300-2000 ITEM 2

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

W239 N1812 ROCKWOOD DRIVE • PO BOX 1607 • WAUKESHA, WI 53187-1607•

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

Serving the Counties of:

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December 1, 2015

Mr. Robert Vanden Noven, P.E. City Engineer/Director of Public Works City of Port Washington Dept. of Public Works P.O. Box 307 Port Washington, WI 53074

Re: SEWRPC No. CA-210-38

KENOSHA MILWAUKEE OZAUKEE RACINE WALWORTH WASHINGTON WAUKESHA

Dear Mr. Vanden Noven:

This will respond to your email message of March 2, 2015, requesting that the Commission staff conduct a field inspection of the proposed sanitary sewer and water main extension project areas along the east side of CTH C. The project areas are located in parts of U.S. Public Land Survey Section 33, Township 11 North, Range 22 East; and Sections 3 and 4, Township 10 North, Range 22 East, City of Port Washington, Ozaukee County, Wisconsin. The purpose of the field inspection was to identify and stake the boundaries of any wetlands contained within the project areas.

Pursuant to your request, Commission staff identified and staked the wetland boundaries within the project areas on July 21 and 22, 2015. A copy of the wetland delineation report is attached for your reference.

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

Sincerely,

Kenneth R. Yunker, P.E. Executive Director

KRY/TMS/CJJ/kmd #229058 – CA210-38 CTH C Utilities

Enclosure (#229197)

cc: Mr. Joseph Eberle, P.E., Ruekert & Mielke, Inc. (w/enclosure) Ms. Kathleen Kramasz, Wisconsin Department of Natural Resources (w/enclosure) Mr. Anthony Jernigan, U.S. Army Corps of Engineers (w/enclosure)

WETLAND DELINEATION REPORT

CTH C (Centerline to 75' East of Centerline) FOR PROPOSED SEWER AND WATERLINES TO SERVE PROPOSED CEDAR VINEYARDS Section 33, T11N, R22E Sections 3 and 4, T10N, R22E CITY OF PORT WASHINGTON OZAUKEE COUNTY WISCONSIN

Prepared by: Jennifer Dietl Christopher Jors Daniel Carter

Southeastern Wisconsin Regional Planning Commission W239 N1812 Rockwood Drive P.O. Box 1607 Waukesha, WI 53187-1607

WETLAND DELINEATION REPORT OVERVIEW

(Based upon WDNR WETLAND Delineation Confirmation Request Check List)

INTRODUCTION

- Who requested the delineation Robert J. Vanden Noven, P.E., City Engineer/Director of Public Works, City of Port Washington
- Why the delineation was undertaken Sewer and water lines to serve proposed Cedar Vineyards
- Date the field work was completed July 21 and 22, 2015
- Who conducted field work Jennifer Dietl, Christopher Jors, Daniel Carter
- Statement of Qualifications

METHODS

- Description of Methods
- Sources Reviewed
 - Topographic Map Exhibit 1 (Maps 1 to 3)
 - Wisconsin Wetland Inventory (WWI) Map Exhibit 2 (Maps 1 to 3)
 - Soil Survey and Floodplain Map Exhibit 3 (Maps 1 to 3)
 - Historical Aerial Photos Exhibits 4A to 4J (Maps 1 to 3)
 - Sanitary Sewer Service Map Exhibits 5A and 5B
 - Advanced Delineation and Identification (ADID) Wetland Map Exhibit 6 (Maps 1 to 3)
- Description of any site specific agency guidance (site meetings, etc.) None

RESULTS AND DISCUSSION

- Antecedent hydrologic condition analysis Normal
- Previous wetland delineation mapping **None**
- Existing environmental mapping (WWI mapping, Soil survey, etc.)
- Amount and types of wetland located within the project area
- Wetland/upland boundary explanation
- Disturbed and problematic areas encountered
- Other water resources located in the project area

LITERATURE CITED

Wetland Delineation Map – Exhibit 7 (Maps 1 to 3)

Vegetation Survey and Wetland Delineation Data Forms

- Preliminary Vegetation Survey Exhibit 8
- Wetland Determination Data Forms Northcentral and Northeast Region Exhibit 9

Site Photos – Exhibit 10

Farm Service Agency Slide Review

- Completed wetland documentation form (NRCS form NRCS-CPA-32A) Exhibit 11
- FSA Slide Review Map Exhibit 12
- Copies or photos of slides if available Exhibit 13
- Copy of the draft NRCS Wetland Inventory map if available Exhibit 14

INTRODUCTION

This wetland delineation report responds to the City of Port Washington's letter of request to identify the boundaries of any wetland along County Highway C (Centerline to 75' East of Centerline) between North of Sunset Road and South of Stonecroft Drive for proposed sewer and water lines to serve proposed Cedar Vineyards. This area is located in U.S. Public Land Survey Sections 33, Township 11 North, Range 22 East, and Sections 3 and 4, Township 10 North, Range 22 East, City of Port Washington, Ozaukee County, Wisconsin.

Statement of Qualifications

Jennifer Dietl, Specialist-Biologist, earned a Bachelor's degree in Biology and Environmental Science from Carroll University in 1992. She has worked at the Commission from 1992 to 1997 and from 2006 to the present conducting wetland delineations, primary environmental corridor delineations, and vegetation surveys. In between years of service at the Commission she worked for the Wisconsin Department of Transportation – Green Bay as an LTE Environmental Analysis and Review Specialist – and the Wisconsin Department of Natural Resources – Green Bay as an LTE Hydrologist. Jennifer attended the UW-La Crosse Basic and Advanced Wetland Delineation Workshops on August 10-15, 2015 and a Wisconsin Dept. of Natural Resources Wetland Delineation & Wetland Rapid Assessment Methodology Workshop on April 23, 2014.

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

Daniel Carter, PhD, Principal Biologist, has worked at SEWRPC since 2013. He graduated with honors from Grinnell College with a Bachelor's degree in Biology. He later received a PhD in Biology from Kansas State University. Daniel has published several plant ecology articles in peer-reviewed journals, serves on the botany team for the Wisconsin Wildlife Action Plan, and co-teaches the UW-La Crosse Basic Wetland Plant Identification course. He has completed both basic and advanced wetland delineation training as well as Wisconsin Natural Heritage Inventory training. Prior to working for the Commission, Daniel served as project coordinator for a grassland restoration project overseen jointly by the United States Department of Agriculture and The Nature Conservancy and taught high school Biology.

METHODS

Description of Methods

The wetland boundary determinations were based upon the criteria and methodologies set forth in the 1987 *Corps* of Engineers Wetlands Delineation Manual; the January 2012 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast (Version 2.0); the March 4, 2015, Guidance for Submittal of Delineation Reports to the St. Paul District Army Corps of Engineers and the Wisconsin Department of Natural Resources; and the State of Wisconsin 2014 Wetland Plant List.

Specific methods used to field identify wetland boundaries included the U.S. Department of the Army Corps of Engineers Routine Onsite Determination Method – Plant Community Assessment Procedure. This procedure requires an initial identification of representative plant community types in the project area followed by a characterization of vegetation, soils, and hydrology for each type.

Sources Reviewed

Prior to conducting field work, Commission staff reviewed the following data sources: Ozaukee County's topographic mapping (Exhibit 1), Wisconsin Wetland Inventory (Exhibit 2), Natural Resource Conservation Service's (NRCS) soil survey and FEMA Floodplains (Exhibit 3), Commission aerial photography (Exhibits 4A – 4J), Sanitary Sewer Service Map (Exhibit 5), Advanced Delineation and Identification (ADID) Wetland Map (Exhibit 6) and United States Department of Agriculture (USDA) and National Climatic Data Center (NCDC) data for antecedent and observed precipitation.

RESULTS AND DISCUSSION

Jennifer Dietl, lead investigator, and Christopher Jors and Dr. Daniel Carter, identified and staked the boundaries of the wetlands contained within the project area on July 21 and 22, 2015.

The results of the wetland delineation field inspection for this project area are shown on Exhibit 7, which includes sample site numbers and locations, staked and surveyed wetland boundaries, plant community area numbers and locations, photograph locations and directions, as well as GPS-located wet ditches.

Antecedent Hydrologic Conditions

WETS Station: PORT WASHINGTON (WI6467)

GHCN-D Station: SAUKVILLE (WI 7581)

Climatological data were taken from the nearest WETS station with relevant data. Observed precipitation amounts were taken from the nearest GHCN-D weather station with monthly precipitation summaries.

	Month	3 yrs. In 10 Iess than	Normal	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
1st prior	1 i	0.50	0.04	4.55	0.05	Normal	0		0
month	July	2.59	3.81	4.55	3.05	Normal	2	3	6
2nd prior month	June	2.15	3.58	4.35	3.12	Normal	2	2	4
3rd prior month	May	1.8	2.93	3.54	3.62	Wet	3	1	3
								sum	13
		If sum is							
		6 - 9	drier than	normal					
		10 - 14	normal						
		15 - 18	wetter that	an normal					
		Conclusion	Normal						

Previous wetland delineation mapping – None

Existing Environmental Mapping

The Ozaukee County topographic map (Exhibit 1) shows that the project area has slight rolling topography ranging from highs of just above 700 feet to lows around 690 feet above sea level at several points along the project area. Surface water flows west to east towards Lake Michigan in several small drainage ways.

The Wisconsin Wetland Inventory map (WWI) (Exhibit 2) indicates four small farmed wetlands (F0Kf), one shrub/wet meadow (S3/E2K), two wet shrub-carrs (S3K), and one emergent wet meadow (E2K) in the project area.

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

Soil Name	Slope %	Drainage Class	Comments
Kewaunee silt loam (KnA)	0-2%	Well drained	Sample sites: 12, 13, 14, 15, 16, 17, 18, 20, 22, 23,
Kewaunee silt loam (KnB)	2-6%	Well drained	Sample site: 3, 4, 5, 10,
Kewaunee silty clay loam (KoB2)	2-6%, eroded	Well drained	
Kewaunee silty clay loam (KoC2)	6-12%, eroded	Well drained	Sample sites: 1, 2, 7
Kewaunee silty clay (KrC3)	6-12%, severely eroded	Well drained	Sample site: 25
Manawa silt loam (MaA)	0-3%	Somewhat poorly drained	Sample sites: 6, 8, 11, 19, 24
Poygan silty clay loam (Py)	0-2%	Very poorly drained	Sample sites: 21

Historical aerial photos of the project area were reviewed back to 1963. Aerial photos for years 2015, 2010, 2007, 2005, 2000, 1995, 1990, 1980, 1970, and 1963 are attached (Exhibits 4A to 4J, maps 1 to 3). This review is summarized in the table below.

Year	Northern Project Area (Map 1)	Southern Project Area (Maps 2 & 3)
1963	Agricultural land use - cropland	Agricultural land use – Mostly cropland except for approx. 600 feet of road frontage in pasture
1970	No change	No change except for a new driveway just north of the pasture
1980	No change	Driveway just north of pasture removed & returned to cropland. Driveway across from Stonecroft Drive also removed and returned to cropland
1990	No change	Pasture apparently abandoned – woody vegetation encroaching
1995	No change	No change
2000	No change	No change
2005	Significant land disturbance related to conversion of coal-fired power plant to natural gas. New road built to serve power plant and extensive staging areas for construction equipment and soil material. Stormwater detention pond built just east of CTH C.	No change
2007	No change	No change
2010	Construction equipment & soil material removed, site regraded	No change
2015	Site revegetated – hayfield?	No change

CHANGES IN LAND USE OBSERVED ON AERIAL PHOTOGRAPHY FROM 1963 TO 2015

SEWRPC's sanitary sewer map (Exhibit 5) shows that the entire project area is located in the City of Port Washington and Environs planned sanitary sewer service area.

The ADID wetland map (Exhibit 6) indicates that wetland Plant Community Area Nos. 5 and 6 are located within a designated Primary Environmental Corridor (PEC) and have been designated as ADID wetlands under the Section 404(b)(1) Guidelines of the Clean Water Act.

Amount and Types of Wetlands in the Project Area

A total of eight plant community areas were identified within the project area. A list of vascular plant species observed during the field inspection was prepared for each plant community area as well as plant community

type(s), dominant plant species, disturbances, and any critical plant and animal species (Exhibit 8). The table below summarizes characteristics for each plant community area (PCA).

PCA Number	Acreage(s)	PCA Type(s)	Dominant Species	Critical Species
1	0.10	Fresh (wet) meadow and constructed roadside ditch with fresh (wet) meadow	<u>Agrostis gigantea</u> -Redtop grass <u>Phalaris arundinacea</u> -Reed canary grass <u>Toxicodendron rydbergii</u> -Poison ivy	None
2		Constructed roadside ditch with fresh (wet) meadow	<u>Agrostis gigantea</u> -Redtop grass <u>Juncus bufonius</u> -Toad rush <u>Phalaris arundinacea</u> -Reed canary grass <u>Poa pratensis</u> -Kentucky bluegrass	None
3	0.14 0.04	Atypical (farmed) wetland Fresh (wet) meadow	<u>Agrostis stolonifera</u> -Creeping bent-grass <u>Phalaris arundinacea</u> -Reed canary grass <u>Schedonorus pratensis</u> -Tall fescue <u>Typha angustifolia</u> -Narrow-leaved cat-tail	None
4	0.14 0.03 0.08 0.03	Atypical (farmed) wetland Fresh (wet) meadow Southern wet to wet-mesic lowland hardwoods Constructed roadside ditch with fresh (wet) meadow	Fraxinus pennsylvanica-Green ash Juncus bufonius-Toad rush Phalaris arundinacea-Reed canary grass Poa pratensis-Kentucky bluegrass Puccinellia distans-Alkali grass Toxicodendron rydbergii-Poison ivy Triticum aestivum-Wheat (planted)	None
5	0.03	Fresh (wet) meadow and constructed roadside ditch with fresh (wet) meadow	Phalaris arundinacea-Reed canary grass Solidago gigantea-Giant goldenrod	None
6	0.14	Southern wet to wet-mesic lowland hardwoods Constructed roadside ditch with fresh (wet) meadow	<u>Carex vulpinodea</u> -Fox sedge <u>Fraxinus pennsylvanica</u> -Green ash <u>Geum canadense</u> -White avens <u>Impatiens capensis</u> -Jewelweed <u>Juncus dudleyi</u> -Dudley's rush	None
7	0.03 0.14	Atypical (farmed) wetland Fresh (wet) meadow Constructed roadside ditch with fresh (wet) meadow	Phalaris arundinacea-Reed canary grass	None
8	0.03 0.03	Atypical (farmed) wetland Fresh (wet) meadow	<u>Equisetum</u> <u>arvense</u> -Common horsetail <u>Phalaris</u> <u>arundinacea</u> -Reed canary grass	None

Wetland/Upland Boundary Explanation

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

Disturbed and Problematic Areas Encountered

Wetland sample site 6 has naturally problematic soils (A16. Coast Prairie Redox). Wetland sample sites 16 and 22 had "significantly" disturbed vegetation due to agricultural land management activities (managed plant community) which obscured hydrophytic vegetation.

Other Water Resources Located in the Project Area

No other water resources are located in the project area. However, an unnamed tributary is identified to the west of CTH C (crosses West Sunset Road) and Lake Michigan is located about 900 feet to the east, both at the north

end of the project area. Another unnamed tributary is identified to the east of CTH C (near Stonecroft Drive) at the south end of the project area.

Other Considerations

Please be advised that no Federal or State regulatory jurisdiction determinations relative to any wetland permits or certifications are made under this report.

LITERATURE CITED

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

U.S. Army Corps of Engineers, 2014, State of Wisconsin Wetland Plant List

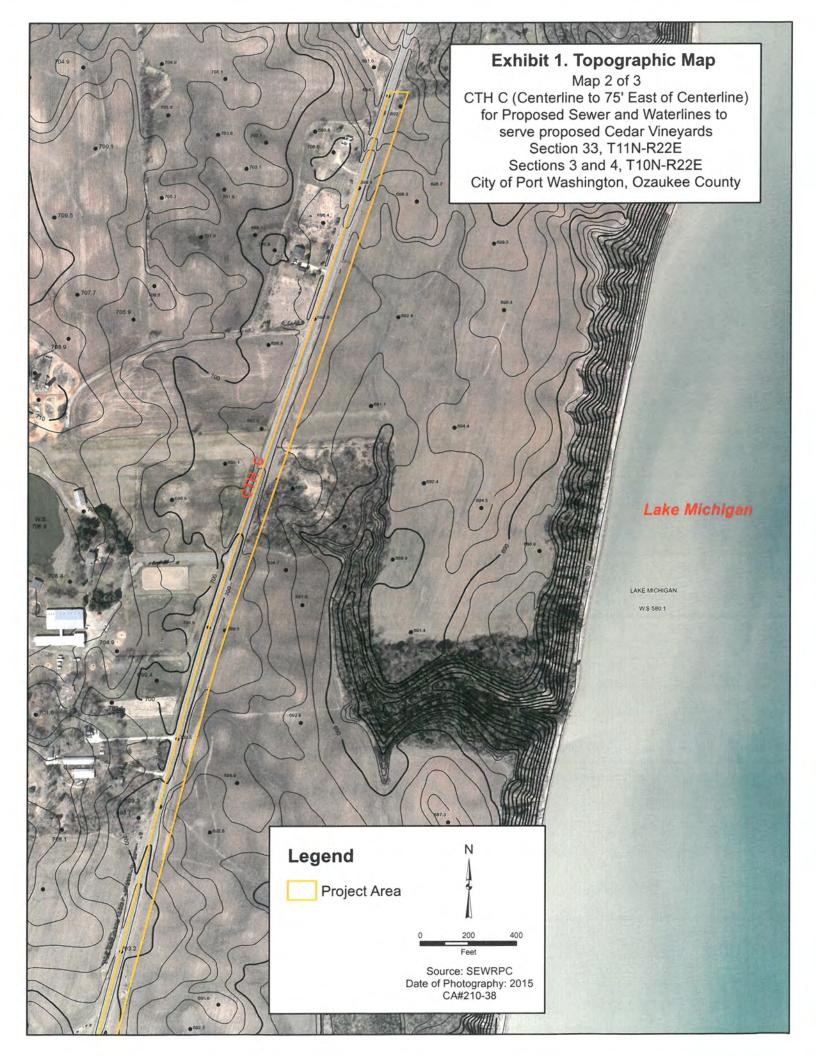
U.S. Army Corps of Engineers, 2012, *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0). U.S. Army Engineer Research and Development Center, January 2012.

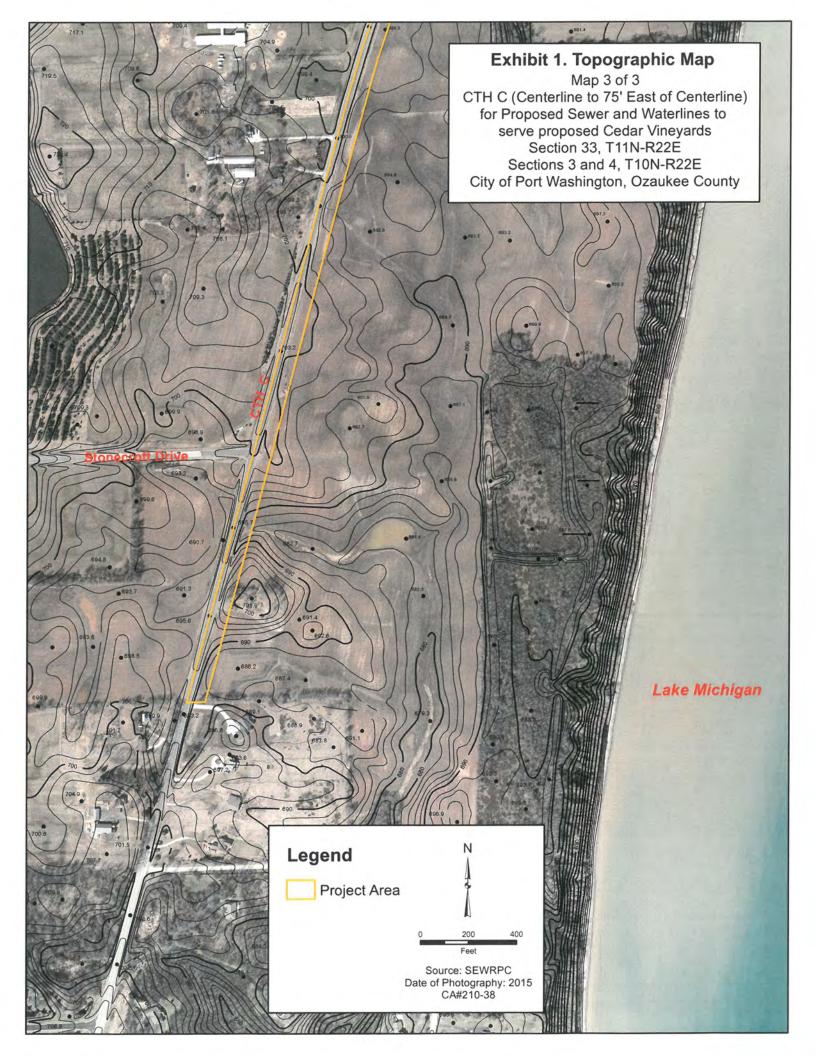
U.S. Army Corps of Engineers, 1987, U.S. Army Corps of Engineers wetlands delineation manual. Wetlands Research Program Technical Report Y-87-1.

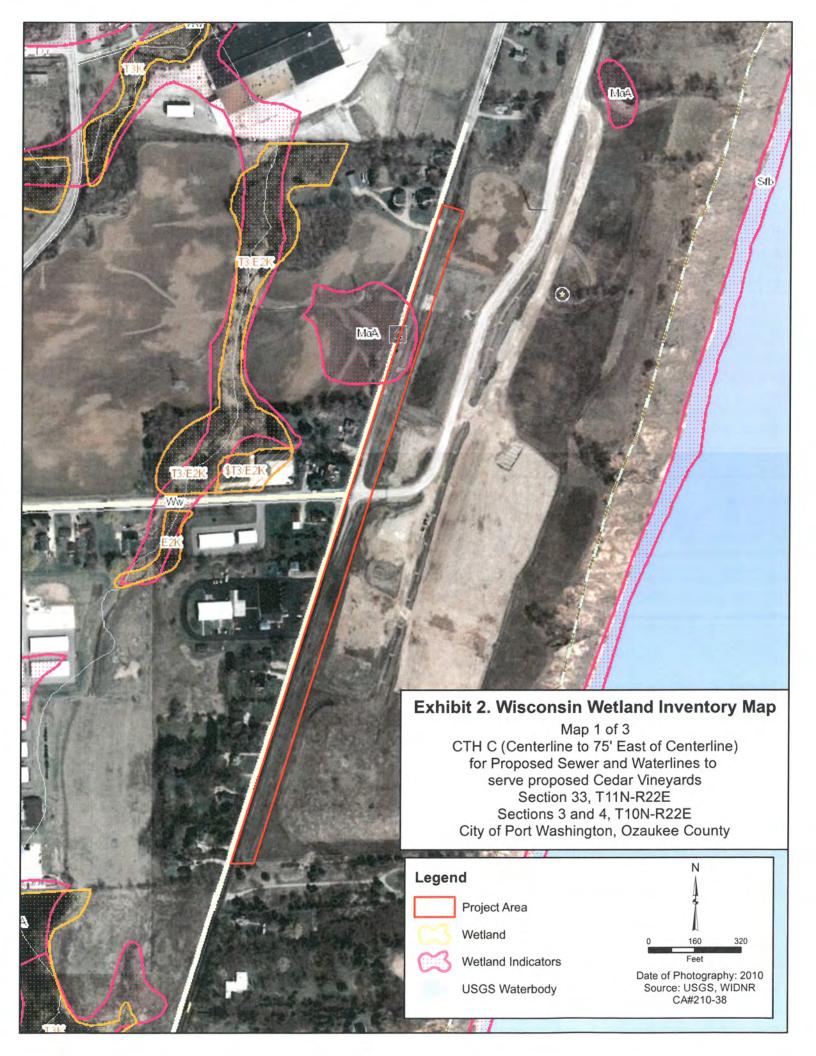
Wisconsin Coastal Management Program, 1995, Basic Guide to Wisconsin's Wetlands and their Boundaries.

