% (A/B)
6	0			That Are OBL, FACW, or FAC:(A/B)
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 78.5 sf)		= Total Cover		Total % Cover of: Multiply by:
1	0			OBL species <u>0</u> x 1 = <u>0</u>
2			-	FACW species $0 \times 2 = 0$
3				FAC species $0 \times 3 = 0$
4				FACU species $0 \times 4 = 0$
5				UPL species $0 \times 5 = 0$
6				Column Totals: (A) (B)
7	0			Prevalence Index = $B/A = 0.000$
(Diet size, 78.5 sf)	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
Herb Stratum (Plot size: 78.5 sf)				Rapid Test for Hydrophytic Vegetation
1				Dominance Test is > 50%
2	0			Prevalence Index is ≤3.0 ¹
3	0			Morphological Adaptations ¹ (Provide supporting
4	0			data in Remarks or on a separate sheet)
5	0			✓ Problematic Hydrophytic Vegetation ¹ (Explain)
6	0			
7	0			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
8	0			
9	0			Definitions of Vegetation Strata:
10	0			Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 78.5 sf)		= Total Cover		greater than 3.28 ft (1m) tall.
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic Vegetation Present? Yes () No ()
Remarks: (Include photo numbers here or on a separate she	et.)			

There was no vegetation in the plot (the woody plots were the same size as the herbaceous plot due to the small size of the habitat). The entire plot consisted of standing water shaded by mature trees outside of the plot. The plot was designated "Problematic Hydrophytic Vegetation".

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

US Army Corps of Engineers

Color (moist) % Color (moist) % Type 1 Loc2 Texture Remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks no soil, see remarks remarks no soil, see remarks no soil, see remarks no soil, see remarks see remarks no soil, see remarks n	Depth <u>Matrix</u>	Redox Features	
:: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Location: PL=Pore Lining, M=Matrix ::: C=Concentration. D=Depletion. RM=Reduced Matrix, CS=Covered or Coated Sand Grains *Location: PL=Pore Lining, M=Matrix :::: Csoll Indicators: Indicators for Problematic Hydric Soils : ³ ::::::::::::::::::::::::::::::::::::	1 .		Texture Remarks
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is Soil Indicators: Indicators for Problematic Hydric Soils: 3 iistosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) iistic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) ikack Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) ivady gene Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Dark Surface (S7) (LRR K, L, M) ivady Below Dark Surface (A11) Depleted Matrix (F3) Dark Surface (S9) (LRR K, L) indicators (S6) Redox Dark Surface (F7) Polyvalue Below Surface (S9) (LRR K, L, R) indicators (S5) Iran-Manganese Masses (F12) (LRR K, L, R) intripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144B) itripped Matrix (S6) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) itripped Matrix (S6) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) itrippet (inches):			
is Soil Indicators: Indicators for Problematic Hydric Soils: 3 iistosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) iistic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) ikack Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LRR K, L, R) ivady gene Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Dark Surface (S7) (LRR K, L, M) ivady Below Dark Surface (A11) Depleted Matrix (F3) Dark Surface (S9) (LRR K, L) indicators (S6) Redox Dark Surface (F7) Polyvalue Below Surface (S9) (LRR K, L, R) indicators (S5) Iran-Manganese Masses (F12) (LRR K, L, R) intripped Matrix (S6) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144B) itripped Matrix (S6) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) itripped Matrix (S6) Very Shallow Dark Surface (TF12) Very Shallow Dark Surface (TF12) itrippet (inches):	: C=Concentration. D=Depletion. RM=Re	duced Matrix. CS=Covered or Coated Sand Grains ² Loc	ation: PL=Pore Lining, M=Matrix
Histosol (A1) Polyvalue Below Surface (S8) (LRR R, MLRA 149B) 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Coast Prairie Redox (A16) (LRR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Dark Surface (S7) (LRR K, L, M) Bittiffied Layers (A5) Loamy Gleyed Matrix (F2) Dark Surface (S9) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Thin Dark Surface (F6) Thick Dark Surface (A12) Redox Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Biandy Muck Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Biandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Biandy Redox (S5) Red Parent Material (F21) Birtiped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) Icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): rpe: Yes (No () arks: Hydric Soil Present? Yes (No ()			
MLŘA 149B) Jack Histic (A3) Joamy Mucky Mineral (F1) LRR K, L) Joamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Polyvalue Below Surface (S9) (LRR K, L, M) hick Dark Surface (A12) andy Muck Mineral (S1) andy Gleyed Matrix (S4) andy Redox (S5) tripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (A16) (LRR K, L, R) Depleted Dark Surface (S7) Intin Dark Surface (S7) Mick A 149B) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Redox Depressions (F8) Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (A16) (LRR K, L, R) Depleted Dark Surface (S7) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (S5) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (S5) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (S5) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Cast Prairie Redox (S5) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Itripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) I		Deharalua Palaw Surface (SS) (LDB D	
Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) Loamy Mucky Mineral (F1) LRR K, L) Loamy Mucky Mineral (F1) LRR K, L) Dark Surface (S7) (LRR K, L, M) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Matrix (F3) Depleted Dark Surface (F6) Thin Dark Surface (S9) (LRR K, L, R) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Grandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Red Parent Material (F21) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Coast Prairie Redox (A12) Wey Shallow Dark Surface (TF12) Other (Explain in Remarks) Coast Prairie Redox (A12) Pietin Distribution on the start of the start of	()		2 cm Muck (A10) (LRR K, L, MLRA 149B)
Add Hister (16)		Thin Dark Surface (S9) (LRR R, MLRA 149B)	Coast Prairie Redox (A16) (LRR K, L, R)
utratified Layers (A5) Loamy Gleyed Matrix (F2) Depleted Below Dark Surface (A11) Depleted Matrix (F3) Polyvalue Below Surface (A12) Redox Dark Surface (F6) Inon-Manganese Masses (F12) (LRR K, L, R) andy Muck Mineral (S1) Depleted Dark Surface (F7) andy Gleyed Matrix (S4) Redox Depressions (F8) andy Redox (S5) Redox Depressions (F8) atripped Matrix (S6) Very Shallow Dark Surface (TF12) bark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. ictive Layer (if observed): pe: pe: pe: mexts:	. ,		5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
addited By dis (HS) Depleted Matrix (F3) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) hick Dark Surface (A12) Redox Dark Surface (F7) andy Muck Mineral (S1) Depleted Dark Surface (F7) andy Gleyed Matrix (S4) Redox Depressions (F8) andy Redox (S5) Red Parent Material (F21) tripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) (LRR R, MLRA 149B) Very Shallow Dark Surface (TF12) cators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. ictive Layer (if observed): rpe:			Dark Surface (S7) (LRR K, L, M)
Chick Dark Surface (A12) Redox Dark Surface (F6) Thick Dark Surface (A12) Depleted Dark Surface (F7) Sandy Muck Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8) Sandy Redox (S5) Redox Depressions (F8) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Other (Explain in Remarks) icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): //pe: //pe: <t< td=""><td></td><td></td><td>Polyvalue Below Surface (S8) (LRR K, L)</td></t<>			Polyvalue Below Surface (S8) (LRR K, L)
Inite Dark Sufface (H2) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Muck Mineral (S1) Bedox Depressions (F8) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): ype:			Thin Dark Surface (S9) (LRR K, L)
Gleyed Matrix (S4) Gandy Redox (S5) Gandy Redox (S6) Gandy Redox (S7) (LRR R, MLRA 149B) Gandy Surface (S7) (LRR R, MLRA 149B) Gandy Redox (S7) (LRR R, MLRA 149B) Gandy Gandy Redox (S7) (LRR R, MLRA 149B) Gandy Redox (S7)			Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Sandy Redox (S5) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B) Stripped Matrix (S6) Stripp	Sandy Muck Mineral (S1)		Piedmont Floodplain Soils (F19) (MLRA 149B)
Sindy 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. rictive Layer (if observed): <code>ype:</code>	Sandy Gleyed Matrix (S4)		
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. rictive Layer (if observed): ype:	Sandy Redox (S5)		
Dark Surface (S7) (LRR R, MLRA 149B) icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. rictive Layer (if observed): /pe:	Stripped Matrix (S6)		_
icators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. icitive Layer (if observed): //pe: epth (inches): epth (inches): arks:	Dark Surface (S7) (LRR R, MLRA 149B)		_
ictive Layer (if observed):	licators of hydrophytic vegetation and wet	land hydrology must be present jupless disturbed or prob	
uppe:			
epth (inches): Hydric Soil Present? Yes No arks:			
arks:	ype:		
	epth (inches):		
il data were collected; the soil was assumed hydric since standing water was present and the site appeared to be permanently inundated	narks:		
	bil data were collected; the soil was a	assumed hydric since standing water was present ;	and the site appeared to be permanently inundated.
		, , , , , , , , , , , , , , , , , , , ,	

WETLAND DETERMINATION DATA FORM - Northcentral and Northeast Region

Project/Site: Hostrawser Property		City/County: Tw	n. Dunkirk, Dan	ne Co.	Samplin	g Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser			State: Wis	sconsi	Sampling Point:	01b
Investigator(s): Scott Taylor		Section, Town	ship, Range:	s. 8	T. 5N	R. 11E
Landform (hillslope, terrace, etc.):	Footslope	Local relief (conca	ive, convex, n	one):	concave	Slope: <u>1.0</u> % / <u>0.6</u> °
Subregion (LRR or MLRA): LRR K	Lat.:	42.905775	Long	j.: -89.	2250057	Datum: NAD83
Soil Map Unit Name: Dresden loam	(DrD2)			N	WI classification:	None
Are climatic/hydrologic conditions of Are Vegetation , Soil Are Vegetation , Soil Summary of Findings - At	, or Hydrology Significant	tly disturbed? problematic?	Are "Normal (If needed, e	Circums explain a	explain in Remarks stances" present? any answers in Ren nsects, impor	Yes • No Onarks.)
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes No Yes No Yes No No	Is the Sar within a V	mpled Area Wetland?	Yes (⊃ No	
Remarks: (Explain alternative proc	cedures here or in a separate repo	ort.)				
Using the Natural Resource Conser (July-Wet; August-Normal; Septem County Regional Airport weather si the date of fieldwork.	nber-Normal), was found to be AV	/ERAGE. In additio	n, a total of 0	.7 inch o	of rainfall was reco	rded at the nearby Dane

Hydrology

Wetland Hydrology Indicators:			Secondary Indicators (minimum of 2 required)				
Primary Indicators (minimum of one require	ed; check all that apply)		Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leav	/es (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13	3)	Moss Trim Lines (B16)				
Saturation (A3)	Dry Season Water Table (C2)						
Water Marks (B1)	Hydrogen Sulfide C	dor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Sediment Deposits (B2) Oxidized Rhizospheres along Living Roots (C3)						
Drift deposits (B3)	Stunted or Stressed Plants (D1)						
Algal Mat or Crust (B4)	ils (C6) Geomorphic Position (D2)						
Iron Deposits (B5)	Iron Deposits (B5)						
Inundation Visible on Aerial Imagery (B7)	Microtopographic Relief (D4)						
Sparsely Vegetated Concave Surface (B8)	FAC-neutral Test (D5)						
Field Observations:	_						
Surface Water Present? Yes 🔾 No 🤆	Depth (inches):	0	_				
Water Table Present? Yes O No 🤆							
Saturation Present? (includes capillary fringe) Yes O No	Wetland Hydrology Present? Yes \bigcirc No $oldsymbol{igstar}$						
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:							
Remarks:							
, , , , , , , , , , , , , , , , , , , ,	he bottom of a swale but	it was still in	a relatively well elevated location. Water would not linger in this				
area.							

vegeration - use scientific names of plan	Sampling Point: 01b							
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:				
1. Juglans nigra	65		FACU	Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)				
2	0			Total Number of Dominant				
3	0			Species Across All Strata:7(B)				
4								
5				Percent of dominant Species That Are OBL, FACW, or FAC: <u>28.6%</u> (A/B)				
6								
7				Prevalence Index worksheet:				
Sapling/Shrub Stratum (Plot size: 2,826 sf)	65:	= Total Cover		$\begin{array}{ccc} Total & Cover of: & Multiply by: \\ OBL species & 0 & x 1 = 0 \end{array}$				
1 _ Sambucus nigra	10	\checkmark	FACW	FACW species $15 \times 2 = 30$				
2 _. Lonicera x bella	10	\checkmark	FACU	FAC species $10 \times 3 = 30$				
3. Fraxinus pennsylvanica	5	\checkmark	FACW	FACU species $125 \times 4 = 500$				
4				UPL species $10 \times 5 = 50$				
5								
6	_							
7				Prevalence Index = B/A = <u>3.813</u>				
Herb Stratum (Plot size: 78.5 sf)		= Total Cover		Hydrophytic Vegetation Indicators:				
1. Glechoma hederacea	20	\checkmark	FACU	Rapid Test for Hydrophytic Vegetation				
2. Alliaria petiolata	45		FACU	Dominance Test is > 50%				
3. Leonurus cardiaca	F		UPL	Prevalence Index is $\leq 3.0^{-1}$				
4. Arctium minus	10		FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)				
5. Nepeta cataria	5		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)				
6. Verbena urticifolia	5		FAC					
7. Carex blanda			FAC	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
8. Rubus occidentalis	-		UPL	Definitions of Vegetation Strata:				
9				Demittons of Vegetation Strata.				
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter				
11				at breast height (DBH), regardless of height.				
12		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and				
Woody Vine Stratum (Plot size: 2,826 sf)				greater than 3.28 ft (1m) tall				
1	0			Herb - All herbaceous (non-woody) plants, regardless of				
2	0			size, and woody plants less than 3.28 ft tall.				
3	0			Woody vine - All woody vines greater than 3.28 ft in				
4	0			height.				
		= Total Cover						
				Hydrophytic				
				Vegetation Present? Yes O No 🖲				
Remarks: (Include photo numbers here or on a separate she	et.)							
The plot occupied a walnut grove. The garlic mustard and c	-	arlie were still	green, su	agesting the growing season had not ended.				