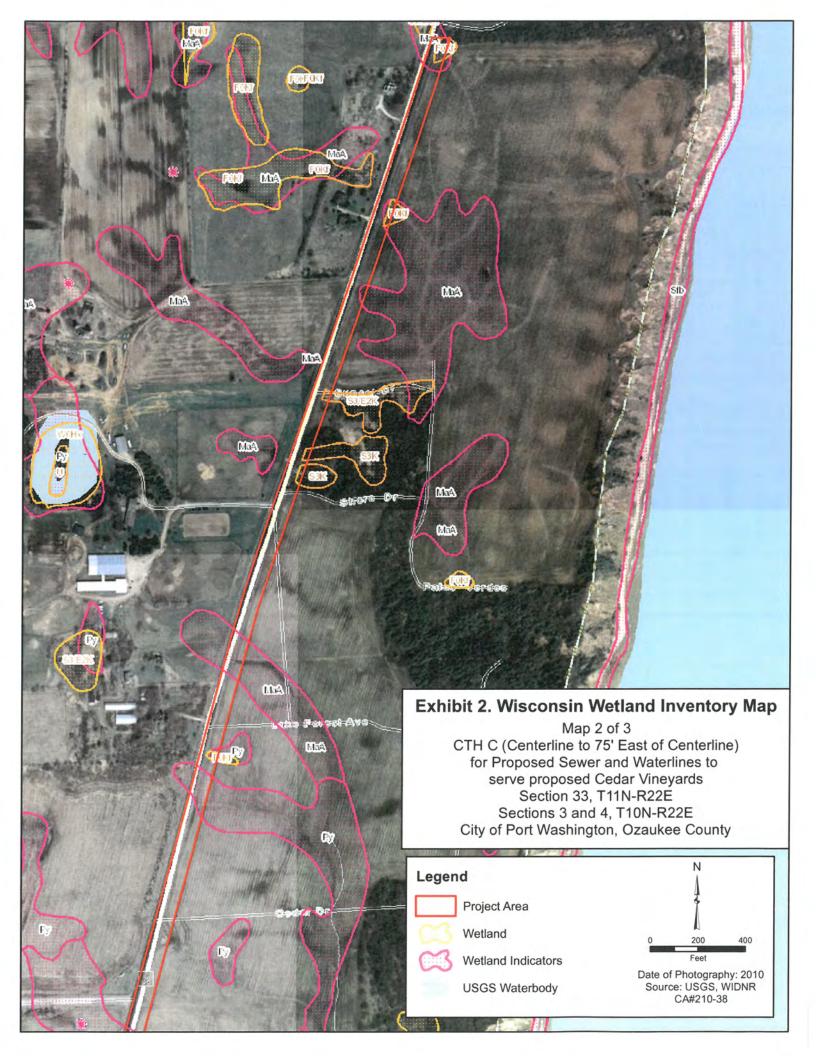
CA210-38 CTH C Sewer and Waterlines for Cedar Vineyards (00226457).DOC 300-2000 JLD/CJJ/DC/kmd 12/1/15











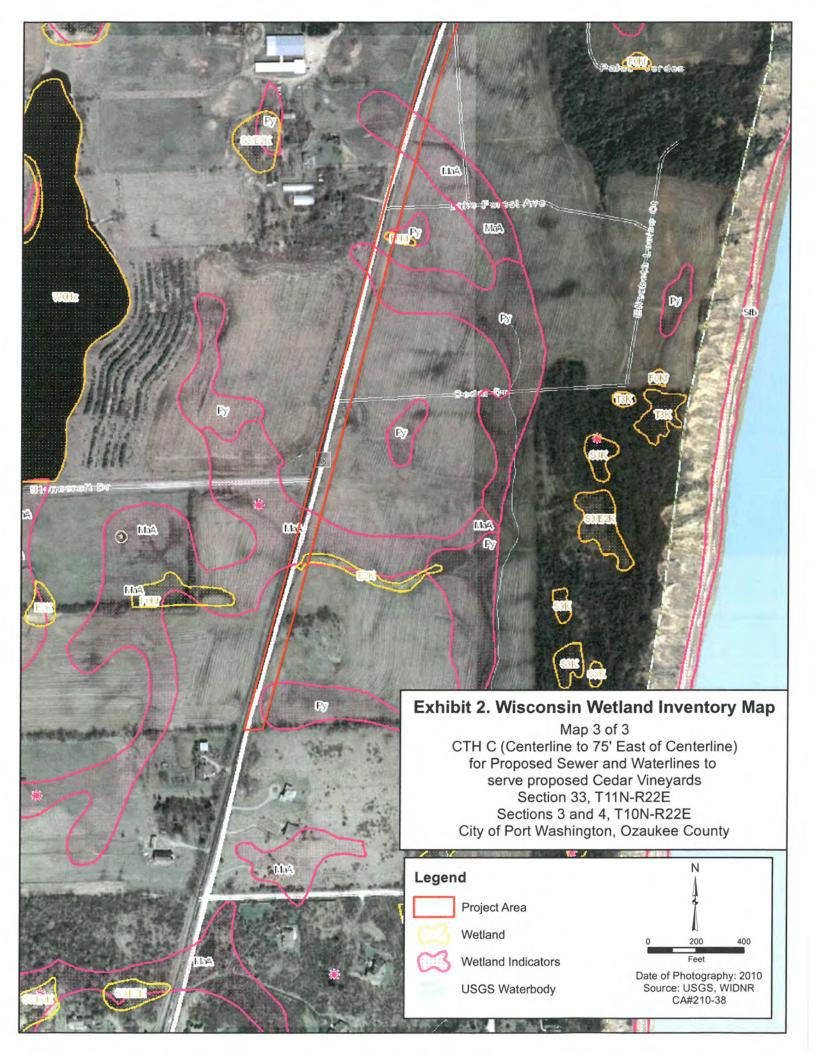




Exhibit 3. Soils and Floodplain Map Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

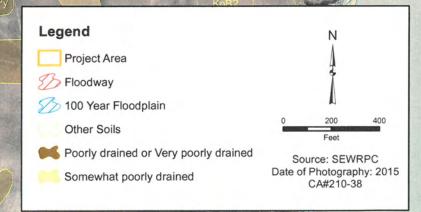
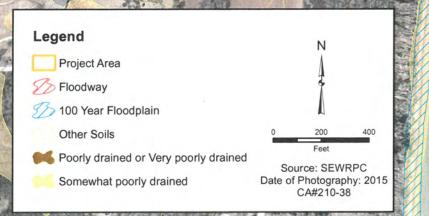


Exhibit 3. Soils and Floodplain Map Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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Lake Michigan



Stonecroft Drive

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Exhibit 4A. 2015 Orthophotograph Map 1 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

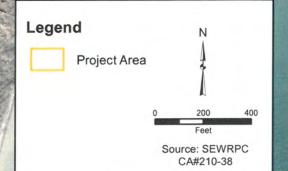


Exhibit 4A. 2015 Orthophotograph Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

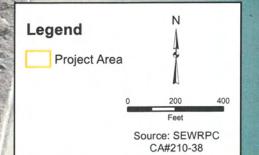


Exhibit 4A. 2015 Orthophotograph

Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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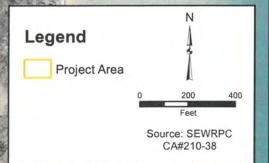
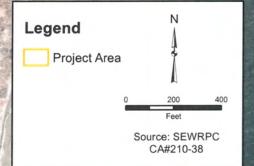




Exhibit 4B. 2010 Orthophotograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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Exhibit 4B. 2010 Orthophotograph

Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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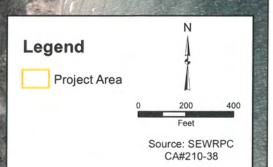
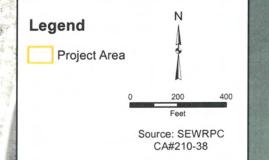




Exhibit 4C. 2007 Orthophotograph Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County



A CALL

Exhibit 4C. 2007 Orthophotograph

Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

Stonecroft Drive

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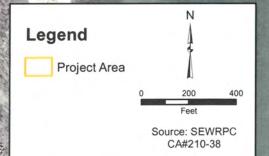




Exhibit 4D. 2005 Orthophotograph Map 1 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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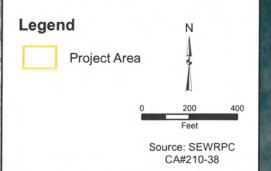


Exhibit 4D. 2005 Orthophotograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

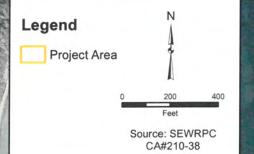
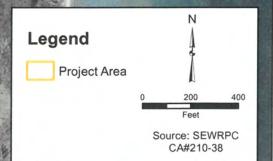


Exhibit 4D. 2005 Orthophotograph

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Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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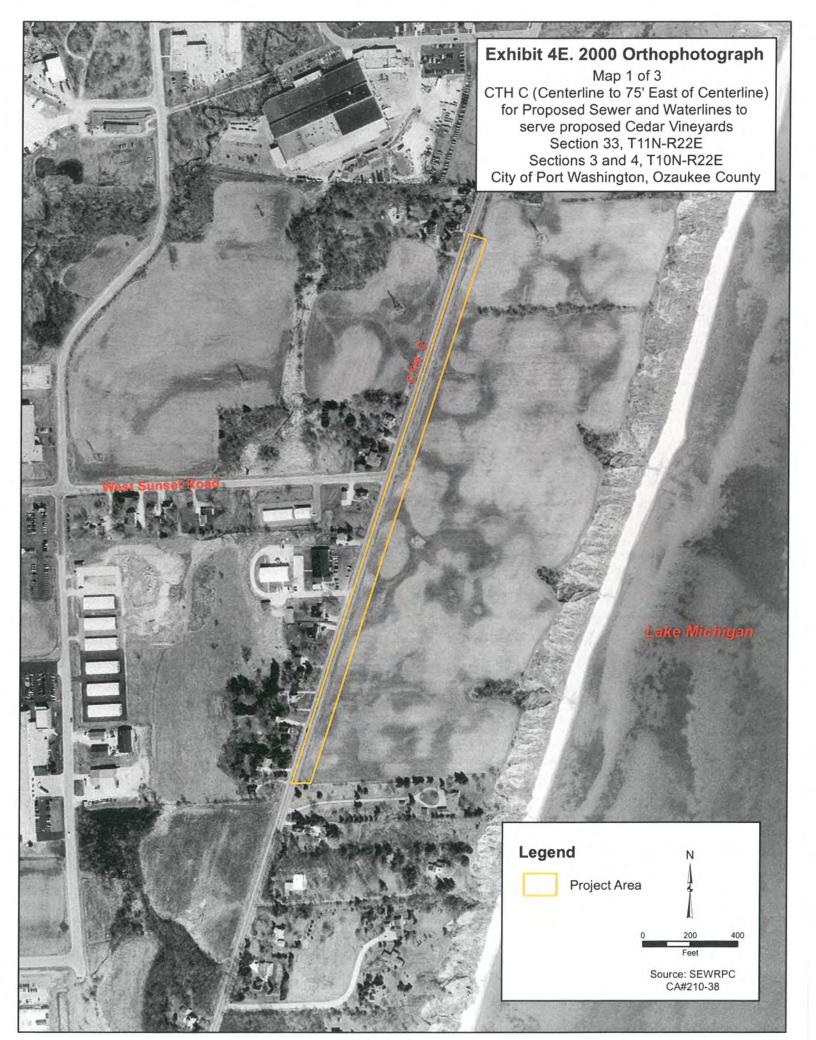


Exhibit 4E. 2000 Orthophotograph Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

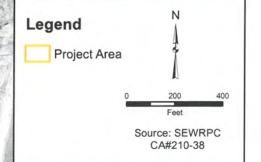
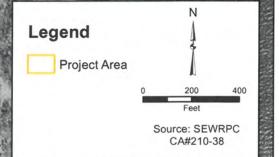


Exhibit 4E. 2000 Orthophotograph

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Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County



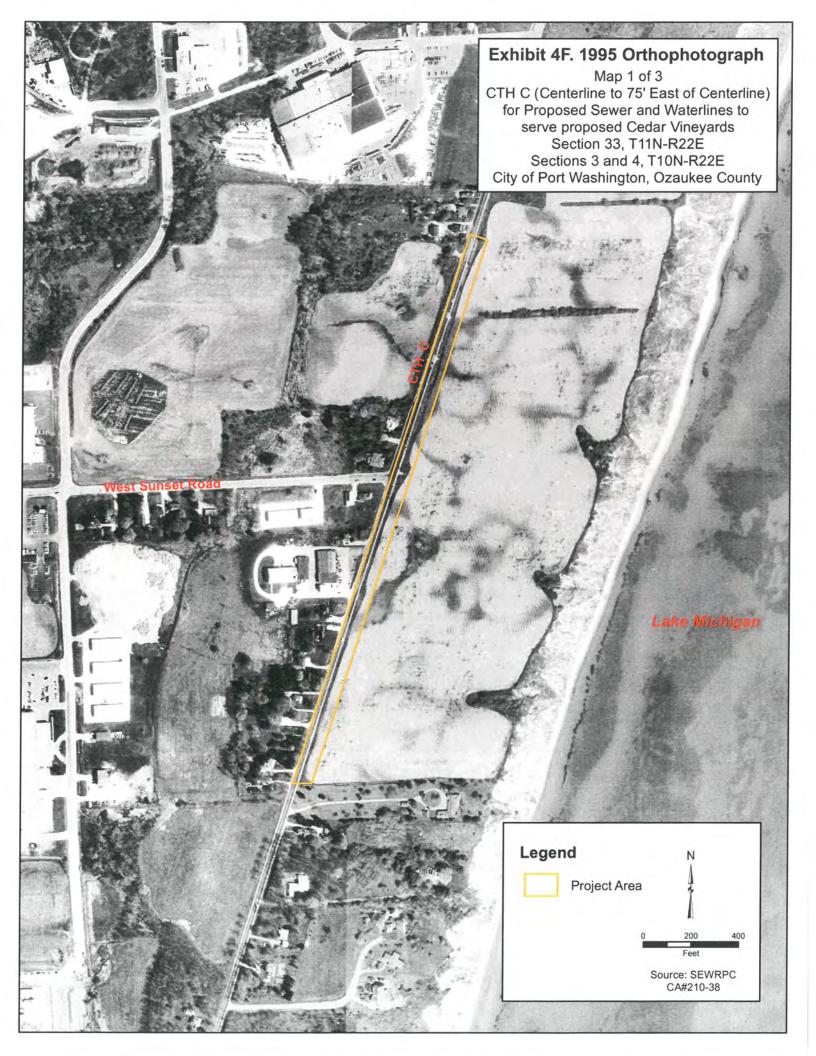
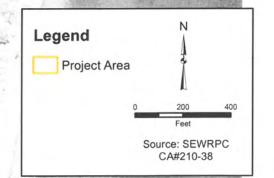


Exhibit 4F. 1995 Orthophotograph Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County



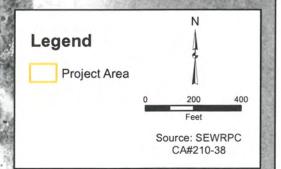
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Exhibit 4F. 1995 Orthophotograph

Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

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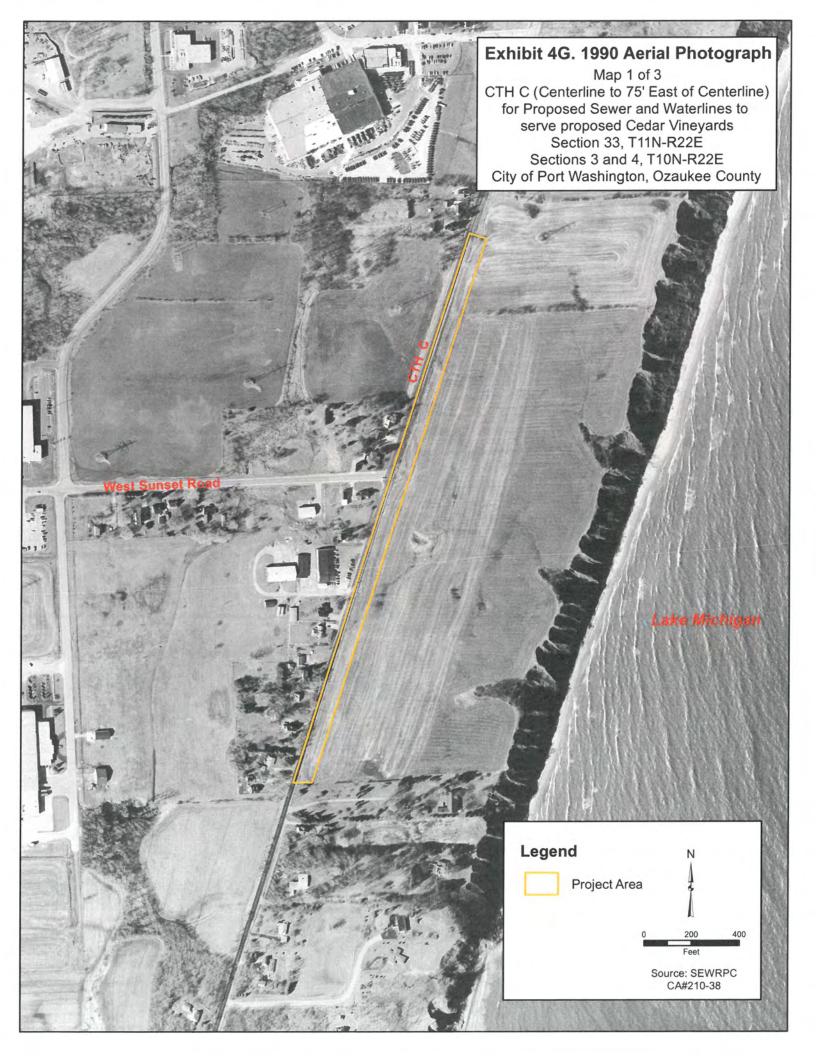


Exhibit 4G. 1990 Aerial Photograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

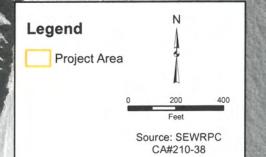
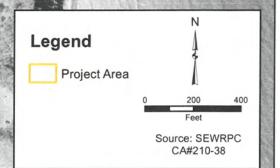


Exhibit 4G. 1990 Aerial Photograph Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

Stonecroft Drive

NAME OF STREET



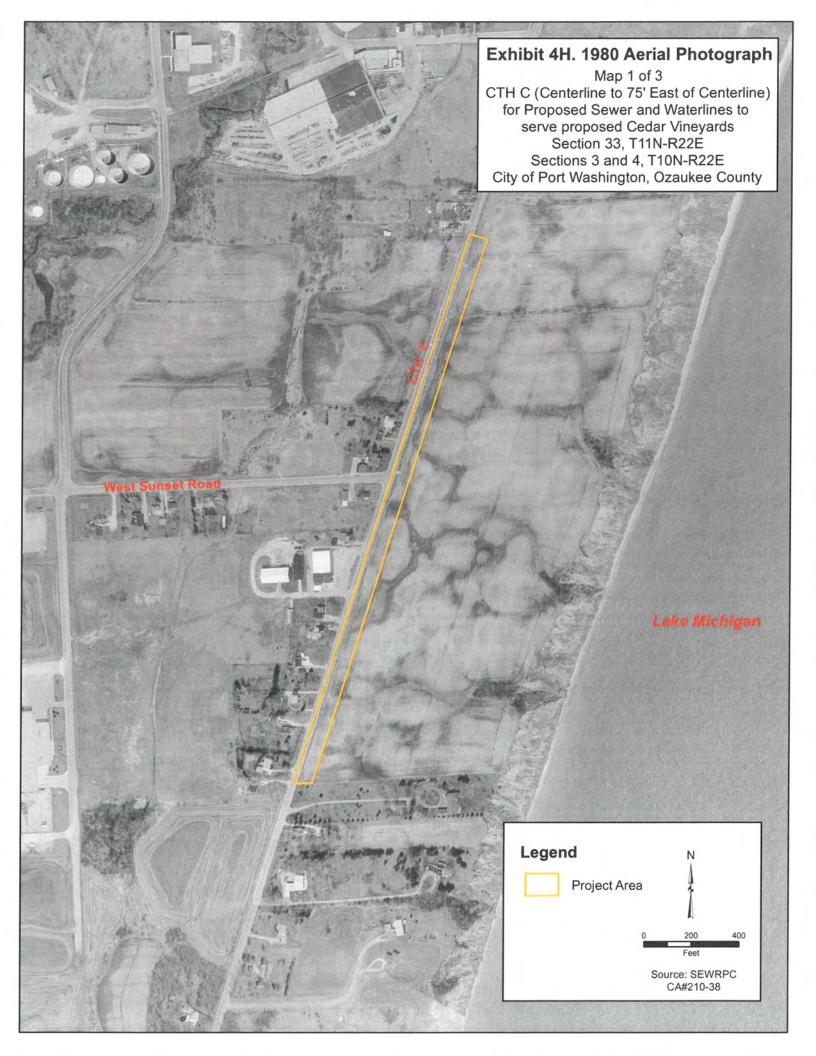


Exhibit 4H. 1980 Aerial Photograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

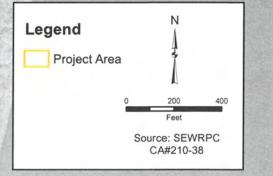


Exhibit 4H. 1980 Aerial Photograph Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County



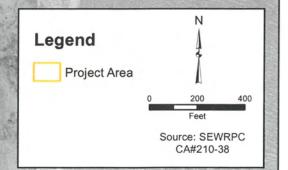


Exhibit 4I. 1970 Aerial Photograph

Map 1 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

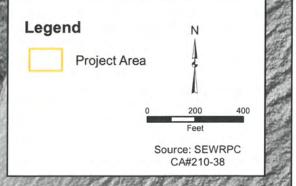
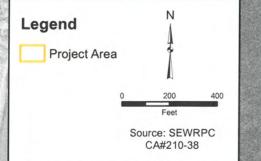


Exhibit 4I. 1970 Aerial Photograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County



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Exhibit 4I. 1970 Aerial Photograph Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

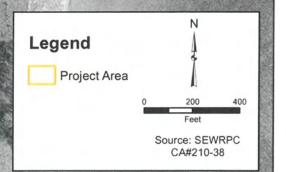


Exhibit 4J. 1963 Aerial Photograph Map 1 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County Lake Michigan l egend

egena	N.	
Project Area	ł	
0	200	400
	Feet	
Sc	ource: SEW CA#210-3	

Exhibit 4J. 1963 Aerial Photograph

Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

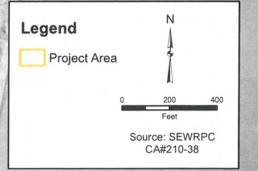


Exhibit 4J. 1963 Aerial Photograph Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

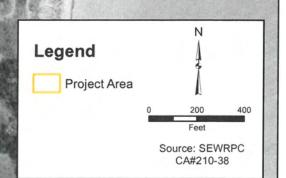


EXHIBIT 5A. Sanitary Sewer Service Map CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF PORT WASHINGTON AND ENVIRONS

> U. S. Public Land Survey Sections 28 and 33 Township 11 North, Range 22 East



SECONDARY ENVIRONMENTAL CORRIDOR

ISOLATED NATURAL RESOURCE AREA

WETLANDS AND SURFACE WATER AREAS LESS THAN FIVE ACRES IN SIZE

PLANNED SANITARY SEWER SERVICE AREA

LANDS WITHIN THE PLANNED SANITARY SEWER SERVICE AREA INCLIGIBLE FOR SERVICE SERVICE ENVIRONMENTALLY SIGNAICANT LANDS WHERE THE LITENSION OF SEVERS TO SERVE NEW INTENSIVE URBAN DEVELOPMENT IS NOT PERMITTED NEW SEVERIED DEVELOPMENT IS CONFINED TO LIMITED RECREATIONAL AND INSTITUTIONAL USES AND RURAL DENSITY RESIDENTIAL DEVELOPMENT IN UPLAND AREAS



Source SEWRPC

EXHIBIT 5B. Sanitary Sewer Service Map CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

ENVIRONMENTALLY SIGNIFICANT LANDS AND PLANNED SANITARY SEWER SERVICE AREA FOR THE CITY OF PORT WASHINGTON AND ENVIRONS

> U. S. Public Land Survey Sections 3, 4, 9 and 10 Township 10 North, Range 22 East



Source SEWRPC

11

 Exhibit 6. ADID Wetland Map

 Map 1 of 3

 CHC (Centerline to 75' East of Centerline)

 for Proposed Sewer and Waterlines to

 serve proposed Cedar Vineyards

 Section 33, T11N-R22E

 Sections 3 and 4, T10N-R22E

 City of Port Washington, Ozaukee County

Lake Michigan

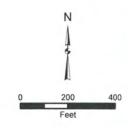
Legend

Project Area 2010 Wetlands ADID Wetlands

ADID Lakes and Ponds

ADID Natural Area Wetlands

2010 Primary Environmental Corridors



Source: SEWRPC Date of Photography: 2015 CA#210-38

Exhibit 6. ADID Wetland Map Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

Lake Michigan



FOK

FOK

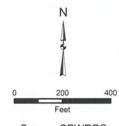




ADID Lakes and Ponds

ADID Natural Area Wetlands

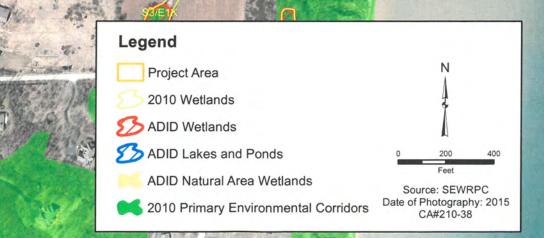
5 2010 Primary Environmental Corridors



Source: SEWRPC Date of Photography: 2015 CA#210-38

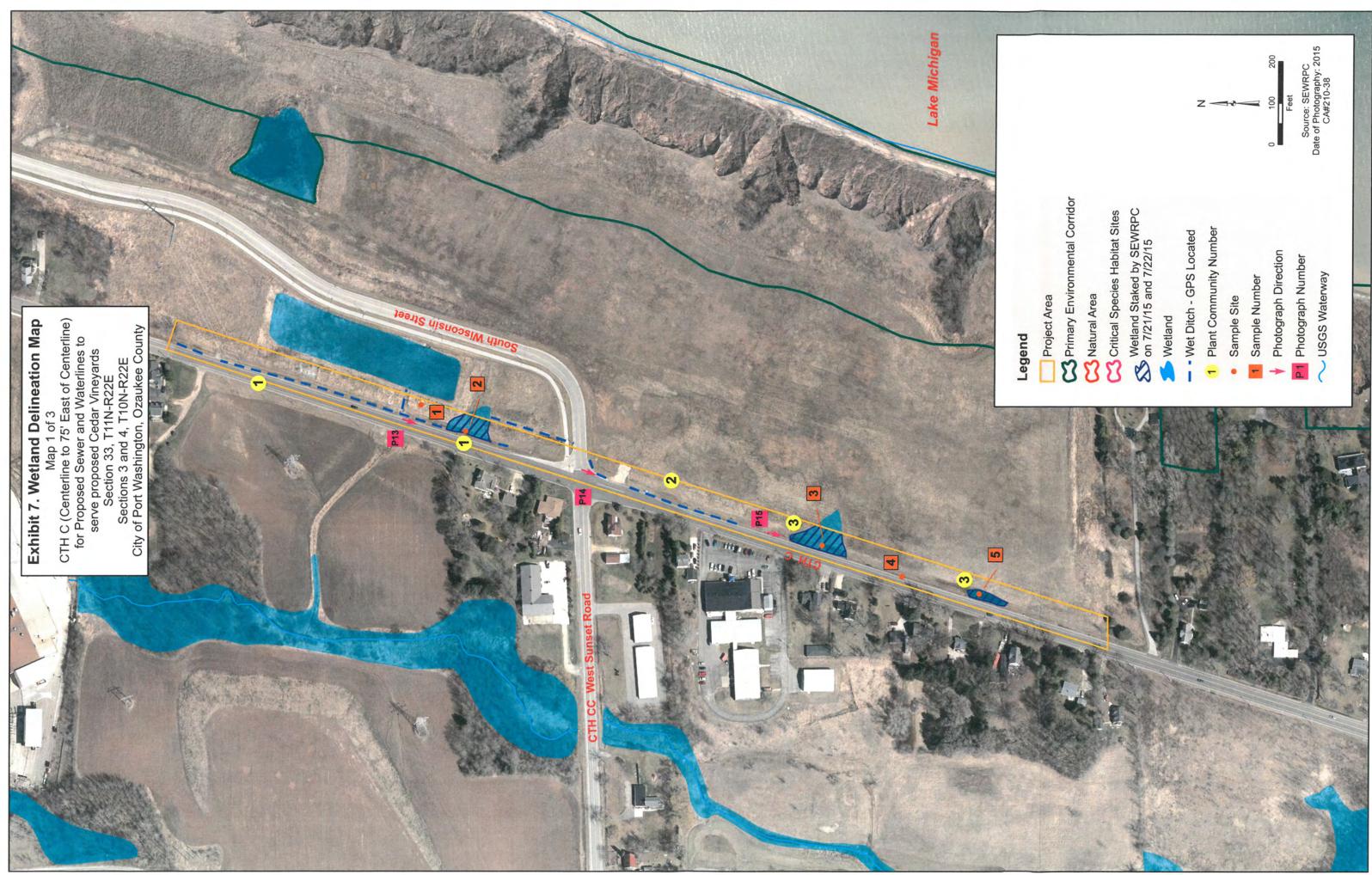
Exhibit 6. ADID Wetland Map Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County





Stonecroft Drive

FOK



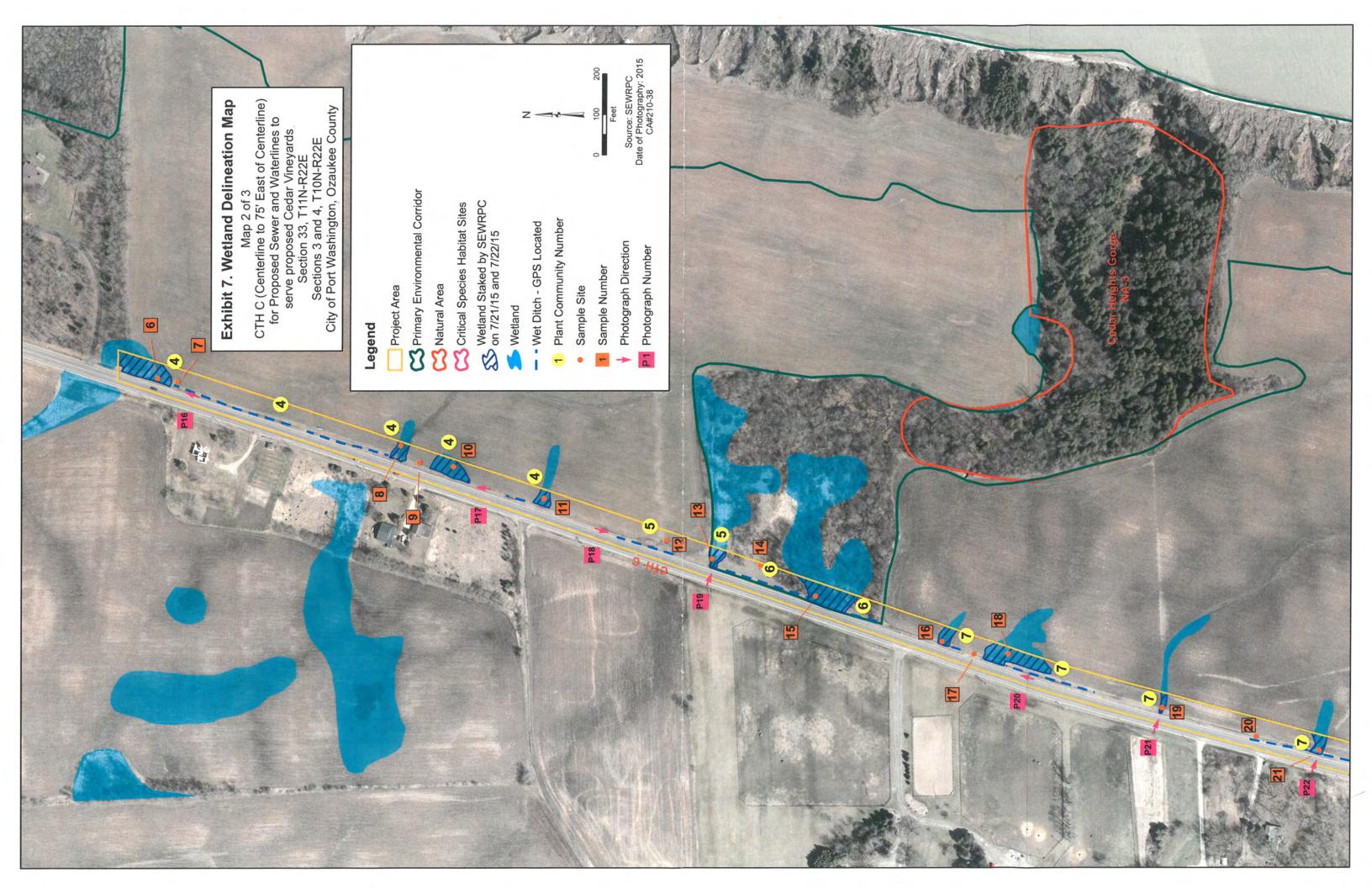


Exhibit 7. Wetland Delineation Map Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

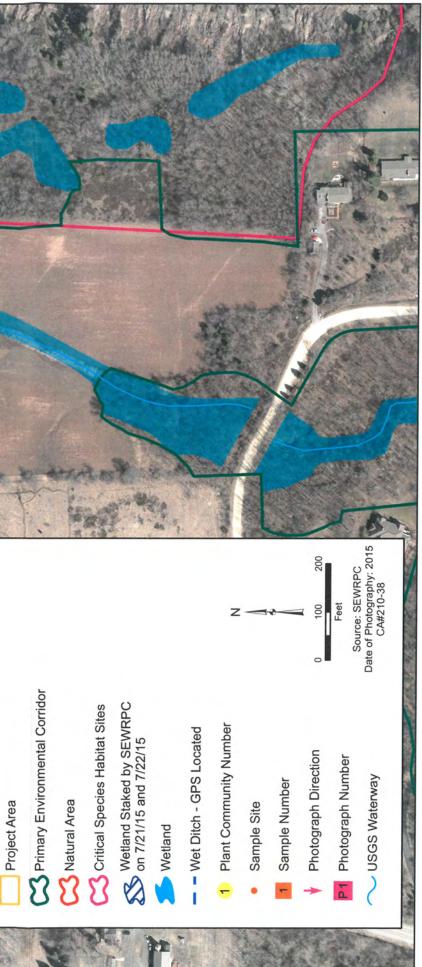
20

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Legend



SVY4202 CA210-38

EXHIBIT 8

PRELIMINARY VEGETATION SURVEY CTH C (CENTERLINE TO 75' EAST OF CENTERLINE) FOR PROPOSED SEWER AND WATERLINES TO SERVE PROPOSED CEDAR VINEYARDS

Dates:	July 21 and 22, 2015	
Dates.	July 21 and 22, 2010	

Observers:	Daniel L. Carter, Ph.D., Principle Biologist
	Christopher J. Jors, Senior Biologist
	Jennifer Dietl, Biologist
	Southeastern Wisconsin Regional Planning Commission

Location: City of Port Washington in parts of U.S. Public Land Survey Section 33, Township 11 North, Range 22 East; and in parts of U.S. Public Land Survey Sections 3 and 4, Township 10 North, Range 22 East, Ozaukee County, Wisconsin.

Species List: Plant Community Area No. 1 – Native Plants Co-Dominant Species

> Acer negundo--Boxelder Carex granularis--Pale sedge Carex molesta--Sedge Carex stipata--Common fox sedge Equisetum arvense--Common horsetail Fraxinus pennsylvanica--Green ash Geum aleppicum--Yellow avens Populus deltoides--Cottonwood Rosa blanda--Wild rose Salix amygdaloides -- Peach-leaved willow Salix interior--Sandbar willow Solidago altissima--Tall goldenrod Solidago gigantea--Giant goldenrod Symphyotrichum novae-angliae--New England aster Toxicodendron rydbergii--Poison ivy Vitis riparia--Riverbank grape

NON-Native Plants

Agrostis gigantea--Redtop grass Agrostis stolonifera--Creeping bentgrass <u>Cirsium arvense</u>--Canada thistle <u>Daucus carota</u>--Queen Anne's lace <u>Lonicera X bella</u>--Hybrid honeysuckle <u>Phalaris arundinacea</u>--Reed canary grass <u>Poa pratensis</u>--Kentucky bluegrass <u>Sonchus arvensis</u>--Sow thistle <u>Typha angustifolia</u>--Narrow-leaved cat-tail

Plant Community Area No. 1 continued

Total number of plant species: 25 Number of alien, or non-native, plant species: 9 (36 percent)

This approximately 0.1-acre wetland plant community area consists of fresh (wet) meadow and a constructed roadside ditch with fresh (wet) meadow. Disturbances to the plant community area include filling, excavation of a stormwater detention pond, side casting of dredge spoil material, and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 2 - Native Plants

<u>Carex</u> <u>molesta</u>--Sedge <u>Equisetum</u> <u>arvense</u>--Common horsetail <u>Juncus</u> <u>bufonius</u>--Toad rush <u>Juncus</u> <u>dudleyi</u>--Dudley's rush <u>Potentilla</u> <u>anserina</u>--Silverweed

NON-Native Plants

Agrostisgigantea--Redtop grassAnagallisarvensis--Scarlet pimpermelHordeumjubatum--SquirreltailPhalarisarundinacea--Reed canary grassPoapratensis--Kentucky bluegrassPuccinelliadistans--Alkali grassRumexcrispus--Curly dockSalixfragilis--Crack willowSchedonorusarundinaceous--Tall fescueTrifoliumhybridum--Alsike cloverTrifoliumpratense--Red cloverTyphaangustifolia--Narrow-leaved cat-tail

Total number of plant species: 17 Number of alien, or non-native, plant species: 12 (71 percent)

This approximately 0.001-acre plant community area is part of a constructed roadside ditch with fresh (wet) meadow. Disturbances to the plant community area include filling, mowing, and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 3 - Native Plants

<u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Juncus</u> <u>dudleyi</u>--Dudley's rush <u>Potentilla</u> <u>anserina</u>--Silverweed

NON-Native Plants

Agrostisgigantea--Redtop grassAgrostisstolonifera--Creeping bentgrassBromusinermis--Smooth brome grassCirsiumarvense--Canada thistleElymusrepens--Quack grassPhalarisarundinacea--Reed canary grassPoapratensis--Kentucky bluegrassSchedonoruspratensis--Tall fescueTyphaangustifolia--Narrow-leaved cat-tail

Total number of plant species: 12 Number of alien, or non-native, plant species: 9 (75 percent)

These approximately 0.14 and 0.04-acre wetland plant community areas consists of atypical (farmed) wetland and fresh (wet) meadow. Disturbances to the plant community area include agricultural land management activities, mowing, and water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 4 - Native Plants

<u>Ambrosia</u> <u>artemisiifolia</u>--Common ragweed <u>Carex</u> <u>cristatella</u>--Crested sedge <u>Carex</u> <u>stipata</u>--Common fox sedge <u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Juncus</u> <u>bufonius</u>--Toad rush <u>Juncus</u> <u>dudleyi</u>--Dudley's rush <u>Juncus</u> <u>effusus</u>--Common rush <u>Polygonum</u> <u>erectum</u>--Erect knotweed <u>Scirpus</u> <u>atrovirens</u>--Green bulrush <u>Solidago</u> <u>gigantea</u>--Giant goldenrod <u>Toxicodendron</u> <u>rydbergii</u>--Poison ivy

NON-Native Plants

<u>Agrostis gigantea</u>--Redtop grass <u>Anagallis arvensis</u>--Scarlet pimpermel <u>Atriplex patula</u>--Common orach <u>Barbarea vulgaris</u>--Yellow rocket <u>Bromus inermis</u>--Smooth brome grass <u>Centaurium pulchellum</u>--Centaury <u>Cirsium arvense</u>--Canada thistle PCA No. 4 NON-Native Plants continued

<u>Daucus carota</u>--Queen Anne's lace <u>Echinochloa crusgalli</u>--Barnyard grass <u>Elymus repens</u>--Quack grass <u>Phalaris arundinacea</u>--Reed canary grass <u>Poa compressa</u>--Canada bluegrass <u>Poa pratensis</u>--Kentucky bluegrass <u>Puccinellia distans</u>--Alkali grass <u>Ranunculus acris</u>--Tall buttercup <u>Schedonorus arundinaceous</u>--Tall fescue <u>Sonchus arvensis</u>--Sow thistle <u>Triticum aestivum</u>--Wheat (planted) <u>Typha angustifolia</u>--Narrow-leaved cat-tail

Total number of plant species: 31 Number of alien, or non-native, plant species: 19 (61 percent)

These approximately 0.14, 0.03, 0.08, and 0.03-acre plant community areas consist of atypical (farmed) wetland, fresh (wet) meadow, second growth, Southern wet to wet-mesic lowland hardwoods, and constructed roadside ditches with fresh (wet) meadow. Disturbances to the plant community area include mowing, water level changes due to ditching and draining, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 5 - Native Plants

<u>Cornus</u> <u>alba</u>--Red-osier dogwood <u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Solidago</u> <u>altissima</u>--Tall goldenrod **Solidago** <u>gigantea--Giant goldenrod</u>

NON-Native Plants

<u>Phalaris</u> <u>arundinacea</u>--Reed canary grass <u>Poa</u> <u>pratensis</u>--Kentucky bluegrass <u>Vicia</u> <u>cracca</u>--Vetch

Total number of plant species: 7 Number of alien, or non-native, plant species: 3 (43 percent)

This approximately 0.03-acre plant community area is part of a larger wetland complex and consists of fresh (wet) meadow and a constructed roadside ditch with fresh (wet) meadow. Disturbances to the plant community area include water level changes due to ditching and draining, and agricultural land management activities including plowing along the wetland edge. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 6 - Native Plants

<u>Carex</u> <u>vulpinoidea</u>--Fox sedge <u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Geum</u> <u>canadense</u>--White avens <u>Impatiens</u> <u>capensis</u>--Jewelweed <u>Juncus</u> <u>dudleyi</u>--Dudley's rush <u>Prunus</u> <u>virginiana</u>--Chokecherry <u>Tilia</u> <u>americana</u>--Basswood

NON-Native Plants

<u>Lonicera X bella</u>--Hybrid honeysuckle <u>Rhamnus</u> <u>cathartica</u>--Common buckthorn <u>Typha</u> <u>angustifolia</u>--Narrow-leaved cat-tail <u>Viburnum</u> <u>opulus</u>--European highbush-cranberry

Total number of plant species: 11 Number of alien, or non-native, plant species: 4 (36 percent)

This approximately 0.14-acre plant community area is part of a larger wetland complex and consists of second growth, Southern wet to wet-mesic lowland hardwoods and a constructed roadside ditch with fresh (wet) meadow. Disturbances to the plant community area include water level changes due to ditching and draining. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 7 – Native Plants

Ambrosia artemisiifolia</u>--Common ragweed <u>Carex</u> <u>cristatella</u>--Crested sedge <u>Carex</u> <u>stipata</u>--Common fox sedge <u>Carex</u> <u>vulpinoidea</u>--Fox sedge <u>Chenopodium</u> <u>album</u>—Lamb's quarters <u>Epilobium</u> <u>coloratum</u>--Willow-herb <u>Equisetum</u> <u>arvense</u>--Common horsetail <u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Juncus</u> <u>dudleyi</u>--Dudley's rush <u>Polygonum</u> <u>erectum</u>--Erect knotweed <u>Ranunculus</u> <u>sceleratus</u>--Cursed crowfoot <u>Vitis</u> <u>riparia</u>--Riverbank grape

NON-Native Plants

<u>Agrostis stolonifera</u>--Creeping bentgrass <u>Ambrosia artemisiifolia</u>--Common ragweed <u>Atriplex patula</u>--Common orach <u>Barbarea vulgaris</u>--Yellow rocket <u>Cirsium arvense</u>--Canada thistle <u>Daucus carota</u>--Queen Anne's lace <u>Echinochloa crusgalli</u>--Barnyard grass PCA 7 – NON-Native Plants continued

<u>Elymus repens</u>--Quack grass <u>Lolium perenne</u>--English rye grass <u>Persicaria maculosa</u>--Lady's thumb <u>Phalaris arundinacea</u>--Reed canary grass <u>Poa pratensis</u>--Kentucky bluegrass <u>Puccinellia distans</u>--Alkali grass <u>Sonchus arvensis</u>--Sow thistle <u>Tanacetum vulgare</u>--Tansy <u>Taraxacum officinale</u>--Common dandelion <u>Trifolium repens</u>--White clover <u>Zea mays</u>--Domestic corn (planted)

Total number of plant species: 29 Number of alien, or non-native, plant species: 18 (62 percent)

These approximately 0.03, 0.14, 0.01, and 0.03-acre plant community areas are part of larger wetland complexes and consist of atypical (farmed) wetland and fresh (wet) meadow with constructed roadside ditches containing fresh (wet) meadow. Disturbances to the plant community areas include water level changes due to ditching and draining and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

Plant Community Area No. 8 - Native Plants

<u>Ambrosia</u> <u>artemisiifolia</u>--Common ragweed <u>Chenopodium</u> <u>album</u>—Lamb's quarters <u>Equisetum</u> <u>arvense</u>--Common horsetail <u>Fraxinus</u> <u>pennsylvanica</u>--Green ash <u>Polygonum</u> <u>erectum</u>--Erect knotweed <u>Rosa</u> <u>blanda</u>--Wild rose <u>Rubus</u> <u>idaeus</u>--Red raspberry <u>Solidago</u> <u>altissima</u>--Tall goldenrod <u>Symphyotrichum</u> <u>lanceolatum</u>--Marsh aster <u>Vitis</u> <u>riparia</u>--Riverbank grape

NON-Native Plants

Atriplex patula--Common orach <u>Bromus inermis</u>--Smooth brome grass <u>Cirsium arvense</u>--Canada thistle <u>Echinochloa crusgalli</u>--Barnyard grass <u>Elymus repens</u>--Quack grass <u>Persicaria maculosa</u>--Lady's thumb <u>Phalaris arundinacea</u>--Reed canary grass <u>Poa pratensis</u>--Kentucky bluegrass <u>Sonchus arvensis</u>--Sow thistle <u>Taraxacum officinale</u>--Common dandelion <u>Zea mays</u>--Domestic corn (planted) PCA No. 8 continued

Total number of plant species: 21 Number of alien, or non-native, plant species: 11 (52 percent)

These approximately 0.03 and 0.03-acre plant community areas consists of atypical (farmed) wetland and fresh (wet) meadow. Disturbances to the plant community areas include water level changes due to ditching and draining, mowing, and agricultural land management activities such as plowing. No Federal- or State-designated Special Concern, Threatened, or Endangered species were observed during the field inspection.

EXHIBIT 9

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: <u>City of Port Washington/Ozaukee County</u> Sampling Date: <u>07/21/2015</u>
Applicant/Owner:	State: WI Sampling Point: 1
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 33, T11N, R22E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): none Slope (%): 6-12%
Subregion (LRR or MLRA): LRR K	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silty clay loam (KoC2)	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 disturbe	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problematic	tic? (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 Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce pond constructed prior to 2005.	edures here or ir	n a separate report.) Up	land sample point on dredge spoil	Is from an off-site s	stormwater detention
pond constructed phor to 2005.					

HYDROLOGY

		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	k all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)
Saturation (A3) Water marks (B1) Sediment Deposits (B2) Drift Deposits (B3) Algal Mat or Crust (B4) Iron Deposits (B5)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soil	s (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 🛛 D	Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 D	Depth (inches):	
Saturation Present? Yes No 🛛 D	Depth (inches): <u>0-2*</u>	Wetland Hydrology Present? Yes 🗌 No 🖂
		, , ,
(includes capillary fringe)		
Describe Recorded Data (stream gauge, monitoring v	,	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
	,	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring v	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
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Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring w Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (I	(Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory

VEGETATION – Use scientific names of plants

Tree Stratum (Plot size: 30' radius)	Absolute	Dominant	Indicator	Dominance Test worksheet:
1	<u>% Cover</u>	Species?	<u>Status</u>	
2				Number of Dominant SpeciesThat are OBL, FACW, or FAC:0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
* 5				
		_		Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)
5				Prevalence Index worksheet:
7				
	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species x 1 =
l				FACW species x 2 =
2			<u> </u>	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B
ð				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: <u>5' radius</u>)				□ Prevalence Index is $\leq 3.0^{1}$
1. <u>Poa pratensis</u>	<u>60</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Cirsium arvense</u>	<u>30</u>	\boxtimes	FACU	□ Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Elymus repens</u>	<u>20</u>		FACU	
4. Phalaris arundinacea	<u>15</u>		FACW	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Sonchus arvense</u>	<u>10</u>		FACU	
 5				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
3				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
 11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	135	= Total Cove	er	
<u>Woody Vine Stratum</u> (Plot size: <u>30' radius</u>)				Woody vines – All woody vines greater than 3.28 ft in
1				height
2				<u> </u>
<u></u>				
A				Hydrophytic Vegetation
4				Present? Yes No 🛛
	<u>0</u>	= Total Cove	*1	

SOIL

Sampling Point: 1

Profile Des	scription: (Describe to	the dep	th needed to docum	ent the ind	icator or cor	firm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	ures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-14	7.5YR 3/1	50					Clay	loam	with gravel fill material
	5YR 5/3	50							
14-19	5YR 4/4	100		·			Clay		with gravel fill material
19-24.5	10YR 3/2	60	5YR 4/6	10	С	PL M	Clay		fill material
	5YR 4/4	30							
				·					
				·					
				·					
				·					
				·					
				·					
				·					
¹ Type: C=0	Concentration, D=Deple	etion, RM	=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore	Lining M=Matrix
	I Indicators:	5001, 100							ematic Hydric Soils ³ :
-	Histosol (A1)		🗌 Pol	yvalue Belo	w Surface (S	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRI		1 49B)		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			amy Mucky I amy Gleyed	Vineral (F1) (Matrix (F2)	LRR K, L)			(S7) (LRR K, L) ow Surface (S8) (LRR K, L)
	Depleted Below Dark S	urface (A		pleted Matrix					face (S9) (LRR K, L)
	Thick Dark Surface (A1			dox Dark Su	. ,			Iron-Mangane	ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (\$ Sandy Redox (S5)	54)		dox Depress	sions (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LRI	R R, MLF	A 149B)					Other (Explain	
2									
	of Hydrophytic vegetati Layer (if observed):		etland hydrology mus	st be presen	t, unless disti	urbed or pro	oblema	atic.	
								Hydric Soil Present	? Yes 🗌 No 🖂
	n (inches):								
	Fill material and dred	ge spoil	s from adjacent sto	rmwater de	etention pon	d.			

WETLAND DETERMINATION DA	TA FORM – Northcentral and Northeast	Region
Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County	Sampling Date: 07/21/2015
Applicant/Owner:	State: WI	Sampling Point: 2
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 33, T11N, R22E	
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): none	Slope (%): <u>6-12%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Kewaunee silty clay loam (KoC2)	NWI cla	ssification: <u>none</u>
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	ed? Are "Normal Circumstances" present? Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemat	ic? (If, needed, explain any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map showing s	ampling point locations, transects, importa	nt features, etc.
Hydrophytic Vegetation Present? ☑Yes □No Hydric Soils Present? ☑Yes □No Wetland Hydrology Present? ☑Yes □No	Is the Sampled Area within a Wetland?	□No
, , , , , , , , , , , , , , , , , , , ,	If yes, optional Wetland Site ID: Plant Community	Area (PCA) No. 1
Remarks: (Explain alternative procedures here or in a separate report. vegetation.) Sample site selected as area was unmapped, yet	dominated by hydric

HYDROLOGY

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	cots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Reduced Iron (C4) Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Iron Deposits (B5) Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7) Dther (Explain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):	
Water Table Present? Yes No Depth (inches): 22	
Saturation Present? Yes No Depth (inches): 0 (surface)*	Wetland Hydrology Present? Yes 🛛 No 🗌
Saturation Present? Yes ⊠ No □ Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	
Saturation Present? Yes ⊠ No Depth (inches): 0 (surface)* (includes capillary fringe) 0 0 0 0 0 Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an other stress of the	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes X No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge is a stream gauge.	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).
Saturation Present? Yes ⊠ No Depth (inches): <u>0 (surface)*</u> (includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 2
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5		_		
				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
6				· · ·
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species x 1 =
1. <u>Fraxinus pennsylvanica</u>	<u>4</u>		FACW	FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	4	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	_	- 10101 001		☑ Dominance Test is >50% ☑ Prevalence Index is ≤3.01
	<u>90</u>	\boxtimes	FACW	 Morphological Adaptations¹ (Provide supporting
1. <u>Phalaris arundinacea</u>			FACW	data in Remarks or on a separate sheet)
2. <u>Solidago gigantea</u>	<u>30</u>			Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Poa pratensis</u>	<u>20</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must
4. Agrostis stolonifera	<u>15</u>		FACW	Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11.				
				Herb – All herbaceous (non-woody) plants, regardless
12	155	<u> </u>		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Distaire) 20' redius)	<u>155</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	/er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate sh	eet.) Fresh (we	et) meadow.		

Profile De	scription: (Describe	to the dep	oth needed to docu	ment the ind	icator or cor	nfirm the a	bsence of indicators.)	Sampling Fornt. <u>z</u>
Depth	Matrix			Redox Feat	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	 Texture	Remarks
0-4	7.5YR 3/2	100	,,				Clay loam	
4-12	7.5YR 3/2	95	5YR 4/6	5	С	PL M	Clay loam	
12-16	10YR 3/1	95	5YR 4/6	5	С	PL M	Clay	
16-23	5YR 4/2	50					Clay	
	5YR 4/4	50						
		·						
	Concentration, D=Dep	pletion, RM	I=Reduced Matrix, M	IS= Masked S	Sand Grains		² Location: PL=Por	
	il Indicators: Histosol (A1)			olyvalue Belo	w Surface (S	8) (RR P		olematic Hydric Soils ³ : (A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		0) (L NN N,		e Redox (A16) (LLR K, L, R)
	Black Histic (A3)		ПТ	hin Dark Surfa	,	R R, MLRA		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4))		oamy Mucky I				e (S7) (LRR K, L)
	Stratified Layers (A5)			oamy Gleyed	Matrix (F2)			elow Surface (S8) (LRR K, L)
	Depleted Below Dark			epleted Matrix				urface (S9) (LRR K, L)
	Thick Dark Surface (A			edox Dark S				nese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			epleted Dark				oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix Sandy Redox (S5)	(34)	L R	edox Depress	SIONS (FO)			ic (TA6) (MLRA 144A, 145, 149B) Material (F21)
	Stripped Matrix (S6)							w Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	₹A 149B)					ain in Remarks)
	of Hydrophytic vegeta		etland hydrology m	ust be presen	t, unless dist	urbed or pr	oblematic.	
	e Layer (if observed)):						
	: h (inches):						Hydric Soil Presen	nt? Yes⊠ No 🗌
Remarks:								
rtemanto.								