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

Soil

	ription: (De	scribe to	the depth	needed to docume	nt the indic	ator or co	nfirm the a	absence of indicators.)	
Depth (inches)		Matrix			edox Featu			_	
	Color (<u>%</u>	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-18	10YR	2/2	100	· ·				Silt Loam	
		-				-		-	
		2-							
		2-							
¹ Type: C=Cor	ncentration. D	=Depletio	n. RM=Red	uced Matrix, CS=Cove	red or Coate	ed Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=	Matrix
Hydric Soil	Indicators:							Indicators for Prob	lematic Hydric Soils : ³
Histosol ((A1)			Polyvalue Bel	ow Surface (S8) (LRR R	,		-
🗌 Histic Epi	ipedon (A2)			MLRA 149B)) (LRR K, L, MLRA 149B)
Black His				Thin Dark Su	face (S9) (I	RR R, MLR	A 149B)		lox (A16) (LRR K, L, R)
	n Sulfide (A4)			Loamy Mucky	Mineral (F1) LRR K, L)			t or Peat (S3) (LRR K, L, R)
	Layers (A5)			Loamy Gleye	d Matrix (F2)	1		Dark Surface (S	
	Below Dark S	Surface (A	11)	Depleted Mat	rix (F3)				Surface (S8) (LRR K, L)
	rk Surface (A)	Redox Dark S	urface (F6)				e (S9) (LRR K, L)
	uck Mineral (S			Depleted Dar	k Surface (Fi	7)			Masses (F12) (LRR K, L, R)
	eyed Matrix (3	-		Redox Depres		-		_	lain Soils (F19) (MLRA 149B)
		54)							A6) (MLRA 144A, 145, 149B)
Sandy Re								Red Parent Mate	
	Matrix (S6)		4 40 5 \					Very Shallow Da	rk Surface (TF12)
Dark Sur	face (S7) (LR	R R, MLRA	(149B)					Other (Explain ir	Remarks)
³ Indicators o	of hydrophytic	vegetatio	n and wetla	nd hydrology must be	present, un	less disturb	ed or proble	ematic.	
Restrictive L	.aver (if obs	erved):							
Type:									
Depth (inc	hes).							Hydric Soil Present?	Yes 🔾 No 🖲
Remarks:									
No hydric inc	licators.								

Project/Site: Hostrawser Property	City/County: Twn. Dunkirk	k, Dane Co.	Sampling	g Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser	State:	Wisconsi	Sampling Point:	01c
Investigator(s): Scott Taylor	Section, Township, Ran	nge: S. 8	T. 5N	R. 11E
Landform (hillslope, terrace, etc.): Footslope	Local relief (concave, conv	ex, none):	convex	Slope: <u>1.0</u> % / <u>0.6</u> °
Subregion (LRR or MLRA): LRR K Lat.:	42.905775	Long.: -89.	.2250057	Datum: NAD83
Soil Map Unit Name: Dresden loam (DrD2)		N	WI classification:	None
	thy disturbed? Are "Nor problematic? (If need sampling point locat Is the Sampled Are within a Wetland? ort.) nethod, antecedent moisture /ERAGE. In addition, a total	rmal Circum led, explain tions, tra ea Yes e, based on of 0.7 inch	No	Yes No Control No Cont

Wetland Hydrology Indicato	ors:		Secondary Indicators (minimum of 2 required)
Primary Indicators (minimu	im of one require	Surface Soil Cracks (B6)	
Surface Water (A1)		Drainage Patterns (B10)	
High Water Table (A2)		Moss Trim Lines (B16)	
Saturation (A3)		Aquatic Fauna (B13)	Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)		iving Roots (C3) Saturation Visible on Aerial Imagery (C9)	
Drift deposits (B3)			
Algal Mat or Crust (B4)		Presence of Reduced Iron (C4)	
Iron Deposits (B5)		Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aeria	l Imagery (B7)	Microtopographic Relief (D4)	
Sparsely Vegetated Concav	ve Surface (B8)	FAC-neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes 🔿 No 🖲	Depth (inches): 0	
Water Table Present?	Yes 🔿 No 🖲	Depth (inches):0	Wetland Hydrology Present? Yes \bigcirc No \odot
Saturation Present? (includes capillary fringe)	Yes 🔘 No 🖲	Depth (inches): 0	Wetland Hydrology Present? Yes 🔾 No 🔍
Describe Recorded Data (str	ream gauge, mon	toring well, aerial photos, previous	s inspections), if available:
Remarks:			
No hydrology indicators. The	e plot was well el	evated above the nearby wetland.	

VEGETATION - Use scientific names of pla	Sampling Point: 01c							
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:				
1. Juglans nigra	35	\checkmark	FACU	Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)				
2. Quercus macrocarpa	25	\checkmark	FACU					
3	0			Total Number of Dominant Species Across All Strata:7(B)				
4								
5				Percent of dominant Species That Are OBL EACW or EAC: 28.6% (A/B)				
6				That Are OBL, FACW, or FAC:				
7				Prevalence Index worksheet:				
	60 :	= Total Cover		Total % Cover of: Multiply by:				
Sapling/Shrub Stratum (Plot size: 2,826 sf)				OBL species 0 x 1 = 0				
1. Juglans nigra		\checkmark	FACU	FACW species 15 x 2 = 30				
2. Ulmus americana			FACW	FAC species $20 \times 3 = 60$				
3 _. Quercus macrocarpa			FACU	FACU species $115 \times 4 = 460$				
4				UPL species $0 \times 5 = 0$				
5								
6				Column Totals: <u>150</u> (A) <u>550</u> (B)				
7	0			Prevalence Index = $B/A = 3.667$				
Herb Stratum (Plot size: 78.5 sf)	40	= Total Cover		Hydrophytic Vegetation Indicators:				
				Rapid Test for Hydrophytic Vegetation				
1. Geum canadense			FAC	Dominance Test is > 50%				
2. Hackelia virginiana			FACU	Prevalence Index is \leq 3.0 1				
3. Ageratina altissima			FACU	Morphological Adaptations ¹ (Provide supporting				
4. <i>Pilea pumila</i>			FACW	data in Remarks or on a separate sheet)				
5. Alliaria petiolata	-		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)				
6. Athyrium filix-femina			FAC					
7				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.				
8				Definitions of Vegetation Strata:				
9				Demitions of Vegetation Strata.				
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter				
11				at breast height (DBH), regardless of height.				
12				Sapling/shrub - Woody plants less than 3 in. DBH and				
Woody Vine Stratum (Plot size: 2,826 sf)	50	= Total Cover	•	greater than 3.28 ft (1m) tall				
1	0			Herb - All herbaceous (non-woody) plants, regardless of				
2	0			size, and woody plants less than 3.28 ft tall.				
3	0			Woody vine - All woody vines greater than 3.28 ft in				
4	0			height.				
	0	= Total Cover						
				Hydrophytic Vegetation Present? Yes O No 💿				
Remarks: (Include photo numbers here or on a separate she			a atili					
The plot occupied a sparsely wooded area. The garlic must	ard and whi	ite avens wer	e still gree	en, suggesting the growing season had not ended.				

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

0-12 10' 12-18 10' 	YR 3/4	9% 100 100	Color (moist)	ox Features <u>%</u> <u>Type</u> ¹ <u>Loc</u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u>	C2 Texture Remarks Silt Loam
12-18 10' 12-18 10' Type: C=Concentrat	YR 3/4			d or Coated Sand Grains	
Type: C=Concentrat Hydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	ion. D=Depletic			d or Coated Sand Grains 2	Silty Clay Loam
Hydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:			d or Coated Sand Grains 2	
lydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:			d or Coated Sand Grains 2	
lydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:			d or Coated Sand Grains 2	
dric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:		iced Matrix, CS=Covered	d or Coated Sand Grains 2	
dric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:	 m. RM=Redu		d or Coated Sand Grains ²	
ydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:	n. RM=Redu	uced Matrix, CS=Covered	l or Coated Sand Grains ²	
ydric Soil Indicat Histosol (A1) Histic Epipedon (Black Histic (A3)	tors:			- Of Coaled Sand Grains	Location: DI-Dore Lining M-Matrix
Histic Epipedon (Black Histic (A3)	(A2)				Indicators for Problematic Hydric Soils : 3
Black Histic (A3)	(A2)			Surface (S8) (LRR R,	2 cm Muck (A10) (LRR K, L, MLRA 149B)
			MLRA 149B)		Capat Durinia Daday (A1C) (LDD K L D)
				ce (S9) (LRR R, MLRA 149B	5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
Hydrogen Sulfide				ineral (F1) LRR K, L)	Dark Surface (S7) (LRR K, L, M)
	atified Layers (A5)				Polyvalue Below Surface (S8) (LRR K, L)
_	pleted Below Dark Surface (A11)				Thin Dark Surface (S9) (LRR K, L)
_	ick Dark Surface (A12) Redox Dark Surface (F6)				Iron-Manganese Masses (F12) (LRR K, L, R)
Sandy Muck Mine	ndy Muck Mineral (S1)				Piedmont Floodplain Soils (F19) (MLRA 149B)
Sandy Gleyed Ma	atrix (S4)		Redox Depression	ons (F8)	Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
Sandy Redox (S	5)				Red Parent Material (F21)
Stripped Matrix (S6)				Very Shallow Dark Surface (TF12)
Dark Surface (S7	') (LRR R, MLRA	\ 149B)			Other (Explain in Remarks)
Indicators of hydro	phytic vegetatic	on and wetlar	nd hydrology must be pr	esent, unless disturbed or p	
estrictive Layer (i Type:	f observed):				
					Hydric Soil Present? Yes \bigcirc No \odot
Depth (inches):					,
emarks: hydric indicators					

Project/Site: Hostrawser Property	City/County:	Twn. Dunkirk, Dane Co	o. Samplii	ng Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser		State: Wiscon	si Sampling Point:	01d
Investigator(s): Scott Taylor	Section, To	ownship, Range: S. 🤅	з т. 5N	R. 11E
Landform (hillslope, terrace, etc.): Footslope	Local relief (co	oncave, convex, none): convex	Slope: <u>1.0</u> % / <u>0.6</u> °
Subregion (LRR or MLRA): LRR K Lat.:	42.905775	Long.:	-89.2250057	Datum: NAD83
Soil Map Unit Name: Dresden loam (DrD2)	-		NWI classification:	None
	problematic? sampling pole is the within port.) method, anteced VERAGE. In add	Are "Normal Circ (If needed, expl oint locations, f Sampled Area n a Wetland? Y dent moisture, based lition, a total of 0.7 ir	es O No O	Yes No marks.) rtant features, etc. for the previous 3 months orded at the nearby Dane

Wetland Hydrology Indicators:					Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one	Surface Soil Cracks (B6)				
Surface Water (A1)	Drainage Patterns (B10)				
Surface Water (A1) Water-Stained Leaves (B9) High Water Table (A2) Aquatic Fauna (B13)				Moss Trim Lines (B16)	
Saturation (A3)		Marl Deposits (B15	5)		Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide Odor (C1)			Crayfish Burrows (C8)
Sediment Deposits (B2)					Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduc	ed Iron (C4)		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduc	tion in Tilled Soils	(C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface		. ,	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in R		Microtopographic Relief (D4)	
Sparsely Vegetated Concave Surface (FAC-neutral Test (D5)				
Field Observations:					
Surface Water Present? Yes 🔾	No 🖲	Depth (inches):	0		
Water Table Present? Yes 🔾	No 🖲	Depth (inches):	0		rology Present? Yes 🔿 No 🖲
Saturation Present? Yes O	No 🖲	Depth (inches):	0	Wetland Hyd	rology Present? Yes 🔾 No 🖲
Describe Recorded Data (stream gauge	ge, monitorii	ng well, aerial photo	s, previous insp	ections), if avai	lable:
Remarks:					
No hydrology indicators. The plot was	well elevate	ed above the nearby	y wetland.		