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/20	15
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>3</u>	
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 33, T11N, R22E	
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 2-64	<u>%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Kewaunee silt loam (KnB)	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 disturb	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌	
Are Vegetation, Soil, or Hydrology naturally problemat	c? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No
			If yes, optional Wetland Site II	D: <u>PCA No. 3</u>	
Remarks: (Explain alternative proc vegetation and standing water v		,	mple site selected as area w	vas not mapped as w	vetland, yet hydric

o required)
gery (C9)
Inventory
_
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VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>3</u>
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov		Rapid Test for Hydrophytic Vegetation
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	-	= 10tal 00v	CI	☑ Dominance Test is >50% ☑ Prevalence Index is ≤3.01
1. <u>Phalaris arundinacea</u>	<u>50</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
	<u>40</u>		FACW	data in Remarks or on a separate sheet)
2. <u>Agrostis stolonifera</u>	<u>20</u>		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Poa pratensis</u>				¹ Indicators of hydric soil and wetland hydrology must
4. <u>Elymus repens</u>	<u>10</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. <u>Hordeum jubatum</u>	<u>10</u>		FAC	Definitions of Vegetation Strata:
6. <u>Typha angustifolia</u>	<u>10</u>		<u>OBL</u>	Deminions of Vegetation Strata.
7. <u>Juncus dudleyi</u>	<u>5</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>145</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
4.				Vegetation
	<u>0</u>	= Total Cov	er	Present? Yes No

Sampling Point: 3

Profile Des	scription: (Describe t	to the dep	oth needed to docum	ent the ind	icator or cor	nfirm the a	bsenc	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-5	5YR 3/2	50					Clay	loam	
	5YR 4/4	50							
5-15	7.5YR 4/2	98	5YR 4/6	2	С	PL M	Clay		
15-17	5YR 4/2	50	5YR 4/6	30	C	PL M	Clay		
	5YR 3/1	20							
17-25	10YR 4/2	60	5YR 4/6	35	С	PL M	Clay		
			N 2.5/1	5					Mg nodules
									5
		·	•						
		·	•						
		·							
		·							
¹ Type: C=0	Concentration, D=Dep	letion, RM	I=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
Hydric Soi	I Indicators:		· · ·					Indicators for Proble	ematic Hydric Soils ³ :
	Histosol (A1)		Pol		w Surface (S	8) (LRR R ,	,		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)	\			ace (S9) (LRI Mineral (F1) (•			Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Stratified Layers (A5))		amy Gleyed		,/			low Surface (S8) (LRR K, L)
	Depleted Below Dark	k Surface		pleted Matr				Thin Dark Su	face (S9) (LRR K, L)
	Thick Dark Surface (A	,		dox Dark Su	, ,				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (bleted Dark dox Depress	Surface (F7)				odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(34)		JOX Depies				Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	RR R, MLF	RA 149B)					Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic yearta	tion and v	vetland hydrology mus	t ha nrasan	t unloss dist	urbed or pr	obloma	atic	
	Layer (if observed)		vetiand hydrology mus	t be preseri			Obieina	anc.	
	:							Hydric Soil Present	?Yes 🛛 No 🗌
Dept	h (inches):							-	
Remarks:									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/20	15
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>4</u>	
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 33, T11N, R22E	
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>2-6%</u>	
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Kewaunee silt loam (KnB)	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 disturb	ed? Are "Normal Circumstances" present? Yes ⊠ No □	
Are Vegetation, Soil, or Hydrology naturally problemat	c? (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 Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	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 on Living R	Roots (C3) Saturation Visible on Aerial Imagery (C9)			
Water marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living R Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Is (C6) Geomorphic Position (D2)			
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):				
Water Table Present? Yes 🗌 No 🛛 Depth (inches):				
Saturation Present? Yes No Depth (inches): 2-4* and 16	Wetland Hydrology Present? Yes D No 🛛			
(includes capillary fringe)				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory			
(includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRC	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory S Wetland Inventory Map (Exhibit 15).			

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>4</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: $\underline{0}$ (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cove		Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2		_		FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	r	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square Prevalence Index is \le 3.0^{1}$
1. <u>Poa pratensis</u>	<u>60</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Scheonorus arundinaceus</u>	<u>40</u>	\boxtimes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Trifolium pratense</u>	<u>15</u>		FACU	
4. <u>Sonchus arvensis</u>	<u>5</u>		<u>FACU</u>	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Taraxacum officinale</u>	<u>3</u>		FACU	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12	123	= Total Cove		of size, and woody plants less than 3.28 ft tall.
Woody Vine Stratum (Plot size: <u>30' radius)</u>	120		I	Woody vines – All woody vines greater than 3.28 ft in bound
1				height
··				
<u>-</u>				
S				Hydrophytic Vogetation
4		<u> </u>		Vegetation Present? Yes □ No ⊠
	<u>0</u>	= Total Cove		
Remarks: (include photo number here or on a separate shee	et.) Mowed a	gricultural field.		

Profile Des	scription: (Describe t	o the depth	needed to doc	ument the inc	licator or cor	firm the a	bsence	of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-6	7.5YR 4/3	100	. ,				Clay lo	oam	
6-17	5YR 4/4	100					Clay		
17-24	5YR 5/4	100			- <u> </u>		Clay		
							Ciay		
					- <u> </u>				
	·								
					·				
					·				
	Concentration, D=Dep	lation DM_	Peducod Motrix	MS- Maakad	Sand Grains		:	² Location: PL=Pore L	ining M-Matrix
	il Indicators:			wio= wiasked	Ganu Grains			ndicators for Proble	
	Histosol (A1)			Polyvalue Belo	ow Surface (S	8) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 14	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surf			149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky		LRR K, L)			S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark \$	Surface (A11		Loamy Gleyed Depleted Matr					ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A			Redox Dark S					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral	(S1)		Depleted Dark	Surface (F7)			Piedmont Floo	dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)		Redox Depres	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent Ma	
	Stripped Matrix (S6) Dark Surface (S7) (LR		149B)					Other (Explain	Dark Surface (TF12) in Remarks)
	of Hydrophytic vegeta		land hydrology i	must be preser	nt, unless dist	urbed or pro	oblemat	ic.	
	e Layer (if observed)	:							
	: h (inches):						ŀ	Hydric Soil Present?	Yes 🗌 No 🖾
Remarks:									
rtomanto.									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>5</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 33, T11N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 2-6%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silt loam (KnB)	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 disturb	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemat	c? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A No. 3</u>	
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required
Primary Indicators (minimum of one is required; check all that	nat apply)	Surface Soil Cracks (B6)
☑ Surface Water (A1)] Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
□ Water marks (B1) □	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	ots (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 (i	(inches): <u>3</u>	
Water Table Present? Yes No Depth (i	(inches):	
Saturation Present? Yes No Depth (i		Wetland Hydrology Present? Yes 🛛 No 🗌
Saturation Present? Yes No Depth (i (includes capillary fringe)	(inches):	
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe)	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Saturation Present? Yes No Depth (i (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, ae Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit	(inches): erial photos, previous inspections), if ava	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.	Sampling Point: 5			
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
				Prevalence Index worksheet:
7				
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species <u>2</u> x 1 = <u>2</u>
1				FACW species <u>60</u> x 2 = <u>120</u>
2				FAC species $\underline{0}$ x 3 = $\underline{0}$
3				FACU species <u>50</u> x 4 = <u>200</u>
4				UPL species $\underline{0}$ x 5 = $\underline{0}$
5				Column Totals: <u>112</u> (A) <u>322</u> (B)
6				Prevalence Index = $B/A = 2.9$
7				Hydrophytic Vegetation Indicators:
··	<u>0</u>	= Total Cov		Rapid Test for Hydrophytic Vegetation
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	<u>-</u>	- 10101 000	CI	 □ Dominance Test is >50% ☑ Prevalence Index is ≤3.0¹
	<u>50</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
1. <u>Schedonorus arundinaceus</u>				data in Remarks or on a separate sheet)
2. <u>Agrostis stolonifera</u>	<u>40</u>		FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Phalaris arundinacea	<u>15</u>		FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Potentilla anserina	<u>5</u>		FACW	Be present, unless disturbed or problematic.
5. <u>Typha angustifolia</u>	<u>2</u>		<u>OBL</u>	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				
				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
12		<u> </u>		of size, and woody plants less than 3.28 ft tall.
	<u>112</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate she				1
	, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,	,		

Sampling Point: 5

Profile De	scription: (Describe	to the dep	oth needed to do	cument the in	dicator or co	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Fea	atures				
(inches)	Color (moist)	%	Color (moist)) %	Type ¹	Loc ²	_	Texture	Remarks
0-5	5YR 4/2	95	5YR 4/6	5	С	PL M	Clay		
5-14	7.5YR 3/2	95	5YR 4/6	5	С	PL M	Clay	loam	with gravel
14-24.5	7.5YR 4/2	55	5YR 4/6	40	C	PL M	Clay		
			N 2.5/1	5					Mg nodules
		·	11 2.0/1						ing notates
		·							
		·							
		·							
		·							
		·							
		·							
		·							
-	·	·							
¹ Type: C=	Concentration, D=Dep	letion, RN		MS= Masked	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
	il Indicators:			.,					ematic Hydric Soils ³ :
	Histosol (A1)			Polyvalue Bel		8) (LRR R ,		2 cm Muck (A	(10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 14	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)	`		Thin Dark Sur					Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5))		Loamy Mucky Loamy Gleyed		(LRR K, L)			(S7) (LRR K, L) low Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (/	_	Depleted Mat					rface (S9) (LRR K, L)
	Thick Dark Surface (A		, M	Redox Dark S					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral			Depleted Dark					odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix Sandy Redox (S5)	(S4)		Redox Depres	ssions (F8)			Mesic Spodic Red Parent N	(TA6) (MLRA 144A, 145, 149B)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	₹A 149B)						n in Remarks)
2									
	of Hydrophytic vegeta e Layer (if observed)		vetland hydrology	must be prese	nt, unless dist	urbed or pr	oblema	tic.	
								Hydric Soil Present	? Yes 🛛 No 🗌
	 h (inches):							nyunc son Fresent	
Remarks:	()								

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/201
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>6</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T11N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): none Slope (%): 0-3%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Manawa silt Ioam (MmA)	NWI classification: FOKf
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	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil X, 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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID:	PCA No. 4	
Remarks: (Explain alternative proce	edures here or in	a separate report.) Na	turally problematic soils (A16.	Coast Prairie Red	ox) present.

Wetland Hydrology Indicators:	<u>5</u>	econdary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required; check all that apply)	C	Surface Soil Cracks (B6)				
Surface Water (A1) Water-Stained Leaves (B9)		Drainage Patterns (B10)				
High Water Table (A2)		Moss Trim Lines (B16)				
Saturation (A3)		Dry-Season Water Table (C2)				
Image: Saturation (A3) Image: Marl Deposits (B15) Image: Water marks (B1) Image: Hydrogen Sulfide Odor (C1) Image: Sediment Deposits (B2) Image: Oxidized Rhizospheres on Living Rd Image: Drift Deposits (B3) Image: Presence of Reduced Iron (C4) Image: Algal Mat or Crust (B4) Image: Recent Iron Reduction in Tilled Solids Image: Iron Deposits (B5) Image: Thin Muck Surface (C7)		Crayfish Burrows (C8)				
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro	oots (C3)	Saturation Visible on Aerial Imagery (C9)				
Drift Deposits (B3)		Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	s (C6)	Geomorphic Position (D2)				
Iron Deposits (B5)		Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)		Microtopographic Relief (D4)				
Sparsely Vegetated Concave Surface (B8)	\triangleright	FAC-Neutral Test (D5)				
Field Observations:						
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):						
Water Table Present? Yes No Depth (inches): 22						
Saturation Present? Yes No Depth (inches): 2-4* and 10 (includes capillary fringe)	Wetland Hydr	ology Present? Yes 🛛 No 🗌				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and NRCS Wetland Inventory Map (Exhibit 15).						
Remarks: *Saturation from 2 to 4 inches is due to recent rainfall. Soils are saturated from	m 10 inches d	own to water table at 22 inches.				

VEGETATION – Use scientific names of plants.

EGETATION – Use scientific names of plants.				Sampling Point: <u>6</u>
<u>Tree Stratum</u> (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	ver	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: <u>5' radius</u>)				□ Prevalence Index is ≤3.0 ¹
1. <u>Phalaris arundinacea</u>	<u>50</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Agrostis gigantea</u>	<u>30</u>	\boxtimes	FACW	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Poa pratensis</u>	<u>20</u>		FACU	
4. <u>Schedonorus arundinaceus</u>	<u>15</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Toxicodendron rydbergii</u>	<u>15</u>		FAC	
6. <u>Bromus inermis</u>	<u>10</u>		FACU	Definitions of Vegetation Strata:
7. Fraxinus pennsylvanica	<u>3</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Solidago gigantea</u>	<u>2</u>		FACW	at breast height (DBH), regardless of height
9. <u>Typha angustifolia</u>	<u>1</u>		<u>OBL</u>	Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>146</u>	= Total Cov	er	
Woody Vine Stratum (Plot size: <u>30' radius</u>)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	<i>r</i> er	Present? Yes No
Remarks: (include photo number here or on a separate				

Sampling Point: 6

Profile Des	scription: (Describe	to the dep	oth needed to docun	nent the ind	licator or cor	nfirm the a	absence of indicators.)	
Depth	Matrix			Redox Fea	itures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture Remarks	
0-5.5	7.5YR 3/2	100					Silty clay loam	
5.5-16	7.5YR 3/2	98	7.5YR 4/6	2	С	PL M	Clay loam	
16-24	7.5YR 3/1	92	7.5YR 4/6	8	С	PL M	Clay	
				·	·			
		·	·					
		·	·					
		·			·			
				·	·			
		·	· - <u></u>		·			
		·			- <u> </u>			
		·	·	·	·			
		·						
		·	·					
¹ Type: C=0	Concentration, D=Dep	letion, RM	I=Reduced Matrix, M	S= Masked	Sand Grains		² Location: PL=Pore Lining, M=Matrix	
	I Indicators:		The search and the se				Indicators for Problematic Hydric Soils ³ :	
	Histosol (A1)		🗌 Po		ow Surface (S	8) (LRR R,	R, 2 cm Muck (A10) (LRR K, L, MLRA 1498)	
	Histic Epipedon (A2)			MLRA 14 9	,		Coast Prairie Redox (A16) (LLR K, L, R)	
	Black Histic (A3)	`			ace (S9) (LR			R)
	Hydrogen Sulfide (A4) Stratified Layers (A5))		• •	Mineral (F1) (Matrix (F2)		.) Dark Surface (S7) (LRR K, L) Polyvalue Below Surface (S8) (LRR K, L)	
	Depleted Below Dark	Surface (/		pleted Matri			Thin Dark Surface (S9) (LRR K, L)	
	Thick Dark Surface (A			dox Dark Sເ			Iron-Manganese Masses (F12) (LRR K, L	, R)
	Sandy Mucky Mineral				Surface (F7)		Piedmont Floodplain Soils (F19) (MLRA 1	
	Sandy Gleyed Matrix	(S4)	🗌 Re	dox Depres	sions (F8)		Mesic Spodic (TA6) (MLRA 144A, 145, 14	9B)
	Sandy Redox (S5) Stripped Matrix (S6)						 Red Parent Material (F21) Very Shallow Dark Surface (TF12) 	
	Dark Surface (S7) (LF	RR R, MLF	RA 149B)				 Other (Explain in Remarks) 	
			,				_ ()	
	of Hydrophytic vegeta		vetland hydrology mu	st be preser	nt, unless dist	urbed or pr	problematic.	
	Layer (if observed)):						
	n (inches):						Hydric Soil Present? Yes 🛛 No 🗌	
Remarks:								
Remarks.								

	-
Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: <u>City of Port Washington/Ozaukee County</u> Sampling Date: <u>07/21/2015</u>
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>7</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): none Slope (%): 0-3%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Manawa silt loam (MmA)	NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🔲 (If no, explain in Remarks)
Are Vegetation, Soil, or Hydrology significantly disturb	d? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation , Soil , or Hydrology naturally problemati	? (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 Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits (B2) Oxidized Rhizospheres on Living R Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soil Iron Deposits (B5) Thin Muck Surface (C7)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (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):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>15</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 7
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Of E species
6				Prevalence Index = B/A = (b)
				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	70			 Prevalence Index is ≤3.0¹ Morphological Adaptations¹ (Provide supporting
1. <u>Triticum aestivum (planted)</u>	<u>70</u>		UPL	data in Remarks or on a separate sheet)
2. <u>Bromus inermis</u>	<u>20</u>		<u>UPL</u>	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Cirsium arvense</u>	<u>20</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Ambrosia artemisiifolia	<u>15</u>		<u>FACU</u>	Be present, unless disturbed or problematic.
5. Avena sativa (planted)	<u> 10 </u>		<u>UPL</u>	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12.				Herb – All herbaceous (non-woody) plants, regardless
12	<u>135</u>			of size, and woody plants less than 3.28 ft tall.
	100	= Total Cov	ei	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				
	<u>0</u>	= Total Cov		Present? Yes 🗌 No 🛛
Remarks: (include photo number here or on a separate she	et.) Old field b	petween CTH	C and agric	ultural field.

Profile Des	scription: (Describe to	o the dep	oth needed to docur	nent the ind	licator or con	firm the a	bsend	ce of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-15	7.5YR 3/2	100					Clay	y loam	
15-25	5YR 4/3	95	10Y 6/1	5	D	М	Clay		with stones
15-25	5TK 4/5	95	101 0/1			IVI	Clay	/	with stones
			·				<u> </u>		
					·				
			·		·				
					·				
	Concentration, D=Depl	etion, RN	I=Reduced Matrix, N	S= Masked	Sand Grains			² Location: PL=Pore	
	I Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)			•	w Surface (S	B) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		— —	MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRF		149E		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark S	Surface (amy Gleyed					low Surface (S8) (LRR K, L) rface (S9) (LRR K, L)
	Thick Dark Surface (A1			edox Dark Si					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (edox Depres					(TA6) (MLRA 144A , 145 , 149B)
	Sandy Redox (S5)	.,		5 a 6 A 2 6 P 1 6 6				Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLI	RA 149B)					Other (Explain	
	of Hydrophytic vegetat		vetland hydrology mu	ist be preser	nt, unless distu	urbed or pro	oblem	atic.	
	Layer (if observed):								
Type:								Hydric Soil Present?	? Yes 🗌 No 🛛
Depth	n (inches):								
Remarks:									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>8</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0-3%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Manawa silt loam (MaA)	NWI classification: F0Kf
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	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	c? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	A No. 4	
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check	all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living R	pots (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 Soil	s (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 🖾 De	epth (inches):	
Water Table Present? Yes 🗌 No 🖾 De	epth (inches):	
	epth (inches): <u>11</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)		
Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (E		vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Remarks:		

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 8
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cove	r	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cove	r	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	_			Dominance lest is >50% Prevalence Index is $\leq 3.0^1$
1. Phalaris arundinacea	<u>80</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
	20		FACU	data in Remarks or on a separate sheet)
2. <u>Poa pratensis</u>	<u>15</u>		UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Bromus inermis</u>				¹ Indicators of hydric soil and wetland hydrology must
4. <u>Elymus repens</u>	<u>10</u>		FACU	Be present, unless disturbed or problematic.
5. Ambrosia artemisiifolia	<u>5</u>		FACU	Definitions of Vegetation Strata:
6. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>	
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>135</u>	= Total Cove	r	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2.				
3.				Hydrophytic
4.				Hydrophytic Vegetation
··	<u>0</u>	= Total Cove	r	Present? Yes No
Remarks: (include photo number here or on a separate she			•	1
		.,		

Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_ т	exture	Remarks
0-5	7.5 YR 3/2	100					Silty clay I	oam	
5-12	7.5YR 3/1	95	7.5YR 4/6	5	С	PL M	Clay		
12-15	10YR 4/1	70	10YR 3/6 to 4/6	30	С	PL M	Clay		
15-25	5YR 4/4	70					Clay		with small stones
10 20	10Y 4/1	30					Oldy		
		<u> </u>		·					
		<u> </u>		·					
				. <u> </u>					
	·								
	Concentration, D=Depl	otion PM	-Poducod Matrix MS	- Mackad S	Sand Grains		21.00	ation: PL=Pore I	ining M-Matrix
	I Indicators:			- iviaskeu s					matic Hydric Soils ³ :
-	Histosol (A1)			value Belo	w Surface (St	B) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	B)			Coast Prairie	Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRF				eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark S	Surface (A		my Gleyed					ow Surface (S8) (LRR K, L) face (S9) (LRR K, L)
	Thick Dark Surface (A				urface (F6)				se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)	Rec	lox Depress	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)								
	Stripped Matrix (S6) Dark Surface (S7) (LR		A 140B)						Dark Surface (TF12)
			A 149D)				L		III Remarks)
³ Indicators	of Hydrophytic vegetat	ion and w	etland hydrology mus	t be presen	t, unless distu	irbed or pro	oblematic.		
Restrictive	e Layer (if observed):								
Туре							Hydr	ic Soil Present?	Yes 🛛 No 🗌
	h (inches):								
Remarks:									
L									

WEILAND DETERMINATION D	AIA FORM – Northcentral and	Northeast Region
Project/Site: CTH C Prop Sewer and Waterlines to Prop Development	t City/County: City of Port Washington/Oza	ukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>M</u>	1 Sampling Point: 9
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T1	<u>DN, R22E</u>
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): non	<u>e</u> Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Dat	um:
Soil Map Unit Name: Kewaunee silt loam (KnA)		NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of year	、	,
Are Vegetation, Soil, or Hydrology significantly distu		— — —
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If, needed, explain any answers in	n Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transec	ts, important features, etc.
Hydrophytic Vegetation Present? □Yes ⊠No Hydric Soils Present? ⊠Yes □No Wetland Hydrology Present? □Yes ⊠No	Is the Sampled Area within a Wetland?	□ Yes
	If yes, optional Wetland Site ID:	_
Remarks: (Explain alternative procedures here or in a separate repo	ort.)	

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	cots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (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 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): 22	Wetland Hydrology Present? Yes 🗌 No 🖂
Saturation Present? Yes No Depth (inches): 22 (includes capillary fringe)	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge is a stream gauge.	
Saturation Present? Yes No Depth (inches): 22 (includes capillary fringe)	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge is a stream gauge.	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes X No Depth (inches): 22 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if an Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>9</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				
4				FACU species x 4 =
				UPL species x 5 = Column Totals: (A)
5				Column Totals: (A) (B)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		_		$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Bromus inermis</u>	<u>40</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. <u>Poa pratensis</u>	<u>40</u>	\boxtimes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Solidago juncea</u>	<u>20</u>		FACU	
4. Phleum pratense	<u>10</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Daucus carota</u>	<u>5</u>		<u>UPL</u>	
6. <u>Erigeron annuus</u>	<u>5</u>		FACU	Definitions of Vegetation Strata:
7. <u>Cirsium arvense</u>	<u>3</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
12.	123	= Total Cove	er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				
2				
3				I hadrow have to
4				Hydrophytic Vegetation
4				Present? Yes No
Remarks: (include photo number here or on a separate shee	0 http://www.adu	= Total Cove		

Profile Des	cription: (Describe to	o the dep	th needed to docum	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)							
Depth	Matrix		Redox Features								
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	-	Texture	Remarks		
0-8.5	7.5YR 3/2	100					Clay I	oam			
8.5-14	5YR 4/4	80	10Y 5/1	20	D	PL M	Clay				
14-25	5YR 4/3	85	10Y 6/1	15	D	PL M	Clay				
	Concentration, D=Depl	etion, RN	=Reduced Matrix, MS	= Masked S	Sand Grains			² Location: PL=Pore L			
	l Indicators: Histosol (A1)			walue Polo	w Surface (S			ndicators for Probler	natic Hydric Soils ³ : 0) (LRR K, L, MLRA 149B)		
	Histic Epipedon (A2)			MLRA 149	,	(LKKK,			edox (A16) (LLR K, L, R)		
	Black Histic (A3)		🗖 Thir		–, ace (S9) (LRF	R. MLRA	(149B)		eat or Peat (S3) (LLR K, L, R)		
	Hydrogen Sulfide (A4)				Vineral (F1) (- /	Dark Surface (
	Stratified Layers (A5)			my Gleyed					w Surface (S8) (LRR K, L)		
	Depleted Below Dark S			leted Matrix					ace (S9) (LRR K, L)		
	Thick Dark Surface (A			lox Dark Su					e Masses (F12) (LRR K, L, R)		
	Sandy Mucky Mineral (Sandy Gleyed Matrix (lox Depress	Surface (F7)				dplain Soils (F19) (MLRA 149B) TA6) (MLRA 144A, 145, 149B)		
	Sandy Redox (S5)	04)		IOX Depiese				Red Parent Ma			
	Stripped Matrix (S6)								Dark Surface (TF12)		
	Dark Surface (S7) (LR	R R, MLF	A 149B)					Other (Explain	in Remarks)		
³ Indicators	of Hydrophytic vegetat	tion and w	etland bydrology mus	t ha present	t unloss dist	urbed or pr	obloma	tic			
	Layer (if observed):		cilana nyarology mas				obicina	iic.			
Type:							1	Hydric Soil Present?	Yes 🛛 No 🗌		
Depth	1 (inches):										
Remarks:											
L											

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>10</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0-2%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silt loam (KnA)	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 disturb	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemat	c? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A No. 4</u>	
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	⊠ Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro	bots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (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):	
Water Table Present? Yes No Depth (inches): 24	
Saturation Present? Yes No Depth (inches): <u>0 (at surface)</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌
	ailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	railable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).

VEGETATION – Use scientific names of plants.

EGETATION – Use scientific names of plants.				Sampling Point: <u>10</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>2</u> (A)
3				Total Number of Dominant
ł				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
5				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	rer	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
 3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	ver	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Juncus bufonius</u>	<u>30</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
2. <u>Puccinellia distans</u>	<u>20</u>	\boxtimes	FACW	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Agrostis stononifera	<u>3</u>		FACW	
4. <u>Echinochloa crus-galli</u>	<u>3</u>		FAC	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Elymus repens</u>	<u>3</u>		FACU	
6. <u>Ambrosia artemisiifolia</u>	<u>2</u>		FACU	Definitions of Vegetation Strata:
7. Atriplex patula	<u>2</u>		FACW	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8. <u>Centaurium pulchellum</u>	2		FAC	at breast height (DBH), regardless of height
9. <u>Poa compressa</u>	_ 1		FACU	Sapling/shrub – Woody plants less than 3in. DBH
10. Polvaonum erectum	<u>1</u>		FACU	and greater than 3.28 ft (1 m) tall.
11. <u>Triticum aestivum</u>	<u>1</u>		UPL	
12	_			Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>68</u>	= Total Cov		
Woody Vine Stratum (Plot size: <u>30' radius</u>)	<u></u>	- 10(01000	0.	Woody vines – All woody vines greater than 3.28 ft in
				height
1				
2				
3				Hydrophytic Vogetation
4				Vegetation Present? Yes ⊠ No □
	<u>0</u>	= Total Cov	/er	

Sampling Point: 10

Profile Des	scription: (Describe t	o the dep	oth needed to docun	nent the ind	licator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-5.5	7.5YR 3/2	98	5YR 4/6	2	C	PL M	Silty of	clay loam	
5.5-9	7.5YR 3/1	80	7.5YR 4/6	5	C	PL M	Clay	,	
0.0 0	7.5YR 4/1	15	1.011(4/0			<u> </u>	Oldy		
0.40							01	<u> </u>	
9-12	7.5YR 3/1	70	7.5YR 4/6	30	C	PL M	Clay		
12-13	7.5YR 4/2	100					Sand		
13-24	5YR 4/4	70	2.5YR 4/8	10	C	PL M	Clay		with stones
	5YR 4/2	20							
24+									Refusal: Stones and gravel
		·							
¹ Type: C=0	Concentration, D=Dep	letion RM	I=Reduced Matrix M	S= Masked 9	Sand Grains			² Location: PL=Pore L	ining M=Matrix
	I Indicators:							Indicators for Proble	
-	Histosol (A1)		🗌 Po	lyvalue Belo	w Surface (S	8) (LRR R.			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149		-/ ()			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗌 Th	in Dark Surf	ace (S9) (LR	R R, MLRA	149B)	5 cm Mucky P	eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1)	(LRR K, L)			(S7) (LRR K, L)
	Stratified Layers (A5)			amy Gleyed					ow Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark S					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	54)	L Re	dox Depres	SIONS (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R. MLF	RA 149B)					Other (Explain	
³ Indicators	of Hydrophytic vegeta	tion and v	vetland hydrology mu	st be presen	it, unless dist	urbed or pr	oblema	tic.	
	e Layer (if observed)	:							
	: Stones and gravel						1	Hydric Soil Present?	Yes 🛛 No 🗌
Depth	h (inches): <u>24</u>								
Remarks:									
L									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>11</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0-3%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Manawa silt Ioam (MmA)	NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🛛 No 🔲 (If no, explain in Remarks)
Are Vegetation, Soil, or Hydrology significantly disturb	d? Are "Normal Circumstances" present? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology naturally problemat	c? (If, needed, explain any answers in Remarks.)

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

⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
		If yes, optional Wetland Site ID: P	CA No. 4	
edures here or i	n a separate report.)			
	⊠Yes ⊠Yes	— ⊠Yes □No	⊠Yes No Within a Wetland? WYes No If yes, optional Wetland Site ID: P	⊠Yes □No ⊠Yes □No If yes, optional Wetland Site ID: <u>PCA No. 4</u>

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3)	Dry-Season Water Table (C2)
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	bots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
□ Drift Deposits (B3) □ Presence of Reduced Iron (C4) ☑ Algal Mat or Crust (B4) □ Recent Iron Reduction in Tilled Soil	s (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):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>10</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌
	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).

VEGETATION - Use scientific names of plants.

Absolute Dominant Indicator **Dominance Test worksheet:** Tree Stratum (Plot size: 30' radius) Species? <u>Status</u> % Cover 1. _____ Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u>(A) 2. _____ 3. _____ **Total Number of Dominant** Species Across All Strata: <u>1</u> (B) 4. _____ 5. _____ Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B) 6. _____ 7. ___ Prevalence Index worksheet: 0 = Total Cover Total % Cover of: Multiply by: Sapling/Shrub Stratum (Plot size: 30' radius) **OBL** species x 1 = 1. _____ **FACW** species x 2 = 2. _____ FAC species x 3 = 3. _____ **FACU** species x 4 = 4. _____ **UPL** species x 5 = 5. _____ Column Totals: (A) (B) 6. ____ Prevalence Index = B/A = Hydrophytic Vegetation Indicators: 7. ____ Rapid Test for Hydrophytic Vegetation 0 = Total Cover Dominance Test is >50% Herb Stratum (Plot size: 5' radius) □ Prevalence Index is $\leq 3.0^{1}$ Morphological Adaptations¹ (Provide supporting 100 \boxtimes FACW 1. Puccinellia distans data in Remarks or on a separate sheet) UPL 2. Triticum aestivum (planted) 5 Problematic Hydrophytic Vegetation¹ (Explain) 3. _____ ¹ Indicators of hydric soil and wetland hydrology must 4. _____ Be present, unless disturbed or problematic. 5. _____ **Definitions of Vegetation Strata:** 6. _____ 7. _____ Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height 8. 9. _____ Sapling/shrub - Woody plants less than 3in. DBH 10. _____ and greater than 3.28 ft (1 m) tall. 11. _____ **Herb** – All herbaceous (non-woody) plants, regardless 12. of size, and woody plants less than 3.28 ft tall. <u>105</u> = Total Cover **Woody vines** – All woody vines greater than 3.28 ft in Woody Vine Stratum (Plot size: 30' radius) height 1. _____ 2. 3. _____ Hydrophytic Vegetation 4. ____ Present? Yes 🖂 No 🗌 0 = Total Cover Remarks: (include photo number here or on a separate sheet.) Fresh (wet) meadow/atypical (farmed) wetland.

Profile De	scription: (Describe to	o the dep	oth needed to docum	ent the ind	licator or cor	firm the a	bsenc	e of indicators.)	
Depth	Matrix			Redox Fea	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-4	7.5YR 3/2	100	<u></u>				Silty	clay loam	
4-8	5YR 4/1	70	5YR 4/6	30	С	PL M	Clay	-	with gravel
8-18	7.5YR 5/1	60	5YR 4/6	40	С	PL M	Clay		
18-25	5YR 4/3	50	10Y 5/1	30	D	PL M	Clay		
	5YR 4/4	20					<u> </u>		
					·		·		
		-			·				
		-			·				
	·		·		·		·		
	·		·		·		·		
	·				·				
	·				·				
	·	·			·				
¹ Type: C=	Concentration, D=Depl	etion. RM	A=Reduced Matrix. MS	= Masked	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
21	il Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)				w Surface (S	B) (LRR R,		2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149					Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LRI Mineral (F1) (Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			• •	Matrix (F2)	LKK K, L)			ow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface		pleted Matr					face (S9) (LRR K, L)
	Thick Dark Surface (A	,		lox Dark Su	• •				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (Sandy Redox (S5)	54)		lox Depres	SIONS (F8)			Mesic Spodic	(TA6) (MLRA 144A, 145, 149B) laterial (F21)
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	₹A 149B)					Other (Explain	
3 la ali a a ta na	af I budua a budia una satat						- h	-4'-	
	of Hydrophytic vegetat e Layer (if observed):		veliand hydrology mus	t be presen	it, unless dist		opiema	alic.	
	:							Hydric Soil Present	? Yes 🛛 No 🗌
	h (inches):								
Remarks:									

Project/Site: CTH C Prop Sewer and Waterlines to Prop Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>12</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silt loam (KnA)	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 disturb	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	c? (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 Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Image: Construction of the second	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 D No Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No X Depth (inches): (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>12</u>
Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
7				Prevalence Index worksheet:
··	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals:
6				Prevalence Index = B/A = (B)
				Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
Hards Oberland (Distation Flag dista)	<u>0</u>	= Total Cov	er	Dominance Test is >50%
Herb Stratum (Plot size: <u>5' radius</u>)	20			 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. Triticum aestivum (planted)	<u>30</u>		<u>UPL</u>	data in Remarks or on a separate sheet)
2. <u>Poa compressa</u>	<u>20</u>		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Elymus repens</u>	<u>15</u>	\boxtimes	FACU	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Trifolium pratense</u>	<u>5</u>		FACU	Be present, unless disturbed or problematic.
5. Ambrosia artemisiifolia	<u>5</u>		<u>FACU</u>	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
12				Herb – All herbaceous (non-woody) plants, regardless
12.	75	= Total Cov		of size, and woody plants less than 3.28 ft tall.
Woody Vino Stratum (Plot size: 20' radius)	10	- 10tal 000		Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3		<u> </u>		Hydrophytic
4				Vegetation Present? Yes No X
	<u>0</u>	= Total Cov		
Remarks: (include photo number here or on a separate she	et.) Old field b	etween CTH	C and agric	cultural field.

Profile Des	scription: (Describe t	o the dep	th needed to docum	ent the ind	licator or con	firm the a	bsence	e of indicators.)	Camping Font. <u>12</u>
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-6	7.5YR 4/3	100					Silty	clay loam	
6-14	5YR 4/3	80					Clay		
	7.5YR 3/2	20							
14-24	5YR 4/3	75	10Y 6/1	25	D	М	Clay		with stones
	·								
	·								
	·								
	·								
	· · · · · · · · · · · · · · · · · · ·								
	·								
	· · · · · · · · · · · · · · · · · · ·								
	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore	
	il Indicators:								ematic Hydric Soils ³ :
	Histosol (A1) Histic Epipedon (A2)			yvalue Belo MLRA 149	w Surface (Sa	8) (LRR R,			10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗖 Thi		ace (S9) (LRF		149B)		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (1400)		(S7) (LRR K, L)
	Stratified Layers (A5)			amy Gleyed		. ,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark			oleted Matri					face (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix (bleted Dark dox Depress	Surface (F7)				odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(34)		Jux Depress	SIULIS (FO)			Mesic Spodic	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	RR R, MLR	A 149B)					Other (Explain	n in Remarks)
3 Indiantoro	of Lludrophytic vocato	tion and u	atland hudralage mus	the proces	t unloco diotu	wheed or pro	ablama	tio	
	of Hydrophytic vegeta e Layer (if observed)		eliand hydrology mus	t be presen			Juleina		
Туре								Hydric Soil Present?	? Yes 🗌 No 🛛
	h (inches):								
Remarks:									

City/County: City of Port Washington/Ozaukee County	Sampling Date: 07/21/2015
State: WI	Sampling Point: <u>13</u>
Section, Township, Range: Section 3, T10N, R22E	
Local relief (concave, convex, none): concave	Slope (%): <u>0-2%</u>
Lat: Long: Datum:	
NWI cla	assification: <u>S3/E2K</u>
Yes 🛛 No 🗌 (If no, explain in Remarks)	
d? Are "Normal Circumstances" present? Yes 🖂	No 🗌
c? (If, needed, explain any answers in Remarks.)	
? e	Section, Township, Range: Section 3, T10N, R22E Local relief (concave, convex, none): concave Lat: Long: Datum: NWI cla NWI cla ? Yes ⊠ No □ (If no, explain in Remarks) ed? Are "Normal Circumstances" present? Yes ⊠

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

⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
		If yes, optional Wetland Site ID: P	CA No. 5	
edures here or	in a separate report.)			
	⊠Yes ⊠Yes	— — — — — — — — — — — — — — — — — — —	☑Yes □No ☑Yes □No ☑Yes □No If yes, optional Wetland Site ID: P	☑Yes □No ☑Yes □No ☑Yes □No If yes, optional Wetland Site ID: PCA No. 5

Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check a	all that apply)	Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Ro	cots (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 Soil	s (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 🖾 De	pth (inches):	
Water Table Present? Yes 🗌 No 🛛 De	pth (inches):	
	pth (inches): <u>8</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)		
Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Ex		vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Remarks:		

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.					Samplin	g Point: <u>13</u>	
Tree Stratum (Plot size: <u>30' radius)</u>	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test wo	rksheet:		
1				Number of Dominant Sp	oecies		
2				That are OBL, FACW, o		<u>1</u> (A)	
3				Total Number of Domin	t		
		_		Total Number of Domina Species Across All Strat		<u>2</u> (B)	
4					<i>u</i> .	<u>z</u> (D)	
5				Percent of Dominant Sp			
6				That Are OBL, FACW, o	r FAC:	<u>50%</u> (A/B)	
7				Prevalence Index worl	(sheet:		
	<u>0</u>	= Total Cov	/er	Total % Cover of:		Multiply by:	
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species <u>C</u>	<u>)</u> x 1 =	<u>0</u>	
1				FACW species <u>10</u>	<u>00</u> x 2 =	<u>200</u>	
2				FAC species	<u>x</u> 3 =	<u>0</u>	
3				FACU species 4	0 x 4 =		
4				UPL species 1	_	50	
5				Column Totals: 15	_	<u>410</u>	(B)
6							(D)
				Hydrophytic Vegetatio	Index = B/A		
7				Rapid Test for Hydro			
	<u>0</u>	= Total Cov	/er	Dominance Test is :			
Herb Stratum (Plot size: 5' radius)		_		Prevalence Index i		wide europerti	
1. <u>Phalaris arundinacea</u>	<u>90</u>	\boxtimes	FACW	Morphological Adap data in Remark			-
2. <u>Poa pratensis</u>	<u>30</u>	\boxtimes	FACU	Problematic Hydrop		• /	
3. Solidago altissima	<u>10</u>		FACU				-
4. <u>Solidago gigantea</u>	<u>10</u>		FACW	¹ Indicators of hydric so Be present, unless distu			nust
5. <u>Vicia cracca</u>	<u>10</u>		UPL				
6				Definitions of Vegetati	on Strata:		
7				Tree – Woody plants 3i	ո. (7.6 cm) զ	or more in dia	meter
8				at breast height (DBH),	regardless of	of height	
9				Sapling/shrub – Wood	y plants less	s than 3in. DB	н
10				and greater than 3.28 ft	(1 m) tall.		
11					(
12				Herb – All herbaceous (of size, and woody plan			aless
	<u>150</u>	= Total Cov	/er	or size, and woody plan	10 1000 111011	0.20 11 1011.	
Woody Vine Stratum (Plot size: <u>30' radius</u>)	<u></u>	- 10101 001		Woody vines – All woo	dy vines gre	eater than 3.28	8 ft in
				height			
1							
2							
3				Hydrophytic			
4				Vegetation		<u> </u>	
	<u>0</u>	= Total Cov	/er	Present? Yes		D □	
Remarks: (include photo number here or on a separate sh	eet.) Fresh (we	et) meadow.					

Sampling Point: 13

Profile Des	scription: (Describe to	o the dep	th needed to doo			nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Feat			_	
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-7	7.5YR 2.5/1	100					Silt loam	
7-14	7.5YR 2.5/1	98	7.5YR 3/4	2	С	PL M	Silty clay loam	
14-20	7.5YR 4/2	60	5YR 4/6	40	С	PL M	Clay	with grit
20-24	5YR 4/3	70	5YR 4/6	10	С	PL M	Clay	with grit
	7.5YR 4/3	20					- <u> </u>	
	·							
				<u> </u>		·		_,
							<u></u>	
¹ Type: C-0	Concentration, D=Depl	letion RM	I=Reduced Matrix	MS= Masked S	Sand Grains		² Location: PL=Pore	Lining, M=Matrix
	I Indicators:			MO- Masked C				lematic Hydric Soils ³ :
	Histosol (A1)			Polyvalue Belo	w Surface (S	8) (LRR R,		A10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)			Thin Dark Surfa				Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			Loamy Mucky		(LRR K, L)		e (S7) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark S	Surface (4		Loamy Gleyed Depleted Matrix				elow Surface (S8) (LRR K, L) Irface (S9) (LRR K, L)
	Thick Dark Surface (/			Redox Dark Si				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral	-		Depleted Dark				oodplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)		Redox Depress	sions (F8)			c (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Material (F21)
	Stripped Matrix (S6) Dark Surface (S7) (LR		A 140B)					/ Dark Surface (TF12) in in Remarks)
		ix ix, wi⊑i	(A 149D)					in in Remarks)
	of Hydrophytic vegetat		etland hydrology	must be presen	t, unless dist	urbed or pr	oblematic.	
Restrictive	e Layer (if observed):							
Туре							Hydric Soil Present	t? Yes 🛛 No 🗌
	h (inches):							
Remarks:								
L								

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>14</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silt loam (KnA)	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	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemation	c? (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 Soils Present? Wetland Hydrology Present?	□Yes □Yes □Yes	⊠No ⊠No ⊠No	Is the Sampled Area within a Wetland?	☐ Yes	⊠No
			If yes, optional Wetland Site ID:		
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
U Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R	coots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Is (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):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): 23 (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛
Saturation Present? Yes 🛛 No 🗌 Depth (inches): 23	
Saturation Present? Yes I No Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
Saturation Present? Yes X No Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
Saturation Present? Yes INO Depth (inches): 23 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>14</u>
Tree Stratum (Plot size: <u>30' radius</u>)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Bereast of Deminant Species
6				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
				Prevalence Index worksheet:
7				
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)		_		OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	/er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				$\square Prevalence Index is \leq 3.0^{\circ}$
1. <u>Poa pratensis</u>	<u>50</u>	\boxtimes	FACU	Morphological Adaptations ¹ (Provide supporting
2. Bromus inermis	<u>40</u>	\boxtimes	UPL	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Asclepias syriaca</u>	<u>15</u>		UPL	
	<u>10</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. <u>Fragaria virginiana</u>				Be present, unless disturbed or problematic.
5. <u>Monarda fistulosa</u>	<u>5</u>		FACU	Definitions of Vegetation Strata:
6. <u>Phleum pratense</u>	<u>5</u>		FACU	
7. <u>Solidago juncea</u>	<u>5</u>		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>130</u>	= Total Cov	/er	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				noight
2				
2				
4				Hydrophytic Vegetation
4				Present? Yes No 🛛
Remarks: (include photo number here or on a separate sh	<u>0</u> No breigi Liniand ol	= Total Cov		
Temaina, (include proto number here of on a separate st	ieel.) Opialiu Ol			

Profile Des	scription: (Describe to	o the depth	needed to docu	ment the ind	icator or cor	firm the al	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-7	10YR 3/2	100					Clay	loam	
7-10	7.5YR 3/2	80					Clay	loam	
	5YR 4/3	20							
10-20	5YR 4/4	100					Clay		with gravel
20-25	5YR 4/3	90					Clay		with gravel
	5YR 4/2	10							
¹ Type: C=	Concentration, D=Deple	etion, RM=R	educed Matrix, M	IS= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
-	il Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)			olyvalue Belo	•	B) (LRR R,			10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2) Black Histic (A3)		ПТ	MLRA 149 hin Dark Surfa			140B)		Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)			pamy Mucky I			1490)		(S7) (LRR K, L)
	Stratified Layers (A5)			pamy Gleyed		,			ow Surface (S8) (LRR K, L)
	Depleted Below Dark S	•	,	epleted Matrix	. ,				face (S9) (LRR K, L)
	Thick Dark Surface (A1	,		edox Dark Su	· ,				ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (Sandy Gleyed Matrix (epleted Dark edox Depress					odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	51)						Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLRA	149B)					Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegetat	ion and wetl	and hydrology m	ust be presen	t, unless distu	urbed or pro	oblema	atic.	
	e Layer (if observed):		, ,,	•					
	:							Hydric Soil Present	? Yes 🗌 No 🖾
-	h (inches):								
Remarks:									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 0	7/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>1</u>	5
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E	
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): <u>none</u> Slope (%): <u>0-2%</u>	
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Kewaunee silt loam (KnA)	NWI classification: S3K	
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 disturb	ed? Are "Normal Circumstances" present? Yes ⊠ No □	
Are Vegetation, Soil, or Hydrology naturally problemat	tic? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: I	PCA No. 6	
Remarks: (Explain alternative proce	edures here or ir	n a separate report.)			

	Secondary Indicators (minimum of two required)			
all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained Leaves (B9)				
Aquatic Fauna (B13)	Moss Trim Lines (B16)			
Marl Deposits (B15)	Dry-Season Water Table (C2)			
Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Oxidized Rhizospheres on Living Re	bots (C3)			
Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)			
Recent Iron Reduction in Tilled Soil	s (C6) Geomorphic Position (D2)			
Thin Muck Surface (C7)	Shallow Aquitard (D3)			
Other (Explain in Remarks)	Microtopographic Relief (D4)			
	FAC-Neutral Test (D5)			
pth (inches):				
pth (inches):				
pth (inches): <u>7</u>	Wetland Hydrology Present? Yes 🛛 No 🗌			
II, aerial photos, previous inspections), if a chibit 4), and Site photos (Exhibit 10).	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory			
	Water-Stained Leaves (B9) Aquatic Fauna (B13) Marl Deposits (B15) Hydrogen Sulfide Odor (C1) Oxidized Rhizospheres on Living Ro Presence of Reduced Iron (C4) Recent Iron Reduction in Tilled Soils Thin Muck Surface (C7) Other (Explain in Remarks) bth (inches): bth (inches): l, aerial photos, previous inspections), if avoid 1000000000000000000000000000000000000			

VEGETATION - Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>15</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Tilia americana</u>	<u>60</u>	\boxtimes	FACU	Number of Dominant Species
2. <u>Fraxinus pennsylvanica</u>	<u>30</u>	\boxtimes	FACW	That are OBL, FACW, or FAC: <u>3</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>4</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>75%</u> (A/B)
				Prevalence Index worksheet:
7	90			
	<u></u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)	45		540	OBL species x 1 =
1. <u>Rhamnus cathartica</u>	<u>15</u>		FAC	FACW species x 2 =
2. <u>Viburnum opulus</u>	<u>3</u>		FACW	FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>18</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation
Herb Stratum (Plot size: 5' radius)	—	- 10101 001		 ☑ Dominance Test is >50% □ Prevalence Index is ≤3.0¹
1. Impatiens capensis	<u>80</u>		FACW	Morphological Adaptations ¹ (Provide supporting
	<u>15</u>		FAC	data in Remarks or on a separate sheet)
2. <u>Geum canadense</u>				Problematic Hydrophytic Vegetation ¹ (Explain)
3. Lonicera x bella	<u>5</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Rhamnus cathartica	<u>5</u>		FAC	Be present, unless disturbed or problematic.
5. <u>Viburnum opulus</u>	<u>3</u>		FACW	
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Capling/abruh Weady plants loss than 2in DDU
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11.				
				Herb – All herbaceous (non-woody) plants, regardless
12	108	<u> </u>		of size, and woody plants less than 3.28 ft tall.
	<u>108</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
				Vegetation
4				Present? Yes No
4	<u>0</u>	= Total Cov	/er	

	scription: (Describe t	o the dep				nirm the a	psence	e of indicators.)	
Depth	Matrix			Redox Feat			_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-16	7.5YR 2.5/1	100					Silty of	clay loam	
16-20	7.5YR 4/2	80	7.5YR 4/6	20	С	PL M	Clay		
20-24	7.5YR 4/1	55	7.5YR 5/8	10	С	PL M	Clay		
	7.5YR 5/3	35							
							·	·	
							·	·	
¹ Type: C=	Concentration, D=Dep	letion RM	I=Reduced Matrix MS	= Masked S	Sand Grains			² Location: PL=Pore L	ining M=Matrix
	il Indicators:							Indicators for Problem	
	Histosol (A1)				w Surface (S	8) (LRR R,		2 cm Muck (A1	0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Vineral (F1) (LRR K, L)		Dark Surface (S7) (LRR K, L) w Surface (S8) (LRR K, L)
	Stratified Layers (A5) Depleted Below Dark	Surface (/		my Gleyed					ace (S9) (LRR K, L)
	Thick Dark Surface (lox Dark Su					e Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				dplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)	🗌 Red	lox Depress	sions (F8)				TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)							Red Parent Ma	
	Stripped Matrix (S6) Dark Surface (S7) (LR		A 1/0B)					 Very Shallow E Other (Explain 	Dark Surface (TF12)
			(A 149D)						in Remarks)
³ Indicators	of Hydrophytic vegeta	tion and v	vetland hydrology mus	t be present	t, unless dist	urbed or pr	oblema	tic.	
Restrictive	e Layer (if observed)								
Туре								Hydric Soil Present?	Yes 🛛 No 🗌
Dept	h (inches):								
Remarks:									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/	<u>2015</u>
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>16</u>	
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E	
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0	-2%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:	
Soil Map Unit Name: Kewaunee silt loam (KnA)	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 X, Soil, or Hydrology significantly disturbed?	? Are "Normal Circumstances" present? Yes 🗌 No 🛛	
Are Vegetation, Soil, or Hydrology naturally problemati	ic? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID:	PCA No. 7	
Remarks: (Explain alternative proce	edures here or	in a separate report.) Dis	sturbed vegetation due to agric	cultural land manag	gement activities
(managed plant community). Sa	ample site sel	ected due to evidence	of several indicators of hydrol	ogy and landscape	e position.

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	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 on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Stunted or Stressed Plants (D1)			
Sediment Deposits (B2) Oxidized Rhizospheres on Living R Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled S	oils (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):				
Water Table Present? Yes 🗌 No 🛛 Depth (inches):				
Saturation Present? Yes No Depth (inches): <u>0 (at surface)</u>	Wetland Hydrology Present? Yes 🛛 No 🗌			
(includes capillary fringe)				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a				
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	Slide Review (Exhibitis 11 to 15).			

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: <u>16</u>
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. Zea mays (planted)	<u>50</u>	\boxtimes	<u>UPL</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Tanacetum vulgare	<u>3</u>		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Chenopodium album</u>	<u>1</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Persicaria maculosa	<u>1</u>		FAC	Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>55</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov		Present? Yes No
Remarks: (include photo number here or on a separate shee	et.) Problema	tic hydrophyti	c vegetation	due to agricultural land management activities

Remarks: (include photo number here or on a separate sheet.) Problematic hydrophytic vegetation due to agricultural land management activities (managed plant community). Indicators of hydric soil and wetland hydrology are present. Atypical (farmed) wetland.