VEGETATION - Use scientific names of plan	nts			Sampling Point: 01d
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Prunus serotina	20		FACU	Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)
2 Juglans nigra	20		FACU	
3				Total Number of Dominant Species Across All Strata: 7 (B)
4				
5				Percent of dominant Species
6				That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B)
7				Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		_		OBL species $0 \times 1 = 0$
1 . Juglans nigra			FACU	FACW species $0 \times 2 = 0$
2				FAC species $0 \times 3 = 0$
3				FACU species <u>90</u> x 4 = <u>360</u>
4				UPL species 10 x 5 = 50
5	_			Column Totals: 100 (A) 410 (B)
6				$\frac{100}{100}$ (A) $\frac{100}{100}$ (B)
7				Prevalence Index = $B/A = 4.100$
Herb Stratum (Plot size: 78.5 sf)	35	= Total Cover		Hydrophytic Vegetation Indicators:
	10		FACU	Rapid Test for Hydrophytic Vegetation
1. Glechoma hederacea			FACU	Dominance Test is > 50%
2. Leonurus cardiaca				Prevalence Index is ≤3.0 ¹
3. Oxalis stricta	-		FACU	Morphological Adaptations ¹ (Provide supporting
4. Rubus occidentalis			UPL	data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7				be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				_
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.
11				a breast height (DDF), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 2,826 sf)	25	= Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes O No 🖲
Remarks: (Include photo numbers here or on a separate she	ot)			
The plot occupied a sparsely wooded area. The creeping ch		still areen ou	naestina H	he growing season had not ended
		San green, Su	ggesung u	ne growing season had not ended.

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

	ption: (Des		the depth				nfirm the a	absence of indicators.)			
Depth (inches)	Color (Matrix moist)	%	Rec Color (moist)	dox Featı %	ures Type ¹	Loc ²	Texture	Remarks		
0-13	10YR	3/2	100		-70	Type		Silt Loam	Relliarks		
13-18		3/4	100					Silt Loam			
15-10	101K	5/4									
								p			
		-									
¹ Type: C=Conc	entration. D	=Depletio	n. RM=Red	uced Matrix, CS=Covere	ed or Coate	ed Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=Ma	atrix		
Hydric Soil I				_				Indicators for Proble	ematic Hydric Soils : ³		
Histosol (A	,			Polyvalue Belov MLRA 149B)	v Surface	(S8) (LRR R,	,	2 cm Muck (A10) ((LRR K, L, MLRA 149B)		
Histic Epip				Thin Dark Surfa	aca (SQ) (140R)		x (A16) (LRR K, L, R)		
Black Histi				_			- 1+ <i>J</i> D)	5 cm Mucky Peat o	or Peat (S3) (LRR K, L, R)		
	Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) LRR K, L) Stratified Layers (A5) Loamy Gleyed Matrix (F2)						Dark Surface (S7) (LRR K, L, M)				
_							Polyvalue Below S	urface (S8) (LRR K, L)			
_						Thin Dark Surface					
							lasses (F12) (LRR K, L, R)				
	Sandy Muck Mineral (S1) Depleted Dark Surface (F7) Sandy Gleyed Matrix (S4) Redox Depressions (F8)						in Soils (F19) (MLRA 149B)				
Sandy Cic		51)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)			
Stripped M								Red Parent Material (F21) Very Shallow Dark Surface (TF12)			
_	ace (S7) (LRF	R R, MLRA	149B)					Other (Explain in R			
-				nd hydrology must be p	present ur	less disturba	ed or proble		(Cildiks)		
				na nyarology mast be p	incocnic, un						
Restrictive La	iyer (if obs	erved):									
Type:								Hydric Soil Present?	Yes 🔾 No 🖲		
Depth (inch	les):							-			
Remarks:											
No hydric indi	cators.										

Project/Site: Hostrawser Property	City/County: Twn. Dunkirk, Dane	Co. Sampling Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser	State: Wisc	onsi Sampling Point: 02a
Investigator(s): Scott Taylor	Section, Township, Range: S	. 8 T. 5N R. 11E
Landform (hillslope, terrace, etc.): Toeslope	Local relief (concave, convex, no	ne): flat Slope: 0.0 % / 0.0 °
Subregion (LRR or MLRA): LRR K	42.905775 Long.	-89.2250057 Datum: NAD83
Soil Map Unit Name: Wacousta silty clay loam (Wa)		NWI classification: None
	tly disturbed? Are "Normal (problematic? (If needed, ex sampling point locations	If no, explain in Remarks.) Circumstances" present? Yes No cplain any answers in Remarks.) 5, transects, important features, etc.
Hydric Soil Present?Yes NoWetland Hydrology Present?Yes No	Is the Sampled Area within a Wetland?	Yes 🖲 No 🔾
Remarks: (Explain alternative procedures here or in a separate reported of the Natural Resource Conservation Service weighted-month r (July-Wet; August-Normal; September-Normal), was found to be A County Regional Airport weather station within two weeks prior to t the date of fieldwork. The soil was naturally problematic since it was	nethod, antecedent moisture, bas VERAGE. In addition, a total of 0.3 the date of fieldwork. A total of 0.	7 inch of rainfall was recorded at the nearby Dane 4 inch of rainfall was recorded within 3 days prior to

Wetland Hydrology Indicat	tors:					Secondary Indicators (minimum of 2 required)
Primary Indicators (minim	um of one	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)						Drainage Patterns (B10)
High Water Table (A2)						Moss Trim Lines (B16)
Saturation (A3)			Marl Deposits (B15)			✓ Dry Season Water Table (C2)
Water Marks (B1)			Hydrogen Sulfide Odor (C1)			Crayfish Burrows (C8)
Sediment Deposits (B2)			Oxidized Rhizospheres along Living Roots (C3)			Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)			Presence of Reduced Iron (C4)			Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)					Geomorphic Position (D2)	
Iron Deposits (B5)					Shallow Aquitard (D3)	
Inundation Visible on Aerial Imagery (B7)					Microtopographic Relief (D4)	
Sparsely Vegetated Conca	ave Surface ((B8)				✓ FAC-neutral Test (D5)
Field Observations:	0	0				
Surface Water Present?	Yes \bigcirc	No 🖲	Depth (inches):	0		
Water Table Present?	Yes 🖲	No \bigcirc	Depth (inches):	14		
Saturation Present? (includes capillary fringe)	Yes 🖲	No \bigcirc	Depth (inches):	0	Wetland Hydi	ology Present? Yes 🖲 No 🔾
Describe Recorded Data (s	tream gau	ge, monito	ring well, aerial photos	, previous ins	spections), if avail	able:
Demenden						
Remarks:				.		
The soil was saturated to t stream.	the surface.	. The plot	occupied a stream terra	ace. The terra	ace was just sligh	tly higher than the water level of the nearby
Stream.						

vederation - use scientific names of plan	Sampling Point: 02a			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
 1	0			Number of Dominant Species That are OBL, FACW, or FAC: 3 (A)
2	0			
3	0			Total Number of Dominant Species Across All Strata: 4 (B)
4				
5				Percent of dominant Species That Are OBL, FACW, or FAC:75.0%(A/B)
6	0			
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		= Total Cover		Total % Cover of: Multiply by:
1 Cornus alba	20		FACW	OBL species $0 \times 1 = 0$
2. Rhamnus cathartica	5		FAC	FACW species $45 \times 2 = 90$
3	0			FAC species 15 x 3 = 45
4				FACU species 20 x 4 = 80
5	0			UPL species $\underbrace{0}_{x 5} = \underbrace{0}_{x 5}$
6	0			Column Totals: <u>80</u> (A) <u>215</u> (B)
7	0			Prevalence Index = B/A =2.688_
Herb Stratum (Plot size: 78.5 sf)		= Total Cover		Hydrophytic Vegetation Indicators:
1. Pilea pumila	15	\checkmark	FACW	Rapid Test for Hydrophytic Vegetation
2. Solanum dulcamara			FAC	✓ Dominance Test is > 50%
3. Fallopia japonica			FACU	✓ Prevalence Index is \leq 3.0 ¹
4. Lysimachia nummularia	10		FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11	0			at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 2,826 sf)	55=	= Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	=	= Total Cover		
				the description
				Hydrophytic Vegetation Present? Yes () No ()
Pemarks: (Include photo numbers here or on a senarate she	et)			

Include photo numbers here or on a separate sheet.)

The plot occupied an open herbaceous area with scattered shrubs. Most of the herb layer plants were still at least partially green, suggesting the growing season had not ended.

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

Soil

Depth <u>Matrix</u>	Redox Features		
nches) Color (moist) % 0-22 10YR 2/1 100	Color (moist)%Type ¹ Loc ²	Texture Silt Loam	Remarks
be: C=Concentration. D=Depletion. RM= dric Soil Indicators:	Reduced Matrix, CS=Covered or Coated Sand Grains ² Loca		ematic Hydric Soils : ³
Histosol (A1) Histic Epipedon (A2)	 Polyvalue Below Surface (S8) (LRR R, MLRA 149B) Thin Dark Surface (S9) (LRR R, MLRA 149B) 	2 cm Muck (A10)	(LRR K, L, MLRA 149B) xx (A16) (LRR K, L, R)
Black Histic (A3) Hydrogen Sulfide (A4)	Loamy Mucky Mineral (F1) LRR K, L)	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R) (LRR K, L, M)
Stratified Layers (A5) Depleted Below Dark Surface (A11)	Depleted Matrix (F3) Redox Dark Surface (F6)	Polyvalue Below S	urface (S8) (LRR K, L) (S9) (LRR K, L)
Thick Dark Surface (A12) Sandy Muck Mineral (S1)	Depleted Dark Surface (F7)	_	1asses (F12) (LRR K, L, R) ain Soils (F19) (MLRA 149B)
Sandy Gleyed Matrix (S4) Sandy Redox (S5)	Redox Depressions (F8)	_	5) (MLRA 144A, 145, 149B)
Stripped Matrix (S6) Dark Surface (S7) (LRR R, MLRA 149B)		Very Shallow Dark	Surface (TF12)
	etland hydrology must be present, unless disturbed or probl		(emarks)
trictive Layer (if observed): Type:			
Depth (inches):		Hydric Soil Present?	Yes 🔍 No 🔾
marks:			
cators. Since the plot occupied a str	professional judgment was used to assume the soil v eam terrace, which is a depositional setting, the soil		
out a B-horizon.			

Project/Site: Hostrawser Property	City/County:	Twn. Dunkirk, Dane Co.	Samplin	g Date: 21-Oct-20					
Applicant/Owner: Rob Hostrawser		State: Wisconsi	Sampling Point:	02b					
Investigator(s): Scott Taylor	Section, To	wnship, Range: S. 8	T. 5N	R. 11E					
Landform (hillslope, terrace, etc.): Summit	Local relief (co	ncave, convex, none):	convex	Slope: <u>1.0</u> % / <u>0.6</u> °					
Subregion (LRR or MLRA): LRR K	Lat.: 42.905775	Long.: -8	9.2250057	Datum: NAD83					
Soil Map Unit Name: Dresden loam (DrD2)			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 naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.									
Hydrophytic Vegetation Present?Yes ○No ●Hydric Soil Present?Yes ○No ●Wetland Hydrology Present?Yes ○No ●		Sampled Area a Wetland? Yes	5 🔾 No 🖲						
Remarks: (Explain alternative procedures here or in a	separate report.)								
Using the Natural Resource Conservation Service weig (July-Wet; August-Normal; September-Normal), was f County Regional Airport weather station within two we the date of fieldwork.	ound to be AVERAGE. In add	ition, a total of 0.7 incl	n of rainfall was reco	orded at the nearby Dane					

Wetland Hydrology Indicato	ors:				Secondary Indicators (minimum of 2 required)
Primary Indicators (minimu	m of one required;	Surface Soil Cracks (B6)			
Surface Water (A1)		Drainage Patterns (B10)			
High Water Table (A2)		Water-Stained Leav	()		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15			Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide O	·		Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizosphe	. ,	ots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduce			Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduct	()	(6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface			Shallow Aquitard (D3)
Inundation Visible on Aeria	l Imagery (B7)	Other (Explain in Re	. ,		Microtopographic Relief (D4)
Sparsely Vegetated Concav	e Surface (B8)				FAC-neutral Test (D5)
					_ 、 、
Field Observations:					
Surface Water Present?	Yes 🔾 No 🖲	Depth (inches):	0		
Water Table Present?	Yes 🔿 No 🖲	Depth (inches):	0		rology Present? Yes 🔿 No 🖲
Saturation Present? (includes capillary fringe)	Yes 🔾 No 🖲	Depth (inches):	0	Wetland Hydi	rology Present? Yes 🔾 No 🖲
Describe Recorded Data (str	ream gauge, monito	ing well, aerial photo	s, previous inspe	ctions), if avai	able:
Remarks:					
No hydrology indicators. The	e plot was well eleva	ted above the nearby	wetland.		

vegeration - use scientific names of pla	Sampling Point: 02b			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Quercus macrocarpa	60		FACU	Number of Dominant SpeciesThat are OBL, FACW, or FAC:3(A)
2. Prunus serotina	20		FACU	
	10		FAC	Total Number of Dominant
	10		FACU	Species Across All Strata:6(B)
•			TACO	Percent of dominant Species
5				That Are OBL, FACW, or FAC:
6				Drevelance Index workshoets
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 2,826 sf)	100 =	= Total Cover		Total % Cover of: Multiply by:
1 Rhamnus cathartica	40		FAC	OBL species $0 \times 1 = 0$
2	0			FACW species $5 \times 2 = 10$
3				FAC species $65 \times 3 = 195$
4				FACU species95 x 4 =380
				UPL species $0 \times 5 = 0$
5				Column Totals: <u>165</u> (A) <u>585</u> (B)
6				
7		= Total Cover		Prevalence Index = $B/A = 3.545$
Herb Stratum (Plot size: 78.5 sf)	40			Hydrophytic Vegetation Indicators:
1. Rhamnus cathartica	15		FAC	Rapid Test for Hydrophytic Vegetation
2. Hackelia virginiana			FACU	Dominance Test is > 50%
	-		FACW	\Box Prevalence Index is \leq 3.0 ¹
•				Morphological Adaptations ¹ (Provide supporting
4				data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				¹ Indicators of hydric soil and wetland hydrology must
7				be present, unless disturbed or problematic.
8			. <u> </u>	Definitions of Vegetation Strata:
9				Demittions of Vegetation Strata.
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 2,826 sf)	25 =	= Total Cover		greater than 3.28 ft (1m) tall.
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic Vegetation Present? Yes No 💿
				Present? Yes 🔾 No 🖲
Remarks: (Include photo numbers here or on a separate she	et.)			
The plot occupied a tree grove.				

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

Profile Descr	ription: (Dee	scribe to	the depth	needed to document	the indic	ator or co	nfirm the a	absence of indicators.)			
Depth (inches)	Color (Matrix moist)	%	Rec Color (moist)	dox Featu %	ures Type ¹	Loc ²	Texture	Remarks		
0-14	10YR	2/1	100					Sandy Loam	Kellidi KS		
14-20	7.5YR	3/4	100					Sandy Loam			
17-20	/.511										
				·				<u>.</u>			
¹ Tvpe: C=Cor	centration. D	=Depletic	n. RM=Red	uced Matrix, CS=Cover	ed or Coat	ed Sand Gra	ains ² Loca	ation: PL=Pore Lining. M=Ma	atrix		
Hydric Soil 1									ematic Hydric Soils : ³		
Histosol (Polyvalue Below	w Surface ((S8) (LRR R	-1		LRR K, L, MLRA 149B)		
Histic Epi	ipedon (A2)			MLRA 149B)					LRR K, L, MLRA 149B) x (A16) (LRR K, L, R)		
Black Hist				Thin Dark Surfa			A 149B)		v (A10) (LRR K, L, R) pr Peat (S3) (LRR K, L, R)		
	n Sulfide (A4)			Loamy Mucky M				Dark Surface (S7)			
	Layers (A5)	/ •		Loamy Gleyed N)		Polyvalue Below Surface (S8) (LRR K, L)			
	Below Dark S		.11)	Redox Dark Sur				Thin Dark Surface (S9) (LRR K, L)			
	rk Surface (A1 uck Mineral (S			Depleted Dark S				Iron-Manganese Masses (F12) (LRR K, L, R)			
	eyed Matrix (S	-		Redox Depressi				Piedmont Floodplain Soils (F19) (MLRA 149B)			
Sandy Re		5.,						Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Ped Parent Material (E21)			
	Matrix (S6)							Red Parent Material (F21)			
Dark Surf	face (S7) (LRF	r r, mlra	4 149B)					Other (Explain in R			
³ Indicators o	of hydrophytic	vegetatio	on and wetla	nd hydrology must be p	oresent, ur	iless disturb	ed or proble				
Restrictive L											
Туре:											
Depth (inc	ches):							Hydric Soil Present?	Yes 🔾 No 🖲		
Remarks:											
No hydric ind	licators.										
-											
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Project/Site: Hostrawser Property		City/County: Twr	n. Dunkirk, Dane Co	. Sampli	ng Date: 21-Oct-20			
Applicant/Owner: Rob Hostrawser			State: Wiscons	Sampling Point:	02c			
Investigator(s): Scott Taylor		Section, Towns	ship, Range: S. 8	в т. 5N	R. 11E			
Landform (hillslope, terrace, etc.):	Footslope	Local relief (conca	ve, convex, none): convex	Slope: <u>1.0</u> % / <u>0.6</u> °			
Subregion (LRR or MLRA): LRR K	Lat.:	42.905775	Long.:	-89.2250057	Datum: NAD83			
Soil Map Unit Name: Wacousta silty	/ clay loam (Wa)			NWI classification:	None			
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes O No O Yes No O Yes No O	Is the San within a V	npled Area Vetland? Y	es 🔿 No 🖲				
Remarks: (Explain alternative pro	cedures here or in a separate repo	ort.)						
Using the Natural Resource Conse (July-Wet; August-Normal; Septer County Regional Airport weather s the date of fieldwork.	nber-Normal), was found to be A	VERAGE. In addition	n, a total of 0.7 ir	ich of rainfall was rec	orded at the nearby Dane			

Wetland Hydrology Indicators:					Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum o	of one required; c	Surface Soil Cracks (B6)			
Surface Water (A1)		Drainage Patterns (B10)			
High Water Table (A2)		Water-Stained Leav	()		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)			Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide O			Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizosphe	. ,	ots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduce	5 5		Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduct	()	26)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface (Shallow Aquitard (D3)
Inundation Visible on Aerial Image	agery (B7)	Other (Explain in Re			Microtopographic Relief (D4)
Sparsely Vegetated Concave Su	urface (B8)		linanoj		FAC-neutral Test (D5)
Field Observations:					
Surface Water Present? Yes	s 🔾 No 🖲	Depth (inches):	0		
Water Table Present? Yes	s 🔾 No 🖲	Depth (inches):	0		oloav Present? Yes 🔾 No 🖲
Saturation Present? (includes capillary fringe) Yes	s 🔾 No 🖲	Depth (inches):	0	Wetland Hydr	ology Present? Yes 🔾 No 🖲
Describe Recorded Data (stream	n gauge, monitori	ng well, aerial photos	s, previous inspe	ctions), if avail	able:
Remarks:					
No hydrology indicators. The plo	ot was well elevat	ed above the nearby	wetland.		

VEGETATION - Use scientific names of plan	Sampling Point: 02c			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species
1 Fraxinus pennsylvanica	35	\checkmark	FACW	That are OBL, FACW, or FAC:
2. Salix amygdaloides	20	\checkmark	FACW	
3 _. Juglans nigra	25	\checkmark	FACU	Total Number of Dominant Species Across All Strata: 11 (B)
4. Ulmus americana	20	\checkmark	FACW	()
5. <i>Robinia pseudoacacia</i>	5		FACU	Percent of dominant Species That Are OBL, FACW, or FAC:45.5%(A/B)
6. Acer platanoides	15		UPL	That Are OBL, FACW, or FAC:45.5% (A/B)
7	0			Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 2,826 sf)	=	= Total Cover		$\begin{array}{cccc} & \text{Total } \% \text{ Cover of:} & \text{Multiply by:} \\ \hline \textbf{OBL species} & 0 & \textbf{x 1} = & 0 \\ \end{array}$
1 Acer platanoides	10		UPL	
2 Juglans nigra	25		FACU	FACW species $75 \times 2 = 150$
3. Rhamnus cathartica	15		FAC	FAC species $25 \times 3 = 75$
4				FACU species $95 \times 4 = 380$
5				UPL species $25 \times 5 = 125$
6				Column Totals: <u>220</u> (A) <u>730</u> (B)
7				Prevalence Index = $B/A = 3.318$
		= Total Cover		
Herb Stratum (Plot size: 78.5 sf)				Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation
1. Hesperis matronalis	20	\checkmark	FACU	
2. Glechoma hederacea	10	\checkmark	FACU	Dominance Test is > 50%
3. Geum canadense	10	\checkmark	FAC	Prevalence Index is $\leq 3.0^{-1}$
4. Hackelia virginiana	10	\checkmark	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 2,826 sf)				
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic Vegetation
				Present? Yes O No 💿

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

The plot occupied a tree grove with a diverse mix of tree species. Many small trees and shrubs in this area were cut recently. The creeping charlie were still green, suggesting the growing season had not ended.