Profile Des	scription: (Describe	to the dep	oth needed to docun	nent the ind	licator or cor	nfirm the a	bsence of indicators.)	
Depth	Matrix			Redox Fea	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-7	10YR 3/2	100			·		Silty clay loam	
7-12	10YR 3/2	95	7.5YR 4/6	5	С	PL M	Silty clay loam	
12-17	7.5YR 4/2	70	7.5YR 4/6	30	С	PL M	Sandy loam	
17-24	5YR 4/4	55	10Y 5/1	5	D	PL M	Clay	with grit
	7.5YR 5/3	40			·			
				·	·			
		·			·			
		·			·			
		. <u></u>			·			
		. <u></u>			·			
				·	·			
				·	·			
		·			·			
¹ Type: C=	Concentration, D=Dep	letion, RM	I=Reduced Matrix, M	S= Masked	Sand Grains		² Location: PL=Pore	Lining, M=Matrix
-	il Indicators:							ematic Hydric Soils ³ :
	Histosol (A1)		D Po		ow Surface (S	8) (LRR R ,		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2) Black Histic (A3)		□ Th	MLRA 149	ace (S9) (LR			Redox (A16) (LLR K, L, R) Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4))			Mineral (F1) ((S7) (LRR K, L)
	Stratified Layers (A5)	, ,		amy Gleyed	· · ·	,	Polyvalue Bel	ow Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matri				face (S9) (LRR K, L)
	Thick Dark Surface (A Sandy Mucky Mineral				Surface (F6) Surface (F7)			ese Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix			dox Depres				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(-)			(-)		Red Parent M	
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	≀A 149B)				Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegeta	ation and v	vetland hydrology mu	st be preser	nt, unless dist	urbed or pr	oblematic.	
	e Layer (if observed)			·i		· · · ·		
	:						Hydric Soil Present	? Yes 🛛 No 🗌
-	h (inches):							
Remarks:								

WEILAND DETERMINATION D	ATA FORM – Northcentral and	Northeast Region
Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozau	ukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>M</u>	VI Sampling Point: <u>17</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T1	10N, R22E
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): non	ne Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Dat	tum:
Soil Map Unit Name: Kewaunee silt loam (KnA)		NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of year	ır? Yes 🛛 No 🗌 (If no, explain	n in Remarks)
Are Vegetation, Soil, or Hydrology significantly distur	rbed? Are "Normal Circumstances" prese	ent? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problem	atic? (If, needed, explain any answers in	in Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transec	cts, important features, etc.
Hydrophytic Vegetation Present? Yes No Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No	Is the Sampled Area within a Wetland?	☐ Yes
	If yes, optional Wetland Site ID:	
Remarks: (Explain alternative procedures here or in a separate repo	rt.)	

Secondary Indicators (minimum of two required)
Surface Soil Cracks (B6)
Drainage Patterns (B10)
Moss Trim Lines (B16)
Dry-Season Water Table (C2)
Crayfish Burrows (C8)
) Saturation Visible on Aerial Imagery (C9)
Stunted or Stressed Plants (D1)
Geomorphic Position (D2)
Shallow Aquitard (D3)
Microtopographic Relief (D4)
FAC-Neutral Test (D5)
d Hydrology Present? Yes 🗌 No 🛛
·
d Hydrology Present? Yes □ No ⊠ Topo Map (Exhibit 1), Wisconsin Wetland Inventory
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VEGETATION – Use scientific names of plants.

Sapling/Shrub Stratum (Plot size: 30' radius) 1	Image:
3.	Image: Species Across All Strata:1Image: Species Across All Strata:0% (A/B)Image: Species Across All Strata:0% (A/B)Image: Species Across All Strata:0% (A/B)Image: Species Across All Strata:1Image: Species Across All Strata:0% (A/B)Image: Species Across Acro
4.	Species Across All Strata:1 (B)Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)Prevalence Index worksheet:Prevalence Index worksheet:al CoverTotal % Cover of: Multiply by:Multiply by:OBL species $x 1 =$ FACW species $x 2 =$ FAC species $x 3 =$ FAC species $x 4 =$ UPL species $x 5 =$ Column Totals:(A)Prevalence Index = B/A =Hydrophytic Vegetation Indicators:Rapid Test for Hydrophytic VegetationDominance Test is >50%Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)Problematic Hydrophytic Vegetation ¹ (Explain)
5.	Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)Prevalence Index worksheet: 0% (A/B)al Cover $Total \% Cover of:$ Multiply by:OBL species $x 1 =$ $$
6	Image:
7 [Prevalence Index worksheet:al Cover $\underline{Total \% Cover of:}$ Multiply by:OBL species $x 1 =$ OBL species $x 2 =$ FACW species $x 2 =$ FAC species $x 3 =$ FAC species $x 4 =$ UPL species $x 5 =$ Column Totals:(A)Mydrophytic Vegetation Indicators:Rapid Test for Hydrophytic VegetationDominance Test is >50%Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)FACUFACU
Q = Tot Sapling/Shrub Stratum (Plot size: 30' radius)	Image: Cover of:Image: Cover of:Multiply by:OBL species $x 1 =$ OBL species $x 2 =$ FACW species $x 2 =$ FAC species $x 3 =$ FAC species $x 4 =$ UPL species $x 5 =$ Column Totals:(A)Column Totals:(A)Hydrophytic Vegetation Indicators:Rapid Test for Hydrophytic VegetationDominance Test is >50%Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)FACUFACUFACU
Sapling/Shrub Stratum (Plot size: 30' radius) 1	OBL species $x 1 =$ Image: FACW species $x 2 =$ Image: FAC species $x 3 =$ Image: FACU species $x 4 =$ Image: FACU species $x 4 =$ Image: Image: FACU species $x 5 =$ Image: Image
1.	Image: Second systemFACW species $x 2 =$ Image: Second systemFACW species $x 3 =$ Image: Second systemFACU species $x 4 =$ Image: Second systemImage: Second syst
2	FAC species $x 3 =$ FAC species $x 4 =$ UPL species $x 5 =$ Column Totals: (A) Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Prevalence Index is $\leq 3.0^1$ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) FACU FACU
3	Image: product in the expected
4	Image: constraint of the second s
5	Column Totals: (A) (B) Prevalence Index = $B/A = \ Hydrophytic Vegetation Indicators: (B) al Cover Rapid Test for Hydrophytic Vegetation Dominance Test is >50% Prevalence Index is \leq 3.0^1 Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation1 (Explain) $
6 [7 [90 = Tot Herb Stratum (Plot size: 5' radius) 1. Bromus inermis 90 [2. Poa pratensis 20 [3. Aspargus officinalis 5 [4. Daucus carota 5 [5. Taraxacum officinale 5 [6	Image: Prevalence Index = B/A = Hydrophytic Vegetation Indicators: Image: Rapid Test for Hydrophytic Vegetation Image: Dominance Test is >50% Image: Prevalence Index is ≤3.01 Image: Prevalence Index is ≤3.01 <tr< td=""></tr<>
7	Hydrophytic Vegetation Indicators: □ Rapid Test for Hydrophytic Vegetation □ Dominance Test is >50% □ Prevalence Index is ≤3.01 □ Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation1 (Explain)
<u> </u>	Image: Cover Image: Rapid Test for Hydrophytic Vegetation Image: Dominance Test is >50% Image: Dominance Test is >50% <t< td=""></t<>
Herb Stratum (Plot size: 5' radius) 1. Bromus inermis 90 2 2. Poa pratensis 20 1 3. Aspargus officinalis 5 1 4. Daucus carota 5 1 5. Taraxacum officinale 5 1 6	al Cover □ Dominance Test is >50% □ Prevalence Index is ≤3.01 □ Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) □ FACU □ FACU
1. Bromus inermis 90 2 2. Poa pratensis 20 1 3. Aspargus officinalis 5 1 4. Daucus carota 5 1 5. Taraxacum officinale 5 1 6	UPL □ Prevalence Index is ≤3.01 UPL □ Morphological Adaptations1 (Provide supporting data in Remarks or on a separate sheet) FACU □ Problematic Hydrophytic Vegetation1 (Explain) FACU □
2. Poa pratensis 20 3. Aspargus officinalis 5 4. Daucus carota 5 5. Taraxacum officinale 5 6	Gata in Remarks or on a separate sheet) FACU Problematic Hydrophytic Vegetation ¹ (Explain) FACU
3. Aspargus officinalis 5 1 4. Daucus carota 5 1 5. Taraxacum officinale 5 1 6 1 7 1 8 1	FACU Problematic Hydrophytic Vegetation ¹ (Explain) FACU FACU
4. Daucus carota 5 1 5. Taraxacum officinale 5 1 6	FACU
5. Taraxacum officinale 5 1 6 1 7 1 8 1	
6 [7 [8 [UPL Be present, unless disturbed or problematic.
7 [8 [
8. <u> </u>	Definitions of Vegetation Strata:
	Tree – Woody plants 3in. (7.6 cm) or more in diameter
9	at breast height (DBH), regardless of height
	Sapling/shrub – Woody plants less than 3in. DBH
10 [
11. <u> </u>	Herb – All herbaceous (non-woody) plants, regardless
12 [of size, and woody plants less than 3.28 ft tall.
<u>125</u> = Tot	al Cover
Woody Vine Stratum (Plot size: 30' radius)	Woody vines – All woody vines greater than 3.28 ft in height
1. <u> </u>	
2	
3	Hydrophytic
4	Vegetation
	al Cover Present? Yes No 🛛
Remarks: (include photo number here or on a separate sheet.) Old field betwee	

Profile Des	scription: (Describe t	o the dep	th needed to docum	ent the ind	icator or cor	firm the a	bsence	of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks
0-4.5	7.5YR 3/2	100					Clay l	oam	with gravel
4.5-10	7.5YR 3/2	80					Clay		with gravel
	5YR 4/3	20							5.00
10-19	5YR 4/3	90					Clay		
10-13	5YR 4/2	10					Ciay		
10.24					C		Clay		with group
19-24	5YR 4/3	90	7.5YR 4/6	2	<u> </u>	PL M	Clay		with gravel
	10YR 5/3	8			. <u> </u>				
								•	
	Concentration, D=Dep	letion, RM	=Reduced Matrix, MS	= Masked S	Sand Grains			² Location: PL=Pore	
-	I Indicators:			walua Pala	W Surface (S				ematic Hydric Soils³: 10) (LRR K, L, MLRA 149B)
	Histosol (A1) Histic Epipedon (A2)			MLRA 149	w Surface (S B)	\mathcal{O} (LKK K,			Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🔲 Thi		ace (S9) (LRI	R R, MLRA	149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (,		(S7) (LRR K, L)
	Stratified Layers (A5)				Matrix (F2)				ow Surface (S8) (LRR K, L)
	Depleted Below Dark		· · ·	oleted Matri	· · ·				face (S9) (LRR K, L)
	Thick Dark Surface (A Sandy Mucky Mineral			lox Dark Su	Surface (F6)				se Masses (F12) (LRR K, L, R) odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (dox Depress					(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	- /			(-)			Red Parent M	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegeta	tion and w	etland hydrology mus	t ha nrasan	t unless disti	irbed or pr	hlomat	tic	
	Layer (if observed)		cuana nyarology maa				obiernat		
Туре							ŀ	Hydric Soil Present?	Yes 🗌 No 🛛
Depth	n (inches):								
Remarks:									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>18</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0-2%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Kewaunee silt loam (KnA)	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 disturb	ed? Are "Normal Circumstances" present? Yes 🛛 No 🗌
Are Vegetation, Soil, or Hydrology naturally problemat	? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	<u>A No. 7</u>	
Remarks: (Explain alternative proce	edures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Moss Trim Lines (B16)
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)
U Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized Rhizospheres on Living Re	bots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (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 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>0 (at surface)</u>	Wetland Hydrology Present? Yes 🛛 No 🗌
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe)	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 18
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	/er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species <u>5</u> x 1 = <u>5</u>
1				FACW species <u>85</u> x 2 = <u>170</u>
2				FAC species $\underline{0} \times 3 = \underline{0}$
3				FACU species $35 \times 4 = 140$
4				
5				
				、,
6				Prevalence Index = B/A = 2.5 Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cov	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				 ☑ Prevalence Index is ≤3.0¹ ☑ Morphological Adaptations¹ (Provide supporting
1. Phalaris arundinacea	<u>50</u>		FACW	data in Remarks or on a separate sheet)
2. <u>Poa pratensis</u>	<u>30</u>	\boxtimes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Carex cristatella</u>	<u>20</u>		FACW	¹ Indicators of hydric soil and wetland hydrology must
4. Agrostis stolonifera	<u>15</u>		FACW	Be present, unless disturbed or problematic.
5. <u>Carex vulpinoidea</u>	<u>5</u>		<u>OBL</u>	
6. Elymus repens	<u>5</u>		FACU	Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diamete
8				at breast height (DBH), regardless of height
9.				
				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
10				
11				Herb – All herbaceous (non-woody) plants, regardless
12	405	<u> </u>		of size, and woody plants less than 3.28 ft tall.
	<u>125</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft ir
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	<i>e</i> r	Present? Yes No
Remarks: (include photo number here or on a separate she	et.) Fresh (we			•

Profile Des	scription: (Describe to	the dep	oth needed to docu	ment the ind	icator or cor	nfirm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-7	7.5YR 3/1	98	5YR 4/6	2	С	PL M	Silty	clay loam	
7-18	5YR 4/2	65	5YR 4/6	35	С	PL M	Clay		
18-24	5YR 4/3	60	10Y 4/1	20	D	PL M	Clay		with gravel
	5YR 3/1	20							
							·		
			·				·		
							·		
							· <u> </u>		
							·		
							·		
¹ Type: C=0	Concentration, D=Deple	etion, RN	A=Reduced Matrix	/IS= Masked S	Sand Grains			² Location: PL=Pore	Lining M=Matrix
	I Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)		🗆 P	olyvalue Belo		8) (LRR R ,		2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)			hin Dark Surfa			149B)		Peat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			oamy Mucky I oamy Gleyed		(LRR K, L)			(S7) (LRR K, L) ow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface		epleted Matr					face (S9) (LRR K, L)
	Thick Dark Surface (A1			edox Dark S					ese Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral (epleted Dark					odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S	54)		edox Depress	sions (F8)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5) Stripped Matrix (S6)							Red Parent M	Dark Surface (TF12)
	Dark Surface (S7) (LRI	R R, MLI	RA 149B)					Other (Explain	
			,					_ 、 .	,
	of Hydrophytic vegetati		vetland hydrology m	ust be presen	t, unless dist	urbed or pr	oblema	itic.	
	Layer (if observed):								
	(inches):							Hydric Soil Present	? Yes 🛛 No 🗌
Remarks:									
i temanto.									

Project/Site: CTH C Prop. Sewer & Waterlines to Prop. Development	City/County: City of Port	Washington/Ozaukee County	Sampling Date: 07/21/2015
Applicant/Owner:		State: WI	Sampling Point: <u>19</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Rar	ge: Section 3, T10N, R22E	
Landform (hillslope, terrace, etc.): small drainage way	Local relief (concave, co	onvex, none): slightly concave	Slope (%): <u>0-3%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long:	Datum:	
Soil Map Unit Name: Manawa silt Ioam (MaA)		NWI cla	assification: <u>none</u>
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 disturb	ed? Are "Normal Cir	cumstances" present? Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology naturally problemat	ic? (If, needed, exp	lain any answers in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID: PC	CA No. 7	
Remarks: (Explain alternative proce	edures here or ir	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	Doots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (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 Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>17</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌
	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).

VEGETATION - Use scientific names of plants.

<u> Free Stratum</u> (Plot size: <u>30' radius</u>)	Absolute	Dominant	Indicator	Dominance Tes	st works	sheet:		
·	<u>% Cover</u>	Species?	<u>Status</u>	Number of Domina				
·				That are OBL, FA			A)	
				Total Number of D)ominant			
~ ŀ				Species Across Al		<u>2</u>	(B)	
5				Percent of Domina	ant Speci	es		
5				That Are OBL, FA			<u>%</u> (A/B)	
7				Prevalence Index	worksh	eet:		
	<u>0</u>	= Total Cov	er	Total % Cove	er of:	N	lultiply by:	
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species	<u>32</u>	x 1 =	<u>32</u>	
I				FACW species	<u>59</u>	x 2 =	<u></u> <u>118</u>	
2				FAC species	<u>50</u> <u>10</u>	x 3 =	<u>30</u>	
 3				FACU species	<u>10</u> 25	x 4 =	<u>50</u> 100	
 				UPL species	<u>25</u> 0	x 4 =		
*• 5				Column Totals:	<u>0</u> <u>126</u>	(A)	<u>0</u> <u>280</u>	(B)
5						dex = B/A =		(0)
7				Hydrophytic Veg			<u> </u>	
·	<u>0</u>	= Total Cov	er	Rapid Test for			tion	
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)	—	- 10101 001	01	Dominance Te				
I. <u>Phalaris arundinacea</u>	<u>50</u>	\boxtimes	FACW	Morphological				-
2. <u>Cirsium arvense</u>	<u>20</u>	\boxtimes	FACU	data in Re		on a separ	,	
B. <u>Carex stipata</u>	<u>15</u>		<u>OBL</u>			-		
I. <u>Carex vupinoidea</u>	<u>15</u>		<u>OBL</u>	¹ Indicators of hyd Be present, unless				nust
5. <u>Barbarea vulgaris</u>	<u>10</u>		FAC	De present, unies			manc.	
6. <u>Carex cristatella</u>	<u>5</u>		FACW	Definitions of Ve	getation	Strata:		
7. <u>Sonchus arvensis</u>	<u>5</u>		FACU	Tree – Woody pla	nte 2in (⁻	7.6 cm) or r	noro in dia	motor
3. <u>Juncus dudleyi</u>	<u>4</u>		FACW	at breast height (D				netei
 <u>Epilobium coloratum</u> 	<u> </u>		OBL	O				
10	—			Sapling/shrub – V and greater than 3			ian 3in. DB	,H
1.						,		
12				Herb – All herbace of size, and woody			. 0	dless
	126	= Total Cov	er	or size, and woody	y piants it	555 IIIAII 5.2	20 11 1411.	
Noody Vine Stratum (Plot size: <u>30' radius</u>)		- 10101 001	01	Woody vines – A	ll woody y	vines greate	er than 3.2	8 ft in
I				height				
2 3.								
				Hydrophytic Vegetation				
+. <u></u>	<u></u>	= Total Cov		Present?	Yes 🛛	No		
Remarks: (include photo number here or on a separate			CI	1				
		,						

Profile Des	scription: (Describe t	o the dep	oth needed to docun			firm the a	bsence	of indicators.)	
Depth	Matrix			Redox Feat	ures		_		
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-5	7.5YR 3/1	100					Clay lo	oam	
5-10	10YR 3/1	98	7.5YR 4/6	2	С	PL M	Clay		
10-19	5YR 4/1	90	5YR 4/6	2	С	PL M	Clay		
	5YR 5/2	8							
19-24	5YR 5/1	40	5YR 4/6	35	С	PL M	Clay		
	5YR 4/2	25							
				- <u> </u>					
	Concentration, D=Dep	letion, RN	1=Reduced Matrix, M	S= Masked S	Sand Grains			² Location: PL=Pore L	-
-	I Indicators:		— ~	havelus Del				ndicators for Problem	-
	Histosol (A1) Histic Epipedon (A2)		D Po	MLRA 149	w Surface (S	8) (LRR R,		,	10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🔲 Th		ace (S9) (LRI		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4))			Mineral (F1) (S7) (LRR K, L)
	Stratified Layers (A5)		🗌 Lo	amy Gleyed				Polyvalue Belo	ow Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matrix					ace (S9) (LRR K, L)
	Thick Dark Surface (A	,		dox Dark Su	• •				se Masses (F12) (LRR K, L, R) dplain Soils (F19) (MLRA 149B)
	Sandy Mucky Mineral Sandy Gleyed Matrix (dox Depress	Surface (F7)				(TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(0.)						Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	RR R, MLF	RA 149B)					Other (Explain	in Remarks)
³ Indicators	of Hydrophytic vegeta	tion and w	vetland hydrology mu	st be present	t unless disti	urbed or pro	oblemat	ic	
	Layer (if observed)		ionalia nyarology ma		, unicee alet				
Type	:						H	ydric Soil Present?	Yes 🛛 No 🗌
Depth	n (inches):								
Remarks:									

	ATA FURINI – Northcentral and N	ionneast Region
Project/Site: CTH C Prop.Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozauke	ee County Sampling Date: 07/21/2015
Applicant/Owner:	State: WI	Sampling Point: 20
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 3, T10	<u>N, R22E</u>
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none): none	Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datu	m:
Soil Map Unit Name: Kewaunee silt loam (KnA)		NWI classification: none
Are climatic/hydrologic conditions on the site typical for this time of year	ar? 🛛 Yes 🛛 No 🔲 (If no, explain ii	n Remarks)
Are Vegetation, Soil, or Hydrology significantly distu		
Are Vegetation, Soil, or Hydrology naturally problem	natic? (If, needed, explain any answers in	Remarks.)
SUMMARY OF FINDINGS – Attach site map showing	sampling point locations, transect	s, important features, etc.
Hydrophytic Vegetation Present? □Yes ⊠No Hydric Soils Present? □Yes ⊠No Wetland Hydrology Present? □Yes ⊠No	Is the Sampled Area within a Wetland?	□ Yes
	If yes, optional Wetland Site ID:	_
Remarks: (Explain alternative procedures here or in a separate repo	prt.)	

HYDROLOGY

\A/E

-

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	oots (C3)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ls (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 Depth (inches):	
Water Table Present? Yes Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>15</u>	Wetland Hydrology Present? Yes 🗌 No 🛛
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
(includes capillary fringe)	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	

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VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.	Sampling Point: 20			
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>3</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: 0% (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				□ Prevalence Index is $\leq 3.0^{1}$
1. Bromus inermis	<u>25</u>	\boxtimes	UPL	Morphological Adaptations ¹ (Provide supporting
2. Poa pratensis	<u>20</u>	\boxtimes	FACU	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Cirsium vulgare</u>	<u>15</u>	\boxtimes	FACU	
4. <u>Daucus carota</u>	<u>10</u>		UPL	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
	<u>10</u>		FACU	be present, unless disturbed of problematic.
5. <u>Trifolium hybridum</u>	<u>5</u>		UPL	Definitions of Vegetation Strata:
6. <u>Zea mays (planted)</u>			<u>FAC</u>	
7. <u>Equisetum arvense</u>	<u>4</u> 3		FACU	Tree – Woody plants 3in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height
8. <u>Medicago sativa</u>	<u>3</u>		<u>1 ACO</u>	
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>92</u>	= Total Cov	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov		Present? Yes D No
Remarks: (include photo number here or on a separate shee	et.) Old field b	between CTH	C and agric	cultural field.

Profile Des	scription: (Describe t	o the dep	oth needed to docum	ent the ind	icator or cor	firm the a	bsence	e of indicators.)	
Depth	Matrix			Redox Feat	tures				
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	-	Texture	Remarks
0-8	7.5YR 4/2	100					Clay	loam	
8-19	2.5YR 4/4	100					Clay		
19-24	2.5YR 4/4	90	2.5YR 4/8	10	С	PL M	Clay		
								·	
				·				·	
							·		
								·	
								<u></u>	
	Concentration, D=Dep	letion, RN	I=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore L	
	I Indicators: Histosol (A1)				w Surface (S			Indicators for Probler	matic Hydric Soils³: 0) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		L Po	MLRA 149	•) (LKK K ,			0) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)
	Black Histic (A3)		🗍 Thi		ace (S9) (LRI	R R, MLRA	149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4)				Mineral (F1) (- /	Dark Surface (
	Stratified Layers (A5)			amy Gleyed					w Surface (S8) (LRR K, L)
	Depleted Below Dark			pleted Matri					ace (S9) (LRR K, L)
	Thick Dark Surface (A Sandy Mucky Mineral			dox Dark Su	Inface (F6) Surface (F7)				se Masses (F12) (LRR K, L, R) dplain Soils (F19) (MLRA 149B)
	Sandy Mucky Milleral Sandy Gleyed Matrix (dox Depress					TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	01)						Red Parent Ma	
	Stripped Matrix (S6)								Dark Surface (TF12)
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain	in Remarks)
³ Indiantoro	of Hydrophytic vegeta	tion and w	otland hydrology mu	the proces	t unlogo dist	urbad or pro	hlomo	tio	
	Layer (if observed)		enand hydrology mus	st be presen	it, uniess uist		Julema		
	:	-						Hydric Soil Present?	Yes 🗌 No 🖂
	h (inches):								
Remarks:	<u> </u>								

Project/Site: CTH C Prop.Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/Ozaukee County Sampling Date: 07/21/2015
Applicant/Owner:	State: <u>WI</u> Sampling Point: <u>21</u>
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 4, T10N, R22E
Landform (hillslope, terrace, etc.): low terrace	Local relief (concave, convex, none): slightly concave Slope (%): 0-2%
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Datum:
Soil Map Unit Name: Poygan silty clay loam (Py)	NWI classification: F0Kf
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 disturb	bed? Are "Normal Circumstances" present? Yes ⊠ No □
Are Vegetation, Soil, or Hydrology naturally problema	tic? (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 Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No				
			If yes, optional Wetland Site ID: PC	A No. 7					
Remarks: (Explain alternative proce	Remarks: (Explain alternative procedures here or in a separate report.)								

Wetland Hydrology Indicators:	<u>S</u>	econdary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)		Surface Soil Cracks (B6)
Surface Water (A1)	ined Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	auna (B13)	Moss Trim Lines (B16)
Saturation (A3)	osits (B15)	Dry-Season Water Table (C2)
	Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2) Oxidized F	Rhizospheres on Living Roots (C3)	Saturation Visible on Aerial Imagery (C9)
Water marks (B1) Hydrogen Sediment Deposits (B2) Oxidized F Drift Deposits (B3) Presence f	of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
	on Reduction in Tilled Soils (C6)	Geomorphic Position (D2)
	s Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	plain in Remarks)	Microtopographic Relief (D4)
Sparsely Vegetated Concave Surface (B8)]] FAC-Neutral Test (D5)
Field Observations:		
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):		
Water Table Present? Yes 🗌 No 🛛 Depth (inches):		
Saturation Present? Yes No Depth (inches): 0 (a) (includes capillary fringe)	Wetland Hyd	rology Present? Yes 🛛 No 🗌
· · · · · · ·	previous inspections), if available: Topo I	Map (Exhibit 1), Wisconsin Wetland Inventory
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, p Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site phot Remarks: Standing water observed adjacent to sample area. FSA	previous inspections), if available: Topo I tos (Exhibit 10), and FSA Slide Review (E	Map (Exhibit 1), Wisconsin Wetland Inventory Exhibits 11 to 15).