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

Depth			are depui				uie	absence of indicators.)		
(inches)	Color	Matrix (moist)	%	Color (moist	Redox Feat	ures Type_1	Loc ²	Texture	Remarks	
0-6	10YR	2/2	100					Silt Loam		
6-18	10YR		99	10YR 4	6 1	C	DI	Silt Loam		
0-10	101K	3/2		101K 4,	6 1		PL			
	-			·			-			
						_		·		
	-		-							
			n. RM=Red	luced Matrix, CS=Co	overed or Coat	ed Sand Gr	ains ² Loca	ation: PL=Pore Lining. M=M		
Hydric Soil								Indicators for Proble	ematic Hydric Soils : ³	
Histosol				Polyvalue MLRA 149	Below Surface	(S8) (LRR F	ξ ,	2 cm Muck (A10)	(LRR K, L, MLRA 149B)	
	ipedon (A2)				Surface (S9) (A 149R)	Coast Prairie Redo	x (A16) (LRR K, L, R)	
Black His								5 cm Mucky Peat of	or Peat (S3) (LRR K, L, R)	
	n Sulfide (A4))		Loamy Mucky Mineral (F1) LRR K, L)				Dark Surface (S7) (LRR K, L, M)		
	Layers (A5)	C	11)	Depleted Matrix (F3)				Polyvalue Below Surface (S8) (LRR K, L)		
	Below Dark		(11)	_	k Surface (F6)			Thin Dark Surface (S9) (LRR K, L)		
_	rk Surface (A			_	ark Surface (F			Iron-Manganese Masses (F12) (LRR K, L, R)		
	uck Mineral (_	ressions (F8)	- /		Piedmont Floodplain Soils (F19) (MLRA 149B)		
_	eyed Matrix ((54)						Mesic Spodic (TA6) (MLRA 144A, 145, 149B)		
_	edox (S5)							Red Parent Material (F21)		
_	Matrix (S6) face (S7) (LR		140P)					Very Shallow Dark Surface (TF12)		
								Other (Explain in F	Remarks)	
³ Indicators of	of hydrophytic	c vegetatic	on and wetla	and hydrology must	be present, u	nless disturl	ped or probl	ematic.		
Restrictive I	ayer (if obs	served):								
Туре:									~ ~	
Depth (in	ches):							Hydric Soil Present?	Yes 🔾 No 🖲	
Remarks:										
	licators Th	e redov (concentrat	ions in the lower	horizon wer	e too few	to meet th	e criteria of F6		
			LUNCEIRIAL			e loo iew	to meet ui			

Project/Site: Hostrawser Property	City/County:	Twn. Dunkirk, Dane Co	Sampli	ng Date: 21-Oct-20				
Applicant/Owner: Rob Hostrawser		State: Wiscons	Sampling Point:	03				
Investigator(s): Scott Taylor	Section, T	ownship, Range: S. 8	T. 5N	R. 11E				
Landform (hillslope, terrace, etc.): Footslope	Local relief (c	oncave, convex, none)	: convex	Slope: <u>1.0</u> % / <u>0.6</u> °				
Subregion (LRR or MLRA): LRR K Lat.:	42.905775	Long.: -	89.2250057	Datum: NAD83				
Soil Map Unit Name: Wacousta silty clay loam (Wa)			NWI classification:	None				
Are climatic/hydrologic conditions on the site typical for this time of year? Yes NO (If no, explain in Remarks.) Are Vegetation , soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes NO Are Vegetation , soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.								
Hydrophytic Vegetation Present?YesNo●Hydric Soil Present?YesNo●Wetland Hydrology Present?YesNo●		e Sampled Area n a Wetland? Ye	es 🔿 No 🖲					
Remarks: (Explain alternative procedures here or in a separate report Using the Natural Resource Conservation Service weighted-month in (July-Wet; August-Normal; September-Normal), was found to be AV County Regional Airport weather station within two weeks prior to t the date of fieldwork. The vegetation was significantly disturbed and	nethod, antece /ERAGE. In add he date of field	dition, a total of 0.7 in lwork. A total of 0.4 in	ch of rainfall was rec ch of rainfall was rec	orded at the nearby Dane corded within 3 days prior to				

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required	Surface Soil Cracks (B6)	
Surface Water (A1)	Drainage Patterns (B10)	
High Water Table (A2)	Water-Stained Leaves (B9) 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)
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
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)		FAC-neutral Test (D5)
		_
Field Observations:		
Surface Water Present? Yes 🔾 No 🖲	Depth (inches): 0	
Water Table Present? Yes O No 🖲	Depth (inches):0	
Saturation Present? Yes O No •	Depth (inches):0	ydrology Present? Yes \bigcirc No $ullet$
Describe Recorded Data (stream gauge, mon	toring well, aerial photos, previous inspections), if av	/ailable:
Remarks:		
No hydrology indicators. The plot was well ele	evated above the nearby wetland.	

VEGETATION - Use scientific fiames of plat	TION - Use sciencific names of plants					
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species		
1. Morus alba	20	\checkmark	FACU	That are OBL, FACW, or FAC:(A)		
2. Acer negundo	10	\checkmark	FAC			
3	0			Total Number of Dominant Species Across All Strata: 6 (B)		
4	0					
5				Percent of dominant Species That Are OBL FACW or FAC: 16.7% (A/B)		
6				That Are OBL, FACW, or FAC: <u>16.7%</u> (A/B)		
7	0			Prevalence Index worksheet:		
	30 =	= Total Cover		Total % Cover of: Multiply by:		
Sapling/Shrub Stratum (Plot size: 2,826 sf)				OBL species x 1 =		
1. Lonicera x bella			FACU	FACW species $0 \times 2 = 0$		
2. Morus alba			FACU	FAC species $10 \times 3 = 30$		
3				FACU species 110 x 4 = 440		
4				UPL species $0 \times 5 = 0$		
5						
6				Column Totals: <u>120</u> (A) <u>470</u> (B)		
7	0			Prevalence Index = $B/A = 3.917$		
Herb Stratum (Plot size: 78.5 sf)	25 =	= Total Cover		Hydrophytic Vegetation Indicators:		
	30	\checkmark	FACU	Rapid Test for Hydrophytic Vegetation		
	25	\checkmark	FACU	Dominance Test is > 50%		
			FACU	Prevalence Index is ≤3.0 ¹		
•			TACO	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)		
4						
5				Problematic Hydrophytic Vegetation ¹ (Explain)		
6				¹ Indicators of hydric soil and wetland hydrology must		
7				be present, unless disturbed or problematic.		
8				Definitions of Vegetation Strata:		
9						
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.		
11	0			a breast height (DDH), regardless of height.		
12		– Totol Covor		Sapling/shrub - Woody plants less than 3 in. DBH and		
Woody Vine Stratum (Plot size: 2,826 sf)	65 =	= Total Cover	-	greater than 3.28 ft (1m) tall		
1	0			Herb - All herbaceous (non-woody) plants, regardless of		
2	0			size, and woody plants less than 3.28 ft tall.		
3	0			Woody vine - All woody vines greater than 3.28 ft in		
4	0			height.		
	0 =	= Total Cover				
				Hydrophytic		
				Vegetation Present? Yes ○ No ●		
Remarks: (Include photo numbers here or on a separate she	et.)					

The plot occupied a partially wooded area with a sparse ground layer. The site was mowed recently. It is possible some herbaceous plants were present but not observed due to the mowing. The creeping charlie and tall fescue were still green, suggesting the growing season had not ended.

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

	ription: (De	scribe to	the depth	needed to document	the indic	ator or co	nfirm the	absence of indicators.)		
Depth (inches)	C -1(Matrix			dox Featu		1 2		Provention	
	Color (%	Color (moist)	%	Type ¹	Loc ²	Cilt Loom	Remarks	
0-10	10YR	2/2	100					Silt Loam		
10-18	10YR	3/3	100					Silt Loam		
								-		
1 Type: C=Con	centration D	=Depletio	n RM=Red	uced Matrix CS=Covere	- -d or Coate		ins ² l oca	ation: PL=Pore Lining. M=	Matrix	
Hydric Soil 1		Popletie								
Histosol (Polyvalue Belov	w Surface ((S8) (I RR R			olematic Hydric Soils : ³	
	pedon (A2)			MLRA 149B)		(00) (1.000)	/	_) (LRR K, L, MLRA 149B)	
Black Hist				Thin Dark Surfa	ace (S9) (L	_RR R, MLR	A 149B)		dox (A16) (LRR K, L, R)	
_	Sulfide (A4)			Loamy Mucky N				Dark Surface (S7	t or Peat (S3) (LRR K, L, R)	
Stratified	Layers (A5)			Loamy Gleyed I)			Surface (S8) (LRR K, L)	
Depleted	Below Dark S	Surface (A	.11)	Depleted Matrix					e (S9) (LRR K, L)	
Thick Dar	k Surface (A	12)		Redox Dark Sur					Masses (F12) (LRR K, L, R)	
Sandy Mu	uck Mineral (S	51)		Depleted Dark		7)		Piedmont Floodplain Soils (F12) (MLRA 149B)		
_	eyed Matrix (S4)		Redox Depress	ions (F8)				A6) (MLRA 144A, 145, 149B)	
Sandy Re								Red Parent Mate	rial (F21)	
_	Matrix (S6)							Very Shallow Da	rk Surface (TF12)	
Dark Surf	ace (S7) (LR	R R, MLRA	4 149B)					Other (Explain in	Remarks)	
³ Indicators o	f hydrophytic	vegetatio	on and wetla	and hydrology must be p	present, un	less disturb	ed or probl	ematic.		
Restrictive L	ayer (if obs	erved):								
Туре:										
Depth (inc	hes):							Hydric Soil Present?	Yes 🔾 No 🖲	
Remarks:										
No hydric ind	licators.									

Project/Site: Hostrawser Property		City/County: Tw	n. Dunkirk, Dane Co.	Sampli	ng Date: 21-Oct-20		
Applicant/Owner: Rob Hostrawser			State: Wisconsi	Sampling Point:	04		
Investigator(s): Scott Taylor		Section, Town	ship, Range: S. 8	T. 5N	R. 11E		
Landform (hillslope, terrace, etc.):	Footslope	Local relief (conca	ve, convex, none):	convex	Slope: <u>1.0</u> % / <u>0.6</u> °		
Subregion (LRR or MLRA): LRR K	Lat.:	42.905775	Long.: -8	9.2250057	Datum: NAD83		
Soil Map Unit Name: Wacousta silty	/ clay loam (Wa)			NWI classification:	None		
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes O No O Yes No O Yes No O	Is the Sar within a V	npled Area Vetland? Ye	s 🔿 No 🖲			
Remarks: (Explain alternative pro	cedures here or in a separate repo	ort.)					
Using the Natural Resource Conse (July-Wet; August-Normal; Septer County Regional Airport weather s the date of fieldwork.	nber-Normal), was found to be A	VERAGE. In addition	n, a total of 0.7 inc	h of rainfall was reco	orded at the nearby Dane		

Wetland Hydrology Indicators:					Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum o	of one required; cl	Surface Soil Cracks (B6)			
Surface Water (A1)		Drainage Patterns (B10)			
High Water Table (A2)		Water-Stained Leav	()		Moss Trim Lines (B16)
Saturation (A3)		Marl Deposits (B15)			Dry Season Water Table (C2)
Water Marks (B1)		Hydrogen Sulfide O			Crayfish Burrows (C8)
Sediment Deposits (B2)		Oxidized Rhizosphe	. ,	oots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)		Presence of Reduce		(11)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)		Recent Iron Reduct	()	C6)	Geomorphic Position (D2)
Iron Deposits (B5)		Thin Muck Surface			Shallow Aquitard (D3)
Inundation Visible on Aerial Ima	agery (B7)	Other (Explain in Re			Microtopographic Relief (D4)
Sparsely Vegetated Concave Su	urface (B8)				FAC-neutral Test (D5)
Field Observations:					
Surface Water Present? Yes	s 🔿 No 🖲	Depth (inches):	0		
Water Table Present? Yes	s 🔿 No 🖲	Depth (inches):	0		ology Present? Yes 🔿 No 🖲
Saturation Present? (includes capillary fringe) Yes	s 🔿 No 🖲	Depth (inches):	0	Wetland Hydr	ology Present? Yes 🔾 No 🖲
Describe Recorded Data (stream	n gauge, monitori	ng well, aerial photos	s, previous inspe	ections), if avail	able:
Remarks:					
No hydrology indicators. The plo	ot was well elevat	ed above the nearby	wetland.		

vegeration - use scientific names of plai	Sampling Point: 04			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Acer negundo	5		FAC	Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)
2 Quercus macrocarpa	50		FACU	
3 _. Juglans nigra	20	\checkmark	FACU	Total Number of Dominant Species Across All Strata: 5 (B)
4				
5		\Box		Percent of dominant Species
6				That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		= Total Cover		Total % Cover of: Multiply by:
			FAC	OBL species <u>0</u> x 1 = <u>0</u>
1. Acer negundo	5		FAC	FACW species $0 \times 2 = 0$
2. Prunus serotina			FACU	FAC species <u>10</u> x 3 = <u>30</u>
3				FACU species <u>140</u> x 4 = <u>560</u>
4				UPL species25_ x 5 =125
5				Column Totals: <u>175</u> (A) <u>715</u> (B)
6				
7		= Total Cover		Prevalence Index = $B/A = 4.086$
Herb Stratum (Plot size: 78.5 sf)	10 =			Hydrophytic Vegetation Indicators:
1. Glechoma hederacea	50	\checkmark	FACU	Rapid Test for Hydrophytic Vegetation
2 Leonurus cardiaca	15	Π	UPL	Dominance Test is > 50%
3. Rubus occidentalis	10		UPL	Prevalence Index is ≤3.0 ¹
4. Ageratina altissima			FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12	0			Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 2,826 sf)		= Total Cover		greater than 3.28 ft (1m) tall.
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
		= Total Cover		
				Hydrophytic Vegetation Present? Yes No •
Remarks: (Include photo numbers here or on a separate she The plot occupied an oak-black walnut grove. The creeping		e still green,	suggesting	g the growing season had not ended.

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

	iption: (De		the depth				nfirm the a	absence of indicators.)		
Depth (inches)	Color (Matrix moist)	%	Color (moist)	dox Featu %	Type ¹	Loc ²	Texture Remarks		
0-18	10YR	2/1	100			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Silt Loam		
18-24	10YR	4/4	100	·				Loamy Sand		
				·						
								. <u> </u>		
				·	·					
¹ Type: C=Con	centration. D	=Depletio	n. RM=Red	uced Matrix, CS=Covere	ed or Coate	ed Sand Gra	ins ² Loca	tion: PL=Pore Lining. M=1	 Matrix	
Hydric Soil 1									lematic Hydric Soils : ³	
Black Hist Hydrogen Stratified Depleted Thick Dar Sandy Mu Sandy Gle Sandy Re Stripped I Dark Surf	pedon (A2) ic (A3) I Sulfide (A4) Layers (A5) Below Dark S k Surface (A2) ick Mineral (S eyed Matrix (S dox (S5) Matrix (S6) iace (S7) (LRI f hydrophytic	Surface (A 12) 51) 54) R R, MLRA vegetatio	A 149B)	Polyvalue Below MLRA 149B) Thin Dark Surfa Loamy Mucky N Loamy Gleyed I Depleted Matrix Redox Dark Sur Depleted Dark Sur Redox Depress	ace (S9) (I 4ineral (F1 Matrix (F2) < (F3) rface (F6) Surface (F6) Surface (F8)	lrr r, mlr.) lrr k, l)) 7)	A 149B)	2 cm Muck (A10) Coast Prairie Red 5 cm Mucky Peat Dark Surface (S7 Polyvalue Below 3 Thin Dark Surface Iron-Manganese Piedmont Floodpl Mesic Spodic (TA Red Parent Matee Very Shallow Dar Other (Explain in	(LRR K, L, MLRA 149B) lox (A16) (LRR K, L, R) or Peat (S3) (LRR K, L, R)) (LRR K, L, M) Surface (S8) (LRR K, L) e (S9) (LRR K, L) Masses (F12) (LRR K, L, R) lain Soils (F19) (MLRA 149B) 6) (MLRA 144A, 145, 149B) rial (F21) k Surface (TF12)	
Restrictive L Type:	ayer (if obs	erved):								
Depth (inc	hes):							Hydric Soil Present?	Yes 🔿 No 🖲	
Remarks: No hydric ind	icators.									

Project/Site: Hostrawser Property	City/County: Twn. Dunkirk, Dane Co. Sampling Date: 21-Oct-20							
Applicant/Owner: Rob Hostrawser	State: Wisconsi Sampling Point: 05							
Investigator(s): Scott Taylor	Section, Township, Range: S. 8 T. 5N R. 11E							
Landform (hillslope, terrace, etc.): Footslope	Local relief (concave, convex, none): flat Slope: 0.0 % /	0.0 °						
Subregion (LRR or MLRA): LRR K Lat.:	42.905775 Long.: -89.2250057 Datum: NAD83	1						
Soil Map Unit Name: Wacousta silty clay loam (Wa)	NWI classification: None							
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc. Hydrophytic Vegetation Present? Yes No No No Hydrophytic Vegetation Present? Yes No No No No No No No No								
Hydric Soil Present? Yes ○ No ● Wetland Hydrology Present? Yes ○ No ●	Is the Sampled Area within a Wetland? Yes O No •							
Remarks: (Explain alternative procedures here or in a separate report Using the Natural Resource Conservation Service weighted-month in (July-Wet; August-Normal; September-Normal), was found to be AN	ort.) method, antecedent moisture, based on total precipitation for the previous 3 mor VERAGE. In addition, a total of 0.7 inch of rainfall was recorded at the nearby Da the date of fieldwork. A total of 0.4 inch of rainfall was recorded within 3 days pr	ane						

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)	
Primary Indicators (minimum of one requi	red; check all that apply)	Surface Soil Cracks (B6)	
Surface Water (A1)	Drainage Patterns (B10)		
High Water Table (A2)	Water-Stained Leaves (B9) 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)	
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)	
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)	
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)		FAC-neutral Test (D5)	
Field Observations:			
Surface Water Present? Yes O No	Depth (inches): 0		
Water Table Present? Yes O No		vdrology Present? Yes 🔿 No 🖲	
Saturation Present? Yes O No	Depth (inches): 0	ydrology Present? Yes 🔾 No 🖲	
Describe Recorded Data (stream gauge, m	onitoring well, aerial photos, previous inspections), if av	vailable:	
Remarks:			
No hydrology indicators. The plot occupied	a well elevated landscape area.		

VEGETATION - Use scientific names of plan	Sampling Point: 05			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
1. Ulmus pumila	80	\checkmark	FACU	Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)
2	0			
3				Total Number of Dominant Species Across All Strata: 4 (B)
4				
5				Percent of dominant Species
6		\Box		That Are OBL, FACW, or FAC:(A/B)
7	0			Prevalence Index worksheet:
	80 =	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		_	=	OBL species $0 \times 1 = 0$
1. <i>Rhamnus cathartica</i>			FAC	FACW species $0 \times 2 = 0$
2				FAC species 80 x 3 = 240
3				FACU species <u>135</u> x 4 = <u>540</u>
4				UPL species $0 \times 5 = 0$
5				Column Totals: _215_ (A)780_ (B)
6				$\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$ $\frac{1}{100}$
7				Prevalence Index = $B/A = $ <u>3.628</u>
Herb Stratum (Plot size: 78.5 sf)	70 =	= Total Cover		Hydrophytic Vegetation Indicators:
	20	\checkmark	FACU	Rapid Test for Hydrophytic Vegetation
		\checkmark	FACU	Dominance Test is > 50%
2. Alliaria petiolata 3. Arctium minus			FACU	Prevalence Index is ≤3.0 ¹
	<u>10</u> 5			Morphological Adaptations ¹ (Provide supporting
4. Morus alba	10		FACU	data in Remarks or on a separate sheet)
5. Geum canadense	-		FAC	Problematic Hydrophytic Vegetation ¹ (Explain)
6. Hesperis matronalis			FACU	¹ Indicators of hydric soil and wetland hydrology must
7				be present, unless disturbed or problematic.
8				Definitions of Vegetation Strata:
9				
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Sapling/shrub - Woody plants less than 3 in. DBH and
Woody Vine Stratum (Plot size: 2,826 sf)	65 =	= Total Cover		greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
۵	0			height.
T	0 =	= Total Cover		
				Hydrophytic
				Vegetation Present? Yes ○ No ●

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

The plot occupied a grove of siberian elm trees with a dense buckthorn shrub layer. The garlic mustard and creeping charlie were still green, suggesting the growing season had not ended.

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

Soil

Remarks
Hydric Soils : ³
<i>.</i> L, MLRA 149B)
(LRR K, L, R)
(S3) (LRR K, L, R)
L, M)
58) (LRR K, L)
RR K, L)
F12) (LRR K, L, R)
(F19) (MLRA 149B)
144A, 145, 149B)
e (TF12)
)
,
○ No ●

Project/Site: Hostrawser Property		City/County:	Twn. Dunkirk, Dane Co.	Samplin	g Date: 21-Oct-20		
Applicant/Owner: Rob Hostrawser			State: Wisconsi	Sampling Point:	06		
Investigator(s): Scott Taylor		Section, T	ownship, Range: S. 8	T. 5N	R. 11E		
Landform (hillslope, terrace, etc.):	Summit	Local relief (c	oncave, convex, none):	convex	Slope: <u>1.0</u> % / <u>0.6</u> °		
Subregion (LRR or MLRA): LRR K	Lat.:	42.905775	Long.: -8	9.2250057	Datum: NAD83		
Soil Map Unit Name: Dresden silt loa	am (DsC2)	-		NWI classification:	None		
Are climatic/hydrologic conditions on the site typical for this time of year? Yes No (If no, explain in Remarks.) Are Vegetation , Soil , or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No Are Vegetation , Soil , or Hydrology naturally problematic? (If needed, explain any answers in Remarks.) Summary of Findings - Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Hydric Soil Present? Wetland Hydrology Present?	Yes ○ No ● Yes ○ No ● Yes ○ No ●		e Sampled Area n a Wetland? Yes	; 🔿 No 🖲			
Remarks: (Explain alternative proc	edures here or in a separate repo	ort.)					
Using the Natural Resource Conser (July-Wet; August-Normal; Septem County Regional Airport weather st the date of fieldwork.	nber-Normal), was found to be AV	/ERAGE. In add	dition, a total of 0.7 incl	n of rainfall was reco	orded at the nearby Dane		

Wetland Hydrology Indicat	ors:		Secondary	/ Indicators (minimum of 2 required)		
Primary Indicators (minim	um of one required	; check all that apply)		ce Soil Cracks (B6)		
Surface Water (A1)			Drainage Patterns (B10)			
High Water Table (A2)		Water-Stained Leaves (B9)		Trim Lines (B16)		
Saturation (A3)		Marl Deposits (B15)		eason Water Table (C2)		
Water Marks (B1)		Hydrogen Sulfide Odor (C1)	,	ish Burrows (C8)		
Sediment Deposits (B2)		Oxidized Rhizospheres along	,	Saturation Visible on Aerial Imagery (C9)		
Drift deposits (B3)		Presence of Reduced Iron (· · · ·	ed or Stressed Plants (D1)		
Algal Mat or Crust (B4)		Recent Iron Reduction in Til	,	norphic Position (D2)		
Iron Deposits (B5)		Thin Muck Surface (C7)		w Aquitard (D3)		
Inundation Visible on Aeri	al Imagery (B7)	Other (Explain in Remarks)		topographic Relief (D4)		
Sparsely Vegetated Conca	ave Surface (B8)			neutral Test (D5)		
Field Observations:						
Surface Water Present?	Yes 🔾 No 🖲	Depth (inches): 0				
Water Table Present?	Yes 🔾 No 🖲	Depth (inches):0		sent? Yes 🔿 No 🖲		
Saturation Present? (includes capillary fringe)	Yes 🔿 No 🖲	Depth (inches):0	Wetland Hydrology Pres			
Describe Recorded Data (s	tream gauge, moni	toring well, aerial photos, previo	us inspections), if available:			
Remarks:						
No hydrology indicators. The	ne plot occupied a	vell elevated landscape area.				

VEGETATION - Use scientific names of pla	Sampling Point: 06			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover	O	Indicator Status	Dominance Test worksheet:
1. Robinia pseudoacacia	80	\checkmark	FACU	Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)
2. Ulmus pumila	20		FACU	
3				Total Number of Dominant Species Across All Strata: 6 (B)
4				
5				Percent of dominant Species
6				That Are OBL, FACW, or FAC:33.3% (A/B)
7				Prevalence Index worksheet:
	100	= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		_		OBL species $0 \times 1 = 0$
1. Fraxinus pennsylvanica	40		FACW	FACW species40 x 2 =80
2. Morus alba			FACU	FAC species20 x 3 =60
3 Rhamnus cathartica			FAC	FACU species $150 \times 4 = 600$
4 _. Juglans nigra			FACU	UPL species $0 \times 5 = 0$
5. Prunus serotina			FACU	Column Totals: <u>210</u> (A) <u>740</u> (B)
6				
7				$Prevalence Index = B/A = \underline{3.524}$
Herb Stratum (Plot size: 78.5 sf)	65	= Total Cover		Hydrophytic Vegetation Indicators:
1 Geum canadense	10		FAC	Rapid Test for Hydrophytic Vegetation
2. Glechoma hederacea	20		FACU	Dominance Test is > 50%
3. Alliaria petiolata	10		FACU	Prevalence Index is \leq 3.0 ¹
4 Hesperis matronalis			FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				 Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				
Woody Vine Stratum (Plot size: 2,826 sf)		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0	= Total Cover		
				Hydrophytic Vegetation Present? Yes No 💿
Remarks: (Include photo numbers here or on a separate she				
The plot occupied a locust grove. Most of the herb layer spe	ecies were s	still at least p	artially gre	een, suggesting the growing season had not ended.