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.	Sampling Point: 21			
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: $\underline{1}$ (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	er	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
<u>Herb Stratum</u> (Plot size: <u>5' radius</u>)				$\square Prevalence Index is \leq 3.0^{1}$
1. <u>Persicaria maculosa</u>	<u>10</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
2. Echinochloa crus-galli	<u>3</u>		FAC	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Polygonum erectum	<u>3</u>		FACU	
4. <u>Daucus carota</u>	<u>2</u>		UPL	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Ranunculus sceleratus</u>	<u>2</u>		<u>OBL</u>	
6	-			Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				Herb – All herbaceous (non-woody) plants, regardless
12	20	= Total Cov		of size, and woody plants less than 3.28 ft tall.
Mandy Vine Stratum (Plat aize: 20' radius)	20		EI	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)				height
1				
2				
3				Hydrophytic
4				Vegetation Present? Yes ⊠ No
2	0	= Total Cov		
Remarks: (include photo number here or on a separate she	ei.) Atypical (I	ianneu) wetla	nu.	

Profile De	scription: (Describe	to the dep	th needed to docum	ent the ind	licator or cor	nfirm the a	bsence of indicators.)	•••••••••••••••• <u>••</u> •
Depth	Matrix			Redox Fea	tures			
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	Texture	Remarks
0-7	10YR 3/2	100					Silty clay loam	
7-12	7.5YR 2.5/1	96	7.5YR 4/6	4	С	PL M	Clay loam	
12-18	7.5YR 4/1	60	7.5YR 4/6	20	С	PL M	Clay	
	10YR 4/2	20						
18-25	7.5YR 5/1	70	7.5YR 4/6	30	C	PL M	Clay	
		·						
		·						
		·					·	
		·					·	
		·						
		·						
	·	·						
¹ Type: C=	Concentration, D=Dep	letion, RM	Reduced Matrix, MS	= Masked \$	Sand Grains		² Location: PL=Pore	Lining, M=Matrix
	il Indicators:							ematic Hydric Soils ³ :
	Histosol (A1)				w Surface (S	8) (LRR R,		10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)			MLRA 149	,			Redox (A16) (LLR K, L, R)
	Black Histic (A3) Hydrogen Sulfide (A4)	\			ace (S9) (LR Mineral (F1) (Peat or Peat (S3) (LLR K, L, R) (S7) (LRR K, L)
	Stratified Layers (A5))			Matrix (F2)	(LIXIX IX, L)		ow Surface (S8) (LRR K, L)
	Depleted Below Dark	Surface (A		oleted Matri			Thin Dark Sui	face (S9) (LRR K, L)
	Thick Dark Surface (A				urface (F6)			se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral Sandy Gleyed Matrix			bleted Dark	Surface (F7)			odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)
	Sandy Redox (S5)	(04)		ION Depies			Red Parent M	
	Stripped Matrix (S6)							Dark Surface (TF12)
	Dark Surface (S7) (LF	RR R, MLF	(A 149B)				Other (Explain	n in Remarks)
³ Indicators	of Hydrophytic vegeta	ution and w	etland hydrology mus	t ha nrasan	nt unloss dist	urbed or pr	oblematic	
	e Layer (if observed)		cliana nyarology mas					
	:						Hydric Soil Present	?Yes 🛛 No 🗌
Dept	h (inches):						-	
Remarks:								

Project/Site: CTH C Prop Sewer and Waterlines to Prop Development	City/County: City	of Port Washingtor	/Ozaukee County	Sampling Date: 07/22/2015
Applicant/Owner:		Sta	te: <u>WI</u>	Sampling Point: 22
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Townsh	ip, Range: Section	4, T10N, R22E	
Landform (hillslope, terrace, etc.): low terrace	Local relief (cond	cave, convex, none):	slightly concave	Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	Long:	Datum:	
Soil Map Unit Name: Poygan silty clay loam (Py)			NWI clas	ssification: none
Are climatic/hydrologic conditions on the site typical for this time of year?	Yes 🖂	No 🗌 (If no, ex	plain in Remarks)	
Are Vegetation X, Soil, or Hydrology significantly disturbed?	Are "Norr	mal Circumstances"	present? Yes	No 🖂
Are Vegetation, Soil, or Hydrology naturally problemati	c? (If, neede	ed, explain any answ	ers in Remarks.)	

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

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	⊠ Yes	□No
			If yes, optional Wetland Site ID:	PCA No. 8	
Remarks: (Explain alternative proce	edures here or	in a separate report.) Dis	sturbed vegetation due to agrid	cultural land manag	gement activities
(managed plant community). S	ample site se	lected due to evidence	of several indicators of hydrol	logy and landscape	e position.

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)		
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)		
High Water Table (A2)	Moss Trim Lines (B16)		
Saturation (A3)	Dry-Season Water Table (C2)		
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2) Oxidized Rhizospheres on Living Ro Drift Deposits (B3) Presence of Reduced Iron (C4) Algal Mat or Crust (B4) Recent Iron Reduction in Tilled Soils	bots (C3) Saturation Visible on Aerial Imagery (C9)		
Drift Deposits (B3)	Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	s (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 Depth (inches):			
Water Table Present? Yes No Depth (inches): 20			
	Wetland Hydrology Present? Yes 🛛 No 🗌		
Saturation Present? Yes No Depth (inches): <u>9</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌		
	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), Site photos (Exhibit 10), and FSA	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory Slide Review (Exhibits 11 to 15).		

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 22
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>50%</u> (A/B)
7				Prevalence Index worksheet:
	<u>0</u>	= Total Cov	ver	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)				OBL species $\underline{0}$ x 1 = $\underline{0}$
1				FACW species $\underline{0}$ x 2 = $\underline{0}$
2				FAC species <u>25</u> x 3 = <u>75</u>
3				FACU species <u>8</u> x 4 = <u>32</u>
4				UPL species <u>8</u> x 5 = <u>40</u>
5				Column Totals: <u>41</u> (A) <u>147</u> (B)
6				Prevalence Index = $B/A = 3.6$
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	ver	 Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square Prevalence Index is \leq 3.0^{1}$
1. Equisetum arvense	<u>20</u>	\boxtimes	FAC	Morphological Adaptations ¹ (Provide supporting
2. <u>Zea mays (planted)</u>	<u>8</u>	\boxtimes	<u>UPL</u>	data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain)
3. Polygonum erectum	<u>5</u>		FACU	
4. <u>Persicaria maculosa</u>	<u>4</u>		FAC	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5. <u>Chenopodium album</u>	<u>3</u>		FACU	
6. Echinochloa crus-galli	<u>1</u>		FAC	Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10.				and greater than 3.28 ft (1 m) tall.
11.				
12				Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.
	<u>41</u>	= Total Cov	ver	
Woody Vine Stratum (Plot size: 30' radius)				Woody vines – All woody vines greater than 3.28 ft in height
1				neight
2				
3				Deduce locks
<u> </u>				Hydrophytic Vegetation
··	0	= Total Cov	er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate she				due to agricultural land management activities

Remarks: (include photo number here or on a separate sheet.) Problematic hydrophytic vegetation due to agricultural land management activities (managed plant community). Indicators of hydric soil and wetland hydrology are present. Atypical (farmed) wetland.

Depth Matix Redox Features Cuty Index Color (modd) % Type Loc' Texture Remarks 0-4 SYR 32 60 7.5YR 4/6 5 C PL M Day mixed layer 411 SYR 32 60 7.5YR 4/6 5 C PL M Day mixed layer 1225 257R 4/6 60 SYR 4/2 20 D M Day with git 125 257R 4/6 60 SYR 4/2 20 D M Day with git 126 257R 4/6 60 SYR 4/2 20 D M Day with git 126 201 Mixes D M Day with git Day	Profile Des	Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Inches) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks 0-4 5YR 3/2 100	Denth	Matrix			Redox Feat	ures				
0.4 5YR 3/2 100	-	Color (moist)	%	Color (moist)			1 oc^2	_	Texture	Remarks
4-11 SYR 3/2 80 7.5YR 4/6 5 C PL Clay mixed layer 11-19 SYR 4/4 15	· · ·	. ,						Clav		
SYR 4/4 15				7.5VR 1/6	5		DI M			mixed laver
11-19 SYR 4/4 100	4-11			7.511(4/0				Ciay		
19-25 2.5YR 4/6 60 5YR 5/1 20 D M Clay with grit 5YR 4/2 20	44.40				·			0		
SYR 4/2 20 Syr 20 100							<u> </u>		y ciay	
Image: sector of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Polyalian Bisturbed (Present?) Yers Present? Yers Notice Yers Yers Yers Yers Yers	19-25			5YR 5/1	20	D	IVI	Clay		with grit
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LLR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LLR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Redox Depresent, unless disturbed or problematic. Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Polyte Soil Present? Yes No No		5YR 4/2	20		·					
Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ : Histosol (A1) Polyvalue Below Surface (S8) (LRR R, 2 cm Muck (A10) (LRR K, L, MLRA 149B) Histic Epipedon (A2) MLRA 149B) Coast Prairie Redox (A16) (LLR K, L, R) Black Histic (A3) Thin Dark Surface (S9) (LRR R, MLRA 149B) 5 cm Mucky Peat or Peat (S3) (LLR K, L, R) Hydrogen Sulfide (A4) Loamy Mucky Mineral (F1) (LRR K, L) Dark Surface (S7) (LRR K, L) Depleted Below Dark Surface (A11) Depleted Matrix (F2) Polyvalue Below Surface (S8) (LRR K, L) Thick Dark Surface (A12) Redox Dark Surface (F6) Iron-Manganese Masses (F12) (LRR K, L, R) Sandy Mucky Mineral (S1) Depleted Dark Surface (F7) Piedmont Floodplain Soils (F19) (MLRA 149B) Sandy Redox (S5) Redox Depressions (F8) Mesic Spodic (TA6) (MLRA 144A, 145, 149B) Stripped Matrix (S6) Redox Depresent, unless disturbed or problematic. Very Shallow Dark Surface (TF12) Other (Explain in Remarks) Other (Explain in Remarks) Polyte Soil Present? Yes No No					·					
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□ Depleted Below Dark Surface (A11) □ Depleted Matrix (F3) □ Thin Dark Surface (S9) (LRR K, L) □ Thick Dark Surface (A12) ☑ Redox Dark Surface (F6) □ Iron-Manganese Masses (F12) (LRR K, L, R) □ Sandy Mucky Mineral (S1) □ Depleted Dark Surface (F7) □ Piedmont Floodplain Soils (F19) (MLRA 149B) □ Sandy Gleyed Matrix (S4) □ Redox Depressions (F8) □ Mesic Spodic (TA6) (MLRA 144A, 145, 149B) □ Stripped Matrix (S6) □ Very Shallow Dark Surface (TF12) □ Dark Surface (S7) (LRR R, MLRA 149B) □ Other (Explain in Remarks) ³Indicators of Hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic. Hydric Soil Present? Yes ⊠ No □ Type: Depth (inches): Yes ∑ No □								- /		
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Restrictive Layer (if observed): Type: Type: Hydric Soil Present? Yes I No I Depth (inches): No I		Dark Surface (S7) (LRI	R R, MLF	RA 149B)					Other (Explain	n in Remarks)
Restrictive Layer (if observed): Type: Type: Depth (inches):	³ Indicators	of Hydrophytic yeaetati	ion and w	vetland bydrology mus	et ha procon	t unloss disti	urbed or pro	hloma	tic	
Type: Hydric Soil Present? Yes 🛛 No 🗌 Depth (inches):				venand nydrology mae		t, unicos ust		Joienna		
Depth (inches):									Hvdric Soil Present	? Yes 🕅 No 🗖
Remarks:	Depth	n (inches):								
	Remarks:									

	IATION DATA FORM - Northce	ntral and Northeast	Region
Project/Site: CTH C Prop.Sewer & Waterlines to Prop. D	Development City/County: City of Port Was	hington/Ozaukee County	Sampling Date: 07/22/2015
Applicant/Owner:		State: <u>WI</u>	Sampling Point: 23
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range:	Section 4, T10N, R22E	
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, conve	x, none): <u>none</u>	Slope (%): <u>0-2%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat: Long: Long:	Datum:	
Soil Map Unit Name: Kewaunee silt loam (KnA)		NWI clas	sification: <u>none</u>
Are climatic/hydrologic conditions on the site typical for the	his time of year? Yes 🛛 No 🗌	(If no, explain in Remarks)	
Are Vegetation, Soil, or Hydrology sign	nificantly disturbed? Are "Normal Circum	stances" present? Yes 🖂	No 🗌
Are Vegetation, Soil, or Hydrology natu	urally problematic? (If, needed, explain a	any answers in Remarks.)	
SUMMARY OF FINDINGS – Attach site map	p showing sampling point location	ıs, transects, importar	nt features, etc.
Hydric Soils Present?	⊠No Is the Sampled Area ⊠No within a Wetland? ⊠No	☐ Yes	⊠No
	If yes, optional Wetlan	d Site ID:	
Remarks: (Explain alternative procedures here or in a	separate report.)		

HYDROLOGY

\A/E

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Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	Roots (C3) Saturation Visible on Aerial Imagery (C9)
Sediment Deposits (B2) Oxidized Rhizospheres on Living R Drift Deposits (B3) Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	ils (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):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): <u>15</u>	Wetland Hydrology Present? Yes 🗌 No 🖂
(includes capillary fringe)	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
	available: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	available: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a	available: Topo Map (Exhibit 1), Wisconsin Wetland Inventory
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VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 23
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>0</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>2</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
				Prevalence Index worksheet:
7	<u>0</u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)		-		 □ Prevalence Index is ≤3.0¹ □ Morphological Adaptations¹ (Provide supporting
1. <u>Bromus inermis</u>	<u>60</u>	\boxtimes	<u>UPL</u>	data in Remarks or on a separate sheet)
2. <u>Schedonorus arundinaceus</u>	<u>40</u>	\boxtimes	FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Poa pratensis	<u>20</u>		FACU	1 Indiantara of hydria call and watland hydrolomy must
4. Daucus carota	<u>4</u>		<u>UPL</u>	¹ Indicators of hydric soil and wetland hydrology must Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				
				Herb – All herbaceous (non-woody) plants, regardless
12	124			of size, and woody plants less than 3.28 ft tall.
	124	= Total Cove	1	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)				height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes 🗌 No 🛛
Remarks: (include photo number here or on a separate shee	et.) Old field b	etween CTH	C and agric	ultural field.

-	scription: (Describe to	o the depth	needed to docum			ntirm the ab	osence	e of indicators.)	
Depth	Matrix			Redox Feat			-	_	_
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		Texture	Remarks
0-10	7.5YR 3/2	100					Silty of	clay loam	
10-19	5YR 4/4	100		. <u> </u>			Clay		
19-24	5YR 5/4	100					Clay		with stones and grit
				·					
				·					
				·					
				·					
				·					
		<u> </u>		·					
		<u> </u>		·					
¹ Type: C=0	Concentration, D=Depl	etion. RM=R	educed Matrix. MS	S= Masked S	Sand Grains			² Location: PL=Pore	Lining, M=Matrix
	I Indicators:								ematic Hydric Soils ³ :
	Histosol (A1)		Pol		w Surface (S	8) (LRR R,		2 cm Muck (A	10) (LRR K, L, MLRA 149B)
	Histic Epipedon (A2)		_	MLRA 149	,				Redox (A16) (LLR K, L, R)
	Black Histic (A3)				ace (S9) (LR		149B)		eat or Peat (S3) (LLR K, L, R)
	Hydrogen Sulfide (A4) Stratified Layers (A5)			amy Mucky r amy Gleyed	Vineral (F1) (Matrix (F2)	(LRR K, L)			(S7) (LRR K, L) ow Surface (S8) (LRR K, L)
	Depleted Below Dark S	Surface (A11		pleted Matrix					face (S9) (LRR K, L)
	Thick Dark Surface (A			dox Dark Su					se Masses (F12) (LRR K, L, R)
	Sandy Mucky Mineral				Surface (F7)				odplain Soils (F19) (MLRA 149B)
	Sandy Gleyed Matrix (S4)	🗌 Re	dox Depress	sions (F8)				(TA6) (MLRA 144A , 145 , 149B)
	Sandy Redox (S5)							Red Parent M	
	Stripped Matrix (S6) Dark Surface (S7) (LR		149B)					 Very Shallow Other (Explain 	Dark Surface (TF12) in Remarks)
			1400)						
	of Hydrophytic vegetat		and hydrology mus	st be present	t, unless dist	urbed or pro	blema	tic.	
	Layer (if observed):								
Type:							I	Hydric Soil Present?	?Yes 🗌 No 🖾
	n (inches):								
Remarks:									

WETLAND DETERMINATION DA	TA FC)RM – No	orthce	entral and Nort	heast F	Region
Project/Site: CTH C Prop.Sewer & Waterlines to Prop. Development	City/Cou	inty: City of	Port Wa	shington/Ozaukee Co	<u>ounty</u>	Sampling Date: 07/22/2015
Applicant/Owner:				State: WI		Sampling Point: 24
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section	n, Township	, Range:	Section 4, T10N, R2	<u>22E</u>	
Landform (hillslope, terrace, etc.): drainage way	Local r	relief (concav	ve, conv	ex, none): <u>concave</u>		Slope (%): <u>0-3%</u>
Subregion (LRR or MLRA): <u>LRR K</u>	Lat:	L	ong:	Datum:		
Soil Map Unit Name: Manawa silt Ioam (MaA)					NWI class	sification: <u>E2K</u>
Are climatic/hydrologic conditions on the site typical for this time of year?	2	Yes 🖂 🛛 🛛	10 🗌	(If no, explain in Rer	marks)	
Are Vegetation, Soil, or Hydrology significantly disturb	ed?	Are "Norma	al Circum	nstances" present?	Yes 🖂	No 🔲
Are Vegetation, Soil, or Hydrology naturally problemat	ic?	(If, needed	, explain	any answers in Rem	arks.)	
SUMMARY OF EINDINGS - Attach site man showing s	ampli	na noint l	ocatio	ne transacte in	nnortan	t fasturas ata

S JMMARY Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Hydric Soils Present? Wetland Hydrology Present?	⊠Yes ⊠Yes ⊠Yes	□No □No □No	Is the Sampled Area within a Wetland?	🛛 Yes	□No
			If yes, optional Wetland Site ID: PC/	<u>A No. 8</u>	
Remarks: (Explain alternative proce	dures here or in	a separate report.)			

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	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 on Living R	cots (C3) Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)
Image: Sediment Deposits (B2) Image: Difference of Reduced Iron (C4) Image: Difference of Reduced Iron (C4) Image: Recent Iron Reduction in Tilled Soil Image: Recent Iron Deposits (B5) Image: 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)	AC-Neutral Test (D5)
Field Observations:	
Surface Water Present? Yes Depth (inches):	
Water Table Present? Yes 🗌 No 🛛 Depth (inches):	
Saturation Present? Yes No Depth (inches): 21 (includes capillary fringe) (includes capillary fringe) (includes capillary fringe)	Wetland Hydrology Present? Yes 🛛 No 🗌
Saturation Present? Yes 🛛 No 🗌 Depth (inches): <u>21</u>	, , ,
Saturation Present? Yes I No Depth (inches): 21 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if and the stream gauge is a stream gauge in the stream gauge is a stream gauge.	, , ,
Saturation Present? Yes ⊠ No Depth (inches): 21 (includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if av Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).	vailable: Topo Map (Exhibit 1), Wisconsin Wetland Inventory

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 24
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator <u>Status</u>	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: <u>1</u> (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Dereent of Dominant Species
				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100%</u> (A/B)
6				Prevalence Index worksheet:
7	<u>0</u>	□ = Total Cov		
Sapling/Shrub Stratum (Plot size: <u>30' radius</u>)	<u>-</u>			Total % Cover of: Multiply by: OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				FACU species x 4 =
4				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A =
7				Hydrophytic Vegetation Indicators:
	<u>0</u>	= Total Cov	/er	Rapid Test for Hydrophytic Vegetation Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				□ Prevalence Index is $\leq 3.0^{1}$
1. Phalaris arundinacea	<u>100</u>	\boxtimes	FACW	Morphological Adaptations ¹ (Provide supporting
2. <u>Elymus repens</u>	20		FACU	data in Remarks or on a separate sheet)
	<u>10</u>		FACU	Problematic Hydrophytic Vegetation ¹ (Explain)
3. <u>Poa pratensis</u>	<u></u>	_	17100	¹ Indicators of hydric soil and wetland hydrology must
4				Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Sapling/shrub – Woody plants less than 3in. DBH
10				and greater than 3.28 ft (1 m) tall.
11				°
				Herb – All herbaceous (non-woody) plants, regardless
12	120			of size, and woody plants less than 3.28 ft tall.
	<u>130</u>	= Total Cov	/er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: <u>30' radius</u>)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cov	/er	Present? Yes 🛛 No 🗌
Remarks: (include photo number here or on a separate she	et.) Fresh (we			

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)											
Depth	Matrix			F	Redox Feat	ures					
(inches)	Color (moist)	%	Color (moi	st)	%	Type ¹	Loc ²	_	Texture	Remarks	
0-5	7.5YR 3/1+	100		<u> </u>				Clay	loam		
5-12	7.5YR 3/1	95	5YR 3/4		5	С	PL M	Clay	loam		
12-14	7.5YR 4/1	70	5YR 4/6		30	С	PL M	Clay		with grit	
14-18	7.5YR 4/2	60	5YR 4/6		20	C	PL M	Clay		with grit	
	7.011(4/2		N2.5/1		20			Oldy		Mg nodules	
18-24	5YR 4/4	60	10Y 6/1		20	D	M	Clay		with small stones	
10-24	511(4/4	00	5YR 4/8		20	C	PL M	Ciay			
			5TK 4/6		20						
					·						
					. <u> </u>						
					. <u> </u>						
1 T urney C (Concentration D. Den	lation DM	Deduced Met		Maskad				² Lesstian, DL Dave	Lining NA Matrix	
	¹ Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS= Masked Sand Grains ² Location: PL=Pore Lining, M=Matrix Hydric Soil Indicators: Indicators for Problematic Hydric Soils ³ :										
-	Histosol (A1)		Г] Polv	value Relo	w Surface (S	8) (LRR R			10) (LRR K, L, MLRA 149B)	
	Histic Epipedon (A2)			-	MLRA 149		o) (L ittin,			Redox (A16) (LLR K, L, R)	
	Black Histic (A3)] Thin	Dark Surfa	ace (S9) (LR I	R R, MLRA	149B		Peat or Peat (S3) (LLR K, L, R)	
	Hydrogen Sulfide (A4)				• •	Mineral (F1) ((LRR K, L)			(S7) (LRR K, L)	
	Stratified Layers (A5)	/.				Matrix (F2)				ow Surface (S8) (LRR K, L)	
	Depleted Below Dark 3 Thick Dark Surface (A		\11) L ⊠		leted Matrix	x (F3) urface (F6)				face (S9) (LRR K, L) ese Masses (F12) (LRR K, L, R)	
	Sandy Mucky Mineral					Surface (F0)				odplain Soils (F19) (MLRA 149B)	
	Sandy Gleyed Matrix (ox Depress					(TA6) (MLRA 144A , 145 , 149B)	
	Sandy Redox (S5)					. ,			Red Parent M	aterial (F21)	
	Stripped Matrix (S6)									Dark Surface (TF12)	
	Dark Surface (S7) (LR	R R, MLR	(A 149B)						Other (Explain	n in Remarks)	
³ Indicators	of Hydrophytic vegeta	tion and w	etland hydrolog	av must	be present	t. unless dist	urbed or pro	oblema	atic.		
	Layer (if observed)		<u></u>	<i>,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		.,					
Type:	: <u></u>								Hydric Soil Present	? Yes 🛛 No 🗌	
Depth	n (inches):										
Remarks:											

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region							
Project/Site: CTH C Prop.Sewer & Waterlines to Prop. Development	City/County: City of Port Washington/O	zaukee County	Sampling Date: 07/22/2015				
Applicant/Owner:	State	e: <u>WI</u>	Sampling Point: <u>25</u>				
Investigator(s): Jen Dietl and Dan Carter; SEWRPC	Section, Township, Range: Section 4	<u>, T10N, R22E</u>					
Landform (hillslope, terrace, etc.): terrace	Local relief (concave, convex, none):	none	Slope (%): <u>6-12%</u>				
Subregion (LRR or MLRA): LRR K	Lat: Long:	Datum:					
Soil Map Unit Name: Kewaunee silty clay loam (KrC3)		NWI clas	sification: none				
Are climatic/hydrologic conditions on the site typical for this time of year	r? Yes 🛛 No 🗌 (If no, exp	lain in Remarks)					
Are Vegetation, Soil, or Hydrology significantly distur	bed? Are "Normal Circumstances" p	oresent? Yes 🖂	No 🗌				
Are Vegetation, Soil, or Hydrology naturally problema	atic? (If, needed, explain any answe	ers in Remarks.)					
SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.							
Hydrophytic Vegetation Present? Yes No	Is the Sampled Area	_	_				
Hydric Soils Present? Yes No Wetland Hydrology Present? Yes No	within a Wetland?	☐ Yes	⊠No				
	within a Wetland? If yes, optional Wetland Site ID:		⊠No				

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required; check all that apply)	Surface Soil Cracks (B6)			
Surface Water (A1) Water-Stained Leaves (B9)	Drainage Patterns (B10)			
High Water Table (A2)	Moss Trim Lines (B16)			
Saturation (A3) Marl Deposits (B15)	Dry-Season Water Table (C2)			
Water marks (B1) Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)			
Umath Umath Umath Hydrogen Sulfide Odor (C1) Umath Sediment Deposits (B2) Umath Oxidized Rhizospheres on Living R	oots (C3) Saturation Visible on Aerial Imagery (C9)			
Drift Deposits (B3)	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	s (C6) Geomorphic Position (D2)			
Iron Deposits (B5)	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7) Dther (Explain in Remarks)	Microtopographic Relief (D4)			
Sparsely Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)			
Field Observations:				
Surface Water Present? Yes 🗌 No 🛛 Depth (inches):				
Water Table Present? Yes 🗌 No 🛛 Depth (inches):				
Saturation Present? Yes No Depth (inches): <u>22</u> (includes capillary fringe)	Wetland Hydrology Present? Yes 🗌 No 🛛			
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				
(includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if a Map (Exhibit 2), Soils Map (Exhibit 3), Aerial photos (Exhibit 4), and Site photos (Exhibit 10).				

VEGETATION – Use scientific names of plants.