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

	ption: (De		the depth				firm the a	absence of indicators.)	
Depth (inches)			Loc ²	Texture	Remarks				
0-3	10YR	2/1	100					Silt Loam	
3-18	10YR	3/4	100	·				Silty Clay Loam	
J-10	101K			· ·					
				· ·					
	entration D	-Depletio	n RM-Red	uced Matrix CS-Covere	d or Coate	d Sand Gra		tion: PL=Pore Lining. M=M	latrix
							IIIS LOCA		
Hydric Soil I				Polyvalue Belov	N Surface (מ מסו/ (גצ		_	ematic Hydric Soils : ³
				MLRA 149B)		50) (LKK K		2 cm Muck (A10)	(LRR K, L, MLRA 149B)
Black Hist				Thin Dark Surfa	ace (S9) (l	RR R, MLR	A 149B)	Coast Prairie Redo	ox (A16) (LRR K, L, R)
_	Sulfide (A4)			Loamy Mucky N			,	5 cm Mucky Peat	or Peat (S3) (LRR K, L, R)
_	_ayers (A5)			Loamy Gleyed	-			Dark Surface (S7)	
_	Below Dark S	Surface (A	11)	Depleted Matrix					urface (S8) (LRR K, L)
	surface (Al)	Redox Dark Su				Thin Dark Surface	
	ck Mineral (S			Depleted Dark		7)			lasses (F12) (LRR K, L, R)
	yed Matrix (-		Redox Depress					ain Soils (F19) (MLRA 149B)
Sandy Ge		54)			. ,				5) (MLRA 144A, 145, 149B)
Stripped N								Red Parent Materi	
_	ace (S7) (LRI		140R)					Very Shallow Dark	
								Other (Explain in F	Remarks)
³ Indicators of	hydrophytic	vegetatio	n and wetla	nd hydrology must be p	present, un	less disturb	ed or proble	ematic.	
Restrictive La	ayer (if obs	erved):							
Туре:									
Depth (incl	nes):							Hydric Soil Present?	Yes 🔿 No 🖲
Remarks:								I	
No hydric ind	cators								
no nyane ma	cator 5.								

Project/Site: Hostrawser Property		City/County:	Twn. Dunkirk, Dane Co.	Samplir	ng Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser			State: Wisconsi	Sampling Point:	07a
Investigator(s): Scott Taylor		Section, To	wnship, Range: S. 8	T. 5N	R. 11E
Landform (hillslope, terrace, etc.): Toes	slope	Local relief (co	oncave, convex, none):	concave	Slope: <u>0.0</u> % / <u>0.0</u> °
Subregion (LRR or MLRA): LRR K	Lat.: 4	42.905775	Long.: -8	9.2250057	Datum: NAD83
Soil Map Unit Name: Troxel silt loam (Tr	гВ)			NWI classification:	None
	Hydrology Significantl Hydrology naturally p	y disturbed? roblematic?	Are "Normal Circu (If needed, explain	o, explain in Remarks mstances" present? n any answers in Rei ansects, impo l	Yes No 💿
Hydric Soil Present? Ye	es ● No ○ es ● No ○ es ● No ○		Sampled Area n a Wetland? Yes	;	
Remarks: (Explain alternative procedu Using the Natural Resource Conservatio (July-Wet; August-Normal; September- County Regional Airport weather station the date of fieldwork. The vegetation w been tilled recently. The soil was natura	on Service weighted-month m Normal), was found to be AVI n within two weeks prior to th vas significantly disturbed and	ethod, anteced ERAGE. In add le date of field normal circun	lition, a total of 0.7 incl work. A total of 0.4 inc nstances were not pres	h of rainfall was reco h of rainfall was reco ent since the plot wa	orded at the nearby Dane orded within 3 days prior to as in a crop field and had

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)		
Primary Indicators (minimum of one required;	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)		
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)		
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)		
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)		Microtopographic Relief (D4)		
Sparsely Vegetated Concave Surface (B8)				
		✓ FAC-neutral Test (D5)		
Field Observations:				
Surface Water Present? Yes O No 🖲	Depth (inches): 0			
Water Table Present? Yes No	Depth (inches):11	drology Present? Yes 🖲 No 🔾		
Saturation Present? (includes capillary fringe) Yes • No	Depth (inches):7	drology Present? Yes 🔍 No 🔾		
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspections), if ava	ailable:		
Aerial imagery review showed wetland signatur	es in this area for 50% of normal rainfall years since	e 2000.		
Remarks:				
The plot occupied the bottom of a closed depre	ssion			
	551011.			

vederation - use scientific names of plan	Sampling Point: 07a			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
	0			Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)
2	0			
3				Total Number of Dominant Species Across All Strata: 2 (B)
4				
5				Percent of dominant Species That Are OBL FACW, or FAC:100.0% (A/B)
6				That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
7				Prevalence Index worksheet:
		= Total Cover		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 2,826 sf)				OBL species x 1 =
1				FACW species <u>120</u> x 2 = <u>240</u>
2				FAC species x 3 =
3				FACU species $0 \times 4 = 0$
4				UPL species $0 \times 5 = 0$
5				Column Totals: <u>120</u> (A) <u>240</u> (B)
6				
7		- Total Cavar		Prevalence Index = $B/A = 2.000$
Herb Stratum (Plot size: 78.5 sf)	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
1. Panicum dichotomiflorum	60	\checkmark	FACW	Rapid Test for Hydrophytic Vegetation
2. Cyperus esculentus			FACW	✓ Dominance Test is > 50%
3				✓ Prevalence Index is \leq 3.0 ¹
4				Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
5				Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				1 Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Conting (should be Weather should be a them 2 in DDU and
Woody Vine Stratum (Plot size: 2,826 sf)		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
1	0			Herb - All herbaceous (non-woody) plants, regardless of
2	0			size, and woody plants less than 3.28 ft tall.
3	0			Woody vine - All woody vines greater than 3.28 ft in
4	0			height.
	0 =	= Total Cover		
				Hydrophytic Vegetation Present? Yes • No ○
Remarks: (Include photo numbers here or on a senarate she	et)			

hoto numbers here or on a separate sheet.)

The plot occupied a weedy spot (the weeds had mostly died back) where the soybean crop drowned out earlier in the growing season. There were young wheat plants amid the dead weeds that were green suggesting the growing season had not ended.

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

Soil

Depth		Matrix		Rec	lox Features			
(inches)	Color (moist)	%	Color (moist)	<u>%</u> <u>Type</u> ¹	Loc ²	Texture	Remarks
		2/1	 				Iexture Silt Loam	Kemarks
Histosol (Histosol (Histic Epij Black Hist Hydrogen Stratified Depleted Thick Dar Sandy Mu	Indicators: A1) pedon (A2) tic (A3) a Sulfide (A4) Layers (A5) Below Dark S rk Surface (A: uck Mineral (S eyed Matrix (S	Surface (A 12) 51)		Polyvalue Below MLRA 149B) Thin Dark Surfa	/ Surface (S8) (LRR R ce (S9) (LRR R, MLR lineral (F1) LRR K, L) Matrix (F2) : (F3) face (F6) Surface (F7)	,	Dark Surface (S7) (Polyvalue Below Sur Thin Dark Surface (! Iron-Manganese Ma Piedmont Floodplair	matic Hydric Soils : 3 RR K, L, MLRA 149B) (A16) (LRR K, L, R) (A16) (LRR K, L, R) (MLRR K, L, R) (RR K, L, M) (MLRA 1498) (face (S8) (LRR K, L) (S9) (LRR K, L) (S9) (LRR K, L) (MLRA 149B) (MLRA 144A, 145, 149B) (MLRA 144A, 145, 149B)
	Matrix (S6) ace (S7) (LRI	r r, mlra	(149B)				Very Shallow Dark S	Surface (TF12)
			n and wetla	nd hydrology must be p	resent, unless disturb	ed or proble		-
Restrictive L Type: Depth (inc	<i>·</i> · ·	erved):					Hydric Soil Present?	Yes 🕘 No 🔾
Remarks:								
lo hydric ind ndicators.	licators obs	erved ho	wever prof	essional judgment w	as used to assume	the soil w	ras hydric based on the vo	egetation and hydrology

Project/Site: Hostrawser Property	City/County:	Twn. Dunkirk, Dane Co.	Sampling	g Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser		State: Wisconsi	Sampling Point:	07b
Investigator(s): Scott Taylor	Section, T	ownship, Range: S. 8	T. 5N	R. 11E
Landform (hillslope, terrace, etc.): Footslope	Local relief (c	oncave, convex, none):	convex	Slope:% /^
Subregion (LRR or MLRA): LRR K Lat.:	42.905775	Long.: -8	9.2250057	Datum: NAD83
Soil Map Unit Name: Troxel silt loam (TrB)	-		NWI classification:	None
	problematic?	Are "Normal Circu (If needed, explain	n, explain in Remarks nstances" present? n any answers in Rem ansects, impor	Yes No 🖲 narks.)
Hydrophytic Vegetation Present?YesNoHydric Soil Present?YesNoWetland Hydrology Present?YesNo		e Sampled Area n a Wetland? Yes	5 🔾 No 🖲	
Remarks: (Explain alternative procedures here or in a separate repo Using the Natural Resource Conservation Service weighted-month r (July-Wet; August-Normal; September-Normal), was found to be A' County Regional Airport weather station within two weeks prior to t the date of fieldwork. The vegetation was significantly disturbed an been tilled recently.	method, antece VERAGE. In add the date of field	dition, a total of 0.7 incl lwork. A total of 0.4 inc	n of rainfall was recond h of rainfall was reco	rded at the nearby Dane orded within 3 days prior to

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required	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)
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
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)	FAC-neutral Test (D5)	
Field Observations:		
Surface Water Present? Yes 🔾 No 🖲	Depth (inches): 0	
Water Table Present? Yes O No 🖲	Depth (inches):0	vdrology Present? Yes 🔿 No 🖲
Saturation Present? Yes O No O	Depth (inches): 0	ydrology Present? Yes 🔾 No 🖲
Describe Recorded Data (stream gauge, moni	toring well, aerial photos, previous inspections), if av	/ailable:
Aerial imagery review did not show wetland s	ignatures in this area during normal or wet years sin	ce the year 2000.
Remarks:		
No hydrology indicators. The plot was well ele	vated above the nearby wetland	
The figure logy matcators. The plot was well ele	value above the fictibly wedding.	

vederation - use scientific names of pla	Sampling Point: 07b			
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:
<u> </u>				Number of Dominant Species That are OBL, FACW, or FAC: 0 (A)
2.				
3	0			Total Number of Dominant Species Across All Strata: 0 (B)
4				
5				Percent of dominant Species That Are OBL_EACW_or EAC: 0.0% (A/B)
6				That Are OBL, FACW, or FAC:(A/B)
7				Prevalence Index worksheet:
Sapling/Shrub Stratum (Plot size: 2,826 sf)		= Total Cover		Total % Cover of: Multiply by:
1	0			$\begin{array}{ccc} \text{OBL species} & \underline{0} & \text{x } 1 = & \underline{0} \\ \hline \end{array}$
2				FACW species $0 \times 2 = 0$
3				FAC species $0 \times 3 = 0$
4				FACU species $0 \times 4 = 0$
5	0			UPL species $0 \times 5 = 0$
6				Column Totals: <u>0</u> (A) <u>0</u> (B)
7				Prevalence Index = B/A =0.000
Herb Stratum (Plot size: 78.5 sf)	0 =	= Total Cover		Hydrophytic Vegetation Indicators:
	0			Rapid Test for Hydrophytic Vegetation
1				Dominance Test is > 50%
23				Prevalence Index is \leq 3.0 ¹
				Morphological Adaptations ¹ (Provide supporting
4 5				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
6				
7				¹ Indicators of hydric soil and wetland hydrology must
8				be present, unless disturbed or problematic.
9				Definitions of Vegetation Strata:
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter
11				at breast height (DBH), regardless of height.
12				Oralian/shark, Weathingtonia there there to be
		= Total Cover		Sapling/shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft (1m) tall
Woody Vine Stratum (Plot size: 2,826 sf)	0			Lierh All herbesseus (nen weedu) plants, regerdiese of
1	0			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
2	0			
3	0			Woody vine - All woody vines greater than 3.28 ft in height.
4		= Total Cover		noight.
				Hydrophytic
				Vegetation Present? Yes O No 💿

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

The plot occupied a crop field. There was just soybean stubble and recently germinated wheat plants. Judging from the absence of wetland hydrology and hydric soil indicators, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e. in the absence of tillage. There were young wheat plants that were green suggesting the growing season had not ended.