VEGETATION – Use scientific names of plants.				Sampling Point: 25
Tree Stratum (Plot size: 30' radius)	Absolute <u>% Cover</u>	Dominant Species?	Indicator Status	Dominance Test worksheet:
1				Number of Dominant Species
2				That are OBL, FACW, or FAC: 0 (A)
3				Total Number of Dominant
4				Species Across All Strata: <u>1</u> (B)
5				Percent of Dominant Species
6				That Are OBL, FACW, or FAC: <u>0%</u> (A/B)
				Prevalence Index worksheet:
7	<u></u>	= Total Cove	er	Total % Cover of: Multiply by:
Sapling/Shrub Stratum (Plot size: 30' radius)				OBL species x 1 =
1				FACW species x 2 =
2				FAC species x 3 =
3				
4				FACU species x 4 =
				UPL species x 5 =
5				Column Totals: (A) (B)
6				Prevalence Index = B/A = Hydrophytic Vegetation Indicators:
7				Rapid Test for Hydrophytic Vegetation
	<u>0</u>	= Total Cove	er	Dominance Test is >50%
Herb Stratum (Plot size: 5' radius)				$\square Prevalence Index is \le 3.0^{1}$
1. <u>Bromus inermis</u>	<u>80</u>	\boxtimes	<u>UPL</u>	Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
2. Daucus carota	<u>10</u>		UPL	Problematic Hydrophytic Vegetation ¹ (Explain)
3. Arctium minus	<u>5</u>		FACU	¹ Indicators of hydric soil and wetland hydrology must
4. Medicago lupulina	<u>3</u>		FACU	Be present, unless disturbed or problematic.
5				
6				Definitions of Vegetation Strata:
7				Tree – Woody plants 3in. (7.6 cm) or more in diameter
8				at breast height (DBH), regardless of height
9				Serling/abruh Weady plants loss than 2in DDU
10				Sapling/shrub – Woody plants less than 3in. DBH and greater than 3.28 ft (1 m) tall.
11				
				Herb – All herbaceous (non-woody) plants, regardless
12				of size, and woody plants less than 3.28 ft tall.
	<u>98</u>	= Total Cove	er	Woody vines – All woody vines greater than 3.28 ft in
Woody Vine Stratum (Plot size: 30' radius)		_		height
1				
2				
3				Hydrophytic
4				Vegetation
	<u>0</u>	= Total Cove	er	Present? Yes 🗌 No 🛛
Remarks: (include photo number here or on a separate sheet				nd ag field.
· · ·				-

Profile Des	scription: (Describe to	o the dep	oth needed to docum	ent the ind	licator or cor	firm the a	bsence	e of indicators.)				
Depth	Matrix			Redox Fea	tures							
(inches)	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²	_	Texture	Remarks			
0-22	5YR 4/3	100					Clay		with gravel			
22-24	5YR 4/4	98	5YR 5/8	2	C	PL M	Clay		with gravel			
	·											
				·								
				·								
				·								
				·								
	·		-									
				·								
	Concentration, D=Depl	etion, RN	I=Reduced Matrix, MS	S= Masked S	Sand Grains			² Location: PL=Pore				
-	I Indicators:				W Surface (C)				ematic Hydric Soils ³ :			
	Histosol (A1) Histic Epipedon (A2)		L Po	MLRA 149	w Surface (Sa B)	0) (LRR R,			10) (LRR K, L, MLRA 149B) Redox (A16) (LLR K, L, R)			
	Black Histic (A3)		🗍 Thi		ace (S9) (LRF	R. MLRA	(149B)		Peat or Peat (S3) (LLR K, L, R)			
	Hydrogen Sulfide (A4)				Mineral (F1) ((S7) (LRR K, L)			
	Stratified Layers (A5)				Matrix (F2)	. ,			ow Surface (S8) (LRR K, L)			
	Depleted Below Dark S			pleted Matri					face (S9) (LRR K, L)			
	Thick Dark Surface (A			dox Dark Su				Iron-Manganese Masses (F12) (LRR K, L, R)				
	Sandy Mucky Mineral (Sandy Gleyed Matrix (pleted Dark dox Depres:	Surface (F7)				odplain Soils (F19) (MLRA 149B) (TA6) (MLRA 144A, 145, 149B)			
	Sandy Redox (S5)	34)			50115 (1.0)			Red Parent M				
	Stripped Matrix (S6)								Dark Surface (TF12)			
	Dark Surface (S7) (LR	R R, MLF	RA 149B)					Other (Explain				
0												
	of Hydrophytic vegetat		vetland hydrology mus	st be presen	it, unless disti	urbed or pr	oblema	atic.				
	e Layer (if observed):											
	 n (inches):							Hydric Soil Present	? Yes 🗌 No 🛛			
Remarks:												
rtemanto.												

Photo 1. Upland sample site 1.



Photo 3. Wetland sample site 3. Wetland sample site 5 is similar.



Photo 5. Wetland sample site 6. Wetland sample sites 8, 13, 18, 19, and 24 are similar.



Photo 2. Wetland sample site 2.



Photo 4. Upland sample site 4.



Photo 6. Upland sample site 7. Upland sample site 12 is similar.



Photo 7. Upland sample site 9.



Photo 9. Upland sample site 14.

Photo 8. Wetland sample site 10. Sample site 11 is similar.



Photo 10. Wetland sample site 15.



Photo 11. Wetland sample site 16. Wetland sample sites 21 and 22 are similar.





Photo 12. Upland sample site 17. Upland sample sites 20, 23, and 25 are similar.



Photo 13. South view of ditch. Sample 1 is off photo to left.



Photo 15. South view of sample sites 3, 4, and 5.



Photo 17. North view of sample sites 8, 9, 10 and ditch north of sample 8.



Photo 14. South view of ditch from the SE corner of CTH C and W. Sunset Rd.



Photo 16. North view of ditch, wetland sample 6, and Upland sample 7.



Photo 18. South view of ditch and sample sites 12 and 13.



Photo 19. East view and sample site 13 wetland.



Photo 21. East view of sample 19 wetland.

Photo 23. East view of sample 24 wetland.



Photo 20. North view of ditch and sample sites 17 and 18.



Photo 22. East view of sample 21 wetland.



Photo 24. North view of sample 24 wetland.



EXHIBIT 11. FSA Slide Review Data WETLAND DOCUMENTATION RECORD **Remotely Sensed Data Summary**

Owner/Operator:	CTH C Prop. Sewer & Waterlines	County: Ozaukee	State: WI
Slide Reviewer:	Daniel Carter; Jennifer Dietl	Date: <u>09/04</u>	/15; 11/11/15

Site Identification No. _____ - ____ (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave. =)	Interpretation- (codes listed in box below)	
		FSA Slide Review Area: A	FSA Slide Review Area: B
2013	3	Y CR 6d	Y CR 6d
2010	3	Y CR 6d	N CR
2008	2	Y CR 6d	N CR
2006	3	Y CR 6d	N CR
2005	1	Y CR 6a, 6d	N CR
June 2003	2	Y- CR 6d	Y- CR 6d
July 2002	3	N CR 6a	N CR
June 2001	3	Y- CR 6d	N CR
July 2000	2	N CR	N CR
June 1999	3	Y- CR 6d	N CR
June 1998	3	Y- CR 6d	N CR
July 1997	2	Y- CR 6d	N CR
June 1996	2	Y- CR 6d	Y- CR 6d
May 1995	2	Y- CR 6d	Y-CR 6d
June 1994	1	Y CR 6d	Y- CR 6d
1993	3	Y- CR 6d	Y- CR 6d
June 1992	1	Y- CR 6d	Y- CR 6d
June 1991	2	Y CR 6d	Y- CR 6d
July 1990	3	N NC	N CR
Air Photo			
2015	3	Y- CR 6d	Y- CR 6d
2007	2	Y- CR 6d	Y- CR 6d

Y = Yes, signal indicates wetness (+ = strong, - = weak) CR = cropped (row crop or tilled)	8	nature nay, pasture, idle, etc.)
FeatureColor1 = water6a = dark green2 = mud flat6b = light green3 = bare spot6c = yellow4 = drowned crop6d = brown5 = planted late6e = black	<u>Manipulation</u> (year of installation) 7a = ditched 7b = tiled 7c = filled 7d = tree/brush removal 8 = plowed/tilled	Other write explanation

A. Does slide/air photo data indicate the site is a wetland?B. Does slide/air photo data indicate the site is a wetland?

🛛 Yes 🗌 No 🛛 Yes 🗌 No

A. A total of 7 years out of 8 most normal years (88%) have wet (Y) signatures.

B. A total of $\frac{5}{2}$ years out of $\frac{8}{2}$ most normal years (63%) have wet (Y) signatures.

A. A total of <u>18</u> years out of <u>21</u> years (86%) observed have wet (Y) signatures.

B. A total of <u>10</u> years out of <u>21</u> years (48%) observed have wet (Y) signatures.

Owner/Operator: CTH C Prop. Sewer & Waterlines	County: Ozaukee	State: <u>WI</u>
Slide Reviewer: Daniel Carter; Jennifer Dietl	Date: 09/0	4/15; 11/11/15

Site Identification No. ______ - _____ (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

FSA Slide Review Area: C	Interpretation- (codes listed in box below)	
FOA SILUE REVIEW ALEA: C	FSA Slide Review Area: D	
Y CR 6b, 6d	Y CR 6d	
Y- CR 6d	N CR	
Y CR 6d	Y- CR 6d	
Y- CR 6d	N CR	
Y CR 6d	Y- CR 6d	
Y-CR 6d	N CR	
Y- CR 6d	N CR	
Y-CR 6d	N CR	
Y CR 6d	N CR	
Y CR 6d	Y- CR 6d	
Y CR 6d	Y- CR 6d	
Y- CR 6d	Y- CR 6d	
Y CR 6b, 6d	Y CR 6d	
N CR	Y- CR 6d	
Y CR 6d	Y CR 6d	
Y CR 6b	Y- CR 6b	
Y CR 6d	Y- CR 6d	
Y CR 6d	Y- CR 6d	
N CR	N CR	
Y- CR	N CR	
Y- CR 6d	Y- CR 6d	

CR = cropped (row crop	or tilled)	NC = not cropped (hay, pasture, idle, etc.)
Feature	<u>Color</u>	Manipulation (year of installation)	<u>Other</u>
1 = water	6a = dark green	7a = ditched	write explanation
2 = mud flat	6b = light green	7b = tiled	
3 = bare spot	6c = yellow	7c = filled	
4 = drowned crop	6d = brown	7d = tree/brush removal	
5 = planted late	6e = black	8 = plowed/tilled	

C. Does slide/air photo data indicate the site is a wetland? D. Does slide/air photo data indicate the site is a wetland?

🛛 Yes	🗌 No
🛛 Yes	🗌 No

C. A total of 7 years out of 8 most normal years (88%) have wet (Y) signatures. D. A total of $\frac{6}{5}$ years out of $\frac{8}{5}$ most normal years (75%) have wet (Y) signatures.

C. A total of <u>19</u> years out of <u>21</u> years (90%) observed have wet (Y) signatures.

D. A total of $\overline{13}$ years out of $\overline{21}$ years (62%) observed have wet (Y) signatures.

: <u>WI</u>	

Slide Reviewer: Daniel Carter; Jennifer Dietl Date: 09/04/15; 11/11/15

Site Identification No.

_____ - ____ (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave. =)	Interpretation- (codes listed in box below)	
		FSA Slide Review Area: E	FSA Slide Review Area: F
2013	3	Y CR 6d	Y- CR 6d
2010	3	Y- CR 6d	Y- CR 6d
2008	2	N CR	Y+ CR 6d
2006	3	Y- CR 6d	N CR
2005	1	N CR	N CR
June 2003	2	Y- CR 6d	N CR
July 2002	3	N CR	Y CR 6d
June 2001	3	Y- CR 6d	N CR
July 2000	2	Y- CR 6d	Y- CR 6d
June 1999	3	N CR	Y- CR 6d
June 1998	3	Y CR 6d	N CR
July 1997	2	N CR	N CR
June 1996	2	Y- CR 6d	Y CR 6d
May 1995	2	Y- CR 6d	Y- Cr 6d
June 1994	1	Y CR 6d	N CR
1993	3	N CR	N CR
June 1992	1	N CR	N CR
June 1991	2	N CR	N CR
July 1990	3	N CR	N CR
Air Photo			
2015	3	N CR	Y CR 6d
2007	2	Y- CR 6d	Y- CR 6d
	al indicates wetness d (row crop or tilled)		N = No wetness signature NC = not cropped (hay, pasture, idle, etc.)

Feature	<u>Color</u>	Manipulation (year of installation)	<u>Other</u>
1 = water	6a = dark green	7a = ditched	write explanation
2 = mud flat	6b = light green	7b = tiled	
3 = bare spot	6c = yellow	7c = filled	
4 = drowned crop	6d = brown	7d = tree/brush removal	
5 = planted late	6e = black	8 = plowed/tilled	

E. Does slide/air photo data indicate the site is a wetland?F. Does slide/air photo data indicate the site is a wetland?

⊠ Yes □ No ⊠ Yes □ No

E. A total of 5 years out of 8 most normal years (63%) have wet (Y) signatures. F. A total of 5 years out of 8 most normal years (63%) have wet (Y) signatures.

E. A total of <u>11</u> years out of <u>21</u> years (52%) observed have wet (Y) signatures.

F. A total of $\underline{10}$ years out of $\underline{21}$ years (48%) observed have wet (Y) signatures.

Owner/Operator	: <u>CTH C Prop. Sewer & Waterlines</u>	County: Ozaukee	State: <u>WI</u>
Slide Reviewer:	Daniel Carter; Jennifer Dietl	Date: 09/0	4/15; 11/11/15

Site Identification No. _____ - ____ (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave. =)	Interpretation- (codes listed in box below)	
		FSA Slide Review Area: G	FSA Slide Review Area: H
2013	3	Y- CR 6d	Y+ CR 6d
2010	3	Y- CR 6d	Y+ CR 6d
2008	2	Y- CR 6d	Y- CR 6b, 6d
2006	3	N CR	Y- CR 6d
2005	1	N CR	Y- CR 6d
June 2003	2	N CR	Y- CR 6d
July 2002	3	Y CR 6d	N CR
June 2001	3	N CR	Y+ NC 6d
July 2000	2	Y- CR 6d	Y CR 6d
June 1999	3	Y-CR 6d	Y- CR 6d
June 1998	3	N CR	N CR
July 1997	2	N CR	Y- CR 6d
June 1996	2	Y CR 6d	Y CR 6e
May 1995	2	Y- CR 6d	Y CR 6d
June 1994	1	N CR	N NC
1993	3	N CR	Y CR 6d
June 1992	1	N CR	Y- CR 6d
June 1991	2	N CR	Y+ CR 6d
July 1990	3	N CR	N CR
Air Photo			1
2015	3	Y CR 6d	Y- CR 6d
2007	2	Y- CR 6d	Y CR 6d
	al indicates wetness d (row crop or tilled)		N = No wetness signature NC = not cropped (hay, pasture, idle, etc.)

$\mathbf{CR} = \text{cropped}(\text{row crop of tilled})$		$\mathbf{NC} = 101 \text{ cropped (flay, pasture, fulle, etc.)}$		
Feature	Color	Manipulation (year of installation)	<u>Other</u>	
1 = water	6a = dark green	7a = ditched	write explanation	
2 = mud flat	6b = light green	7b = tiled		
3 = bare spot	6c = yellow	7c = filled		
4 = drowned crop	6d = brown	7d = tree/brush removal		
5 = planted late	6e = black	8 = plowed/tilled		

G. Does slide/air photo data indicate the site is a wetland? H. Does slide/air photo data indicate the site is a wetland?

🛛 Yes	🗌 No
🛛 Yes	🗌 No

G. A total of 5 years out of 8 most normal years (63%) have wet (Y) signatures. H. A total of $\underline{8}$ years out of $\underline{8}$ most normal years (100%) have wet (Y) signatures.

G. A total of <u>10</u> years out of <u>21</u> years (48%) observed have wet (Y) signatures.

H. A total of $\overline{17}$ years out of $\overline{21}$ years (81%) observed have wet (Y) signatures.

Owner/Operator	: CTH C Prop. Sewer & Waterlines	County: Ozaukee	State: WI
Slide Reviewer:	Daniel Carter; Jennifer Dietl	Date: 09/0	<u>4/15; 11/11/15</u>

Site Identification No.

- _____ (Tract No. + Site No.)

Farm Service Agency (or Other) Aerial Slide Data

Date (Mo./Yr)	Rainfall (in) +D/N/W (Apr- June ave. =)	Interpretation- (codes listed in box below)		
		FSA Slide Review Area: I	FSA Slide Review Area: J	
2013	3	Y- CR 6d	N CR	
2010	3	N CR	Y CR 6d	
2008	2	Y- CR 6d	Y CR 6d	
2006	3	Y- CR 6d	Y+ CR 6d	
2005	1	Y- CR 6d	N CR	
June 2003	2	N CR	N CR	
July 2002	3	N CR	N CR	
June 2001	3	N CR	Y- CR 6d	
July 2000	2	N CR	N CR	
June 1999	3	N CR	N CR	
June 1998	3	N CR	Y CR 6d	
July 1997	2	N CR	N CR	
June 1996	2	Y- CR 6d	Y- CR 6d	
May 1995	2	N CR	No slide available	
June 1994	1	N CR	N CR	
1993	3	N CR	Y- CR 6b	
June 1992	1	N CR	N CR	
June 1991	2	N CR	N CR	
July 1990	3	N CR	N CR	
Air Photo				
2015	3	N CR	Y- CR 6d	
2007	2	N CR	Y- CR 6d	
	al indicates wetness d (row crop or tilled)	(+ = strong, - = weak)	N = No wetness signature NC = not cropped (hay, pasture, idle, etc.)	
$\frac{Feature}{1 = water}$ $2 = mud flat$		Manipulationdark green7a = ditchedlight green7b = tiled	(year of installation) <u>Other</u> write explanation	

realure	0000	<u>Manipulation</u> (year or installation)	Other
1 = water	6a = dark green	7a = ditched	write explanation
2 = mud flat	6b = light green	7b = tiled	
3 = bare spot	6c = yellow	7c = filled	
4 = drowned crop	6d = brown	7d = tree/brush removal	
5 = planted late	6e = black	8 = plowed/tilled	

I. Does slide/air photo data indicate the site is a wetland? J. Does slide/air photo data indicate the site is a wetland?

A total of <u>2</u> years out of <u>8</u> most normal years (25%) have wet (Y) signatures. A total of <u>2</u> years out of <u>7</u> most normal years (29%) have wet (Y) signatures.

I. A total of <u>5</u> years out of <u>21</u> years (24%) observed have wet (Y) signatures.

J. A total of $\underline{9}$ years out of $\underline{20}$ years (45%) observed have wet (Y) signatures.

2008 FSA Photo Areas A, B, C, and D



2008 FSA Photo Areas E, F and G



2008 NAIP Photo Areas H, I, and J



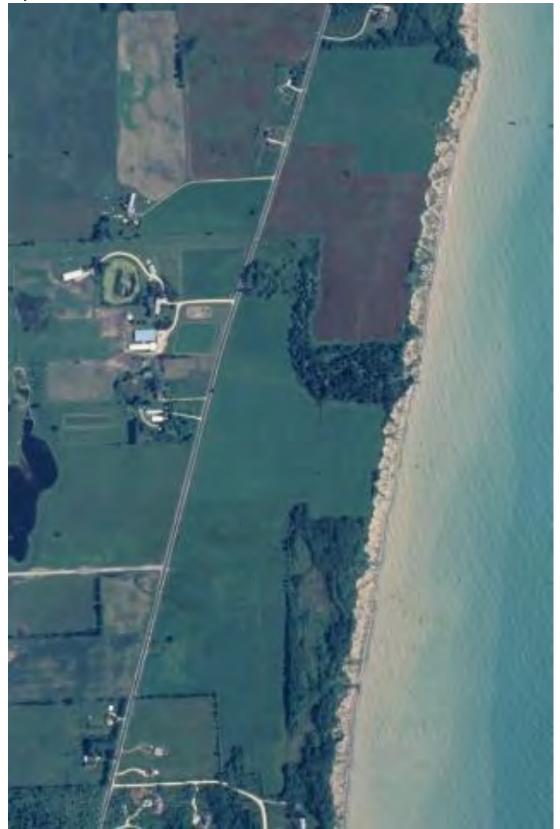
2003 FSA Slide all areas.



2000 FSA Slide All Areas



July 1997 FSA Slide



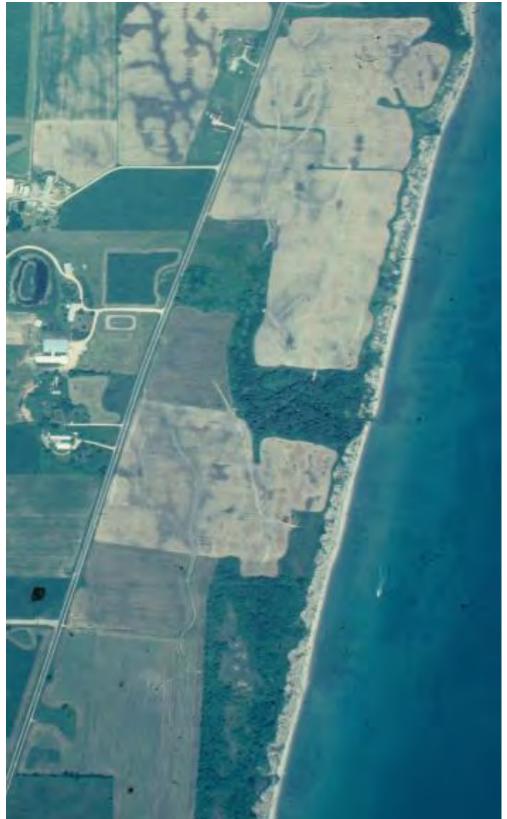
June 1996 FSA Slide all areas



May 1995 FSA Slide (Area J missing).



June 1991 FSA Slide all areas.



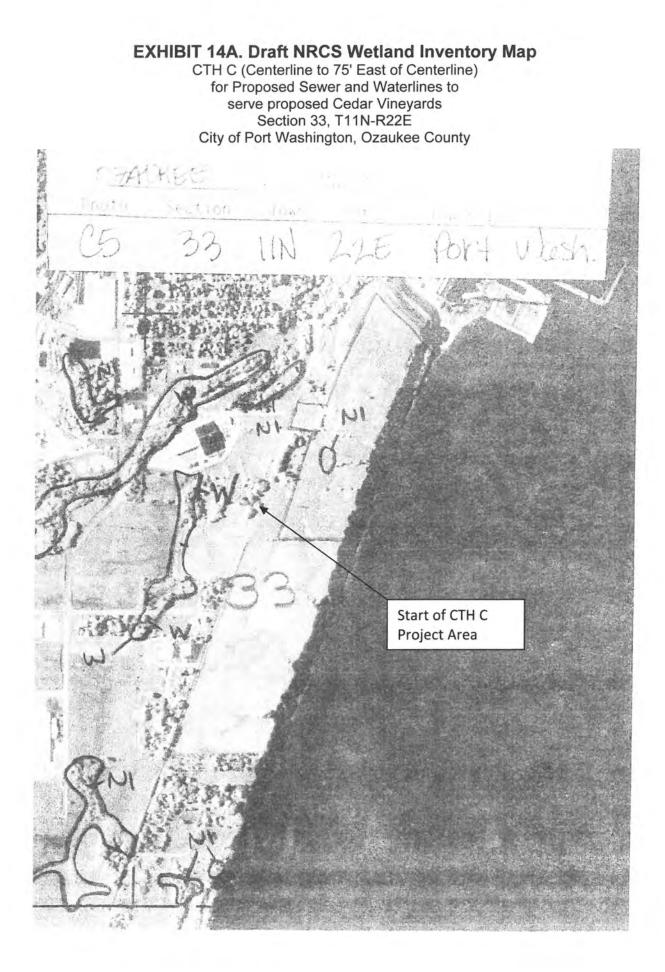


EXHIBIT 14B. Draft NRCS Wetland Inventory Map CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 3, T10N-R22E City of Port Washington, Ozaukee County

089 C5 sec3 T10n R22e Grafton Not to Scale ange WETLAND DELINEATIONS ARE FOR

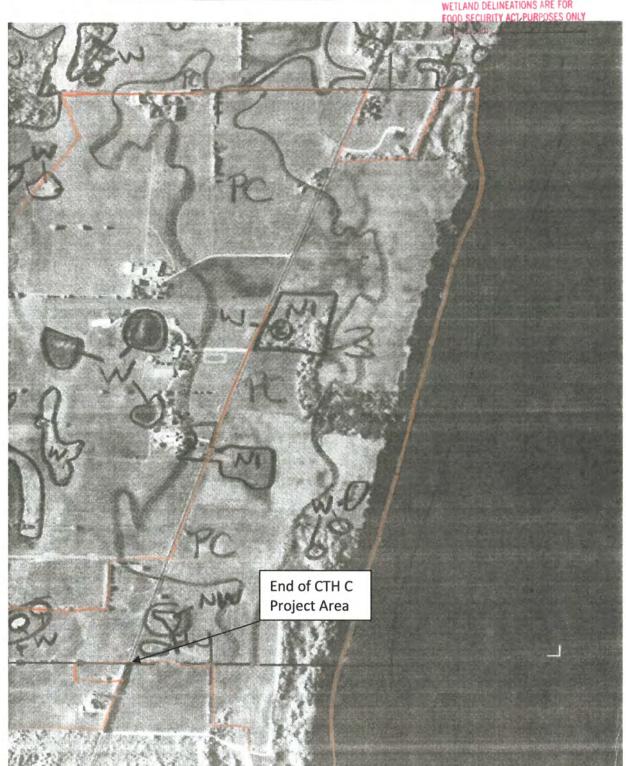




Exhibit 12. FSA Slide Review Map Map 2 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

Lake Michigan

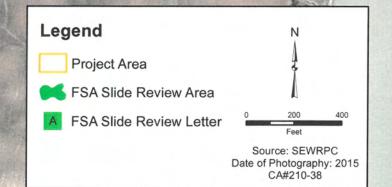


Exhibit 12. FSA Slide Review Map Map 3 of 3 CTH C (Centerline to 75' East of Centerline) for Proposed Sewer and Waterlines to serve proposed Cedar Vineyards Section 33, T11N-R22E Sections 3 and 4, T10N-R22E City of Port Washington, Ozaukee County

Lake Michigan



N

200

Feet

400

Stonecroft Dr