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

Depth		Matrix	the depth		dox Featu			absence of indicators.)	
(inches)	Color ((moist)	%	Color (moist)	w	Type ¹	Loc ²	Texture	Remarks
0-18	10YR	2/2	100	·		- <u></u> ,		Silt Loam	
18-26	10YR	2/1	100					Silt Loam	
					·	· ·			· · · · · · · · · · · · · · · · · · ·
)=Depletio	on. RM=Redu		ed or Coate	d Sand Grai	ns ²Loca	tion: PL=Pore Lining. M=M	
Black Hist Hydroger Stratified Depleted Thick Dar Sandy Mu Sandy Gle Sandy Re Stripped Dark Surf ³ Indicators o Restrictive L	A1) pedon (A2) tic (A3) n Sulfide (A4) Layers (A5) Below Dark rk Surface (A uck Mineral (S eyed Matrix (eyed Matrix (edox (S5) Matrix (S6) face (S7) (LR f hydrophytic ayer (if obs	Surface (A 12) S1) S4) R R, MLRA c vegetatio	A 149B)	Polyvalue Belov MLRA 149B) Thin Dark Surfa Loamy Mucky N Loamy Gleyed Depleted Matrix Redox Dark Su Depleted Dark Redox Depress	ace (S9) (L Mineral (F1 Matrix (F2) x (F3) rface (F6) Surface (F7 ions (F8)	RR R, MLRA) LRR K, L) 7)		2 cm Muck (A10) Coast Prairie Redd 5 cm Mucky Peat Dark Surface (S7) Polyvalue Below S Thin Dark Surface Iron-Manganese N Piedmont Floodpla Mesic Spodic (TA6 Red Parent Materi Very Shallow Dark Other (Explain in	Surface (S8) (LRR K, L) (S9) (LRR K, L) Masses (F12) (LRR K, L, R) ain Soils (F19) (MLRA 149B) 5) (MLRA 144A, 145, 149B) ial (F21) < Surface (TF12)
Depth (inc Remarks: No hydric ind									

Project/Site: Hostrawser Property	City/County	r: Twn. Dunkirk, Dane Co	o. Samplin	ng Date: 21-Oct-20
Applicant/Owner: Rob Hostrawser		State: Wiscon	si Sampling Point:	07c
Investigator(s): Scott Taylor	Section,	Township, Range: S.	з т. 5N	R. 11E
Landform (hillslope, terrace, etc.): Footslope	Local relief	(concave, convex, none): convex	Slope:% /°
Subregion (LRR or MLRA): LRR K La	at.: 42.905775	Long.:	-89.2250057	Datum: NAD83
Soil Map Unit Name: Kegonsa silt loam (KeB)	-		NWI classification:	None
	icantly disturbed	Are "Normal Circo (If needed, expl	no, explain in Remarks cumstances" present? ain any answers in Rer transects, impo l	Yes No 💿
Hydrophytic Vegetation Present?YesNoHydric Soil Present?YesNoWetland Hydrology Present?YesNo		the Sampled Area hin a Wetland? Y	ies \bigcirc No $oldsymbol{ ilde{O}}$	
Remarks: (Explain alternative procedures here or in a separate Using the Natural Resource Conservation Service weighted-mon (July-Wet; August-Normal; September-Normal), was found to b County Regional Airport weather station within two weeks prior the date of fieldwork. The vegetation was significantly disturbed been tilled recently.	nth method, ante e AVERAGE. In a to the date of fie	ddition, a total of 0.7 in eldwork. A total of 0.4 in	nch of rainfall was reco nch of rainfall was reco	orded at the nearby Dane orded within 3 days prior to

Wetland Hydrology Indicators:		Secondary Indicators (minimum of 2 required)
Primary Indicators (minimum of one required;	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)
Sediment Deposits (B2)	Oxidized Rhizospheres along Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Drift deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
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)		FAC-neutral Test (D5)
		_ 、 、
Field Observations:		
Surface Water Present? Yes O No 💿	Depth (inches): 0	
Water Table Present? Yes O No 💿	Depth (inches): 0	
Saturation Present? Yes O No •	Wetland Hy Depth (inches): 0	drology Present? Yes 🔿 No 🖲
Describe Recorded Data (stream gauge, monito	ring well, aerial photos, previous inspections), if available	ailable:
Aerial imagery review did not show wetland sig	natures in this area during normal or wet years sinc	te the year 2000.
Remarks: No hydrology indicators. The plot was well eleva	ated above the nearby wetland.	

vederation - use scientific names of pla	Sampling Point: 07c					
Tree Stratum (Plot size: 2,826 sf)	Absolute % Cover		Indicator Status	Dominance Test worksheet:		
 1	0			Number of Dominant Species That are OBL, FACW, or FAC:0(A)		
2				Tatal Number of Deminent		
3	0			Total Number of Dominant Species Across All Strata:0(B)		
4						
5	0			Percent of dominant Species That Are OBL, FACW, or FAC:0.0% (A/B)		
6						
7	0			Prevalence Index worksheet:		
bling/Shrub Stratum (Plot size: 2,826 sf) 0		= Total Cover		$\begin{array}{c c} Total \% Cover of: Multiply by: \\ \hline \textbf{OBL species} & 0 & \textbf{x 1} = 0 \\ \end{array}$		
1	0			FACW species $0 \times 2 = 0$		
2	0			FAC species $0 \times 3 = 0$		
3	0			FACU species $0 \times 4 = 0$		
4	0					
5	0					
6				Column Totals: <u>0</u> (A) <u>0</u> (B)		
7				Prevalence Index = B/A =0.000		
Herb Stratum (Plot size: 78.5 sf)	0 :	= Total Cover		Hydrophytic Vegetation Indicators:		
	0			Rapid Test for Hydrophytic Vegetation		
1 2				Dominance Test is > 50%		
3				□ Prevalence Index is \leq 3.0 ¹		
4				Morphological Adaptations ¹ (Provide supporting		
5				data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)		
6						
7				1 Indicators of hydric soil and wetland hydrology must		
8				be present, unless disturbed or problematic.		
9				Definitions of Vegetation Strata:		
10				Tree - Woody plants, 3 in. (7.6 cm) or more in diameter		
11				at breast height (DBH), regardless of height.		
12				Sapling/shrub - Woody plants less than 3 in. DBH and		
		= Total Cover		greater than 3.28 ft (1m) tall		
Woody Vine Stratum (Plot size: 2,826 sf)						
1	0			Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.		
2	0					
3	0			Woody vine - All woody vines greater than 3.28 ft in height.		
4		= Total Cover		neight.		
				Hydrophytic		
				Vegetation Present? Yes O No 🖲		

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

The plot occupied a crop field. There was just soybean stubble and recently germinated wheat plants. Judging from the absence of wetland hydrology and hydric soil indicators, this site would probably support predominantly non-hydrophytic vegetation under normal circumstances, i.e. in the absence of tillage. There were young wheat plants that were green suggesting the growing season had not ended.

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

Soil

Depth			ule depui		dox Featu			absence of indicators.)	
(inches)	Color (r	<u>Matrix</u> moist)	%	Color (moist)	www.uox reatu	Type ¹	Loc ²	Texture	Remarks
0-24	10YR	2/2	100					Silt Loam	
		-			-				
				· ·					
			-					-	
								-	
	I	-		. <u> </u>					
Type: C=Cor	centration. D=	=Depletio	n. RM=Redu	iced Matrix, CS=Covere	ed or Coate	ed Sand Grai	ns ² Loca	tion: PL=Pore Lining. M=	Matrix
Hydric Soil	Indicators:							Indicators for Prol	blematic Hydric Soils : ³
Histosol ((A1)			Polyvalue Below	v Surface ((S8) (LRR R,) (LRR K, L, MLRA 149B)
🗌 Histic Epi	pedon (A2)			MLRA 149B)				_	dox (A16) (LRR K, L, R)
Black His	tic (A3)			Thin Dark Surfa	ace (S9) (l	_RR R, MLRA	A 149B)		
	n Sulfide (A4)			Loamy Mucky N	Mineral (F1) LRR K, L)			t or Peat (S3) (LRR K, L, R)
	Layers (A5)			Loamy Gleyed	Matrix (F2)	1		Dark Surface (S	
	Below Dark S	Surface (A	11)	Depleted Matrix	k (F3)				Surface (S8) (LRR K, L)
	rk Surface (A1		11)	Redox Dark Su	rface (F6)			_	ce (S9) (LRR K, L)
	uck Mineral (S			Depleted Dark		7)			Masses (F12) (LRR K, L, R)
	-	-		Redox Depress				Piedmont Flood	olain Soils (F19) (MLRA 149B)
_	eyed Matrix (S	54)							A6) (MLRA 144A, 145, 149B)
Sandy Re								Red Parent Mate	erial (F21)
	Matrix (S6)							Very Shallow Da	rk Surface (TF12)
Dark Sur	face (S7) (LRR	R, MLRA	. 149B)					Other (Explain ir	n Remarks)
³ Indicators o	f hydrophytic	vegetatio	n and wetla	nd hydrology must be p	resent, un	less disturbe	ed or proble	ematic.	
	ayer (if obse	erveu):							
Type:								Hydric Soil Present?	Yes 🔿 No 🖲
Depth (inc	:hes):							nyune bon resent.	
Remarks:									
lo hydric inc	licators.								
,									

APPENDIX D

Nonfederal Wetland Exemption Determination

State of Wisconsin DEPARTMENT OF NATURAL RESOURCES 3911 Fish Hatchery Rd. Fitchburg, WI, 53711

Tony Evers, Governor Preston D. Cole, Secretary Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



04/28/2022

Robert Hostrawser 3092 Linnerud Drive Stoughton, WI 53589 EXE-SC-2022-13-01497

RE: Nonfederal Wetland Exemption Determination for an area described as Wetland 3 located at SE SW T5N R11E S8 in the Town of Dunkirk, Dane County.

Dear Mr. Hostrawser:

This letter is in response to your request for a nonfederal wetland exemption determination for the above mentioned wetlands.

According to 281.36 (4n), State Stat., a nonfederal wetland is a wetland that is not federally jurisdictional. Projects impacting nonfederal wetlands in urban areas must be less than 1 acre of total impact, (s. 281.36(4n)(3b)1, Wis. Stat.). In addition, DNR must also consider whether the nonfederal wetland is a rare and high quality wetland as defined in s 281.36(4n)(a)3, Wis. Stat.

The Department reviewed the following materials to aid in our exemption determination: The request narrative including project scope and purpose Site location map and photographs that show different angles and views of the wetland Botanical survey results Wetland delineation information

Below is a summary of our findings:

Request Narrative

According to the request narrative the total wetland impacts will be 0.2 acres. The purpose of this project is to develop residential housing.

Site Location and Photographs

The site location confirms that the wetland is located in an urban area. Wetland photographs also show the farmed wetland with low quality hydrophytic vegetation.

Botanical Survey

The botanical survey demonstrations that the wetland isn't a rare and high quality wetland.

Wetland Delineation Information

The wetland delineation shows the topographic placement of the wetland in relation to the landscape. Aerial review shows wetland signatures at 50% prevalence in a row cropped field.

Stormwater Compliance Information

The documentation demonstrated that the project will be completed in compliance with applicable WPDES stormwater permits and stormwater ordinances adopted under s. 59.693, 60.627, 61.354, or 62.234, Wis. Stats.

Conclusion:

Based upon the documentation provided above, the project meets the eligibility criteria pursuant to s. 281.36 (4n), State Stat., You are able to proceed with this project. If you have any questions or would like to schedule a meeting to discuss this approval, please call me at (608) 228-4067 or email <u>Allen.Ramminger@wisconsin.gov</u> Sincerely,

Cel Kungja

Allen Ramminger Water Management Specialist

Copy to:



Figure 1: Landscape Overview.

Source: Imagery - National Agricultural Imagery Program, 2013; Roads & Waters – Wisconsin Department of Natural Resources.



